Pennsylvania Public Utility Commission v. The Peoples Natural Gas Company LLC Call-In Telephonic Evidentiary Hearings	Docket Nos.: R-2023-3044549 C-2024-3045268 C-2024-3045385 C-2024-3045960 C-2024-3046069 C-2024-3046233

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Judge's Chambers

Piatt Place

301 5th Avenue

Suite 220

Pittsburgh, PA

Thursday, May 9, 2024

Commencing at 10:00 a.m.

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BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Peoples Natural Gas Company LLC

Docket No. R-2023-3044549

Volume 9

Direct Testimony

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	Docket No. R-2023-3044549
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED DIRECT TESTIMONY OF
MICHAEL HUWAR, PRESIDENT
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: December 29, 2023
DATE ADMITTED: _____

Peoples Statement No. 1

PREPARED DIRECT TESTIMONY
OF MICHAEL HUWAR

Introduction

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Michael Huwar. My business address is Peoples Natural Gas Company LLC, 375 North Shore Drive, Suite 600, Pittsburgh, Pennsylvania 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Peoples Natural Gas Company LLC ("Peoples Natural Gas," "Peoples," or the "Company") as President. I am also the President of Peoples Natural Gas' direct parent, PNG Companies LLC ("PNG"). On January 1, 2023, Peoples Natural Gas was merged with People Gas Company LLC and two divisions were formed.

Q. PLEASE DESCRIBE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.

A. I hold an undergraduate degree from the University of Pittsburgh, and completed a leadership development program at the University of Pennsylvania's Wharton School. Currently, I am the corporate officer responsible for Peoples Natural Gas and its various departments including but not limited to Operations, Construction, Pipeline Safety and Compliance, Damage Prevention, Sales, Customer Service and Community Relations. Prior to my time at Peoples, I held various positions with Columbia Gas of Pennsylvania, Inc. and its parent company, NiSource Inc. from 1986 through 2021, including President and Chief Operating Officer of Columbia Gas of Pennsylvania, Inc. While at Columbia/NiSource I also served as Vice President and General Operations Manager for Columbia Gas of Virginia, Inc., Vice President of Sales, Vice President of Products and

Services, and Director of Large Customer Relations. From 2015 through 2017, I served as Vice President of Marketing for Columbia Midstream, a subsidiary of Columbia Pipeline Group and TransCanada/TC Energy.

Q. WHAT ARE YOUR CURRENT JOB RESPONSIBILITIES WITH PEOPLES?

A. As President, I have the overall responsibility of leading the business and establishing the strategic plan for Peoples Natural Gas. My principle role is setting and executing on Peoples' strategic goals, which prioritize the operation and maintenance of a safe and reliable natural gas distribution system from which we serve our customers and communities.

Safety and reliability are the top priorities at Peoples and as such, I oversee the modernization of Peoples' infrastructure to maintain the overall safety and integrity of our natural gas delivery system. From that system, we meet the natural gas distribution needs of our customers in 18 counties in Southwest Pennsylvania. While we improve our infrastructure, Peoples is committed to providing top tier customer service. I also serve as Peoples' chief spokesperson and representative on important energy issues being debated and deliberated on both the federal and state levels.

Q. HAVE YOU TESTIFIED PREVIOUSLY IN ANY REGULATORY PROCEEDING?

A. Yes. Most recently, I submitted testimony in Peoples Gas Company LLC and Peoples Natural Gas Company LLC's Joint Application for Merger at Docket Nos. A-2021-3029831 and A-2021-3029833, which was approved by the Pennsylvania Public Utility

Commission ("Commission") on August 25, 2022. While at Columbia, I submitted testimony in support of Columbia Gas of Pennsylvania, Inc.'s base rate proceedings before the Commission at Docket Nos. R-2018-2647577 and R-2020-3018835.

Q. WHY DID THE COMPANY FILE THIS RATE CASE?

A. Peoples committed to file a base rate proceeding by no later than December 31, 2023 as part of a Joint Settlement in the Company's Tax Repair Election Petition in Docket No. P-2020-3021191 before the Commission in 2021. Prior to this filing, Peoples Natural Gas Division filed its last base rate proceeding in 2019 and Peoples Gas Division filed its last base rate proceeding in 2013[1]. By the time proposed new rates would become effective in this filing, it will have been nearly five years since the Company's last rate increase.

Q. WHAT IS THE PRIMARY DRIVER FOR THIS FILING?

A. The primary drivers for this case are the Company's ongoing infrastructure modernization programs which are supported by significant ongoing capital investments. These capital investments involve the replacement of aging infrastructure that will enhance the overall safety, reliability and integrity of the Company's natural gas distribution system. Therefore, the Company is requesting a base rate increase to recover the revenue requirement associated with the capital invested through the test year and continued investment in modernizing its infrastructure through the fully projected future test year.

[1] For more information regarding the two Divisions and Merger information for Peoples Natural Gas Company LLC's Peoples Natural Gas Division and Peoples Gas Division, see the Testimony of Andrew Wachter, pages 3-4.

Approval of the Company's request is necessary for Peoples to continue to provide safe and reliable natural gas service at a reasonable price to its customers while providing the Company with a reasonable opportunity to recover its costs and earn a fair rate of return on its capital investments in this proceeding. The Company is seeing overall increases in its costs to do business, including rising interest rates and post-pandemic pressures related to labor and availability of materials. As such, approval of the Company's request herein will demonstrate to its investors that the Commission continues to support the Company's need for natural gas infrastructure modernization and investment, as well as the need for reasonable and predictable earnings to continue to operate its business.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?

A. First, I will introduce Peoples' witnesses in this case, as well as the subject matters presented by each witness. Next, I will discuss the various priorities in this filing, including but not limited to the unification of the retail tariffs of the two divisions of Peoples (Peoples Gas Division and Peoples Natural Gas Division) into one combined retail tariff under Peoples Natural Gas Company LLC. I will also highlight some of the Company's operational performance and safety results, including the progress the Company has made with its infrastructure modernization program. In addition, I will discuss Peoples' customer service metrics and how the Company has been improving its customer experience. Additionally, I will briefly summarize some of the Company's requests in this proceeding, including a weather normalization adjustment mechanism and a new rate proposal to attract large industrial customers to the Company's distribution system.

Lastly, I will conclude my testimony with a discussion regarding the Company's focus on delivering safe and reliable natural gas distribution service, the benefits of that service, and the overall community impact resulting from that service.

Q. PLEASE LIST THE FILING REQUIREMENTS THAT YOU ARE SPONSORING AS A WITNESS.

A. I am sponsoring Exhibit 13, Sch. 10 and Exhibit 15, Sch. 1.

Witnesses

Q. PLEASE PROCEED WITH THE INTRODUCTION OF PEOPLES' WITNESSES.

A. Peoples' witnesses and the subject matters of their testimonies are as follows:

Andrew P. Wachter, Director, Finance and Regulation, will discuss the overall rate case organization and the merger of the Divisions. In addition, he will support the Company's proposed revenue requirement and identify and explain Peoples' operating and maintenance expenses for the Historic Test Year, Future Test Year, and the Fully Projected Future Test Year ("FPFTY"). Moreover, Mr. Wachter will discuss the Company's WNA proposal, the Company's proposals related to Rider TCJA and the Company's Tax Repairs proposal. (Peoples Statement No. 2);

Carol Scanlon, Manager of Rates and Regulation, will discuss the Company's calculation of historical and projected revenues, including customer counts and volume projections, the determination of rates for competitive accounts and the Company's proposal for a Weather Normalization Mechanism. Additionally, Ms. Scanlon will describe the Company's AVC rate blending proposal and the combination of the PNG and PG universal service riders. (Peoples Statement No. 3)

Ed Palombo, Vice President of Reliability, will describe the Company's gas supply plan, the Company's gathering approach, and the Company's safety performance. (Peoples Statement No. 4)

Paul Becker, Vice President of Construction and Engineering, will discuss the Company's capital pipeline work programs. (Peoples Statement No. 5)

Christine Saball, Vice President of Taxation will sponsor and support the Company's tax calculations for ratemaking purposes and the tax-related information provided by Peoples in response to the Commission's rate filing regulations. More specifically, Ms. Saball will explain the Company's Net Operating Loss carryforward, the Consolidated Tax Adjustment, how the Company is reflecting the effects of Tax Repairs in this proceeding, the impact of the Gas Safe Harbor rules issued in 2023 and how the reduction to the Corporate Net Income tax rate impacts the Company's revenue requirement in this matter. (Peoples Statement No. 6)

Luke Ravenstahl, Vice President Sales and Marketing, will sponsor and support the Company's negotiated contracts with competitive customers, Microgrid and Combined Heat and Power facilities, and outline the Company's requests to expand the use and availability of natural gas. (Peoples Statement No. 7)

Joyce Mitole, Controller, will sponsor the accounting filing requirements and explain how the accounting records of Peoples are maintained under industry standards. (Peoples Statement No. 8)

Rita Black, Director of Customer Service Programs, will sponsor and explain the Company's universal service programs and the implementation of said programs. (Peoples Statement No. 9)

Rudolph Hanechak, Financial Analysis and Budget Manager, will sponsor and support the Company's taxes other than income calculations. (Peoples Statement No. 10)

Dawn Folks, Senior Rates Analyst, will present the calculation of the Company's rate base. In addition, Ms. Folks will discuss the Company's tariff changes and the proposal to consolidate the Company's two tariff divisions (Peoples Gas Division and Peoples Natural Gas Division) into one retail tariff under Peoples Natural Gas Company LLC. (Peoples Statement No. 11)

Krista Snyder, Rates Analyst, will present the calculation of the Company's cash working capital requirements. (Peoples Statement No. 12)

Paul Moul, Managing Consultant, P. Moul & Associates, will present an independent assessment of the fair rate of return that Peoples should be authorized to earn on its investment in providing gas delivery service to customers. (Peoples Statement No. 13)

John Spanos, President, Gannett Fleming, Inc., will sponsor a depreciation study that determined Peoples' annual depreciation accrual rates. (Peoples Statement No. 14)

Ralph Zarumba, Black & Veatch Management Consulting, LLC, will sponsor the cost of service allocation studies prepared by his firm and he will explain how Peoples' rates were designed to produce the revenue requirement described in Peoples' witness Andrew Wachter's testimony. Mr. Zarumba will also discuss the Company's WNA proposal and its request to a new rate for industrial customers. (Peoples Statement No. 15)

Unification of Tariffs

Q. PLEASE DESCRIBE THE COMPANY'S CURRENT STRUCTURE AND WHAT HAS OCCURRED SINCE ITS LAST BASE RATE PROCEEDING.

A. Over the last few years, the Company has made great strides to merge its two Pennsylvania gas utilities, Peoples Gas Company LLC and Peoples Natural Gas Company LLC, into one entity, Peoples Natural Gas Company LLC. Today, the entities are legally merged, but remain as two divisions before the Commission– Peoples Gas Division and Peoples Natural Gas Division – with two separate tariffs on file. Moreover, the two divisions have separate base rates and accounting books and records.

Q. WHAT STEPS HAS THE COMPANY TAKEN TO UNIFY THE PEOPLES GAS AND PEOPLES NATURAL GAS DIVISIONS' OPERATIONS?

A. The Company has taken a variety of steps to unify the operations of its divisions. In particular, the organizational structures of the two divisions have been restructured to avoid duplicative positions, the unions have been merged, and the vehicles, tools, and equipment have been standardized across the divisions. In addition, the Company has re-aligned the locations of offices across the combined service territory to better serve the customers and avoid duplicative offices. The Company has gone to great efforts to create a single operation that provides the most valuable services to its customers in the most efficient means possible.

Additionally, the Company, in this proceeding, is requesting all of the necessary regulatory approvals from the Commission to fully merge its two divisions.

Q. HAS THE COMMISSION APPROVED THE JOINT APPLICATION FOR MERGER OF THE PEOPLES GAS DIVISION AND PEOPLES NATURAL GAS DIVISION INTO ONE ENTITY?

A. Yes, the Commission approved the Joint Application for merger of the Peoples Gas Division and Peoples Natural Gas Division on August 25, 2022 in Docket Nos. A-2021-3029831 and A-2021-3029833.

Q. HAS THE COMMISSION APPROVED THE CONSOLIDATION OF THE PEOPLES GAS DIVISION AND PEOPLES NATURAL GAS DIVISION PURCHASED GAS COST RATES?

A. Yes, the Commission approved the consolidation of the Peoples Gas Division and Peoples Natural Gas Division Purchased Gas Cost Rates in the 2022 1307(f) proceeding at Docket Nos. R-2023-3037928, *et al.*

Q. WHAT IS PEOPLES PROPOSING IN THIS PROCEEDING WITH RESPECT TO THE PEOPLES GAS AND PEOPLES NATURAL GAS DIVISIONS' BASE RATES, TARIFFS AND ACCOUNTING?

A. The Company is requesting consolidation of the base rates and accounting of the Peoples Gas and Peoples Natural Gas Divisions together into one unified company and the elimination of any requirement to maintain separate divisions. In addition, the Company is proposing one new retail tariff, Peoples Natural Gas Tariff Gas No. 48 to serve all retail customers. Peoples Natural Gas' Tariff Gas- PA PUC No. 47 and Peoples Gas Tariff– PA PUC No. 8 would be canceled and superseded by this new retail tariff, Peoples Natural Gas

Tariff Gas No. 48. The Peoples Natural Gas Division's Supplier Tariff S-3 will be canceled and superseded by a new PA PUC Tariff No. S-4 and will cover supplier issues for both the Peoples Natural Gas and Peoples Gas Divisions. Dawn Folks' testimony (Peoples Statement No. 11) discusses this in more detail. At a high level, the merging of the tariffs will involve the merging of certain rates and fees that may be effective for one division but not yet another. For example, in this proceeding, the Company proposes to apply its gathering fees across both divisions. Further, the Company proposes to spread the capacity gas costs incurred by the Company on Equitran's Allegheny Valley Connector system across both divisions, as well.

Q. WHAT ARE THE BENEFITS OF COMBINING THE PEOPLES AND PEOPLES NATURAL GAS DIVISIONS' RATES AND TARIFFS?

A. As described above, the Company has made efforts to combine the operations procedures of the two divisions, as well as the purchased gas cost rates. The final step to complete the acquisition will be in combining the tariffs and rates of the Peoples Gas and Peoples Natural Gas Divisions. By combining the rates and tariffs, the Company will ensure that standards, procedures and customer charges are uniform across its service territory. This will present the Company to customers as one company and avoid customer confusion concerning rates and services. Duplicative regulatory filings for the Peoples Gas and Peoples Natural Gas Divisions will be eliminated. In addition, the new rates will reflect more accurate costs to customers of the unified company, instead of separate rates for each division. Additionally, the merger affords the Company with operational flexibility related to the procurement of natural gas. As previously described the Company operates and holds itself out as a single

business to the people and businesses it serves. This will simplify that even further for customers' benefit.

Case Priorities

Q. WHAT ARE PEOPLES' TOP PRIORITIES?

A. At Peoples, our mission is to sustain life and improve economic prosperity by safely and reliably delivering natural gas to our customers and communities. The Company delivers on this mission while striving to achieve the operational excellence necessary to provide safe and reliable natural gas delivery service to its customers. We are fully engaged in the Southwestern Pennsylvania community. I am personally actively engaged in the Southwestern Pennsylvania community through various organizations and events. In 2022, I was the Chair of the Heart Association Walk in downtown Pittsburgh's North Shore and in 2023, I was Chair of the Leukemia and Lymphoma Association's Light The Night Walk in North Shore. Additionally, I am an active board member for the Marcellus Shale Coalition and the Allegheny Conference on Economic Development. I am also Co-Chair of Pittsburgh Works Together – a Pittsburgh based business and labor coalition. Many of our executives and employees are likewise highly involved in the community and such participation is strongly encouraged by Peoples. We work hard to support our customers, our employees and to help the communities we serve grow and prosper. We achieve our mission with a focus on safety. We strive to keep our customers, the communities we serve and our employees safe every day. In order to keep our system safe, the Company is investing and will continue to invest in upgrading and modernizing the infrastructure from which we serve our customers.

Additionally, since we are geographically located on top of the second largest known natural gas reserve on the planet, the Company prioritizes and supports the utilization of the available and affordable energy supply we have right here in Southwestern Pennsylvania. We work with producers and customers as well as economic leaders to optimize the incredible asset of natural gas for the benefit of this Commonwealth and Southwestern Pennsylvania. Helping customers understand the environmental and economic benefits of natural gas is a key part of our mission.

At the same time that we are delivering safe and reliable natural gas service, we are also working to reduce our methane emissions and our overall impact on the environment with our leak reduction and pipeline replacement work and other projects. We continue to partner with leaders at the local and state levels to drive both economic development in this region but also environmentally conscious initiatives to help us all reach our emissions reduction goals.

Infrastructure Investment

Q. PLEASE EXPLAIN THE COMPANY'S INFRASTRUCTURE INVESTMENTS.

A. The Peoples Companies, and their predecessor companies, have had Long Term Infrastructure Improvement Plans ("LTIIPs") in place since 2013. The most-recently approved version is a Combined Distribution LTIIP that encompasses infrastructure modernization for both the Peoples Natural Gas and Peoples Gas Divisions. The current approved Combined Distribution LTIIP approved in January of 2021 targeted the replacement of 871 miles of at-risk pipe for a total cost of approximately $1.512 billion related to mains and services.

Q. ON WHAT DOES THE COMBINED DISTRIBUTION LTIIP FOCUS?

A. Peoples' Second Combined Distribution LTIIP maintains its commitment to replace all at-risk pipelines over an approximately 20-year period. The current LTIIP focuses primarily on removing bare steel and cast/wrought iron from the Company's system. Typically, the highest risk pipes are mainly located in urban areas, which have the highest concentration of customers being served. These pipe replacement projects are much more costly per mile than the rural pipe replacement projects due to the significant paving and restoration work associated with the urban projects. In addition, and of growing importance to all of us, our LTIIP focuses on the mitigation and elimination of methane impacts on the quality of air. The Company is committed to reducing its overall emissions by 60% from its 2019 baseline, by 2034. The LTIIP work is one of the major ways the Company will meet its emissions reduction goals.

Q. WILL THE COMPANY CONTINUE TO INVEST IN THE MODERNIZATION OF ITS INFRASTRUCTURE AND WHY?

A. Yes, Peoples is committed to continue its investment in infrastructure modernization for many years to come. Through its capital pipeline work, the Company will systematically replace older and more vulnerable sections of its pipeline made of leak-prone materials in order to reduce its overall scope 1 greenhouse gas emissions. Moreover, the Company's infrastructure modernization programs allow the Company to maintain the reliability and integrity of its natural gas system for the safety of its customers and the environment.

Witness Paul Becker further details the Company's work and spend on pipeline modernization.

Weather Normalization Adjustment

Q. PLEASE BRIEFLY EXPLAIN THE COMPANY'S WNA PROPOSAL.

A. In this proceeding, the Company is requesting a Weather Normalization Adjustment ("WNA") mechanism. With this mechanism, the Company will adjust the customer delivery charges based on normal historic weather patterns. For example, if the weather a customer experiences is colder than normal weather, through a WNA mechanism, that customer would receive a credit on their bill. Alternatively, if the weather a customer experiences is warmer than normal, then that customer would receive an additional charge on their bill. A WNA mechanism provides customers with more predictable winter bills and in turn stabilizes Company revenues for that same period of time. For more information about the Company's WNA proposal and the mechanics of the mechanism, please see the testimonies of Ralph Zarumba and Carol Scanlon.

Q. WHAT ARE THE BENEFITS OF A WNA MECHANISM?

A. A WNA mechanism has benefits for both the customer and the Company. The Company is able to bring in steady, predictable revenue while in turn, the customer is afforded stable distribution charges during typically high usage winter months. A WNA mechanism reduces some of the volatility associated with weather on a customer's bill.

Q. DOES ANYONE ELSE USE A WNA MECHANISM?

A. Yes. There are four other Pennsylvania gas utilities with WNA mechanisms – PGW, Columbia, National Fuel and UGI. Additionally, there are WNA mechanisms approved or proposed in 40 states in the United States. For more information about our proposed WNA mechanism please see the testimonies of Carol Scanlon and Ralph Zarumba.

Q. WHY SHOULD THE COMMISSION APPROVE THE COMPANY'S WNA MECHANISM?

A. The Commission should approve the Company's WNA mechanism as it benefits both the customer and the Company to reflect normal weather for distribution charges on a monthly billed basis. Additionally, as the Company is engaged in modernizing its infrastructure, it is important to keep utility revenues as stable as possible in order to attract the capital necessary to fund its modernization programs.

Customer Service

Q. PLEASE EXPLAIN THE COMPANY'S GOALS WITH RESPECT TO CUSTOMER SERVICE.

A. One of our primary goals has been to focus on and continually improve our customer service, and I am happy to be able to testify that we have been successful in this area. Peoples has objective targets for measuring customer service including certain call center metric targets and metrics related to customer complaints and the Company's response to such complaints. Overall, the Company as a whole has embraced the principle that people who care about what they are doing will provide a more efficient and higher quality of service to customers. Our employees are proud to work for the Company and they

recognize the importance of their services to the region where they live. They see themselves as neighbors helping to make their neighbors' lives better, which is a long-term core value for our Company in the communities we serve.

Q. WHAT HAS BEEN PEOPLES' PERFORMANCE REGARDING CUSTOMER SERVICE?

A. Since Peoples Natural Gas Company LLC's last base rate proceeding in 2019, Peoples has made great strides to improve customer service goals and our success is reflected in the Annual Customer Service Performance Report[2] published by the Commission. Some of the highlights from the 2022 report are as follows:

- **Highest Service Level at 85%. (**Goal was 82%.)
- **Lowest Abandon Rate at 3%.** (Regulatory goal was 2%. The average for all gas companies combined was just under 9% for reference.)
- **2nd Highest IVR Score at 78%** (Average for all companies was 78%)
- **Highest Rep Satisfaction at 94%** (Average for all companies was 92%)
- **Highest Rep Courtesy at 97%** (Average for all companies was 95%)
- **2nd Highest Rep Knowledge at 93%** (Average for all companies was 92%)
- **Highest Overall Satisfaction at 91%** (Average for all companies was 88%)

Q. CAN YOU PROVIDE EXAMPLES OF PEOPLES PROVIDING QUALITY CUSTOMER SERVICE?

A. Yes, as demonstrated in the PUC's Annual Utility Consumer Report and Evaluation for 2022[3] Peoples provided excellent service. The report provides information on each utility's performance in handling complaints. The three main areas covered in the report are: Consumer Complaints, Payment Arrangement Requests ("PAR") and Compliance with

[2] https://www.puc.pa.gov/media/2566/2022-customer-service-performance-report-final-092623.pdf

[3] https://www.puc.pa.gov/media/2606/2022-ucare-final-version.pdf

Commission regulations. As shown in the table below, Peoples' Consumer Complaint Rate for both divisions was lower than the Pennsylvania NGDC average.

	Consumer Complaint Rate	Justified Consumer Complaint Rate	Percent of Justified Consumer Complaints
Peoples	0.58	0.02	3.8%
NGDC Average	0.86	0.12	13.7%

Further, Peoples responds promptly to consumer complaints received by the PUC as demonstrated by the following table:

2019-22 Average Response Time to BCS
Residential Consumer Complaints
Major Natural Gas Distribution Companies

Utility	Number of Days			
	2019	2020	2021	2022
Columbia	6.9	9.6	10.3	8.2
NFG	12.9	11.2	13.6	16.9
Peoples+	3.6	3.4	4.8	4.6
Peoples-Equitable+	3.8	n/a	n/a	n/a
PGW	14.8	10.5	21.2	19.8
UGI Gas++	11.3	8.8	7.6	10.7
UGI North++	11.9	n/a	n/a	n/a
Average	**11.2**	**8.4**	**13.0**	**14.2**

+ Due to the Peoples Natural Gas merger, effective Jan. 1, 2020, the Peoples data includes Peoples-Equitable.
++ Due to the UGI Gas merger, effective Jan. 1, 2020, the UGI Gas data includes UGI Central and UGI North.

Peoples also treats customers fairly with respect to payment arrangement requests (PAR), having the lowest justified PAR rate of its NGDC Peers. The following table shows that Peoples' PAR Rate, Justified PAR Rate and Percent of Justified PARs are significantly less than the average NGDC rates:

2022 Residential Payment Arrangement Request (PAR) Rates,
Justified PAR Rates, and Percent of Justified PARs
Major Natural Gas Distribution Companies

Utility	PAR Rate	Justified PAR Rate	Percent of Justified PARs
Columbia	1.35	0.04	3.1%
NFG	1.79	0.07	3.7%
Peoples	1.71	0.03*	1.5%*
PGW	8.21	1.43*	17.5%*
UGI Gas	5.49	0.14*	2.5%*
Average	**3.71**	**0.34**	**8.9%**

* Based on a probability sample of complaints

Finally, Peoples' infraction rates remain very low in the Commonwealth and the Company is tied with Columbia Gas of Pennsylvania for the lowest rate in 2022 as shown below:

Commission Infraction Rates*
Major Natural Gas Distribution Companies

Utility	2019	2020	2021	2022
Columbia	0.00	0.00	0.03	0.02
NFG	0.07	0.06	0.16	0.10
Peoples+	0.01	0.01	0.06	0.02
Peoples-Equitable+	0.03	n/a	n/a	n/a
PGW	0.18	0.28	0.47	0.83
UGI Gas++	0.14	0.04	0.13	0.18
UGI North++	0.25	n/a	n/a	n/a

* The infraction rate is the number of informally verified infractions per 1,000 residential customers. Dividing per 1,000 customers normalizes the data for comparison purposes. The infraction rate is not a percentage.
+ Due to the Peoples Natural Gas merger, effective Jan. 1, 2020, the Peoples data includes Peoples-Equitable.
++ Due to the UGI Gas merger, effective Jan. 1, 2020, the UGI Gas data includes UGI Central and UGI North.

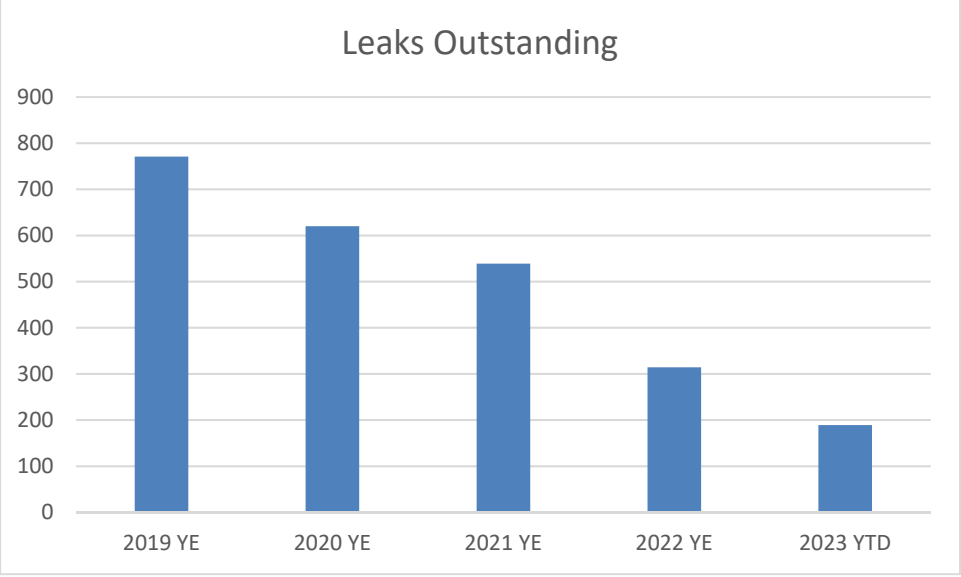
Operations and Safety Performance

Q. PLEASE EXPLAIN THE COMPANY'S GOALS WITH RESPECT TO OPERATIONS AND SAFETY?

A. As previously mentioned, safety is the Company's top priority. As such, the safe operation of our system is what our Company focuses on every day. Some of the ways the Company measures its operational safety performance include outstanding leaks, emergency response and pipeline safety compliance. As demonstrated below, the Company is working hard to achieve its operations and safety performance.

Q. CAN YOU PROVIDE EXAMPLES OF PEOPLES' OPERATIONAL AND SAFETY PERFORMANCE?

A. Yes. As demonstrated by the following table, the Peoples team has worked hard and continues to work hard to reduce the outstanding leaks on its system. Since 2019, the Company has reduced its outstanding leaks (Grade 1 and 2) from more than 700 in 2019 to less than 200 as of November, 2023.



Regarding Emergency Response times, the Company has successfully reduced its results with respect to "average minutes to respond" and also met its goals for "% response within 60 minutes." The following table demonstrates 2020-2022 results for both categories:

AVERAGE RESPONSE TIME TO POTENTIAL GAS EMERGENCIES

	2022	2021	2020
Average minutes to respond	24.2	24.3	25.0
% Response within 60 minutes	98.6	98.7	98.3

Lastly, the Company has achieved success with respect to gas safety compliance. In 2023, the Commission has conducted 160 audits of field operations and associated records, finding no violations, fines or citations. In 2023, the Pipeline Safety Division of the Commission's Bureau of Investigation and Enforcement did issue three letters of potential Non-Compliance (NC letters) to the Company that recommended minor revisions to procedures and policies to enhance the pipeline safety performance. The Company is working with the Pipeline Safety Division to incorporate its suggestions into the Company's standard operating procedures. The following table demonstrates the number of NC letters and reportable incidents the Company had since 2019:

	2019 YE	2020 YE	2021 YE	2022 YE	2023 YTD
NC Letters	3	5	9	3	2
Reportable Incidents	2	2	2	3	1

For more information on the Company's operations and safety programs, please see the testimony of Company witness Edward Palombo.

Economic Development

Q. EARLIER YOU TESTIFIED THAT PEOPLES WILL REMAIN FOCUSED ON DRIVING ECONOMIC DEVELOPMENT AND JOB CREATION IN WESTERN PENNSYLVANIA. WHY IS THIS IMPORTANT TO PEOPLES?

A. Peoples serves more than 700,000 customers and over two million people in Southwestern Pennsylvania. Each customer represents at least one individual, but most represent more than that – perhaps a family or a business with employees. Peoples will only continue to be successful if its service to customers remains safe and reliable. I believe that Peoples can help make this happen with our focus on modernizing infrastructure. To complete our modernization work, we need people. Our work is creating jobs at Peoples with businesses that help us serve our customers and run our Company. Further, Peoples is committed to not only creating jobs but helping to sustain the jobs and retain the key talent employed in those positions.

Despite the challenges the Company faced during the COVID-19 pandemic with regard to recruiting and retaining talent, the Company managed to mitigate turnover and create additional jobs through its pipeline capital work programs. Our LTIIP alone has created significant employment opportunities beyond any project in the Company's long history. For example, in 2023, the Company's LTIIP program required 70 different pipeline crews to complete its work. Our work creates jobs for both internal positions as well as positions outside the company for people employed by contractors engaged to help execute the Company's program. The vast majority of these jobs are good paying union positions including positions in the building trades in the region.

In the same way that Peoples supports job creation in its service territory, Peoples continues to support and encourage local production of natural gas in whatever ways we can. Our commitment to bring our customers gas supply from locally drilled gas wells has driven more jobs for local drilling companies and related activities. We consider the local producers on our system as partners in making sure this region and our Commonwealth realize the full economic benefits of having this incredible abundance of gas supply right beneath our feet.

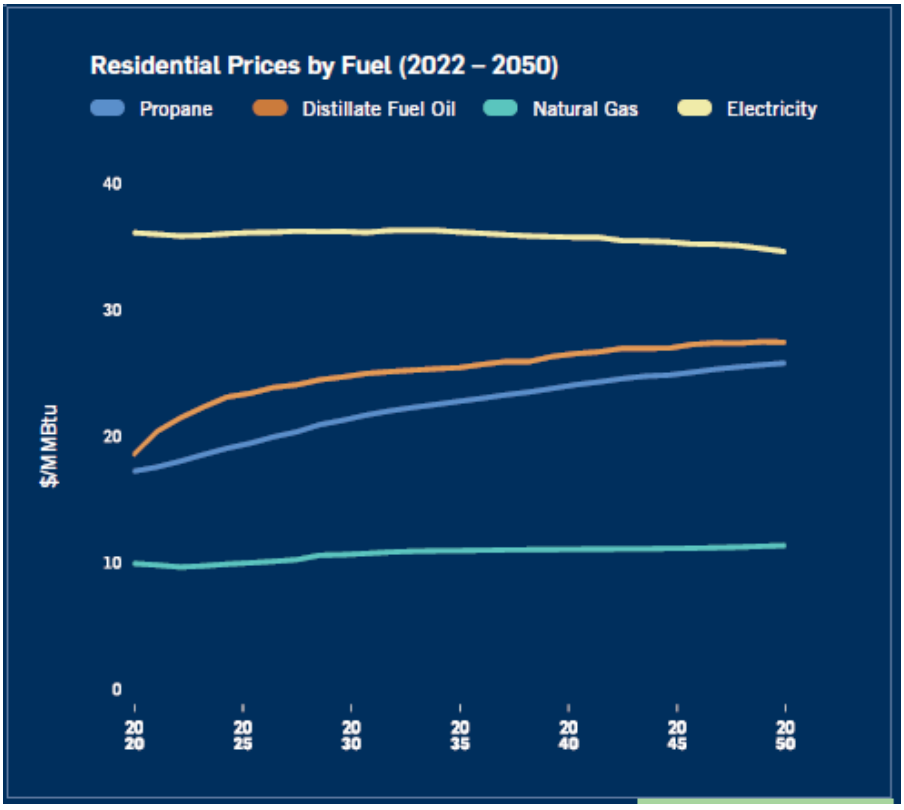
Affordability

Q. HOW DO CUSTOMERS BENEFIT FROM BEING LOCATED WITHIN PEOPLES' SERVICE TERRITORY?

A. Peoples' customers benefit from the fact that the Company is uniquely and strategically positioned within the Marcellus Shale region which affords both the Company with an opportunity to purchase and customers with an opportunity to avail themselves of an affordable natural resource – natural gas. The combination of this region's abundant natural gas resources, competitive marketplace and well-developed infrastructure collectively contributes to the comparatively lower natural gas prices in the western Pennsylvania region compared to other parts of the country. For example, natural gas purchased within the Peoples footprint has traditionally traded (over the past several years) at a negative basis differential of approximately $1.00 per Mcf as compared to the benchmark Henry Hub price used as a standard pricing reference in many regions of the country. That cost differential allows Peoples to purchase gas for our customers at a lower

price which provides them with an affordable energy solution. Further, lower gas costs have helped to maintain affordable rates for our customers at the same time that we have been increasing modernization efforts to provide a safer and more reliable system for our customers.

We continue to educate our customers and the businesses we serve on seeing the economic value in using natural gas for their energy needs. Natural gas is more affordable than other home energy sources. For example, according to the American Gas Association ("AGA")[4], for residential customers, natural gas will cost *significantly* less than other fuels for many years to come (emphasis added). The table below demonstrates that natural gas will be a cost-effective choice for consumers through 2050:



[4] https://playbook.aga.org/share/residential-prices

Moreover, in August of 2023, the Department of Energy published analysis which shows the affordability of natural gas – with natural gas being two to three times more affordable than other energy sources for the same amount of energy delivered[5].

As such, Peoples is committed to boosting economic development in this region by job creation, job retention and by way of providing a cost-effective, geographically available essential resource – natural gas – to Southwestern Pennsylvania consumers.

Community

Q. PLEASE EXPLAIN THE PEOPLES COMPANIES' COMMITMENT TO THE COMMUNITIES THEY SERVE.

A. Community involvement is not only one of the Peoples Companies' stated core values, it is how we have become recognized in the communities we serve as a true community leader. In a time when governmental support is becoming more challenging at both the federal and state levels, the need for social services in our region continues to grow. The Peoples Companies make financial commitments to organizations that serve our service territory communities - both large organizations and small. Some examples of organizations we support are the Greater Pittsburgh Food Bank, United Way, Leukemia/Lymphoma Society, Dollar Energy Fund, March of Dimes, Salvation Army and Greater Pittsburgh Literacy Council.

One of the key values our employees have embraced is the need to support the communities we serve. I am proud to say that we have a very active Volunteer Activities Committee and many of our employees volunteer on the boards of community

[5] https://www.govinfo.gov/content/pkg/FR-2023-08-28/pdf/2023-18532.pdf

organizations. A large number of Peoples' corporate donations are made to organizations in which our employees are actively involved or actively support.

This includes giving time and money to help those in need. We offer ongoing volunteer events such as collecting and packing food in partnership with local food banks, restoring and protecting urban forests with Tree Pittsburgh, mentoring youths through Big Brothers Big Sisters and providing winter outwear for children with the Salvation Army's Project Bundle Up. This is helping our customers to see us differently, as something other than a company who sends them a bill every month for their utility services, and at the same time building a pride in the employee ranks that we have not seen before.

Management Effectiveness

Q. DO YOU BELIEVE THAT PEOPLES' ACTIVITIES THAT YOU HAVE DISCUSSED IN THIS TESTIMONY SHOULD HAVE ANY IMPACT ON THE RESULT OF THIS RATE CASE?

A. Yes, I do. We all know that in deciding these cases, the presiding Administrative Law Judge and then the Commission consider many conflicting positions and, with respect to the authorized return on common equity, often end up with a range of returns recommended by various experts from which an authorized return is selected. Peoples' success in many of the areas I have discussed in this testimony - improving its customer service and accelerating pipeline replacements, bringing jobs to its service territory, and demonstrating that Peoples is a valuable corporate citizen – should lead the decision makers to authorize a 0.25% addition to the determination of the return on common equity proposed by Mr.

Moul to bring it to the high end of the range of returns being considered. Peoples has become a critically valuable business to the region and to the state. Its impact has made a positive difference in the lives of people and the prosperity of its customers in many ways. We believe our importance will continue to grow into the future.

Q. TO WHAT DO YOU ATTRIBUTE THE SUCCESS THAT PEOPLES HAS ACHIEVED?

A. To attain these results, Peoples' employees have shown great skill, innovation and dedication, but they would not be able to do their jobs as successfully as they have if Peoples does not have access to capital to improve Peoples' facilities and service. I am confident that I can continue to lead and motivate Peoples' employees to improve Peoples. A results-based return on capital will encourage continued financial support for that improvement.

Our investors have the ability and the interest to fund the necessary additional equity needed to modernize our critical natural gas infrastructure. The outcome of this rate case will send a clear message to our investors and, just as importantly, to the investment community in general on how this Commonwealth views critical infrastructure investment and service to customers. It is critically important at this time to provide a positive message to that important stakeholder group that Pennsylvania is a good place to invest.

Conclusion

Q. WILL PEOPLES' PRIORITIES CHANGE IN THE FUTURE?

A. Yes and no. Peoples will not change its core values of Safety, Reliability, Integrity, Respect and Operational Excellence. Peoples will continue to prioritize employee and public safety, customer service, community involvement, economic development, and conducting its business in the correct way. These priorities will remain unchanged. How we provide our services may change regularly with advances in technology, innovation as well as changes in our customer expectations and their needs. Within this framework, our primary focus will continue to be on providing safe and reliable service while maintaining high quality customer service and making improvements to our infrastructure through pipeline replacement and modernization.

Q. WHY IS A RATE INCREASE NECESSARY FOR PEOPLES AT THIS TIME?

A. Peoples filed this base rate proceeding to satisfy a settlement commitment as part of a settlement in its tax repairs election proceeding. Specifically, Peoples was required to file this base rate proceeding by the end of 2023. Additionally, this was also filed as Peoples' continuing investment in its infrastructure is driving the need for an increase in base rates. Peoples is experiencing higher costs resulting from increases in both its plant in service and expenses related to the operating and maintenance of its system. Without a base rate increase, Peoples' revenues will no longer be adequate to cover its costs to provide service and to offer an opportunity to earn a fair rate of return on Peoples' investment.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does. I reserve the right to submit supplemental testimony as additional issues arise during the course of this proceeding. Thank you.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	Docket No. R-2023-3044549
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED DIRECT TESTIMONY OF
ANDREW P. WACHTER
DIRECTOR OF FINANCE AND REGULATION
PNG COMPANIES LLC

DATE SERVED: December 29, 2023
DATE ADMITTED: _____

Peoples Statement No. 2

PREPARED DIRECT TESTIMONY OF
ANDREW P. WACHTER

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Andrew P. Wachter, and my business address is 375 North Shore Drive, Pittsburgh, Pennsylvania 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed as Director, Finance and Regulation for PNG Companies LLC ("PNG"). I provide services to Peoples Natural Gas Company LLC ("Peoples" or the "Company") and its two divisions: the Peoples Natural Gas Division ("PNGD") and the Peoples Gas Company Division ("PGD"). As Director, Finance and Regulation, I oversee the Rates and Regulatory department and the Financial, Planning and Analysis department at Peoples and its affiliates.

Q. PLEASE DESCRIBE YOUR PROFESSIONAL BACKGROUND AND EMPLOYMENT EXPERIENCE.

A. I graduated from Duquesne University in 2000 with a Bachelor of Science Degree in Accounting. I also obtained a Masters in Business Administration from Duquesne University in 2001. After graduation, I was employed as an Auditor with Deloitte and Touche LLP. In September 2004, I joined T. W. Phillips Gas and Oil Co., the predecessor to Peoples Gas Company LLC ("Peoples Gas") as the Assistant Controller and was ultimately promoted to the Vice President of Finance and Rates. In June 2012, I assumed the position of Manager, Rates and Regulatory as the result of a post-acquisition reorganization. After that I held multiple roles until I was named Director, Finance in

February 2016. In 2018, I assumed regulatory responsibilities in addition to my financial responsibilities and my title was changed to Director, Finance and Regulation. I am a Certified Public Accountant, having obtained my certificate in Pennsylvania in 2004.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION (THE "COMMISSION")?

A. Yes. I have submitted Testimony in various base rate cases, purchased gas cost cases and other proceedings on behalf of Peoples and Peoples Gas Division and its predecessor companies. I have also testified for Peoples Gas WV LLC before the West Virginia Public Service Commission.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to explain the overall rate case organization and identify Peoples' overall revenue requirement for non-gas costs. I will also discuss the following items:

- The recent merger of the Peoples Gas Company into the Peoples Natural Gas Company;
- Identify and explain Peoples' operating and maintenance expenses for the test years relevant to this proceeding and, where helpful, the individual components of those expenses;
- The Company's proposal for a Weather Normalization Mechanism;
- The Company's proposals related to the Rider TCJA – TCJA Temporary Surcharge on PGD; and
- The Company's proposals related to Tax Repairs;

There are three relevant test years: the historic test year ("HTY"), which covers the period September 1, 2022 through August 31, 2023, the future test year ("FTY") which covers the period September 1, 2023 through August 31, 2024, and the fully projected future test year ("FPFTY") which covers the period October 1, 2024 through September 30, 2025.

MERGER

Q. PLEASE EXPLAIN THE MERGER WHICH RECENTLY OCCURRED.

A. Effective January 1, 2023, Peoples Gas Company LLC ("Peoples Gas") was merged with and into Peoples Natural Gas, with Peoples Natural Gas being the surviving entity and Peoples Gas becoming an operating division of Peoples Natural Gas (the "Merger"). The Merger was approved by an Order of the Commission entered on August 25, 2022 at Docket Nos. A-2021-3029831 and A-2021-3029833.

Because Peoples Gas was merged into Peoples Natural Gas with Peoples Natural Gas being the surviving entity, Peoples Natural Gas retained all of the service rights and certificates of public convenience of Peoples Gas and ownership interests in Peoples Gas's property. PNG Companies previously owned Peoples Gas as a wholly owned separate subsidiary and continues to be the sole direct owner of all membership interests in Peoples Natural Gas following the Merger.

At the effective time of the Merger, Peoples Natural Gas assumed all the debt that Peoples Gas has outstanding with PNG Companies (the "Debt Assumption"). The terms and conditions of the debt assumed by Peoples Natural Gas did not change. The principal amount of the total debt outstanding at Peoples Natural and Peoples Gas was unchanged by the Proposed Merger.

Q. WHAT WAS THE EFFECT OF THE PROPOSED MERGER ON BASE RATES?

A. With the exception of changes described herein, the base tariff rates of Peoples Natural Gas and of Peoples Gas in effect at the time the Proposed Merger remained in effect following the Merger. Following the Merger, the base rates of Peoples Natural Gas and Peoples Gas were maintained separately with separate accounting for each Division. The only changes to rates made in conjunction with the Merger and the Application were to merge each of the Purchased Gas Cost ("PGC") rates and the Merchant Function ("MFC") and Gas Procurement ("GPC") charges of Peoples Natural Gas and Peoples Gas, effective October 1, 2022. Upon closing, the existing tariff of Peoples Gas was adopted as the tariff of the Peoples Gas Division of Peoples Natural Gas. As part of this proceeding we are recommending a complete merger of the rates of Peoples Natural Gas and the Peoples Gas Divisions and the creation of a unified tariff. Please refer to Statement No. 15 - the Direct Testimony of Ralph Zarumba for further discussion on the merger of rates and Statement No. 11 – the Direct Testimony of Dawn Folks for further discussion on the tariff unification.

Q. WHAT WAS THE EFFECT OF THE PROPOSED MERGER ON GAS COST RATES?

A. In the Merger, the Commission approved the merger of the PGC rates of Peoples Natural Gas and Peoples Gas so that, effective October 1, 2022, Peoples Natural Gas and Peoples Gas, with the exception of Peoples Natural's Allegheny Valley Connector ("AVC") capacity charge. As a result, all customers of Peoples are charged the same PGC rate components, balancing charges and retainage rates to their respective customers, other than

the AVC charge. Effective October 1, 2022, gas supplies under gas purchase agreements were purchased for the combined use and benefit of customers of the Peoples Natural Gas Divisions, as were pipeline services under interstate pipeline service agreements. In short, for both 1307(f) ratemaking and gas supply acquisition purposes, the two Divisions were treated as one. Beginning in April of 2023 Peoples Natural Gas and Peoples Gas began making a single annual 1307(f) filing, that included the gas procurement plans and purchased gas costs for the combined Peoples Natural Gas and Peoples Gas Divisions. As part of this proceeding we are recommending that the AVC capacity charge be applied to customers of both the Peoples Natural Gas and the Peoples Gas Divisions. Please refer to Statement No. 3 - the Direct Testimony of Carol Scanlon for further discussion on AVC.

RATE CASE ORGANIZATION

Q. HOW HAS PEOPLES ORGANIZED THIS RATE CASE?

A. Consistent with the last Peoples Natural Gas Company case, we have organized the filing by topics, instead of the previous numerical method. The below table summarizes how the information is structured in this case by exhibit. Within each exhibit, there are schedules and attachments to further organize the information. While the filing requirements are still listed in each response, the Company's witnesses will be referring to the filing requirements by their corresponding exhibit and schedule numbers. Where applicable, information is provided for the HTY, FTY and FPFTY in one response.

Exhibit 1	Balance Sheet
Exhibit 2	Income Statement
Exhibit 3	Revenues
Exhibit 4	O&M Expenses
Exhibit 5	Depreciation Study

Exhibit 6	Taxes other than Income Taxes
Exhibit 7	Income Taxes
Exhibit 8	Rate Base
Exhibit 9	Depreciation
Exhibit 10	Sales
Exhibit 11	Cost of Service
Exhibit 12	Gas Planning
Exhibit 13	General
Exhibit 14	Tariffs
Exhibit 15	System
Exhibit 16	Capitalization
Exhibit 17	COS Standard Data Requests
Exhibit 18	ROR Standard Data Requests
Exhibit 19	RR Standard Data Requests
Exhibit 20	Testimony

An index of all information provided can be found in Exhibit 13, Schedule 1.

Q. HOW IS THE INFORMATION FOR THE PEOPLES NATURAL GAS AND PEOPLES GAS DIVISIONS PRESENTED IN THIS CASE?

A. Where applicable, Peoples has provided information for each requirement on both a divisional and combined basis. To avoid duplicative responses for certain filing requirements, the Company has provided a combined answer for both divisions on questions where the answer would be identical for each Division.

Please note that the Divisions themselves are referred to in various ways. For example, the Peoples Natural Division may be referred to as Peoples Natural, PNG or PNGD and the Peoples Gas Division may be referred to as Peoples Gas, PG, or PGD.

OVERALL REVENUE REQUIREMENT

Q. WHAT IS THE ADDITIONAL PROPOSED NON-GAS COST RECOVERY IN THIS PROCEEDING?

A. Approximately $156 million of additional revenues are required in order for Peoples to recover its non-gas costs. This is the additional non-gas cost revenue requirement above our current non-gas revenues.

Q. WHAT DO YOU MEAN BY THE TERM NON-GAS COST REVENUE REQUIREMENT?

A. Peoples' non-gas costs are the costs incurred to provide public utility service, other than the cost of natural gas that is normally recovered in the Commission's 1307(f) proceedings.

Q. HOW WAS THAT AMOUNT DETERMINED?

A. The Company's non-gas revenue requirement is the sum of the individual cost components introduced and supported by the other witnesses in this proceeding and me. These individual components include: (1) operation and maintenance expenses, which I explain below; (2) depreciation and amortization expense and negative salvage expense to which witness John Spanos has testified (**Peoples Statement No. 14**); (3) taxes other than income taxes supported by witness Rudolph Hanechak (**Peoples Statement No. 10**); (4) a return allowance which is the product of an overall rate of return of 11.75%, to which witness Paul R. Moul has testified (**Peoples Statement No. 13**), rate base supported by witness Dawn Folks (**Peoples Statement No. 11**); and (5) federal and state income taxes to which witness Christine Saball has testified (**Peoples Statement No. 6**).

Q. CAN YOU SUMMARIZE THE REVENUE REQUIREMENT?

A. Yes. Below is a table which summarizes the major components of our non-gas revenue requirement necessary to recover our FPFTY expenses and a fair return on plant investment at the end of the FPFTY as compared to our revenue at present rates.

Revenue Requirement		
Equity Return	$	270,179,758
Interest Expense		84,085,080
Depreciation		134,219,598
Expenses and TOTI		242,363,973
Gas Costs		317,688,615
Income Taxes		(59,295,392)
Revenue Requirement	$	989,241,631
Revenue at Current Rates		833,215,508
Requested Rate Increase	$	156,026,122

Q. WHAT EXHIBIT PROVIDES THE REVENUE REQUIREMENT?

A. Exhibit 2, Schedule 4 (53.53.III.A.17) provides the income statement for both divisions and combined for each period in the case (HTY, FTY and FPFTY) at present and proposed rates (pages 2-4). Further, page 5 of this exhibit provides a calculation of proforma interest expense, page 6 provides rate of return on rate base including the derivation of the gross revenue conversion factors and page 7 provides the derivation of the adjustments to proposed rates necessary to derive projected rates for the combined Company. This results an overall increase in revenues of $156,026,122.

O&M EXPENSE

Q. ARE YOU SPONSORING ANY EXHIBITS AS PART OF YOUR TESTIMONY?

A. Yes, I am sponsoring the main O&M claim schedule, **Peoples Exhibit 4, Schedule 1** ("Ex. 4, Sch. 1"), along with the filing requirements and standard data requests identified in Appendix A to this testimony.

Q. WHAT ARE PEOPLES' TOTAL FPFTY OPERATING AND MAINTENANCE EXPENSES AT PROPOSED RATES?

A. Operating and Maintenance expenses at proposed rates for the FPFTY is $227,010,806 on a combined basis[1], as shown in the income statement presented at **Exhibit 2, Schedule 4** (filing requirement 53.53 III.A.17). This includes $223,598,704 of expense at present rates which is presented **Ex. 4, Sch. 1** and $3,412,102 of additional uncollectible expense as derived at **Exhibit 2, Schedule 4**.

Q. PLEASE DESCRIBE THE PROCESS BY WHICH YOU DETERMINED THE FPFTY OPERATING AND MAINTENANCE EXPENSES.

A. I started with the "per books" operating and maintenance expenses of $192,351,147 for the HTY as shown on **Ex. 4, Sch. 1 Page 2**, and I made HTY, FTY and FPFTY adjustments to determine the "normal" level of operating and maintenance expenses of $203,964,225 for the HTY, of $207,039,623 for the FTY and of $223,598,704 for the FPFTY. These adjustments were made after reviewing Peoples' actual expenses and obtaining additional information from department heads.

Q. WHAT IS THE HTY ADJUSTMENT FOR LABOR ON PAGE 5 OF EX. 4, SCH. 1?

[1] The combined results of Peoples Natural Gas – Peoples Natural Gas Division and Peoples Gas Division will be referred to throughout this testimony as the Company is proposing to combine these rates in this proceeding.

A. The HTY Labor adjustment is $7,422,979. This was determined by starting with the Full Time Equivalents ("FTEs") complement on board at August 31, 2023 and annualizing the labor costs associated with those FTEs at our current wage rates (Lines 1-3) net of capitalization (Line 4) to derive an adjustment to the HTY (Line 5).

Q. DO THE NORMALIZED LABOR COSTS REFLECT THE IMPACTS OF THE SERVICE AGREEMENT BETWEEN PEOPLES AND PNG AND OTHER SUCH AGREEMENTS?

A. Yes, the normalized labor costs reflect the impacts of the Service Agreement between Peoples and PNG as well as the Second Amended Operational Service Agreement by and among Peoples and various affiliates both approved by the Commission in 2018. Under these agreements administrative employees are hired at PNG and perform work for PNG's various affiliates. In addition, operational employees in Pennsylvania are hired at Peoples Natural and perform work for other affiliates (primarily Peoples Gas Division). The impacts of these agreements can be seen primarily in the Labor and Benefits expenses.

Q. IN LIGHT OF THE SERVICE AGREEMENT BETWEEN PEOPLES AND PNG AS WELL AS THE SECOND AMENDED OPERATIONAL SERVICE AGREEMENT DISCUSSED ABOVE HOW ARE YOU GOING TO ADDRESS NUMBER OF EMPLOYEES?

A. Pursuant to these agreements, employees are hired at PNG or Peoples and perform work for affiliates as well as for the Company. Thus, I will provide the actual number of employees expected to be hired across the companies as well as the FTE anticipated to be

charged to Peoples. To be clear, the costs claimed in this proceeding include only costs expected to be incurred by Peoples and do not include any costs for its affiliates.

Q. WHAT ARE THE FTY ADJUSTMENTS FOR LABOR ON PAGE 5 OF EX. 4, SCH. 1?

A. The adjustments for the FTY (Lines 7-13) were derived by starting with the annualized HTY labor of $62,604,088 on a combined basis and making three types of adjustments. First, we added anticipated merit increases for the FTY period (Columns 4-6) based upon recent history. Second, we added in expected union job progression and anticipated normal salaried promotion increases (Columns 7-9). Third, we adjusted for routine/normal vacancies as of the end of the HTY as well as added the salaries related to incremental FTE additions expected in the FTY.

Q. PLEASE EXPLAIN YOUR TREATMENT OF ROUTINE OR NORMAL POSITION VACANCIES.

A. Routine and/or normal position vacancies which occur as a result of terminations or retirements were assumed to be filled by employees with equivalent pay or by temporary employees while the positions are being filled. The associated amounts are included in FTY Adjustments (Columns 10-12). These amounts are net of a vacancy credit.

Q. PLEASE EXPLAIN THE VACANCY CREDIT ADJUSTMENTS INCLUDED IN THE FTY and FPFTY.

A. Although the Company is seeking to fill all positions that are currently open, a certain level of vacancies is expected during the FTY the FPFTY. The Company estimates that 29 FTEs

and 8 FTEs will be vacant on average during the FTY and FPFTY, respectively. The Company has experienced higher average vacancies since COVID but expects to be at pre-COVID average vacancy levels by September 30, 2025, the end of the FPFTY.

Q. WHAT ARE THE FPFTY ADJUSTMENTS FOR LABOR ON PAGE 5 OF EX. 4, SCH. 1?

A. The adjustments for the FPFTY (Lines 14-19) were derived by starting with the annualized FTY labor of $64,552,792 on a combined basis and making three types of adjustments. First, we added anticipated merit increases for the FPFTY period (Columns 4-6) based upon recent history. Second, we added in expected union job progression and anticipated normal salaried promotion increases (Columns 7-9). Third, we adjusted for the filled vacant positions expected in the FPFTY and added the salaries related to these positions.

Q. CAN YOU EXPLAIN THE EMPLOYEES ADDED BEYOND FILLING EXISTING VACANCIES IN THE FTY AND FPFTY?

A. The Company did not add any such positions.

Q. WHAT IS THE TOTAL FTE COMPLEMENT INCLUDED IN YOUR FPFTY LABOR EXPENSES?

A. The Company's projected FTE complement is based on the organization proposed by the department heads. This level increases the FTE equivalent staffing level for Peoples to 1,465, our FPFTY FTE count in this proceeding.

Q. EXPLAIN THE O&M LABOR PERCENTAGE UTILIZED ON THE LABOR SCHEDULES.

A. We developed the O&M labor percentage based upon payroll information during the period from September 1, 2022 through August 31, 2023 and an evaluation of the new labor added and the type of work they will perform.

Q. IS THE ALLOCATION OF LABOR COSTS BETWEEN THE PEOPLES NATURAL GAS AND PEOPLES GAS DIVISIONS CONSISTENT WITH THE PREVIOUSLY MENTIONED AGREEMENTS?

A. Yes. The labor costs in this case reflect the impacts of the Service Agreement between Peoples and PNG as well as the Second Amended Operational Service Agreement by and among Peoples and various affiliates.

Q. WHAT IS THE BASIS FOR THE SHORT-TERM INCENTIVE PROGRAM ("STI") AND INCENTIVE COMPENSATION CLAIM ON PAGE 6 OF EX. 4, SCH. 1?

A. First the Company normalized and annualized the per books incentive compensation to the amounts based upon the complement of FTEs on board as of the end of the HTY (Lines 1-5). Then the Company made an adjustment to the FTY (Line 11) and the FPFTY (Line 17) to reflect the incentive compensation based upon the FTEs and their associated compensation projected in the FTY and the FPFTY. Lines 7 and 13 include the incentive compensation related to FTEs projected to be added in the FTY and FPFTY, respectively.

Q. WHY IS IT IMPORTANT FOR PEOPLES TO RECOVER THE EXPENSE RELATED TO INCENTIVE COMPENSATION?

A. To retain talent, Peoples must offer benefits comparable to other companies. Offering Incentive Compensation is one way for Peoples to retain talent by offering market-based incentives to Company employees. The Company has undertaken research to ensure that it offers market-based compensation and incentive programs. Eliminating or reducing these programs would have a significant impact on the Company's ability to attract and retain competent employees.

Q. WHAT IS THE BASIS OF THE FPFTY PENSION CLAIM ON PAGE 10 OF EX. 4, SCH. 1?

A. Peoples' FPFTY pension expense is based on the FTEs' pension costs determined on a contribution basis. The Company used a two-year average of contributions made in 2022 and 2023 to derive the claim amount. Peoples intends to make contributions consistent with recent contributions.

Q. WHAT IS THE BASIS FOR YOUR FTY EXPENSE FOR POST RETIREMENT BENEFITS OTHER THAN PENSIONS ("PBOPS") ON PAGE 11 OF EX. 4, SCH. 1?

A. Peoples has been accounting for PBOPs on the same basis that these costs are recovered in rates. That is, on an accrual basis consistent with FAS 106 and the prior Commission order at both the Peoples Natural Division and the Peoples Gas Division. Peoples has complied with that order and deposited the amounts into dedicated trust accounts in response to the Commission's Opinion and Order at Docket No R-00943111. Line 2 reflects the recovery

of a prior period net undercollection of PBOP costs as compared to the amounts set in the above referenced proceedings amortized over two years. The HTY adjusted expense is reflected on Line 3 of this schedule.

Under our existing benefits programs, the total FPFTY PBOP expense is $2,414,041 (Line 9) which includes the projections provided by the Company's actuary as well as the previously discussed amortization amount.

Q. ARE YOU PROPOSING ANY CHANGES TO THE RECOVERY OF THESE COSTS IN THIS PROCEEDING?

A. No. Consistent with prior cases, the Company is proposing to track actual PBOP costs and amortize the cumulative difference between actual and projected costs in the Company's next base rate proceeding. The amount to be tracked is $779,921 as calculated on Line 10 on page 11 of **Ex. 4, Sch. 1**. The tracking will exclude the amortization of prior period amounts. This treatment is consistent with the past ratemaking treatment of these costs by both divisions. The Company anticipates that differences between the rate allowance and actual accruals be tracked and amortized over a period to be determined in the Company's next base rate proceeding.

Q. WHAT APPROACH DID YOU USE TO DETERMINE PEOPLES' BENEFITS EXPENSES ON PAGE 12 OF EX. 4, SCH. 1?

A. Overall, these benefits include Medical, Dental, Vision, Life Insurance, Long Term Disability Insurance, 401(k) plans and other such programs. The FPFTY benefits expenses reflect the HTY benefits expenses adjusted to include the costs of the benefits for vacant positions filled and annualized for changes in costs relative to the anticipated results from

future open seasons. Medical and other benefits were increased based upon information provided by our third-party benefits consultants. 401(k) benefits were increased consistent with merit increases utilized to develop the labor claim. The combined benefits expense claim for the FPFTY is $20,985,623.

Q. PLEASE DESCRIBE THE ADJUSTMENTS MADE TO OUTSIDE SERVICES-CONTRACTED ON PAGE 13 OF EX. 4, SCH. 1?

A. I adjusted the HTY costs to remove non-recurring charges in the HTY, if applicable, and then adjusted for future increases in determining the FTY and FPFTY expense. Below is a summary of the adjustments included in the FTY and FPFTY:

	PNG	PG	DESCRIPTION
BRIDGE WORK	$675,000	$75,000	Required atmospheric remediation for exposed pipe on bridges. This work is required for compliance and integrity of the bridge lines. The work will include inspection of the lines on the bridges and subsequent remediation. Remediation will include replacing hangers and pipe supports, wrapping and/or painting the pipe, and general maintenance.
PRESSURE TESTS	810,000	90,000	These are part of the prescriptive pipeline integrity management program. Pressure testing of sections is required on three lines.
ADDITIONAL PIG RUN COSTS	450,000	50,000	Internal line inspection "ILI" of Transmission Pipelines as mandated by Federal Code; PHMSA, Subpart O of 49 CFR part 192, which prescribes requirements for managing pipeline integrity in HCAs and requires that operators perform pipeline assessments.
ADDITIONAL PIPELINE MAINTENANCE/CORROSION	285,371	31,708	Ground Bed and Rectifier needs due to age and condition. These units typically have a 25-30 year working lifespan. We typically have 320 at any given time, due to differing decades of installation, depleting, etc. They get replaced and updated to maintain the requirements of CFR 192.465 (A) (B) 1 & 2.

	PNG	PG	DESCRIPTION
ADDITIONAL RIGHT OF WAY MAINT.	110,206	15,608	Process of cutting or trimming vegetation within the right of way of gas lines. The ROW must be clear for the overall operation and maintenance of our gas lines to allow for any ongoing maintenance/inspection activities
TOTAL	$2,330,577	$262,316	

Further, I increased both the FTY and FPFTY by 3.75% which represents the recent 5-year annualized increase in these costs.

Q. PLEASE DESCRIBE THE ADJUSTMENTS MADE TO OUTSIDE SERVICES-IT ON PAGE 14 OF EX. 4, SCH. 1?

A. I added an adjustment for $1,117,550 in the FTY and $67,600 in the FPFTY for a total of $1,185,150 for various maintenance contracts on new software systems. Further, I increased both the FTY and FPFTY by 2.39% which represents the recent 5-year annualized increase in these costs.

Q. PLEASE DESCRIBE THE ADJUSTMENTS MADE TO OUTSIDE SERVICES-A&G ON PAGE 15 OF EX. 4, SCH. 1?

A. I adjusted the HTY costs to remove non-recurring charges, if applicable, in the HTY and then increased it by 7.0% which represents the recent 5-year annualized increase in these costs in determining the FTY and FPFTY expense (Lines 3 and 7).

Q. HOW DID YOU DETERMINE THE COSTS OF RENT FOR THE FTY AND FPFTY ON PAGE 16 OF EX. 4, SCH. 1?

A. Our General Office Rent for the FTY and FPFTY are based on the terms and conditions of the lease for our main office and call center operations in downtown Pittsburgh as well as our Etna and Grove City field office facilities. The adjustment on Line 2 represents the annualization of rent expense according to the terms of the leases compared to the HTY expense amount.

Q. HOW WERE PEOPLES' INSURANCE COSTS DETERMINED ON PAGE 17 OF EX. 4, SCH. 1?

A. I have adjusted the HTY Corporate Insurance Premium by annualizing the most recent premium invoices. Furthermore, I increased the cost thereafter by 13.1% which represents the average total premium increase experienced from the 2023 invoice as compared to the 2022 premiums and the premium increase experienced from the 2022 invoice as compared to the 2021 premiums. The Company further affirmed the reasonableness of this increase with our third-party insurance brokers. They shared with us the following feedback about upcoming rates:

Industry data for forecasts beyond this horizon is scarce, as market dynamics can shift dramatically. This is illustrated in various lines of coverage:

- *Excess Liability:*
  - *Historically stable, with occasional modest increases.*
  - *However, from 2018 to 2020, the market experienced a seismic shift due to nuclear verdicts, resulting in carriers reducing their capacity. They transitioned from providing $25 million layers to $10 million or $15 million while maintaining similar pricing to the prior $25 million, causing significant cost increases for policyholders.*

- *D&O:*
  - *Leading up to the COVID-19 pandemic, the public D&O market witnessed a surge in securities litigation and claim payouts. This trend was further amplified by the increasing number of SPACs, contributing to higher premiums.*
  - *Similar to the Excess Liability market, D&O coverage experienced a substantial decrease in available capacity, with $25 million chunks becoming scarce.*

- *Cyber:*
  - *The cyber insurance market underwent a radical transformation due to the rising incidence of ransomware attacks and inadequate protection by businesses. This led to triple-digit rate increases, reduced capacity, and, in extreme cases, some insureds being left without coverage.*
  - *While the rate increases were not as dramatic, the cyber market evolved due to the heightened requirements set by insurance companies. Businesses invested significant time and resources in enhancing their cybersecurity, resulting in a notable decline in claims activity and a stabilization of this previously volatile market.*

- *Property:*
  - *Currently, the property insurance market is facing a challenging phase, often referred to as a "hard market." The industry collectively hopes for this to be a cyclical pattern but currently sees no end to issues, particularly those related to weather, which are driving claims.*

The examples provided emphasize how rapidly insurance markets can change. Predicting market conditions 3-5 years ahead remains a challenging task, as evidenced by the persistence of nuclear verdicts and extreme weather-related claims. The volatility in the insurance market is likely to continue as long as these trends persist.

Q. WHAT IS THE BASIS FOR THE INJURIES AND DAMAGES EXPENSE ON PAGE 18 OF EX. 4, SCH. 1?

A. I have reviewed the history of Peoples' Injuries and Damages expenses and have included an average of the past three years' expenses. Further, I increased it by a Consumer Price Index inflation rate to adjust the FTY and FPFTY.

Q. DISCUSS THE TRAVEL EXPENSES ON PAGE 19 OF EX. 4, SCH. 1?

A. I adjusted the HTY costs to remove non-recurring charges, if applicable, in the HTY and then increased it by 4.40% which represents the recent 5-year annualized increase in these costs in determining the FTY and FPFTY expense (Lines 5 and 9).

Q. WERE COMPANY MEMBERSHIPS ADJUSTED ON PAGE 20 OF EX. 4, SCH. 1?

A. Yes. The O&M Expense related to Company Memberships has been adjusted for expected increases.

Q. WERE LICENSES AND PERMITS ADJUSTED ON PAGE 21 OF EX. 4, SCH. 1?

A. I adjusted the HTY costs to remove non-recurring charges, if applicable, in the HTY and then increased it by 3.62% which represents the recent 5-year annualized increase in these costs in determining the FTY and FPFTY expense (Lines 5 and 9).

Q. PLEASE EXPLAIN THE ADJUSTMENTS TO UTILITIES AND FUEL USED IN COMPANY OPERATIONS ON PAGE 22 OF EX. 4, SCH. 1?

A. Since the expense of gas used in company operations is recovered through the 1307(f) proceeding, it has been removed from the O&M expense in this proceeding on Line 2 of this schedule. The remaining level of costs in this category represent other utility costs, like electric, that are not recovered through the 1307(f) proceeding. The remaining costs in this category were increased for the FTY and FPFTY based upon recent increases in this category.

Q. WHAT ARE PEOPLES' FPFTY ADVERTISING EXPENSES ON PAGE 23 OF EX. 4, SCH. 1?

A. Peoples advertising expenses total $1,423,934 for the FPFTY. This amount was adjusted to only include expenses which satisfy at least one of the criteria set forth in Section 1316(a) of the Public Utility Code.

Q. PLEASE DESCRIBE THE ADJUSTMENTS MADE TO FLEET MAINTENANCE AND FUEL AS WELL AS MATERIALS & SUPPLIES ON PAGES 24, AND 23, RESPECTIVELY OF EX. 4, SCH. 1?

A. I adjusted these categories for expected increases based upon historical experience in determining the FTY and FPFTY expense.

Q. WERE MATERIALS AND SUPPLIES ADJUSTED ON PAGE 25 OF EX. 4, SCH. 1?

A. I adjusted the HTY costs to remove non-recurring charges, if applicable, in the HTY and then increased it by 2.94% which represents the recent 5-year annualized increase in these costs in determining the FTY and FPFTY expense (Lines 3 and 6). Additional incremental adjustments were added for the expected increase in average cost per fault, higher number of faults expected and the higher cost of anodes.

Q. PLEASE DESCRIBE THE ADJUSTMENTS MADE TO OTHER O&M EXPENSE ON PAGE 24 OF EX. 4, SCH. 1?

A. I added an adjustment on Line 3 to remove the cost of operating the building at 225 N. Main Street in Butler, Pennsylvania. The Company received approval to sell this building at Docket No. A-2022-3034038 and the sale was consummated on October 26, 2023. As such, it was appropriate to remove the HTY costs from the claim in this proceeding.

Further, I added an adjustment on Line 10 for the services provided to us from Essential Utilities via PNG Companies, the parent company of PNG and PG. This represents the normalized costs of such items. Essential provides various administrative services to both

divisions such as Human Resources, Information Technology, Finance, Accounting and many other such services.

Q. PLEASE DESCRIBE PEOPLES' ADJUSTMENT FOR DEBT ISSUANCE COSTS ON PAGE 27 OF EX. 4, SCH. 12?

A. PNG Companies recently refinanced the revolving credit facility for debt borrowed for less than one-year which is used to help finance capital expenditures and to fund working capital, particularly in the summer months when revenues are low. The claim in this case represents Peoples' share of such debt issuance costs. I have included one year's worth of that amortization amounting to $404,371 in our O&M expenses as shown on this page.

Q. PLEASE DESCRIBE THE COMPANY'S CLAIM FOR THIRD PARTY PAYMENT PROCESSING FEES IN THE COST OF SERVICE.

A. Currently, both Peoples Natural Gas Division and Peoples Gas Division customers can make payment through various channels such as mail, web and automated telephone ("IVR"). The costs associated with third party payment processing for certain web, IVR and walk-in payments including credit card payments at the Peoples Natural Gas Division are borne by customers via base rates. However, for the Peoples Gas Division such payments are currently borne by the individual customers making such payments.

The Company is proposing to pay all costs associated with customer payments directly to its service providers and recover such costs from all customers via base rates rather than a customer-paid transaction cost. If approved, all customers of both divisions will be able to select the payment channel of their choice without consideration of additional convenience or transaction fees subject to certain limitations.

Q. PLEASE DESCRIBE HOW CUSTOMERS BENEFIT FROM THIS PROPOSAL.

A. Overall, this will improve the Customer Experience at the Peoples Gas Division and align it with the Peoples Natural Gas Division and thus improve customer satisfaction. Customers have frequently voiced dissatisfaction with having to pay transaction fees for making payments. Additional benefits include:

- Elimination of the convenience fee to customers for electronic payment through our third-party processor for credit card, debit card and ACH transactions;
- Elimination of transaction fees for bill payment at authorized walk-in locations;
- Encourage customer use of authorized agents, thus avoiding delays in processing payments made through unauthorized agents;
- Increased customer satisfaction by allowing customers to pay via the channel of their choice – free of charge; and,
- Encourages payment, especially from those who have limited means.

Q. DO MANY NON-UTILITY INDUSTRIES CHARGE CUSTOMERS PER TRANSACTION FOR PROCESSING PAYMENTS?

A. No. It is my observation that very few industries outside of utilities and government charge a per transaction fee for payment processing.

Q. PLEASE DESCRIBE THE ADJUSTMENTS TO PAYMENT PROCESSING FEES MADE ON PAGE 28 OF EX. 4, SCH. 1.

A. There were three types of adjustments made to this schedule. The first adjustment of $124,419 was made on Line 2 to reflect the cost of extending such payments to the Peoples

Gas Division customers as discussed above. The support of this amount is shown on Lines 12 through 20 on this same schedule and is self-explanatory. The second adjustment was to reflect the cost of additional adoption of this payment channel based upon the percentage increase for the twelve-months ended (TME) August 31, 2023 as compared to the TME August 31, 2022 (7.82%). Both the FTY was adjusted on Lines 5 and 9. The third adjustment was made on Line 10 and reflects a 10% increase in costs the Company expects to incur on such costs upon the expiration of the existing contract in February of 2025.

Q. PLEASE SUMMARIZE YOUR PAYMENT PROCESSING FEE PROPOSAL.

A. The Company proposes to waive all transaction fees associated with the payment of residential customers' bills and include these costs in the cost of service for the Peoples Gas Division customers in order to align with the Peoples Natural Gas Division customers.

Q. IF APPROVED, WHEN WOULD THE PROPOSAL GO INTO EFFECT?

A. Since the proposal would require IT changes for both Peoples and the third-party payment processing company, Peoples will endeavor to implement these changes as soon as possible after approval.

Q. PLEASE EXPLAIN ANY CLAIM FOR LOBBYING EXPENSE IN THIS PROCEEDING.

A. Peoples is not making a claim for expenses related to lobbying in this case.

Q. PLEASE EXPLAIN THE CALCULATION OF RATE CASE EXPENSES ON PAGE 29 OF EX. 4, SCH. 1.

A. I have used the projected costs for outside services of $2,062,000 related to this proceeding and normalized them over two years.

Q. WHY DID YOU SELECT TWO YEARS FOR THE NORMALIZATION OF THESE COSTS?

A. Peoples filed rate cases in 2010, 2012 and 2019. The reason seven years elapsed between the 2012 case and the 2019 case was a result of the stay out period committed to in the Company acquisition of the Equitable Gas Company. Further, the main reason for the time that has elapsed between the 2019 case and this case was the result of the Company receiving Accounting and Regulatory approval regarding its treatment of the tax repair election in Docket No. P-2020-3021191. Specifically, the Company changed its tax accounting method to define its unit of property under the IRS's tangible property regulations, which allowed the Company to prospectively deduct, as an operating expense on its income tax returns, the costs of certain asset improvements that otherwise would be capitalized and depreciated for tax purposes. See the testimony of Christine Saball for further discussion. Peoples projects two years to be the approximate length of time between the filing of this proceeding and the filing of Peoples' next base rate proceeding given the Company's LTIIP commitments for infrastructure replacement. For example, the Company is projected to have capital expenditures of over $1 billion for the combined FTY and FPFTY and expects this to continue beyond the FPFTY.

Q. HOW DID YOU DEVELOP PEOPLES' EXPENSES FOR WRITE-OFF OF UNCOLLECTIBLE ACCOUNTS ON PAGE 30 OF EX. 4, SCH. 2?

A. The uncollectible write-off amount is based on the relationship between write-offs and revenues. I have used a normalized three-year average of write-offs as the basis for my adjustment. However, I note that based upon the analysis discussed below the normalized residential write-off rate I used of 2.2% is consistently close to one to seven years average depicted in the chart below. This schedule depicts the development of each customer class' uncollectible expense by using a percentage of write-offs to revenues for each test year. These averages were applied to both pro-forma revenue at present rate levels and proposed revenue levels to determine normal uncollectible write-off amounts.

Q. PLEASE DESCRIBE THE NORMALIZATION ADJUSTMENT TO WRITE-OFFS THAT YOU CALCULATED FOR RESIDENTIAL UNCOLLECTIBLE ACCOUNTS EXPENSE.

A. I made two main normalization adjustments to the three-year average of write-offs. First, I added $5,000,000 to the 2020 write-offs as the Company provided a credit to customers in this amount as a result of the settlement of the proceeding at Docket No. P-2020-3021191. Specifically, the credit was "The credit would equate to a maximum of 70% of the past due balance on an eligible customer's bill since March 2020."[2] It is reasonable to conclude that write-offs were avoided as a result of this customer credit.

Second, I normalized the LIHEAP grants for the period utilizing an average of the annual grants received in 2017, 2018, 2019 and 2022. During 2021 and 2022 the Company's customers received abnormally high grants due to increased Federal funding resulting from the COVID pandemic. The impact on bad debt was calculated by taking

[2] Paragraph 17g of on page 6 the ALJ's Recommending Decision at Docket No. P-2020-3021191.

75% of normalized Crisis grants (grants given to low income customers who are also at risk for termination) and 25% of the normalized LIHEAP Cash grants (given to low income customers without risk of termination).

The result of this normalization is depicted in the chart shown below:

Original RS Writeoffs	7-Year	6-Year	5-Year	4-Year	3-Year	2-Year	1-Year
Cumulative Revenue	$ 3,937,650,863	$ 3,395,047,246	$ 2,795,006,481	$ 2,213,252,745	$ 1,705,289,721	$ 1,151,256,907	$ 408,201,175
Cumulative Adj. Writeoffs	$ 76,992,581	$ 65,506,137	$ 52,202,020	$ 36,978,889	$ 32,500,999	$ 23,345,054	$ 13,405,732
Unadjusted Averages	1.96%	1.93%	1.87%	1.67%	1.91%	2.03%	3.28%
Adjusted Write-Offs							
Annual Writeoffs	$ 11,486,444	$ 13,304,116	$ 15,223,131	$ 4,477,891	$ 9,155,944	$ 9,939,323	$ 13,405,732
$5M Repair Tax Credit				5,000,000			
LIHEAP Grants Normalized	(65,826)	111,766	(29,296)	(426,293)	2,170,163	2,430,063	409,649
Adjusted Writeoffs	$ 11,420,619	$ 13,415,882	$ 15,193,835	$ 9,051,598	$ 11,326,107	$ 12,369,385	$ 13,815,381
					used in Rate Case		
Revised Writeoffs	7-Years	6-Years	5-Years	4-Years	3-Years	2-Years	1-Years
Cumulative Revenue	$ 3,937,650,863	$ 3,395,047,246	$ 2,795,006,481	$ 2,213,252,745	$ 1,705,289,721	$ 1,151,256,907	$ 408,201,175
Cumulative Adj. Writeoffs	$ 86,592,807	$ 75,172,188	$ 61,756,306	$ 46,562,471	$ 37,510,873	$ 26,184,766	$ 13,815,381
Adjusted Averages	2.20%	2.21%	2.21%	2.10%	2.20%	2.27%	3.38%
Difference	0.24%	0.28%	0.34%	0.43%	0.29%	0.25%	0.10%

Q. WAS A NORMALIZATION ADJUSTMENT NECESSARY FOR COMMERCIAL AND INDUSTRIAL WRITE-OFF RATIOS.

A. No. The normalization adjustments mentioned above are unnecessary for the Commercial and Customer calculations as the adjustments were unique items only impacting residential customers.

Q. HOW WAS THE UNIVERSAL SERVICE PROGRAM ("USP") RIDER ADJUSTMENT DETERMINED ON PAGE 31 OF EX. 4, SCH. 1?

A. In order to normalize USP O&M both the O&M and revenue associated with these programs were removed from the claim. This adjustment has no impact on base rates. The Company is not proposing any other changes to the costs of these programs within this case. See the Testimony of Rita Black for further discussion of these programs.

Q. HOW WAS THE INTEREST EXPENSE ON CUSTOMER DEPOSITS DERIVED ON PAGE 32 OF EX. 4, SCH. 1?

A. Peoples used a twelve-month average of customer deposits which represents the customer deposit amount utilized as a deduction to rate base. This average was then multiplied by the current interest rate of 7%, per Chapter 14 of the Public Utility code, to determine the interest on customer deposits at current rates. No adjustment is needed for the FTY or the FPFTY as the Company has not projected a change to the balance of customer deposits.

PEOPLES GAS DIVISION RIDER TCJA – TCJA TEMPORARY SURCHARGE ("TCJA RIDER")

Q. WHAT IS THE PURPOSE AND BACKGROUND OF THE TCJA RIDER?

A. The purpose of this rider is to refund all impacts of the TCJA on PGD from the effective date of TCJA on January 1, 2018 through the present. The Opinion and Order issued on June 16, 2022 at Docket No. P-2022-3031235 provides the background:

> *On March 15, 2018, the Commission issued a Temporary Rates Order at Docket No. M-2018-2641242, directing Peoples Gas and other public utilities to file their current base rates and riders as temporary rates, pursuant to Section 1310(d) of the Pennsylvania Public Utility Code (Code).*
>
> *The Commission issued an Order on May 17, 2018, at Docket No. R-2018-3000502 (Peoples Gas Compliance Order), which indicated that a negative surcharge of 2.6676%[3] be applied to customer bills. The Peoples*

[3] Peoples Gas determined that this calculation did not fully reflect the tax reductions intended by the Commission and did not correctly calculate the negative surcharge. In accordance with the procedure set forth in the Peoples Gas Compliance Order, Peoples Gas then filed on June 4, 2018, a Petition for Reconsideration to allow Commission staff to review and address the newly discovered computation errors. The Petition for Reconsideration stated a corrected negative surcharge of -6.6820%, which was approved by the Commission by Reconsideration Order entered on June 14, 2018. The Petition for Reconsideration did not request modification and the

Gas Compliance Order provided that the TCJA temporary surcharge will be effective July 1, 2018 on a prospective basis. However, the Commission also recognized that the tax savings from TCJA commenced on January 1, 2018. In lieu of addressing this portion of the tax savings in the May 17, 2018 Order, the Commission directed Peoples Gas to establish a "deferred regulatory liability" account to record on its books the tax savings associated with the TCJA for the January 1, 2018, through June 30, 2018, time period (the "Stub Period"). The Peoples Gas Compliance Order also directed that: the account shall accrue interest at the residential mortgage lending rate specified by the Secretary of Banking in accordance with the Loan Interest and Protection Law (41. P.S. §§ 101, et seq.); the rate treatment of this amount plus accrued interest shall be addressed in Peoples Gas' next base rate case; in that future proceeding, Peoples Gas and parties can address the appropriate negative surcharge, amortization or other disposition of this deferred regulatory liability, including any legal issues; and if Peoples Gas did not file, within three (3) years of May 17, 2018 (i.e., by May 17, 2021), a Section 1308(d), 66 Pa. C.S. § 1308(d), general base rate case, the Company was directed to file a petition proposing how to distribute the funds in the deferred regulatory liability account related to the Stub Period.

On May 17, 2021, Peoples Gas filed a Petition to Establish a Mechanism to Distribute the Tax Savings Associated with Tax Cuts and Jobs Act of 2017 for the Period between January 1, 2018, and June 30, 2018 (TCJA Petition) at Docket No. P-2021-302598. On November 18, 2021, the Commission approved Peoples Gas's TCJA Petition. However, the Commission determined that Peoples Gas did not include tax savings associated with the Company's EADIT for the Stub Period, and that the Commission had approved the distribution of TCJA-related tax savings for the period prior to July 1, 2018, which included the flowback of EADIT, for other utilities. The Commission also stated that the "Commission's intent to flow back taxes to customers on a current basis is clear…. Thus, it is clear that the Commission intended for all tax savings to be flowed back to customers on a timely basis." As such, the Commission required Peoples Gas to file a Petition within 60 days of the TCJA Order to distribute the tax savings associated with its EADIT[4].

Reconsideration Order did not modify any of the procedures approved in the Peoples Gas Compliance Order related to the establishment of the deferred regulatory liability account and the distribution of funds in that account.

[4] The company sought and was granted a 45-day extension, making the Petition due on or before March 3, 2022.

As a result of the June 16, 2022 Order at Docket No. P-2022-3031235, the Company filed a petition on March 3, 2022. This petition was approved and a compliance filing was made on June 21, 2022.

Q. ARE THERE ANY FURTHER ADJUSTMENTS NECESSARY?

A. The TCJA Rider calculations have addressed and will address the impact of the TCJA through the effective date of rates in this proceeding. The only matter left is to roll the impact of TCJA into base rates.

Q. HOW TO PROPOSE TO ROLL THE TCJA IMPACT INTO BASE RATES?

A. I recommend the following:

- The prospective impact of the TCJA for PGD be reflected in the development of rates in the case. This is being handled as such in the development of the income tax claim in Exhibit No. 7;
- Upon the effective date of rates in this proceeding, the TCJA Rider will continue to only apply to the former customers of PGD and the rate will be changed to only reflect the over/under collection recovery and remove the prospective impact of the TCJA as this will be rolled into base rates. The rate will be to recover any over or under collection amount over a twelve-month period. The Company reserved the right to adjust the rate through this twelve-month period in order to minimize the amount of over or under collection at the end of the period; and
- Further, any over or under collection amounts remaining at the end of the period shall be flowed through to Customers in the Company's next 1307(f) gas cost proceeding.

Q. DOES THE PEOPLES NATURAL GAS DIVISION HAVE A SIMILAR RIDER?

A. It previously did but the rate no longer applies as all matters related to the TCJA were resolved in the prior base rate case at Docket No. R-2018-3006818.

Q. HOW HAS RIDER TCJA BEEN REFLECTED IN EXHIBIT 3, WHICH DETAILS THE CALCULATION OF REVENUES AT PRESENT AND PROPOSED RATES?

A. Rider TCJA, as billed, is reflected in the historical test period revenues. Since the proposed revenues have been designed to recover income tax expense at the 21% federal income tax rate, revenue derived from Rider TCJA is eliminated when calculating revenue at proposed rates except for the portion related to the over/under collection of prior TCJA Rider credits.

Q. DOES THIS PROPOSAL REQUIRE ANY TARIFF CHANGES.

A. Yes. The Company's proposed treatment would result in revision to the previously approved Tax Repair Surcharge Rider included in both the PNGD and PGD tariffs to account for the aforementioned adjustments. Refer to Exhibit No. 14 for a red-line of such tariff changes.

TAX REPAIR SURCREDIT

Q. PLEASE EXPLAIN THE TAX REPAIR SURCREDIT CURRENTLY IN PLACE AT PNG?

A. Pursuant to Docket No. P-2020-3021191, effective August 1, 2021, a surcredit was put into effect on the Peoples Natural Gas Division. The purpose of this surcredit is to refund, over a five-year period, the entire tax benefit of a catch-up tax deduction resulting from the Company's defining its unit of property under the Internal Revenue Service's ("IRS") Treasury Regulations 1.263(a)-3 and 1.162-4. This catch-up deduction or "look back"

represents the difference between federal and state income tax depreciation claimed versus the repair deductions that would have been claimed for the tax years ended December 31, 2012 through March 15, 2020.

Q. DOES THE PEOPLES GAS DIVISION CURRENTLY HAVE SUCH A RIDER?

A. No. Although this tax methodology was approved in the Merger, the resolution of the Catch Up deduction was deferred to this base rate case proceeding.

Q. WHAT HAS CHANGED SINCE THE SURCREDIT WAS PUT INTO EFFECT?

A. In addition to PG's adoption of the deduction effective January 1, 2023, the Pennsylvania and Corporate Net Income ("CNI") tax rate changes, the IRS issued Natural Gas industry Safe Harbor rules for this deduction and the Company is applying this Unit of Property methodology to mandatory relocations.

Q. PLEASE FURTHER EXPLAIN PG ADOPTION OF TAX REPAIRS.

A. As a result of the Merger, PG adopted the tax methodologies of PNG including its definition of a Unit of Property for income tax purposes. However, the treatment of the Catch-Up deduction by PG was deferred to this proceeding. This was described in the Merger and specifically the ALJs decision had the following paragraph:

> *35. No refund of the anticipated catch-up benefits associated with Peoples Gas' adoption of Peoples Natural Gas' tax methodologies will be made in this proceeding. The Company will defer any retroactive ("catch up") benefits and will address such retrospective catch-up tax benefits achieved between the implementation of the tax change and the next base rate proceeding in the next base rate case proceeding. Regarding the prospective impact, Peoples Natural Gas (which will include the Peoples Gas assets) will account for the prospective impact utilizing flow-through accounting*

consistent with the recent Peoples Natural Gas repairs tax settlement at Docket No. P- 2020-3021191.

The impact of PG's adoption of the unit of property is to begin refunding to customers the Catch-Up benefit associated with PG's adoption.

Q. PLEASE FURTHER EXPLAIN THE PENNSYLVANIA CNI TAX RATE CHANGES.

A. In 2021, Pennsylvania House Bill 1342 was passed reducing the PA CNI rates beginning on January 1, 2023. This bill reduced such rates in subsequent years as follows:

- January 1, 1995, through December 31, 2022; 9.99%;
- January 1, 2023, through December 31, 2023; 8.99%
- January 1, 2024, through December 31, 2024; 8.49%
- January 1, 2025, through December 31, 2025; 7.99%
- January 1, 2026, through December 31, 2026; 7.49%
- January 1, 2027, through December 31, 2027; 6.99%
- January 1, 2028, through December 31, 2028; 6.49%
- January 1, 2029, through December 31, 2029; 5.99%
- January 1, 2030, through December 31, 2030; 5.49%
- January 1, 2031, and each year thereafter; 4.99%

The lower PA CNI tax rate results in a reduced tax benefit of the catch-up deduction thus the amount refunded by PNG since August 2021 has been overstated. The original order related to PNG's adoption addressed this. The ALJ's recommendation decision at paragraph 17(e) provided for the following:

> *(e) <u>Subsequent Changes to Benefit of Catch-Up Deduction.</u>*
> *To the extent that the benefit of the Company's catch-up deduction is affected by: (i) any subsequent disallowance by a future IRS audit;(ii) any changes in tax rate; or (iii) any change in rules or guidance that require a method change and, therefore, a change of benefit, permission is granted to defer those impacts for future refund or recovery for customers.*

The impact of this is that the Company needs to be made whole for the over-refund of the benefit via the surcredit resulting from the reduced Pennsylvania CNI tax rate.

Q. PLEASE FURTHER EXPLAIN THE SAFE HARBOR RULES.

A. The gas industry many years ago sought specific IRS guidance in the form of an industry issue resolution request. This was similar to the IRS guidance the electric industry sought and received around 2010. In 2023, the IRS finally issued gas industry specific guidance regarding the tangible property regulations that defined the unit of property for transmission and distribution property. Tax filers that previously had a method change filed for the tangible property regulations are provided with a "safe harbor" to quantify the impacts of the new regulations to its previous method without penalty. The end result is the Company having to quantify the difference in methods in the 481(a) adjustment and on a going forward basis, applying this guidance to future tax repair deductions.

Q. PLEASE FURTHER EXPLAIN MANDATORY RELOCATIONS.

A. Mandatory relocations are a type of project that the Company has determined is eligible for treatment as a tax repair deduction. This determination was a change in tax accounting method, hence a separate 481(a) catch up deduction was calculated in this instance.

Q. ARE THERE ANY OTHER CONSIDERATIONS THAT SHOULD BE FACTORED INTO THIS?

A. The Company has contracted a consulting firm with expertise in the very prescriptive methods required by the IRS to perform the examination of its records and determine the impacts of this guidance on a retroactive and going forward basis. That work is ongoing as

of the date of filing this case. Pursuant to IRS regulations, the Company has until it files its 2023 tax return (in October 2024), to quantify the impacts of the new IRS guidance. The Company will net the costs associated with implementing this change in method with the benefits to be given to customers.

Q. WHAT ARE YOU PROPOSING IN THIS PROCEEDING?

A. Regarding the current and ongoing benefit, the Company has reflected in its claim for income tax expense the expected repairs deduction to be realized by applying the new IRS regulations, what I refer to as the "current repair deduction".

As far as the catch-up adjustment impacts, given the fact that the examination and analysis of the Company records going back to 2012 is ongoing and the Company was required to file this case by December 2023 pursuant to Docket No. P-2020-3021191, the Company is proposing that the impacts of the following adjustments be recognized in a revised Tax Repair Surcharge Rider to be filed 90 days following the effective date of new rates in this proceeding, the adjustments listed as follows:

1.) Adjustment to reflect the reduced tax benefits as a result of the reduction in the State CNI rate;

2.) Adjustment to reflect the impacts of the new IRS regulations "Natural Gas Safe Harbor" – IRS Rev. Proc. 2023-15 to the "Catch-Up" adjustment amounts quantified in Docket No. P-2020-3021191;

3.) Adjustment to include the 481(a) adjustment for PG;

4.) Adjustment to include the 481(a) adjustment for Mandatory Relocations; and

5.) Extend the amortization period from 5 years to 10 years including the amortized portion of the previous sur-credit authorized in Docket No. P-2020-3021191, including the aforementioned adjustments.

Q. DOES THIS PROPOSAL REQUIRE ANY TARIFF CHANGES.

A. Yes. The Company's proposed treatment would result in a revision to the previously approved Tax Repair Surcharge Rider, including to account for the aforementioned adjustments. The Tax Repair surcharge will apply to all customers of the combined company. Refer to Exhibit No. 14 for a red-line of such tariff changes.

Q. IS THERE ANYTHING ELSE YOU WOULD LIKE TO ADDRESS REGARDING REPAIRS?

A. Yes. I would like to discuss the "Collar" proposal related to repairs.

Q. HAS THE COLLAR BEEN ADDRESSED IN ANY OTHER PROCEEDING?

A. Yes. In Docket No. P-2020-3021191, the Company was instructed to propose a collar for current repairs deductions similar to the one that was approved for our affiliate companies Aqua Pennsylvania, Inc. & Aqua Pennsylvania Wastewater, Inc., in Docket Nos. R-2018-3003558/3003561 & R-2021-3027385/3027386.

Q. WHAT ARE YOU PROPOSING AS THE COLLAR?

A. The Company's proposal is substantially similar to that of our affiliates. We are proposing in this case that the level of tax repair benefits claimed in the calculation of income tax expense (see Exhibit 7) have a collar applied on the higher and lower end in the amount of

$10 million before the requirement to defer those impacts for future base rate case treatment is implemented. The effective date of this should be the first day of the first calendar year after the effective date of new rates in this proceeding which is January 1, 2025. Said another way, as an example, if the final tax repair benefit in this proceeding was set at $300 million, the requirement to defer the financial impacts of the actual deduction would not be triggered unless the tax benefit realized on the tax return were greater than $310 million or less than $290 million. The differences between our proposal in this case, to that of our affiliate is 1.) the size of the collar and 2.) FIN 48 – Uncertain tax position is not applicable to gas as we have not recorded an uncertain tax position and we have industry specific guidance now.

Q. DOES THIS COMPLETE YOUR TESTIMONY?

A. Yes, it does.

Appendix A

Reference	FR/SDR#
Ex. 1, Sch. 4	53.53.II.A.18
Ex. 1, Sch. 18	53.53.III.A.13
Ex. 2, Sch. 3	53.53.II.A.22
Ex. 2, Sch. 4	53.53.III.A.17
Ex. 2, Sch. 9	53.53.III.E.21
Ex. 4, Sch. 1	53.53.III.E.17
Ex. 4, Sch. 2	53.53.III.A.20
Ex. 4, Sch. 3	53.53.III.A.21
Ex. 4, Sch. 4	53.53.III.A.25
Ex. 4, Sch. 5	53.53.III.A.29
Ex. 4, Sch. 6	53.53.III.A.33
Ex. 4, Sch. 7	53.53.III.A.22
Ex. 4, Sch. 8	53.53.III.A.23
Ex. 4, Sch. 9	53.53.III.A.24
Ex. 4, Sch. 10	53.53.III.A.27
Ex. 4, Sch. 11	53.53.III.A.28
Ex. 4, Sch. 12	53.53.III.A.31
Ex. 4, Sch. 13	53.53.III.A.32
Ex. 4, Sch. 14	53.53.III.A.30
Ex. 4, Sch. 15	53.53.III.A.34
Ex. 4, Sch. 16	53.53.III.A.35
Ex. 4, Sch. 17	53.53.III.A.36
Ex. 4, Sch. 18	53.53.III.A.37
Ex. 4, Sch. 20	53.53.III.E.29
Ex. 4, Sch. 21	53.53.III.E.33
Ex. 4, Sch. 22	53.53.III.E.34
Ex. 13, Sch. 1	53.53.III.A.39
Ex. 13, Sch. 2	53.52(a)(6)
Ex. 13, Sch. 3	53.53.II.A.13
Ex. 13, Sch. 4	53.53.III.A.40
Ex. 13, Sch. 5	53.53.III.A.44
Ex. 13, Sch. 6	53.53.III.A.46
Ex. 13, Sch. 8	53.53.III.A.41
Ex. 13, Sch. 9	53.53.III.A.19
Ex. 13, Sch. 12	53.52(a)(11)
Ex. 13, Sch. 13	53.52(b)(1)
Ex. 13, Sch. 14	53.52(a)(5)
Ex. 13, Sch. 15	53.52(a)(10)
Ex. 13, Sch. 16	53.52(a)(7)

Reference	FR/SDR#
Ex. 13, Sch. 17	53.52(a)(8)
Ex. 13, Sch. 18	53.52(a)(9)
Ex. 15, Sch. 4	53.53.II.A.24
Ex. 16, Sch. 14	53.53.II.A.16
Ex. 16, Sch. 15	53.53.II.A.17
Ex. 17, COS 1	COS 1
Ex. 18, ROR 1	ROR 1
Ex. 18, ROR 8	ROR 8
Ex. 18, ROR 13	ROR 13
Ex. 18, ROR 14	ROR 14
Ex. 18, ROR 16	ROR 16
Ex. 18, ROR 22	ROR 22
Ex. 18, ROR 23	ROR 23
Ex. 19, RR 15	RR 15
Ex. 19, RR 19	RR 19
Ex. 19, RR 20	RR 20
Ex. 19, RR 21	RR 21
Ex. 19, RR 22	RR 22
Ex. 19, RR 26	RR 26
Ex. 19, RR 27	RR 27
Ex. 19, RR 28	RR 28
Ex. 19, RR 29	RR.29
Ex. 19, RR 30	RR.30
Ex. 19, RR 31	RR.31
Ex. 19, RR 32	RR 32
Ex. 19, RR 33	RR 33
Ex. 19, RR 34	RR 34
Ex. 19, RR 35	RR 35
Ex. 19, RR 37	RR 37
Ex. 19, RR 40	RR 40
Ex. 19, RR 43	RR 43
Ex. 19, RR 44	RR 44
Ex. 19, RR 46	RR 46
Ex. 19, RR 47	RR 47
Ex. 19, RR 50	RR 50
Ex. 19, RR 51	RR 51
Ex. 19, RR 52	RR 52
Ex. 19, RR 53	RR 53
Ex. 19, RR 54	RR 54

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	Docket No. R-2023-3044549
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED DIRECT TESTIMONY OF
CAROL A. SCANLON,
MANAGER, RATES
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: December 29, 2023 Peoples Statement No. 3
DATE ADMITTED: _____

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Carol A. Scanlon. My business address is 375 North Shore Drive, Pittsburgh, PA 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by PNG Companies LLC ("PNG Companies" or "PNG") as Rates Manager. Effective January 1, 2023 the Peoples Natural Gas Company LLC and Peoples Gas Company LLC were merged. As such, Peoples Natural Gas Company LLC ("Company") currently includes – Peoples Natural Gas Division ("PNGD" or "Peoples Natural Gas Division") and Peoples Gas Division ("PGD" or "Peoples Gas Division"). When referring to both divisions herein, they may be referred to as the Peoples Divisions, Peoples Natural Gas, the Company or Peoples. In my position as Rates Manager, I provide rates and regulatory services for both PNGD and PGD.

Q. PLEASE DESCRIBE BRIEFLY YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A. I graduated from the University of Pittsburgh in 1994 with a Bachelor of Science Degree in Business Administration with a concentration in Finance, and from Robert Morris University in 2001 with a Master's Degree in Business Administration. My career began with the former Equitable Gas Company ("EGC") in 2004, where I was employed in various positions of increasing responsibility. I started with EGC as a Senior Financial Analyst supporting the

Collections and Compliance areas of the business. In March 2006, I transitioned to the role of Supervisor of Collections and Analysis. I was in that role until August of 2007, when I was promoted to the Manager of Account Maintenance, during which time I directed the activities of the Audit and Back Office departments. In May 2009, I was promoted to Manager of Commercial and Residential Analysis. In June 2010, I was promoted to the Manager of Rates. I continued in that role until December 17, 2013, at which time EGC was acquired by PNG Companies and merged into Peoples Natural Gas. At that time, I transitioned to Peoples Natural Gas as a Rate Consultant. In August 2017, I was promoted to Manager of Transportation and Revenue. In this role, I managed revenue reporting and the team responsible for all interactions with the Natural Gas Suppliers ("NGSs"). In 2018, I transferred to PNG Companies. In April of the same year, I moved back to the Regulatory team as the Rates Manager.

Q. WHAT ARE YOUR RESPONSIBILITIES FOR PURPOSES OF THIS PROCEEDING?

A. I will provide an overview of the historical test year revenues presented in this case. I will explain the forecasting methods used to develop customer count and usage data for the future and fully projected future test years. I will describe how those forecasted counts and volumes were priced to determine total revenues. I will explain the use of competitive pricing in the Company's business model and the inclusion of negotiated rates in the pricing of the revenue claim. I will also describe adjustments made to normalize and annualize the revenues presented.

In addition, I will explain implementation aspects of the proposed weather normalization adjustment mechanism, describe the AVC rate blending proposal, and support the strategy to combine the universal service riders.

Q. PLEASE LIST THE EXHIBITS AND FILING REQUIREMENTS THAT YOU ARE SPONSORING AS A WITNESS.

A. Please refer to Appendix A to this testimony for a complete list of the filing requirements for which I am the responsible witness.

REVENUES (EXHIBIT NO. 3)

Q. PLEASE BRIEFLY DESCRIBE THE TEST YEAR REVENUES AS PRESENTED IN PEOPLES' FILING.

A. The schedules set forth in my testimony are presented separately for PNGD and PGD, but the exhibits follow the same numbering for each entity. Refer to the schedule "Volume and Revenue Summary at Current Rates," Exhibit 3, Schedule 15, Attachment C, page 1. Column 1 reflects the per books revenue for the year prior to the historic test year and column 2 reflects the per books revenue for the Historic Test Year ("HTY") of August 31, 2023 by FERC account. Columns 3-9 display the amounts of per books revenue related to gas cost, universal service rider, Gas Procurement Charge ("GPC"), Merchant Function Charge ("MFC"), Supplier Choice Rider ("SCR"), DSIC, Tax Repairs Surcredit rider ("TRS") for PNGD, and the Tax Cuts and Jobs Act rider ("TCJA" for PGD). The calculation of the gas cost

revenue for the HTY provided in Exhibit 3, Schedule 15, Attachment M and the calculation of the rider revenues for the HTY is provided in Exhibit 3, Schedule 15, Attachment N. Column 10 displays the unbilled and cycle 22 adjustment amount, which is presented in Exhibit 3, Schedule 15, Attachment K. This amount is being excluded because it is not pertinent to calculate the annualized revenues. Column 11 presents a weather adjustment to normalize the revenues for weather. The weather adjustment calculation is shown in Exhibit 3, Schedule 15, Attachment H, page 1. Column 12 reflects an adjustment to price the test year bills and volumes to the most current base rates. Column 13 is the annualized delivery service and customer charge revenue at current rates as calculated in Exhibit 3, Schedule 15, Attachment D, pages 1-6.

Refer next to Exhibit 3, Schedule 15, Attachment C, page 2. This schedule summarizes the annualized total revenue at present rates as shown in Exhibit 3, Schedule 15, Attachment D, pages 1-6. The present rates used in the schedule are those in effect as of October 1, 2023, with the exception of the Gas Cost Adjustment ("GCA") rate component. The GCA rate component is excluded because Peoples accelerated the refund of the over collections of gas cost commodity costs experienced during the 2022/2023 winter by decreasing the GCA charge to customers for the period of October 1, 2023 through December 31, 2023. This was approved by the Commission in Peoples 2023 -1307(f) annual gas cost proceeding at Docket No. R-2023-3037928. As a result, the GCA rate in effect from October 1, 2023 through December 31, 2023 is a credit of ($3.7904) per Mcf. Since the amount is not typical, Peoples excluded GCA from the gas cost rate displayed in the Exhibit

3 schedules so that gas cost rate is not skewed by it and remains in line with the actual cost of gas. The annualized universal service rider revenues in column (3) of Exhibit 3, Schedule 15, Attachment C, page 2, are reduced by the Customer Assistance Program ("CAP") Credit amount shown in Exhibit 3, Schedule 15, Attachment D, page 1, line no. 29.

Q. PLEASE EXPLAIN THE DEVELOPMENT OF YOUR ADJUSTMENT TO NORMALIZE REVENUES FOR THE EFFECTS OF THE HISTORICAL TEST YEAR WEATHER.

A. Exhibit 3, Schedule 15, Attachment H, page 1 summarizes the adjustment made to normalize the historical test year revenues for the effects of weather. This adjustment was calculated by determining the use per customer ("UPC") for each class of customer and multiplying the historical customer counts by this amount. I will discuss the calculation of UPC by class further in my testimony. Peoples is using 5,341 heating degree days ("HDDs") to forecast normal weather. This is derived by averaging a 20-year average with a 65-year regression for the periods ending December 31, 2022 as obtained from the National Oceanographic Atmospheric Association ("NOAA"). At Statement No. 15, Ralph Zarumba supports the use of a regression model, and specifically the use of a 65-year regression model for this case. The Company believes the 65-year regression model provides a reasonable basis for weather normalization. However, Peoples is proposing to use the average of the 65-year regression model result with the average of the 20-year average due to the concept of gradualism. The 65-year regression model produces a result of 5,240

HDDs. In Peoples Natural Gas Division's last base rate case in 2018, the HDDs employed in the forecasting model were 5,416. Although the methodology proposed by Ralph Zarumba is reasonable, in order to transition from the prior methodology to this new methodology we are utilizing an average of the 20-year average and the new methodology. which results in the use of 5,341 HDDs. The HTY billed throughput is deducted from the normalized volume to calculate the adjustment amount in Mcf. The Mcf adjustment amount is multiplied by the current delivery rate to determine the dollar amount of the adjustment.

Q. PLEASE FURTHER DESCRIBE THE DEVELOPMENT OF THE UPC PER CUSTOMER CLASS.

A. A UPC factor was developed for each class of customer to both normalize the historical test year and forecast the future test year ("FTY") and fully projected future test year ("FPFTY") volumes. Different methods were used to determine the UPC for each class of customer. Residential and commercial SGS and MGS customers traditionally are heat sensitive and require a model that includes a weather variable. By comparison, commercial LGS and all industrial customers are not predominantly impacted by weather, so using historical usage patterns for this class of customer is more indicative of future usage.

Q. LET'S START WITH HEAT SENSITIVE CUSTOMER CLASSES. PLEASE ELABORATE ON THE MODEL USED TO DEVELOP THE RESIDENTIAL AND COMMERCIAL SGS AND MGS UPC.

A. The Company employed a forecasting model that uses historical actual data to calculate a non-heat sensitive base load factor and a seasonal, heating degree day factor. This is the method that was used to calculate the UPC for all residential customers and small and medium commercial customers. Each of the calculated UPCs was then reduced by 0.50% to account for customer conservation measures. Small commercial customers are defined as commercial customers using between 0 – 999 Mcf annually. Medium commercial customers are defined as commercial customers using between 1,000 – 24,999 Mcf annually.

Q. HOW IS THE NON-HEAT SENSITIVE BASE LOAD DEVELOPED FOR THE RESIDENTIAL AND SMALL AND MEDIUM SIZE COMMERCIAL CUSTOMERS?

A. The non-heat sensitive base load is developed by reviewing actual volumes for the months of July and August, both of which have a low number of heating degree days, to establish a non-heat sensitive base load. This base load volume is divided by the number of customers and number of days in the month to arrive at a daily customer base load figure.

Q. HOW IS THE HEATING DEGREE DAY FACTOR DEVELOPED?

A. The first step is to remove the non-heat sensitive usage as identified above. This isolates the usage impacted by weather. Next, we identify the actual HDDs related to the historical data we are using. Finally, we take total heat load, divided by the total heating degree days for the period, then divided by the number of customers, to arrive

at a heating degree day factor.

Q. HOW WAS THE UPC FOR LARGE COMMERCIAL CUSTOMERS DEVELOPED?

A. Large commercial customers, defined as commercial customers using 25,000 Mcf or greater annually, often have usage patterns that behave more similarly to industrial customers than to heat sensitive customers. As a result, development of the large commercial customer's UPC is included in the next section with industrial customers.

Q. HOW WAS THE FORECAST FOR LARGE COMMERCIAL CUSTOMERS AND ALL INDUSTRIAL CUSTOMERS DEVELOPED?

A. The large commercial and all of the industrial volume projections were prepared using the actual, HTY history of volumes. The Company believes this is the best indicator of future usage trends for this group of customers. We then utilized the input of our sales representatives to incorporate significant known changes in usage patterns.

Q. PLEASE EXPLAIN HOW THE NUMBER OF BILLS ARE ANNUALIZED.

A. Refer to Exhibit 3, Schedule 15, Attachment F, pages 1-2. The net change in customers for growth and attrition, as presented in column (2), is determined by the net overall change in average number of customers over the last five years. The Company compared the average number of customers for the twelve months ending 8/31/2023 to the average number of customers for the twelve months ending

8/31/2018. The change in the average number of customers is then divided by the number of years between the two time frames to arrive at an annual change in customers number. The details of this analysis are presented in Exhibit 3, Schedule 15, Attachment H, page 2.

Depicted in column 3 of Exhibit 3, Schedule 15, Attachment F, pages 1-2 is the change of customers between classes. The purpose of this column is to align the customers with the correct rate category, as compared to the HTY data. For example, customers may switch back and forth between sales and transportation service. Also, as a result of the annual consumption review process, customers may move to another annual usage tier within the same category.

Q. PLEASE EXPLAIN HOW THE NUMBER OF BILLS ARE FORECASTED FOR THE FTY AND FPFTY.

A. The average annual change in number of customers, as determined to annualize the bills and described above, is forecasted for the FTY and FPFTY as shown in Exhibit 3, Schedule 15, Attachment F, pages 3-6.

Q. PLEASE DESCRIBE EXHIBIT 3, SCHEDULE 15, ATTACHMENT G.

A. Exhibit 3, Schedule 15, Attachment G summarizes the adjustments to weather normalize volumes and to annualize and forecast customer counts for each of the pertinent time frames; HTY, FTY, FPFTY. The adjustments to annualize volumes for net customer growth and attrition and customer reclasses used in Attachment G are summarized in Exhibit 3, Schedule 15, Attachment I.

Q. PLEASE DESCRIBE EXHIBIT 3, SCHEDULE 15, ATTACHMENT D.

A. Exhibit 3, Schedule 15, Attachment D incorporates the summary information provided in Exhibit 3, Schedule 15, Attachments F & G in the first two columns of each page. These volumes and customer counts are then priced out at current rates to calculate the revenue at current rates shown in column 4. This exercise is repeated for each of the pertinent time frames; Adjusted HTY (pages 1-6), FTY (pages 7-12), FPFTY (pages 13-18).

Q. YOU HAVE DESCRIBED THE PROCESS FOR PREPARING THE CUSTOMER COUNTS AND USAGE FORECASTED FOR EACH CLASS. PLEASE EXPLAIN HOW THESE COUNTS AND VOLUMES WERE PRICED IN EXHIBIT 3, SCHEDULE 15, ATTACHMENT D.

A. The retail sales customers are priced at current tariff rates effective October 1, 2023 (excluding the atypical GCA discussed earlier). The transportation service is priced in two parts: customers subject to full tariff rates are priced at the current tariff rates effective October 1, 2023, and competitive customers that have negotiated rates are priced individually at their negotiated delivery rate. The negotiated delivery rate line item displayed in Exhibit 3, Schedule 15, Attachment D is the weighted average negotiated delivery rate for the group of competitive customers specific to each rate class.

Q. YOU MENTION NEGOTIATED DELIVERY RATES FOR COMPETITIVE CUSTOMERS. WHAT MAKES A CUSTOMER "COMPETITIVE"?

A. The Company's service territory is a productive market for competition in several ways, including competition among Natural Gas Distribution Companies (NGDC), the ability for customers to bypass the system, and for customers to choose between natural gas and alternate fuels. Some of our commercial customers and most industrial customers have more than one service option available to them. These customers support important operational needs of the Company's system and also offset the cost of service for other customers. In order to ensure we maintain these accounts, it is necessary to flex our maximum delivery rates to remain competitive. Competitive customers are further discussed by Luke Ravenstahl at Statement No. 7.

Q. PLEASE DESCRIBE EXHIBIT 3, SCHEDULE 15, ATTACHMENT C, PAGES 3 - 6.

A. Exhibit 3, Schedule 15, Attachment C, pages 3-6 are comparable to the schedules presented in the same attachment on pages 1 and 2 and discussed on page 3, lines 7-23, and page 4, lines 1-11 in my testimony. Attachment C, page 3 starts with the pro forma revenue for the future test year as presented in Exhibit 3, Schedule 15, Attachment D, pages 7-12, and walks through the future test year gas costs and rider revenues to arrive at the annualized base revenue for the future test year at current rates. Attachment C, page 4 summarizes the annualized total revenue at present rates as shown in Exhibit 3, Schedule 15, Attachment D, pages 7-12. Annualized universal service rider revenues (column (3) of Attachment C) are reduced by annualized CAP expenses and net to zero. As a result, in Exhibit 3,

Schedule 15, Attachment C, universal service rider revenues are excluded from the schedule for the FTY and FPFTY periods, as also presented in Exhibit 3, Schedule 15, Attachment D, pages 7-18.

Q. PLEASE EXPLAIN THE PROPOSED REVENUES.

A. Exhibit 3, Schedule 15, Attachment O shows the allocation of proposed annual revenues by rate schedule based upon the class revenue requirements presented by witness Ralph Zarumba at Statement No. 15. Next, refer to Exhibit 3, Schedule 15, Attachment E. Exhibit 3, Schedule 15, Attachment E is similar to Exhibit 3, Schedule 15, Attachment D in that it incorporates the summary information provided in Exhibit 3, Schedule 15, Attachments F & G in the first two columns of each page. However, the volumes and customer counts are then priced out at proposed rates to calculate the revenue at proposed rates shown in column 4. This exercise is repeated for each of the pertinent time frames; Adjusted HTY (pages 1-6), FTY (pages 7-12), FPFTY (pages 13-18). Schedules that summarize the comparison of current rates to proposed rates for each of the relevant time periods are shown in Exhibit 3, Schedule 15, Attachment A.

OTHER OPERATING REVENUES

Q. PLEASE DESCRIBE, BY CATEGORY, THE OTHER OPERATING REVENUES INCLUDED IN THE HISTORIC, FUTURE, AND FULLY PROJECTED FUTURE TEST YEARS.

A. As displayed in Exhibit 3, Schedule 15, Attachment A, Line Nos. 19-27, seven accounts are presented as Other Operating Revenues. Account 487 is Forfeited Discounts which represents late payment charges applied to delinquent customer accounts. Account 483 presents sales for resale. This account contains the sales side of gas to third party suppliers. Account 488 is Miscellaneous Service Revenues which includes revenues from connection fees and service fees. Revenues from Transportation of Gas through Gathering Facilities is shown in Account 489.1 for Peoples Natural Gas Division. Account 493 provides revenue from rental of gas property. Account 495 includes several different items such as pooling and billing fees, off-system sales revenue, and other non-distribution revenues. Account 496 is Provision for Rate Refunds. This account is relative to the Tax Cuts and Jobs Act of 2018.

Q. LET'S BEGIN WITH THE FIRST ACCOUNT 483 - SALES FOR RESALE. DID YOU MAKE ANY ADJUSTMENTS TO THIS ACCOUNT?

A. As shown in Exhibit 3, Schedule 15, Attachment C, page 1 sales for resale are removed from the booked revenue as a normalization adjustment. Refer to Exhibit 3, Schedule 15, Attachment J . As mentioned, the entries in this account are for the sales side of gas to third party suppliers, but these sales are offset by the expense to suppliers, netting to zero. As a result, there is nothing forecasted for this account in any of the future periods.

Q. NEXT, ACCOUNT 487 - FORFEITED DISCOUNTS. DID YOU MAKE

ANY ADJUSTMENTS TO THIS ACCOUNT?

A. Yes. The forfeited discounts are projected as a percentage of gross revenues. Refer to Exhibit 3, Schedule 15, Attachment L, page 1. This schedule shows the actual forfeited discounts as a percentage of gross revenues for the HTY is 0.69%. The gross revenues projected for each of the pertinent time frames are then multiplied by 0.69% to forecast the forfeited discounts amount for each period.

Q. DID YOU MAKE ANY ADJUSTMENTS TO ACCOUNT 488 – MISCELLANEOUS SERVICE REVENUES?

A. No. The historic revenues for these fees were used to forecast the future test year and fully projected future test year revenues.

Q. DID YOU MAKE ANY ADJUSTMENTS TO ACCOUNT 489.1 RELATED TO REVENUES FROM THE TRANSPORTATION OF GAS THROUGH GATHERING FACILITIES?

A. Yes. The Company has experienced declining revenues due to declining production during recent years. As a result, Peoples reflected a decline in the forecasted revenues based upon 18 months of historical production data ending May 31, 2023.

Q. DID YOU MAKE ANY ADJUSTMENTS TO ACCOUNT 493 – REVENUE FROM RENTAL OF GAS PROPERTY?

A. No. The historic revenues for these fees were used to forecast the future test year and fully projected future test year revenues.

Q. DID YOU MAKE ANY ADJUSTMENTS TO ACCOUNT 495 – OTHER GAS REVENUES?

A. No. The historic revenues for these fees were used to forecast the future test year and fully projected future test year revenues.

Q. FINALLY, DID YOU MAKE ANY ADJUSTMENTS TO ACCOUNT 496 – PROVISION FOR RATE REFUNDS.

A. No.

WEATHER NORMALIZATION ADJUSTMENT ("WNA")

Q. IS THE COMPANY PROPOSING ANY NEW RATE MECHANISMS?

A. Yes. Peoples is proposing a weather normalization adjustment ("WNA") mechanism in this proceeding.

Q. PLEASE DESCRIBE WHAT A WNA MECHANISM IS.

A. In general, a WNA mechanism adjusts customers' bills to better reflect normalized weather conditions. If weather is colder than normal, customers receive a credit from the utility on their bill which offsets, to some degree, the higher distribution charges based on usage. If weather is warmer than normal, customers receive an additional charge from the utility on their bill which is offset, to some degree, by lower distribution charges based on usage.

Q. WHY IS PEOPLES PROPOSING A WNA MECHANISM?

A. Ralph Zarumba discusses the rationale and support for instituting a WNA mechanism at Statement No. 15. However, I will examine aspects of implementation of the WNA mechanism for Peoples.

Q. DESCRIBE THE WNA CALCULATION.

A. Exhibit CAS-1 presents the formulas and proposed calculation for the WNA mechanism. Additionally, the appropriate tariff pages to implement the proposed WNA mechanism are presented in Dawn Folk's testimony at Statement No. 11. Turning to Exhibit CAS-1, a WNA factor is developed by dividing the normal number of HDD's by the number of actual HDDs. Peoples is proposing that the normal number of HDDs used in the WNA calculation will be based upon the HDDs utilized to develop the revenue requirement in this proceeding (discussed above), and thus would remain the same until a future base rate case proceeding. The next step in the WNA calculation is to determine the baseload amount and heat sensitive amount of the customer's actual monthly consumption. The baseload amount is determined by averaging the actual daily consumption for July and August. Next, the customer's actual consumption for the month is reduced by the baseload amount. The result is the heat sensitive consumption for the month. The heat sensitive consumption is then multiplied by the WNA factor developed above and added to the baseload amount to calculate a weather normalized consumption amount. The difference between the weather normalized consumption amount and

the customer's actual total monthly consumption is the weather normalized adjusted Mcf amount. This amount is multiplied by the distribution rate charge to arrive at the weather normalized adjustment dollar amount that will be included on the customer bill.

Q. WHICH CUSTOMERS WILL WNA APPLY TO?

A. The Company is proposing that WNA apply to residential including CAP, commercial SGS and commercial MGS customers. Consistent with the revenue forecasting methodology, these customer classes are predominantly weather sensitive**.**

Q. WHICH MONTHS WILL WNA APPLY?

A. The Company is proposing that WNA is applicable on a service rendered basis during the heating season months, specifically October 1st through May 31st.

Q. HOW WILL WNA BE REFLECTED ON THE CUSTOMER'S BILL?

A. Peoples will calculate the WNA on an individual customer basis using the actual HDDs and expected HDDs pertaining to the days in the specific customer's billing cycle. The WNA adjustment amount for that billing cycle will roll up with the distribution charge component on the customer's bill and will be included in the total charges displayed as the delivery line item on the bill. Since the WNA mechanism effectively normalizes the distribution revenues recovered from the customer, this will aid the customer in seeing charges on their bill that are more

aligned with the weather most recently experienced. I would also note that WNA amounts will be subject to STAS, DSIC, TRS, and TCJA riders.

Q. HOW WILL WNA IMPACT CAP CUSTOMERS?

A. The WNA program will not impact the amount a CAP customer is expected to pay but rather only impact the "full tariff" charges that costs of the program will be calculated on. Peoples CAP program is a percentage of income program, where CAP customers pay the lower of a percentage of their income or their budget amount. WNA will not change the payment amount requested of CAP customers. WNA will be calculated on a CAP customer's bill, the same as it would for a non-CAP residential customer. However, if the amount of the CAP customer's actual usage bill at "full tariff" rates is greater than the CAP customer's asked to pay amount, the difference is called a CAP Credit. CAP credits are recovered through the Company's Universal Service Program rider that is applicable to Residential non-CAP customers. In this circumstance, the WNA dollars charged to customers enrolled in CAP can be part of the CAP Credit amount that is recovered through the Universal Service rider.

Q. HOW WILL WNA IMPACT BUDGET BILLING CUSTOMERS?

A. The WNA program will not impact the monthly amount a budget customer is expected to pay, meaning the WNA adjustment will not be added to or reduced from the otherwise applicable monthly budget amount. The WNA will be factored into the customer's annual budget reconciliation, which occurs on or near the

annual anniversary date of when the customer enrolled in budget billing. This results in matching the WNA charge with the benefit of a lower gas bill resulting from warmer than normal weather or matches the WNA credit with the higher gas bill resulting from colder than normal weather.

Q. WILL WNA REQUIRE ADDITIONAL FILINGS?

A. Peoples will file weather normalization information with the Commission annually on or before September 1st for the 12-month period ending June of that same year. The filing will contain the following information on the WNA mechanism:

- monthly WNA billed revenue; and
- monthly actual and normal HDD data.

Q. HOW DOES PEOPLES NATURAL GAS'S PROPOSED WNA ALIGN WITH THE STATEMENTS OF POLICY AS OUTLINED BY THE COMMISSION IN THE ALTERNATIVE RATEMAKING AT DOCKET NO. M-2015-2518883?

A. The Company's evaluation of each consideration from the aforementioned Statement of Policy is listed below along with the relevant effect the WNA has on the same.

1. ***Please explain how the ratemaking mechanism and rate design align revenues with cost causation principles as to both fixed and variable costs.***

Peoples' proposed WNA is designed to recover distribution revenues needed to satisfy the cost-of-service requirement determined in this proceeding, while lessening the variance between actual and projected distribution revenues due to weather. Peoples recovers a significant portion of fixed costs through volumetric

rates. These fixed costs do not vary with the amount of gas delivered to customers and are composed of fixed operation and maintenance ("O&M") expenses, administrative and general expenses, depreciation, certain taxes, a portion of working capital requirements, and return on investment. These costs also do not vary due to changes in temperature. Thus, a WNA mechanism will better align distribution revenues with cost causation principles; appropriately accounting for variation in usage due to weather.

2. ***Please explain how the ratemaking mechanism and rate design impact the fixed utility's capacity utilization.***

Peoples' WNA proposal does not impact capacity utilization.

3. ***Please explain whether the ratemaking mechanism and rate design reflect the level of demand associated with the customer's anticipated consumption levels.***

Customer specific usage factors corresponding to the customer's individual demand are continually updated by the Company and reflect the level of demand associated with said customer's expected consumption levels.

4. ***How the ratemaking mechanism and rate design limit or eliminate interclass and intraclass cost shifting.***

Because Peoples Natural Gas's proposed WNA mechanism applies to rates which are based upon the specific revenue allocation and rate design ultimately approved by the Commission, the WNA mechanism will reduce the potential for interclass or intraclass cost shifting related to usage variances brought on by weather from the same weather assumptions incorporated into establishing the Company's rates.

5. ***Please explain how the WNA limits or eliminates disincentives for the promotion of efficiency programs.***

Peoples' proposed WNA only addresses variations due to weather and does not affect customers' ability to pursue energy efficiency measures. Further Peoples will continue to promote the use of energy efficiency measures to its customers.

6. ***Please explain how the WNA impacts customer incentives to employ efficiency measures and distributed energy resources.***

Peoples' customers will continue to be incentivized to use and employ energy efficiency measures and distributed energy resources

because a reduction in the customer's ultimate usage will still reduce their overall bill.

7. ***Please explain how the WNA impacts low-income customers and supports consumer assistance programs.***

As proposed, under Peoples WNA mechanism, customers enrolled in CAP will see lower bill variability for distribution costs during colder than normal billing cycles. Relatedly, customers who are currently enrolled to pay their bills based off of a percentage of their household income will see little to no affect to their bills under the WNA mechanism.

8. ***Please explain how the WNA impacts customer rate stability principles.***

As proposed, Peoples' WNA mechanism would provide customers with more stable bills on an annual basis and, during the cold weather heating months, the WNA will directly reduce bill volatility through the WNA adjustment should weather be abnormally warm or cold.

9. ***Please explain how the weather impacts utility revenue under the WNA.***

Peoples' proposed WNA adjusts a customer's bill due to variations from normal weather and will be in effect during the heating season months (October through May). Further it only applies to certain of the Company's customer classes (Residential including CAP, Commercial SGS, and Commercial MGS) and it does not guarantee that Peoples will recover 100% of its authorized distribution revenues, however, does reduce the amount of weather-related variation in customer bills and the Company's utility distribution revenue.

10. ***Please explain how the WNA impacts the frequency of rate case filings and affects regulatory lag.***

The WNA will not impact the Company's rate case frequency or have an effect on regulatory lag.

11. ***Please explain if the WNA interacts with other revenue sources, such as Section 1307 automatic adjustment surcharges 66. Pa. C.S § 1307 (relating to sliding scale of rates; adjustments), riders such as 66 Pa. C.S. § 2804 (relating to standards for restructuring of electric industry) or system improvement charges66 Pa. C.S. § 1353 (relating to distribution system improvement charge).***

Peoples' proposed WNA only applies to distribution related charges recovering the base distribution revenue requirement from customers subject to the WNA during October through May of each year. WNA amounts will be subject to STAS, DSIC, TRS, and TCJA riders.

12. ***Please explain whether the WNA includes appropriate consumer protections.***

Peoples' proposed WNA mechanism will adjust bills to reflect the revenues that would be recovered under normal weather. Peoples will not recover additional distribution revenues due to colder weather that result in relatively higher usage by customers subject to the WNA.

13. ***Please explain whether the WNA is understandable to customers.***

Peoples' WNA is not new within the NGDC landscape. Several other NGDCs in Pennsylvania have implemented WNA mechanisms. Peoples' proposed WNA is similar to that of those other Pennsylvania NGDCs and, further, Peoples will develop and employ consumer education and customer service training should the WNA mechanism be approved, as well as provide notice of the WNA to its customers pursuant to the Commission's alternative ratemaking notice requirements.

14. ***Please explain how the WNA will support improvements in utility reliability.***

Peoples' cost-of-service is inclusive of investments and costs to continue to enhance the safety and reliability of Peoples' system. Indeed, the WNA will stabilize the recovery of these costs, thereby assisting the Company to continue to pursue improvements to its system.

ALLEGHENY VALLEY CONNECTOR ("AVC") CAPACITY

Q. PLEASE DESCRIBE AVC CAPACITY, INCLUDING HOW AVC COSTS ARE CALCULATED AND RECOVERED.

A. The AVC facilities consist of transmission and storage facilities that are used to provide service to customers. The AVC facilities were historically owned by the

Peoples Natural Gas Division and AVC costs were recovered in base rates from both sales and transportation customers in accordance with the cost allocation approved in Peoples then most recent base rate case. The AVC facilities were transferred to EQT Corporation ("EQT") as part of Peoples acquisition of the Equitable Gas as distribution system in December 2013. When that happened, the AVC costs were removed from base rates and included in purchased gas costs as a stand-alone capacity charge. In other words, the AVC costs were not rolled into Peoples traditional capacity charges for recovery. To date, AVC costs are recovered via a separate surcharge applicable to all Peoples Natural Gas customers. Additionally, AVC capacity is not included in the Price to Compare ("PTC") because it is charged to all of Peoples Natural Gas' customers and therefore shopping customers would not shed this cost if choosing to purchase commodity through a third-party supplier.

Q. ARE YOU PROPOSING TO BLEND THE AVC RATES IN THIS PROCEEDING?

A. Yes. Although capacity is a gas cost and typically reviewed in the context of a 1307(f) proceeding, Peoples is proposing the blending of the AVC rate in this rate case proceeding because it is applicable to all customer classes. Peoples proposal is to charge the stand alone AVC capacity charge to all Peoples Natural Gas Division and Peoples Gas Division customers. As indicated in the application to merge Peoples Natural Gas Company LLC and Peoples Gas Company LLC at Docket Nos. A-2021-3029831 and A-2021-3029833 filed on December 21, 2021,

how and whether the AVC surcharge should be applied to former Peoples Gas customers presents complex issues that should be addressed in a base rate proceeding.

Q. WHY IS PEOPLES PROPOSING AVC CHARGES FOR PEOPLES GAS DIVISION CUSTOMERS?

A. The Company combined gas costs for Peoples Natural Gas Division and Peoples Gas Division effective October 1, 2022. Since that time, with the exception of AVC, both divisions have the same PGC rate components, balancing charges and retainage rates. In this proceeding, Peoples is proposing the combining of base rates and tariffs as the next step in the process of merging these separate divisions into one company. The blending of the AVC rate is necessary to bring the divisions together on the same footing.

Additionally, since the combining of the gas costs, Peoples Gas Division customers receive the benefit of the AVC capacity. Specifically, Peoples is able to "move" the capacity, including AVC, across both legacy systems. This is of particular note when considering Peoples' transportation program. Third-party suppliers are able to bring gas to Peoples system at any of the interconnection points, no matter where the end use customer is receiving the gas. In this fashion, the capacity can be used in the same way by either of the divisions and is not contingent on which of the legacy distribution systems the customer is served from.

Q. HAVE YOU PREPARED AN ANALYSIS OF THIS PROPOSAL?

A. Yes. Refer to Exhibit CAS-2. Peoples is not proposing any changes to the AVC capacity dollars to be recovered in this proceeding. Peoples is also not proposing any change to the allocation of the costs to the customer classes as defined in the current Peoples Natural Gas Company LLC - Peoples Natural Gas Division tariff and shown below.

Rate Class	Allocation
Residential	66.25%
SGS	11.94%
MGS	12.99%
LGS	8.82%

Peoples is only proposing recovery from all Peoples Natural Gas Division and Peoples Gas Division customers. Exhibit CAS-2 displays the AVC revenues included in the gas cost rate displayed in Exhibit No. 3, Schedule 15, Attachment D for the HTY on the left-hand side of the exhibit. The revenues are based upon the AVC rate as of October 1, 2023. On the right-hand side of the exhibit, Peoples utilized the same existing AVC revenue at current rates, but presents the recovery of the revenue from both Peoples Natural Gas Division and Peoples Gas Division customers. As evidenced in the combined totals at the bottom of the page, the Company's AVC proposal is revenue neutral.

Q. IS THE PROPOSED BLENDED AVC RATE WHAT WILL GO INTO EFFECT AT THE CONCLUSION OF THIS CASE?

A. Generally, yes, but not exactly. In the 2024-1307(f) gas cost proceeding, Peoples will propose the same calculation methodology for AVC, but with updated projections of the AVC capacity costs, revisions to the forecasted volumes for both

Divisions, and including any adjustments, if necessary, to account for volumes from negotiated rate customers that are not subject to the AVC capacity charge for competitive reasons.

Q. DOES CHARGING AVC CAPACITY COSTS TO PGD CUSTOMERS HELP MITIGATE RATE DIFFERENCES BETWEEN THE TWO DIVISIONS?

A. Yes. PGD rates are currently higher than PNGD rates. Allocating some of the AVC costs to PGD customers will reduce the overall rate increase for PNGD customers.

COMBINING OF UNIVERSAL SERVICE RIDERS

Q. ARE YOU PROPOSING TO COMBINE UNIVERSAL SERVICE PROGRAM RIDERS IN THIS PROCEEDING?

A. Yes. In conjunction with combining the tariffs and rates for Peoples Natural Gas Division and Peoples Gas Division, the Company is also proposing to combine Rider Universal Service for Peoples Natural Gas Division with Rider USP – Universal Service Program for Peoples Gas Division into one collective Universal Service rider.

Q. PLEASE DESCRIBE WHAT COMBINING THE UNIVERSAL SERVICE RIDERS ENTAILS.

A. The first step is to align the presentation of the riders for ratemaking purposes.

Exhibit CAS-3 displays the rate calculation for Peoples Gas Division in Peoples Natural Gas Division filing format. As a validation point, the rate effective July 1, 2023 as calculated in the legacy Peoples Gas Division format equals the rate calculated in Exhibit CAS-3 using the Peoples Natural Gas Division template. As a validation point, the July 1st Universal Service filings are also included in Exhibit CAS-3, starting on page 6 of 14. Upon approval of combining the riders in this proceeding, Peoples will add the expense components together for PNG & PG shown in Line Nos. 1 through 9 on page 1 of Exhibit CAS-3, and then divide this by the sum of the projected residential non-CAP throughput on Line No. 10, to arrive at a combined C-factor rate. The same calculation methodology will then be applied to the reconciliation adjustment dollars shown in Line No. 12 to arrive at the E-factor rate. The C-factor rate component and the E-factor rate component will be summed to determine the total combined Universal Service rider rate to go into effect for both divisions.

Q. REFERRING TO EXHIBIT CAS-3, WOULD THE COMBINED UNIVERSAL SERVICE RIDER RATE GOING INTO EFFECT UPON APPROVAL OF RATES IN THIS PROCEEDING BE $0.1475 PER MCF?

A. No. Exhibit CAS-3 is presented to illustrate the approach the Company is proposing to combine the universal service rider rates upon approval in this proceeding. The rate of $0.1475 is calculated using the universal service filings effective July 1, 2023. However, there are subsequent universal service filings submitted to the Commission on a quarterly basis. Most recently, October 1, 2023 and an upcoming

filing January 1, 2024. Peoples' proposal to combine the universal service riders will be consistent with the approach shown in Exhibit CAS-3, but will reflect figures based upon the most recent universal service filing filed with the Commission at the commencement of new rates in this proceeding. From that point forward, the Company is proposing to calculate the combined universal service rider using the current Peoples Natural Gas Division calculation methodology, for both PNG and PG.

Q. YOU MENTION USING THE CURRENT PEOPLES NATURAL GAS DIVISION CALCULATION METHODOLOGY FOR THE UNIVERSAL SERVICE RIDER GOING FORWARD. WILL THAT INVOLVE CHANGES FOR THE PEOPLES GAS DIVISION?

A. Yes. This will involve a few changes for the current Peoples Division calculation methodology. First, is the timing and methodology of the bad debt offset calculation. Presently, Peoples Gas Division determines the bad debt offset amount on an annual basis. Using this Peoples Natural Gas Division methodology, this will change to quarterly. Secondly, Peoples Gas Division's bad debt offset calculation uses the average number of customers during the period of October – September to subtract from the CAP Participation threshold amount of 1,500 participants. This would change to using the actual number of customers to subtract from the CAP Participation threshold amount. Next, Peoples Gas Division currently projects customer payments and billed revenue by each tier level of the CAP program. This would change to being projected in the aggregate. Lastly, consistent with the

existing Peoples Natural Gas Division universal service rider, interest will not be applicable.

Q. PLEASE DESCRIBE HOW THE BAD DEBT OFFSET AND CAP PARTICIPATION LEVELS WILL BE COMBINED.

A. The Company proposes to reflect a bad debt offset amount of 4.70% in the first universal service update filing (after the initial compliance filing described above) upon approval in this case. This percentage is determined by dividing the gross write-offs in dollars for confirmed low-income customers by the annual residential revenues for confirmed low-income customers as reported in the Commission's Universal Service Programs and Collections Performance 2022 Report. The calculation is presented in Exhibit CAS-4.

In relation to the CAP participation level, Peoples proposes the threshold amount to trigger the bad debt offset is CAP enrollment in excess of 33,800 customers. This figure is derived by adding the current threshold amount of 32,300 customer on Peoples Natural Gas Division and 1,500 on Peoples Gas Division.

Q. ARE THERE ANY OTHER ASPECTS OF COMBINING THE UNIVERSAL SERVICE RIDERS THAT YOU WOULD LIKE TO ADDRESS?

A. Yes. The current timing of the reconciliation period and roll in of the reconciliation amount into the rate is not the same for Peoples Natural Gas Division and Peoples Gas Division. As inferred by the proposed tariff changes, the Company plans to incorporate the timing set forth for the existing Peoples Gas Division, which means

the annual reconciliation period will be October - September of a given year. The annual 1307(e) reconciliation statement will then be filed by October 31st of the same year as the period end and the reconciliation adjustment will be included in the rate calculation effective January 1st of the following year. To align the two divisions upon approval of this filing, the Company proposes that the Peoples Natural Gas Division annual reconciliation filing of January – December 2023 will be filed by January 31, 2024 and included in the rate calculation effective April 1, 2024. The next annual filing reconciliation statement, that will be filed by October 31, 2024, will include both divisions. For Peoples Natural Gas Division, it will include the months of January 2024 – September 2024 and for Peoples Gas Division, it will include October 2023 – September 2024. The combined reconciliation adjustment amount will be included in the rate calculation effective January 1, 2025.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes. I reserve the right to supplement my testimony as other issues arise during the course of this proceeding. Thank you.

Appendix A -
Filing Requirements Sponsored by Carol Scanlon

Exhibit/SDR	Filing Requirement
Ex. 1, Sch. 22	53.52(d)(1)
Ex. 3, Sch. 1	Ex. 3, Sch. 1
Ex. 3, Sch. 2	53.52(a)(3)
Ex. 3, Sch. 3	53.52(a)(4)
Ex. 3, Sch. 4	53.52(b)(3)
Ex. 3, Sch. 5	53.52(b)(4)
Ex. 3, Sch. 6	53.52(b)(5)
Ex. 3, Sch. 7	53.52(b)(6)
Ex. 3, Sch. 8	53.53.III.E.4
Ex. 3, Sch. 9	53.53.III.E.6
Ex. 3, Sch. 10	53.53.III.E.8
Ex. 3, Sch. 11	53.53.III.E.9
Ex. 3, Sch. 12	53.53.III.E.10
Ex. 3, Sch. 13	53.53.III.E.11
Ex. 3, Sch. 14	53.53.III.E.13
Ex. 3, Sch. 15	53.53.III.E.14
Ex. 3, Sch. 16	53.53.III.E.15
Ex. 3, Sch. 17	53.53.III.E.20
Ex. 3, Sch. 18	53.53.III.E.37
Ex. 10, Sch. 1	53.53.III.E.12
Ex. 10, Sch. 2	53.53.III.E.19
Ex. 10, Sch. 4	53.53.III.E.38
Ex. 10, Sch. 5	53.53.III.E.39
Ex. 10, Sch. 6	53.53.III.E.7
Ex. 12, Sch. 8	53.53.III.E.25
Ex. 12, Sch. 9	53.53.III.E.31
Ex. 12, Sch. 13	53.53.IV.B.4
Ex. 12, Sch. 14	53.53.IV.B.13
Ex. 14, Sch. 1	53.53.IV.B.6
Ex. 14, Sch. 2	53.53.III.A.26
Ex. 17, COS 9	
Ex. 17, COS 13	
Ex. 17, COS 15	
Ex. 17, COS 18	
Ex. 17, COS 21	
Ex. 19, RR 2	
Ex. 19, RR 3	
Ex. 19, RR 4	
Ex. 19, RR 5	
Ex. 19, RR 6	
Ex. 19, RR 7	
Ex. 19, RR 8	
Ex. 19, RR 9	
Ex. 19, RR 10	
Ex. 19, RR 11	
Ex. 19, RR 12	
Ex. 19, RR 16	

Peoples Natural Gas Company LLC

Exhibit CAS-1

WNA Calculation

WNA Formulas	
Weather Normalization Adjustment (WNA)	WNAM X Distribution Usage Charge
WNAM = Weather Normalized Adjustment MCF	WNBM-AMUM
WNBM = Weather Normalized Billing MCF	BLMM+ [(NHDDA/AHDDA)x(AMUM-BLMM)]
BLMM = Base Load Monthly MCF	Actual average daily consumption for July and August
NHDD = Normal Heating Degree Days	Per revenue requirement

Gray highlighted cells designate input fields.

	WNA Calculation			
1	Normal Heating Degree Days		914	NHDD
2	Actual Heating Degree Days		956	AHDD
3	WNA Factor (Line 1 / Line 2)		0.956	NHDD/AHDD
4	Total Monthly MCF Consumption		13.5	AMUM
5	Base Load MCF Consumption		2.2	BLMM
6	Heat Sensitive MCF Consumption (Line 4 - Line 5)		11.3	
7	Weather Normalized Billing MCF (Line 5 + (Line 3 x Line 6))		13.0	WNBM
8	Weather Normalized Adjusted MCF (Line 7 - Line 4)		(0.50)	WNAM
9	Distribution Charge 1/	$	3.9608	
10	**Weather Normalization Adjustment (Line 8 x Line 9)**	**$**	**(1.98)**	WNA

1/ Represents Peoples Natural Gas Division residential delivery rate as of Oct 1, 2023

2/ WNA is a delivery charge adjustment

3/ Calculated WNA amounts are subject to STAS, DSIC, and TRS

Peoples Natural Gas Company LLC
Proposed Blended AVC Rate

Exhibit CAS-2

	Exhibit No. 3 - AVC Revenues at Current Rates					Exhibit No. 3 - AVC Revenues at Proposed Rates				
Peoples Natural Gas Division	**Gas Cost Prior**	**Current AVC Rate**	**Exhibit 3 Total AVC Dollars**	**Exhibit 3 FPFTY Volumes for Gas Cost at Current Rates**	**Exhibit 3 Sch 15 Attach M Volumes x Prior Gas Cost**	**Proposed Blended AVC Rate**	**Exhibit 3 Total AVC Dollars**	**Gas Cost New**	**Exhibit 3 FPFTY Volumes**	**Volumes x New Gas Cost**
Residential Sales	$ 4.7036	$ 0.7515	$ 30,151,960	40,122,369	$ 188,719,575	$ 0.6835	$ 27,424,802	$ 4.6356	40,122,369	$ 185,992,416
Residential CAP Sales	$ 4.7036	$ 0.7515	$ 2,414,333	3,212,685	$ 15,111,187	$ 0.6835	$ 2,195,964	$ 4.6356	3,212,685	$ 14,892,818
Commercial SGS Sales	$ 4.6693	$ 0.7172	$ 4,716,898	6,576,824	$ 30,709,166	$ 0.6604	$ 4,343,226	$ 4.6125	6,576,824	$ 30,335,493
Industrial SGS Sales	$ 4.6693	$ 0.7172	$ 35,452	49,432	$ 230,811	$ 0.6604	$ 32,644	$ 4.6125	49,432	$ 228,003
Commercial MGS Sales	$ 4.4064	$ 0.4543	$ 1,410,135	3,103,973	$ 13,677,347	$ 0.4156	$ 1,290,149	$ 4.3677	3,103,973	$ 13,557,361
Industrial MGS Sales	$ 4.4064	$ 0.4543	$ 54,018	118,903	$ 523,934	$ 0.4156	$ 49,421	$ 4.3677	118,903	$ 519,337
Commercial LGS Sales	$ 4.2071	$ 0.2550	$ 42,635	167,194	$ 703,403	$ 0.2047	$ 34,227	$ 4.1568	167,194	$ 694,996
Industrial LGS Sales	$ 4.2071	$ 0.2550	$ 1,211	4,750	$ 19,982	$ 0.2047	$ 972	$ 4.1568	4,750	$ 19,743
Residential Transport	$ 1.7816	$ 0.7515	$ 5,315,019	7,072,546	$ 12,600,449	$ 0.6835	$ 4,834,290	$ 1.7136	7,072,546	$ 12,119,720
Commercial SGS Transport	$ 1.1640	$ 0.7172	$ 2,152,401	3,001,117	$ 3,493,300	$ 0.6604	$ 1,981,888	$ 1.1072	3,001,117	$ 3,322,787
Industrial SGS Transport	$ 1.1640	$ 0.7172	$ 18,283	25,492	$ 29,673	$ 0.6604	$ 16,834	$ 1.1072	25,492	$ 28,224
Commercial MGS Transport	$ 0.9011	$ 0.4543	$ 5,349,460	11,775,170	$ 10,610,606	$ 0.4156	$ 4,894,283	$ 0.8624	11,775,170	$ 10,155,429
Industrial MGS Transport	$ 0.9011	$ 0.4543	$ 548,700	1,207,792	$ 1,088,341	$ 0.4156	$ 502,012	$ 0.8624	1,207,792	$ 1,041,653
Commercial LGS Transport	$ 0.3715	$ 0.2550	$ 1,728,835	6,779,746	$ 2,518,676	$ 0.2047	$ 1,387,895	$ 0.3212	6,779,746	$ 2,177,736
Industrial LGS Transport	$ 0.3715	$ 0.2550	$ 7,812,739	30,638,193	$ 11,382,089	$ 0.2047	$ 6,272,005	$ 0.3212	30,638,193	$ 9,841,355
Total PNG Division			**$ 61,752,079**	**113,856,187**	**$ 291,418,538**		**$ 55,260,613**		**113,856,187**	**$ 284,927,072**
Check					$ -					
Peoples Gas Division	**Gas Cost Prior**	**Current AVC**	**Exhibit 3 Total AVC Dollars**	**Exhibit 3 FPFTY Volumes for Gas Cost at Current Rates**	**Exhibit 3 Sch 15 Attach M Volumes x Prior Gas Cost**	**Proposed Blended AVC**	**Exhibit 3 Total AVC Dollars**	**Gas Cost New**	**Exhibit 3 FPFTY Volumes**	**Volumes x New Gas Cost**
Residential Sales	$ 3.9521	$ -	$ -	4,740,915	$ 18,736,569	$ 0.6835	$ 3,240,552	$ 4.6356	4,740,915	$ 21,977,121
Residential CAP Sales	$ 3.9521	$ -	$ -	242,455	$ 958,205	$ 0.6835	$ 165,725	$ 4.6356	242,455	$ 1,123,930
Commercial SGS Sales	$ 3.9521	$ -	$ -	705,440	$ 2,787,968	$ 0.6604	$ 465,861	$ 4.6125	705,440	$ 3,253,829
Industrial SGS Sales	$ 3.9521	$ -	$ -	-	$ -	$ 0.6604	$ -	$ 4.6125	-	$ -
Commercial MGS Sales	$ 3.9521	$ -	$ -	556,923	$ 2,201,015	$ 0.4156	$ 231,482	$ 4.3677	556,923	$ 2,432,497
Industrial MGS Sales	$ 3.9521	$ -	$ -	-	$ -	$ 0.4156	$ -	$ 4.3677	-	$ -
Commercial LGS Sales	$ 3.9521	$ -	$ -	-	$ -	$ 0.2047	$ -	$ 4.1568	-	$ -
Industrial LGS Sales	$ 3.9521	$ -	$ -	-	$ -	$ 0.2047	$ -	$ 4.1568	-	$ -
Residential Transport	$ 1.0301	$ -	$ -	29,230	$ 30,109	$ 0.6835	$ 19,979	$ 1.7136	29,230	$ 50,089
Commercial SGS Transport	$ 0.4468	$ -	$ -	124,491	$ 55,622	$ 0.6604	$ 82,211	$ 1.1072	124,491	$ 137,834
Industrial SGS Transport	$ 0.4468	$ -	$ -	560	$ 250	$ 0.6604	$ 370	$ 1.1072	560	$ 620
Commercial MGS Transport	$ 0.4468	$ -	$ -	862,735	$ 385,470	$ 0.4156	$ 358,591	$ 0.8624	862,735	$ 744,061
Industrial MGS Transport	$ 0.4468	$ -	$ -	87,512	$ 39,100	$ 0.4156	$ 36,374	$ 0.8624	87,512	$ 75,474
Commercial LGS Transport	$ 0.1165	$ -	$ -	613,149	$ 71,432	$ 0.2047	$ 125,519	$ 0.3212	613,149	$ 196,951
Industrial LGS Transport	$ 0.1165	$ -	$ -	8,620,901	$ 1,004,335	$ 0.2047	$ 1,764,802	$ 0.3212	8,620,901	$ 2,769,137
Total PG Division			**-**	**16,584,310**	**$ 26,270,077**		**$ 6,491,466**		**16,584,310**	**$ 32,761,543**
					-					
COMBINED			**$ 61,752,079**	**130,440,497**	**$ 317,688,615**		**$ 61,752,079**		**130,440,497**	**$ 317,688,615**

Peoples Natural Gas Company LLC
Universal Service Rider Combining

Exhibit CAS-3

Rider Rates Effective July 1, 2023

Line No.		PNG	PG	COMBINED
	CAP			
1	CAP Credit (Shortfall or deficiency)	$ 2,568,519	$ 820,539	$ 3,389,058
2	Arrearage Forgiveness	$ 3,376,435	$ 322,539	$ 3,698,973
3	CAP Administration - Third Party Administrator	$ 1,222,607	$ 119,000	$ 1,341,607
4	Total CAP Expenses	$ 7,167,561	$ 1,262,078	$ 8,429,639
	Other Universal Services			
5	LIURP	$ 3,216,438	$ 528,500	$ 3,744,937
6	Emergency Line Repair	$ 900,407	$ 67,531	$ 967,938
7	Billing System Modifications to Support LIHEAP State Plan	$ -	$ -	$ -
8	Total Other Universal Services	$ 4,116,845	$ 596,031	$ 4,712,875
9	Total Projected Universal Service Program Costs (Line No. 8 + Line No. 4)	$ 11,284,405	$ 1,858,109	$ 13,142,514
10	Residential Non-CAP Throughput	47,052,173	4,825,163	51,877,336
11	Proposed Rider Universal Surcharge per Mcf (Line No. 9 / Line No. 10)	$ 0.2398	$ 0.3851	$ 0.2533
12	Reconciliation Adjustment Dollars	$ (4,345,257)	$ (1,142,783)	$ (5,488,040)
13	Proposed Reconciliation Adjustment Amount per Mcf (Line No. 12 / Line No. 10)	$ (0.0923)	(0.2368)	$ (0.1058)
14	**Total Proposed Rider Universal Service Surcharge per Mcf (Line No. 11 + Line No. 13)**	**$ 0.1475**	**$ 0.1482**	**$ 0.1475**

Includes E-CAP Customers

Peoples Natural Gas Company LLC
Universal Service Rider Combining

Exhibit CAS-3

Calculation of CAP Credits and Arrearage Forgiveness

			PNG	PG
	CAP Credit Calculation			
1	Active CAP Accounts (including E-CAP) + Projected Enrollments		32,506	3008
2	CAP enrollment level as established		32,300	
3	Current Average CAP Payment		72	60
4	Average CAP Usage		112	98
	Average Bill Calculation			
5	Monthly Service Charge		$ 14.2330	14.4524
6	Usage charge per MCF		$ 6.9012	8.5104
7	Average Annual Bill	**(Line 5 * 12) + (Line 4 * Line 6)**	$ 941	$ 998
8	Annual average CAP Payments per customer	**(Line 3 * 12)**	$ 862	$ 725
9	Annual average CAP Credit per customer	**(Line 7 - Line 8)**	$ 79	$ 273
10	Projected CAP credit (shortfall)	**(Line 2 * Line 9)**	$ 2,552,866	$ 820,539
	Incremental Enrollments			
11	Incremental enrollment above established level (Including E-CAP customers)	**(Line 1- Line 2)**	206	
12	Projected Cap Credit for incremental enrollments	**(Line 9 * Line 11)**	$ 16,281	$ -
13	Bad Debt Offset for Incremental enrollments	**(3.86% * Line 12)** **(7.14% * Line 12)**	$ 628	$ -
14	Net Projected CAP Credit (shortfall) for Incremental Enrollments	**(Line 12 - Line 13)**	$ 15,653	$ -
	Total CAP Credits			
15	**Total Projected CAP Credits**	**(Line 10 + Line 14)**	**$ 2,568,519**	**$ 820,539**
	Arrearage Forgiveness			
	Enrollments to Established level			
16	Enrollments up to established level		32,300	3,008
17	Average Arrearage Forgiveness per cust.		$ 104	107
18	Total Projected Annual Arrearage Forgiveness	**(Line 16 * Line 17)**	$ 3,355,858	$ 322,539
	Incremental Enrollments			
19	Projected Incremental Enrollment above established level (Including E-CAP cust	**(Line 11)**	206	
20	Average Arrearage Forgiveness per cust.	**(Line 17)**	$ 104	$ 107
21	Total Projected Annual Arrearage Forgiveness	**(Line 19 * Line 20)**	$ 21,403	$ -
22	Bad Debt Offset for Incremental Enrollments	**(3.86% * Line 21)**	$ 826	$ -
23	Net Annual Arrearage Forgiveness for Incremental Enrollments	**(Line 21 - Line 22)**	$ 20,577	$ -
24	**Total Projected Annual Arrearage Forgiveness**	**(Line 18 + Line 23)**	**$ 3,376,435**	**$ 322,539**

1/ Per Docket No. M-2018-3003177, monthly CAP Plus charges eliminated and no longer included in the total monthly CAP payment.

2/ Projected Arrearage Forgiveness is based upon average forgiveness per customer over the June 2022-May 2023 period.

Peoples Natural Gas Company LLC
Universal Service Rider Combining

Exhibit CAS-3

Universal Service Programs and Administrative Costs

			PNG Annual Cost		PG Annual Cost
	CAP Administration				
1	Third Party Administrator		$ 1,222,607		$ 119,000
	Other Universal Services				
2	Low Income Usage Reduction Program (LIURP)		$ 3,216,438		$ 528,500
3	Emergency Line Repair		$ 900,407		$ 67,531
4	Billing System Modifications to Support LIHEAP State Plan		$ -	1/	$ -
5	Total Program Costs -- Other Universal Services	**(Lines 2 through 4)**	$ 4,116,845		$ 596,031
6	**Total Administrative & Program Costs**	**(Line 1 + Line 5)**	**$ 5,339,452**		**$ 715,031**

1/ *Billing System Modifications to Support the LIHEAP State Plan were approved through Peoples' base rate proceeding at Docket No. R-2012-2285985.*

Peoples Natural Gas Company LLC
Universal Service Rider Combining

Exhibit CAS-3

Annual Reconciliation of CAP Costs to CAP Recoveries

	PNG	PG
	Reconciliation Rate Adjustment	
Prior Period Over/ (Under) Collection	$ (3,350,375)	$ (86,703)
Actual Total CAP Costs	$ 25,646,759	$ 1,648,195
Interest	$ -	$ (120,495)
Less:		
Cost Offsets for Customers	$ (20,825)	$ 45,075
Audit Adjustment	$ (59,077) [1/]	$ -
Total CAP Recoveries	$ 33,262,489	$ 2,712,111
Over / (Under) Recoveries	$ 4,345,257	$ 1,142,783
Residential throughput (Mcf)	47,052,173	4,825,163
Reconciliation Rate Adjustment	$ (0.0923)	$ (0.2368)

[1/] - *Per current audit for PNG Universal Service Rider, an adjustment made to refund customers due to prior miscalculation*

Peoples Natural Gas Company LLC
Universal Service Rider Combining

Exhibit CAS-3

Calculation of Credit Offset

	PG			PNG		
Line No.	**Month**		**Total Rate Discount & Arrearage Forgiveness**	**Month**		**Total Rate Discount & Arrearage Forgiveness**
1	Oct-21	$	45,716	Jan 22	$	2,588,247
2	Nov-21		61,188	Feb	$	3,955,789
3	Dec-21		121,847	Mar	$	3,101,349
4	Jan-22		181,982	Apr	$	2,301,871
5	Feb-22		313,622	May	$	1,036,798
6	Mar-22		246,473	Jun	$	438,632
7	Apr-22		180,345	Jul	$	347,147
8	May-22		84,656	Aug	$	439,746
9	Jun-22		41,142	Sep	$	341,916
10	Jul-22		31,875	Oct	$	786,815
11	Aug-22		38,238	Nov	$	1,402,619
12	Sep-22		28,484	Dec	$	3,557,853
		$	1,375,568		$	20,298,782
13	Avg # of Customers Oct. 2021-Sept. 2022		2,772	Avg # of Customers Jan22-Dec 22		337,817
14	Average Cost Per Customer	$	496	Average Cost Per Customer	$	60
15	Average # of Customers in Excess of 1,500		1,272	Average # of Customers in Excess of 32,300		305,517
16	Total Annual Cost of Excess Customers	$	631,303	Total Annual Cost of Excess Customers	$	18,357,938
17	Credit %		7.14%	Credit %		3.86%
18	Credit Amount	$	45,075	Credit Amount	$	708,616

Peoples Natural Gas Company LLC - Peoples Natural Gas Division
Rider Universal Service Costs
Effective 7/1/2023

CAP			
CAP Credit (Shortfall or deficiency)	**Page 2**	$	2,568,519 [1/]
Arrearage Forgiveness	**Page 2**	$	3,376,435 [1/]
CAP Administration - Third Party Administrator	**Page 3**	$	1,222,607
Total CAP Expenses		$	7,167,561
Other Universal Services			
LIURP	**Page 3**	$	3,216,438
Emergency Line Repair	**Page 3**	$	900,407
Billing System Modifications to Support LIHEAP State Plan	**Page 3**	$	-
Total Other Universal Services		$	4,116,845
Total Projected Universal Service Program Costs		**$**	**11,284,405**
Residential Non-CAP Throughput			47,052,173
Proposed Rider Universal Surcharge per Mcf		$	0.2398
Plus: Reconciliation Adjustment	**Page 4**	$	(0.0923)
Total Proposed Rider Universal Service Surcharge per Mcf		**$**	**0.1475**

[1/] *Includes E-CAP Customers*

Peoples Natural Gas Company LLC - Peoples Natural Gas Division
Rider Universal Service Costs
Calculation of CAP Credits and Arrearage Forgiveness

CAP Credit Calculation

1	Active CAP Accounts (including E-CAP) + Projected Enrollments			32,506	
2	CAP enrollment to 32,300 level as established @ Docket R-2018-3006818			32,300	
3	Current Average CAP Payment			72	1/
4	Average CAP Usage			112	
	Average Bill Calculation				
5	Monthly Service Charge		$	14.2330	
6	Usage charge per MCF		$	6.9012	
7	Average Annual Bill	**(Line 5 * 12) + (Line 4 * Line 6)**	$	941	
8	Annual average CAP Payments per customer	**(Line 3 * 12)**	$	862	
9	Annual average CAP Credit per customer	**(Line 7 - Line 8)**	$	79	
10	Projected CAP credit (shortfall)	**(Line 2 * Line 9)**	$	2,552,866	
	Incremental Enrollments				
11	Incremental enrollment above 32,300 (Including E-CAP customers)	**(Line 1- Line 2)**		206	
12	Projected Cap Credit for incremental enrollments	**(Line 9 * Line 11)**	$	16,281	
13	Bad Debt Offset for Incremental enrollments (3.86%)	**(3.86% * Line 12)**	$	628	
14	Net Projected CAP Credit (shortfall) for Incremental Enrollments	**(Line 12 - Line 13)**	$	15,653	
	Total CAP Credits				
15	**Total Projected CAP Credits**	**(Line 10 + Line 14)**	**$**	**2,568,519**	

Arrearage Forgiveness

	Enrollments to 32,330 level				
16	Enrollments up to 32,330 level			32,300	
17	Average Arrearage Forgiveness per cust.		$	104	
18	Total Projected Annual Arrearage Forgiveness	**(Line 16 * Line 17)**	$	3,355,858	2/
	Incremental Enrollments				
19	Projected Incremental Enrollment above 32,330 (Including E-CAP customers)	**(Line 11)**		206	
20	Average Arrearage Forgiveness per cust.	**(Line 17)**	$	104	
21	Total Projected Annual Arrearage Forgiveness	**(Line 19 * Line 20)**	$	21,403	
22	Bad Debt Offset for Incremental Enrollments	**(3.86% * Line 21)**	$	826	
23	Net Annual Arrearage Forgiveness for Incremental Enrollments	**(Line 21 - Line 22)**	$	20,577	2/
24	**Total Projected Annual Arrearage Forgiveness**	**(Line 18 + Line 23)**	**$**	**3,376,435**	

1/ *Per Docket No. M-2018-3003177, monthly CAP Plus charges eliminated and no longer included in the total monthly CAP payment.*

2/ *Projected Arrearage Forgiveness is based upon average forgiveness per customer over the December 2021-November 2022 period.*

Peoples Natural Gas Company LLC - Peoples Natural Gas Division
Rider Universal Service Costs
Universal Service Programs and Administrative Costs

				Annual Cost	
	CAP Administration				
1	Third Party Administrator		$	1,222,607	
	Other Universal Services				
2	Low Income Usage Reduction Program (LIURP)		$	3,216,438	
3	Emergency Line Repair		$	900,407	
4	Billing System Modifications to Support LIHEAP State Plan		$	-	1/
5	Total Program Costs -- Other Universal Services	**(Lines 2 through 4)**	$	4,116,845	
6	**Total Administrative & Program Costs**	**(Line 1 + Line 5)**	**$**	**5,339,452**	

1/ *Billing System Modifications to Support the LIHEAP State Plan were approved through Peoples' base rate proceeding at Docket No. R-2012-2285985.*

Peoples Natural Gas Company LLC - Peoples Natural Gas Division

Rider Universal Service - Annual Reconciliation and Rate Adjustment
Effective 4/1/2023

Annual Reconciliation of CAP Costs to CAP Recoveries

		Reconciliation Rate Adjustment
Prior Period Over/ (Under) Collection	$	(3,350,375)
Actual Total CAP Costs	$	25,646,759
Less:		
Cost Offsets for Customers	$	(20,825)
Audit Adjustment	$	(59,077) 1/
Total CAP Recoveries	$	33,262,489
Over / (Under) Recoveries	$	4,345,257
Residential throughput (Mcf)		47,052,173
Reconciliation Rate Adjustment	$	(0.0923)

Peoples Natural Gas Company LLC - Peoples Gas Division

Derivation of Rider USP Surcharge Rate
Effective July 1, 2023

Line No.	Description			Amount
	Current CAP Customers			
1	Enrolled Customers	**page 2 of 5**		2,208
2	Consumption	**page 2 of 5**		98
3	Revenues Billed	**page 2 of 5**	$	2,203,857
4	Customer Payments	**page 3 of 5**	$	(1,608,918)
5	CAP Credits for Current Customers		$	594,939
	Projected CAP Customers			
6	Estimated Enrollment	**page 2 of 5**		800
7	Average Consumption	**page 2 of 5**		98
8	Revenues Billed	**page 2 of 5**	$	797,597
9	Customer Payments	**page 3 of 5**	$	(571,998)
10	CAP Credits for Additional Enrollment		$	225,600
	Rate Derivation:			
11	Total Estimated CAP Credits		$	820,539
12	Estimated Pre-Program Arrearages		$	322,539
13	Estimated Low Income Usage Reduction Program (LIURP)		$	528,500
14	Estimated External Administrative costs related to Universal Service Programs		$	119,000
15	Annual Reconciliation of Rider USP Surcharge	**page 5 of 5**	$	(1,142,783)
16	Estimated Emergency Furnace Repair		$	67,531
17	Total Costs to be Recovered		$	715,325
18	Rate Determinants (Projected non EHF RS Volume) (a)			4,825,163
19	**Rider USP Rate per Mcf - Effective 7/1/2023**		**$**	**0.1482**

Notes:

(a) Based on the volumes reflected in Peoples Gas' 2021 1307(f) proceeding.

Peoples Natural Gas Company LLC - Peoples Gas Division

Calculation of Estimated Revenues Billed at Full Tariff
Effective July 1, 2023

Line No.	Description		Amount				
			Tier 1	Tier 2	Tier 3	Tier 4	Total
1	**CURRENT CUSTOMERS**						
2	Currently Enrolled EHF Customers		528	815	679	186	2,208
3	**Customer Charge**						
4	Monthly Customer Charge		$ 14.4524	$ 14.4524	$ 14.4524	$ 14.4524	
5	Annual Customer Charge	**Line 2 * Line 4 * 12**	$ 91,570	$ 141,344	$ 117,758	$ 32,258	$ 382,930
6	**Commodity Charge**						
7	Demand Charge Rate		1.0310	$ 1.0310	$ 1.0310	$ 1.0310	
8	Volumetric Delivery Rate		6.7743	$ 6.7743	$ 6.7743	$ 6.7743	
9	Commodity Gas Supply Rate		0.7262	$ 0.7262	$ 0.7262	$ 0.7262	
10	Gas Cost Adjustment		0.3936	$ 0.3936	$ 0.3936	$ 0.3936	
11	STAS		0.0043	$ 0.0043	$ 0.0043	$ 0.0043	
12	RIDER GPC		0.0865	$ 0.0865	$ 0.0865	$ 0.0865	
13	RIDER MFC		0.0526	$ 0.0526	$ 0.0526	$ 0.0526	
14	RIDER TCJA		(0.5581)	$ (0.5581)	$ (0.5581)	$ (0.5581)	
15	Total Rate		$ 8.5104	$ 8.5104	$ 8.5104	$ 8.5104	
16	Average Volumes - Mcf		97	96	97	101	
17	Annual Commodity Costs	**Line 2 * Line 15 * Line 16**	$ 437,110	$ 665,091	$ 559,572	$ 159,154	$ 1,820,928
18	Total Revenue Billed for Enrolled Customers	**Line 5 + Line 17**	$ 528,680	$ 806,435	$ 677,330	$ 191,412	$ 2,203,857
19	**PROJECTED ENROLLMENT**						
20	Projected Annual Enrollment		200	304	256	40	800
21	**Customer Charge**						
22	Monthly Customer Charge	**Line 4**	$ 14.4524	$ 14.4524	$ 14.4524	$ 14.4524	
23	Annual Customer Charge	**Line 20 * Line 22 * 12**	$ 34,686	$ 52,722	$ 44,398	$ 6,937	$ 138,743
24	**Commodity Charge**						
25	Total Billed Rate	**Line 15**	$ 8.5104	$ 8.5104	$ 8.5104	$ 8.5104	
26	Average Normalized Volumes - Mcf	**Line 16**	97	96	97	101	
27	Annual Commodity Costs	**Line 20 * Line 25 * Line 26**	$ 165,572	$ 248,083	$ 210,973	$ 34,227	$ 658,855
28	Total Revenue for Projected Enrollment	**Line 23 + Line 27**	$ 200,258	$ 300,805	$ 255,370	$ 41,164	$ 797,597

Peoples Natural Gas Company LLC - Peoples Gas Division

Calculation of Expected Customer Payments
Effective July 1, 2023

Line No.	Description		Amount				
			Tier 1	Tier 2	Tier 3	Tier 4	Total
1	**CURRENT CUSTOMERS**						
2	Enrolled EHF Customers	**page 2 of 5**	528	815	679	186	2,208
3	Average Required Monthly Payment		$ 33	$ 58	$ 77	$ 90	
4	Annual Required Monthly Payment (a)	**Line 2 * Line 3 * 12**	$ 210,859	$ 571,428	$ 624,867	$ 201,764	$ 1,608,918
5	**PROJECTED ENROLLMENT**						
6	Projected Enrollment	**page 2 of 5**	200	304	256	40	800
7	Average Required Monthly Payment	**Line 3**	$ 33	$ 58	$ 77	$ 90	
8	Annual Required Monthly Payment	**Line 6 * Line 7 * 12**	$ 79,871	$ 213,146	$ 235,591	$ 43,390	$ 571,998

Notes:

(a) Per Docket No. M-2018-3003177, monthly CAP Plus charges eliminated and is no longer included in the total monthly CAP payment.

Peoples Natural Gas Company LLC - Peoples Gas Division

Rider USP - Annual Reconciliation
Effective January 1, 2023

Annual Reconciliation of CAP Costs to CAP Recoveries

Prior Period Over/ (Under) Collection	$	(86,703)
Actual Total CAP Costs	$	1,648,195
Interest Oct 2021 - Sept 2022	$	(120,495)
Less:		
Cost Offsets	$	45,075
Total CAP Recoveries	$	2,712,111
Over / (Under) Recoveries	$	1,142,783

Peoples Natural Gas Company LLC - Peoples Gas Division

Calculation of Credit Offset
Effective January 1, 2023

Line No.	Month	Total Rate Discount & Arrearage Forgiveness		
1	Oct-21	$	45,716	
2	Nov-21		61,188	
3	Dec-21		121,847	
4	Jan-22		181,982	
5	Feb-22		313,622	
6	Mar-22		246,473	
7	Apr-22		180,345	
8	May-22		84,656	
9	Jun-22		41,142	
10	Jul-22		31,875	
11	Aug-22		38,238	
12	Sep-22		28,484	
				$ 1,375,568
13	Avg # of Customers Oct. 2021 through Sept. 2022			2,772
14	Average Cost Per Customer			$ 496
15	Average # of Customers in Excess of 1,500			1,272
16	Total Annual Cost of Excess Customers			$ 631,303
17	Credit %			7.14%
18	Credit Amount			$ 45,075

Peoples Natural Gas Company LLC
Docket No. R-2023-3044549 Exhibit CAS-4

Derivation of CAP Bad Debt Offset for CAP Credits and Arrearage Forgiveness

		2022
Annual Residential Revenue_Confirmed Low Income [1/]		
Peoples	$	116,734,701
Gross Write-Offs in Dollars_Confirmed Low Income [1/]		
Peoples	$	5,489,071
		4.70%

[1/] As reported in the Commission's Universal Service Programs and Collections Performance 2022 Report.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	
	:	

PREPARED REBUTTAL TESTIMONY OF CAROL A. SCANLON, MANAGER, RATES PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED:
DATE ADMITTED: April 18, 2024

Peoples Statement No. 3-R

PREPARED REBUTTAL TESTIMONY OF
CAROL A. SCANLON

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Carol A. Scanlon. My business address is 375 North Shore Drive, Pittsburgh, PA 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by PNG Companies LLC ("PNG Companies" or "PNG") as Rates Manager. Effective January 1, 2023 the Peoples Natural Gas Company LLC and Peoples Gas Company LLC were merged. As such, Peoples Natural Gas Company LLC ("Company") currently includes – Peoples Natural Gas Division ("PNGD" or "Peoples Natural Gas Division") and Peoples Gas Division ("PGD" or "Peoples Gas Division"). When referring to both divisions herein, they may be referred to as the Peoples Divisions, or the Company. In my position as Rates Manager, I provide rates and regulatory services for both PNGD and PGD.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 3.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I will respond to the testimony set forth by the Commission's Bureau of Investigation and Enforcement's ("I&E") witness Ethan H. Cline, the Office of Consumer Advocate's

("OCA") witnesses David T. Evrard, Dante Mugrace, Clarence Johnson, Barbara Alexander, and Roger Colton, as well as the Office of Small Business Advocate's ("OSBA") witness Robert D. Knecht, and the Coalition of Affordable Utility Service and Energy Efficiency in Pennsylvania's ("CAUSE-PA") witness Harry Geller. Many of these identified witnesses' testimony have overlapping subject matters. Where possible, I will address issues in kind and by subject matter, rather than by specific witness.

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. Yes, I am sponsoring Exhibits CAS-1R, CAS-2R and CAS-3R.

Q. HOW HAVE YOU ARRANGED YOUR REBUTTAL TESTIMONY?

A. I address each issue in kind in the following order: (1) other parties direct testimony related to the Company's proposal to implement a weather normalization adjustment ("WNA") mechanism, as identified by various witnesses for various parties (Section I, *supra);* (2) other parties direct testimony related to derivation of annual heating degree days ("HDD"s) used to forecast normal weather identified by I&E witness Cline in I&E Statement No. 3 and the conservation adjustment factor identified by witness Knecht in OSBA Statement No. 1(Section II, *supra*); (3) other parties direct testimony related to the alleged notice issues identified by OCA witnesses Evrard in OCA Statement No. 1 and Alexander in OCA Statement No. 5 (Section III, *supra*); (4) other parties direct testimony related to the bad debt offset for universal service rider as identified by OCA witness Mr. Colton in OCA Statement No. 6 (Section IV, *supra*); and (5) other parties direct testimony related to the

AVC capacity charge combining as identified witness Knecht in OSBA Statement No. 1 (Section V, *supra*).

I. WEATHER NORMALIZATION ADJUSTMENT

Q. PLEASE BRIEFLY EXPLAIN THE COMPANY'S WNA PROPOSAL.

A. The Company's WNA proposal requests a mechanism that adjusts customers' bills to better reflect normalized weather conditions. If weather is colder than normal, customers receive a credit from the utility on their bill which offsets, to some degree, the higher distribution charges based on usage. If weather is warmer than normal, customers receive an additional charge from the utility on their bill which is offset, to some degree, by lower distribution charges based on usage.

More specifically, Peoples' proposal is for a WNA mechanism that would apply to residential (including Customer Assistance Program ("CAP")) customers, commercial SGS and commercial MGS customers that are predominantly weather sensitive, meaning that fluctuations in heating degree days is the predominant variable that impacts the customer's usage. The WNA will be calculated on an individual customer basis using the actual HDDs and expected HDDs pertaining to the days in the specific customer's billing cycle. The Company's proposal does not include a deadband and would be applicable during the heating season months, specifically October through May.

Q. IS PEOPLES PROPOSAL BASED UPON SERVICE RENDERED OR BILLS RENDERED?

A. Peoples intended to propose the WNA mechanism on a bills rendered basis, not a service rendered basis, from May 1st through October 31st. I note this because the proposed WNA tariff inadvertently references a service rendered basis. As stated in response to OSBA-I-12(j) the Company specified it would adjust its tariff to reflect the mechanism as bill rendered in rebuttal testimony. The revised tariff language is presented in Peoples Exhibit No. DMF-2R.

Q. DID OTHER PARTIES SUBMIT DIRECT TESTIMONY REGARDING THE WNA?

A. Yes. I&E, OCA, OSBA, and CAUSE-PA all addressed the Company's WNA proposal through their Direct Testimony.

Q. PLEASE SUMMARIZE OTHER PARTIES' TESTIMONY WITH RESPECT TO THE WNA.

A. Various parties submitted direct testimony related to the WNA. I&E witness Mr. Cline states that the WNA mechanism as proposed by the Company should be revised to include a 3% deadband but otherwise be approved. OCA witness David T. Evrard recommends that the WNA be denied and points to other utilities' WNA programs and how they differ from Peoples' proposal. Mr. Evrard also argues that alternative ratemaking mechanisms, like the WNA, can guarantee revenue for a utility and traditional ratemaking methods render certain benefits. OCA witness Mugrace also recommends that the WNA be denied as, according to Mr. Mugrace, implementation of the WNA will impose more volatility to customers' bills, doesn't closely relate to cost causation principles, and the WNA will be

difficult to understand from customers' perspective. Similarly, OCA witness Johnson recommends that the WNA be denied, as he claims that the WNA would result in more charges than credits, that the WNA may constitute single issue ratemaking, that the WNA is difficult for customers to understand, and that implementation of the WNA would disincentivize energy efficiency measures. OCA witness Colton also recommends that the WNA be denied and that the Company's budget billing program is sufficient.

OSBA witness Robert D. Knecht recommends that, if the WNA is approved by the Commission, certain "protections" should be adopted for the program.

CAUSE-PA witness Geller recommends that the WNA be denied and argues that the WNA would prevent residential customers from realizing bill savings "that result from warming weather trends and would shift all weather-related risk from the utility to the consumer."

A. Application and Efficacy of a Deadband

Q. PLEASE EXPLAIN WHAT A "DEADBAND" IS WITH RESPECT TO THE WNA.

A. In relation to a WNA mechanism, a deadband is a threshold upon which until met, the WNA mechanism would not apply. Said another way, it sets a boundary such that slight fluctuations in actual HDDs compared to normal HDDs are not adjusted for.

Q. DO OTHER PARTIES RECOMMEND THE IMPLEMENTATION OF A DEADBAND IN ORDER FOR THE COMMISSION TO APPROVE THE WNA?

A. Yes. I&E witness Mr. Cline recommends that Peoples' WNA be approved on the condition that a 3% deadband is included. He indicates that his recommendation maintains

consistency with the Commission's previous ruling and with existing WNAs of Columbia, NFG, and UGI. OSBA witness Knecht, by way of discovery, notes the following about the deadband: "In my testimony, I did not recommend a deadband as a necessary condition for approval of the Company's WNA proposal." He then goes on to say that he would not object to a reasonable deadband. Refer to Exhibit CAS-1R for OSBA's response to OCA's data request.

Q. DO YOU AGREE WITH I&E WITNESS MR. CLINE THAT THE WNA MECHANISM SHOULD ONLY BE APPROVED WITH A THREE PERCENT DEADBAND?

A. No, I do not.

Q. WHY NOT?

A. As also discussed in the direct testimony of Ralph Zarumba at Peoples Statement No. 15, page 57, deadbands reduce the effectiveness of the weather normalization mechanism and therefore reduce their values to both the Company and customers. The goal of the WNA mechanism is to adjust bills to better reflect normalized weather conditions. Implementation of a deadband conflicts with this normalization and leaves a portion of weather-related revenues unaddressed. In this way, the deadband negates the purpose of the WNA mechanism.

On page 14 of his direct testimony, witness Mr. Cline, points to the 2021 Columbia Gas Order as support for the appropriateness of a deadband.

> In the 2021 Columbia Order, the Commission determined that "without an extraordinary set of circumstances, there is no need for Columbia to

> reconcile day-to-day temperature variations that are part of normal business." (Docket No. R-13 2020-3018835, Order entered February 19, 2021, pp. 264-265)

However, Peoples WNA proposal is not to reconcile day-to-day temperature changes, but rather to compare a customer's full billing cycle of actual HDDs to the comparable full cycle of normal HDDs. Therefore, any day-to-day weather fluctuations will be flushed out since the comparison will be done on a full billing cycle of data, which on average, is approximately 30 days.

Finally, as will be discussed later in my rebuttal testimony, another concern raised by OCA witness Johnson is that the WNA is difficult for customers to understand. Johnson's concern is presented in response to Peoples proposed calculation that does not contain a deadband. Including a deadband will certainly add complexity to the calculation that will elevate concerns on this front.

Q. HOW DO YOU THINK THE COMMISSION SHOULD EVALUATE I&E'S ARGUMENTS RELATED TO A DEADBAND?

A. Peoples believes that application of the WNA without a deadband is the most consistent and correct application of the mechanism, as the purpose of the WNA is to remedy variations in weather for both the customer and the company. Additionally, it is the most straightforward application of the mechanism which will be important for ease of customer understanding. Consider a case when the variation in weather is 3.1% versus 3.0%. In this scenario, the WNA mechanism would be applied to a 0.1% change in weather. The Company believes this could create more complexity and confusion for customers.

The Commission should approve the Company's WNA proposal without a deadband. Both the Company and even OSBA in discovery, agree that a deadband is NOT a necessary condition for approving the WNA mechanism.

B. Complexity and Customer Understanding

Q. WHAT STATEMENTS DO THE OCA WITNESSES MAKE REGARDING COMPLEXITY OF THE WNA MECHANISM?

A. OCA witness Mr. Mugrace claims the WNA calculation proposed by Peoples is a complex model that will make it difficult for customers to understand what exactly is included in their bill. He further points to Peoples proposal to include the WNA component with the delivery charge line item on a customer's bill as a reason customers will find it difficult to understand what's in their bill.

OCA witness Mr. Johnson cites the testimony of Peoples customer Nick Hoffman from a public input hearing on March 5, 2024, in Monroeville, PA. Mr. Hoffman stated that the calculation of the WNA is complex and that customers would have a hard time verifying the accuracy of the charge or credit. Witness Mr. Johnson also references an occasion two years ago when some PGW customers received high charges in the month of May when customers ordinarily reduced their heating use. He points to this as a reason that shoulder months are a particular cause for concern since at times a shoulder month can be more similar to summer than winter and that the complexity of the formula could lead to customer confusion or complaint.

OCA witness Ms. Alexander supplements the other OCA witnesses' position on the WNA mechanism. Similar to OCA witness Mr. Johnson, Ms. Alexander addresses Mr.

Hoffman's testimony at the public input hearing, pointing out that he testified in opposition of the WNA because he does not view it as being neutral," stating, "It seems doubtful that WNA would be revenue neutral because a warmer month does not guarantee a colder month is inevitable."[1] Ms. Alexander also echoes Mr. Mugrace's concern about the WNA rate adjustment not being listed out separately on the customer's bill but rather being included in the customer's "delivery charge" line item.

Q. PLEASE RESPOND TO THE OCA'S CONCERNS REGARDING COMPLEXITY OF THE PROGRAM.

A. Peoples acknowledges there are multiple steps and variables in the WNA calculation. However, that should not be viewed as a reason for rejecting the WNA mechanism. In Pennsylvania, four other Natural Gas Distribution Companies (NGDCs) have Commission approved weather normalization mechanisms in place. They are Columbia Gas of PA, National Fuel Gas, PGW, and UGI. Peoples' proposed WNA is similar to that of those other Pennsylvania NGDCs. This supports the notion that while the WNA calculation contains multiple steps, customers are able to understand the nature of the mechanism. Peoples' proposal is to include the WNA adjustment with the distribution charge component on a customer's bill. Peoples is experienced with handling this function. Currently, the universal service rider ("USR") rate component is included with the distribution charge rate component and displayed on the customer's bill as the "delivery" line item for presentation purposes. The reason for handling the WNA mechanism the same way is to aid the customer in seeing charges on their bill that are more aligned with normal

[1] Public Input Transcript, March 5, 2024, page 49.

weather, in essence, a more stable delivery charge amount. However, this does not mean that Peoples is not anticipating customer education and awareness of the WNA mechanism. If approved, Peoples plans to include information and FAQs in a bill insert and on the Company's website explaining the WNA. The Company will also ensure training for customer service center representatives to be able to walk a customer through what the WNA is and how the WNA is calculated.

Q. DID YOU ATTEND THE PUBLIC INPUT HEARING ON MARCH 5, 2024 IN MONROEVILLE PA?

A. No, I did not.

Q. HAVE YOU REVIEWED THE TRANSCRIPT FROM THE PUBLIC INPUT HEARING ON MARCH 5, 2024 IN MONROEVILLE PA SPECIFIC TO MR. HOFFMAN'S TESTIMONY?

A. Yes, I have.

Q. HOW DO YOU RESPOND TO THE CONCERNS RAISED BY OCA PURSUANT TO MR. HOFFMAN'S TESTIMONY?

A. While I completely understand and appreciate Mr. Hoffmann's concerns that are mentioned by OCA witnesses Mr. Mugrace and Ms. Alexander, I believe the Company is taking the necessary steps towards alleviating those concerns. Specifically, in relation to the complexity of the mechanism and being able to understand it, I mentioned that, if approved, Peoples will be providing customer communication and education through bill inserts and the Company's website. In addition, customer service center representatives

will be trained to assist customers with WNA questions. I reiterate that multiple NGDCs in PA have this mechanism currently in place and that is not new within the NGDC landscape. In relation to Mr. Hoffman's belief that the mechanism in not neutral, I respectfully point out that he is focused only on the impact of weather that is warmer than normal versus a more comprehensive view of the mechanism. The other side of the coin is that Peoples will not recover additional distribution revenues due to colder weather that results in relatively higher usage by customers subject to the WNA. The Company anticipates that over a length of time the total weather related cumulative impact is expected to be zero or near zero.

Q. IS THERE ANYTHING ELSE IN REGARD TO MR. HOFFMAN'S TESTIMONY AT THE PUBLIC INPUT HEARING THAT YOU WOULD LIKE TO POINT OUT?

A. Yes. Mr. Hoffman testified that "Peoples has made errors on my bill. The simple DSIC charge surcharge of 5.00 percent on my bill has been wrong for the last three months. It's easy to compute 5.00 percent of the customer charge plus delivery charge, but Peoples has been charging me about 5.17 percent."[2]

Q. DID YOU REVIEW MR. HOFFMAN'S BILLS?

A. Yes. After the public input hearing, I was made aware of his claim about the incorrect DSIC amount being billed to him. As a result, and in conjunction with Peoples Billing and

[2] Public Input Transcript, March 5, 2024, page 51.

Compliance departments, I reviewed each of Mr. Hoffman's bills from July 2023 through February 2024.

Q. WERE ANY OF THE BILLS YOU REVIEWED FOUND TO BE INCORRECT?

A. No. The DSIC surcharge was properly applied to each bill. I had a follow up phone conversation with Mr. Hoffman to walk through each bill and explain how the DSIC amount was calculated for each of the bills.

Q. ARE YOU FAMILIAR WITH THE RECENT PGW PETITION FOR EMERGENCY ORDER AT DOCKET NO. R-2022-3034229?

A. Yes, I am.

Q. PLEASE SUMAMRIZE YOUR UNDERSTANDING OF THIS CASE.

A. My understanding of the case is that Philadelphia Gas Works ("PGW") experienced an anomaly in the application of the WNA to May 2022 usage, which produced unusually large and unanticipated charges to customers in the majority of billing cycles with May usage. PGW did not believe their customers should be subject to the unusually large charges and requested approval to reverse the WNA charges that were applied to the May usage billings while they conducted an internal investigation into the WNA formula, inputs and current information about weather trends as they affect May. I am not aware of any public information about PGW's WNA mechanism producing inaccurate results, but just that there were unanticipated charges for May usage.

Q. WILL PEOPLES' WNA RESULT IN THE SAME SITUATION AS PGW'S MAY 2022?

A. In my opinion, the chances are extremely low that this would happen. I have a general understanding of PGW's situation based upon the public record available at Docket No. R-2022-3034229, however, I do not have an in depth knowledge of the issue nor do I have customer specific information as to what happened. PGW's petition states that their WNA was originally authorized by the Commission in 2002 and has worked more or less as anticipated over the past twenty years. I am not aware of the triggering event(s) that caused this specific condition. Further, after reviewing the docket, I found no information to show that PGW's WNA formula was misapplied or inaccurately calculated.

What I can say, and what does support our position is the seven years' worth of data we have reviewed and analyzed. That data shows that a situation like PGW's May 2022 is extremely rare. I point to the rebuttal testimony of witness Ralph Zarumba at Statement No.15-R for a detailed discussion of the analysis and results. What Mr. Zarumba's rebuttal testimony will show, and what we have found is that PGW and Peoples cannot be compared as apples to apples. PGW and Peoples have different weather, different HDDs, different delivery rates, etc. In the extremely rare circumstance that an unusual WNA situation occurs, Peoples will address it reasonably as the Company has adequate protections in place to ensure that the WNA formula will be applied fairly and accurately.

C. <u>Low Income Issues</u>

Q. DOES THE WNA PREVENT RESIDENTIAL CUSTOMERS FROM REALIZING BILL SAVINGS OFTEN ASSOCIATED WITH WARMER-THAN-NORMAL WEATHER?

A. No. The WNA mechanism pertains to distribution charges, which generally reflect the cost of delivering natural gas to the customer's premises. In warmer than normal weather, customers can still realize savings on the commodity portion of their bill. The commodity charge reflects the actual cost of the natural gas a customer consumes. In warmer than normal weather, it is expected less gas would be consumed, thereby the customer would still receive benefit of a lower gas bill (compared to normal weather) during a warmer than normal billing month.

Q. WILL THE WNA INCREASE VOLATILITY IN RESIDENTIAL CUSTOMERS' BILLS?

A. No, quite the contrary. The WNA mechanism seeks to stabilize the amount of distribution revenues billed due to weather impacts. The concept of increased volatility relies on parties focused on only the warmer than normal scenario. Peoples respectfully calls attention to the other side of the coin. Peoples will not recover additional distribution revenues due to colder weather that results in relatively higher usage by customers subject to the WNA. Additionally, the Company offers a budget billing program that can be used in conjunction with the WNA mechanism to further reduce bill volatility, as examined later in this testimony. However, I note that this option alone is insufficient as will be discussed later in my testimony.

Q. MR. GELLER OF CAUSE-PA ARGUES THAT THE WNA WILL DISINCENTIVIZE ENERGY EFFICIENCY MEASURES. DO YOU AGREE?

A. No, I do not. As discussed above, the WNA mechanism pertains to the distribution charges, which roughly make up about half of the total bill amount. The other half is for commodity, which reflects the actual cost of the natural gas a customer consumes. Customers can still recognize savings. WNA mechanism adjusts for weather impacts, whether that weather be warmer or colder than normal. The mechanism is applied to the usage factors present on individual accounts. These factors are specific to usage patterns of the customer account and are updated annually. When customers conserve, these usage factors will adjust accordingly over time. Therefore, customer efforts to reduce bills through using less gas will continue to have a positive effect, regardless of the adjustment for weather normalization.

Q. CAUSE-PA WITNESS GELLER ARGUES THAT THE WNA MAY MAKE CUSTOMERS' BILLS LESS AFFORDABLE FOR LOW INCOME CUSTOMERS. DO YOU AGREE?

A. No. First, I would like to note that Mr. Geller's testimony concentrates only on the impact of weather that is warmer than normal versus a more comprehensive view of the mechanism. I reiterate the point that the other side of the coin is that Peoples will not recover additional distribution revenues due to colder weather that results in relatively higher usage by customers subject to the WNA. This insulates customers from higher bills in colder than normal conditions. With that said, for low income customers enrolled in CAP, the WNA mechanism will not impact the amount a CAP customer is expected to pay

but rather only impact the "full tariff" charges that costs of the program will be calculated on. Peoples CAP program is a percentage of income program, where CAP customers pay the lower of a percentage of their income or their budget amount. WNA will not change the payment amount requested of CAP customers.

Q. CAUSE-PA WITNESS GELLER STATES THAT THE VAST MAJORITY OF LOW INCOME CUSTOMERS IN PEOPLES' SERVICE TERRITORY ARE NOT ENROLLED IN CAP. HOW DO YOU ADDRESS THAT?

A. Peoples flagship program to support affordability is CAP. Peoples CAP program is open to anyone that is income eligible, meaning any customer at or below 150% of Federal Poverty Level ("FPL"). A customer does not need to be in arrears or on a payment arrangement to be eligible for the CAP program. Further, in Peoples direct testimony at Statement No. 9 and in rebuttal Statement No. 9-R, witness Rita Black, discusses Peoples' outreach and intake efforts for CAP and the Low Income Home Energy Assistance Program ("LIHEAP"). Income eligible low income customers that are payment troubled should enroll in the CAP program to maintain affordability. Additionally, low income customers with arrears and income between 151 and 200% FPL can participate in Peoples pilot CAP expansion, providing protection against bill volatility for those who are payment troubled and are ineligible for LIHEAP

Q. ACCORDING TO OCA WITNESS COLTON, THE WNA WILL DISPROPORTIONATELY ADVERSELY AFFECT LOW-INCOME CUSTOMERS. PLEASE RESPOND.

A. OCA witness Mr. Colton is primarily concerned with low income customers that are not enrolled in CAP. As examined above, the first point is that Mr. Colton is only assessing warmer than normal weather impacts versus a more comprehensive view of the mechanism. I restate the point that the other side of the coin is that Peoples will not recover additional distribution revenues due to colder weather that results in relatively higher usage by customers subject to the WNA. In relation to low income customers not enrolled in CAP, the first goal is to enroll income eligible customers in CAP. Again, at Statement No. 9 and in Statement No. 9-R, Peoples witness Rita Black, discusses Peoples' outreach and intake efforts for CAP and LIHEAP. Next, for customers that are not eligible or choose not to enroll in CAP, the budget billing program will remain available and can be utilized to even out the seasonal highs and lows for more affordability. Additionally, low income customers with arrears and income between 151 and 200% FPL can participate in Peoples pilot CAP expansion, providing protection against bill volatility for those who are payment troubled and are ineligible for LIHEAP

Q. IS THE COMPANY PROPOSING TO CONTINUE ITS BUDGET BILLING PROGRAM IN ADDITION TO THE WNA MECHANISM?

A. Yes, and the WNA program will not impact the monthly amount a budget customer is expected to pay, meaning the WNA adjustment will not be added to or reduced from the otherwise applicable monthly budget amount. The WNA will be factored into the customer's periodic budget reconciliation, which occurs on or near the annual anniversary date of when the customer enrolled in budget billing.

Q. WOULD BUDGET BILLING PROTECT LOW-INCOME CUSTOMERS FROM BILL VOLATILITY BETTER THAN THE WNA?

A. As mentioned above, the budget billing program will remain available and can be utilized in conjunction with the WNA mechanism to even out the seasonal highs and lows for more affordability. This (budget billing) will be an option for low income customers. However, while both budget billing and WNA attempt to levelize bill amounts month to month, they are not interchangeable as Mr. Colton recommends. Meaning, the purpose of each mechanism is different. Both mechanisms can be used together and are complementary, but exchanging one for the other, for example, use budget billing instead of WNA, does not produce the same result. The WNA mechanism seeks to stabilize the amount of distribution revenue billed due to weather impacts. Budget billing spreads a customer's annual bill amount equally over a twelve month period. Once billed, the budget billing programs balances the monthly bill amounts to keep the payment amount the same in order to even out the high and low bills over a period of time. Once the WNA mechanism is approved, a customer on budget billing would likely see lower levels of change during the budget review and/ budget reconciliation processes, as the differences between actual and normal weather will be adjusted. This, in turn, increases bill stability for customers rather than making the bills more volatile.

D. Responses to Weather-Related Issues

Q. HOW DO OCA WITNESS JOHNSON AND CAUSE-PA WITNESS GELLER CHARCTERIZE THE IMPACTS OF THE WNA MECHANISM?

A. Both witnesses, Mr, Johnson and Mr. Geller, reference concerns about warmer than normal weather. Mr. Johnson states the implication of Mr. Zarumba's statement that "it is generally agreed that weather is becoming milder (i.e. warmer) over time" and that the "average number of HDDs for each year are decreasing"[3] is that customers are likely to see more WNA charges than credits. Mr. Geller asserts that when temperatures are warmer than normal, which they have been for the last several years, WNAs result in higher bills for residential customers.

Q. ARE WARMER-THAN-NORMAL WINTERS MORE COMMON THAN COLDER-THAN-NORMAL WINTERS?

A. Yes and no. I say yes in relation to Mr. Zarumba's statement about weather becoming generally milder over time. This notion is reflected in Peoples HDDs proposal for normal weather used in the revenue forecast for this case. In Peoples 2018 base rate case, the Company proposed 5,416 HDDs to forecast normal weather. In this case, Peoples is proposing 5,341 HDDs to forecast normal weather. The proposal to use less HDDs to forecast normal weather is consistent with Mr. Zarumba's statement about weather becoming generally milder over time. Without a weather normalization adjustment, weather sensitive revenues will fluctuate, higher or lower, depending on the difference in HDDs as compared to 5,341. With a weather normalization adjustment in place, the Company's weather sensitive revenues would be consistent with the revenue projections based upon 5,341 HDDs annually, which, as shown, accounts for the concept that weather is becoming milder.

[3] Peoples Statement No 15, page 53.

I say no in response to this question in the context that weather can be unpredictable. As OCA witness Mr. Mugrace stated in his testimony, "Weather cannot be predicted accurately and with certainty."[4] As support that the WNA mechanism can provide symmetric protection to *customers* (emphasis added) and the Company for revenue variations in usage associated with non-normal weather, refer to the below table[5]. The table presents a summary of the impact of the proposed WNA on a typical residential customer for the years 2019 through 2022. The following assumptions were made in preparing this analysis.

1. Billing periods are aligned with the calendar month.
2. Only the current base delivery and current base customer charges were applied.
3. Monthly NHDD are the same as that used in the rate case except for February in leap years which are adjusted slightly for the different number of days.
4. Average monthly consumption is based on the PNGD & PGD combined entity.
5. The delivery and customer charge rates used represent PNGD residential delivery rates as of Oct 1, 2023.
6. Assumes no deadband.

Annual Base Bill	2019	2020	2021	2022		Total
Initial Base Delivery Charges	$354.82	$330.55	$331.15	$357.01		$1,373.53
WNA Adj. Base Delivery Charges	$346.50	$341.24	$337.88	$340.77		$1,366.40
Incr/ (Decr) to Base Delivery	($8.32)	$10.69	$6.73	($16.24)		($7.13)
% Change in Delivery Charges	-2.3%	3.2%	2.0%	-4.5%		-0.52%
Customer Charge	$174.00	$174.00	$174.00	$174.00		$696
Total Base Charges	$528.82	$504.55	$505.15	$531.01		$2,069.53
WNA Adjusted Base Charges	$520.50	$515.24	$511.88	$514.77		$2,062.40
$ Inc / (Decr) in Base Charges	-1.6%	2.1%	1.3%	-3.1%		-0.34%

[4] OCA Statement No. 2, page 23.

[5] Excerpt from Peoples response to CAUSE-PA-I-16.

As shown, the WNA impact over four recent years of weather varied between colder than normal results and warmer than normal results. In fact, over this four year period, the cumulative impact was a net savings for the customer based on the assumptions above.

Q. SHOULD THE COMMISSION WEIGH OTHER CONSIDERATIONS WHEN EVALUATING THE TRADE-OFFS FOR CUSTOMERS BETWEEN COLDER-THAN-NORMAL AND WARMER-THAN-NORMAL WINTERS?

A. Yes. A common theme throughout the other parties direct testimonies is that they are testifying in opposition of the WNA mechanism based upon reliance that only warmer than normal weather will be present. Many of the arguments against the WNA mechanism only weigh the warmer than normal scenario. I recap throughout this testimony that Peoples will not recover additional distribution revenues due to colder weather that results in relatively higher usage by customers subject to the WNA. The WNA mechanism provides symmetric protection to *customers* (emphasis added) and the Company for revenue variations in usage associated with non-normal weather, as evidenced in the table above for a typical customer between the years of 2019 – 2022. Peoples anticipates that over a length of time the total weather related cumulative impact is expected to be zero or near zero.

E. Derivation of Daily Heating Degree Days

Q. DOES ANY PARTY TAKE ISSUE WITH HOW THE COMPANY DERIVES ITS NORMAL DAILY HDDs?

A. Yes. OSBA witness Mr. Knecht raise concern about Peoples approach to allocating the 5,341 annual HDDs to the daily level of HDDs that are necessary for deriving the billing period normal HDDs for each individual customer for purposes of billing the weather normalization adjustment.

Q. WHAT ARE MR. KNECHT'S CONCERNS WITH THE DERIVATION OF DAILY HDDs?

A. As presented in Peoples response to OSBA-I-12(a), which is included in Exhibit IEc-3 attached to Mr. Knecht's direct testimony, the Company used use an average of the past 10 years of data to define normal daily HDDs that are necessary for deriving the billing period normal HDDs for each individual customer. Their concern is that the average annual HDDs for the ten year period used appears to have been 5,389 HDDs, modestly higher (colder) than the 5,341 normal value used for load forecasting. They believe that if actual HDDs in FPFTY 2025 exactly meets the 5,341 HDD normal value used for load forecasting, the Company will be permitted to increase its charges for heating load by about 0.9 percent.

Q. DOES MR. KNECHT MAKE ANY RECOMMENDATIONS AS TO THE COMPANY'S METHOD FOR DERIVING ITS NORMAL DAILY HEATING DEGREE DAYS?

A. Yes. He recommends that the Company clarify its proposed method for deriving normal HDDs for individual billing periods to ensure that they are consistent with the annual normal HDDs used for load forecasting.

Q. PLEASE RESPOND TO MR. KNECHT'S RECOMMENDATION.

A. I am not able to tie back to the average annual HDDs of 5,389 for the ten year period that Mr. Knecht references. However, to clarify the derivation of the normal daily HDDs that Peoples intends to use for the WNA calculation, refer to Exhibit CAS-2R. Exhibit CAS-2R contains an extract from the excel document provided by Peoples in response to OSBA-I-12(a). Peoples used the ten year period of HDDs to ascertain a reasonable allocation of monthly HDDs to daily HDDs. As shown in Exhibit CAS-2R, the total number of daily HDDs ties back to the annual HDD figure of 5,341 proposed in this proceeding. The only exception to this is during a leap year. In a leap year, there is an extra day, so the total annual HDDs increase to 5,368 to account for the additional day. For comparative purposes, the leap year table of normal HDDs that Peoples intends to use in a leap year is on page 2 of Exhibit CAS-2R.

F. Response to OCA's Policy Concerns with WNA Mechanisms

Q. BEYOND THE UNSUPPORTED ASSERTIONS RELATED TO THE WNA'S IMPACT ON LOW-INCOME CUSTOMERS, DOES THE OCA RAISE OTHER POLICY CONCERNS WITH THE WNA?

A. Yes. OCA witness Mr. Johnson raises concern that the WNA mechanism is analogous to a take or pay provision and that implementation of the WNA may constitute single issues ratemaking. Additionally, OCA witness Mr. Evrard reviewed the WNA proposal in the context of each of the fourteen policy statement factors, and believes the result is that the factors weigh heavily against the WNA.

Q. WHY DOES OCA WITNESS JOHNSON BELIEVE THAT THE WNA MECHANISM RESULTS IN A TAKE-OR-PAY BILLING FEATURE?

A. OCA witness Mr. Johnson, believes from the customer's perspective, the WNA produces a charge without a concomitant increase in delivered gas. He goes on to say, the WNA is normalizing the billing units rather than imposing a charge or credit for providing an increase or decrease in service.[6]

Q. DOES THE AMOUNT OF DISTRIBUTION SERVICE PROVIDED TO PEOPLES' CUSTOMERS CHANGE DEPENDENT ON WEATHER?

A. No, it does not. Distribution costs are largely fixed in nature and do not fluctuate based on customer usage. Despite the fixed nature of costs recovered through the distribution charge, the rates for recovery are primarily set on a volumetric basis, with the exception of the customer charge. Consider a simple example of this construct. The cost to prepare and send a bill to a customer is an example of a distribution cost. Whether a customer uses 1 Mcf or 1,000 Mcf, the cost to prepare and mail the bill is the same. The customer does not receive more or less bills dependent on their usage. Most distribution costs are characterized in this this nature.

Q. IN YOUR DIRECT TESTIMONY, YOU ADDRESSS EACH OF THE 14 CONSIDERATIONS OUTLINED IN THE COMMISSION'S STATEMENT OF POLICY ON ALTERNATIVE RATEMAKING. DOES OCA WITNESS EVRARD ADDRESS THOSE CONSIDERATIONS?

[6] OCA Statement No. 4, pages 43-44.

A. Yes, he does.

Q. PLEASE EXPLAIN WHERE YOUR ANALYSIS DIFFERS FROM THAT OF MR. EVRARD.

A. **Consideration 1** – Mr. Evrard indicates that WNA represents a clear misalignment between revenue and cost causation. In my opinion, they are not misaligned because the purpose of the WNA is to recover distribution revenues needed to satisfy the cost-of-service requirement determined in this proceeding. During the course of this proceeding the cost causation, through the cost of service model, is determined. The WNA mechanism does not alter that.

Consideration 2 – Peoples and Mr. Evrard are in alignment.

Consideration 3 – Mr. Evrard contends that the heart of this matter is that even with a customer-specific base load factor, the WNA mechanism reflects an anticipation that the customer's actual demand will be at a lower level than their anticipated consumption. Throughout this testimony, I direct attention to the other side of the coin, that Peoples will not recover additional distribution revenues due to colder weather that results in relatively higher usage by customers subject to the WNA. This side of the coin is not considered in Mr. Evrard's response to Consideration 3.

Consideration 4- Mr. Evrard surmises that revenue generated from the WNA mechanism will serve to reduce deficits the Company experiences as a result of other customer classes, including recipients of competitive flex rates, or other rates
offered by Peoples which may be below the cost-of-service as how the WNA mechanism limits or eliminates eliminate interclass and intraclass cost shifting. The Company disagrees. The rates established in this proceeding are based upon specific revenue allocations and rate design, ultimately approved by the Commission. The WNA mechanism only adjusts for weather related variances back to the baseline normal weather used in this proceeding to set the rates originally.

Consideration 5- Mr. Evrard maintains that the WNA mechanism disincentivizes energy efficiency programs because it because it imposes a disconnect between cost-savings and conserving energy. The Company does not agree. In warmer than normal weather, when the WNA would traditionally be a charge, customers can still realize savings on the commodity portion of their bill. The WNA only applies to the distribution portion of the customer's bill. Cost savings from reduced commodity charges can still drive energy efficiency.

Consideration 6- Mr. Evrard contends that if a customer reduces usage for reasons other than weather, such as costs savings or a new furnace, they will be disincentivized from improving efficiency because they will be paying for gas they do not use. This notion is misguided. First, with a WNA mechanism, the customer is not paying for gas that they do not use. The WNA mechanism is designed to recover distribution costs that are largely

fixed in nature and do not fluctuate based on customer usage. Further, the WNA mechanism would only adjust the customer's bill back to the baseline (normal weather) per this proceeding. Secondly, akin to Consideration 5, if the customer reduced usage for reasons other than weather, such as costs savings or a new furnace, they would realize the cost savings from the commodity portion of the customer's bill.

Consideration 7 –In relation to how the WNA mechanism impacts low-income customers and supports consumer assistance programs, Mr. Evrard focuses his attention only on low income customers that are not enrolled in CAP. Peoples avers that first, the CAP is Peoples flagship program for low income customers and the WNA mechanism will not impact the amount a CAP customer is expected to pay. . Peoples has outreach and intake efforts in place to enroll income eligible low income customers into CAP that are not already. Low income customers also have the option to enroll in budget billing to spread the seasonal bills into a more stable and constant monthly payment amount. Further, low income customers with arrears and income between 151 and 200% FPL can participate in Peoples pilot CAP expansion, providing protection against bill volatility for those who are payment troubled and are ineligible for LIHEAP.

Consideration 8 – As to how the WNA mechanism impacts customer rate stability principles, Mr. Evrard claims Peoples' WNA decreases customer rate stability because it obscures price signals for customers by dissociating their monthly bill from their actual usage as to how the WNA mechanism impacts customer rate stability principles. Peoples standpoint is that it is quite the contrary. The purpose of the WNA mechanism is to stabilize

revenues consistent with normal weather conditions, in essence taking the "guess work" out of the equation.

Consideration 9- Mr. Evrard solely focuses on warmer than normal weather with regard to how weather impacts utility revenue under the ratemaking mechanism and rate design. In colder than normal weather conditions, when the customer is most vulnerable, they will receive the benefit of the WNA mechanism insulating them from higher distribution charges when the commodity charges will also be higher due to increased consumption.

Consideration 10- Peoples and Mr. Evrard are in agreement.

Consideration 11 – Peoples and Mr. Evrard primarily agree on how the ratemaking mechanism and rate design interact with other revenue sources. Mr. Evrard comments that the interaction with the other riders mentioned will likely increase the charges on the bill. Peoples notes that some of the riders that WNA will interact with are surcredits.

Consideration 12- Mr. Evrard points out that Peoples did not propose a deadband or exclude May from the WNA mechanism, and as such, have no consumer protections for its WNA mechanism. Peoples specifies the WNA mechanism itself is a customer protection as it shields customers from especially high bills in colder than normal weather conditions.

Consideration 13 – Mr. Evrard indicates that multiple customers at the public hearing testified that they did not understand the WNA mechanism as a reason it is not

understandable to consumers. He further points to the Company's notice and avers that inadequate information was provided to customers. Finally, he mentions that Peoples is not proposing to include the WNA as a separate line item on a customer's bill. Peoples contends that communication and customer education plans include providing information and FAQs in a bill insert and on the Company's website explaining the WNA. Moreover, the Company will ensure training for customer service center representatives to be able to walk a customer through what the WNA is and how the WNA is calculated. The customers at public hearing that testified they did not understand the WNA mechanism have not yet been privy to any educational materials by the Company, but if approved, they will be forthcoming. Refer to page 31, Section III of this testimony for further detail on the Company's position on the customer notices.

Consideration 14 – Mr. Evrard alleges the WNA will provide additional revenues which are not cost-based and are not dedicated to infrastructure upgrades as a reason that the WNA mechanism does not support improvements in utility reliability. Again, Peoples points to the fact that Mr. Evrard is purely focused on warmer than normal weather. Peoples reaffirms that the Company's cost-of-service is inclusive of investments and costs to continue to enhance the safety and reliability of Peoples' system. Indeed, the WNA will stabilize the recovery of these costs, thereby assisting the Company to continue to pursue improvements.

Q. WHAT IS YOUR UNDERSTANDING OF SINGLE ISSUE RATEMAKING?

A. Simply put, it is when a single cost or revenue is reviewed by a regulator in isolation, without considering other changes in costs and /or revenues.

Q. PLEASE ADDRESS OCA WITNESS JOHNSON'S POSITION THAT IMPLEMENTATION OF THE WNA MAY CONSTITUTE SINGLE ISSUE RATEMAKING.

A. The appropriate level of revenue and customer bills is set in a rate case. The WNA mechanism adjusts actual revenues and customer bills to account for the differences between normal weather and actual weather in order to better align what was set in the rate case versus what occurs in future years. Peoples' projected revenues in this proceeding are determined using normalized weather of 5,341 HDDs. Without a weather normalization adjustment, weather sensitive revenues will fluctuate, higher or lower, depending on the difference in HDDs as compared to 5,341. With a weather normalization adjustment in place, the Company's weather sensitive revenues would be consistent with the revenue projections based upon 5,341 HDDs annually. In conclusion, I do not agree the WNA adjustment constitutes single-issue ratemaking because is not creating a new level of revenues allowed, but rather adjusts the revenues so that the revenues that *have been* allowed can be realized.

Q. IS IT YOUR UNDERSTANDING THAT OTHER NGDCS IN PENNSYLVANIA HAVE IMPLEMENTED WNA MECHANISMS?

A. Yes, it is my understanding that Columbia Gas of PA, National Fuel Gas, PGW, and UGI have Commission approved WNA mechanisms in place.

Q. DID YOU REVIEW THE WNA CALCUATION OF THE OTHER NGDCS IN PENNSYLVANIA?

A. Yes, I have. Specifically, we focused on the formulae and calculations for NFG, UGI and Columbia as those mechanisms were most recently approved.

Q. IS THE COMPANY'S WNA MODEL CALCULATION SIMILAR TO THE WNA MECHANISMS APPROVED AND IMPLEMENTED BY OTHER NGDCs?

A. I would say it is similar to those NGDCs upon which we focused our review. However, I do note that the Company's proposed mechanism does not use a deadband, uses different weather patterns and may apply to different months.

II. DERIVATION OF HEATING DEGREE DAYS AND CONSERVATION ADJUSTMENT FACTOR

A. Heating Degree Days

Q. DOES ANY PARTY TAKE ISSUE WITH HOW THE COMPANY DERIVES ITS NORMAL ANNUAL HDDs?

A. Yes. I&E witness Mr. Cline presents an issue with the Company's methodology for developing normal HDDs used to forecast normal weather.

Q. WHAT ARE MR. CLINE'S CONCERNS WITH THE DERIVIATION OF ANNUAL HDDs?

A. Peoples proposed using 5,341 HDDs to forecast normal weather. This is derived by averaging a 20-year average with a 65-year regression for the periods ending December

31, 2022. Mr. Cline says what while he does not necessarily disagree with the concept of using a regression analysis to normalize HDDs, he does disagree with the Company's proposal to use 65-years of historic data to determine normalized HDDs. He states the reason for this is because Peoples witness Mr. Zarumba provided no support for why he selected 65 years of data for his analysis. He goes on to say that he also does not identify why he considers weather from as early as 1958 to be representative of weather patterns occurring today. He asserts that the Company selected this methodology in order to justify a specific normalized HDD result.

Q. WHAT DOES MR. CLINE'S RECOMMEND?

A. He recommends Peoples use 5,443 HDD to forecast normal weather. This value is equivalent to the 20 year average of HDD.

Q. HOW DO YOU RESPOND TO MR. CLINE?

A. Mr. Zarumba addresses Mr. Cline's concerns about the use of the 65-year regression approach in his rebuttal testimony at Peoples Statement No. 15-R. I further note that in Mr. Cline's proposed revenue adjustment related to this topic, he utilized gross revenue including gas cost revenue. Refer to the rebuttal testimony of witness Andrew Wachter at Peoples Statement No. 2-R for additional discussion of this matter including an error made by Mr. Cline in his proposed adjustment.

Q. DO YOU HAVE ANY ADDITIONAL COMMENTS ABOUT THE DERIVATION OF ANNUAL HDDs?

A. Yes. In OSBA Statement No. 1, witness Knecht also considers the Company's proposal to use 5,341 HDDs to forecast normal weather. He discusses how he evaluated and confirmed the Company's statistical trend analysis. In conclusion, he states that his analysis suggests that applying the Company's proposal, namely using an average of the 20-year method and the trend method, appears to be slightly better than relying only on the trend approach. As a result, OSBA takes no exception to the Company's proposed method for deriving normal annual HDDs.[7]

B. Conservation Adjustment Factor

Q. DOES ANY PARTY TAKE ISSUE WITH THE BILLING DETERMINANTS THE COMPANY IS USING?

A. Yes. OSBA witness Knecht raises concern with the Company's 0.5 percent conservation factor adjustment applied to the load forecast.

Q. WHAT IS MR. KNECHT'S CONCERN WITH THE CONSERVATION FACTOR ADJUSTMENT?

A. Mr. Knecht conducted his own statistical analysis using a model for each rate class reflecting actual "HDDs" in the month and a trend variable, to evaluate the reasonableness of the Company's assumptions that weather-normalized use per customer is declining for all rate classes except Rate LGS. He concluded that the statistical analysis does not show a statistically significant trend effect, either for a total class load analysis or a per-customer analysis.

[7] OSBA Statement No. 1, pages 50-51.

Q. WHAT DOES HE RECOMMEND?

A. He recommends that the Company's conservation adjustment factor be rejected, and that use per customer for the temperature sensitive classes be based solely on historical average use per customer.

Q. HOW DO YOU RESPOND TO THIS RECOMMEDATION?

A. Peoples believes the conservation factor is appropriate to account for the continual shift towards more energy efficient appliances. Refer to Exhibit CAS-3R for a recent online article by Time. The article discusses forthcoming changes to regulations for household appliances anticipated to take effect in 2027. The article also corroborates the current shift towards more energy efficient appliances, stating "Despite this, substantially more energy efficient models are available today."

III. NOTICE ISSUES

Q. PLEASE DESCRIBE THE NOTICE PROVIDED BY THE COMPANY TO ITS CUSTOMERS WITH RESPECT TO THIS PROCEEDING.

A. Peoples provided notice to its customers through bill inserts that are included with the bill for each individual customer. Peoples also placed notice in newspapers that cover the Company's service territory. Lastly, information is presented on the Company's website about the rate case filing, the public input hearings, the statement of reasons for the filing, along with several other rate case topics in the form of FAQs to assist customers.

Q. DID THE COMPANY'S NOTICE PRACTICES IN THIS PROCEEDING COMPLY WITH THE COMMISSION'S REQUIREMENTS?

A. Yes.

Q. DID ANY PARTY TO THIS PROCEEDING RAISE ISSUES RELATED TO THE NOTICE PROVIDED BY THE TO ITS CUSTOMERS?

A. Yes. OCA witness Mr. Evrard discusses concerns with Peoples notice. These concerns are then echoed by OCA witness Ms. Alexander.

Q. WHAT WERE THE ISSUES THE OCA WITNESSES MR. EVRARD AND MS. ALEXANDER RAISE WITH RESPECT TO NOTICE?

A. The main concern is that Peoples sent the same public notice of the rate case to all its customers without separating the notices into a PNGD and PGD division notice, particularly because the bill impacts differ between these two divisions. To be clear, I note that the bill insert clearly provided the proposed increase and the effect on a residential customer's bill by division assuming usage of 80 mcf/annually. Nevertheless, the OCA witness suggests that customers could not easily identify which division serves them and would have to take additional steps to find out. They further claim the burden was exacerbated because Peoples' live customer service hours are limited to traditional business hours, making customers' access to information about the rate increase even more difficult to obtain.

Q. WHAT DO OCA WITNESSES MR. EVRARD AND MS. ALEXANDER RECOMMEND WITH RESPECT TO THE COMPANY'S NOTICE PRACTICES?

A. Mr. Evrard said he encourages Peoples to develop notices that do not place unfair burdens on the customer. He added that one way Peoples could do this is by considering whether usage of 80 Mcf per year is a fair metric to use in the notice, as one customer testified it was too low. Ms. Alexander recommended that Peoples conduct an evaluation of the potential for extending the customer service center hours to accommodate customers who are employed during normal business hours.

Q. PLEASE RESPOND TO THE RECOMMENDATIONS BY MR. EVRARD AND MS. ALEXANDER.

A. As Mr. Evrard recognized in his testimony, the issue of the consolidated notice will likely not be a problem in the future because Peoples' proposal in this case is to unify the tariffs and rates for the PNGD and PGD divisions and these entities have already been legally merged. Since the consolidated notice will likely not be a future problem, Peoples will re-evaluate the Mcf usage for the next notice requirement, but points out that it has been a long standing practice to provide notice based upon an "average" customer's usage, which is what the Company did in this case. This approach is consistent with the Commission's requirements around customer notices.

I further note that by providing a combined bill insert and notice the Company presented the higher divisional impact on rates and thus erred on the side of caution.

Q. DID PEOPLES NOTICE CUSTOMERS ABOUT THE PROPOSED WNA MECHANISM?

A. Yes. Both the newspaper notice and the bill insert included communication that the filing contained a request for the approval of a Weather Normalization Adjustment (WNA) as an alternative rate mechanism in accordance with 66 Pa. C.S. § 1330. Adding that, "The WNA would adjust certain customers' bills to reflect normalized weather conditions."

Q. DOES THE WNA MECHANISM IMPACT THE PROJECTED RATE INCREASE OF 21% FOR PNGD AND 7% FOR PGD?

A. No.

Q. WHY NOT?

A. The purpose of a WNA mechanism is to adjust customers' bills to better reflect normalized weather conditions. The proposed rates in this proceeding assume normal weather conditions (i.e. 5,341 HDDs). As future real-time weather conditions vary from these normal conditions proposed in the case, the WNA mechanism would adjust the customer's bill back to the baseline (normal weather). Using normal weather proposed in the case, the corresponding increases are 21% for PNGD and 7% for PGD. The WNA mechanism would only adjust the distribution portion of the bills back to that normal level.

IV. BAD DEBT OFFSET FOR UNIVERSAL SERVICE RIDER

Q. PLEASE EXPLAIN THE POSITION OF MR. COLTON PERTAINING TO THE BAD DEBT OFFSET FOR THE UNIVERSAL SERVICE RIDER.

A. Mr. Colton accepts the Company's combined universal service cost recovery proposal, with the exception of one component. He does not agree with the 33,800 base CAP participation level over which the Company will apply the proposed bad debt offset. He recommends a combined participation level of 30,800 based upon the combined projected CAP participation for the year starting October 2024, as presented in Peoples Exhibit No. 3, Schedule 15 Attachment E, rounded to the nearest 100.

Q. HOW DO YOU RESPOND TO MR. COLTON'S RECOMMENDATION FOR THE BASE CAP PARTICIPATION LEVEL OVER WHICH THE COMPANY WILL APPLY THE PROPOSED BAD DEBT OFFSET?

A. The Company accepts Mr. Colton's recommendation of a combined base participation rate of 30,800. Peoples reaffirms that pending the approval of the tariffs and rates in this proceeding, the Company will no longer track the PNGD and PGD separately, so the universal service recovery mechanism will only recognize a combined base participation

V. AVC CAPACITY

Q. PLEASE EXPLAIN THE POSITION OF MR. KNECHT PERTAINING TO THE COMPANY'S PROPOSAL TO COMBINE THE AVC CAPACITY CHARGE.

A. Mr. Knecht starts out by indicating that he needs to develop a better understanding of the history of AVC and this issue for consideration. However, based on his existing understanding, he identifies three main areas of concern. They are (1) the allocation of costs has not been updated since about 2013, (2) the recovery of costs from both sales and

transportation customers does not appear to reflect the relative use of the AVC system, and (3) the appropriateness of applying AVC costs to all transportation customers.

Q. WHAT IS MR. KNECHT'S RECOMMENDATION?

A. He recommends the Commission defer any approval of the AVC capacity charge approach proposed by the Company to the PGC proceeding.

Q. HOW DO YOU RESPOND?

A. Peoples believes the methodology of applying AVC capacity to both PNGD and PGD should be approved in the context of this proceeding, however, the Company is amenable to working through the specific rate calculation to determine the final AVC rate applicable to each customer class in the context of its existing PGC proceeding at Docket No. R-2024-3045945.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

Peoples Natural Gas Company LLC 2023 Base Rate Case
Docket No. R- 2023-3044549

OSBA Responses to OCA Set I

OCA-OSBA-I-5

5. Please clarify whether Mr. Knecht recommends a deadband as a condition for approving the WNA proposal.

Response:

In my testimony, I did not recommend a deadband as a necessary condition for approval of the Company's WNA proposal. However, I would not object to the adoption of a reasonable deadband. My concerns with WNA mechanisms, however, are more related to inaccurate and unreasonably large bill adjustments due either to low actual heating degree day billing periods, or due to the default assumption that the difference between actual usage and average prior summer usage is necessarily and entirely due to space heating.

	Non-Leap Year Daily NHDDs												
	Month												
Day	1	2	3	4	5	6	7	8	9	10	11	12	Total
1	30	34	24	25	6	3	0	0	1	6	14	26	170
2	33	37	29	24	6	3	0	0	1	4	15	25	176
3	34	37	32	19	6	4	0	0	1	4	17	27	180
4	33	35	33	19	6	3	0	0	0	7	15	29	180
5	35	36	32	18	10	1	0	0	0	6	10	28	176
6	40	37	28	16	12	4	0	0	1	3	12	29	181
7	44	31	26	14	9	2	0	0	2	4	19	34	185
8	38	34	26	13	8	1	0	0	1	7	22	35	184
9	35	36	24	12	8	1	0	0	3	7	19	30	174
10	35	36	20	11	5	0	0	0	2	6	18	30	163
11	27	30	20	10	9	1	0	0	1	6	17	31	151
12	26	33	27	9	10	1	0	0	2	8	22	33	171
13	29	37	29	6	12	1	0	0	5	8	27	31	185
14	33	34	22	6	10	1	0	2	4	9	27	28	177
15	36	34	24	11	5	0	0	2	3	9	25	28	177
16	36	38	23	15	4	1	0	1	2	14	22	27	182
17	33	37	24	14	4	1	0	0	2	16	21	31	183
18	34	33	22	12	5	1	0	0	2	19	20	36	181
19	29	33	22	12	2	1	0	0	1	19	26	35	179
20	32	32	23	13	3	0	0	0	1	12	27	33	176
21	36	25	22	16	4	0	0	0	1	13	25	28	170
22	36	23	24	14	2	2	0	0	5	13	26	24	169
23	35	24	25	12	6	1	0	0	9	15	26	27	181
24	37	26	20	13	5	0	0	0	6	16	23	32	179
25	37	29	19	13	3	0	0	2	3	17	20	34	176
26	36	34	21	13	3	0	0	2	3	19	22	32	184
27	37	31	21	13	2	1	0	0	4	17	22	30	178
28	38	30	20	13	2	1	0	0	4	14	25	29	178
29	36	0	19	11	3	0	2	0	6	17	25	28	147
30	40	0	16	9	2	0	1	0	8	18	21	29	144
31	38	0	17	0	1	0	0	0	0	15	0	33	104
Total	1077	918	732	404	172	33	4	9	86	348	626	932	**5341**

	Leap Year Daily NHDDs												
	Month												
Day	1	2	3	4	5	6	7	8	9	10	11	12	Total
1	33	28	32	12	7	10	0	0	0	7	17	27	173
2	31	26	33	19	7	0	4	0	0	10	16	29	176
3	26	16	37	20	4	0	0	0	0	12	14	29	157
4	35	26	36	18	9	0	0	0	0	7	17	26	173
5	41	34	37	19	11	0	0	0	1	10	15	27	196
6	34	31	39	14	9	0	0	0	0	8	13	29	178
7	34	34	30	13	9	1	0	0	0	2	13	30	166
8	36	34	16	14	13	8	0	0	0	12	13	33	179
9	27	35	9	24	16	5	0	0	0	11	14	33	174
10	24	35	13	25	9	0	0	0	0	8	10	30	154
11	26	42	26	13	9	0	0	0	0	8	15	26	167
12	30	45	18	14	7	0	0	0	0	4	27	22	168
13	41	47	17	16	7	5	0	0	0	12	25	26	196
14	29	53	20	17	9	3	0	0	2	14	28	35	211
15	23	42	22	15	8	0	0	0	6	8	20	43	187
16	29	33	22	15	6	0	0	0	4	11	22	42	184
17	43	35	24	13	3	0	0	0	2	12	26	28	186
18	44	34	26	10	5	0	0	0	6	7	21	28	181
19	47	29	24	10	4	0	0	0	11	6	21	38	191
20	50	26	26	9	5	0	0	0	9	5	23	34	187
21	49	33	41	9	5	0	0	0	9	8	29	30	213
22	46	30	31	13	3	0	0	0	9	11	28	27	198
23	40	25	16	12	0	0	0	0	2	7	33	27	162
24	37	18	17	8	0	0	0	0	0	14	28	24	146
25	32	26	22	7	0	0	0	0	2	19	23	37	167
26	29	33	21	8	0	0	0	0	0	24	22	30	167
27	36	36	14	11	0	0	0	0	2	16	25	24	165
28	33	29	12	11	0	0	0	0	2	18	28	26	160
29	37	30	14	7	0	1	0	0	9	13	19	32	161
30	34	0	21	10	2	0	0	0	10	18	21	29	145
31	21	0	15	0	2	0	0	9	0	26	0	30	102
Total	1077	945	732	404	172	33	4	9	86	348	626	932	5368

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The U.S. Government Is Requiring Washers, Refrigerators and Freezers to be More Efficient. Here's What It Means for You

5 MINUTE READ

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BY **ANISHA KOHLI**

FEBRUARY 11, 2023 1:02 PM EST

Under the Biden administration, the Department of Energy (DOE) proposed a series of stricter energy standards on Friday that they said would update regulations for household appliances, and slash greenhouse gas emissions while saving Americans around $3.5 billion annually on utility bills.

It's been more than a decade since the DOE has updated the regulations for refrigerators, washing machines, and other such appliances. Despite this, substantially more energy efficient models are available today. The proposed changes, which would go farther than current levels of energy efficiency, would ideally go into effect in 2027 and the department is hopeful that they'll save consumers $60 billion over a 30-year period.

"With today's proposals, we're building on a decades-long effort with our industry partners to ensure tomorrow's appliances work more efficiently and save Americans money," U.S. Secretary of Energy Jennifer Granholm said.

The news comes after both the US Consumer Product Safety Commission and the DOE said they were considering how best to regulate gas stoves due to health, climate, and energy efficiency concerns.

Previous DOE regulations have kept up with energy efficiency technology, while allowing manufacturers flexibility to keep improving products. Today, a standard new refrigerator uses 75% less energy than one from 1973. The DOE has raised its efficiency standard for refrigerators three times in the past 40 years. The department said that the proposed rules, "will continue this trajectory of innovation and savings."

Here's what to know:

When will this impact people?

The new energy standards wouldn't take into effect until 2027, or perhaps later, but the DOE is optimistic about both the environmental conservation and consumer cost reduction potential.

The department has estimated that over the next 30 years the proposed changes would reduce carbon emissions by 233 million metric tons—equivalent to a year's worth of emissions from 29 million homes. The proposal builds on Biden's clean-energy agenda to combat climate change. Despite conservative opposition against Biden's increased regulation of household appliances, energy experts say that such standards are long overdue.

Read more: *What the Potential Ban on Gas Stoves Means If You Have One*

What's the climate impact of household energy appliances?

Residential energy use accounts for about 20% of greenhouse gas emissions in the U.S., according to a 2020 study published in *PNAS*. The same study suggested that retrofitting energy systems would be a key part of meeting carbon emissions reduction goals. Products covered by the DOE's regulations—like washers, dryers, refrigerators, and dishwashers— currently account for 5% of annual residential energy use.

Household appliances that use the least electricity and fewest kilowatts per hour like ovens, space heaters, and even refrigerators are the most efficient, according to All Energy Solar. Central air and heat can also be highly efficient, especially when buying products with high seasonal energy-efficiency ratio (SEER) ratings. Refrigerators that have the freezer on top and that opt out of water and ice dispensers are also typically more energy efficient. Induction stoves can be up to 10% more efficient than conventional electric stoves and three times more efficient than gas stoves.

Read more: *The Best Stove for Your Health and the Environment*

Under the DOE's proposed changes, households that use new, up-to-code refrigerators and washing machines would save $425 on electric and water bills

over the the appliances' lifespan.The proposal is contingent on consumers buying new appliances or already having energy-efficient ones, rather than keeping old inefficient products for a long time.

Although energy efficient appliances can cost more up front, experts have long boasted that the major savings in utility costs and carbon emissions pay for themselves after a short period of initial investment.

How do the DOE's standards compare with Energy Star?

Energy Star is a program run jointly by the Environmental Protection Agency and the DOE that certifies buildings and products which meet strong energy efficiency standards. The Energy Star logo pops up on all sorts of consumer products, from refrigerators, to washing machines and light bulbs.

Energy Star is a completely voluntary program that provides consumers with guidance on which products are the most energy efficient. The new rules proposed by the DOE, on the other hand, are regulations that would require strict standards for all household appliances. The Energy Department hasn't given much information on what exactly those requirements would look like yet. The department is responsible for implementing minimum energy conservation standards on more than 60 categories of appliances and equipment.

Read more: *The Inflation Reduction Act Will Soon Make it Cheaper to Buy EVs —If They Have North American Batteries*

What about appliance incentives under the Inflation Reduction Act?

The Inflation Reduction Act includes provisions to provide tax credits and rebates for certain energy efficient home improvements, such as heat pumps and solar panels, with the aim of making it more affordable for people to invest in clean, domestically-sourced renewable energy. Despite being a federally-

funded program, it's up to states to implement the climate-friendly appliance incentives, which are anticipated to be up and running later this year.

So far, there's little information available about what product specifications will grant incentives, but households could receive as much as $14,000 in rebates, according to some estimates. Like Energy Star, the Inflation Reduction Act's incentives are voluntary and rely on consumers to take initiative.

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BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED SURREBUTTAL TESTIMONY OF
CAROL A. SCANLON,
MANAGER, RATES
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED:
DATE ADMITTED: May 3, 2024

Peoples Statement No. 3-SR

PREPARED SURREBUTTAL TESTIMONY OF
CAROL A. SCANLON

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Carol A. Scanlon. My business address is 375 North Shore Drive, Pittsburgh, PA 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by PNG Companies LLC ("PNG Companies" or "PNG") as Rates Manager. Effective January 1, 2023 the Peoples Natural Gas Company LLC and Peoples Gas Company LLC were merged. As such, Peoples Natural Gas Company LLC ("Company") currently includes – Peoples Natural Gas Division ("PNGD" or "Peoples Natural Gas Division") and Peoples Gas Division ("PGD" or "Peoples Gas Division"). When referring to both divisions herein, they may be referred to as the Peoples Divisions, Peoples Natural Gas, the Company or Peoples. In my position as Rates Manager, I provide rates and regulatory services for both PNGD and PGD.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 3 and my rebuttal testimony is set forth in Peoples Statement No. 3-R.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. I will respond to the rebuttal testimony set forth by the Office of Consumer Advocate ("OCA") witness Clarence Johnson related to the weather normalization adjustment ("WNA").

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. No, I am not.

Q. HAVE YOU REVIEWED THE REBUTTAL TESTIMONY OF MR. JOHNSON?

A. Yes, I have.

Q. **PLEASE SUMMARIZE MR. JOHNSON'S REBUTTAL TESTIMONY RELATED TO WNA.**

A. Mr. Johnson evaluates the positions of two intervening parties in this case that accept the WNA mechanism, but with some modifications from the Company's proposal: the Office of Small Business Advocate ("OSBA") witness Robert D. Knecht and the Commission's Bureau of Investigation and Enforcement ("I&E") witness Ethan H. Cline. Mr. Johnson continues to reject the WNA mechanism and points out why he does not agree with the positions of Mr. Knecht and Mr. Cline. Mr. Johnson further goes on to summarize the five reasons he concludes as why the WNA mechanism should be denied.

Q. WHAT ARE MR. KNECHT'S AND MR. CLINE'S POSITION WITH REGARD TO WNA?

A. Mr. Knecht recommends that, if the WNA is approved by the Commission, certain "protections" should be adopted for the program. Specifically, one such protection that Mr. Knecht recommends is that WNA not apply when actual HDDs for a billing period are below 100 HDDs. Mr. Cline recommends that Peoples' WNA be approved on the condition that a 3% deadband is included. However, it should also be noted that in relation to the Company's proposal of annual HDDs for forecasting normal weather, Mr. Cline is proposing a 20 year average of HDDs, or a total of 5,443 HDDs be used to forecast normal weather. This will, in turn, affect the WNA calculation if adopted. As noted in rebuttal, the Company opposes this recommendation from Mr. Cline.

Q. WHAT DOES MR. JOHNSON CONCLUDE ABOUT MR. KNECHT'S AND MR. CLINE'S CONCERNS RELATED TO WNA?

A. Mr. Johnson indicates that the concerns raised by Mr. Knecht and Mr. Cline are further support for denial of the proposed WNA mechanism.

Q. DO YOU AGREE?

A. No. In my rebuttal testimony at Statement No. 3-R, I address the overall concerns raised by Mr. Knecht and Mr. Cline. However, it is worth noting here, Mr. Knecht and Mr. Cline suggested some modifications to the Company's proposed WNA mechanism, but even they did not view the matters raised as ones that warrant denial of the mechanism. Rather, they both accept the mechanism, itself (with certain caveats, as aforementioned).

Q. MR. JOHNSON SUGGESTS THAT MR. KNECHT'S PROPOSAL TO NOT APPLY THE WNA IN MONTHS WITH LESS THAN 100 HDDS IS INSUFFICIENT TO CORRECT ISSUES WITH POTENTIAL LARGE BILL ADJUSTMENTS IN MONTHS WITH LOW HDDS. OCA ST. NO. 4-R, P. 26. DO YOU AGREE?

A. I disagree with Mr. Johnson. I believe Mr. Knecht's approach could remedy potential issues, however, as discussed in the surrebuttal testimony of Ralph Zarumba at Statement No. 15-SR, I also believe that Mr. Knecht's approach introduces practical challenges which makes implementation of the proposal problematic. As a result, Peoples continues to examine different options for mitigating potential large bill adjustments in months with low actual HDDs as compared to anticipated HDDs.

Q. DO YOU AGREE WITH MR. KNECHT AND MR. CLINE THAT CUSTOMER PROTECTIONS ARE NECESSARY?

A. Yes. The Company recognizes this as an important issue and is continuing to evaluate additional customer protections to put in place. As Peoples explores the options available, I note that the Company would be open to customer protections, including changing the effective dates of the WNA mechanism from October 1st through May 31st to October 1st through April 30th.

Q. IS THERE ANYTHING ELSE THE COMMISSION SHOULD CONSIDER RELATED TO CUSTOMER PROTECTIONS?

A. Yes. As referenced in the prior testimonies in this case, PGW previously filed a petition to suspend their application of the WNA for May 2022 due to unusually large charges on customer bills. In that proceeding, the Commission found it appropriate and acceptable to remove May from the WNA mechanism as a suitable customer protection.[1] Although, as discussed in my rebuttal testimony at Statement No. 3-R, Peoples and PGW have different weather, different HDDs, different delivery rates, and are not an apples to apples comparison. Nonetheless, Peoples' analysis as completed by witness Zarumba and provided in his Rebuttal testimony at Statement No. 15-R, has shown that most outliers occur in the month of May, and I believe this approach to be a fitting safeguard for customers.

Q. WHAT ARE THE FIVE MAIN REASONS MR. JOHNSON CONCLUDES AS TO WHY THE WNA MECHANISM SHOULD BE DENIED?

A. Mr. Johnson concludes the five main reasons for rejecting the WNA mechanism are (1) the Company has failed to demonstrate that extraordinary circumstances justify departure from important principles of traditional regulatory practice; (2) single issue rate making unreasonably allows the Company to reflect changes in a single component of rates without recognizing potential off-setting changes in other components; (3) The WNA is likely to produce more increases in gas bills than credits, given the long term warming trends; (4) The WNA may be perceived by customers as a disincentive to energy conservation; and (5) the tariff will likely cause customer confusion regarding billing changes resulting from the weather adjustments.

[1] Opinion and Order entered September 21, 2023 at Docket No. R-2022-3034229.

Q. HOW DO YOU RESPOND TO THE FIRST REASON THAT THE COMPANY HAS FAILED TO DEMONSTRATE EXTRAORDINARY CIRCUMSTANCES THAT WARRANT A WNA MECHANISM?

A. Peoples witness Ralph Zarumba addresses this aspect in his surrebuttal testimony at Statement No. 15-SR.

Q. HOW DO YOU RESPOND TO THE SECOND REASON RELATED TO SINGLE ISSUE RATEMAKING?

A. The appropriate level of revenue and customer rates is set in a rate case. The WNA mechanism adjusts actual revenues and customer bills to account for the differences between normal weather and actual weather in order to better align what was set in the rate case versus what occurs in future years. Peoples' projected revenues in this proceeding are determined using normalized weather of 5,341 HDDs. Without a weather normalization adjustment, weather sensitive revenues will fluctuate, higher or lower, depending on the difference in HDDs as compared to 5,341. With a weather normalization adjustment in place, the Company's weather sensitive revenues would be consistent with the revenue projections based upon 5,341 HDDs annually. In conclusion, I do not agree the WNA adjustment constitutes single-issue ratemaking because it is not creating a new level of revenues allowed, but rather adjusts the revenues so that the revenues that *have been* allowed can be realized (emphasis added).

Q. HOW DO YOU RESPOND TO THE THIRD REASON THAT WNA IS LIKELY TO PRODUCE MORE INCREASES IN BILLS THAN CREDITS?

A. As support that the WNA mechanism can provide symmetric protection to *customers* (emphasis added) and the Company for revenue variations in usage associated with non-normal weather, refer to the below table[2]. The table presents a summary of the impact of the proposed WNA on a typical residential customer for the years 2019 through 2022. The following assumptions were made in preparing this analysis.

1. Billing periods are aligned with the calendar month.
2. Only the current base delivery and current base customer charges were applied.
3. Monthly NHDDs are the same as that used in the rate case except for February in leap years which are adjusted slightly for the different number of days.
4. Average monthly consumption is based on the PNGD & PGD combined entity.
5. The delivery and customer charge rates used represent PNGD residential delivery rates as of Oct 1, 2023.
6. Assumes no deadband.

Annual Base Bill	2019	2020	2021	2022		Total
Initial Base Delivery Charges	$354.82	$330.55	$331.15	$357.01		$1,373.53
WNA Adj. Base Delivery Charges	$346.50	$341.24	$337.88	$340.77		$1,366.40
Incr/ (Decr) to Base Delivery	($8.32)	$10.69	$6.73	($16.24)		($7.13)
% Change in Delivery Charges	-2.3%	3.2%	2.0%	-4.5%		-0.52%
Customer Charge	$174.00	$174.00	$174.00	$174.00		$696
Total Base Charges	$528.82	$504.55	$505.15	$531.01		$2,069.53
WNA Adjusted Base Charges	$520.50	$515.24	$511.88	$514.77		$2,062.40
$ Inc / (Decr) in Base Charges	-1.6%	2.1%	1.3%	-3.1%		-0.34%

As shown, the WNA impact over four recent years of weather varied between colder than normal results and warmer than normal results. In fact, over this four year

[2] Excerpt from Peoples response to CAUSE-PA-I-16.

period, the cumulative impact was a net savings for the customer based on the assumptions above.

Q. HOW DO YOU RESPOND TO THE FOURTH REASON THAT WNA MAY BE PERCEIVED AS A DISINCENTIVE TO ENERGY CONSERVATION?

A. The WNA mechanism pertains to distribution charges, which generally reflect the cost of delivering natural gas to the customer's premises. In warmer than normal weather, customers can still realize savings on the commodity portion of their bill. The commodity charge reflects the actual cost of the natural gas a customer consumes. In warmer than normal weather, it is expected less gas would be consumed, thereby the customer would still receive benefit of a lower gas bill (compared to normal weather) during a warmer than normal billing month.

Q. FINALLY, HOW DO YOU RESPOND TO MR. JOHNSON'S FIFTH REASON THAT THE WNA TARIFF WILL CAUSE CUSTOMER CONFUSION REGARDING BILLINGS CHANGES RESULTING FROM THE WEATHER ADJUSTMENT?

A. Peoples intends to provide communication and customer education materials that include providing information and FAQs in a bill insert and on the Company's website explaining the WNA. Moreover, the Company will ensure training for customer service center representatives to be able to walk a customer through what the WNA is and how the WNA is calculated.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	
	:	

PREPARED REJOINDER TESTIMONY OF CAROL A. SCANLON, MANAGER, RATES PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: May 8, 2024
DATE ADMITTED: May __ 2024

Peoples Statement No. 3-RJ

PREPARED REJOINDER TESTIMONY OF
CAROL A. SCANLON

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Carol A. Scanlon. My business address is 375 North Shore Drive, Pittsburgh, PA 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by PNG Companies LLC ("PNG Companies" or "PNG") as Rates Manager. Effective January 1, 2023 the Peoples Natural Gas Company LLC and Peoples Gas Company LLC were merged. As such, Peoples Natural Gas Company LLC ("Company") currently includes – Peoples Natural Gas Division ("PNGD" or "Peoples Natural Gas Division") and Peoples Gas Division ("PGD" or "Peoples Gas Division"). When referring to both divisions herein, they may be referred to as the Peoples Divisions, or the Company. In my position as Rates Manager, I provide rates and regulatory services for both PNGD and PGD.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT, REBUTTAL, AND SURREBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 3, my rebuttal testimony is set forth in Peoples Statement No. 3-R, and my surrebuttal testimony is set forth in Peoples Statement No. 3-SR.

Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?

A. I will respond to the surrebuttal testimony set forth by the Commission's Bureau of Investigation and Enforcement's ("I&E") witness Ethan H. Cline, the Office of Consumer Advocate's ("OCA") witnesses David T. Evrard, Dante Mugrace, Clarence Johnson, Barbara Alexander, and Roger Colton, as well as the Office of Small Business Advocate's ("OSBA") witness Robert D. Knecht. Many of these identified witnesses' testimony have overlapping subject matters. Where possible, I will address issues in kind and by subject matter, rather than by specific witness.

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. Yes. I am sponsoring Exhibit CAS-1-RJ and CAS-2-RJ.

Q. HOW HAVE YOU ARRANGED YOUR REJOINDER TESTIMONY?

A. I address each issue in kind in the following order: (1) other parties surrebuttal testimony related to the Company's proposal to implement a weather normalization adjustment ("WNA") mechanism, as identified by various witnesses for various parties (Section I, supra); and (2) other parties surrebuttal testimony related to the AVC capacity charge combining as identified by witness Knecht in OSBA Statement No. 1S. (Section II, supra).

I. WEATHER NORMALIZATION ADJUSTMENT

Q. DID OTHER PARTIES SUBMIT SURREBUTTAL TESTIMONY REGARDING THE WNA MECHANISM?

A. Yes. I&E witness Mr. Cline states that the WNA mechanism can be approved as long as a 3% deadband is included. OSBA witness Knecht continues to recommend that, if the WNA

is approved, certain "protections" should be adopted for the program. OCA witnesses Evrard, Mugrace, Johnson, Alexander, and Colton continue to reject the WNA mechanism for various reasons. Of particular note, concerns about the complexity of the WNA mechanisn making it difficult for customers to understand and that the WNA mechanism can discourage energy efficiency are discussed in OCA's surrebuttal testimony.

Q. HOW DO YOU RESPOND TO THE CUSTOMER PROTECTIONS RECOMMENDATIONS FOR WNA?

A. The Company recognizes customer protections as an important issue related to the WNA mechanism. As such, Peoples agrees to display the WNA amount as a separate and distinct line item on the customer's bill. Peoples will also institute the recommended deadband of 3%. Lastly, as also mentioned in my surrebuttal testimony, the Company would be open to changing the effective dates of the WNA mechanism from October 1st through May 31st to October 1st through April 30th as an additional customer protection.

Q. PLEASE COMMENT ON THE COMPLEXITY OF WNA LEADING TO CUSTOMER CONFUSION.

A. As discussed in my rebuttal testimony, the Company will make customers aware of the WNA and educate them about the mechanism. If approved, Peoples plans to include information and FAQs in a bill insert and on the Company's website explaining the WNA. The Company will also ensure training for customer service center representatives to be able to walk a customer through what the WNA is and how the WNA is calculated. However, I would like to further expound on this topic. Exhibit CAS-1-RJ presents bill

samples that are published on the Commission's website as fact sheets to help customers understand their natural gas bill by breaking down the various charges. Exhibit CAS-1-RJ includes the bill sample fact sheets for two of the PA Natural Gas Distribution Companies (NGDCs) that have the WNA mechanism. As evidenced, the WNA mechanism can be shown in simple terms that customers are able to understand.

II. AVC CAPACITY

Q. DID OTHER PARTIES SUBMIT SURREBUTTAL TESTIMONY REGARDING AVC CAPACITY?

A. Yes. OSBA witness Knecht reiterates his concerns related to AVC capacity and indicates that I generally agreed with his recommendation in my rebuttal testimony that this issue be deferred to the Company's current Section 1307(f) Purchased Gas Cost ("PGC") case. He now further recommends that the Commission direct Peoples to undertake an evaluation of the cost recovery method for the AVC costs to address the three main issues he cites and that the Company file its results in the 2025 Section 1307(f) proceeding.

Q. HOW DO YOU RESPOND?

A. First, I would like to start by clarifying that I did not agree entirely with the approach initially recommended by Mr. Knecht. I stated that the methodology of applying AVC capacity to both PNGD and PGD should be approved in the context of *this proceeding* (emphasis added), however, the Company is amenable to working through the specific rate calculation to determine the final AVC rate applicable to each customer class in the context of its existing PGC proceeding at Docket No. R-2024-3045945. Attached to this testimony

as Exhibit CAS-2-RJ is the Company's response to OSBA-I-13 that addressed certain facets of AVC capacity. I note that no party submitted direct testimony related to the final AVC rate calculation in the context of this year's PGC proceeding at Docket No. R-2024-3045945. To reiterate, Peoples proposal in this proceeding is to apply AVC capacity to both Peoples divisions and the proposal seeks approval of the specific rate calculation as well. In his rejoinder testimony at Peoples Statement No. 4-RJ, Ed Palombo explains how AVC capacity is used to serve both Peoples divisions. Additionally, no parties to this proceeding challenged the application of AVC capacity to both divisions and the application of the AVC capacity to both Peoples divisions results in all customers having the same PGC rates by rate class. I further note that the Company would be willing to discuss the AVC rate in its current PGC proceeding at the referenced docket and parties are able to make recommendations regarding the AVC rate calculation in subsequent PGC proceedings.

Q. DOES THIS CONCLUDE YOUR REJOINDER TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

Gas Bill Breakdown

Understanding Your Natural Gas Bill

Columbia Gas®
A NiSource Company

Detail Charges

Rate Schedule RSS

Gas Supply Charges 49 thm at $0.18622 per thm	$9.13
Gas Cost Adjustment 49 thm at -$0.01426 per thm	-$0.70

Supply

Customer Charge	$16.75
Distribution Charges 49 thm at $0.60763 per thm	
Pass-through Charges 49 thm at $0.30442 per thm	
Distribution System Improvement Charge (DSIC)	
Weather Normalization Adjustment	

Delivery

Total Current Utility Charges

- Your distribution charges have been adjusted to reduce the impact of warmer than normal weather.
- Your bill includes $0.41 in state taxes, not including sales tax.
- Effective January 1, 2021 the DSIC rate has increaded from 4.25% to 5.00%.

Columbia Gas of Pennsylvania Price to Compare per therm $0.20259
The Price to Compare is the price to use when comparing Columbia's gas cost to gas supply prices offered by other natural gas suppliers in the CHOICE program. This price may change in January, April, July and October each year.

Gas Supply Charge - This is the commodity price, the charges for natural gas supply, which is converted to therms*.

Gas Cost Adjustment - The amount billed or credited each month to account for differences between projected and actual gas supply costs.

Customer Charge - A fixed, monthly charge that helps Columbia Gas provide safe, reliable service. This charge includes the cost of maintaining the meter and preparing bills. You must pay the Customer Charge even if you do not use any gas.

Distribution Charge - The charges for the delivery of natural gas from Columbia Gas to your home.

Pass-through Charges - The charges that the company must pay to third-parties for the ability to deliver natural gas to its' system and universal service charges, as applicable.

Distribution System Improvement Charge - This is a monthly charge to recover a portion of Columbia Gas' distribution system infrastructure costs.

Weather Normalization Adjustment - A method of adjusting customers' bills to reflect normal, rather than actual, weather conditions during the months of November through May. As a result, customers are less impacted by large monthly swings in their gas bills which can occur during the heating season as a result of increased usage during colder weather. *This adjustment will only appear if the temperature is more than 3% colder or warmer than normal during the billing period.*

***Therm (thm) -** A unit of heat equal to 100,000 British thermal units (BTU)*

Gas Bill Breakdown

Understanding Your Natural Gas Bill

PHILADELPHIA GAS WORKS
GAS LEAK EMERGENCIES: (215) 235-1212

Access Your Account Online **www.pgworks.com**
Billing & General Information **(215) 235-1000** *(English & Español)*

Residential Heat & Domestic

BREAK DOWN OF CHARGES

Supply Charges	
Commodity Charge 69 Ccf @ $0.39431	$27.21
Total Supply Charges	**$27.21**
Delivery Charges	
Customer Charge @ $14.10	$14.10
Distribution Charge 69 Ccf @ $0.88096	$60.79
Distribution System Improvement Charge 7.5%	$0.88
Distribution System Improvement Charge 7%	$4.42
Gas Cost Adjustment @ -$0.03088	-$2.13
Weather Normalization Adjustment	$3.53
Total Delivery Charges	**$81.59**
Total Billing Charges	**$108.80**

METER DETAILS

Meter Number:	
Read Cycle:	16
Read Dates:	03/26/2021 - 04/27/2021
Starting Read:	
Ending Read:	
Usage in CCF:	69.00
Conversion Factor:	1.0336 Therm = 1 Ccf
Usage in Therms:	71.31
Next Meter Read:	05/26/2021

SHOPPING INFORMATION BOX

When shopping for Natural Gas with a Natural Gas Supplier, please provide the following:

PGW Account:	
Service Point ID:	
Rate Class:	General Service Residential
Rate Schedule:	GSR

If you are already shopping know your contract expiration date.

Commodity Charge - This is the charge for natural gas supply, which is sold in Ccf (100 Cubic Feet).

Customer Charge - A fixed, monthly charge that helps PGW provide safe, reliable service. This charge includes the cost of maintaining the meter and preparing bills. You must pay the Customer Charge even if you do not use any gas.

Distribution Charge - The charges for the delivery of natural gas from PGW to your home.

Distribution System Improvement Charge - The charge for the increased replacement of infrastructure (e.g. pipes) which is calculated by applying the same percentage to both the customer charge and the distribution charge.

Weather Normalization Adjustment – An adjustment approved by the PUC as a way to help PGW stabilize its income and operate more efficiently within its budget during the heating season.

Gas Cost Adjustment - The amount billed or credited each month to account for differences between projected and actual gas supply costs.

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OSBA-I-013

Witness: Scanlon, Carol **Title:** Rates Manager

Question: Reference Peoples Statement No. 3, AVC Capacity:

a. Please describe fully the facilities associated with the AVC Capacity, the geographic regions served by that capacity, and the customers downstream from that capacity.

b. Please explain why AVC Capacity costs are considered to be a PGC cost, when they are charged to all ratepayers.

c. Please indicate where costs associated with AVC Capacity are functionalized, classified and allocated in the Company's proposed allocated cost of service study.

d. Please provide a calculation of the revenue requirement for the AVC Capacity for the FPFTY.

e. For the most recent 12-month period, please provide volumes shipped on the AVC Capacity into the Company's service territory, split between sales and transportation customers, and segregated by rate class if available.

f. Please provide the basis for the AVC Capacity allocators shown on page 25 and provide supporting calculations. Please explain why the allocation factors remain appropriate.

Answer: a. AVC capacity is able to provide supply to all regions of PNG and PG through multiple delivery points and company interconnects, with the exception of the Grove City area which does not have a physical delivery point from AVC.

b. Refer to the attachment for an excerpt from the direct testimony of Joseph A. Gregorini at Joint Applicants Statement No. 4 from Peoples acquisition of Equitable Gas proceeding at Docket No. Docket Nos. A-2013-2353647, A-2013-2353649, A-2013-2353651.

c. These costs are embedded in gas supply expenses.

Functionalization: Please refer to excel row 195 in the "Functions" tab in OCA Attachment 5-1a (COS Model)

Classification: Please refer to excel row 191 in the "Classification" tab in OCA Attachment 5-1a

(COS Model)

Allocation: Please refer to excel row 190 in the “GS_Com” tab in OCA Attachment 5-1a (COS Model)

d. AVC Capacity is not included in base rates, so there is not a revenue requirement calculation per se for the FPFTY. Attached is the summary page of the AVC rate calculation for rates effective October 1, 2023. In Peoples 2024-1307(f) proceeding, a revised calculation reflecting the Oct 2024 – Sep 2025 projected AVC costs to be recovered will be presented, but all of the information in not yet available to include as part of this response.

e. See attached OSBA 1-13e.pdf

f. Refer to the attachment for Exhibit JAG-1 and page 1 of Exhibit JAG-2 from the proceeding for Peoples acquisition of Equitable Gas at Docket Nos. A-2013-2353647, A-2013-2353649, A-2013-2353651. As shown in the referenced exhibits, the allocation factors were derived from the revenue requirement based on when the assets were removed from Peoples base rates.

Submit Date: 2/23/2024

OSBA Set I Q.13 e.
Docket No. R-2023-3044549

	AVC (Sales)	AVC (Transport)	AVC Total
Jan-23	3,868,712	1,386,410	5,255,122
Feb-23	2,958,672	1,607,248	4,565,920
Mar-23	3,628,056	1,124,089	4,752,145
Apr-23	1,381,718	443,216	1,824,934
May-23	1,080,930	454,687	1,535,617
Jun-23	599,431	417,062	1,016,493
Jul-23	744,721	229,385	974,106
Aug-23	543,187	336,296	879,483
Sep-23	458,841	312,364	771,205
Oct-23	986,426	672,882	1,659,308
Nov-23	2,910,823	1,014,489	3,925,312
Dec-23	2,900,478	1,304,090	4,204,568
Jan-24	4,743,534	1,475,719	6,219,253

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Joint Application of Peoples Natural Gas Company LLC, Peoples TWP LLC, and Equitable Gas Company, LLC for All of the Authority and the Necessary Certificates of Public Convenience (1) to Transfer All of the Issued and Outstanding Limited Liability Company Membership Interest of Equitable Gas Company, LLC to PNG Companies LLC, (2) to Merge Equitable Gas Company, LLC with Peoples Natural Gas Company LLC, (3) to Transfer Certain Storage and Transmission Assets of Peoples Natural Gas Company LLC to EQT Corporation, (4) to Transfer Certain Assets between Equitable Gas Company, LLC and EQT Corporation, (5) for Approval of Certain Ownership Changes Associated with the Transaction, (6) for Approval of Certain Associated Gas Capacity and Supply Agreements, and (7) for Approval Certain Changes in the Tariffs of Peoples Natural Gas Company LLC, Peoples TWP LLC, and Equitable Gas Company, LLC.	:	Docket Nos. A-2013-2353647 A-2013-2353649 A-2013-2353651

DIRECT TESTIMONY OF
JOSEPH A. GREGORINI

Joint Applicants Statement No. 4

rate base updates for annual depreciation and modernization and compliance capital; an adjustment to O&M for inflation; actual taxes other than income; actual depreciation at 1.9%; and a pre-tax return of 12.5%. The recovery by Equitrans of the return and depreciation on improvements will be updated annually as opposed to the more frequent quarterly adjustments under the DSIC mechanism.

It is important to note that the Peoples Asset Transportation and Storage Agreement prohibits the inclusion of any expansion capital costs in the cost of service formula and requires Equitrans to provide project specific cost data that demonstrates that any modernization and compliance capital to be included in the rate were incurred solely in support of the transportation and storage services to be provided to Peoples.

Q. How does Peoples propose to recover the capacity costs for the transportation and storage services on the AVC system?

A. Peoples is proposing to establish a rate mechanism in its Retail Tariff to recover the capacity costs associated with the AVC from all sales and transportation customers. The costs are currently recovered from all Peoples customers in base rates. The facilities are needed to serve all customers and will continue to be needed post-closing of the Proposed Transaction. Peoples' proposed rate recovery mechanism has been included in Rider B of Peoples' Retail Tariff. Rider B currently provides for the recovery of 1307(f) purchased gas-cost related expenses, and includes the rate calculation methodology and charges for recovery of upstream pipeline capacity charges, natural gas supply commodity charges and over/under gas cost recoveries. Peoples is proposing to add a new and separate charge to

Rider B for the recovery of the transportation and storage capacity costs for use of the AVC. I have been advised by counsel that it is appropriate to recover these upstream pipeline capacity costs through Rider B and as a component of the 1307(f) mechanism because they are pipeline capacity charges that fit the definition of a natural gas cost as defined in Section 1307(f) of the Public Utility Code[1]

Q. Please describe the changes you are proposing to Peoples' Rider B.

A. Attached to my testimony, as Joint Applicants Exhibit JAG-3, are pro-forma tariff pages showing the proposed revisions to Peoples' Retail Gas Tariff to reflect the various aspects of the Proposed Transaction. I will describe those changes later in my testimony. Tariff pages 62 through 63B show the proposed revisions to Rider B.

The new charges and computational formula for the recovery of transportation and storage capacity costs for use of the AVC by Peoples are shown on Pro Forma Page 62 of Rider B. These new charges are referred to as the "AVC Capacity Charge". The gas cost charges currently set forth in Rider B are subject to a quarterly rate adjustment process that modifies the gas cost charges on January 1, April 1, July 1, and October 1 of each year. Consistent with this process, Peoples is proposing to adjust the AVC Capacity Charges on the same quarterly basis. The proposed initial AVC Capacity Charges that will become effective

[1] As used in the Public Utility Code, the terms "natural gas costs" and "gas costs" include the direct costs paid by a natural gas distribution company for the purchase and the delivery of natural gas to its system in order to supply its customers. Such costs may include costs paid under agreements to purchase natural gas from sellers; costs paid for transporting natural gas to its system; costs paid for natural gas storage service from others, including the costs of injecting and withdrawing natural gas from storage; all charges, fees, taxes and rates paid in connection with such purchases, pipeline gathering, storage and transportation; and costs paid for employing futures, options and other risk management tools. "Natural gas" and "gas" include natural gas, liquified natural gas, synthetic natural gas and any natural gas substitutes.

Peoples Natural Gas Company
Revenue Requirement on Transferred Assets

		Revenue Requirement (1)
Transmission Facilities		
Plant in Service	$	50,156,741
Depreciation Reserve	$	(15,300,068)
Material and Supplies	$	107,367
Total Rate Base	$	34,964,040
Pretax Return (12.32%)	$	4,307,570
O&M Expenses	$	4,350,000
Other Taxes (Plant & Payroll)	$	150,745
Depreciation Expense	$	807,523
Total Transmission Revenue Req.	$	9,615,838
Storage Facilities		
Plant in Service	$	77,946,961
Depreciation Reserve	$	(19,862,993)
Inventory (Base Gas Only)	$	212,634
Material and Supplies	$	136,845
Total Rate Base	$	58,433,447
Pretax Return (12.32%)	$	7,199,001
O&M Expenses	$	5,783,506
Other Taxes (Plant & Payroll)	$	254,718
Depreciation Expense	$	1,915,162
Total Storage Revenue Req.	$	15,152,386
Total Revenue Requirement	**$**	**24,768,224**

Peoples Natural Gas Company
Delivery Base Rate Reduction - Transferred Transmission and Storage Assets
Based on Blended Peak and Peak & Average Methodologies

	Revenue Requirement	Allocation to Customer Class - Blended Methodologies - 2012 Rate Case PNG Rebuttal COSS				
		Total	Residential	SGS	MGS	LGS
	(1)	(2)	(3)	(4)	(5)	(6)
Transmission Facilities						
Plant in Service	$ 50,156,741	$ 50,156,741	$ 27,488,333	$ 5,154,547	$ 7,705,020	$ 9,808,841
Depreciation Reserve	$ (15,300,068)	$ (15,300,068)	$ (8,385,181)	$ (1,572,369)	$ (2,350,379)	$ (2,992,139)
Material and Supplies	$ 107,367	$ 107,367	$ 58,842	$ 11,034	$ 16,494	$ 20,997
Total Rate Base	$ 34,964,040	$ 34,964,040	$ 19,161,994	$ 3,593,212	$ 5,371,135	$ 6,837,699
Pretax Return (12.32%)	$ 4,307,570	$ 4,307,570	$ 2,360,758	$ 442,684	$ 661,724	$ 842,405
O&M Expenses	$ 4,350,000	$ 4,350,000	$ 3,087,282	$ 537,049	$ 444,911	$ 280,757
Other Taxes (Plant & Payroll)	$ 150,745	$ 150,745	$ 94,861	$ 17,059	$ 19,269	$ 19,556
Depreciation Expense	$ 807,523	$ 807,523	$ 442,562	$ 82,988	$ 124,051	$ 157,922
Total Transmission Revenue Req.	$ 9,615,838	$ 9,615,838	$ 5,985,463	$ 1,079,780	$ 1,249,955	$ 1,300,641
Storage Facilities						
Plant in Service	$ 77,946,961	$ 77,946,961	$ 48,212,211	$ 9,131,019	$ 11,575,622	$ 9,028,108
Depreciation Reserve	$ (19,862,993)	$ (19,862,993)	$ (12,285,775)	$ (2,326,830)	$ (2,949,782)	$ (2,300,606)
Inventory (Base Gas Only)	$ 212,634	$ 212,634	$ 132,880	$ 24,997	$ 30,913	$ 23,843
Material and Supplies	$ 136,845	$ 136,845	$ 84,642	$ 16,031	$ 20,322	$ 15,850
Total Rate Base	$ 58,433,447	$ 58,433,447	$ 36,143,959	$ 6,845,216	$ 8,677,077	$ 6,767,196
Pretax Return (12.32%)	$ 7,199,001	$ 7,199,001	$ 4,452,936	$ 843,331	$ 1,069,016	$ 833,719
O&M Expenses	$ 5,783,506	$ 5,783,506	$ 4,017,821	$ 720,076	$ 674,445	$ 371,164
Other Taxes (Plant & Payroll)	$ 254,718	$ 254,718	$ 166,197	$ 30,674	$ 34,207	$ 23,640
Depreciation Expense	$ 1,915,162	$ 1,915,162	$ 1,184,577	$ 224,350	$ 284,414	$ 221,821
Total Storage Revenue Req.	$ 15,152,386	$ 15,152,386	$ 9,821,531	$ 1,818,431	$ 2,062,082	$ 1,450,343
Revenue Req. Recovered from NGSs	$ (907,440) *1/*	$ (907,440)	$ -	$ (48,964)	$ (213,297)	$ (645,179)
Net Storage Revenue Requirement	$ 14,244,946	$ 14,244,946	$ 9,821,531	$ 1,769,467	$ 1,848,785	$ 805,164
Revenue Requirement - In Base Rates	**$ 23,860,784**	**$ 23,860,784**	**$ 15,806,993**	**$ 2,849,247**	**$ 3,098,739**	**$ 2,105,805**
Percentage by Class		**100.00%**	**66.25%**	**11.94%**	**12.99%**	**8.82%**
2012 Base Rate Case Settlement Volumes - Mcf		67,404,572	31,218,167	5,662,081	9,372,424	21,151,900
Base Rate Reduction to Delivery Charges - $/Mcf		**$ 0.3540**	**$ 0.5063**	**0.5032**	**0.3306**	**0.0996**

1/ 2012 Base Rate Case - Rate ST and ST-SW Revenues

Peoples Natural Gas Company

Quarterly 1307(f)
October 1, 2023
Page 23/25

AVC Capacity Charge Rate Calculation for October 1, 2023

	Total	RS	RS Rate	SGS	SGS Rate	MGS	MGS Rate	LGS	LGS Rate
Oct 23 - Sept 24 Projected AVC Capacity Costs	$53,547,044	$35,474,916		$6,393,517		$6,955,761		$4,722,849	
Less: Competitive Contribution		$0		$593		$25,184		$424,508	
Subtotal	$53,096,760	$35,474,916	$0.7003	$6,392,924	$0.6741	$6,930,577	$0.4478	$4,298,341	$0.2664
Over/(Under) Collection through September 2023	($2,920,572)	($2,594,170)	$0.0512	($408,520)	$0.0431	($101,001)	$0.0065	$183,119	($0.0113)
Net AVC to be Recovered	$56,017,332	$38,069,087		$6,801,443		$7,031,579		$4,115,221	
Volumes to be Charged AVC Capacity Cost	91,751,343	50,654,549		9,483,776		15,477,351		16,135,666	
Projected AVC Rate to be effective October 1, 2023			**$ 0.7515**		**$ 0.7172**		**$ 0.4543**		**$ 0.2550**

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	Docket No. R-2023-3044549
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED DIRECT TESTIMONY OF
EDWARD A. PALOMBO,
VICE PRESIDENT, RELIABILITY
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: December 29, 2023
DATE ADMITTED: _____

Peoples Statement No. 4

PREPARED DIRECT TESTIMONY OF
EDWARD A. PALOMBO

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Edward A. Palombo. My business address is 375 North Shore Drive, Pittsburgh, Pennsylvania 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Peoples Natural Gas Company LLC ("Peoples" or "Company") as Vice President, Reliability.

Q. PLEASE STATE BRIEFLY YOUR EDUCATIONAL BACKGROUND AND EMPLOYMENT EXPERIENCE.

A. I graduated from The Pennsylvania State University in August 1983 with a Bachelor of Science Degree in Petroleum and Natural Gas Engineering. After graduation, I was hired as a Project Engineer for Washington Gas Light Corporation. I progressed to leadership roles in the Distribution, Planning, and Design department, until January 1987 when I left to join Peoples Natural Gas, and have been employed since. During this time, I've held several leadership positions in the Operations departments, with responsibilities in PA, WV, OH, and KY. Currently I am Vice President, Reliability and am responsible for directing the activities for Gas Supply & Transportation Services, Local Production Acquisition, Gas Control, System Planning, Pipeline Safety & Compliance, Employee Safety, Technical Training, and GIS.

Q. PLEASE LIST THE FILING REQUIREMENTS THAT YOU ARE SPONSORING AS WITNESS.

A. Please refer to Appendix A for a complete list of the filing requirements for which I am the responsible witness.

Q. WHAT ARE YOUR RESPONSIBILITIES FOR PURPOSES OF THIS PROCEEDING?

A. My responsibilities which I will describe in separate sections of my testimony are:

1. Safety Programs
2. Peak Day and Annual Gas Supply Plan
3. Local Production - Gathering and Cost Recovery

SAFETY PROGRAMS

Q. PLEASE DESCRIBE SOME OF THE COMMITMENTS PEOPLES HAS MADE TO THE SAFE OPERATION OF ITS PIPELINE SYSTEM.

A. Peoples is strongly committed to safety, and has established a comprehensive safety program that strives to protect employees, its customers, the public, and property. All levels of management and employees are responsible and accountable for safety, and expected to continuously work together to foster and promote a healthy safety culture. This culture is integral to making safety a priority by incorporating the following into all Company activities: Management commitment at all levels of the organization; Employee engagement and accountability; Recognizing, controlling, and eliminating work place

hazards and unsafe behaviors; and Safety training and education. No employee will be required to perform a task or job that they consider unsafe. Peoples complies with all applicable safety and health requirements, and maintains occupational safety and health standards that equal or exceed best practices.

The Company demonstrates its commitment to safety by including a Safety component in its employee incentive compensation goals. In addition, all Operations Department employees also have a pipeline compliance component included in their performance expectations and incentive compensation goals.

Additionally, the Company engages our Compliance Process Managers, Safety Department, and the entire Operations leadership team on a regular basis by conducting weekly safety conference calls where injuries, accidents, operating guidelines (Job Procedures and Standard Operating Procedures or "SOPs"), line hit damages, and near miss safety incidents are reviewed and discussed. Further, we have implemented procedures for ongoing safety observations of work activities by supervisors and rapid dissemination of injury details to the all field leadership and union personnel. We also work closely with our union to solve all safety-related issues and to communicate and advance safety initiatives throughout the organization. A component of this is management's and employees' commitment to operational and safety training at our Training Center where employees obtain hands-on experience through controlled simulations of emergency events and other real-life situations that enhance their safety awareness and hone their emergency response capability. We have also perfected our compliance work tracking system. This system schedules our prescribed, routine maintenance, compliance check work and provides for information system tracking of our planning and progress.

Q. PLEASE DESCRIBE THE COMPANY'S EMPLOYEE SAFETY PROGRAM.

A. Peoples' Employee Safety Program is multi-dimensional and includes numerous activities focused on accident prevention and compliance with applicable safety regulations. Safety is supported through active participation by operations leadership, a strong union management partnership, and engagement with industry organizations.

The three cornerstones of Peoples' Employee Safety Program are:

- Training and Education - where technical skills, emergency response, and specialized safety training is provided to employees, contractors, and external partners.
- Awareness and Communication – where weekly and monthly safety meetings, pre-job briefings, safety alerts, and intranet website resources are used to inform and refresh safety messaging.
- Investigations, Observations, and Safety Analysis – where safety incidents and risks are thoroughly investigated, discussed, trended, and mitigated.

In recognition of the success of the Company's safety program and performance for 2022, the Energy Association of Pennsylvania awarded Peoples the 2023 Safety Achievement Award, the 2023 Safety Improvement Award, the 2023 Safety Sustainability Award, and the 2023 Motor Vehicle Fleet Safety Achievement Award.

Q. EARLIER YOU MENTIONED THE COMPANY'S TRAINING PROGRAM, COULD YOU DESCRIBE IT IN MORE DETAIL?

A. Peoples operates an in-house training facility in McKeesport, PA that provides multi-week introductory training for new hires, training for employees entering new job classifications, initial and refresher operator qualification ("OQ") training on covered tasks performed by each field classification for both employees and contractors, and supplemental training for field personnel. By providing training internally, as opposed to using a 3rd party vendor, Peoples is able to ensure training captures Company-specific processes and procedures, and this allows us to provide direct oversight of rigorous testing methods.

In addition to providing training to employees and contractors, the training team also conducts community outreach sessions for audiences beyond those affiliated with Peoples. These sessions include:

- First Responder Training: Emergency training for local volunteer fire departments
- Natural Gas Construction Heat Installation Training
- Natural gas utility and pipeline field skills training: This program is to prepare a new potential workforce for a career in the gas and pipeline industry.

Q. ARE THERE OTHER NOTEWORTHY SAFETY RELATED INITIATIVES THAT YOU WOULD LIKE TO DISCUSS?

A. Yes. Peoples has a well-established Corporate Safety Committee known as the CARE (Combined Accident Reduction Effort) Committee. This committee is comprised of senior leaders from Operations, Safety, and Bargaining Unit personnel whose sole purpose is to provide a cooperative forum for discussions on all safety-related issues and concerns. The main goal is to promote and support a strong safety culture, and to assure a safe and healthy work environment for all employees. Operations management meets monthly with the

Salaried and Bargaining Unit CARE Coordinators to discuss safety matters that arise locally at their respective operating locations. The CARE Steering Committee meets quarterly to review and discuss more systemic issues that arise from the local shop discussions, and also Company-wide safety issues to evaluate and implement potential overall corrective actions.

Q. PLEASE PROVIDE AN UPDATE ON THE COMPANY'S SAFETY MANAGEMENT SYSTEM INITIATIVE.

A. Peoples continues to expand and build upon the Pipeline Safety Management System ("PSMS") first initiated in 2018. Safety Management Systems have proven to be successful in many industries (aviation, nuclear, petrochemical to name a few), and are being widely adopted and implemented within the natural gas industry. As a result of the Merrimac, MA incident, many organizations, such as the American Gas Association (AGA), the US Pipeline and Hazardous Materials Safety Administration (PHMSA), as well as state regulators, have strongly recommended gas operators implement a safety management program related to pipeline operations. In 2020, Peoples completed a gap analysis on the API recommended practices to help develop the framework of the PSMS program. A Program Manager was hired in 2020 to lead the implementation of the overall program, communicate the elements of the program with all operations employees, and develop the staff and resources for the program. Two QA/QC Specialists were hired in 2021 to conduct field audits of employees and contractors to ensure adherence to appropriate SOPs and Job Procedures when completing tasks and jobs. Three external consulting QA/QC Specialists were added in 2022 to bring the team to the current staffing of six.

The PSMS team has been currently focused on three primary functional areas of the operations: plastic fusions on pipeline replacement projects; working in and around live gaseous environments, and preventing/mitigating damages to meters and facilities. The PSMS team collects and compiles information from the field audits, analyzes the results for trends, and makes recommendations to the PSMS Steering Committee for revisions or additions to SOPs, Job Procedures, Training materials, etc. that may enhance pipeline safety and reliability.

Q. PLEASE DESCRIBE WHAT THE COMPANY HAS DONE AND PLANS TO DO GOING FORWARD TO MANAGE THE RISKS ASSOCIATED WITH LEAKAGE.

A. Peoples has an extensive leak management and repair program with SOP's that are designed to ensure safe and reliable delivery of natural gas to our customers. Peoples has implemented enhanced operating procedures regarding leak mitigation to further ensure safety across its system, that also helps reduce emissions and improve the environment. These enhancements include adoption of: 1) the Gas Piping Technology Committee ("GPTC") Leak Classification and Action Criteria for Grade 1, 2, and 3 leaks; 2) newer operating procedures designed to identify and replace shorter sections of leak prone pipelines instead of repairing those sections; 3) procedures on the handling of Grade 1 leaks (potentially most hazardous leaks) which require that Grade 1 leaks only be vented as a last resort, Peoples' Operations Management personnel being directly involved and consulted in Grade 1 leak situations, and vented Grade 1 leaks being monitored on a daily basis during frost/frozen ground conditions; and 4) a Leak Detection and Reduction ("LDAR") program that focuses on accelerated leak surveys on certain systems; reducing leaks on gathering

pipes, and utilizing newer technologies for identifying potential leaks. Another effective leak mitigation measure is the accelerated replacement of older higher-risk bare steel pipelines under our Long Term Infrastructure Improvement Plan ("LTIIP"), that is described in more detail in the testimony of Paul Becker, VP Engineering & Construction. As a result of these enhanced leak management efforts, Peoples has experienced a 60% reduction from 2019 to 2022 in outstanding unrepaired leaks at year end.

PEAK DAY AND ANNUAL GAS SUPPLY PLAN

Q. AS THE WITNESS SUPPORTING THE ANNUAL AND PEAK REQUIREMENTS AND SUPPLY VOLUME PROJECTIONS USED IN THIS FILING, PLEASE GENERALLY DESCRIBE HOW PEOPLES FORMULATES ITS ANNUAL GAS SUPPLY PLAN.

A. Each year, Peoples Natural Gas projects its total system requirements and available sources of supply. On the requirements side of the analysis, Peoples develops throughput projections by various requirements categories including usage by class of customer. The Company then adds monthly projections for company use and lost and unaccounted for gas to arrive at total projected system requirements on a monthly basis.

Certain operational considerations play a role in the requirements analysis. For example, there are portions of Peoples Natural Gas' service territory that are not physically interconnected with the main portion of Peoples' facilities, particularly in the Grove City area. Similarly, there are portions of Peoples Gas' service territory that require support from specific interstate pipeline delivery points at times of high demand, most notably the

Punxsutawney area. As a result, Peoples ~~a~~analyzes alternative options in those areas to maintain adequate supplies to maintain reliable service.

On the supply side of the analysis, Peoples pursues a least-cost reliable-service strategy through a combination of local and interstate assets and supplies. Local assets include an on-system storage facility and the gathering system, which allows Peoples to enhance the delivery of gas supplies produced locally in western Pennsylvania. The Company's interstate assets are comprised of a portfolio of transportation and storage services with six interstate pipelines that provides Peoples with access to a variety of supply source locations. Using this gas supply portfolio, Peoples uses an economic dispatch approach that also takes into account reliability, operational requirements, and contractual obligations. Under that approach, Peoples reviews the cost of its various sources of supply and plans to use those that are least costly. The Company starts by base loading local supplies; that is, using local gas first. From there the Company then turns to the existing pipeline supply assets and existing gas supply agreements. These include the firm transportation and storage service agreements with interstate pipelines and the long-term firm gas supply commodity agreement with EQT Energy.

Q. HOW DOES PEOPLES TYPICALLY DETERMINE ITS CUSTOMERS' REQUIREMENTS AND ASSOCIATED GAS SUPPLIES ON A DESIGN PEAK DAY?

A. Peoples uses a forecasting model that employs a number of variables including but not limited to temperature, and historical consumption levels. The values accorded the temperature and wind speed variables are minus 9 degrees Fahrenheit and 15.8 miles per

hour respectively. The values assigned to consumption levels and the other variables change over time. Using send-out data for the four years ended May 2022 the Company calculated total system peak day design requirements of 1,468.8 MMcf per day.

Q. WILL THE COMPANY SUPPLY THE ENTIRETY OF THE 1,468.8 MMCF FOR ITS CUSTOMERS?

A. No. Peoples Natural Gas will supply 1,170.6 MMcf of the Company's customers' design day requirements of 1,468.8 MMcf. The supply of 1,170.6 MMcf per day includes the following components:

- Projected local gas volumes of 13.8 MMcf. This volume is based on a projection of the amount of local gas under contract to Peoples Natural Gas and available on a design day;
- The on-system storage design day supply of 55.3 MMcf reflects the expected volume of supplies available from the Company's on-system storage fields; and
- Interstate delivered gas of 1101.5 MMcf projected to be received from Equitrans, EGTS, Tennessee Gas Pipeline Company, LLC ("Tennessee"), TETCO, TCO and NFG.

Q. WHY DOESN'T PEOPLES NATURAL GAS HAVE TO BE PREPARED TO SUPPLY ALL OF ITS CUSTOMERS' DESIGN DAY REQUIREMENTS?

A. Many of Peoples Natural Gas's customers, generally also its largest customers, that purchase their supplies from NGSs – customers whom the Company refers to as Non-Priority 1 or NP-1 – are responsible for acquiring their own design day assets at a level sufficient to deliver their average daily usage during that month. The Company expects those customers to deliver to the system 298.4 MMcf on a design day during the 1307(f)-2023 projected period.

Q. HOW DO THE DESIGN DAY REQUIREMENTS OF PEOPLES NATURAL GAS'S SMALLER CUSTOMERS WHO PURCHASE THEIR SUPPLIES FROM NGSs FIT INTO PEOPLES NATURAL GAS'S SUPPLY PORTFOLIO?

A. When a substantial alternative supply market for those smaller Priority 1 ("P-1"), or essential human needs, customers first began to develop on Peoples Natural Gas's system in 1997, Peoples Natural Gas addressed the design day requirements of those customers under a program of mandatory capacity assignment. Peoples Natural Gas's tariff requires that the P-1 customers acquire their design day capacity requirements from Peoples Natural Gas by means of mandatory assignment of capacity and that the P-1 customers must pay the costs of that assigned capacity through the capacity charge. The P-1 NGSs are expected to utilize the assigned capacity to deliver to the system sufficient supplies to meet the projected total usage for their P-1 customers on a design day during the 1307(f)-2023 projected period.

Q. IN ADDITION TO ITS CUSTOMERS' DESIGN DAY CAPACITY AND SUPPLY REQUIREMENTS, WHAT OTHER CUSTOMER REQUIREMENTS MUST PEOPLES NATURAL GAS'S GAS SUPPLY PORTFOLIO SATISFY?

A. Peoples Natural Gas must also satisfy the day-to-day supply requirements of Peoples Natural Gas's customers who purchase supplies from Peoples Natural Gas, the day-to-day balancing requirements of NP-1 transportation customers, and the requirements for gas that either will be used in Peoples Natural Gas's operations (i.e., company-use gas) or that will be "lost or unaccounted for" because of various reasons.

Q. DOES PEOPLES NATURAL GAS USE ITS ANNUAL CONSUMPTION PROJECTIONS FOR THOSE CUSTOMERS WHO LIKELY WILL BUY THEIR SUPPLIES FROM NGSs FOR ANY PURPOSE IN THIS PROCEEDING?

A. Yes. Although those customers' capacity requirements are measured strictly by the demands that they will place on Peoples Natural Gas's system on a design peak day, Peoples Natural Gas recovers the costs of meeting those requirements through each Mcf that Peoples Natural Gas delivers to those customers throughout the year. In the case of P-1 customers, Peoples Natural Gas recovers the costs through a capacity charge per Mcf consumed. In the case of NP-1 customers, the recovery is through a balancing charge per Mcf consumed.

Q. HOW DO THE DESIGN DAY SUPPLY ASSETS COMPARE TO THE PROJECTED DESIGN DAY REQUIREMENTS?

A. As shown on **Peoples Natural Gas Exhibit No. 1**, the Company is projecting that its design day supply assets will be within 0.2 MMcf of its design day requirements.

Q. PLEASE DESCRIBE HOW LOCAL GAS PURCHASES FROM CONVENTIONAL WELLS ARE USED TO SATISFY SYSTEM GAS SUPPLY NEEDS.

A. Peoples and natural gas suppliers operating on our system use natural gas produced from local shallow wells as a base load supply to meet customer's usage requirements. However, since 2012, local gas produced and delivered from conventional wells into the Company's system has declined year-over-year. In 2017, Peoples received supplies from conventional wells totaling approximately 39.0 BCF. In 2022, a total of approximately 29.5 Bcf of conventional production was delivered into the Peoples' systems. Over this

six-year period, this represents a total decline of 9.5 Bcf, or 24%. A reversal of this ongoing decline is not expected. The conventional production volume level for the 11 months ended November 30, 2023 is 25.9 Bcf.

Q. DOES PEOPLES HAVE A POLICY REGARDING ADDITIONAL MARCELLUS SHALE WELL PRODUCTION?

A. Peoples' current role in the development of Marcellus Shale has been to provide producers of unconventional gas with similar access to both on-system and off-system markets as provided to conventional producers. Peoples has been able to accept Marcellus Shale production into its systems on a case by case basis, using the same analysis for Marcellus Shale production tap requests that it uses for conventional production tap requests. The analysis includes (i) the location and quantity of gas supply, (ii) the unused pipeline capacity at the proposed injection point, (iii) the anticipated gas quality and the investment required to resolve gas quality issues, and (iv) the impact of the production on existing base load supplies from local and interstate alternatives.

Peoples' market fundamentally benefits from having access to additional direct feed local Marcellus Shale production. It provides a replacement supply for declining conventional production volumes. Also, local gas supplies, including gas produced into the Peoples' system from both conventional and Marcellus wells, represent a lower cost supply than interstate delivered gas. Peoples plans to remain involved in finding opportunities to utilize Marcellus Shale gas produced in Peoples' service territory, and that activity will continue to benefit Peoples' market.

LOCAL PRODUCTION - GATHERING AND COST RECOVERY

Q. PLEASE DESCRIBE GENERALLY THE TRADITIONAL GATHERING PIPELINE SYSTEM.

A. Both the Peoples Natural Gas Division ("PNGD") and Peoples Gas Division ("PGD") have distribution systems that serve customers in and near the natural gas production regions of Pennsylvania. In fact, it was natural gas from the western Pennsylvania gas fields that originally served the customers of both Divisions.

Gathering systems are pipeline facilities that have the primary purpose of moving conventionally produced gas from production fields to transmission and distribution facilities for delivery to end use customers. In contrast, distribution pipelines generally are a system of mains and service lines that primarily function to deliver natural gas to individual homes and businesses. However, in some instances, customers and small distribution systems are connected directly to gathering systems in rural areas where it is not economic to extend pipelines from the major distribution centers because of the low density of potential customers.

In addition to gathering pipelines, gathering systems also typically include compression facilities and equipment to monitor and treat the gas. Gathering compressors are used to increase the flow of local production by raising the gathering pipeline pressure to the pressure of the pipeline that the gathering pipeline feeds into, typically a transmission pipeline or higher pressure gathering or distribution pipeline. Gas monitoring and treatment is another part of a gathering system. Peoples requires producers to remove water and other contaminants from the gas delivered to the gathering system. In some cases, the gas is further

treated by Peoples at compressor stations where dehydration facilities are installed to remove water prior to delivering gas to transmission or distribution systems.

There are also situations where Peoples receives locally produced gas directly into its distribution and transmission systems. This production can be from both conventional and unconventional sources. Although PGD does not have a Gathering System per its Books and Records, it does have systems that serve a similar purpose to the PNGD Gathering system.

Q. DO GAS PRODUCERS BENEFIT FROM GATHERING SYSTEMS?

A. Yes. Producers benefit from gathering lines because, in most cases, it is their only means to get their gas production to a market. The gas produced into the gathering systems originates from conventional wells. Generally, gathering systems cannot be used to receive and deliver higher pressure gas produced from unconventional sources such as Marcellus Shale.

Q. DO CUSTOMERS BENEFIT FROM LOCAL PRODUCTION AND GATHERING SYSTEMS?

A. Yes. Customers receive a notable cost savings benefit from local production delivered into the Peoples' systems. Production directly feeding utility pipelines avoids costly interstate pipeline charges, which include fixed reservation charges for interstate pipeline reservation space, usage charges to cover variable interstate pipeline costs and retainage to cover gas loss and gas used in interstate pipeline operations.

Q. HAS THE COMPANY PREPARED A COMPARISON OF THE COST PER MCF OF DELIVERING GAS THROUGH INTERSTATE PIPELINES TO THE COST OF DELIVERING GAS THROUGH THE COMPANY'S GATHERING SYSTEM?

A. Yes. Peoples Natural Gas Exhibit No. EAP-1 provides this comparison for the projected twelve months ended September 30, 2025 (Fully Projected Future Test Year - "FPFTY"). It shows that gas produced into and delivered through the gathering systems is notably less costly than gas procured on and delivered from Peoples' interstate pipeline suppliers. The total average cost of gas delivered via the gathering system for the FPFTY is estimated at $3.08 per Mcf. The total average cost of gas delivered via the interstate systems for the FPFTY is estimated at $3.48 per Mcf. This results in an estimated cost savings of $0.40 per Mcf for the local gas purchased by Peoples' for our on-system customers alone. Customers that purchase local gas supplies from third party marketers can reasonably be expected to receive a similar cost per Mcf savings benefit. As noted in Peoples Natural Gas Exhibit No. EAP-1, this analysis reflects the various costs incurred by Peoples' ratepayers for the FPFTY which include: the projected average commodity cost of gas delivered to the Peoples' system; Peoples' costs to own and operate the gathering systems (including gathering UFG); and interstate pipeline costs for capacity, retainage, and delivery. Mr. Zarumba calculated and presented testimony in support of the projected non-gas costs incurred by Peoples to own and operate the PNG gathering system.

Q. DOES INTERSTATE PIPELINE GAS AND LOCAL GAS SERVE THE SAME PURPOSES?

A. While both supply sources provide the gas supply needed by the customer, pipeline gas is much more flexible in that it is provided to the Company at significantly higher pressure which is required in peak periods of usage and for injection into storage. The amount of pipeline gas entering the Company's system can also more easily be adjusted up or down to meet the daily gas consumption swings due to weather. In addition, pipeline gas generally meets higher quality standards relating to containing impurities and water and creates fewer operational problems.

Q. HOW SHOULD THE BASE RATE COSTS OF THE GATHERING SYSTEM BE RECOVERED?

A. Gathering system costs are incurred to provide a market for supplies produced by local wells and to provide cost effective gas supplies to customers. In my opinion, it is appropriate for both producers and customers to share in paying these costs.

Q. WHAT FACTORS SHOULD BE CONSIDERED IN ALLOCATING THESE COSTS BETWEEN CUSTOMERS AND LOCAL SUPPLIERS?

A. As I have noted previously, customers benefit from obtaining local gas at a cost lower than interstate pipeline gas. The gathering system lowers the amount of interstate pipeline capacity that is required to serve customers and lowers pipeline demand costs recovered from all sales and transportation customers. In addition, customers served directly from the gathering system receive their service from gathering pipelines and not distribution pipelines. Finally, some of Peoples' distribution areas are served only by local gas from the gathering systems.

Producers derive substantial benefit from the gathering facilities as it is their source to a market. In addition, Peoples operates its gathering and distribution systems to facilitate the introduction of lower pressure gas from conventional wells into its system.

While it is difficult to specifically quantify these benefits between producers and customers, it is clear that both producers and customers benefit from the gathering systems.

Q. ARE THERE ANY UNIQUE OPERATIONAL ISSUES AND/OR COSTS ASSOCIATED WITH GATHERING SYSTEMS?

A. Gathering systems present operational challenges uncommon to distribution. Since the facilities typically are in rural areas, and consist of many measurement delivery points, potential leaks are not as readily detectable. This can contribute to potential higher lost and unaccounted for gas than on distribution systems, as well as higher methane emissions. Peoples has attempted to mitigate this by operating and maintaining gathering assets under the same guidelines as distribution assets. While not required by federal codes, Peoples conducts leak surveys on the gathering pipelines at intervals similar to distribution pipelines, and schedules gathering line leak repairs accordingly.

A pending issue related to gathering facilities has surfaced under the requirements within the 2022 Inflation Reduction Act (IRA) waste methane fees. Natural gas distribution assets are exempt from the methane fees, however gathering pipelines may be subject to the fees under the "Gathering and Boosting" industry segment. The IRA details the implementation of a waste methane fee based upon the ratio between the emissions and gas sales as represented by a methane intensity. If the calculated methane intensity exceeds the threshold established in the IRA, a waste methane fee is applied to the emissions above the

threshold. The method to calculate the methane intensity has not been finalized and is still in the proposed rule-making process, and the associated proposed methane fee schedule (in $/Metric Ton Methane) is $900 for 2024, $1,200 for 2025, and $1,500 for 2026. Peoples continues to evaluate and analyze the potential impact of the waste methane fee, and estimates the annual costs to be $1.1-1.8 million, depending on the final methodology for calculating the fee. These incremental fees are included in the total cost of service for gathering and claimed within Taxes Other than Income in Exhibit No. 6

Q. HOW DOES PEOPLES PROPOSE TO RECOVER THE COSTS OF THE GATHERING SYSTEMS?

A. There is a practical limit to how much of the gathering system costs can be recovered from producers. The projected average market price that producers will receive for their gas purchased by Peoples for system supply is $2.22/Dth for the projected twelve months ended September 30, 2025 (FPFTY). These prices are low by historical standards and it is likely that this has contributed to the reduction of production from conventional wells since 2012.

PNGD currently charges amounts to producers for gathering system costs through its existing Rate Schedule AGS and PGD does not currently charge any gathering fee to producers. The Company proposes to institute a uniform gathering service rate for all conventional gas production produced into both divisions. The proposal is set forth in the tariff rate schedule – Appalachian Gathering Service -- that is provided in Exhibit No. 14.

Q. PLEASE EXPLAIN THESE EXISTING GATHERING PROGRAMS AND THE ASSESSMENT OF CHARGES TO PRODUCERS.

A. The current structure for assessing gathering related charges on the Peoples Natural Gas and Peoples Gas differ.

At the Peoples Natural Gas Division a gathering tariff service and fee structure was approved by the Commission and put in place during the Peoples Natural Gas Division 2019 Rate Case. That service, which currently exists today, is provided under Rate AGS – Appalachian Gathering Service. Under Rate AGS any conventional natural gas producers desiring to produce gas into and transport gas on the distribution or gathering systems are subject to a gathering rate and a gas retainage charge. It is not a voluntary program. All producers transporting conventional local production onto the Company's system are subject to gathering rates ($0.26 for conventional production) and a retainage charge of 2.3%. Gathering rates and retainage charges for unconventional production such as that from horizontally drilled Marcellus and Utica shale gas are determined through negotiation. For the HTY 12-month period ending August 31, 2023, Peoples Natural Gas recovered just under $7 million in gathering rate revenues.

The Peoples Gas Division currently has Rate GS – Gathering Service tariff service. Under Rate GS, producers are not charged a gathering fee for utilizing Peoples Gas' system. However, they are charged a retainage fee of 3.4% that was established during a prior 1307(f) case.

Q. PLEASE EXPLAIN THE COMPANY'S PROPOSAL TO INSTITUTE A UNIFORM GATHERING RATE FOR CONVENTIONAL GAS PRODUCTION ACROSS THE DIVISIONS.

A. Before I describe the mechanics of the gathering pricing proposal I would like to point out that our gathering rate proposal is designed to bring together the existing and differing programs of Peoples Natural Gas and Peoples Gas and set a producer paid gathering fee structure that attempts to establish a reasonable and ongoing producer revenue contribution (to offset the customers' share of gathering costs) that also does not create an economic disincentive for conventional gas producers to continue to produce low cost gas supplies into the Peoples' systems. All conventional gas producers will be required to pay the same uniform gathering fee for any gas produced into and transported on the distribution or gathering systems. All unconventional gas producers, including but not limited to, horizontally drilled Marcellus and Utica shale gas and landfill gas, shall be negotiated and agreed to with the producer. As set forth and described in the proposed, combined tariff at Exhibit No. 14, a gathering rate will continue to be assessed to any party desiring to transport gas through the gathering system, as well as deliver locally produced gas directly into the Company's distribution or transmission systems on PNGD. The Company also proposes to apply this gathering rate on PGD.

Lastly, I'd like to point out that this proposal addresses the recovery of gathering related non-gas costs and does not address the assessment of gas retainage charges to producers. Peoples plans to continue to assess the gas retainage rates currently charged to producers but plans to make a proposal to have a uniform retainage rate across the two divisions in its next 1307(f) purchased gas cost proceeding to be filed on April 1, 2024.

Q. WHY IS IT APPROPRIATE FOR THE GATHERING FEE TO APPLY TO THE PEOPLES GAS DIVISION?

A. While the PG system does not have gathering pipelines as defined by federal DOT code or by the FERC Chart of Accounts gathering definition, it does have facilities that move local production to the Company's distribution system. The pipelines and associated facilities (meters, compressors, regulators) receive gas directly from local production. The gas is then transported to high pressure and/or distribution pipelines for delivery to end user customers. Although these facilities are non-jurisdictional, PG operates and maintains them under the same procedures as distribution facilities from a pipeline safety viewpoint.

Q. WHAT IS THE GATHERING RATE STRUCTURE APPLICABLE TO GAS DELIVERED INTO THE GATHERING SYSTEMS OR CONVENTIONAL GAS PRODUCED AND DELIVERED INTO THE DISTRIBUTION OR TRANSMISSION SYSTEMS?

A. The Company is proposing to utilize the current PNGD gathering rate of of $0.26/Mcf for all conventional production across both PNGD and PGD.

Q. HOW MUCH REVENUE DOES THE COMPANY PROJECT TO RECOVER IN THE FULLY PROJECTED FUTURE TEST YEAR?

A. The annual volume projection of conventional production on PNGD and PGD that will be subject to the gathering fee for the FPFTY is 30.1 Bcf. This volume projection was based on recent actual production levels adjusted to reflect current production decline trends. The

resulting revenues to be paid for by conventional well producers for the FPFTY is projected to be $7.8 million.

Q. YOU MENTIONED EARLIER IN YOUR TESTIMONY THAT PEOPLES ALSO RECEIVES UNCONVENTIONAL SUPPLIES INTO ITS SYSTEMS. ARE THERE GATHERING FEES ASSESSED TO PRODUCERS BY PEOPLES FOR UNCONVENTIONAL SUPPLIES AND IF SO WHAT ARE THE EXPECTED ANNUAL REVENUES?

A. Yes. As set forth in the existing tariff rate schedule – Appalachian Gathering Service (Peoples Natural Gas Exhibit No. 14), Peoples charges a rate for gathering natural gas produced from unconventional sources that is determined through negotiation. It's important that this rate be negotiable because Peoples needs to compete with midstream and interstate pipelines to acquire this gas supply. Marcellus producers generally have multiple options to get their gas to market. Based on the negotiated rate currently charged to existing unconventional producers and the associated expected annual volumes produced from unconventional sources for the FPFTY, Peoples projects to generate $1.55 million in annual gathering fees from unconventional gas producers for the FPFTY period.

Q. BASED UPON THE COMPANY'S FPFTY PROJECTION OF RECOVERIES UNDER THE GATHERING CHARGES TO CONVENTIONAL AND UNCONVENTIONAL PRODUCERS HOW MUCH OF THE GATHERING COSTS WILL BE RECOVERED?

A. The Company projects that it will recover $9.4 million, a $2.4M or 34% increase over the existing revenue of $7.0M at present rates.

Q. HOW DOES THE COMPANY PROPOSE TO RECOVER THE REMAINDER OF THE GATHERING COSTS THAT ARE NOT PROJECTED TO BE RECOVERED FROM PRODUCERS?

A. We have directed Mr. Zarumba to allocate the remaining costs to the various customer classes. He uses a volumetric allocation factor to assign gathering plant and associated expenses to customer classes based on the percentage of annual gas volumes in each class supplied by Pennsylvania gas producers. This is consistent with the methodology used in the Company's last base rate proceeding.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes. I reserve the right to supplement my testimony as other issues arise during the course of this proceeding. Thank you.

APPENDIX A

Exhibit	**Filing Requirement**
Ex. 10, Sch. 3	53.53.III.E.22
Ex. 12, Sch. 1	53.53.III.E.5
Ex. 12, Sch. 2	53.53.III.E.18
Ex. 12, Sch. 3	53.53.III.E.23
Ex. 12, Sch. 4	53.53.III.E.24
Ex. 12, Sch. 5	53.53.III.E.26
Ex. 12, Sch. 6	53.53.III.E.30
Ex. 12, Sch. 7	53.53.III.E.36
Ex. 12, Sch. 10	53.53.IV.B.11
Ex. 12, Sch. 11	53.53.I.C.1
Ex. 12, Sch. 12	53.53.III.E.28
Ex. 12, Sch. 15	53.53.III.E.3
Ex. 12, Sch. 16	53.53.IV.B.14
Ex. 13, Sch. 7	53.53.III.E.27
Ex. 15, Sch. 2	53.53.I.C.2
Ex. 15, Sch. 3	53.53.IV.B.8
Ex. 17, COS-10	COS 10
Ex. 17, COS-11	COS 11
Ex. 17, COS-12	COS 12
Ex. 17, COS-14	COS 14
Ex. 17, COS-16	COS 16
Ex. 17, COS-17	COS 17

Cost Comparison - Local Gas Purchased and Delivered via Gathering vs. Interstate Supplied Deliveries (Peoples Natural Gas and Peoples Gas Combined)

Index - EGTS Appalachian Index Cost per Dth 1/		$	2.22	/ Dth					
	Local Gas via Gathering					Interstate Gas*			
Commodity Cost 2/		$	2.3088	/ Mcf			$	2.3088	/ Mcf	
Gathering UFG (A) or Interstate Retainage (B)	7.33%	$	0.1692	/ Mcf	A	1.50%	$	0.0346	/ Mcf	B
Producer Contribution - Gathering Retainage 3/	-2.47%	$	(0.0570)	/ Mcf						
Delivery Cost to City-Gate		$	-				$	0.1027	/ Mcf	
Gathering System Cost (A) or Interstate Capacity (B)		$	0.9200	/ Mcf	A		$	1.0301	/ Mcf	B
Producer Contribution - Gathering Fee 4/		$	(0.2600)	/ Mcf			$	-		
Total Delivered Cost		**$**	**3.0810**	/ Mcf			**$**	**3.4762**	/ Mcf	

$ 0.3952 Local Gas Discount

* Based on weighted average cost of all existing Peoples Natural Gas interstate FT and storage contracts.

1/ EGTS Appalachian Index Price as estimated for the FPFTY - October 2024 through September 2025 as of 12/11/2023

2/ Commodity Cost for Local Purchases is 100% EGTS App Index and interstate supplies are converted from Dth to Mcf at 1.04 system average Btu.

3/ Gathering retainage level recovered from producers on the PNG & PG system.

4/ Gathering Fee is the producer paid fee under Peoples' proposed Appalachian Gathering Service rate schedule for the FPFTY - Oct. 2024 - Sept. 2025.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	Docket No. R-2023-3044549
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED DIRECT TESTIMONY OF
PAUL BECKER
VICE PRESIDENT, CONSTRUCTION & ENGINEERING
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: December 29, 2023
DATE ADMITTED: _____

Peoples Statement No. 5

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Paul Becker. My business address is 375 North Shore Drive, Pittsburgh, PA 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Peoples Natural Gas Company LLC ("Peoples" or the "Company") as the Vice President, Construction and Engineering.

Q. PLEASE STATE BRIEFLY YOUR EDUCATIONAL BACKGROUND AND EMPLOYMENT EXPERIENCE.

A. I have worked in the gas energy industry for almost four decades and now work as Vice President, Construction & Engineering at Peoples, a position I have held since 2017. I am responsible for the design and construction of natural gas facilities, specifically relating to transmission, storage, gathering and distribution. I received my Bachelor of Science in engineering from the University of Pittsburgh and a Master of Business Administration from Duquesne University. I am a registered professional engineer in Pennsylvania and a member of the American Society of Civil Engineers, the Energy Association of Pennsylvania, and the American Gas Association.

Q. WHAT ARE YOUR RESPONSBILITIES FOR PURPOSES OF THIS PROCEEDING?

A. I will describe the Company's four major pipeline capital programs which make up the majority of the Company's overall capital budget. Moreover, I will provide an update as

to the progress the Company has made with respect to its pipeline capital programs and why the Company should continue to invest these programs.

PIPELINE CAPITAL WORK PLAN

Q. PLEASE GENERALLY DESCRIBE WHAT THE COMPANY MEANS BY PIPELINE CAPITAL WORK.

A. The Company is engaged in various programs to modernize its infrastructure (pipelines and related facilities) to maintain the safety and integrity of its natural gas distribution system. As part of its modernization efforts, the Company performs the replacement, improvement and retirement of its pipelines (and related facilities) on a daily basis. The Company's most significant modernization program in terms of cost and mileage is its Long-Term Infrastructure Improvement Plan (LTIIP). For example, the Company anticipates that since its last base rate case (PNG case) through the end of the Fully Projected Future Test Year presented in this filing, it will spend nearly $2 Billion to replace more than 1,000 miles of its aging infrastructure. In addition to its LTIIP, the Company has three other pipeline programs.

Q. **PLEASE GENERALLY DESCRIBE THE COMPANY'S FOUR MAJOR CAPITAL PIPELINE WORK PROGRAMS.**

A. The four programs include the Company's Long-Term Infrastructure Improvement Plan ("LTIIP"), the Gathering Pipeline Replacement Program ("GP"), the Goodwin Tombaugh Program ("GT") and the Mainline Extension Program or MLX.

(1) The Company's LTIIP is a multiyear program targeting primarily the replacement of distribution and transmission bare steel and cast/wrought iron pipelines. The Company's current five-year LTIIP was approved by the Commission on January 14, 2021 and is in effect through 2025[1]. The five-year program targets replacement of a total of 871 miles of pipeline. The as-filed anticipated total costs of the current LTIIP program for the years 2021-2025 are approximately $1.6 Billion.

(2) The GP Replacement Program is an annual program primarily targeting the replacement and/or abandonment of bare steel gathering pipelines. The GP program targets approximately 25 miles of gathering pipeline for abandonment or replacement at an estimated cost of $5-$7M annually.

(3) The GT Program is a program specifically targeting the replacement and conversion of an aging legacy gathering system. The replacement of the GT system was a settlement requirement stemming from the 2020 acquisition of Peoples by Essential Utilities, Inc.[2] The settlement requires the Company to replace over 300 miles of the GT pipeline over a seven-year time frame for an estimated total cost of $120 Million. Under the acquisition settlement, as the GT plant is completed and placed in service, the plant is transferred to Peoples Natural Gas, regulated under the Commission's jurisdiction and classified as distribution pipeline and operated for safety purposes following all provisions

[1] Docket Nos. P-2020-3021942 and P-2020-3022053
[2] Docket Nos. A-2018-3006061, A-2018-3006062 and A-2018-3006063

under 49 C.F.R. § 192 for distribution pipeline. See Settlement §A[3]. Consistent with the Settlement, as PNG has replaced GT plant, the new plant has been transferred to PNG and included in distribution plant.

(4) The Mainline Extension Program ("MLX") is an annual program encompassing the construction of mainlines, meters, and services associated with new customers coming onto the Company's system. Typically, the MLX program adds about 30-40 miles of distribution pipeline (and associated meters and services) for an estimated cost of $20-30M, annually.

Q. **PLEASE SUMMARIZE THE COMPANY'S PIPELINE CAPITAL WORK ACCOMPLISHMENTS/INVESTMENTS.**

A. LTIIP – As of October 2023, approximately 485 miles or 56% of the projected 871 total miles in the Company's current LTIIP have been replaced at a cost of $918M or 63% of the estimated program costs for mains and services of $1.5 Billion. The following table provides a summary of the Company's current LTIIP results from 2021 through October 2023:

[3] *Id.*

Current LTIIP 2021-2025								
Mains and Services Only		as of Oct 2023						
LTIIP		Miles				Dollars, Millions		
LTIIP Program year	Year	Plan miles	actual miles	actual PTD miles	% actual to plan each year	Planned costs	actual costs	% actual to plan each year
1	2021	159	165	165	103%	$242	$247	102%
2	2022	159	163	327	102%	$239	$326	137%
3	2023	181	158	485	87%	$328	$344	105%
4	2024	186				$329		
5	2025	186				$329		
Total		871		485	56%	$1,467	$918	63%

GP –From 2019 through October of 2023, the Company has replaced or abandoned more than 200 miles of its bare steel gathering pipeline for a total cost of approximately $25 Million. The following table summarizes the Company's GP Program results from 2019 through October 2023:

as of Oct 2023					
GP	Miles			Dollars, Millions	
Year	pipe replaced	pipe abandoned	total	capital	cumulative capital
2019	17.5	15.2	32.7	$ 7.4	$ 7.4
2020	12.1	39.0	51.1	$ 4.2	$ 11.6
2021	11.9	56.0	67.9	$ 3.6	$ 15.2
2022	11.2	36.3	47.5	$ 5.3	$ 20.5
2023	8.6	16.0	24.6	$ 4.7	$ 25.2
total	61.3	162.5	223.8	$ 25.2	

GT - As of October, 2023, the Company has replaced or abandoned 151 miles or 49% of the targeted GT pipe in the Company's system for a cost of $37.7 M or 31% of the original $120M estimate. The Company is meeting its mileage commitment and carrying out the

terms of the referenced settlement. Please see the table below for the Company's progress on its GT Program since 2020:

as of Oct 2023					
GT		Miles		Dollars, Millions	
program year	year	PTD	% complete	PTD	% complete
1	2020	26.2	8%	$2.8	2%
2	2021	69.2	22%	$13.0	11%
3	2022	103.0	33%	$26.4	22%
4	2023	150.8	49%	$37.7	31%

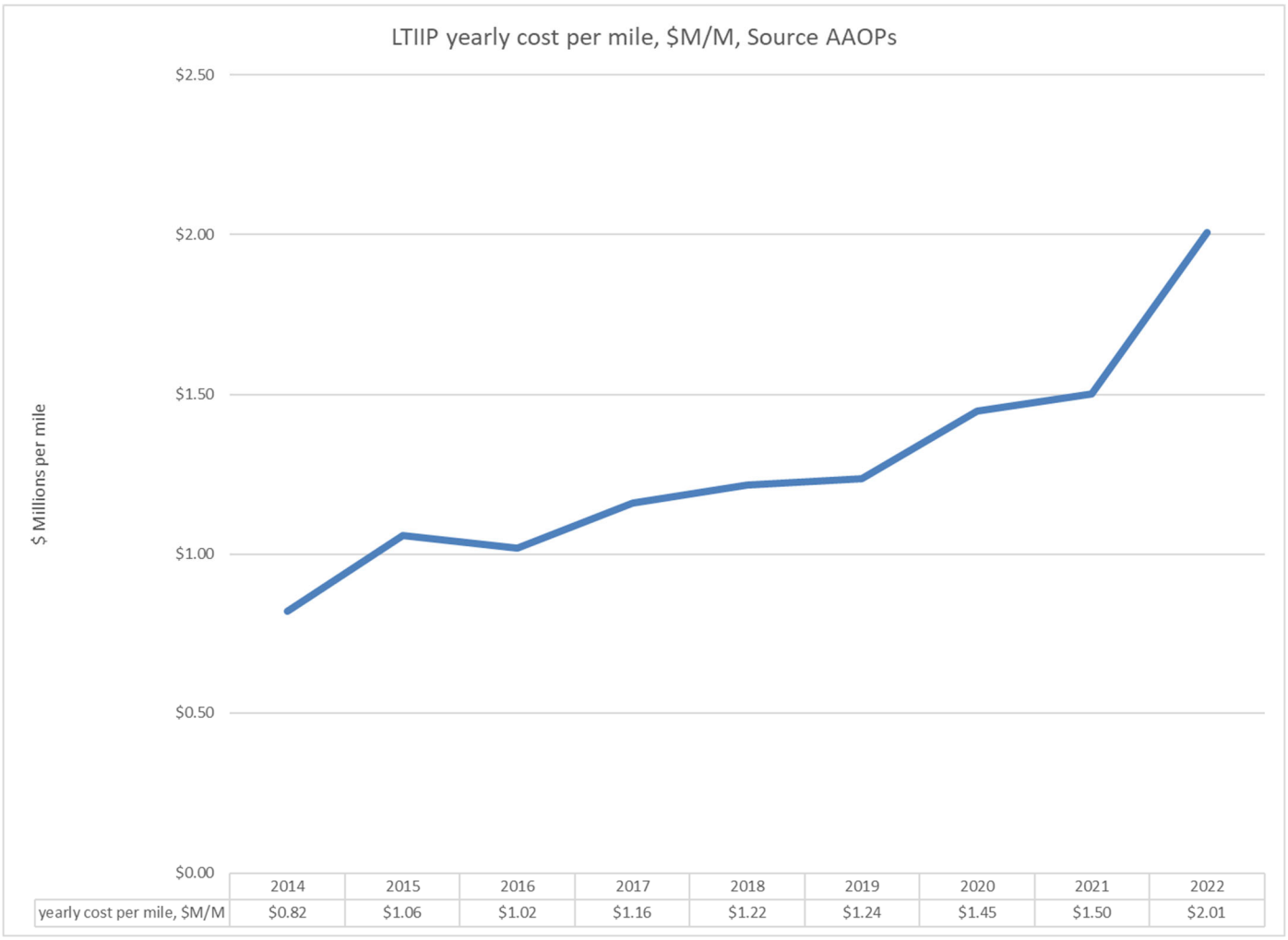
To date there have been no adverse impacts to existing GT customers (switched 223 customers to the new pipe). Throughout the process, the Company has been evaluating ways to achieve efficiencies and minimize costs. The Company's design team identified 93 miles (30%) of pipeline that can be abandoned (to date 73 of those miles have been abandoned). Also, the design team identified 84 miles (27%) that can be moved from rights of way to along the road, thereby minimizing environmental impacts and positioning the new distribution pipe to serve future loads.

MLX - Since 2020, the Company has installed approximately 131 miles of mainline pipe for a total cost of approximately $97 Million. Such mainline extensions vary from a short section for a single customer to miles long segments to and in subdivisions serving tens or hundreds of customers. The Company's Tariff Rule 4 addresses the Company's extension of its facilities and is consistent with the Commission's regulations. The Company adheres to these tariff provisions when analyzing potential mainline extension projects. The following table summarizes the Company's progress on its MLX program since 2020:

as of Oct 2023				
MLX	Miles		Dollars, Millions	
Year	pipe installed	cumulative total	capital	cumulative capital
2020	35.0	35.0	$ 21.6	$ 21.6
2021	24.0	59.0	$ 20.7	$ 42.3
2022	42.0	101.0	$ 28.4	$ 70.7
2023	30.1	131.1	$ 26.8	$ 97.5
total	131.1		$ 97.5	

Q. **HAS THE COVID-19 PANDEMIC IMPACTED THE COMPANY'S CAPITAL WORK PLANS?**

A. In general, the Company is enduring a tighter labor market and higher inflation costs which have increased the Company's average cost per mile for its capital programs significantly more than historical levels. From 2016-2019 the average cost per mile for the Company's LTIIP grew at an average annual compound growth rate of approximately 4% per year. From 2020-2022 the average cost per mile grew at an average annual compound growth rate of approximately 17% per year.



	2014	2015	2016	2017	2018	2019	2020	2021	2022
yearly cost per mile, $M/M	$0.82	$1.06	$1.02	$1.16	$1.22	$1.24	$1.45	$1.50	$2.01

These macroeconomic forces (labor market, inflation, etc.) have directly translated into increased investment costs for the Company to meet its LTIIP commitments. Currently, the LTIIP remains on track from a mileage point of view and the Company continues to evaluate and consider the need to file a petition for a major modification of the current LTIIP as the Company is currently exceeding the 20% or more variation in cost. The following table shows that the program is currently exceeding the 20% cost threshold which will require a petition for the major modification of the Company's LTIIP.

•Filed LTIIP Commitment		Miles	•LTIIP Actual/Forecast:		Miles	Variance	
2021	$ 258.1	159	2021	$ 262.0	167	1.51%	
2022	$ 256.2	159	2022	$ 340.4	159	32.86%	
2023	$ 346.6	181	2023	$ 417.7	181	20.52%	
2024	$ 347.3	186	2024	$ 451.9	186	30.12%	
2025	$ 347.5	186	2025	$ 468.5	186	34.82%	
	$ 1,555.7	871		$ 1,940.5	879	24.73%	Cumulative

Q. WHAT ARE THE PROJECTED FTY AND FPFTY AMOUNTS FOR THE COMPANY'S PIPELINE CAPITAL WORK PROGRAMS IN THIS FILING?

A. The Peoples' estimated Pipeline Capital Work Plan (including LTIIP, GP, GT and MLX) spend for the FTY and FPFTY is $484.1 million and $581.4 million, respectively. Peoples estimates that it will spend over $900 million in LTIIP spending alone over the FTY and FPFTY.

Q. **WHY SHOULD THE COMPANY BE ALLOWED TO CONTINUE ITS CAPITAL WORK AS EXPLAINED IN THIS TESTIMONY?**

A. Through its capital work programs, the Company is able to modernize its infrastructure from which it ultimately serves homes and businesses in its service territory. By replacing its aging infrastructure and installing state of the art infrastructure, the Company is able to ensure the safe and reliable delivery of natural gas service to its customers. Moreover, upgrading older pipelines helps to protect the environment by reducing methane emissions associated with leak prone, older pipelines. The Company should be able to continue its capital program spending at the estimated levels identified in its FTY and FPFTY to meet its infrastructure investment commitments and for the continued safe and reliable

distribution of natural gas. For more information on the benefits of our capital programs, please see the testimony of Company witness, Michael Huwar.

Q. DOES THIS COMPLETE YOUR TESTIMONY?

A. Yes, it does.

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	Docket No. R-2023-3044549
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED DIRECT TESTIMONY OF
CHRISTINE SABALL
VICE PRESIDENT, TAX
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: December 29, 2023

Peoples Natural Gas Statement No. 6

DATE ADMITTED: _____

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Christine Saball, and my business address is 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010.

Q. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?

A. I am employed as Vice President, Tax for Essential Utilities, Inc. ("Essential"), the parent company of Peoples Natural Gas Company LLC ("Peoples" or the "Company").

Q. PLEASE DESCRIBE YOUR PROFESSIONAL AND EDUCATIONAL BACKGROUND.

A. I graduated from Boston University's Questrom School of Business in 1999 with a Bachelor of Science degree in Business Administration, with a concentration in Accounting. I am a Certified Public Accountant ("CPA") in the Commonwealth of Pennsylvania. I have held various positions in public accounting at regional firms in New England and obtained my CPA license in 2003. I began my career in the utility industry in October 2003, when I joined National Grid as a Senior Tax Analyst. At National Grid, I had the opportunity to support the ratemaking process by reviewing the utility's accrual for income tax liability, calculating its year end provision to actual federal and state liability calculations, and analyzing the flow through and normalized deferred tax accounts. Prior to joining Essential in May 2019, I was employed by Connecticut Water Company ("Connecticut Water") for ten years. I started as a Tax Manager in the Finance Department and held that position for five years, and then was promoted to the position of Tax Director and held that position for five years. During my employment with Connecticut Water, my

responsibilities included preparing tax schedules for regulatory filings and related activities for Connecticut Water and its affiliate Maine Water Company. In addition, I prepared workpapers and exhibits, and provided testimony in support of regulatory filings.

Q. WHAT ARE YOUR DUTIES AS VICE PRESIDENT OF TAXES?

A. My primary responsibilities include oversight of the Company's income tax functions with responsibility for tax aspects of acquisitions, planning, risk management, financial reporting and compliance. I oversee and manage accounting for income taxes under ASC 740 and ASC 980, and federal and state tax compliance filings for all subsidiaries. I assist in regulatory filings including base rate cases for the regulated businesses. In addition, I perform tax research, and provide budget information and guidance on tax matters.

Q. HAVE YOU BEEN A WITNESS IN MATTERS PREVIOUSLY BEFORE THE COMMISSION?

A. Yes, I was a witness for Aqua Pennsylvania, Inc. and Aqua Pennsylvania Wastewater, Inc. in their consolidated base rate proceeding before the Pennsylvania Public Utility Commission ("PUC" or "Commission") at Docket Nos. R-2021-3027385 and R-2021-3027386. I have also served as a witness before the West Virginia Public Service Commission for Peoples Gas WV, LLC in Case No. 19-1229-G-P.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. First, I will explain the calculation of the Company's federal and state income tax expense claims in this case and the tax balances included in rate base Second, I will explain the Company's need for a mechanism related to the realization of its Pennsylvania State Net Operating Loss carryforward. Third, I will address the Consolidated Tax Adjustment. Fourth, I will describe how the Company is reflecting the effects of its tax treatment of repairs pursuant to the terms of the Joint Petition for Settlement and Approval of Tax Repairs Sur-credit, which was approved by the Commission in Docket No. P-2020-3021191, including how the Company proposes to reflect the effects of its tax treatment of repairs under Revenue Procedure 2023-15 (the "Gas Safe Harbor"), which was recently issued by the Internal Revenue Service ("IRS") on April 14, 2023. Fifth, I will describe how the reduction in the Pennsylvania Corporate Net Income ("CNI") tax rate affects the development of the Company's revenue requirement in this case.

Q. ARE YOU SPONSORING ANY EXHIBITS AS PART OF YOUR TESTIMONY?

A. Yes, I am sponsoring **Exhibit 7** (Income Taxes) along with the filing requirements and standard data requests identified in Appendix A to this testimony as well the accumulated deferred tax components of Rate Base included in Exhibit 8.

Q. WERE YOU INVOLVED IN THE PREPARATION OF THE TAX-RELATED INFORMATION SUBMITTED IN THIS PROCEEDING?

A. Yes. I participated in the preparation and review of the information along with members of the Company's tax department.

Q. WHAT SCHEDULE SETS FORTH THE COMPANY'S CALCULATION OF ITS INCOME TAX EXPENSE?

A. **Exhibit 7** includes all filing requirements related to income taxes. Specifically, **Exhibit 7, Schedule 8** sets forth the calculation of income tax expense.

Q. PLEASE EXPLAIN HOW THESE SCHEDULES WERE PREPARED IN LIGHT OF THE SEPARATE DIVISIONS.

A. All the tax schedules were prepared individually for the Peoples Natural Gas ("PNG division") and Peoples Gas Divisions ("PG division"), as well as on a combined basis.

THE COMPANY'S CALCULATION OF FEDERAL AND STATE INCOME TAX

Q. PLEASE EXPLAIN THE BASIS FOR THE FEDERAL AND STATE INCOME TAX COMPUTATIONS SET FORTH IN EXHIBIT 7, SCHEDULE 8.

A. Schedule 8 of Exhibits No. 7 contain four income tax expense computations: one for the historic test year at base rates then in effect (which are the same as current base rates), one for the future test year at current base rates, one for the FPFTY at current base rates and one for the FPFTY at the rates proposed by the Company. All four of the computations employ the same methodology but, since it is the level of income tax expense applicable to the FPFTY at proposed rates that is of greatest relevance in this case, I will describe that computation (columns G and I). First, the schedule shows the computation of current state and federal income tax expense – that is, the income tax that would be paid with respect to operations during the year assuming the projected levels of income and expense are achieved. The second part is the computation of deferred federal and state tax expense. The

two components, when combined, equal the Company's total income tax expense to be recovered in proposed base rates.

Q. PLEASE DESCRIBE THE CALCULATION OF CURRENT INCOME TAX EXPENSE.

A. I will describe the calculation of income tax expense for the combined entities fully forecasted test year at proposed rates, noting that each of the other tax expense calculations operates in essentially the same fashion. The purpose of this calculation is to derive income tax expense attributable to the Company's regulated gas operations. The calculation starts on line 1 with Operating Income before Taxes and Interest ("OIBTI"). The calculation of current income tax expense begins with pre-tax income (operating income before income taxes and before interest expense). OIBTI, derived from **Exhibit 2, Schedule 4**, reflects the items of income and expense for the provision of natural gas service. There are adjustments made to OIBIT that are the same for both federal and state income tax purposes. These are interest expense, meals and entertainment, tax repairs, Sec 263A capitalized interest, contributions in aid of construction, cost of removal, UNICAP 263A inventory and book depreciation.

Interest expense (line 2) is not reflected in pre-tax income but is deductible for both federal and state income tax purposes. Consequently, an adjustment must be made. The interest deduction, calculated at **Exhibit 2, Schedule 4**, is the product of multiplying Peoples weighted overall cost of debt by its regulated rate base for the same period. This calculation "synchronizes" the tax deduction with the rate base supported by the underlying debt and is consistent with the approach used in previous rate proceedings. Meals & entertainment

expense (line 4) is a permanent difference addback. Under federal tax law, most of the Company's meals and entertainment expenditures that are expensed for book purposes are not deductible for tax purposes. Thus, an adjustment is necessary to increase taxable income.

The tax repair deduction (line 7) is the deduction that the Company projects it will claim during the test year for both federal and state income tax purposes. Tax repairs book depreciation (line 8) is comprised of the book depreciation reversal on the 481(a) deduction taken in 2020 for the repair method change, as well as the book depreciation reversal on the current and on-going deductions taken since the tax accounting method change. The nature of the tax repair deduction is described later in my testimony.

Other property differences flow through (line 9) is comprised of an addback for the reversal of like kind exchange benefits that are now reversing through book depreciation over the life of the property.

Sec 263A interest (line 12) is an addback for the differences in the methodology for capitalizing construction period interest under the IRS rules.

Contributions in aid of construction (line 13) is an addback for customer payments towards the construction of facilities that are not income for book purposes but are taxable to the Company. Assets depreciated for book purposes have a cost basis net of CIAC, whereas for tax purposes, the basis is not reduced for CIAC. In subsequent years, this basis difference yields a tax depreciation deduction which is greater than the deduction for book purposes.

Cost of removal (line 14) is a deduction for tax purposes when incurred. Under Pennsylvania regulatory accounting principles, these costs are amortized over the five-year period subsequent to the year in which the cost is incurred.

Property basis differences, other (line 15) is an adjustment for the differences in book and tax depreciation on equipment and vehicles required to be capitalized when assets are self-constructed.

UNICAP 263A inventory (line 16) is a deduction for the differences in overhead costs capitalized to inventory for tax purposes under the IRS rules. These differences reverse as gas is withdrawn from storage.

Book depreciation is added back to both the federal and state computation (line 11) and tax depreciation is then deducted for both state and federal income tax purposes (line 11).

Q. WHAT DEPRECIABLE LIVES AND DEPRECIATION METHODS DOES THE COMPANY USE FOR FEDERAL INCOME TAX PURPOSES?

A. The Company uses the following depreciable lives and depreciation methods for tax purposes:

Utility Property Vintages		
1969 and prior	50 years (1)	Straight-Line
1970	50 years (1)	Double Declining Balance Switching to Straight-Line
1971 to 1980	40 years (2)	Double Declining Balance Switching to Straight-Line
1981 to 1986	15 years	Accelerated Cost Recovery System (ACRS)

1987 to June, 1996 20 years Modified Accelerated Cost Recovery System (MACRS)

June, 1996 and subsequent 25 years Straight-Line

Tax Exempt Financed Property 50 years Straight-Line

Buildings

1970 and prior 45 years (1) Straight-Line

1971 to 1980 45 years (2) Straight-Line

1981 to 1984 (portion) 15 years ACRS

1984 (portion) to 1985 18 years ACRS

1986 19 years ACRS

1987 and subsequent 31 1/2 years Straight-Line

Office Equipment

1970 and prior 10 years (1) Straight-Line

1971 to 1980 8 years (2) Double Declining Balance

1981 to 1986 5 years ACRS

1987 and subsequent 7 years MACRS

Qualified Technological Equipment

1987 and subsequent 5 years MACRS

(1) Guideline Lives

(2) Lives under Asset Depreciation Range (ADR)

Q. WHY DO THE FEDERAL AND STATE TAX DEPRECIATION AMOUNTS DIFFER FROM ONE ANOTHER?

A. Under Pennsylvania law, the method of depreciation for state income tax does not always conform to the method utilized for federal income tax. The difference between the two methods results in an adjustment to derive state taxable income. This is reflected in the PA depreciation adjustment (line 20).

Q. IS THERE ANOTHER ADJUSTMENT NECESSARY TO DERIVE STATE TAXABLE INCOME?

A. Yes. In past years, the Peoples Natural Gas and Peoples Gas Division's regulated operations have produced tax net operating losses ("NOLs") for Pennsylvania income tax purposes. As of September 30, 2025, the Company projects that it will have a state net operating loss carryforward ("NOLC") of over $2 billion. Under Pennsylvania law, this NOLC can offset state taxable income, subject to both taxable income and time limitations. Pennsylvania law limits the NOLC offset to a percentage of the state taxable income produced. This limit was 35% in 2018 and 2019 and increased to 40% in 2020 and thereafter. There is no utilization of these NOLCs reflected in the FPFTY due to the level of tax deductions. The state NOLC is increasing into the FPFTY.

Q. ARE THERE ANY OTHER ADJUSTMENTS?

A. Just one. Since state income taxes are deductible for federal purposes, once the current state income tax liability is computed (column I, lines 24 & 25) by multiplying state taxable income (column I, line 23) by the state income tax rate, that amount is deducted to derive federal taxable income. Federal taxable income is then multiplied by the21% federal income tax rate.

Q. WHAT IS THE TOTAL CURRENT INCOME TAX PROVISION?

A. Total current federal income tax expense for the FPFTY at proposed rates is projected to be $0 for both current federal and state income tax expense in the FPFTY. As previously stated, the level of current and projected tax deductions results in net operating losses for both federal and state taxable income. When a company is in a net operating loss there are no current taxes payable.

Q. PLEASE EXPLAIN THE DEFERRED INCOME TAX COMPONENT OF THE COMPANY'S TOTAL INCOME TAX EXPENSE.

A. Pennsylvania regulatory policy is, generally, to charge customers a level of tax expense equal to the taxes the utility expects to pay currently. This is referred to as "flow through" tax accounting. However, there are exceptions to this policy – particularly as it relates to the Federal tax benefits of accelerated depreciation (which is subject to the tax normalization rules). Further, in the Company's case, because of the settlement of the Petition for Accounting and Regulatory Approvals and Approval of Related Tariff Sur-credits Associated with Tax Repair Election Docket No. P-2020-3021191 (the "TRS") for the Peoples Natural Gas division, there is also an exception for the Section 481(a) adjustment relating to the tax repairs change in accounting method, which I discuss later in this testimony. As to the Section 481(a) adjustment (the so-called "catch-up" adjustment), the Company agreed to amortize the tax effect of that deduction in the manner set forth in the settlement of the TRS, as I explain later in my testimony. As to accelerated depreciation related to property subject to the normalization requirement, the Company records deferred

taxes. The provision of deferred income taxes is the accounting and ratemaking mechanism that implements the normalization requirement the Internal Revenue Code imposes as a condition for using the liberalized depreciation methodologies allowed for income tax purposes. The normalization requirement does not permit the tax benefit of tax depreciation in excess of book depreciation to be flowed through to customers as a tax deduction in the year(s) those deductions occur. Instead, the tax effects of those amounts are recorded as deferred taxes. These taxes are deferred, not eliminated; the taxes that are deferred will be paid to the government later in the life of the depreciable asset when the relationship between book and tax depreciation reverses. To recognize the fact that deferred taxes are a source of capital to the Company that does not have an attendant capital cost, accumulated deferred income taxes are deducted from rate base for ratemaking purposes. The Company's deferred tax expense in this case also includes the flow-through of excess accumulated deferred income taxes ("ADIT"), as described later in my testimony.

Q. PLEASE EXPLAIN THE PROVISION OF DEFERRED INCOME TAX EXPENSE FOR ACCELERATED DEPRECIATION.

A. As I introduced earlier, deferred income tax expense arises from the normalization requirement imposed by the Internal Revenue Code and reflects the difference between tax depreciation and book depreciation for post-1969 utility property. Tax depreciation is calculated by multiplying the tax basis of assets by the applicable depreciation rates used for income tax purposes. The applicable depreciation rates are a function of the depreciable lives and depreciation methods that I previously described for each relevant vintage of the Company's property. Because depreciable lives and methods differ based on the year plant

was placed in service, the difference between tax and book depreciation and the associated tax effect differs depending on the vintage year of the property involved. For assets acquired prior to 1970, there are no deferred taxes because this property was not subject to a normalization requirement. In total, the difference between tax depreciation and book depreciation (Exhibit No. 7, Schedule 8, Attachment 2, line 3) when multiplied by the 21% federal income tax rate is $7,140,430 for the HTY.

Q. DOES THE COMPANY RECORD DEFERRED STATE INCOME TAX EXPENSE RELATED TO ITS USE OF ACCELERATED DEPRECIATION?

A. No, on property related differences it does not. The federal tax normalization rules only apply to the federal income tax. The only deferred state income taxes recorded are for the temporary differences related to UNICAP 263A Inventory and Line Pack Gas. These differences are treated as normalized for state income taxes and the related state deferred taxes are included in rate base because the underlying assets giving rise to the temporary differences are included in rate base.

Q. PLEASE EXPLAIN THE EFFECT OF PROVIDING THE FINANCIAL STATEMENT TAX BENEFIT OF THE CATCH-UP ADJUSTMENT TO CUSTOMERS, ON THE COMPANY'S DEFERRED INCOME TAX EXPENSE.

A. The tax benefit derived from the catch-up adjustment calculated when the Company changed its accounting method for its PNG division, is providing a rate reduction to customers through a sur-credit on customer bills. The sur-credit is being provided over a five-year period which is in accordance with the terms of the TRS for the PNG division.

Due to the differences in depreciation methods under Pennsylvania state law, as discussed earlier in my testimony, the Company had a higher tax basis for state purposes to which the Section 481(a) calculation was applied. The state 481(a) adjustment included in the sur-credit calculation is $407.2M, while the Federal deduction is $390.9M. The total benefit that will be provided to customers over the five-year period was calculated based on the respective basis and rate, which is the Pennsylvania basis at the Pennsylvania rate net of Federal benefit or 7.89%; and the Federal basis at the Federal rate of 21%. As the sur-credit is provided, the Regulatory Liability that accounts for the benefit to be returned, amortizes to and reduces the Company's deferred income tax expense. This reduction is $22,847,694 as reflected in column A, on line 39 of Exhibit 7, Schedule 8, for the HTY. The level of a is amortization included in the FPFTY is $20,947,437. Please refer to the Direct Testimony of Witness Andrew Wachter for further discussion of returning the tax benefit to customers of the Section 481(a) amortization in rates. I will discuss the tax implications later in my testimony.

Q. PLEASE EXPLAIN THE IMPACT OF THE EXCESS ADIT ON THE COMPANY'S DEFERRED INCOME TAX EXPENSE.

A. The Company's deferred tax expense is reduced by the flow-back to customers of a portion of the excess ADIT resulting from the reduction in federal tax rate from 35% to 21% resulting from the Tax Cuts and Jobs Act of 2017 ("TCJA") tax rate reduction. As proposed and accepted in the Company's prior rate filing, Docket No. R-2018-3006818, the flow-back of ADIT resulting from accelerated depreciation ("protected ADIT") is computed

using the Average Rate Assumption Method ("ARAM") and is $1,757,485, as shown in column A, on line 37, of Schedule 8 of Exhibit No. 7 for the HTY.

Q. HOW ARE NOLCS REFLECTED IN DERIVING TAX EXPENSE?

A. The federal NOLC is estimated to increase to over $1.1 billion by the FPFTY. Similar to the state NOLC this is due to the increasing level of tax deductions greater than book income. The creation and utilization of federal NOLs does not impact the overall federal income tax expense because deferral of the benefits of the federal NOL are recorded to deferred income tax expense. State NOLCs utilized offset 40% of the current year taxable income. The creation and utilization of the state NOLs either decrease the overall state income tax expense (in the event of state NOLC utilization) or increase the overall state income tax expense (in the event of state NOLC creation) because the tax consequences of the creation and utilization of the state NOLC are not reflected in deferred income tax expense. This flow through tax accounting is consistent with Pennsylvania regulatory policy and the Company's treatment of not recording deferred state income tax expense on property related differences.

Q. WHAT IS THE COMPANY'S TOTAL PROJECTED DEFERRED INCOME TAX EXPENSE?

A. The total amount of these various components constitutes the Company's anticipated federal deferred tax expense of ($59,276,678) for the FPFTY at proposed rates as set forth on Schedule 8 of Exhibit Nos. 7. The corresponding state amount is ($18,714).

Q. WHAT IS THE COMPANY'S TOTAL PROJECTED INCOME TAX EXPENSE?

A. The Company projects total federal income tax expense of ($59,276,678)~~,~~ and state income tax expense of ($18,714). The reason for the large negative total federal income tax expense (benefit) is that the federal tax benefit of the tax repairs deduction is being flowed through to customers in this case. I will explain the consequences of this treatment later in my testimony.

THE COMPANY'S CALCULATION OF TAX BALANCES IN RATE BASE

Q. HOW IS THE ADIT SET FORTH IN THE COMPANY'S RATE BASE CALCULATION DERIVED?

A. The ADIT for the rate base calculation, as shown on Schedule 8, Attachment 2 of Exhibit 8, is calculated by including the normalized deferred taxes and the unamortized excess ADIT related to the 35% to 21% tax rate reduction resulting from the tax law changes made in 2017 under the TCJA at the end of the FPFTY. This amount is $47,366,959 for the combined divisions (Schedule 8, Attachment 2 of Exhibit 7 lines 31-38 and lines 47-48).

Q. WHY IS THE ADIT REFLECTED AS AN INCREASE TO RATE BASE IN THIS CASE?

A. Typically, ADIT in rate base is a large deferred tax liability due to the property related book vs tax differences that are normalized for federal income taxes resulting in a decrease to rate base, however, as a result of using different depreciable lives and methods to depreciate property for tax purposes as well as taking tax repairs deductions, the Company has experienced net taxable losses and projects net taxable losses in the FTY and FPFTY.

The result is that the Company booked and will continue to book deferred federal income taxes in those years for which the Company has not received any cash for the losses. The Company cannot reflect an increase in deferred taxes for tax depreciation deductions that have not been realized. To do so would violate the principles of the Normalization requirements under the Internal Revenue Code. Past IRS rulings addressing this issue have made it clear that companies cannot reduce rate base for benefits that have not been realized. Therefore, included as an increase to rate base is a deferred tax asset in the amount of $246,494,052 (line 38) which represents the remaining balance of un-utilized federal net operating loss. As a consequence of the flow through treatment of the tax repairs deduction, the federal deferred tax liability for the amount owed to the IRS for the future reversal of the tax repairs deduction through book depreciation expense is adjusted out of rate base (line 44) since customers are receiving the tax benefit through cost of service. Had the tax benefit of the tax repairs deduction not been flowed through in cost of service, the deferred tax liability would be included in rate base resulting in a significant reduction to rate base. This results in a net increase to rate base for ADIT as shown on lines 59 and 60 of Schedule 8, Attachment 2 of Exhibit 7. I discuss the inclusion of state deferred taxes later in my testimony.

Q. HOW ARE EXCESS DEFERRED TAXES REFLECTED IN RATE BASE?

A. The property related ADIT on lines 31-35 are at the 21% statutory rate, then the excess ADIT resulting from the TCJA rate reduction is recorded in the regulatory liability for excess ADIT (line 61) in the amount of ($90,495,350) and included as a reduction to rate base. This balance represents the remaining amount, after tax gross-up, due to customers

for the collection of taxes from customers at higher federal rates for book vs tax differences that will reverse at the current 21% rate in the future. The regulatory liability balance includes the gross-up for taxes, therefore, also included in rate base are the associated deferred tax assets that represent the tax gross-up of the regulatory liability on lines 39 and 51.

Q. ARE THERE ANY OTHER ADJUSTMENTS TO ADIT INCLUDED IN RATE BASE?

A. Yes, there is. On Exhibit 7, Schedule 8, Attachment 5, the Company has calculated a projected test period normalization adjustment. Whenever there are estimated changes in the deferred taxes that occur in a future rate period, the Normalization requirements of the Internal Revenue Code require that the deferred taxes be reflected on a pro rata basis as provided under Reg. Section 1.167(I)-1(h)(6)(ii). A future test period is defined as that portion of the test period after the effective date of the rate order. Under the pro rata basis, the change in the deferred taxes is determined by multiplying the change by a fraction of the number of days remaining in the period at the time such change is to be accrued over the total number of days in the future period. Applying this calculation results in an increase to deferred taxes (decrease to rate base) of $18,247,276 as shown on Exhibit 7, Schedule 8, Attachment 5, line 20.

Also, on Exhibit 7, Schedule 8, Attachment 2, the Company has included the deferred tax asset for the PA rate change (line 55) in the amount of $65,863,679 with offsets in the federal impact of the PA rate change and Regulatory Liability PA rate change (lines 43 & 65).

Q. WHY IS THERE A DEFERRED TAX ASSET FOR THE STATE NOLC REFLECTED IN RATE BASE IN THIS CASE?

A. On line 50 there is a deferred tax asset for the State NOLC generated based on the level of regulated operations and tax deductions through the FPFTY. This does not include the historical tax repairs (481(a) tax repairs and tax repairs deductions prior to the HTY). The State NOL ADIT is shown as an increase to rate base, however the Regulatory Liability-State NOLC flow through (line 64) and the tax gross-ups on the Regulatory Liability-State NOLC flow through (lines 41 and 53) have also been included and when all combined net to zero because the State NOLC creation did not result in any deferred tax expense being reflected in rates through cost of service. The zero rate base increase for the State NOLC ADIT is a consequence of the zero current state tax expense in cost of service due to the flow through of the State NOLC generated.

There is another deferred tax asset for the State NOLC on line 49. This amount represents the State NOLC generated by the 481(a) tax repairs deduction and is thus referred to as State NOL Historical Tax Repairs. It is included in rate base because the Regulatory Liability for the 481(a) Tax Repairs has been included as a reduction to rate base on line 66. Since the Regulatory Liability is grossed-up for taxes, the deferred taxes representing the tax gross-up (lines 42 and 54) have also been included in rate base. Even though the Company has not been able to monetize the State NOLC created by the 481(a) tax repairs deduction, Peoples Natural Gas division has been providing the tax benefits to customers through the TRS at the tax rate before phase down of 9.99%. The state tax rate phase down and the carryforward limitations on the State NOLC present a risk that the Company is

likely to provide tax benefits to customers that more likely than not will never be monetized through future state income tax deductions. This results in the need for protections that the Company can recover amounts over refunded to customers if the calculation of income tax expense in this rate case is approved and a valuation allowance on the State NOLC is required, as I will discuss in the next section of my testimony.

STATE NOLC AND VALUATION ALLOWANCE

Q. WHAT IS A VALUATION ALLOWANCE?

A. Under ASC 740, companies must value deferred tax assets, including net operating loss carryforwards, at the amount to be realized. A valuation allowance is a reserve that is used to offset the amount of a deferred tax asset, such as the deferred tax asset on a net operating loss, that could not be monetized due to insufficient taxable income or other limitations. The amount of the allowance is based on that portion of the tax asset for which it is more likely than not that a tax benefit will not be realized by the reporting entity.

Q. HOW IS A VALUATION ALLOWANCE DETERMINED?

A. The Company projects its taxable income for future periods. The projections include estimates of capital spending, revenues, depreciation expense, operating expenses and other items impacting income before taxes and taxable income. The Company then estimates the amount of net operating loss carryforward that will be utilized, if any, in each future period. Based on this analysis, the Company projects that the state NOLC may not be fully utilized by the end of the state's 20-year NOL carryforward limitation. In the case of Pennsylvania, this is largely affected by the 40% taxable income limitation on the

utilization of the PA NOLC each year as well as the carryforward period limitation.

Q. IN THE EVENT THE STATE NOLC CANNOT BE FULLY UTILIZED WHAT IMPACTS DOES THAT HAVE?

A. As discussed earlier in my testimony, the Company has been refunding to customers the tax benefit of the deduction for the tax repairs catch up adjustment through the TRS even though the Company has not yet been able to monetize the tax benefits (i.e. the Company has not been paying state income taxes nor has it been able to reduce the amount of cash it has to pay for state taxes). A substantial portion of the state NOLC was generated by the catch-up adjustment being refunded to customers by means of the TRS. The result could be that the Company has refunded to customers more than it will eventually recognize in actual state tax benefits.

Q. HOW DOES THE COMPANY PROPOSE TO RECOVER THE AMOUNTS REFUNDED TO CUSTOMERS THAT ARE NOT REALIZED DUE TO THE STATE NOLC LIMITATIONS?

A. In the event the Company has returned to customers state tax benefits that it cannot monetize, the Company is requesting approval of protections that the Company will be able to recover these amounts from customers. The Company is proposing the following: To the extent that the benefit of the Company's state NOLC is affected by: (i) any disallowance due to the 40% taxable income and the 20 year carryforward limitation; (ii) any subsequent disallowance by a future IRS audit; (iii) any changes in tax rate; or (iv) any change in rules or guidance that require a change to the originating amount of the NOL, the Company is

requesting permission to defer those impacts for future recovery from customers.

THE IMPACT OF THE CONSOLIDATED TAX ADJUSTMENT ("CTA")

Q. HAS THE COMPANY CALCULATED A CONSOLIDATED TAX ADJUSTMENT ("CTA")?

A. Yes, but not for the purpose of flowing through as a ratemaking deduction to federal income tax expense. In 2016, Act 40 was passed which eliminated the consolidated tax savings adjustment. With the passage of Act 40, a utility's tax expense for regulatory purposes is calculated on a stand-alone basis and is not subsidized by its affiliates. Act 40 has been codified as Section 1301.1 of the Public Utility Code. Section 1301.1 (a) clearly and unambiguously states:

> *"If an expense or investment is not allowed to be included in a public utility's rates, the related income tax deductions and credits, including tax losses of the public utility's parent or affiliated companies, shall not be included in the computation of income tax expense to reduce rates. The deferred income taxes used to determine the rate base of a public utility for ratemaking purposes shall be based solely on the tax deductions and credits received by the public utility and shall not include any deductions or credits generated by the expenses or investments of a public utility's parent or any affiliated entity."*

Section 1301.1(b) requires a public utility seeking to change rates to demonstrate that it uses at least 50 percent of what would have been a consolidated tax expense adjustment under the law prior to Act 40 for reliability or infrastructure related capital investment and

the other 50 percent may be used for general corporate purposes. Included at **Exhibit 7, Schedule 3** is the calculation of such an adjustment using the modified effective tax rate methodology traditionally used by the Commission prior to the enactment of Act 40. **Exhibit 7, Schedule 3** calculated the former consolidated tax adjustment to be $0 for both divisions combined. For the fully projected future test year, pipe replacement spending under the Long-Term Infrastructure Improvement Program ("LTIIP") program will be $508 million. Section 1301.1(b) requires that $36.7 million (50% of $73 million consolidated tax adjustment) to be spent on infrastructure replacement. For the fully projected future test year, the Company will spend fourteen times the amount required under Section 1301.1(b) on infrastructure related capital investment. Since the company has and will spend far more than the 50% (369.7 million) of the former CTA on replacement of its plant under the LTIIP, the remaining 50% is available for any permissible corporate purpose. Therefore, Peoples has satisfied the Section 1301.1(b) requirements.

THE COMPANY'S TREATMENT OF PAST AND FUTURE REPAIRS DEDUCTIONS FOR RATEMAKING PURPOSES IN THIS CASE

Q. PLEASE BEGIN BY EXPLAINING WHAT QUALIFIES AS A REPAIR FOR TAX PURPOSES.

A. Work performed on an asset to keep it in its normal working condition which does not materially extend its life, increase its value or change its use generally qualifies as a repair for tax purposes.

Q. WHAT IS THE USUAL TAX TREATMENT OF REPAIR COSTS?

A. Expenditures for incidental repairs are deductible as incurred for tax purposes.

Q. WHAT IS A UNIT OF PROPERTY?

A. The unit of property is the asset to which the "repair" test is applied. The concept is, therefore, critical for distinguishing between repairs (which are currently deductible) and capital costs (which are depreciated). A simple illustration will make this clear. Take the changing of a truck's spark plugs. If each spark plug is defined as a separate unit of property, then the changing of 6 spark plugs represents the retirement of 6 units of property and the installation of 6 new units of property. Because the removal of a unit of property does not, by definition, keep that unit in its normal operating condition, the installation of a new unit of property is a capital cost and not a repair. Consequently, the installation of each spark plug would be a capital addition that would be depreciated over the tax life of the asset. By contrast, if the truck was defined as the unit of property, then the changing of spark plugs would not constitute the installation of new units of property. Because a tune-up (of which the spark plug replacements are a part) keeps the truck in its normal operating condition, it would meet the definition of a repair and, as such, be fully deductible when the repair occurs. Thus, the same work can produce radically different tax results depending on the definition of a unit of property.

Q. WHAT DOES THIS EXAMPLE ILLUSTRATE ABOUT UNITS OF PROPERTY?

A. It demonstrates the fundamental characteristic that the larger the unit of property, the more likely it is that projects associated with that asset will qualify as deductible repairs.

Q. ARE THERE SPECIFIC RULES THAT GOVERN HOW TAXPAYERS MUST DEFINE THEIR UNITS OF PROPERTY?

A. The current Treasury Regulations provide several helpful definitions and examples. However, with respect to network assets such as gas and oil pipelines, electric lines, railroad track and water and wastewater systems, the regulations are singularly unhelpful. In this regard, they state:

> (B) Unit of property for network assets. In the case of network assets, the unit of property is determined by the taxpayer's particular facts and circumstances except as otherwise provided in published guidance in the federal register or in the Internal Revenue Bulletin (see §601.601(d)(2)(ii)(b) of this chapter). For these purposes, the functional interdependence standard provided in paragraph (e)(3)(i) of this section is not determinative.

Treasury Regulations §1.263-3(e)(3)(iii)(B).

Q. HAS THE IRS ISSUED ANY PUBLISHED GUIDANCE WITH RESPECT TO NETWORK ASSETS?

A. Yes, it has for certain types of network assets in the past – and just recently this year the Gas Safe Harbor rules under Rev. Proc. 2023-15 for Gas Transmission and Distribution were published on April 14, 2023.

Q. IN THE PAST WHAT UNITS OF PROPERTY DID THE COMPANY USE FOR DETERMINING WHETHER A PARTICULAR COST WAS A REPAIR OR A CAPITAL EXPENDITURE?

A. Prior to 2020, the Company and the now-merged Peoples Gas Company used the same units of property for tax purposes that they used for book purposes. That is, the Company followed its books in determining what expenditures were and were not repairs for tax purposes.

Q. WHAT CAUSED THE COMPANY TO CHANGE ITS UNITS OF PROPERTY FOR TAX PURPOSES?

A. In 2006, the Internal Revenue Service ("IRS") issued proposed regulations in which, for the first time, it addressed the determination of a unit of property in a systematic way. In 2008, it withdrew these proposed regulations and issued a revised version. While these revised proposed regulations provided principles and helpful examples for many types of assets, with respect to network assets they said nothing. The preamble to these proposed regulations contained the following statement:

> The IRS and Treasury Department generally think that the unit of property rules for network assets should be addressed on an industry by industry basis in internal revenue bulletin guidance. Industries are invited to submit requests for guidance under the industry issue resolution (IIR) program after these regulations are finalized.

This invitation indicated that the final determination of units of property for network assets had to be negotiated for each industry group interested in pursuing a common definition for that industry.

Q. WAS THERE A TAX RULE THAT CREATES A PARTICULAR PROBLEM FOR LINEAR UNITS OF PROPERTY?

A. Yes, there was. One historical tax rule has been that the replacement of a material portion of a linear unit of property is a capital expenditure — not a repair. When a taxpayer uses large units of property, this requires that one must be able to draw a line that divides a material replacement from a non-material replacement. The dividing line is a percentage of the unit of property. Unfortunately, prior to 2023, there was no specific percentage that the IRS has identified as being acceptable. It could have been 5% or 10% or 20% or some other percentage. Thus, even were the units of property certain, the identification of repairs remained uncertain.

Q. PLEASE DESCRIBE THE COMPANY'S CHANGE IN ITS TREATMENT OF REPAIRS.

A. Subsequent to the Company's last base rate case, on March 31, 2020, effective for the tax year ended December 31, 2020, but prior to the issuance of the Gas Safe Harbor rules, Peoples Natural Gas made an election to define its units of property under the Internal Revenue Service's ("IRS") tangible property regulations, which allows the Company to prospectively deduct, as an operating expense on its income tax returns, the costs of certain asset improvements that otherwise would be capitalized and depreciated for income tax purposes (the "tax repair election"). As a result of making the tax repair election, the Company also is required to calculate a one-time "catch-up deduction" that involves a restatement of the Company's tax books and records to conform to what they would have looked like if the new method had always been used. The effect of the catch-up deduction

was an additional tax deduction of approximately $425million, which was claimed as a deduction on the Peoples Natural Gas division's 2020 Federal and State income tax returns (the estimated deduction was $380.7 million when the tariff sur-credit was filed for) and the Peoples Gas division's 2021 Federal and State income tax returns. The Company is currently in a Net Operating Loss ("NOL") position, which prevents it from currently receiving the cash benefit of the catch-up deduction.

Q. HOW WAS THE CHANGE IN ACCOUNTING METHOD RECORDED ON THE COMPANY'S FEDERAL INCOME TAX RETURNS?

A. The change had two components and thus the treatment in rates has been different for each of the divisions. First, all costs incurred in 2020 for PNG and 2021 for PG that qualified as repairs under the Company's new accounting method (that is, its use of defined units of property) were deducted. This enhanced deduction will continue each year into the future. The second component is referred to as a "Section 481(a)" adjustment or catch-up adjustment. It is a "one time" deduction. When a taxpayer changes a tax accounting method, its tax books and records are essentially restated to conform to what they would have looked like had the taxpayer always used its new method. The Company restated the tax basis of its assets as if it had always deducted those projects that would have been repairs had its new unit of property definition been in use for the 481(a) years. 15 years is the furthest back the Company could go to determine the 481(a) catch-up adjustment since the tax life of gas distribution assets is 15 years. The 481(a) period selected was from 2012 to 3/15/2020 for the Peoples Natural Gas division with the deduction being taken on the 2020 return and 2013 to 2020 for the Peoples Gas division with the deduction being taken

on the 2021 return. For each of those years they needed to go back and determine in each year what projects it capitalized that would have qualified as repairs under its new unit of property definition. However, since the costs of those projects had, in fact, been capitalized and depreciated for tax purposes, the cumulative incremental repair amount must be reduced by the tax depreciation already claimed to arrive at a net amount by which the tax basis of the distribution assets will be reduced. Because reducing the tax basis will deprive the utility of ever claiming a deduction for the costs reflected in this basis reduction, the tax rules allow the company to claim the entire amount as a deduction in the year in which the change is made. The Section 481(a) adjustment is, in reality, a "catch-up" adjustment.

Q. HOW DOES ALL OF THIS BACKGROUND RELATE TO THE TREATMENT OF REPAIRS IN THIS CASE?

A. I will first explain the treatment of repairs for the Peoples Natural Gas division, and later explain the treatment of repairs for the Peoples Gas Division. For Peoples Natural Gas the treatment of the 481(a) adjustment, the ongoing current and going-forward benefits were all handled in the TRS proceeding. The TRS proceeding (Docket No. P-2020-3021191) was resolved by a settlement. During the pendency of the case, the Company had an accounting method change on file with the IRS's National Office but the calculation of the 481(a) adjustment was not finalized at the time. Although the actual amount with respect to the Peoples Natural Gas division, which is now known at $390.9 million was not fixed at the time the settlement was reached, the parties decided to lay out the terms and conditions for any eventual change in the settlement agreement. The Joint Petition for Settlement, which was approved by the Commission, stated, in pertinent part:

(a) Treatment Of the Catch-Up Deduction. Peoples Natural Gas's proposed treatment of the approximately $380.7 Million catch-up deduction associated with its tax repairs election is modified as follows. The actual amount of the catch-up deduction will be based upon the amount reported on the 2020 tax return as filed:

(i) One hundred percent (100%) of the benefit from the approximately $380.7 Million catch-up deduction will be used to provide a sur-credit to customers. The sur-credit is designed to provide a rate reduction of approximately $27.845 Million per year over five years, beginning within 90 days after an Order is issued in this proceeding.

(ii) The Rider Tax Repair Sur-credit ("Rider TRS") will be credited to customers' bills by application to both customer charges and base rate delivery charges, and flexible rate customers will not be eligible for the sur-credit, as set forth in attached Appendix A.

(b) Treatment Of the Current and Going-Forward Benefits. The effects of the current and going forward tax deduction of Peoples Natural Gas's tax repairs election will continue to flow-through the Company's financials until the effective date of rates established in the Company's next base rate case filing.

(c) Revenue Requirement in Next Base Rate Proceeding. Peoples Natural Gas will reflect the ongoing repair benefit in the Company's calculation of income tax expense (i.e., reduced effective income tax rate) in its revenue requirement in its next base rate proceeding.

(d) Rate Case Filing. Peoples Natural Gas affirmatively commits that it will file a base rate proceeding no later than December 31, 2023. As part of that filing, Peoples

Natural Gas will propose a tracker mechanism to account for variances between the estimated net tax repair benefit incorporated into the Company's revenue requirement and the actual net tax repair benefit realized on the Company's tax returns on a going-forward basis from the effective date of new base rates, similar to the tracker mechanism adopted in the settlement of the Aqua Pennsylvania, Inc. base rate case at Docket No. R-2018-3003558. A copy of that settlement term is attached as Appendix B hereto for illustrative purposes. The proposed tracker mechanism will require the Company to return or recoup the tax benefits associated with these variances to or from customers in an expeditious manner. This filing commitment is not intended to affect the rights of other parties to this Settlement to oppose any proposals presented by the Company or to offer alternative proposals in that rate case.

I Subsequent Changes to Benefit of Catch-Up Deduction. To the extent that the benefit of the Company's catch-up deduction is affected by: (i) any subsequent disallowance by a future IRS audit; (ii) any changes in tax rate; or (iii) any change in rules or guidance that require a method change and, therefore, a change of benefit, permission is granted to defer those impacts for future refund or recovery for customers.

Q. PLEASE DESCRIBE HOW THE COMPANY TREATED THE TAX CONSEQUENCES OF THE ACCOUNTING METHOD CHANGE SINCE THE ORDER WAS ENTERED APPROVING THE SETTLEMENT.

A. In accordance with the terms of the settlement with respect to the Section 481(a) adjustment for the Peoples Natural Gas division, the Company commenced flow-through accounting beginning in calendar year 2020. In August of 2021, the Company placed sur-credits on customer bills to begin providing the tax benefit of the 481(a) adjustment claimed on the Company's 2020 tax return. The calculation of the sur-credit was based on the $390.9million.

Q. IS THIS TREATMENT CONSISTENT WITH THE DICTATES OF THE ORDER?

A. Yes, it is.

Q. PLEASE EXPLAIN THE TREATMENT OF REPAIRS FOR THE PEOPLES GAS DIVISION.

A. The former Peoples Gas Company did not make the tax repair election at the same time as the Peoples Natural Gas Company. Peoples Natural Gas filed an election with its 2021 tax return to adopt a repair methodology consistent with that of the Peoples Natural Gas Division. The Section 481(a) adjustment with respect to the Peoples Gas division assets is $34 million.

The treatment of the 481(a) adjustment, the ongoing current and going-forward benefits for the Peoples Gas division were established in the Joint Petition for Settlement of the merger of Peoples Gas into Peoples Natural Gas, as approved by the Commission Order entered August 25, 2022, at Docket Nos. A-2021-3029831 and A-2021-3029833. As relevant to this proceeding that settlement provided:

> No refund of the anticipated catch-up benefits associated with Peoples Gas' adoption of Peoples Natural Gas' tax methodologies will be made in this proceeding. The Company will defer any retroactive ("catch up") benefits and will address such retrospective catch-up tax benefits achieved between the implementation of the tax change and the next base rate proceeding in the next base rate case proceeding. Regarding the prospective impact, Peoples Natural Gas (which will include the Peoples Gas assets) will account for the prospective impact utilizing flow-through accounting consistent with the recent Peoples Natural Gas repairs tax settlement at Docket No. P-2020-3021191.

Consistent with that settlement, the Company has deferred the catch-up benefits for the Peoples Gas division for treatment in this case and has implemented flow-through accounting subsequent to adoption of the repairs method.

Q. DOES THE COMPANY PROPOSE TO DISCONTINUE THE TRS AND INCLUDE THE REFUND OF THE CATCH-UP ADJUSTMENT IN THE CURRENT CASE?

A. The proposed treatment of the catch-up adjustment is discussed by Witness Andrew Wachter in his Direct Testimony. Pursuant to the terms of the TRS Order, the current and going forward repair benefit is included in the Company's calculation of income tax expense (i.e., reduced effective income tax rate) in its revenue requirement in this base rate proceeding. The repair benefit included in this case is calculated based on the new Gas Safe Harbor rules.

Q. PLEASE EXPLAIN THE NEW GAS SAFE HARBOR RULES.

A. The gas safe harbor, Revenue Procedure 2023-15, is the culmination of years of negotiations between the IRS and the gas industry under the Industry Issue Resolution (IRR). The revenue procedure provides a safe harbor method of accounting that taxpayers may use to determine whether certain expenditures to maintain, repair, replace, or improve natural gas transmission and distribution property must be capitalized as improvements under §263(a) of the Internal Revenue Code (Code) or as the costs of property produced by the taxpayer for use in its trade or business under §263A, or are allowable as deductions under §162. The revenue procedure also provides procedures for taxpayers to obtain automatic consent to change their method of accounting to the safe harbor method of accounting permitted by this revenue procedure. Under the safe harbor method, the unit of property for linear transmission property is 10%. Linear distribution property has no defined unit of property, and the safe harbor allows for projects under 4 miles to be deducted as a repair. The safe harbor method defines units of property and major components of non-linear transmission and distribution property.

Q. WILL THE COMPANY CALCULATE A REVISION TO THE CATCH-UP ADJUSTMENT PRESENTED IN THE TRS SETTLEMENTAS A RESULT OF THE RECENTLY ISSUED GAS SAFE HARBOR RULES?

A. Yes. The Company plans to calculate the differences between the tax repair deduction under the previous methodology compared to what the deduction would have been under the current gas safe harbor rules. Pursuant to subsection (e) of the TRS settlement, quoted previously, this change in IRS guidance which affects the catch-up adjustment will be provided to customers.

Q. HAS THE COMPANY INCLUDED AN ESTIMATE OF THE TAX IMPACTS OF THE REVISION TO THE CATCH-UP IN THE CURRENT CASE?

A. No, it has not. The Company will be calculating a revision to the catch-up adjustment based on the Safe Harbor rules for gas. The revised adjustment will be finalized in 2024 and included in the Company's 2023 tax return to be filed in October of 2024. For the proposed rate treatment of the revised catch-up adjustment resulting from the Safe Harbor rules for gas, please see the Direct Testimony of Witness Andrew Wachter.

Q. ARE THERE ANY OTHER ITEMS RELATED TO TAX REPAIRS THAT THE COMPANY WOULD LIKE TO DISCUSS?

A. Yes, there is. On October 10, 2023 the Company filed for a change in method of accounting to treat costs incurred for "mandatory relocations" as a currently deductible expense This change is limited to expenditures for the relocation of portion of mains and services pipelines for both public and private purposes, that were previously capitalized for both book and tax purposes.

Q. PLEASE EXPLAIN WHAT A MANDATORY RELOCATION IS.

A. Per the IRS rules, mandatory relocations consist of public and private relocations of pipeline that are mandated by the federal government, state government, county officials, townships, municipal road owners, turnpike commissions, developers, companies, corporations or individuals. Mandatory relocations typically occur when gas pipelines are

required to be relocated due to conflicts with other utility lines or construction of highways, roadways, buildings and other development.

Q. PLEASE EXPLAIN THE IMPACT OF THIS CHANGE.

A. Previously the Company capitalized the expenditures for mandatory relocations for book and tax purposes. The tax rules permit an automatic change in accounting for mandatory relocations that are not required to be capitalized as improvements but can instead be eligible for a tax repairs deduction if the tax repairs requirements are met. The result is projects previously not eligible for tax repairs qualified and the Company became eligible for additional repairs deduction that it had not taken previously.

Q. HOW WAS THE CHANGE IN ACCOUNTING FOR REPAIRS ON MANDATORY RELOCATIONS RECORDED ON THE COMPANY'S 2022 TAX RETURN?

A. Similar to the repairs, deduction discussed previously, the change also had two components. First, all costs incurred in 2022 that qualified as repairs under the Company's new accounting method (that is, mandatory relocations eligible for repairs) were deducted. This enhanced deduction will continue each year into the future. The enhanced deduction is included as additional repairs deductions in this case. The second component is another "Section 481(a)" adjustment or catch-up adjustment the description for which is discussed previously. The amount of the "one time" or catch-up adjustment results in a $36,461,137 deduction after the Company restated the tax basis of its assets as if it had always deducted those projects that would have been repairs had the repairs eligible mandatory relocations been in use for all prior years.

Q. PLEASE DESCRIBE HOW THE COMPANY TREATED THE TAX CONSEQUENCES OF THE ACCOUNTING METHOD CHANGE FOR REPAIRS ON MANDATORY RELOCATIONS IN THIS CASE?

A. Due to the NOLC's the Company is not currently able to monetize the tax benefits of the catch-up deduction for mandatory relocations. Please see the Direct Testimony of Witness Andrew Wachter for the proposed treatment of the catch-up deduction related to mandatory relocations.

STATE TAX RATE CHANGE

Q. WHAT CHANGES IN PENNSYLVANIA TAX LAW HAVE BEEN ENACTED SINCE THE FILING OF THE LAST RATE CASE?

A. House Bill 1342 was signed into law in Pennsylvania on July 8, 2022. The bill makes significant changes to the Commonwealth's corporate net income tax laws:

- Corporate net income tax rate reduction from 9.99 to 4.99 percent over a period of years;
- Sales factor changes;
- Codification of economic nexus standards.

Q. WHEN IS THE RATE REDUCTION EFFECTIVE?

A. House Bill 1342 reduces that rate incrementally to 4.99%. These rate reductions are scheduled to occur automatically and are not contingent on state tax revenues meeting or

exceeding specific thresholds. The rate is first reduced to 8.99% for the 2023 tax year. The rate is further reduced as follows:

8.49% for tax year 2024

7.99% for tax year 2025

7.49% for tax year 2026

6.99% for tax year 2027

6.49% for tax year 2028

5.99% for tax year 2029

5.49% for tax year 2030

4.99% for tax years beginning January 1, 2031, and thereafter

Q. HOW HAS THE RATE REDUCTION BEEN REFLECTED IN THE INCOME TAX CALCULATIONS IN THIS CASE?

A. By the FPFTY the rate is 7.99%. Since the FPFTY consists of 3 months of 2024 and 9 months of 2025, the Company has used a blended rate to calculated state income tax expense for the FPFTY.

Q. HOW WILL FUTURE CHANGES TO THE STATE INCOME TAX RATE BE REFLECTED?

A. Future changes to the state income tax rate will be managed through the State Tax Adjustment Surcharge, or in future base rate proceedings. Because rates in this case reflect a blended tax rate, the Company's STAS effective with the effective date of rates will be set to 0% for the state income tax rate. As I have previously explained, due

principally to ongoing repair deductions, the Company is claiming $0 state income tax expense in this case. Further, due to substantial state NOLs and expected continued high levels of repair deductions, the Company does not anticipate paying any state income taxes into the foreseeable future. For these reasons, the Company will not be reflecting reductions to the CNI tax rate through the STAS during the period that base rates established in this case remain effective. Future base rate cases will reflect the applicable CNI rate in effect at the time, applied to the pro forma taxable income in those cases.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

Peoples Natural Gas Company

Appendix A

Filing Requirements and Standard Data Requests

Sponsored by Christine Saball

Filing Requirements		Standard Data Requests
Exhibit 7, Schedule 1	53.53.II.A.8	Revenue Requirement RR 41
Exhibit 7, Schedule 2	53.53.II.A.9	Revenue Requirement RR 48
Exhibit 7, Schedule 3	53.53.II.A.26	Revenue Requirement RR 49
Exhibit 7, Schedule 4	53.53.III.A.51	Revenue Requirement RR 50
Exhibit 7, Schedule 5	53.53.III.A.52	Revenue Requirement RR 55
Exhibit 7, Schedule 6	53.53.III.A.53	
Exhibit 7, Schedule 7	53.53.III.A.54	
Exhibit 7, Schedule 8	53.53.III.A.55	
Exhibit 7, Schedule 9	53.53.III.A.56	
Exhibit 7, Schedule 10	53.53.III.A.57	
Exhibit 7, Schedule 11	53.53.III.A.58	
Exhibit 7, Schedule 12	53.53.III.A.59	
Exhibit 7, Schedule 13	53.53.III.A.62	
Exhibit 7, Schedule 14	53.53.III.A.63	
Exhibit 7, Schedule 15	53.53.III.A.64	
Exhibit 7, Schedule 16	53.53.III.A.60	
Exhibit 7, Schedule 17	53.53.III.A.61	
Exhibit 7, Schedule 18	53.53.III.A.65	
Exhibit 7, Schedule 19	53.53.III.A.66	
Exhibit 7, Schedule 20	53.53.III.A.67	
Exhibit 7, Schedule 21	53.53.III.A.68	
Exhibit 7, Schedule 22	53.53.III.A.69	
Exhibit 7, Schedule 23	53.53.III.A.70	
Exhibit 7, Schedule 24	53.53.III.A.71	
Exhibit 7, Schedule 25	53.53.II.A.10	

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	Docket No. R-2023-3044549
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED DIRECT TESTIMONY OF
LUKE RAVENSTAHL
VICE PRESIDENT OF SALES AND MARKETING
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: December 29, 2023

DATE ADMITTED: _____

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Luke Ravenstahl. My business address is 375 North Shore Drive, Pittsburgh, PA 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Peoples Natural Gas Company LLC ("Peoples" or the "Company") as the Vice President of Sales and Marketing.

Q. PLEASE STATE BRIEFELY YOUR EDUCATIONAL BACKGROUND AND EMPLOYMENT EXPERIENCE.

A. I graduated from Washington & Jefferson College in 2003 with a Bachelor of Business Administration in 2003. I served for 10 years as an elected official in the City of Pittsburgh, serving 7 ½ of those years as the City's mayor. I started with Peoples in a consulting role before becoming a full-time employee in 2015. During that time, I helped launch the Company's Go With Gas expansion program. In my capacity of Vice President of Sales and Marketing at Peoples, I oversee traditional sales work. Recently, my role has expanded, and I am also responsible for our Process Operations group which includes Damage Prevention, Corrosion and Leak Survey.

Q. PLEASE LIST THE FILING REQUIREMENTS THAT YOU ARE SPONSORING AS A WITNESS.

A. I am sponsoring Exhibit 19, RR13.

Q. WHAT ARE YOUR RESPONSIBILITIES FOR PURPOSES OF THIS PROCEEDING?

A. My responsibilities which I will describe in separate sections of my testimony are:

1) Competitive customers (including actual contracts and rate discounts)
2) MICROGRID/CHP (assets and contracts)
3) Extension of facilities (150-foot rule) expansion to PG
4) Expansion of Natural Gas & New Rate Request

COMPETITIVE CUSTOMERS

Q. WHAT MAKES A CUSTOMER COMPETITIVE?

A. The Company's service territory is an active market for competition both among natural gas distribution companies (NGDC) and between natural gas and alternate energy sources, including private well gas, landfill gas, interstate pipeline companies, and alternative fuels such as electricity or propane. Some of our commercial customers, and most industrial customers, have more than one energy service option available to them. These competitive customers support the operational needs of the Company's system and also offset the cost of service for other non-competitive customers as for example, they generate additional revenue that offsets the rates of non-competitive customers. In order to ensure we maintain these accounts, it is necessary to flex our maximum delivery rates to remain competitive.

Q. DESCRIBE THE COMPANY'S COMPETITIVE ALTERNATIVE ANALYSIS.

A. As contracts are newly negotiated or renewed, the Company performs its normal assessment, which includes verification of the competitive alternative and a fixed cost analysis. Every

competitive rate that the Company establishes is directly and exclusively tied to the cost of the customer's alternative service. The Company continually seeks to maximize the revenues it can receive through negotiations with current or potential customers. Doing so is in the non-discounted customers' best interest because it provides additional revenues that would be lost if the discounted customers left the system. It is also in the best interest of the Company to maximize revenues from discounted customers to mitigate potential revenue loss. Peoples must properly balance the competing demands of rate maximization against revenue retention.

Moreover, Peoples has a legal duty to its customers to maintain just and reasonable rates. One way of doing so is to maintain a reasonable customer load. If discounted customers were to reduce or eliminate production at facilities on Peoples' system or to switch to alternative sources of fuel, this would have a substantial negative impact on the Company's non-discounted customer rates. This is because the incremental cost to serve these customers is less than the discounted revenue generated as natural gas customers of Peoples. That is, although the discounted customers do not pay full tariffed rates, they still generate millions of dollars in annual revenue for Peoples and contribute to the Company's fixed costs. However, if those competitive customers leave the Company's system, the Company's non-discounted customer rates could be increased to offset the lost revenue in future base rate cases. Also, customers may look to reduce their other expenses and investments in an effort to maintain their current profit levels, such as by laying off existing employees, not hiring prospective employees, or reducing their production and operations. All of these would have negative effects on jobs and the local economy. Furthermore, we strongly believe that public policy should favor the use of flexed rates that encourage

increased economic development due to the availability and affordability of shale gas, thus utilizing more of this abundant resource in Pennsylvania to benefit the Commonwealth's economy.

Q. WHAT DID THE COMPANY AGREE TO WITH RESPECT TO COMPETITIVE CUSTOMERS IN ITS LAST BASE RATE PROCEEDING?

A. In the Company's last base rate case at Docket No. R-2018-3006818, the Company agreed to the following with respect to its competitive rate discounts:

> Customer number, effective date of the agreement, the reason(s) for offering a negotiated delivery agreement, supporting work papers relied upon to substantiate the negotiated agreement, and an analysis which evaluates the contribution to overall fixed costs provided by each customer.
>
> In implementing this provision in circumstances where a bypass of the Company's facilities is the customer's competitive option, the Company will work with the customer in future negotiations to develop an analysis of the likely construction cost of the bypass facilities and apply that estimate in determining, through negotiations, the discounted rate offered to the customer. This information will be included as a part of the confidential materials presented in the Company's initial filing in future base rate proceedings. The Company will also provide a confidential annual report to the Statutory Advocates listing all customers that currently are receiving a discounted rate due to any of the reasons contained herein. The confidential report will provide information regarding whether the customer is being offered the discounted rate due to gas-on-gas competition, potential bypass, economic reasons or alternative fuel reasons. The Company should include in its analysis the annual log information. In future base rate proceedings, the confidential materials presented as part of the Company's filing will include sworn affidavits from all discount customers as to the facts and reasons for the discounts as set forth in the Company supplied materials.

To the extent any new agreements have been added since the Company's base rate case at Docket No. R-2018-3006818, the Company is complying with the settlement provisions regardless of the reason for the discount. For any new agreement or renewed agreement

executed since the last case, the Company performed a new verification and analysis to justify the competitive alternative and negotiated rate.

Notably, several discounted delivery rate customers had their competitive options and their associated retainage discounts reviewed and approved or were unopposed in prior 1307(f) settlements. Access to the Company's CONFIDENTIAL competitive customer information is included with the initial materials presented for this base rate case filing and will be made available upon execution of a Protective Agreement.

Q. SHOULD ELECTRICITY BE CONSIDERED A COMPETITIVE ALTERNATIVE?

Yes. Electricity should be deemed a competitive alternative as it can be used to displace natural gas for heating, cooking, clothes drying, and other uses. The Company evaluates each existing and potential competitive customer on a case-by-case basis and completes a detailed assessment prior to deeming a customer as competitively situated. Like other alternate fuel sources, such as coal, steam, or propane, electricity is a competitive option and customers certainly treat it as such. Therefore, the Company has revised its tariff to allow for electricity to be considered a competitive alternative subject to the same cost of service justification analysis and assessment as other competitive alternatives. See the Company's proposed Tariff – GAS – PA PUC No. 48, Rule 20. Service Agreement and Flexible Rates.

Q. PLEASE EXPLAIN THE STATUS OF THE COMPANY'S CURRENTLY EFFECTIVE NEGOTIATED CONTRACTS AS COMPARED TO THE COMPANY'S LAST RATE CASE.

A. In the Company's last base rate proceeding (for Peoples Natural Gas Division), there were 42 negotiated contracts in effect for Peoples Natural Gas Division. As a result of that rate case and as contract expirations come up, the Company evaluated all of its negotiated contracts and has successfully negotiated some customers to full tariffed rates. As of October 2023, there are 17 negotiated contracts on the Company's system (for both Divisions of the Company). All of the current customers with negotiated rates have a viable competitive alternative and justified cost of service analysis.

Q. HAS THE COMPANY ENTERED INTO ANY NEW FLEX AGREEMENTS SINCE ITS LAST RATE PROCEEDING?

A. Yes, the Company will have one new flex agreement. The Company has entered into a discounted delivery agreement with a new customer and that agreement is expected to become effective in the first quarter of 2024.

Q. PLEASE DISCUSS WHY THE COMPANY ENTERED INTO THIS NEW AGREEMENT?

A. This new agreement is justified as there is a competitive alternative (interstate pipeline) in close proximity to the new customer. If not for the discounted rate, the customer would connect to an alternative transportation service via direct bypass with an interstate pipeline. The Company performed an assessment for this competitive situation, which included a

verification of the competitive alternative and a fixed cost analysis. The established competitive rate for this new customer is directly and exclusively tied to the cost of the customer's alternative service.

SALE OF MICROGRID/CHP ASSETS

Q. PLEASE DISCUSS THE PENDING SALE OF CERTAIN NON-JURISDICTIONAL MICROGRID/CHP ASSETS IN THE COMPANY'S SERVICE TERRITORY.

A. As of October 2023, the Company entered into an agreement to sell certain non-jurisdictional, district energy and microgrid notes receivable in Pittsburgh, Pennsylvania. As a result of these non-jurisdictional projects, the Company was able to add three new jurisdictional customers, including a customer with a negotiated delivery rate agreement and also two customers paying full tariffed rates. These projects were completed with shareholder not customer funds but resulted in a direct benefit to customers resulting from the customer additions.

COMBINED HEAT AND POWER ("CHP")

Q. PLEASE EXPLAIN THE COMPANY'S POSITION WITH RESPECT TO CHP.

A. The Company believes that natural gas should have a major role in the development of CHP technology for its customers. The Company is committed to helping its customers explore the benefits of installing CHP systems to power their businesses. The Company's position is in line with the spirit and purpose of the Commission's Policy Statement on CHP development[1]. Customers using CHP systems can benefit by improved operational

[1] See Docket No. M-2016-2530484.

efficiency, increased flexibility and reliability by shifting away from grid reliance and reduced methane emissions.

Q. IS THE COMPANY PROPOSING ANYTHING IN THIS PROCEEDING WITH RESPECT TO CHP?

A. The Company is proposing some revisions to its tariff section on flex rates, Section 20. The Company's intention is to relax the tariff language such that a discount could be provided to certain applicants/customers who wish to install new technologies such as CHP. The Company feels that this tariff revision will allow owners and operators to invest in new CHP technologies which would ultimately expand the use of natural gas in the Company's service territory. The Company's proposed, combined tariff in this proceeding, is sponsored by Company witness Dawn Folks.

EXTENSION OF FACILITIES

Q. DOES THE COMPANY CURRENTLY OFFER ANY FOOTAGE ALLOWANCE FOR CUSTOMERS TO CONNECT TO PEOPLES SYSTEM?

A. Yes, Peoples Natural Gas currently offers customers a 150-feet main line allowance. This provision is not currently included in the Peoples Gas Division tariff.

Q. WHAT IS PEOPLES' MAIN EXTENSION TARIFF CHANGE PROPOSAL?

A. The Company is proposing to extend the 150-feet main line allowance for residential extensions to the customers of Peoples Gas. As with Peoples Natural Gas, for each applicant that requests a main line extension, Peoples Gas would install the first 150-feet of main line

without charge to the customer in normal situations. At the discretion of the Company, certain projects which contain abnormal underground conditions, such as crossing a stream or state highway, or visible ledge or rock that will affect excavation or excessive permitting fees would not be eligible for the 150-foot allotment. As more applicants join in a single project to extend gas facilities the greater the length of main the Company will install without charge to the applicants. For example, on a single project with four customers electing to receive natural gas, the Company will install up to 150-feet of main line per customer, or 600 feet, without requiring a contribution in aid of construction ("CIAC") from the customers. For extension projects greater than 150-feet per customer, the Company will run an economic model solely on the line extension segment in excess of the 150-foot allotment per customer to determine if the customer(s) will be required to pay a CIAC. For example, if one customer requested a 150-foot line extension, the Company would conduct analysis on the cost to extend facilities 150-feet to the customer. If a CIAC was necessary, the applicant(s) would be required to pay this up front.

EXPANSION OF NATURAL GAS AND NEW RATES

Q. PLEASE EXPLAIN THE NEW RATE FOR COMMERCIAL AND INDUSTRIAL CUSTOMERS THE COMPANY IS PROPOSING IN THIS PROCEEDING.

A. The Company is proposing to incorporate a mainline service rate ("Rate MLS") into its tariff. This rate would be available to existing or new large commercial and industrial customers in the Company's service territory. In order to qualify for Rate MLS, a customer must meet certain requirements: (1) have consumption greater than 500,000 mcf on an

annual basis AND (2) be located within 1,000 feet of a Peoples' Transmission mainline pipe OR be located within 1,000 feet of an interstate pipeline.

Q. WHY IS THE COMPANY PROPOSING AN MLS RATE?

A. Peoples is proposing this rate as it will allow qualifying customers who meet certain requirements to avail themselves of a just and reasonable delivery rate directly tied to the appropriate cost of service for the Company to serve that customer. Said in other words, this would be a tariffed rate that is justified due to the customer's load and proximity to the Company's system. The proposed rate is available on pages 61-62 of the Tariff as sponsored by Witness Dawn Folks.

Q. DOES THIS COMPLETE YOUR TESTIMONY?

A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	Docket No. R-2023-3044549
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED DIRECT TESTIMONY OF
JOYCE MITOLE
CONTROLLER
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: December 29, 2023 Peoples Statement No. 8
DATE ADMITTED: _____

PREPARED DIRECT TESTIMONY OF
JOYCE MITOLE

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Joyce Mitole. My business address is 375 North Shore Drive, Suite 400, Pittsburgh, PA 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by PNG Companies LLC ("PNG Companies") as Controller. PNG Companies provides various administrative functions for Peoples Natural Gas Company LLC ("Peoples" or the "Company") including Accounting.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EMPLOYMENT EXPERIENCE.

A. I received a Bachelor of Science Degree in Accounting from University of Malawi in 1993 and a Master of Business Administration from Carnegie Mellon University in 1997. I am a Certified Public Accountant in the Commonwealth of Pennsylvania.

From 1997 to 2020, I worked in different accounting roles at Alcoa and its successor companies after two consecutive company splits (Arconic and Howmet Aerospace). In 2021, I joined Peoples as the Controller where my responsibilities include accounting and financial reporting for Peoples in addition to Fixed Asset accounting.

Q. WHAT ARE YOUR RESPONSIBILITIES AS CONTROLLER OF PEOPLES?

A. I am responsible for the overall development and execution of the Company's policies, strategies, and practices in the areas of General and Fixed Asset Accounting.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. I will identify the filing requirements that I am sponsoring. Also, I will discuss how the accounting records of Peoples are maintained and what industry standards are followed. Additionally, I will discuss the Company's settlement commitment in the merger of Peoples Natural Gas Division and Peoples Gas Company Division and how the accounting information is reported by division in this proceeding based upon the settlement agreement.

Q. WHAT FILING REQUIREMENTS ARE YOU SPONSORING?

A. A list of the filing requirements that I am sponsoring is attached to my testimony as Appendix A.

Q. PLEASE DISCUSS HOW PEOPLES MAINTAINS ITS ACCOUNTING RECORDS AND WHAT INDUSTRY STANDARDS IT FOLLOWS IN DOING SO.

A. Peoples' accounting records are maintained using both a "Natural" chart of accounts and a "FERC" chart of accounts. Transactional data is recorded, maintained and reported in accordance with Generally Accepted Accounting Principles ("GAAP"). Several authoritative sources are utilized including standards and interpretations issued by the Financial Accounting Standards Board ("FASB") and FASB's Accounting Standards

Codification ("ASC"), and the Code of Federal Regulations ("CFR"). Additionally, Pennsylvania Public Utility Commission ("Commission") and Federal Energy Regulatory Commission ("FERC") directives and standards are reviewed to assure compliance with applicable reporting requirements.

Further, Peoples' financial statements are included in the annual report and audit of its parent company PNG Companies. The report is based on audits conducted in accordance with auditing standards generally accepted in the United States of America.

Q. PLEASE DISCUSS THE SETTLEMENT COMMITMENT FROM THE AGREEMENT TO MERGE PEOPLES NATURAL GAS COMPANY LLC AND PEOPLES GAS COMPANY LLC DOCKETED AT NOS. A-2021-3029831, AND A-2021-3029833.

A. As specified in Settlement Paragraph 33, the Company agreed to maintain pre-merger accounting records for Peoples Natural Gas Division and Peoples Gas Division and to maintain separate accounting by division post-merger, at least until a plan of consolidation of base rates is established for the two divisions and otherwise in accordance with applicable record retention legal requirements.

In Settlement Paragraph 34, the Company was directed to utilize the same allocation factors of the existing affiliated interest agreements between Peoples Natural Gas Division and Peoples Gas Division to allocate costs between the Peoples Gas

Division and Peoples Natural Gas Division. Services provided by PNG Companies or other affiliated interests were agreed to be provided pursuant to existing Commission-approved affiliate interest agreements.

Q. HAS THE COMPANY ADHERED TO THIS SETTLEMENT PROVISION?

A. Yes, Peoples has maintained separate and sufficient accounting records for both Divisions and for operations in West Virginia and Kentucky. Cost allocations between the Peoples Natural Gas Division and Peoples Gas Division and affiliates have followed the standards and methodologies approved at Docket No. G-2022-3036720, and allocation factors have been updated each year based on the approved methodology.

Q. HOW IS THE ACCOUNTING INFORMATION PRESENTED IN THIS CASE?

A. In the filing requirements, Peoples has provided separate information by division and/or combined, where applicable.

Q. HOW ARE OPERATING COSTS ALLOCATED BETWEEN DIVISIONS IN THIS CASE?

A. Costs are allocated based upon the affiliated interest agreements that are provided in SDR-RR-51, Attachments 1 and 2, which have been filed and approved by the Commission.

Q. WHAT IS PEOPLES PROPOSING IN THIS PROCEEDING WITH RESPECT TO THE PEOPLES NATURAL GAS DIVISION AND PEOPLES GAS DIVISION ACCOUNTING?

A. The Company is proposing to consolidate the accounting of the Peoples Natural Gas Division and Peoples Gas Division together into one unified company with consolidated accounting records.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding.

Appendix A
Page 1 of 2

Filing Requirements Sponsored by
Joyce Mitole

Exhibit/SDR	**Filing Requirement**
Ex. 1, Sch. 1	53.52(c)(2)
Ex. 1, Sch. 2	53.53.III.A.1
Ex. 1, Sch. 3	53.52(c)(6)
Ex. 1, Sch. 5	53.53.II.A.23
Ex. 1, Sch. 7	53.53.III.A.2
Ex. 1, Sch. 8	53.53.III.A.3
Ex. 1, Sch. 9	53.53.III.A.4
Ex. 1, Sch. 10	53.53.III.A.5
Ex. 1, Sch. 11	53.53.III.A.6
Ex. 1, Sch. 12	53.53.III.A.7
Ex. 1, Sch. 13	53.53.III.A.8
Ex. 1, Sch. 14	53.53.III.A.9
Ex. 1, Sch. 15	53.53.III.A.10
Ex. 1, Sch. 16	53.53.III.A.11
Ex. 1, Sch. 17	53.53.III.A.12
Ex. 1, Sch. 19	53.53.III.E.1
Ex. 1, Sch. 20	53.53.III.E.2
Ex. 1, Sch. 21	53.53.III.E.32
Ex. 1, Sch. 23	53.53.II.A.20
Ex. 2, Sch. 1	53.52(b)(2)
Ex. 2, Sch. 2	53.52(c)(5)
Ex. 2, Sch. 5	53.53.III.A.18
Ex. 2, Sch. 6	53.53.III.A.42
Ex. 2, Sch. 7	53.53.III.A.43
Ex. 2, Sch. 8	53.53.III.E.16
Ex. 4, Sch 3	53.53.III.A.21
Ex. 4, Sch. 19	53.53.III.A.38
Ex. 16, Sch. 8	53.53.II.A.11
RR 1	
RR 23	
RR 24	
RR 25	
RR 38	
RR 39	
RR 41	
RR 42	

COS 3
COS 4
COS 5
COS 6
COS 7
ROR 1
ROR 2
ROR 5

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
	:	
	:	
v.	:	Docket No. R-2023-3044549
	:	
	:	
	:	
Peoples Natural Gas Company LLC	:	

PREPARED DIRECT TESTIMONY OF
KRISTA SNYDER
FINANCIAL ANALYST
ON BEHALF OF
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: December 29, 2023
DATE ADMITTED: _____

Peoples Statement No. 12

PREPARED DIRECT TESTIMONY OF
KRISTA SNYDER

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Krista Snyder and my business address is 375 North Shore Drive, Pittsburgh, Pennsylvania 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by PNG Companies LLC ("PNG Companies" or "PNG") as a Financial Rates Analyst. I provide rates and regulatory services for Peoples Natural Gas Company LLC, a direct subsidiary of PNG.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A. I received my Master of Business Administration from Point Park University in 2019, and a Bachelor of Science in Business Administration in Finance from West Virginia University in 2014. After receiving my Bachelor's degree, I was employed at The Bank of New York Mellon as a Regulatory and Reporting Lead Analyst. In October 2022, I accepted my current position as a Financial Rates Analyst in the Rates and Regulatory Affairs Department.

Q. HAVE YOU TESTIFIED PREVIOUSLY IN ANY REGULATORY PROCEEDING?

A. I have not.

Q. ARE YOU SPONSORING ANY FILING REQUIREMENTS OR OTHER EXHIBITS?

A. Yes, I am. Attached to this Direct Testimony as Appendix A is a complete list of the exhibits for which I am the responsible witness.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. I am responsible for developing the value of Cash Working Capital. I have also prepared **Peoples Exhibit No. KMS-1**, which includes the lead-lag study in support of the Company's cash working capital requirement pursuant to Section 53.53 III. A.15 of the Commission's standard filing requirements.

Q. HAS THE COMPANY PERFORMED A STUDY TO DETERMINE THE LEVEL OF CASH WORKING CAPITAL THE COMPANY REQUIRES TO FINANCE ITS DAY-TO-DAY OPERATIONS?

A. Yes, the Company performed a lead-lag study by analyzing the Company's cash transactions and invoices for the twelve months ended August 31, 2023.

Q. PLEASE DEFINE WHAT YOU MEAN BY THE PHRASE "CASH WORKING CAPITAL".

A. Cash working capital is the amount of funds required to finance the day-to-day operations of the Company.

Q. HOW SHOULD THE RESULTS OF THE CASH WORKING CAPITAL ANALYSIS BE TREATED FOR RATEMAKING PURPOSES?

A. The cash working capital requirements should be included as part of the Company's rate base for ratemaking purposes.

Q. DID YOU PREPARE A SEPARATE STUDY FOR THE PEOPLES NATURAL GAS DIVISION AND THE PEOPLES GAS DIVISION?

A. No. The study to develop the lead/lag day was performed on a combined basis as the Company finances its day-to-day operations on a combined basis. Therefore, it would be inappropriate to segment the study. However, the results were applied to the divisional operations to show the cash working capital claim by division.

Q. WHAT IS A LEAD-LAG STUDY?

A. A lead-lag study is an analysis of the differences between the revenue "lags" and the expense "leads" of a utility. The revenue lag reflects the time between the date customers receive service and the date that customers' payments are available to the utility. This revenue lag is offset by an expense lead time during which the utility receives goods and services, but pays for them at a later date. The leads and lags are both measured in days. The dollar-weighted lead and lag days are then divided by 365 to determine a daily cash working capital factor ("CWC factor") for each specified expense category in the study. These CWC factors are then multiplied by the applicable annual test year cash expenses to determine the amount of cash working capital required for operations. The resulting amount of cash working capital is then included as part of the utility's rate base.

Q. WHAT ARE THE VARIOUS LEADS AND LAGS THAT SHOULD BE CONSIDERED IN A CASH WORKING CAPITAL ANALYSIS?

A. Two broad categories of leads and lags should be considered: 1) lag times associated with the collection of revenues owed to the utility; and 2) lead times associated with the payments for goods and services received by the utility.

Q. WHAT WAS THE SOURCE OF INFORMATION YOU EMPLOYED TO DETERMINE THE LEADS AND LAGS IN YOUR CASH WORKING CAPITAL ANALYSIS?

A. Data from the Company's Accounts Payable, Accounts Receivable ("A/R"), Payroll, and Tax accounts were utilized. The information derived from these sources, together with analyses of specific invoices, led to the determination of the appropriate number of lead-lag days for the Company.

Q. WHAT IS A REVENUE LAG AND HOW IS IT DETERMINED?

A. The revenue lag measures the number of days from the date service was rendered by the Company until the date payment was received from customers and such funds were available to the Company. In this study, the revenue lag was divided into three distinct components: 1) service lag; 2) billing lag; and 3) collections lag. Considered together, these three components of retail revenue lag totaled a weighted average of 59.44 lag days. An explanation of each component of the base revenue lag follows.

Q. WHAT IS MEANT BY SERVICE LAG?

A. The service lag refers to the period of time from when service is rendered to the time the customer's meter is read. Using the mid-point methodology, the average service lag associated with meter reading was 15.21 days (365 days in the year divided by 12 months divided by 2). Twelve months was appropriate to use for purposes of determining the service lag because the Company bills its customers monthly.

Q. WHAT IS THE MID-POINT METHODOLOGY?

A. For purposes of determining the service lead or lag, the Company's methodology presumes that the service was provided (or received) evenly over a given period (i.e., a month). Adding the one-half month to the derivation of the lead or lag is referred to as the mid-point methodology.

Q. WHAT IS MEANT BY BILLING LAG?

A. Billing lag refers to the average number of days from the date on which the meter was read until the date a customer is billed. Based upon the percentage weighted distribution of the mailing of the bills, the Company determined the billing lag to be 1.0 day.

Q. WHAT IS MEANT BY COLLECTIONS LAG?

A. The collections lag refers to the average amount of time from the date when the Company mailed a bill to the date that the Company received payment from its customers. As shown on page 4 of Exhibit KMS-1, the Company calculated collections lag using the days in accounts receivable methodology. First, average monthly accounts receivable is calculated by adding the end of month accounts receivable balances for each month in the preceding

12 months to the historic test year and dividing the total by 12. Then, A/R Turnover is calculated by taking the trailing twelve months sales divided by the average accounts receivable balance. Finally, we calculate the collection days lag by taking 365 divided by the A/R Turnover previously calculated. Based on this approach, the average collection lag at the Company was determined to be 43.23 days.

Q. PLEASE SUMMARIZE THE CALCULATION OF REVENUE LAG DAYS.

A. The calculation of the overall revenue lag, by lag component is summarized in the following table:

Revenue Lag Component	Lag Days
Service Lag	15.21
Billing Lag	1.0
Collections Lag	43.23
Total Lag Days	59.44

Q. WHAT EXPENSE-RELATED LEADS WERE CONSIDERED IN THE LEAD LAG ANALYSIS?

A. Lead times associated with the following expense categories were considered in the study: a) Gas Purchase Costs; b) Payroll; c) Pensions and Benefits, d) Other Operations and Maintenance Expenses, e) Taxes other than Income Taxes; f) Federal Income taxes; g) State Income Taxes; h) Interest on Long-term Debt; and i) Interest on Short-term Debt.

Q. WHAT TYPES OF LEADS WERE ASSOCIATED WITH THE COMPANY'S PURCHASES OF NATURAL GAS?

A. Pipeline companies typically send out invoices around the 10th of the month following the service month with payments due 10 days later. Payments to suppliers were made electronically. The Company also purchases gas from local producers. The Company reads the meters at the end of each month and cuts a check to the producer on the last day of the following month. As shown on pages 5 through 11 of Exhibit KMS-1; the Company used payment data for the twelve months ended August 31, 2023, and determined that the expense lead time associated with payments for natural gas and pipeline services, including 15.21 days of service lead time, was 35.49 days.

Q. PROVIDE AN EXPLANATION OF THE LEAD ASSOCIATED WITH THE COMPANY'S PAYROLL EXPENSES.

A. The Company's payroll records were analyzed to measure the number of lead days between the Company's receipt of services from its employees and the payment for those services. As shown on page 12 through 14 of Exhibit KMS-1, payroll lead days were calculated by: a) calculating the unweighted (or nominal) lead time by pay day and pay-cycle including a mid-point of the pay period as indicative of a service lead time and weighting the resulting lead days by the amounts paid out by the Company to cover its payroll obligations. The Company's pay-roll cycles are bi-weekly; resulting in a total average payroll expense lag of 15.55 days.

Q. WHAT TYPE OF LEADS ASSOCIATED WITH THE COMPANY'S EMPLOYEE BENEFIT PROGRAMS WERE CONSIDERED IN THE ANALYSIS?

A. As shown on page 15 of Exhibit KMS-1, the estimated lead times associated with the following major categories of the Company's employee benefit programs were considered: a) pensions; and b) employee benefits including group life, group health, and other employee programs. The medical benefits calculation is for lead time of premium payments is based off of an estimated monthly premium amount. These premiums will be paid in full before the next month of coverage begins. All of these benefits and programs taken together, had a dollar-weighted lead time of 30.63 days.

Q. DID THE COMPANY MAKE CONTRIBUTIONS TO THE DEFINED BENEFIT PENSION FUND ("DB") DURING THE HISTORIC TEST YEAR?

A. Yes. The Company made quarterly contributions to the pension fund for its unionized employees. The contributions were typically made around the 15th day of the month following the end of a quarter. The costs are accrued monthly which helps to appropriately align the costs to the appropriate service period for both the pension and post-retirement benefits.

Q. HOW WAS THE EXPENSE LEAD TIME ASSOCIATED WITH THE COMPANY'S OTHER BENEFIT PROGRAMS DETERMINED?

A. The Company is billed monthly by each of its benefit providers. The bill may consist of service costs and/or administrative fees. The invoices are typically paid within one week

following the receipt of the invoice. Funds for 401K accounts are sent the day following pay day.

Q. WHAT ARE OTHER OPERATIONS AND MAINTENANCE EXPENSES AND WHAT LEAD TIMES WERE ASSOCIATED WITH SUCH EXPENSES?

A. The Company engages in transactions with other vendors (not associated with pensions, benefits, payroll, natural gas and pipeline services, or taxes) for a variety of purposes including facility maintenance, maintenance of system reliability, and customer service. As shown on pages 16 through 21 of Exhibit KMS-1, a random sample of invoices from providers of such services were analyzed in order to estimate a lead time associated with payment for services related to other operations and maintenance activities. The analysis indicates that on average, invoices were paid by the Company 42.40 days after receipt.

Q. WHAT ARE THE GENERAL TAXES CONSIDERED IN THE ANALYSIS OF EXPENSE LEADS?

A. As shown on page 22 through 24 of Exhibit KMS-1, the following general taxes and similar assessments were considered in the study: a) property taxes; b) State & Federal Alternative Fuel Taxes; c) U.S. DOT Fees; d) Federal Heavy Highway Taxes; e) PUC assessments; f) WV Gas Stored Tax; g) PURTA; and h) Sales and use taxes. Payroll-related taxes were not considered in the analysis because the funds associated with those taxes are forwarded to our payroll processor, at the same time as the payroll funds. The payroll processor is then responsible for remitting the funds to the appropriate taxing bodies. When dollar-weighted using twelve months ended August 31, 2023 actual payments, the weighted expense lead

time for all categories of these general taxes was determined to be 51.86 days. This weighted lead time was then used in computing the cash working capital requirement associated with taxes other than income taxes

Q. HOW DID YOUR STUDY ADDRESS INCOME TAXES?

A. As shown on page 25 of Exhibit KMS-1, for Federal and State income taxes, the statutory payment schedules relative to each tax were utilized to arrive at 37.00 and 54.78 lag days, respectively.

Q. PROVIDE A DESCRIPTION OF HOW LEAD TIMES ASSOCIATED WITH THE COMPANY'S INTEREST EXPENSE ON LONG-TERM AND SHORT –TERM DEBT WERE ADDRESSED BY THE STUDY.

A. As shown on page 26 of Exhibit KMS-1, interest expense on long term debt was assigned expense lag days based on the semi-annual payments of the Company's installment promissory notes to arrive at an average of 67.26 days. Short term debt is not applicable to this study as the Company is not making contributions.

Q. HAVE YOU PREPARED AN EXHIBIT THAT SUMMARIZES THE RESULTS OF YOUR ANALYSIS OF THE COMPANY'S CASH WORKING CAPITAL REQUIREMENTS?

A. Yes. The results of the cash working capital study are presented in Peoples Exhibit No. KMS-1, pages 1 to 3. As shown on page 1, the total cash working capital claim is

$36,256,917. This amount is included in rate base in Peoples Exhibit No. 2. Peoples Exhibit No KMS-1 is attached following my testimony.

Q. DOES THIS COMPLETE YOUR PREPARED DIRECT TESTIMONY?

A. Yes, it does. I reserve the right to submit additional testimony as issues arise during the course of the proceeding. Thank you.

Appendix A

Filing Requirements Sponsored by
Krista Snyder

Exhibit	**Filing Requirement**
Exhibit 8, Schedule 17	53.53.III.A.15

Line No.	Description	Revenue Lag	Expense Lead	Net Lag	CWC Factor	Adjusted Historic Test Year Expenses	Historic Test Year Cash Working Capital Requirement	Future Test Year Expenses	Future Test Year Cash Working Capital Requirement	Fully Projected Future Test Year Expenses	Fully Projected Future Test Year Cash Working Capital Requirement
	(A)	(B)	(C)	(D)	(E)	(F)	(G)				
1	**Gas Purchase Costs**	59.44	(35.49)	23.95	0.0656	317,606,717	20,835,917	317,734,843	20,844,322	317,688,615	20,841,289
2	**Payroll**	59.44	(15.55)	43.89	0.1202	67,817,447	8,154,415	71,826,769	8,636,499	75,087,605	9,028,584
3	**Pensions and Benefits**	59.44	(30.63)	28.81	0.0789	24,642,192	1,944,857	27,642,633	2,181,663	29,066,537	2,294,043
4	**Taxes Other Than Income Taxes**	59.44	(51.86)	7.58	0.0208	12,636,610	262,459	14,433,429	299,779	15,353,167	318,882
5	**Other O&M Expenses**	59.44	(42.40)	17.03	0.0467	111,504,586	5,203,357	107,570,221	5,019,760	119,444,563	5,573,876
	Income Taxes										
6	State	59.44	(54.78)	4.66	0.0128	674,317	8,614	31,327	400	-	-
7	Federal	59.44	(37.00)	22.44	0.0615	-	-	-	-	-	-
	Interest Expense										
8	Long Term Debt	59.44	(67.26)	(7.82)	(0.0214)	60,606,300	(1,298,935)	65,570,364	(1,405,326)	83,973,864	(1,799,756)
9	Short Term Debt	59.44	-	59.44	0.1628	-	-	-	-	-	-
10	**Total**					$ 595,488,169	$ 35,110,684	$ 604,809,586	$ 35,577,097	$ 640,614,349	$ 36,256,917

Line No.	Description	Revenue Lag	Expense Lead	Net Lag	CWC Factor	Adjusted Historic Test Year Expenses	Historic Test Year Cash Working Capital Requirement	Future Test Year Expenses	Future Test Year Cash Working Capital Requirement	Fully Projected Future Test Year Expenses	Fully Projected Future Test Year Cash Working Capital Requirement
	(A)	(B)	(C)	(D)	(E)	(F)	(G)				
1	**Gas Purchase Costs**	59.44	(35.49)	23.95	0.0656	291,416,000	19,117,730	291,499,330	19,123,197	291,418,538	19,117,897
2	**Payroll**	59.44	(15.55)	43.89	0.1202	50,794,622	6,107,579	54,224,018	6,519,932	56,995,561	6,853,184
3	**Pensions and Benefits**	59.44	(30.63)	28.81	0.0789	18,771,866	1,481,548	21,342,958	1,684,469	22,491,611	1,775,125
4	**Taxes Other Than Income Taxes**	59.44	(51.86)	7.58	0.0208	10,349,635	214,959	12,074,920	250,793	12,930,136	268,556
5	**Other O&M Expenses**	59.44	(42.40)	17.03	0.0467	98,675,363	4,604,682	94,599,711	4,414,492	105,271,935	4,912,511
	Income Taxes										
6	State	59.44	(54.78)	4.66	0.0128	-	-	241,139	3,080	58,200	743
7	Federal	59.44	(37.00)	22.44	0.0615	(70,009,296)	(4,303,682)	(89,342,484)	(5,492,151)	(88,685,698)	(5,451,776)
	Interest Expense										
8	Long Term Debt	59.44	(67.26)	(7.82)	(0.0214)	55,013,446	(1,179,067)	59,734,601	(1,280,252)	77,003,607	(1,650,367)
9	Short Term Debt	59.44	-	59.44	0.1628	-	-	-	-	-	-
10	**Total**					$ 455,011,635	$ 26,043,750	$ 444,374,193	$ 25,223,560	$ 477,483,891	$ 25,825,872

Line No.	Description	Revenue Lag	Expense Lead	Net Lag	CWC Factor	Adjusted Historic Test Year Expenses	Historic Test Year Cash Working Capital Requirement	Future Test Year Expenses	Future Test Year Cash Working Capital Requirement	Fully Projected Future Test Year Expenses	Fully Projected Future Test Year Cash Working Capital Requirement
	(A)	(B)	(C)	(D)	(E)	(F)	(G)				
1	**Gas Purchase Costs**	59.44	(35.49)	23.95	0.0656	26,190,717	1,718,187	26,235,512	1,721,125	26,270,077	1,723,393
2	**Payroll**	59.44	(15.55)	43.89	0.1202	17,022,826	2,046,836	17,602,751	2,116,567	18,092,044	2,175,399
3	**Pensions and Benefits**	59.44	(30.63)	28.81	0.0789	5,870,326	463,309	6,299,675	497,195	6,574,926	518,919
4	**Taxes Other Than Income Taxes**	59.44	(51.86)	7.58	0.0208	2,286,975	47,500	2,358,509	48,986	2,423,031	50,326
5	**Other O&M Expenses**	59.44	(42.40)	17.03	0.0467	12,829,223	598,675	12,970,510	605,268	14,172,627	661,365
	Income Taxes										
6	State	59.44	(54.78)	4.66	0.0128	674,317	8,614	(209,813)	(2,680)	(76,914)	(983)
7	Federal	59.44	(37.00)	22.44	0.0615	(6,386,832)	(392,618)	(2,502,323)	(153,825)	(2,640,023)	(162,290)
	Interest Expense										
8	Long Term Debt	59.44	(67.26)	(7.82)	(0.0214)	5,592,855	(119,868)	5,835,763	(125,074)	6,970,256	(149,389)
9	Short Term Debt	59.44	-	59.44	0.1628	-	-	-	-	-	-
10	**Total**					$ 64,080,406	$ 4,370,635	$ 68,590,586	$ 4,707,561	$ 71,786,024	$ 4,816,740

Calculation of Revenue Lag Time

Line No.	Description	(A) Reference or Factor	(B) Accounts Receivable Balance End of Month	(C) Total Monthly Sales	(D) A/R Turnover	(E) Days Lag
					(C) / (B)	365 / (D)
1	Annual Number of Days					365
2	August, 2022		$ 59,670			
3	September		$ 55,669	$ 34,249		
4	October		$ 62,479	$ 69,507		
5	November		$ 76,407	$ 101,366		
6	December		$ 124,460	$ 161,132		
7	January		$ 148,218	$ 131,758		
8	February		$ 162,211	$ 111,818		
9	March		$ 163,405	$ 113,310		
10	April		$ 135,879	$ 46,953		
11	May		$ 105,002	$ 36,479		
12	June		$ 83,129	$ 24,294		
13	July		$ 70,614	$ 22,503		
14	August, 2023		$ 62,113	$ 25,855		
15	Total	Sum Ln3 to Ln14	$ 1,249,587			
16	Average A/R Balance		$ 104,132	$ 879,224		
17	Factor				8.44	43.23
18	Collection Days Lag					43.23
19	Billing Lag					1.00
20	Service Lag			365 / 12 * 0.5		15.21
21	Total Revenue Lag Days	Sum Ln17 to Ln19				**59.44**

Calculation of Purchased Gas Costs

Weighted Expense Lead Time: **35.49** **days**

Line No.	(A) Company	(B) Period Start	(C) Period End	(D) Payment Amount	(E) Payment Date	(F) Service Lead Time	(G) Payment Lead Time	(H) Total Lead Time	(I) Weighting Factor	(J) Weighted Lead Time
1	Eastern Gas Transmision and Storage, Inc.	9/1/2022	9/30/2022	$ (1,255,477.15)	10/13/2022	14.5	13.00	27.50	0.359%	0.10
2	Equitrans	9/1/2022	9/30/2022	$ (6,429,112.69)	10/5/2022	14.5	5.00	19.50	1.837%	0.36
3	Eastern Gas Transmision and Storage, Inc.	9/1/2022	9/30/2022	$ (26,427.51)	10/17/2022	14.5	17.00	31.50	0.008%	0.00
4	Texas Eastern Transmission, LP	9/1/2022	9/30/2022	$ (336,756.70)	10/20/2022	14.5	20.00	34.50	0.096%	0.03
5	Tennessee Gas Pipeline	9/1/2022	9/30/2022	$ (19,014.81)	10/24/2022	14.5	24.00	38.50	0.005%	0.00
6	EQT Energy (PNG NAESB)	9/1/2022	9/30/2022	$ (26,037,847.00)	10/25/2022	14.5	25.00	39.50	7.440%	2.94
7	Mpower	9/1/2022	9/30/2022	$ 27,298.14	10/25/2022	14.5	25.00	39.50	-0.008%	(0.00)
8	National Fuel Gas Supply	9/1/2022	9/30/2022	$ (149,457.53)	10/25/2022	14.5	25.00	39.50	0.043%	0.02
9	NextEra Energy	9/1/2022	9/30/2022	$ (5,412,453.20)	10/25/2022	14.5	25.00	39.50	1.546%	0.61
10	Sequent Energy Management	9/1/2022	9/30/2022	$ (3,740,793.12)	10/25/2022	14.5	25.00	39.50	1.069%	0.42
11	SFE Energy	9/1/2022	9/30/2022	$ 13,018.28	10/25/2022	14.5	25.00	39.50	-0.004%	(0.00)
12	SouthStar	9/1/2022	9/30/2022	$ 108,072.00	10/25/2022	14.5	25.00	39.50	-0.031%	(0.01)
13	XTO	9/1/2022	9/30/2022	$ (857,995.30)	10/25/2022	14.5	25.00	39.50	0.245%	0.10
14	Eastern Gas Transmision and Storage, Inc.	9/1/2022	9/30/2022	$ (171,583.00)	10/13/2022	14.5	13.00	27.50	0.049%	0.01
15	Equitrans	9/1/2022	9/30/2022	$ (361,949.69)	10/5/2022	14.5	5.00	19.50	0.103%	0.02
16	Eastern Gas Transmision and Storage, Inc.	9/1/2022	9/30/2022	$ (2,675.46)	10/17/2022	14.5	17.00	31.50	0.001%	0.00
17	Texas Eastern Transmission, LP	9/1/2022	9/30/2022	$ (108,393.89)	10/20/2022	14.5	20.00	34.50	0.031%	0.01
18	Columbia Gas Transmission LLC	9/1/2022	9/30/2022	$ (59,986.95)	10/24/2022	14.5	24.00	38.50	0.017%	0.01
19	Range Resources	9/1/2022	9/30/2022	$ (2,238,850.00)	10/25/2022	14.5	25.00	39.50	0.640%	0.25
20	Sequent Energy Management	9/1/2022	9/30/2022	$ (2,529,327.24)	10/25/2022	14.5	25.00	39.50	0.723%	0.29
21	Eastern Gas Transmision and Storage, Inc.	10/1/2022	10/31/2022	$ (1,270,271.64)	11/14/2022	15.0	14.00	29.00	0.363%	0.11
22	Equitrans	10/1/2022	10/31/2022	$ (6,744,594.08)	11/15/2022	15.0	15.00	30.00	1.927%	0.58
23	Tennessee Gas Pipeline	10/1/2022	10/31/2022	$ 17.81	11/21/2022	15.0	21.00	36.00	0.000%	(0.00)
24	EQT Energy	10/1/2022	10/31/2022	$ (8,270,900.00)	11/25/2022	15.0	25.00	40.00	2.363%	0.95
25	EQT Energy (PNG NAESB)	10/1/2022	10/31/2022	$ (14,074,000.00)	11/25/2022	15.0	25.00	40.00	4.021%	1.61
26	Mpower	10/1/2022	10/31/2022	$ 29,048.88	11/25/2022	15.0	25.00	40.00	-0.008%	(0.00)
27	National Fuel Gas Supply	10/1/2022	10/31/2022	$ (148,845.14)	11/25/2022	15.0	25.00	40.00	0.043%	0.02
28	Sequent Energy Management	10/1/2022	10/31/2022	$ (7,023,271.58)	11/25/2022	15.0	25.00	40.00	2.007%	0.80
29	SFE Energy	10/1/2022	10/31/2022	$ 17,292.09	11/25/2022	15.0	25.00	40.00	-0.005%	(0.00)
30	SouthStar	10/1/2022	10/31/2022	$ 64,177.44	11/25/2022	15.0	25.00	40.00	-0.018%	(0.01)
31	Texas Eastern Transmission, LP	10/1/2022	10/31/2022	$ (336,756.70)	12/20/2022	15.0	50.00	65.00	0.096%	0.06
32	Eastern Gas Transmision and Storage, Inc.	10/1/2022	10/31/2022	$ (174,289.58)	11/14/2022	15.0	14.00	29.00	0.050%	0.01
33	Equitrans	10/1/2022	10/31/2022	$ (369,115.91)	11/15/2022	15.0	15.00	30.00	0.105%	0.03
34	Columbia Gas Transmission LLC	10/1/2022	10/31/2022	$ (69,643.13)	11/21/2022	15.0	21.00	36.00	0.020%	0.01
35	Texas Eastern Transmission, LP	10/1/2022	10/31/2022	$ (109,913.00)	11/21/2022	15.0	21.00	36.00	0.031%	0.01
36	Range Resources	10/1/2022	10/31/2022	$ (603,450.00)	11/25/2022	15.0	25.00	40.00	0.172%	0.07
37	Sequent Energy Management	10/1/2022	10/31/2022	$ (3,297,078.55)	11/25/2022	15.0	25.00	40.00	0.942%	0.38
38	Eastern Gas Transmision and Storage, Inc.	11/1/2022	11/30/2022	$ (1,261,989.15)	12/12/2022	14.5	12.00	26.50	0.361%	0.10
39	Eastern Gas Transmision and Storage, Inc.	11/1/2022	11/30/2022	$ (20,095.36)	12/15/2022	14.5	15.00	29.50	0.006%	0.00

Line No.	(A) Company	(B) Period Start	(C) Period End	(D) Payment Amount	(E) Payment Date	(F) Service Lead Time	(G) Payment Lead Time	(H) Total Lead Time	(I) Weighting Factor	(J) Weighted Lead Time
40	Equitrans	11/1/2022	11/30/2022	$ (12,312,915.46)	12/15/2022	14.5	15.00	29.50	3.518%	1.04
41	Texas Eastern Transmission, LP	11/1/2022	11/30/2022	$ (464,618.56)	12/20/2022	14.5	20.00	34.50	0.133%	0.05
42	Tennessee Gas Pipeline	11/1/2022	11/30/2022	$ 3,992.75	12/22/2022	14.5	22.00	36.50	-0.001%	(0.00)
43	Colonial Energy	11/1/2022	11/30/2022	$ (22,000.00)	12/28/2022	14.5	28.00	42.50	0.006%	0.00
44	EQT Energy (EGC NAESB)	11/1/2022	11/30/2022	$ (863,929.53)	12/21/2022	14.5	21.00	35.50	0.247%	0.09
45	EQT Energy (PNG NAESB)	11/1/2022	11/30/2022	$ (21,341,715.62)	12/21/2022	14.5	21.00	35.50	6.098%	2.16
46	IGS	11/1/2022	11/30/2022	$ 1,252,083.00	12/27/2022	14.5	27.00	41.50	-0.358%	(0.15)
47	Mid Atlantic Energy Services	11/1/2022	11/30/2022	$ 6,144.63	12/15/2022	14.5	15.00	29.50	-0.002%	(0.00)
48	Mpower	11/1/2022	11/30/2022	$ 39,156.41	12/28/2022	14.5	28.00	42.50	-0.011%	(0.00)
49	Sequent Energy Management	11/1/2022	11/30/2022	$ (3,326,535.22)	12/27/2022	14.5	27.00	41.50	0.950%	0.39
50	SFE Energy	11/1/2022	11/30/2022	$ 26,506.26	12/23/2022	14.5	23.00	37.50	-0.008%	(0.00)
51	UGI Energy Services	11/1/2022	11/30/2022	$ 1,139,046.28	12/23/2022	14.5	23.00	37.50	-0.325%	(0.12)
52	National Fuel Gas Supply	11/1/2022	11/30/2022	$ (151,627.71)	12/27/2022	14.5	27.00	41.50	0.043%	0.02
53	Eastern Gas Transmision and Storage, Inc.	11/1/2022	11/30/2022	$ (230,960.90)	12/12/2022	14.5	12.00	26.50	0.066%	0.02
54	Eastern Gas Transmision and Storage, Inc.	11/1/2022	11/30/2022	$ (3,278.51)	12/15/2022	14.5	15.00	29.50	0.001%	0.00
55	Equitrans	11/1/2022	11/30/2022	$ (379,015.22)	12/15/2022	14.5	15.00	29.50	0.108%	0.03
56	Texas Eastern Transmission, LP	11/1/2022	11/30/2022	$ (92,492.88)	12/20/2022	14.5	20.00	34.50	0.026%	0.01
57	Tennessee Gas Pipeline Company, LLC	11/1/2022	11/30/2022	$ 3.39	12/21/2022	14.5	21.00	35.50	0.000%	(0.00)
58	Columbia Gas Transmission LLC	11/1/2022	11/30/2022	$ (69,081.05)	12/22/2022	14.5	22.00	36.50	0.020%	0.01
59	Eastern Gas Transmision and Storage, Inc.	12/1/2022	12/31/2022	$ (1,260,309.57)	1/13/2023	15.0	13.00	28.00	0.360%	0.10
60	Equitrans	12/1/2022	12/31/2022	$ (12,554,287.40)	1/13/2023	15.0	13.00	28.00	3.587%	1.00
61	Eastern Gas Transmision and Storage, Inc.	12/1/2022	12/31/2022	$ (39,186.39)	1/17/2023	15.0	17.00	32.00	0.011%	0.00
62	Texas Eastern Transmission, LP	12/1/2022	12/31/2022	$ (359,762.55)	1/20/2023	15.0	20.00	35.00	0.103%	0.04
63	Tennessee Gas Pipeline	12/1/2022	12/31/2022	$ 4,278.61	1/23/2023	15.0	23.00	38.00	-0.001%	(0.00)
64	Colonial Energy	12/1/2022	12/31/2022	$ (288,965.00)	1/25/2023	15.0	25.00	40.00	0.083%	0.03
65	Direct Energy	12/1/2022	12/31/2022	$ 226,183.90	1/25/2023	15.0	25.00	40.00	-0.065%	(0.03)
66	EQT Energy (EGC NAESB)	12/1/2022	12/31/2022	$ (17,914,788.54)	1/25/2023	15.0	25.00	40.00	5.119%	2.05
67	EQT Energy (PNG NAESB)	12/1/2022	12/31/2022	$ (18,067,621.82)	1/25/2023	15.0	25.00	40.00	5.162%	2.06
68	IGS	12/1/2022	12/31/2022	$ 1,204,349.69	1/25/2023	15.0	25.00	40.00	-0.344%	(0.14)
69	Mid Atlantic Energy Services	12/1/2022	12/31/2022	$ 279,892.65	1/25/2023	15.0	25.00	40.00	-0.080%	(0.03)
70	Mpower	12/1/2022	12/31/2022	$ 79,124.35	1/25/2023	15.0	25.00	40.00	-0.023%	(0.01)
71	National Fuel Gas Supply	12/1/2022	12/31/2022	$ (153,098.09)	1/25/2023	15.0	25.00	40.00	0.044%	0.02
72	Sequent Energy Management	12/1/2022	12/31/2022	$ (5,666,164.25)	1/25/2023	15.0	25.00	40.00	1.619%	0.65
73	SFE Energy	12/1/2022	12/31/2022	$ 69,352.24	1/25/2023	15.0	25.00	40.00	-0.020%	(0.01)
74	Snyder	12/1/2022	12/31/2022	$ (414,252.48)	1/25/2023	15.0	25.00	40.00	0.118%	0.05
75	SouthStar	12/1/2022	12/31/2022	$ 94,679.50	1/25/2023	15.0	25.00	40.00	-0.027%	(0.01)
76	UGI Energy Services	12/1/2022	12/31/2022	$ 2,673,022.52	1/25/2023	15.0	25.00	40.00	-0.764%	(0.31)
77	United Energy Trading	12/1/2022	12/31/2022	$ 1,428,957.50	1/25/2023	15.0	25.00	40.00	-0.408%	(0.16)
78	Eastern Gas Transmision and Storage, Inc.	12/1/2022	12/31/2022	$ (235,191.36)	1/13/2023	15.0	13.00	28.00	0.067%	0.02
79	Equitrans	12/1/2022	12/31/2022	$ (401,672.31)	1/13/2023	15.0	13.00	28.00	0.115%	0.03
80	Eastern Gas Transmision and Storage, Inc.	12/1/2022	12/31/2022	$ (7,227.20)	1/17/2023	15.0	17.00	32.00	0.002%	0.00
81	Texas Eastern Transmission, LP	12/1/2022	12/31/2022	$ (97,788.00)	1/20/2023	15.0	20.00	35.00	0.028%	0.01

Line No.	(A) Company	(B) Period Start	(C) Period End	(D) Payment Amount	(E) Payment Date	(F) Service Lead Time	(G) Payment Lead Time	(H) Total Lead Time	(I) Weighting Factor	(J) Weighted Lead Time
82	Columbia Gas Transmission LLC	12/1/2022	12/31/2022	$ (70,348.02)	1/23/2023	15.0	23.00	38.00	0.020%	0.01
83	Sequent Energy Management	12/1/2022	12/31/2022	$ (122,800.00)	1/25/2023	15.0	25.00	40.00	0.035%	0.01
84	Eastern Gas Transmision and Storage, Inc.	1/1/2023	1/31/2023	$ 139,844.12	2/13/2023	15.0	13.00	28.00	-0.040%	(0.01)
85	Equitrans	1/1/2023	1/31/2023	$ (12,344,069.69)	2/15/2023	15.0	15.00	30.00	3.527%	1.06
86	Tennessee Gas Pipeline	1/1/2023	1/31/2023	$ 12,176.12	2/21/2023	15.0	21.00	36.00	-0.003%	(0.00)
87	Texas Eastern Transmission, LP	1/1/2023	1/31/2023	$ (401,209.80)	2/21/2023	15.0	21.00	36.00	0.115%	0.04
88	Colonial Energy	1/1/2023	1/31/2023	$ (22,000.00)	2/24/2023	15.0	24.00	39.00	0.006%	0.00
89	EQT Energy (EGC NAESB)	1/1/2023	1/31/2023	$ (10,582,587.55)	2/24/2023	15.0	24.00	39.00	3.024%	1.18
90	EQT Energy (PNG NAESB)	1/1/2023	1/31/2023	$ (1,683,951.25)	2/24/2023	15.0	24.00	39.00	0.481%	0.19
91	IGS	1/1/2023	1/31/2023	$ 1,004,400.00	2/24/2023	15.0	24.00	39.00	-0.287%	(0.11)
92	Mid Atlantic Energy Services	1/1/2023	1/31/2023	$ 216,997.94	2/24/2023	15.0	24.00	39.00	-0.062%	(0.02)
93	Mpower	1/1/2023	1/31/2023	$ 34,543.71	2/24/2023	15.0	24.00	39.00	-0.010%	(0.00)
94	Sequent Energy Management	1/1/2023	1/31/2023	$ (1,937,623.33)	2/24/2023	15.0	24.00	39.00	0.554%	0.22
95	SFE Energy	1/1/2023	1/31/2023	$ 52,949.39	2/24/2023	15.0	24.00	39.00	-0.015%	(0.01)
96	UGI Energy Services	1/1/2023	1/31/2023	$ 1,695,798.73	2/24/2023	15.0	24.00	39.00	-0.485%	(0.19)
97	United Energy Trading	1/1/2023	1/31/2023	$ 1,403,593.95	2/24/2023	15.0	24.00	39.00	-0.401%	(0.16)
98	National Fuel Gas Supply	1/1/2023	1/31/2023	$ (155,973.33)	2/23/2023	15.0	23.00	38.00	0.045%	0.02
99	Eastern Gas Transmision and Storage, Inc.	1/1/2023	1/31/2023	$ (225,223.06)	2/13/2023	15.0	13.00	28.00	0.064%	0.02
100	Equitrans	1/1/2023	1/31/2023	$ (377,190.27)	2/15/2023	15.0	15.00	30.00	0.108%	0.03
101	Columbia Gas Transmission LLC	1/1/2023	1/31/2023	$ (70,240.31)	2/21/2023	15.0	21.00	36.00	0.020%	0.01
102	Tennessee Gas Pipeline Company, LLC	1/1/2023	1/31/2023	$ (1,169.12)	2/21/2023	15.0	21.00	36.00	0.000%	0.00
103	Texas Eastern Transmission, LP	1/1/2023	1/31/2023	$ (106,928.00)	2/21/2023	15.0	21.00	36.00	0.031%	0.01
104	Eastern Gas Transmision and Storage, Inc.	2/1/2023	2/28/2023	$ (1,154,434.47)	3/13/2023	13.5	13.00	26.50	0.330%	0.09
105	Equitrans	2/1/2023	2/28/2023	$ (12,335,378.00)	3/15/2023	13.5	15.00	28.50	3.525%	1.00
106	Tennessee Gas Pipeline	2/1/2023	2/28/2023	$ 5,111.13	3/20/2023	13.5	20.00	33.50	-0.001%	(0.00)
107	Texas Eastern Transmission, LP	2/1/2023	2/28/2023	$ (358,987.98)	3/20/2023	13.5	20.00	33.50	0.103%	0.03
108	Colonial Energy	2/1/2023	2/28/2023	$ (102,000.00)	3/24/2023	13.5	24.00	37.50	0.029%	0.01
109	EQT Energy (EGC NAESB)	2/1/2023	2/28/2023	$ (8,508,164.89)	3/24/2023	13.5	24.00	37.50	2.431%	0.91
110	EQT Energy (PNG NAESB)	2/1/2023	2/28/2023	$ (1,672,271.90)	3/24/2023	13.5	24.00	37.50	0.478%	0.18
111	IGS	2/1/2023	2/28/2023	$ 692,023.38	3/24/2023	13.5	24.00	37.50	-0.198%	(0.07)
112	Mid Atlantic Energy Services	2/1/2023	2/28/2023	$ 173,950.50	3/24/2023	13.5	24.00	37.50	-0.050%	(0.02)
113	Mpower	2/1/2023	2/28/2023	$ 17,187.76	3/24/2023	13.5	24.00	37.50	-0.005%	(0.00)
114	Sequent Energy Management	2/1/2023	2/28/2023	$ (1,351,325.97)	3/24/2023	13.5	24.00	37.50	0.386%	0.14
115	SFE Energy	2/1/2023	2/28/2023	$ 34,553.33	3/24/2023	13.5	24.00	37.50	-0.010%	(0.00)
116	SouthStar	2/1/2023	2/28/2023	$ 4,082.48	3/24/2023	13.5	24.00	37.50	-0.001%	(0.00)
117	UGI Energy Services	2/1/2023	2/28/2023	$ 994,425.60	3/24/2023	13.5	24.00	37.50	-0.284%	(0.11)
118	United Energy Trading	2/1/2023	2/28/2023	$ 591,920.00	3/24/2023	13.5	24.00	37.50	-0.169%	(0.06)
119	National Fuel Gas Supply	2/1/2023	2/28/2023	$ (154,446.37)	3/27/2023	13.5	27.00	40.50	0.044%	0.02
120	Eastern Gas Transmision and Storage, Inc.	2/1/2023	2/28/2023	$ (98,927.56)	3/13/2023	13.5	13.00	26.50	0.028%	0.01
121	Equitrans	2/1/2023	2/28/2023	$ (385,675.81)	3/15/2023	13.5	15.00	28.50	0.110%	0.03
122	Columbia Gas Transmission LLC	2/1/2023	2/28/2023	$ (70,095.78)	3/20/2023	13.5	20.00	33.50	0.020%	0.01
123	Texas Eastern Transmission, LP	2/1/2023	2/28/2023	$ (95,302.00)	3/20/2023	13.5	20.00	33.50	0.027%	0.01

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124	Sequent Energy Management	2/1/2023	2/28/2023	$ (8,700.00)	3/24/2023	13.5	24.00	37.50	0.002%	0.00
125	Eastern Gas Transmision and Storage, Inc.	3/1/2023	3/31/2023	$ (1,120,943.93)	4/13/2023	15.0	13.00	28.00	0.320%	0.09
126	Equitrans	3/1/2023	3/31/2023	$ (12,413,960.59)	4/13/2023	15.0	13.00	28.00	3.547%	0.99
127	Eastern Gas Transmision and Storage, Inc.	3/1/2023	3/31/2023	$ (29,580.06)	4/17/2023	15.0	17.00	32.00	0.008%	0.00
128	Texas Eastern Transmission, LP	3/1/2023	3/31/2023	$ 297,987.21	4/20/2023	15.0	20.00	35.00	-0.085%	(0.03)
129	Tennessee Gas Pipeline	3/1/2023	3/31/2023	$ (2,888.52)	4/24/2023	15.0	24.00	39.00	0.001%	0.00
130	Colonial Energy	3/1/2023	3/31/2023	$ (22,000.00)	4/25/2023	15.0	25.00	40.00	0.006%	0.00
131	EQT Energy (EGC NAESB)	3/1/2023	3/31/2023	$ (8,792,887.07)	4/25/2023	15.0	25.00	40.00	2.512%	1.00
132	EQT Energy (PNG NAESB)	3/1/2023	3/31/2023	$ (1,362,351.42)	4/25/2023	15.0	25.00	40.00	0.389%	0.16
133	IGS	3/1/2023	3/31/2023	$ 329,918.00	4/25/2023	15.0	25.00	40.00	-0.094%	(0.04)
134	Mpower	3/1/2023	3/31/2023	$ 11,705.51	4/25/2023	15.0	25.00	40.00	-0.003%	(0.00)
135	National Fuel Gas Supply	3/1/2023	3/31/2023	$ (152,606.61)	4/25/2023	15.0	25.00	40.00	0.044%	0.02
136	Sequent Energy Management	3/1/2023	3/31/2023	$ (1,424,652.01)	4/25/2023	15.0	25.00	40.00	0.407%	0.16
137	SFE Energy	3/1/2023	3/31/2023	$ 25,338.53	4/25/2023	15.0	25.00	40.00	-0.007%	(0.00)
138	UGI Energy Services	3/1/2023	3/31/2023	$ 634,081.24	4/25/2023	15.0	25.00	40.00	-0.181%	(0.07)
139	Eastern Gas Transmision and Storage, Inc.	3/1/2023	3/31/2023	$ (221,001.00)	4/13/2023	15.0	13.00	28.00	0.063%	0.02
140	Equitrans	3/1/2023	3/31/2023	$ (373,433.34)	4/13/2023	15.0	13.00	28.00	0.107%	0.03
141	Eastern Gas Transmision and Storage, Inc.	3/1/2023	3/31/2023	$ (1,208.10)	4/17/2023	15.0	17.00	32.00	0.000%	0.00
142	Texas Eastern Transmission, LP	3/1/2023	3/31/2023	$ (93,705.52)	4/20/2023	15.0	20.00	35.00	0.027%	0.01
143	Columbia Gas Transmission LLC	3/1/2023	3/31/2023	$ (70,132.07)	4/24/2023	15.0	24.00	39.00	0.020%	0.01
144	Tennessee Gas Pipeline Company, LLC	3/1/2023	3/31/2023	$ 18.22	4/24/2023	15.0	24.00	39.00	0.000%	(0.00)
145	Eastern Gas Transmision and Storage, Inc.	4/1/2023	4/30/2023	$ (1,120,131.43)	5/11/2023	14.5	11.00	25.50	0.320%	0.08
146	Eastern Gas Transmision and Storage, Inc.	4/1/2023	4/30/2023	$ (28,239.07)	5/12/2023	14.5	12.00	26.50	0.008%	0.00
147	Equitrans	4/1/2023	4/30/2023	$ (6,481,423.53)	5/15/2023	14.5	15.00	29.50	1.852%	0.55
148	Texas Eastern Transmission, LP	4/1/2023	4/30/2023	$ (263,124.45)	5/22/2023	14.5	22.00	36.50	0.075%	0.03
149	Dynegy Marketing and Trade	4/1/2023	4/30/2023	$ (36,503.85)	5/25/2023	14.5	25.00	39.50	0.010%	0.00
150	EQT Energy (EGC NAESB)	4/1/2023	4/30/2023	$ (4,718,850.00)	5/25/2023	14.5	25.00	39.50	1.348%	0.53
151	National Fuel Gas Supply	4/1/2023	4/30/2023	$ (148,555.66)	5/25/2023	14.5	25.00	39.50	0.042%	0.02
152	NextEra Energy	4/1/2023	4/30/2023	$ (1,599,125.52)	5/25/2023	14.5	25.00	39.50	0.457%	0.18
153	Sequent Energy Management	4/1/2023	4/30/2023	$ (718,651.61)	5/25/2023	14.5	25.00	39.50	0.205%	0.08
154	Tennessee Gas Pipeline	4/1/2023	4/30/2023	$ 2,069.90	5/25/2023	14.5	25.00	39.50	-0.001%	(0.00)
155	Eastern Gas Transmision and Storage, Inc.	4/1/2023	4/30/2023	$ (214,371.00)	5/11/2023	14.5	11.00	25.50	0.061%	0.02
156	Equitrans	4/1/2023	4/30/2023	$ (309,660.33)	5/15/2023	14.5	15.00	29.50	0.088%	0.03
157	Columbia Gas Transmission LLC	4/1/2023	4/30/2023	$ (63,636.44)	5/22/2023	14.5	22.00	36.50	0.018%	0.01
158	Texas Eastern Transmission, LP	4/1/2023	4/30/2023	$ (77,562.25)	5/22/2023	14.5	22.00	36.50	0.022%	0.01
159	EQT Energy (EGC NAESB)	4/1/2023	4/30/2023	$ (562,350.00)	5/25/2023	14.5	25.00	39.50	0.161%	0.06
160	Sequent Energy Management	4/1/2023	4/30/2023	$ (23,562.50)	5/25/2023	14.5	25.00	39.50	0.007%	0.00
161	Tomorrow Energy	5/1/2023	5/31/2023	$ (8,266.59)	5/25/2023	15.0	(6.00)	9.00	0.002%	0.00
162	Eastern Gas Transmision and Storage, Inc.	5/1/2023	5/31/2023	$ (1,144,684.19)	6/12/2023	15.0	12.00	27.00	0.327%	0.09
163	Equitrans	5/1/2023	5/31/2023	$ (6,552,939.12)	6/15/2023	15.0	15.00	30.00	1.872%	0.56
164	Texas Eastern Transmission, LP	5/1/2023	5/31/2023	$ (260,995.05)	6/20/2023	15.0	20.00	35.00	0.075%	0.03
165	Tennessee Gas Pipeline	5/1/2023	5/31/2023	$ 1,033.03	6/22/2023	15.0	22.00	37.00	0.000%	(0.00)

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166	EQT Energy (EGC NAESB)	5/1/2023	5/31/2023	$ (4,522,782.51)	6/22/2023	15.0	22.00	37.00	1.292%	0.48
167	NextEra Energy	5/1/2023	5/31/2023	$ (1,312,207.50)	6/22/2023	15.0	22.00	37.00	0.375%	0.14
168	Range Resources	5/1/2023	5/31/2023	$ (362,895.00)	6/22/2023	15.0	22.00	37.00	0.104%	0.04
169	Sequent Energy Management	5/1/2023	5/31/2023	$ 97,362.88	6/28/2023	15.0	28.00	43.00	-0.028%	(0.01)
170	SouthStar	5/1/2023	5/31/2023	$ 16,932.51	6/23/2023	15.0	23.00	38.00	-0.005%	(0.00)
171	National Fuel Gas Supply	5/1/2023	5/31/2023	$ (151,100.27)	6/26/2023	15.0	26.00	41.00	0.043%	0.02
172	Eastern Gas Transmision and Storage, Inc.	5/1/2023	5/31/2023	$ (198,249.00)	6/12/2023	15.0	12.00	27.00	0.057%	0.02
173	Eastern Gas Transmision and Storage, Inc.-usage	5/1/2023	5/31/2023	$ (3,750.32)	6/12/2023	15.0	12.00	27.00	0.001%	0.00
174	Equitrans	5/1/2023	5/31/2023	$ (389,092.88)	6/15/2023	15.0	15.00	30.00	0.111%	0.03
175	Texas Eastern Transmission, LP	5/1/2023	5/31/2023	$ (78,628.00)	6/20/2023	15.0	20.00	35.00	0.022%	0.01
176	Columbia Gas Transmission LLC	5/1/2023	5/31/2023	$ (63,256.73)	6/22/2023	15.0	22.00	37.00	0.018%	0.01
177	Colonial Energy	5/1/2023	5/31/2023	$ (130,579.75)	6/22/2023	15.0	22.00	37.00	0.037%	0.01
178	EQT Energy (EGC NAESB)	5/1/2023	5/31/2023	$ (1,233,180.00)	6/22/2023	15.0	22.00	37.00	0.352%	0.13
179	Range Resources	5/1/2023	5/31/2023	$ (83,626.00)	6/22/2023	15.0	22.00	37.00	0.024%	0.01
180	Sequent Energy Management	5/1/2023	5/31/2023	$ (3,496.50)	6/28/2023	15.0	28.00	43.00	0.001%	0.00
181	Eastern Gas Transmision and Storage, Inc.	6/1/2023	6/30/2023	$ (1,073,350.45)	7/13/2023	14.5	13.00	27.50	0.307%	0.08
182	Eastern Gas Transmision and Storage, Inc.	6/1/2023	6/30/2023	$ (22,819.86)	7/14/2023	14.5	14.00	28.50	0.007%	0.00
183	Equitrans	6/1/2023	6/30/2023	$ (6,512,874.53)	7/13/2023	14.5	13.00	27.50	1.861%	0.51
184	Texas Eastern Transmission, LP	6/1/2023	6/30/2023	$ (260,995.05)	7/20/2023	14.5	20.00	34.50	0.075%	0.03
185	Tennessee Gas Pipeline	6/1/2023	6/30/2023	$ 4,917.07	7/24/2023	14.5	24.00	38.50	-0.001%	(0.00)
186	Colonial Energy	6/1/2023	6/30/2023	$ (632,390.55)	7/25/2023	14.5	25.00	39.50	0.181%	0.07
187	EQT Energy (EGC NAESB)	6/1/2023	6/30/2023	$ (1,498,355.10)	7/25/2023	14.5	25.00	39.50	0.428%	0.17
188	EQT Energy (PNG NAESB)	6/1/2023	6/30/2023	$ (2,180,904.00)	7/25/2023	14.5	25.00	39.50	0.623%	0.25
189	National Fuel Gas Supply	6/1/2023	6/30/2023	$ (149,804.42)	7/25/2023	14.5	25.00	39.50	0.043%	0.02
190	NextEra Energy	6/1/2023	6/30/2023	$ (776,936.69)	7/25/2023	14.5	25.00	39.50	0.222%	0.09
191	Sequent Energy Management	6/1/2023	6/30/2023	$ 393,522.89	7/25/2023	14.5	25.00	39.50	-0.112%	(0.04)
192	SouthStar	6/1/2023	6/30/2023	$ 12,959.10	7/25/2023	14.5	25.00	39.50	-0.004%	(0.00)
193	Eastern Gas Transmision and Storage, Inc.	6/1/2023	6/30/2023	$ (196,713.02)	7/13/2023	14.5	13.00	27.50	0.056%	0.02
194	Eastern Gas Transmision and Storage, Inc.	6/1/2023	6/30/2023	$ (3,629.34)	7/14/2023	14.5	14.00	28.50	0.001%	0.00
195	Equitrans	6/1/2023	6/30/2023	$ (446,722.14)	7/13/2023	14.5	13.00	27.50	0.128%	0.04
196	Texas Eastern Transmission, LP	6/1/2023	6/30/2023	$ (82,138.00)	7/20/2023	14.5	20.00	34.50	0.023%	0.01
197	Columbia Gas Transmission LLC	6/1/2023	6/30/2023	$ (63,333.05)	7/24/2023	14.5	24.00	38.50	0.018%	0.01
198	Colonial Energy	6/1/2023	6/30/2023	$ (121,954.00)	7/25/2023	14.5	25.00	39.50	0.035%	0.01
199	EQT Energy (EGC NAESB)	6/1/2023	6/30/2023	$ (1,306,800.00)	7/25/2023	14.5	25.00	39.50	0.373%	0.15
200	Range Resources	6/1/2023	6/30/2023	$ (31,622.50)	7/25/2023	14.5	25.00	39.50	0.009%	0.00
201	Eastern Gas Transmision and Storage, Inc.	7/1/2023	7/31/2023	$ (1,120,767.80)	8/11/2023	15.0	11.00	26.00	0.320%	0.08
202	Eastern Gas Transmision and Storage, Inc.	7/1/2023	7/31/2023	$ (29,892.44)	8/14/2023	15.0	14.00	29.00	0.009%	0.00
203	Equitrans	7/1/2023	7/31/2023	$ (6,577,235.25)	8/15/2023	15.0	15.00	30.00	1.879%	0.56
204	Tennessee Gas Pipeline	7/1/2023	7/31/2023	$ (7,581.62)	8/21/2023	15.0	21.00	36.00	0.002%	0.00
205	Texas Eastern Transmission, LP	7/1/2023	7/31/2023	$ (265,603.04)	8/21/2023	15.0	21.00	36.00	0.076%	0.03
206	Colonial Energy	7/1/2023	7/31/2023	$ (259,230.00)	8/25/2023	15.0	25.00	40.00	0.074%	0.03
207	EQT Energy (PNG NAESB)	7/1/2023	7/31/2023	$ (3,976,470.00)	8/25/2023	15.0	25.00	40.00	1.136%	0.45

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208	National Fuel Gas Supply	7/1/2023	7/31/2023	$ (150,025.83)	8/25/2023	15.0	25.00	40.00	0.043%	0.02
209	NextEra Energy	7/1/2023	7/31/2023	$ (1,287,303.24)	8/25/2023	15.0	25.00	40.00	0.368%	0.15
210	Sequent Energy Management	7/1/2023	7/31/2023	$ 498,840.87	8/25/2023	15.0	25.00	40.00	-0.143%	(0.06)
211	SouthStar	7/1/2023	7/31/2023	$ 1,470.00	8/25/2023	15.0	25.00	40.00	0.000%	(0.00)
212	Eastern Gas Transmision and Storage, Inc.	7/1/2023	7/31/2023	$ (206,895.40)	8/11/2023	15.0	11.00	26.00	0.059%	0.02
213	Eastern Gas Transmision and Storage, Inc.	7/1/2023	7/31/2023	$ (3,750.32)	8/14/2023	15.0	14.00	29.00	0.001%	0.00
214	Equitrans	7/1/2023	7/31/2023	$ (463,828.13)	8/15/2023	15.0	15.00	30.00	0.133%	0.04
215	Columbia Gas Transmission LLC	7/1/2023	7/31/2023	$ (62,879.94)	8/21/2023	15.0	21.00	36.00	0.018%	0.01
216	Texas Eastern Transmission, LP	7/1/2023	7/31/2023	$ (82,038.00)	8/21/2023	15.0	21.00	36.00	0.023%	0.01
217	Colonial Energy	7/1/2023	7/31/2023	$ (133,935.50)	8/25/2023	15.0	25.00	40.00	0.038%	0.02
218	EQT Energy (PNG NAESB)	7/1/2023	7/31/2023	$ (1,450,000.00)	8/25/2023	15.0	25.00	40.00	0.414%	0.17
219	Sequent Energy Management	7/1/2023	7/31/2023	$ (37,112.74)	8/25/2023	15.0	25.00	40.00	0.011%	0.00
220	Eastern Gas Transmision and Storage, Inc.	8/1/2023	8/31/2023	$ (1,118,708.51)	9/11/2023	15.0	11.00	26.00	0.320%	0.08
221	Eastern Gas Transmision and Storage, Inc.	8/1/2023	8/31/2023	$ (23,887.43)	9/15/2023	15.0	15.00	30.00	0.007%	0.00
222	Equitrans	8/1/2023	8/31/2023	$ (6,309,610.93)	9/15/2023	15.0	15.00	30.00	1.803%	0.54
223	Texas Eastern Transmission, LP	8/1/2023	8/31/2023	$ (261,339.35)	9/20/2023	15.0	20.00	35.00	0.075%	0.03
224	Colonial Energy	8/1/2023	8/31/2023	$ (122,307.50)	9/25/2023	15.0	25.00	40.00	0.035%	0.01
225	EQT Energy (PNG NAESB)	8/1/2023	8/31/2023	$ (970,920.00)	9/25/2023	15.0	25.00	40.00	0.277%	0.11
226	National Fuel Gas Supply	8/1/2023	8/31/2023	$ (149,833.43)	9/25/2023	15.0	25.00	40.00	0.043%	0.02
227	NextEra Energy	8/1/2023	8/31/2023	$ (977,061.00)	9/25/2023	15.0	25.00	40.00	0.279%	0.11
228	Range Resources	8/1/2023	8/31/2023	$ (438,025.00)	9/25/2023	15.0	25.00	40.00	0.125%	0.05
229	Sequent Energy Management	8/1/2023	8/31/2023	$ 241,570.50	9/25/2023	15.0	25.00	40.00	-0.069%	(0.03)
230	Tennessee Gas Pipeline	8/1/2023	8/31/2023	$ 1.50	9/25/2023	15.0	25.00	40.00	0.000%	(0.00)
231	Eastern Gas Transmision and Storage, Inc.	8/1/2023	8/31/2023	$ (217,041.00)	9/11/2023	15.0	11.00	26.00	0.062%	0.02
232	Eastern Gas Transmision and Storage, Inc.	8/1/2023	8/31/2023	$ (3,051.49)	9/15/2023	15.0	15.00	30.00	0.001%	0.00
233	Equitrans	8/1/2023	8/31/2023	$ (448,040.83)	9/15/2023	15.0	15.00	30.00	0.128%	0.04
234	Texas Eastern Transmission, LP	8/1/2023	8/31/2023	$ (94,518.00)	9/20/2023	15.0	20.00	35.00	0.027%	0.01
235	Colonial Energy	8/1/2023	8/31/2023	$ (87,237.50)	9/25/2023	15.0	25.00	40.00	0.025%	0.01
236	Columbia Gas Transmission LLC	8/1/2023	8/31/2023	$ (62,784.20)	9/25/2023	15.0	25.00	40.00	0.018%	0.01
237	EQT Energy (PNG NAESB)	8/1/2023	8/31/2023	$ (1,171,800.00)	9/25/2023	15.0	25.00	40.00	0.335%	0.13
238	Sequent Energy Management	8/1/2023	8/31/2023	$ (24,831.00)	9/25/2023	15.0	25.00	40.00	0.007%	0.00
239	Local Producer Gas Payments - Ensyte	9/1/2022	9/30/2022	$ (5,291,524.75)	10/31/2022	14.5	31.00	45.50	1.512%	0.69
240	Local Producer Gas Payments - Ensyte	10/1/2022	10/31/2022	$ (2,951,946.61)	11/30/2022	15.0	30.00	45.00	0.843%	0.38
241	Local Producer Gas Payments - Ensyte	11/1/2022	11/30/2022	$ (2,285,063.54)	12/30/2022	14.5	30.00	44.50	0.653%	0.29
242	Local Producer Gas Payments - Ensyte	12/1/2022	12/31/2022	$ (2,739,747.50)	1/31/2023	15.0	31.00	46.00	0.783%	0.36
243	Local Producer Gas Payments - Ensyte	1/1/2023	1/31/2023	$ (1,822,668.67)	2/28/2023	15.0	28.00	43.00	0.521%	0.22
244	Local Producer Gas Payments - Ensyte	2/1/2023	2/28/2023	$ (1,156,679.74)	3/31/2023	13.5	31.00	44.50	0.330%	0.15
245	Local Producer Gas Payments - Ensyte	3/1/2023	3/31/2023	$ (1,021,095.38)	4/28/2023	15.0	28.00	43.00	0.292%	0.13
246	Local Producer Gas Payments - Ensyte	4/1/2023	4/30/2023	$ (783,507.94)	5/31/2023	14.5	31.00	45.50	0.224%	0.10
247	Local Producer Gas Payments - Ensyte	5/1/2023	5/31/2023	$ (790,378.37)	6/30/2023	15.0	30.00	45.00	0.226%	0.10
248	Local Producer Gas Payments - Ensyte	6/1/2023	6/30/2023	$ (637,858.05)	7/31/2023	14.5	31.00	45.50	0.182%	0.08
249	Local Producer Gas Payments - Ensyte	7/1/2023	7/31/2023	$ (716,132.66)	8/31/2023	15.0	31.00	46.00	0.205%	0.09

Line No.	(A) Company	(B) Period Start	(C) Period End	(D) Payment Amount	(E) Payment Date	(F) Service Lead Time	(G) Payment Lead Time	(H) Total Lead Time	(I) Weighting Factor	(J) Weighted Lead Time
250	Local Producer Gas Payments - Ensyte	8/1/2023	8/31/2023	$ (689,239.40)	9/30/2023	15.0	30.00	45.00	0.197%	0.09
251				$ (349,988,398.75)						

Calculation of Payroll Lead Time

Weighted Expense Lead Time: **15.55** days

Line No.		(A) Type	(B) Pay Period End Date	(C) Pay Date	(D) Payroll Amount	(E) Pay Period Begin	(F) Mid Point of Pay Period	(G) Payment Lead Time	(H) Total Lead Time	(I) Weighting Factor	(J) Weighted Lead Time
1	1M4	Union Payroll	8/27/2022	9/7/2022	$ 3,021,634.09	8/14/2022	6.5	11.00	17.50	2.25%	0.39
2	1M4	Union Payroll	9/10/2022	9/21/2022	$ 2,923,246.51	8/28/2022	6.5	11.00	17.50	2.17%	0.38
3	1M4	Union Payroll	9/24/2022	10/5/2022	$ 3,036,298.23	9/11/2022	6.5	11.00	17.50	2.26%	0.39
4	1M4	Union Payroll	10/8/2022	10/19/2022	$ 3,050,487.41	9/25/2022	6.5	11.00	17.50	2.27%	0.40
5	1M4	Union Payroll	10/22/2022	11/2/2022	$ 3,123,004.54	10/9/2022	6.5	11.00	17.50	2.32%	0.41
6	1M4	Union Payroll	11/5/2022	11/16/2022	$ 3,098,721.40	10/23/2022	6.5	11.00	17.50	2.30%	0.40
7	1M4	Union Payroll	11/19/2022	11/30/2022	$ 3,165,378.16	11/6/2022	6.5	11.00	17.50	2.35%	0.41
8	1M4	Union Payroll	12/3/2022	12/14/2022	$ 3,118,444.57	11/20/2022	6.5	11.00	17.50	2.32%	0.41
9	1M4	Union Payroll	12/17/2022	12/28/2022	$ 3,117,968.11	12/4/2022	6.5	11.00	17.50	2.32%	0.41
10	1M4	Union Payroll	12/31/2022	1/11/2023	$ 3,605,944.43	12/18/2022	6.5	11.00	17.50	2.68%	0.47
11	1M4	Union Payroll	1/14/2023	1/25/2023	$ 3,133,009.57	1/1/2023	6.5	11.00	17.50	2.33%	0.41
12	1M4	Union Payroll	1/28/2023	2/8/2023	$ 3,168,077.13	1/15/2023	6.5	11.00	17.50	2.35%	0.41
13	1M4	Union Payroll	2/11/2023	2/22/2023	$ 3,279,269.60	1/29/2023	6.5	11.00	17.50	2.44%	0.43
14	1M4	Union Payroll	2/25/2023	3/8/2023	$ 3,160,467.55	2/12/2023	6.5	11.00	17.50	2.35%	0.41
15	1M4	Union Payroll	3/11/2023	3/22/2023	$ 3,106,737.35	2/26/2023	6.5	11.00	17.50	2.31%	0.40
16	1M4	Union Payroll	3/25/2023	4/5/2023	$ 3,133,107.82	3/12/2023	6.5	11.00	17.50	2.33%	0.41
17	1M4	Union Payroll	4/8/2023	4/19/2023	$ 3,144,143.38	3/26/2023	6.5	11.00	17.50	2.34%	0.41
18	1M4	Union Payroll	4/22/2023	5/3/2023	$ 3,084,845.30	4/9/2023	6.5	11.00	17.50	2.29%	0.40
19	1M4	Union Payroll	5/6/2023	5/17/2023	$ 3,050,327.22	4/23/2023	6.5	11.00	17.50	2.27%	0.40
20	1M4	Union Payroll	5/20/2023	5/31/2023	$ 3,110,983.19	5/7/2023	6.5	11.00	17.50	2.31%	0.40
21	1M4	Union Payroll	6/3/2023	6/14/2023	$ 3,091,574.46	5/21/2023	6.5	11.00	17.50	2.30%	0.40
22	1M4	Union Payroll	6/17/2023	6/28/2023	$ 3,083,458.80	6/4/2023	6.5	11.00	17.50	2.29%	0.40
23	1M4	Union Payroll	7/1/2023	7/12/2023	$ 3,115,733.94	6/18/2023	6.5	11.00	17.50	2.32%	0.41
24	1M4	Union Payroll	7/15/2023	7/26/2023	$ 3,079,566.00	7/2/2023	6.5	11.00	17.50	2.29%	0.40
25	1M4	Union Payroll	7/29/2023	8/9/2023	$ 3,137,538.48	7/16/2023	6.5	11.00	17.50	2.33%	0.41
26	1M4	Union Payroll	8/12/2023	8/23/2023	$ 3,159,114.19	7/30/2023	6.5	11.00	17.50	2.35%	0.41
27	CWA	Union Payroll	9/4/2022	9/14/2022	$ 54,392.73	8/22/2022	6.5	10.00	16.50	0.04%	0.01
28	CWA	Union Payroll	9/18/2022	9/28/2022	$ 53,128.06	9/5/2022	6.5	10.00	16.50	0.04%	0.01
29	CWA	Union Payroll	10/2/2022	10/12/2022	$ 56,527.51	9/19/2022	6.5	10.00	16.50	0.04%	0.01
30	CWA	Union Payroll	10/16/2022	10/26/2022	$ 56,730.65	10/3/2022	6.5	10.00	16.50	0.04%	0.01
31	CWA	Union Payroll	10/30/2022	11/9/2022	$ 53,685.08	10/17/2022	6.5	10.00	16.50	0.04%	0.01
32	CWA	Union Payroll	11/13/2022	11/23/2022	$ 66,581.54	10/31/2022	6.5	10.00	16.50	0.05%	0.01
33	CWA	Union Payroll	11/27/2022	12/7/2022	$ 55,174.21	11/14/2022	6.5	10.00	16.50	0.04%	0.01
34	CWA	Union Payroll	12/11/2022	12/21/2022	$ 57,003.13	11/28/2022	6.5	10.00	16.50	0.04%	0.01
35	CWA	Union Payroll	12/25/2022	1/4/2023	$ 57,326.01	12/12/2022	6.5	10.00	16.50	0.04%	0.01
36	CWA	Union Payroll	1/8/2023	1/18/2023	$ 53,702.08	12/26/2022	6.5	10.00	16.50	0.04%	0.01
37	CWA	Union Payroll	1/22/2023	2/1/2023	$ 55,096.74	1/9/2023	6.5	10.00	16.50	0.04%	0.01
38	CWA	Union Payroll	2/5/2023	2/15/2023	$ 54,621.63	1/23/2023	6.5	10.00	16.50	0.04%	0.01
39	CWA	Union Payroll	2/19/2023	3/1/2023	$ 57,378.70	2/6/2023	6.5	10.00	16.50	0.04%	0.01
40	CWA	Union Payroll	3/5/2023	3/15/2023	$ 54,841.90	2/20/2023	6.5	10.00	16.50	0.04%	0.01
41	CWA	Union Payroll	3/19/2023	3/29/2023	$ 51,576.37	3/6/2023	6.5	10.00	16.50	0.04%	0.01
42	CWA	Union Payroll	4/2/2023	4/12/2023	$ 48,860.70	3/20/2023	6.5	10.00	16.50	0.04%	0.01
43	CWA	Union Payroll	4/16/2023	4/26/2023	$ 50,055.99	4/3/2023	6.5	10.00	16.50	0.04%	0.01
44	CWA	Union Payroll	4/30/2023	5/10/2023	$ 51,576.78	4/17/2023	6.5	10.00	16.50	0.04%	0.01

Line No.		(A) Type	(B) Pay Period End Date	(C) Pay Date	(D) Payroll Amount	(E) Pay Period Begin	(F) Mid Point of Pay Period	(G) Payment Lead Time	(H) Total Lead Time	(I) Weighting Factor	(J) Weighted Lead Time
45	CWA	Union Payroll	5/14/2023	5/24/2023	$ 53,423.80	5/1/2023	6.5	10.00	16.50	0.04%	0.01
46	CWA	Union Payroll	5/28/2023	6/7/2023	$ 55,436.29	5/15/2023	6.5	10.00	16.50	0.04%	0.01
47	CWA	Union Payroll	6/11/2023	6/21/2023	$ 54,856.23	5/29/2023	6.5	10.00	16.50	0.04%	0.01
48	CWA	Union Payroll	6/25/2023	7/5/2023	$ 57,416.08	6/12/2023	6.5	10.00	16.50	0.04%	0.01
49	CWA	Union Payroll	7/9/2023	7/19/2023	$ 52,784.91	6/26/2023	6.5	10.00	16.50	0.04%	0.01
50	CWA	Union Payroll	7/23/2023	8/2/2023	$ 55,595.27	7/10/2023	6.5	10.00	16.50	0.04%	0.01
51	CWA	Union Payroll	8/6/2023	8/16/2023	$ 54,450.30	7/24/2023	6.5	10.00	16.50	0.04%	0.01
52	CWA	Union Payroll	8/20/2023	8/30/2023	$ 52,267.98	8/7/2023	6.5	10.00	16.50	0.04%	0.01
53	1M6	Salaried Payroll	9/3/2022	9/9/2022	$ 717,548.07	8/21/2022	6.5	6.00	12.50	0.53%	0.07
54	1M6	Salaried Payroll	9/17/2022	9/23/2022	$ 724,898.47	9/4/2022	6.5	6.00	12.50	0.54%	0.07
55	1M6	Salaried Payroll	10/1/2022	10/7/2022	$ 715,375.83	9/18/2022	6.5	6.00	12.50	0.53%	0.07
56	1M6	Salaried Payroll	10/15/2022	10/21/2022	$ 720,203.67	10/2/2022	6.5	6.00	12.50	0.54%	0.07
57	1M6	Salaried Payroll	10/29/2022	11/4/2022	$ 715,663.12	10/16/2022	6.5	6.00	12.50	0.53%	0.07
58	1M6	Salaried Payroll	11/12/2022	11/18/2022	$ 722,281.50	10/30/2022	6.5	6.00	12.50	0.54%	0.07
59	1M6	Salaried Payroll	11/26/2022	12/2/2022	$ 729,200.64	11/13/2022	6.5	6.00	12.50	0.54%	0.07
60	1M6	Salaried Payroll	12/10/2022	12/16/2022	$ 719,395.65	11/27/2022	6.5	6.00	12.50	0.53%	0.07
61	1M6	Salaried Payroll	12/24/2022	12/30/2022	$ 728,003.25	12/11/2022	6.5	6.00	12.50	0.54%	0.07
62	1M6	Salaried Payroll	1/7/2023	1/13/2023	$ 736,734.93	12/25/2022	6.5	6.00	12.50	0.55%	0.07
63	1M6	Salaried Payroll	1/21/2023	1/27/2023	$ 716,677.38	1/8/2023	6.5	6.00	12.50	0.53%	0.07
64	1M6	Salaried Payroll	2/4/2023	2/10/2023	$ 709,757.74	1/22/2023	6.5	6.00	12.50	0.53%	0.07
65	1M6	Salaried Payroll	2/18/2023	2/24/2023	$ 715,150.23	2/5/2023	6.5	6.00	12.50	0.53%	0.07
66	1M6	Salaried Payroll	3/4/2023	3/10/2023	$ 712,511.56	2/19/2023	6.5	6.00	12.50	0.53%	0.07
67	1M6	Salaried Payroll	3/18/2023	3/24/2023	$ 718,336.00	3/5/2023	6.5	6.00	12.50	0.53%	0.07
68	1M6	Salaried Payroll	4/1/2023	4/6/2023	$ 731,388.31	3/19/2023	6.5	5.00	11.50	0.54%	0.06
69	1M6	Salaried Payroll	4/15/2023	4/21/2023	$ 741,819.95	4/2/2023	6.5	6.00	12.50	0.55%	0.07
70	1M6	Salaried Payroll	4/29/2023	5/5/2023	$ 749,984.82	4/16/2023	6.5	6.00	12.50	0.56%	0.07
71	1M6	Salaried Payroll	5/13/2023	5/19/2023	$ 747,458.78	4/30/2023	6.5	6.00	12.50	0.56%	0.07
72	1M6	Salaried Payroll	5/27/2023	6/2/2023	$ 738,219.00	5/14/2023	6.5	6.00	12.50	0.55%	0.07
73	1M6	Salaried Payroll	6/10/2023	6/16/2023	$ 751,684.22	5/28/2023	6.5	6.00	12.50	0.56%	0.07
74	1M6	Salaried Payroll	6/24/2023	6/30/2023	$ 734,655.03	6/11/2023	6.5	6.00	12.50	0.55%	0.07
75	1M6	Salaried Payroll	7/8/2023	7/14/2023	$ 739,217.14	6/25/2023	6.5	6.00	12.50	0.55%	0.07
76	1M6	Salaried Payroll	7/22/2023	7/28/2023	$ 725,360.60	7/9/2023	6.5	6.00	12.50	0.54%	0.07
77	1M6	Salaried Payroll	8/5/2023	8/11/2023	$ 726,934.09	7/23/2023	6.5	6.00	12.50	0.54%	0.07
78	1M6	Salaried Payroll	8/19/2023	8/25/2023	$ 795,710.80	8/6/2023	6.5	6.00	12.50	0.59%	0.07
79	7TY	Salaried Payroll	9/3/2022	9/9/2022	$ 1,396,726.44	8/21/2022	6.5	6.00	12.50	1.04%	0.13
80	7TY	Salaried Payroll	9/17/2022	9/23/2022	$ 1,441,205.47	9/4/2022	6.5	6.00	12.50	1.07%	0.13
81	7TY	Salaried Payroll	10/1/2022	10/7/2022	$ 1,397,981.95	9/18/2022	6.5	6.00	12.50	1.04%	0.13
82	7TY	Salaried Payroll	10/15/2022	10/21/2022	$ 1,314,417.34	10/2/2022	6.5	6.00	12.50	0.98%	0.12
83	7TY	Salaried Payroll	10/29/2022	11/4/2022	$ 1,475,913.42	10/16/2022	6.5	6.00	12.50	1.10%	0.14
84	7TY	Salaried Payroll	11/12/2022	11/18/2022	$ 1,301,339.93	10/30/2022	6.5	6.00	12.50	0.97%	0.12
85	7TY	Salaried Payroll	11/26/2022	12/2/2022	$ 1,332,186.90	11/13/2022	6.5	6.00	12.50	0.99%	0.12
86	7TY	Salaried Payroll	12/10/2022	12/16/2022	$ 1,318,329.95	11/27/2022	6.5	6.00	12.50	0.98%	0.12
87	7TY	Salaried Payroll	12/24/2022	12/30/2022	$ 1,355,433.54	12/11/2022	6.5	6.00	12.50	1.01%	0.13
88	7TY	Salaried Payroll	1/7/2023	1/13/2023	$ 1,146,073.71	12/25/2022	6.5	6.00	12.50	0.85%	0.11
89	7TY	Salaried Payroll	1/21/2023	1/27/2023	$ 1,195,528.03	1/8/2023	6.5	6.00	12.50	0.89%	0.11
90	7TY	Salaried Payroll	2/4/2023	2/10/2023	$ 1,164,282.69	1/22/2023	6.5	6.00	12.50	0.87%	0.11
91	7TY	Salaried Payroll	2/18/2023	2/24/2023	$ 1,464,705.65	2/5/2023	6.5	6.00	12.50	1.09%	0.14

Line No.		(A) Type	(B) Pay Period End Date	(C) Pay Date	(D) Payroll Amount	(E) Pay Period Begin	(F) Mid Point of Pay Period	(G) Payment Lead Time	(H) Total Lead Time	(I) Weighting Factor	(J) Weighted Lead Time
92	7TY	Salaried Payroll	3/4/2023	3/10/2023	$ 1,138,918.46	2/19/2023	6.5	6.00	12.50	0.85%	0.11
93	7TY	Salaried Payroll	3/18/2023	3/24/2023	$ 1,158,886.96	3/5/2023	6.5	6.00	12.50	0.86%	0.11
94	7TY	Salaried Payroll	4/1/2023	4/6/2023	$ 1,146,945.19	3/19/2023	6.5	5.00	11.50	0.85%	0.10
95	7TY	Salaried Payroll	4/15/2023	4/21/2023	$ 1,202,105.58	4/2/2023	6.5	6.00	12.50	0.89%	0.11
96	7TY	Salaried Payroll	4/29/2023	5/5/2023	$ 1,159,532.98	4/16/2023	6.5	6.00	12.50	0.86%	0.11
97	7TY	Salaried Payroll	5/13/2023	5/19/2023	$ 1,201,746.48	4/30/2023	6.5	6.00	12.50	0.89%	0.11
98	7TY	Salaried Payroll	5/27/2023	6/2/2023	$ 1,215,013.93	5/14/2023	6.5	6.00	12.50	0.90%	0.11
99	7TY	Salaried Payroll	6/10/2023	6/16/2023	$ 1,211,685.08	5/28/2023	6.5	6.00	12.50	0.90%	0.11
100	7TY	Salaried Payroll	6/24/2023	6/30/2023	$ 1,189,125.82	6/11/2023	6.5	6.00	12.50	0.88%	0.11
101	7TY	Salaried Payroll	7/8/2023	7/14/2023	$ 1,212,633.76	6/25/2023	6.5	6.00	12.50	0.90%	0.11
102	7TY	Salaried Payroll	7/22/2023	7/28/2023	$ 1,265,934.24	7/9/2023	6.5	6.00	12.50	0.94%	0.12
103	7TY	Salaried Payroll	8/5/2023	8/11/2023	$ 1,198,413.24	7/23/2023	6.5	6.00	12.50	0.89%	0.11
104	7TY	Salaried Payroll	8/19/2023	8/25/2023	$ 1,225,389.22	8/6/2023	6.5	6.00	12.50	0.91%	0.11
105					$ 134,538,198.84						

Calculation of Pension & Benefits Lead Time

Weighted Expense Lead Time: **30.63** **days**

Line No.	(A) Pensions & Benefits	(B) End of Period	(C) Paid Date		(D) Amount	(E) Service Lead Time	(F) Payment Lead Time	(G) Total Lead Time	(H) Weighting Factor	(I) Weighted Lead Time
1	Benefits - Medical - Salary & Union	9/30/2022	8/19/2022	$	1,201,091.32	15.21	(42.00)	(26.79)	5.752%	(1.54)
2	Benefits - Medical - Salary & Union	10/31/2022	9/16/2022	$	1,240,522.49	15.21	(45.00)	(29.79)	5.941%	(1.77)
3	Benefits - Medical - Salary & Union	11/30/2022	11/1/2022	$	1,093,712.30	15.21	(29.00)	(13.79)	5.238%	(0.72)
4	Benefits - Medical - Salary & Union	12/31/2022	11/17/2022	$	1,162,104.90	15.21	(44.00)	(28.79)	5.565%	(1.60)
5	Benefits - Medical - Salary & Union	1/31/2023	12/16/2022	$	1,200,231.36	15.21	(46.00)	(30.79)	5.748%	(1.77)
6	Benefits - Medical - Salary & Union	2/28/2023	1/20/2023	$	1,440,420.83	15.21	(39.00)	(23.79)	6.898%	(1.64)
7	Benefits - Medical - Salary & Union	3/31/2023	2/16/2023	$	1,337,595.39	15.21	(43.00)	(27.79)	6.406%	(1.78)
8	Benefits - Medical - Salary & Union	4/30/2023	3/17/2023	$	1,338,249.76	15.21	(44.00)	(28.79)	6.409%	(1.85)
9	Benefits - Medical - Salary & Union	5/31/2023	4/14/2023	$	1,240,474.53	15.21	(47.00)	(31.79)	5.940%	(1.89)
10	Benefits - Medical - Salary & Union	6/30/2023	5/13/2023	$	1,343,660.29	15.21	(48.00)	(32.79)	6.435%	(2.11)
11	Benefits - Medical - Salary & Union	7/31/2023	6/16/2023	$	1,304,415.12	15.21	(45.00)	(29.79)	6.247%	(1.86)
12	Benefits - Medical - Salary & Union	8/31/2023	7/17/2023	$	1,284,320.54	15.21	(45.00)	(29.79)	6.150%	(1.83)
13	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	9/30/2022	10/4/2022	$	374,354.91	15.21	4.00	19.21	1.793%	0.34
14	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	10/31/2022	10/18/2022	$	(119,290.88)	15.21	(13.00)	2.21	-0.571%	(0.01)
15	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	11/30/2022	11/23/2022	$	53,142.27	15.21	(7.00)	8.21	0.254%	0.02
16	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	12/31/2022	1/9/2023	$	59,605.64	15.21	9.00	24.21	0.285%	0.07
17	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	1/31/2023	2/17/2023	$	138,922.66	15.21	17.00	32.21	0.665%	0.21
18	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	2/28/2023	4/3/2023	$	92,211.53	15.21	34.00	49.21	0.442%	0.22
19	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	3/31/2023	4/17/2023	$	96,109.93	15.21	17.00	32.21	0.460%	0.15
20	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	4/30/2023	5/10/2023	$	96,047.40	15.21	10.00	25.21	0.460%	0.12
21	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	5/31/2023	5/24/2023	$	711,154.74	15.21	(7.00)	8.21	3.406%	0.28
22	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	6/30/2023	6/20/2023	$	144,124.08	15.21	(10.00)	5.21	0.690%	0.04
23	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	7/31/2023	7/25/2023	$	149,545.80	15.21	(6.00)	9.21	0.716%	0.07
24	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	8/31/2023	8/29/2023	$	147,187.36	15.21	(2.00)	13.21	0.705%	0.09
25	Pension Contribution	12/31/2021	8/3/2022	$	2,571,430.00	182.50	215.00	397.50	12.314%	48.95
26	Health Equity - HSA Employer Amortization	9/30/2022		$	105,856.98	7.02	1.00	8.02	0.507%	0.04
27	Health Equity - HSA Employer Amortization	10/31/2022		$	107,893.37	7.02	1.00	8.02	0.517%	0.04
28	Health Equity - HSA Employer Amortization	11/30/2022		$	108,146.25	7.02	1.00	8.02	0.518%	0.04
29	Health Equity - HSA Employer Amortization	12/31/2022		$	134,033.37	7.02	1.00	8.02	0.642%	0.05
30	Health Equity - HSA Employer Amortization	1/31/2023		$	89,194.58	7.02	1.00	8.02	0.427%	0.03
31	Health Equity - HSA Employer Amortization	2/28/2023		$	89,194.50	7.02	1.00	8.02	0.427%	0.03
32	Health Equity - HSA Employer Amortization	3/31/2023		$	89,683.11	7.02	1.00	8.02	0.429%	0.03
33	Health Equity - HSA Employer Amortization	4/30/2023		$	89,683.11	7.02	1.00	8.02	0.429%	0.03
34	Health Equity - HSA Employer Amortization	5/31/2023		$	90,133.53	7.02	1.00	8.02	0.432%	0.03
35	Health Equity - HSA Employer Amortization	6/30/2023		$	92,896.39	7.02	1.00	8.02	0.445%	0.04
36	Health Equity - HSA Employer Amortization	7/31/2023		$	91,774.65	7.02	1.00	8.02	0.439%	0.04
37	Health Equity - HSA Employer Amortization	8/31/2023		$	92,145.80	7.02	1.00	8.02	0.441%	0.04
38				$	20,881,979.91					

Calculation of Other O&M Lead Time

Weighted Expense Lead Time: **42.40** **days**

Line No.	(A) Name	(B) Inv Amount	(C) Invoice Date	(D) Paid Date	(E) Service Lead Time	(F) Payment Lead Time	(G) Total Lead Time	(H) Weighting Factor	(I) Weighed Lead Time
1	Selection Item 1	$ (645.30)	1/10/2023	2/9/2023	15.21	30.00	45.21	0.022%	0.01
2	Selection Item 2	$ (233.78)	1/10/2023	2/9/2023	15.21	30.00	45.21	0.008%	0.00
3	Selection Item 3	$ (182.72)	1/10/2023	2/9/2023	15.21	30.00	45.21	0.006%	0.00
4	Selection Item 4	$ (213.96)	1/10/2023	2/9/2023	15.21	30.00	45.21	0.007%	0.00
5	Selection Item 5	$ (62.22)	1/10/2023	2/9/2023	15.21	30.00	45.21	0.002%	0.00
6	Selection Item 6	$ (635.27)	1/2/2023	1/12/2023	15.21	10.00	25.21	0.022%	0.01
7	Selection Item 7	$ (143.48)	1/3/2023	1/12/2023	15.21	9.00	24.21	0.005%	0.00
8	Selection Item 8	$ (19,848.00)	1/10/2023	1/19/2023	15.21	9.00	24.21	0.680%	0.16
9	Selection Item 9	$ (6.67)	1/7/2023	2/2/2023	15.21	26.00	41.21	0.000%	0.00
10	Selection Item 10	$ (13.66)	1/7/2023	2/2/2023	15.21	26.00	41.21	0.000%	0.00
11	Selection Item 11	$ (445.17)	1/16/2023	2/9/2023	15.21	24.00	39.21	0.015%	0.01
12	Selection Item 12	$ (5,441.12)	1/10/2023	1/19/2023	15.21	9.00	24.21	0.186%	0.05
13	Selection Item 13	$ (48.04)	1/10/2023	1/19/2023	15.21	9.00	24.21	0.002%	0.00
14	Selection Item 14	$ (42.80)	1/10/2023	1/19/2023	15.21	9.00	24.21	0.001%	0.00
15	Selection Item 15	$ (47.15)	1/10/2023	1/19/2023	15.21	9.00	24.21	0.002%	0.00
16	Selection Item 16	$ (12,793.33)	1/10/2023	1/19/2023	15.21	9.00	24.21	0.438%	0.11
17	Selection Item 17	$ (7,616.91)	1/10/2023	1/19/2023	15.21	9.00	24.21	0.261%	0.06
18	Selection Item 18	$ (18,445.00)	1/3/2023	1/19/2023	15.21	16.00	31.21	0.632%	0.20
19	Selection Item 19	$ (73.87)	1/10/2023	2/7/2023	15.21	28.00	43.21	0.003%	0.00
20	Selection Item 20	$ (18,000.00)	1/5/2023	2/2/2023	15.21	28.00	43.21	0.616%	0.27
21	Selection Item 21	$ (242.00)	1/18/2023	2/15/2023	15.21	28.00	43.21	0.008%	0.00
22	Selection Item 22	$ (83.12)	1/18/2023	2/15/2023	15.21	28.00	43.21	0.003%	0.00
23	Selection Item 23	$ (41.16)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.001%	0.00
24	Selection Item 24	$ (43.27)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.001%	0.00
25	Selection Item 25	$ (41.62)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.001%	0.00
26	Selection Item 26	$ (61.73)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.002%	0.00
27	Selection Item 27	$ (48.21)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.002%	0.00
28	Selection Item 28	$ (156.72)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.005%	0.00
29	Selection Item 29	$ (48.98)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.002%	0.00
30	Selection Item 30	$ (44.12)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.002%	0.00
31	Selection Item 31	$ (49.15)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.002%	0.00
32	Selection Item 32	$ (199.92)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.007%	0.00
33	Selection Item 33	$ (58.23)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.002%	0.00
34	Selection Item 34	$ (47.04)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.002%	0.00
35	Selection Item 35	$ (64.65)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.002%	0.00

Line No.	(A) Name	(B) Inv Amount	(C) Invoice Date	(D) Paid Date	(E) Service Lead Time	(F) Payment Lead Time	(G) Total Lead Time	(H) Weighting Factor	(I) Weighed Lead Time
36	Selection Item 36	$ (87.52)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.003%	0.00
37	Selection Item 37	$ (85.05)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.003%	0.00
38	Selection Item 38	$ (20,967.00)	2/7/2023	5/4/2023	15.21	86.00	101.21	0.718%	0.73
39	Selection Item 39	$ (10,190.00)	11/30/2022	6/15/2023	15.21	197.00	212.21	0.349%	0.74
40	Selection Item 40	$ (500.00)	2/21/2023	5/25/2023	15.21	93.00	108.21	0.017%	0.02
41	Selection Item 41	$ (32.50)	2/28/2023	3/9/2023	15.21	9.00	24.21	0.001%	0.00
42	Selection Item 42	$ (1,970.00)	2/20/2023	3/16/2023	15.21	24.00	39.21	0.067%	0.03
43	Selection Item 43	$ (3,050.00)	2/20/2023	3/16/2023	15.21	24.00	39.21	0.104%	0.04
44	Selection Item 44	$ (102.50)	2/20/2023	3/16/2023	15.21	24.00	39.21	0.004%	0.00
45	Selection Item 45	$ (86.00)	2/20/2023	3/16/2023	15.21	24.00	39.21	0.003%	0.00
46	Selection Item 46	$ (10,557.50)	2/28/2023	3/23/2023	15.21	23.00	38.21	0.362%	0.14
47	Selection Item 47	$ (100.00)	3/2/2023	3/9/2023	15.21	7.00	22.21	0.003%	0.00
48	Selection Item 48	$ (68.00)	2/21/2023	3/23/2023	15.21	30.00	45.21	0.002%	0.00
49	Selection Item 49	$ (233.19)	3/7/2023	4/6/2023	15.21	30.00	45.21	0.008%	0.00
50	Selection Item 50	$ (679,061.50)	2/28/2023	3/30/2023	15.21	30.00	45.21	23.258%	10.51
51	Selection Item 51	$ (1,142.42)	3/18/2023	4/13/2023	15.21	26.00	41.21	0.039%	0.02
52	Selection Item 52	$ (362.66)	3/13/2023	4/6/2023	15.21	24.00	39.21	0.012%	0.00
53	Selection Item 53	$ (403.00)	3/10/2023	4/6/2023	15.21	27.00	42.21	0.014%	0.01
54	Selection Item 54	$ (104.00)	3/15/2023	4/13/2023	15.21	29.00	44.21	0.004%	0.00
55	Selection Item 55	$ (13,485.00)	3/1/2023	3/30/2023	15.21	29.00	44.21	0.462%	0.20
56	Selection Item 56	$ (67.42)	3/15/2023	3/23/2023	15.21	8.00	23.21	0.002%	0.00
57	Selection Item 57	$ (59.32)	3/15/2023	3/23/2023	15.21	8.00	23.21	0.002%	0.00
58	Selection Item 58	$ (100.00)	3/15/2023	3/23/2023	15.21	8.00	23.21	0.003%	0.00
59	Selection Item 59	$ (23.94)	3/22/2023	4/20/2023	15.21	29.00	44.21	0.001%	0.00
60	Selection Item 60	$ (117.00)	3/23/2023	4/20/2023	15.21	28.00	43.21	0.004%	0.00
61	Selection Item 61	$ (50.74)	3/23/2023	4/20/2023	15.21	28.00	43.21	0.002%	0.00
62	Selection Item 62	$ (39.98)	3/23/2023	4/20/2023	15.21	28.00	43.21	0.001%	0.00
63	Selection Item 63	$ (5.99)	3/23/2023	4/20/2023	15.21	28.00	43.21	0.000%	0.00
64	Selection Item 64	$ (456.00)	3/22/2023	6/8/2023	15.21	78.00	93.21	0.016%	0.01
65	Selection Item 65	$ (995.87)	3/22/2023	4/20/2023	15.21	29.00	44.21	0.034%	0.02
66	Selection Item 66	$ (482.50)	3/22/2023	4/20/2023	15.21	29.00	44.21	0.017%	0.01
67	Selection Item 67	$ (482.50)	3/22/2023	4/20/2023	15.21	29.00	44.21	0.017%	0.01
68	Selection Item 68	$ (982.15)	3/20/2023	4/13/2023	15.21	24.00	39.21	0.034%	0.01
69	Selection Item 69	$ (3,000.00)	2/3/2023	4/6/2023	15.21	62.00	77.21	0.103%	0.08
70	Selection Item 70	$ (1,170.00)	2/22/2023	3/30/2023	15.21	36.00	51.21	0.040%	0.02
71	Selection Item 71	$ (14,363.38)	3/6/2023	5/4/2023	15.21	59.00	74.21	0.492%	0.37
72	Selection Item 72	$ (990.00)	3/9/2023	6/15/2023	15.21	98.00	113.21	0.034%	0.04
73	Selection Item 73	$ (1,023.15)	3/7/2023	6/8/2023	15.21	93.00	108.21	0.035%	0.04

Line No.	(A) Name	(B) Inv Amount	(C) Invoice Date	(D) Paid Date	(E) Service Lead Time	(F) Payment Lead Time	(G) Total Lead Time	(H) Weighting Factor	(I) Weighed Lead Time
74	Selection Item 74	$ (87.94)	4/1/2023	4/6/2023	15.21	5.00	20.21	0.003%	0.00
75	Selection Item 75	$ (24,000.00)	4/6/2023	5/4/2023	15.21	28.00	43.21	0.822%	0.36
76	Selection Item 76	$ (19,800.00)	3/31/2023	4/27/2023	15.21	27.00	42.21	0.678%	0.29
77	Selection Item 77	$ (44,960.65)	4/4/2023	4/13/2023	15.21	9.00	24.21	1.540%	0.37
78	Selection Item 78	$ (40.76)	4/1/2023	4/13/2023	15.21	12.00	27.21	0.001%	0.00
79	Selection Item 79	$ (74.28)	4/1/2023	4/13/2023	15.21	12.00	27.21	0.003%	0.00
80	Selection Item 80	$ (31.80)	4/3/2023	4/13/2023	15.21	10.00	25.21	0.001%	0.00
81	Selection Item 81	$ (7.95)	4/3/2023	4/13/2023	15.21	10.00	25.21	0.000%	0.00
82	Selection Item 82	$ (112.30)	4/3/2023	4/13/2023	15.21	10.00	25.21	0.004%	0.00
83	Selection Item 83	$ (4,918.42)	3/27/2023	4/13/2023	15.21	17.00	32.21	0.168%	0.05
84	Selection Item 84	$ (588.04)	4/2/2023	4/13/2023	15.21	11.00	26.21	0.020%	0.01
85	Selection Item 85	$ (121.00)	4/11/2023	5/11/2023	15.21	30.00	45.21	0.004%	0.00
86	Selection Item 86	$ (295.00)	4/4/2023	5/4/2023	15.21	30.00	45.21	0.010%	0.00
87	Selection Item 87	$ (18.49)	4/10/2023	5/4/2023	15.21	24.00	39.21	0.001%	0.00
88	Selection Item 88	$ (23.36)	4/7/2023	5/4/2023	15.21	27.00	42.21	0.001%	0.00
89	Selection Item 89	$ (60.65)	3/29/2023	4/27/2023	15.21	29.00	44.21	0.002%	0.00
90	Selection Item 90	$ (1,622.00)	4/5/2023	5/4/2023	15.21	29.00	44.21	0.056%	0.02
91	Selection Item 91	$ (544.52)	3/30/2023	4/27/2023	15.21	28.00	43.21	0.019%	0.01
92	Selection Item 92	$ (170.03)	3/27/2023	4/20/2023	15.21	24.00	39.21	0.006%	0.00
93	Selection Item 93	$ (181.18)	3/27/2023	4/20/2023	15.21	24.00	39.21	0.006%	0.00
94	Selection Item 94	$ (1,155.87)	4/7/2023	5/4/2023	15.21	27.00	42.21	0.040%	0.02
95	Selection Item 95	$ (5,796.80)	4/13/2023	5/11/2023	15.21	28.00	43.21	0.199%	0.09
96	Selection Item 96	$ (10,800.00)	3/20/2023	5/4/2023	15.21	45.00	60.21	0.370%	0.22
97	Selection Item 97	$ (10,800.00)	4/3/2023	5/4/2023	15.21	31.00	46.21	0.370%	0.17
98	Selection Item 98	$ (10,800.00)	4/17/2023	5/11/2023	15.21	24.00	39.21	0.370%	0.15
99	Selection Item 99	$ (691.23)	3/31/2023	4/27/2023	15.21	27.00	42.21	0.024%	0.01
100	Selection Item 100	$ (128,304.00)	3/31/2023	4/27/2023	15.21	27.00	42.21	4.394%	1.85
101	Selection Item 101	$ (120.00)	4/12/2023	4/27/2023	15.21	15.00	30.21	0.004%	0.00
102	Selection Item 102	$ (120.00)	4/12/2023	4/27/2023	15.21	15.00	30.21	0.004%	0.00
103	Selection Item 103	$ (120.00)	4/12/2023	4/27/2023	15.21	15.00	30.21	0.004%	0.00
104	Selection Item 104	$ (182.00)	4/10/2023	5/4/2023	15.21	24.00	39.21	0.006%	0.00
105	Selection Item 105	$ (665,102.00)	3/31/2023	4/27/2023	15.21	27.00	42.21	22.780%	9.61
106	Selection Item 106	$ (550.00)	4/20/2023	5/18/2023	15.21	28.00	43.21	0.019%	0.01
107	Selection Item 107	$ (413.00)	4/20/2023	5/18/2023	15.21	28.00	43.21	0.014%	0.01
108	Selection Item 108	$ (420.00)	4/20/2023	5/18/2023	15.21	28.00	43.21	0.014%	0.01
109	Selection Item 109	$ (402.50)	4/20/2023	5/18/2023	15.21	28.00	43.21	0.014%	0.01
110	Selection Item 110	$ (4,961.25)	3/3/2023	5/4/2023	15.21	62.00	77.21	0.170%	0.13
111	Selection Item 111	$ (169.00)	4/26/2023	5/25/2023	15.21	29.00	44.21	0.006%	0.00

Line No.	(A) Name	(B) Inv Amount	(C) Invoice Date	(D) Paid Date	(E) Service Lead Time	(F) Payment Lead Time	(G) Total Lead Time	(H) Weighting Factor	(I) Weighed Lead Time
112	Selection Item 112	$ (107.17)	5/1/2023	5/4/2023	15.21	3.00	18.21	0.004%	0.00
113	Selection Item 113	$ (200.00)	5/4/2023	5/11/2023	15.21	7.00	22.21	0.007%	0.00
114	Selection Item 114	$ (100.00)	5/4/2023	5/11/2023	15.21	7.00	22.21	0.003%	0.00
115	Selection Item 115	$ (1,000.00)	4/27/2023	5/25/2023	15.21	28.00	43.21	0.034%	0.01
116	Selection Item 116	$ (10,874.23)	4/30/2023	5/25/2023	15.21	25.00	40.21	0.372%	0.15
117	Selection Item 117	$ (4,365.60)	4/21/2023	5/18/2023	15.21	27.00	42.21	0.150%	0.06
118	Selection Item 118	$ (35.21)	4/28/2023	5/11/2023	15.21	13.00	28.21	0.001%	0.00
119	Selection Item 119	$ (132.15)	4/30/2023	5/11/2023	15.21	11.00	26.21	0.005%	0.00
120	Selection Item 120	$ (114.30)	5/1/2023	5/11/2023	15.21	10.00	25.21	0.004%	0.00
121	Selection Item 121	$ (4,774.88)	3/17/2023	5/11/2023	15.21	55.00	70.21	0.164%	0.11
122	Selection Item 122	$ (515.00)	1/12/2023	5/11/2023	15.21	119.00	134.21	0.018%	0.02
123	Selection Item 123	$ (500.00)	1/12/2023	5/11/2023	15.21	119.00	134.21	0.017%	0.02
124	Selection Item 124	$ (482.50)	1/12/2023	5/11/2023	15.21	119.00	134.21	0.017%	0.02
125	Selection Item 125	$ (515.00)	1/12/2023	5/11/2023	15.21	119.00	134.21	0.018%	0.02
126	Selection Item 126	$ (9,820.00)	4/26/2023	5/11/2023	15.21	15.00	30.21	0.336%	0.10
127	Selection Item 127	$ (1.50)	5/5/2023	6/1/2023	15.21	27.00	42.21	0.000%	0.00
128	Selection Item 128	$ (5,437.32)	5/8/2023	5/25/2023	15.21	17.00	32.21	0.186%	0.06
129	Selection Item 129	$ (2,051.71)	5/4/2023	5/25/2023	15.21	21.00	36.21	0.070%	0.03
130	Selection Item 130	$ (1,881.68)	5/7/2023	5/25/2023	15.21	18.00	33.21	0.064%	0.02
131	Selection Item 131	$ (7,048.50)	5/4/2023	5/25/2023	15.21	21.00	36.21	0.241%	0.09
132	Selection Item 132	$ (281.00)	5/22/2023	6/15/2023	15.21	24.00	39.21	0.010%	0.00
133	Selection Item 133	$ (120.00)	5/15/2023	6/8/2023	15.21	24.00	39.21	0.004%	0.00
134	Selection Item 134	$ (15,219.00)	4/28/2023	5/23/2023	15.21	25.00	40.21	0.521%	0.21
135	Selection Item 135	$ (41.98)	5/12/2023	6/8/2023	15.21	27.00	42.21	0.001%	0.00
136	Selection Item 136	$ (21,390.00)	5/17/2023	5/25/2023	15.21	8.00	23.21	0.733%	0.17
137	Selection Item 137	$ (10,800.00)	5/1/2023	6/8/2023	15.21	38.00	53.21	0.370%	0.20
138	Selection Item 138	$ (10,800.00)	5/15/2023	6/8/2023	15.21	24.00	39.21	0.370%	0.15
139	Selection Item 139	$ (33.99)	5/23/2023	6/22/2023	15.21	30.00	45.21	0.001%	0.00
140	Selection Item 140	$ (6,360.00)	5/22/2023	6/15/2023	15.21	24.00	39.21	0.218%	0.09
141	Selection Item 141	$ (115.25)	5/22/2023	6/8/2023	15.21	17.00	32.21	0.004%	0.00
142	Selection Item 142	$ (350.00)	4/7/2023	6/8/2023	15.21	62.00	77.21	0.012%	0.01
143	Selection Item 143	$ (115.75)	5/25/2023	6/22/2023	15.21	28.00	43.21	0.004%	0.00
144	Selection Item 144	$ (1,800.24)	5/4/2023	6/1/2023	15.21	28.00	43.21	0.062%	0.03
145	Selection Item 145	$ (366.29)	5/5/2023	6/1/2023	15.21	27.00	42.21	0.013%	0.01
146	Selection Item 146	$ (18,000.00)	5/15/2023	6/8/2023	15.21	24.00	39.21	0.616%	0.24
147	Selection Item 147	$ (17,250.00)	4/28/2023	6/1/2023	15.21	34.00	49.21	0.591%	0.29
148	Selection Item 148	$ (12,840.00)	5/1/2023	6/8/2023	15.21	38.00	53.21	0.440%	0.23
149	Selection Item 149	$ (4,365.60)	3/31/2023	6/8/2023	15.21	69.00	84.21	0.150%	0.13

Line No.	(A) Name	(B) Inv Amount	(C) Invoice Date	(D) Paid Date	(E) Service Lead Time	(F) Payment Lead Time	(G) Total Lead Time	(H) Weighting Factor	(I) Weighed Lead Time
150	Selection Item 150	$ (142.00)	5/23/2023	6/22/2023	15.21	30.00	45.21	0.005%	0.00
151	Selection Item 151	$ (154.72)	5/22/2023	6/15/2023	15.21	24.00	39.21	0.005%	0.00
152	Selection Item 152	$ (52.97)	5/30/2023	6/29/2023	15.21	30.00	45.21	0.002%	0.00
153	Selection Item 153	$ (79.37)	5/30/2023	6/29/2023	15.21	30.00	45.21	0.003%	0.00
154	Selection Item 154	$ (57,500.00)	5/8/2023	6/8/2023	15.21	31.00	46.21	1.969%	0.91
155	Selection Item 155	$ (5,188.00)	5/26/2023	6/15/2023	15.21	20.00	35.21	0.178%	0.06
156	Selection Item 156	$ (23.00)	6/1/2023	6/8/2023	15.21	7.00	22.21	0.001%	0.00
157	Selection Item 157	$ (39.70)	5/26/2023	6/8/2023	15.21	13.00	28.21	0.001%	0.00
158	Selection Item 158	$ (34.87)	5/31/2023	6/8/2023	15.21	8.00	23.21	0.001%	0.00
159	Selection Item 159	$ (5,470.00)	1/31/2023	6/8/2023	15.21	128.00	143.21	0.187%	0.27
160	Selection Item 160	$ (65.45)	5/31/2023	6/29/2023	15.21	29.00	44.21	0.002%	0.00
161	Selection Item 161	$ (2,295.00)	5/31/2023	6/8/2023	15.21	8.00	23.21	0.079%	0.02
162	Selection Item 162	$ (41.15)	6/1/2023	6/29/2023	15.21	28.00	43.21	0.001%	0.00
163	Selection Item 163	$ (57,500.00)	6/7/2023	7/6/2023	15.21	29.00	44.21	1.969%	0.87
164	Selection Item 164	$ (28.98)	6/7/2023	7/6/2023	15.21	29.00	44.21	0.001%	0.00
165	Selection Item 165	$ (21,600.00)	5/31/2023	6/29/2023	15.21	29.00	44.21	0.740%	0.33
166	Selection Item 166	$ (25,200.00)	6/2/2023	6/29/2023	15.21	27.00	42.21	0.863%	0.36
167	Selection Item 167	$ (315.70)	2/8/2023	6/22/2023	15.21	134.00	149.21	0.011%	0.02
168	Selection Item 168	$ (21.99)	6/9/2023	7/6/2023	15.21	27.00	42.21	0.001%	0.00
169	Selection Item 169	$ (307.50)	4/5/2023	6/15/2023	15.21	71.00	86.21	0.011%	0.01
170	Selection Item 170	$ (605.82)	6/1/2023	6/15/2023	15.21	14.00	29.21	0.021%	0.01
171	Selection Item 171	$ (113.49)	6/1/2023	6/15/2023	15.21	14.00	29.21	0.004%	0.00
172	Selection Item 172	$ (6,747.29)	6/6/2023	6/15/2023	15.21	9.00	24.21	0.231%	0.06
173	Selection Item 173	$ (6,373.75)	6/7/2023	6/15/2023	15.21	8.00	23.21	0.218%	0.05
174	Selection Item 174	$ (2,186.31)	6/7/2023	6/15/2023	15.21	8.00	23.21	0.075%	0.02
175	Selection Item 175	$ (1,899.53)	6/5/2023	6/15/2023	15.21	10.00	25.21	0.065%	0.02
176	Selection Item 176	$ (413.00)	6/5/2023	6/29/2023	15.21	24.00	39.21	0.014%	0.01
177	Selection Item 177	$ (437.50)	6/5/2023	6/29/2023	15.21	24.00	39.21	0.015%	0.01
178	Selection Item 178	$ (375.00)	6/5/2023	6/29/2023	15.21	24.00	39.21	0.013%	0.01
179	Selection Item 179	$ (437.50)	6/5/2023	6/29/2023	15.21	24.00	39.21	0.015%	0.01
180	Selection Item 180	$ (440.00)	6/5/2023	6/29/2023	15.21	24.00	39.21	0.015%	0.01
181	Selection Item 181	$ (817.88)	6/6/2023	7/6/2023	15.21	30.00	45.21	0.028%	0.01
182	Selection Item 182	$ (437.50)	6/6/2023	7/6/2023	15.21	30.00	45.21	0.015%	0.01
183	Selection Item 183	$ (2,200.00)	6/30/2023	7/27/2023	15.21	27.00	42.21	0.075%	0.03
184	Selection Item 184	$ (64.99)	7/10/2023	8/3/2023	15.21	24.00	39.21	0.002%	0.00
185	Selection Item 185	$ (16,800.00)	6/30/2023	7/27/2023	15.21	27.00	42.21	0.575%	0.24
186	Selection Item 186	$ (43.55)	6/16/2023	7/13/2023	15.21	27.00	42.21	0.001%	0.00
187	Selection Item 187	$ (2,200.00)	6/1/2023	7/27/2023	15.21	56.00	71.21	0.075%	0.05

Line No.	(A) Name	(B) Inv Amount	(C) Invoice Date	(D) Paid Date	(E) Service Lead Time	(F) Payment Lead Time	(G) Total Lead Time	(H) Weighting Factor	(I) Weighed Lead Time
188	Selection Item 188	$ (281.00)	7/12/2023	8/10/2023	15.21	29.00	44.21	0.010%	0.00
189	Selection Item 189	$ (69.19)	6/28/2023	7/13/2023	15.21	15.00	30.21	0.002%	0.00
190	Selection Item 190	$ (554.83)	7/2/2023	7/13/2023	15.21	11.00	26.21	0.019%	0.00
191	Selection Item 191	$ (9,994.00)	7/7/2023	7/20/2023	15.21	13.00	28.21	0.342%	0.10
192	Selection Item 192	$ (182,451.50)	6/30/2023	7/20/2023	15.21	20.00	35.21	6.249%	2.20
193	Selection Item 193	$ (495,083.00)	6/30/2023	7/20/2023	15.21	20.00	35.21	16.956%	5.97
194	Selection Item 194	$ (12.00)	6/16/2023	7/20/2023	15.21	34.00	49.21	0.000%	0.00
195	Selection Item 195	$ (1,756.00)	6/15/2023	7/20/2023	15.21	35.00	50.21	0.060%	0.03
196	Selection Item 196	$ (403.00)	6/15/2023	7/20/2023	15.21	35.00	50.21	0.014%	0.01
197	Selection Item 197	$ (19,316.00)	6/15/2023	7/20/2023	15.21	35.00	50.21	0.662%	0.33
198	Selection Item 198	$ (5,000.00)	4/14/2023	7/13/2023	15.21	90.00	105.21	0.171%	0.18
199	Selection Item 199	$ (24,222.00)	6/22/2023	7/20/2023	15.21	28.00	43.21	0.830%	0.36
200		$ (2,919,734.05)							

Calculation of Taxes Other than Income Lead Time

Weighted Expense Lead Time: **51.86** **days**

Line No.	(A) Type of Tax	(B) Begin of Period	(C) MidPoint Method	(D) End of Period	(E) Payment Date	(F) Amount	(G) Service Lead Time	(H) Payment Lead Time	(I) Total Lead time	(J) Weighting Factor	(K) Weighted Lead Time
1	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	9/6/2022	$ 394.54	182.00	(177.00)	5.00	0.00%	0.00
2	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	11/2/2022	$ 4,754.93	182.00	(120.00)	62.00	0.03%	0.02
3	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	12/15/2022	$ 2,800.00	182.00	(77.00)	105.00	0.02%	0.02
4	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	12/22/2022	$ 13,091.13	182.00	(70.00)	112.00	0.08%	0.09
5	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	2/8/2023	$ 1,375.03	182.00	(22.00)	160.00	0.01%	0.01
6	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	2/20/2023	$ 331.18	182.00	(10.00)	172.00	0.00%	0.00
7	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	3/7/2023	$ 5,709.97	182.00	5.00	187.00	0.03%	0.06
8	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	3/22/2023	$ 215.55	182.00	20.00	202.00	0.00%	0.00
9	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	4/14/2023	$ 9,284.71	182.00	43.00	225.00	0.05%	0.12
10	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	5/4/2023	$ 4,196.98	182.00	63.00	245.00	0.02%	0.06
11	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	5/10/2023	$ 14,260.66	182.00	69.00	251.00	0.08%	0.21
12	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	5/11/2023	$ 1,312.75	182.00	70.00	252.00	0.01%	0.02
13	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	6/13/2023	$ 2,036.27	182.00	103.00	285.00	0.01%	0.03
14	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	8/15/2023	$ 1,100.60	182.00	166.00	348.00	0.01%	0.02
15	PA and Local Sales Tax	9/1/2022	9/15/2022	9/30/2022	9/20/2022	$ 115,285.00	14.50	4.50	19.00	0.68%	0.13
16	PA and Local Sales Tax	9/1/2022	9/15/2022	9/30/2022	10/11/2022	$ 240,931.80	14.50	25.50	40.00	1.42%	0.57
17	PA and Local Sales Tax	10/1/2022	10/16/2022	10/31/2022	10/11/2022	$ 136,188.00	15.00	(5.00)	10.00	0.80%	0.08
18	PA and Local Sales Tax	10/1/2022	10/16/2022	10/31/2022	11/14/2022	$ 470,326.79	15.00	29.00	44.00	2.77%	1.22
19	PA and Local Sales Tax	11/1/2022	11/15/2022	11/30/2022	11/14/2022	$ 259,849.00	14.50	(1.50)	13.00	1.53%	0.20
20	PA and Local Sales Tax	11/1/2022	11/15/2022	11/30/2022	12/14/2022	$ 594,770.75	14.50	28.50	43.00	3.51%	1.51
21	PA and Local Sales Tax	12/1/2022	12/16/2022	12/31/2022	12/14/2022	$ 638,197.00	15.00	(2.00)	13.00	3.76%	0.49
22	PA and Local Sales Tax	12/1/2022	12/16/2022	12/31/2022	1/18/2023	$ 1,230,071.01	15.00	33.00	48.00	7.25%	3.48
23	PA and Local Sales Tax	1/1/2023	1/16/2023	1/31/2023	1/18/2023	$ 742,864.00	15.00	2.00	17.00	4.38%	0.74
24	PA and Local Sales Tax	1/1/2023	1/16/2023	1/31/2023	2/15/2023	$ 1,396,665.16	15.00	30.00	45.00	8.24%	3.71
25	PA and Local Sales Tax	2/1/2023	2/14/2023	2/28/2023	2/15/2023	$ 929,816.00	13.50	0.50	14.00	5.48%	0.77
26	PA and Local Sales Tax	2/1/2023	2/14/2023	2/28/2023	3/17/2023	$ 928,266.47	13.50	30.50	44.00	5.47%	2.41
27	PA and Local Sales Tax	3/1/2023	3/16/2023	3/31/2023	3/17/2023	$ 707,770.00	15.00	1.00	16.00	4.17%	0.67
28	PA and Local Sales Tax	3/1/2023	3/16/2023	3/31/2023	4/18/2023	$ 967,693.45	15.00	33.00	48.00	5.71%	2.74
29	PA and Local Sales Tax	4/1/2023	4/15/2023	4/30/2023	4/18/2023	$ 477,347.00	14.50	2.50	17.00	2.82%	0.48
30	PA and Local Sales Tax	4/1/2023	4/15/2023	4/30/2023	5/16/2023	$ 485,800.40	14.50	30.50	45.00	2.86%	1.29
31	PA and Local Sales Tax	5/1/2023	5/16/2023	5/31/2023	5/16/2023	$ 294,485.00	15.00	-	15.00	1.74%	0.26
32	PA and Local Sales Tax	5/1/2023	5/16/2023	5/31/2023	6/13/2023	$ 173,281.55	15.00	28.00	43.00	1.02%	0.44
33	PA and Local Sales Tax	6/1/2023	6/15/2023	6/30/2023	6/13/2023	$ 162,242.00	14.50	(2.50)	12.00	0.96%	0.11
34	PA and Local Sales Tax	6/1/2023	6/15/2023	6/30/2023	7/18/2023	$ 139,950.45	14.50	32.50	47.00	0.83%	0.39
35	PA and Local Sales Tax	7/1/2023	7/16/2023	7/31/2023	7/18/2023	$ 143,787.00	15.00	2.00	17.00	0.85%	0.14
36	PA and Local Sales Tax	7/1/2023	7/16/2023	7/31/2023	8/15/2023	$ 90,731.80	15.00	30.00	45.00	0.54%	0.24
37	PA and Local Sales Tax	8/1/2023	8/16/2023	8/31/2023	8/15/2023	$ 182,574.00	15.00	(1.00)	14.00	1.08%	0.15
38	PA and Local Sales Tax	8/1/2023	8/16/2023	8/31/2023	9/12/2023	$ 39,237.82	15.00	27.00	42.00	0.23%	0.10
39	PA and Local Use Tax	9/1/2022	9/15/2022	9/30/2022	9/20/2022	$ 74,050.00	14.50	4.50	19.00	0.44%	0.08
40	PA and Local Use Tax	9/1/2022	9/15/2022	9/30/2022	10/11/2022	$ 16,957.11	14.50	25.50	40.00	0.10%	0.04
41	PA and Local Use Tax	10/1/2022	10/16/2022	10/31/2022	10/11/2022	$ 85,976.00	15.00	(5.00)	10.00	0.51%	0.05

Line No.	(A) Type of Tax	(B) Begin of Period	(C) MidPoint Method	(D) End of Period	(E) Payment Date	(F) Amount	(G) Service Lead Time	(H) Payment Lead Time	(I) Total Lead time	(J) Weighting Factor	(K) Weighted Lead Time
42	PA and Local Use Tax	10/1/2022	10/16/2022	10/31/2022	11/14/2022	$ 75,844.03	15.00	29.00	44.00	0.45%	0.20
43	PA and Local Use Tax	11/1/2022	11/15/2022	11/30/2022	11/14/2022	$ 89,203.00	14.50	(1.50)	13.00	0.53%	0.07
44	PA and Local Use Tax	11/1/2022	11/15/2022	11/30/2022	12/14/2022	$ 79,459.38	14.50	28.50	43.00	0.47%	0.20
45	PA and Local Use Tax	12/1/2022	12/16/2022	12/31/2022	12/14/2022	$ 206,325.00	15.00	(2.00)	13.00	1.22%	0.16
46	PA and Local Use Tax	12/1/2022	12/16/2022	12/31/2022	1/18/2023	$ 61,865.79	15.00	33.00	48.00	0.36%	0.18
47	PA and Local Use Tax	1/1/2023	1/16/2023	1/31/2023	1/18/2023	$ 109,045.00	15.00	2.00	17.00	0.64%	0.11
48	PA and Local Use Tax	1/1/2023	1/16/2023	1/31/2023	2/15/2023	$ (10,437.96)	15.00	30.00	45.00	-0.06%	(0.03)
49	PA and Local Use Tax	2/1/2023	2/14/2023	2/28/2023	2/15/2023	$ 76,896.00	13.50	0.50	14.00	0.45%	0.06
50	PA and Local Use Tax	2/1/2023	2/14/2023	2/28/2023	3/17/2023	$ 22,161.16	13.50	30.50	44.00	0.13%	0.06
51	PA and Local Use Tax	3/1/2023	3/16/2023	3/31/2023	3/17/2023	$ 90,245.00	15.00	1.00	16.00	0.53%	0.09
52	PA and Local Use Tax	3/1/2023	3/16/2023	3/31/2023	4/18/2023	$ 68,863.40	15.00	33.00	48.00	0.41%	0.19
53	PA and Local Use Tax	4/1/2023	4/15/2023	4/30/2023	4/18/2023	$ 151,525.00	14.50	2.50	17.00	0.89%	0.15
54	PA and Local Use Tax	4/1/2023	4/15/2023	4/30/2023	5/16/2023	$ (48,265.37)	14.50	30.50	45.00	-0.28%	(0.13)
55	PA and Local Use Tax	5/1/2023	5/16/2023	5/31/2023	5/16/2023	$ 33,184.00	15.00	-	15.00	0.20%	0.03
56	PA and Local Use Tax	5/1/2023	5/16/2023	5/31/2023	6/13/2023	$ 160,245.79	15.00	28.00	43.00	0.94%	0.41
57	PA and Local Use Tax	6/1/2023	6/15/2023	6/30/2023	6/13/2023	$ 39,203.00	14.50	(2.50)	12.00	0.23%	0.03
58	PA and Local Use Tax	6/1/2023	6/15/2023	6/30/2023	7/18/2023	$ 116,462.88	14.50	32.50	47.00	0.69%	0.32
59	PA and Local Use Tax	7/1/2023	7/16/2023	7/31/2023	7/18/2023	$ 30,445.00	15.00	2.00	17.00	0.18%	0.03
60	PA and Local Use Tax	7/1/2023	7/16/2023	7/31/2023	8/15/2023	$ 125,235.99	15.00	30.00	45.00	0.74%	0.33
61	PA and Local Use Tax	8/1/2023	8/16/2023	8/31/2023	8/15/2023	$ 63,528.00	15.00	(1.00)	14.00	0.37%	0.05
62	PA and Local Use Tax	8/1/2023	8/16/2023	8/31/2023	9/12/2023	$ 148,050.40	15.00	27.00	42.00	0.87%	0.37
63	PA Excise Alternative Fuel Tax	9/1/2022	9/15/2022	9/30/2022	10/11/2022	$ 1,231.07	14.50	25.50	40.00	0.01%	0.00
64	PA Excise Alternative Fuel Tax	10/1/2022	10/16/2022	10/31/2022	11/14/2022	$ 1,201.83	15.00	29.00	44.00	0.01%	0.00
65	PA Excise Alternative Fuel Tax	11/1/2022	11/15/2022	11/30/2022	12/14/2022	$ 1,097.41	14.50	28.50	43.00	0.01%	0.00
66	PA Excise Alternative Fuel Tax	12/1/2022	12/16/2022	12/31/2022	1/18/2023	$ 1,188.62	15.00	33.00	48.00	0.01%	0.00
67	PA Excise Alternative Fuel Tax	1/1/2023	1/16/2023	1/31/2023	2/17/2023	$ 1,154.37	15.00	32.00	47.00	0.01%	0.00
68	PA Excise Alternative Fuel Tax	2/1/2023	2/14/2023	2/28/2023	3/17/2023	$ 1,057.61	13.50	30.50	44.00	0.01%	0.00
69	PA Excise Alternative Fuel Tax	3/1/2023	3/16/2023	3/31/2023	4/18/2023	$ 1,408.12	15.00	33.00	48.00	0.01%	0.00
70	PA Excise Alternative Fuel Tax	4/1/2023	4/15/2023	4/30/2023	5/16/2023	$ 844.02	14.50	30.50	45.00	0.00%	0.00
71	PA Excise Alternative Fuel Tax	5/1/2023	5/16/2023	5/31/2023	6/13/2023	$ 766.74	15.00	28.00	43.00	0.00%	0.00
72	PA Excise Alternative Fuel Tax	6/1/2023	6/15/2023	6/30/2023	7/18/2023	$ 985.19	14.50	32.50	47.00	0.01%	0.00
73	PA Excise Alternative Fuel Tax	7/1/2023	7/16/2023	7/31/2023	8/15/2023	$ 642.59	15.00	30.00	45.00	0.00%	0.00
74	PA Excise Alternative Fuel Tax	8/1/2023	8/16/2023	8/31/2023	9/12/2023	$ 907.30	15.00	27.00	42.00	0.01%	0.00
75	U.S DOT Pipeline Safety User Fee	1/1/2023	7/2/2023	12/31/2023	5/11/2023	$ 60,006.60	182.00	(52.00)	130.00	0.35%	0.46
76	U.S DOT Pipeline Safety User Fee	1/1/2023	7/2/2023	12/31/2023	7/12/2023	$ 3,934.65	182.00	10.00	192.00	0.02%	0.04
77	U.S DOT Underground Natural Gas Storage Fee	1/1/2023	7/2/2023	12/31/2023	7/6/2023	$ 59,231.00	182.00	4.00	186.00	0.35%	0.65
78	Federal Excise - Alternative Fuels Tax	7/1/2022	8/15/2022	9/30/2022	10/10/2022	$ (1,864.55)	45.50	55.50	101.00	-0.01%	(0.01)
79	Federal Excise - Alternative Fuels Tax	10/1/2022	11/15/2022	12/31/2022	1/24/2023	$ (2,041.73)	45.50	69.50	115.00	-0.01%	(0.01)
80	Federal Excise - Alternative Fuels Tax	1/1/2023	2/14/2023	3/31/2023	4/18/2023	$ (1,998.07)	44.50	62.50	107.00	-0.01%	(0.01)
81	Federal Excise - Alternative Fuels Tax	4/1/2023	5/16/2023	6/30/2023	7/12/2023	$ (1,432.92)	45.00	57.00	102.00	-0.01%	(0.01)
82	Federal Heavy Highway Tax	7/1/2022	12/30/2022	6/30/2023	7/5/2023	$ 15,039.42	182.00	187.00	369.00	0.09%	0.33
83	PURTA	1/1/2023	7/2/2023	12/31/2023	5/1/2023	$ 866,025.00	182.00	(62.00)	120.00	5.11%	6.13
84	PURTA	1/1/2023	7/2/2023	12/31/2023	5/1/2023	$ 93,000.00	182.00	(62.00)	120.00	0.55%	0.66
85	PA PUC Assessment	7/1/2022	12/30/2022	6/30/2023	10/10/2022	$ 2,235,182.50	182.00	(81.00)	101.00	13.18%	13.31

Line No.		(A) Type of Tax	(B) Begin of Period	(C) MidPoint Method	(D) End of Period	(E) Payment Date		(F) Amount	(G) Service Lead Time	(H) Payment Lead Time	(I) Total Lead time	(J) Weighting Factor	(K) Weighted Lead Time
86	WV Gas Stored		1/1/2022	7/2/2022	12/31/2022	2/9/2023	$	72,309.00	182.00	222.00	404.00	0.43%	1.72
87	WV Gas Stored		1/1/2022	7/2/2022	12/31/2022	8/17/2023	$	72,309.00	182.00	411.00	593.00	0.43%	2.53
88							$	16,957,248.12					

Calculation of Income Tax Lead Time - State & Federal

Line No.	Period Covered Beginning	Period Covered End	Mid-Point of Period	Date Paid	(Lead) / Lag Days (D) - (C)	Payment Schedule	Dollar Weighted Days
	(A)	(B)	(C)	(D)	(F)	(E)	(G)
	Federal Income Tax						
1	1/1/2022	12/31/2022	7/2/2022	9/15/2022	75.00	25.0%	18.75
2	1/1/2022	12/31/2022	7/2/2022	12/15/2022	166.00	25.0%	41.50
3	1/1/2023	12/31/2023	7/2/2023	4/17/2023	(76.00)	25.0%	(19.00)
4	1/1/2023	12/31/2023	7/2/2023	6/15/2023	(17.00)	25.0%	(4.25)
						100.0%	**37.00**
	State Income Tax						
5	1/1/2022	12/31/2022	7/2/2022	9/15/2022	75.00	22.5%	16.88
6	1/1/2022	12/31/2022	7/2/2022	12/15/2022	166.00	22.5%	37.35
7	1/1/2022	12/31/2022	7/2/2022	4/17/2023	289.00	10.0%	28.90
8	1/1/2023	12/31/2023	7/2/2023	3/15/2023	(109.00)	22.5%	(24.53)
9	1/1/2023	12/31/2023	7/2/2023	6/15/2023	(17.00)	22.5%	(3.83)
						100.0%	**54.78**

Calculation of Interest Expense Lead Time - Both Short Term and Long Term

Line No.	(A) Date of Issuance	(B) Date of Maturity	(C) Payment Date	(D) Start of Period	(E) End of Period	(F) Mid Point of Half	(G) Payment Lead Time	(H) Principal	(I) Interest	(J) Payment	(K) Nominal Net Lead	(L) Weighting Factor	(M) Weighted Lead
1	12/19/2013	12/19/2023	6/19/2023	12/19/2022	6/19/2023	3/20/2023	90.75	$ 144,746,400	4.10%	$ 2,967,301	90.75	11.59%	10.52
2	12/19/2013	12/19/2025	6/19/2023	12/19/2022	6/19/2023	3/20/2023	90.75	$ 110,007,200	4.25%	$ 2,337,653	90.75	8.81%	8.00
3	12/18/2017	12/18/2027	6/18/2023	12/19/2022	6/19/2023	3/20/2023	89.75	$ 178,911,000	3.38%	$ 3,023,596	89.75	14.33%	12.86
4	12/18/2017	12/18/2032	6/18/2023	12/19/2022	6/19/2023	3/20/2023	89.75	$ 178,911,000	3.63%	$ 3,247,235	89.75	14.33%	12.86
5	10/31/2021	4/15/2030	9/30/2023	8/1/2023	8/31/2023	8/16/2023	45.00	$ 183,149,854	2.70%	$ 2,476,186	45.00	14.67%	6.60
6	10/31/2021	4/15/2050	9/30/2023	8/1/2023	8/31/2023	8/16/2023	45.00	$ 219,779,827	3.35%	$ 3,682,411	45.00	17.60%	7.92
7	12/31/2021	5/31/2031	9/30/2023	8/1/2023	8/31/2023	8/16/2023	45.00	$ 65,364,587	2.40%	$ 784,375	45.00	5.24%	2.36
8	12/31/2021	5/31/2052	9/30/2023	8/1/2023	8/31/2023	8/16/2023	45.00	$ 81,705,732	5.30%	$ 2,165,202	45.00	6.54%	2.94
9	10/31/2021	4/15/2030	9/30/2023	8/1/2023	8/31/2023	8/16/2023	45.00	$ 38,636,364	2.70%	$ 522,364	45.00	3.09%	1.39
10	10/31/2021	4/15/2050	9/30/2023	8/1/2023	8/31/2023	8/16/2023	45.00	$ 46,363,636	3.34%	$ 773,137	45.00	3.71%	1.67
11	10/31/2017	10/31/2023	7/31/2023	10/31/2022	7/31/2023	1/30/2023	181.75	$ 909,090	5.99%	$ 27,227	181.75	0.07%	0.13
12	**Historical Test Year - Long Term Debt Outstanding**							**$ 1,248,484,690**		**$ 22,006,686**			**LT DEBT**
									1.76%		**Weighted Expense Lead Time:**		**67.26**

ST Debt from previous month; est invoice on 25th of the month, int "paid" by month end

(A) ST Debt	(B) End of Period	(C) Posting Date	(D) Paid Date	(E) Amount	(F) Service Lead Time	(G) Payment Lead time	(H) Total Lead Time	(I) Weighting Factor	(J) Weighted Lead Time

NOT APPLICABLE

ST DEBT
Weighted Expense Lead Time: -

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission,	:	
	:	
Complainant	:	
	:	
v.	:	Docket No. R-2023-3044549
	:	
Peoples Natural Gas Company LLC,	:	
	:	
Respondent	:	

DIRECT TESTIMONY OF PAUL R. MOUL, MANAGING CONSULTANT P. MOUL & ASSOCIATES ON BEHALF OF PEOPLES NATURAL GAS COMPANY LLC

Concerning
Rate of Return

DATE SERVED: Peoples Statement No. 13

Peoples Natural Gas Company LLC
Direct Testimony of Paul R. Moul
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Appendix A - Educational Background, Business Experience and Qualifications

GLOSSARY OF ACRONYMS AND DEFINED TERMS	
ACRONYM	**DEFINED TERM**
AFUDC	Allowance for Funds Used During Construction
β	Beta
b	Represents the retention rate that consists of the fraction of earnings that are not paid out as dividends
b x r	Represents internal growth
CAPM	Capital Asset Pricing Model
CCR	Corporate Credit Rating
CE	Comparable Earnings
DCF	Discounted Cash Flow
FERC	Federal Energy Regulatory Commission
FOMC	Federal Open Market Committee
FPFTY	Fully Projected Future Test Year
g	Growth rate
IGF	Internally Generated Funds
LDC	local distribution companies
Lev	Leverage modification
LT	Long Term
M&M	Modigliani & Miller
MLP	Master Limited Partnerships
OCI	Other Comprehensive Income
PPUC	Pennsylvania Public Utility Commission
PUC	Public Utility Commission
r	represents the expected rate of return on common equity
Rf	Risk-free rate of return
Rm	Return on the market
RP	Risk Premium
s	Represents the new common shares expected to be issued by a firm
s x v	Represents external growth

GLOSSARY OF ACRONYMS AND DEFINED TERMS	
ACRONYM	**DEFINED TERM**
S&P	Standard & Poor's
v	Represents the value that accrues to existing shareholders from selling stock at a price different from book value
WNA	Weather Normalization Adjustment Mechanism
YTM	Yield to Maturity

DIRECT TESTIMONY OF PAUL R. MOUL

INTRODUCTION AND SUMMARY OF RECOMMENDATIONS

Q. Please state your name, occupation and business address.

A. My name is Paul Ronald Moul. My business address is 251 Hopkins Road, Haddonfield, New Jersey 08033-3062. I am Managing Consultant at the firm P. Moul & Associates, an independent financial and regulatory consulting firm. My educational background, business experience and qualifications are provided in Appendix A, which follows my direct testimony.

Q. What is the purpose of your direct testimony?

A. My testimony presents evidence, analysis and a recommendation concerning the appropriate cost of equity and overall rate of return that the Pennsylvania Public Utility Commission ("PPUC" or the "Commission") should recognize in determining the revenues that Peoples Natural Gas Company LLC ("Peoples" or the "Company") should realize as a result of this proceeding. My analysis and recommendation are supported by the detailed financial data contained in Exhibit PRM-1, which is a multi-page document divided into fourteen (14) schedules.

Q. Based upon your analysis, what is your conclusion concerning the appropriate rate of return for the Company in this case?

A. My conclusion is that the Company's cost of common equity is 11.75%. The 11.75% cost of equity includes recognition of the exemplary performance of the Company's management, as a provider of high quality customer service and as a leader in the replacement of cast iron mains and the rehabilitation of its infrastructure. That is to say, the cost of equity that I am proposing is comprised

of an 11.50% market-determined rate plus 0.25% for management performance. My cost of equity determination should be viewed in the context of increased capital costs revealed by the highest interest rates that have been seen in the past fifteen (15) years. Moreover, supportive regulation is essential, especially at a time of increased infrastructure improvements now underway by the Company. As shown on page 1 of Schedule 1, I have presented the weighted average cost of capital for the Company, which is calculated with the September 30, 2025 Fully Projected Future Test Year ("FPFTY"). The Company's proposed rate of return is shown below:

Type of Capital	Ratios	Cost Rate	Weighted Cost Rate
Debt	45.33%	4.37%	1.98%
Common Equity	54.67%	11.75%	6.42%
Total	100.00%		8.40%

The resulting overall cost of capital, which is the product of weighting the individual capital costs by the proportion of each respective type of capital, should establish a compensatory level of return for the use of capital and, if achieved, will provide the Company with the ability to attract capital on reasonable terms.

Q. What background information have you considered in reaching a conclusion concerning the Company's cost of capital?

A. The Company provides natural gas service to over 700,000 customers in Pittsburgh and surrounding counties in western Pennsylvania. The Company

consists of its legacy operations and those of T. W. Phillips Gas and Oil Company and Equitable Gas Company. For the Historic Test Year ("HTY"), gas throughput (both sales and transportation) for Peoples was comprised of approximately 45% to residential, 27% to commercial, 28% to industrial customers. The Company's top ten customers represent approximately 15 million MCF, or approximately 13% of total throughput, but less than 1% of revenue. Further, the Company provides discounted service to commercial and industrial accounts that have access to competitive sources of supply. The Company obtains its natural gas supply from both local Pennsylvania producers and purchases that are delivered by interstate pipelines. The Company supplements flowing natural gas with gas withdrawn from underground storage. Peoples is a wholly-owned subsidiary of PNG Companies, LLC, which is ultimately owned by Essential Utilities, Inc., a New York Stock Exchange listed company. Essential also owns water and wastewater utilities and is categorized as a water utility holding company by The Value Line Investment Survey.

Q. How have you determined the cost of common equity in this case?

A. The cost of common equity is established using capital market and financial data relied upon by investors to assess the relative risk, and hence the cost of equity, for a gas distribution utility, such as the Company. In this regard, I have considered four (4) well-recognized models. These methods include: the Discounted Cash Flow ("DCF") model, the Risk Premium ("RP") analysis, the Capital Asset Pricing Model ("CAPM"), and the Comparable Earnings ("CE") approach. The results of a variety of approaches indicate that the Company's rate

of return on common equity is 11.75%, including recognition of exemplary management performance.

Q. In your opinion, what factors should the Commission consider when determining the Company's cost of capital in this proceeding?

A. The Commission's rate of return allowance must be set to cover the Company's interest and dividend payments, provide a reasonable level of earnings retention, produce an adequate level of internally generated funds to meet capital requirements, be commensurate with the risk to which the Company's capital is exposed, assure confidence in the financial integrity of the Company, support reasonable credit quality, and allow the Company to raise capital on reasonable terms. The return that I propose fulfills these established standards of a fair rate of return set forth by the landmark Bluefield and Hope cases.[1] That is to say, my proposed rate of return is commensurate with returns available on investments having corresponding risks.

Q. How have you measured the cost of equity in this case?

A. The models that I used to measure the cost of common equity for the Company were applied with market and financial data developed from a group of eight (8) gas companies. The companies are identified on page 2 of Schedule 3. I will refer to these companies as the "Gas Group" throughout my testimony. In the Quarterly Earnings Report approved by the Commission on July 13, 2023, the Gas Distribution Company group included all eight companies that are part of my Gas Group.

[1] Bluefield Water Works & Improvement Co. v. P.S.C. of West Virginia, 262 U.S. 679 (1923) and F.P.C. v. Hope Natural Gas Co., 320 U.S. 591 (1944).

Q. Please explain the selection process used to assemble the Gas Group?

A. I began with all of the gas utilities contained in The Value Line Investment Survey, which consists of nine companies. Value Line is an investment advisory service that is a widely used source in public utility rate cases. Through the application of my screening process, I eliminated one company. UGI Corp. was removed due to its diversified businesses consisting of six reportable segments, including propane, two international LPG segments, natural gas utility, energy services, and electric generation. The elimination was attributed to operational differences and diversification. The remaining eight companies are identified in page 2 of Schedule 3.

Q. How have you performed your cost of equity analysis with the market data for the Gas Group?

A. I have applied the models/methods for estimating the cost of equity using the average data for the Gas Group. I have not measured separately the cost of equity for the individual companies within the Gas Group, because the determination of the cost of equity for an individual company can be problematic. The use of group average data will reduce the effect of potentially anomalous results for an individual company if a company-by-company approach were utilized.

Q. What noteworthy factors have influenced your cost of equity analysis?

A. My cost of equity analysis reflects the impact of high levels of inflation, which have not been seen for four decades. Indeed, the rate of inflation spiked upward to 9.1% in June 2022, and as of October 2023, it was 3.2%. High levels of inflation, i.e., those above the Federal Open Market Committee ("FOMC") policy

goal of 2%, have an impact on the level of economic activity, the cost of capital – particularly the interest cost of debt, and the need for more cautious financial practices, such as a prudent level of borrowing. While short-term interest rates were at historically low levels during much of the Pandemic, longer term interest rates began to rise in February 2021 and have continued at high levels throughout 2022 and 2023. Indeed, accommodative policy by the FOMC has ended and higher interest rates have occurred and will prevail in the future. The FOMC uses its open market operations to control the Fed Funds rate as a means of implementing its dual mandate of healthy employment and price stability. This was shown by the Fed Funds rate, which has increased 525 basis points since the beginning of 2022 through eleven (11) increases in 20 months. The FOMC paused its rate increase cycle and held rates steady at its meeting on June 14, 2023. Thereafter another rate increase occurred on July 26, 2023. The FOMC has paused again at its meeting on September 20 and November 1. The chairman of the FOMC indicated that additional rate increases could be forthcoming, but at a slowing pace, until its policy goal is achieved according to comments at his press conference on November 1, 2023.

Q. Please summarize your cost of equity analysis.

A. My cost of equity determination was derived from the results of the methods/models identified above. In general, the use of more than one method provides a superior foundation to arrive at the cost of equity. At any point in time, a single method can provide an incomplete measure of the cost of equity. The specific application of these methods/models will be described later in my

testimony. The following table provides a summary of the indicated costs of equity using each of these approaches.

	Gas Group
DCF	11.88%
Risk Premium	11.50%
CAPM	15.42%
Comparable Earnings	12.70%

The range of equity cost rates is 11.50% to 15.42%. By focusing on the lower part of the range, the Company's cost of equity is at least 11.50%. As I will discuss later, Peoples has more risk than the Gas Group and Subgroup attributed to its smaller size and other factors. To the 11.50% minimum cost of equity, twenty-five (25) basis points has been added in recognition of the exemplary performance of the Company's management. The exemplary performance of the Company's management is described in the direct testimony of Mr. Michael Huwar. Mr. Huwar describes the many initiatives that the Company has undertaken, which have produced high quality service at reasonable prices. The combined 11.75% (11.50% + 0.25%) rate of return on common equity is reasonable and cost based because it is within the range of returns (i.e., 11.50% to 15.42%) and recognizes the Company's greater risk as compared to the Barometer group. My recommended rate of return on common equity of 11.75% is likewise conservative because it makes no provision for the prospect that the rate of return may not be achieved due to unforeseen events, such as unexpected spikes in the

cost of purchased products and other expenses. To obtain new capital and retain existing capital, the rate of return on common equity must be high enough to satisfy investors' requirements. From these measures, I recommend a cost of equity of 11.75%, which includes recognition of the exemplary performance of the Company's management.

NATURAL GAS RISK FACTORS

Q. What factors currently affect the business risk of natural gas utilities?

A. Gas utilities face risks arising from competition, economic regulation, the business cycle, and customer usage patterns. Their business profile is influenced by market-oriented pricing for the commodity distributed to customers and open access for the transportation of natural gas for customers.

Natural gas utilities have focused increased attention on safety and reliability issues, energy conservation and efficiency, and the reduction of greenhouse gas emissions. In order to address these issues and to comply with new and pending pipeline safety regulations, natural gas companies are now allocating more of their resources to addressing aging infrastructure.

Finally, the existence of local gas production in the Company's service territory and potential access to interstate pipelines provide a bypass threat to the Company, especially with production from the Marcellus Shale formation. Overall, the Company's risk of competition is considerably higher than that faced by many LDCs, including the members of the Gas Group that I used to measure the Company's cost of equity.

Q. Are there other features of the Company's business that should be considered when assessing the Company's risk?

A. Yes. Most of the Company's residential and commercial customers use natural gas for space heating purposes. This indicates that a large proportion of the Company's residential and commercial customers present a low load factor profile and their energy demands are significantly influenced by temperature conditions, over which the Company has absolutely no control. I should note that for the Gas Group, rate stabilization mechanisms (e.g., weather normalization adjustments, decoupling, infrastructure trackers/riders) provide a common characteristic of most of these companies. In the LDC industry, rate stabilization mechanisms are frequently expected by investors for gas distribution utilities.

Q. Is Peoples proposing to adjust its rates to deal with this issue?

A. Yes. The Company is proposing an increase in its monthly customer charge to more closely align it with its fixed costs. If the Commission does not adopt the Company's proposal, then the Company will continue to have higher risk that would mandate a higher required return in the future. Failing to approve the Company's proposal would miss the opportunity to mitigate one of the high-risk traits of Peoples.

Q. Is the Company also proposing a revenue decoupling feature in its tariff in this case?

A. Yes. Most of the Company's residential customers use natural gas for space heating purposes. Indeed, 81% of residential throughput is to customers with natural gas space heating. This indicates that the energy requirements of a large

proportion of the Company's residential customers are significantly influenced by temperature conditions over which the Company has absolutely no control. If weather patterns in the future do not align with rate case test period data, a weather normalization adjustment ("WNA") feature enables a company to adjust its revenue collections to account for those variations. My cost of equity analysis takes into account the Company's proposed WNA mechanism proposal.

Q. Please explain.

A. My analysis reflects the impact of the WNA on investor expectations through the use of market-determined models. All of the companies in my Gas Group have some form of WNA mechanism that is intended to accomplish the same result as the Company's proposal in this case. As a group, the market prices of these companies' common equity reflect the expectations of investors that the companies' revenues are stabilized to some extent by a WNA. Therefore, my analysis reflects the impacts of decoupling on investor expectations through the use of market-determined models.

As such, the market prices of these companies' common stocks reflect the expectations of investors related to a regulatory mechanism that adjusts revenues for conservation, abnormal weather, and other items. The trend in the industry is to stabilize the recovery of fixed costs, which are unaffected by usage. Indeed, there has been a proliferation of these mechanisms in the LDC business. Because the Gas Group that I use to measure the cost of equity has the risk attributes related to the revenue decoupling mechanism "baked in" to their stock prices, the

absence of the benefit of the WNA would increase the cost of equity as determined by the models that are applied with the Gas Group data.

Q. How does the Company's throughput to large volume users or those with competitive alternatives affect its risk profile?

A. The Company's risk profile is influenced by natural gas delivered to its large industrial and commercial customers and those customers with competitive alternatives. Generally speaking, there are four primary threats to throughput to the Company's largest volume users. First, the Company can and has experienced attrition in this large customer group. Second, the Company's largest customers, which have traditionally used transportation service, have the ability to bypass the Company's system to other gas supply sources such as interstate pipelines, other local distribution companies, and/or nonregulated pipeline contractors providing access to local supplies. Third, in addition to the bypass threat, a material portion of the large customer throughput can be exposed to fuel switching to coal, oil, propane, or other energy sources depending on the cost of natural gas as compared to the cost of these fuels. Finally, in its effort to retain load, the Company is vulnerable to the impacts of business cycles, competition within its customers' industries, and other external factors that can result in shifts of production to customer facilities that are not served by the Company. All of these risks put fixed cost recovery for this class of customers at risk.

Q. Are you aware that a DSIC is available to natural gas utilities in Pennsylvania, and does the DSIC affect the Company's cost of capital?

A. I am aware that the Company has utilized the DSIC in the past. The cost of capital for Peoples, however, is not affected by the DSIC. I say this because most of the proxy group companies (i.e., six of eight companies) whose data has been used to develop the cost of equity for Peoples in this proceeding have a DSIC or similar infrastructure rehabilitation mechanisms. Indeed, Atmos Energy, New Jersey Resources, Northwest Natural Gas, South Jersey Industries, Southwest Gas, and Spire make use of a DSIC or similar infrastructure rehabilitation mechanisms. Hence, whatever the benefit of a DSIC, or other regulatory mechanisms, that impact is already reflected in the market evidence of the cost of equity for the proxy group.

Q. Please indicate how the Company's construction program affects its risk profile.

A. The Company is faced with the requirement to undertake investments to maintain and upgrade existing facilities in its service territory. To maintain safe and reliable service to existing customers, the Company must invest to upgrade its infrastructure. The rehabilitation of the Company's infrastructure represents capital expenditures that do not increase the Company's customer base. Although the Company (including TNP) has made significant strides in reducing its percentage of cast iron and unprotected steel pipe, these facilities still represent 2,889.5 miles (or approximately 22%) of its distribution mains as of year-end 2022. The Company also has 44,832 (or approximately 6%) of its services constructed of unprotected steel. In addition, the Company's gathering lines are

represented by 1,094 miles (or approximate 73%) of unprotected steel pipe. For the future, the Company expects its net capital expenditures to be:

Year	Capital Expenditures ($ 000)
2024	$ 581,600
2025	$ 591,700
2026	$ 572,500
2027	$ 610,700
2028	$ 677,600
Total	$ 3,034,100

The incremental capital expenditures for the next five years of $3,034.1 million represents approximately 108% ($3,034.100 ÷ $2,804.280) of the Company's net utility plant at December 31, 2022. These levels of capital expenditures and ongoing expenditures illustrate the significant capital requirements that the Company must fund going forward.

Q. How should the Commission respond to the issues facing the natural gas utilities and in particular Peoples?

A. The Commission should recognize and take into account the need to replace infrastructure and the competitive environment in the natural gas business in determining the cost of capital for the Company and provide a reasonable opportunity for the Company to actually achieve its cost of capital. A fair rate of return also represents a key to a financial profile that will provide the Company with the ability to raise the significant amount of capital necessary to meet its capital needs on reasonable terms.

FUNDAMENTAL RISK ANALYSIS

Q. Is it necessary to conduct a fundamental risk analysis to provide a framework for a determination of a utility's cost of equity?

A. Yes, it is. It is necessary to establish a company's relative risk position within its industry through a fundamental analysis of various quantitative and qualitative factors that bear upon investors' assessment of overall risk. The qualitative factors that bear upon Company risk have already been discussed previously. The quantitative risk analysis follows. The items that influence investors' evaluation of risk and their required returns were described above. For this purpose, I compared the Company to the S&P Public Utilities, an industry-wide proxy consisting of various regulated businesses, and to the Gas Group.

Q. What are the components of the S&P Public Utilities?

A. The S&P Public Utilities is a widely recognized index that is comprised of electric power and natural gas companies. These companies are identified on page 3 of Schedule 4.

Q. What companies comprise the gas group?

A. My Gas Group consists of the following companies: Atmos Energy Corp., Chesapeake Utilities Corporation, New Jersey Resources Corp., NiSource, Inc., Northwest Natural Holding Co., ONE Gas, Inc., Southwest Gas Holdings, and Spire, Inc.

Q. Is knowledge of a utility's bond rating an important factor in assessing its risk and cost of capital?

A. Yes. Knowledge of a company's credit quality rating is important because the cost of each type of capital is directly related to the associated risk of the firm. So, while a company's credit quality risk is shown directly by the rating and yield on its bonds, these relative risk assessments also bear upon the cost of equity. This is because a firm's cost of equity is represented by its borrowing cost, plus compensation to recognize the higher risk of an equity investment compared to debt.

Q. How do the credit quality ratings compare for the Company, the Gas Group, and the S&P Public Utilities?

A. The Company obtains its external capital from PNG Companies, and as such it has no rating on its debt. Presently, the credit quality ratings for PNG Companies are Baa1 from Moody's Investors Service ("Moody's") and A from Standard & Poor's Corporation ("S&P"). These ratings represent the Long Term ("LT") issuer rating by Moody's and the corporate credit rating ("CCR") designation by S&P, which focuses upon the credit quality of the issuer of the debt rather than upon the debt obligation itself.

For the Gas Group, the average LT issuer rating is A3 by Moody's and the average CCR is A- by S&P, as displayed on page 2 of Schedule 3. For the S&P Public Utilities, the average credit quality rating is A3 by Moody's and BBB+ by S&P, as displayed on page 3 of Schedule 4. Many of the financial indicators that I will subsequently discuss are considered during the rating process.

Q. How do the financial data compare for the Company, the Gas Group, and the S&P Public Utilities?

A. The broad categories of financial data that I will discuss are shown on Schedules 2, 3, and 4. The data cover the five-year period 2018-2022. The important categories of relative risk may be summarized as follows:

Size. In terms of capitalization, the Company is smaller than the average size of the Gas Group, and smaller still than the average size of the S&P Public Utilities. Indeed, the Company is approximately one-third the average size of the Gas Group. All other things being equal, a smaller company is riskier than a larger company because a given change in revenue and expense has a proportionately greater impact on a small firm. As I will demonstrate later, the size of a firm can impact its cost of equity.

Market Ratios. Market-based financial ratios, such as earnings/price ratios and dividend yields, provide a partial measure of the investor-required cost of equity. If all other factors are equal, investors will require a higher rate of return for companies that exhibit greater risk, in order to compensate for that risk. That is to say, a firm that investors perceive to have higher risks will experience a lower price per share in relation to expected earnings.[2]

There are no market ratios available for the Company because its stock is owned by PNG Companies, whose stock is also not traded. The five-year average price-earnings multiple were equivalent for the Gas Group and the S&P Public Utilities. The five-year average dividend yield was lower for the Gas Group as

[2]For example, two otherwise similarly situated firms each reporting $1.00 in earnings per share would have different market prices at varying levels of risk (i.e., the firm with a higher level of risk will have a lower share value, while the firm with a lower risk profile will have a higher share value).

compared to the S&P Public Utilities. The five-year average market-to-book ratio was somewhat lower for the Gas Group as compared to the S&P Public Utilities.

Common Equity Ratio. The level of financial risk is measured by the proportion of long-term debt and other senior capital that is contained in a company's capitalization. Financial risk is also analyzed by comparing common equity ratios (the complement of the ratio of debt and other senior capital). That is to say, a firm with a high common equity ratio has lower financial risk, while a firm with a low common equity ratio has higher financial risk. The five-year average common equity ratios, based on permanent capital, were 58.8% for Peoples, 49.0% for the Gas Group, and 40.5% for the S&P Public Utilities. The historic common equity ratio for Peoples was higher than the Gas Group, thereby indicating lower financial risk.

Return on Book Equity. Greater variability (i.e., uncertainty) of a firm's earned returns signifies relatively greater levels of risk, as shown by the coefficient of variation (standard deviation ÷ mean) of the rate of return on book common equity. The higher the coefficients of variation, the greater degree of variability. For the five-year period, the coefficients of variation were 0.045 (2.3% ÷ 11.5%) for the Company, 0.113 (1.1% ÷ 9.7%) for the Gas Group, and 0.040 (0.4% ÷ 10.0%) for the S&P Public Utilities. The variability of the Company's rates of return was much higher than the Gas Group and the S&P Public Utilities, thereby signifying higher risk for the Company.

Operating Ratios. I have also compared operating ratios (the percentage of revenues consumed by operating expense, depreciation, and taxes other than

income).[3] The five-year average operating ratios were 77.3% for the Company, 82.7% for the Gas Group, and 81.0% for the S&P Public Utilities. The Company's average operating ratio was somewhat lower than the Gas Group, thereby indicating lower risk.

Coverage. The level of fixed charge coverage (i.e., the multiple by which available earnings cover fixed charges, such as interest expense) provides an indication of the earnings protection for creditors. Higher levels of coverage, and hence earnings protection for fixed charges, are usually associated with superior grades of creditworthiness. Excluding Allowance for Funds Used During Construction ("AFUDC"), the five-year average pre-tax interest coverage was 4.63 times for the Company, 4.33 times for the Gas Group, and 2.94 times for the S&P Public Utilities. The average interest coverages were highest for Peoples, followed by the Gas Group and the S&P Public Utilities. As compared to the Gas Group, the Company has slightly higher credit risk.

Quality of Earnings. Measures of earnings quality usually are revealed by the percentage of AFUDC related to income available for common equity, the effective income tax rate, and other cost deferrals. These measures of earnings quality usually influence a firm's internally generated funds because poor quality of earnings would not generate high levels of cash flow. Quality of earnings has not been a significant concern for the Company, the Gas Group and the S&P Public Utilities.

[3]The complement of the operating ratio is the operating margin which provides a measure of profitability. The higher the operating ratio, the lower the operating margin.

Internally Generated Funds. Internally generated funds ("IGF") provide an important source of new investment capital for a utility and represent a key measure of credit strength. Historically, the five-year average percentage of IGF to capital expenditures was 37.4% for the Company, 56.3% for the Gas Group and 62.3% for the S&P Public Utilities. The Company's average IGF to construction percentage has been extremely variable historically.

Betas. The financial data that I have been discussing relate primarily to company-specific risks. Market risk for firms with publicly-traded stock is measured by beta coefficients. Beta coefficients attempt to identify systematic risk, i.e., the risk associated with changes in the overall market for common equities.[4] Value Line publishes such a statistical measure of a stock's relative historical volatility to the rest of the market. A comparison of market risk is shown by the Value Line beta of 0.86 as the average for the Gas Group (see page 2 of Schedule 3) and 0.90 as the average for the S&P Public Utilities (see page 3 of Schedule 4).

Q. Please summarize your risk evaluation.

A. The risk of Peoples is greater than that of the Gas Group. Peoples has higher credit risk, which is shown by the Company's small size. Further, based on the Company's business risk characteristics, especially with regard to the threat of bypass from the interstate pipelines, the availability of other sources of gas, its

[4]Beta is a relative measure of the historical sensitivity of the stock's price to overall fluctuations in the New York Stock Exchange Composite Index. The ''Beta coefficient'' is derived from a regression analysis of the relationship between weekly percentage changes in the price of a stock and weekly percentage changes in the NYSE Index over a period of five years. The betas are adjusted for their long-term tendency to converge toward 1.00. A common stock that has a beta less than 1.0 is considered to have less systematic risk than the market as a whole and would be expected to rise and fall more slowly than the rest of the market. A stock with a beta above 1.0 would have more systematic risk.

higher percentage of throughput to its top ten customers, and its infrastructure needs, the Company's overall risk is above that of the Gas Group that is used as a basis to measure the Company's cost of equity.

CAPITAL STRUCTURE RATIOS

Q. Please explain the selection of capital structure ratios for Peoples.

A. In this case, the capital structure ratios of Peoples have been proposed to calculate the rate of return. I will show that the Company's capital structure ratios proposed in this case are reasonable. Furthermore, consistency requires that the embedded cost rate of the Company's senior securities also be employed.

Q. Does Schedule 5 provide the Company's capitalization and capital structure ratios?

A. Yes. Schedule 5 presents the Company's capitalization and related capital structure ratios. The August 31, 2023 capitalization corresponds with the end of the HTY in this case. The August 31, 2024 capital structure is estimated at the end of the future test year ("FTY"), and the September 30, 2025 capital structure is estimated at the end of the FPFTY. The September 30, 2025 forecast capital structure reflects the issuance of $814 million ($547.4 million in the FTY and $266.6 million in the FPFTY of new long-term debt in five series, maturities of $370.071 million of long-term debt and Intercompany Demand Note, equity contributions of $107.409 million and the build-up of retained earnings.

Q. How do the capital structure ratios compare for Peoples and the Gas Group?

A. I have verified the reasonableness of the Company's common equity ratio by considering the historical comparison to the Gas Group. For the historical comparison, the Gas Group had a 45.7% common equity ratio at year-end 2022. The range of ratios was 34.7% to 58.2%. Over the past five years, the range of common equity ratios was 35.2% to 57.8% for the Gas Group. Based on the Value Line forecasts, the range is 32.5% to 60.0%. For the Company, its FPFTY common equity ratio is 54.67%, thereby indicating that the Company's common equity ratio is reasonable because it is within the range of the Gas Group.

Q. Have you included short-term debt in the capital structure for Peoples?

A. No. In reaching this conclusion, I have analyzed the 12-month average balances of short-term debt for the HTY and compared those amounts to the Company's construction work in progress ("CWIP"). I have done this because the Company follows the FERC formula to calculate its AFUDC rate. That formula assigns short-term debt first to CWIP, with any excess balance of CWIP receiving the Company's overall rate of return. In order to avoid double-counting the amount of short-term debt that finances CWIP, those amounts must be removed from the average short-term debt amounts for rate case purposes. For the HTY, the CWIP balances of $144.1 million exceeds the average amount of 24.3 million short-term debt. Therefore, the short-term debt is not considered in the capital structure.

Q. What capital structure ratios do you recommend be adopted for rate of return purposes in this proceeding?

A. Since ratesetting is prospective, the rate of return should, at a minimum, reflect known or reasonably foreseeable changes which will occur during the course of

the FPFTY. As a result, I will adopt the Company's FPFTY capital structure ratios of 45.33%% long-term debt and 54.67% common equity at September 30, 2025. These capital structure ratios are the best approximation of the mix of capital the Company will employ to finance its rate base during the period new rates are in effect.

COSTS OF SENIOR CAPITAL

Q. What cost rate have you assigned to the debt portion of Peoples' capital structure?

A. The determination of the long-term debt cost rate is essentially an arithmetic exercise. This is due to the fact that the Company has contracted for the use of this capital for a specific period of time at a specified cost rate. As shown on page 1 of Schedule 6, I have computed the actual embedded cost rate of debt at August 31, 2023. And on page 3 of Schedule 6, the embedded cost of debt is shown at September 30, 2025. By September 30, 2025, the embedded long-term debt cost rate is estimated to be 4.37%. The FPFTY embedded cost of long-term debt reflects a 7.00% stated interest rate on the proposed issue of $378 million in the FTY and FPFTY. There was a previous issue of $193.584 million of long-term debt in 2023 that carried a stated rate of 2.40%, established when interest rates were low, followed by 5.30% on a $242.416 million issue, after rates moved up as I previously explained. In the FPFTY, the rate is estimated to be 7.00%. The details leading to the development of the individual effective cost rates for each series of long-term debt, using the cost rate to maturity technique, are shown on

page 4 of Schedule 6. The cost rate, or yield to maturity ("ytm"), is the rate of discount that equates the present value of all future interest and principal payments with the net proceeds of the bond.

Q. What overall debt cost rate have you determined for rate of return purposes?

A. As shown on page 3 of Schedule 6, the combined cost of long- and short-term debt is 4.37% for the FPFTY. The 4.37% debt cost rate is related to the amount of total debt shown on Schedule 5 which provides the basis for the 45.33% debt ratio.

COST OF EQUITY – GENERAL APPROACH

Q. Please describe how you determined the cost of equity for the Company.

A. Although my fundamental financial analysis provides the required framework to establish the risk relationships among Peoples, the Gas Group, and the S&P Public Utilities, the cost of equity must be measured by standard financial models that I identified above. Differences in risk traits, such as size, business diversification, geographical diversity, regulatory policy, financial leverage, and bond ratings must be considered when analyzing the cost of equity.

It is also important to reiterate that no one method or model of the cost of equity can be applied in an isolated manner. Rather, informed judgment must be used to take into consideration the relative risk traits of the firm. It is for this reason that I have used more than one method to measure the Company's cost of equity. As I describe below, each of the methods used to measure the cost of equity contains certain incomplete and/or overly restrictive assumptions and constraints

that are not optimal. Therefore, I favor considering the results from a variety of methods. In this regard, I applied each of the methods with data taken from the Gas Group and arrived at a cost of equity of 11.75% for the Company, which includes an increment for exemplary management performance.

DISCOUNTED CASH FLOW

Q. Please describe the DCF model.

A. The DCF model seeks to explain the value of an asset as the present value of future expected cash flows discounted at the appropriate risk-adjusted rate of return. In its simplest form, the DCF-determined return on common stock consists of a current cash (dividend) yield and future price appreciation (growth) of the investment. The dividend discount equation is the familiar DCF valuation model, which assumes that future dividends are systematically related to one another by a constant growth rate. The DCF formula is derived from the standard valuation model: $P = D/(k-g)$, where P = price, D = dividend, k = the cost of equity, and g = growth in cash flows. By rearranging the terms, we obtain the familiar DCF equation: $k= D/P + g$. All of the terms in the DCF equation represent investors' assessment of expected future cash flows that they will receive in relation to the value that they set for a share of stock (P). The DCF equation is sometimes referred to as the "Gordon" model.[5] My DCF results are provided on Schedule 1, page 2, for the Gas Group. The DCF return is 11.88% with the leverage adjustment and 10.47% without the leverage

[5] Although the popular application of the DCF model is often attributed to the work of Myron J. Gordon in the mid-1950s, J.B. Williams exposited the DCF model in its present form nearly two decades earlier.

adjustment for the Gas Group. The leverage adjustment is discussed more fully below.

Among the limitations of the model, there is a certain element of circularity in the DCF method when applied in rate cases. This is because investors' expectations for the future depend upon regulatory decisions. In turn, when regulators depend upon the DCF model to set the cost of equity, they rely upon investor expectations that include an assessment of how regulators will decide rate cases. Due to this circularity, the DCF model may not fully reflect the true risk of a utility. Other limitations of the DCF include the constant P-E multiple assertion that does not conform with actual stock market performance. And, indeed, the FERC has moved to using multiple methods for measuring the cost of equity due to the limitations of the DCF.

Q. What is the dividend yield component of a DCF analysis?

A. The dividend yield reveals the portion of investors' cash flow that is generated by the return provided by the dividends an investor receives. It is measured by the dividends per share relative to the price per share. The DCF methodology requires the use of an expected dividend yield to establish the investor-required cost of equity. For the twelve months ended September 2023, the monthly dividend yields are shown on Schedule 7. The month-end prices were adjusted to reflect the buildup of the dividend in the price that has occurred since the last ex-dividend date (i.e., the date by which a shareholder must own the shares to be entitled to the dividend payment – usually about two to three weeks prior to the actual payment).

For the twelve months ended September 2023, the average dividend yield was 3.43% for the Gas Group based upon a calculation using annualized dividend payments and adjusted month-end stock prices. The dividend yields for the more recent six-month and three-month periods were 3.59% and 3.70%, respectively. For applying the DCF model, I have used the six-month average dividend yield of 3.59% for the Gas Group. The use of this dividend yield will reflect current capital costs while avoiding spot yields. For the purpose of a DCF calculation, the average dividend yield must be adjusted to reflect the prospective nature of the dividend payments, i.e., the higher expected dividends for the future. Recall that the DCF is an expectational model that must reflect investors' anticipated cash flows. I have adjusted the six-month average dividend yield in three different but generally accepted manners and used the average of the three adjusted values as calculated in the lower panel of data presented on Schedule 7.[6] This adjustment adds thirteen basis points to the six-month average historical yield, thus producing the 3.72% adjusted dividend yield for the Gas Group.

Q. What factors influence investors' growth expectations?

A. As noted previously, investors are interested principally in the dividend yield and future growth of their investment (i.e., the price per share of the stock). Future

[6] These adjustments are the 1/2 growth approach, the discrete approach, and the quarterly approach. Under the 1/2 approach, the procedure to adjust the average dividend yield for the expectation of a dividend increase during the initial investment period will be at a rate of one-half the growth component, which assumes that half of the dividend payments will be at the expected higher rate during the initial investment period. Under the discrete approach, the "*g*" in the DCF model reflects the discrete growth in the quarterly dividend, which is required for the periodic form of the DCF to properly recognize that dividends are expected to grow on a discrete basis. The quarterly approach takes into account that investors have the opportunity to reinvest quarterly dividend receipts. Recognizing the compounding of the periodic quarterly dividend payments (D_0) results in this third DCF formulation. This DCF equation provides no further recognition of growth in the quarterly dividend. A compounding of the quarterly dividend yield recognizes the necessity for an adjusted dividend yield.

growth in earnings per share is the DCF model's primary focus because, under the model's assumption that the P-E multiple remains constant, the price per share of stock will grow at the same rate as earnings per share. A growth rate analysis considers a variety of variables to reach a consensus of prospective growth, including historical data and widely available analysts' forecasts of earnings, dividends, book value, and cash flow (all stated on a per-share basis). A fundamental growth rate analysis is frequently based upon internal growth ("b x r"), where "r" is the expected rate of return on common equity and "b" is the retention rate (a fraction representing the proportion of earnings not paid out as dividends). To be complete, the internal growth rate should be modified to account for sales of new common stock (external growth), which is represented by the formula s x v, where "s" is the number of new common shares that the firm expects to issue and "v" is the value that accrues to existing shareholders from selling stock at a price above book value. Fundamental growth, which combines internal and external growth, encompasses the factors that cause book value per share to grow over time.

Growth also can be expressed in multiple stages. This expression of growth consists of an initial "growth" stage during which a firm enjoys rapidly expanding markets, high profit margins, and abnormally high growth in earnings per share. Thereafter, a firm enters a "transition" stage during which fewer technological advances and increased product saturation begin to reduce the growth rate and profit margins come under pressure. During the "transition" stage, investment opportunities begin to mature, capital requirements decline, and a firm begins to pay out a larger percentage of earnings to shareholders. Finally, the mature or

"steady-state" stage is reached when a firm's earnings growth, payout ratio, and return on equity stabilize at levels where they remain for the life of a firm. The three stages of growth assume a step-down of high initial growth to lower sustainable growth. Even if these three stages of growth can be envisioned for a firm, the third "steady-state" growth stage, which is assumed to remain fixed in perpetuity, represents an unrealistic expectation because the three stages of growth can be repeated. That is to say, the stages can be repeated where growth for a firm ramps up and ramps down in cycles over time. For these reasons, there is no need to analyze growth rates individually for each cycle, but rather to rely upon analysts' growth forecasts that are used by investors when pricing common stocks.

Q. What factor should be considered in the determination of an appropriate growth rate?

A. The growth rate used in a DCF calculation should measure investor expectations. Investors consider both company-specific variables and overall market sentiment (i.e., level of inflation rates, interest rates, economic conditions, etc.) when balancing their capital gains expectations with their dividend yield requirements. Investors are not influenced solely by a single set of company-specific variables weighted in a formulaic manner. Therefore, all relevant growth rate indicators should be evaluated using a variety of techniques when formulating a judgment of investor-expected growth.

Q. What data for the Gas Group have you considered in your growth rate analysis?

A. I considered the growth in the financial variables shown on Schedules 8 and 9, which reflect historical (Schedule 8) and projected (Schedule 9) rates of growth in earnings per share, dividends per share, book value per share, and cash flow per share for the Gas Group. While analysts will review all measures of growth, as I have done, earnings per share growth directly influences the expectations of investors for the future performance of utility stocks. Forecasts of earnings growth are required because the DCF model is forward-looking, and, with the constant P-E multiple and constant payout ratio that the DCF model assumes, all other measures of growth will mirror earnings growth. The historical growth rates, which were also reviewed to gain a perspective on the industry, were obtained from the Value Line publication that provides this data. While historical data cannot be ignored, they are much less significant when applying the DCF model than projections of future growth. Investors cannot purchase the past earnings of a utility. To the contrary they are only entitled to future earnings, which are the focus of growth projections. Furthermore, if significant weight is assigned to historical performance, the historical data are double-counted because they are already factored into analysts' forecasts of earnings growth.

Q. Is a five-year investment horizon associated with the analysts' forecasts consistent with the traditional DCF model?

A. Yes, it is. Although the constant form of the DCF model assumes an infinite stream of cash flows, investors do not expect to hold an investment indefinitely. Rather

than viewing the DCF in the context of an endless stream of growing dividends (e.g., a century of cash flows), the growth in the share value (i.e., capital appreciation, or capital gains yield) is most relevant to investors' total return expectations. Hence, the sale price of a stock can be viewed as a liquidating dividend that can be discounted along with the annual dividend receipts during the investment-holding period to arrive at the investors' expected return. The growth in the price per share will equal the growth in earnings per share if, as the DCF model assumes, there is no change in the P-E multiple. As such, my company-specific growth analysis, which focuses principally upon five-year forecasts of earnings per share growth, conforms with the type of analysis that influences investors' expectations of their actual total return. Moreover, academic research also focuses on five-year growth rates specifically because market outcomes occurring over that investment horizon are what influence stock prices. Indeed, if investors required forecasts beyond five years in order to properly value common stocks, then it would be reasonable to expect that some investment advisory service would begin publishing that information for individual stocks in order to meet the demands of the marketplace. The absence of such a publication suggests that there is no market for this information because investors do not require forecasts for an infinite series of future data points in order to make informed decisions to purchase and sell stocks.

Q. What are the analysts' forecasts of future growth that you considered?

A. Schedule 9 provides projected earnings per share growth rates taken from analysts' five-year forecasts compiled by IBES/First Call, Zacks, and Value Line. These are

all reliable authorities of projected growth that investors use to make buy, sell, and hold decisions. The IBES/First Call and Zacks estimates are obtained from the Internet and are widely available to investors. The growth rates reported by IBES/First Call and Zacks are consensus forecasts taken from a survey of analysts that make growth projections for these companies. Notably, First Call's earnings forecasts are frequently quoted in the financial press. The Value Line forecasts also are widely available to investors and can be obtained by subscription or free of charge at most public and collegiate libraries. The IBES/First Call and Zacks forecasts are limited to earnings per share growth, while Value Line makes projections of other financial variables. The Value Line forecasts of dividends per share, book value per share, and cash flow per share for the Gas Group are also included on Schedule 9.

Q. What are the projected growth rates published by the sources you discussed?

A. Schedule 9 shows the prospective five-year earnings per share growth rates projected for the Gas Group by IBES/First Call (5.57%), Zacks (5.46%), and Value Line (7.31%).

Q. Are certain growth rate forecasts entitled to greater weight in developing a growth rate for use in the DCF model?

A. Yes. While a variety of factors should be examined to reach a reasonable conclusion on the DCF growth rate, growth in earnings per share should receive the greatest emphasis. Growth in earnings per share is the primary determinant of investors' expectations of the total returns they will obtain from stocks because the capital gains yield (i.e., price appreciation) will track earnings growth if the P-E

multiple remains constant, as the DCF model assumes. Moreover, earnings per share (derived from net income) are the source of dividend payments and are the primary driver of retention growth and its surrogate, i.e., book value per share growth. As such, under these circumstances, greater emphasis must be placed upon projected earnings per share growth. In fact, Professor Gordon, the foremost proponent of the use of the DCF model in setting utility rates, concluded that the best measure of growth for use in the DCF model is a forecast of earnings per-share growth.[7] Consistent with Professor Gordon's findings, projections of earnings per share growth, such as those published by IBES/First Call, Zacks, and Value Line, provide the best indication of investor expectations.

Q. What growth rate do you use in your DCF model?

A. The forecasts shown on Schedule 9 for the Gas Group exhibit a range of average earnings per share growth rates from 5.46% to 7.31%. DCF growth rates should not be established by mathematical formulation, and I have not done so. In my opinion, a growth rate of 6.75% is a reasonable estimate of investor-expected growth for the Gas Group. This value is within the array of analysts' forecasts of five-year earnings per share growth rates. The reasonableness of this growth rate is also supported by the expected continuation of gas utility infrastructure spending. Based upon the dividend yield and growth rate that I have recommended the DCF cost rate would be 10.47%

[7] Gordon, Gordon & Gould, "Choice Among Methods of Estimating Share Yield," The Journal of Portfolio Management (Spring 1989).

Q. Are the dividend yield and growth components of the DCF adequate to accurately depict the rate of return on common equity when it is used to calculate a utility's weighted average overall cost of capital?

A. The components of the DCF model are adequate for that purpose only if the capital structure ratios are measured by the market value of debt and equity. In the case of the Gas Group, average capital structure ratios are 37.19% long-term debt, 1.38% preferred stock, and 61.43% common equity, as shown on Schedule 10. If book values are used to compute the capital structure ratios, then a leverage adjustment is required.

Q. What is a leverage adjustment?

A. If a firm's capitalization, as measured by its stock price, diverges from its capitalization, measured at book value, the potential exists for a financial risk difference. Such a risk difference arises because a market-valued capitalization contains more equity and less debt than a book-value capitalization and, therefore, has less risk than the book-value capitalization. A leverage adjustment properly accounts for the risk differential between market-value and book-value capital structures.

Q. Why is a leverage adjustment necessary?

A. In order to make the DCF results relevant to the capitalization measured at book value (as is done for rate setting purposes), the market-derived cost rate must be adjusted to account for this difference in financial risk. The only perspective that is important to investors is the return that they can realize on the market value of their investment. As I have measured the DCF, the simple yield (D/P) plus growth (g)

provides a return applicable strictly to the price (P) that an investor is willing to pay for a share of stock. The need for the leverage adjustment arises when the results of the DCF model (k) are to be applied to a capital structure that is different from the capital structure indicated by the market price (P). From the market perspective, the financial risk of the Gas Group is accurately measured by the capital structure ratios calculated from the market-valued capitalization of a firm. If the ratemaking process utilized the market capitalization ratios, then no additional analysis or adjustment would be required, and the simple yield (D/P) plus growth (g) components of the DCF would satisfy the financial risk associated with the market value of the equity capitalization. Because the ratemaking process uses ratios calculated from a firm's book value capitalization, further analysis is required to synchronize the financial risk of the book capitalization with the required return on the book value of the firm's equity. This adjustment is developed through precise mathematical calculations, using well-recognized analytical procedures that are widely accepted in the financial literature. To arrive at that return, the rate of return on common equity is the unleveraged cost of capital (or equity return at 100% equity) plus one or more terms reflecting the increase in financial risk resulting from the use of leverage in the capital structure. The calculations presented in the lower panel of data shown on Schedule 10, under the heading "M&M,"[8] provide a return of 8.81% when applicable to a capital structure with 100% common equity.

[8] Franco Modigliani and Merton H. Miller, "The Cost of Capital, Corporation Finance, and the Theory of Investments," American Economic Review, June 1958, at 261-97. Franco Modigliani and Merton H. Miller, "Taxes and the Cost of Capital: A Correction," American Economic Review, June 1963, at 433-43.

Q. Are there specific factors that influence market-to-book ratios that determine whether the leverage adjustment should be made?

A. No. The leverage adjustment is not intended, nor was it designed, to address the reasons that stock prices vary from book value. Hence, any observations concerning market prices relative to book value are not on point. The leverage adjustment deals with the issue of financial risk and does not transform the DCF result to a book value return through a market-to-book adjustment. Again, the leverage adjustment that I propose is based on the fundamental financial precept that the cost of equity is equal to the rate of return for an unleveraged firm (i.e., where the overall rate of return equates to the cost of equity with a capital structure that contains 100% equity) plus the additional return required for introducing debt and/or preferred stock leverage into the capital structure.

Further, as noted previously, the relatively high market prices of utility stocks cannot be attributed solely to the notion that these companies are expected to earn a return on the book value of equity that differs from their cost of equity determined from stock market prices. Stock prices above book value are common for utility stocks, and indeed the stock prices of non-regulated companies exceed book values by even greater margins. It is difficult to accept that the vast majority of all firms operating in our economy are generating returns far in excess of their cost of capital. Certainly, in our free-market economy, competition should contain such "excesses" if they actually exist.

Finally, the leverage adjustment adds stability to the final DCF cost rate. That is to say, as the market capitalization increases relative to its book value, the

leverage adjustment increases while the simple yield (D/P) plus growth (g) result declines. The reverse is also true: when the market capitalization declines, the leverage adjustment also declines as the simple yield (D/P) plus growth (g) result increases.

Q. Is the leverage adjustment that you propose designed to transform the market return into one that is designed to produce a particular market-to-book ratio?

A. No, it is not. What I label a "leverage adjustment" is merely a convenient way of showing the amount that must be added to (or subtracted from) the result of the simple DCF model (i.e., D/P + g) when the DCF return applies to a capital structure used for ratemaking that is computed with book-value weighting rather than market-value weighting. Although I specify a separate factor, which I call the leverage adjustment, there is no need to do so other than to identify this factor. If I were to express my return solely in the context of the book value weighting that we use to calculate the weighted average cost of capital and ignore the familiar D/P + g expression entirely, then a separate element in the DCF cost of equity determination would not be needed to reflect the differential in financial leverage between a market-value and book-value capitalization. As shown in the bottom panel of data on Schedule 10, the equity return applicable to the book value common equity ratio is equal to 8.81%, which is the return for the Gas Group appropriate for a capital structure with no debt (i.e., a 100% equity ratio) plus 2.96% to compensate investors for the risk of 52.11% debt ratio and 0.11% for a 1.63% preferred stock ratio. These are the book-value ratios that differ markedly from the market-value based ratios I discussed previously. Under this approach, the parts add up to

11.88% (8.81% + 2.96% + 0.11%), and there is no need to even address the cost of equity in terms of D/P + g. To express this same return in the context of the familiar DCF model, I added the 3.72% dividend yield, the 6.75% growth rate, and 1.41% for the leverage adjustment in order to arrive at the same 11.88% return computed directly with the "M&M formula. I know of no means to mathematically solve for the 1.41% leverage adjustment by expressing it in the terms of any particular relationship of market price to book value. The 1.41% adjustment is merely a convenient way to compare the 11.88% return computed using the Modigliani & Miller formulas to the 10.47% return generated by the DCF model (i.e., D_1/P_0 + g, or the traditional form of the DCF shown on Schedule 7) based on a market-value capital structure. A 10.47% return assigned to anything other than the market value of equity cannot equate to a reasonable return on book value that has higher financial risk. My point is that when we use a market-determined cost of equity developed from the DCF model, it reflects a level of financial risk that is different (in this case, lower) from the capital structure stated at book value. This process has nothing to do with targeting any particular market-to-book ratio.

Q. Please provide the DCF return based upon your preceding discussion of dividend yield, growth, and leverage.

A. As explained previously, I have utilized a six-month average dividend yield (D_1/P_0) adjusted in a forward-looking manner for my DCF calculation. This dividend yield is used in conjunction with the growth rate (g) previously developed. The DCF also includes the leverage modification (Lev.) required when the book value equity ratio is used in determining the weighted average cost of capital in the ratemaking

process rather than the market value equity ratio related to the price of stock. The resulting DCF cost rate is 11.88%, computed as follows:

	D_1/P_0	+	g	+	$lev.$	=	k
Gas Griyo	3.72%	+	6.75%	+	1.41%	=	11.88%

The DCF result shown above represents the simplified (i.e., Gordon) form of the model that contains a constant-growth assumption. I should reiterate, however, that the DCF-indicated cost rate provides an explanation of the rate of return on common stock market prices without regard to the prospect of a change in the P-E multiple. An assumption that there will be no change in the P-E multiple is not supported by the realities of the equity market because P-E multiples do not remain constant. This is one of the constraints of this model that makes it important to consider the results of other models when determining a company's cost of equity.

RISK PREMIUM ANALYSIS

Q. Please describe your use of the Risk Premium approach to determine the cost of equity.

A. With the Risk Premium approach, the cost of equity capital is determined by corporate bond yields plus a premium to account for the fact that common equity is exposed to greater investment risk than debt capital. The result of my Risk Premium study is shown on Schedule 1, page 2. That result is 11.50%.

Q. What long-term public utility debt cost rate did you use in your Risk Premium analysis?

A. In my opinion, and as I will explain in more detail further in my testimony, a 5.00% yield represents a reasonable estimate of the prospective yield on long-term, public utility bonds.

Q. What historical data are shown by the Moody's data?

A. I have analyzed the historical yields on the Moody's index of long-term public utility debt as shown on Schedule 11, page 1. For the twelve months ended September 2023 the average monthly yield on Moody's index public utility bonds was 5.47%. For the six- and three-month periods ended September 2023, the yields were 5.48% and 5.66%, respectively. During the twelve months ended September 2023, the range of the yields on public utility bonds were 5.13% to 5.88% dependent on credit rating. Page 2 of Schedule 11 shows the long-run spread in yields between A-rated public utility bonds and long-term Treasury bonds. As shown on page 3 of Schedule 11, the yields on A-rated public utility bonds have exceeded those on Treasury bonds by 1.55% on a twelve-month average basis, 1.46% on a six-month average basis, and 1.42% on a three-month average basis. With these data, 1.25% represents a reasonable, albeit conservative, spread for the yield on A-rated public utility bonds over Treasury bonds.

Q. What forecasts of interest rates have you considered in your analysis?

A. I have determined the prospective yield on A-rated public utility debt by using the Blue Chip Financial Forecasts ("Blue Chip") along with the spread in the yields that I describe below. Blue Chip is a reliable authority and contains consensus forecasts

of a variety of interest rates compiled from a panel of banking, brokerage, and investment advisory services. In early 1999, Blue Chip stopped publishing forecasts of yields on A-rated public utility bonds because the Federal Reserve deleted these yields from its Statistical Release H.15. To independently project a forecast of the yields on A-rated public utility bonds, I have combined the forecast yields on long-term Treasury bonds published on October 1, 2023 and a yield spread of 1.25%, derived from historical data.

Q. How have you used these data to project the yield on A-rated public utility bonds for the purpose of your Risk Premium analyses?

A. Shown below is my calculation of the prospective yield on A-rated public utility bonds using the building blocks discussed above, i.e., the Blue Chip forecast of Treasury bond yields and the public utility bond yield spread. For comparative purposes, I also have shown the Blue Chip forecasts of Aaa-rated and Baa-rated corporate bonds. These forecasts are:

		Blue Chip Financial Forecasts				
		Corporate		30-Year	A-rated Public Utility	
Year	Quarter	Aaa-rated	Baa-rated	Treasury	Spread	Yield
2023	Fourth	5.2%	6.2%	4.4%	1.25%	5.65%
2024	First	5.2%	6.1%	4.3%	1.25%	5.55%
2024	Second	5.0%	6.0%	4.2%	1.25%	5.45%
2024	Third	5.0%	6.0%	4.2%	1.25%	5.45%
2024	Fourth	4.9%	6.0%	4.1%	1.25%	5.35%
2025	First	4.9%	5.9%	4.0%	1.25%	5.25%

Q. Are there additional forecasts of interest rates that extend beyond those shown above?

A. Yes. Twice yearly, Blue Chip provides long-term forecasts of interest rates. In its June 1, 2023 publication Blue Chip published longer-term forecasts of interest rates,

which were reported to be:

	Blue Chip Financial Forecasts		
	Corporate		30-Year
Averages	Aaa-rated	Baa-rated	Treasury
2024-2028	4.8%	5.7%	3.8%
2029-2033	5.0%	5.9%	3.9%

The longer-term forecasts by Blue Chip suggest that interest rates will move up from the levels revealed by the near-term forecasts. A 5.00% yield on A-rated public utility bonds represents a reasonably conservative benchmark for measuring the cost of equity in this case. All the data I used to formulate my conclusion as to a prospective yield on A-rated public utility debt are available to investors, who regularly rely upon such data to make investment decisions.

Q. What equity risk premium have you determined for public utilities?

A. To develop an appropriate equity risk premium, I analyzed the results from 2022 SBBI Yearbook, Stocks, Bonds, Bills and Inflation. My investigation reveals that the equity risk premium varies according to the level of interest rates. That is to say, the equity risk premium increases as interest rates decline, and it declines as interest rates increase. This inverse relationship is revealed by the summary data presented below and shown on Schedule 12, page 1.

Common Equity Risk Premiums	
Low Interest Rates	7.13%
Average Across All Interest Rates	5.96%
High Interest Rates	4.76%

Based on my analysis of the historical data, the equity risk premium was 7.13% when the marginal cost of long-term government bonds was low (i.e., 2.83%, which was the average yield during periods of low rates). Conversely, when the yield on long-term government bonds was high (i.e., 7.03% on average during periods of high interest rates), the spread narrowed to 4.76%. Over the entire spectrum of interest rates, the equity risk premium was 5.96% when the average government bond yield was 4.93%. From these data, I have utilized a 6.50% equity risk premium. The equity risk premium of 6.50% is between the premiums associated with low interest rates (i.e., 7.13%) and average for the entire historical period interest rates (i.e., 5.96%).

Q. What common equity cost rate did you determine based on your Risk Premium analysis?

A. The cost of equity (i.e., "k") is represented by the sum of the prospective yield for long-term public utility debt (i.e., "i") and the equity risk premium (i.e., "RP"). The Risk Premium approach provides a cost of equity of:

	i	+	RP	=	k
Gas Group	5.00%	+	6.50%	=	11.50%

CAPITAL ASSET PRICING MODEL

Q. How is the CAPM used to measure the cost of equity?

A. The CAPM uses the yield on a risk-free interest-bearing obligation plus a rate of return premium that is proportional to the systematic risk of an investment. As shown on page 2 of Schedule 1, the result of the CAPM is 15.42% for the Gas

Group with the leverage adjustment. Without the leverage adjustment, the CAPM result is 13.09% (15.42% - (0.24 x 9.68%)) through use of the Value Line beta excluding the leverage adjustment (i.e., 1.10 - 0.86 = 0.24). To compute the cost of equity with the CAPM, three components are necessary: a risk-free rate of return ("Rf"), the beta measure of systematic risk ("β"), and the market risk premium ("Rm-Rf") derived from the total return on the market of equities reduced by the risk-free rate of return. The CAPM specifically accounts for differences in systematic risk (i.e., market risk as measured by the beta) between an individual firm or group of firms and the entire market of equities.

Q. What betas have you considered in the CAPM?

A. For my CAPM analysis, I initially considered the Value Line betas. As shown on page 2 of Schedule 3, the average beta is 0.86 for the Gas Group.

Q. Did you use the Value Line betas in the CAPM determined cost of equity?

A. I used the Value Line betas as a foundation for the leverage adjusted betas that I used in the CAPM. The Value Line betas are measured over a five-year period. The betas must be reflective of the financial risk associated with the ratemaking capital structure that is measured at book value. Therefore, Value Line betas cannot be used directly in the CAPM, unless the cost rate developed using those betas is applied to a capital structure measured with market values. Since we used book values in this case, the Value Line betas must be adjusted for the higher financial risk associated with the book value capital structure. To develop a CAPM cost rate applicable to a book-value capital structure, the Value Line (market value) betas

have been unleveraged and re-leveraged for the book value common equity ratios using the Hamada formula,[9] as follows:

$$\beta l = \beta u \, [1 + (1 - t) \, D/E + P/E]$$

ßl = the leveraged beta, ßu = the unleveraged beta, t = income tax rate, D = debt ratio, P = preferred stock ratio, and E = common equity ratio. The betas published by Value Line have been calculated with the market price of stock and are related to the market value capitalization. By using the formula shown above and the capital structure ratios measured at market value, the beta would become 0.57 for the Gas Group if it employed no leverage and was 100% equity financed. Those calculations are shown on Schedule 10 under the section labeled "Hamada," who is credited with developing those formulas. With the unleveraged beta as a base, I calculated the leveraged beta of 1.10 for the book value capital structure of the Gas Group.

Q. What risk-free rate have you used in the CAPM?

A. As shown on page 1 of Schedule 13, I provided the historical yields on Treasury notes and bonds. For the twelve months ended September 2023, the average yield on 30-year Treasury bonds was 3.92%. For the six- and three-months ended September 2023, the yields on 30-year Treasury bonds were 4.02% and 4.24%, respectively. During the twelve months ended September 2023, the range of the yields on 30-year Treasury bonds was 3.66% to 4.47%.

[9] Robert S. Hamada, "The Effects of the Firm's Capital Structure on the Systematic Risk of Common Stocks;" The Journal of Finance, Vol. 27, No. 2; Papers and Proceedings of the Thirtieth Annual Meeting of the American Finance Association, New Orleans, Louisiana, Dec. 27-29, 1971. (May 1972), pp. 435-52.

The low yields that existed prior to 2022 can be traced to extraordinary events associated with the Pandemic that jolted the capital markets. Since then, much higher rates have been in place. Higher inflation was a contributing factor that prompted the FOMC to raise the Fed Funds rate that I described previously.

Due to high inflation rates above the policy goal of the FOMC, accommodative policy was ended by the FOMC in the first quarter of 2022. Tighter monetary policy exists today and has caused higher interest rates that have already occurred. After the FOMC ended its bond-buying program (i.e., quantitative easing) in March 2022, it is in the process of running off its $9 trillion asset portfolio, which will keep interest rates at elevated levels.

High interest rates clearly point to high capital costs prospectively, as indicated by recent bond yield changes. The yield on 10-year Treasury bonds moved above the 3% level on May 2, 2022, the first time since late 2018. By September 2023, the yield on 30-year Treasury bonds moved to 4.47%, or an increase of 2.80% (or 168%) since December 2020.

As shown on page 2 of Schedule 13, forecasts published by Blue Chip on October 1, 2023 indicate that the yields on long-term Treasury bonds are expected to be in the range of 4.0% to 4.4% during the next six quarters. This means that elevated interest rates will continue near current levels into 2024. The longer-term forecasts show that the yields on 30-year Treasury bonds will average 3.8% from 2024 through 2028 and 3.9% from 2029 to 2033. For the reasons explained previously, forecasts of interest rates should be emphasized at this time in selecting

the risk-free rate of return in CAPM. Hence, I have used a conservative 3.75% risk-free rate of return for CAPM purposes, which considers the Blue Chip forecasts.

Q. What market premium have you used in the CAPM?

A. As shown in the lower panel of data presented on Schedule 13, page 2, the market premium is derived from historical data and the forecast returns. For the historically based market premium, I have used the arithmetic mean obtained from the data presented on Schedule 12, page 1. On that schedule, the market return was 12.21% (12.40% + 12.02% = 24.42% ÷ 2) as the midpoint of the "low" and "average" interest rate environments. During those periods, the yield on long-term government bonds was 3.87% (2.83% + 4.91% = 7.74% ÷ 2). The resulting market premium is 8.34% (12.21% - 3.87%) based on historical data, as shown on Schedule 13, page 2. As also shown on Schedule 13, page 2, I calculated the forecast returns, which show a 14.77% total market return based on the Value Line forecasts. With these data, I calculated a market premium of 11.02% (14.77% - 3.75%) using the forecast data by Value Line. The resulting market premium applicable to the CAPM derived from these sources equals 9.68% (11.02% + 8.34% = 19.36% ÷ 2).

Q. Are there adjustments to the CAPM that are necessary to fully reflect the rate of return on common equity?

A. Yes. The technical literature supports an adjustment relating to the size of the company or portfolio for which the calculation is performed. As the size of a firm decreases, its risk and required return increases. Moreover, in his discussion of the cost of capital, Professor Eugene F. Brigham has indicated that smaller firms have

higher capital costs than otherwise similar larger firms. Also, the Fama/French study (see "The Cross-Section of Expected Stock Returns"; The Journal of Finance, June 1992) established that the size of a firm helps explain stock returns. In an October 15, 1995 article in Public Utility Fortnightly, entitled "Equity and the Small-Stock Effect," it was demonstrated that the CAPM could significantly understate the cost of equity according to a company's size. Indeed, it was demonstrated in the SBBI Yearbook that the returns for stocks in lower deciles (i.e., smaller stocks) had returns in excess of those shown by the simple CAPM. To recognize this fact, I used the mid-cap adjustment of 1.02%, as revealed on page 3 of Schedule 13, for the CAPM calculation. The adjustment here is related to the size of the Gas Group.

Q. What does your CAPM analysis show?

A. Using the 3.75% risk-free rate of return, the leverage adjusted beta of 1.10 for the Gas Group, the 9.68% market premium, and the 1.02% size adjustment, the following result is indicated.

	Rf	+	***ß***	***x (Rm-Rf)***	+	***size***	=	***k***
Gas Group	3.75%	+	1.10	x (9.68%)	+	1.02%	=	15.42%

Excluding the leverage adjusted beta and eliminating the size adjustment, the CAPM result would be 12.07% = (3.75% + .86 (9.68%))

COMPARABLE EARNINGS APPROACH

Q. What is the Comparable Earnings approach?

A. The Comparable Earnings approach estimates a fair return on equity by comparing

returns realized by non-regulated companies to returns that a public utility with similar risk characteristics would need to realize in order to compete for capital. Because regulation is a substitute for competitively determined prices, the returns realized by non-regulated firms with comparable risks to a public utility provide useful insight into investor expectations for public utility returns. The firms selected for the Comparable Earnings approach should be companies whose prices are not subject to cost-based price ceilings (i.e., non-regulated firms) so that circularity is avoided.

There are two avenues available to implement the Comparable Earnings approach. One method involves the selection of another industry (or industries) with comparable risks to the public utility in question, and the results for all companies within that industry serve as a benchmark. The second approach requires the selection of parameters that represent similar risk traits for the public utility and the comparable risk companies. Using this approach, the business lines of the comparable companies become unimportant. The latter approach is preferable with the further qualification that the comparable risk companies exclude regulated firms in order to avoid the circular reasoning implicit in the use of the achieved earnings/book ratios of other regulated firms. The United States Supreme Court has held that:

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and

> economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. Bluefield Water Works v. Public Service Commission, 262 U.S. 668 (1923).

It is important to identify the returns earned by firms that compete for capital with a public utility. This can be accomplished by analyzing the returns of non-regulated firms that are subject to the competitive forces of the marketplace.

Q. Did you compare the results of your DCF and CAPM analyses to the results indicated by a Comparable Earnings approach?

A. Yes. I selected companies from The Value Line Investment Survey for Windows that have six categories of comparability designed to reflect the risk of the Gas Group. These screening criteria were based upon the range as defined by the rankings of the companies in the Gas Group. The items considered were Timeliness Rank, Safety Rank, Financial Strength, Price Stability, Value Line betas, and Technical Rank. The definition for these parameters is provided on Schedule 14, page 3. The identities of the companies comprising the Comparable Earnings group and their associated rankings within the ranges are identified on Schedule 14, page 1.

I relied upon Value Line data because it provides a comprehensive basis for evaluating the risks of the comparable firms. As to the returns calculated by Value Line for these companies, there is some downward bias in the figures shown on Schedule 14, page 2, because Value Line computes the returns on year-end rather than average book value. If average book values had been employed, the rates of return would have been slightly higher. Nevertheless, these are the returns considered by investors when taking positions in these stocks. Because many of the

comparability factors, as well as the published returns, are used by investors in selecting stocks, and the fact that investors rely on the Value Line service to gauge returns, it is an appropriate database for measuring comparable return opportunities.

Q. What data did you consider in your Comparable Earnings analysis?

A. I used both historical realized returns and forecasted returns for non-utility companies. As noted previously, I have not used returns for utility companies in order to avoid the circularity that arises from using regulatory-influenced returns to determine a regulated return. It is appropriate to consider a relatively long measurement period in the Comparable Earnings approach in order to cover conditions over an entire business cycle. A ten-year period (five historical years and five projected years) is sufficient to cover an average business cycle. Unlike the DCF and CAPM, the results of the Comparable Earnings method can be applied directly to the book value capitalization. In other words, the Comparable Earnings approach does not contain the potential misspecification contained in market models when the market capitalization and book value capitalization diverge significantly. A point of demarcation was chosen to eliminate the results of highly profitable enterprises, which the Bluefield case stated were not the type of returns that a utility was entitled to earn. For this purpose, I used 20% as the point where those returns could be viewed as highly profitable and should be excluded from the Comparable Earnings approach. The average historical rate of return on book common equity was 12.1% using only the returns that were less than 20%, as shown on Schedule 14, page 2. The average forecasted rate of return as published by Value Line is 13.3% also using values less than 20%, as provided on Schedule

14, page 2. Using the average of these data, my Comparable Earnings result is 12.70%, as shown on Schedule 1, page 2.

CONCLUSION ON COST OF EQUITY

Q. What is your conclusion regarding the Company's cost of common equity?

A. Based upon the application of a variety of methods and models described previously, it is my opinion that a reasonable rate of return on common equity is 11.75% for Peoples, which includes twenty-five basis points or 0.25% for recognition of the Company's strong management performance. My cost of equity recommendation is within the range of results and should be considered in the context of the Company's higher risk characteristics relative to the barometer group companies. It is essential that the Commission employ a variety of techniques to measure the Company's cost of equity because of the limitations/infirmities that are inherent in each method. In summary, the Company should be provided an opportunity to realize a 11.75% rate of return on common equity so that it can compete in the capital markets, attain reasonable credit quality, sustain its cash flow in the context of its capital expenditures, and receive recognition of the significant accomplishments that management has achieved.

Q. Does this complete your direct testimony?

A. Yes. However, I reserve the right to supplement my testimony, if necessary, and to respond to witnesses presented by other parties.

APPENDIX A TO DIRECT TESTIMONY OF PAUL R. MOUL

EDUCATIONAL BACKGROUND, BUSINESS EXPERIENCE AND QUALIFICATIONS

I was awarded a degree of Bachelor of Science in Business Administration by Drexel University in 1971. While at Drexel, I participated in the Cooperative Education Program which included employment, for one year, with American Water Works Service Company, Inc., as an internal auditor, where I was involved in the audits of several operating water companies of the American Water Works System and participated in the preparation of annual reports to regulatory agencies and assisted in other general accounting matters.

Upon graduation from Drexel University, I was employed by American Water Works Service Company, Inc., in the Eastern Regional Treasury Department where my duties included preparation of rate case exhibits for submission to regulatory agencies, as well as responsibility for various treasury functions of the thirteen New England operating subsidiaries.

In 1973, I joined the Municipal Financial Services Department of Betz Environmental Engineers, a consulting engineering firm, where I specialized in financial studies for municipal water and wastewater systems.

In 1974, I joined Associated Utility Services, Inc., now known as AUS Consultants. I held various positions with the Utility Services Group of AUS Consultants, concluding my employment there as a Senior Vice President.

In 1994, I formed P. Moul & Associates, an independent financial and regulatory consulting firm. In my capacity as Managing Consultant and for the past forty-one years, I have continuously studied the rate of return requirements for cost of service-regulated firms. In this regard, I have supervised the preparation of rate of return studies, which were employed, in connection with my testimony and in the past for other individuals. I have

presented direct testimony on the subject of fair rate of return, evaluated rate of return testimony of other witnesses, and presented rebuttal testimony.

My studies and prepared direct testimony have been presented before thirty-seven (37) federal, state and municipal regulatory commissions, consisting of: the Federal Energy Regulatory Commission; state public utility commissions in Alabama, Alaska, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Virginia, West Virginia, Wisconsin, and the Philadelphia Gas Commission, and the Texas Commission on Environmental Quality. My testimony has been offered in over 300 rate cases involving electric power, natural gas distribution and transmission, resource recovery, solid waste collection and disposal, telephone, wastewater, and water service utility companies. While my testimony has involved principally fair rate of return and financial matters, I have also testified on capital allocations, capital recovery, cash working capital, income taxes, factoring of accounts receivable, and take-or-pay expense recovery. My testimony has been offered on behalf of municipal and investor-owned public utilities and for the staff of a regulatory commission. I have also testified at an Executive Session of the State of New Jersey Commission of Investigation concerning the BPU regulation of solid waste collection and disposal.

I was a co-author of a verified statement submitted to the Interstate Commerce Commission concerning the 1983 Railroad Cost of Capital (Ex Parte No. 452). I was also co-author of comments submitted to the Federal Energy Regulatory Commission regarding the Generic Determination of Rate of Return on Common Equity for Public Utilities in

1985, 1986 and 1987 (Docket Nos. RM85-19-000, RM86-12-000, RM87-35-000 and RM88-25-000). Further, I have been the consultant to the New York Chapter of the National Association of Water Companies, which represented the water utility group in the Proceeding on Motion of the Commission to Consider Financial Regulatory Policies for New York Utilities (Case 91-M-0509). I have also submitted comments to the Federal Energy Regulatory Commission in its Notice of Proposed Rulemaking (Docket No. RM99-2-000) concerning Regional Transmission Organizations and on behalf of the Edison Electric Institute in its intervention in the case of Southern California Edison Company (Docket No. ER97-2355-000). Also, I was a member of the panel of participants at the Technical Conference in Docket No. PL07-2 on the Composition of Proxy Groups for Determining Gas and Oil Pipeline Return on Equity.

In late 1978, I arranged for the private placement of bonds on behalf of an investor-owned public utility. I have assisted in the preparation of a report to the Delaware Public Service Commission relative to the operations of the Lincoln and Ellendale Electric Company. I was also engaged by the Delaware P.S.C. to review and report on the proposed financing and disposition of certain assets of Sussex Shores Water Company (P.S.C. Docket Nos. 24-79 and 47-79). I was a co-author of a Report on Proposed Mandatory Solid Waste Collection Ordinance prepared for the Board of County Commissioners of Collier County, Florida.

I have been a consultant to the Bucks County Water and Sewer Authority concerning rates and charges for wholesale contract service with the City of Philadelphia. My municipal consulting experience also included an assignment for Baltimore County, Maryland, regarding the City/County Water Agreement for Metropolitan District customers

(Circuit Court for Baltimore County in Case 34/153/87-CSP-2636).

Exhibit PRM-1

PEOPLES NATURAL GAS COMPANY LLC

Exhibit to Accompany the

Direct Testimony

of

Paul R. Moul, Managing Consultant
P. Moul & Associates

Concerning
Fair Rate of Return

Peoples Natural Gas Company LLC
Index of Schedules

	Schedule
Summary Cost of Capital and Cost of Equity	1
Peoples Natural Gas Company LLC Historical Capitalization and Financial Statistics	2
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Peoples Natural Gas Company LLC
Summary Cost of Capital
Estimated at September 30, 2025

Type of Capital	Ratios	Cost Rate	Weighted Cost Rate
Debt	45.33%	4.37%	1.98%
Equity	54.67%	11.75%	6.42%
Total	100.00%		8.40%

Indicated levels of fixed charge coverage assuming that the Company could actually achieve its overall cost of capital:

Pre-tax coverage of interest expense based upon a 28.8921% composite federal and state income tax rate (11.01% ÷ 1.98%)	5.56 x
Post-tax coverage of interest expense (8.40% ÷ 1.98%)	4.24 x

Peoples Natural Gas Company LLC
Cost of Equity
as of September 30, 2023

Discounted Cash Flow (DCF)				D_1/P_0 [1]	+	g [2]	+	***lev.*** [3]	=	***k***
Gas Group				3.72%	+	6.75%	+	1.41%	=	11.88%
Risk Premium (RP)						***I*** [4]	+	***RP*** [5]	=	***k***
Gas Group						5.00%	+	6.50%	=	11.50%
Capital Asset Pricing Model (CAPM)	***Rf*** [67]	+	***ß*** [7]	***x***	***(Rm-Rf*** [8]	***)***	+	***size*** [9]	=	***k***
Gas Group	3.75%	+	1.10	x	(9.68%	)	+	1.02%	=	15.42%

Comparable Earnings (CE) [10]	***Historical***	***Forecast***	***Average***
Comparable Earnings Group	12.1%	13.3%	12.70%

References:
[1] Schedule 07
[2] Schedule 09
[3] Schedule 10
[4] Schedule 11
[4] A-rated public utility bond yield comprised of a 3.75% risk-free rate of return (Schedule 13 page 2) and a yield spread of 1.25% (Schedule 11 page 3)
[5] Schedule 12 page 1
[6] Schedule 13 page 2
[7] Schedule 10
[8] Schedule 13 page 2
[9] Schedule 13 page 3
[10] Schedule 14 page 2

Peoples Natural Gas Company LLC
Capitalization and Financial Statistics
2018-2022, Inclusive

	2022	2021	2020	2019	2018	
			(Millions of Dollars)			
Amount of Capital Employed						
Permanent Capital	$ 2,734.5	$ 2,458.8	$ 1,985.0	$ 2,218.3	$ 2,106.1	
Short-Term Debt	$ 76.2	$ 91.1	$ 138.7	$ 169.8	$ 130.7	
Total Capital	$ 2,810.7	$ 2,549.8	$ 2,123.7	$ 2,388.1	$ 2,236.8	
						Average
Capital Structure Ratios						
Based on Permanent Capital:						
Long-Term Debt	40.3%	42.4%	37.0%	41.9%	44.3%	41.2%
Common Equity [1]	59.7%	57.6%	63.0%	58.1%	55.7%	58.8%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Based on Total Capital:						
Total Debt, incl. Short Term	41.9%	44.5%	41.2%	46.0%	47.6%	44.2%
Common Equity [1]	58.1%	55.5%	58.8%	54.0%	52.4%	55.8%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Rate of Return on Book Common Equity [1]	14.2%	13.6%	10.7%	9.4%	9.5%	11.5%
Operating Ratio [2]	80.5%	75.9%	76.2%	75.9%	78.1%	77.3%
Coverage incl. AFUDC [3]						
Pre-tax: All Interest Charges	5.33 x	5.27 x	4.42 x	4.12 x	4.20 x	4.67 x
Post-tax: All Interest Charges	6.55 x	5.99 x	4.36 x	3.40 x	3.42 x	4.74 x
Coverage excl. AFUDC [3]						
Pre-tax: All Interest Charges	5.26 x	5.23 x	4.38 x	4.10 x	4.19 x	4.63 x
Post-tax: All Interest Charges	6.48 x	5.95 x	4.32 x	3.38 x	3.41 x	4.71 x
Quality of Earnings & Cash Flow						
AFC/Income Avail. for Common Equity	1.2%	0.8%	1.2%	0.6%	0.4%	0.8%
Effective Income Tax Rate	-28.2%	-17.0%	1.7%	23.0%	24.4%	0.8%
Internal Cash Generation/Construction [4]	186.3%	60.2%	61.7%	-43.8%	-77.4%	37.4%
Gross Cash Flow/ Avg. Total Debt [5]	28.4%	27.2%	22.2%	20.8%	19.2%	23.6%
Gross Cash Flow Interest Coverage [6]	8.42 x	7.52 x	5.45 x	4.67 x	4.76 x	6.16 x
Common Dividend Coverage [7]	13.41 x	11.15 x	8.95 x	0.64 x	0.58 x	6.95 x

See Page 2 for Notes.

Peoples Natural Gas Company LLC
Capitalization and Financial Statistics
2018-2022, Inclusive

Notes:

(1) Excluding Accumulated Other Comprehensive Income ("OCI") from the equity account.

(2) Total operating expenses, maintenance, depreciation and taxes other than income as a percentage of operating revenues.

(3) Coverage calculations represent the number of times available earnings, both including and excluding AFUDC (allowance for funds used during construction) as reported in its entirety, cover fixed charges.

Source of Information: Company provided data

Gas Group
Capitalization and Financial Statistics [1]
2018-2022, Inclusive

	2022	2021	2020	2019	2018	Average
			(Millions of Dollars)			
Amount of Capital Employed						
Permanent Capital	$ 7,730.2	$ 7,293.8	$ 6,052.7	$ 5,316.3	$ 4,769.0	
Short-Term Debt	$ 745.4	$ 577.9	$ 285.2	$ 516.3	$ 527.8	
Total Capital	$ 8,475.6	$ 7,871.7	$ 6,337.9	$ 5,832.6	$ 5,296.8	
Market-Based Financial Ratios						
Price-Earnings Multiple	19 x	21 x	24 x	25 x	20 x	22 x
Market/Book Ratio	192.6%	185.7%	188.6%	225.0%	218.5%	202.1%
Dividend Yield	3.1%	3.2%	3.1%	2.5%	2.7%	2.9%
Dividend Payout Ratio	57.1%	65.6%	74.7%	63.9%	52.4%	62.7%
Capital Structure Ratios						
Based on Permanent Capital:						
Long-Term Debt	52.1%	53.5%	48.6%	46.4%	45.4%	49.2%
Preferred Stock	2.1%	2.3%	1.8%	1.7%	1.1%	1.8%
Common Equity [2]	45.7%	44.2%	49.6%	52.0%	53.6%	49.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Based on Total Capital:						
Total Debt incl. Short Term	57.0%	58.2%	52.3%	51.4%	51.3%	54.0%
Preferred Stock	1.9%	2.1%	1.7%	1.5%	1.0%	1.6%
Common Equity [2]	41.2%	39.7%	46.1%	47.2%	47.7%	44.4%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Rate of Return on Book Common Equity [2]	10.6%	9.0%	8.7%	9.0%	11.2%	9.7%
Operating Ratio [3]	81.9%	81.3%	82.7%	83.1%	84.3%	82.7%
Coverage incl. AFUDC [4]						
Pre-tax: All Interest Charges	5.01 x	4.88 x	4.18 x	4.02 x	4.02 x	4.42 x
Post-tax: All Interest Charges	4.28 x	4.09 x	3.61 x	3.57 x	3.80 x	3.87 x
Overall Coverage: All Int. & Pfd. Div.	4.18 x	3.99 x	3.57 x	3.52 x	3.80 x	3.81 x
Coverage excl. AFUDC [4]						
Pre-tax: All Interest Charges	4.90 x	4.76 x	4.07 x	3.96 x	3.96 x	4.33 x
Post-tax: All Interest Charges	4.16 x	3.97 x	3.50 x	3.50 x	3.75 x	3.78 x
Overall Coverage: All Int. & Pfd. Div.	4.06 x	3.87 x	3.46 x	3.45 x	3.74 x	3.72 x
Quality of Earnings & Cash Flow						
AFC/Income Avail. for Common Equity	2.4%	4.3%	3.1%	2.5%	1.6%	2.8%
Effective Income Tax Rate	20.7%	20.3%	16.5%	14.3%	8.5%	16.1%
Internal Cash Generation/Construction [5]	61.0%	62.8%	54.8%	52.1%	50.6%	56.3%
Gross Cash Flow/ Avg. Total Debt [6]	15.2%	17.4%	19.1%	19.8%	20.1%	18.3%
Gross Cash Flow Interest Coverage [7]	7.02 x	8.34 x	7.35 x	6.67 x	6.67 x	7.21 x
Common Dividend Coverage [8]	3.85 x	4.22 x	3.96 x	4.10 x	3.93 x	4.01 x

See Page 2 for Notes.

Gas Group
Capitalization and Financial Statistics
2018-2022, Inclusive

Notes:

(1) All capitalization and financial statistics for the group are the arithmetic average of the achieved results for each individual company in the group.
(2) Excluding Accumulated Other Comprehensive Income ("OCI") from the equity account.
(3) Total operating expenses, maintenance, depreciation and taxes other than income taxes as a percent of operating revenues.
(4) Coverage calculations represent the number of times available earnings, both including and excluding AFUDC (allowance for funds used during construction) as reported in its entirety, cover fixed charges.
(5) Internal cash generation/gross construction is the percentage of gross construction expenditures provided by internally-generated funds from operations after payment of all cash dividends divided by gross construction expenditures.
(6) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) plus interest charges, divided by interest charges.
(7) Gross Cash Flow plus interest charges divided by interest charges.
(8) Common dividend coverage is the relationship of internally-generated funds from operations after payment of preferred stock dividends to common dividends paid.

Basis of Selection:
The Gas Group includes companies that are contained in The Value Line Investment Survey within the industry group "Natural Gas Utility," they are not currently the target of a publicly-announced merger or acquisition (i.e., South Jersey Industries), and after eliminating UGI Corp. due to its highly diversified businesses.

		Corporate Credit Ratings		Stock	Value Line
Ticker	Company	Moody's	S&P	Traded	Beta
ATO	Atmos Energy Corp.	A1	A-	NYSE	0.85
CPK	Chesapeake Utilities Corp.	NAIC "2b"		NYSE	0.80
NJR	New Jersey Resources Corp.	A1	-	NYSE	0.95
NI	NiSource Inc.	Baa2	BBB+	NYSE	0.90
NWN	Northwest Natural Holding Compa	Baa1	A+	NYSE	0.80
OGS	ONE Gas, Inc.	A3	A-	NYSE	0.80
SWX	Southwest Gas Holdings, Inc.	Baa1	BBB	NYSE	0.90
SR	Spire, Inc.	A1	A-	NYSE	0.85
	Average	A3	A-		0.86

Note: Ratings are those of utility subsidiaries

Source of Information: Annual Reports to Shareholders
Utility COMPUSTAT
Moody's Investors Service
Standard & Poor's Corporation

Standard & Poor's Public Utilities
Capitalization and Financial Statistics [1]
2018-2022, Inclusive

	2022	2021	2020	2019	2018	
			(Millions of Dollars)			
Amount of Capital Employed						
Permanent Capital	$ 42,136.6	$ 40,154.3	$ 38,732.9	$ 36,461.6	$ 32,871.6	
Short-Term Debt	$ 1,713.7	$ 1,397.4	$ 1,154.1	$ 1,221.9	$ 1,420.3	
Total Capital	$ 43,850.3	$ 41,551.7	$ 39,887.0	$ 37,683.5	$ 34,291.9	
Market-Based Financial Ratios						Average
Price-Earnings Multiple	23 x	22 x	23 x	20 x	21 x	22 x
Market/Book Ratio	219.2%	220.7%	218.2%	220.9%	204.4%	216.7%
Dividend Yield	3.3%	3.5%	3.6%	3.2%	3.5%	3.4%
Dividend Payout Ratio	72.5%	72.9%	78.0%	62.7%	68.7%	71.0%
Capital Structure Ratios						
Based on Permanent Captial:						
Long-Term Debt	58.3%	57.4%	58.1%	56.7%	55.0%	57.1%
Preferred Stock	2.2%	2.3%	2.6%	2.4%	2.5%	2.4%
Common Equity [2]	39.6%	40.4%	39.4%	41.0%	42.5%	40.5%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Based on Total Capital:						
Total Debt incl. Short Term	60.0%	58.9%	59.4%	58.1%	57.0%	58.7%
Preferred Stock	2.1%	2.2%	2.5%	2.3%	2.4%	2.3%
Common Equity [2]	37.9%	38.9%	38.1%	39.6%	40.7%	39.1%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Rate of Return on Book Common Equity [2]	9.9%	9.4%	10.2%	10.3%	10.3%	10.0%
Operating Ratio [3]	83.1%	83.1%	79.8%	79.3%	79.8%	81.0%
Coverage incl. AFUDC [4]						
Pre-tax: All Interest Charges	3.28 x	3.16 x	2.80 x	3.05 x	2.94 x	3.05 x
Post-tax: All Interest Charges	2.94 x	2.87 x	2.60 x	3.10 x	2.59 x	2.82 x
Overall Coverage: All Int. & Pfd. Div.	2.89 x	2.81 x	2.55 x	3.04 x	2.55 x	2.77 x
Coverage excl. AFUDC [4]						
Pre-tax: All Interest Charges	3.17 x	3.06 x	2.70 x	2.95 x	2.84 x	2.94 x
Post-tax: All Interest Charges	2.84 x	2.78 x	2.50 x	3.00 x	2.48 x	2.72 x
Overall Coverage: All Int. & Pfd. Div.	2.79 x	2.72 x	2.46 x	2.94 x	2.44 x	2.67 x
Quality of Earnings & Cash Flow						
AFC/Income Avail. for Common Equity	7.1%	7.4%	6.8%	6.0%	7.3%	6.9%
Effective Income Tax Rate	12.9%	10.6%	9.9%	12.2%	42.0%	17.5%
Internal Cash Generation/Construction [5]	60.2%	60.5%	58.6%	65.9%	66.2%	62.3%
Gross Cash Flow/ Avg. Total Debt [6]	15.1%	15.0%	15.9%	17.5%	17.4%	16.2%
Gross Cash Flow Interest Coverage [7]	5.70 x	5.17 x	4.90 x	4.97 x	4.98 x	5.14 x
Common Dividend Coverage [8]	3.49 x	3.47 x	3.52 x	5.56 x	4.80 x	4.17 x

See Page 2 for Notes.

Standard & Poor's Public Utilities
Capitalization and Financial Statistics
2018-2022, Inclusive

Notes:

(1) All capitalization and financial statistics for the group are the arithmetic average of the achieved results for each individual company in the group.
(2) Excluding Accumulated Other Comprehensive Income ("OCI") from the equity account
(3) Total operating expenses, maintenance, depreciation and taxes other than income taxes as a percent of operating revenues.
(4) Coverage calculations represent the number of times available earnings, both including and excluding AFUDC (allowance for funds used during construction) as reported in its entirety, cover fixed charges.
(5) Internal cash generation/gross construction is the percentage of gross construction expenditures provided by internally-generated funds from operations after payment of all cash dividends divided by gross construction expenditures.
(6) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) as a percentage of average total debt.
(7) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) plus interest charges, divided by interest charges.
(8) Common dividend coverage is the relationship of internally-generated funds from operations after payment of preferred stock dividends to common dividends paid.

Source of Information: Annual Reports to Shareholders
Utility COMPUSTAT

Standard & Poor's Public Utilities

Company Identities

	Ticker	Credit Rating [1] Moody's	Credit Rating [1] S&P	Common Stock Traded	Value Line Beta
Alliant Energy Corporation	LNT	Baa1	A-	NYSE	0.85
Ameren Corporation	AEE	Baa1	BBB+	NYSE	0.85
American Electric Power	AEP	Baa1	A-	NYSE	0.75
American Water Works	AWK	Baa1	A	NYSE	0.90
CenterPoint Energy	CNP	Baa1	BBB+	NYSE	1.10
CMS Energy	CMS	Baa1	A-	NYSE	0.80
Consolidated Edison	ED	Baa1	A-	NYSE	0.75
Dominion Energy	D	A2	BBB+	NYSE	0.85
DTE Energy Co.	DTE	A2	A-	NYSE	0.95
Duke Energy	DUK	A2	BBB+	NYSE	0.85
Edison Int'l	EIX	Baa1	BBB	NYSE	0.95
Entergy Corp.	ETR	Baa1	BBB+	NYSE	0.95
Evergy, Inc.	EVRG	Baa1	A-	NYSE	0.90
Eversource	ES	A3	A	NYSE	0.90
Exelon Corp.	EXC	A2	BBB+	NDQ	NMF
FirstEnergy Corp.	FE	A3	BBB	NYSE	0.85
NextEra Energy Inc.	NEE	A1	A	NYSE	0.95
NiSource Inc.	NI	Baa2	BBB+	NYSE	0.85
NRG Energy Inc.	NRG	Ba1	BB	NYSE	1.10
Pinnacle West Capital	PNW	A3	BBB+	NYSE	0.90
PPL Corp.	PPL	A3	A	NYSE	1.05
Public Serv. Enterprise Inc.	PEG	A3	A-	NYSE	0.90
Sempra Energy	SRE	A3	BBB+	NYSE	0.95
Southern Co.	SO	Baa1	BBB+	NYSE	0.90
WEC Energy Corp.	WEC	A2	A-	NYSE	0.80
Xcel Energy Inc	XEL	A2	A-	NYSE	0.80
Average for S&P Utilities		A3	BBB+		0.90

Note: [1] Ratings are those of utility subsidiaries

Source of Information: Moody's Investors Service, Inc.
S&P Global Inc.
The Value Line Investment Survey

Peoples Natural Gas Company LLC
Investor-provided Capitalization
Actual at August 31, 2023, Estimated at August 31, 2024, and Estimated at September 30, 2025

	Actual at August 31, 2023			Estimated at August 31, 2024			Estimated at September 30, 2025		
	Amount	Ratios		Amount	Ratios		Amount	Ratios	
	Outstanding	Excl. S-T Debt	Incl. S-T Debt	Outstanding	Excl. S-T Debt	Incl. S-T Debt	Outstanding	Excl. S-T Debt	Incl. S-T Deb
Long Term Debt	$1,472,973,705	45.33%	45.33%	$1,675,253,511 [1] [2]	45.33%	45.33%	$1,916,902,758 [1] [3]	45.33%	45.33%
Common Stock Equity									
Common Stock & Paid-in Capital [4]	1,189,250,800			1,222,733,742			1,296,659,433		
Retained Earnings [5]	587,178,747			797,654,265			1,015,168,334		
Total Common Equity	1,776,429,547	54.67%	54.67%	2,020,388,007	54.67%	54.67%	2,311,827,767	54.67%	54.67%
Total Permanent Capital	$3,249,403,252	100.00%	100.00%	$3,695,641,518	100.00%	100.00%	$4,228,730,526	100.00%	100.00%
Short Term Debt	-		0.00%	-		0.00%	-		0.00%
Total Capital Employed	$3,249,403,252		100.00%	$3,695,641,518		100.00%	$4,228,730,526		100.00%
Average Short Term	$ 24,285,980			$ 24,285,980			$ 24,285,980		
Average CWIP	144,100,000			144,100,000			144,100,000		
Difference	$ (119,814,020)			$ (119,814,020)			$ (119,814,020)		

Notes:

[1] Debt Maturities		$ (145,655,490)	
[1] Intercompany Demand Note		(199,464,704)	$ (24,950,752)
[2] 2023 Intercompany Promissory Note, Tranche 1		193,584,000	
[2] 2023 Intercompany Promissory Note, Tranche 2		242,416,000	
[2] 2024 Intercompany Promissory Note, Tranche 1		111,400,000	
[3] 2024 Intercompany Promissory Note, Tranche 2			139,000,000
[3] 2025 Intercompany Promissory Note, Tranche 1			127,600,000
[4] Contributions from Members		33,482,942	73,925,692
[5] Projected increase in Retained Earnings		210,475,518	217,514,069

Source of information: Company provided data

Peoples Natural Gas Company LLC
Calculation of the Embedded Cost of Long-Term Debt
Actual at August 31, 2023

Series	Principal Outstanding	Percent to Total	Effective Cost Rate [1]	Weighted Cost Rate
2013 Intercompany Promissory Note, Tranche 2	$ 144,746,400	9.83%	4.15%	0.41%
2013 Intercompany Promissory Note, Tranche 3	110,007,200	7.47%	4.30%	0.32%
2017 Intercompany Promissory Note, Tranche 2	178,911,000	12.15%	3.47%	0.42%
2017 Intercompany Promissory Note, Tranche 3	178,911,000	12.15%	3.70%	0.45%
2022 Intercompany Promissory Note, Tranche 1	183,149,854	12.43%	2.80%	0.35%
2022 Intercompany Promissory Note, Tranche 2	219,779,827	14.92%	3.41%	0.51%
2022 Intercompany Promissory Note, Tranche 7	65,364,587	4.44%	2.51%	0.11%
2022 Intercompany Promissory Note, Tranche 8	81,705,732	5.55%	5.43%	0.30%
2022 Intercompany Promissory Note, Tranche 1	38,636,364	2.62%	2.80%	0.07%
2022 Intercompany Promissory Note, Tranche 2	46,363,636	3.15%	3.39%	0.11%
2017 Intercompany Promissory Note, Tranche 5	909,090	0.06%	6.15%	0.00%
Intercompany Demand Note, Capex Portion	224,489,015	15.24%	6.20%	0.95%
Long-Term Debt	$ 1,472,973,705	100.00%		4.00%
Long-Term Debt	$ 1,472,973,705	100.00%	4.00%	4.00%
Short-Term- Debt [2]	-	0.00%	6.20%	0.00%
Total	$ 1,472,973,705	100.00%		4.00%

Notes: [1] As calculated on page 4 of this schedule.

Source of Information: Company provided data

Peoples Natural Gas Company LLC
Calculation of the Embedded Cost of Long-Term Debt
Actual at August 31, 2024

Series	Principal Outstanding	Percent to Total	Effective Cost Rate [1]	Weighted Cost Rate
2013 Intercompany Promissory Note, Tranche 3	$ 110,007,200	6.57%	4.30%	0.28%
2017 Intercompany Promissory Note, Tranche 2	178,911,000	10.68%	3.47%	0.37%
2017 Intercompany Promissory Note, Tranche 3	178,911,000	10.68%	3.70%	0.40%
2022 Intercompany Promissory Note, Tranche 1	183,149,854	10.93%	2.80%	0.31%
2022 Intercompany Promissory Note, Tranche 2	219,779,827	13.12%	3.41%	0.45%
2022 Intercompany Promissory Note, Tranche 7	65,364,587	3.90%	2.51%	0.10%
2022 Intercompany Promissory Note, Tranche 8	81,705,732	4.88%	5.43%	0.27%
2022 Intercompany Promissory Note, Tranche 1	38,636,364	2.31%	2.80%	0.07%
2022 Intercompany Promissory Note, Tranche 2	46,363,636	2.77%	3.39%	0.09%
2023 Intercompany Promissory Note, Tranche 1	193,584,000	11.56%	2.51%	0.29%
2023 Intercompany Promissory Note, Tranche 2	242,416,000	14.47%	5.41%	0.78%
2024 Intercompany Promissory Note, Tranche 1	111,400,000	6.65%	7.12%	0.47%
Intercompany Demand Note, Capex Portion	25,024,311	1.49%	6.20% [2]	0.09%
Long-Term Debt	$ 1,675,253,511	100.00%		3.96%
Long-Term Debt	$ 1,675,253,511	100.00%	3.96%	3.96%
Short-Term- Debt	-	0.00%	6.20%	0.00%
Total	$ 1,675,253,511	100.00%		3.96%

Notes: [1] As calculated on page 4 of this schedule.
[2] Actual Rate at 8/31/23

Source of Information: Company provided data

Peoples Natural Gas Company LLC
Calculation of the Embedded Cost of Long-Term Debt
Actual at September 30, 2025

Series	Principal Outstanding	Percent to Total	Effective Cost Rate [1]	Weighted Cost Rate
2013 Intercompany Promissory Note, Tranche 3	$ 110,007,200	5.74%	4.30%	0.25%
2017 Intercompany Promissory Note, Tranche 2	178,911,000	9.33%	3.47%	0.32%
2017 Intercompany Promissory Note, Tranche 3	178,911,000	9.33%	3.70%	0.35%
2022 Intercompany Promissory Note, Tranche 1	183,149,854	9.55%	2.80%	0.27%
2022 Intercompany Promissory Note, Tranche 2	219,779,827	11.47%	3.41%	0.39%
2022 Intercompany Promissory Note, Tranche 7	65,364,587	3.41%	2.51%	0.09%
2022 Intercompany Promissory Note, Tranche 8	81,705,732	4.26%	5.43%	0.23%
2022 Intercompany Promissory Note, Tranche 1	38,636,364	2.02%	2.80%	0.06%
2022 Intercompany Promissory Note, Tranche 2	46,363,636	2.42%	3.39%	0.08%
	-			
2023 Intercompany Promissory Note, Tranche 1	193,584,000	10.10%	2.51%	0.25%
2023 Intercompany Promissory Note, Tranche 2	242,416,000	12.65%	5.41%	0.68%
2024 Intercompany Promissory Note, Tranche 1	111,400,000	5.81%	7.12%	0.41%
2024 Intercompany Promissory Note, Tranche 2	139,000,000	7.25%	7.12%	0.52%
2025 Intercompany Promissory Note, Tranche 1	127,600,000	6.66%	7.12%	0.47%
Intercompany Demand Note, Capex Portion	73,558	0.00%	5.78% [3]	0.00%
Long-Term Debt	$ 1,916,902,758	100.00%		4.37%
Long-Term Debt	$ 1,916,902,758	100.00%	4.37%	4.37%
Short-Term- Debt	-	0.00%	5.78%	0.00%
Total	$ 1,916,902,758	100.00%		4.37%

Notes: [1] As calculated on page 4 of this schedule.
[3] Represents projected SOFR rate plus margin of 0.90%

Source of Information: Company provided data

Peoples Natural Gas Company LLC

Calculation of the Effective Cost of Long-Term Debt by Series

Series	Coupon Rate	Date of Issue	Date of Maturity	Average Term in Years [1]	Principal Amount Issued	Discount and Expense	Net Proceeds	Net Proceeds Ratio	Effective Cost Rate [2]
2013 Intercompany Promissory Note, Tranche 2	4.10%	12/19/13	12/19/23	10.0	$ 144,746,400	$ 618,352	$ 144,128,048	99.57%	4.15%
2013 Intercompany Promissory Note, Tranche 3	4.25%	12/19/13	12/19/25	12.0	110,007,200	523,077	109,484,123	99.52%	4.30%
2017 Intercompany Promissory Note, Tranche 2	3.38%	12/18/17	12/18/27	10.0	178,911,000	1,338,539	177,572,461	99.25%	3.47%
2017 Intercompany Promissory Note, Tranche 3	3.63%	12/18/17	12/18/32	15.0	178,911,000	1,340,456	177,570,544	99.25%	3.70%
2022 Intercompany Promissory Note, Tranche 1	2.70%	10/31/21	04/15/30	8.5	183,149,854	1,334,416	181,815,438	99.27%	2.80%
2022 Intercompany Promissory Note, Tranche 2	3.35%	10/31/21	04/15/50	28.5	219,779,827	2,272,105	217,507,722	98.97%	3.41%
2022 Intercompany Promissory Note, Tranche 7	2.40%	12/31/21	05/31/31	9.4	65,364,587	618,896	64,745,691	99.05%	2.51%
2022 Intercompany Promissory Note, Tranche 8	5.30%	12/31/21	05/31/52	30.4	81,705,732	1,621,181	80,084,551	98.02%	5.43%
2022 Intercompany Promissory Note, Tranche 1	2.70%	10/31/21	04/15/30	8.5	38,636,364	288,944	38,347,420	99.25%	2.80%
2022 Intercompany Promissory Note, Tranche 2	3.34%	10/31/21	04/15/50	28.5	46,363,636	483,062	45,880,574	98.96%	3.39%
2017 Intercompany Promissory Note, Tranche 5	5.99%	10/31/17	10/31/23	6.0	5,454,545	42,887	5,411,658	99.21%	6.15%
2023 Intercompany Promissory Note, Tranche 1	2.40%	12/31/23	05/01/31	7.3	193,584,000	1,376,903	192,207,097	99.29%	2.51%
2023 Intercompany Promissory Note, Tranche 2	5.30%	12/31/23	05/02/52	28.4	242,416,000	4,006,583	238,409,417	98.35%	5.41%
2024 Intercompany Promissory Note, Tranche 1	7.00%	07/31/24	06/30/54	29.9	111,400,000	1,671,000	109,729,000	98.50%	7.12%
2024 Intercompany Promissory Note, Tranche 2	7.00%	12/31/24	06/30/54	29.5	139,000,000	2,085,000	136,915,000	98.50%	7.12%
2025 Intercompany Promissory Note, Tranche 1	7.00%	07/31/25	06/30/54	28.9	127,600,000	1,914,000	125,686,000	98.50%	7.12%
Intercompany Demand Note, Capex Portion	6.20%				219,943,560	-	219,943,560	100.00%	6.20%

Notes: [1] Determined by taking into account the effect the annual sinking fund requirements, which are met by the payment of principal that reduces the term of each issue.

[2] The effective cost for each issue is the yield to maturity ("ytm") using as inputs the average term of the issue, the coupon rate, and the net proceeds ratio.

Source of Information: Company provided data

378,000,000

Monthly Dividend Yields for
Natural Gas Group
for the Twelve Months Ending September 2023

Company	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	12-Month Average	6-Month Average	3-Month Average
Atmos Energy Corp (ATO)	2.79%	2.46%	2.65%	2.53%	2.63%	2.64%	2.61%	2.57%	2.55%	2.44%	2.56%	2.80%			
Chesapeake Utilities Corp (CPK)	1.72%	1.79%	1.81%	1.70%	1.68%	1.67%	1.92%	1.86%	1.98%	2.00%	2.15%	2.42%			
New Jersey Resources Corporation (NJR)	3.51%	3.15%	3.15%	3.14%	3.08%	2.94%	3.03%	3.24%	3.31%	3.51%	3.73%	3.84%			
NiSource Inc (NI)	3.66%	3.37%	3.45%	3.64%	3.65%	3.60%	3.51%	3.73%	3.68%	3.59%	3.75%	4.08%			
Northwest Natural Holding Company (NWN)	4.04%	3.89%	4.11%	3.87%	4.03%	4.11%	4.13%	4.56%	4.54%	4.52%	4.96%	5.13%			
ONE Gas Inc (OGS)	3.22%	2.86%	3.29%	3.18%	3.24%	3.29%	3.40%	3.22%	3.40%	3.31%	3.59%	3.83%			
Southwest Gas Holdings Inc (SWX)	3.42%	3.63%	4.03%	3.73%	3.94%	3.99%	4.47%	4.25%	3.92%	3.79%	4.01%	4.13%			
Spire Inc. (SR)	4.15%	3.92%	4.19%	4.01%	4.13%	4.12%	4.28%	4.51%	4.55%	4.56%	4.99%	5.11%			
Average	**3.31%**	**3.13%**	**3.34%**	**3.23%**	**3.30%**	**3.30%**	**3.42%**	**3.49%**	**3.49%**	**3.47%**	**3.72%**	**3.92%**	**3.43%**	**3.59%**	**3.70%**

Note: Monthly dividend yields are calculated by dividing the annualized quarterly dividend by the month-end closing stock price adjusted by the fraction of the ex-dividend.

Source of Information: https://finance.yahoo.com/quote
https://www.nasdaq.com/market-activity/stocks

Forward-looking Dividend Yield

1/2 Growth	D_0/P_0	(.5g)	D_1/P_0	$K = \frac{D_0(1+g)^0 + D_0(1+g)^0 + D_0(1+g)^1 + D_0(1+g)^1}{P_0} + g$
	3.59%	1.033750	3.71%	
Discrete	D_0/P_0	Adj.	D_1/P_0	$K = \frac{D_0(1+g)^{.25} + D_0(1+g)^{.50} + D_0(1+g)^{.75} + D_0(1+g)^{1.00}}{P_0} + g$
	3.59%	1.041843	3.74%	
Quarterly	D_0/P_0	Adj.	D_1/P_0	$K = \left[\left(1 + \frac{D_0(1+g)^{.25}}{P_0}\right)^4 - 1\right] + g$
	0.8975%	1.016464	3.70%	
Average			3.72%	
Growth rate			6.75%	
K			10.47%	

Historical Growth Rates
Earnings Per Share, Dividends Per Share,
Book Value Per Share, and Cash Flow Per Share

Gas Group	Earnings per Share		Dividends per Share		Book Value per Share		Cash Flow per Share	
	Value Line		Value Line		Value Line		Value Line	
	5 Year	10 Year	5 Year	10 Year	5 Year	10 Year	5 Year	10 Year
Atmos Energy Corp (ATO)	9.00%	9.00%	8.50%	6.50%	12.00%	9.00%	7.00%	6.50%
Chesapeake Utilities Corp (CPK)	11.00%	9.50%	9.50%	7.50%	10.00%	10.00%	9.50%	8.00%
New Jersey Resources Corporation (NJR)	2.50%	5.00%	6.50%	6.50%	7.00%	7.50%	4.50%	7.00%
NiSource Inc (NI)	15.00%	1.50%	3.50%	-0.50%	0.50%	-3.00%	6.50%	0.50%
Northwest Natural Holding Company (NWN)	2.50%	-1.00%	0.50%	1.50%	0.50%	1.00%	2.50%	1.00%
ONE Gas Inc (OGS)	8.00%	-	10.00%	-	4.00%	-	7.50%	-
Southwest Gas Holdings Inc (SWX)	4.50%	5.50%	7.00%	8.50%	7.00%	6.50%	1.50%	4.00%
Spire Inc. (SR)	1.00%	2.50%	6.00%	5.00%	4.00%	6.50%	4.00%	5.50%
Average	6.69%	4.57%	6.44%	5.00%	5.63%	5.36%	5.38%	4.64%

Source of Information: Value Line Investment Survey, August 25, 2023

Analysts' Five-Year Projected Growth Rates
Earnings Per Share, Dividends Per Share,
Book Value Per Share, and Cash Flow Per Share

Gas Group	I/B/E/S First Call	Zacks	Value Line Earnings Per Share	Value Line Dividends Per Share	Value Line Book Value Per Share	Value Line Cash Flow Per Share	Value Line Percent Retained to Common Equity
Atmos Energy Corp (ATO)	7.50%	7.30%	7.00%	7.50%	5.00%	6.50%	5.00%
Chesapeake Utilities Corp (CPK)	7.00%	NA	6.00%	8.50%	6.50%	6.00%	5.50%
New Jersey Resources Corporatior	6.00%	6.00%	5.00%	5.00%	4.50%	5.00%	4.50%
NiSource Inc (NI)	6.70%	7.00%	9.50%	4.50%	5.00%	5.50%	4.50%
Northwest Natural Holding Compar	2.80%	3.70%	6.50%	0.50%	4.00%	5.00%	3.50%
ONE Gas Inc (OGS)	5.00%	5.00%	6.50%	5.50%	6.50%	8.00%	4.00%
Southwest Gas Holdings Inc (SWX	4.00%	5.00%	10.00%	5.50%	7.50%	8.50%	3.00%
Spire Inc. (SR)	N/A	4.20%	8.00%	5.00%	6.50%	6.50%	2.50%
Average	5.57%	5.46%	7.31%	5.25%	5.69%	6.38%	4.06%

Source of Information : Yahoo Finance, September 27, 2023
Zacks, September 27, 2023
Value Line Investment Survey, August 25, 2023

Gas Group
Financial Risk Adjustment

	ATMOS Energy (NYSE:ATO)	Chesapeake Utilities (NYSE:CPK)	New Jersey Resources (NYSE:NJR)	NiSource, Inc (NYSE:NI)	Northwest Natural Gas (NYSE:NWN)	ONE Gas Inc (NYSE:OGS)	Southwest Gas (SWX)	Spire Inc. (NYSESR)	Average
Fiscal Year	09/30/22	12/31/22	09/30/22	12/31/22	12/31/22	12/31/22	12/31/22	09/30/22	
Capitalization at Fair Values									
Debt(D)	6,918,843	505,000	1,946,356	8,479,400	1,148,395	2,500,000	3,945,072	2,851,800	3,536,858
Preferred(P)	0	0	0	1,546,500	0	0	0	242,000	223,563
Equity(E)	14,350,318	2,096,681	3,701,222	11,300,961	1,690,635	4,191,099	4,153,333	3,271,985	5,594,529
Total	21,269,161	2,601,681	5,647,578	21,326,861	2,839,030	6,691,099	8,098,405	6,365,785	9,354,950
Capital Structure Ratios									
Debt(D)	32.53%	19.41%	34.46%	39.76%	40.45%	37.36%	48.71%	44.80%	37.19%
Preferred(P)	0.00%	0.00%	0.00%	7.25%	0.00%	0.00%	0.00%	3.80%	1.38%
Equity(E)	67.47%	80.59%	65.54%	52.99%	59.55%	62.64%	51.29%	51.40%	61.43%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Common Stock									
Issued	140,896.598	17,741.418	96,249.859	416,106.000	35,525.000	55,349.954	67,119.143	52,494.543	
Treasury	0.000	0.000	611.045	3,963.000	0.000	0.000	0.000	0.000	
Outstanding	140,896.598	17,741.418	95,638.814	412,143.000	35,525.000	55,349.954	67,119.143	52,494.543	
Market Price	$ 101.85	$ 118.18	$ 38.70	$ 27.42	$ 47.59	$ 75.72	$ 61.88	$ 62.33	
Capitalization at Carrying Amounts									
Debt(D)	7,960,000	600,800	2,362,845	9,553,600	1,336,864	2,682,471	4,447,856	3,239,700	4,023,017
Preferred(P)	0	0	0	1,546,500	0	0	0	242,000	223,563
Equity(E)	9,419,091	832,801	1,817,210	6,028,900	1,175,441	2,584,426	3,058,759	2,576,500	3,436,641
Total	17,379,091	1,433,601	4,180,055	17,129,000	2,512,305	5,266,897	7,506,615	6,058,200	7,683,221
Capital Structure Ratios									
Debt(D)	45.80%	41.91%	56.53%	55.77%	53.21%	50.93%	59.25%	53.48%	52.11%
Preferred(P)	0.00%	0.00%	0.00%	9.03%	0.00%	0.00%	0.00%	3.99%	1.63%
Equity(E)	54.20%	58.09%	43.47%	35.20%	46.79%	49.07%	40.75%	42.53%	46.26%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Betas Value Line	0.85	0.80	0.95	0.90	0.80	0.80	0.90	0.85	0.86

Hamada	Bl	=	Bu	[1+	(1 - t)	D/E	+	P/E	]	
	0.86	=	Bu	[1+	(1-0.21)	0.6054	+	0.0225	]	
	0.86	=	Bu	[1+	0.79	0.6054	+	0.0225	]	
	0.86	=	Bu	1.5008						
	0.57	=	Bu							
Hamada	Bl	=	0.57	[1+	(1 - t)	D/E	+	P/E	]	
	Bl	=	0.57	[1+	0.79	1.1264	+	0.0352	]	
	Bl	=	0.57	1.9251						
	Bl	=	1.10							

M&M	ku	=	ke	-	(((	ku	-	i	)		1-t	)		D	/	E	-	(ku - d) P / E
	8.81%	=	10.47%	-	(((	8.81%	-	5.48%	)		0.79	)		37.19%	/	61.43%	-	8.81% - 5.68%) 1.38% / 61.43%
	8.81%	=	10.47%	-	(((	3.33%			)		0.79	)		0.6054			-	3.13%) 0.0225
	8.81%	=	10.47%	-	((	2.63%						)		0.6054			-	3.13%) 0.0225
	8.81%	=	10.47%	-		1.59%											-	0.07%

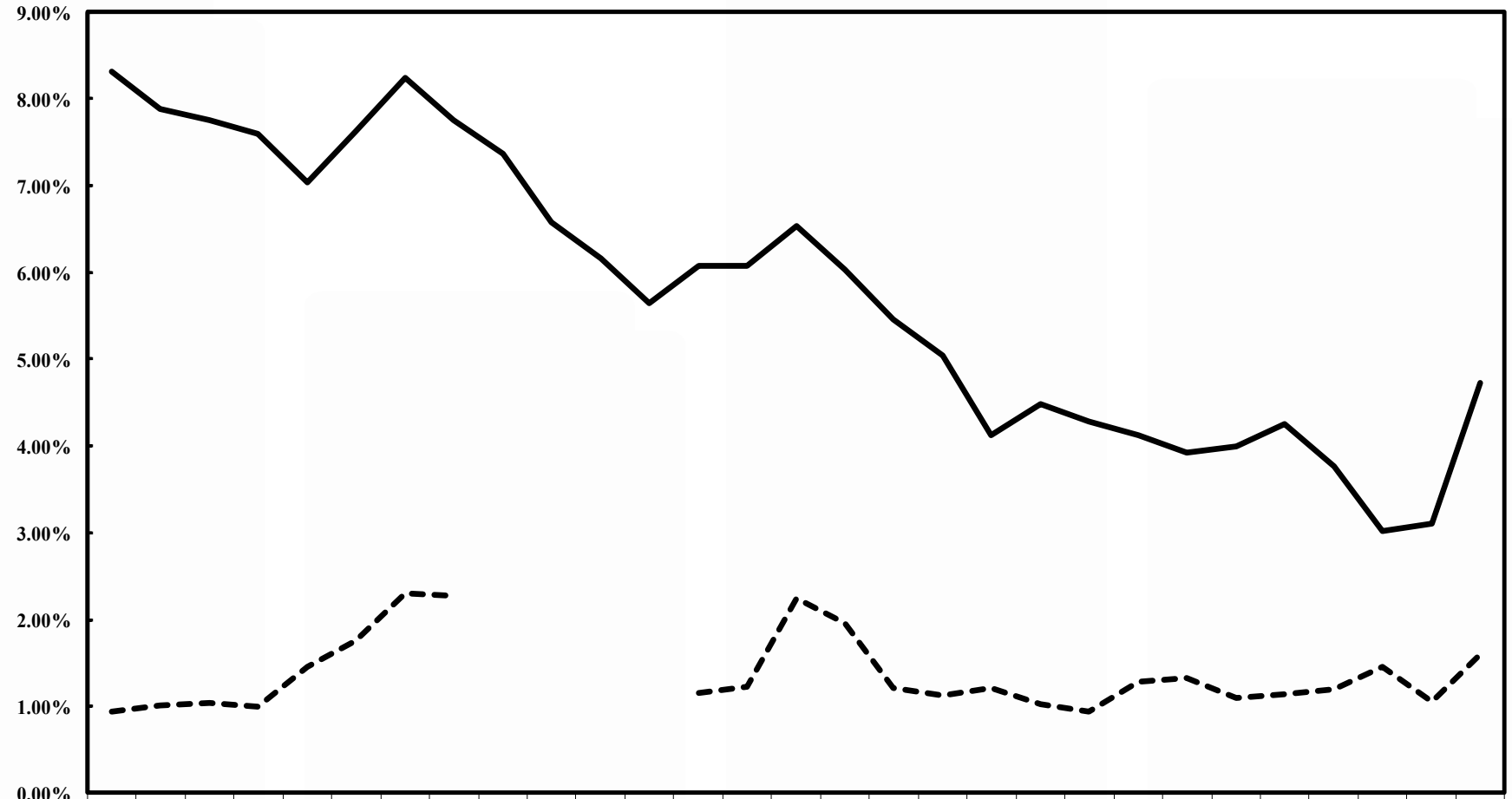
M&M	ke	=	ku	+	(((	ku	-	i	)		1-t	)		D	/	E	+	(ku - d) P / E
	11.88%	=	8.81%	+	(((	8.81%	-	5.48%	)		0.79	)		52.11%	/	46.26%	+	8.81% - 5.68%) 1.63% / 46.26%
	11.88%	=	8.81%	+	(((	3.33%			)		0.79	)		1.1264			+	3.13%) 0.0352
	11.88%	=	8.81%	+	((	2.63%						)		1.1264			+	3.13%) 0.0352
	11.88%	=	8.81%	+		2.96%											+	0.11%

Interest Rates for Investment Grade Public Utility Bonds
Yearly for 2017-2022
and the Twelve Months Ended September 2023

Years	Aa Rated	A Rated	Baa Rated	Average
2018	4.09%	4.25%	4.67%	4.34%
2019	3.61%	3.77%	4.19%	3.86%
2020	2.79%	3.02%	3.39%	3.07%
2021	2.97%	3.11%	3.36%	3.15%
2022	4.53%	4.72%	5.03%	4.77%
Five-Year Average	3.60%	3.77%	4.13%	3.84%
Months				
Oct-22	5.68%	5.88%	6.18%	5.91%
Nov-22	5.54%	5.75%	6.05%	5.78%
Dec-22	5.06%	5.28%	5.57%	5.30%
Jan-23	4.98%	5.20%	5.49%	5.23%
Feb-23	5.12%	5.29%	5.54%	5.32%
Mar-23	5.24%	5.39%	5.68%	5.44%
Apr-23	5.00%	5.13%	5.47%	5.20%
May-23	5.24%	5.36%	5.71%	5.44%
Jun-23	5.26%	5.38%	5.73%	5.46%
Jul-23	5.30%	5.41%	5.73%	5.48%
Aug-23	5.58%	5.71%	6.08%	5.77%
Sep-23	5.72%	5.86%	6.15%	5.91%
Twelve-Month Average	5.31%	5.47%	5.78%	5.52%
Six-Month Average	5.35%	5.48%	5.81%	5.54%
Three-Month Average	5.53%	5.66%	5.99%	5.72%

Source: Mergent Bond Record

Yields on
A-rated Public Utility Bonds and
Spreads over 30-Year Treasuries



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
A-rated Public Utility	8.31	7.89	7.75	7.60	7.04	7.62	8.24	7.76	7.37	6.58	6.16	5.65	6.07	6.07	6.53	6.04	5.46	5.04	4.13	4.48	4.28	4.12	3.93	4.00	4.25	3.77	3.02	3.11	4.72
Spread vs. 30-year	0.94	1.01	1.04	0.99	1.46	1.75	2.30	2.27					1.16	1.23	2.25	1.96	1.21	1.13	1.21	1.03	0.94	1.28	1.33	1.10	1.14	1.19	1.46	1.06	1.60

A rated Public Utility Bonds over 30-Year Treasuries

Year	A-rated Public Utility	30-Year Treasuries Yield	30-Year Treasuries Spread
Jan-99	6.97%	5.16%	1.81%
Feb-99	7.09%	5.37%	1.72%
Mar-99	7.26%	5.58%	1.68%
Apr-99	7.22%	5.55%	1.67%
May-99	7.47%	5.81%	1.66%
Jun-99	7.74%	6.04%	1.70%
Jul-99	7.71%	5.98%	1.73%
Aug-99	7.91%	6.07%	1.84%
Sep-99	7.93%	6.07%	1.86%
Oct-99	8.06%	6.26%	1.80%
Nov-99	7.94%	6.15%	1.79%
Dec-99	8.14%	6.35%	1.79%
Jan-00	8.35%	6.63%	1.72%
Feb-00	8.25%	6.23%	2.02%
Mar-00	8.28%	6.05%	2.23%
Apr-00	8.29%	5.85%	2.44%
May-00	8.70%	6.15%	2.55%
Jun-00	8.36%	5.93%	2.43%
Jul-00	8.25%	5.85%	2.40%
Aug-00	8.13%	5.72%	2.41%
Sep-00	8.23%	5.83%	2.40%
Oct-00	8.14%	5.80%	2.34%
Nov-00	8.11%	5.78%	2.33%
Dec-00	7.84%	5.49%	2.35%
Jan-01	7.80%	5.54%	2.26%
Feb-01	7.74%	5.45%	2.29%
Mar-01	7.68%	5.34%	2.34%
Apr-01	7.94%	5.65%	2.29%
May-01	7.99%	5.78%	2.21%
Jun-01	7.85%	5.67%	2.18%
Jul-01	7.78%	5.61%	2.17%
Aug-01	7.59%	5.48%	2.11%
Sep-01	7.75%	5.48%	2.27%
Oct-01	7.63%	5.32%	2.31%
Nov-01	7.57%	5.12%	2.45%
Dec-01	7.83%	5.48%	2.35%
Jan-02	7.66%	5.45%	2.21%
Feb-02	7.54%	5.40%	2.14%
Mar-02	7.76%		
Apr-02	7.57%		
May-02	7.52%		
Jun-02	7.42%		
Jul-02	7.31%		
Aug-02	7.17%		
Sep-02	7.08%		
Oct-02	7.23%		
Nov-02	7.14%		
Dec-02	7.07%		
Jan-03	7.07%		
Feb-03	6.93%		
Mar-03	6.79%		
Apr-03	6.64%		
May-03	6.36%		
Jun-03	6.21%		
Jul-03	6.57%		
Aug-03	6.78%		
Sep-03	6.56%		
Oct-03	6.43%		
Nov-03	6.37%		
Dec-03	6.27%		
Jan-04	6.15%		
Feb-04	6.15%		
Mar-04	5.97%		
Apr-04	6.35%		
May-04	6.62%		
Jun-04	6.46%		
Jul-04	6.27%		
Aug-04	6.14%		
Sep-04	5.98%		
Oct-04	5.94%		
Nov-04	5.97%		
Dec-04	5.92%		
Jan-05	5.78%		
Feb-05	5.61%		
Mar-05	5.83%		
Apr-05	5.64%		
May-05	5.53%		
Jun-05	5.40%		
Jul-05	5.51%		
Aug-05	5.50%		
Sep-05	5.52%		
Oct-05	5.79%		
Nov-05	5.88%		
Dec-05	5.80%		

Year	A-rated Public Utility	30-Year Treasuries Yield	30-Year Treasuries Spread
Jan-06	5.75%		
Feb-06	5.82%	4.54%	1.28%
Mar-06	5.98%	4.73%	1.25%
Apr-06	6.29%	5.06%	1.23%
May-06	6.42%	5.20%	1.22%
Jun-06	6.40%	5.15%	1.25%
Jul-06	6.37%	5.13%	1.24%
Aug-06	6.20%	5.00%	1.20%
Sep-06	6.00%	4.85%	1.15%
Oct-06	5.98%	4.85%	1.13%
Nov-06	5.80%	4.69%	1.11%
Dec-06	5.81%	4.68%	1.13%
Jan-07	5.96%	4.85%	1.11%
Feb-07	5.90%	4.82%	1.08%
Mar-07	5.85%	4.72%	1.13%
Apr-07	5.97%	4.87%	1.10%
May-07	5.99%	4.90%	1.09%
Jun-07	6.30%	5.20%	1.10%
Jul-07	6.25%	5.11%	1.14%
Aug-07	6.24%	4.93%	1.31%
Sep-07	6.18%	4.79%	1.39%
Oct-07	6.11%	4.77%	1.34%
Nov-07	5.97%	4.52%	1.45%
Dec-07	6.16%	4.53%	1.63%
Jan-08	6.02%	4.33%	1.69%
Feb-08	6.21%	4.52%	1.69%
Mar-08	6.21%	4.39%	1.82%
Apr-08	6.29%	4.44%	1.85%
May-08	6.28%	4.60%	1.68%
Jun-08	6.38%	4.69%	1.69%
Jul-08	6.40%	4.57%	1.83%
Aug-08	6.37%	4.50%	1.87%
Sep-08	6.49%	4.27%	2.22%
Oct-08	7.56%	4.17%	3.39%
Nov-08	7.60%	4.00%	3.60%
Dec-08	6.52%	2.87%	3.65%
Jan-09	6.39%	3.13%	3.26%
Feb-09	6.30%	3.59%	2.71%
Mar-09	6.42%	3.64%	2.78%
Apr-09	6.48%	3.76%	2.72%
May-09	6.49%	4.23%	2.26%
Jun-09	6.20%	4.52%	1.68%
Jul-09	5.97%	4.41%	1.56%
Aug-09	5.71%	4.37%	1.34%
Sep-09	5.53%	4.19%	1.34%
Oct-09	5.55%	4.19%	1.36%
Nov-09	5.64%	4.31%	1.33%
Dec-09	5.79%	4.49%	1.30%
Jan-10	5.77%	4.60%	1.17%
Feb-10	5.87%	4.62%	1.25%
Mar-10	5.84%	4.64%	1.20%
Apr-10	5.81%	4.69%	1.12%
May-10	5.50%	4.29%	1.21%
Jun-10	5.46%	4.13%	1.33%
Jul-10	5.26%	3.99%	1.27%
Aug-10	5.01%	3.80%	1.21%
Sep-10	5.01%	3.77%	1.24%
Oct-10	5.10%	3.87%	1.23%
Nov-10	5.37%	4.19%	1.18%
Dec-10	5.56%	4.42%	1.14%
Jan-11	5.57%	4.52%	1.05%
Feb-11	5.68%	4.65%	1.03%
Mar-11	5.56%	4.51%	1.05%
Apr-11	5.55%	4.50%	1.05%
May-11	5.32%	4.29%	1.03%
Jun-11	5.26%	4.23%	1.03%
Jul-11	5.27%	4.27%	1.00%
Aug-11	4.69%	3.65%	1.04%
Sep-11	4.48%	3.18%	1.30%
Oct-11	4.52%	3.13%	1.39%
Nov-11	4.25%	3.02%	1.23%
Dec-11	4.33%	2.98%	1.35%
Jan-12	4.34%	3.03%	1.31%
Feb-12	4.36%	3.11%	1.25%
Mar-12	4.48%	3.28%	1.20%
Apr-12	4.40%	3.18%	1.22%
May-12	4.20%	2.93%	1.27%
Jun-12	4.08%	2.70%	1.38%
Jul-12	3.93%	2.59%	1.34%
Aug-12	4.00%	2.77%	1.23%
Sep-12	4.02%	2.88%	1.14%
Oct-12	3.91%	2.90%	1.01%
Nov-12	3.84%	2.80%	1.04%
Dec-12	4.00%	2.88%	1.12%

Year	A-rated Public Utility	30-Year Treasuries Yield	30-Year Treasuries Spread
Jan-13	4.15%	3.08%	1.07%
Feb-13	4.18%	3.17%	1.01%
Mar-13	4.20%	3.16%	1.04%
Apr-13	4.00%	2.93%	1.07%
May-13	4.17%	3.11%	1.06%
Jun-13	4.53%	3.40%	1.13%
Jul-13	4.68%	3.61%	1.07%
Aug-13	4.73%	3.76%	0.97%
Sep-13	4.80%	3.79%	1.01%
Oct-13	4.70%	3.68%	1.02%
Nov-13	4.77%	3.80%	0.97%
Dec-13	4.81%	3.89%	0.92%
Jan-14	4.63%	3.77%	0.86%
Feb-14	4.53%	3.66%	0.87%
Mar-14	4.51%	3.62%	0.89%
Apr-14	4.41%	3.52%	0.89%
May-14	4.26%	3.39%	0.87%
Jun-14	4.29%	3.42%	0.87%
Jul-14	4.23%	3.33%	0.90%
Aug-14	4.13%	3.20%	0.93%
Sep-14	4.24%	3.26%	0.98%
Oct-14	4.06%	3.04%	1.02%
Nov-14	4.09%	3.04%	1.05%
Dec-14	3.95%	2.83%	1.12%
Jan-15	3.58%	2.46%	1.12%
Feb-15	3.67%	2.57%	1.10%
Mar-15	3.74%	2.63%	1.11%
Apr-15	3.75%	2.59%	1.16%
May-15	4.17%	2.96%	1.21%
Jun-15	4.39%	3.11%	1.28%
Jul-15	4.40%	3.07%	1.33%
Aug-15	4.25%	2.86%	1.39%
Sep-15	4.39%	2.95%	1.44%
Oct-15	4.29%	2.89%	1.40%
Nov-15	4.40%	3.03%	1.37%
Dec-15	4.35%	2.97%	1.38%
Jan-16	4.27%	2.86%	1.41%
Feb-16	4.11%	2.62%	1.49%
Mar-16	4.16%	2.68%	1.48%
Apr-16	4.00%	2.62%	1.38%
May-16	3.93%	2.63%	1.30%
Jun-16	3.78%	2.45%	1.33%
Jul-16	3.57%	2.23%	1.34%
Aug-16	3.59%	2.26%	1.33%
Sep-16	3.66%	2.35%	1.31%
Oct-16	3.77%	2.50%	1.27%
Nov-16	4.08%	2.86%	1.22%
Dec-16	4.27%	3.11%	1.16%
Jan-17	4.14%	3.02%	1.12%
Feb-17	4.18%	3.03%	1.15%
Mar-17	4.23%	3.08%	1.15%
Apr-17	4.12%	2.94%	1.18%
May-17	4.12%	2.96%	1.16%
Jun-17	3.94%	2.80%	1.14%
Jul-17	3.99%	2.88%	1.11%
Aug-17	3.86%	2.80%	1.06%
Sep-17	3.87%	2.78%	1.09%
Oct-17	3.91%	2.88%	1.03%
Nov-17	3.83%	2.80%	1.03%
Dec-17	3.79%	2.77%	1.02%
Jan-18	3.86%	2.88%	0.98%
Feb-18	4.09%	3.13%	0.96%
Mar-18	4.13%	3.09%	1.04%
Apr-18	4.17%	3.07%	1.10%
May-18	4.28%	3.13%	1.15%
Jun-18	4.27%	3.05%	1.22%
Jul-18	4.27%	3.01%	1.26%
Aug-18	4.26%	3.04%	1.22%
Sep-18	4.32%	3.15%	1.17%
Oct-18	4.45%	3.34%	1.11%
Nov-18	4.52%	3.36%	1.16%
Dec-18	4.37%	3.10%	1.27%

Year	A-rated Public Utility	30-Year Treasuries Yield	30-Year Treasuries Spread
Jan-19	4.35%	3.04%	1.31%
Feb-19	4.25%	3.02%	1.23%
Mar-19	4.16%	2.98%	1.18%
Apr-19	4.08%	2.94%	1.14%
May-19	3.98%	2.82%	1.16%
Jun-19	3.82%	2.57%	1.25%
Jul-19	3.69%	2.57%	1.12%
Aug-19	3.29%	2.12%	1.17%
Sep-19	3.37%	2.16%	1.21%
Oct-19	3.39%	2.19%	1.20%
Nov-19	3.43%	2.28%	1.15%
Dec-19	3.40%	2.30%	1.10%
Jan-20	3.29%	2.22%	1.07%
Feb-20	3.11%	1.97%	1.14%
Mar-20	3.50%	1.46%	2.04%
Apr-20	3.19%	1.27%	1.92%
May-20	3.14%	1.38%	1.76%
Jun-20	3.07%	1.49%	1.58%
Jul-20	2.74%	1.31%	1.43%
Aug-20	2.73%	1.36%	1.37%
Sep-20	2.84%	1.42%	1.42%
Oct-20	2.95%	1.57%	1.38%
Nov-20	2.85%	1.62%	1.23%
Dec-20	2.77%	1.67%	1.10%
Jan-21	2.91%	1.82%	1.09%
Feb-21	3.09%	2.04%	1.05%
Mar-21	3.44%	2.34%	1.10%
Apr-21	3.30%	2.30%	1.00%
May-21	3.33%	2.32%	1.01%
Jun-21	3.16%	2.16%	1.00%
Jul-21	2.95%	1.94%	1.01%
Aug-21	2.95%	1.92%	1.03%
Sep-21	2.96%	1.94%	1.02%
Oct-21	3.09%	2.06%	1.03%
Nov-21	3.02%	1.94%	1.08%
Dec-21	3.13%	1.85%	1.28%
Jan-22	3.33%	2.10%	1.23%
Feb-22	3.68%	2.25%	1.43%
Mar-22	3.98%	2.41%	1.57%
Apr-22	4.32%	2.81%	1.51%
May-22	4.75%	3.07%	1.68%
Jun-22	4.86%	3.25%	1.61%
Jul-22	4.78%	3.10%	1.68%
Aug-22	4.76%	3.13%	1.63%
Sep-22	5.28%	3.56%	1.72%
Oct-22	5.88%	4.04%	1.84%
Nov-22	5.75%	4.00%	1.75%
Dec-22	5.28%	3.66%	1.62%
Jan-23	5.20%	3.66%	1.54%
Feb-23	5.29%	3.80%	1.49%
Mar-23	5.39%	3.77%	1.62%
Apr-23	5.13%	3.68%	1.45%
May-23	5.36%	3.86%	1.50%
Jun-23	5.38%	3.87%	1.51%
Jul-23	5.41%	3.96%	1.45%
Aug-23	5.71%	4.28%	1.43%
Sep-23	5.86%	4.47%	1.39%

Recent Average:	12-month:	1.55%
	6-month:	1.46%
	3-month:	1.42%

Common Equity Risk Premiums
Years 1926-2022

	Large Common Stocks	Long-Term Corp. Bonds	Equity Risk Premium	Long-Term Govt. Bonds Yields
Low Interest Rates	12.40%	5.27%	7.13%	2.83%
Average Across All Interest Rates	12.02%	6.06%	5.96%	4.91%
High Interest Rates	11.63%	6.87%	4.76%	7.03%

Source of Information: 2023 SBBI Yearbook Stocks, Bonds, Bills, and Inflation

Basic Series
Annual Total Returns (except yields)

Year	Large Common Stocks	Long-Term Corp. Bonds	Long-Term Govt. Bonds Yields
2020	18.40%	15.40%	1.37%
2021	28.71%	-2.66%	1.88%
1940	-9.78%	3.39%	1.94%
1945	36.44%	4.08%	1.99%
1941	-11.59%	2.73%	2.04%
1949	18.79%	3.31%	2.09%
1946	-8.07%	1.72%	2.12%
1950	31.71%	2.12%	2.24%
2019	31.49%	19.95%	2.25%
1939	-0.41%	3.97%	2.26%
1948	5.50%	4.14%	2.37%
1947	5.71%	-2.34%	2.43%
1942	20.34%	2.60%	2.46%
1944	19.75%	4.73%	2.46%
2012	16.00%	10.68%	2.46%
2014	13.69%	17.28%	2.46%
1943	25.90%	2.83%	2.48%
1938	31.12%	6.13%	2.52%
2017	21.83%	12.25%	2.54%
1936	33.92%	6.74%	2.55%
2011	2.11%	17.95%	2.55%
2015	1.38%	-1.02%	2.68%
1951	24.02%	-2.69%	2.69%
1954	52.62%	5.39%	2.72%
2016	11.96%	6.70%	2.72%
1937	-35.03%	2.75%	2.73%
1953	-0.99%	3.41%	2.74%
1935	47.67%	9.61%	2.76%
1952	18.37%	3.52%	2.79%
2018	-4.38%	-4.73%	2.84%
1934	-1.44%	13.84%	2.93%
1955	31.56%	0.48%	2.95%
2008	-37.00%	8.78%	3.03%
1932	-8.19%	10.82%	3.15%
1927	37.49%	7.44%	3.17%
1957	-10.78%	8.71%	3.23%
1930	-24.90%	7.98%	3.30%
1933	53.99%	10.38%	3.36%
1928	43.61%	2.84%	3.40%
1929	-8.42%	3.27%	3.40%
1956	6.56%	-6.81%	3.45%
1926	11.62%	7.37%	3.54%
2013	32.39%	-7.07%	3.78%
1960	0.47%	9.07%	3.80%
1958	43.36%	-2.22%	3.82%
1962	-8.73%	7.95%	3.95%
1931	-43.34%	-1.85%	4.07%
2010	15.06%	12.44%	4.14%
1961	26.89%	4.82%	4.15%
1963	22.80%	2.19%	4.17%
1964	16.48%	4.77%	4.23%
2022	-18.11%	-26.18%	4.24%
1959	11.96%	-0.97%	4.47%
1965	12.45%	-0.46%	4.50%
2007	5.49%	2.60%	4.50%
1966	-10.06%	0.20%	4.55%
2009	26.46%	3.02%	4.58%
2005	4.91%	5.87%	4.61%
2002	-22.10%	16.33%	4.84%
2004	10.88%	8.72%	4.84%
2006	15.79%	3.24%	4.91%
2003	28.68%	5.27%	5.11%
1998	28.58%	10.76%	5.42%
1967	23.98%	-4.95%	5.56%
2000	-9.10%	12.87%	5.58%
2001	-11.89%	10.65%	5.75%
1971	14.30%	11.01%	5.97%
1968	11.06%	2.57%	5.98%
1972	18.99%	7.26%	5.99%
1997	33.36%	12.95%	6.02%
1995	37.58%	27.20%	6.03%
1970	3.86%	18.37%	6.48%
1993	10.08%	13.19%	6.54%
1996	22.96%	1.40%	6.73%
1999	21.04%	-7.45%	6.82%
1969	-8.50%	-8.09%	6.87%
1976	23.93%	18.65%	7.21%
1973	-14.69%	1.14%	7.26%
1992	7.62%	9.39%	7.26%
1991	30.47%	19.89%	7.30%
1974	-26.47%	-3.06%	7.60%
1986	18.67%	19.85%	7.89%
1994	1.32%	-5.76%	7.99%
1977	-7.16%	1.71%	8.03%
1975	37.23%	14.64%	8.05%
1989	31.69%	16.23%	8.16%
1990	-3.10%	6.78%	8.44%
1978	6.57%	-0.07%	8.98%
1988	16.61%	10.70%	9.19%
1987	5.25%	-0.27%	9.20%
1985	31.73%	30.09%	9.56%
1979	18.61%	-4.18%	10.12%
1982	21.55%	42.56%	10.95%
1984	6.27%	16.86%	11.70%
1983	22.56%	6.26%	11.97%
1980	32.50%	-2.76%	11.99%
1981	-4.92%	-1.24%	13.34%

Yields for Treasury Constant Maturities
Yearly for 2018-2022
and the Twelve Months Ended September 2023

Years	1-Year	2-Year	3-Year	5-Year	7-Year	10-Year	20-Year	30-Year
2018	2.33%	2.53%	2.63%	2.75%	2.85%	2.91%	3.02%	3.11%
2019	2.05%	1.97%	1.94%	1.96%	2.05%	2.14%	2.40%	2.58%
2020	0.38%	0.40%	0.43%	0.54%	0.73%	0.89%	1.35%	1.56%
2021	0.10%	0.27%	0.46%	0.86%	1.19%	1.44%	1.98%	2.05%
2022	2.79%	2.98%	3.05%	3.00%	3.01%	2.95%	3.30%	3.12%
Five-Year Average	1.53%	1.63%	1.70%	1.82%	1.97%	2.07%	2.41%	2.48%
Months								
Oct-22	4.43%	4.38%	4.38%	4.18%	4.09%	3.98%	4.28%	4.04%
Nov-22	4.73%	4.50%	4.34%	4.06%	3.99%	3.89%	4.22%	4.00%
Dec-22	4.68%	4.29%	4.05%	3.76%	3.72%	3.62%	3.87%	3.66%
Jan-23	4.69%	4.21%	3.91%	3.64%	3.59%	3.53%	3.81%	3.66%
Feb-23	4.93%	4.53%	4.23%	3.94%	3.86%	3.75%	3.95%	3.80%
Mar-23	4.68%	4.30%	4.09%	3.82%	3.77%	3.66%	3.94%	3.77%
Apr-23	4.68%	4.02%	3.76%	3.54%	3.50%	3.46%	3.80%	3.68%
May-23	4.91%	4.13%	3.82%	3.59%	3.58%	3.57%	3.96%	3.86%
Jun-23	5.24%	4.64%	4.27%	3.95%	3.85%	3.75%	4.04%	3.87%
Jul-23	5.37%	4.83%	4.47%	4.14%	4.03%	3.90%	4.15%	3.96%
Aug-23	5.37%	4.90%	4.59%	4.31%	4.26%	4.17%	4.46%	4.28%
Sep-23	5.44%	5.02%	4.74%	4.49%	4.46%	4.38%	4.65%	4.47%
Twelve-Month Average	4.93%	4.48%	4.22%	3.95%	3.89%	3.81%	4.09%	3.92%
Six-Month Average	5.17%	4.59%	4.28%	4.00%	3.95%	3.87%	4.18%	4.02%
Three-Month Average	5.39%	4.92%	4.60%	4.31%	4.25%	4.15%	4.42%	4.24%

Source: Federal Reserve statistical release H.15

Measures of the Risk-Free Rate & Corporate Bond Yields

The forecast of Treasury and Corporate yields
per the consensus of nearly 50 economists
reported in the Blue Chip Financial Forecasts dated June 1, 2023 and October 1, 2023

		Treasury					Corporate	
Year	Quarter	1-Year Bill	2-Year Note	5-Year Note	10-Year Note	30-Year Bond	Aaa Bond	Baa Bond
2023	Fourth	5.4%	4.8%	4.3%	4.2%	4.4%	5.2%	6.2%
2024	First	5.1%	4.6%	4.2%	4.1%	4.3%	5.2%	6.1%
2024	Second	4.8%	4.3%	4.0%	3.9%	4.2%	5.0%	6.0%
2024	Third	4.5%	4.0%	3.9%	3.9%	4.2%	5.0%	6.0%
2024	Fourth	4.1%	3.8%	3.8%	3.8%	4.1%	4.9%	6.0%
2025	First	3.9%	3.7%	3.6%	3.8%	4.0%	4.9%	5.9%
Long-range CONSENSUS								
2024		3.6%	3.4%	3.4%	3.4%	3.8%	4.7%	5.8%
2025		3.0%	3.0%	3.1%	3.3%	3.6%	4.6%	5.6%
2026		2.9%	3.0%	3.2%	3.4%	3.7%	4.7%	5.7%
2027		2.9%	3.1%	3.2%	3.5%	3.8%	4.8%	5.8%
2028		2.9%	3.0%	3.3%	3.5%	3.9%	4.9%	5.8%
2029		2.9%	3.0%	3.2%	3.5%	3.8%	4.8%	5.8%
Averages:								
	2024-2028	2.9%	3.0%	3.2%	3.4%	3.8%	4.8%	5.7%
	2029-2033	2.9%	3.1%	3.3%	3.6%	3.9%	5.0%	5.9%

Measures of the Market Premium

Historical Market Premium

Avg. to Low Interest Rates	(Rm)	(Rf)	
1926-2022 Arith. mean	12.21%	3.87%	8.34%

Forecast Market Premium

Value Line	Dividend Yield		Median Appreciation Potential		Median Total Return
As of: 29-Sep-23	2.3%	+	12.47%	=	14.77%
Risk-free Rate of Return (Rf)					3.75%
					11.02%
Average - Historical/Forecast					9.68%

Exhibit 7.8: Size-Decile Portfolios of the NYSE/NYSE MKT/NASDAQ Long-Term Returns in Excess of CAPM
1926–2016

Size Grouping	OLS Beta	Arithmetic Mean	Return in Excess of Risk-free Rate (actual)	Return in Excess of Risk-free Rate (as predicted by CAPM)	Size Premium
Mid-Cap (3–5)	1.12	13.82%	8.80%	7.79%	1.02%
Low-Cap (6–8)	1.22	15.26%	10.24%	8.49%	1.75%
Micro-Cap (9–10)	1.35	18.04%	13.02%	9.35%	3.67%
Breakdown of Deciles 1–10					
1-Largest	0.92	11.05%	6.04%	6.38%	-0.35%
2	1.04	12.82%	7.81%	7.19%	0.61%
3	1.11	13.57%	8.55%	7.66%	0.89%
4	1.13	13.80%	8.78%	7.80%	0.98%
5	1.17	14.62%	9.60%	8.09%	1.51%
6	1.17	14.81%	9.79%	8.14%	1.66%
7	1.25	15.41%	10.39%	8.67%	1.72%
8	1.30	16.14%	11.12%	9.04%	2.08%
9	1.34	16.97%	11.96%	9.28%	2.68%
10-Smallest	1.39	20.27%	15.25%	9.66%	5.59%

Betas are estimated from monthly returns in excess of the 30-day U.S. Treasury bill total return, January 1926–December 2016. Historical riskless rate measured by the 91-year arithmetic mean income return component of 20-year government bonds (5.02%). Calculated in the context of the CAPM by multiplying the equity risk premium by beta. The equity risk premium is estimated by the arithmetic mean total return of the S&P 500 (11.95%) minus the arithmetic mean income return component of 20-year government bonds (5.02%) from 1926–2016. Source: Morningstar *Direct* and CRSP. Calculated based on data from CRSP US Stock Database and CRSP US Indices Database ©2017 Center for Research. Used with permission. All calculations performed by Duff & Phelps, LLC.

Comparable Earnings Approach
Using Non-Utility Companies with
Timeliness of 3, 4 & 5; Safety Rank of 1, 2 & 3; Financial Strength of B+, B++, A & A+;
Price Stability of 80 to 95; Betas of .80 to .95; and Technical Rank of 1, 2, 3 & 4

Company	Industry	Timeliness Rank	Safety Rank	Financial Strength	Price Stability	Beta	Technical Rank
AbbVie Inc	Drug	3	2	A	90	0.85	4
Agilent Technologies	Precision Instrument	3	2	A	90	0.95	4
Altria Group Inc	Tobacco	3	2	B++	95	0.85	3
Booz Allen Hamilton Holding Corporation	Industrial Services	3	2	B++	90	0.85	3
Broadridge Fin'l	Information Services	3	2	B++	95	0.90	2
Brown Forman Corp (Class B)	Beverage	4	1	A	95	0.85	3
CACI International Inc	IT Services	3	3	B+	90	0.90	3
Cboe Global Markets	Brokers & Exchanges	3	2	A	95	0.80	3
Chemed Corporation	Diversified Co.	4	2	A	95	0.80	3
Commerce Bancshares Inc	Bank (Midwest)	3	3	B++	95	0.90	4
Corteva Inc.	Chemical (Basic)	3	3	B++	80	0.95	4
CSW Industrials	Petroleum (Producing)	4	2	B++	85	0.90	3
Dolby Laboratories Inc	Entertainment Tech	4	2	A	90	0.95	2
Expeditors International of Washington Inc	Industrial Services	3	1	A+	90	0.95	3
Exponent Inc.	Information Services	4	3	B+	85	0.95	4
Fastenal Co	Retail Building Supply	3	1	A+	90	0.90	2
Franklin Electric Co Inc	Electrical Equipment	3	2	A	90	0.90	2
GATX Corp	Railroad	3	3	B+	85	0.95	1
Harris Corp.	Aerospace/Defense	3	2	A+	85	0.90	4
Houlihan Lokey	Investment Banking	4	3	A	90	0.80	3
Huntington Ingalls Industries Inc	Aerospace/Defense	3	3	B++	80	0.95	3
Ingredion Incorporated	Food Processing	3	2	B++	95	0.90	2
Intercontinental Exch.	Brokers & Exchanges	4	1	A	95	0.95	1
International Business Machines Corp	Computers/Peripherals	3	3	B++	90	0.95	3
J and J Snack Foods Corp	Food Processing	3	2	A	80	0.85	2
J B Hunt Transport Services Inc	Trucking	4	2	A+	85	0.95	3
Landstar System	Trucking	3	1	A	95	0.80	2
McCormick and Co	Food Processing	4	1	A+	95	0.80	2
Monster Beverage Corporation	Beverage	4	1	A+	95	0.85	1
Motorola Solutions Inc	Telecom. Equipment	3	2	B++	95	0.95	3
MSC Industrial Direct Co Inc	Machinery	3	2	B++	90	0.90	3
OSI Systems Inc	Precision Instrument	3	2	B++	85	0.90	1
Packaging Corp	Packaging & Container	3	2	A	90	0.95	3
Philip Morris International Inc	Tobacco	4	3	B++	85	0.95	4
Prestige Consumer	Household Products	4	3	B+	80	0.90	2
Quest Diagnostics Inc	Medical Services	3	2	B++	90	0.80	2
RLI Corp	Insurance (Prop/Cas.)	3	2	A	95	0.80	4
Rollins Inc	Industrial Services	3	2	A	85	0.85	3
Roper Tech.	Machinery	3	1	A+	95	0.95	2
Rush Enterprises 'A'	Retail Automotive	3	3	B+	80	0.95	3
Schneider National	Trucking	4	3	B++	85	0.80	2
Selective Insurance Group Inc	Insurance (Prop/Cas.)	3	3	B+	90	0.85	3
Sensient Technologies Corp	Food Processing	4	2	B++	90	0.95	3
Service Corp International Inc	Industrial Services	3	3	B+	85	0.90	3
Stepan Company	Chemical (Specialty)	5	2	B++	90	0.80	3
Thermo Fisher Scientific Inc	Precision Instrument	4	1	A	95	0.85	3
Trimas Corporation	Diversified Co.	3	3	B+	80	0.85	4
Tyler Technologies	IT Services	3	2	A+	80	0.85	3
UniFirst Corp	Industrial Services	3	2	A	90	0.90	4
United Parcel Service	Air Transport	4	2	A+	85	0.80	3
Universal Corp	Tobacco	4	3	B++	95	0.80	3
VeriSign Inc	Internet	3	2	A	90	0.90	3
Waters Corp	Precision Instrument	3	2	A	85	0.95	4
Watsco Inc	Retail Building Supply	4	1	A+	90	0.90	3
Average		3	2	A	89	0.89	3
Gas Group	Average	4	2	A	89	0.86	3

Source of Information: Value Line Investment Survey for Windows, September 2023

Comparable Earnings Approach
Five -Year Average Historical Earned Returns
for Years 2018-2022 and
Projected 2026-28

Company	2018	2019	2020	2021	2022	Average	Projected 2026-28
AbbVie Inc	-	-	NMF	NMF	NMF	-	NMF
Agilent Technologies	19.9%	20.8%	21.0%	24.7%	29.5%	23.2%	33.5%
Altria Group Inc	51.0%	NMF	NMF	NMF	NMF	51.0%	NMF
Booz Allen Hamilton Holding Corporation	58.8%	56.4%	50.8%	54.5%	61.3%	56.4%	34.0%
Broadridge Fin'l	46.1%	49.1%	43.7%	36.8%	39.9%	43.1%	35.0%
Brown Forman Corp (Class B)	50.7%	41.9%	29.1%	30.6%	24.0%	35.3%	55.0%
CACI International Inc	9.4%	11.2%	12.1%	17.2%	12.0%	12.4%	10.0%
Cboe Global Markets	13.1%	11.1%	13.9%	14.6%	6.8%	11.9%	12.0%
Chemed Corporation	33.9%	31.7%	32.9%	49.5%	37.4%	37.1%	24.5%
Commerce Bancshares Inc	14.8%	13.4%	10.4%	15.4%	19.8%	14.8%	14.5%
Corteva Inc.	-	4.4%	4.5%	6.3%	7.6%	5.7%	9.5%
CSW Industrials	17.5%	16.6%	9.8%	14.2%	18.3%	15.3%	14.0%
Dolby Laboratories Inc	12.6%	11.1%	9.5%	11.9%	8.2%	10.7%	11.5%
Expeditors International of Washington Inc	31.1%	26.9%	26.2%	40.5%	43.6%	33.7%	26.5%
Exponent Inc.	23.0%	23.5%	22.8%	24.3%	31.9%	25.1%	28.5%
Fastenal Co	32.7%	29.7%	31.4%	30.4%	34.4%	31.7%	37.5%
Franklin Electric Co Inc	14.6%	12.3%	12.1%	16.3%	17.5%	14.6%	20.0%
GATX Corp	11.2%	10.9%	6.5%	9.0%	10.7%	9.7%	9.5%
Harris Corp.	-	3.6%	5.4%	9.6%	5.7%	6.1%	19.0%
Houlihan Lokey	17.9%	18.7%	22.6%	30.3%	16.0%	21.1%	24.0%
Huntington Ingalls Industries Inc	55.1%	36.5%	36.6%	19.4%	16.6%	32.8%	15.5%
Ingredion Incorporated	20.8%	16.4%	13.6%	14.4%	15.6%	16.2%	20.0%
Intercontinental Exch.	12.1%	12.7%	12.8%	12.8%	13.1%	12.7%	11.5%
International Business Machines Corp	75.4%	54.9%	37.7%	47.7%	37.9%	50.7%	36.5%
J and J Snack Foods Corp	11.1%	11.4%	2.3%	6.6%	5.5%	7.4%	12.5%
J B Hunt Transport Services Inc	29.7%	24.9%	19.5%	24.4%	26.4%	25.0%	17.0%
Landstar System	37.2%	31.6%	27.8%	44.3%	48.6%	37.9%	23.0%
McCormick and Co	20.9%	20.8%	19.4%	18.7%	14.6%	18.9%	16.0%
Monster Beverage Corporation	27.5%	26.6%	24.6%	21.0%	17.0%	23.3%	27.0%
Motorola Solutions Inc	-	-	-	-	-	-	NMF
MSC Industrial Direct Co Inc	20.8%	20.0%	20.1%	23.4%	25.5%	22.0%	19.0%
OSI Systems Inc	5.3%	11.7%	13.2%	11.6%	18.1%	12.0%	13.0%
Packaging Corp	27.6%	22.7%	16.9%	24.8%	28.4%	24.1%	25.0%
Philip Morris International Inc	-	-	-	-	-	-	NMF
Prestige Consumer	13.3%	12.2%	12.1%	13.0%	14.5%	13.0%	10.0%
Quest Diagnostics Inc	16.8%	15.9%	22.6%	28.4%	20.0%	20.7%	19.0%
RLI Corp	11.4%	11.8%	10.4%	14.5%	19.1%	13.4%	14.0%
Rollins Inc	32.5%	24.9%	27.7%	32.4%	29.1%	29.3%	36.5%
Roper Tech.	15.9%	14.4%	12.9%	13.1%	9.5%	13.2%	11.0%
Rush Enterprises 'A'	13.0%	12.2%	9.1%	16.5%	22.4%	14.6%	15.5%
Schneider National	12.6%	6.6%	10.3%	16.7%	16.1%	12.5%	15.0%
Selective Insurance Group Inc	12.2%	12.0%	9.1%	13.5%	13.0%	12.0%	21.0%
Sensient Technologies Corp	18.3%	14.2%	11.7%	14.1%	13.9%	14.4%	12.5%
Service Corp International Inc	20.4%	19.4%	29.8%	40.7%	36.3%	29.3%	29.0%
Stepan Company	14.4%	11.6%	12.9%	12.8%	12.6%	12.9%	9.0%
Thermo Fisher Scientific Inc	10.7%	11.5%	18.5%	18.9%	15.8%	15.1%	15.5%
Trimas Corporation	13.1%	9.5%	11.8%	9.1%	10.2%	10.7%	11.5%
Tyler Technologies	14.6%	13.1%	11.5%	12.8%	12.1%	12.8%	15.5%
UniFirst Corp	10.2%	10.0%	7.8%	8.1%	5.4%	8.3%	7.0%
United Parcel Service	NMF	NMF	NMF	NMF	57.0%	57.0%	44.0%
Universal Corp	7.8%	5.7%	6.7%	6.5%	8.1%	7.0%	12.0%
VeriSign Inc	-	-	-	-	-	-	NMF
Waters Corp	39.9%	-	NMF	NMF	NMF	39.9%	30.0%
Watsco Inc	18.0%	17.1%	18.1%	25.2%	31.8%	22.0%	26.0%
Average						22.0%	20.6%
Median						15.7%	17.0%
Average (excluding companies with values >20%)						12.1%	13.3%

Comparable Earnings Approach
Screening Parameters

Timeliness Rank

The rank for a stock's probable relative market performance in the year ahead. Stocks ranked 1 (Highest) or 2 (Above Average) are likely to outpace the year-ahead market. Those ranked 4 (Below Average) or 5 (Lowest) are not expected to outperform most stocks over the next 12 months. Stocks ranked 3 (Average) will probably advance or decline with the market in the year ahead. Investors should try to limit purchases to stocks ranked 1 (Highest) or 2 (Above Average) for Timeliness.

Safety Rank

A measure of potential risk associated with individual common stocks rather than large diversified portfolios (for which Beta is good risk measure). Safety is based on the stability of price, which includes sensitivity to the market (see Beta) as well as the stock's inherent volatility, adjusted for trend and other factors including company size, the penetration of its markets, product market volatility, the degree of financial leverage, the earnings quality, and the overall condition of the balance sheet. Safety Ranks range from 1 (Highest) to 5 (Lowest). Conservative investors should try to limit purchases to equities ranked 1 (Highest) or 2 (Above Average) for Safety.

Financial Strength

The financial strength of each of the more than 1,600 companies in the VS II data base is rated relative to all the others. The ratings range from A++ to C in nine steps. (For screening purposes, think of an A rating as "greater than" a B). Companies that have the best relative financial strength are given an A++ rating, indicating ability to weather hard times better than the vast majority of other companies. Those who don't quite merit the top rating are given an A+ grade, and so on. A rating as low as C++ is considered satisfactory. A rating of C+ is well below average, and C is reserved for companies with very serious financial problems. The ratings are based upon a computer analysis of a number of key variables that determine (a) financial leverage, (b) business risk, and (c) company size, plus the judgment of Value Line's analysts and senior editors regarding factors that cannot be quantified across-the-board for companies. The primary variables that are indexed and studied include equity coverage of debt, equity coverage of intangibles, "quick ratio", accounting methods, variability of return, fixed charge coverage, stock price stability, and company size.

Price Stability Index

An index based upon a ranking of the weekly percent changes in the price of the stock over the last five years. The lower the standard deviation of the changes, the more stable the stock. Stocks ranking in the top 5% (lowest standard deviations) carry a Price Stability Index of 100; the next 5%, 95; and so on down to 5. One standard deviation is the range around the average weekly percent change in the price that encompasses about two thirds of all the weekly percent change figures over the last five years. When the range is wide, the standard deviation is high and the stock's Price Stability Index is low.

Beta

A measure of the sensitivity of the stock's price to overall fluctuations in the New York Stock Exchange Composite Average. A Beta of 1.50 indicates that a stock tends to rise (or fall) 50% more than the New York Stock Exchange Composite Average. Use Beta to measure the stock market risk inherent in any diversified portfolio of, say, 15 or more companies. Otherwise, use the Safety Rank, which measures total risk inherent in an equity, including that portion attributable to market fluctuations. Beta is derived from a least squares regression analysis between weekly percent changes in the price of a stock and weekly percent changes in the NYSE Average over a period of five years. In the case of shorter price histories, a smaller time period is used, but two years is the minimum. The Betas are periodically adjusted for their long-term tendency to regress toward 1.00.

Technical Rank

A prediction of relative price movement, primarily over the next three to six months. It is a function of price action relative to all stocks followed by Value Line. Stocks ranked 1 (Highest) or 2 (Above Average) are likely to outpace the market. Those ranked 4 (Below Average) or 5 (Lowest) are not expected to outperform most stocks over the next six months. Stocks ranked 3 (Average) will probably advance or decline with the market. Investors should use the Technical and Timeliness Ranks as complements to one another.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED REBUTTAL TESTIMONY OF
PAUL R. MOUL, MANAGING CONSULTANT
P. MOUL & ASSOCIATES
ON BEHALF OF
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED:
DATE ADMITTED:

Peoples Statement No. 13-R

PREPARED REBUTTAL TESTIMONY OF
P. MOUL

INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Paul Ronald Moul. My business address is 251 Hopkins Road, Haddonfield, New Jersey 08033-3062. I am Managing Consultant at the firm P. Moul & Associates, an independent financial and regulatory consulting firm.

Q. DID YOU PREVIOUSLY SUBMIT TESTIMONY IN THIS PROCEEDING ON BEHALF OF PEOPLES NATURAL GAS COMPANY, LLC, INC. ("PEOPLES" OR THE "COMPANY")?

A. Yes. I submitted my direct testimony, Peoples Statement No. 13, on December 29, 2023.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. My rebuttal testimony responds to the direct testimony submitted by Anthony Spadaccio, a witness appearing on behalf of the Commission's Bureau of Investigation and Enforcement ("I&E"), and Aaron L. Rothschild, a witness appearing on behalf of the Office of the Consumer Advocate ("OCA"). If I fail to address each and every issue in the testimonies of each of these witnesses, it does not imply agreement with those issues.

Q. WHAT RATE OF RETURN ISSUES HAVE BEEN DISPUTED IN THIS CASE?

A. The Company's capital structure has been challenged by Mr. Rothschild. Mr. Spadaccio has accepted the Company's proposed capital structure. Each of the opposing witnesses

have accepted the Company's proposed cost of debt in this case. The cost of equity has been disputed by both Messrs. Rothschild and Spadaccio. The equity returns proposed by the I&E and OCA witnesses are entirely too low to reflect the risks of Peoples and the prospective cost of equity.

There are three key factors that bear on the rate of return issue in this case. Aside from technical issues that I will discuss later in my rebuttal testimony, the Commission should take into consideration the following:

1) A rate of return that will be reflective of the current capital cost rates, which is today higher than any time since the financial crisis of 2007-08.

2) A rate of return that will reflect and be supportive of the Company's financial and risk profile.

3) The management effectiveness displayed by Peoples.

As I explain below, the opposing party recommendations fail to adequately consider these points and thereby understate the required cost of common equity in this proceeding.

Q. PLEASE SUMMARIZE THE KEY POINTS OF YOUR COST OF EQUITY REBUTTAL TESTIMONY.

A. My key points are:

- Comparable Companies - Mr. Spadaccio has made one deletion to the members of my Gas Group and Mr. Rothschild has made three deletions to the Gas Group that I proposed in this case. I disagree with those eliminations to my Gas Group because my group fairly reflects the risks for the typical natural gas distribution utility.

- Discounted Cash Flow (DCF) - A variety of DCF results are too close to the cost of debt to provide a reliable measure of the cost of equity. As such, alternative measures should be considered as has been Commission practice in other recent proceedings.
- DCF Leverage Adjustment - The I&E and OCA witnesses have not refuted the accuracy of the Company's leverage adjustments to the DCF and beta component of the CAPM.
- Capital Asset Pricing Model - A reasonable application of the CAPM mandates using prospective yields on 30-year Treasury bonds, leverage adjusted betas, and size adjustment.
- Risk Premium Analysis - The Risk Premium approach has previously been considered by the Commission and the results presented by the Company substantiate the Company's proposed return in this case.
- Comparable Earnings Approach - This approach verifies the Company's proposed return in this case.

Management effectiveness of Peoples warrants an equity return above the midpoint of the indicated returns shown by the standard models of the cost of equity.

Q. WHAT ARE THE KEY ASPECTS OF THE RATE OF RETURN ISSUE THAT THE PENNSYLVANIA PUBLIC UTILITY COMMISSION ("COMMISSION") SHOULD CONSIDER WHEN DECIDING THIS ISSUE IN THIS CASE?

A. The issues involve the Company's cost of equity and the capital structure. OCA's witness, Mr. Rothschild, has opposed the actual capital structure and instead proposed a

hypothetical capital structure, which is not warranted based upon the Commission's policy on this matter. Mr. Rothschild's use of a hypothetical capital structure, rather than the Company's projected actual capital structure for the FPFTY, is factually wrong and contrary to long-standing Commission practice and precedent. I will detail the Commission recent findings on capital structure below.

My key points on the cost of equity are:

- The recommended equity returns proposed by Messrs. Spadaccio and Rothschild fail to adequately reflect higher interest rates that have transpired since the end of the Pandemic. Today, the return should be higher for reasons I will explain below. Instead, Messrs. Spadaccio and Rothschild are erroneously moving in the other direction. Some of the flawed analysis by opposing witnesses can be traced to the failure by Mr. Spadaccio to give any weight to CAPM and Mr. Rothschild's defective CAPM analysis. These omissions by the opposing witnesses rest with their failure to follow the Commission's lead established in the Aqua and Columbia Water rate case decisions.
- The Commission has recognized that additional methods should be considered when establishing the cost of equity. This is especially important because of monetary policy by the FOMC and relatively high inflation points to a higher cost of equity than formerly. Moreover, the DCF model is slow to respond to changes in bond yields, mandating use of alternative methods, such as CAPM and Risk Premium. Both the I&E and OCA witnesses have inadequately addressed this issue.

- Discounted Cash Flow ("DCF") – many of DCF results by the opposing parties are clearly too low to provide a reliable measure of the cost of equity. This can be traced to the formulaic approach taken by Mr. Spadaccio in applying this model (see pages 26-22 of I&E Statement No. 2). It is troublesome that Mr. Spadaccio only devotes about two pages out of 68 pages of his direct testimony to substantiate his recommended cost of equity. Regarding Mr. Rothschild, he fails to adequately reflect investor expectations of growth. He errs when he gives insufficient weight to analysts' growth rate forecasts of earnings per share that are consistently used by Mr. Spadaccio, me, and the Commission.
- The DCF proposal by Mr. Rothschild provides an inappropriate measure of investor expected returns. Analysts' projections of future growth are the only reasonable evidence of the DCF growth rate and the retention growth rate that he used is entirely inappropriate and has never been adopted in Pennsylvania.
- A multistage DCF model, as proposed by Mr. Rothschild is unnecessary for this case. The only thing that the multistage DCF model does, when properly applied, is to show that his sustainable growth DCF result is too low.
- DCF Leverage Adjustment – Mr. Spadaccio has not refuted the accuracy of my leverage adjustments to the DCF and beta component of the Capital Asset Pricing Model ("CAPM"). Mr. Rothschild draws erroneous conclusions concerning my leverage adjustment.
- CAPM – A reasonable application of the CAPM mandates using 30-year Treasury bond yields, leverage adjusted betas, and size adjustment. With these

elements the CAPM indicates an equity cost rate that is 11.96% following the approach used by Mr. Spadaccio. Indeed, Mr. Spadaccio has proposed an 10.91% CAPM result in this case, even without these considerations. Significantly, he fails to reflect his CAPM result in his cost of equity recommendation. Without the results of the CAPM, Mr. Spadaccio fails to adequately incorporate the current level of high interest rates. And, Mr. Spadaccio fails to incorporate CAPM results that the Commission used in its recent Aqua and Columbia Water rate case decisions.

Q. HOW SHOULD THE RATE OF RETURN SET BY THE COMMISSION SUPPORT THE COMPANY'S FINANCIAL PROFILE?

A. The Commission should set the Company's return on equity at a level that will attract investment in the Company to ensure the Company's financial ability to render safe and reliable service. Applying this principle, the Commission should reject the proposals by Messrs. Spadaccio and Rothschild to lower the Company's return on common equity to 9.96% and 8.02%, respectively. These proposed equity returns would be viewed by investors as unsupportive of the Company's financial condition. The I&E and OCA witnesses provide no explanation why 9.96% or 8.02% would be reasonable. Indeed, in my memory, the Commission has not set a return on equity on an original cost rate base that was less than 9% for an investor-owned utility in the past 40-years. This makes Mr. Rothschild's proposal clearly an outlier and should be rejected. Indeed, the Commission approved 10.24% in the last PECO gas rate case in 2021, and the Aqua Pennsylvania rate case where 10.00% was approved in 2022. Columbia Water received a 9.75% equity return

without any recognition of management performance. There have been dramatic increases in inflation, prompting the Federal Open Market Committee ("FOMC") to increase the federal funds ("Fed Funds") rate to combat inflation. While the March 2024 rate of inflation was 3.5%, a meaningful decline from the peak of 9.1% that occurred in June 2022, it is still above the policy goal of 2% set by the FOMC. Indeed, to combat inflation, the Fed Funds rate has been increased by the FOMC eleven times, amounting to a 5.25% increase. This has been the fastest rate of increase in 40 years. This fact has not been adequately incorporated into the cost of equity proposals of Messrs. Rothschild and Spadaccio. Indeed, with the upward move in interest rates, an equity return above 10% is clearly warranted today. Rather, based on the factors listed below, and for technical reasons set forth later in my rebuttal testimony, the Commission should adopt a substantially higher equity return today for Peoples.

Q. ARE THERE ADDITIONAL ISSUES THAT THE COMMISSION SHOULD CONSIDER WHEN SETTING THE COMPANY'S RETURN?

A. Yes. The investment community would be very concerned if the Commission were to adopt the position of the OCA in this case. If it were to do so, investors would view Pennsylvania regulation as less supportive of the Company at a time of high levels of capital investment and increasing capital cost rates. Over the next five years, Peoples expects capital expenditures to be approximately $3 billion, which represents 108% of the Company's existing Utility Plant In Service. Indeed, Mr. Spadaccio acknowledges (see page 39 of I&E Statement No. 2) that future capex for Peoples will increase by this level, but does not adequately reflect this in his proposed return on equity. If the Commission

were to adopt the returns proposed by the OCA, Pennsylvania's regulatory support would certainly be placed into question by the investment community, particularly in the context of higher capital costs. Although cost allocations, rate design issues, and regulatory policies relative to the cost of service are important considerations, the return on equity used by the Commission to set rates, embodies in a single numerical value a clear signal of regulatory support (or lack thereof) for the financial strength of the utilities that it regulates. In a single figure, the return on equity utilized to set rates provides a common and widely understood benchmark that can be compared from one company to another and is the basis by which returns on all financial assets (stocks – both utility and non-regulated, bonds, money market instruments, and so forth) can be measured. So, while varying degrees of sophistication are required to interpret the meaning of specific Commission policies on technical matters, the return on equity figure is universally understood and communicates to investors the types of returns that they can reasonably expect from an investment in utilities operating in Pennsylvania.

Q. SHOULD THE COMMISSION CONSIDER THE CURRENT HIGH LEVEL OF CAPITAL COSTS WHEN DECIDING THE RETURN ON EQUITY IN THIS CASE?

A. Yes. The Commission should recognize that accommodative policy by the FOMC has ended and higher interest rates have occurred and will prevail in the future. High inflation also has been a driving factor. As noted previously, the rate of inflation spiked upward to 9.1% in June 2022, and as of March 2024, it stood at 3.5%. High levels of inflation have an impact on the level of economic activity, the cost of capital – particularly the interest

cost of debt – and the need for more cautious financial practices, such as a prudent level of borrowing. Today's inflation is substantially higher than the target rate of 2%, which is the FOMC policy goal. Contributing to "sky high" inflation is pandemic-related supply side issues, strong consumer demand, and tight labor markets. Supply disruptions have also significantly impacted the consumer sector of the economy, which developed during the pandemic. While short-term interest rates were at historically low levels during much of the pandemic, interest rates began to rise and have continued at high levels throughout 2023 and 2024.

Q. IS THERE ADDITIONAL EVIDENCE THAT SUGGESTS THAT THE COST OF CAPITAL WILL CONTINUE AT HIGH LEVELS?

A. Yes. To gain a consensus view of future interest rates, I tabulated the forecasts of yields on 10-year Treasury notes published by a variety of well recognized and investor-influencing sources. I chose the 10-year Treasury note because it is available on a consistent basis for each source. The comparisons are:

	2024	2025	2026	2027	2028
Blue Chip	4.10%	3.90%	3.90%	3.90%	3.90%
CBO	4.60%	4.60%	3.90%	3.80%	3.80%

The Blue Chip (December 2023) and CBO (February 2024) reflect the general consensus is that interest rates will remain at elevated levels in the future. The high levels of interest rates represent one key factor that adds to the risk of common equity. The Commission should take into account the forecast of interest rates when it sets the cost of equity for Peoples.

Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

A. I will cover the issues of (i) capital structure, (ii) the composition of the proxy (i.e., barometer) group, (iii) the weight to be given to the DCF method, (iv) the DCF growth rate, (v) the leverage adjustment to the DCF and CAPM methods, (vi) the CAPM method, (vii) the Risk Premium analysis, (viii) Comparable Earnings, and (ix) management performance as part of the return on equity consideration.

CAPITAL STRUCTURE RATIOS

Q. ARE THERE DIFFERENCES IN THE PROPOSED CAPITAL STRUCTURES UTILIZED BY THE RATE OF RETURN WITNESSES IN THIS CASE?

A. Yes. Mr. Rothschild has erroneously proposed a lower hypothetical common equity ratio in Peoples' capital structure. Mr. Spadaccio has accepted the Company's proposed capital structure, because it falls within the range of capital structures of the proxy group.

Q. HOW DOES THE COMPANY'S CAPITAL STRUCTURE PROPOSAL DIFFER FROM THAT ADVOCATED BY MR. ROTHSCHILD?

A. Mr. Rothschild's proposal is based on the average common equity from his proxy group. In reaching his conclusion on capital structure ratios, Mr. Rothschild says his 50% common equity ratio represent the "high side" of the mean and median common equity ratios of his Gas Proxy Group. He also observes that the common equity ratio of Essential Utilities (the parent company of Peoples) has an impact on his capital structure proposal.

Q. IS THERE ANY BASIS TO DEVIATE FROM THE COMPANY'S ACTUAL CAPITAL STRUCTURE TO SET THE RATE OF RETURN IN THIS CASE?

A. No. The Company's actual capital structure ratios are entirely reasonable and acceptable. That alone is sufficient to support the use of the Company's actual capital structure in this case. Mr. Rothschild might have been led to a different conclusion if he had considered the most recently approved common equity ratio by this Commission rather than rely on the actions of other commissions. Indeed, in its Order Entered on October 25, 2018 in Docket No. R-2017-2640058, the Commission adopted a 54.02% common equity ratio. This is the most relevant benchmark common equity ratio for comparative purposes in this case. Indeed, the Company's proposed common equity ratio of 54.67% is entirely reasonable based a prior Commission decision which have approved equity ratios that are within the range employed by the barometer group. Moreover, the reasonableness of the Company's actual capital structure containing a common equity ratio of 54.67% is revealed by the data provided by Mr. Spadaccio. His data shows that the Company's common equity ratio is within the range employed by his barometer groups and, therefore, supports the level of common equity proposed by the Company. Those comparisons show that his Barometer Group has a range of common equity ratios from 34.62% to 60.01% according to Mr. Spadaccio. This comparison supports the actual 54.67% common equity ratio for Peoples. Here, the Company's actual common equity ratio falls within that range. Hence, the Company's actual common equity ratio conforms with Commission policy that states that the actual, not hypothetical, common equity ratio will be employed when it falls within the Barometer Group's range.

PROXY GROUP

Q. ARE THERE DIFFERENCES IN THE PROXY GROUPS UTILIZED BY THE RATE OF RETURN WITNESSES IN THIS CASE?

A. Yes. Mr. Spadaccio includes only seven companies from my Gas Group in his barometer group. He drops Southwest Gas Holdings. Mr. Rothschild accepts only five of the companies in my Gas Group and drops Chesapeake, New Jersey Resources, and Southwest Gas.

Q. MR. SPADACCIO USED THE PERCENTAGE OF REVENUES DEVOTED TO UTILITY OPERATIONS AS A CRITERION FOR SCREENING COMPANIES TO ASSEMBLE HIS BAROMETER GROUP. IS THIS A CORRECT CRITERION?

A. No. For utilities, the percentage of regulated revenues cannot be used as the criteria to select members of the Barometer Group. This is because the margins on other business segments within Barometer Group companies are generally dissimilar to the utility business. Energy trading is a case in point, which would make revenue comparisons incompatible because of the large revenues and small margins associated with that business. That is to say, energy trading generates large amount of revenues, but little profits because the margins on such trades are very small.

Q. HOW DO THE PERCENTAGES OF UTILITY INCOME AND ASSETS COMPARE TO THE COMPANIES CONTAINED IN YOUR GAS GROUP?

A. Those results are shown below:

		Percent Regulated Operations		
		Revenues	Income	Assets
ATO	Atmos Energy Corp	96%	67%	97%
CPK	Chesapeake Utilities Corp.	62%	81%	77%
NJR	New Jersey Resources Corp.	39%	58%	64%
NI	NiSource, Inc.	100%	101%	93%
NWN	Northwest Natural Gas	95%	92%	93%
OGS	One Gas, Inc.	100%	100%	100%
SWX	Southwest Gas Corp.	39%	99%	67%
SR	Spire, Inc.	88%	83%	80%
	Average	77%	85%	84%

As shown above, the percentage of utility assets is above 64% for all members of my Gas Group. As such, these data show that no elimination to my Gas Group is appropriate in this case.

Q. HAS THE COMMISSION USED YOUR GAS GROUP?

A. Yes. The Commission has recently used my Gas Group in its Quarterly Earnings Report (Docket Number U-2023-3044811) for the year ended September 30, 2023, which was adopted at the Public Meeting on January 18, 2024.

COST OF EQUITY

Q. THE DCF MODEL HAS BEEN USED BY MR. SPADACCIO, MR. ROTHSCHILD AND YOU AS ONE METHOD TO MEASURE THE COST OF EQUITY. WHAT IS YOUR POSITION CONCERNING THE USEFULNESS OF THE DCF METHOD?

A. While the results of a DCF analysis should certainly be given weight, the use of more than one method provides a superior foundation for the cost of equity determination. Since all

cost of equity methods contain certain unrealistic and overly restrictive assumptions, the use of more than one method will capture the multiplicity of factors that motivate investors to commit capital to an enterprise (i.e., current income, capital appreciation, preservation of capital, level of risk bearing). I am aware that the Commission usually expresses its cost of equity determination in the context of the DCF model. But the Commission also considers other methods as well. In its order entered on December 28, 2012, in Docket No. R-2012-2290597, the Commission stated:

> Sole reliance on one methodology without checking the validity of the results of that methodology with other cost of equity analyses does not always lend itself to responsible ratemaking. We conclude that methodologies other than the DCF can be used as a check upon the reasonableness of the DCF derived equity return calculation.[1]

Similarly, in the Aqua Pennsylvania decision, the Commission observed:

> In the 2012 PPL Order, the Commission considered PPL's CAPM and RP methods, tempered by informed judgment, instead of DCF-only results. We conclude that methodologies other than the DCF can be used as a check upon the reasonableness of the DCF derived ROE calculation. Historically, we have relied primarily upon the DCF methodology in arriving at ROE determinations and have utilized the results of the CAPM as a check upon the reasonableness of the DCF derived equity return. As such, where evidence based on other methods suggests that the DCF-only results may understate the utility's ROE, we will consider those other methods, to some degree, in determining the appropriate range of reasonableness for our equity return determination.[2]

[1] Pennsylvania Public Utility Commission v. PPL Electric Utilities, R-2012-2290597, meeting held December 5, 2012, at 80.

[2] Pennsylvania Public Utility Commission v. Aqua Pennsylvania, Inc., R-2021-3027385, order entered May 16, 2022, at 154-55.

Again, the Commission recognized the need for additional methods in its decision for Columbia Water.

> In *Aqua 2022*, the Commission determined the ROE by using informed judgement based on I&E's DCF and CAPM methodologies. We conclude that methodologies other than the DCF can be used as a check upon the reasonableness of the DCF derived ROE calculation. We historically have primarily relied upon the DCF methodology in arriving at ROE determinations and utilized the results of the CAPM, as a check upon the reasonableness of the DCF derived equity return. As such, where evidence based on other methods suggests that the DCF-only results may understate the utility's ROE, we will consider those other methods, to some degree, in determining the appropriate range of reasonableness for our ROE determination.[3]

The Commission has acknowledged the usefulness of other methods, such as CAPM, as a means of establishing a range of reasonable returns. Indeed, it is clear that the Commission has been guided by the results of other models and other factors aside from DCF when setting the DSIC return. The Commission's selection of the rate of return on equity for use in the DSIC is usually set well above the cost of equity indicated by the DCF model alone.

Indeed, the influence of other methods must have an impact on the Commission's attitude toward the DCF model because the Commission's selection of the rate of return on equity for use in the DSIC is usually set well above the cost of equity indicated by the DCF model alone. For example, in the Quarterly Earnings Report at Docket No. M-2023-3044811, the Commission set the DSIC return at 10.15% for the Gas Companies, while the DCF returns were 10.06% using current stock prices and 9.74% using 52-week average stock prices. It is clear that the Commission has been guided by the results of other models and other factors aside from DCF when setting the DSIC return.

[3] Pennsylvania Public Utility Commission v. Columbia Water Company, R-2023-3040258, order entered January 18, 2024, at 108.

Q. WHAT HAS MR. SPADACCIO DONE WITH THE RESULTS OF MODELS OTHER THAN DCF?

A. Nothing. In this case, Mr. Spadaccio essentially ignores the results of the CAPM, calling his CAPM results a basis for comparison purposes only (see page 33 of I&E Statement No. 2). Unlike Mr. Spadaccio, Mr. Rothschild acknowledges (see page 10 of OCA Statement No. 2) that the CAPM serves as a check on the DCF because it considers how inflation and interest rates are impacting the cost of equity. The use of multiple methods provides a more comprehensive and reliable basis to establish a reasonable equity return for Peoples. In his testimony, Mr. Spadaccio shows that the average DCF result is too low by reference to his CAPM results. In this situation, the Commission should consider moving to within the top half of the range of DCF returns submitted in this case due to this understatement. This process would preserve use of DCF, but also accommodate the tendency of the DCF model to understate the required return in this market. Mr. Spadaccio's DCF return range is from 8.49% for Chesapeake to 12.34% for NiSource. Since Mr. Spadaccio's CAPM result is 10.91%, then it stands to reason that the top half of the range of DCF results should be emphasized in this case, because the average DCF by itself is too low. Hence if DCF is to be used exclusively, as argued by Mr. Spadaccio, then the proper DCF return should be 11.15% which is within the top half of the range, i.e., 9.96% + 12.34% = 22.30% ÷ 2, and is without regard to management performance.

Indeed, the CAPM and RP methods reflect directly the changes in interest rates and are an important indicator of higher equity cost rates. Although he claims (see page 33 of I&E Statement No. 2) that DCF sufficiently considers economic factors, including inflation, there is no input in the DCF that Mr. Spadaccio can point to that substantiates his

position. We know that CAPM and RP reflects directly changes in interest rates and those models are more responsive in this regard than DCF.

Q. HAS THE NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS ("NARUC") TAKEN A POSITION ON THE USE OF MULTIPLE METHODS TO MEASURE THE COST OF EQUITY?

A. Yes. The NARUC has published a paper entitled "Cost of Capital and Capital Markets Primer for Utility Regulators." In it, the NARUC said:

> The goal of all cost of equity models is to capture the realities of the capital marketplace and each model does so from a different perspective. Because these financial models are simplifications of the real world, the ROE results are estimates rather than exact discernments of ultimate truth. Ideally, the model results will corroborate each other but may not in practice. Different estimates resulting from different models can usefully frame, bracket, or define a range or zone of estimates.
>
> Investors, investment bankers, and corporate financial professionals use multiple models when evaluating the cost of equity. Likewise, it is desirable for regulators to also use multiple models when evaluating the cost of equity.

DCF APPLICATION BY I&E

Q. WHAT FORM OF THE DCF MODEL HAS BEEN EMPLOYED IN THIS CASE?

A. The constant growth form of the DCF model has been used by Mr. Spadaccio, Mr. Rothschild, and me.

Q. ARE THERE LIMITATIONS TO THE APPLICATION OF THE DCF THAT INDICATES THAT IT SHOULD NOT BE USED ALONE TO ESTABLISH THE EQUITY RETURN, WHICH MR. SPADACCIO SEEMS TO SUPPORT

ESPECIALLY IN TIMES OF RISING OR FALLING INTEREST RATES?

A. My point is that all models have their strengths and weaknesses, and it is important to rely on more than one model in determining the cost of common equity. There are many assumptions associated with the specification of the DCF. These are:

- The form of the model. A choice must be made whether to employ the continuous or discrete form of the model.
- Whether a finite or infinite form of the model realistically represents investor's horizon.
- Whether compounding of the quarterly dividend should be employed.
- The timing of the dividend payments regarding the interval from the ex-dividend date and the stock measurement date needs to be addressed.
- A choice is necessary relative to a representative price that would reasonably represent the rate effective period, e.g., 12-month average, 6-month average, 13-week average, spot, etc.
- Assumptions concerning the structure of returns which under the DCF assumes that the price-earnings multiple, dividend payout ratio, and earned return will be constant.
- Whether single or multiple growth rates better reflect investor expectations.
- Choices concerning the use of historical or forecast growth rates.
- From a historical perspective, whether 10-years, 5-years, or some other historical period is representative of investor expectations.

- Choice among variables to measure growth, e.g., earnings per share, dividends per share, book value per share, cash flow per share, retention growth, price growth, etc.
- Choice of investor influencing growth rates that are available from I/B/E/S First Call, Zacks, and Value Line.
- Whether the growth rate if measured by the formula "b x r" should be modified for external growth, i.e., "sv."
- The potential misspecification of the rate of return applicable to book value when taken directly from DCF if the market price diverges from book value.

Many of the assumptions, especially the constant price-earnings multiple, constant payout rate, and constant earned return, are particularly unrealistic.

Q. DO THE DCF RESULTS PROPOSED BY MR. SPADACCIO PROVIDE A REASONABLE REPRESENTATION OF THE COST OF EQUITY?

A. Not in my opinion. I&E Witness Spadaccio concludes that the DCF cost of equity is 9.96%, while the CAPM cost rate is 10.91% (I&E Statement No. 2, pages 28 and 32). As noted above, the Commission has stated that it would consider other methods when the other methods showed that the DCF method understated the cost of equity. It should be noted that I&E's DCF result in this case is also too low for two reasons. First, there have been significant increases in interest rates and inflation since the Pandemic, indicating a higher cost of equity today. Second, I&E's own CAPM result of 10.91% illustrates its DCF result is too low.

Focusing on the DCF approach, the principal purpose of assembling a barometer group is to avoid relying on data for a single company that may not be representative and to thereby smooth out any abnormalities. That said, when some of the DCF results for companies in the I&E barometer group are unreasonable on their face, the reliability of the method being used, or the witness' application of that method, must be questioned. As indicated below, the DCF results shown below fall into this category:

Company	Average: 52 wk & Spot Yield	+	Growth	=	Total
Chesapeake Utilities Corp.	2.49%	+	6.00%	=	8.49%
ONE Gas, Inc.	4.18%	+	4.67%	=	8.85%

It is a fundamental tenet of finance that the cost of equity must be higher than the cost of debt by a meaningful margin to compensate for the higher risk associated with a common equity investment. As noted above, the DCF return for these companies fail to provide a sufficient spread over the yield of on A-rated public utility bonds, which currently stands at 5.55%. Hence, any DCF return below 9% is clearly unreasonable and should be rejected.

Q. PLEASE SUMMARIZE THE DCF GROWTH RATE ANALYSIS PERFORMED BY MR. SPADACCIO.

A. As shown on page 27 of I&E Statement No. 2, Mr. Spadaccio proposes a growth rate based on his review of analysts' projected earnings growth rates. His growth rate (i.e., 5.91%) is below the 6.75% growth rate that I determined. Referring to Mr. Spadaccio's growth rates, the 4.33% growth rate for Northwest Natural and 4.67% for ONE Gas appear to be outliers.

The range of growth rates for other companies is 5.49% (i.e., Spire) to 8.00% (i.e., NiSource).

Q. What DCF return is indicated from the data presented by Mr. Spadaccio after removing the unduly low results for Chesapeake and ONE Gas?

A. Those results are revealed below:

Company	Average: 52 wk & Spot Yield	+	Growth	=	Total
Atmos Energy Corp.	3.08%	+	7.27%	=	10.35%
NiSource Inc.	4.34%	+	8.00%	=	12.34%
New Jersey Resources Corp.	4.01%	+	5.67%	=	9.68%
Northwest Natural Gas Co.	5.01%	+	4.33%	=	9.34%
Spire Inc.	5.21%	+	5.49%	=	10.70%
Average					**10.48%**

DCF APPLICATION BY OCA

Q. PLEASE SUMMARIZE MR. ROTHSCHILD'S DCF METHODOLOGY.

A. In his DCF analyses, Mr. Rothschild uses dividend yields for the average yearly period and spot prices as of February 29, 2024 (see Exhibit ALR-5, page 1). He arrives at a dividend yield of 4.03% and 4.35% for each calculation. He employs the Retention Growth Rate as his first DCF approach. As part of his retention growth analysis, Mr. Rothschild relies upon book value returns for his proxy group (see Source [C] on page 1 of Exhibit ALR-3).

Q. ARE THERE OTHER ASPECTS OF MR. ROTHSCHILD'S TESTIMONY WHERE HE IS INCONSISTENT IN HIS APPROACH?

A. Yes. Specific instances include:

- Mr. Rothschild states that his recommended ROE is "market-based" and "forward-looking" (page 5 of OCA Statement 3), yet he criticizes forecasts as unreliable (page 89).
- He claims that he uses primarily current, forward-looking market data (e.g., stock prices, bond yields, stock option prices) and then criticizes me for relying on historical data (betas in my CAPM are based on past 5 years of data) and non-market data. Yet, he used historical data himself, which conflicts with his own criticism of historical data. Indeed, Mr. Rothschild used book value data extensively in his analysis. First, he calculates a return on book value as part of his Retention Growth Rate (see page 56 of OCA Statement No. 3). Second, he also employs book value per share growth rates in his non-constant DCF (see page 58 of OCA Statement No. 3).
- Despite his preference for forward-looking data, he claims that using analyst's forecasts would be speculative. He also states that his market-based cost of equity recommendation is not based on future stock prices because he cannot "predict the future" and "capital markets are unpredictable" (page 18 of OCA Statement No. 3).
- His retention method relies on historic data in part, yet he previously criticized my use of historic data.
- He states that he uses an analytical approach focused on market data while my testimony is too focused on non-market data. Yet he uses book value data in his analysis, e.g. growth rate and book value per share. Also, he uses historical data for risk free rate of return for CAPM.

- Although he criticizes analyst forecasts as speculative and unreliable (p. 19), he admits to using them. Specifically, he admits to relying on Value Line and Zacks analyst forecasts in his DCF analysis despite his own criticisms of the data.

Q. AT PAGE 13 OF OCA STATEMENT NO. 3, MR. ROTHSCHILD ASSERTS THAT HE USES AN ANALYTICAL APPROACH FOCUSED PRIMARILY OF MARKET DATA. HE FURTHER ALLEGES THAT YOUR ANALYSIS IS TOO FOCUSED ON NON-MARKET DATA. IS THIS AN ACCURATE DESCRIPTION OF THE EVIDENCE IN THIS CASE?

A. No. Both Mr. Rothschild and I have considered both historical and forecast data for this case. And, we both have used book value data and market data in our analysis. For example, the dividend yield component of the DCF and the risk-free rate of return component of the CAPM are recent averages of historical data. No other approach here is possible. Forecasts have been employed by both of us for the growth component of the DCF and the market risk premium of the CAPM. I have looked at book value measures of historical data, just like Mr. Rothschild as revealed on page 58 of OCA Statement No. 3. His extensive use of history strongly indicates that Mr. Rothschild's analysis is in no way superior to my analysis.

Q. AT PAGE 90 OF OCA STATEMENT NO. 3, MR. ROTHSCHILD CLAIMS THAT IT IS DANGEROUS TO USE ANALYSTS' EPS GROWTH FORECASTS WITHOUT ADDITIONAL INTERPRETATION. DO YOU AGREE?

A. No. As noted above, to properly reflect investor expectations within the limitations of the DCF model, earnings per share growth, which is the basis for the capital gains yield and the source of dividend payments, must be given greatest weight. The reason that earnings per share growth is the primary determinant of investor expectations rests with the fact that the capital gains yield (i.e., price appreciation) will track earnings growth with a constant price earnings multiple (a key assumption of the DCF model). It is also important to recognize that analysts' forecasts significantly influence investor growth expectations and include review of historic growth rates. The theory of the model rests on the assumption that there will be a constant price-earnings multiple, and therefore the price of stock will increase at the same rate as earnings growth – that is, EPS growth is the metric that drives the DCF analysis. Moreover, with the constant payout ratio assumption of the DCF, dividend growth will equal earnings growth in the long-term. Finally, with a consistent market-to-book ratio assumption of the DCF, book value per share will equal the other variables of growth, i.e., earnings per share and dividends per share. It is therefore not surprising that Professor Myron Gordon[4] found that EPS forecast are the best measure of growth in the DCF. I cited to his work on this matter above.

Q. IN HIS DIRECT TESTIMONY, MR. ROTHSCHILD RELIES HEAVILY ON RETENTION GROWTH IN HIS CONSTANT GROWTH DCF ANALYSIS. PLEASE DISCUSS THE LIMITATIONS OF THIS APPROACH.

A. Retention growth, along with external financing growth, is another means of describing

[4]The Company has previously adjusted its interest rates on long-term debt in its rebuttal testimony to reflect changing market conditions. In its 2021 Electric Base Rate Case proceeding at Docket No. R-2021-3023618. Peoples Electric lowered its interest rate, which had the effect of reducing its overall rate of return in that proceeding. Peoples Electric St. No. 5-R, p. 9.

book value per share growth. Other factors also contribute to earnings growth that is not accounted for by the retention growth formula, such as sales of new common stock that Mr. Rothschild has included in his DCF growth rate analysis, reacquisition of common stock previously issued, changes in financial leverage, acquisition of new business opportunities, profitable liquidation of assets, and repositioning of existing assets. In my view, book value per share growth, or its surrogate retention growth, does not represent the proper financial variable to be considered when selecting the DCF growth component. This shows how the return expected of 8.60% translates into a much lower DCF result for his Comparison Group (see page 1 of Exhibit ALR-3).

	Year Ending 2/29/2024	As of 2/29/2024
Return on Equity (Line 2c)	8.60%	8.60%
Dividend Yield on Book Value (Line 2b)	-6.30%	-6.18%
Dividend Yield on Market Value (Lines 2 & 6)	4.11%	4.43%
Result	6.41%	6.85%
New financing growth (Line 4)	1.65%	1.24%
Average DCF return	8.06%	8.09%

As shown above, the retention approach advocated by Mr. Rothschild is clearly inconsistent with the traditional form of the DCF model used by the Commission. It should be noted that the Commission has not previously adopted a retention growth approach in the DCF analysis. A key component of retention growth is the analyst's assumed return

on book common equity. Mr. Rothschild does not and cannot explain why an investor expected return of 8.60% should be reduced to 8.06% or 8.09% in this case, particularly since rates are set on book value (net original cost). If the NiSource book value return were updated for the most recent Value Line report, the group average return would increase to 9.30%.

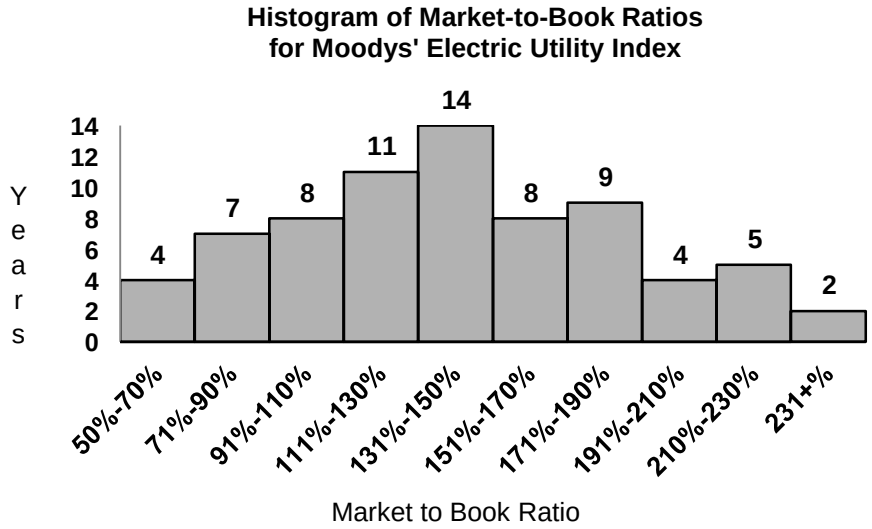
Q. WHAT DCF RESULTS WOULD BE OBTAINED BY RELYING ON FORECASTS OF EARNINGS PER SHARE GROWTH STATED BY MR. ROTHSCHILD THAT IS TYPICALLY CONSIDERED BY THE COMMISSION?

A. Mr. Rothschild himself relied on forecast by analysts published by Value Line and Zacks (see page 56 of OCA Statement No. 3), but fails to use these forecasts directly. This violates the process used by investors that I will discuss below, which results in a mis-specified cost of equity determination by Mr. Rothschild. Mr. Rothschild declined to use directly the earnings per share forecast growth rate of 5.76% by Zacks (see page 3 of Exhibit ALR-5). Had he done so, the resulting DCF return would be 9.91% ((4.03% (1 + 0.5 (0.0576%) + 5.76%) to 10.24% ((4.35% (1 + 0.5 (5.76%)) + 5.76%) with the Zacks growth rate. This provides a far more reasonable DCF result than the DCF returns advocated by Mr. Rothschild (see OCA Statement No. 3 at page 11). As I describe in my pre-filed direct testimony (Statement No. 13), forecast earnings growth is the only valid measure of growth for DCF purposes.

Q. ONE OF THE FEATURES OF MR. ROTHSCHILD'S DIRECT TESTIMONY IS HIS CONTENTION THAT WHEN STOCK PRICES ARE CONSIDERABLY

HIGHER THAN THEIR BOOK VALUE THEN THE RETURN THAT INVESTORS EXPECT TO RECEIVE ON THEIR MARKET PRICES IS LESS THAN WHATEVER IS ANTICIPATED ON BOOK VALUE (APPENDIX A OF OCA STATEMENT NO. 3). PLEASE RESPOND.

A. Mr. Rothschild makes this assertion in Appendix A of his direct testimony. That is to say, when a company has a market-to-book ratio above 1, it is over earning, in Mr. Rothschild's view. But such a claim is unwarranted given the evidence of the history of market-to-book ratios I provide below. The Commission has stated that it does not believe that its rate case decisions can ensure any particular market-to-book ratios (*PUC vs. The York Water Co.*, 62 Pa.PUC 459, Order Entered November 25, 1986). Moreover, if this assertion were correct then it leads to the inevitable conclusion that if investors expected to earn their required return, then stock prices would revert to their book value. However, the market for stocks shows that Mr. Rothschild's assertion is baseless. In the long history of market-to-book ratios for electric utilities since 1945, M/B ratios equal to 1.0 are unusual and ratios of greater than 1.0 are quite common. That data is shown below.



These data show that it is unusual for market prices to gravitate to book value. Indeed, in only about 11% of the years studied did electric utility stock prices approximate book value. In 74% of the years, gas utilities stock prices exceeded book value and sometimes by a substantial amount. The average market-to-book ratio over the past 72 years is 143%.

Q. MR. ROTHSCHILD ALSO USES WHAT HE IDENTIFIES AS "CONSTANT GROWTH – OPTION-IMPLIED GROWTH" MODEL OF THE DCF. WHAT VALUE DO THE RESULTS OF THE MODEL PROVIDE?

A. Very little to none. Mr. Rothschild provides virtually no explanation for this model and only divulges the result on page 2 of Exhibit ALR-3. These are the only two values provided, i.e., 9.42% and 9.43%, that reveal that his retention growth DCF returns are unreasonable.

Q. MR. ROTHSCHILD ALSO SUBMITS A THIRD ALTERNATIVE DCF CALCULATION TO MEASURE THE COST OF EQUITY. IS THIS DATA USEFUL IN THIS CASE?

A. When properly applied it shows that his constant-growth DCF model results are unrealistic. As shown on Rebuttal Exhibit PRM-2, the non-constant DCF results are 15.00% and 12.79%, which demonstrates the unreasonable results of Mr. Rothschild's constant growth DCF model. As opposed to Mr. Rothschilds use of book value per share growth as a key input in his non-constant the DCF, I have corrected his calculation by using EPS and Price-Earnings multiple forecasts by Value Line. These inputs are essential to understanding investors future return expectations, because stock prices are a function of future earnings

per share and expected Price-Earnings multiples. The non-constant DCF results are shown on Rebuttal Exhibit PRM-2.

LEVERAGE ADJUSTMENT

Q. AT PAGES 47-54 OF I&E STATEMENT NO. 2, MR. SPADACCIO RESPONDS TO YOUR LEVERAGE ADJUSTMENT AND ARGUES THAT IT SHOULD BE REJECTED. DO YOU AGREE?

A. No. Mr. Spadaccio states that he opposes the leverage adjustment. In his discussion of my leverage adjustment, Mr. Spadaccio mentions market-to-book ratios ("M/B") (see page 48 of I&E Statement No. 2). I need to be clear that my leverage adjustment is not designed to produce any particular M/B ratio.

Q. PLEASE RESPOND TO MR. SPADACCIO'S CRITICISM OF YOUR LEVERAGE ADJUSTMENT.

A. Mr. Spadaccio offers three reasons for not making a leverage adjustment. First, Mr. Spadaccio notes that the credit rating agencies assess financial risk in terms of a company's booked debt obligations in their analysis of the creditworthiness of a company (see I&E Statement No. 2 page 49). I agree. But this has nothing to do with my leverage adjustment. The credit rating agencies do not measure the market required cost of equity for a company. The credit rating agencies are only concerned with the interests of lenders. They are judging risk associated with a company's ability to make timely payments of principal and interest. Hence, they are not concerned with the cost of equity or how it is applied in the rate-setting context. While Mr. Spadaccio's observation is correct, it has no relevance to

my leverage adjustment.

Q. SECOND, MR. SPADACCIO ALSO QUESTIONS YOUR LEVERAGE ADJUSTMENT BY REFERENCE TO PRIOR COMMISSION ORDERS. PLEASE COMMENT.

A. Mr. Spadaccio points to several decisions where the Commission declined to make a leverage adjustment (see I&E Statement No. 2 pages 50-52). The fact that the Commission declined to use the leverage adjustment in the Aqua Pennsylvania case cited by Mr. Spadaccio does not invalidate its use. Notably, the Commission did not repudiate the leverage adjustment in the Aqua case, but instead arrived at an 11.00% return on equity for Aqua by including a separate return increment for management performance. Just like an increment for management performance is not recognized in all rate cases, so too the Commission seems to be taking a similar approach to the leverage adjustment. As to the City of Lancaster decision, the situation there was quite different than the leverage adjustment that I propose in this case. Lancaster proposed a leverage adjustment to the cost of equity measured with the Hamada formula and applied it to the DCF result, the Risk Premium result, and the CAPM. While the Hamada formula plays a role in the CAPM, it is not applicable to the DCF or the Risk Premium measures of the cost of equity. Hence, this distinguishes the City of Lancaster approach to the leverage adjustment from mine in this case. As to the Peoples Utilities – Electric Division case, there the Commission granted a management performance increment rather than a leverage adjustment when arriving at a 9.85% equity return. And for Columbia, the Company accepted the I&E's recommendation of the allowed return, which was 9.86%, in a case litigated at the height

of the COVID-19 Pandemic. Thus, Columbia chose not to argue the leverage adjustment in Exceptions to the Commission. However, based upon the current inputs to the DCF that indicated a low result, the Commission should now consider using the leverage adjustment, just as it did previously when the DCF was suggesting unusual results. In the PECO - electric rate case, the Commission arrived at a 10.24% return without the leverage adjustment, because that return was already deemed to be on the higher side and no additional adjustment was warranted. Finally, the Commission set the equity return at 10.00% for Aqua Pennsylvania recently without a leverage adjustment, but with an adjustment for management performance.

Q. THIRD, MR. SPADACCIO ARGUES THAT INFORMATION PROVIDED INVESTORS IS BOOK VALUES ACCORDING TO VALUE LINE. IS THIS CORRECT?

A. No. Mr. Spadaccio contends that information presented to investors (see page 53 of I&E Statement No. 3), such as that included in the Value Line reports, argues against my leverage adjustment because investors base their investment decisions on book value. However, the Value Line reports clearly show the market capitalization of each company in his barometer group. This means that investors are well aware of the market capitalization of the electric utility stocks that Mr. Spadaccio relies upon for his analysis of the cost of equity. More importantly, I fundamentally disagree that investors base their decisions on book values. To the contrary, it is the future cash flows that investors expect to realize that determines the price they are willing to pay for a share of common equity. Stated differently, investors are concerned with the return that will be earned on the dollars

they invest (i.e., their market price) and not some accounting value of little relevance to them. The financial risk associated with the book value capital structure is different from the market value of the capitalization. I clearly demonstrate this point on Schedule 10 of Peoples Exhibit B. Hence, the observation of Mr. Spadaccio is misplaced because I have clearly shown the difference in financial risk and that risk difference must be taken into account when arriving at an equity return that is applicable to the weighted average cost of capital using book value weights.

Q MR. ROTHSCHILD CRITICIZED THE LEVERAGE ADJUSTMENT THAT YOU PROPOSE TO ACCOUNT FOR THE DIVERGENCE OF MARKET CAPITALIZATION AND BOOK VALUE CAPITALIZATION. PLEASE COMMENT.

A. Mr. Rothschild claims that the market value capital structure and the book value capital structure are two completely different ways of measuring the same thing. But it must be recognized that, in order to make the DCF results relevant in the rate-setting context, the market-derived cost rate cannot be used without modification. The importance of the leverage modification to the DCF results was fully supported in my direct testimony, wherein it was shown that the market value of the equity in the Gas Group's capitalization was much higher than its book value. The market value common equity ratio was 61.43% compared to a book value common equity ratio 46.26%. The leverage adjustment is necessary to make the market-derived DCF results applicable in the rate-setting context. Because the market-based cost rate is determined based on less financial risk than that reflected in the ratemaking capital structure, and because increased financial risk justifies

a higher return on equity, it is necessary to account for the higher financial risk that arises from the lower common equity ratio measured by book value capitalization.

Q. DO YOU AGREE WITH MR. ROTHSCHILD'S CONTENTION THAT THE MARKET VALUE CAPITAL STRUCTURE AND THE BOOK VALUE CAPITAL STRUCTURE ARE TWO COMPLETELY DIFFERENT WAYS OF MEASURING THE SAME THING?

A. No. As Professors Modigliani and Miller proved 50 years ago (as discussed on page 34 of my direct testimony), the amount of leverage, or proportion of debt, in a firm's capital structure is directly related to the firm's financial risk and cost of equity. Mr. Rothschild's analogy to the measurement of weight on two scales (see page 92 of OCA Statement No. 3) is no analogy at all. Unlike weight, there is only one scale for measuring financial risk and that is the proportion of leverage in a firm's capital structure. A firm's financial risk changes when the quantities of debt and equity capital, on which the proportion is based, are changed. For the Gas Group, the average market value of their debt is $3.537 million and the book value of their debt is $4,023 million. Both of these measures are stated as dollar values; there has been no change in the units of measurement. Likewise, for their equity. The average market value of the Gas Group's common equity is $5.595 million and the corresponding book value is $3,437 million. Again, both are stated in dollars and there has been no change in the units of measurement. A measurement of financial risk that is based on a market-value capitalization cannot be applied directly to book-value capitalization if there is a material difference attributed to a change in financial risk between the two. Unlike weight, where the relationship between the scales of measurement

is fixed (*i.e.*, one-pound equals 0.45359 kilograms), the financial risk associated with a market-value capitalization can be higher or lower than the financial risk associated with a book-value capitalization, depending on the quantities, stated in dollars, of debt and equity measured and their relative proportion to the total capitalization. Financial risk is measured as a percent of fixed-cost (*i.e.*, senior) capital. That is to say, the quantities that are used to measure financial risk account for the different quantities of debt and equity that result from market and book valuations of capital.

According to Mr. Rothschild's analogy (see page 92 of OCA Statement No. 3), one loses weight by merely changing the calibration of the scale from pounds to kilograms. Mr. Rothschild's position that a cost of equity derived from market-value capitalizations may be applied to a book-value capitalization is just like saying one kilogram is the same as one pound. This is, of course, incorrect, just as it is indisputable that there is more financial risk associated with a 45.26% common equity ratio than there is with a 61.43% common equity ratio. The risk-adjusted return associated with a higher market-value capitalization is different than and generally lower than its risk-adjusted return associated with a book-value capitalization. Indeed, Mr. Rothschild's own studies support this proposition. Using his adjustment noted in Source [F] shown on Exhibit ALR-1, the adjustment would be 0.61% (61.43% - 46.26% = 15.17% x 0.04%). Although less than my leverage adjustment of 1.41%, it does establish the propriety of the adjustment. Therefore, in order to apply a measurement of a return measured based on a firm's market-value capitalization to a book-value capitalization, the return measurement must be adjusted before it is applied to the firm's capitalization measured based on book value. All

returns derived from the market models of the cost of equity are related to the price of stock established by investors and not based on book values.

COST OF COMMON EQUITY - CAPITAL ASSET PRICING MODEL

Q. AT PAGE 19 OF I&E STATEMENT NO. 2, MR. SPADACCIO TRIES TO EXPLAIN THAT THE CAPM IS LESS RESPONSIVE THAN DCF TO CHANGES IN THE CAPITAL MARKETS, BECAUSE THE CAPM USES HISTORICAL BETAS AND MEASURES THE RETURN ON EQUITY INDIRECTLY. DO THESE OBSERVATIONS DEFEAT THE USEFULNESS OF THE RESULTS OF THE CAPM?

A. Absolutely not. The CAPM is just as responsive to changes in capital costs as is the DCF. Indeed, the CAPM is more responsive to the current level and trend in interest rates because the risk-free rate of return reflects those factors directly. The market risk premium is also forward-looking, as it is based on a DCF type calculation for the market total return, as proposed by Mr. Spadaccio. And while the beta calculation is based on historical data, Value Line adjusts its historical betas for the tendency of betas to move toward 1.00 on a forward-looking basis. The bottom line is the CAPM is just as responsive to changes in capital costs as any other method.

Q. MR. SPADACCIO PRESENTS A REVENUE REQUIREMENTS CALCULATION SHOWING THE DIFFERENCE ASSOCIATED WITH USING THE DCF AND CAPM RESULTS (SEE PAGE 35 OF I&E STATEMENT NO. 2.) WHAT DOES THIS COMPARISON REVEAL?

A. This comparison is not relevant to this case. If any insight can be made with these inputs, it would be between the midpoint of the range, i.e., 10.44% (10.91% + 9.96% = 20.87% ÷ 2) and the lower end of the range, i.e., 9.96%. That gap is 48 basis points. That produces a $14.081 million difference in revenue requirements, not the $28.162 million Mr. Spadaccio reports.

Q. DO YOU HAVE CONCERNS REGARDING MR. SPADACCIO'S AND MR. ROTHSCHILD'S APPLICATIONS OF THE CAPM?

A. Yes. Mr. Spadaccio's CAPM analysis understates the cost of equity for a number of reasons: (i) his use of the yield on 10-year Treasury notes, (ii) his failure to use leveraged adjusted betas, and (iii) his failure to make a size adjustment. Mr. Rothschild uses a beta that is not leverage adjusted, an unrealistic market risk premium, and ignores the size adjustment. He therefore proposes a totally unrealistic CAPM result of 7.50% to 8.22%. This compares with my CAPM of 15.42%, Mr. Spadaccio's CAPM of 10.91%, and the Quarterly Earnings Report's CAPM of 10.87%. Excluding the leverage and size adjustments, my CAPM result would be 12.07% (13.09% - 1.02%). With regard to Mr. Spadaccio's CAPM analysis, which produces a 10.91% cost rate, it can be argued that he has understated the risk-free rate. On Schedule 9 of I&E Exhibit No. 2, he uses a projected 10-year treasury note yield from Blue Chip on February 1, 2024 and December 1, 2023, producing a 3.88% risk-free rate.

Q. HOW DOES THE USE OF THE YIELD ON 10-YEAR TREASURY NOTES COMPARE WITH YIELDS ON LONGER-TERM TREASURY BONDS?

A. The Blue Chip report shows this comparison. For the fourth quarter of 2023, the gap was 0.14% (4.58% - 4.44%) between the yields on 30-year and 10-year Treasury obligations. For the period 2025-2029, that gap is projected to increase to 0.20% (4.1% - 3.9%) according to the December 1, 2023 Blue Chip. This shows a systematic understatement of Mr. Spadaccio's CAPM returns. Shorter-term rates, such as 10-year notes, respond more to the policy initiatives of monetary officials, while long-term rates, such as 30-year bonds, are more a reflection of investor sentiment of their required returns. For this reason, long-term rates, such as those revealed by 30-year Treasury bonds, should be used to measure the risk-free rate of return.

Q. HOW HAS MR. SPADACCIO UNDERSTATED THE RISK-FREE RATE OF RETURN?

A. The support for his risk-free rate of return is shown on his Schedule 9 of I&E Exhibit No. 2. There, he incorrectly gives the same weight to the yield on 10-year Treasury notes for the second quarter of 2024 as he does for the entire five-year period from 2025 through 2029. This approach leads to an understated risk-free rate of return. Even if 10-year rates are used, it is necessary to correct the weights assigned to the forecast data presented by Mr. Spadaccio. The resulting risk-free rate of return is 3.94% using the yield on 10-year Treasury Notes and 4.16% using the yield on 30-year Treasury Bonds.

Year	10-Year Treasury Yield	30-Year Treasury Yield
2024	4.10%	4.30%
2025	3.90%	4.10%
2026	3.90%	4.10%
2027	3.90%	4.10%
2028	3.90%	4.20%
Average	3.94%	4.16%

Q. HOW SHOULD THESE RESULTS BE USED IN THE CAPM?

A. The risk-free rate of return should be calculated with the data that I present above. The size adjustment of 1.02% must also be incorporated into the CAPM. I have corrected Mr. Spadaccio's CAPM as indicated below using those inputs and the forecast yield on 30-year Treasury bond shown above:

	Rf	+	*β*	(	*Rm*	-	*Rf*	) +	*size*	=	*K*
Gas Group	4.16%	+	0.86	(	12.05%	-	4.16%	) +	1.02%	=	11.97%

Q. MR. SPADACCIO QUESTIONS THE NEED TO ADJUST THE CAPM RESULTS FOR SIZE DIFFERENCES. PLEASE COMMENT.

A. As a preliminary matter, it is noteworthy that CAPM provides compensation solely for systematic risk, and that the size of the Electric Group must be considered separately. Just as investors have choices concerning large cap, midcap, and small cap equity investments offered by many mutual funds and ETFs, size is clearly on important investment criteria for investors. It is well recognized that the return for small cap investments outperform large cap investments. Indeed, the Ibbotson Yearbook shows that small cap stocks have

outperformed large cap stocks by four percentage points (4.00%) over the past ninety-seven (97) years. As I indicated with the data presented on Schedules 2, 3 and 4 of Exhibit PRM-1, the gas utilities are small as they are just 19% of the size of the electric and gas utilities that comprise the S&P Public Utilities. Indeed, recent Federal Energy Regulatory Commission ("FERC") orders specifically prescribe an adjustment to the CAPM due to the size of an enterprise.[5] Mr. Spadaccio's arguments revolve around the purported distinction between regulated utilities and unregulated industrial companies (see pages 57-60 of I&E Statement No. 2). However, the Wong article that he relies upon was authored nearly thirty (30) years ago, and employed data going back into the 1960s. Enormous changes have occurred in the industry since the 1960s that have fundamentally changed the utility business. The Wong article also noted that betas for the non-regulated companies were larger than the betas of the utilities. This, however, is not a revelation, because utilities continue to have lower betas than many other companies. This fact does not invalidate the additional risk associated with small size.

The Wong article further concludes that size cannot be explained in terms of beta. Again, this should not be a surprise. Beta is not the tool that should be employed to make that determination. Indeed, beta is a measure of systematic risk and it does not provide the means to identify the return necessary to compensate for the additional risk of small size. In contrast, the famous Fama/French study (see "The Cross-Section of Expected Stock Returns," The Journal of Finance, June 1992) identified size as a separate factor that helps explain returns.

[5] *See, e.g.*, Association of Businesses Advocating Tariff Equity, 171 FERC ¶61,154 (May 21, 2020).

Q. HOW DOES SIZE AFFECT THE FINANCIAL PERFORMANCE OF A SMALL COMPANY?

A. Examples of the financial consequences of external factors that can influence the financial performance of a small company include loss of a large customer and the effect of unexpected changes in expense.

Q. MR. ROTHSCHILD USES A VARIETY OF APPROACHES TO APPLY THE CAPM. IS THERE ANYTHING UNUSUAL IN HIS APPROACH?

A. Yes. Aside from his consideration of yields on 3-month Treasury bills which are rarely considered in rate cases such as these, he uses a non-standard approach for the selection of his betas and an unusual approach for his market risk premium. He makes CAPM calculations that produce results in the range of 7.50% to 8.09% with spot data and 7.62% to 8.18% with average data. By any reasonable standard, such low returns are simply not credible. All of Mr. Rothschild's CAPM results are below his DCF returns. In contrast, Mr. Spadaccio and I have provided CAPM results that exceed the DCF. Mr. Rothschild does not use betas that are available to investors, but instead uses a "phantom" beta that invalidates his CAPM. Mr. Rothschild calculates "option implied betas" that have not and could not have any influence on the types of returns investors could expect using the CAPM, such as the Value Line betas do. Rather than use betas that are available to or used by investors, Mr. Rothschild has manufactured his own betas. It is well known that investors use the Value Line data. He says he follows the Value Line approach for calculating betas, but he ignores the actual Value Line betas. This makes no sense. There is no evidence that the betas calculated by Mr. Rothschild have any bearing on investor

expected returns, and in setting rates of return that is what is relevant. Even if Mr. Rothschild was correct that his calculations are valid, investors simply could not have relied on them. The Value Line data is relied upon by investors. As such, the Value Line betas should be used directly in the cost of capital computation. To augment the Value Line betas with other information that investors do not use is not appropriate, regardless of the theoretical underpinnings of the modifications.

I know of no other witness in public utility rate cases that use "Historical Blended" betas or "Forward" betas like Mr. Rothschild. Mr. Rothschild has not shown, nor could he, that investors use his betas. If they are not used by investors, they have no relevance in establishing a market-based cost of equity. Mr. Rothschild should have used standard Value Line betas that are used by the Commission, the FERC, Mr. Spadaccio, and almost all other rate of return witnesses, including me. His cumulative probably "Option-Implied Growth Rate" for the S&P 500 is also highly unusual and not supported in other rate cases. To show how unusual Mr. Rothschild's approach is here, just consider the overall market risk of 12.05% that Mr. Spadaccio developed and the 8.30% market return that Mr. Rothschild proposes. With Mr. Rothschild's unconventional approach, it is not surprising that he develops CAPM returns that are not credible when his range is from 7.50% to 8.22%. Those returns are clearly outside the range of reasonableness when Mr. Spadaccio develops a CAPM of 10.91% and I obtained 12.07% (13.09% - 1.02%) without the size adjustment or the leveraged betas (see page 43 of Statement No. 13).

Q. AT PAGES 97-98 OF OCA Statement 3, MR. ROTHSCHILD ALSO CHALLENGES THE ADJUSTMENT THAT YOU MADE TO THE RESULTS OF THE CAPM FOR

THE SIZE OF THE ELECTRIC GROUP. PLEASE RESPOND.

A. A size adjustment is necessary because the financial impact of changes in specific dollar amounts of revenues and costs have a magnified influence on a small company because there are fewer dollars over which those revenues or costs can be spread. The SBBI/Morningstar Yearbook clearly demonstrates that the simple CAPM does not reflect the return that is associated with small size. As Ibbotson has stated:

> The security market line is based on the pure CAPM without adjusting for the size premium. Based on the risk (or beta) of a security, the expected return should fluctuate along the security market line. However, the expected returns for the smaller deciles of the NYSE/AMEX/NASDAQ lie above the line, indicating that these deciles have had returns in excess of those appropriate for their systematic risk.

COST OF COMMON EQUITY - RISK PREMIUM ANALYSIS

Q. DO YOU BELIEVE THE RISK PREMIUM METHOD PROVIDES SIGNIFICANT EVIDENCE OF THE COST OF EQUITY?

A. Yes. In my opinion, the Risk Premium results should be given serious consideration. The Risk Premium method is straight-forward, understandable and has intuitive appeal because it is based on a company's own borrowing rate. The utility's borrowing rate provides the foundation for its cost of equity, which must be higher than the cost of debt in recognition of the higher risk of equity (see Statement No. 13 pages 41-42). So, while Mr. Spadaccio and Mr. Rothschild decline to use the Risk Premium approach to measure the Company's cost of equity, it is an approach that provides a direct and complete reflection of a utility's risk and return because it considers additional factors not reflected in the beta measure of systematic risk. It is particularly useful when investors expect changes in the cost of debt prospectively, which is currently the expectation of investors, as I have explained above

and in Statement No. 13, page 41. Indeed, the Risk Premium approach provides for direct reflection of prospective interest rates in the model and therefore should be given weight in determining the equity cost rate in this case.

Q. WHAT DOES MR. SPADACCIO SAY ABOUT YOUR RISK PREMIUM ANALYSIS?

A. Mr. Spadaccio makes the unfounded assertion that the Risk Premium and CAPM methods should only be used as a comparison to the results of the DCF method because they do not carry over from the investment decision-making process to the utility rate setting process (see pages 20-21 of OCA Statement 3). In fact, it is precisely because investors consider the results of other methods that they too should be used in addition to the DCF in the development of the cost of equity in this proceeding. Mr. Spadaccio's assertion that the Risk Premium method does not measure the current cost of equity as directly as the DCF is similarly without foundation. As I explained in my direct testimony and earlier in this rebuttal testimony, we are facing the prospect of increasing interest rates for the future. I incorporated the trend toward higher interest rates when I developed my Risk Premium cost of equity of 11.50% although, as noted above, actual interest rates on A-rated public utility bonds have already exceeded the projection I used for my Risk Premium cost of equity. Hence, my Risk Premium cost rate is fully responsive to changing market fundamentals and the credit quality of the Electric Group.

Q. MR. ROTHSCHILD CLAIMS (SEE PAGES 94-96 OF OCA STATEMENT NO. 3) THAT YOUR RISK PREMIUM APPROACH IS FLAWED. PLEASE RESPOND.

A. Mr. Rothschild claims that Kroll supply-side equity risk premium is much lower than the risk premium that I established using historical data. His claim is unsupported because it was not shown to be related to the level of interest rates, i.e., it expands when interest rates decline and contracts as interest rates increase, and it is not based on actual measurable returns that are revealed by historical data.

COST OF COMMON EQUITY - COMPARABLE EARNINGS APPROACH

Q. PLEASE RESPOND TO THE CRITICISM OF THE COMPARABLE EARNINGS APPROACH.

A. The underlying premise of the Comparable Earnings method is that regulation should emulate results obtained by firms operating in competitive markets and that a utility must be given an opportunity cost of capital equal to that which could be earned if one invested in firms of comparable risk. For non-regulated firms, the cost of capital concept is used to determine whether the expected marginal returns on new projects will be greater than the cost of capital, i.e., the cost of capital provides the hurdle rate at which new projects can be justified, and therefore undertaken. Further, given the 10-year time frame (i.e., five years historical and five years projected) considered by my study, it is unlikely that the earned returns of non-regulated firms would diverge significantly from their cost of capital.

The Comparable Earnings approach satisfies the comparability standard established in the Hope case. In addition, the financial community has expressed the view that the regulatory process must consider the returns that are being achieved in the non-regulated sector to ensure that regulated companies can compete effectively in the capital markets. Moreover, in a 1994 study that addressed the ROE issue, John Olson (then with Merrill

Lynch) established that equity returns from non-regulated companies provide better assessment of investor requirements than those available for regulated utilities.[6]

MANAGEMENT PERFORMANCE

Q. BOTH MR. SPADACCIO AND MR. ROTHSCHILD OPPOSE ANY RECOGNITION FOR MANAGEMENT PERFORMANCE IN THE DETERMINATION OF THE RETURN ON EQUITY. MR. SPADACCIO AND MR. ROTHSCHILD ASSERT THAT PEOPLES HAS ONLY DONE WHAT IT IS REQUIRED TO BY LAW. HOW DO YOU RESPOND?

A. As I stated in my direct testimony, I believe Peoples has performed in an exemplary manner, as explained by Peoples Witness Wachter, and that performance should be recognized in this case. Mr. Spadaccio simply disagrees, without addressing any of the items highlighted by Mr. Wachter as examples of Peoples's excellent performance. Mr. Rothschild's position regarding management performance is that the models of the cost of equity already incorporate management effectiveness. In each case, neither Messrs. Spadaccio nor Rothschild have shown that Peoples is not entitled to some form of management performance recognition by the Commission. Mr. Wachter's direct and rebuttal testimony establish that the Company's management performance warrants recognition by the Commission.

SUMMARY

[6] "Natural Gas: The Case for ROE Reform," John E. Olson First Vice President, Merrill Lynch & Co., October 11, 1994.

Q. PLEASE SUMMARIZE YOUR REBUTTAL TESTIMONY.

A. It is my opinion that the equity allowances proposed by Mr. Spadaccio and Mr. Rothschild seriously understate the cost of common equity for Peoples. This is particularly true for Mr. Rothschild's proposal. In an environment of high interest rates and Company-specific risk factors, an opportunity to earn a cost of equity of 11.75% is reasonable for Peoples.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**Docket No. R-2023-3044549**
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED SURREBUTTAL TESTIMONY OF
PAUL R. MOUL, MANAGING CONSULTANT
P. MOUL & ASSOCIATES
ON BEHALF OF
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: May 3, 2024 **Peoples Statement No. 13-SR**
DATE ADMITTED:

REJOINDER TESTIMONY OF PAUL R. MOUL

Q. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.

A. My name is Paul R. Moul and I am Managing Consultant at the firm P. Moul & Associates. My business address is 251 Hopkins Road, Haddonfield, NJ 08033-3062.

Q. MR. MOUL, HAVE YOU PREVIOUSLY SUBMITTED DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony (Peoples Statement No. 13) was submitted with the Company's case-in-chief on December 29, 2023 and my rebuttal testimony (Peoples Statement No. 13 No. 5-R) was submitted on April 18, 2024.

Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?

A. Peoples has requested that I respond to the rebuttal testimony presented by Mr. Aaron L. Rothschild a witness appearing on behalf of the Office of Consumer Advocate ("OCA"). If I fail to address each and every issue in the rebuttal testimony of Mr. Rothschild, it does not imply agreement with those issues.

Q. BASED ON YOUR REVIEW OF THE REBUTTAL TESTIMONY OF MR. ROTHSCHILD, DO YOU PROPOSE ANY CHANGE IN YOUR RECOMMENDED RETURN FOR PEOPLES IN THIS PROCEEDING?

A. No. There was nothing contained in the rebuttal testimony of Mr. Rothschild that changes my position that Peoples is entitled to an 11.75% rate of return on common equity ("ROE") and that the Company's actual capital structure of 45.23% debt and 54.67% common equity should be used in this proceeding.

Q. WHAT ISSUES WERE CONTAINED IN THE SURREBUTTAL TESTIMONY OF OCA WITNESS ROTHSCHILD?

A. Mr. Rothschild has addressed the following issues: (i) he says that the ROE proposed by Mr. Spadaccio is too high and (ii) that the Company's actual capital structure accepted by Mr. Spadaccio is inappropriate.

Q. WHAT IS THE BASIS FOR MR. ROTHSCHILD'S ASSERTIONS?

A. He essentially repeats many of his positions that he set forth in his direct testimony. where he finds that his analysis results in a lower ROE and a capital structure that is more highly leveraged than the Company's actual capital structure supported by Mr. Spadaccio. Accordingly, as a result, he faults Mr. Spadaccio's recommendation.

Q. CAN YOU SHOW HOW THE REBUTTAL TESTIMONY OF MR. ROTHSCHILD DOES NOT UNDERMINE THE ANALYSIS OF MR. SPADACCIO?

A. I have already shown in my rebuttal testimony that Mr. Spadaccio's ROE analysis is flawed and produces an ROE that is too low. To support his position Mr. Rothschild asserts, at page 5, that Mr. Spadaccio failed to consider expenses, as well as income, as it impacts the DCF returns considered by investors. He says the DCF can only be accurate if it considers money taken out by dividends during the holding period. He is way off base with his contention. The DCF represents investor expected positive cash flows that accrue to them during their holding period. Those cash flows consist

of dividend receipts and the sale price of stock at the end of the holding period. I have shown in my rebuttal how that works in the non-constant growth form of the DCF that revealed investor expected returns of 12.79% to 15.00%. First, in an article published in The Wall Street Journal on April 26, 2010, it was reported that 64% of companies had beaten analysts' forecasts since the start of 1999. More importantly, however, investors rely heavily on analysts' forecasts in determining the price they are willing to pay for a particular stock. This was confirmed by the research by Myron Gordon, the "father" of the DCF model in rate cases. I have specifically noted that Myron Godon established that analysts' forecasts of earnings growth is the best growth rate measures in the DCF, and retention growth was not the preferred approach. Second, there is no requirement in the DCF model that the growth rate must include a retention rate factor/percentage. Accordingly, Mr. Rothschilds contention that the growth rate must be reduced by dividends is flawed. Neither Mr. Spadaccio or I have made this improper adjustment, which is one of the primary flaws made in Mr. Rothschild's analysis and results in his erroneous DCF result.

Q. AT PAGES 8 AND 9 OF MR. ROTHSCHILD'S REBUTTAL, HE COMPLAINS ABOUT THE MARKET RISK PREMIUM USED BY MR. SPADACCIO THAT HE SAID WAS TOO HIGH. IS THIS COMPLAINT JUSTIFIED?

A. No. First Mr. Rothschild claims that I used the "geometric supply-side equity risk premium of 4.39%" in my analysis. I did no such thing. Rather, Mr. Spadaccio's market-risk premium analysis aligns with the analysis that I conducted, and is within the mainstream, unlike Mr. Rothschild's analysis.

Q. MR. ROTHSCHILD ALSO COMPLAINS ABOUT PEOPLES' CAPITAL STRUCTURE THAT MR. SPADACCIO ACCEPTS. ARE HIS ARGUMENTS PERSUASIVE AND SUPPORTED BY COMMISSION PRACTICE?

A. No. Mr. Spadaccio and I have followed Commission policy on capital structure. Mr. Rothschild has not followed the Commission policy by advocating a hypothetical capital structure even though the projected Company capital structure is within the range of capital structures used by the barometer group companies. His position must be rejected.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**Docket No. R-2023-3044549**
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED REJOINDER TESTIMONY OF
PAUL R. MOUL, MANAGING CONSULTANT
P. MOUL & ASSOCIATES
ON BEHALF OF
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: May 8, 2024 **Peoples Statement No. 13-R**
DATE ADMITTED: _____, 2024

REJOINDER TESTIMONY OF PAUL R. MOUL

Q. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.

A. My name is Paul R. Moul and I am Managing Consultant at the firm P. Moul & Associates. My business address is 251 Hopkins Road, Haddonfield, NJ 08033-3062.

Q. MR. MOUL, HAVE YOU PREVIOUSLY SUBMITTED DIRECT, REBUTTAL AND SURREBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony Peoples Statement No. 13 was submitted with the Company's case-in-chief on December 29, 2023, my rebuttal testimony (Peoples Statement No. 13R) was submitted on April 18, 2024, and my surrebuttal testimony (Peoples Statement No. 13 SR) was submitted on May 3, 2024.

Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?

A. Peoples has requested that I respond to the surrebuttal testimony presented by Mr. Anthony Spadaccio, a witness appearing on behalf of the Bureau of Investigation and Enforcement ("I&E"), Mr. Aaron L. Rothschild, a witness appearing on behalf of the Office of Consumer Advocate ("OCA"), and Mr. David Evrard another witness appearing on behalf of the OCA. If I fail to address each and every issue in the surrebuttal testimony of Mr. Rothschild, Mr. Spadaccio, and Mr. Evrard it does not imply agreement with those issues.

Q. BASED ON YOUR REVIEW OF THE SURREBUTTAL TESTIMONY OF THESE WITNESSES, DO YOU PROPOSE ANY CHANGE IN YOUR RECOMMENDED RETURN FOR PEOPLES IN THIS PROCEEDING?

A. No. There was nothing contained in the surrebuttal testimony of these witnesses that

changes my position that Peoples is entitled to an 11.75% rate of return on common equity. The proposals of Messrs. Spadaccio and Rothschild of 9.96% and 8.02%, respectively, are entirely too low by reference to returns set by the Commission in recent rate cases, the DSIC proceedings, and the current level of interest rates.

Q. DOES MR. EVRARD'S SURREBUTTAL TESTIMONY THAT ATTEMPTS TO LINK THE COMPANY'S ACQUISITION BY ESSENTIAL UTILITIES AND THE RETURN COMPONENT FOR MANAGEMENT PERFORMANCE IN THIS CASE HAVE MERIT?

A. No. The public utility code authorizes the Commission to consider management performance in deciding the rate of return in rate cases. Performance should be considered with the acquisition of the Company by Essential Utilities or if the acquisition had never occurred. In this case, the Commission can decide the merits of the Company's management independent of the acquisition that occurred, which was well before the test years in this proceeding.

Q. ON PAGES 9 THROUGH 11 OF HIS SURREBUTTAL TESTIMONY, MR. SPADACCIO ASSERTS THAT THE PERCENTAGE OF UTILITY ASSETS IS NOT THE APPROPRIATE CRITERION TO ASSEMBLE A BAROMETER GROUP. DOES MR. SPADACCIO ADEQUATELY SUPPORT HIS POSITION?

A. No. Mr. Spadaccio says that the value of a utility's assets depends on its age. While this is true, it has nothing to do with the validity of using assets to identify whether a particular company is predominately a utility. The basic ratesetting formula accounts for the level of depreciated assets in the determination of the rate base. Therefore, highly depreciated assets for a utility means that rate base is low and therefore

earnings are low. There is a direct relationship between assets and earnings for a public utility. Therefore, there is no reason to ignore the percentage of assets in the screening process for the barometer group.

Q. MR. SPADACCIO CLAIMS THE DSIC RETURN PROVIDES A BENCHMARK TO SIGNIFY "OVEREARNING" BY A UTILITY. WHAT ROLE DO YOU SEE FOR THE DSIC RETURN IN THIS CASE?

A. Mr. Spadaccio argues that the DSIC rate is merely a benchmark (*see* page 15 of I&E Statement No. 2-SR) to identify "overearning." Mr. Spadaccio is confusing achieved returns to be eligible for the DSIC and the opportunity rate of return established in a rate case for revenues to be collected in the future. The actual collection of revenues from the DSIC can only occur if earnings historically were below the DSIC rate. And it is illogical that once DSIC assets enter the rate base, the utility should be penalized with a lower return. Such a result would occur if Mr. Spadaccio's recommended 9.96% equity return was accepted because it is below the Commission's 10.15% DSIC rate (*see Bureau of Technical Utility Services Report on the Quarterly Earnings of Jurisdictional Utilities for the Year Ended September 30, 2023*, Docket No. M-2023-3044811 [January 18,2024]). So, although the Commission has stated that the DSIC return is not company specific and is determined on a quarterly basis (*see Pennsylvania Public Utility Commission v. Aqua Pennsylvania, Inc*., Dkt. No. R-2021-3027385 (Order entered May 16, 2022), page 178), it does provide an overall benchmark to gauge the reasonableness of the proposed return that a Company should be given an opportunity to earn in the future. I also would note that the Staff Quarterly Report was established long before the DSIC was enacted in 2012. Moreover, the DSIC rate comes into play only if the

utility has not had a recent rate case determination of cost of equity. In other words, it is a default rate when there has been no rate case and is obviously not intended to establish a cap on rate case cost of equity findings.

Q. IS THERE EVIDENCE FROM ANY RATE CASE DECISIONS THAT THE COMMISSION USUALLY SETS THE RATE OF RETURN ON COMMON EQUITY HIGHER THAN THE DSIC RETURN PUBLISHED IN THE QUARTERLY REPORT?

A. Yes. Four rate case decisions substantiate this position. In the PPL Electric Utilities rate case at Docket No. R-2012-2290597,[1] the Commission set the return on equity at 10.40% when the DSIC return was 10.20% for electric utilities. In the UGI Electric rate case at Docket No. R-2017-2640058,[2] the Commission set the rate of return on common equity at 9.85% when the DSIC return was 9.65% for electric utilities. In the PECO gas rate case at Docket No. R-2020-3018929,[3] the equity return was set at 10.24% when the DSIC rate was 10.20%. The same is true in the Aqua Pennsylvania rate case at Docket No. R-2021-3027385,[4] where the Commission set the return on equity at 10.00% when the water DSIC return was 9.80% (*see* page 15 of I&E Statement No. 3-SR). So, this evidence supports a higher return in base rate cases than the prevailing DSIC return, contrary to Mr. Spadaccio's opinion expressed on pages 14 through 16 of his surrebuttal testimony (I&E Statement No. 3-SR).

Q. AT PAGES 12-14 OF HIS SURREBUTTAL TESTIMONY (I&E STATEMENT NO. 2-

[1] *Pennsylvania Public Utility Commission v. PPL Electric Utilities*, Dkt. No. R-2012-2290597 (Order entered Dec. 28, 2012).
[2] *Pennsylvania Public Utility Commission v. UGI Utilities, Inc. – Electric Division*, Dkt. No. R-2017-2640058 (Order entered Oct. 25, 2018)(UGI Electric 2018 Rate Case).
[3] *Pennsylvania Public Utility Commission v. PECO Energy Company – Gas Division*, Dkt. No. R-2020-3018929 (Order entered June 22, 2021).
[4] *Pennsylvania Public Utility Commission v. Aqua Pennsylvania, Inc.*, Dkt. No. R-2021-3027385 (Order entered May 16, 2022)(Aqua Order).

SR), MR. SPADACCIO DISCUSSES THE RELATIVE WEIGHT THAT SHOULD BE ASSIGNED TO THE DCF. PLEASE RESPOND.

A. His discussion as to the weight that should be given to models other than DCF is somewhat difficult to follow. As near as I can tell, he proposes that the Capital Asset Pricing Model ("CAPM") should only be used as a comparison to DCF, but not as additional input. It seems to me that ignoring the CAPM results in exclusive use of the DCF, meaning that there would be no need to calculate a CAPM return in the first place. But his CAPM return of 10.91% clearly shows that the DCF return needs validation. His position of exclusive reliance on DCF is contrary to the Commission's recent Aqua and Columbia Water Orders that established a range of equity returns using DCF and CAPM. While Mr. Spadaccio seems troubled by alternative models, including CAPM, there is no basis to ignore the results of these models when the DCF is producing unreasonably low results. While I have considerable concerns about Mr. Spadaccio's application of his models, as noted in my rebuttal and rejoinder testimony, the simple average of the DCF and CAPM proposed by him provides a 10.44% (9.96% + 10.91% = 20.87% ÷ 2) return on equity.

Q. ON PAGE 17 OF HIS SURREBUTTAL TESTIMONY, MR. SPADACCIO STATES THAT HIS RECOMMENDED DCF RETURN OF 9.96% PROVIDES AN ADEQUATE SPREAD OVER THE YEILED ON A-RATED PUBLIC UTILITY BONDS. IS THIS THE POINT OF YOUR REBUTTAL ON THIS ISSUE?

A. No. My point was that his average DCF return is downwardly biased by the result of two companies with returns that are too close to the cost of debt. That is to say, his DCF return would be 10.48% with those companies removed. He does not effectively respond to this point.

Q. AT PAGE 24 OF HIS SURREBUTTAL TESTIMONY, MR. SPADACCIO ACKNOWLEDGES THAT INVESTORS PURCHASE STOCKS AT THEIR MARKET VALUE AND NOT BOOK VALUE. WHAT ARE THE IMPLICATIONS OF THIS FACT?

A. This statement supports the underlying principle of the leverage adjustment. Mr. Spadaccio acknowledges that "Clearly an investor takes financial risk into consideration when determining a required return." (See page 25 of I&E Statement No. 2-SR.) This statement clearly supports my leverage adjustment, notwithstanding his statement he wants to ignore the capital structure effects on financial risk. Mr. Spadaccio cites to the Value Line reports where those amounts are related to the market value of equity and excludes debt. However, the Yahoo! Finance reports show that the "Enterprise Value" of a utility includes both its debt capital, as well the market value of equity. This supports the fact that investors are well aware of the market value of a utility's total capitalization, including both debt and equity.

Q. MR. SPADACCIO CLAIMS ON PAGE 26 OF HIS SURREBUTTAL (I&E STATEMENT NO. 2-SR) THAT HIS USE OF SPOT STOCK PRICES PROVIDES THE MOST UP-TO-DATE INFORMATION THAT ACCOUNTS FOR RECENT INFLATION DATA. DOES THIS REMEDY THE SITUATION WHERE THE DCF RESULTS LAG EXPECTED INFLATION AND INTEREST RATES?

A. No. While spot prices provide an indication of current dividend yields, those yields reflect mainly the assessment of current analysts' growth forecasts. Those growth rate forecasts relate to company-specific fundamentals that existed when those forecasts were made in the past. We do not know if current interest rates and

inflation expectations today are embedded in analysts' forecasts made in the past. So spot prices in the DCF would reflect today's interest rate and inflation expectation only by chance.

Q. ON PAGE 28 OF HIS SURREBUTTAL TESTIMONY, MR. SPADACCIO CLAIMS THAT LESS WEIGHT SHOULD BE GIVEN TO MORE DISTANT FORECASTS BECAUSE THEY ARE LESS RELIABLE. PLEASE RESPOND.

A. I find his observations to conflict with his use of five-year projections of earnings growth in his DCF analysis. If reliance upon five-year projections, whatever their reliability, is okay for DCF purposes, then there is no reason to discount any of the projections of Treasury yields when looking for the appropriate risk-free rate of return in the CAPM.

Q. MR. SPADACCIO SEEMS TO IMPLY THAT THE EVIDENCE YOU USED TO SUPPORT THE SIZE ADJUSTMENT IN THE CAPM IS NOT SPECIFIC TO UTILITY STOCKS. IS THIS CORRECT?

A. No. Mr. Spadaccio states on page 32 that the Fama/French study is not specific to utility stocks. But what Mr. Spadaccio has not acknowledged is that utility stock performance was used in the Fama/French study that makes the size adjustment relevant to utilities, and appropriate to consider in this case. Furthermore, the article by Annie Wong was deficient because it attempted to correlate betas with size. As Fama/French subsequently established, beta is not the correct measure to identify returns associated with the relative size of a company, either utility or non-regulated. Beta measures systematic risk, and the size of a company is an unsystematic risk.

Q. AT PAGES 37-40 OF HIS SURREBUTTAL (I&E STATEMENT NO. 2-SR), MR. SPADACCIO OPPOSES ANY RECOGNITION OF THE COMPANY'S MANAGEMENT PERFORMANCE. PLEASE RESPOND.

A. Mr. Spadaccio asserts that a utility should not be rewarded for implementing programs funded by ratepayers or for meeting their obligations under 66 Pa C.S. §1501. The Commission has a long history of recognizing management performance (either positively or negatively) in rate case decisions. If the Commission were to abandon its constructive ratesetting approaches, such as recognition of management performance, then the assessment by investors of the Commission's pattern of regulation would surely suffer.

Q. ON PAGES 38-39 OF HIS SURREBUTTAL TESTIMONY (I&E STATEMENT NO. 2-SR), MR. SPADACCIO CLAIMS THAT MANAGEMENT PERFORMANCE NEED NOT BE CONSIDERED AS AN ISSUE IN THIS CASE. IS THAT CORRECT?

A. No. The Commission has a long history of recognizing management performance (either positively or negatively) in rate case decisions. If the Commission were to abandon its constructive ratesetting approaches that include recognition of management performance, or to reduce the return to levels suggested by Mr. Spadaccio, then the Company's ranking would surely suffer. Mr. Spadaccio asserts that recognition of management performance is "nonsensical" in that higher equity returns should not occur for management initiatives that are funded by ratepayers under 66 Pa C.S.A. §1501. Mr. Spadaccio does acknowledge that the legislature authorized this approach and that the Commission has followed it.

Q. WHAT ISSUES WERE CONTAINED IN THE SURREBUTTAL TESTIMONY OF

OCA WITNESS ROTHSCHILD?

A. Mr. Rothchild has addressed the following issues: the discounted cash flow model, market-to-book ratios, analyst's growth projections, betas, and capital structure.

Q. IN HIS SURREBUTTAL TESTIMONY (*SEE* PAGES 37-38 OF OCA STATEMENT NO. 3-SR), MR. ROTHSCHILD OPINES THAT THE COMPANY'S PROPOSED CAPITAL STRUCTURE IS UNREASONABLE AND UNFAIRLY PREJUDICES RATEPAYERS. DO YOU AGREE?

A. No. Mr. Rothchild adopts a hypothetical capital structure for Peoples in place of its actual capital structure. His proposal provides a generic capital structure that would apply to any and all LDCs. But he is entirely wrong on this matter. Moreover, as explained in my rebuttal testimony (see pages 12-13 of Peoples Statement No. 13-R), his approach drives down his equity return on Peoples actual equity to 7.72% (6.20% - 1.98% = 4.22% ÷ 54.67%) from 8.02%. The Commission's policy on capital structure, which adopts the projected equity ratio if it is the range employed by the barometer group companies, places a limit on the common equity ratio that triggers the imposition of a hypothetical capital structure. Further, it is incorrect for Mr. Rothschild to argue on page 37 of his surrebuttal testimony (OCA Statement No. 3-SR) that his hypothetical capital structure complies with Commission policy. I have explained at length in my rebuttal testimony why this is not correct. Therefore, there is no need to repeat my justification here. He also fails to acknowledge my alternative analysis of public utility capital structures. As revealed on page 21 of Peoples Statement No. 9, the range of common equity ratios is 34.7% to 58.2% for 2022 and 32.5% to 60.0% based on Value Line forecasts. The common equity ratio

for Peoples in this case is 54.67%, which clearly falls within these ranges. Hence, the Company's proposal is reasonable and should be accepted.

Q. MR. ROTHSCHILD ATTEMPTS TO RESPOND (*SEE* PAGES 5-8 OF OCA STATEMENT NO. 3-SR) TO YOUR OBSERVATION CONCERNING THE MANY INCONSISTENCIES IN HIS DIRECT TESTIMONY. HAS HE SUCCESSFULLY DONE SO?

A. For the most part, no. Many of his responses in his surrebuttal testimony attempt to distinguish investor expectations from expert forecasts and the necessary use of historical data due to the limitations of capital market data. But what Mr. Rothschild has failed to explain is how his testimony addresses these factors in any way that is superior to my use of these data. That is to say, expert forecasts are the only hard data that we can use to gain insight into investor expectations, and historical data provides the foundation upon which expectations are formed. As is often repeated, past performance provides no guarantee of future returns. But what it does is to provide a basis for judgments on how the future will diverge from the past given changing fundamentals that impact the capital markets. And that is how I used historical data in my testimony.

Q. BEGINNING ON PAGE 10 OF HIS SURREBUTTAL TESTIMONY, MR. ROTHSCHILD ATTEMPTS TO DIMINISH THE USEFULNESS OF ANALYSTS' PROJECTED GROWTH RATES IN THE DCF. PLEASE RESPOND.

A. Mr. Rothschild sets forth two arguments. He claims at page 13 that analysts' projected growth rates are overly optimistic and that the retention rate must be considered in the DCF. First, in an article published in The Wall Street Journal on

April 26, 2010, it was reported that 64% of companies had beaten analysts' forecasts since the start of 1999. More importantly, however, investors rely heavily on analysts' forecasts in determining the price they are willing to pay for a particular stock. Consequently, if the forecasted earnings growth rates were to be discounted, a downward adjustment would also have to be made to the stock prices that reflect those forecasts. This, in turn, would generate higher dividend yields in the DCF analysis. I have specifically noted that Myron Gordon established that analysts' forecasts of earnings growth is the best growth rate measures in the DCF, and retention growth was not the preferred approach. Second, there is no requirement in the DCF model that the growth rate must include a retention rate factor/percentage. Mr. Rothschild's paycheck analogy is way off the mark. The paycheck in his example (see page 14) is represented by the dividend receipts component that establishes the dividend yield in the DCF equation. This is distinct from the expected growth in future paychecks that an individual might expect. Hopefully, an individual will realize a growing paycheck in the future attributed to (i) inflation and (ii) the relationship between the employer and employee. Hence, paycheck growth occurs mostly from these two factors and has nothing to do with the amount an individual retains in his/her bank account.

Q. IN HIS SURREBUTTAL TESTIMONY (*SEE* PAGE 14 OF OCA STATEMENT NO. 3-SR), MR. ROTHSCHILD CLAIMS TO HAVE USED A "HOLISTIC ANALYSIS" WHEN EMPLOYING ANALYSTS' FIVE-YEAR GROWTH RATE FORECASTS. HAS HIS "HOLISTIC ANALYSIS" IMPROVED UPON USE OF ANALYSTS' FORECASTS DIRECTLY?

A. No. My understanding of holism is that the whole is worth more than merely the sum of the parts. Mr. Rothschild used many parts in his analysis, i.e., earnings per share, dividends per share, book value per share, dividend payout ratios, earnings book ratios, market to book ratios, and analysts' forecasts. In his use of these data sets, Mr. Rothschild has missed some key components in pursuit of a truly holistic outcome. We know this because the sum of all the parts used by Mr. Rothschild produces a result that fails the holistic analysts because it is less than the analysts' forecasts used directly.

Q. REGARDING THE ISSUE OF MARKET-TO-BOOK RATIOS, MR. ROTHSCHILD CLAIMS ON PAGES 15-17 OF HIS SURREBUTTAL TESTIMONY (OCA STATEMENT NO. 3-SR) THAT WHEN INVESTORS PAY MORE THAN BOOK VALUE, THEY REQUIRE A LOWER RETURN THAN WHAT THEY EXPECT A UTILITY WILL EARN. IS THIS CORRECT?

A. No. Since utility stock prices are today, and have been generally throughout history, considerably higher than book value, Mr. Rothschild's apparent desire is to reduce those prices to book value is unjustified. Of course, no rational investor would take a position in a utility stock with the expectation that the price would decline, thereby losing capital. So while utility stock prices exceed book value, the stock prices of many non-utilities exceed their book values by even larger amounts. Hence, stock prices above book value for utilities provide no basis for reducing market determined returns because they must compete in the capital markets with these other companies. Nevertheless, Mr. Rothschild does exactly that in his analysis.

Q. AT PAGE 27 OF OCA STATEMENT NO. 3-SR, MR. ROTHSCHILD COMPLAINS

ABOUT THE HISTORICAL NATURE OF THE VALUE LINE BETAS. ARE HIS COMPLAINTS VALID?

A. No. What Mr. Rothschild fails to acknowledge is that Value Line adjusts its betas in recognition of the regression bias associated with use of historical data. What Value Line has done is to recognize that the betas of low beta stocks must be adjusted upward, and high beta stocks must be adjusted downward. These adjustments recognize that high and low beta stocks will revert to the mean beta of 1.0 moving from historical performance to expectations. So Value Line has already acknowledged Mr. Rothschild's observation and adjusted for it.

Q. DOES THIS CONCLUDE YOUR REJOINDER TESTIMONY?

A. Yes.

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Peoples Natural Gas Company LLC

Docket No. R-2023-3044549

Volume 10

Direct Testimony and Exhibits of John P. Spanos
Statement No. 14

PEOPLES STATEMENT NO. 14

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	)	
	)	
	)	
vs.	)	Docket No. R-2023-3044549
	)	
	)	
Peoples Natural Gas Company, LLC	)	

DIRECT TESTIMONY OF

JOHN J. SPANOS

ON BEHALF OF

PEOPLES NATURAL GAS COMPANY, LLC

December 29, 2023

Q. Please state your name and address.

A. John J. Spanos. My business address is 207 Senate Avenue, Camp Hill, Pennsylvania.

Q. With what firm are you associated and in what capacity?

A. I am associated with the firm of Gannett Fleming Valuation and Rate Consultants, LLC (Gannett Fleming) as President.

Q. How long have you been associated with Gannett Fleming?

A. I have been associated with the firm since June 1986.

Q. What is your educational background?

A. I have Bachelor of Science degrees in Industrial Management and Mathematics from Carnegie-Mellon University and a Master of Business Administration from York College of Pennsylvania.

Q. Are you a member of any professional societies?

A. Yes. I am a member and past President of the Society of Depreciation Professionals. I am also a member of the American Gas Association/Edison Electric Institute Industry Accounting Committee.

Q. Do you hold any special certification as a depreciation expert?

A. Yes. The Society of Depreciation Professionals has established national standards for depreciation professionals. The Society administers an examination to become certified in this field. I passed the certification exam in September 1997 and was recertified in August 2003, February 2008, January 2013, February 2018 and February 2023.

Q. Will you outline your experience in the field of depreciation?

A. I have over 37 years of depreciation experience which includes giving expert testimony in more than 440 cases before 46 regulatory commissions, including the Pennsylvania Public Utility Commission ("Commission"). My participation in the cases where I appeared as an expert witness has included conducting and analyzing depreciation studies for companies, government-owned utilities and other service providers in the electric, gas,

water, wastewater and pipeline industries. In addition to the cases in which I submitted testimony, I have supervised over 800 other depreciation or valuation assignments. Please refer to Appendix A for additional information on my qualifications, work history, case experience, and my leadership in the Society of Depreciation Professionals.

Q. What is the purpose of your testimony?

A. My testimony is in support of the depreciation studies conducted under my direction and supervision for the gas plant of the Peoples Natural Gas Division of Peoples Natural Gas Company LLC ("PNG" or "PNG Division"); Peoples Gas Division of Peoples Natural Gas Company LLC ("PGC" or "PG Division") and the combined gas of both the Peoples Natural Gas Division and Peoples Gas Division ("Companies").

Q. Have you prepared exhibits presenting the results of your studies?

A. Yes, I have prepared a total of nine exhibits, consisting of the following: Exhibit Nos. 5A, 5B and 5C present the results of the depreciation studies for the combined gas operations as of August 31, 2023, August 31, 2024 and September 30, 2025. The three depreciation studies for the PNG Division as of August 31, 2023, August 31, 2024 and September 30, 2025 are presented in Appendix B of Statement No. 14. The three depreciation studies for the PG Division are presented in Appendix C of Statement No. 14.

In addition, I am responsible for the responses to Depreciation Data Filing Requirements FR VI.1, FR VI.2, FR VI.3, FR VI.4, FR VI.5 and FR VI.6 that are presented as Exhibit No. 9.

Q. Please describe what is set forth in each of Exhibit Nos. 5 and 14.

A. Exhibit No. 5A, titled "2023 Depreciation Study - Calculated Annual Depreciation Accruals Related to Gas Plant as of August 31, 2023," includes the results of the depreciation study related to the assets of the combined companies as of August 31, 2023. The report also includes the detailed depreciation calculations. Exhibit No. 5B, titled

"2024 Depreciation Study - Calculated Annual Depreciation Accruals Related to Gas Plant as of August 31, 2024," includes the results of the depreciation study related to the assets of combined companies estimated as of August 31, 2024. The report also includes explanatory text, statistics related to the estimation of service life, and the detailed depreciation calculations. Exhibit No. 5C titled "2025 Depreciation Study – Calculated Annual Depreciation Accruals Related to Gas Plant as of September 30, 2025," includes the results of the depreciation study related to the assets of combined companies estimated as of September 30, 2025.

Statement No. 14, Appendix B and C pertain to the PNG Division and PG Division gas operations and are organized in the same fashion described above for combined companies.

Q. What were the purposes of your depreciation studies?

A. The purposes of the depreciation studies were to estimate the annual depreciation accruals related to gas plant in service for ratemaking purposes and, using Commission-approved procedures, to estimate the Company's book reserve as of August 31, 2023, August 31, 2024 and September 30, 2025.

Q. Is the Company's claim for annual depreciation in the current proceeding based on the same methods of depreciation as were used in its most recent Annual Depreciation Reports filed in June and August 2023?

A. Yes, it is. For most plant accounts, the current claim for annual depreciation is based on the straight line remaining life method of depreciation, which has been used for over thirty years. For Accounts 391.01, 391.02, 391.03, 393, 394, 394.01, 397.02, 397.03, 397.10, 397.20 and 398, the claim is based on the straight line remaining life method of amortization. The accounts have a large number of units, but small asset values representing slightly more than 1 percent of the depreciable plant. The assets represent

items located in office buildings, service centers, garages and warehouses. Given the difficulty in maintaining accounting records for these numerous assets and high cost for periodic inventories, retirements are recorded when a vintage is fully amortized, rather than as the units are removed from service. All units are retired when the age of the vintage reaches the amortization period. The annual amortization is based on amortization accounting which distributes the unrecovered cost of fixed capital assets over the remaining amortization period selected for each account.

Q. What group procedure is being used in this proceeding for depreciable accounts?

A. The average service life procedure is used in the current proceeding for plant installed prior to 1983 and the equal life group procedure for 1983 and subsequent vintages for the individual PNG Division study and the combined Companies. The average service life procedure is used for plant installed prior to 1976 and the equal life group procedure for 1976 and subsequent vintages for the individual PG Division study. These calculations have been used in the same manner for each Company's most recent annual depreciation reports.

Q. Is the Company's claim for accrued depreciation in the current proceeding made on the same basis as has been used for over thirty years?

A. Yes. The current claim for accrued depreciation is the book reserve brought forward from the book reserve approved by the Commission in the last proceeding for each division.

Q. How was the book reserve used in the calculation of annual depreciation?

A. The book reserve by account was allocated to vintages to determine original cost less accrued depreciation by vintage. The total annual accrual is the sum of the results of dividing the original costs less accrued depreciation by the vintage composite remaining lives.

Q. How was the book reserve as of August 31, 2024, estimated?

A. The book reserve as of August 31, 2024, by account, was projected by adding estimated accruals, salvage and the amortization of net salvage, and subtracting estimated retirements and cost of removal from the book reserve as of August 31, 2023. Annual accruals were estimated using the annual accruals calculated as of August 31, 2023. For most accounts, gross salvage and cost of removal were estimated by (1) expressing actual gross salvage and cost of removal as a percent of retirements by account, for the most recent five-year period, and (2) applying those percents to the projected retirements by account.

For the purpose of calculating the annual accruals, the projected book reserve by account was allocated to vintages based on calculated accrued depreciation as of August 31, 2024.

Q. Was the book reserve as of September 30, 2025, estimated using the same methodology?

A. Yes.

Q. Has a service life study of the Company's gas utility property been performed?

A. Yes. A service life study of the combined two divisions was performed as of December 2022 as well as an individual service life study for the PNG Division. The most recent service life study for the PG Division was as of December 2019. The service life studies were the basis for the service lives I used to calculate annual accruals . The service life study of the combined companies was used for Exhibit No. 5 and the individual company service life studies were used for Appendix B and C.

Q. Briefly outline the procedure used in performing the service life study.

A. The service life study consisted of assembling and compiling historical data from the records related to the gas utility plant of the Company; statistically analyzing such data to obtain historical trends of survivor characteristics; obtaining supplementary information from management and operating personnel concerning Company practices and plans as

they relate to plant operations; and interpreting the above data to form judgments of service life characteristics. Iowa type survivor curves were used to describe the estimated survivor characteristics of the mass property groups. Individual service lives were used for major individual units of plant, such as distribution buildings housing offices and shops. The life span concept was recognized by coordinating the lives of associated plant installed in subsequent years with the probable retirement date defined by the life estimated for the major unit.

Q. What statistical data were employed in the historical analyses performed for the purpose of estimating service life characteristics?

A. The data consisted of the entries made to record retirements and other transactions related to the gas plant during the period 1939-2022. The year 1939 is the first year continuing property records were maintained.

These entries were classified by depreciable group, type of transaction, the year in which the transaction took place, and the year in which the plant was installed. Types of transactions included in the data were plant additions, retirements, transfers, and balances. In the presentation of service life statistics, only the significant exposure points that were utilized in determining survivor curves were plotted. This process is utilized to show my judgment in service life determinations.

Q. What was the source of these data?

A. They were assembled from Company records related to its gas plant in service.

Q. Were the methods used in the service life studies the same as those used in other depreciation studies for gas utility plant presented before this Commission?

A. Yes. The methods are the same ones that have been presented previously for Peoples Natural Gas Company and Peoples Gas Company and for other gas companies before the Pennsylvania Public Utility Commission and that have been accepted by the Commission

in its past orders concerning gas utilities.

Q. What approach did you use to estimate the lives of significant structures such as office buildings and service centers?

A. I used the life span technique to estimate the lives of significant structures. In this technique, the survivor characteristics of the structures are described by the use of interim survivor curves and estimated probable retirement dates. The interim survivor curve describes the rate of retirement related to the replacement of elements of the structure such as plumbing, heating, doors, windows, roofs, etc. that occur during the life of the facility.The probable retirement date provides the rate of final retirement for each year of installation for the structure by truncating the interim survivor curve for each installation year at its attained age at the date of probable retirement. The use of interim survivor curves truncated at the date of probable retirement provides a consistent method for estimating the lives of the several years of installation inasmuch as concurrent retirement of all years of installation will occur when the structure is retired.

Q. Has your firm used this approach in other proceedings before this Commission?

A. Yes, we have used the life span technique on many occasions before the Pennsylvania Public Utility Commission.

Q. What are the bases for the probable retirement years that you have estimated for each 1 structure?

A. The bases for the estimates of probable retirement years are life spans for each structure that are based on judgment and incorporate consideration of the age, use, size, nature of construction, management outlook and typical life spans experienced and used by other gas utilities for similar structures. Most of the life spans result in probable retirement dates that are many years in the future. As a result, the retirement of these structures is not yet subject to specific management plans. Such plans would be premature. At the

appropriate time, studies of the economics of rehabilitation and continued use or retirement of the structure will be analyzed and the results incorporated in the estimation of the structure's life span.

Q. Are the factors considered in your estimates of service life presented in Exhibit Nos. 5B-B, Appendix B and Appendix C?

A. Yes. A discussion of the factors considered in the estimation of service lives is presented in Part III of each of these exhibits.

Q. Please outline the contents of Exhibit Nos. 5B, Appendix B and Appendix C.

A. Exhibit Nos. 5B, Appendix B (Future Test Year) and Appendix C (Future Test Year) are each presented in eight parts. Part I, Introduction, sets forth the scope and basis of the study. Part II, Estimation of Survivor Curves, includes a description of the Iowa Curves and the formulation of the retirement rate method. Part III, Service Life Considerations, and Part IV, Calculation of Annual and Accrued Depreciation, include a description of the judgment utilized for life parameters and the explanation of depreciation procedures. Part V, Results of Study, presents a description of the results and summaries of the depreciation calculations. Part VI, Service Life Statistics, presents the graphs and tables which relate to the service life study. Part VII, Detailed Depreciation Calculations, sets forth the detailed depreciation calculations by account. Part VIII, Experienced and Estimated Net Salvage, presents the cost of removal and gross salvage by account for the years 2019 through 2023. For Exhibit No. 5B, Table 1, pages V-4 through V-6 presents the estimated survivor curve, the original cost as of August 31, 2024, and the book reserve and calculated annual depreciation for each account or subaccount of Gas Plant. Table 2, pages V-7 and V-8 presents the bringforward to August 31, 2024, of the book depreciation reserve as of August 31, 2023. Table 3 on pages V-9 and V-10 sets forth the calculation of the annual accruals used in the bringforward. Table 4, page V-11, presents the experienced

and estimated net salvage during the five-year period, 2019 through 2023. The section beginning on page VI-1 presents the results of the retirement rate analyses prepared as the historical bases for the service life estimates. The section beginning on page VII-1 presents the depreciation calculations related to original cost. The tabulation on pages VII-3 through VII- 6 presents the cumulative depreciated original cost by year installed. The tabulations on pages VII-8 through VII-130 present the calculation of annual depreciation by vintage by account for each depreciable group of utility plant. The tabulation on pages VIII-2 through VIII-6 presents the retirements, salvage, and cost of removal by account for each year during the period 2019 through 2023.

Exhibit Nos. Appendix B (Future Test Year) and Appendix C (Future Test Year) are presented in the same fashion described above for the Company's gas plant for the PNG and PG Divisions.

Q. Please outline the contents of Exhibit Nos. 5C, Appendix B (Fully Forecasted Test Year) and Appendix C (Fully Forecasted Test Year).

A. Exhibit Nos. 5C includes a description of the results, summaries of the depreciation calculations, and the detailed depreciation calculations as of September 30, 2025. The descriptions and explanations presented in Exhibit No. 5B are also applicable to the depreciation calculations presented in Exhibit No. 5C. The graphs and tables related to service life presented in Exhibit No. 5B, also support the service life estimates used in Exhibit No. 15C inasmuch as the estimates are the same for both test years. The summary tables and detailed depreciation calculations as of September 30, 2025, are organized and presented in the same manner as those as of August 31, 2024. Exhibit Nos. Appendix B(Fully Forecasted Test Year) and Appendix C(Fully Forecasted Test Year) present data and information for the PNG and PG Divisions in the same fashion described above.

Q. Please outline the contents of Exhibit Nos. 5A, Appendix B(Historic Test Year) and

Appendix C(Historic Test Year).

A. Exhibit No. 5A includes a description of the results, summaries of the depreciation calculations, and the detailed depreciation calculations as of August 31, 2023. The descriptions and explanations presented in Exhibit No. 5B are also applicable to the depreciation calculations presented in Exhibit No. 5A. The graphs and tables related to service life presented in Exhibit No. 5B also support the service life estimates used in Exhibit No. 5A, inasmuch as the estimates are the same for both test years. The summary tables and detailed depreciation calculations as of August 31, 2023, are organized and presented in the same manner as those as of August 31, 2024. Exhibit Nos. Appendix B(Historic Test Year) and Appendix C(Historic Test Year) are presented in the same fashion for the PNG and PG Divisions.

Q. Please use an example to illustrate the manner in which the studies are as presented in Exhibit Nos. 5A, Appendix B and Appendix C.

A. I will use the combined companies Account 380, Services, as my example, inasmuch as it is one of the largest depreciable groups and represents 18 percent of the original cost of depreciable gas plant as of August 31, 2024. The retirement rate method was used to analyze the survivor characteristics of this group. The life table for the 1939-2022 experience band is presented on pages VI-167 through VI-170 of Exhibit No. 5B. The life table, or original survivor curve, is plotted along with the estimated smooth survivor curve, the 55-R2, on page VI-166. The calculations of the annual depreciation related to the original cost as of August 31, 2023, of gas plant are presented on pages II-101 through II-103 of Exhibit No. 5A. The calculation is based on the 55-R2 survivor curve, the attained age, and the allocated book reserve. The calculations as of August 31, 2024, are presented on pages VII-122 through VII-125 of Exhibit No. 5B and are based in part on the bringforward of the book reserve. Also, the calculations as of September 30, 2025 are

presented on pages II-98 and II-99 of Exhibit No. 5C and are based in part on the bringforward of the book reserve. The tabulations in Exhibit Nos. 5A, 5B and 5C set forth the installation year, the original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual. The totals are brought forward to Table 1 on page I-4 in Exhibit No. 5A, page V-5 in Exhibit No. 5B, and on page I-4 in Exhibit No. 5C.

Q. In what manner is net salvage incorporated in the depreciation calculations?

A. As stated on page IV-9 of Exhibit No. 5B no adjustment for net salvage was made to the calculated annual depreciation amounts. The total calculated annual depreciation set forth on page I-5 of Exhibit No. 5A, page V-6 of Exhibit No. 5B, and on page I-5 of Exhibit No. 5C should include an addition for the amortization of negative net salvage in accordance with the practice of this Commission. The amortization is based on experience during the period 2018 through 2022 for the calculation as of August 31, 2023, and on experience during the period 2019 through August 31, 2023, plus estimates for the last four months of 2023 for the calculation as of August 31, 2024. The amortization for the September 30, 2025 calculation is based on experience during the period 2020 through August 31, 2023, plus estimates for the period September 2023 through December 2024. The amounts of the five-year amortizations are calculated in Table 2 on page I-6 of Exhibit No. 5A, in Table 4 on page V-11 of Exhibit No. 5B, and in Table 4 on page I-10 of Exhibit No. 5C.

Q. Does this complete your testimony at this time?

A. Yes, it does.

APPENDIX A

JOHN SPANOS

DEPRECIATION EXPERIENCE

Q. Please state your name.

A. My name is John J. Spanos.

Q. What is your educational background?

A. I have Bachelor of Science degrees in Industrial Management and Mathematics from Carnegie-Mellon University and a Master of Business Administration from York College.

Q. Do you belong to any professional societies?

A. Yes. I am a member and past President of the Society of Depreciation Professionals and a member of the American Gas Association/Edison Electric Institute Industry Accounting Committee.

Q. Do you hold any special certification as a depreciation expert?

A. Yes. The Society of Depreciation Professionals has established national standards for depreciation professionals. The Society administers an examination to become certified in this field. I passed the certification exam in September 1997 and was recertified in August 2003, February 2008, January 2013, February 2018 and February 2023.

Q. Please outline your experience in the field of depreciation.

A. In June 1986, I was employed by Gannett Fleming Valuation and Rate Consultants, Inc. as a Depreciation Analyst. During the period from June 1986 through December 1995, I helped prepare numerous depreciation and original cost studies for utility companies in various industries. I helped perform depreciation studies for the following telephone companies: United Telephone of Pennsylvania, United Telephone of New Jersey, and Anchorage Telephone Utility. I helped perform depreciation studies for the following companies in

the railroad industry: Union Pacific Railroad, Burlington Northern Railroad, and Wisconsin Central Transportation Corporation.

I helped perform depreciation studies for the following organizations in the electric utility industry: Chugach Electric Association, The Cincinnati Gas and Electric Company (CG&E), The Union Light, Heat and Power Company (ULH&P), Northwest Territories Power Corporation, and the City of Calgary - Electric System.

I helped perform depreciation studies for the following pipeline companies: TransCanada Pipelines Limited, Trans Mountain Pipe Line Company Ltd., Interprovincial Pipe Line Inc., Nova Gas Transmission Limited and Lakehead Pipeline Company.

I helped perform depreciation studies for the following gas utility companies: Columbia Gas of Pennsylvania, Columbia Gas of Maryland, The Peoples Natural Gas Company, T. W. Phillips Gas & Oil Company, CG&E, ULH&P, Lawrenceburg Gas Company and Penn Fuel Gas, Inc.

I helped perform depreciation studies for the following water utility companies: Indiana-American Water Company, Consumers Pennsylvania Water Company and The York Water Company; and depreciation and original cost studies for Philadelphia Suburban Water Company and Pennsylvania-American Water Company.

In each of the above studies, I assembled and analyzed historical and simulated data, performed field reviews, developed preliminary estimates of service life and net salvage, calculated annual depreciation, and prepared reports for submission to state public utility commissions or federal regulatory agencies. I performed these studies under the general direction of William M. Stout, P.E.

In January 1996, I was assigned to the position of Supervisor of Depreciation Studies. In July 1999, I was promoted to the position of Manager, Depreciation and

Valuation Studies. In December 2000, I was promoted to the position as Vice-President of Gannett Fleming Valuation and Rate Consultants, Inc., in April 2012, I was promoted to the position as Senior Vice President of the Valuation and Rate Division of Gannett Fleming Inc. (now doing business as Gannett Fleming Valuation and Rate Consultants, LLC) and in January of 2019, I was promoted to my present position of President of Gannett Fleming Valuation and Rate Consultants, LLC. In my current position I am responsible for conducting all depreciation, valuation and original cost studies, including the preparation of final exhibits and responses to data requests for submission to the appropriate regulatory bodies.

Since January 1996, I have conducted depreciation studies similar to those previously listed including assignments for Pennsylvania-American Water Company; Aqua Pennsylvania; Kentucky-American Water Company; Virginia-American Water Company; Indiana-American Water Company; Iowa-American Water Company; New Jersey-American Water Company; Hampton Water Works Company; Omaha Public Power District; Enbridge Pipe Line Company; Inc.; Columbia Gas of Virginia, Inc.; Virginia Natural Gas Company National Fuel Gas Distribution Corporation - New York and Pennsylvania Divisions; The City of Bethlehem - Bureau of Water; The City of Coatesville Authority; The City of Lancaster - Bureau of Water; Peoples Energy Corporation; The York Water Company; Public Service Company of Colorado; Enbridge Pipelines; Enbridge Gas Distribution, Inc.; Reliant Energy-HLP; Massachusetts-American Water Company; St. Louis County Water Company; Missouri-American Water Company; Chugach Electric Association; Alliant Energy; Oklahoma Gas & Electric Company; Nevada Power Company; Dominion Virginia Power; NUI-Virginia Gas Companies; Pacific Gas & Electric Company; PSI Energy; NUI - Elizabethtown Gas Company; Cinergy Corporation – CG&E; Cinergy

Corporation – ULH&P; Columbia Gas of Kentucky; South Carolina Electric & Gas Company; Idaho Power Company; El Paso Electric Company; Aqua North Carolina; Aqua Ohio; Aqua Texas, Inc.; Aqua Illinois, Inc.; Ameren Missouri; Central Hudson Gas & Electric; Centennial Pipeline Company; CenterPoint Energy-Arkansas; CenterPoint Energy – Oklahoma; CenterPoint Energy – Entex; CenterPoint Energy - Louisiana; NSTAR – Boston Edison Company; Westar Energy, Inc.; United Water Pennsylvania; PPL Electric Utilities; PPL Gas Utilities; Wisconsin Power & Light Company; TransAlaska Pipeline; Avista Corporation; Northwest Natural Gas; Allegheny Energy Supply, Inc.; Public Service Company of North Carolina; South Jersey Gas Company; Duquesne Light Company; MidAmerican Energy Company; Laclede Gas; Duke Energy Company; E.ON U.S. Services Inc.; Elkton Gas Services; Anchorage Water and Wastewater Utility; Kansas City Power and Light; Duke Energy North Carolina; Duke Energy South Carolina; Monongahela Power Company; Potomac Edison Company; Duke Energy Ohio Gas; Duke Energy Kentucky; Duke Energy Indiana; Duke Energy Progress; Northern Indiana Public Service Company; Tennessee- American Water Company; Columbia Gas of Maryland; Maryland-American Water Company; Bonneville Power Administration; NSTAR Electric and Gas Company; EPCOR Distribution, Inc.; B. C. Gas Utility, Ltd; Entergy Arkansas; Entergy Texas; Entergy Mississippi; Entergy Louisiana; Entergy Gulf States Louisiana; the Borough of Hanover; Louisville Gas and Electric Company; Kentucky Utilities Company; Madison Gas and Electric; Central Maine Power; PEPCO; PacifiCorp; Minnesota Energy Resource Group; Jersey Central Power & Light Company; Cheyenne Light, Fuel and Power Company; United Water Arkansas; Central Vermont Public Service Corporation; Green Mountain Power; Portland General Electric Company; Atlantic City Electric; Nicor Gas Company; Black Hills Power; Black Hills Colorado Gas; Black Hills Energy Arkansas, Inc.; Black Hills Kansas

Gas; Black Hills Service Company; Black Hills Utility Holdings; Public Service Company of Oklahoma; City of Dubois; Peoples Gas Light and Coke Company; North Shore Gas Company; Connecticut Light and Power; New York State Electric and Gas Corporation; Rochester Gas and Electric Corporation; Greater Missouri Operations; Tennessee Valley Authority; Omaha Public Power District; Indianapolis Power & Light Company; Vermont Gas Systems, Inc.; Metropolitan Edison; Pennsylvania Electric; West Penn Power; Pennsylvania Power; PHI Service Company - Delmarva Power and Light; Atmos Energy Corporation; Citizens Energy Group; PSE&G Company; Berkshire Gas Company; Alabama Gas Corporation; Mid-Atlantic Interstate Transmission, LLC; SUEZ Water; WEC Energy Group; Rocky Mountain Natural Gas, LLC; Illinois-American Water Company; Northern Illinois Gas Company; Public Service of New Hampshire; FirstEnergy Service Corporation; Northeast Ohio Natural Gas Corporation; Blue Granite Water Company; Spire Missouri, Inc.; Dominion Energy South Carolina, Inc.; South FirstEnergy Operating Companies; Dayton Power and Light Company; Liberty Utilities; East Kentucky Power Cooperative; Bangor Natural Gas; Hanover Borough Municipal Water Works; West Virginia American Water Company; Evergy Metro; Evergy Missouri West; Granite State Electric; Bluegrass Water; The Borough of Ambler; Newtown Artesian Water Company and Connecticut Water Company.

My additional duties include determining final life and salvage estimates, conducting field reviews, presenting recommended depreciation rates to management for its consideration and supporting such rates before regulatory bodies.

Q. Have you submitted testimony to any state utility commission on the subject of utility plant depreciation?

A. Yes. I have submitted testimony to the Pennsylvania Public Utility Commission; the

Commonwealth of Kentucky Public Service Commission; the Public Utilities Commission of Ohio; the Nevada Public Utility Commission; the Public Utilities Board of New Jersey; the Missouri Public Service Commission; the Massachusetts Department of Telecommunications and Energy; the Alberta Energy & Utility Board; the Idaho Public Utility Commission; the Louisiana Public Service Commission; the State Corporation Commission of Kansas; the Oklahoma Corporate Commission; the Public Service Commission of South Carolina; Railroad Commission of Texas – Gas Services Division; the New York Public Service Commission; Illinois Commerce Commission; the Indiana Utility Regulatory Commission; the California Public Utilities Commission; the Federal Energy Regulatory Commission ("FERC"); the Arkansas Public Service Commission; the Public Utility Commission of Texas; Maryland Public Service Commission; Washington Utilities and Transportation Commission; The Tennessee Regulatory Commission; the Regulatory Commission of Alaska; Minnesota Public Utility Commission; Utah Public Service Commission; District of Columbia Public Service Commission; the Mississippi Public Service Commission; Delaware Public Service Commission; Virginia State Corporation Commission; Colorado Public Utility Commission; Oregon Public Utility Commission; South Dakota Public Utilities Commission; Wisconsin Public Service Commission; Wyoming Public Service Commission; the Public Service Commission of West Virginia; Maine Public Utility Commission; Iowa Utility Board; Connecticut Public Utilities Regulatory Authority; New Mexico Public Regulation Commission; Commonwealth of Massachusetts Department of Public Utilities; Rhode Island Public Utilities Commission and the North Carolina Utilities Commission.

Q. Have you had any additional education relating to utility plant depreciation?

A. Yes. I have completed the following courses conducted by Depreciation Programs, Inc.:

"Techniques of Life Analysis," "Techniques of Salvage and Depreciation Analysis," "Forecasting Life and Salvage," "Modeling and Life Analysis Using Simulation," and "Managing a Depreciation Study." I have also completed the "Introduction to Public Utility Accounting" program conducted by the American Gas Association.

Q. Does this conclude your qualification statement?

A. Yes.

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY

	Year	Jurisdiction	Docket No.	Client Utility	Subject
01.	1998	PA PUC	R-00984375	City of Bethlehem – Bureau of Water	Original Cost and Depreciation
02.	1998	PA PUC	R-00984567	City of Lancaster	Original Cost and Depreciation
03.	1999	PA PUC	R-00994605	The York Water Company	Depreciation
04.	2000	D.T.&E.	DTE 00-105	Massachusetts-American Water Company	Depreciation
05.	2001	PA PUC	R-00016114	City of Lancaster	Original Cost and Depreciation
06.	2001	PA PUC	R-00017236	The York Water Company	Depreciation
07.	2001	PA PUC	R-00016339	Pennsylvania-American Water Company	Depreciation
08.	2001	OH PUC	01-1228-GA-AIR	Cinergy Corp – Cincinnati Gas & Elect Company	Depreciation
09.	2001	KY PSC	2001-092	Cinergy Corp – Union Light, Heat & Power Co.	Depreciation
10.	2002	PA PUC	R-00016750	Philadelphia Suburban Water Company	Depreciation
11.	2002	KY PSC	2002-00145	Columbia Gas of Kentucky	Depreciation
12.	2002	NJ BPU	GF02040245	NUI Corporation/Elizabethtown Gas Company	Depreciation
13.	2002	ID PUC	IPC-E-03-7	Idaho Power Company	Depreciation
14.	2003	PA PUC	R-0027975	The York Water Company	Depreciation
15.	2003	IN URC	R-0027975	Cinergy Corp – PSI Energy, Inc.	Depreciation
16.	2003	PA PUC	R-00038304	Pennsylvania-American Water Company	Depreciation
17.	2003	MO PSC	WR-2003-0500	Missouri-American Water Company	Depreciation
18.	2003	FERC	ER03-1274-000	NSTAR-Boston Edison Company	Depreciation
19.	2003	NJ BPU	BPU 03080683	South Jersey Gas Company	Depreciation
20.	2003	NV PUC	03-10001	Nevada Power Company	Depreciation
21.	2003	LA PSC	U-27676	CenterPoint Energy – Arkla	Depreciation
22.	2003	PA PUC	R-00038805	Pennsylvania Suburban Water Company	Depreciation
23.	2004	AB En/Util Bd	1306821	EPCOR Distribution, Inc.	Depreciation
24.	2004	PA PUC	R-00038168	National Fuel Gas Distribution Corp (PA)	Depreciation
25.	2004	PA PUC	R-00049255	PPL Electric Utilities	Depreciation
26.	2004	PA PUC	R-00049165	The York Water Company	Depreciation
27.	2004	OK Corp Cm	PUC 200400187	CenterPoint Energy – Arkla	Depreciation
28.	2004	OH PUC	04-680-El-AIR	Cinergy Corp. – Cincinnati Gas and Electric Company	Depreciation
29.	2004	RR Com of TX	GUD#	CenterPoint Energy – Entex Gas Services Div.	Depreciation
30.	2004	NY PUC	04-G-1047	National Fuel Gas Distribution Gas (NY)	Depreciation
31.	2004	AR PSC	04-121-U	CenterPoint Energy – Arkla	Depreciation
32.	2005	IL CC	05-ICC-06	North Shore Gas Company	Depreciation
33.	2005	IL CC	05-ICC-06	Peoples Gas Light and Coke Company	Depreciation
34.	2005	KY PSC	2005-00042	Union Light Heat & Power	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
35.	2005	IL CC	05-0308	MidAmerican Energy Company	Depreciation
36.	2005	MO PSC	GF-2005	Laclede Gas Company	Depreciation
37.	2005	KS CC	05-WSEE-981-RTS	Westar Energy	Depreciation
38.	2005	RR Com of TX	GUD #	CenterPoint Energy – Entex Gas Services Div.	Depreciation
39.	2005	US District Court	Cause No. 1:99-CV-1693-LJM/VSS	Cinergy Corporation	Accounting
40.	2005	OK CC	PUD 200500151	Oklahoma Gas and Electric Company	Depreciation
41.	2005	MA Dept Tele-com & Ergy	DTE 05-85	NSTAR	Depreciation
42.	2005	NY PUC	05-E-934/05-G-0935	Central Hudson Gas & Electric Company	Depreciation
43.	2005	AK Reg Com	U-04-102	Chugach Electric Association	Depreciation
44.	2005	CA PUC	A05-12-002	Pacific Gas & Electric	Depreciation
45.	2006	PA PUC	R-00051030	Aqua Pennsylvania, Inc.	Depreciation
46.	2006	PA PUC	R-00051178	T.W. Phillips Gas and Oil Company	Depreciation
47.	2006	NC Util Cm.	G-5, Sub522	Pub. Service Company of North Carolina	Depreciation
48.	2006	PA PUC	R-00051167	City of Lancaster	Depreciation
49.	2006	PA PUC	R00061346	Duquesne Light Company	Depreciation
50.	2006	PA PUC	R-00061322	The York Water Company	Depreciation
51.	2006	PA PUC	R-00051298	PPL GAS Utilities	Depreciation
52.	2006	PUC of TX	32093	CenterPoint Energy – Houston Electric	Depreciation
53.	2006	KY PSC	2006-00172	Duke Energy Kentucky	Depreciation
54.	2006	SC PSC		SCANA	Accounting
55.	2006	AK Reg Com	U-06-6	Municipal Light and Power	Depreciation
56.	2006	DE PSC	06-284	Delmarva Power and Light	Depreciation
57.	2006	IN URC	IURC43081	Indiana American Water Company	Depreciation
58.	2006	AK Reg Com	U-06-134	Chugach Electric Association	Depreciation
59.	2006	MO PSC	WR-2007-0216	Missouri American Water Company	Depreciation
60.	2006	FERC	IS05-82-002, et al	TransAlaska Pipeline	Depreciation
61.	2006	PA PUC	R-00061493	National Fuel Gas Distribution Corp. (PA)	Depreciation
62.	2007	NC Util Com.	E-7 SUB 828	Duke Energy Carolinas, LLC	Depreciation
63.	2007	OH PSC	08-709-EL-AIR	Duke Energy Ohio Gas	Depreciation
64.	2007	PA PUC	R-00072155	PPL Electric Utilities Corporation	Depreciation
65.	2007	KY PSC	2007-00143	Kentucky American Water Company	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
66.	2007	PA PUC	R-00072229	Pennsylvania American Water Company	Depreciation
67.	2007	KY PSC	2007-0008	NiSource – Columbia Gas of Kentucky	Depreciation
68.	2007	NY PSC	07-G-0141	National Fuel Gas Distribution Corp (NY)	Depreciation
69.	2008	AK PSC	U-08-004	Anchorage Water & Wastewater Utility	Depreciation
70.	2008	TN Reg Auth	08-00039	Tennessee-American Water Company	Depreciation
71.	2008	DE PSC	08-96	Artesian Water Company	Depreciation
72.	2008	PA PUC	R-2008-2023067	The York Water Company	Depreciation
73.	2008	KS CC	08-WSEE1-RTS	Westar Energy	Depreciation
74.	2008	IN URC	43526	Northern Indiana Public Service Company	Depreciation
75.	2008	IN URC	43501	Duke Energy Indiana	Depreciation
76.	2008	MD PSC	9159	NiSource – Columbia Gas of Maryland	Depreciation
77.	2008	KY PSC	2008-000251	Kentucky Utilities	Depreciation
78.	2008	KY PSC	2008-000252	Louisville Gas & Electric	Depreciation
79.	2008	PA PUC	2008-20322689	Pennsylvania American Water Co. - Wastewater	Depreciation
80.	2008	NY PSC	08-E887/08-00888	Central Hudson	Depreciation
81.	2008	WV TC	VE-080416/VG-8080417	Avista Corporation	Depreciation
82.	2008	IL CC	ICC-09-166	Peoples Gas, Light and Coke Company	Depreciation
83.	2009	IL CC	ICC-09-167	North Shore Gas Company	Depreciation
84.	2009	DC PSC	1076	Potomac Electric Power Company	Depreciation
85.	2009	KY PSC	2009-00141	NiSource – Columbia Gas of Kentucky	Depreciation
86.	2009	FERC	ER08-1056-002	Entergy Services	Depreciation
87.	2009	PA PUC	R-2009-2097323	Pennsylvania American Water Company	Depreciation
88.	2009	NC Util Cm	E-7, Sub 090	Duke Energy Carolinas, LLC	Depreciation
89.	2009	KY PSC	2009-00202	Duke Energy Kentucky	Depreciation
90.	2009	VA St. CC	PUE-2009-00059	Aqua Virginia, Inc.	Depreciation
91.	2009	PA PUC	2009-2132019	Aqua Pennsylvania, Inc.	Depreciation
92.	2009	MS PSC	Docket No. 2011-UA-183	Entergy Mississippi	Depreciation
93.	2009	AK PSC	09-08-U	Entergy Arkansas	Depreciation
94.	2009	TX PUC	37744	Entergy Texas	Depreciation
95.	2009	TX PUC	37690	El Paso Electric Company	Depreciation
96.	2009	PA PUC	R-2009-2106908	The Borough of Hanover	Depreciation
97.	2009	KS CC	10-KCPE-415-RTS	Kansas City Power & Light	Depreciation
98.	2009	PA PUC	R-2009-	United Water Pennsylvania	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
99.	2009	OH PUC		Aqua Ohio Water Company	Depreciation
100.	2009	WI PSC	3270-DU-103	Madison Gas & Electric Company	Depreciation
101.	2009	MO PSC	WR-2010	Missouri American Water Company	Depreciation
102.	2009	AK Reg Cm	U-09-097	Chugach Electric Association	Depreciation
103.	2010	IN URC	43969	Northern Indiana Public Service Company	Depreciation
104.	2010	WI PSC	6690-DU-104	Wisconsin Public Service Corp.	Depreciation
105.	2010	PA PUC	R-2010-2161694	PPL Electric Utilities Corp.	Depreciation
106.	2010	KY PSC	2010-00036	Kentucky American Water Company	Depreciation
107.	2010	PA PUC	R-2009-2149262	Columbia Gas of Pennsylvania	Depreciation
108.	2010	MO PSC	GR-2010-0171	Laclede Gas Company	Depreciation
109.	2010	SC PSC	2009-489-E	South Carolina Electric & Gas Company	Depreciation
110.	2010	NJ BD OF PU	ER09080664	Atlantic City Electric	Depreciation
111.	2010	VA St. CC	PUE-2010-00001	Virginia American Water Company	Depreciation
112.	2010	PA PUC	R-2010-2157140	The York Water Company	Depreciation
113.	2010	MO PSC	ER-2010-0356	Greater Missouri Operations Company	Depreciation
114.	2010	MO PSC	ER-2010-0355	Kansas City Power and Light	Depreciation
115.	2010	PA PUC	R-2010-2167797	T.W. Phillips Gas and Oil Company	Depreciation
116.	2010	PSC SC	2009-489-E	SCANA – Electric	Depreciation
117.	2010	PA PUC	R-2010-22010702	Peoples Natural Gas, LLC	Depreciation
118.	2010	AK PSC	10-067-U	Oklahoma Gas and Electric Company	Depreciation
119.	2010	IN URC	Cause No. 43894	Northern Indiana Public Serv. Company - NIFL	Depreciation
120.	2010	IN URC	Cause No. 43894	Northern Indiana Public Serv. Co. - Kokomo	Depreciation
121.	2010	PA PUC	R-2010-2166212	Pennsylvania American Water Co. - WW	Depreciation
122.	2010	NC Util Cn.	W-218,SUB310	Aqua North Carolina, Inc.	Depreciation
123.	2011	OH PUC	11-4161-WS-AIR	Ohio American Water Company	Depreciation
124.	2011	MS PSC	EC-123-0082-00	Entergy Mississippi	Depreciation
125.	2011	CO PUC	11AL-387E	Black Hills Colorado	Depreciation
126.	2011	PA PUC	R-2010-2215623	Columbia Gas of Pennsylvania	Depreciation
127.	2011	PA PUC	R-2010-2179103	City of Lancaster – Bureau of Water	Depreciation
128.	2011	IN URC	43114 IGCC 4S	Duke Energy Indiana	Depreciation
129.	2011	FERC	IS11-146-000	Enbridge Pipelines (Southern Lights)	Depreciation
130.	2011	IL CC	11-0217	MidAmerican Energy Corporation	Depreciation
131.	2011	OK CC	201100087	Oklahoma Gas & Electric Company	Depreciation
132.	2011	PA PUC	2011-2232243	Pennsylvania American Water Company	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
133.	2011	FERC	RP11-___-000	Carolina Gas Transmission	Depreciation
134.	2012	WA UTC	UE-120436/UG-120437	Avista Corporation	Depreciation
135.	2012	AK Reg Cm	U-12-009	Chugach Electric Association	Depreciation
136.	2012	MA PUC	DPU 12-25	Columbia Gas of Massachusetts	Depreciation
137.	2012	TX PUC	40094	El Paso Electric Company	Depreciation
138.	2012	ID PUC	IPC-E-12	Idaho Power Company	Depreciation
139.	2012	PA PUC	R-2012-2290597	PPL Electric Utilities	Depreciation
140.	2012	PA PUC	R-2012-2311725	Borough of Hanover – Bureau of Water	Depreciation
141.	2012	KY PSC	2012-00222	Louisville Gas and Electric Company	Depreciation
142.	2012	KY PSC	2012-00221	Kentucky Utilities Company	Depreciation
143.	2012	PA PUC	R-2012-2285985	Peoples Natural Gas Company	Depreciation
144.	2012	DC PSC	Case 1087	Potomac Electric Power Company	Depreciation
145.	2012	OH PSC	12-1682-EL-AIR	Duke Energy Ohio (Electric)	Depreciation
146.	2012	OH PSC	12-1685-GA-AIR	Duke Energy Ohio (Gas)	Depreciation
147.	2012	PA PUC	R-2012-2310366	City of Lancaster – Sewer Fund	Depreciation
148.	2012	PA PUC	R-2012-2321748	Columbia Gas of Pennsylvania	Depreciation
149.	2012	FERC	ER-12-2681-000	ITC Holdings	Depreciation
150.	2012	MO PSC	ER-2012-0174	Kansas City Power and Light	Depreciation
151.	2012	MO PSC	ER-2012-0175	KCPL Greater Missouri Operations Company	Depreciation
152.	2012	MO PSC	GO-2012-0363	Laclede Gas Company	Depreciation
153.	2012	MN PUC	G007,001/D-12-533	Integrys – MN Energy Resource Group	Depreciation
154.	2012	TX PUC	SOAH 582-14-1051/ TECQ 2013-2007-UCR	Aqua Texas	Depreciation
155.	2012	PA PUC	2012-2336379	York Water Company	Depreciation
156.	2013	NJ BPU	ER12121071	PHI Service Company– Atlantic City Electric	Depreciation
157.	2013	KY PSC	2013-00167	Columbia Gas of Kentucky	Depreciation
158.	2013	VA St CC	2013-00020	Virginia Electric and Power Company	Depreciation
159.	2013	IA Util Bd	2013-0004	MidAmerican Energy Corporation	Depreciation
160.	2013	PA PUC	2013-2355276	Pennsylvania American Water Company	Depreciation
161.	2013	NY PSC	13-E-0030, 13-G-0031, 13-S-0032	Consolidated Edison of New York	Depreciation
162.	2013	PA PUC	2013-2355886	Peoples TWP LLC	Depreciation
163.	2013	TN Reg Auth	12-0504	Tennessee American Water	Depreciation
164.	2013	ME PUC	2013-168	Central Maine Power Company	Depreciation
165.	2013	DC PSC	Case 1103	PHI Service Company – PEPCO	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
166.	2013	WY PSC	2003-ER-13	Cheyenne Light, Fuel and Power Company	Depreciation
167.	2013	FERC	ER13-2428-0000	Kentucky Utilities	Depreciation
168.	2013	FERC	ER13- -0000	MidAmerican Energy Company	Depreciation
169.	2013	FERC	ER13-2410-0000	PPL Utilities	Depreciation
170.	2013	PA PUC	R-2013-2372129	Duquesne Light Company	Depreciation
171.	2013	NJ BPU	ER12111052	Jersey Central Power and Light Company	Depreciation
172.	2013	PA PUC	R-2013-2390244	Bethlehem, City of – Bureau of Water	Depreciation
173.	2013	OK CC	UM 1679	Oklahoma, Public Service Company of	Depreciation
174.	2013	IL CC	13-0500	Nicor Gas Company	Depreciation
175.	2013	WY PSC	20000-427-EA-13	PacifiCorp	Depreciation
176.	2013	UT PSC	13-035-02	PacifiCorp	Depreciation
177.	2013	OR PUC	UM 1647	PacifiCorp	Depreciation
178.	2013	PA PUC	2013-2350509	Dubois, City of	Depreciation
179.	2014	IL CC	14-0224	North Shore Gas Company	Depreciation
180.	2014	FERC	ER14- -0000	Duquesne Light Company	Depreciation
181.	2014	SD PUC	EL14-026	Black Hills Power Company	Depreciation
182.	2014	WY PSC	20002-91-ER-14	Black Hills Power Company	Depreciation
183.	2014	PA PUC	2014-2428304	Borough of Hanover – Municipal Water Works	Depreciation
184.	2014	PA PUC	2014-2406274	Columbia Gas of Pennsylvania	Depreciation
185.	2014	IL CC	14-0225	Peoples Gas Light and Coke Company	Depreciation
186.	2014	MO PSC	ER-2014-0258	Ameren Missouri	Depreciation
187.	2014	KS CC	14-BHCG-502-RTS	Black Hills Service Company	Depreciation
188.	2014	KS CC	14-BHCG-502-RTS	Black Hills Utility Holdings	Depreciation
189.	2014	KS CC	14-BHCG-502-RTS	Black Hills Kansas Gas	Depreciation
190.	2014	PA PUC	2014-2418872	Lancaster, City of – Bureau of Water	Depreciation
191.	2014	WV PSC	14-0701-E-D	First Energy – MonPower/PotomacEdison	Depreciation
192	2014	VA St CC	PUC-2014-00045	Aqua Virginia	Depreciation
193.	2014	VA St CC	PUE-2013	Virginia American Water Company	Depreciation
194.	2014	OK CC	PUD201400229	Oklahoma Gas and Electric Company	Depreciation
195.	2014	OR PUC	UM1679	Portland General Electric	Depreciation
196.	2014	IN URC	Cause No. 44576	Indianapolis Power & Light	Depreciation
197.	2014	MA DPU	DPU. 14-150	NSTAR Gas	Depreciation
198.	2014	CT PURA	14-05-06	Connecticut Light and Power	Depreciation
199.	2014	MO PSC	ER-2014-0370	Kansas City Power & Light	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
200.	2014	KY PSC	2014-00371	Kentucky Utilities Company	Depreciation
201.	2014	KY PSC	2014-00372	Louisville Gas and Electric Company	Depreciation
202.	2015	PA PUC	R-2015-2462723	United Water Pennsylvania Inc.	Depreciation
203.	2015	PA PUC	R-2015-2468056	NiSource - Columbia Gas of Pennsylvania	Depreciation
204.	2015	NY PSC	15-E-0283/15-G-0284	New York State Electric and Gas Corporation	Depreciation
205.	2015	NY PSC	15-E-0285/15-G-0286	Rochester Gas and Electric Corporation	Depreciation
206.	2015	MO PSC	WR-2015-0301/SR-2015-0302	Missouri American Water Company	Depreciation
207.	2015	OK CC	PUD 201500208	Oklahoma, Public Service Company of	Depreciation
208.	2015	WV PSC	15-0676-W-42T	West Virginia American Water Company	Depreciation
209.	2015	PA PUC	2015-2469275	PPL Electric Utilities	Depreciation
210.	2015	IN URC	Cause No. 44688	Northern Indiana Public Service Company	Depreciation
211.	2015	OH PSC	14-1929-EL-RDR	First Energy-Ohio Edison/Cleveland Electric/ Toledo Edison	Depreciation
212.	2015	NM PRC	15-00127-UT	El Paso Electric	Depreciation
213.	2015	TX PUC	PUC-44941; SOAH 473-15-5257	El Paso Electric	Depreciation
214.	2015	WI PSC	3270-DU-104	Madison Gas and Electric Company	Depreciation
215.	2015	OK CC	PUD 201500273	Oklahoma Gas and Electric	Depreciation
216.	2015	KY PSC	Doc. No. 2015-00418	Kentucky American Water Company	Depreciation
217.	2015	NC UC	Doc. No. G-5, Sub 565	Public Service Company of North Carolina	Depreciation
218.	2016	WA UTC	Docket UE-17	Puget Sound Energy	Depreciation
219.	2016	NY PSC	Case No. 16-W-0130	SUEZ Water New York, Inc.	Depreciation
220.	2016	MO PSC	ER-2016-0156	KCPL – Greater Missouri	Depreciation
221.	2016	WI PSC		Wisconsin Public Service Corporation	Depreciation
222.	2016	KY PSC	Case No. 2016-00026	Kentucky Utilities Company	Depreciation
223.	2016	KY PSC	Case No. 2016-00027	Louisville Gas and Electric Company	Depreciation
224.	2016	OH PUC	Case No. 16-0907-WW-AIR	Aqua Ohio	Depreciation
225.	2016	MD PSC	Case 9417	NiSource - Columbia Gas of Maryland	Depreciation
226.	2016	KY PSC	2016-00162	Columbia Gas of Kentucky	Depreciation
227.	2016	DE PSC	16-0649	Delmarva Power and Light Company – Electric	Depreciation
228.	2016	DE PSC	16-0650	Delmarva Power and Light Company – Gas	Depreciation
229.	2016	NY PSC	Case 16-G-0257	National Fuel Gas Distribution Corp – NY Div	Depreciation
230.	2016	PA PUC	R-2016-2537349	Metropolitan Edison Company	Depreciation
231.	2016	PA PUC	R-2016-2537352	Pennsylvania Electric Company	Depreciation
232.	2016	PA PUC	R-2016-2537355	Pennsylvania Power Company	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
233.	2016	PA PUC	R-2016-2537359	West Penn Power Company	Depreciation
234.	2016	PA PUC	R-2016-2529660	NiSource - Columbia Gas of PA	Depreciation
235.	2016	KY PSC	Case No. 2016-00063	Kentucky Utilities / Louisville Gas & Electric Co	Depreciation
236.	2016	MO PSC	ER-2016-0285	KCPL Missouri	Depreciation
237.	2016	AR PSC	16-052-U	Oklahoma Gas & Electric Co	Depreciation
238.	2016	PSCW	6680-DU-104	Wisconsin Power and Light	Depreciation
239.	2016	ID PUC	IPC-E-16-23	Idaho Power Company	Depreciation
240.	2016	OR PUC	UM1801	Idaho Power Company	Depreciation
241.	2016	ILL CC	16-	MidAmerican Energy Company	Depreciation
242.	2016	KY PSC	Case No. 2016-00370	Kentucky Utilities Company	Depreciation
243.	2016	KY PSC	Case No. 2016-00371	Louisville Gas and Electric Company	Depreciation
244.	2016	IN URC	Cause No. 45029	Indianapolis Power & Light	Depreciation
245.	2016	AL RC	U-16-081	Chugach Electric Association	Depreciation
246.	2017	MA DPU	D.P.U. 17-05	NSTAR Electric Company and Western Massachusetts Electric Company	Depreciation
247.	2017	TX PUC	PUC-26831, SOAH 973-17-2686	El Paso Electric Company	Depreciation
248.	2017	WA UTC	UE-17033 and UG-170034	Puget Sound Energy	Depreciation
249.	2017	OH PUC	Case No. 17-0032-EL-AIR	Duke Energy Ohio	Depreciation
250.	2017	VA SCC	Case No. PUE-2016-00413	Virginia Natural Gas, Inc.	Depreciation
251.	2017	OK CC	Case No. PUD201700151	Public Service Company of Oklahoma	Depreciation
252.	2017	MD PSC	Case No. 9447	Columbia Gas of Maryland	Depreciation
253.	2017	NC UC	Docket No. E-2, Sub 1142	Duke Energy Progress	Depreciation
254.	2017	VA SCC	Case No. PUR-2017-00090	Dominion Virginia Electric and Power Company	Depreciation
255.	2017	FERC	ER17-1162	MidAmerican Energy Company	Depreciation
256.	2017	PA PUC	R-2017-2595853	Pennsylvania American Water Company	Depreciation
257.	2017	OR PUC	UM1809	Portland General Electric	Depreciation
258.	2017	FERC	ER17-217-000	Jersey Central Power & Light	Depreciation
259.	2017	FERC	ER17-211-000	Mid-Atlantic Interstate Transmission, LLC	Depreciation
260.	2017	MN PUC	Docket No. G007/D-17-442	Minnesota Energy Resources Corporation	Depreciation
261.	2017	IL CC	Docket No. 17-0124	Northern Illinois Gas Company	Depreciation
262.	2017	OR PUC	UM1808	Northwest Natural Gas Company	Depreciation
263.	2017	NY PSC	Case No. 17-W-0528	SUEZ Water Owego-Nichols	Depreciation
264.	2017	MO PSC	GR-2017-0215	Laclede Gas Company	Depreciation
265.	2017	MO PSC	GR-2017-0216	Missouri Gas Energy	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
266.	2017	ILL CC	Docket No. 17-0337	Illinois-American Water Company	Depreciation
267.	2017	FERC	Docket No. ER18-22-000	PPL Electric Utilities Corporation	Depreciation
268.	2017	IN URC	Cause No. 44988	Northern Indiana Public Service Company	Depreciation
269.	2017	NJ BPU	BPU Docket No. WR17090985	New Jersey American Water Company, Inc.	Depreciation
270.	2017	RI PUC	Docket No. 4800	SUEZ Water Rhode Island	Depreciation
271.	2017	OK CC	Cause No. PUD 201700496	Oklahoma Gas and Electric Company	Depreciation
272.	2017	NJ BPU	ER18010029 & GR18010030	Public Service Electric and Gas Company	Depreciation
273.	2017	NC Util Com.	Docket No. E-7, SUB 1146	Duke Energy Carolinas, LLC	Depreciation
274.	2017	KY PSC	Case No. 2017-00321	Duke Energy Kentucky, Inc.	Depreciation
275.	2017	MA DPU	D.P.U. 18-40	Berkshire Gas Company	Depreciation
276.	2018	IN IURC	Cause No. 44992	Indiana-American Water Company, Inc.	Depreciation
277.	2018	IN IURC	Cause No. 45029	Indianapolis Power and Light	Depreciation
278.	2018	NC Util Com.	Docket No. W-218, Sub 497	Aqua North Carolina, Inc.	Depreciation
279.	2018	PA PUC	Docket No. R-2018-2647577	NiSource - Columbia Gas of Pennsylvania, Inc.	Depreciation
280.	2018	OR PUC	Docket UM 1933	Avista Corporation	Depreciation
281.	2018	WA UTC	Docket No. UE-108167	Avista Corporation	Depreciation
282.	2018	ID PUC	AVU-E-18-03, AVU-G-18-02	Avista Corporation	Depreciation
283.	2018	IN URC	Cause No. 45039	Citizens Energy Group	Depreciation
284.	2018	FERC	Docket No. ER18-	Duke Energy Progress	Depreciation
285.	2018	PA PUC	Docket No. R-2018-3000124	Duquesne Light Company	Depreciation
286.	2018	MD PSC	Case No. 948	NiSource - Columbia Gas of Maryland	Depreciation
287.	2018	MA DPU	D.P.U. 18-45	NiSource - Columbia Gas of Massachusetts	Depreciation
288.	2018	OH PUC	Case No. 18-0299-GA-ALT	Vectren Energy Delivery of Ohio	Depreciation
289.	2018	PA PUC	Docket No. R-2018-3000834	SUEZ Water Pennsylvania Inc.	Depreciation
290.	2018	MD PSC	Case No. 9847	Maryland-American Water Company	Depreciation
291.	2018	PA PUC	Docket No. R-2018-3000019	The York Water Company	Depreciation
292.	2018	FERC	ER-18-2231-000	Duke Energy Carolinas, LLC	Depreciation
293.	2018	KY PSC	Case No. 2018-00261	Duke Energy Kentucky, Inc.	Depreciation
294.	2018	NJ BPU	BPU Docket No. WR18050593	SUEZ Water New Jersey	Depreciation
295.	2018	WA UTC	Docket No. UE-180778	PacifiCorp	Depreciation
296.	2018	UT PSC	Docket No. 18-035-36	PacifiCorp	Depreciation
297.	2018	OR PUC	Docket No. UM-1968	PacifiCorp	Depreciation
298.	2018	ID PUC	Case No. PAC-E-18-08	PacifiCorp	Depreciation
299.	2018	WY PSC	20000-539-EA-18	PacifiCorp	Depreciation
300.	2018	PA PUC	Docket No. R-2018-3003068	Aqua Pennsylvania, Inc.	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
301.	2018	IL CC	Docket No. 18-1467	Aqua Illinois, Inc.	Depreciation
302.	2018	KY PSC	Case No. 2018-00294	Louisville Gas & Electric Company	Depreciation
303.	2018	KY PSC	Case No. 2018-00295	Kentucky Utilities Company	Depreciation
304.	2018	IN URC	Cause No. 45159	Northern Indiana Public Service Company	Depreciation
305.	2018	VA SCC	Case No. PUR-2019-00175	Virginia American Water Company	Depreciation
306.	2019	PA PUC	Docket No. R-2018-3006818	Peoples Natural Gas Company, LLC	Depreciation
307.	2019	OK CC	Cause No. PUD201800140	Oklahoma Gas and Electric Company	Depreciation
308.	2019	MD PSC	Case No. 9490	FirstEnergy – Potomac Edison	Depreciation
309.	2019	SC PSC	Docket No. 2018-318-E	Duke Energy Progress	Depreciation
310.	2019	SC PSC	Docket No. 2018-319-E	Duke Energy Carolinas	Depreciation
311.	2019	DE PSC	DE 19-057	Public Service of New Hampshire	Depreciation
312.	2019	NY PSC	Case No. 19-W-0168 & 19-W-	SUEZ Water New York	Depreciation
313.	2019	PA PUC	Docket No. R-2019-3006904	Newtown Artesian Water Company	Depreciation
314.	2019	MO PSC	ER-2019-0335	Ameren Missouri	Depreciation
315.	2019	MO PSC	EC-2019-0200	KCP&L Greater Missouri Operations Company	Depreciation
316.	2019	MN DOC	G011/D-19-377	Minnesota Energy Resource Corp.	Depreciation
317.	2019	NY PSC	Case 19-E-0378 & 19-G-0379	New York State Electric and Gas Corporation	Depreciation
318.	2019	NY PSC	Case 19-E-0380 & 19-G-0381	Rochester Gas and Electric Corporation	Depreciation
319.	2019	WA UTC	Docket UE-190529 / UG-190530	Puget Sound Energy	Depreciation
320.	2019	PA PUC	Docket No. R-2019-3010955	City of Lancaster	Depreciation
321.	2019	IURC	Cause No. 45253	Duke Energy Indiana	Depreciation
322.	2019	KY PSC	Case No. 2019-00271	Duke Energy Kentucky, Inc.	Depreciation
323.	2019	OH PUC	Case No. 18-1720-GA-AIR	Northeast Ohio Natural Gas Corp	Depreciation
324.	2019	NC Util. Com.	Docket No. E-2, Sub 1219	Duke Energy Carolinas	Depreciation
325.	2019	FERC	Docket No. ER20-277-000	Jersey Central Power & Light Company	Depreciation
326.	2019	MA DPU	D.P.U. 19-120	NSTAR Gas Company	Depreciation
327.	2019	SC PSC	Docket No. 2019-290-WS	Blue Granite Water Company	Depreciation
328.	2019	NC Util. Com.	Docket No. E-2, Sub 1219	Duke Energy Progress	Depreciation
329.	2019	MD PSC	Case No. 9609	NiSource Columbia Gas of Maryland, Inc.	Depreciation
330.	2020	NJ BPU	Docket No. ER20020146	Jersey Central Power & Light Company	Depreciation
331.	2020	PA PUC	Docket No. R-2020-3018835	NiSource - Columbia Gas of Pennsylvania, Inc.	Depreciation
332.	2020	PA PUC	Docket No. R-2020-3019369	Pennsylvania-American Water Company	Depreciation
333.	2020	PA PUC	Docket No. R-2020-3019371	Pennsylvania-American Water Company	Depreciation
334.	2020	MO PSC	GO-2018-0309, GO-2018-0310	Spire Missouri, Inc.	Depreciation
335.	2020	NM PRC	Case No. 20-00104-UT	El Paso Electric Company	Depreciation
336.	2020	MD PSC	Case No. 9644	Columbia Gas of Maryland, Inc.	Depreciation
337.	2020	MO PSC	GO-2018-0309, GO-2018-0310	Spire Missouri, Inc.	Depreciation
338.	2020	VA St CC	Case No. PUR-2020-00095	Virginia Natural Gas Company	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
339.	2020	SC PSC	Docket No. 2020-125-E	Dominion Energy South Carolina, Inc.	Depreciation
340.	2020	WV PSC	Case No. 20-0745-G-D	Hope Gas, Inc. d/b/a Dominion Energy West Virginia	Depreciation
341.	2020	VA St CC	Case No. PUR-2020-00106	Aqua Virginia, Inc.	Depreciation
342.	2020	PA PUC	Docket No. R-2020-3020256	City of Bethlehem – Bureau of Water	Depreciation
343.	2020	NE PSC	Docket No. NG-109	Black Hills Nebraska	Depreciation
344.	2020	NY PSC	Case No. 20-E-0428 & 20-G-0429	Central Hudson Gas & Electric Corporation	Depreciation
345.	2020	FERC	ER20-598	Duke Energy Indiana	Depreciation
346.	2020	FERC	ER20-855	Northern Indiana Public Service Company	Depreciation
347.	2020	OR PSC	UE 374	PacifiCorp	Depreciation
348.	2020	MD PSC	Case No. 9490 Phase II	Potomac Edison – Maryland	Depreciation
349.	2020	IN URC	Case No. 45447	Southern Indiana Gas and Electric Company	Depreciation
350.	2020	IN URC	IURC Cause No. 45468	Indiana Gas Company, Inc. d/b/a Vectren Energy Delivery of	Depreciation
351.	2020	KY PSC	Case No. 2020-00349	Kentucky Utilities Company	Depreciation
352.	2020	KY PSC	Case No. 2020-00350	Louisville Gas and Electric Company	Depreciation
353.	2020	FERC	Docket No. ER21- 000	South FirstEnergy Operating Companies	Depreciation
354.	2020	OH PUC	Case Nos 20-1651-EL-AIR, 20-1652-EL-AAM & 20-1653-EL-ATA	Dayton Power and Light Company	Depreciation
355.	2020	OR PSC	UG 388	Northwest Natural Gas Company	Depreciation
356.	2020	MO PSC	Case No. GR-2021-0241	Ameren Missouri Gas	Depreciation
357.	2021	KY PSC	Case No. 2021-00103	East Kentucky Power Cooperative	Depreciation
358.	2021	MPUC	Docket No. 2021-00024	Bangor Natural Gas	Depreciation
359.	2021	PA PUC	Docket No. R-2021-3024296	Columbia Gas of Pennsylvania, Inc.	Depreciation
360.	2021	NC Util. Com.	Doc. No. G-5, Sub 632	Public Service of North Carolina	Depreciation
361.	2021	MO PSC	ER-2021-0240	Ameren Missouri	Depreciation
362.	2021	PA PUC	Docket No. R-2021-3024750	Duquesne Light Company	Depreciation
363.	2021	KS PSC	21-BHCG-418-RTS	Black Hills Kansas Gas	Depreciation
364.	2021	KY PSC	Case No. 2021-00190	Duke Energy Kentucky	Depreciation
365.	2021	OR PSC	Docket UM 2152	Portland General Electric	Depreciation
366.	2021	ILL CC	Docket No. 20-0810	North Shore Gas Company	Depreciation
367.	2021	FERC	ER21-1939-000	Duke Energy Progress	Depreciation
368.	2021	FERC	ER21-1940-000	Duke Energy Carolina	Depreciation
369.	2021	KY PSC	Case No. 2021-00183	NiSource Columbia Gas of Kentucky	Depreciation
370.	2021	MD PSC	Case No. 9664	NiSource Columbia Gas of Maryland	Depreciation
371.	2021	OH PUC	Case No. 21-0596-ST-AIR	Aqua Ohio	Depreciation
372.	2021	PA PUC	Docket No. R-2021-3026116	Hanover Borough Municipal Water Works	Depreciation
373.	2021	OR PSC	UM-2180	Idaho Power Company	Depreciation
374.	2021	ID PUC	Case No. IPC-E-21-18	Idaho Power Company	Depreciation
375.	2021	WPSC	6690-DU-104	Wisconsin Public Service Company	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
376.	2021	PAPUC	Docket No. R-2021-3026116	Borough of Hanover	Depreciation
377.	2021	OH PUC	Case No. 21-637-GA-AIR; Case No. 21-638-GA-ALT; Case No. 21-639-GA-UNC; Case No. 21-640-GA-AAM	NiSource Columbia Gas of Ohio	Depreciation
378.	2021	TX PUC	Texas PUC Docket No. 52195; SOHA Docket No. 473-21-2606	El Paso Electric	Depreciation
379.	2021	MO PSC	Case No. GR.2021-0108	Spire Missouri	Depreciation
380.	2021	WV PSC	Case No. 21-0215-WS-P	West Virginia American Water Company	Depreciation
381.	2021	FERC	ER21-2736	Duke Energy Carolinas	Depreciation
382.	2021	FERC	ER21-2737	Duke Energy Progress	Depreciation
383.	2021	IN URC	Cause #45621	Northern Indiana Public Service Company	Depreciation
384.	2021	PA PUC	Docket No. R-2021-3026682	City of Lancaster	Depreciation
385.	2021	OH PUC	Case No. 21-887-EL-AIR; Case No. 21-888-EL-ATA; Case No. 889-El-AAM	Duke Energy Ohio	Depreciation
386.	2021	AK PSC	Docket No. 21-097-U	Black Hills Energy Arkansas, Inc.	Depreciation
387.	2021	OK CC	Cause No. PUD202100164	Oklahoma Gas & Electric	Depreciation
388.	2021	FERC	Case ER-22-392-001	El Paso Electric	Depreciation
389.	2021	FERC	Case ER-21-XXX	MidAmerican Electric	Depreciation
390.	2021	PA PUC	Docket Nos. R-2021-3027385, R-2021-3027386	Aqua Pennsylvania, Inc. Aqua Pennsylvania Wastewater, Inc.	Depreciation
391.	2022	FERC	Case ER-22-282-000	El Paso Electric	Depreciation
392.	2022	ILL CC	Docket No. 22-0154	MidAmerican Gas	Depreciation
393.	2022	MO PSC	Case No. ER-2022-0129	Evergy Metro	Depreciation
394.	2022	MO PSC	Case No. ER-2022-0130	Evergy Missouri West	Depreciation
395.	2022	PA PUC	Docket No. R-2022-3031211	NiSource Columbia Gas of Pennsylvania, Inc.	Depreciation
396.	2022	MA DPU	D.P.U. 22-20	The Berkshire Gas Company	Depreciation
397.	2022	PA PUC	R-2022-3031672; R-2022-	Pennsylvania-American Water Company	Depreciation
398.	2022	SD PUC	Docket No. NG22-	MidAmerican Gas	Depreciation
399.	2022	MD PSC	Case No. 9680	NiSource Columbia Gas of Maryland	Depreciation
400.	2022	WYPSC	Docket No. 20003-214-ER-22	Black Hills Energy – Cheyenne Light, Fuel and Power Company	Depreciation
401.	2022	MA DPU	D.P.U. 22.22	NSTAR Electric Company d/b/a Eversource Energy	Depreciation
402.	2022	NC Util Com	Docket No. W-218, Sub 573	Aqua North Carolina, Inc.	Depreciation
403.	2022	OR PUC	UM2213	Northwest Natural Gas	Depreciation
404.	2022	OR PUC	UM2214	Northwest Natural Gas	Depreciation
405.	2022	ME PUC	Docket No. 2022-00152	Central Maine Power	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
406.	2022	SC PSC	Docket No. 2022-254-E	Duke Energy Progress	Depreciation
407.	2022	NC Util Com	Docket No. E-2, SUB 1300	Duke Energy Progress	Depreciation
408.	2022	IN URC	Cause #45772	Northern Indiana Public Service Company	Depreciation
409.	2022	PA PUC	R-2022-3031340	The York Water Company	Depreciation
410.	2022	PA PUC	R-2022-3032806	The York Water Company	Depreciation
411.	2022	PA PUC	R-2022-3031704	Borough of Ambler	Depreciation
412.	2022	MO PSC	ER-2022-0337	Ameren Missouri	Depreciation
413.	2022	OH PUC	Case No. 22-507-GA-AIR	Duke Energy Ohio	Depreciation
414.	2022	PA PUC	R-2022-3035730	National Fuel Gas Distribution Corporation – PA Division	Depreciation
415.	2022	WY PSC	20003-214-ER-22	Cheyenne Light, Fuel and Power Company	Depreciation
416.	2022	NJ BPU	BPU Docket No. ER2303144	Jersey Central Power & Light Company	Depreciation
417.	2022	KY PSC	Case No. 2022-00372	Duke Energy Kentucky	Depreciation
418.	2022	TX PUC	SOAH Docket No. 473-23-04521	Aqua Texas, Inc.	Depreciation
419.	2022	NC Util Com	Docket No. E-7, Sub 1276	Duke Energy Carolinas, LLC	Depreciation
420.	2022	KY PSC	Case No. 2022-00432	Bluegrass Water	Depreciation
421.	2023	ILL CC	Docket No. 23-0069	The Peoples Gas Light and Coke Company	Depreciation
422.	2023	ILL CC	Docket No. 23-0068	North Shore Gas Company	Depreciation
423.	2023	WV PSC	Case No. 23-0030-E-D	Monongahela Power Company and The Potomac Edison Company	Depreciation
424.	2023	ID PUC	AVU-E-23-01; AVU-G-23-01	Avista Corporation	Depreciation
425.	2023	ILL CC	Docket No. 23-0066	Northern Illinois Gas Company d/b/a Nicor Gas Company	Depreciation
426.	2023	SC PSC	Docket No. 2023-70-G	Dominion Energy South Carolina, Inc.	Depreciation
427.	2023	FERC	Docket No. ER23-xxx-00	Duke Energy Ohio, Inc.	Depreciation
428.	2023	WY PSC	Docket No. 30036-78-GR-23	Black Hills Wyoming Gas Company d/b/a Black Hills Energy	Depreciation
429.	2023	PSC MD	Case No. 9695	The Potomac Edison Company	Depreciation
430.	2023	OR PUC	Case No. UM2277	Avista Corporation	Depreciation
431.	2023	FERC	Docket No. ER23-xxx-000	PPL Electric Utilities	Depreciation
432.	2023	OH PUC	Case No. 23-0154-GA-AIR	Northeast Ohio Natural Gas Corporation	Depreciation
433.	2023	DE PSC	PSC Docket No. 23-0601	Artesian Water Company	Depreciation
434.	2023	CO PUC	No. 23AL-0231G	Black Hills Colorado d/b/a Black Hills Energy	Depreciation
435.	2023	NH PUC	Docket No. DE 23-039	Granite State Electric d/b/a Liberty Utilities	Depreciation
436.	2023	MD PSC	Case No. 9701	Columbia Gas of Maryland	Depreciation
437.	2023	NY PSC	Case Nos. 23-E-0418; 23-G-0419	Central Hudson Gas and Electric	Depreciation
438.	2023	FERC	Docket No. ER23-xxx-000	Central Maine Power Company	Depreciation
439.	2023	SD PUC	Docket Number EL23-016	Northwestern Energy	Depreciation
440.	2023	CT PURA	Docket No. 23-08-32	Connecticut Water Company	Depreciation
441.	2023	OH PUC	Case 23-0894-GA-AIR	The East Ohio Gas Company d/b/a Dominion Energy Ohio	Depreciation
442.	2023	IN URC	Cause No. 45911	Indianapolis Power & Light	Depreciation
443.	2023	IN URC	Cause No. 45967	Northern Indiana Public Service Company	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
444.	2023	PA PUC	Docket No. R-2023-3043189 and Docket No. R-2023-3043190	Pennsylvania-American Water Company	Depreciation
445.	2023	IN URC	Cause No. 45988	Citizens Energy Group	Depreciation
446.	2023	IN URC	Cause No. 45990	Southern Indiana Gas and Electric Company d/b/a Centerpoint Energy Indiana South	Depreciation

APPENDIX B

PEOPLES NATURAL GAS COMPANY LLC

PITTSBURGH, PENNSYLVANIA

PEOPLES NATURAL GAS DIVISION

2023 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION
ACCRUALS RELATED TO GAS PLANT
AS OF AUGUST 31, 2023

Prepared by:

PEOPLES NATURAL GAS COMPANY LLC

Pittsburgh, Pennsylvania

PEOPLES NATURAL GAS DIVISION

2023 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO GAS PLANT
AS OF AUGUST 31, 2023

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | **F** 717.763.8150

gannettfleming.com

December 14, 2023

Peoples Natural Gas Company, LLC
375 North Shore Drive, Suite 600
Pittsburgh, PA 15212-5322

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to gas plant as of August 31, 2023. Summaries of the original cost, annual accruals and the book depreciation reserve are presented in Tables 1 and 2, beginning on page I-3 of the attached report.

A description of the methods and procedures upon which the study was based is set forth in a companion report, "2024 Depreciation Study - Calculated Annual Depreciation Accruals Related to Gas Plant as of August 31, 2024".

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS
President

JJS:mle

075181.000

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PART I. RESULTS OF STUDY

PEOPLES NATURAL GAS COMPANY LLC
PEOPLES NATURAL GAS DIVISION
DEPRECIATION STUDY

PART I. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

The results of the depreciation study are summarized in Table 1, which sets forth the calculated annual depreciation related to Gas Plant in Service as of August 31, 2023. Table 2 presents the experienced gross salvage and cost of removal associated with regular retirements during the five-year period, 2018-2022 and the annual amortization of net salvage.

DETAILED TABULATIONS OF DEPRECIATION CALCULATIONS

The supporting data for the depreciation calculations are presented in account sequence in the section beginning on II-7. The original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual are shown for each vintage of each account or subaccount. The amounts of regular retirements, gross salvage and cost of removal are set forth by account for the years 2018 through 2022, beginning on beginning on III-2 through III-6.

PEOPLES NATURAL GAS COMPANY LLC

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF AUGUST 31, 2023

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF AUGUST 31, 2023	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL		COMPOSITE REMAINING LIFE
						AMOUNT	RATE	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)=(5)/(6)
	DEPRECIABLE GAS PLANT							
	INTANGIBLE PLANT							
303.00	MISCELLANEOUS INTANGIBLE PLANT							
	CIAC	40-SQ	5,904,747.33	1,389,569	4,515,178	146,359	2.48	30.9
	OTHER	5-SQ	39,376,126.11	17,297,721	22,078,405	7,031,037	17.86	3.1
	MAJOR	15-SQ	33,590,790.88	13,561,243	20,029,548	2,162,249	6.44	9.3
	SAP	10-SQ	22,351,644.60	20,033,255	2,318,390	244,128	1.09	9.5
	TOTAL MISCELLANEOUS INTANGIBLE PLANT		**101,223,308.92**	**52,281,788**	**48,941,521**	**9,583,773**	**9.47**	
	PRODUCTION PLANT							
325.01	PRODUCING LANDS	75-R4	139,440.21	78,935	60,505	1,085	0.78	55.8
325.02	PRODUCING LEASEHOLDS	45-L0	14,480.68	10,016	4,465	187	1.29	23.9
325.03	GAS RIGHTS	65-R2.5	20,984.28	13,052	7,933	225	1.07	35.3
325.04	RIGHTS OF WAY	75-R2.5	1,628,852.90	984,638	644,215	14,938	0.92	43.1
327.00	FIELD COMPRESSOR STATION EQUIPMENT	50-S0.5	11,674,553.60	4,629,210	7,045,343	245,097	2.10	28.7
328.00	FIELD MEASURING AND REGULATING STATION STRUCTURES	33-S0	51,358.18	50,628	731	97	0.19	7.5
329.00	OTHER STRUCTURES	60-R2.5	1,926,213.73	968,363	957,851	24,347	1.26	39.3
330.00	PRODUCING GAS WELLS - WELL CONSTRUCTION	25-L1	9,221.39	8,307	914	157	1.70	5.8
331.00	PRODUCING GAS WELLS - WELL EQUIPMENT	26-L1	2,984.12	2,419	565	300	10.05	1.9
332.00	FIELD LINES	65-R1.5	78,309,827.93	30,690,727	47,619,101	1,253,270	1.60	38.0
333.00	FIELD COMPRESSOR STATION EQUIPMENT	35-S0.5	43,495,391.65	16,232,151	27,263,241	1,440,222	3.31	18.9
334.00	FIELD MEASURING AND REGULATING STATION EQUIPMENT	20-L0	4,668,451.79	2,532,096	2,136,355	229,216	4.91	9.3
337.00	OTHER EQUIPMENT	23-L1	66,192.40	36,721	29,471	2,926	4.42	10.1
	TOTAL PRODUCTION PLANT		**142,007,952.86**	**56,237,262**	**85,770,690**	**3,212,067**	**2.26**	
	UNDERGROUND STORAGE PLANT							
350.11	LAND - GAS	55-L4	16,823.84	10,525	6,299	471	2.80	13.4
350.21	RIGHTS OF WAY	65-R3	46,800.39	25,424	21,376	512	1.09	41.8
351.00	STRUCTURES AND IMPROVEMENTS	60-R2	1,800,679.17	1,081,746	718,933	20,155	1.12	35.7
352.01	WELLS - CONSTRUCTION	50-R1.5	803,281.15	754,732	48,549	1,603	0.20	30.3
352.02	WELLS - EQUIPMENT	55-R1	282,543.02	232,574	49,969	1,506	0.53	33.2
352.11	LEASEHOLDS	60-R3	161,936.70	161,937	0	0	-	-
352.12	STORAGE RIGHTS	65-R5	20,734.05	20,734	0	0	-	-
352.21	RESERVOIRS	40-SQ	433,138.50	174,638	258,500	9,640	2.23	26.8
352.31	NON-RECOVERABLE NATURAL GAS	37-SQ	205,250.77	205,251	0	0	-	-
353.00	LINES	50-R2	2,139,392.79	1,337,126	802,267	26,988	1.26	29.7
354.00	COMPRESSOR STATION EQUIPMENT	45-R1.5	7,574,440.99	2,564,165	5,010,276	209,871	2.77	23.9
355.00	MEASURING AND REGULATING STATION EQUIPMENT	60-R2.5	75,749.16	75,749	0	0	-	-
357.00	OTHER EQUIPMENT	30-R2.5	30,183.87	30,184	0	0	-	-
	TOTAL UNDERGROUND STORAGE PLANT		**13,590,954.40**	**6,674,785**	**6,916,169**	**270,746**	**1.99**	

PEOPLES NATURAL GAS COMPANY LLC

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF AUGUST 31, 2023

	DEPRECIABLE GROUP	SURVIVOR CURVE		ORIGINAL COST AS OF AUGUST 31, 2023	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)=(5)/(6)
	TRANSMISSION PLANT								
365.02	RIGHTS OF WAY	80-R4		2,777,500.74	1,661,425	1,116,076	23,601	0.85	47.3
366.01	STRUCTURES AND IMPROVEMENTS - COMPRESSOR STATION	60-R3		1,397,311.49	855,827	541,485	14,993	1.07	36.1
366.02	STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING	55-R2.5		1,654,058.01	976,582	677,476	18,310	1.11	37.0
366.03	STRUCTURES AND IMPROVEMENTS - OTHER	45-R1.5		49,995.58	47,509	2,486	160	0.32	15.5
367.00	MAINS	80-R2.5		178,397,820.17	58,599,920	119,797,900	2,208,460	1.24	54.2
368.00	COMPRESSOR STATION EQUIPMENT	35-S1		11,621,894.34	6,146,003	5,475,892	325,001	2.80	16.8
369.00	MEASURING AND REGULATING STATION EQUIPMENT	50-R1		36,782,203.49	12,835,686	23,946,517	836,074	2.27	28.6
371.00	OTHER EQUIPMENT	35-R1		2,650,785.29	1,072,874	1,577,912	75,472	2.85	20.9
	TOTAL TRANSMISSION PLANT			**235,331,569.11**	**82,195,825**	**153,135,744**	**3,502,071**	**1.49**	
	DISTRIBUTION PLANT								
374.02	RIGHTS OF WAY	80-R4		5,734,940.08	2,551,124	3,183,816	65,111	1.14	48.9
375.00	STRUCTURES AND IMPROVEMENTS								
	MEASURING AND REGULATING	65-R2		4,034,091.94	2,023,904	2,010,188	57,588	1.43	34.9
	OTHER								
	MAJOR STRUCTURES	85-R1	*	24,751,013.56	17,290,050	7,460,963	766,607	3.10	9.7
	MINOR STRUCTURES	65-R2		113,241.63	57,931	55,311	1,608	1.42	34.4
	TOTAL OTHER			24,864,255.19	17,347,981	7,516,274	768,215	3.09	9.8
	TOTAL STRUCTURES AND IMPROVEMENTS			28,898,347.13	19,371,885	9,526,462	825,803	2.86	11.5
376.00	MAINS								
	LOW PRESSURE	73-S0.5		1,113,081,583.49	184,595,403	928,486,180	19,851,543	1.78	46.8
	REGULAR PRESSURE	75-S0.5		1,165,575,266.51	280,647,217	884,928,049	19,123,641	1.64	46.3
	TOTAL MAINS			2,278,656,850.00	465,242,620	1,813,414,229	38,975,184	1.71	46.5
378.00	MEASURING AND REGULATING STATION EQUIPMENT - GENERAL	50-R1.5		80,361,194.90	29,661,973	50,699,222	1,747,664	2.17	29.0
380.00	SERVICES	55-R2		742,987,648.81	276,421,417	466,566,231	14,003,514	1.88	33.3
381.00	METERS	32-S0.5		117,256,692.59	44,356,242	72,900,450	3,746,675	3.20	19.5
382.00	METER INSTALLATIONS	55-R2		90,077,512.73	40,505,033	49,572,480	1,516,400	1.68	32.7
385.00	INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT	50-R0.5		12,408,558.21	5,612,634	6,795,925	246,776	1.99	27.5
386.00	OTHER PROPERTY ON CUSTOMER PREMISES	20-S4		14,644,532.28	14,644,532	0	0	-	-
387.00	OTHER EQUIPMENT	26-R2.5		15,620,698.73	3,037,998	12,582,701	718,306	4.60	17.5
	TOTAL DISTRIBUTION PLANT			**3,386,646,975.46**	**901,405,458**	**2,485,241,516**	**61,845,433**	**1.83**	
	GENERAL PLANT								
389.02	LAND RIGHTS AND RIGHTS OF WAY	60-R3		52,996.00	38,207	14,789	529	1.00	28.0
390.00	STRUCTURES AND IMPROVEMENTS								
	OWNED	55-R1		12,592,730.88	2,705,551	9,887,180	355,129	2.82	27.8
	LEASED - NORTH SHORE	75-R0.5	*	8,112,867.83	5,344,164	2,768,704	521,947	6.43	5.3
	TOTAL STRUCTURES AND IMPROVEMENTS			20,705,598.71	8,049,715	12,655,884	877,076	4.24	14.4

PEOPLES NATURAL GAS COMPANY LLC

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF AUGUST 31, 2023

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF AUGUST 31, 2023	BOOK DEPRECIATION RESERVE	FUTURE ACCURALS	CALCULATED ANNUAL ACCRUAL		COMPOSITE REMAINING LIFE
						AMOUNT	RATE	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)=(5)/(6)
391.01	OFFICE FURNITURE AND EQUIPMENT - FURNITURE	20-SQ	2,587,256.76	1,636,970	950,286	83,130	3.21	11.4
391.02	OFFICE FURNITURE AND EQUIPMENT - COMPUTERS	5-SQ	15,679,206.37	10,729,904	4,949,303	1,349,876	8.61	3.7
391.03	OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT	15-SQ	321,370.44	115,771	205,599	23,496	7.31	8.8
392.00	TRANSPORTATION EQUIPMENT							
	AUTOMOBILES	6-L2.5	2,040.49	2,040	0	0	-	-
	TRUCKS	10-L2.5	62,200,717.48	16,757,598	45,443,119	8,856,212	14.24	5.1
	TRAILERS	15-L2	2,715,736.21	558,820	2,156,916	262,578	9.67	8.2
	TOTAL TRANSPORTATION EQUIPMENT		64,918,494.18	17,318,459	47,600,035	9,118,790	14.05	5.2
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT	25-SQ	5,464,050.56	3,306,508	2,157,543	198,638	3.64	10.9
394.01	DUAL FUEL STATIONS	15-SQ	398,116.81	175,217	222,900	26,123	6.56	8.5
396.00	POWER OPERATED EQUIPMENT	14-L2	13,602,046.57	6,379,683	7,222,363	959,921	7.06	7.5
397.01	COMMUNICATION EQUIPMENT - RADIO	10-SQ	512,281.75	238,070	274,212	63,307	12.36	4.3
397.02	COMMUNICATION EQUIPMENT - TELEPHONE	15-SQ	18,916,082.37	8,935,941	9,980,141	1,295,546	6.85	7.7
397.03	COMMUNICATION EQUIPMENT - MICROWAVE	18-SQ	16,917,130.74	7,005,482	9,911,649	837,198	4.95	11.8
398.00	MISCELLANEOUS EQUIPMENT	15-SQ	54,885.82	38,972	15,914	1,587	2.89	10.0
	TOTAL GENERAL PLANT		**160,129,517.08**	**63,968,899**	**96,160,618**	**14,835,217**	**9.26**	
	AMORTIZATION OF NET SALVAGE					**7,949,922**		
	TOTAL DEPRECIABLE GAS PLANT		**4,038,930,277.83**	**1,162,764,018**	**2,876,166,258**	**101,199,229**	**2.51**	
	NONDEPRECIABLE GAS PLANT							
301.00	ORGANIZATION		49,770.42					
325.51	OTHER LAND AND LAND RIGHTS		47,094.57	2,031				
365.11	LAND		261,389.12					
374.01	LAND AND LAND RIGHTS - LAND		1,047,916.85	30,228				
389.01	LAND AND LAND RIGHTS - LAND		259,215.74					
	TOTAL NONDEPRECIABLE GAS PLANT		**1,665,386.70**	**32,259**				
	TOTAL GAS PLANT		**4,040,595,664.53**	**1,162,796,278**				

* LIFESPAN PROCEDURE IS USED. SURVIVOR CURVE SHOWN IS INTERIM CURVE.

PEOPLES NATURAL GAS COMPANY LLC

TABLE 2. AMORTIZATION OF EXPERIENCED NET SALVAGE

	2018		2019		2020		2021		2022			
ACCOUNT	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE	SALVAGE ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)=(12)/5
332.00	143,823		163,483		354,270		283,431	5,356	1,324		(940,975)	(188,195)
333.00	46,521	54,824	27,646		49,796	(399)	598,259		128,575		(796,371)	(159,274)
334.00	2,388				6,415		193,592				(202,394)	(40,479)
366.02			5,102		2,930						(8,032)	(1,606)
367.00	14,100										(14,100)	(2,820)
368.00			13,412		8,925						(22,337)	(4,467)
369.00	8,115				149,913						(158,028)	(31,606)
376.00	5,826,929	19,470	5,865,944	11,161	5,481,114	5,448	2,963,188	23,652	215,592	(11,206)	(20,304,243)	(4,060,849)
378.00	49,357		10,946		133,252		111,985				(305,540)	(61,108)
380.00	4,827,652		5,241,626		7,218,286		2,895,377				(20,182,941)	(4,036,588)
382.00	147,178		222,228		179,486		203,907		3,689		(756,488)	(151,298)
385.00	5,285										(5,285)	(1,057)
392.02		565,837		652,921		740,403		1,222,609			3,181,770	636,354
392.03		32,570		17,165		62,343					112,078	22,416
396.00		288,315		117,395		244,664					650,374	130,075
397.02								2,900			2,900	580
TOTAL	11,071,347	961,015	11,550,388	798,643	13,584,387	1,052,459	7,249,739	1,254,516	349,180	(11,206)	(39,749,614)	(7,949,922)

PART II. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

PEOPLES NATURAL GAS COMPANY LLC

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1874	5	5			0.0
1875	12,004	12,004			0.0
1876	956	956			0.0
1877	121	121			0.0
1881	12	12			0.0
1885	6,789	6,643	146	146	0.0
1886	4,979	4,977	2	148	0.0
1887	13,637	13,637		148	0.0
1888	13,667	13,387	280	428	0.0
1889	22,339	21,681	658	1,086	0.0
1890	47,265	47,263	2	1,088	0.0
1891	41,974	40,621	1,353	2,441	0.0
1892	14,882	14,881	1	2,442	0.0
1893	20,635	20,633	2	2,444	0.0
1894	25,150	25,098	52	2,496	0.0
1895	8,871	8,871		2,496	0.0
1896	21,832	21,333	499	2,995	0.0
1897	23,679	23,560	119	3,114	0.0
1898	33,087	33,068	19	3,133	0.0
1899	80,123	79,422	701	3,834	0.0
1900	1,114,106	1,034,716	79,390	83,224	0.0
1901	232,156	228,273	3,883	87,107	0.0
1902	401,407	387,883	13,524	100,631	0.0
1903	266,525	256,493	10,032	110,663	0.0
1904	129,084	123,001	6,083	116,746	0.0
1905	231,482	224,161	7,321	124,067	0.0
1906	176,817	168,465	8,352	132,419	0.0
1907	170,730	165,251	5,479	137,898	0.0
1908	181,260	171,257	10,003	147,901	0.0
1909	74,809	70,474	4,335	152,236	0.0
1910	85,540	82,325	3,215	155,451	0.0
1911	68,233	62,200	6,033	161,484	0.0
1912	64,299	59,783	4,516	166,000	0.0
1913	244,246	223,742	20,504	186,504	0.0
1914	243,401	223,158	20,243	206,747	0.0
1915	85,878	78,071	7,807	214,554	0.0
1916	95,505	86,429	9,076	223,630	0.0
1917	141,461	134,179	7,282	230,912	0.0
1918	85,805	77,986	7,819	238,731	0.0
1919	86,021	80,287	5,734	244,465	0.0
1920	59,073	57,783	1,290	245,755	0.0
1921	125,906	113,350	12,556	258,311	0.0
1922	184,294	174,457	9,837	268,148	0.0
1923	221,684	203,253	18,431	286,579	0.0
1924	312,138	286,860	25,278	311,857	0.0
1925	414,699	368,490	46,209	358,066	0.0

PEOPLES NATURAL GAS COMPANY LLC

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1926	258,679	224,779	33,900	391,966	0.0
1927	344,657	304,334	40,323	432,289	0.0
1928	299,080	257,207	41,873	474,162	0.0
1929	280,972	245,739	35,233	509,395	0.0
1930	337,316	294,140	43,176	552,571	0.0
1931	270,383	230,775	39,608	592,179	0.0
1932	183,874	153,379	30,495	622,674	0.0
1933	112,938	99,498	13,440	636,114	0.0
1934	87,167	77,962	9,205	645,319	0.0
1935	107,619	90,603	17,016	662,335	0.0
1936	161,399	140,086	21,313	683,648	0.0
1937	304,077	249,320	54,757	738,405	0.0
1938	344,285	292,169	52,116	790,521	0.0
1939	444,623	366,856	77,767	868,288	0.0
1940	535,005	413,686	121,319	989,607	0.0
1941	814,167	649,421	164,746	1,154,353	0.0
1942	447,234	372,076	75,158	1,229,511	0.0
1943	304,415	273,830	30,585	1,260,096	0.0
1944	441,322	378,409	62,913	1,323,009	0.0
1945	289,152	238,121	51,031	1,374,040	0.0
1946	574,154	443,307	130,847	1,504,887	0.1
1947	717,603	583,743	133,860	1,638,747	0.1
1948	1,430,841	1,253,465	177,376	1,816,123	0.1
1949	2,484,341	2,092,200	392,141	2,208,264	0.1
1950	3,015,927	2,519,229	496,698	2,704,962	0.1
1951	2,568,235	1,849,602	718,633	3,423,595	0.1
1952	3,946,662	3,059,439	887,223	4,310,818	0.1
1953	3,623,552	2,665,917	957,635	5,268,453	0.2
1954	2,405,247	1,825,930	579,317	5,847,770	0.2
1955	3,370,670	2,454,978	915,692	6,763,462	0.2
1956	3,672,796	2,619,312	1,053,484	7,816,946	0.3
1957	4,694,323	3,457,681	1,236,642	9,053,588	0.3
1958	5,526,681	3,873,957	1,652,724	10,706,312	0.4
1959	7,380,007	5,232,443	2,147,564	12,853,876	0.4
1960	5,108,827	3,511,023	1,597,804	14,451,680	0.5
1961	7,210,095	4,983,508	2,226,587	16,678,267	0.6
1962	6,416,692	4,396,828	2,019,864	18,698,131	0.7
1963	6,481,788	4,516,196	1,965,592	20,663,723	0.7
1964	7,684,132	5,359,284	2,324,848	22,988,571	0.8
1965	7,621,059	5,110,015	2,511,044	25,499,615	0.9
1966	8,655,000	5,717,684	2,937,316	28,436,931	1.0
1967	9,190,078	5,843,036	3,347,042	31,783,973	1.1
1968	11,107,925	7,255,115	3,852,810	35,636,783	1.2
1969	9,938,581	6,457,146	3,481,435	39,118,218	1.4
1970	8,816,653	5,763,692	3,052,961	42,171,179	1.5
1971	12,271,343	7,821,191	4,450,152	46,621,331	1.6

PEOPLES NATURAL GAS COMPANY LLC

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1972	16,719,583	10,252,651	6,466,932	53,088,263	1.8
1973	16,819,882	9,809,049	7,010,833	60,099,096	2.1
1974	15,065,690	8,887,119	6,178,571	66,277,667	2.3
1975	10,799,434	6,668,452	4,130,982	70,408,649	2.4
1976	9,910,167	6,197,307	3,712,860	74,121,509	2.6
1977	16,148,567	9,468,235	6,680,332	80,801,841	2.8
1978	22,545,796	14,501,587	8,044,209	88,846,050	3.1
1979	21,904,617	12,579,141	9,325,476	98,171,526	3.4
1980	25,144,606	13,869,387	11,275,219	109,446,745	3.8
1981	37,546,680	20,737,683	16,808,997	126,255,742	4.4
1982	29,382,133	16,449,525	12,932,608	139,188,350	4.8
1983	19,855,986	12,938,198	6,917,788	146,106,138	5.1
1984	29,636,946	19,298,066	10,338,880	156,445,018	5.4
1985	41,787,654	26,003,937	15,783,717	172,228,735	6.0
1986	27,730,612	16,709,604	11,021,008	183,249,743	6.4
1987	46,553,002	28,595,106	17,957,896	201,207,639	7.0
1988	34,980,279	21,200,078	13,780,201	214,987,840	7.5
1989	32,332,925	18,639,077	13,693,848	228,681,688	8.0
1990	44,960,821	25,654,693	19,306,128	247,987,816	8.6
1991	41,295,702	22,981,839	18,313,863	266,301,679	9.3
1992	49,457,710	27,021,078	22,436,632	288,738,311	10.0
1993	38,349,475	20,625,495	17,723,980	306,462,291	10.7
1994	42,941,367	22,662,804	20,278,563	326,740,854	11.4
1995	43,608,486	22,253,611	21,354,875	348,095,729	12.1
1996	32,825,447	16,341,527	16,483,920	364,579,649	12.7
1997	43,376,477	21,839,415	21,537,062	386,116,711	13.4
1998	28,283,972	13,981,152	14,302,820	400,419,531	13.9
1999	33,849,976	15,683,059	18,166,917	418,586,448	14.6
2000	24,982,536	10,993,443	13,989,093	432,575,541	15.0
2001	47,886,913	21,028,632	26,858,281	459,433,822	16.0
2002	60,635,227	25,770,832	34,864,395	494,298,217	17.2
2003	54,381,963	21,768,831	32,613,132	526,911,349	18.3
2004	62,739,848	24,011,557	38,728,291	565,639,640	19.7
2005	89,248,707	42,316,956	46,931,751	612,571,391	21.3
2006	67,681,838	24,090,163	43,591,675	656,163,066	22.8
2007	61,148,966	21,189,492	39,959,474	696,122,540	24.2
2008	58,061,075	19,088,115	38,972,960	735,095,500	25.6
2009	68,152,862	21,928,350	46,224,512	781,320,012	27.2
2010	58,637,453	17,571,847	41,065,606	822,385,618	28.6
2011	78,092,929	24,003,180	54,089,749	876,475,367	30.5
2012	105,970,534	28,106,992	77,863,542	954,338,909	33.2
2013	69,685,017	15,884,294	53,800,723	1,008,139,632	35.1
2014	91,821,302	25,691,171	66,130,131	1,074,269,763	37.4
2015	112,989,088	33,073,366	79,915,722	1,154,185,485	40.1
2016	105,782,478	23,035,722	82,746,756	1,236,932,241	43.0
2017	186,248,491	36,068,673	150,179,818	1,387,112,059	48.2

PEOPLES NATURAL GAS COMPANY LLC

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
2018	213,033,690	28,696,664	184,337,026	1,571,449,085	54.6
2019	223,449,268	30,805,025	192,644,243	1,764,093,328	61.3
2020	238,641,052	29,503,493	209,137,559	1,973,230,887	68.6
2021	323,105,290	28,116,390	294,988,900	2,268,219,787	78.9
2022	361,367,888	13,149,742	348,218,146	2,616,437,933	91.0
2023	263,109,464	3,432,871	259,676,593	2,876,114,526	100.0
9999	92,266	40,532	51,734	2,876,166,260	100.0
TOTAL	4,038,930,279	1,162,764,019	2,876,166,260		

UTILITY PLANT IN SERVICE

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 303.00 MISCELLANEOUS INTANGIBLE PLANT - CIAC

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 40-SQUARE						
2014	5,845,747.33	1,339,670	1,378,690	4,467,057	30.83	144,893
2016	59,000.00	10,571	10,879	48,121	32.83	1,466
	5,904,747.33	1,350,241	1,389,569	4,515,178		146,359
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					30.9	2.48

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 303.01 MISCELLANEOUS INTANGIBLE PLANT - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
2012	2,596,280.71	2,596,281	2,596,281			
2013	76,365.82	76,366	76,366			
2016	495,422.41	495,422	495,422			
2017	4,424.91	4,425	4,425			
2018	75,943.73	75,944	75,944			
2019	3,946,756.39	3,288,951	3,316,234	630,522	0.83	630,522
2020	8,878,324.59	5,622,909	5,669,553	3,208,772	1.83	1,753,427
2021	6,387,363.64	2,767,836	2,790,796	3,596,568	2.83	1,270,872
2022	6,553,557.26	1,529,142	1,541,827	5,011,730	3.83	1,308,546
2023	10,269,420.37	684,662	690,341	9,579,079	4.67	2,051,195
9999	92,266.28	40,261	40,532	51,734		16,475
	39,376,126.11	17,182,199	17,297,721	22,078,405		7,031,037

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.1 17.86

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 303.02 MISCELLANEOUS INTANGIBLE PLANT - MAJOR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
2014	4,465,611.19	2,728,980	2,849,746	1,615,865	5.83	277,164
2015	12,489,882.37	6,799,992	7,100,913	5,388,969	6.83	789,014
2016	1,017.41	486	508	509	7.83	65
2017	221,052.47	90,877	94,899	126,153	8.83	14,287
2019	3,789,607.75	1,052,677	1,099,261	2,690,347	10.83	248,416
2020	9,018,329.45	1,903,860	1,988,112	7,030,217	11.83	594,270
2021	1,939,034.59	280,074	292,468	1,646,567	12.83	128,337
2022	1,666,255.65	129,601	135,336	1,530,920	13.83	110,696
	33,590,790.88	12,986,547	13,561,243	20,029,548		2,162,249

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.3 6.44

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 303.03 MISCELLANEOUS INTANGIBLE PLANT - SAP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
2012	784,769.59	784,770	784,770			
2013	158,350.06	158,350	158,350			
2014	4,827,074.27	4,424,834	4,827,074			
2015	6,567,970.03	5,363,864	6,567,970			
2016	2,489,454.25	1,784,117	2,489,454			
2017	301,381.45	185,853	301,381			
2019	3,164,288.54	1,318,464	3,164,289			
2020	307,096.75	97,248	307,097			
2021	1,286,995.33	278,853	1,106,855	180,140	7.83	23,006
2023	2,464,264.33	82,134	326,015	2,138,249	9.67	221,122
	22,351,644.60	14,478,487	20,033,255	2,318,389		244,128

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.5 1.09

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.01 PRODUCING LANDS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R4						
1938	2,365.49	2,140	2,365			
1954	662.55	538	663			
1966	474.91	335	475			
1983	5,657.27	3,091	5,657			
2008	130,279.99	27,854	69,775	60,505	55.76	1,085
	139,440.21	33,958	78,935	60,505		1,085

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 55.8 0.78

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.02 PRODUCING LEASEHOLDS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-L0						
1890	13.00	11	13			
1897	620.75	496	621			
1899	305.00	242	305			
1900	263.11	208	263			
1901	378.47	297	378			
1908	11.01	8	10	1	10.72	
1909	45.50	34	44	2	10.88	
1910	1.00	1	1			
1914	105.50	78	102	4	11.69	
1915	25.11	18	24	1	11.86	
1916	58.60	43	56	3	12.03	
1917	2.75	2	3			
1919	56.45	41	54	2	12.54	
1921	34.54	25	33	2	12.89	
1922	16.94	12	16	1	13.06	
1926	110.00	76	99	11	13.78	1
1931	44.62	30	39	6	14.70	
1937	39.01	25	33	6	15.87	
1941	198.30	125	163	35	16.68	2
1943	103.13	64	84	19	17.09	1
1945	15.81	10	13	3	17.52	
1946	4.87	3	4	1	17.73	
1947	22.60	14	18	5	17.95	
1948	100.00	60	78	22	18.16	1
1950	70.00	41	54	16	18.61	1
1953	166.24	95	124	42	19.29	2
1955	8.17	5	7	1	19.75	
1956	95.00	53	69	26	19.99	1
1957	187.00	103	135	52	20.22	3
1958	235.50	128	167	68	20.46	3
1959	280.00	151	197	83	20.70	4
1960	81.57	44	57	25	20.95	1
1961	332.30	176	230	102	21.20	5
1965	440.34	223	291	149	22.21	7
1966	37.55	19	25	13	22.47	1
1968	218.17	107	140	78	22.99	3
1970	23.61	11	14	10	23.53	
1971	728.26	343	448	280	23.80	12
1972	2,608.99	1,213	1,584	1,025	24.08	43
1973	116.76	54	71	46	24.36	2
1974	969.05	438	572	397	24.64	16
1975	72.25	32	42	30	24.93	1
1977	1,441.00	624	815	626	25.50	25
1978	765.00	326	426	339	25.80	13

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.02 PRODUCING LEASEHOLDS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-L0						
1979	82.70	35	46	37	26.09	1
1980	91.23	38	50	41	26.39	2
1982	195.00	78	102	93	27.00	3
1995	2,658.92	1,453	1,896	763	23.38	33
	14,480.68	7,713	10,016	4,465		187

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.9 1.29

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.03 GAS RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
1901	1,674.68	1,675	1,675			
1910	22.78	22	23			
1923	1,969.07	1,810	1,969			
1924	25.41	23	25			
1927	43.28	39	43			
1938	1,018.56	882	1,017	2	8.69	
1948	385.48	317	365	20	11.54	2
1959	410.49	310	357	53	15.92	3
1974	3,366.13	2,103	2,425	941	24.39	39
1976	518.00	313	361	157	25.71	6
1980	1,507.30	847	977	530	28.46	19
1981	923.36	509	587	336	29.17	12
2005	9,119.74	2,800	3,228	5,892	41.01	144
	20,984.28	11,650	13,052	7,933		225

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 35.3 1.07

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.04 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
1875	1.00	1	1			
1888	137.42	135	137			
1889	130.52	128	131			
1890	1,873.28	1,834	1,873			
1891	1,372.99	1,339	1,373			
1892	924.40	899	924			
1893	699.05	677	699			
1894	3,023.40	2,917	3,023			
1895	218.54	210	219			
1896	1,259.83	1,206	1,260			
1897	1,642.16	1,566	1,642			
1898	1,409.64	1,339	1,410			
1899	2,897.90	2,743	2,898			
1900	2,874.97	2,711	2,875			
1901	10,007.57	9,403	10,008			
1902	4,457.09	4,174	4,457			
1903	7,504.57	7,002	7,505			
1904	5,966.84	5,549	5,967			
1905	9,920.15	9,195	9,920			
1906	6,726.76	6,216	6,727			
1907	4,784.95	4,407	4,785			
1908	3,068.84	2,818	3,069			
1909	6,824.39	6,246	6,824			
1910	3,360.27	3,065	3,360			
1911	2,637.18	2,398	2,637			
1912	5,250.72	4,760	5,251			
1913	3,998.45	3,613	3,998			
1914	5,211.01	4,693	5,211			
1915	3,526.25	3,165	3,526			
1916	9,327.91	8,344	9,328			
1917	11,339.21	10,110	11,339			
1918	5,939.02	5,277	5,939			
1919	10,034.15	8,884	10,034			
1920	8,068.68	7,119	8,069			
1921	9,874.37	8,680	9,874			
1922	13,323.29	11,669	13,323			
1923	12,530.40	10,935	12,530			
1924	23,943.35	20,815	23,943			
1925	11,074.30	9,590	11,074			
1926	10,137.05	8,745	10,137			
1927	11,336.06	9,740	11,336			
1928	3,835.08	3,281	3,835			
1929	3,297.79	2,810	3,298			
1930	7,617.74	6,463	7,618			

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.04 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
1931	362.17	306	362			
1932	666.58	560	667			
1933	1,250.79	1,047	1,251			
1934	192.41	160	192			
1935	1,203.89	998	1,204			
1936	3,095.27	2,552	3,095			
1937	896.03	735	896			
1938	3,164.87	2,580	3,165			
1939	2,701.60	2,190	2,702			
1940	3,447.99	2,779	3,448			
1941	4,750.60	3,805	4,751			
1942	8,225.90	6,547	8,198	28	15.31	2
1943	7,793.53	6,162	7,716	78	15.70	5
1944	6,457.05	5,070	6,349	108	16.11	7
1945	4,000.28	3,119	3,906	94	16.53	6
1946	3,848.61	2,979	3,730	119	16.95	7
1947	1,792.72	1,377	1,724	69	17.39	4
1948	2,046.38	1,560	1,953	93	17.84	5
1949	1,945.89	1,471	1,842	104	18.31	6
1950	1,033.21	774	969	64	18.78	3
1951	6,743.01	5,011	6,275	468	19.27	24
1952	5,227.54	3,850	4,821	407	19.77	21
1953	3,419.00	2,495	3,124	295	20.28	15
1954	4,135.13	2,988	3,742	393	20.80	19
1955	3,153.08	2,256	2,825	328	21.33	15
1956	13,433.71	9,516	11,916	1,518	21.87	69
1957	5,931.14	4,158	5,207	724	22.42	32
1958	7,746.35	5,372	6,727	1,019	22.99	44
1959	8,167.31	5,602	7,015	1,152	23.56	49
1960	3,263.45	2,213	2,771	492	24.15	20
1961	4,069.92	2,727	3,415	655	24.74	26
1962	5,795.30	3,836	4,803	992	25.35	39
1963	5,947.65	3,889	4,870	1,078	25.96	42
1964	7,158.88	4,622	5,788	1,371	26.58	52
1965	5,532.56	3,525	4,414	1,119	27.22	41
1966	11,080.22	6,964	8,720	2,360	27.86	85
1967	5,622.33	3,485	4,364	1,258	28.51	44
1968	3,247.97	1,985	2,486	762	29.17	26
1969	4,053.75	2,441	3,057	997	29.83	33
1970	25,742.29	15,270	19,121	6,621	30.51	217
1971	51,947.30	30,344	37,997	13,950	31.19	447
1972	27,208.63	15,643	19,588	7,621	31.88	239
1973	21,080.78	11,923	14,930	6,151	32.58	189
1974	11,679.68	6,495	8,133	3,547	33.29	107

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.04 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
1975	15,635.72	8,548	10,704	4,932	34.00	145
1976	24,795.30	13,317	16,676	8,119	34.72	234
1977	9,701.66	5,116	6,406	3,296	35.45	93
1978	12,975.14	6,714	8,407	4,568	36.19	126
1979	18,968.48	9,628	12,056	6,912	36.93	187
1980	8,113.79	4,037	5,055	3,059	37.68	81
1981	16,632.83	8,110	10,155	6,478	38.43	169
1982	8,839.18	4,220	5,284	3,555	39.19	91
1983	11,652.16	6,225	7,795	3,857	35.02	110
1984	61,906.30	32,488	40,682	21,224	35.46	599
1985	15,651.08	8,004	10,023	5,628	36.46	154
1986	17,645.91	8,855	11,088	6,558	36.90	178
1987	4,920.02	2,420	3,030	1,890	37.36	51
1988	38,191.05	18,267	22,874	15,317	38.36	399
1989	8,167.54	3,823	4,787	3,381	38.82	87
1990	1,377.08	630	789	588	39.30	15
1991	28,921.57	12,931	16,192	12,730	39.78	320
1992	11,012.64	4,771	5,974	5,039	40.78	124
1993	5,340.25	2,255	2,824	2,516	41.26	61
1994	15,466.03	6,360	7,964	7,502	41.76	180
1995	5,379.78	2,137	2,676	2,704	42.75	63
1996	12,980.22	5,008	6,271	6,709	43.25	155
1997	7,464.80	2,793	3,497	3,968	43.76	91
1998	3,484.33	1,254	1,570	1,914	44.76	43
1999	15.50	5	6	10	45.28	
2000	16,002.37	5,375	6,731	9,271	45.80	202
2001	26,595.59	8,548	10,704	15,892	46.80	340
2002	309,217.69	95,548	119,647	189,571	47.33	4,005
2003	155,944.14	46,222	57,880	98,064	47.86	2,049
2004	64,143.30	18,197	22,787	41,356	48.40	854
2005	520.27	140	175	345	49.40	7
2006	25,903.77	6,626	8,297	17,607	49.95	352
2007	586.03	142	178	408	50.50	8
2008	82,248.26	18,835	23,586	58,662	51.06	1,149
2009	356.34	77	96	260	51.62	5
2010	4.00	1	1	3	52.20	
2011	17,137.51	3,212	4,022	13,116	52.77	249
2012	44.11	8	10	34	53.77	1
2015	567.59	73	92	476	55.13	9
2021	692.28	25	31	661	57.01	12
	1,628,852.90	811,197	984,638	644,215		14,938

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 43.1 0.92

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 327.00 FIELD COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S0.5						
1906	456.70	457	457			
1910	74.04	74	74			
1929	30.85	30	31			
1937	65.76	59	66			
1938	15,789.80	14,182	15,790			
1942	15.48	13	15			
1944	26.10	22	26			
1945	62.03	53	62			
1947	109.05	91	106	3	8.13	
1952	6,242.77	5,012	5,832	411	9.86	42
1956	25,047.82	19,392	22,566	2,482	11.29	220
1957	1,353.14	1,038	1,208	145	11.65	12
1958	34.99	27	31	4	12.01	
1959	13.86	10	12	2	12.38	
1960	603.38	450	524	79	12.75	6
1962	2,018.73	1,474	1,715	304	13.50	23
1963	1,533.76	1,108	1,289	245	13.88	18
1964	43,478.50	31,070	36,155	7,324	14.27	513
1967	3,629.38	2,509	2,920	709	15.44	46
1968	5,768.79	3,941	4,586	1,183	15.84	75
1969	479.85	324	377	103	16.24	6
1970	1,385.27	924	1,075	310	16.65	19
1971	23,326.32	15,367	17,882	5,444	17.06	319
1972	3,121.79	2,031	2,363	759	17.47	43
1973	786.18	505	588	198	17.90	11
1974	139,894.30	88,637	103,144	36,750	18.32	2,006
1975	609.27	381	443	166	18.75	9
1976	705.18	435	506	199	19.19	10
1977	3,035.23	1,844	2,146	889	19.63	45
1978	6,870.73	4,111	4,784	2,087	20.08	104
1980	11,213.10	6,506	7,571	3,642	20.99	174
1982	703.50	395	460	244	21.92	11
1983	607.35	410	477	130	19.36	7
1985	67,767.23	44,489	51,770	15,997	19.97	801
1987	2,626.40	1,672	1,946	680	20.65	33
1988	1,274.00	798	929	345	21.01	16
1990	13,349.43	8,058	9,377	3,972	21.78	182
1991	32,762.97	19,497	22,688	10,075	21.89	460
1992	26,698.28	15,560	18,107	8,591	22.31	385
1994	42,278.62	23,553	27,408	14,871	23.19	641
1995	118,256.75	64,615	75,190	43,067	23.38	1,842
1996	9,454.33	5,034	5,858	3,596	23.85	151
1997	5,432.04	2,828	3,291	2,141	24.09	89
1998	169,768.23	85,869	99,923	69,845	24.59	2,840

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 327.00 FIELD COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S0.5						
2002	498,453.49	223,656	260,261	238,192	26.00	9,161
2003	113,286.62	48,895	56,898	56,389	26.56	2,123
2004	63,989.80	26,613	30,969	33,021	26.92	1,227
2005	70,222.38	28,068	32,662	37,560	27.29	1,376
2006	87,641.30	33,549	39,040	48,601	27.68	1,756
2007	44,851.16	16,389	19,071	25,780	28.08	918
2008	260,198.94	90,367	105,157	155,042	28.50	5,440
2009	8,618,992.07	2,833,063	3,296,742	5,322,250	28.94	183,906
2010	201,983.09	62,756	73,027	128,956	29.21	4,415
2011	226,605.73	65,897	76,682	149,924	29.67	5,053
2014	44,041.32	10,094	11,746	32,295	30.83	1,048
2017	195,540.18	31,482	36,635	158,905	32.15	4,943
2018	68,940.26	9,438	10,983	57,957	32.57	1,779
2019	1,395.07	157	183	1,212	32.87	37
2021	389,650.91	23,535	27,386	362,265	33.68	10,756
	11,674,553.60	3,978,814	4,629,210	7,045,343		245,097

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 28.7 2.10

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 328.00 FIELD MEASURING AND REGULATING STATION STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 33-S0						
1926	26.31	26	26			
1931	218.45	218	218			
1933	44.94	45	45			
1936	73.64	74	74			
1937	531.89	532	532			
1939	100.05	100	100			
1940	956.27	956	956			
1941	898.87	899	899			
1942	629.69	630	630			
1943	248.82	249	249			
1944	261.20	261	261			
1945	217.29	217	217			
1946	820.91	821	821			
1947	921.97	922	922			
1948	1,216.34	1,216	1,216			
1949	1,134.41	1,134	1,134			
1950	567.10	567	567			
1951	543.96	544	544			
1952	1,053.47	1,053	1,053			
1953	1,069.33	1,069	1,069			
1954	633.57	634	634			
1955	741.69	742	742			
1956	1,395.06	1,395	1,395			
1957	2,346.89	2,347	2,347			
1958	2,203.34	2,183	2,203			
1959	3,274.42	3,208	3,274			
1960	2,528.27	2,449	2,528			
1961	2,559.62	2,450	2,560			
1962	1,874.02	1,773	1,874			
1963	2,029.56	1,897	2,030			
1964	2,616.00	2,416	2,616			
1965	1,273.78	1,162	1,274			
1966	2,269.62	2,045	2,270			
1967	1,324.41	1,178	1,324			
1968	1,734.23	1,522	1,733	1	4.03	
1969	3,425.35	2,967	3,377	48	4.42	11
1970	1,286.76	1,100	1,252	35	4.80	7
1971	668.05	563	641	27	5.19	5
1972	1,383.67	1,150	1,309	75	5.58	13
1973	761.21	623	709	52	5.97	9
1974	719.26	581	662	57	6.36	9
1975	963.27	766	872	91	6.76	13
1977	536.39	414	471	65	7.56	9
1978	215.76	164	187	29	7.96	4

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 328.00 FIELD MEASURING AND REGULATING STATION STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 33-S0						
1980	9.48	7	8	1	8.77	
1981	87.81	63	72	16	9.19	2
1983	39.62	32	36	4	9.09	
1984	99.50	80	91	8	9.61	1
1988	14.12	11	13	1	10.92	
1990	20.61	15	17	4	11.68	
1991	96.00	70	80	16	11.89	1
1996	73.72	49	56	18	13.65	1
1999	618.21	385	438	181	14.59	12
	51,358.18	47,974	50,628	731		97

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.5 0.19

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 329.00 OTHER STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2.5						
1906	29.99	30	30			
1923	95.58	91	96			
1925	385.22	363	385			
1930	2,807.06	2,588	2,807			
1931	435.00	399	435			
1934	601.82	546	602			
1937	1,286.00	1,152	1,286			
1938	651.10	581	651			
1939	189.89	169	190			
1940	636.24	563	636			
1942	77.88	68	78			
1943	2,016.88	1,760	2,017			
1945	452.54	391	453			
1946	2,458.57	2,115	2,459			
1947	904.95	774	905			
1948	1,112.43	947	1,112			
1949	221.89	188	222			
1951	66.26	55	66			
1952	571.42	475	571			
1955	411.60	336	412			
1958	1,144.69	913	1,145			
1959	31,709.01	25,076	31,709			
1960	1,570.53	1,231	1,571			
1961	3,625.00	2,817	3,625			
1962	1,076.72	829	1,077			
1963	680.33	519	680			
1964	4,511.67	3,405	4,512			
1965	831.40	621	831			
1966	114.36	84	114			
1968	36,991.24	26,683	36,991			
1969	245.28	175	245			
1971	2,313.81	1,605	2,314			
1972	612.48	419	612			
1974	22,623.29	15,033	22,350	273	20.13	14
1975	3,901.22	2,552	3,794	107	20.75	5
1976	208.11	134	199	9	21.37	
1977	26,345.91	16,681	24,800	1,546	22.01	70
1979	2,212.93	1,353	2,012	201	23.31	9
1980	97,670.75	58,635	87,174	10,497	23.98	438
1981	643.50	379	563	80	24.66	3
1982	5,146.63	2,972	4,419	728	25.35	29
1983	4,071.13	2,584	3,842	229	23.13	10
1984	20,420.45	12,718	18,908	1,512	23.72	64
1985	5,137.69	3,138	4,665	473	24.33	19

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 329.00 OTHER STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2.5						
1986	3,301.96	1,976	2,938	364	24.94	15
1987	20,490.35	12,005	17,848	2,642	25.56	103
1988	10,481.87	6,008	8,932	1,550	26.18	59
1989	22,648.83	12,690	18,866	3,783	26.81	141
1990	2,552.29	1,397	2,077	475	27.44	17
1991	41,020.96	21,905	32,567	8,454	28.07	301
1992	106,311.11	55,335	82,267	24,044	28.71	837
1994	130,682.51	64,792	96,327	34,356	29.66	1,158
1995	18,382.83	8,853	13,162	5,221	30.32	172
1997	10,281.55	4,654	6,919	3,363	31.64	106
1999	18,151.93	7,676	11,412	6,740	32.98	204
2001	18,550.28	7,279	10,822	7,728	34.33	225
2002	28,964.69	10,914	16,226	12,739	35.01	364
2005	7,907.93	2,600	3,865	4,043	37.08	109
2006	7,372.59	2,303	3,424	3,949	37.78	105
2008	46,189.52	12,961	19,269	26,921	38.89	692
2012	1,028,723.58	218,295	324,544	704,180	41.46	16,985
2013	4,370.54	849	1,262	3,109	42.19	74
2014	54,393.11	9,622	14,305	40,088	42.65	940
2017	33,443.06	4,083	6,071	27,372	44.34	617
2019	2,790.13	235	349	2,441	45.34	54
2021	19,981.66	905	1,346	18,636	45.68	408
	1,926,213.73	661,484	968,363	957,851		24,347

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 39.3 1.26

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 330.00 PRODUCING GAS WELLS - WELL CONSTRUCTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 25-L1						
1921	6,345.86	6,346	6,346			
1933	5.00	5	5			
1942	29.81	30	30			
1965	620.40	527	454	166	3.77	44
1974	1,086.16	845	727	359	5.54	65
1981	177.94	128	110	68	7.08	10
1982	113.94	81	70	44	7.31	6
1985	312.58	262	225	88	7.29	12
1994	198.47	152	131	67	9.00	7
1995	16.42	12	10	6	9.15	1
1997	314.81	231	199	116	9.55	12
	9,221.39	8,619	8,307	914		157

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.8 1.70

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 331.00 PRODUCING GAS WELLS - WELL EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 26-L1						
1921	1,243.54	1,244	1,244			
1945	420.81	406	299	122	0.93	122
1954	1,258.20	1,143	840	418	2.39	175
1979	31.01	22	16	15	7.29	2
1984	30.56	26	20	11	7.56	1
	2,984.12	2,841	2,419	565		300

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.9 10.05

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 332.00 FIELD LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R1.5						
1875	339.17	339	339			
1886	521.89	522	522			
1889	1,152.23	1,152	1,152			
1890	36,476.04	36,476	36,476			
1891	140.55	141	141			
1892	2,502.95	2,503	2,503			
1893	4,595.79	4,579	4,596			
1894	17,812.81	17,673	17,813			
1895	7,774.35	7,675	7,774			
1896	2,813.91	2,764	2,814			
1897	6,600.03	6,450	6,600			
1898	28,600.17	27,804	28,600			
1899	45,385.23	43,884	45,385			
1900	47,159.08	45,352	47,159			
1901	77,641.55	74,261	77,642			
1902	62,748.36	59,698	62,748			
1903	64,031.59	60,594	64,032			
1904	46,306.08	43,599	46,306			
1905	106,796.86	100,077	106,797			
1906	18,607.40	17,359	18,607			
1907	106,537.82	98,982	106,538			
1908	89,446.07	82,772	89,446			
1909	24,785.63	22,849	24,786			
1910	31,172.64	28,626	31,173			
1911	3,772.83	3,452	3,773			
1912	3,158.45	2,879	3,158			
1913	36,587.46	33,221	36,587			
1914	40,224.97	36,382	40,225			
1915	6,958.79	6,269	6,959			
1916	15,682.84	14,071	15,683			
1917	40,540.73	36,218	40,541			
1918	25,369.04	22,567	25,369			
1919	23,700.00	20,991	23,700			
1920	31,246.39	27,550	31,246			
1921	9,705.55	8,518	9,706			
1922	86,401.09	75,475	86,401			
1923	34,869.13	30,315	34,869			
1924	39,098.50	33,829	39,098			
1925	46,311.24	39,870	46,311			
1926	18,066.38	15,476	18,066			
1927	61,156.78	52,125	61,157			
1928	24,811.91	21,037	24,812			
1929	46,530.23	39,243	46,530			
1930	32,223.56	27,033	32,182	42	10.47	4

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 332.00 FIELD LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R1.5						
1931	30,967.80	25,837	30,759	209	10.77	19
1932	8,901.21	7,385	8,792	109	11.07	10
1933	12,977.26	10,705	12,744	233	11.38	20
1934	4,086.44	3,351	3,989	97	11.69	8
1935	8,627.00	7,034	8,374	253	12.00	21
1936	4,046.99	3,281	3,906	141	12.31	11
1937	16,939.99	13,648	16,248	692	12.63	55
1938	44,269.54	35,443	42,194	2,076	12.96	160
1939	84,915.00	67,553	80,421	4,494	13.29	338
1940	33,385.09	26,385	31,411	1,974	13.63	145
1941	188,238.20	147,782	175,932	12,306	13.97	881
1942	51,514.43	40,174	47,827	3,687	14.31	258
1943	39,863.72	30,867	36,747	3,117	14.67	212
1944	131,301.06	100,940	120,168	11,133	15.03	741
1945	97,848.46	74,681	88,907	8,941	15.39	581
1946	55,031.14	41,679	49,618	5,413	15.77	343
1947	55,441.35	41,675	49,613	5,828	16.14	361
1948	20,548.36	15,323	18,242	2,306	16.53	140
1949	57,245.05	42,335	50,399	6,846	16.93	404
1950	59,029.44	43,291	51,537	7,492	17.33	432
1951	55,416.02	40,292	47,967	7,449	17.74	420
1952	65,656.49	47,323	56,337	9,319	18.15	513
1953	101,690.85	72,623	86,457	15,234	18.58	820
1954	56,930.88	40,281	47,954	8,977	19.01	472
1955	53,854.59	37,740	44,929	8,926	19.45	459
1956	316,556.37	219,643	261,482	55,074	19.90	2,768
1957	488,902.66	335,837	399,809	89,094	20.35	4,378
1958	191,972.53	130,482	155,337	36,636	20.82	1,760
1959	356,691.99	239,861	285,551	71,141	21.29	3,342
1960	245,580.83	163,331	194,443	51,138	21.77	2,349
1961	99,360.18	65,333	77,778	21,582	22.26	970
1962	180,425.02	117,276	139,615	40,810	22.75	1,794
1963	243,737.14	156,516	186,330	57,407	23.26	2,468
1964	252,221.71	159,987	190,462	61,760	23.77	2,598
1965	160,622.73	100,600	119,763	40,860	24.29	1,682
1966	210,256.55	129,970	154,727	55,530	24.82	2,237
1967	275,629.54	168,093	200,112	75,518	25.36	2,978
1968	197,279.32	118,671	141,276	56,003	25.90	2,162
1969	624,604.99	370,441	441,004	183,601	26.45	6,941
1970	109,809.24	64,179	76,404	33,405	27.01	1,237
1971	491,669.82	283,049	336,966	154,704	27.58	5,609
1972	1,350,422.96	765,582	911,414	439,009	28.15	15,595
1973	537,719.89	299,967	357,106	180,614	28.74	6,284
1974	705,399.28	387,102	460,839	244,560	29.33	8,338

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 332.00 FIELD LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R1.5						
1975	1,000,831.88	540,139	643,027	357,805	29.92	11,959
1976	580,682.31	307,942	366,600	214,082	30.53	7,012
1977	1,250,273.83	651,293	775,354	474,920	31.14	15,251
1978	606,528.86	310,264	369,365	237,164	31.75	7,470
1979	715,071.68	358,859	427,216	287,856	32.38	8,890
1980	855,188.11	420,881	501,052	354,136	33.01	10,728
1981	736,732.15	355,333	423,019	313,713	33.65	9,323
1982	757,991.69	358,121	426,338	331,654	34.29	9,672
1983	510,034.62	292,964	348,769	161,266	29.76	5,419
1984	880,935.13	496,847	591,489	289,446	30.28	9,559
1985	2,113,095.62	1,169,387	1,392,137	720,959	30.80	23,408
1986	829,717.88	450,205	535,962	293,756	31.33	9,376
1987	328,958.25	174,874	208,185	120,773	31.86	3,791
1988	2,101,373.94	1,093,765	1,302,111	799,263	32.40	24,669
1989	777,437.38	395,793	471,186	306,251	32.95	9,294
1990	601,823.27	301,393	358,804	243,019	33.06	7,351
1991	1,293,952.62	632,613	753,116	540,837	33.62	16,087
1992	1,531,977.13	730,447	869,586	662,391	34.20	19,368
1993	523,587.49	243,259	289,596	233,991	34.77	6,730
1994	611,624.94	276,516	329,188	282,437	35.35	7,990
1995	607,968.29	268,844	320,055	287,913	35.53	8,103
1996	940,777.55	403,782	480,696	460,082	36.13	12,734
1997	2,115,424.13	880,016	1,047,646	1,067,778	36.73	29,071
1998	447,926.04	181,500	216,073	231,853	36.94	6,276
1999	541,575.19	212,027	252,415	289,160	37.56	7,699
2000	852,677.64	323,932	385,636	467,042	37.81	12,352
2001	934,664.20	341,900	407,027	527,637	38.44	13,726
2002	257,745.90	91,113	108,469	149,277	38.71	3,856
2003	1,242,037.11	420,802	500,958	741,079	39.36	18,828
2004	518,289.42	168,859	201,024	317,265	39.66	8,000
2005	834,667.52	260,834	310,519	524,149	39.97	13,114
2006	563,925.92	168,445	200,531	363,395	40.30	9,017
2007	1,604,439.41	456,463	543,412	1,061,027	40.65	26,102
2008	2,432,463.99	656,765	781,869	1,650,595	41.01	40,249
2009	1,481,517.19	377,787	449,750	1,031,767	41.39	24,928
2010	1,888,670.72	452,526	538,725	1,349,946	41.78	32,311
2011	5,132,737.00	1,149,220	1,368,129	3,764,608	42.18	89,251
2012	2,287,601.04	477,651	568,636	1,718,965	42.31	40,628
2013	2,988,337.65	577,347	687,323	2,301,015	42.46	54,193
2014	2,172,840.23	384,375	457,592	1,715,248	42.65	40,217
2015	1,596,414.83	255,586	304,271	1,292,144	42.85	30,155
2016	289,492.25	41,484	49,386	240,106	42.84	5,605
2017	1,091,575.87	137,975	164,257	927,319	42.61	21,763
2018	1,706,596.49	185,166	220,437	1,486,159	42.45	35,010

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 332.00 FIELD LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R1.5						
2019	4,747,541.12	427,279	508,670	4,238,871	42.13	100,614
2020	2,593,714.35	183,116	217,997	2,375,717	41.68	56,999
2021	1,412,927.57	71,635	85,280	1,327,648	40.57	32,725
2022	4,186,243.40	123,076	146,520	4,039,723	38.52	104,873
2023	2,397,263.95	22,774	27,112	2,370,152	34.75	68,206
	78,309,827.93	25,889,374	30,690,727	47,619,101		1,253,270
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					38.0	1.60

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 333.00 FIELD COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S0.5						
1936	305.23	305	305			
1938	3,171.28	3,171	3,171			
1942	255.76	256	256			
1944	284.18	284	284			
1946	11.02	11	11			
1953	52,491.60	52,492	52,492			
1955	479.09	470	440	39	0.66	39
1956	33,800.67	32,825	30,747	3,054	1.01	3,024
1957	5,359.29	5,151	4,825	534	1.36	393
1959	100.53	95	89	12	2.04	6
1963	1,841.23	1,663	1,558	283	3.38	84
1964	419.25	375	351	68	3.72	18
1968	579.93	496	465	115	5.06	23
1969	221.27	187	175	46	5.40	9
1970	1,226.38	1,025	960	266	5.74	46
1971	177,537.02	146,646	137,361	40,176	6.09	6,597
1972	108.27	88	82	26	6.43	4
1973	674.98	544	510	165	6.78	24
1974	431,175.23	343,341	321,602	109,573	7.13	15,368
1976	3,657.60	2,837	2,657	1,001	7.85	128
1977	34,387.95	26,322	24,655	9,733	8.21	1,186
1978	13,478.77	10,178	9,534	3,945	8.57	460
1979	6,137.66	4,570	4,281	1,857	8.94	208
1980	188.21	138	129	59	9.32	6
1981	8,675.45	6,271	5,874	2,801	9.70	289
1982	3,507.78	2,498	2,340	1,168	10.08	116
1984	1,279.85	1,023	958	322	9.85	33
1985	214,542.46	169,489	158,758	55,784	10.14	5,501
1986	17,659.90	13,784	12,911	4,749	10.45	454
1987	2,786.28	2,147	2,011	775	10.78	72
1988	49,235.99	37,400	35,032	14,204	11.13	1,276
1989	59,265.13	44,342	41,535	17,730	11.50	1,542
1990	129,325.31	95,649	89,593	39,732	11.68	3,402
1991	6,677.36	4,854	4,547	2,130	12.08	176
1992	218,806.20	156,162	146,275	72,531	12.50	5,802
1993	46,709.21	32,832	30,753	15,956	12.75	1,251
1994	127,566.85	88,174	82,591	44,976	13.03	3,452
1995	1,718,078.83	1,161,421	1,087,886	630,193	13.50	46,681
1996	74,307.02	49,258	46,139	28,168	13.82	2,038
1997	20,193.55	13,104	12,274	7,920	14.16	559
1998	109,677.40	69,557	65,153	44,524	14.52	3,066
1999	182,541.07	112,938	105,787	76,754	14.89	5,155
2000	131,759.21	79,662	74,618	57,141	15.15	3,772
2001	34,836.33	20,463	19,167	15,669	15.57	1,006

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 333.00 FIELD COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S0.5						
2002	6,687,528.21	3,821,922	3,579,939	3,107,589	15.87	195,815
2003	1,456,829.70	807,958	756,802	700,028	16.20	43,212
2004	820,297.00	438,695	410,919	409,378	16.67	24,558
2005	1,401,347.54	722,955	677,181	724,167	17.05	42,473
2006	1,960,879.99	976,126	914,323	1,046,557	17.32	60,425
2007	5,312,675.83	2,533,615	2,373,200	2,939,476	17.73	165,791
2008	2,294,621.36	1,044,053	977,949	1,316,672	18.17	72,464
2009	3,593,598.31	1,557,825	1,459,192	2,134,406	18.51	115,311
2010	1,978,995.48	812,971	761,498	1,217,497	18.88	64,486
2011	1,141,281.82	441,562	413,605	727,677	19.28	37,743
2012	160,014.49	57,893	54,228	105,786	19.70	5,370
2013	287,953.55	96,896	90,761	197,193	20.05	9,835
2014	152,899.36	47,231	44,241	108,658	20.51	5,298
2015	164,299.48	46,152	43,230	121,069	20.90	5,793
2016	174,711.47	43,957	41,174	133,537	21.32	6,263
2017	1,167,263.40	258,432	242,069	925,194	21.69	42,655
2018	190,466.80	36,017	33,737	156,730	22.16	7,073
2019	1,190,006.26	185,403	173,664	1,016,342	22.57	45,031
2020	441,283.66	53,528	50,139	391,145	22.94	17,051
2021	4,021,103.02	341,392	319,777	3,701,326	23.34	158,583
2022	4,151,745.61	195,132	182,777	3,968,969	23.65	167,821
2023	820,265.73	11,320	10,604	809,662	23.88	33,905
	43,495,391.65	17,325,533	16,232,151	27,263,241		1,440,222

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.9 3.31

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 334.00 FIELD MEASURING AND STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-L0						
1898	63.63	64	64			
1918	8.14	8	8			
1920	10.10	10	10			
1921	18.75	19	19			
1923	7.74	8	8			
1924	43.58	44	44			
1925	40.21	40	40			
1926	560.09	560	560			
1927	107.28	107	107			
1928	66.82	67	67			
1929	220.33	220	220			
1930	36.33	36	36			
1931	83.84	84	84			
1932	44.67	45	45			
1933	8.88	9	9			
1934	712.99	713	713			
1935	11.22	11	11			
1936	501.94	502	502			
1937	181.49	181	181			
1938	145.26	145	145			
1939	247.53	248	248			
1940	728.96	729	729			
1941	611.58	612	612			
1942	1,316.26	1,295	1,316			
1943	347.71	333	348			
1944	332.65	317	333			
1945	472.30	446	472			
1946	1,151.21	1,078	1,151			
1947	507.27	472	507			
1948	796.24	736	796			
1949	2,093.31	1,923	2,093			
1950	440.30	402	440			
1951	535.45	485	535			
1952	3,734.08	3,361	3,734			
1953	9,873.74	8,827	9,874			
1954	10,638.98	9,447	10,639			
1955	2,384.74	2,102	2,385			
1956	6,064.18	5,306	6,064			
1957	4,932.69	4,287	4,917	16	2.62	6
1958	6,369.67	5,494	6,301	69	2.75	25
1959	2,764.71	2,365	2,712	53	2.89	18
1960	3,812.13	3,236	3,711	101	3.02	33
1961	5,498.39	4,632	5,312	186	3.15	59
1962	4,594.65	3,839	4,403	192	3.29	58

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 334.00 FIELD MEASURING AND STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-L0						
1963	3,696.81	3,063	3,513	184	3.43	54
1964	5,113.80	4,201	4,818	296	3.57	83
1965	4,173.68	3,399	3,898	276	3.71	74
1966	4,430.39	3,575	4,100	330	3.86	85
1967	5,043.03	4,034	4,627	416	4.00	104
1968	8,020.16	6,356	7,290	730	4.15	176
1969	12,602.57	9,893	11,346	1,257	4.30	292
1970	4,759.17	3,700	4,243	516	4.45	116
1971	14,785.42	11,377	13,048	1,737	4.61	377
1972	7,088.03	5,398	6,191	897	4.77	188
1973	12,894.47	9,716	11,143	1,751	4.93	355
1974	23,255.32	17,337	19,884	3,371	5.09	662
1975	63,281.47	46,638	53,489	9,792	5.26	1,862
1976	40,036.32	29,186	33,473	6,563	5.42	1,211
1977	54,856.30	39,524	45,330	9,526	5.59	1,704
1978	96,184.07	68,435	78,487	17,697	5.77	3,067
1979	96,189.25	67,573	77,499	18,690	5.95	3,141
1980	30,973.93	21,480	24,635	6,339	6.13	1,034
1981	71,976.20	49,268	56,505	15,471	6.31	2,452
1982	70,222.41	47,400	54,363	15,859	6.50	2,440
1983	64,615.14	56,060	64,295	320	6.13	52
1984	30,308.54	26,117	29,953	356	6.29	57
1985	61,790.08	52,824	60,583	1,207	6.48	186
1986	102,499.87	87,238	100,053	2,447	6.50	376
1987	35,766.84	30,141	34,568	1,199	6.75	178
1988	115,418.15	96,605	110,795	4,623	6.85	675
1989	65,185.78	54,117	62,066	3,120	6.99	446
1990	96,724.79	79,556	91,242	5,483	7.16	766
1991	158,119.23	128,677	147,579	10,540	7.36	1,432
1992	29,377.62	23,714	27,197	2,181	7.44	293
1993	19,402.45	15,452	17,722	1,680	7.71	218
1994	106,062.04	83,524	95,793	10,269	7.87	1,305
1995	11,890.54	9,277	10,640	1,251	7.94	158
1996	7,154.07	5,500	6,308	846	8.17	104
1997	13,306.12	10,097	11,580	1,726	8.32	207
1998	8,035.94	6,006	6,888	1,148	8.51	135
1999	91.55	67	77	15	8.62	2
2000	1,544.13	1,120	1,285	259	8.78	29
2002	8,688.46	6,069	6,960	1,728	9.14	189
2003	6,821.77	4,663	5,348	1,474	9.33	158
2004	8,162.73	5,460	6,262	1,901	9.49	200
2005	9,288.88	6,075	6,967	2,322	9.61	242
2006	6,911.05	4,402	5,049	1,862	9.79	190
2007	42.13	26	30	12	9.94	1

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 334.00 FIELD MEASURING AND STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-L0						
2008	11,306.98	6,791	7,789	3,518	10.09	349
2009	1,030,626.43	598,588	686,515	344,111	10.22	33,670
2010	91,350.96	51,239	58,766	32,585	10.31	3,161
2011	188,760.14	101,515	116,426	72,334	10.46	6,915
2013	28,500.44	13,937	15,984	12,516	10.62	1,179
2017	17,701.28	6,429	7,373	10,328	10.81	955
2020	20,439.63	4,705	5,396	15,044	10.59	1,421
2021	227,237.22	39,335	45,113	182,124	10.35	17,597
2022	422,877.29	44,487	51,022	371,855	9.92	37,485
2023	959,738.70	33,207	38,085	921,653	9.29	99,209
	4,668,451.79	2,209,418	2,532,096	2,136,355		229,216

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.3 4.91

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 337.00 OTHER EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 23-L1						
2004	16,266.98	10,756	9,362	6,905	9.82	703
2005	26,138.29	16,857	14,672	11,466	10.00	1,147
2006	14,141.38	8,885	7,734	6,407	10.16	631
2008	9,645.75	5,691	4,953	4,692	10.54	445
	66,192.40	42,189	36,721	29,471		2,926

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.1 4.42

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 350.11 LAND - GAS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-L4						
1967	764.79	617	512	253	10.64	24
1969	4,194.89	3,358	2,786	1,409	10.97	128
1970	49.41	39	32	17	11.17	2
1976	93.45	71	59	34	13.10	3
1977	2,088.06	1,572	1,305	783	13.58	58
1979	9,290.53	6,809	5,650	3,641	14.69	248
1989	342.71	218	181	161	19.60	8
	16,823.84	12,684	10,525	6,299		471

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.4 2.80

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 350.21 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R3						
1916	922.66	913	923			
1925	257.87	247	258			
1926	459.25	438	459			
1929	64.04	60	64			
1940	198.63	178	199			
1941	73.96	66	74			
1942	442.68	393	443			
1943	166.39	147	166			
1945	66.96	59	67			
1946	558.07	486	558			
1947	1,439.75	1,246	1,440			
1948	342.95	295	343			
1949	1,130.71	967	1,131			
1961	890.72	692	891			
1962	39.11	30	39			
1965	87.33	65	87			
1966	1,016.02	747	1,016			
1967	69.49	50	69			
1968	1,932.65	1,385	1,902	31	18.43	2
1973	95.09	63	87	8	21.63	
1979	60.66	37	51	10	25.84	
2004	17,233.24	5,484	7,532	9,701	41.07	236
2006	19,252.16	5,552	7,625	11,627	42.36	274
	46,800.39	19,600	25,424	21,376		512

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 41.8 1.09

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 351.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2						
1940	400.17	347	400			
1945	426.05	359	426			
1946	58.82	49	59			
1947	155.46	129	155			
1949	1,543.88	1,266	1,544			
1950	5,236.77	4,263	5,237			
1951	3,014.62	2,436	3,015			
1952	535.96	430	536			
1953	2,900.60	2,308	2,901			
1956	157.70	122	158			
1958	1,371.20	1,045	1,371			
1959	1,334.85	1,008	1,335			
1963	3,163.12	2,292	3,163			
1964	41.65	30	42			
1965	1,891.52	1,340	1,892			
1967	126.88	88	127			
1968	1,796.46	1,227	1,796			
1969	756.00	510	756			
1970	537.68	358	538			
1971	551.41	362	551			
1972	347.83	225	348			
1973	2,622.77	1,672	2,623			
1976	85.52	52	83	3	23.51	
1977	200.66	120	192	9	24.12	
1981	1,050.11	584	933	117	26.63	4
1982	80.70	44	70	11	27.28	
1986	5,020.51	2,948	4,712	309	26.13	12
1989	4,130.40	2,286	3,654	476	27.56	17
1992	40,631.25	20,893	33,396	7,235	29.44	246
1993	41,380.63	20,848	33,324	8,057	29.71	271
1994	10,078.67	4,939	7,895	2,184	30.36	72
1995	2,597.85	1,237	1,977	621	31.01	20
1996	67,731.62	31,278	49,996	17,736	31.66	560
1997	126.45	57	91	35	31.97	1
1998	585,144.97	254,772	407,239	177,906	32.64	5,451
1999	21,627.73	9,094	14,536	7,092	33.30	213
2000	86,632.93	35,320	56,457	30,176	33.65	897
2003	329,014.65	119,432	190,906	138,109	35.39	3,902
2004	145,420.89	50,447	80,637	64,784	36.08	1,796
2006	152,337.02	48,123	76,922	75,415	37.18	2,028
2007	103,552.40	31,138	49,772	53,780	37.60	1,430
2014	82,977.62	15,135	24,193	58,785	41.09	1,431

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 351.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2						
2015	4,292.00	708	1,132	3,160	41.34	76
2017	52,907.60	6,751	10,791	42,117	42.14	999
2020	34,685.59	2,418	3,865	30,821	42.29	729
	1,800,679.17	680,490	1,081,746	718,933		20,155

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 35.7 1.12

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.01 WELLS - CONSTRUCTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1.5						
1916	2,539.39	2,539	2,539			
1917	5.00	5	5			
1924	5,818.45	5,766	5,818			
1925	5,901.05	5,810	5,901			
1926	5,036.15	4,925	5,036			
1927	196.72	191	197			
1939	983.70	891	984			
1942	7,760.64	6,915	7,761			
1943	6,320.60	5,600	6,321			
1945	320.90	281	321			
1946	13,641.04	11,868	13,641			
1947	33,367.73	28,850	33,368			
1948	32,038.83	27,521	32,039			
1949	3,272.52	2,793	3,273			
1950	10,222.52	8,665	10,223			
1951	0.98	1	1			
1952	3,023.42	2,527	3,023			
1953	23.42	19	23			
1957	421.40	339	421			
1961	205.46	160	205			
1962	666.08	513	666			
1966	2.80	2	3			
1967	291.86	214	292			
1968	487.45	353	487			
1970	285.49	202	285			
1972	11.53	8	12			
1973	12,091.85	8,222	12,092			
1974	11,875.77	7,964	11,876			
1975	13,432.20	8,879	13,432			
1979	661.73	410	662			
1981	11,407.29	6,828	11,407			
1983	175.10	120	175			
1984	223.74	151	224			
1985	79.69	53	80			
1991	52,170.80	30,880	52,171			
1992	32,064.02	18,488	32,064			
1993	393.40	222	393			
1995	564.33	304	564			
1997	273,774.80	139,680	273,775			
2000	69,902.91	32,547	69,903			
2002	3,116.50	1,352	2,979	138	27.61	5
2004	18,369.13	7,359	16,217	2,152	28.68	75

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.01 WELLS - CONSTRUCTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1.5						
2005	63,589.60	24,488	53,965	9,625	29.00	332
2006	82,093.99	30,161	66,466	15,628	29.56	529
2021	24,449.17	1,562	3,442	21,007	31.73	662
	803,281.15	436,628	754,732	48,549		1,603

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 30.3 0.20

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.02 WELLS - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R1						
1916	605.74	593	606			
1917	1,489.21	1,450	1,489			
1924	2,632.59	2,454	2,633			
1925	2,486.30	2,304	2,486			
1926	805.94	742	806			
1942	13.91	12	14			
1943	7,491.00	6,164	7,491			
1945	2,654.21	2,149	2,654			
1946	5,200.82	4,178	5,201			
1947	9,662.56	7,697	9,663			
1948	11,543.94	9,118	11,544			
1949	37.27	29	37			
1950	2,967.75	2,303	2,968			
1952	1,916.83	1,460	1,917			
1953	260.58	197	261			
1957	733.74	532	734			
1961	964.56	669	965			
1962	174.36	119	174			
1966	137.13	89	137			
1967	870.46	560	870			
1968	7.19	5	7			
1971	198.43	121	198			
1973	20,483.30	12,059	20,483			
1974	18,787.75	10,883	18,788			
1975	11,012.38	6,273	11,012			
1979	2,655.00	1,408	2,655			
1981	693.40	354	693			
1982	32,980.62	16,478	32,904	77	27.52	3
1984	737.19	453	737			
1985	398.44	240	398			
1992	7,004.82	3,689	7,005			
1993	485.00	250	485			
1994	287.22	145	287			
1995	846.49	415	835	11	29.30	
1997	13,420.80	6,251	12,576	845	30.01	28
1998	23,638.35	10,708	21,543	2,095	30.39	69
2000	14,821.28	6,318	12,711	2,110	31.18	68
2008	30,882.48	9,601	19,316	11,566	33.61	344

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.02 WELLS - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R1						
2014	34,845.40	7,314	14,714	20,131	34.50	584
2019	5,714.85	635	1,278	4,437	33.29	133
2021	9,993.73	646	1,299	8,694	31.39	277
	282,543.02	137,065	232,574	49,969		1,506

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 33.2 0.53

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.11 LEASEHOLDS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R3						
1904	35.14	35	35			
1909	75.00	75	75			
1910	211.00	211	211			
1915	26.50	26	26			
1916	58.95	59	59			
1921	17.70	18	18			
1938	58.48	55	58			
1939	330.37	307	330			
1940	19.39	18	19			
1941	201.71	186	202			
1942	29.19	27	29			
1943	27.92	25	28			
1944	102.32	93	102			
1945	7,165.82	6,473	7,166			
1946	114.97	103	115			
1947	1,278.03	1,143	1,278			
1948	4,414.39	3,928	4,414			
1949	330.99	293	331			
1950	69,383.58	61,080	69,384			
1951	60,361.90	52,837	60,362			
1952	1,628.76	1,417	1,629			
1953	40.65	35	41			
1955	52.58	45	53			
1958	453.12	378	453			
1969	320.54	240	321			
1970	249.81	185	250			
1974	465.47	325	465			
1975	12,797.48	8,800	12,797			
1979	1,684.94	1,083	1,686			
	161,936.70	139,500	161,937			

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.12 STORAGE RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R5						
1939	100.32	99	100			
1941	98.88	96	99			
1944	1,462.95	1,409	1,463			
1947	29.25	28	29			
1948	75.00	71	75			
1949	3,618.25	3,429	3,618			
1950	371.91	351	372			
1960	11.75	10	12			
1964	443.26	378	443			
1992	2,452.89	1,200	2,453			
1993	12,069.59	5,716	12,070			
	20,734.05	12,787	20,734			

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.21 RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 40-SQUARE						
1969	7,545.31	7,545	7,545			
1970	116.00	116	116			
1971	9,081.22	9,081	9,081			
1972	5,737.14	5,737	5,737			
1975	23,910.35	23,910	23,910			
1994	10,285.35	7,500	7,542	2,743	10.83	253
1997	15,806.90	10,340	10,397	5,410	13.83	391
2011	360,656.23	109,701	110,310	250,346	27.83	8,996
	433,138.50	173,930	174,638	258,500		9,640

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 26.8 2.23

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.31 NON-RECOVERABLE NATURAL GAS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 37-SQUARE						
1971	205,250.77	205,251	205,251			
	205,250.77	205,251	205,251			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					0.0	0.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 353.00 LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2						
1912	8.69	9	9			
1916	1,786.32	1,786	1,786			
1917	363.37	363	363			
1918	25.48	25	25			
1922	45.18	45	45			
1924	5,593.24	5,593	5,593			
1925	1,233.42	1,233	1,233			
1926	63.48	63	63			
1933	19.78	20	20			
1934	57.37	56	57			
1937	19.93	19	20			
1938	3.19	3	3			
1939	84.73	81	85			
1940	573.99	544	574			
1941	1,087.17	1,025	1,087			
1943	570.69	532	571			
1944	337.97	313	338			
1945	146.21	135	146			
1946	14,905.54	13,627	14,906			
1947	8,931.03	8,113	8,931			
1948	19,135.23	17,271	19,135			
1949	20.86	19	21			
1951	265.03	235	265			
1952	12,170.84	10,701	12,171			
1955	2,228.25	1,919	2,228			
1956	44.62	38	45			
1957	445.55	378	446			
1961	568.38	467	568			
1963	70.50	57	70			
1965	42.48	34	42			
1967	2,981.95	2,319	2,982			
1968	94,202.26	72,479	94,202			
1969	2,017.45	1,535	2,017			
1970	25,791.64	19,406	25,792			
1973	20,201.24	14,646	20,201			
1974	893.39	639	893			
1976	580.66	404	581			
1981	1,605.42	1,030	1,605			
1983	2,071.35	1,456	2,071			
1986	263.84	177	264			
1991	3,151.27	1,906	3,077	74	21.03	4
1996	5,529.70	2,945	4,754	776	23.85	33
2004	314,099.14	127,022	205,030	109,069	28.23	3,864
2005	13,478.65	5,216	8,419	5,060	28.78	176

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 353.00 LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2						
2006	1,330,175.45	490,968	792,487	537,688	29.34	18,326
2009	574.94	181	292	283	30.88	9
2010	35,995.76	10,615	17,134	18,862	31.48	599
2011	68,674.32	18,885	30,483	38,191	32.08	1,190
2012	22,387.48	5,724	9,239	13,148	32.50	405
2013	102,485.49	24,176	39,023	63,462	32.94	1,927
2015	16,105.17	3,118	5,033	11,072	34.03	325
2020	5,277.70	434	701	4,577	35.30	130
	2,139,392.79	869,985	1,337,126	802,267		26,988

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 29.7 1.26

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 354.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R1.5						
1940	38.38	36	29	9	2.42	4
1941	93.26	88	72	21	2.73	8
1947	27.71	25	20	8	4.16	2
1948	135,769.71	122,494	99,556	36,214	4.40	8,230
1949	84.84	76	62	23	4.63	5
1950	2,311.41	2,061	1,675	636	4.88	130
1951	634.60	562	457	178	5.13	35
1954	20.31	18	15	5	5.92	1
1955	425.47	367	298	127	6.20	20
1956	5,827.33	4,988	4,054	1,773	6.48	274
1957	145.59	124	101	45	6.77	7
1958	4,730.84	3,989	3,242	1,489	7.06	211
1959	17,637.66	14,757	11,994	5,644	7.35	768
1960	535.88	445	362	174	7.65	23
1961	920.95	758	616	305	7.96	38
1963	108.84	88	72	37	8.58	4
1964	203.72	163	132	72	8.90	8
1965	136.24	108	88	48	9.23	5
1966	1,354.68	1,067	867	488	9.57	51
1967	2,060.99	1,607	1,306	755	9.92	76
1969	16,191.83	12,363	10,048	6,144	10.64	577
1970	111.84	84	68	44	11.01	4
1971	453.19	338	275	178	11.39	16
1973	3,435.73	2,505	2,036	1,400	12.19	115
1974	657.34	473	384	273	12.61	22
1975	31,166.51	22,135	17,990	13,177	13.04	1,011
1976	23,406.17	16,395	13,325	10,081	13.48	748
1977	33,074.71	22,836	18,560	14,515	13.93	1,042
1978	5,618.23	3,822	3,106	2,512	14.39	175
1979	813.20	545	443	370	14.86	25
1981	2,202.06	1,427	1,160	1,042	15.84	66
1982	30,538.76	19,443	15,802	14,737	16.35	901
1983	4,725.24	3,435	2,792	1,933	15.08	128
1984	105.21	75	61	44	15.48	3
1985	72,682.63	51,321	41,710	30,973	15.89	1,949
1986	216,409.53	150,405	122,240	94,170	16.31	5,774
1987	51,910.04	35,486	28,841	23,069	16.74	1,378
1988	27,704.51	18,609	15,124	12,581	17.19	732
1989	14,761.27	9,734	7,911	6,850	17.65	388
1990	523,871.27	338,840	275,388	248,483	18.11	13,721
1992	13,256.56	8,222	6,682	6,575	19.09	344
1993	627,180.32	380,322	309,102	318,078	19.58	16,245
1994	244,309.75	145,364	118,143	126,167	19.85	6,356
1995	41,444.32	24,046	19,543	21,901	20.38	1,075

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 354.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R1.5						
1996	49,392.46	27,912	22,685	26,707	20.91	1,277
1997	122,261.90	67,183	54,602	67,660	21.45	3,154
1998	77,154.52	41,162	33,454	43,701	22.00	1,986
1999	59,564.52	30,950	25,154	34,411	22.34	1,540
2000	1,384.13	696	566	818	22.92	36
2001	11,860.86	5,785	4,702	7,159	23.29	307
2002	469,373.17	220,558	179,256	290,117	23.88	12,149
2003	594,368.52	269,724	219,215	375,154	24.28	15,451
2004	189,460.43	82,434	66,997	122,463	24.89	4,920
2005	5,302.15	2,215	1,800	3,502	25.31	138
2006	325,656.73	130,263	105,870	219,787	25.75	8,535
2007	7,253.51	2,767	2,249	5,005	26.21	191
2008	6,793.61	2,463	2,002	4,792	26.67	180
2009	2,806.17	962	782	2,024	27.16	75
2011	90,346.36	27,483	22,336	68,010	27.83	2,444
2012	2,472.89	701	570	1,903	28.20	67
2013	104,644.56	27,448	22,308	82,337	28.59	2,880
2014	3,235,313.59	780,034	633,962	2,601,352	28.86	90,137
2015	33,936.60	7,429	6,038	27,899	29.15	957
2016	11,255.01	2,210	1,796	9,459	29.33	323
2017	14,740.67	2,546	2,069	12,671	29.55	429
	7,574,440.99	3,154,971	2,564,165	5,010,276		209,871

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.9 2.77

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 355.00 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2.5						
1952	1,397.86	1,163	1,398			
1953	416.42	344	416			
1958	11,119.58	8,866	11,120			
1960	8,847.25	6,936	8,847			
1961	23,007.08	17,877	23,007			
1962	815.46	628	815			
1968	5,569.00	4,017	5,569			
1971	6,727.65	4,668	6,728			
1975	5,576.52	3,648	5,577			
1976	285.91	184	286			
1992	6,636.43	3,454	6,636			
1998	5,350.00	2,343	5,350			
	75,749.16	54,128	75,749			

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 357.00 OTHER EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-R2.5						
1953	597.38	597	597			
1957	139.38	139	139			
1972	6,119.04	5,876	6,119			
1973	1,697.11	1,614	1,697			
1979	1,203.92	1,089	1,204			
1981	2,893.23	2,573	2,893			
1990	17,052.58	14,648	17,053			
1997	481.23	366	482			
	30,183.87	26,902	30,184			

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 365.02 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R4						
1874	5.22	5	5			
1875	3,511.90	3,512	3,512			
1876	399.33	399	399			
1877	121.20	121	121			
1886	2,347.39	2,347	2,347			
1887	351.96	352	352			
1888	480.50	480	480			
1889	2,276.99	2,277	2,277			
1890	836.20	836	836			
1891	1,881.69	1,882	1,882			
1892	2,891.69	2,892	2,892			
1893	668.86	669	669			
1894	661.91	662	662			
1895	535.27	535	535			
1896	8,678.23	8,678	8,678			
1897	3,023.80	3,024	3,024			
1898	2,342.79	2,343	2,343			
1899	1,728.00	1,728	1,728			
1900	7,217.60	7,218	7,218			
1901	8,315.53	8,303	8,316			
1902	11,669.51	11,630	11,670			
1903	15,951.40	15,858	15,951			
1904	8,357.13	8,288	8,357			
1905	3,124.45	3,093	3,124			
1906	4,197.36	4,145	4,197			
1907	860.32	847	860			
1908	1,143.87	1,123	1,144			
1909	4,361.62	4,273	4,362			
1910	14,240.66	13,913	14,241			
1911	8,984.99	8,754	8,985			
1912	6,710.68	6,519	6,711			
1913	46,028.92	44,585	46,029			
1914	28,967.28	27,975	28,967			
1915	3,539.66	3,408	3,540			
1916	924.66	887	925			
1917	1,143.11	1,094	1,143			
1918	1,101.48	1,050	1,101			
1919	277.77	264	278			
1920	38.58	37	39			
1921	3,301.61	3,117	3,302			
1922	2,148.31	2,021	2,148			
1923	6,792.11	6,367	6,792			
1924	6,974.80	6,514	6,975			
1925	319.55	297	320			

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 365.02 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R4						
1926	57.79	54	58			
1927	2,501.82	2,311	2,502			
1928	458.62	422	459			
1929	803.17	736	803			
1930	5,106.34	4,663	5,106			
1931	1,671.50	1,520	1,672			
1932	322.40	292	322			
1933	434.38	392	434			
1934	58.48	53	58			
1935	371.87	332	372			
1936	1,389.85	1,236	1,390			
1937	119.07	105	119			
1938	270.84	239	271			
1939	3,811.40	3,338	3,811			
1940	6,263.19	5,454	6,263			
1941	13,570.48	11,747	13,570			
1942	10,951.87	9,421	10,952			
1943	6,379.17	5,452	6,379			
1944	8,590.71	7,291	8,591			
1945	1,565.14	1,319	1,565			
1946	2,344.03	1,960	2,344			
1947	5,834.78	4,840	5,835			
1948	30,281.43	24,910	30,126	155	14.19	11
1949	29,163.47	23,779	28,758	405	14.77	27
1950	7,136.36	5,766	6,973	163	15.36	11
1951	15,951.91	12,768	15,441	511	15.97	32
1952	18,754.77	14,863	17,975	780	16.60	47
1953	35,373.14	27,750	33,560	1,813	17.24	105
1954	21,058.72	16,350	19,773	1,286	17.89	72
1955	30,687.82	23,568	28,503	2,185	18.56	118
1956	16,319.65	12,397	14,993	1,327	19.23	69
1957	17,390.24	13,062	15,797	1,593	19.91	80
1958	77,494.10	57,530	69,576	7,918	20.61	384
1959	110,087.45	80,762	97,672	12,415	21.31	583
1960	30,586.70	22,172	26,815	3,772	22.01	171
1961	48,831.97	34,958	42,278	6,554	22.73	288
1962	34,687.71	24,516	29,649	5,039	23.46	215
1963	44,693.62	31,179	37,707	6,987	24.19	289
1964	57,591.74	39,638	47,938	9,654	24.94	387
1965	22,527.96	15,294	18,496	4,032	25.69	157
1966	18,191.57	12,175	14,724	3,468	26.46	131
1967	3,887.30	2,564	3,101	786	27.23	29
1968	30,951.69	20,115	24,327	6,625	28.01	237
1969	14,445.34	9,243	11,178	3,267	28.81	113

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 365.02 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R4						
1970	31,681.13	19,955	24,133	7,548	29.61	255
1971	49,175.27	30,476	36,857	12,318	30.42	405
1972	17,079.41	10,410	12,590	4,489	31.24	144
1973	5,563.59	3,333	4,031	1,533	32.07	48
1974	88,103.17	51,859	62,718	25,385	32.91	771
1975	814.00	471	570	244	33.75	7
1976	7,385.79	4,191	5,069	2,317	34.61	67
1977	3,593.43	2,000	2,419	1,174	35.47	33
1978	82,898.26	45,242	54,715	28,183	36.34	776
1979	11,595.57	6,201	7,499	4,097	37.22	110
1980	18,646.19	9,764	11,808	6,838	38.11	179
1981	10,265.25	5,261	6,363	3,902	39.00	100
1982	20,539.24	10,295	12,451	8,088	39.90	203
1983	26,529.68	13,748	16,627	9,903	37.35	265
1984	16,757.37	8,466	10,239	6,518	38.36	170
1985	6,357.20	3,130	3,785	2,572	39.35	65
1986	4,549.21	2,181	2,638	1,911	40.36	47
1987	12,891.67	6,062	7,331	5,561	40.75	136
1988	28,962.28	13,242	16,015	12,947	41.75	310
1989	14,637.90	6,502	7,863	6,775	42.75	158
1990	58,740.03	25,329	30,633	28,107	43.75	642
1991	34,663.12	14,496	17,531	17,132	44.75	383
1992	19,894.54	8,123	9,824	10,071	45.17	223
1993	19,256.37	7,610	9,203	10,053	46.17	218
1994	6,368.53	2,433	2,942	3,427	47.17	73
1995	10,901.74	4,023	4,865	6,037	48.17	125
1996	11,652.39	4,147	5,015	6,637	49.17	135
1997	33,693.46	11,550	13,968	19,725	50.17	393
1998	15,268.71	5,034	6,088	9,181	51.17	179
1999	14,007.66	4,468	5,404	8,604	51.59	167
2000	1,557.61	476	576	982	52.59	19
2001	489,134.54	143,121	173,089	316,046	53.59	5,897
2002	134,892.85	37,689	45,581	89,312	54.59	1,636
2003	58,286.70	15,516	18,765	39,522	55.59	711
2005	130,678.41	31,337	37,898	92,780	57.59	1,611
2006	3,018.67	684	827	2,192	58.59	37
2007	714.85	153	185	530	59.59	9
2008	31,155.97	6,237	7,543	23,613	60.59	390
2011	17,286.00	2,776	3,357	13,929	63.59	219
2012	1,098.72	163	197	902	64.02	14
2013	15,156.01	2,049	2,478	12,678	65.02	195
2014	29,183.67	3,557	4,302	24,882	66.02	377
2015	36,574.58	3,972	4,804	31,771	67.02	474
2016	34,368.29	3,275	3,961	30,407	68.02	447

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 365.02 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R4						
2017	85,120.56	6,980	8,441	76,680	69.02	1,111
2018	6,158.77	423	512	5,647	70.02	81
2022	2,234.93	35	42	2,193	74.02	30
	2,777,500.74	1,411,303	1,661,425	1,116,076		23,601
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 47.3						0.85

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.01 STRUCTURES AND IMPROVEMENTS - COMPRESSOR STATION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R3						
1978	486,335.94	318,224	439,626	46,710	20.74	2,252
1980	12,052.02	7,607	10,509	1,543	22.13	70
1982	144,492.45	87,755	121,233	23,259	23.56	987
1983	5,454.59	3,527	4,873	582	21.94	27
1984	6,913.86	4,387	6,061	853	22.56	38
1995	6,058.20	2,935	4,055	2,003	29.97	67
2006	93,601.90	29,082	40,177	53,425	38.08	1,403
2007	381,147.00	111,524	154,069	227,078	39.08	5,811
2009	205,133.93	53,171	73,455	131,679	40.48	3,253
2022	56,121.60	1,280	1,769	54,353	50.11	1,085
	1,397,311.49	619,492	855,827	541,485		14,993

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 36.1 1.07

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2.5						
1915	2,039.02	2,039	2,039			
1921	15.25	15	15			
1926	674.20	659	674			
1933	308.06	290	308			
1936	30.20	28	30			
1938	94.77	87	95			
1942	4,567.33	4,134	4,567			
1946	33.12	29	33			
1947	467.40	413	467			
1948	4,490.90	3,953	4,491			
1949	21,634.60	18,948	21,635			
1950	8,623.70	7,514	8,624			
1951	12,398.99	10,749	12,399			
1952	9,794.83	8,445	9,795			
1953	13,583.85	11,647	13,584			
1954	4,182.81	3,566	4,183			
1955	3,289.22	2,788	3,289			
1956	3,955.53	3,332	3,956			
1957	461.88	387	462			
1958	773.26	643	773			
1959	6,263.37	5,172	6,263			
1960	7,763.15	6,364	7,763			
1961	4,903.21	3,989	4,903			
1962	720.58	582	721			
1963	354.80	284	355			
1964	14,377.38	11,405	14,377			
1965	349.99	275	350			
1967	104.28	80	104			
1968	11,523.59	8,785	11,524			
1969	3,475.25	2,620	3,475			
1970	1,542.20	1,149	1,542			
1971	7,492.16	5,516	7,492			
1973	1,761.32	1,264	1,761			
1974	1,991.11	1,409	1,991			
1975	635.87	443	636			
1976	1,120.08	770	1,120			
1978	32,091.49	21,355	32,091			
1979	11,321.38	7,408	11,321			
1980	0.01					
1981	27,039.82	17,074	27,040			
1983	2,322.66	1,567	2,323			
1984	35,381.35	23,557	35,381			
1985	11,908.81	7,772	11,909			
1986	2,486.58	1,590	2,487			

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2.5						
1987	1,364.96	854	1,365			
1988	1,833.40	1,128	1,833			
1989	6,868.66	4,130	6,869			
1990	443.70	260	444			
1991	1,335.51	765	1,336			
1993	81,579.75	44,543	81,022	558	25.08	22
1994	5,801.95	3,080	5,602	200	25.78	8
1997	3,622.95	1,763	3,207	416	27.60	15
1998	5,820.43	2,739	4,982	838	28.31	30
1999	42,005.79	19,083	34,711	7,295	29.03	251
2000	2,641.28	1,156	2,103	538	29.75	18
2002	4,331.23	1,760	3,201	1,130	30.92	37
2003	112,488.50	43,781	79,636	32,852	31.65	1,038
2004	74,594.44	27,883	50,718	23,876	32.11	744
2005	44,125.47	15,713	28,582	15,543	32.85	473
2006	18,974.80	6,417	11,672	7,303	33.59	217
2008	369,366.95	112,029	203,778	165,589	34.84	4,753
2010	119,355.96	31,904	58,032	61,324	36.09	1,699
2014	222,953.81	42,718	77,703	145,251	38.68	3,755
2017	149,925.02	19,880	36,161	113,764	40.34	2,820
2022	106,274.09	2,901	5,277	100,997	41.57	2,430
	1,654,058.01	594,583	976,582	677,476		18,310

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 37.0 1.11

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.03 STRUCTURES AND IMPROVEMENTS - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R1.5						
1904	97.85	98	98			
1920	3,071.90	3,072	3,072			
1923	403.86	404	404			
1927	72.55	73	73			
1929	261.39	261	261			
1930	294.47	294	294			
1932	95.28	95	95			
1937	237.51	230	238			
1939	19.57	19	20			
1941	2,931.40	2,754	2,931			
1947	529.70	481	530			
1949	416.19	373	416			
1950	3,524.86	3,143	3,525			
1951	1,022.22	906	1,022			
1952	5,364.58	4,722	5,365			
1953	2,751.48	2,406	2,751			
1954	2,503.83	2,174	2,504			
1955	1,688.17	1,456	1,688			
1956	69.33	59	69			
1958	3,139.09	2,647	3,139			
1959	727.82	609	728			
1969	176.01	134	169	7	10.64	1
1974	304.86	219	277	28	12.61	2
1980	5,852.63	3,856	4,876	977	15.35	64
1983	414.15	301	381	33	15.08	2
1984	12,992.80	9,313	11,776	1,217	15.48	79
1986	483.17	336	425	58	16.31	4
1997	548.91	302	382	167	21.45	8
	49,995.58	40,737	47,509	2,486		160

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.5 0.32

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
1875	8,090.00	8,058	8,090			
1886	2,037.41	1,962	2,037			
1887	12,982.71	12,455	12,983			
1888	5,051.63	4,829	5,052			
1889	1,217.90	1,160	1,218			
1890	7,553.76	7,169	7,554			
1891	11,558.60	10,930	11,559			
1892	8,224.48	7,751	8,224			
1893	14,634.18	13,745	14,634			
1894	1,427.37	1,336	1,427			
1896	1,722.04	1,602	1,722			
1897	9,432.93	8,748	9,433			
1899	20,243.82	18,660	20,244			
1900	78,811.70	72,428	78,812			
1901	28,958.03	26,533	28,958			
1902	153,493.92	140,235	153,494			
1903	18,254.17	16,627	18,254			
1904	149.68	136	150			
1905	3,999.94	3,621	4,000			
1906	53,560.05	48,344	53,560			
1908	7.82	7	8			
1909	1,564.36	1,399	1,564			
1910	8,171.73	7,284	8,172			
1911	857.22	762	857			
1912	3,524.79	3,121	3,525			
1913	1,840.01	1,624	1,840			
1914	18,283.11	16,082	18,283			
1915	413.55	363	414			
1916	1,229.32	1,074	1,229			
1917	37,079.01	32,277	37,079			
1918	2,200.89	1,909	2,201			
1919	13,817.47	11,942	13,817			
1920	1,556.04	1,340	1,556			
1921	20,172.04	17,305	20,172			
1922	12,536.89	10,713	12,537			
1923	1,730.76	1,473	1,731			
1924	40,891.57	34,661	40,892			
1925	49,124.79	41,467	49,125			
1926	1,753.30	1,474	1,753			
1927	10,977.79	9,186	10,978			
1928	12,657.32	10,544	12,657			
1929	9,778.53	8,108	9,779			
1930	41,996.67	34,652	41,997			
1931	28,706.22	23,568	28,706			

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
1932	5,422.90	4,429	5,423			
1933	6,386.08	5,189	6,386			
1934	4,587.42	3,707	4,587			
1935	4,549.08	3,655	4,549			
1936	19,799.47	15,812	19,799			
1937	20,177.96	16,019	20,178			
1938	21,099.22	16,645	21,099			
1939	61,077.10	47,869	61,077			
1940	25,852.34	20,126	25,852			
1941	15,553.15	12,024	15,553			
1942	71,295.61	54,728	71,040	256	18.59	14
1943	28,513.71	21,727	28,203	311	19.04	16
1944	105,909.82	80,094	103,966	1,944	19.50	100
1945	13,280.27	9,964	12,934	346	19.98	17
1946	21,391.14	15,920	20,665	726	20.46	35
1947	58,660.36	43,291	56,194	2,466	20.96	118
1948	711,039.42	520,303	675,380	35,659	21.46	1,662
1949	1,215,938.17	881,859	1,144,698	71,240	21.98	3,241
1950	169,968.30	122,143	158,548	11,420	22.51	507
1951	176,449.68	125,632	163,077	13,373	23.04	580
1952	1,229,459.89	866,917	1,125,302	104,158	23.59	4,415
1953	548,615.47	382,999	497,152	51,463	24.15	2,131
1954	663,245.77	458,303	594,900	68,346	24.72	2,765
1955	611,840.46	418,425	543,137	68,703	25.29	2,717
1956	304,345.55	205,890	267,256	37,090	25.88	1,433
1957	1,059,920.92	709,087	920,431	139,490	26.48	5,268
1958	712,159.34	471,093	611,503	100,656	27.08	3,717
1959	1,662,929.84	1,087,140	1,411,163	251,767	27.70	9,089
1960	635,018.03	410,222	532,489	102,529	28.32	3,620
1961	1,229,721.15	784,710	1,018,593	211,128	28.95	7,293
1962	1,337,654.45	842,883	1,094,105	243,549	29.59	8,231
1963	717,702.78	446,411	579,464	138,239	30.24	4,571
1964	1,502,973.01	922,450	1,197,387	305,586	30.90	9,890
1965	642,038.32	388,754	504,622	137,416	31.56	4,354
1966	520,018.06	310,451	402,981	117,037	32.24	3,630
1967	778,873.30	458,460	595,104	183,769	32.91	5,584
1968	865,493.33	501,986	651,603	213,890	33.60	6,366
1969	534,009.68	305,053	395,974	138,036	34.30	4,024
1970	399,153.22	224,524	291,444	107,709	35.00	3,077
1971	451,000.97	249,683	324,101	126,900	35.71	3,554
1972	1,528,634.87	832,724	1,080,918	447,717	36.42	12,293
1973	759,267.14	406,777	528,017	231,250	37.14	6,226
1974	233,219.24	122,818	159,424	73,795	37.87	1,949
1975	374,888.95	193,960	251,770	123,119	38.61	3,189

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
1976	125,019.43	63,525	82,459	42,560	39.35	1,082
1977	601,102.94	299,800	389,156	211,947	40.10	5,285
1978	4,218,552.06	2,064,475	2,679,793	1,538,759	40.85	37,669
1979	1,439,042.60	690,568	896,392	542,651	41.61	13,041
1980	390,610.16	183,684	238,431	152,179	42.38	3,591
1981	1,758,535.69	810,017	1,051,443	707,093	43.15	16,387
1982	1,365,613.27	615,728	799,246	566,367	43.93	12,892
1983	358,582.78	181,479	235,569	123,014	39.20	3,138
1984	687,110.27	341,769	443,633	243,477	39.57	6,153
1985	1,226,208.51	599,003	777,536	448,673	39.96	11,228
1986	1,260,335.99	599,542	778,236	482,100	40.96	11,770
1987	1,578,797.31	736,667	956,231	622,566	41.35	15,056
1988	1,306,256.55	592,518	769,118	537,139	42.36	12,680
1989	1,646,869.81	731,540	949,576	697,294	42.75	16,311
1990	2,508,162.47	1,089,797	1,414,612	1,093,550	43.17	25,331
1991	3,126,462.63	1,317,491	1,710,170	1,416,293	44.17	32,065
1992	1,690,205.27	695,350	902,599	787,606	44.59	17,663
1993	1,628,017.06	648,276	841,495	786,522	45.59	17,252
1994	1,061,307.85	411,681	534,383	526,925	46.02	11,450
1995	1,211,318.70	457,152	593,406	617,913	46.46	13,300
1996	1,167,839.10	425,093	551,792	616,047	47.46	12,980
1997	2,250,919.09	795,025	1,031,983	1,218,936	47.91	25,442
1998	1,106,219.44	375,893	487,928	618,291	48.90	12,644
1999	1,031,513.57	339,059	440,116	591,398	49.36	11,981
2000	1,301,500.47	413,096	536,219	765,281	49.82	15,361
2001	772,382.00	234,572	304,486	467,896	50.82	9,207
2002	1,982,558.70	579,105	751,708	1,230,851	51.30	23,993
2003	380,746.10	106,723	138,532	242,214	51.78	4,678
2004	1,480,509.37	394,408	511,962	968,547	52.78	18,351
2005	6,003,202.43	1,526,614	1,981,622	4,021,580	53.26	75,508
2006	4,778,319.38	1,156,353	1,501,005	3,277,314	53.76	60,962
2007	4,298,251.86	980,001	1,272,091	3,026,161	54.75	55,272
2008	5,142,938.60	1,107,789	1,437,966	3,704,973	55.25	67,058
2009	3,425,186.51	693,943	900,773	2,524,414	55.76	45,273
2010	6,580,499.97	1,247,663	1,619,530	4,960,970	56.28	88,148
2011	8,636,818.06	1,523,535	1,977,625	6,659,193	56.80	117,239
2012	5,771,572.54	934,418	1,212,922	4,558,651	57.80	78,869
2013	7,252,942.26	1,076,337	1,397,140	5,855,802	58.33	100,391
2014	2,051,307.05	276,516	358,932	1,692,375	58.86	28,753
2015	3,913,269.31	473,114	614,126	3,299,143	59.40	55,541
2016	2,750,130.96	295,639	383,754	2,366,377	59.50	39,771
2017	10,861,012.51	1,011,160	1,312,536	9,548,477	60.06	158,982
2018	2,597,241.78	203,883	264,650	2,332,592	60.62	38,479
2019	8,213,268.12	527,292	684,452	7,528,816	60.77	123,890

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
2020	3,721,534.09	183,844	238,639	3,482,895	60.94	57,153
2021	893,635.21	30,741	39,903	853,732	60.73	14,058
2022	25,088,128.26	479,183	622,004	24,466,124	59.81	409,064
2023	2,934,851.62	16,729	21,715	2,913,137	57.81	50,392
	178,397,820.17	45,239,310	58,599,920	119,797,900		2,208,460
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					54.2	1.24

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 368.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1						
1920	599.44	599	599			
1954	35.45	35	35			
1955	34.50	34	34			
1956	424.97	416	425			
1960	380.66	361	381			
1962	30,076.54	28,014	29,580	497	2.40	207
1963	109.34	101	107	2	2.68	1
1964	885.85	811	856	30	2.97	10
1971	553.97	474	501	53	5.08	10
1972	197.37	167	176	21	5.39	4
1978	1,246,789.41	983,891	1,038,901	207,888	7.38	28,169
1979	2,233.94	1,741	1,838	396	7.73	51
1980	2,207.18	1,697	1,792	415	8.09	51
1981	72,358.73	54,889	57,958	14,401	8.45	1,704
1982	321,615.86	240,662	254,118	67,498	8.81	7,662
1983	17,457.63	14,444	15,252	2,206	8.38	263
1984	50,633.93	41,449	43,766	6,868	8.68	791
1985	5,075.02	4,106	4,336	739	9.00	82
1986	13,045.60	10,425	11,008	2,038	9.34	218
1987	5,333.27	4,205	4,440	893	9.71	92
1988	571.27	444	469	102	10.08	10
1989	9,828.39	7,556	7,978	1,850	10.28	180
1990	12,099.38	9,150	9,662	2,437	10.69	228
1992	2,215.37	1,623	1,714	501	11.39	44
1994	16,370.44	11,603	12,252	4,118	11.98	344
1995	62,255.32	43,311	45,733	16,522	12.32	1,341
1996	226,028.26	153,518	162,101	63,927	12.83	4,983
1997	1,034.88	690	729	306	13.05	23
1998	20,058.69	13,074	13,805	6,254	13.44	465
2001	455,747.35	274,770	290,132	165,615	14.60	11,343
2003	400,738.96	227,099	239,796	160,943	15.42	10,437
2004	87,639.56	47,869	50,545	37,095	15.92	2,330
2005	1,784,901.41	940,286	992,858	792,043	16.32	48,532
2006	456,808.88	231,328	244,262	212,547	16.73	12,705
2007	1,907,380.38	925,079	976,800	930,580	17.17	54,198
2008	526,974.74	242,988	256,574	270,401	17.73	15,251
2009	461,733.52	202,147	213,449	248,285	18.19	13,650
2010	110,266.29	45,584	48,133	62,133	18.68	3,326
2011	1,439,470.91	558,659	589,893	849,578	19.18	44,295
2012	204,021.65	73,815	77,942	126,080	19.70	6,400
2013	60,030.13	20,080	21,203	38,827	20.23	1,919
2014	1,077,319.14	329,875	348,318	729,001	20.77	35,099
2015	76,770.95	21,250	22,438	54,333	21.33	2,547
2017	62,874.56	13,455	14,207	48,668	22.65	2,149

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 368.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1						
2019	126,064.80	18,645	19,688	106,377	24.00	4,432
2021	206,208.56	16,126	17,028	189,181	25.53	7,410
2022	45,953.47	1,948	2,056	43,897	26.38	1,664
2023	10,478.42	127	135	10,344	27.14	381
	11,621,894.34	5,820,620	6,146,003	5,475,892		325,001
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					16.8	2.80

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 369.00 MEASURING AND REGULATING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1						
1920	75.73	76	76			
1924	113.45	112	113			
1926	31.69	31	32			
1927	40.37	39	40			
1934	461.11	427	461			
1937	111.36	101	111			
1945	123.85	106	124			
1947	1,785.01	1,509	1,785			
1948	1,160.75	974	1,161			
1949	23,909.19	19,888	23,909			
1950	43,298.25	35,712	43,298			
1951	1,164.14	952	1,164			
1952	7,842.29	6,357	7,842			
1953	24,776.71	19,906	24,777			
1954	1,405.57	1,119	1,406			
1955	27,892.90	21,996	27,893			
1956	11,206.72	8,752	11,207			
1957	41,735.83	32,270	41,736			
1958	42,557.84	32,574	42,558			
1959	7,819.32	5,924	7,819			
1960	1,366.59	1,024	1,367			
1961	12,803.13	9,492	12,803			
1962	19,624.13	14,388	19,624			
1963	5,845.08	4,237	5,845			
1964	91,293.53	65,403	91,294			
1965	39,600.20	28,029	39,497	103	14.61	7
1966	16,508.12	11,539	16,260	248	15.05	16
1967	32,860.84	22,681	31,960	901	15.49	58
1968	229,382.71	156,256	220,185	9,198	15.94	577
1969	109,899.02	73,852	104,067	5,832	16.40	356
1970	7,195.06	4,769	6,720	475	16.86	28
1971	68,675.17	44,872	63,230	5,445	17.33	314
1972	11,485.34	7,397	10,423	1,062	17.80	60
1973	19,912.76	12,633	17,802	2,111	18.28	115
1974	26,550.00	16,583	23,368	3,182	18.77	170
1975	6,859.04	4,216	5,941	918	19.27	48
1976	22,368.69	13,524	19,057	3,312	19.77	168
1977	9,987.93	5,937	8,366	1,622	20.28	80
1978	205,396.37	119,993	169,086	36,310	20.79	1,747
1979	135,686.16	77,857	109,711	25,975	21.31	1,219
1980	33,281.24	18,744	26,413	6,868	21.84	314
1981	233,282.51	128,865	181,588	51,695	22.38	2,310
1982	120,442.02	65,207	91,885	28,557	22.93	1,245
1983	132,685.25	87,944	123,925	8,760	20.44	429

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 369.00 MEASURING AND REGULATING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1						
1984	64,985.35	42,507	59,898	5,087	20.71	246
1985	67,382.01	43,205	60,881	6,501	21.36	304
1986	34,221.58	21,621	30,467	3,755	21.66	173
1987	323,790.92	201,430	283,841	39,950	21.97	1,818
1988	58,695.98	35,711	50,321	8,375	22.64	370
1989	226,650.08	135,514	190,957	35,693	22.98	1,553
1990	128,021.34	75,149	105,895	22,126	23.33	948
1991	342,371.76	197,138	277,793	64,579	23.70	2,725
1992	126,500.81	71,359	100,554	25,947	24.08	1,078
1993	564,861.47	311,804	439,372	125,489	24.48	5,126
1994	164,947.58	88,527	124,746	40,202	25.18	1,597
1995	260,208.21	136,323	192,097	68,111	25.60	2,661
1996	86,132.97	44,221	62,313	23,820	25.75	925
1997	214,647.74	107,281	151,173	63,475	26.19	2,424
1998	342,922.93	166,558	234,702	108,221	26.65	4,061
1999	141,158.59	66,514	93,727	47,432	27.12	1,749
2000	142,515.37	65,044	91,655	50,860	27.59	1,843
2001	208,985.37	92,643	130,546	78,439	27.84	2,817
2002	918,587.76	392,788	553,489	365,099	28.34	12,883
2003	517,225.39	213,821	301,302	215,923	28.61	7,547
2004	1,404,203.59	559,856	788,910	615,294	28.91	21,283
2005	61,435.99	23,548	33,182	28,254	29.23	967
2006	983,661.77	361,397	509,255	474,407	29.56	16,049
2007	823,539.89	288,898	407,095	416,445	29.92	13,919
2008	22,727.44	7,584	10,687	12,040	30.29	397
2009	175,791.25	55,779	78,600	97,191	30.48	3,189
2010	481,173.30	144,448	203,546	277,627	30.69	9,046
2011	1,141,582.38	322,269	454,119	687,463	30.94	22,219
2012	2,148,061.97	568,377	800,917	1,347,145	31.03	43,414
2013	759,857.03	186,925	263,401	496,456	31.16	15,932
2014	1,368,306.97	309,785	436,527	931,780	31.32	29,750
2015	1,234,373.34	255,022	359,359	875,014	31.36	27,902
2016	1,642,327.87	305,966	431,146	1,211,182	31.30	38,696
2017	10,752,950.80	1,777,463	2,504,675	8,248,276	31.15	264,792
2018	437,939.03	62,669	88,309	349,630	30.94	11,300
2019	434,595.52	52,151	73,488	361,108	30.56	11,816
2020	514,180.73	49,361	69,556	444,625	29.83	14,905
2021	128,999.10	9,030	12,724	116,275	28.79	4,039
2022	722,696.96	29,992	42,263	680,434	26.92	25,276
2023	4,778,482.38	66,899	94,269	4,684,213	23.53	199,074
	36,782,203.49	9,130,844	12,835,686	23,946,517		836,074

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 28.6 2.27

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 371.00 OTHER EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-R1						
1953	2,740.74	2,734	2,741			
1954	35.60	35	36			
1955	351.02	344	351			
1961	756.22	699	756			
1965	3,429.65	3,052	3,430			
1968	1,634.56	1,410	1,635			
1969	2,732.34	2,333	2,732			
1970	2,520.94	2,128	2,521			
1974	578.55	465	579			
1975	236.10	187	235	1	7.23	
1976	1,215.86	951	1,198	18	7.61	2
1979	17,650.83	13,223	16,652	999	8.78	114
1982	4,504.21	3,213	4,046	458	10.03	46
1986	2,135.76	1,659	2,089	47	10.68	4
1987	256.35	197	248	8	11.00	1
1989	26,482.55	19,634	24,725	1,758	11.92	147
1990	14.84	11	14	1	12.29	
1991	4,856.79	3,484	4,387	470	12.68	37
1992	8,073.07	5,687	7,162	911	13.08	70
1993	12,151.68	8,394	10,570	1,582	13.50	117
1994	35,464.43	23,999	30,222	5,242	13.94	376
1995	17,491.87	11,627	14,642	2,850	14.21	201
1996	17,646.12	11,458	14,429	3,217	14.67	219
1997	108,647.75	68,796	86,634	22,014	15.16	1,452
1998	56,483.33	34,969	44,036	12,447	15.48	804
1999	28,011.20	16,857	21,228	6,783	15.99	424
2000	86,140.66	50,487	63,578	22,563	16.36	1,379
2002	78,749.24	43,501	54,780	23,969	17.15	1,398
2003	46,378.35	24,785	31,211	15,167	17.57	863
2004	24,561.39	12,664	15,948	8,613	18.01	478
2008	111,157.57	48,387	60,933	50,225	19.68	2,552
2011	19,861.33	7,347	9,252	10,609	20.73	512
2013	5,239.33	1,694	2,133	3,106	21.28	146
2014	4,900.00	1,464	1,844	3,056	21.51	142
2015	553,624.92	151,472	190,747	362,878	21.68	16,738
2016	295,458.11	73,037	91,974	203,484	21.82	9,326
2017	631,609.62	138,638	174,585	457,025	21.92	20,850
2018	241,146.06	45,962	57,879	183,267	21.93	8,357

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 371.00 OTHER EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-R1						
2019	4,636.30	746	939	3,697	21.74	170
2021	160,434.13	15,113	19,032	141,402	20.82	6,792
2023	30,785.92	588	741	30,045	17.12	1,755
	2,650,785.29	853,431	1,072,874	1,577,912		75,472
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					20.9	2.85

PEOPLES NATURAL GAS COMPANY LLC

ACOUNT 374.02 LAND RIGHTS AND RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R4						
1876	535.18	535	535			
1881	11.59	12	12			
1885	352.00	352	352			
1887	302.11	302	302			
1888	303.80	304	304			
1889	1,640.73	1,641	1,641			
1890	466.90	467	467			
1891	254.53	255	255			
1892	332.92	333	333			
1894	1,419.69	1,420	1,420			
1895	115.83	116	116			
1896	12.76	13	13			
1897	541.59	542	542			
1898	187.32	187	187			
1899	1,325.25	1,325	1,325			
1900	1,487.01	1,487	1,487			
1901	57,683.41	57,597	57,683			
1902	20,951.96	20,881	20,952			
1903	55,690.50	55,363	55,690			
1904	6,907.11	6,850	6,907			
1905	20,752.66	20,543	20,753			
1906	12,629.15	12,471	12,629			
1907	3,991.47	3,931	3,991			
1908	3,682.91	3,617	3,683			
1909	2,061.23	2,019	2,061			
1910	3,098.35	3,027	3,098			
1911	6,116.69	5,959	6,117			
1912	12,356.15	12,003	12,356			
1913	7,234.15	7,007	7,234			
1914	8,650.32	8,354	8,650			
1915	16,443.73	15,831	16,444			
1916	3,735.88	3,585	3,736			
1917	3,095.78	2,961	3,096			
1918	1,347.79	1,285	1,348			
1919	1,673.56	1,591	1,674			
1920	5,367.89	5,084	5,368			
1921	3,010.45	2,842	3,010			
1922	6,721.09	6,323	6,721			
1923	7,711.85	7,229	7,712			
1924	3,446.87	3,219	3,447			
1925	4,176.63	3,887	4,177			
1926	2,132.54	1,978	2,133			
1927	3,524.17	3,256	3,524			
1928	1,429.17	1,315	1,425	4	6.37	1

PEOPLES NATURAL GAS COMPANY LLC

ACOUNT 374.02 LAND RIGHTS AND RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R4						
1929	3,267.47	2,996	3,246	21	6.65	3
1930	5,668.14	5,176	5,607	61	6.94	9
1931	4,731.61	4,304	4,663	69	7.23	10
1932	2,851.42	2,583	2,798	53	7.53	7
1933	851.21	768	832	19	7.84	2
1934	850.90	764	828	23	8.16	3
1935	908.21	812	880	28	8.49	3
1936	3,346.94	2,978	3,226	121	8.83	14
1937	4,482.64	3,968	4,299	184	9.18	20
1938	3,424.14	3,015	3,266	158	9.55	17
1939	8,945.92	7,836	8,489	457	9.93	46
1940	12,479.23	10,868	11,773	706	10.33	68
1941	25,816.38	22,347	24,208	1,608	10.75	150
1942	6,103.48	5,251	5,688	415	11.18	37
1943	1,364.06	1,166	1,263	101	11.63	9
1944	3,124.90	2,652	2,873	252	12.10	21
1945	16,033.54	13,508	14,633	1,401	12.60	111
1946	8,601.73	7,192	7,791	811	13.11	62
1947	11,568.51	9,596	10,395	1,174	13.64	86
1948	11,280.16	9,279	10,052	1,228	14.19	87
1949	10,146.57	8,273	8,962	1,185	14.77	80
1950	29,692.99	23,992	25,990	3,703	15.36	241
1951	38,944.81	31,171	33,767	5,178	15.97	324
1952	23,874.50	18,921	20,497	3,378	16.60	203
1953	16,201.83	12,710	13,769	2,433	17.24	141
1954	21,913.55	17,013	18,430	3,484	17.89	195
1955	27,482.14	21,106	22,864	4,618	18.56	249
1956	27,191.78	20,655	22,375	4,817	19.23	250
1957	24,312.10	18,261	19,782	4,530	19.91	228
1958	90,945.11	67,516	73,140	17,805	20.61	864
1959	31,221.29	22,905	24,813	6,408	21.31	301
1960	26,962.73	19,545	21,173	5,790	22.01	263
1961	55,962.03	40,062	43,399	12,563	22.73	553
1962	22,170.68	15,669	16,974	5,197	23.46	222
1963	31,787.88	22,176	24,023	7,765	24.19	321
1964	33,329.08	22,939	24,850	8,479	24.94	340
1965	34,496.80	23,419	25,370	9,127	25.69	355
1966	29,075.86	19,459	21,080	7,996	26.46	302
1967	49,650.46	32,750	35,478	14,172	27.23	520
1968	45,755.37	29,735	32,212	13,543	28.01	484
1969	26,644.17	17,049	18,469	8,175	28.81	284
1970	32,271.75	20,327	22,020	10,252	29.61	346
1971	32,255.69	19,990	21,655	10,601	30.42	348
1972	24,125.77	14,705	15,930	8,196	31.24	262

PEOPLES NATURAL GAS COMPANY LLC

ACOUNT 374.02 LAND RIGHTS AND RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R4						
1973	45,249.32	27,110	29,368	15,881	32.07	495
1974	41,949.25	24,692	26,749	15,200	32.91	462
1975	26,525.73	15,335	16,612	9,914	33.75	294
1976	18,098.73	10,269	11,124	6,975	34.61	202
1977	27,541.25	15,330	16,607	10,934	35.47	308
1978	39,100.45	21,339	23,116	15,984	36.34	440
1979	58,508.29	31,287	33,893	24,615	37.22	661
1980	59,975.41	31,404	34,020	25,955	38.11	681
1981	77,970.45	39,960	43,288	34,682	39.00	889
1982	63,421.48	31,790	34,438	28,983	39.90	726
1983	69,166.25	35,842	38,827	30,339	37.35	812
1984	47,160.28	23,825	25,810	21,350	38.36	557
1985	52,608.15	25,904	28,062	24,546	39.35	624
1986	55,195.81	26,461	28,665	26,531	40.36	657
1987	63,004.82	29,625	32,093	30,912	40.75	759
1988	79,849.02	36,507	39,548	40,301	41.75	965
1989	65,470.12	29,082	31,504	33,966	42.75	795
1990	101,734.15	43,868	47,522	54,212	43.75	1,239
1991	72,361.59	30,262	32,783	39,579	44.75	884
1992	107,686.91	43,969	47,631	60,056	45.17	1,330
1993	91,020.76	35,971	38,967	52,054	46.17	1,127
1994	102,018.79	38,981	42,228	59,791	47.17	1,268
1995	64,390.93	23,760	25,739	38,652	48.17	802
1996	37,560.34	13,368	14,482	23,078	49.17	469
1997	139,492.30	47,818	51,801	87,691	50.17	1,748
1998	41,423.54	13,657	14,795	26,629	51.17	520
1999	86,614.37	27,630	29,931	56,683	51.59	1,099
2000	101,982.41	31,186	33,784	68,198	52.59	1,297
2001	362,660.06	106,114	114,953	247,707	53.59	4,622
2002	217,151.26	60,672	65,726	151,425	54.59	2,774
2003	479,909.66	127,752	138,393	341,517	55.59	6,143
2004	191,941.78	48,561	52,606	139,336	56.59	2,462
2005	240,384.90	57,644	62,445	177,940	57.59	3,090
2006	361,866.00	81,999	88,829	273,037	58.59	4,660
2007	75,344.24	16,078	17,417	57,927	59.59	972
2008	72,502.45	14,515	15,724	56,778	60.59	937
2009	32,891.55	6,151	6,663	26,229	61.59	426
2010	1,368.29	238	258	1,110	62.59	18
2011	215,289.34	34,575	37,455	177,834	63.59	2,797
2012	101,513.39	15,075	16,331	85,182	64.02	1,331
2013	30,336.74	4,102	4,444	25,893	65.02	398
2015	12,300.58	1,336	1,447	10,854	67.02	162
2016	107,526.45	10,247	11,101	96,425	68.02	1,418

PEOPLES NATURAL GAS COMPANY LLC

ACOUNT 374.02 LAND RIGHTS AND RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R4						
2017	162,500.44	13,325	14,435	148,065	69.02	2,145
2018	2,388.00	164	178	2,210	70.02	32
2020	12,955.85	545	590	12,366	72.02	172
	5,734,940.08	2,372,031	2,551,124	3,183,816		65,111
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					48.9	1.14

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.01 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2						
1903	87.72	88	88			
1906	182.23	180	182			
1907	516.42	507	516			
1908	20.47	20	20			
1909	390.77	381	391			
1910	304.65	295	305			
1911	646.72	625	647			
1912	578.43	556	578			
1913	1,838.46	1,760	1,838			
1914	1,880.95	1,793	1,881			
1915	2,146.85	2,037	2,147			
1917	1,495.23	1,406	1,495			
1918	2,823.79	2,642	2,824			
1919	854.01	795	854			
1920	370.59	344	371			
1921	1,829.27	1,687	1,829			
1922	1,426.94	1,310	1,427			
1923	637.00	582	637			
1924	663.38	603	663			
1925	4,851.94	4,389	4,852			
1926	1,375.16	1,238	1,375			
1927	3,786.18	3,391	3,786			
1928	5,264.61	4,692	5,238	27	7.07	4
1929	3,155.48	2,798	3,124	31	7.37	4
1930	4,216.25	3,719	4,152	64	7.66	8
1931	734.91	645	720	15	7.96	2
1932	2,011.65	1,756	1,960	52	8.26	6
1933	407.10	353	394	13	8.56	2
1934	328.83	284	317	12	8.86	1
1935	1,806.58	1,552	1,733	74	9.16	8
1936	3,855.28	3,294	3,677	178	9.47	19
1937	4,332.14	3,680	4,108	224	9.79	23
1938	2,344.84	1,980	2,210	135	10.10	13
1939	1,822.26	1,530	1,708	114	10.42	11
1940	1,832.44	1,529	1,707	125	10.75	12
1941	2,222.34	1,843	2,058	164	11.09	15
1942	11,328.05	9,336	10,423	905	11.43	79
1943	2,202.07	1,803	2,013	189	11.77	16
1944	6,853.68	5,576	6,225	629	12.12	52
1945	1,482.24	1,198	1,337	145	12.48	12
1946	11,176.62	8,967	10,011	1,166	12.85	91
1947	10,642.25	8,476	9,463	1,179	13.23	89
1948	26,875.66	21,248	23,721	3,155	13.61	232
1949	31,849.55	24,990	27,899	3,951	14.00	282

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.01 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2						
1950	35,333.67	27,506	30,708	4,626	14.40	321
1951	51,412.60	39,706	44,328	7,085	14.80	479
1952	85,027.11	65,118	72,698	12,329	15.22	810
1953	72,782.06	55,269	61,703	11,079	15.64	708
1954	23,109.99	17,393	19,418	3,692	16.08	230
1955	50,814.38	37,900	42,312	8,502	16.52	515
1956	38,313.10	28,310	31,605	6,708	16.97	395
1957	42,625.66	31,196	34,827	7,799	17.43	447
1958	79,738.28	57,780	64,506	15,232	17.90	851
1959	74,800.04	53,649	59,894	14,906	18.38	811
1960	20,283.81	14,395	16,071	4,213	18.87	223
1961	66,373.89	46,594	52,018	14,356	19.37	741
1962	9,913.67	6,883	7,684	2,230	19.87	112
1963	36,973.77	25,375	28,329	8,645	20.39	424
1964	36,775.68	24,945	27,849	8,927	20.91	427
1965	38,020.47	25,474	28,439	9,581	21.45	447
1966	36,383.95	24,075	26,878	9,506	21.99	432
1967	21,747.56	14,206	15,860	5,888	22.54	261
1968	19,797.16	12,762	14,248	5,549	23.10	240
1969	17,892.97	11,377	12,701	5,192	23.67	219
1970	22,571.86	14,151	15,798	6,774	24.25	279
1971	25,577.92	15,803	17,643	7,935	24.84	319
1972	35,114.52	21,377	23,865	11,250	25.43	442
1973	44,353.01	26,591	29,686	14,667	26.03	563
1974	54,672.82	32,257	36,012	18,661	26.65	700
1975	74,150.48	43,041	48,051	26,099	27.27	957
1976	25,625.76	14,626	16,329	9,297	27.90	333
1977	10,532.04	5,909	6,597	3,935	28.53	138
1978	14,019.66	7,726	8,625	5,395	29.18	185
1979	64,148.10	34,709	38,749	25,399	29.83	851
1980	49,197.48	26,120	29,161	20,036	30.49	657
1981	113,229.81	58,950	65,812	47,418	31.16	1,522
1982	25,662.51	13,092	14,616	11,047	31.84	347
1983	182,580.42	107,065	119,528	63,052	28.33	2,226
1984	52,714.14	30,353	33,886	18,828	28.86	652
1985	45,866.77	25,910	28,926	16,941	29.40	576
1986	32,346.01	17,913	19,998	12,348	29.95	412
1987	28,282.12	15,343	17,129	11,153	30.50	366
1988	38,939.15	20,677	23,084	15,855	31.06	510
1989	64,518.22	33,504	37,404	27,114	31.62	857
1990	34,385.96	17,447	19,478	14,908	32.20	463
1991	32,469.00	16,085	17,957	14,512	32.77	443
1992	13,134.65	6,345	7,084	6,051	33.35	181
1993	41,418.29	19,616	21,899	19,519	33.53	582

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.01 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2						
1994	35,394.00	16,310	18,209	17,185	34.13	504
1995	67,996.39	30,449	33,994	34,002	34.73	979
1996	11,779.78	5,121	5,717	6,063	35.33	172
1997	22,604.71	9,523	10,632	11,973	35.94	333
1998	42,145.24	17,183	19,183	22,962	36.56	628
1999	35,600.82	14,023	15,655	19,946	37.18	536
2000	45,105.04	17,135	19,130	25,975	37.81	687
2002	2,463.00	871	972	1,491	38.71	39
2003	2,151.21	729	814	1,337	39.36	34
2004	46,964.39	15,212	16,983	29,981	40.01	749
2005	66,156.46	20,548	22,940	43,216	40.32	1,072
2006	176,972.15	52,260	58,343	118,629	40.97	2,896
2007	5,788.36	1,628	1,818	3,970	41.30	96
2008	282,942.23	75,093	83,834	199,108	41.98	4,743
2009	2,111.91	530	592	1,520	42.33	36
2010	47,741.75	11,191	12,494	35,248	43.01	820
2011	53,720.27	11,765	13,135	40,585	43.39	935
2012	56,631.58	11,508	12,848	43,784	43.78	1,000
2013	168,150.95	31,276	34,917	133,234	44.48	2,995
2014	22,526.04	3,841	4,288	18,238	44.60	409
2015	439,111.72	67,404	75,249	363,863	45.03	8,080
2017	6,500.00	774	864	5,636	45.65	123
2018	147,693.96	14,961	16,703	130,991	45.85	2,857
2019	17,185.07	1,425	1,591	15,594	46.09	338
2023	79,572.40	629	702	78,870	41.68	1,892
	4,034,091.94	1,813,790	2,023,904	2,010,188		57,588

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 34.9 1.43

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MINOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2						
1928	674.17	601	671	3	7.07	
1939	488.17	410	457	31	10.42	3
1940	123.50	103	115	8	10.75	1
1941	132.11	110	123	9	11.09	1
1942	1,264.96	1,043	1,164	101	11.43	9
1943	140.00	115	128	12	11.77	1
1949	954.21	749	836	118	14.00	8
1952	1,195.33	915	1,021	174	15.22	11
1953	887.37	674	752	135	15.64	9
1955	3,586.28	2,675	2,985	601	16.52	36
1956	1,642.45	1,214	1,355	287	16.97	17
1957	599.42	439	490	109	17.43	6
1958	1,541.06	1,117	1,246	295	17.90	16
1959	113.77	82	91	23	18.38	1
1960	1,611.87	1,144	1,277	335	18.87	18
1962	1,581.69	1,098	1,225	357	19.87	18
1963	790.86	543	606	185	20.39	9
1965	1,487.12	996	1,111	376	21.45	18
1967	2,579.81	1,685	1,880	700	22.54	31
1968	337.93	218	243	95	23.10	4
1970	4,106.41	2,574	2,872	1,234	24.25	51
1971	251.50	155	173	78	24.84	3
1972	1,984.00	1,208	1,348	636	25.43	25
1976	3,842.94	2,193	2,447	1,396	27.90	50
1979	1,163.04	629	702	461	29.83	15
1980	14,273.99	7,578	8,456	5,818	30.49	191
1982	2,997.89	1,529	1,706	1,292	31.84	41
1986	3,142.75	1,740	1,942	1,201	29.95	40
1987	1,943.61	1,054	1,176	768	30.50	25
1988	3,243.38	1,722	1,921	1,322	31.06	43
1990	168.09	85	95	73	32.20	2
1997	4,333.64	1,826	2,038	2,296	35.94	64
1999	21,270.29	8,378	9,348	11,922	37.18	321
2012	25,400.00	5,161	5,759	19,641	43.78	449
2021	3,388.02	154	172	3,216	45.45	71
	113,241.63	51,917	57,931	55,311		1,608

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 34.4 1.42

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PITTSBURGH DIV AND CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2035						
1905	13,481.44	11,962	13,348	134	9.38	14
1919	1,926.91	1,687	1,882	44	10.04	4
1922	400.82	350	391	10	10.16	1
1927	750.59	652	728	23	10.33	2
1936	1,676.98	1,440	1,607	70	10.60	7
1943	872.73	742	828	45	10.77	4
1945	569.96	483	539	31	10.82	3
1948	237.87	201	224	14	10.88	1
1949	692.13	583	651	42	10.90	4
1950	1,244,916.21	1,046,427	1,167,648	77,269	10.92	7,076
1951	1,203.94	1,010	1,127	77	10.94	7
1952	3,847.45	3,222	3,595	252	10.96	23
1953	898.12	751	838	60	10.98	5
1958	891.52	737	822	69	11.07	6
1960	1,158.63	954	1,065	94	11.10	8
1961	1,045.63	859	959	87	11.12	8
1962	1,085.17	889	992	93	11.13	8
1963	660.66	540	603	58	11.15	5
1964	174,029.67	141,799	158,225	15,804	11.16	1,416
1965	19,001.79	15,438	17,226	1,775	11.18	159
1966	4,722.91	3,827	4,270	453	11.19	40
1967	3,887.28	3,140	3,504	384	11.21	34
1968	11,176.28	9,000	10,043	1,134	11.22	101
1969	31.95	26	29	3	11.23	
1970	2,279.85	1,824	2,035	245	11.25	22
1971	21,739.76	17,335	19,343	2,397	11.26	213
1972	12,280.95	9,759	10,890	1,391	11.27	123
1973	11,646.34	9,221	10,289	1,357	11.28	120
1974	1,371.05	1,081	1,206	165	11.29	15
1975	6,993.01	5,493	6,129	864	11.31	76
1976	2,273.20	1,778	1,984	289	11.32	26
1977	5,746.85	4,477	4,996	751	11.33	66
1979	12,619.29	9,743	10,872	1,748	11.35	154
1981	3,057.38	2,337	2,608	450	11.37	40
1982	71,564.28	54,426	60,731	10,833	11.38	952
1983	35,103.99	27,353	30,522	4,582	11.38	403
1984	13,103.50	10,162	11,339	1,764	11.34	156
1985	60,178.50	46,398	51,773	8,406	11.34	741
1986	231,569.14	177,289	197,827	33,743	11.38	2,965
1987	43,822.14	33,283	37,139	6,684	11.45	584
1988	247,922.43	187,454	209,169	38,753	11.34	3,417
1989	21,016.17	15,798	17,628	3,388	11.29	300

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PITTSBURGH DIV AND CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2035						
1990	901,807.59	672,929	750,883	150,925	11.28	13,380
1991	7,921.08	5,860	6,539	1,382	11.31	122
1992	10,029.97	7,346	8,197	1,833	11.39	161
1993	27,940.33	20,313	22,666	5,274	11.33	465
1994	48,213.43	34,733	38,757	9,457	11.32	835
1995	24,537.74	17,486	19,512	5,026	11.36	442
1996	20,252.76	14,250	15,901	4,352	11.44	380
1997	48,138.54	33,504	37,385	10,753	11.43	941
1998	372.78	256	286	87	11.47	8
1999	142.95	97	108	35	11.42	3
2000	169,420.27	113,427	126,567	42,854	11.44	3,746
2001	1,320,721.95	872,469	973,538	347,184	11.39	30,481
2002	185,810.88	120,740	134,727	51,084	11.41	4,477
2003	865,421.13	553,264	617,355	248,066	11.38	21,798
2004	699,652.93	438,542	489,344	210,309	11.41	18,432
2005	85,481.43	52,486	58,566	26,915	11.42	2,357
2006	650,399.85	390,760	436,027	214,373	11.41	18,788
2007	24,300.00	14,259	15,911	8,389	11.38	737
2008	162,468.30	92,656	103,389	59,079	11.43	5,169
2009	166,927.04	92,461	103,172	63,755	11.41	5,588
2011	593,421.97	306,146	341,611	251,811	11.42	22,050
2012	270,229.11	133,682	149,168	121,061	11.41	10,610
2013	3,452.91	1,629	1,818	1,635	11.39	144
2014	63,070.43	28,098	31,353	31,717	11.41	2,780
2016	253,903.20	98,083	109,445	144,458	11.39	12,683
2017	192,263.18	67,581	75,410	116,853	11.38	10,268
2018	1,706,003.98	534,150	596,027	1,109,977	11.33	97,968
2019	783,485.14	210,914	235,347	548,138	11.31	48,465
2020	30,335.80	6,656	7,427	22,909	11.26	2,035
2021	410,715.23	66,577	74,289	336,426	11.20	30,038
	12,020,296.37	6,863,284	7,658,343	4,361,953		384,660
CENT DIV AND GREENSBURG CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2028						
1949	2,371.56	2,201	2,372			
1959	2,096.59	1,929	2,097			
1963	430,677.99	394,544	430,678			
1964	1,539.18	1,408	1,539			

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CENT DIV AND GREENSBURG CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2028						
1965	654.36	598	654			
1966	976.50	891	977			
1967	4,121.30	3,757	4,121			
1968	646.90	589	647			
1969	6,657.08	6,050	6,657			
1971	10,820.37	9,806	10,820			
1972	22,566.15	20,418	22,566			
1973	3,706.54	3,348	3,707			
1974	3,438.45	3,100	3,438			
1976	919.57	826	920			
1977	1,221.18	1,095	1,221			
1978	1,597.60	1,430	1,598			
1979	4,791.81	4,279	4,792			
1980	718.19	640	718			
1981	1,879.91	1,671	1,877	3	4.76	1
1982	8,262.92	7,326	8,228	35	4.76	7
1983	60,171.49	53,896	60,171			
1984	17,367.27	15,509	17,367			
1985	90,145.44	80,166	90,058	87	4.75	18
1986	12,562.64	11,159	12,536	27	4.67	6
1987	8,936.72	7,887	8,860	77	4.82	16
1988	55,686.25	48,959	55,000	686	4.83	142
1989	29,469.36	25,877	29,070	399	4.74	84
1990	18,494.98	16,194	18,192	303	4.71	64
1991	119,393.26	104,075	116,917	2,476	4.73	523
1992	14,894.58	12,905	14,497	397	4.81	83
1993	21,385.70	18,452	20,729	657	4.80	137
1994	187,968.34	161,728	181,684	6,284	4.73	1,329
1995	33,563.46	28,740	32,286	1,277	4.73	270
1996	54,289.39	46,162	51,858	2,431	4.78	509
1997	39,321.00	33,234	37,335	1,986	4.79	415
1998	67,068.81	56,378	63,335	3,734	4.77	783
2002	8,304.30	6,785	7,622	682	4.74	144
2003	306,305.28	247,709	278,275	28,030	4.77	5,876
2005	144,369.95	114,355	128,466	15,904	4.77	3,334
2007	40,891.92	31,601	35,500	5,392	4.75	1,135
2014	37,660.00	24,750	27,804	9,856	4.78	2,062
2017	6,775.00	3,818	4,289	2,486	4.77	521
2018	195,632.54	101,690	114,238	81,395	4.77	17,064

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CENT DIV AND GREENSBURG CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2028						
2019	103,134.21	48,081	54,014	49,120	4.77	10,298
2020	275,385.01	109,961	123,530	151,855	4.76	31,902
2021	13,538.27	4,239	4,762	8,776	4.75	1,848
	2,472,379.32	1,880,216	2,098,024	374,355		78,571
JOHNSTOWN DIVISION AND CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2031						
1943	90,391.82	80,880	90,249	143	7.37	19
1966	318,929.94	276,072	308,053	10,877	7.56	1,439
1967	4,073.03	3,519	3,927	146	7.56	19
1971	2,535.26	2,170	2,421	114	7.59	15
1972	1,702.65	1,454	1,622	80	7.59	11
1975	1,036.16	878	980	56	7.61	7
1976	3,832.16	3,237	3,612	220	7.61	29
1978	1,858.53	1,561	1,742	117	7.62	15
1979	1,896.31	1,587	1,771	125	7.62	16
1980	2,746.10	2,290	2,555	191	7.63	25
1981	3,468.71	2,883	3,217	252	7.63	33
1984	3,697.28	3,099	3,458	239	7.56	32
1985	10,295.41	8,566	9,558	737	7.71	96
1986	8,387.42	6,951	7,756	631	7.68	82
1987	57,873.01	47,722	53,250	4,623	7.69	601
1988	102,396.21	84,262	94,023	8,373	7.57	1,106
1989	36,434.20	29,752	33,199	3,236	7.67	422
1991	55,157.82	44,534	49,693	5,465	7.67	713
1993	25,660.31	20,436	22,803	2,857	7.71	371
1994	27,238.69	21,608	24,111	3,128	7.60	412
1995	17,435.00	13,700	15,287	2,148	7.68	280
1996	28,120.70	21,926	24,466	3,655	7.68	476
1998	46,811.17	35,932	40,094	6,717	7.62	881
1999	7,653.98	5,808	6,481	1,173	7.68	153
2000	21,489.18	16,130	17,999	3,491	7.70	453
2002	47,688.32	35,027	39,085	8,604	7.65	1,125
2005	6,950.00	4,886	5,452	1,498	7.67	195
2006	2,379.47	1,646	1,837	543	7.65	71
2007	26,430.44	17,946	20,025	6,406	7.64	838
2009	71,375.94	46,309	51,674	19,702	7.67	2,569
2012	5,250.00	3,113	3,474	1,776	7.66	232

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
JOHNSTOWN DIVISION AND CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2031						
2016	15,748.38	7,606	8,487	7,261	7.67	947
2018	93,180.06	37,552	41,902	51,278	7.65	6,703
2019	248,846.45	87,818	97,991	150,855	7.64	19,745
2020	10,798.07	3,170	3,537	7,261	7.62	953
2021	74,483.58	16,543	18,459	56,024	7.59	7,381
2022	1,740.67	234	261	1,480	7.53	197
	1,485,992.43	998,807	1,114,511	371,481		48,662
ALTOONA DIVISION, CITY PLANT H.Q. AND WAREHOUSE						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2032						
1924	435.52	391	436			
1945	492.69	434	484	8	8.27	1
1948	2,888.20	2,535	2,829	60	8.31	7
1950	23,605.50	20,664	23,058	548	8.33	66
1951	6,091.93	5,326	5,943	149	8.34	18
1952	142,376.31	124,292	138,690	3,686	8.35	441
1953	23,136.05	20,168	22,504	632	8.36	76
1958	813.70	704	786	28	8.41	3
1961	2,324.78	1,999	2,231	94	8.44	11
1963	2,863.86	2,453	2,737	127	8.46	15
1966	8,158.89	6,944	7,748	410	8.48	48
1968	993.92	842	940	54	8.50	6
1969	523.45	442	493	30	8.50	4
1970	0.70	1	1			
1971	3,328.14	2,798	3,122	206	8.52	24
1972	2,445.48	2,050	2,287	158	8.52	19
1973	6,456.26	5,397	6,022	434	8.53	51
1976	2,945.98	2,440	2,723	223	8.55	26
1977	1,500.00	1,238	1,381	119	8.56	14
1978	12,059.78	9,922	11,071	988	8.56	115
1979	8,643.52	7,085	7,906	738	8.57	86
1981	14,781.49	12,023	13,416	1,366	8.58	159
1982	9,671.00	7,835	8,743	928	8.58	108
1983	4,480.47	3,689	4,116	364	8.61	42
1984	27,253.46	22,416	25,013	2,241	8.45	265
1985	1,263.73	1,032	1,152	112	8.56	13
1986	3,203.40	2,608	2,910	293	8.49	35
1989	782,976.60	625,990	698,507	84,470	8.57	9,856

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ALTOONA DIVISION, CITY PLANT H.Q. AND WAREHOUSE						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2032						
1990	32,673.28	26,008	29,021	3,652	8.50	430
1994	11,371.45	8,789	9,807	1,564	8.57	182
1995	368,068.25	281,977	314,642	53,426	8.60	6,212
1997	13,247.67	9,983	11,139	2,108	8.56	246
1998	44,954.56	33,487	37,366	7,588	8.62	880
2000	1,442.94	1,053	1,175	268	8.58	31
2002	15,461.18	10,996	12,270	3,191	8.60	371
2003	12,062.57	8,441	9,419	2,644	8.65	306
2004	3,675.14	2,536	2,830	845	8.61	98
2005	6,950.00	4,709	5,255	1,695	8.64	196
2008	147,095.70	93,700	104,555	42,541	8.64	4,924
2009	116,934.87	72,722	81,146	35,789	8.61	4,157
2012	39,427.15	22,233	24,809	14,619	8.64	1,692
2017	124,830.59	52,117	58,154	66,676	8.60	7,753
2019	116,711.39	38,176	42,598	74,113	8.57	8,648
	2,150,621.55	1,560,645	1,741,434	409,188		47,635
WEST DIV OFFICE & GIB CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2030						
1960	77,127.48	68,601	76,548	580	6.59	88
1961	20,070.74	17,824	19,889	182	6.60	28
1962	2,612.56	2,317	2,585	27	6.60	4
1970	896.38	784	875	22	6.64	3
1972	1,732.37	1,508	1,683	50	6.65	8
1973	769.29	668	745	24	6.65	4
1974	8,759.09	7,587	8,466	293	6.66	44
1975	1,619.95	1,400	1,562	58	6.66	9
1976	928.15	800	893	35	6.67	5
1977	427.04	367	410	18	6.67	3
1978	2,152.16	1,845	2,059	93	6.67	14
1981	7,269.82	6,176	6,891	378	6.68	57
1982	7,096.99	6,010	6,706	391	6.68	59
1983	8,103.36	6,966	7,773	330	6.56	50
1984	8,548.32	7,299	8,145	404	6.71	60
1985	179.77	153	171	9	6.68	1
1986	4,626.77	3,921	4,375	252	6.69	38
1987	16,040.66	13,517	15,083	958	6.75	142
1988	17,114.06	14,384	16,050	1,064	6.67	160

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WEST DIV OFFICE & GIB CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2030						
1989	148,533.19	124,337	138,741	9,793	6.65	1,473
1993	6,393.47	5,227	5,833	561	6.73	83
1994	8,076.67	6,573	7,334	742	6.67	111
1995	8,892.56	7,189	8,022	871	6.68	130
1997	882.03	702	783	99	6.73	15
1998	552,360.93	436,476	487,038	65,322	6.68	9,779
1999	48,150.89	37,702	42,069	6,081	6.70	908
2000	12,873.57	9,991	11,148	1,725	6.68	258
2002	35,288.07	26,815	29,921	5,367	6.69	802
2003	39,898.68	29,932	33,399	6,499	6.72	967
2004	26,632.62	19,703	21,985	4,647	6.74	689
2007	9,939.28	7,022	7,835	2,104	6.72	313
2008	92,178.51	63,889	71,290	20,888	6.72	3,108
2009	66,266.41	44,968	50,177	16,089	6.71	2,398
2013	88,745.83	53,416	59,604	29,142	6.72	4,337
2014	46,877.95	27,072	30,208	16,670	6.71	2,484
2017	32,750.00	15,694	17,512	15,238	6.70	2,274
2018	88,282.65	38,456	42,911	45,372	6.70	6,772
2019	103,148.79	39,589	44,175	58,974	6.69	8,815
2020	17,716.37	5,699	6,359	11,357	6.68	1,700
	1,619,963.43	1,162,579	1,297,255	322,708		48,193
HOPEWELL CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2031						
1961	239,859.67	209,561	233,837	6,023	7.53	800
1962	7,213.52	6,292	7,021	193	7.53	26
1963	1,692.49	1,474	1,645	48	7.54	6
1965	1,097.03	952	1,062	35	7.55	5
1968	723.51	624	696	27	7.57	4
1969	984.98	847	945	40	7.58	5
1971	581.69	498	556	26	7.59	3
1974	9,535.06	8,101	9,039	496	7.60	65
1975	9,920.85	8,405	9,379	542	7.61	71
1976	1,063.87	899	1,003	61	7.61	8
1978	939.29	789	880	59	7.62	8
1979	10,738.67	8,988	10,029	709	7.62	93
1980	13,487.17	11,249	12,552	935	7.63	123
1981	1,293.50	1,075	1,200	94	7.63	12

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
HOPEWELL CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2031						
1982	1,138.72	943	1,052	86	7.64	11
1984	12,521.03	10,495	11,711	810	7.56	107
1985	21,310.45	17,730	19,784	1,527	7.71	198
1986	11,112.74	9,210	10,277	836	7.68	109
1987	8,570.94	7,068	7,887	684	7.69	89
1988	74,173.84	61,038	68,109	6,065	7.57	801
1989	378.88	309	345	34	7.67	4
1990	39,513.21	32,108	35,827	3,686	7.65	482
1991	17,717.03	14,305	15,962	1,755	7.67	229
1992	13,808.43	11,103	12,389	1,419	7.59	187
1993	10,248.35	8,162	9,108	1,141	7.71	148
1994	10,675.48	8,469	9,450	1,225	7.60	161
1995	11,376.20	8,939	9,975	1,402	7.68	183
1998	70,618.91	54,207	60,486	10,132	7.62	1,330
2000	46,479.64	34,888	38,929	7,550	7.70	981
2001	36,503.82	27,108	30,248	6,256	7.68	815
2002	13,837.16	10,163	11,340	2,497	7.65	326
2003	34,041.04	24,646	27,501	6,540	7.69	850
2005	54,154.92	38,071	42,481	11,674	7.67	1,522
2006	190,619.30	131,870	147,146	43,473	7.65	5,683
2007	24,500.00	16,636	18,563	5,937	7.64	777
2008	11,530.52	7,660	8,547	2,983	7.66	389
2009	14,840.00	9,628	10,743	4,097	7.67	534
2014	12,466.11	6,788	7,574	4,892	7.67	638
2018	219,474.84	88,448	98,694	120,781	7.65	15,788
2019	15,269.00	5,388	6,012	9,257	7.64	1,212
2020	98,227.80	28,840	32,181	66,047	7.62	8,668
2021	68,867.56	15,295	17,067	51,801	7.59	6,825
	1,443,107.22	949,269	1,059,234	383,873		50,276
SOUTHERN DIV AND MON CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2027						
1947	57,166.96	53,923	57,167			
1948	27,660.35	26,073	27,660			
1949	1,266.73	1,193	1,267			
1953	1,917.47	1,802	1,917			
1954	2,355.29	2,212	2,355			
1959	65,507.73	61,282	65,508			

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SOUTHERN DIV AND MON CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2027						
1960	1,184.13	1,107	1,184			
1961	5,571.32	5,204	5,571			
1962	3,383.71	3,158	3,384			
1964	476.07	443	476			
1966	1,683.43	1,565	1,683			
1969	1,559.80	1,445	1,560			
1971	11,780.11	10,886	11,780			
1972	6,154.32	5,680	6,154			
1973	2,390.11	2,203	2,390			
1975	1,247.81	1,147	1,248			
1978	2,389.28	2,186	2,389			
1979	8,709.67	7,955	8,710			
1981	1,869.15	1,700	1,869			
1982	11,780.12	10,696	11,780			
1983	19,931.83	18,254	19,932			
1984	15,807.70	14,426	15,808			
1985	109,553.81	99,519	109,554			
1986	56,131.64	50,906	56,132			
1987	82,066.79	74,205	82,067			
1988	21,602.55	19,524	21,603			
1989	14,727.43	13,234	14,727			
1990	3,194.14	2,871	3,194			
1992	43,057.95	38,382	43,058			
1993	3,763.95	3,338	3,764			
1994	5,127.23	4,531	5,127			
1996	9,452.47	8,295	9,452			
1997	1,576.21	1,378	1,575	1	3.77	
1998	64,019.11	55,581	63,515	504	3.82	132
2000	13,091.82	11,252	12,858	234	3.79	62
2001	7,576.38	6,466	7,389	187	3.81	49
2002	357,642.37	303,567	346,902	10,741	3.77	2,849
2008	19,439.50	15,538	17,756	1,683	3.81	442
2009	28,742.44	22,681	25,919	2,824	3.79	745
2019	50,213.87	26,277	30,028	20,186	3.80	5,312
2020	1.00			1	3.79	
2021	61,020.93	22,199	25,368	35,653	3.79	9,407
	1,203,794.68	1,014,284	1,131,781	72,014		18,998

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
GROVE CITY - LEASED						
FULLY ACCRUED						
1982	20,774.82	20,775	20,775			
1985	335.13	335	335			
1987	6,381.82	6,382	6,382			
1989	1,068.50	1,068	1,069			
1997	8,903.57	8,904	8,904			
	37,463.84	37,464	37,464			
NORTHERN DIVISION H.Q. - KISKI						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2037						
1977	574,656.36	431,458	483,260	91,397	13.14	6,956
1978	6,521.93	4,873	5,458	1,064	13.15	81
1979	9,349.20	6,949	7,783	1,566	13.16	119
1981	16,129.01	11,856	13,279	2,850	13.19	216
1983	3,996.10	3,017	3,379	617	13.03	47
1984	8,494.75	6,355	7,118	1,377	13.19	104
1985	30,698.24	22,846	25,589	5,109	13.12	389
1986	11,922.75	8,818	9,877	2,046	13.09	156
1987	23,108.71	16,966	19,003	4,106	13.09	314
1988	6,440.97	4,689	5,252	1,189	13.14	90
1990	1,876.08	1,344	1,505	371	13.13	28
1991	72.90	52	58	15	13.08	1
1994	22,760.50	15,666	17,547	5,214	13.21	395
1997	156,811.27	104,217	116,730	40,082	13.20	3,037
1998	10,184.58	6,689	7,492	2,692	13.15	205
1999	2,719.86	1,755	1,966	754	13.29	57
2002	37,658.07	23,197	25,982	11,676	13.20	885
2008	376,870.14	201,211	225,369	151,501	13.24	11,443
2012	5,896.34	2,699	3,023	2,873	13.22	217
2013	470.34	205	230	241	13.20	18
2017	9,500.00	3,029	3,393	6,107	13.18	463
2019	51,848.55	12,532	14,037	37,812	13.07	2,893

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NORTHERN DIVISION H.Q. - KISKI						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2037						
2020	35,849.00	7,016	7,858	27,991	13.01	2,151
2021	911,733.42	130,925	146,644	765,089	12.92	59,217
2022	1,825.65	154	172	1,653	12.70	130
	2,317,394.72	1,028,518	1,152,004	1,165,391		89,612
	24,751,013.56	15,495,066	17,290,050	7,460,963		766,607
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					9.7	3.10

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.01 MAINS - LOW PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 73-S0.5						
1886	72.49	69	71	1	3.12	
1889	26.33	25	26			
1890	7.25	7	7			
1892	5.14	5	5			
1894	2.35	2	2			
1895	6.38	6	6			
1896	40.58	37	38	3	6.49	
1897	94.83	86	89	6	6.83	1
1898	169.97	153	158	12	7.16	2
1899	25.10	23	24	1	7.50	
1900	681,331.34	608,252	629,135	52,196	7.83	6,666
1901	29,071.58	25,818	26,704	2,368	8.17	290
1902	94,421.92	83,427	86,291	8,131	8.50	957
1903	66,961.24	58,852	60,873	6,088	8.84	689
1904	38,888.35	34,003	35,170	3,718	9.17	405
1905	51,051.43	44,401	45,925	5,126	9.51	539
1906	56,527.02	48,900	50,579	5,948	9.85	604
1907	45,769.50	39,387	40,739	5,030	10.18	494
1908	32,056.33	27,437	28,379	3,677	10.52	350
1909	18,774.76	15,982	16,531	2,244	10.86	207
1910	16,571.93	14,029	14,511	2,061	11.20	184
1911	31,228.65	26,292	27,195	4,034	11.54	350
1912	22,496.56	18,835	19,482	3,015	11.88	254
1913	134,033.25	111,579	115,410	18,623	12.23	1,523
1914	130,485.52	108,017	111,725	18,761	12.57	1,493
1915	31,911.67	26,264	27,166	4,746	12.92	367
1916	49,477.25	40,490	41,880	7,597	13.26	573
1917	32,462.89	26,411	27,318	5,145	13.61	378
1918	37,104.26	30,009	31,039	6,065	13.96	434
1919	28,381.43	22,818	23,601	4,780	14.31	334
1920	1,674.97	1,339	1,385	290	14.66	20
1921	37,421.84	29,727	30,748	6,674	15.01	445
1922	42,885.34	33,856	35,018	7,867	15.37	512
1923	68,123.34	53,454	55,289	12,834	15.72	816
1924	104,554.62	81,524	84,323	20,232	16.08	1,258
1925	206,676.78	160,131	165,629	41,048	16.44	2,497
1926	144,492.74	111,239	115,058	29,435	16.80	1,752
1927	135,612.41	103,715	107,276	28,336	17.17	1,650
1928	167,597.33	127,351	131,723	35,874	17.53	2,046
1929	127,095.85	95,931	99,225	27,871	17.90	1,557
1930	115,691.99	86,738	89,716	25,976	18.27	1,422
1931	121,595.49	90,547	93,656	27,939	18.64	1,499
1932	99,554.04	73,629	76,157	23,397	19.01	1,231
1933	35,543.47	26,102	26,998	8,545	19.39	441

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.01 MAINS - LOW PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 73-S0.5						
1934	25,236.99	18,406	19,038	6,199	19.76	314
1935	45,187.65	32,721	33,844	11,344	20.14	563
1936	62,501.18	44,924	46,466	16,035	20.53	781
1937	143,613.46	102,477	105,995	37,618	20.91	1,799
1938	123,223.54	87,269	90,265	32,959	21.30	1,547
1939	210,669.56	148,075	153,159	57,511	21.69	2,651
1940	295,812.48	206,338	213,422	82,390	22.08	3,731
1941	234,508.67	162,292	167,864	66,645	22.48	2,965
1942	130,044.74	89,303	92,369	37,676	22.87	1,647
1943	44,616.11	30,394	31,437	13,179	23.27	566
1944	76,824.03	51,904	53,686	23,138	23.68	977
1945	59,996.87	40,206	41,586	18,411	24.08	765
1946	235,625.86	156,578	161,954	73,672	24.49	3,008
1947	222,019.86	146,289	151,311	70,709	24.90	2,840
1948	138,959.74	90,762	93,878	45,082	25.32	1,780
1949	559,562.59	362,261	374,698	184,865	25.74	7,182
1950	769,661.07	493,845	510,800	258,861	26.16	9,895
1951	861,867.95	548,053	566,869	294,999	26.58	11,099
1952	1,393,978.08	878,206	908,357	485,621	27.01	17,979
1953	1,542,846.68	962,690	995,741	547,106	27.45	19,931
1954	855,442.35	528,732	546,885	308,557	27.88	11,067
1955	1,118,967.33	684,864	708,377	410,590	28.32	14,498
1956	1,552,146.05	940,647	972,942	579,204	28.76	20,139
1957	1,177,707.07	706,459	730,713	446,994	29.21	15,303
1958	1,447,424.43	859,336	888,839	558,585	29.66	18,833
1959	1,210,579.96	711,252	735,671	474,909	30.11	15,772
1960	1,091,262.99	634,275	656,051	435,212	30.57	14,237
1961	1,396,932.32	802,943	830,510	566,422	31.04	18,248
1962	1,374,968.55	781,656	808,492	566,477	31.50	17,983
1963	1,493,773.65	839,575	868,400	625,374	31.97	19,561
1964	1,465,881.06	814,268	842,224	623,657	32.45	19,219
1965	1,685,772.77	925,321	957,089	728,684	32.93	22,128
1966	1,930,194.73	1,046,803	1,082,742	847,453	33.41	25,365
1967	1,993,104.22	1,067,546	1,104,197	888,907	33.90	26,221
1968	2,317,612.06	1,225,484	1,267,558	1,050,054	34.40	30,525
1969	1,879,073.04	980,726	1,014,397	864,676	34.90	24,776
1970	1,890,741.81	973,864	1,007,299	883,443	35.40	24,956
1971	2,598,957.43	1,320,478	1,365,813	1,233,144	35.91	34,340
1972	3,216,464.80	1,611,771	1,667,107	1,549,358	36.42	42,541
1973	3,952,919.07	1,952,623	2,019,661	1,933,258	36.94	52,335
1974	3,551,863.15	1,728,727	1,788,078	1,763,785	37.47	47,072
1975	2,124,289.56	1,018,491	1,053,458	1,070,832	38.00	28,180
1976	1,658,212.28	782,759	809,633	848,579	38.54	22,018
1977	3,978,090.43	1,848,459	1,911,921	2,066,169	39.08	52,870

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.01 MAINS - LOW PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 73-S0.5						
1978	3,058,196.34	1,397,963	1,445,958	1,612,238	39.63	40,682
1979	3,581,164.63	1,610,056	1,665,333	1,915,832	40.18	47,681
1980	4,824,698.69	2,132,131	2,205,332	2,619,367	40.74	64,295
1981	5,721,683.83	2,483,840	2,569,116	3,152,568	41.31	76,315
1982	4,931,395.08	2,102,254	2,174,429	2,756,966	41.88	65,830
1983	3,554,380.93	1,912,968	1,978,645	1,575,736	34.46	45,727
1984	4,962,661.26	2,624,255	2,714,352	2,248,309	34.90	64,421
1985	5,773,090.23	2,996,811	3,099,698	2,673,392	35.36	75,605
1986	5,043,274.11	2,568,035	2,656,202	2,387,072	35.82	66,641
1987	5,698,276.83	2,844,010	2,941,651	2,756,626	36.30	75,940
1988	4,463,936.52	2,197,596	2,273,045	2,190,892	36.26	60,422
1989	5,078,475.95	2,446,810	2,530,815	2,547,661	36.75	69,324
1990	6,500,626.10	3,061,795	3,166,914	3,333,712	37.25	89,496
1991	5,826,650.00	2,680,259	2,772,279	3,054,371	37.76	80,889
1992	7,858,940.60	3,551,455	3,673,385	4,185,556	37.80	110,729
1993	7,074,919.17	3,115,794	3,222,766	3,852,153	38.33	100,500
1994	8,467,356.73	3,630,803	3,755,457	4,711,900	38.86	121,253
1995	7,930,156.00	3,328,286	3,442,554	4,487,602	38.95	115,214
1996	5,618,658.01	2,289,603	2,368,210	3,250,448	39.50	82,290
1997	5,077,639.59	2,006,175	2,075,052	3,002,588	40.06	74,952
1998	2,942,767.81	1,132,966	1,171,863	1,770,905	40.20	44,052
1999	4,962,937.58	1,847,205	1,910,624	3,052,314	40.77	74,867
2000	4,365,031.46	1,577,522	1,631,682	2,733,349	40.94	66,765
2001	5,489,364.69	1,910,299	1,975,884	3,513,481	41.53	84,601
2002	7,617,729.18	2,564,128	2,652,160	4,965,569	41.72	119,021
2003	10,120,764.09	3,265,971	3,378,099	6,742,665	42.33	159,288
2004	12,124,331.98	3,764,605	3,893,853	8,230,479	42.56	193,385
2005	15,346,498.75	4,544,098	4,700,107	10,646,392	43.18	246,558
2006	12,798,588.69	3,624,560	3,749,000	9,049,589	43.44	208,324
2007	8,774,004.39	2,354,943	2,435,794	6,338,210	44.07	143,821
2008	8,012,493.35	2,041,583	2,111,675	5,900,818	44.36	133,021
2009	11,789,729.14	2,838,967	2,936,435	8,853,294	44.66	198,238
2010	10,758,392.88	2,422,790	2,505,970	8,252,423	45.31	182,132
2011	16,231,366.43	3,416,703	3,534,006	12,697,360	45.64	278,207
2012	43,909,440.64	8,579,905	8,874,473	35,034,968	45.98	761,961
2013	21,372,973.13	3,847,135	3,979,216	17,393,757	46.33	375,432
2014	26,546,650.50	4,356,305	4,505,867	22,040,784	46.70	471,965
2015	33,691,755.68	4,979,641	5,150,604	28,541,152	47.08	606,227
2016	31,891,964.14	4,158,712	4,301,490	27,590,474	47.78	577,448
2017	51,451,480.29	5,870,614	6,072,166	45,379,314	47.89	947,574
2018	77,988,024.84	7,533,643	7,792,291	70,195,734	48.31	1,453,027
2019	64,064,154.71	5,048,255	5,221,573	58,842,582	48.74	1,207,275
2020	69,862,267.72	4,226,667	4,371,778	65,490,490	49.19	1,331,378

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.01 MAINS - LOW PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 73-S0.5						
2021	128,862,129.77	5,412,209	5,598,023	123,264,107	49.38	2,496,235
2022	152,394,504.34	3,505,074	3,625,411	148,769,093	49.59	2,999,982
2023	111,488,940.98	735,827	761,090	110,727,851	49.92	2,218,106
	1,113,081,583.49	178,468,177	184,595,403	928,486,180		19,851,543
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					46.8	1.78

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.02 MAINS - REGULAR PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-S0.5						
1875	61.81	61	62			
1876	21.73	21	22			
1885	6,437.23	6,082	6,291	146	4.14	35
1888	7,601.43	7,078	7,321	280	5.16	54
1889	15,893.89	14,730	15,236	658	5.49	120
1890	38.69	36	37	2	5.83	
1891	26,766.05	24,568	25,411	1,355	6.16	220
1893	36.90	34	35	2	6.83	
1894	802.55	726	751	52	7.17	7
1896	6,726.57	6,023	6,230	497	7.84	63
1897	1,457.13	1,298	1,343	114	8.17	14
1898	90.25	80	83	7	8.51	1
1899	7,992.79	7,051	7,293	700	8.84	79
1900	294,728.46	258,654	267,534	27,194	9.18	2,962
1901	15,654.21	13,669	14,138	1,516	9.51	159
1902	53,133.40	46,155	47,740	5,393	9.85	548
1903	37,125.64	32,081	33,182	3,944	10.19	387
1904	21,327.01	18,333	18,962	2,365	10.53	225
1905	17,850.01	15,265	15,789	2,061	10.86	190
1906	20,008.92	17,021	17,605	2,404	11.20	215
1907	3,587.77	3,036	3,140	448	11.54	39
1908	48,836.37	41,101	42,512	6,324	11.88	532
1909	15,577.46	13,039	13,487	2,090	12.22	171
1910	8,311.18	6,918	7,156	1,155	12.57	92
1911	13,910.71	11,516	11,911	2,000	12.91	155
1912	10,106.87	8,320	8,606	1,501	13.26	113
1913	12,266.01	10,042	10,387	1,879	13.60	138
1914	9,349.60	7,611	7,872	1,478	13.95	106
1915	18,787.05	15,205	15,727	3,060	14.30	214
1916	8,806.79	7,087	7,330	1,477	14.65	101
1917	12,385.28	9,908	10,248	2,137	15.00	142
1918	9,885.49	7,862	8,132	1,753	15.35	114
1919	4,970.86	3,930	4,065	906	15.71	58
1920	5,350.20	4,205	4,349	1,001	16.06	62
1921	30,613.50	23,911	24,732	5,882	16.42	358
1922	9,936.55	7,713	7,978	1,959	16.78	117
1923	27,707.03	21,375	22,109	5,598	17.14	327
1924	24,371.60	18,685	19,326	5,046	17.50	288
1925	24,330.14	18,533	19,169	5,161	17.87	289
1926	20,513.00	15,527	16,060	4,453	18.23	244
1927	53,848.14	40,494	41,884	11,964	18.60	643
1928	26,242.43	19,605	20,278	5,964	18.97	314
1929	31,446.95	23,338	24,139	7,308	19.34	378
1930	71,680.23	52,833	54,647	17,033	19.72	864

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.02 MAINS - REGULAR PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-S0.5						
1931	46,812.14	34,266	35,442	11,370	20.10	566
1932	27,760.04	20,183	20,876	6,884	20.47	336
1933	18,268.01	13,187	13,640	4,628	20.86	222
1934	11,106.36	7,961	8,234	2,872	21.24	135
1935	20,157.40	14,347	14,840	5,317	21.62	246
1936	17,705.70	12,510	12,939	4,767	22.01	217
1937	58,388.06	40,949	42,355	16,033	22.40	716
1938	59,928.76	41,710	43,142	16,787	22.80	736
1939	53,105.59	36,685	37,944	15,162	23.19	654
1940	124,069.03	85,046	87,966	36,103	23.59	1,530
1941	283,145.31	192,576	199,188	83,957	23.99	3,500
1942	106,246.73	71,695	74,156	32,091	24.39	1,316
1943	43,523.87	29,132	30,132	13,392	24.80	540
1944	82,046.47	54,468	56,338	25,708	25.21	1,020
1945	67,484.95	44,432	45,957	21,528	25.62	840
1946	150,680.87	98,364	101,741	48,940	26.04	1,879
1947	158,566.27	102,624	106,147	52,419	26.46	1,981
1948	158,098.65	101,436	104,919	53,180	26.88	1,978
1949	359,183.62	228,441	236,284	122,900	27.30	4,502
1950	376,482.15	237,285	245,432	131,050	27.73	4,726
1951	1,094,464.45	683,526	706,993	387,471	28.16	13,760
1952	732,048.64	452,897	468,446	263,603	28.60	9,217
1953	876,499.48	537,119	555,560	320,939	29.04	11,052
1954	475,373.89	288,519	298,425	176,949	29.48	6,002
1955	1,050,440.24	631,241	652,913	397,527	29.93	13,282
1956	887,899.88	528,238	546,374	341,526	30.38	11,242
1957	1,332,706.45	784,871	811,817	520,889	30.83	16,896
1958	2,199,378.91	1,281,798	1,325,805	873,574	31.29	27,919
1959	3,127,801.74	1,803,709	1,865,635	1,262,167	31.75	39,753
1960	2,294,951.19	1,309,339	1,354,292	940,659	32.21	29,204
1961	3,144,079.08	1,774,110	1,835,019	1,309,060	32.68	40,057
1962	2,541,534.67	1,417,846	1,466,524	1,075,011	33.16	32,419
1963	2,325,622.76	1,282,511	1,326,543	999,080	33.64	29,699
1964	2,535,808.64	1,382,193	1,429,647	1,106,162	34.12	32,420
1965	2,971,389.16	1,600,182	1,655,120	1,316,269	34.61	38,031
1966	3,556,167.43	1,891,881	1,956,834	1,599,333	35.10	45,565
1967	4,145,458.60	2,178,314	2,253,101	1,892,358	35.59	53,171
1968	4,471,273.64	2,319,115	2,398,736	2,072,538	36.10	57,411
1969	3,858,288.66	1,975,444	2,043,266	1,815,023	36.60	49,591
1970	2,996,666.76	1,513,916	1,565,892	1,430,775	37.11	38,555
1971	4,531,698.82	2,258,010	2,335,533	2,196,166	37.63	58,362
1972	6,724,976.23	3,304,183	3,417,623	3,307,353	38.15	86,693
1973	7,874,574.07	3,813,420	3,944,344	3,930,230	38.68	101,609
1974	6,254,341.16	2,984,572	3,087,039	3,167,302	39.21	80,778

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.02 MAINS - REGULAR PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-S0.5						
1975	3,402,999.20	1,599,410	1,654,321	1,748,678	39.75	43,992
1976	2,862,979.28	1,324,615	1,370,092	1,492,887	40.30	37,044
1977	5,065,041.10	2,306,265	2,385,444	2,679,597	40.85	65,596
1978	3,794,245.01	1,699,822	1,758,181	2,036,064	41.40	49,180
1979	7,963,737.22	3,508,265	3,628,712	4,335,025	41.96	103,313
1980	10,194,104.26	4,413,334	4,564,854	5,629,250	42.53	132,360
1981	14,492,822.28	6,164,232	6,375,864	8,116,958	43.10	188,328
1982	9,267,925.14	3,870,286	4,003,162	5,264,763	43.68	120,530
1983	6,878,085.99	3,619,249	3,743,506	3,134,580	36.17	86,662
1984	8,962,903.26	4,633,821	4,792,911	4,169,992	36.59	113,965
1985	17,251,301.43	8,822,316	9,125,207	8,126,094	36.46	222,877
1986	11,820,904.65	5,931,730	6,135,380	5,685,525	36.90	154,079
1987	17,891,119.55	8,800,642	9,102,788	8,788,332	37.36	235,234
1988	12,363,005.51	5,956,496	6,160,996	6,202,010	37.82	163,988
1989	14,482,539.10	6,828,517	7,062,956	7,419,583	38.30	193,723
1990	17,075,955.69	7,872,016	8,142,281	8,933,675	38.78	230,368
1991	16,019,098.63	7,266,263	7,515,731	8,503,368	38.75	219,442
1992	17,763,096.98	7,861,947	8,131,866	9,631,231	39.25	245,382
1993	12,901,777.27	5,565,827	5,756,915	7,144,862	39.76	179,700
1994	13,577,731.61	5,702,647	5,898,432	7,679,300	40.28	190,648
1995	15,504,611.26	6,375,496	6,594,382	8,910,229	40.33	220,933
1996	10,889,927.70	4,349,437	4,498,763	6,391,165	40.86	156,416
1997	11,469,207.63	4,442,024	4,594,529	6,874,679	41.40	166,055
1998	10,604,423.51	4,003,170	4,140,608	6,463,816	41.50	155,755
1999	11,235,517.48	4,099,840	4,240,597	6,994,920	42.06	166,308
2000	9,810,947.22	3,454,435	3,573,034	6,237,913	42.62	146,361
2001	18,173,472.82	6,204,424	6,417,436	11,756,037	42.77	274,866
2002	23,407,005.67	7,679,839	7,943,506	15,463,500	43.35	356,713
2003	20,280,784.30	6,420,896	6,641,340	13,639,444	43.53	313,334
2004	22,574,068.16	6,835,428	7,070,104	15,503,964	44.13	351,325
2005	25,029,769.67	7,276,154	7,525,961	17,503,809	44.33	394,852
2006	21,152,993.65	5,846,687	6,047,417	15,105,577	44.94	336,128
2007	20,789,993.55	5,478,163	5,666,241	15,123,753	45.18	334,744
2008	16,826,544.90	4,184,762	4,328,435	12,498,110	45.81	272,825
2009	16,974,807.36	3,992,475	4,129,546	12,845,261	46.07	278,821
2010	19,789,662.14	4,351,747	4,501,153	15,288,509	46.71	327,307
2011	14,603,061.30	3,002,389	3,105,468	11,497,593	47.01	244,578
2012	20,528,104.76	3,920,868	4,055,480	16,472,625	47.31	348,185
2013	17,399,503.53	3,060,573	3,165,650	14,233,854	47.64	298,779
2014	14,432,971.18	2,302,059	2,381,094	12,051,877	48.30	249,521
2015	17,018,901.66	2,445,616	2,529,580	14,489,322	48.65	297,828
2016	23,975,902.68	3,059,325	3,164,359	20,811,544	49.01	424,639
2017	34,188,255.77	3,794,896	3,925,183	30,263,073	49.39	612,737
2018	58,574,426.46	5,505,996	5,695,029	52,879,397	49.78	1,062,262

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.02 MAINS - REGULAR PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-S0.5						
2019	66,443,596.12	5,096,224	5,271,189	61,172,407	50.18	1,219,060
2020	63,257,434.13	3,725,863	3,853,781	59,403,653	50.60	1,173,985
2021	87,590,235.08	3,591,200	3,714,494	83,875,741	50.74	1,653,050
2022	102,494,663.81	2,295,880	2,374,703	100,119,961	50.92	1,966,221
2023	71,260,319.44	463,192	479,094	70,781,225	51.21	1,382,176
	1,165,575,266.51	271,331,769	280,647,217	884,928,049		19,123,641
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					46.3	1.64

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1.5						
1898	99.28	99	99			
1900	139.47	139	139			
1901	89.90	90	90			
1902	121.30	121	121			
1905	1.71	2	2			
1906	66.86	67	67			
1907	32.77	33	33			
1911	78.23	78	78			
1919	308.14	308	308			
1921	204.26	204	204			
1922	671.98	672	672			
1924	288.10	286	288			
1925	537.89	530	538			
1926	39.11	38	39			
1927	1,000.39	972	1,000			
1928	2,622.99	2,530	2,623			
1929	982.88	941	983			
1930	1,444.61	1,374	1,445			
1931	276.86	262	277			
1932	285.31	268	285			
1933	92.49	86	92			
1934	1,489.57	1,383	1,490			
1935	306.30	283	306			
1936	594.12	546	594			
1937	5,081.84	4,647	5,082			
1938	1,153.28	1,049	1,153			
1939	272.51	247	273			
1940	3,759.38	3,386	3,759			
1941	821.88	736	822			
1942	1,655.33	1,475	1,655			
1943	2,616.47	2,318	2,616			
1944	1,484.99	1,308	1,485			
1945	2,247.28	1,967	2,247			
1946	2,051.10	1,784	2,051			
1947	3,380.12	2,922	3,380			
1948	4,184.82	3,595	4,185			
1949	16,010.73	13,664	15,976	35	7.33	5
1950	25,300.31	21,445	25,074	226	7.62	30
1951	44,453.13	37,421	43,753	700	7.91	88
1952	77,051.89	64,400	75,297	1,755	8.21	214
1953	123,422.24	102,416	119,746	3,676	8.51	432
1954	36,062.59	29,708	34,735	1,328	8.81	151
1955	88,965.78	72,738	85,046	3,920	9.12	430
1956	62,411.33	50,641	59,210	3,201	9.43	339

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1.5						
1957	67,360.24	54,212	63,385	3,975	9.76	407
1958	174,353.95	139,204	162,759	11,595	10.08	1,150
1959	74,778.31	59,195	69,211	5,567	10.42	534
1960	61,876.88	48,561	56,778	5,099	10.76	474
1961	85,162.83	66,240	77,449	7,714	11.11	694
1962	110,709.75	85,335	99,775	10,935	11.46	954
1963	85,389.48	65,186	76,216	9,173	11.83	775
1964	67,158.00	50,771	59,362	7,796	12.20	639
1965	75,118.65	56,219	65,732	9,387	12.58	746
1966	76,108.20	56,366	65,904	10,204	12.97	787
1967	93,456.02	68,466	80,051	13,405	13.37	1,003
1968	179,571.81	130,046	152,051	27,521	13.79	1,996
1969	132,066.75	94,533	110,529	21,538	14.21	1,516
1970	104,199.49	73,690	86,159	18,040	14.64	1,232
1971	159,479.16	111,380	130,227	29,252	15.08	1,940
1972	280,948.33	193,686	226,460	54,488	15.53	3,509
1973	232,535.39	158,124	184,880	47,655	16.00	2,978
1974	272,253.62	182,573	213,466	58,788	16.47	3,569
1975	277,071.74	183,144	214,134	62,938	16.95	3,713
1976	526,003.09	342,428	400,371	125,632	17.45	7,200
1977	264,556.53	169,581	198,276	66,281	17.95	3,693
1978	423,167.14	266,849	312,003	111,164	18.47	6,019
1979	422,793.02	262,216	306,586	116,207	18.99	6,119
1980	413,439.06	251,950	294,583	118,856	19.53	6,086
1981	1,360,730.19	814,533	952,361	408,369	20.07	20,347
1982	1,025,774.13	602,540	704,497	321,277	20.63	15,573
1983	733,340.54	500,725	585,453	147,888	18.66	7,925
1984	780,307.05	525,693	614,646	165,661	18.97	8,733
1985	1,140,436.23	753,030	880,451	259,985	19.64	13,238
1986	903,736.46	587,790	687,251	216,485	19.98	10,835
1987	934,784.92	598,449	699,713	235,072	20.33	11,563
1988	951,168.50	595,431	696,185	254,984	21.01	12,136
1989	842,056.41	517,865	605,494	236,562	21.39	11,059
1990	818,516.82	494,057	577,657	240,860	21.78	11,059
1991	1,385,679.14	820,183	958,967	426,712	22.18	19,239
1992	953,761.95	549,939	642,995	310,767	22.89	13,577
1993	702,476.60	396,267	463,320	239,157	23.31	10,260
1994	1,082,881.95	596,885	697,885	384,997	23.75	16,210
1995	741,127.15	398,726	466,195	274,932	24.19	11,366
1996	345,471.40	181,131	211,780	133,691	24.65	5,424
1997	895,814.26	457,044	534,381	361,433	25.12	14,388
1998	523,041.10	259,324	303,205	219,836	25.59	8,591
1999	598,939.42	288,030	336,768	262,171	26.09	10,049
2000	688,297.62	320,471	374,698	313,600	26.59	11,794

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1.5						
2001	1,781,786.50	801,804	937,478	844,308	27.09	31,167
2002	1,087,625.71	471,921	551,775	535,851	27.61	19,408
2003	1,006,609.74	420,159	491,255	515,355	28.14	18,314
2004	863,763.15	346,024	404,575	459,188	28.68	16,011
2005	1,257,026.55	484,081	565,993	691,034	29.00	23,829
2006	3,426,658.56	1,258,954	1,471,983	1,954,676	29.56	66,126
2007	1,291,241.69	452,968	529,615	761,627	29.92	25,455
2008	4,730,689.08	1,578,631	1,845,754	2,884,935	30.29	95,244
2009	3,236,691.97	1,022,471	1,195,485	2,041,207	30.68	66,532
2010	711,090.47	211,621	247,430	463,660	31.08	14,918
2011	2,010,732.00	560,190	654,981	1,355,751	31.50	43,040
2012	774,099.36	201,421	235,504	538,595	31.75	16,964
2013	2,650,866.73	638,859	746,961	1,903,906	32.03	59,441
2014	1,076,081.38	237,706	277,929	798,152	32.33	24,688
2015	2,302,644.90	460,759	538,725	1,763,920	32.65	54,025
2016	1,184,420.32	212,248	248,163	936,257	32.83	28,518
2017	6,042,699.03	954,142	1,115,593	4,927,106	32.89	149,806
2018	775,005.76	105,323	123,145	651,861	32.86	19,838
2019	1,580,734.47	178,465	208,663	1,372,071	32.73	41,921
2020	2,401,698.74	213,751	249,920	2,151,779	32.42	66,372
2021	6,890,720.54	440,317	514,823	6,375,898	31.73	200,942
2022	5,314,031.65	197,151	230,511	5,083,521	30.28	167,884
2023	5,382,215.80	65,125	76,145	5,306,070	27.29	194,433
	80,361,194.90	25,371,338	29,661,973	50,699,222		1,747,664

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 29.0 2.17

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 380.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
1900	15.09	15	15			
1901	1,637.59	1,638	1,638			
1902	399.75	400	400			
1903	542.76	543	543			
1904	943.79	944	944			
1905	4,013.41	4,013	4,013			
1906	3,824.81	3,825	3,825			
1907	4,133.89	4,134	4,134			
1908	2,984.98	2,985	2,985			
1909	343.67	344	344			
1920	894.69	895	895			
1921	2,097.63	2,095	2,098			
1922	2,055.39	2,045	2,055			
1923	1,569.86	1,555	1,570			
1924	1,433.06	1,413	1,433			
1925	1,560.98	1,532	1,561			
1926	2,944.33	2,876	2,944			
1927	2,480.59	2,411	2,481			
1928	2,970.73	2,872	2,971			
1929	2,671.22	2,570	2,671			
1930	3,506.91	3,356	3,507			
1931	2,305.13	2,194	2,305			
1932	2,234.89	2,116	2,235			
1933	1,742.22	1,641	1,742			
1934	1,396.21	1,308	1,396			
1935	1,676.13	1,561	1,676			
1936	2,886.59	2,674	2,887			
1937	3,043.76	2,803	3,044			
1938	1,594.53	1,460	1,595			
1939	4,452.21	4,053	4,452			
1940	6,285.44	5,689	6,285			
1941	12,894.55	11,603	12,895			
1942	9,485.77	8,485	9,486			
1943	4,317.00	3,839	4,317			
1944	7,166.32	6,334	7,166			
1945	3,841.76	3,375	3,842			
1946	15,224.52	13,292	15,225			
1947	24,043.05	20,861	24,043			
1948	34,964.39	30,146	34,778	186	7.58	25
1949	36,263.61	31,062	35,835	429	7.89	54
1950	33,970.53	28,906	33,347	624	8.20	76
1951	39,749.37	33,592	38,754	995	8.52	117
1952	42,488.45	35,659	41,138	1,350	8.84	153
1953	58,868.84	49,054	56,591	2,278	9.17	248

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 380.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
1954	95,279.86	78,822	90,933	4,347	9.50	458
1955	119,119.59	97,808	112,837	6,283	9.84	639
1956	163,428.40	133,121	153,575	9,853	10.20	966
1957	200,653.31	162,164	187,081	13,572	10.55	1,286
1958	255,772.74	204,989	236,486	19,287	10.92	1,766
1959	367,463.93	291,968	336,830	30,634	11.30	2,711
1960	402,483.27	317,012	365,722	36,761	11.68	3,147
1961	573,815.64	447,783	516,586	57,230	12.08	4,738
1962	483,039.66	373,433	430,812	52,228	12.48	4,185
1963	823,683.56	630,489	727,366	96,318	12.90	7,467
1964	1,194,893.05	905,299	1,044,401	150,492	13.33	11,290
1965	1,703,524.39	1,277,337	1,473,604	229,920	13.76	16,709
1966	1,748,943.85	1,297,087	1,496,388	252,556	14.21	17,773
1967	1,596,980.51	1,171,018	1,350,949	246,032	14.67	16,771
1968	2,237,624.89	1,621,674	1,870,849	366,776	15.14	24,226
1969	2,275,665.64	1,629,377	1,879,736	395,930	15.62	25,348
1970	2,766,769.60	1,956,355	2,256,955	509,815	16.11	31,646
1971	2,831,485.74	1,976,377	2,280,053	551,433	16.61	33,199
1972	2,760,027.51	1,900,914	2,192,995	567,033	17.12	33,121
1973	2,633,549.18	1,788,891	2,063,760	569,789	17.64	32,301
1974	2,678,534.15	1,793,654	2,069,255	609,279	18.17	33,532
1975	2,671,149.97	1,761,997	2,032,733	638,417	18.72	34,103
1976	3,553,566.55	2,308,539	2,663,253	890,314	19.27	46,202
1977	3,460,167.52	2,211,981	2,551,859	908,309	19.84	45,782
1978	6,947,492.62	4,369,348	5,040,712	1,906,781	20.41	93,424
1979	6,095,616.78	3,768,188	4,347,182	1,748,435	21.00	83,259
1980	6,891,277.50	4,184,866	4,827,884	2,063,394	21.60	95,528
1981	11,455,887.05	6,831,833	7,881,565	3,574,322	22.20	161,005
1982	9,299,460.06	5,441,021	6,277,051	3,022,409	22.82	132,446
1983	6,047,927.07	3,983,770	4,595,889	1,452,038	20.81	69,776
1984	11,481,081.09	7,464,999	8,612,019	2,869,062	21.07	136,168
1985	11,642,556.13	7,420,965	8,561,219	3,081,337	21.71	141,932
1986	5,123,056.76	3,198,837	3,690,348	1,432,709	22.36	64,075
1987	16,987,086.45	10,443,661	12,048,362	4,938,724	22.66	217,949
1988	10,221,234.10	6,147,050	7,091,563	3,129,671	23.31	134,263
1989	5,565,456.23	3,289,741	3,795,220	1,770,236	23.64	74,883
1990	13,080,588.86	7,548,808	8,708,706	4,371,883	24.30	179,913
1991	9,866,978.75	5,554,122	6,407,530	3,459,449	24.98	138,489
1992	16,148,767.35	8,907,660	10,276,350	5,872,417	25.33	231,836
1993	11,062,672.23	5,940,655	6,853,455	4,209,217	26.01	161,831
1994	13,897,797.57	7,296,344	8,417,450	5,480,348	26.39	207,668
1995	12,351,821.10	6,296,958	7,264,505	5,087,316	27.08	187,862
1996	10,667,297.00	5,303,780	6,118,722	4,548,575	27.48	165,523
1997	17,158,082.16	8,261,617	9,531,040	7,627,042	28.18	270,654

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 380.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
1998	7,865,418.99	3,681,803	4,247,524	3,617,895	28.60	126,500
1999	12,165,675.99	5,497,669	6,342,403	5,823,273	29.31	198,679
2000	4,588,180.69	2,008,706	2,317,350	2,270,831	29.75	76,330
2001	13,813,666.20	5,818,316	6,712,319	7,101,347	30.46	233,137
2002	11,222,903.54	4,560,988	5,261,798	5,961,106	30.92	192,791
2003	12,090,124.20	4,705,476	5,428,487	6,661,637	31.65	210,478
2004	16,392,402.56	6,127,480	7,068,987	9,323,416	32.11	290,359
2005	15,137,599.65	5,417,747	6,250,201	8,887,399	32.59	272,703
2006	13,779,857.12	4,707,199	5,430,475	8,349,382	33.09	252,323
2007	9,952,393.97	3,217,609	3,712,005	6,240,389	33.84	184,409
2008	10,555,381.13	3,234,169	3,731,109	6,824,272	34.34	198,727
2009	11,049,807.62	3,193,394	3,684,069	7,365,739	34.85	211,355
2010	5,822,612.69	1,579,093	1,821,726	4,000,887	35.38	113,083
2011	13,994,221.54	3,541,937	4,086,167	9,908,055	35.91	275,914
2012	17,669,063.72	4,162,831	4,802,463	12,866,601	36.23	355,137
2013	10,030,361.25	2,172,576	2,506,399	7,523,962	36.78	204,567
2014	15,877,791.47	3,129,513	3,610,372	12,267,419	37.34	328,533
2015	19,709,572.77	3,508,304	4,047,366	15,662,207	37.71	415,333
2016	21,146,278.32	3,349,570	3,864,242	17,282,036	38.08	453,835
2017	22,265,483.44	3,074,863	3,547,325	18,718,158	38.48	486,439
2018	38,465,497.55	4,531,236	5,227,474	33,238,024	38.69	859,086
2019	35,766,048.72	3,458,577	3,989,998	31,776,051	38.94	816,026
2020	37,217,468.07	2,806,197	3,237,378	33,980,090	38.85	874,648
2021	42,023,197.46	2,231,432	2,574,299	39,448,898	38.65	1,020,670
2022	41,932,025.95	1,257,961	1,451,250	40,480,776	37.74	1,072,623
2023	32,470,934.43	301,980	348,380	32,122,554	35.64	901,306
	742,987,648.81	239,613,106	276,421,417	466,566,231		14,003,514

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 33.3 1.88

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 381.00 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 32-S0.5						
1928	43.29	43	43			
1949	124.21	124	124			
1950	107.47	107	107			
1953	971.99	972	972			
1954	40.00	40	40			
1955	3,514.35	3,514	3,514			
1956	6,576.96	6,577	6,577			
1957	22,050.94	22,051	22,051			
1958	20,507.42	20,507	20,507			
1959	17,875.70	17,876	17,876			
1960	12,365.05	12,245	12,365			
1961	3,071.56	3,008	3,072			
1962	44,607.81	43,200	44,608			
1963	55,609.46	53,263	55,609			
1964	12,511.65	11,847	12,512			
1965	16,231.55	15,202	16,232			
1966	760.74	704	761			
1968	133,553.54	120,866	133,554			
1969	200,587.61	179,464	200,588			
1970	164,466.27	145,398	164,466			
1971	154,818.48	135,225	154,818			
1972	315,714.47	272,499	315,714			
1973	220,507.87	187,983	220,508			
1974	255,277.92	214,913	255,278			
1975	345,934.62	287,558	345,935			
1976	214,708.44	176,127	213,485	1,223	5.75	213
1977	231,026.70	186,988	226,650	4,377	6.10	718
1978	356,841.59	284,917	345,351	11,491	6.45	1,782
1979	260,827.20	205,401	248,968	11,859	6.80	1,744
1980	430,654.38	334,295	405,202	25,452	7.16	3,555
1981	157,476.86	120,470	146,023	11,454	7.52	1,523
1982	368,064.87	277,315	336,136	31,929	7.89	4,047
1983	43,637.29	36,634	43,637			
1984	90,682.98	75,294	90,683			
1985	333,079.53	273,325	331,311	1,769	8.34	212
1986	538,183.42	438,081	531,020	7,163	8.49	844
1987	979,902.06	786,763	953,675	26,227	8.88	2,953
1988	891,194.95	705,113	854,703	36,492	9.28	3,932
1989	742,525.78	580,952	704,201	38,325	9.50	4,034
1990	707,417.65	546,692	662,673	44,745	9.75	4,589
1991	584,600.22	443,770	537,916	46,684	10.21	4,572
1992	575,877.80	430,757	522,142	53,736	10.50	5,118
1993	1,213,271.97	893,089	1,082,558	130,714	10.82	12,081
1994	951,546.03	688,253	834,266	117,280	11.16	10,509

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 381.00 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 32-S0.5						
1995	653,930.05	464,160	562,631	91,299	11.52	7,925
1996	434,085.69	303,079	367,377	66,709	11.74	5,682
1997	867,477.67	592,487	718,183	149,295	12.15	12,288
1998	829,567.61	555,313	673,122	156,446	12.43	12,586
1999	462,691.21	301,906	365,955	96,736	12.87	7,516
2000	612,513.13	390,232	473,020	139,493	13.20	10,568
2001	1,613,724.78	1,001,639	1,214,136	399,589	13.55	29,490
2002	1,548,855.20	934,269	1,132,474	416,381	13.92	29,912
2003	1,110,513.90	651,650	789,897	320,617	14.20	22,579
2004	803,078.29	455,586	552,238	250,840	14.62	17,157
2005	1,058,182.68	580,519	703,676	354,507	14.95	23,713
2006	1,290,990.36	682,547	827,349	463,641	15.30	30,303
2007	1,969,697.14	999,818	1,211,929	757,768	15.68	48,327
2008	1,570,059.67	761,950	923,597	646,463	16.08	40,203
2009	1,661,512.76	769,613	932,886	728,627	16.42	44,374
2010	3,484,960.12	1,527,807	1,851,931	1,633,029	16.86	96,858
2011	2,468,926.40	1,021,395	1,238,084	1,230,842	17.24	71,395
2012	2,703,436.34	1,047,582	1,269,826	1,433,610	17.65	81,224
2013	1,747,314.53	630,606	764,389	982,926	18.00	54,607
2014	2,553,864.71	849,926	1,030,238	1,523,627	18.38	82,896
2015	3,159,591.81	957,356	1,160,459	1,999,133	18.79	106,393
2016	5,894,559.21	1,600,962	1,940,606	3,953,953	19.22	205,721
2017	10,524,307.21	2,511,100	3,043,829	7,480,478	19.67	380,299
2018	12,369,152.92	2,530,729	3,067,622	9,301,531	20.09	462,993
2019	13,837,918.61	2,341,376	2,838,098	10,999,821	20.46	537,626
2020	17,273,748.11	2,274,953	2,757,584	14,516,164	20.87	695,552
2021	4,177,623.81	386,430	468,411	3,709,213	21.25	174,551
2022	5,390,443.40	275,991	334,543	5,055,900	21.61	233,961
2023	3,504,614.62	52,569	63,721	3,440,893	21.84	157,550
	117,256,692.59	36,692,972	44,356,242	72,900,450		3,746,675

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 19.5 3.20

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 382.00 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
1922	5,724.56	5,694	5,725			
1923	56,280.77	55,749	56,281			
1924	50,712.09	50,011	50,712			
1925	54,877.82	53,860	54,878			
1926	49,253.74	48,108	49,254			
1927	56,995.57	55,389	56,996			
1928	50,101.17	48,443	50,101			
1929	50,624.03	48,700	50,624			
1930	44,886.32	42,960	44,886			
1931	31,437.41	29,928	31,437			
1932	33,698.91	31,910	33,699			
1933	34,597.98	32,585	34,598			
1934	35,860.04	33,585	35,860			
1935	22,806.58	21,243	22,807			
1936	39,493.98	36,579	39,494			
1937	44,300.75	40,797	44,301			
1938	60,513.93	55,409	60,514			
1939	10,305.82	9,382	10,306			
1940	18,048.04	16,335	18,048			
1941	24,871.91	22,380	24,872			
1942	22,776.23	20,374	22,776			
1943	12,000.84	10,672	12,001			
1944	8,298.45	7,334	8,298			
1945	6,487.87	5,700	6,488			
1946	24,793.26	21,647	24,793			
1947	46,985.16	40,766	46,985			
1948	49,029.31	42,272	49,029			
1949	99,083.67	84,870	99,084			
1950	90,593.93	77,087	90,594			
1951	93,586.26	79,089	93,586			
1952	61,820.24	51,884	61,820			
1953	92,041.18	76,695	91,666	375	9.17	41
1954	114,703.74	94,891	113,413	1,291	9.50	136
1955	148,436.07	121,879	145,669	2,767	9.84	281
1956	164,350.71	133,872	160,003	4,348	10.20	426
1957	167,646.10	135,488	161,935	5,711	10.55	541
1958	171,630.98	137,554	164,404	7,227	10.92	662
1959	165,265.86	131,312	156,944	8,322	11.30	736
1960	154,202.92	121,456	145,164	9,039	11.68	774
1961	159,068.67	124,131	148,361	10,708	12.08	886
1962	160,947.17	124,427	148,715	12,232	12.48	980
1963	140,609.98	107,630	128,639	11,971	12.90	928
1964	162,909.04	123,426	147,518	15,391	13.33	1,155
1965	139,994.30	104,971	125,461	14,533	13.76	1,056

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 382.00 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
1966	117,011.20	86,780	103,719	13,292	14.21	935
1967	140,257.20	102,846	122,921	17,336	14.67	1,182
1968	161,613.41	117,126	139,989	21,624	15.14	1,428
1969	161,136.46	115,374	137,895	23,241	15.62	1,488
1970	184,648.89	130,563	156,048	28,601	16.11	1,775
1971	242,758.13	169,445	202,520	40,238	16.61	2,423
1972	308,987.49	212,809	254,348	54,639	17.12	3,192
1973	319,536.73	217,052	259,420	60,117	17.64	3,408
1974	203,458.92	136,244	162,838	40,621	18.17	2,236
1975	274,010.16	180,748	216,029	57,981	18.72	3,097
1976	167,654.26	108,915	130,175	37,479	19.27	1,945
1977	481,369.87	307,725	367,792	113,578	19.84	5,725
1978	856,834.12	538,872	644,058	212,776	20.41	10,425
1979	808,757.50	499,958	597,548	211,210	21.00	10,058
1980	662,586.95	402,369	480,910	181,677	21.60	8,411
1981	1,022,881.75	610,006	729,077	293,805	22.20	13,234
1982	1,158,211.65	677,658	809,934	348,278	22.82	15,262
1983	852,691.73	561,668	671,303	181,389	20.81	8,716
1984	1,099,518.34	714,907	854,454	245,064	21.07	11,631
1985	1,111,588.84	708,527	846,829	264,760	21.71	12,195
1986	1,005,109.34	627,590	750,093	255,016	22.36	11,405
1987	1,117,778.21	687,210	821,351	296,427	22.66	13,082
1988	1,227,102.81	737,980	882,031	345,072	23.31	14,804
1989	1,131,328.65	668,728	799,261	332,068	23.64	14,047
1990	1,311,193.03	756,689	904,392	406,801	24.30	16,741
1991	1,727,519.09	972,420	1,162,233	565,286	24.98	22,630
1992	1,963,335.92	1,082,976	1,294,369	668,967	25.33	26,410
1993	1,500,032.42	805,517	962,751	537,281	26.01	20,657
1994	1,739,722.72	913,354	1,091,637	648,086	26.39	24,558
1995	1,551,285.71	790,845	945,215	606,071	27.08	22,381
1996	1,785,577.81	887,789	1,061,082	724,496	27.48	26,364
1997	1,859,181.56	895,196	1,069,935	789,247	28.18	28,007
1998	1,291,040.52	604,336	722,300	568,741	28.60	19,886
1999	1,280,315.88	578,575	691,510	588,806	29.31	20,089
2000	1,375,442.09	602,169	719,710	655,732	29.75	22,041
2001	1,877,015.26	790,599	944,921	932,094	30.46	30,601
2002	2,726,477.71	1,108,041	1,324,326	1,402,152	30.92	45,348
2003	2,050,370.78	798,004	953,771	1,096,600	31.65	34,648
2004	2,706,193.48	1,011,575	1,209,030	1,497,163	32.11	46,626
2005	2,880,357.19	1,030,880	1,232,104	1,648,253	32.59	50,575
2006	2,437,696.71	832,717	995,260	1,442,437	33.09	43,591
2007	2,541,380.28	821,628	982,006	1,559,374	33.84	46,081
2008	2,963,313.68	907,959	1,085,189	1,878,125	34.34	54,692
2009	3,135,439.48	906,142	1,083,017	2,052,422	34.85	58,893

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 382.00 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
2010	3,070,314.21	832,669	995,203	2,075,111	35.38	58,652
2011	2,101,259.07	531,829	635,640	1,465,619	35.91	40,814
2012	2,112,021.58	497,592	594,720	1,517,302	36.23	41,880
2013	1,384,887.39	299,967	358,519	1,026,368	36.78	27,906
2014	1,926,596.88	379,732	453,854	1,472,743	37.34	39,441
2015	2,196,394.73	390,958	467,271	1,729,124	37.71	45,853
2016	2,723,796.88	431,449	515,666	2,208,131	38.08	57,987
2017	3,193,323.13	440,998	527,079	2,666,244	38.48	69,289
2018	2,710,916.07	319,346	381,681	2,329,235	38.69	60,203
2019	3,137,668.81	303,413	362,638	2,775,031	38.94	71,264
2020	2,971,306.33	224,036	267,767	2,703,539	38.85	69,589
2021	3,796,650.36	201,602	240,955	3,555,696	38.65	91,997
	90,077,512.73	33,990,576	40,505,033	49,572,480		1,516,400

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 32.7 1.68

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R0.5						
1888	92.52	93	93			
1903	19.22	19	19			
1917	22.69	23	23			
1923	918.85	916	919			
1925	295.44	290	295			
1926	114.66	111	115			
1927	124.42	120	124			
1928	41.98	40	42			
1930	75.73	71	76			
1934	139.64	125	140			
1936	72.28	64	72			
1937	101.94	89	102			
1941	1,321.95	1,111	1,322			
1942	1,110.62	925	1,111			
1943	2,526.32	2,083	2,526			
1945	1,009.63	816	1,010			
1946	321.44	257	321			
1947	833.94	661	834			
1948	148.37	116	148			
1949	2,998.41	2,330	2,998			
1950	1,563.52	1,202	1,564			
1951	1,241.61	945	1,242			
1952	8,374.82	6,306	8,375			
1953	10,429.71	7,770	10,356	74	12.75	6
1954	13,607.64	10,026	13,363	245	13.16	19
1955	19,820.04	14,441	19,247	573	13.57	42
1956	29,782.71	21,455	28,596	1,187	13.98	85
1957	26,960.52	19,201	25,591	1,370	14.39	95
1958	15,702.81	11,052	14,730	973	14.81	66
1959	31,026.34	21,576	28,757	2,269	15.23	149
1960	19,609.01	13,471	17,954	1,655	15.65	106
1961	16,954.40	11,502	15,330	1,624	16.08	101
1962	32,606.53	21,840	29,109	3,498	16.51	212
1963	20,013.30	13,233	17,637	2,376	16.94	140
1964	15,164.43	9,893	13,186	1,978	17.38	114
1965	50,156.16	32,281	43,025	7,131	17.82	400
1966	35,220.01	22,351	29,790	5,430	18.27	297
1967	20,084.74	12,565	16,747	3,338	18.72	178
1968	29,182.63	17,994	23,983	5,200	19.17	271
1969	35,708.05	21,689	28,908	6,800	19.63	346
1970	33,565.80	20,079	26,762	6,804	20.09	339
1971	80,550.21	47,428	63,213	17,337	20.56	843
1972	42,130.42	24,410	32,534	9,596	21.03	456
1973	50,259.44	28,638	38,169	12,090	21.51	562

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R0.5						
1974	5,622.74	3,150	4,198	1,425	21.99	65
1975	15,860.09	8,733	11,640	4,220	22.47	188
1976	34,883.05	18,858	25,134	9,749	22.97	424
1977	13,318.63	7,070	9,423	3,896	23.46	166
1978	10,964.97	5,711	7,612	3,353	23.96	140
1979	118,558.48	60,560	80,716	37,842	24.46	1,547
1980	104,032.27	52,079	69,412	34,620	24.97	1,386
1981	123,441.67	60,511	80,650	42,792	25.49	1,679
1982	169,232.96	81,198	108,222	61,011	26.01	2,346
1983	86,096.70	54,981	73,280	12,817	22.73	564
1984	100,359.71	63,287	84,350	16,010	22.94	698
1985	154,637.04	95,612	127,434	27,203	23.56	1,155
1986	356,369.01	217,207	289,498	66,871	23.81	2,809
1987	161,277.65	96,831	129,058	32,220	24.07	1,339
1988	475,256.07	280,781	374,230	101,026	24.36	4,147
1989	441,844.00	255,121	340,030	101,814	25.01	4,071
1990	239,096.97	135,616	180,752	58,345	25.31	2,305
1991	396,160.01	220,463	293,837	102,323	25.64	3,991
1992	104,736.43	57,123	76,135	28,601	25.98	1,101
1993	82,552.26	44,083	58,755	23,797	26.33	904
1994	154,455.26	81,089	108,077	46,378	26.39	1,757
1995	168,974.57	86,616	115,443	53,532	26.78	1,999
1996	142,445.46	71,208	94,907	47,538	27.18	1,749
1997	163,085.34	79,374	105,791	57,294	27.60	2,076
1998	82,588.55	39,279	52,352	30,237	27.75	1,090
1999	118,735.05	54,808	73,049	45,686	28.19	1,621
2000	155,236.45	69,763	92,981	62,255	28.38	2,194
2001	97,019.22	42,368	56,469	40,550	28.59	1,418
2002	126,306.03	53,465	71,259	55,047	28.84	1,909
2003	197,524.98	80,867	107,781	89,744	29.09	3,085
2004	186,501.02	73,631	98,137	88,364	29.38	3,008
2006	21,962.54	8,030	10,703	11,260	29.78	378
2007	144,559.05	50,711	67,589	76,970	29.92	2,573
2008	45,224.21	15,159	20,204	25,020	30.08	832
2010	1,291.73	393	524	768	30.12	25
2011	27,034.06	7,761	10,344	16,690	30.21	552
2012	475,133.27	128,381	171,109	304,024	30.16	10,080
2013	1,056,599.74	266,369	355,022	701,578	30.16	23,262
2014	145,107.02	33,926	45,217	99,890	30.05	3,324
2015	361,322.96	77,612	103,443	257,880	29.86	8,636
2016	612,364.74	119,350	159,072	453,293	29.60	15,314
2017	1,648,127.23	286,609	381,998	1,266,129	29.29	43,227
2018	613,698.66	93,528	124,656	489,043	28.73	17,022
2019	227,577.32	29,403	39,189	188,388	28.09	6,707

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R0.5						
2020	444,830.26	46,485	61,956	382,874	27.14	14,107
2021	913,390.62	70,879	94,468	818,923	25.77	31,778
2022	23,269.00	1,103	1,470	21,799	23.46	929
2023	207,888.26	3,451	4,600	203,289	19.79	10,272
	12,408,558.21	4,212,201	5,612,634	6,795,925		246,776
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 27.5						1.99

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 386.00 OTHER PROPERTY ON CUSTOMER PREMISES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-S4						
1997	53,681.30	51,411	53,681			
1998	24,038.51	22,868	24,039			
2005	14,566,812.47	12,306,043	14,566,812			
	14,644,532.28	12,380,322	14,644,532			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					0.0	0.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 387.00 OTHER EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 26-R2.5						
2001	127,844.20	95,781	83,057	44,787	7.42	6,036
2002	72,392.13	52,709	45,707	26,685	7.90	3,378
2003	46,981.59	33,160	28,755	18,227	8.41	2,167
2004	82,425.29	56,082	48,632	33,793	9.00	3,755
2005	106,411.95	69,785	60,514	45,898	9.53	4,816
2006	228,496.48	143,564	124,492	104,004	10.16	10,237
2007	172,643.52	103,828	90,035	82,609	10.72	7,706
2008	109,025.87	62,341	54,059	54,967	11.36	4,839
2010	123,227.17	62,957	54,593	68,634	12.61	5,443
2011	401,850.84	192,647	167,054	234,797	13.21	17,774
2012	234,211.62	104,365	90,500	143,712	13.89	10,346
2013	61,258.09	25,226	21,875	39,383	14.52	2,712
2014	434,494.81	163,718	141,969	292,526	15.16	19,296
2015	1,245,680.94	424,279	367,915	877,766	15.81	55,520
2016	613,051.96	185,877	161,184	451,868	16.47	27,436
2017	2,071,556.38	548,134	475,316	1,596,240	17.14	93,130
2018	1,688,040.05	380,315	329,791	1,358,249	17.77	76,435
2019	238,815.47	44,085	38,228	200,587	18.41	10,896
2020	1,223,231.85	175,044	151,790	1,071,442	18.96	56,511
2021	5,318,585.61	533,454	462,586	4,856,000	19.43	249,923
2022	738,962.16	41,308	35,820	703,142	19.71	35,674
2023	281,510.75	4,758	4,126	277,385	19.43	14,276
	15,620,698.73	3,503,417	3,037,998	12,582,701		718,306

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.5 4.60

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 389.02 LAND RIGHTS AND RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R3						
1895	221.00	221	221			
1896	578.00	578	578			
1897	265.80	266	266			
1898	123.55	124	124			
1899	219.60	220	220			
1900	78.67	79	79			
1901	1,043.20	1,043	1,043			
1902	9.85	10	10			
1903	356.24	356	356			
1904	105.00	105	105			
1905	271.56	272	272			
1907	515.26	515	515			
1908	1.22	1	1			
1909	5.00	5	5			
1912	107.28	107	107			
1913	418.90	419	419			
1914	242.34	242	242			
1915	59.34	59	59			
1916	348.78	349	349			
1917	37.03	37	37			
1919	20.00	20	20			
1920	747.78	748	748			
1923	337.00	335	337			
1924	1,098.02	1,088	1,098			
1925	257.57	254	258			
1926	32.00	31	32			
1927	101.50	99	102			
1928	38.20	37	38			
1929	741.31	720	741			
1930	63.71	62	64			
1932	25.00	24	25			
1935	6.60	6	7			
1936	23.00	22	23			
1937	126.06	118	126			
1940	94.65	88	95			
1941	123.94	114	124			
1942	91.94	84	92			
1944	457.06	415	457			
1945	266.11	240	266			
1946	58.28	52	58			
1948	15.96	14	16			
1949	91.53	81	92			
1950	62.45	55	62			
1951	36.13	32	36			

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 389.02 LAND RIGHTS AND RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R3						
1952	23.18	20	23			
1953	38.67	33	38	1	8.11	
1954	53.96	46	52	2	8.44	
1956	308.81	262	298	11	9.14	1
1958	3,915.91	3,270	3,722	194	9.89	20
1959	630.52	522	594	37	10.28	4
1960	914.07	751	855	59	10.70	6
1961	147.59	120	137	11	11.12	1
1962	74.23	60	68	6	11.57	1
1963	124.21	99	113	11	12.03	1
1964	42.01	33	38	4	12.50	
1965	515.64	404	460	56	12.99	4
1966	2,820.19	2,186	2,488	332	13.50	25
1967	76.52	59	67	10	14.02	1
1968	563.97	427	486	78	14.56	5
1969	267.27	200	228	39	15.11	3
1973	263.19	187	213	50	17.48	3
1977	149.17	99	113	36	20.06	2
1978	842.86	552	628	215	20.74	10
1980	349.81	221	251	99	22.13	4
1981	13,624.82	8,438	9,602	4,023	22.84	176
1983	6,888.56	4,455	5,070	1,819	21.94	83
1984	1,771.57	1,124	1,279	493	22.56	22
1987	565.85	338	385	181	24.44	7
2017	8,100.00	944	1,074	7,026	46.74	150
	52,996.00	34,597	38,207	14,789		529

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 28.0 1.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS - OWNED

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R1						
1905	218.00	218	218			
1928	224.39	204	224			
1946	4,045.95	3,250	4,046			
1947	528.40	421	528			
1950	451.53	350	452			
1951	613.78	472	614			
1952	180.21	137	180			
1953	1,818.93	1,372	1,819			
1954	556.58	416	557			
1957	1,294.00	938	1,294			
1958	558.74	401	559			
1959	632.97	449	633			
1960	883.06	619	883			
1961	636.34	441	636			
1964	284.71	190	285			
1966	1,950.09	1,271	1,950			
1967	459.48	295	459			
1968	676.96	429	677			
1969	96.10	60	96			
1971	587.95	357	578	10	21.60	
1972	60.00	36	58	2	22.11	
1974	1,018.29	590	955	63	23.14	3
1976	464.98	260	421	44	24.20	2
1977	2,596.35	1,428	2,311	285	24.74	12
1978	1,872.84	1,012	1,638	235	25.28	9
1980	15,459.53	8,042	13,016	2,444	26.39	93
1982	52,171.53	26,067	42,188	9,984	27.52	363
1983	122,307.99	76,638	122,308			
1984	80,171.94	49,298	79,841	331	24.53	13
1985	90,140.21	54,355	88,031	2,109	25.13	84
1987	72,286.32	42,092	68,170	4,116	25.94	159
1989	829.86	465	753	77	26.81	3
1991	57,360.67	30,998	50,203	7,158	27.36	262
1992	13,462.64	7,091	11,484	1,979	28.01	71
1993	1,527.03	788	1,276	251	28.32	9
1996	103,828.86	49,641	80,397	23,432	29.65	790
1997	127,383.78	59,335	96,097	31,287	30.01	1,043
1998	1,345.00	609	986	359	30.39	12
2000	14,202.59	6,055	9,806	4,397	31.18	141
2001	5,875.07	2,422	3,923	1,952	31.60	62
2002	112,731.23	45,092	73,029	39,702	31.75	1,250
2003	108,626.01	41,843	67,767	40,859	32.19	1,269
2004	189,407.44	70,422	114,053	75,354	32.38	2,327
2005	63,039.60	22,448	36,356	26,684	32.85	812

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS - OWNED

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R1						
2009	136,463.79	40,216	65,132	71,332	33.91	2,104
2010	1,342,658.88	374,736	606,907	735,752	34.00	21,640
2011	958,822.33	251,979	408,095	550,727	34.13	16,136
2012	50,332.00	12,367	20,029	30,303	34.29	884
2014	235,641.87	49,461	80,105	155,537	34.50	4,508
2015	373,670.25	71,707	116,134	257,536	34.39	7,489
2017	143,613.75	21,959	35,564	108,050	34.16	3,163
2018	764,237.45	101,109	163,752	600,485	33.89	17,719
2019	325,492.78	36,195	58,620	266,873	33.29	8,017
2020	5,969.29	529	857	5,112	32.55	157
2021	225,010.36	14,536	23,542	201,468	31.39	6,418
2022	111,187.19	4,258	6,896	104,291	29.32	3,557
2023	6,664,763.01	85,309	138,163	6,526,600	25.64	254,548
	12,592,730.88	1,673,678	2,705,551	9,887,180		355,129

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 27.8 2.82

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 390.01 STRUCTURES AND IMPROVEMENTS - LEASED - NORTH SHORE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 75-R0.5						
PROBABLE RETIREMENT YEAR.. 1-2029						
2005	2,439,832.84	1,888,187	1,914,976	524,857	5.31	98,843
2007	2,391.03	1,801	1,827	564	5.29	107
2010	127,711.52	90,969	92,260	35,452	5.32	6,664
2011	713,419.33	496,469	503,513	209,906	5.32	39,456
2012	95,432.57	64,684	65,602	29,831	5.31	5,618
2014	39,512.90	25,027	25,382	14,131	5.31	2,661
2015	1,401,257.57	849,162	861,209	540,049	5.31	101,704
2016	2,970,840.94	1,707,639	1,731,865	1,238,976	5.30	233,769
2017	143,613.75	77,221	78,317	65,297	5.30	12,320
2018	17,834.81	8,809	8,934	8,901	5.29	1,683
2020	149,234.52	55,993	56,787	92,448	5.27	17,542
2021	11,786.05	3,443	3,492	8,294	5.25	1,580
	8,112,867.83	5,269,404	5,344,164	2,768,704		521,947

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.3 6.43

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 391.01 OFFICE FURNITURE AND EQUIPMENT - FURNITURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
1998	11,282.11	11,282	11,282			
2007	15,372.00	12,426	15,372			
2008	723.62	549	724			
2009	42,018.52	29,763	41,389	630	5.83	108
2010	17,167.62	11,302	15,717	1,451	6.83	212
2011	526,944.52	320,556	445,773	81,172	7.83	10,367
2013	34,396.55	17,485	24,315	10,082	9.83	1,026
2014	156,256.18	71,617	99,592	56,664	10.83	5,232
2015	1,434,510.51	585,754	814,563	619,948	11.83	52,405
2016	308,359.05	110,494	153,656	154,703	12.83	12,058
2017	30,662.08	9,454	13,147	17,515	13.83	1,266
2021	9,564.00	1,036	1,440	8,124	17.83	456
	2,587,256.76	1,181,718	1,636,970	950,286		83,130

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.4 3.21

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 391.02 OFFICE FURNITURE AND EQUIPMENT - COMPUTER HARDWARE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
2020	1,990,944.89	1,260,925	1,990,945			
2021	8,068,734.90	3,496,425	6,730,690	1,338,045	2.83	472,807
2022	4,011,706.71	936,052	1,801,920	2,209,787	3.83	576,968
2023	1,607,819.87	107,193	206,349	1,401,471	4.67	300,101
	15,679,206.37	5,800,595	10,729,904	4,949,303		1,349,876
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					3.7	8.61

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 391.03 OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
2012	6,374.27	4,745	4,153	2,221	3.83	580
2013	131.73	89	78	54	4.83	11
2016	182,867.92	87,371	76,473	106,395	7.83	13,588
2017	52,750.52	21,686	18,981	33,770	8.83	3,824
2018	20,040.00	6,903	6,042	13,998	9.83	1,424
2019	15,022.00	4,173	3,653	11,369	10.83	1,050
2020	13,792.00	2,912	2,549	11,243	11.83	950
2021	30,392.00	4,390	3,842	26,550	12.83	2,069
	321,370.44	132,269	115,771	205,599		23,496

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.8 7.31

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 392.01 TRANSPORTATION EQUIPMENT - AUTOMOBILES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 6-L2.5						
2010	2,040.49	1,964	2,040			
	2,040.49	1,964	2,040			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					0.0	0.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 392.02 TRANSPORTATION EQUIPMENT - TRUCKS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L2.5						
1999	308,710.70	300,653	196,924	111,787	0.65	111,787
2007	9,684.11	8,673	5,681	4,003	1.88	2,129
2008	17,027.48	14,979	9,811	7,216	2.07	3,486
2009	30,635.75	26,387	17,283	13,353	2.28	5,857
2010	1,790.62	1,509	988	803	2.46	326
2011	65,812.83	54,131	35,455	30,358	2.63	11,543
2012	88,265.00	70,665	46,285	41,980	2.78	15,101
2013	210,753.58	164,135	107,506	103,248	2.89	35,726
2014	1,036,951.19	781,343	511,769	525,182	3.00	175,061
2015	739,089.43	532,366	348,692	390,397	3.17	123,154
2016	4,202,867.34	2,843,240	1,862,283	2,340,584	3.43	682,386
2017	8,609,337.41	5,324,875	3,487,719	5,121,618	3.80	1,347,794
2018	7,203,972.89	3,926,886	2,572,055	4,631,918	4.31	1,074,691
2019	8,298,649.83	3,799,952	2,488,916	5,809,734	4.93	1,178,445
2020	12,038,338.25	4,330,190	2,836,214	9,202,124	5.64	1,631,582
2021	10,540,480.71	2,662,525	1,743,916	8,796,565	6.41	1,372,319
2022	3,957,621.64	548,526	359,277	3,598,345	7.25	496,323
2023	4,840,728.72	193,629	126,824	4,713,904	8.01	588,502
	62,200,717.48	25,584,664	16,757,598	45,443,119		8,856,212

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.1 14.24

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 392.03 TRANSPORTATION EQUIPMENT - TRAILERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-L2						
1999	9,584.60	8,432	4,907	4,678	3.30	1,418
2000	1,132.05	984	573	559	3.50	160
2006	50,914.77	40,121	23,347	27,568	4.62	5,967
2007	9,680.28	7,481	4,353	5,327	4.75	1,121
2008	8,436.33	6,372	3,708	4,728	4.91	963
2009	25,798.90	19,006	11,060	14,739	5.06	2,913
2010	4,790.00	3,437	2,000	2,790	5.18	539
2011	70,144.02	48,729	28,356	41,788	5.35	7,811
2012	94,347.44	63,109	36,724	57,623	5.53	10,420
2013	5,411.65	3,461	2,014	3,398	5.73	593
2014	19,032.38	11,497	6,690	12,342	6.01	2,054
2015	49,235.85	27,705	16,122	33,114	6.35	5,215
2016	174,873.56	89,850	52,285	122,589	6.78	18,081
2017	380,550.89	174,140	101,335	279,216	7.31	38,196
2018	229,178.34	90,571	52,705	176,473	7.91	22,310
2019	624,548.60	204,540	119,026	505,523	8.56	59,056
2020	409,849.91	104,594	60,865	348,985	9.24	37,769
2021	272,131.09	48,521	28,235	243,896	9.98	24,438
2023	276,095.55	7,758	4,515	271,581	11.53	23,554
	2,715,736.21	960,308	558,820	2,156,916		262,578

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.2 9.67

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 394.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
1998	191,544.87	191,545	191,545			
1999	95,567.74	92,382	94,204	1,364	0.83	1,364
2000	206,628.32	191,476	195,253	11,375	1.83	6,216
2001	194,842.63	172,761	176,169	18,674	2.83	6,599
2002	342,377.53	289,881	295,599	46,779	3.83	12,214
2003	194,692.15	157,052	160,150	34,542	4.83	7,152
2004	407,591.88	312,488	318,652	88,940	5.83	15,256
2005	76,325.20	55,463	56,557	19,768	6.83	2,894
2006	185,927.78	127,671	130,189	55,739	7.83	7,119
2007	597,992.98	386,704	394,331	203,662	8.83	23,065
2008	475,653.28	288,565	294,257	181,396	9.83	18,453
2009	531,371.14	301,112	307,051	224,320	10.83	20,713
2010	339,822.19	178,974	182,504	157,318	11.83	13,298
2011	211,403.92	102,884	104,913	106,491	12.83	8,300
2012	250,479.58	111,882	114,089	136,391	13.83	9,862
2013	446,160.84	181,440	185,019	261,142	14.83	17,609
2014	20,034.77	7,346	7,491	12,544	15.83	792
2017	117,295.27	28,933	29,504	87,791	18.83	4,662
2018	272,935.60	56,408	57,520	215,416	19.83	10,863
2019	5,749.93	958	977	4,773	20.83	229
2022	190,034.82	8,869	9,044	180,991	23.83	7,595
2023	109,618.14	1,461	1,490	108,128	24.67	4,383
	5,464,050.56	3,246,255	3,306,508	2,157,543		198,638

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.9 3.64

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 394.01 DUAL FUEL STATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
2014	130,860.25	79,970	81,454	49,406	5.83	8,474
2018	267,256.56	92,054	93,763	173,494	9.83	17,649
	398,116.81	172,024	175,217	222,900		26,123
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					8.5	6.56

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 14-L2						
1994	21,929.12	20,659	21,929			
1995	14,000.00	13,091	13,998	2	1.95	1
1997	58,208.48	53,307	56,999	1,209	2.41	502
1999	328,264.92	295,110	315,549	12,716	2.72	4,675
2000	43,959.89	39,006	41,708	2,252	2.94	766
2001	32,082.44	28,091	30,037	2,045	3.15	649
2002	67,310.80	58,130	62,156	5,155	3.34	1,543
2003	21,015.00	17,884	19,123	1,892	3.53	536
2004	193,977.55	162,476	173,729	20,249	3.72	5,443
2005	216,476.04	178,160	190,499	25,977	3.91	6,644
2006	14,837.75	11,971	12,800	2,038	4.11	496
2007	186,302.87	147,291	157,492	28,811	4.28	6,732
2008	72,523.23	56,097	59,982	12,541	4.44	2,825
2009	32,445.05	24,499	26,196	6,249	4.59	1,361
2010	19,137.35	14,085	15,061	4,076	4.72	864
2011	430,489.46	307,456	328,750	101,739	4.87	20,891
2012	539,135.28	372,057	397,825	141,310	5.01	28,206
2013	294,941.66	194,897	208,395	86,547	5.22	16,580
2014	596,201.83	374,355	400,282	195,920	5.43	36,081
2015	1,002,652.71	588,758	629,535	373,118	5.74	65,003
2016	509,358.77	274,850	293,886	215,473	6.11	35,266
2017	1,615,464.65	781,077	835,174	780,291	6.59	118,405
2018	1,685,530.66	706,237	755,150	930,381	7.16	129,941
2019	1,114,580.05	387,762	414,618	699,962	7.81	89,624
2020	2,058,540.79	559,923	598,703	1,459,838	8.47	172,354
2021	760,228.11	144,747	154,772	605,456	9.21	65,739
2022	1,403,561.48	146,532	156,681	1,246,880	10.01	124,563
2023	268,890.63	8,094	8,654	260,236	10.74	24,231
	13,602,046.57	5,966,602	6,379,683	7,222,363		959,921

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.5 7.06

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 397.01 COMMUNICATION EQUIPMENT - RADIO

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
2013	27,319.52	27,320	27,320			
2016	184,808.87	132,447	105,600	79,209	2.83	27,989
2018	225,466.91	116,492	92,878	132,589	4.83	27,451
2021	66,770.00	14,467	11,535	55,235	7.83	7,054
2022	7,916.45	924	737	7,180	8.83	813
	512,281.75	291,650	238,070	274,212		63,307

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.3 12.36

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 397.02 COMMUNICATION EQUIPMENT - TELEPHONE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
2009	9,733.27	9,192	9,069	664	0.83	664
2010	1,483,377.74	1,302,079	1,284,696	198,682	1.83	108,569
2011	3,933,791.95	3,190,738	3,148,141	785,651	2.83	277,615
2012	929,260.48	691,779	682,543	246,717	3.83	64,417
2013	826,747.38	560,353	552,872	273,875	4.83	56,703
2014	740,938.13	452,795	446,750	294,188	5.83	50,461
2015	1,163,312.65	633,354	624,899	538,414	6.83	78,831
2016	586,347.51	280,145	276,405	309,943	7.83	39,584
2017	693,822.26	285,237	281,429	412,393	8.83	46,704
2018	1,338,735.79	461,114	454,958	883,778	9.83	89,906
2019	643,967.93	178,881	176,493	467,475	10.83	43,165
2020	1,306,261.75	275,765	272,083	1,034,179	11.83	87,420
2021	4,895,206.34	707,064	697,625	4,197,581	12.83	327,169
2022	364,579.19	28,357	27,978	336,601	13.83	24,338
	18,916,082.37	9,056,853	8,935,941	9,980,141		1,295,546

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.7 6.85

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 397.04 COMMUNICATION EQUIPMENT - MICROWAVE TOWERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 18-SQUARE						
2017	16,889,405.25	5,786,141	7,003,307	9,886,098	11.83	835,680
2022	27,725.49	1,797	2,175	25,550	16.83	1,518
	16,917,130.74	5,787,938	7,005,482	9,911,649		837,198
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					11.8	4.95

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 398.00 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
2018	46,650.00	16,068	34,114	12,536	9.83	1,275
2019	8,235.82	2,288	4,858	3,378	10.83	312
	54,885.82	18,356	38,972	15,914		1,587

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.0 2.89

PART III. EXPERIENCED NET SALVAGE

PEOPLES NATURAL GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2018 TRANSACTION YEAR				
303.00	8,804,723.00			
332.00	17,930.32	143,822.74		143,822.74-
333.00		46,521.00	54,823.60	8,302.60
334.00	1,544.86	2,387.55		2,387.55-
337.00	19,354.14			
367.00	79,670.14	14,100.29		14,100.29-
369.00	26,512.60	8,115.09		8,115.09-
375.00	372,636.40			
376.00	1,799,816.91	5,826,928.93	19,469.52	5,807,459.41-
378.00	112,468.52	49,357.24		49,357.24-
380.00	307,052.73	4,827,651.62		4,827,651.62-
381.00	182.54			
382.00	345,982.26	147,178.29		147,178.29-
385.00	37,162.09	5,284.72		5,284.72-
387.00	375,396.06			
391.01	11,004.34-			
391.02	3,735,013.90			
391.03	5,292.58			
392.02	1,788,974.63		565,836.73	565,836.73
392.03	115,726.29		32,570.00	32,570.00
393.01	7,200.20			
394.00	15,682.57			
396.00	578,149.99		288,314.99	288,314.99
398.00	1,647.22			
	18,537,115.61	11,071,347.47	961,014.84	10,110,332.63-

PEOPLES NATURAL GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2019 TRANSACTION YEAR				
303.01	7,016,849.73			
327.00	412.50			
329.00	2,540.99			
332.00	426,749.78	163,482.96		163,482.96-
333.00	2,483,303.08	27,645.66		27,645.66-
334.00	4,499.84			
335.00	18,641.92			
352.01	154.63			
352.02	910.97			
366.02	1,682.01	5,101.88		5,101.88-
367.00	330,132.80			
368.00	112,877.98	13,412.04		13,412.04-
369.00	29,369.33			
374.01	160,658.33			
375.00	350,319.31			
376.00	3,766,252.94	5,865,944.45	11,161.33	5,854,783.12-
378.00	540,252.37	10,946.28		10,946.28-
380.00	668,226.19	5,241,626.46		5,241,626.46-
381.00	3,076,370.11			
382.00	346,112.83	222,227.95		222,227.95-
385.00	71,718.45			
387.00	265,911.05			
390.00	26,625.10			
391.01	1,672.81			
391.02	1,488,636.08			
391.03	8,927.24			
392.02	5,238,075.08		652,921.34	652,921.34
392.03	127,177.30		17,165.00	17,165.00
394.00	118,350.37			
396.00	365,760.88		117,395.00	117,395.00
398.00	14,608.00			
	27,063,780.00	11,550,387.68	798,642.67	10,751,745.01-

PEOPLES NATURAL GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2020 TRANSACTION YEAR				
303.01	3,182,564.17			
332.00	312,037.52	354,270.18		354,270.18-
333.00	147,310.45	49,795.88	398.67-	50,194.55-
334.00		6,414.69		6,414.69-
337.00	3,065.97			
353.00	331.76			
365.02	62.90			
366.02		2,930.29		2,930.29-
367.00	56,129.57			
368.00		8,925.19		8,925.19-
369.00	41,435.12	149,912.81		149,912.81-
375.00	137,699.00			
376.00	2,924,766.75	5,481,114.21	5,447.75	5,475,666.46-
378.00	247,415.34	133,251.85		133,251.85-
380.00	25,391.15	7,218,285.86		7,218,285.86-
382.00	77,330.11	179,485.81		179,485.81-
385.00	11,801.29			
387.00	1,139,893.47			
390.00	4,124.92			
390.01	5,616.43			
391.02	1,682,079.07			
391.03	2,281,202.94			
391.04	9,942.78			
392.02	4,933,097.97		740,403.03	740,403.03
392.03	324,315.66		62,342.60	62,342.60
394.00	111,132.66			
396.00	309,807.97		244,663.79	244,663.79
398.00	133,852.65			
	18,102,407.62	13,584,386.77	1,052,458.50	12,531,928.27-

PEOPLES NATURAL GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2021 TRANSACTION YEAR				
303.01	4,236,928.71			
303.02	688,465.65			
303.03	30,357,603.06			
325.04	842.82			
327.00	72,320.90			
329.00	19,981.66			
332.00	49,572.41	283,430.53	5,355.59	278,074.94-
333.00	393,210.79	598,258.96		598,258.96-
334.00		193,592.24		193,592.24-
352.01	247.67			
352.02	315.72			
367.00	25,087.30			
368.00	60,222.15			
369.00	104,960.48			
371.00	29,956.66			
374.02	65.83			
375.00	302,534.97			
376.00	6,155,363.71	2,963,187.81	23,652.10	2,939,535.71-
378.00	401,683.16	111,984.58		111,984.58-
380.00		2,895,377.06		2,895,377.06-
381.00	1,520,996.65			
382.00	79,377.04	203,907.37		203,907.37-
385.00	19,167.76			
387.00	275,471.62			
390.00	52,628.44			
391.01	2,870.77			
391.02	553,407.37			
391.03	1,989.70			
392.02	3,573,699.45		1,222,608.54	1,222,608.54
392.03	76,012.45			
394.00	181,272.53			
396.00	489,723.91			
397.01	1,032,019.73			
397.02	270,725.48		2,900.00	2,900.00
398.00	2,939.36			
	51,031,665.91	7,249,738.55	1,254,516.23	5,995,222.32-

PEOPLES NATURAL GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2022 TRANSACTION YEAR				
303.01	12,622,314.16			
332.00		1,324.31		1,324.31-
333.00	12,996.49	128,574.90		128,574.90-
337.00	11,276.88			
367.00	122,214.21			
369.00	93,926.26			
375.00	3,029.15			
376.00	4,857,456.40	215,592.11	11,205.71-	226,797.82-
378.00	397,251.67			
380.00	641,920.05			
381.00	105,869.13			
382.00	77,284.99	3,688.77		3,688.77-
387.00	198,953.28			
390.00	12,751.86			
390.01	1,649,167.38			
391.01	44,984.79			
391.02	8,852,331.02			
391.03	404,099.91			
392.01	51,430.57			
392.02	6,677,435.30			
392.03	172,345.94			
392.04	6,344.73			
394.00	101,958.56			
396.00	1,258,914.62			
397.01	19,826.01			
397.02	682,272.80			
398.00	8,672.53			
	39,087,028.69	349,180.09	11,205.71-	360,385.80-
TOTAL	153,821,997.83	43,805,040.56	4,055,426.53	39,749,614.03-

PEOPLES NATURAL GAS COMPANY LLC

PITTSBURGH, PENNSYLVANIA

PEOPLES NATURAL GAS DIVISION

2024 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION
ACCRUALS RELATED TO GAS PLANT
AS OF AUGUST 31, 2024

Prepared by:

GANNETT FLEMING

Excellence Delivered As Promised

PEOPLES NATURAL GAS COMPANY LLC

Pittsburgh, Pennsylvania

PEOPLES NATURAL GAS DIVISION

2024 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO GAS PLANT
AS OF AUGUST 31, 2024

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | **F** 717.763.8150

gannettfleming.com

December 14, 2023

Peoples Natural Gas Company, LLC
375 North Shore Drive, Suite 600
Pittsburgh, PA 15212-5322

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to gas plant in service. The results of our study as of August 31, 2024 are presented in the attached report. The results of our study as of August 31, 2023 are presented in our report titled "2023 Depreciation Study - Calculated Annual Depreciation Accruals Related to Gas Plant as of August 31, 2023". The same methods, procedures and estimates are used in both studies.

The attached report sets forth a description of the methods and procedures upon which the studies were based, the estimates of survivor curves and the calculated annual depreciation rates as of August 31, 2024.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS
President

JJS:mle

075181.000

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PART I. INTRODUCTION

PEOPLES NATURAL GAS COMPANY LLC
PEOPLES NATURAL GAS DIVISION
DEPRECIATION STUDY

PART I. INTRODUCTION

SCOPE

This report sets forth the results of the depreciation study conducted for Peoples Natural Gas Company LLC to determine the annual depreciation accrual rates and amounts for ratemaking purposes applicable to the original cost of gas plant as of August 31, 2024 for the Peoples Natural Gas division.

The depreciation accrual rates and amounts presented herein are based on estimated survivor curves and on methods and procedures set forth in previous orders approved by the Pennsylvania Public Utility Commission. The estimated survivor curves presented herein were based on the results of a service life study incorporating statistical analyses of data through 2022.

BASIS OF STUDY

Depreciation and Amortization

Depreciation, as defined in the Uniform System of Accounts, is the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of gas plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and requirements of public authorities.

Depreciation, as used in accounting, is a method of distributing fixed capital costs over a period of time by allocating annual amounts to expense. Each annual amount of such depreciation expense is part of that year's total cost of providing utility service. Normally, the period of time over which the fixed capital cost is allocated to the cost of service is equal to the period of time over which an item renders service, that is, the item's service life. The most prevalent method of allocation is to distribute an equal amount of cost to each year of service life. This method is known as the straight line method of depreciation.

The calculation of annual and accrued depreciation based on the straight line method requires the estimation of survivor curves and the selection of group depreciation procedures. These subjects are discussed in the sections which follow.

For most plant accounts, depreciation accruals and accrued depreciation were calculated using the straight line method, the remaining life basis, the average service life (ASL) procedure for plant installed prior to 1983 and the equal life group (ELG) procedure for property installed subsequent to 1982. The calculations were based on the attained ages and estimated service life characteristics for each depreciable group of gas property. For certain general plant accounts, the amortization amounts, annual and accrued, were based on the age of the vintage and the selected amortization period.

Survivor curves were used to reflect the expected dispersion of retirements, thus providing a consistent method of estimating service lives and depreciation for mass property. Iowa type curves were used to depict the estimated survivor curves. For life span groups, the estimate of life characteristics is consistent because the calculated

lives of the units within a group are obtained by employing a single probable retirement date for the entire group.

Service Life Estimates

The method of estimating service life consisted of compiling the service life history of the plant accounts, subaccounts or depreciable groups, reducing this history to trends through the use of acceptable actuarial techniques, and forecasting the trend of survivors for each depreciable group on the basis of interpretations of past trends and consideration of Company plans for the future. The combination of the historical trend and the estimated future trend yielded a complete pattern of life characteristics from which the average service life was derived.

The Company's service life estimates used in the depreciation calculation incorporated historical data compiled through 2022 from the property records of the Company. Such data included plant additions, retirements, transfers and other activity. Generally, retirement data for the years 1939 through 2022 were used in the actuarial life table computations which were the primary statistical support of the service life estimates.

A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirement was obtained through field trips conducted during the course of the service life study. Discussions with operating and management personnel also provided information regarding plans for the future which was incorporated in the interpretation and extrapolation of the statistical analyses.

AMORTIZATION OF NET SALVAGE

Inasmuch as this report relates primarily to Pennsylvania rate regulation practices, under which experienced costs of negative net salvage are amortized after their occurrence, no adjustments for expected salvage were made to either the annual depreciation accrual or the calculated accrued depreciation for the individual accounts. The annual provision for recovering negative net salvage is based on the amortization of net salvage over a five-year period.

PART II. ESTIMATION OF SURVIVOR CURVES

PART II. ESTIMATION OF SURVIVOR CURVES

The calculation of annual depreciation based on the straight line method requires the estimation of survivor curves and the selection of group depreciation procedures. The estimation of survivor curves is discussed below and the development of net salvage is discussed in later sections of this report.

SURVIVOR CURVES

The use of an average service life for a property group implies that the various units in the group have different lives. Thus, the average life may be obtained by determining the separate lives of each of the units or by constructing a survivor curve by plotting the number of units which survive at successive ages.

The survivor curve graphically depicts the amount of property existing at each age throughout the life of an original group. From the survivor curve, the average life of the group, the remaining life expectancy, the probable life, and the frequency curve can be calculated. In Figure 1, a typical smooth survivor curve and the derived curves are illustrated. The average life is obtained by calculating the area under the survivor curve, from age zero to the maximum age, and dividing this area by the ordinate at age zero. The remaining life expectancy at any age can be calculated by obtaining the area under the curve, from the observation age to the maximum age, and dividing this area by the percent surviving at the observation age. For example, in Figure 1, the remaining life at age 30 is equal to the crosshatched area under the survivor curve divided by 29.5 percent surviving at age 30. The probable life at any age is developed by adding the age and remaining life. If the probable life of the property is calculated for each year of age, the probable life curve shown in the chart can be developed. The frequency curve presents the number of units retired in each age interval. It is derived by obtaining the differences between the amount of property surviving at the beginning and at the end of each interval.

This study has incorporated the use of Iowa curves developed from a retirement rate analysis of historical retirement history. A discussion of the concepts of survivor curves and of the development of survivor curves using the retirement rate method is presented below.

Iowa Type Curves

The range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized survivor curves known as the Iowa type curves. There are four families in the Iowa system, labeled in accordance with the location of the modes of the retirements (or the portion of the frequency curve with the highest level of retirements) in relationship to the average life and the relative height of the modes. The left moded curves, presented in Figure 2, are those in which the greatest frequency of retirement occurs to the left of, or prior to, average service life. The symmetrical moded curves, presented in Figure 3, are those in which the greatest frequency of retirement occurs at average service life. The right moded curves, presented in Figure 4, are those in which the greatest frequency occurs to the right of, or after, average service life. The origin moded curves, presented in Figure 5, are those in which the greatest frequency of retirement occurs at the origin, or immediately after age zero. The letter designation of each family of curves (L, S, R or O) represents the location of the mode of the associated frequency curve with respect to the average service life. The numbers represent the relative heights of the modes of the frequency curves within each family. A higher number designates a higher mode curve.

The Iowa curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observation and classification of the ages at which industrial property had been retired. A report of the study which resulted in the classification of property survivor characteristics into 18 type curves, which constitute three of the four families, was published in 1935 in the form of the Experiment Station's Bulletin 125.

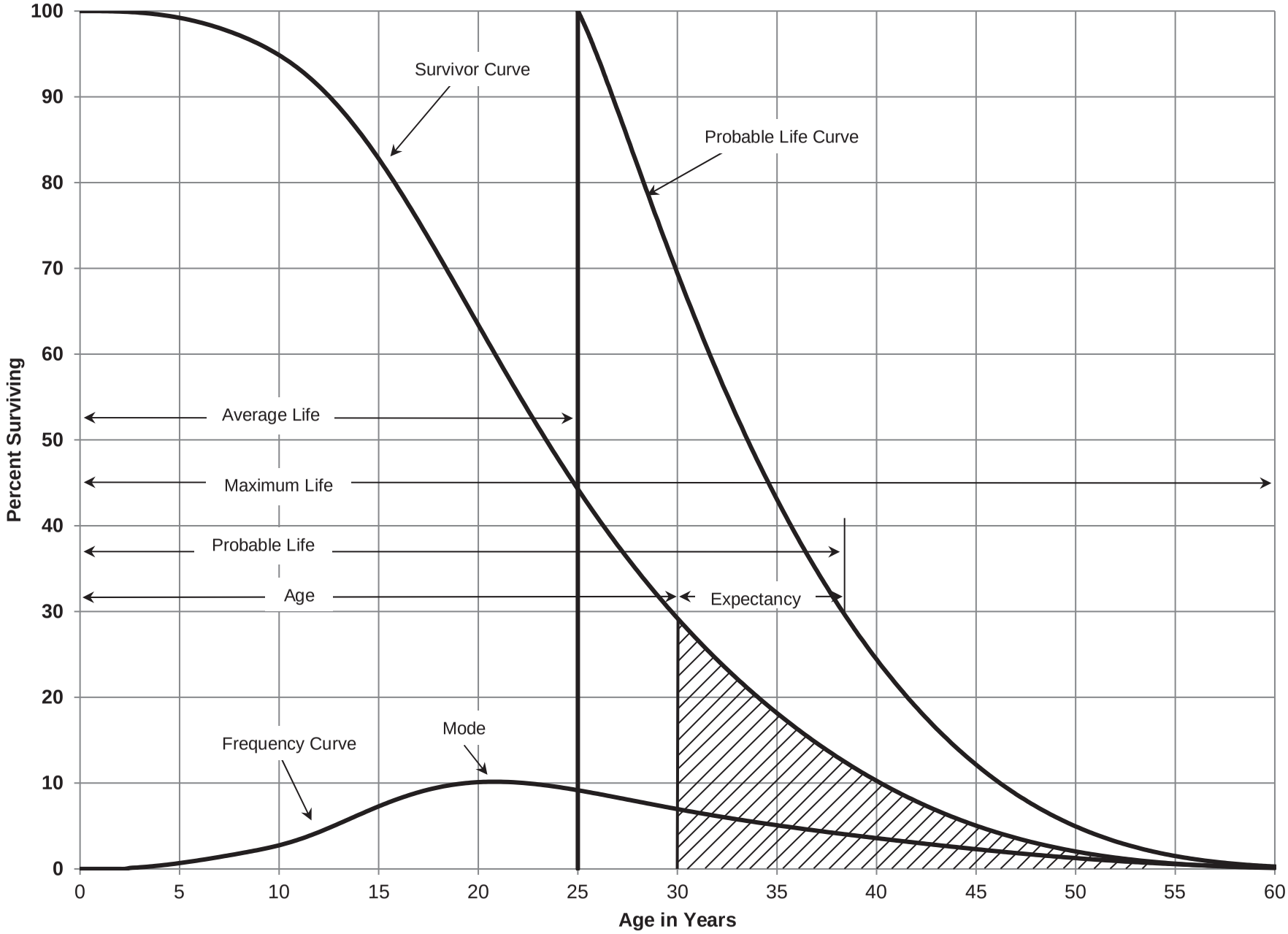


FIGURE 1. TYPICAL SURVIVOR CURVE AND DERIVED CURVES

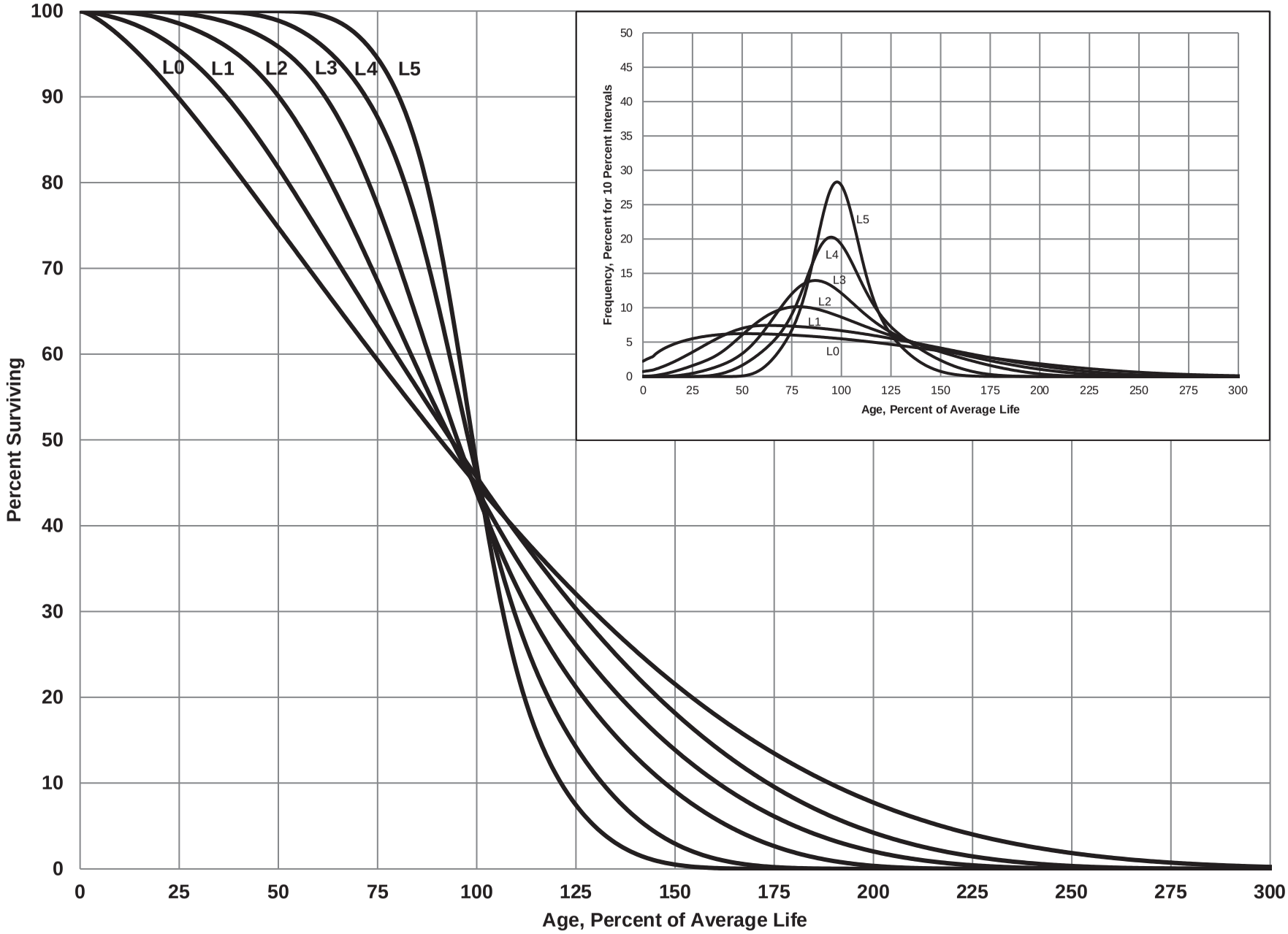


FIGURE 2. LEFT MODAL OR "L" IOWA TYPE SURVIVOR CURVES

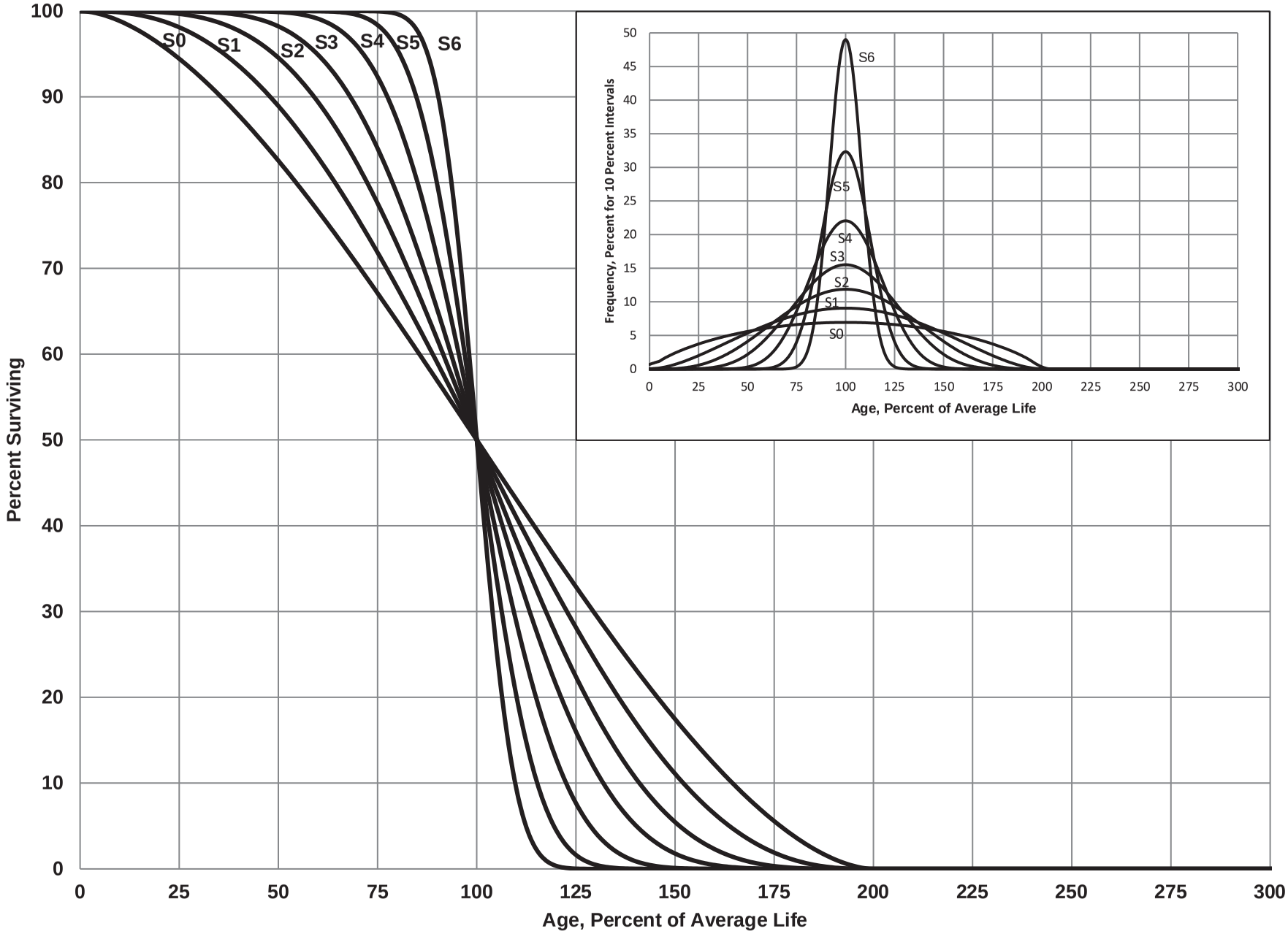


FIGURE 3. SYMMETRICAL OR "S" IOWA TYPE SURVIVOR CURVES

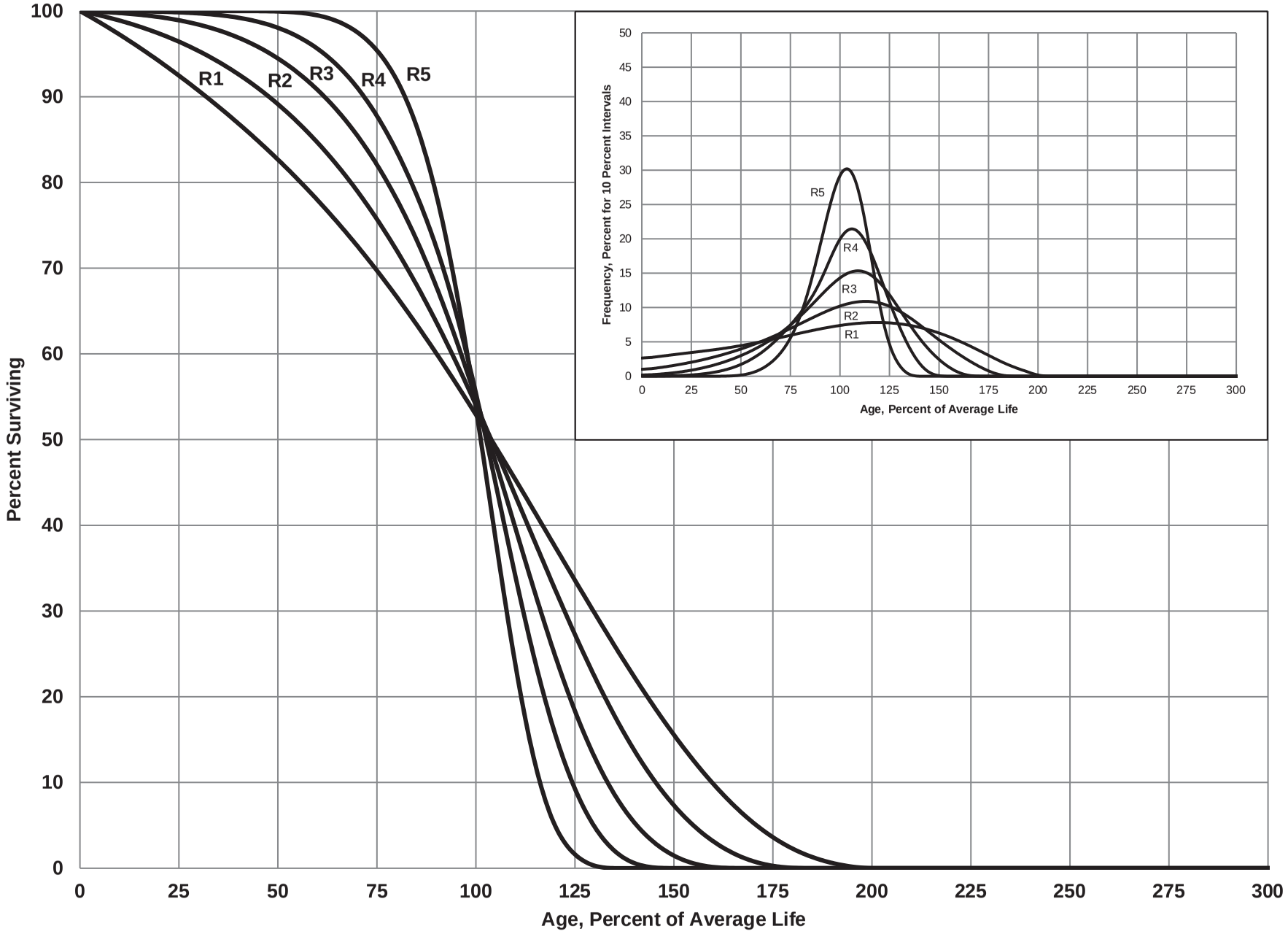


FIGURE 4. RIGHT MODAL OR "R" IOWA TYPE SURVIVOR CURVES

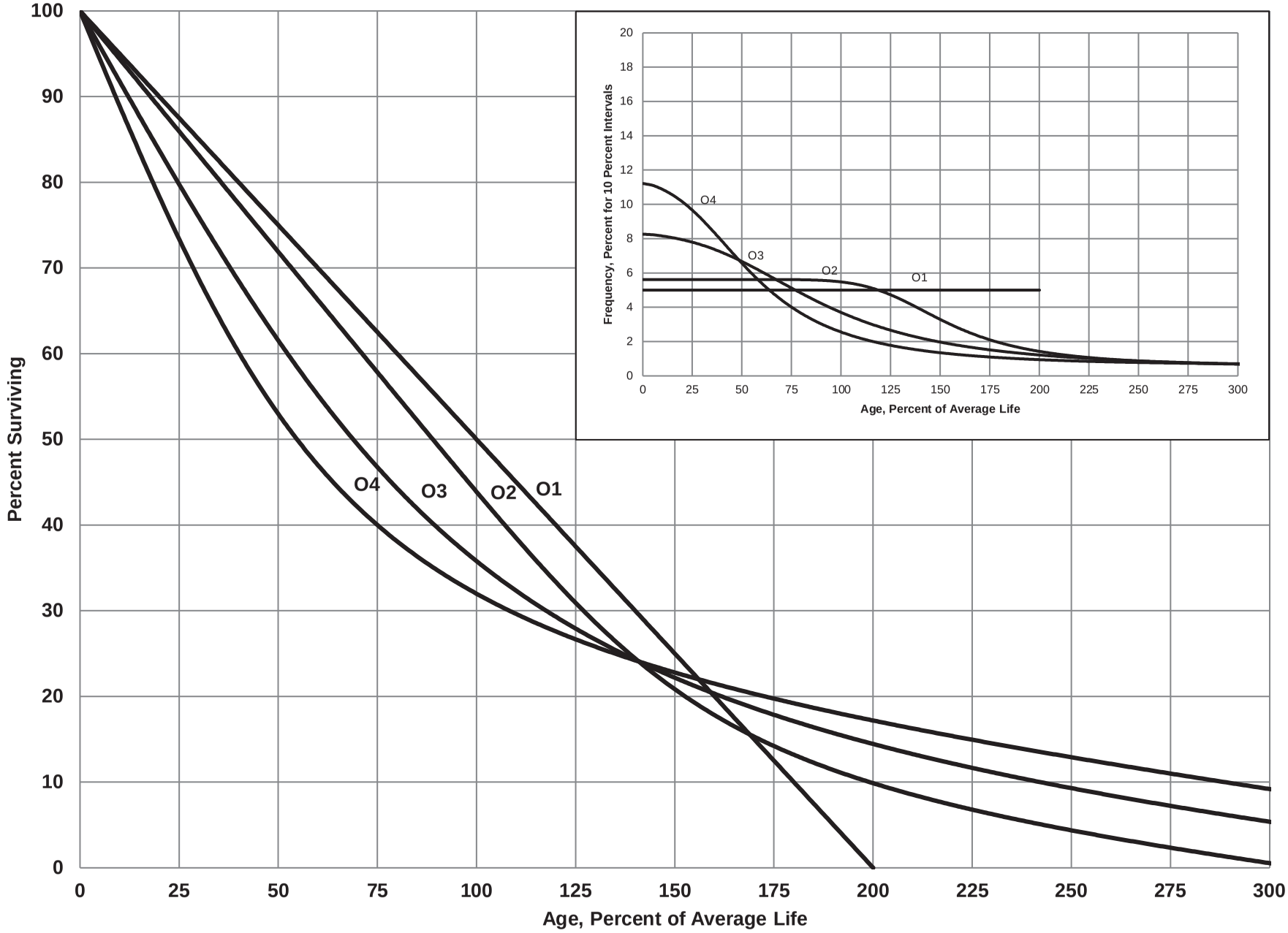


FIGURE 5. ORIGIN MODAL OR "O" IOWA TYPE SURVIVOR CURVES

These curve types have also been presented in subsequent Experiment Station bulletins and in the text, "Engineering Valuation and Depreciation."[1] In 1957, Frank V. B. Couch, Jr., an Iowa State College graduate student, submitted a thesis presenting his development of the fourth family consisting of the four O type survivor curves.

Retirement Rate Method of Analysis

The retirement rate method is an actuarial method of deriving survivor curves using the average rates at which property of each age group is retired. The method relates to property groups for which aged accounting experience is available and is the method used to develop the original stub survivor curves in this study. The method (also known as the annual rate method) is illustrated through the use of an example in the following text and is also explained in several publications including "Statistical Analyses of Industrial Property Retirements,"[2] "Engineering Valuation and Depreciation,"[3] and "Depreciation Systems."[4]

The average rate of retirement used in the calculation of the percent surviving for the survivor curve (life table) requires two sets of data: first, the property retired during a period of observation, identified by the property's age at retirement; and second, the property exposed to retirement at the beginning of the age intervals during the same period. The period of observation is referred to as the experience band. The band of years which represent the installation dates of the property exposed to retirement during the experience band is referred to as the placement band. An example of the calculations used in the development of a life table follows. The example includes schedules of annual aged property transactions, a schedule of plant exposed to retirement, a life table and illustrations of smoothing the stub survivor curve.

---

[1]Marston, Anson, Robley Winfrey and Jean C. Hempstead. Engineering Valuation and Depreciation, 2nd Edition. New York, McGraw-Hill Book Company. 1953.

[2]Winfrey, Robley, Statistical Analyses of Industrial Property Retirements. Iowa State College, Engineering Experiment Station, Bulletin 125. 1935.

[3]Marston, Anson, Robley Winfrey, and Jean C. Hempstead, Supra Note 1.

[4]Wolf, Frank K. and W. Chester Fitch. Depreciation Systems. Iowa State University Press. 1994.

Schedules of Annual Transactions in Plant Records

The property group used to illustrate the retirement rate method is observed for the experience band 2013-2022 for which there were placements during the years 2008-2022. In order to illustrate the summation of the aged data by age interval, the data were compiled in the manner presented in Schedules 1 and 2 on pages II-11 and II-12. In Schedule 1, the year of installation (year placed) and the year of retirement are shown. The age interval during which a retirement occurred is determined from this information. In the example which follows, $10,000 of the dollars invested in 2008 were retired in 2013. The $10,000 retirement occurred during the age interval between 4½ and 5½ years on the basis that approximately one-half of the amount of property was installed prior to and subsequent to July 1 of each year. That is, on the average, property installed during a year is placed in service at the midpoint of the year for the purpose of the analysis. All retirements also are stated as occurring at the midpoint of a one-year age interval of time, except the first age interval which encompasses only one-half year.

The total retirements occurring in each age interval in a band are determined by summing the amounts for each transaction year-installation year combination for that age interval. For example, the total of $143,000 retired for age interval 4½-5½ is the sum of the retirements entered on Schedule 1 immediately above the stair step line drawn on the table beginning with the 2013 retirements of 2008 installations and ending with the 2022 retirements of the 2017 installations. Thus, the total amount of 143 for age interval 4½-5½ equals the sum of:

10 + 12 + 13 + 11 + 13 + 13 + 15 + 17 + 19 + 20.

SCHEDULE 1. RETIREMENTS FOR EACH YEAR 2013-2022
SUMMARIZED BY AGE INTERVAL

Experience Band 2013-2022

Placement Band 2008-2022

Year Placed	Retirements, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2008	10	11	12	13	14	16	23	24	25	26	26	13½-14½
2009	11	12	13	15	16	18	20	21	22	19	44	12½-13½
2010	11	12	13	14	16	17	19	21	22	18	64	11½-12½
2011	8	9	10	11	11	13	14	15	16	17	83	10½-11½
2012	9	10	11	12	13	14	16	17	19	20	93	9½-10½
2013	4	9	10	11	12	13	14	15	16	20	105	8½-9½
2014		5	11	12	13	14	15	16	18	20	113	7½-8½
2015			6	12	13	15	16	17	19	19	124	6½-7½
2016				6	13	15	16	17	19	19	131	5½-6½
2017					7	14	16	17	19	20	143	4½-5½
2018						8	18	20	22	23	146	3½-4½
2019							9	20	22	25	150	2½-3½
2020								11	23	25	151	1½-2½
2021									11	24	153	½-1½
2022										13	80	0-½
Total	53	68	86	106	128	157	196	231	273	308	1,606	

SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2013-2022
SUMMARIZED BY AGE INTERVAL

Experience Band 2013-2022 Placement Band 2008-2022

Year Placed	Acquisitions, Transfers and Sales, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2008	-	-	-	-	-	-	60[a]	-	-	-	-	13½-14½
2009	-	-	-	-	-	-	-	-	-	-	-	12½-13½
2010	-	-	-	-	-	-	-	-	-	-	-	11½-12½
2011	-	-	-	-	-	-	-	(5)[b]	-	-	60	10½-11½
2012	-	-	-	-	-	-	-	6[a]	-	-	-	9½-10½
2013	-	-	-	-	-	-	-	-	-	-	(5)	8½-9½
2014		-	-	-	-	-	-	-	-	-	6	7½-8½
2015			-	-	-	-	-	-	-	-	-	6½-7½
2016				-	-	-	-	(12)[b]	-	-	-	5½-6½
2017					-	-	-	-	22[a]	-	-	4½-5½
2018						-	-	(19)[b]	-	-	10	3½-4½
2019							-	-	-	-	-	2½-3½
2020								-	-	(102)[c]	(121)	1½-2½
2021									-	-	-	½-1½
2022											-	0-½
Total	-	-	-	-	-	-	60	(30)	22	(102)	(50)	

[a] Transfer Affecting Exposures at Beginning of Year

[b] Transfer Affecting Exposures at End of Year

[c] Sale with Continued Use

Parentheses Denote Credit Amount.

In Schedule 2, other transactions which affect the group are recorded in a similar manner. The entries illustrated include transfers and sales. The entries which are credits to the plant account are shown in parentheses. The items recorded on this schedule are not totaled with the retirements, but are used in developing the exposures at the beginning of each age interval.

Schedule of Plant Exposed to Retirement

The development of the amount of plant exposed to retirement at the beginning of each age interval is illustrated in Schedule 3 on page II-14. The surviving plant at the beginning of each year from 2013 through 2022 is recorded by year in the portion of the table headed "Annual Survivors at the Beginning of the Year." The last amount entered in each column is the amount of new plant added to the group during the year. The amounts entered in Schedule 3 for each successive year following the beginning balance or addition are obtained by adding or subtracting the net entries shown on Schedules 1 and 2. For the purpose of determining the plant exposed to retirement, transfers-in are considered as being exposed to retirement in this group at the beginning of the year in which they occurred, and the sales and transfers-out are considered to be removed from the plant exposed to retirement at the beginning of the following year. Thus, the amounts of plant shown at the beginning of each year are the amounts of plant from each placement year considered to be exposed to retirement at the beginning of each successive transaction year. For example, the exposures for the installation year 2018 are calculated in the following manner:

Exposures at age 0	= amount of addition	= $750,000
Exposures at age ½	= $750,000 - $ 8,000	= $742,000
Exposures at age 1½	= $742,000 - $18,000	= $724,000
Exposures at age 2½	= $724,000 - $20,000 - $19,000	= $685,000
Exposures at age 3½	= $685,000 - $22,000	= $663,000

SCHEDULE 3. PLANT EXPOSED TO RETIREMENT
JANUARY 1 OF EACH YEAR 2013-2022
SUMMARIZED BY AGE INTERVAL

Experience Band 2013-2022 Placement Band 2008-2022

Year Placed	Exposures, Thousands of Dollars Annual Survivors at the Beginning of the Year 2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total at Beginning of Age Interval	Age Interval
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2008	255	245	234	222	209	195	239	216	192	167	167	13½-14½
2009	279	268	256	243	228	212	194	174	153	131	323	12½-13½
2010	307	296	284	271	257	241	224	205	184	162	531	11½-12½
2011	338	330	321	311	300	289	276	262	242	226	823	10½-11½
2012	376	367	357	346	334	321	307	297	280	261	1,097	9½-10½
2013	420[a]	416	407	397	386	374	361	347	332	316	1,503	8½-9½
2014		460[a]	455	444	432	419	405	390	374	356	1,952	7½-8½
2015			510[a]	504	492	479	464	448	431	412	2,463	6½-7½
2016				580[a]	574	561	546	530	501	482	3,057	5½-6½
2017					660[a]	653	639	623	628	609	3,789	4½-5½
2018						750[a]	742	724	685	663	4,332	3½-4½
2019							850[a]	841	821	799	4,955	2½-3½
2020								960[a]	949	926	5,719	1½-2½
2021									1,080[a]	1,069	6,579	½-1½
2022										1,220[a]	7,490	0-½
Total	1,975	2,382	2,824	3,318	3,872	4,494	5,247	6,017	6,852	7,799	44,780	

[a]Additions during the year

For the entire experience band 2013-2022, the total exposures at the beginning of an age interval are obtained by summing diagonally in a manner similar to the summing of the retirements during an age interval (Schedule 1). For example, the figure of 3,789, shown as the total exposures at the beginning of age interval 4½-5½, is obtained by summing:

255 + 268 + 284 + 311 + 334 + 374 + 405 + 448 + 501 + 609.

Original Life Table

The original life table, illustrated in Schedule 4 on page II-16, is developed from the totals shown on the schedules of retirements and exposures, Schedules 1 and 3, respectively. The exposures at the beginning of the age interval are obtained from the corresponding age interval of the exposure schedule, and the retirements during the age interval are obtained from the corresponding age interval of the retirement schedule. The retirement ratio is the result of dividing the retirements during the age interval by the exposures at the beginning of the age interval. The percent surviving at the beginning of each age interval is derived from survivor ratios, each of which equals one minus the retirement ratio. The percent surviving is developed by starting with 100% at age zero and successively multiplying the percent surviving at the beginning of each interval by the survivor ratio, i.e., one minus the retirement ratio for that age interval. The calculations necessary to determine the percent surviving at age 5½ are as follows:

Percent surviving at age 4½	=	88.15				
Exposures at age 4½	=	3,789,000				
Retirements from age 4½ to 5½	=	143,000				
Retirement Ratio	=	143,000	÷	3,789,000	=	0.0377
Survivor Ratio	=	1.000	-	0.0377	=	0.9623
Percent surviving at age 5½	=	(88.15)	x	(0.9623)	=	84.83

The totals of the exposures and retirements (columns 2 and 3) are shown for the purpose of checking with the respective totals in Schedules 1 and 3. The ratio of the total retirements to the total exposures, other than for each age interval, is meaningless.

SCHEDULE 4. ORIGINAL LIFE TABLE
CALCULATED BY THE RETIREMENT RATE METHOD

Experience Band 2013-2022 Placement Band 2008-2022

(Exposure and Retirement Amounts are in Thousands of Dollars)

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	Percent Surviving at Beginning of Age Interval
(1)	(2)	(3)	(4)	(5)	(6)
0.0	7,490	80	0.0107	0.9893	100.00
0.5	6,579	153	0.0233	0.9767	98.93
1.5	5,719	151	0.0264	0.9736	96.62
2.5	4,955	150	0.0303	0.9697	94.07
3.5	4,332	146	0.0337	0.9663	91.22
4.5	3,789	143	0.0377	0.9623	88.15
5.5	3,057	131	0.0429	0.9571	84.83
6.5	2,463	124	0.0503	0.9497	81.19
7.5	1,952	113	0.0579	0.9421	77.11
8.5	1,503	105	0.0699	0.9301	72.65
9.5	1,097	93	0.0848	0.9152	67.57
10.5	823	83	0.1009	0.8991	61.84
11.5	531	64	0.1205	0.8795	55.60
12.5	323	44	0.1362	0.8638	48.90
13.5	167	26	0.1557	0.8443	42.24
					35.66
Total	44,780	1,606			

Column 2 from Schedule 3, Column 12, Plant Exposed to Retirement.
Column 3 from Schedule 1, Column 12, Retirements for Each Year.
Column 4 = Column 3 Divided by Column 2.
Column 5 = 1.0000 Minus Column 4.
Column 6 = Column 5 Multiplied by Column 6 as of the Preceding Age Interval.

The original survivor curve is plotted from the original life table (column 6, Schedule 4). When the curve terminates at a percent surviving greater than zero, it is called a stub survivor curve. Survivor curves developed from retirement rate studies generally are stub curves.

Smoothing the Original Survivor Curve

The smoothing of the original survivor curve eliminates any irregularities and serves as the basis for the preliminary extrapolation to zero percent surviving of the original stub curve. Even if the original survivor curve is complete from 100% to zero percent, it is desirable to eliminate any irregularities, as there is still an extrapolation for the vintages which have not yet lived to the age at which the curve reaches zero percent. In this study, the smoothing of the original curve with established type curves was used to eliminate irregularities in the original curve.

The Iowa type curves are used in this study to smooth those original stub curves which are expressed as percents surviving at ages in years. Each original survivor curve was compared to the Iowa curves using visual and mathematical matching in order to determine the better fitting smooth curves. In Figures 6, 7, and 8, the original curve developed in Schedule 4 is compared with the L, S, and R Iowa type curves which most nearly fit the original survivor curve. In Figure 6, the L1 curve with an average life between 12 and 13 years appears to be the best fit. In Figure 7, the S0 type curve with a 12-year average life appears to be the best fit and appears to be better than the L1 fitting. In Figure 8, the R1 type curve with a 12-year average life appears to be the best fit and appears to be better than either the L1 or the S0.

In Figure 9, the three fittings, 12-L1, 12-S0 and 12-R1 are drawn for comparison purposes. It is probable that the 12-R1 Iowa curve would be selected as the most representative of the plotted survivor characteristics of the group.

FIGURE 6. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

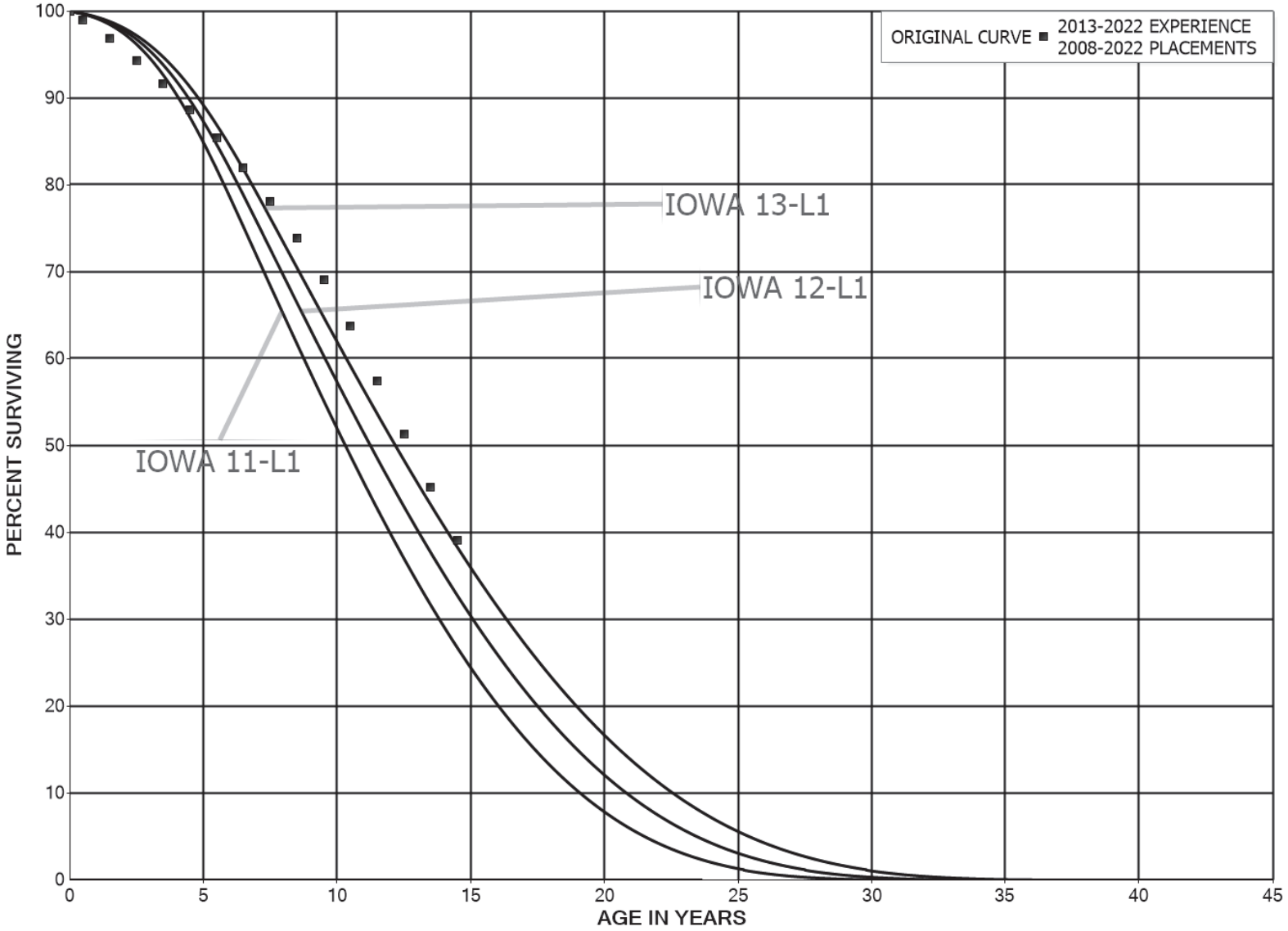


FIGURE 7. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN S0 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

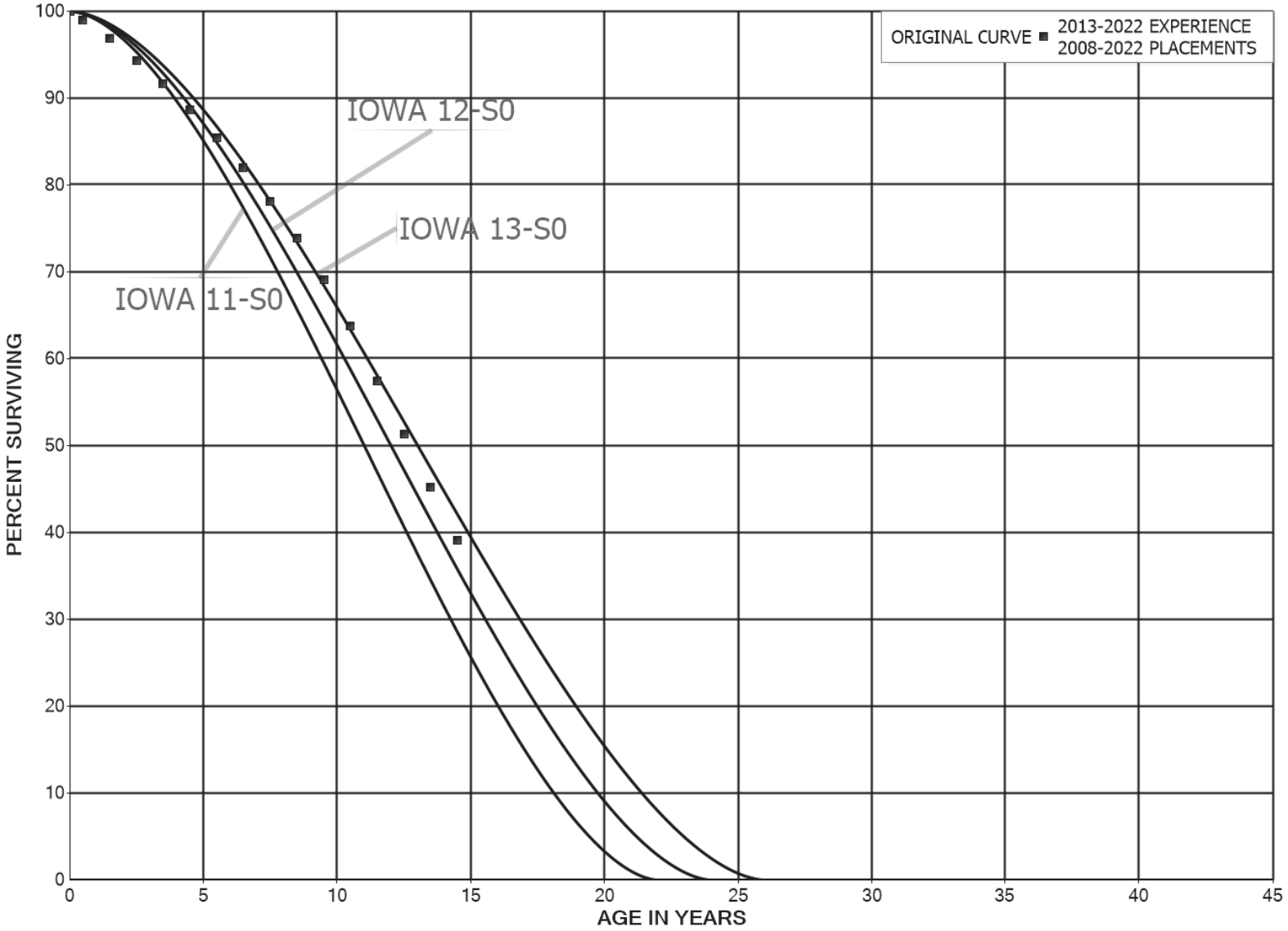


FIGURE 8. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN R1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

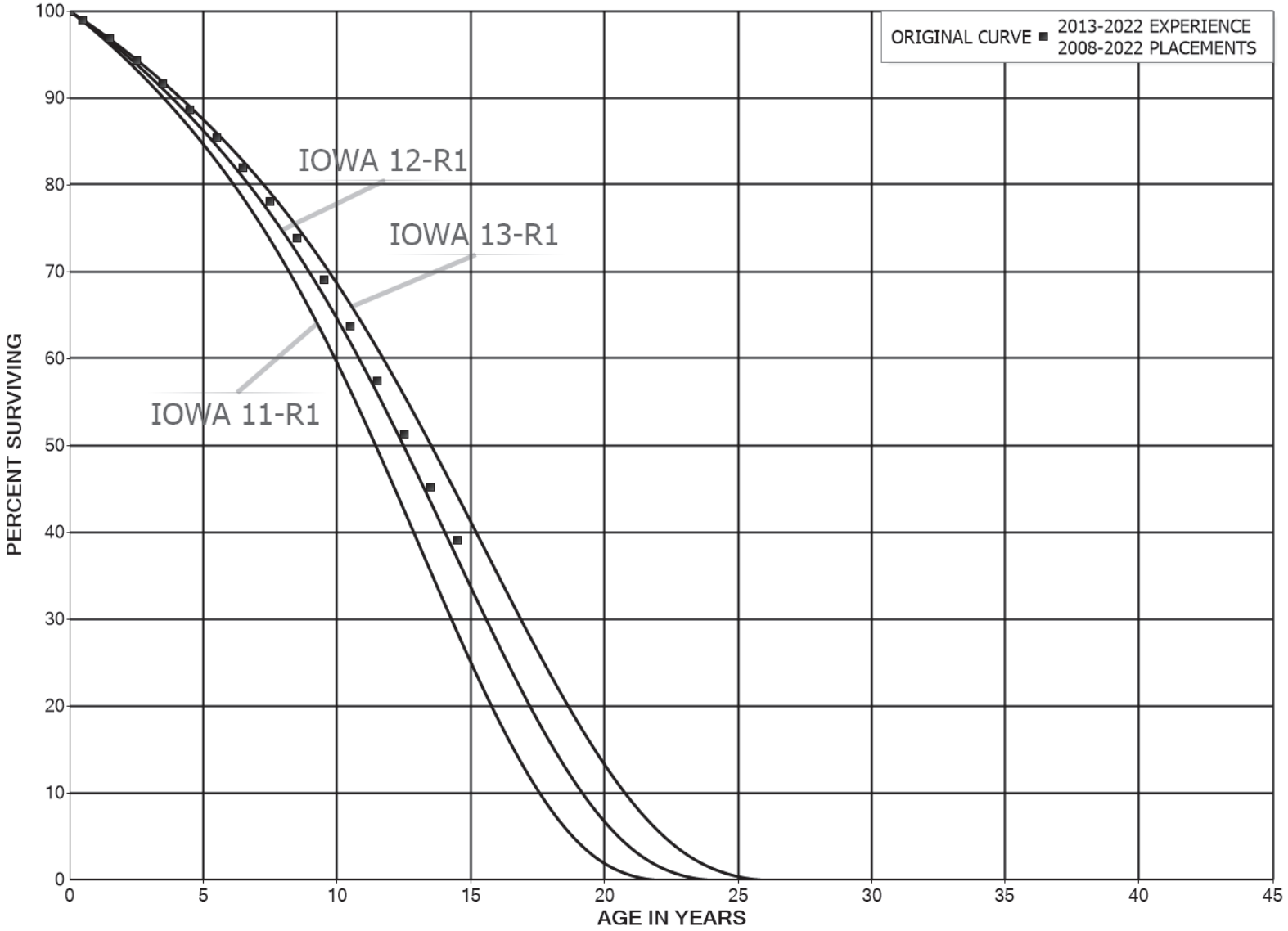
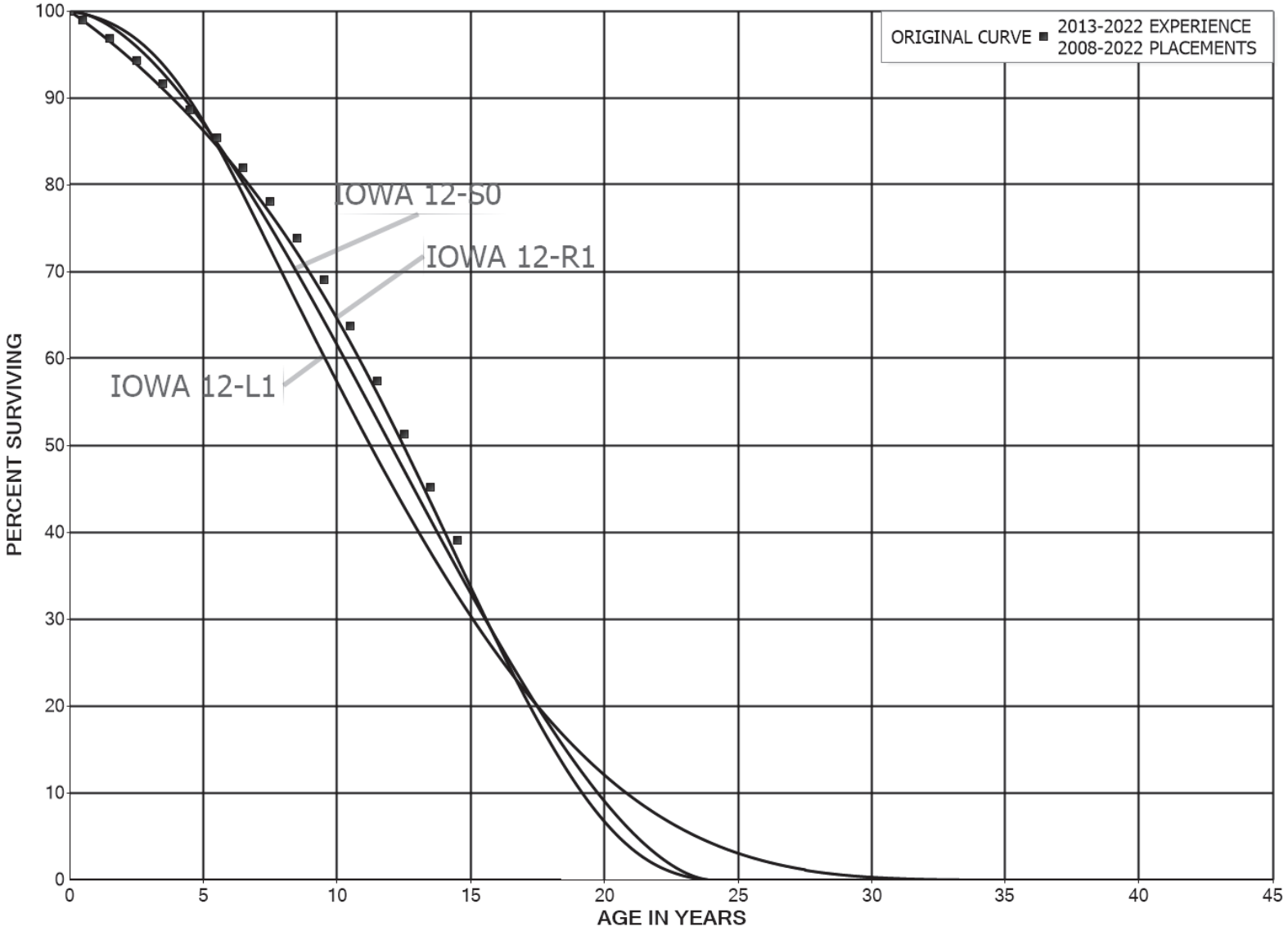


FIGURE 9. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1, S0 AND R1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES



PART III. SERVICE LIFE CONSIDERATIONS

PART III. SERVICE LIFE CONSIDERATIONS

Field Trips

In order to be familiar with the operation of the Company and observe representative portions of the plant, field trips have been conducted periodically. A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirements are obtained during these field trips. This knowledge and information were incorporated in the interpretation and extrapolation of the statistical analyses.

During the extensive period of years our firm has been conducting depreciation studies for the Company, the field trips have resulted in the review of operations of all the Company's divisions numerous times. The following is a list of the locations visited during the past and recent trips.

August 9, 2023

Kinter Compression Station
Pratt Drive Meter Set and Regulator Station
Ricey Alley Regulator Station
Hobo Camp Regulator Station

May 8, 2018

Clever Road City Gate Station
RA 140 District Regulator Station
RA 64 District Regulator Station
Pruitt Regulator Station
Hays Regulator Station
Michelina Regulator Station
Whitaker Regulator Station

May 15-16, 2013

Dice Compressor Station
Chalfont Regulating Station
Jones Lane/LaSalle Meter Station
Newtown Regulator Station (LS1183)
Chestnut Regulator Station (LS1718)
Pitt Street Shop
Westinghouse Suite 303 Meter Station

August 14, 2008

Rager Mountain Compressor Station
Laurel Ridge Compressor Station
Greensburg Service Center
Armbrust Compressor Station
Pardos Excess Station
Wilkinsburg Service Center - Pitt Street
Pitt Street LS Station

August 26-27, 2003

Altoona Service Center
Lynndale & 49th Street Regulator Station (LS2765)
Oak Ave. and 60th Street Regulator Station (LS1723)
Shinkles Mill Road Regulator Station (LS1194)
Stevens Border Station (XS217)
Rager Mountain Compressor Station
Laurel Ridge Compressor Station
Johnstown Service Center
Greensburg Service Center
Gibsonia Service Center
Wilkinsburg Service Center - Pitt Street
Allenby Ave. and Braddock Ave. Regulator Station (LS1475)
Chalfont Border Station

July 2, 1996

Dice Compressor Station
McKeesport Station
Chalfont Regulating Station
Beacon Hill LS Station
Forest Hills Service Center

October 17-18, 1990

Altoona Division Headquarters
Regulating Station LS-1723 at 60th Street and Oak Avenue
Johnstown Division Headquarters
Regulating Station LS-2568
Rager Mountain Compressor Station
Laurel Ridge Compressor Station
Regulating Station XS-292
Central Division Headquarters
Southern Division Headquarters
Wall Compressor Station
Cooper Central Warehouse
Gibson Compressor Station
Pittsburgh Division Headquarters

October 1-2, 1985

Hopewell District Office
Blackhawk Transmission Regulator Station
Western Division Headquarters
Pittsburgh Division Headquarters
Northern Division Headquarters
Leechburg Shop
Roaring Run Compressor Station
Girty Compressor Station
Indiana District Office
Valley Compressor Station
Baum Compressor Station
Truittsburg Compressor Station

Judgment

The survivor curve estimates were based on judgment which considered a number of factors. The primary factors were the statistical analyses of data; current Company policies and outlook as determined during the field trips and other conversations with management; and the survivor curve estimates from previous studies of this company and other gas companies.

For many of the mass plant accounts and subaccounts for which survivor curves were estimated, the statistical analyses resulted in good to excellent indications of the survivor patterns experienced. Generally, the information external to the statistics led to little or no significant departure from the indicated survivor curves for the following accounts:

Account No.	Account Name
325.04	Rights-of-Way
327.00	Field Compressor Station Structures
328.00	Field Measuring and Regulating Station Structures
330.00	Producing Gas Wells - Well Construction
331.00	Producing Gas Wells - Well Equipment
332.00	Field Lines
333.00	Field Compressor Station Equipment
334.00	Field Measuring and Regulating Station Equipment
337.00	Other Equipment
351.00	Structures and Improvements
352.02	Wells - Equipment

353.01	Lines
354.01	Compressor Station Equipment
366.02	Structures and Improvements - Measuring and Regulating
366.03	Structures and Improvements - Other
367.00	Mains
369.00	Measuring and Regulating Station Equipment
371.00	Other Equipment
375.01	Structures and Improvements - Measuring and Regulating - Other - Minor
375.02	Structures and Improvements - Measuring and Regulating - Other - Major
376.00	Mains
378.00	Measuring and Regulating Station Equipment - General
380.00	Services
381.00	Meters
382.00	Meter Installations
385.00	Industrial Measuring and Regulating Station Equipment
387.00	Other Equipment
392.01	Transportation Equipment - Automobiles
392.02	Transportation Equipment - Trucks
392.03	Transportation Equipment - Trailers
396.00	Power Operated Equipment

Account 376.01, Mains – Low Pressure, is used to illustrate the manner in which the study was conducted for the groups in the preceding list. Account 376.01 represents 27 percent of the total depreciable plant. Aged plant accounting data have been compiled for the years 1938 through 2022. These data have been coded in the course of the Company's normal record keeping according to account or property group, type of transaction, year in which the transaction took place, and year in which the gas plant was placed in service. The retirements, and other plant transactions, and plant additions were analyzed by the retirement rate method.

The survivor curve estimate for the periods 1938 through 2022 was selected to analyze the rates of retirements of low pressure distribution mains. The current indication is that an Iowa 73-S0.5 survivor curve is being experienced, based on the statistical analysis for the overall period, 1939-2022. Discussions with operating and managing personnel as well as field observations related to reasons for retirement indicated that little change over the last few years or in the next few years are

expected. Thus, a slight change to a shorter average service life and survivor curve from the last study.

For large structures in Account 375, a life span was estimated for each major structure. Each life span was estimated on the basis of type of construction, use, age, condition, and management's plans within the foreseeable future. An interim survivor curve was estimated for the major structures, based primarily upon the statistical analysis of the interim retirements that have been experienced by the Company's large buildings. The estimates for land, leaseholds, and rights-of-way represented by Accounts 350.11, 350.21, 352.11, 352.12, 365.02, 374.02, and 389.02 were based on a review of the ages and magnitude of experienced retirements and a consideration of the survivor curves of the physical plant with which the rights are associated. Generally, the rates of retirement have been small during the early portion of the life cycles and are of use only in defining the foreportion of the estimated survivor curves. The maximum lives of the estimated curves generally coincide with the maximum lives of the survivor curves determined for the associated physical plant.

The survivor curve for Account 351 was based on statistical analyses and a knowledge of the type of structures in the account. The structures generally are small to medium size metal buildings of the nature expected to experience average service lives approximating 40 to 60 years. The stub survivor curves for the 1951-2022 experience band for Account 351 is reasonably well fit by an R2 Iowa type curve with a 60-year average service life which provides for significant retirements during ages 35 through 65.

The survivor curve estimate for Account 355, Measuring and Regulating Station Equipment, is based on statistical analyses and the nature of the equipment in the account. The range of service lives used by others for this account is 40 to 55 years. The estimates for the Company's measuring and

regulating equipment used in other functions range from 20 to 50 years with low mode survivor curves. The 60-R2.5 is a reasonable interpretation of the available experience, however, longer than the upper end of the range of lives expected for this equipment. The survivor curve estimates for the remaining accounts were based on judgment incorporating the statistical analyses, the nature of the equipment and the typical range of lives used in the industry.

PART IV. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

PART IV. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

Group Depreciation Procedures

A group procedure for depreciation is appropriate when considering more than a single item of property. Normally, the items within a group do not have identical service lives but have lives that are dispersed over a range of time. There are two primary group procedures, namely, average service life and equal life group.

In the average service life procedure, the rate of annual depreciation is based on the average life or average remaining life of the group, and this rate is applied to the surviving balances of the group's cost. A characteristic of this procedure is that the cost of plant retired prior to average life is not fully recouped at the time of retirement, whereas the cost of plant retired subsequent to average life is more than fully recouped. Over the entire life cycle, the portion of cost not recouped prior to average life is balanced by the cost recouped subsequent to average life.

In the equal life group procedure, the property group is subdivided according to service life. That is, each equal life group includes that portion of the property which experiences the life of that specific group. The relative size of each equal life group is determined from the property's life dispersion curve. This procedure eliminates the need to base depreciation on average lives, inasmuch as each group is equivalent to a unit having a single life. The full costs of short-lived units are accrued during their lives, leaving no deferral of accruals required to be added to the annual costs associated with long-lived units. The calculated depreciation for the property group is the summation of the calculated depreciation based on the service life of each equal life group.

Remaining Life Annual Accruals

For the purpose of calculating remaining life accrual rates as of August 31, 2024, the estimated book depreciation reserve for each plant account is allocated among vintages in proportion to the calculated accrued depreciation for the account. Explanations of remaining life accruals and calculated accrued depreciation for the vintages calculated by the average service life procedure and for the vintages calculated by the equal life group procedure follow. The detailed calculations are set forth in the Results of Study section of the report.

Average Service Life Procedure

In the average service life procedure, the remaining life annual accrual for each vintage is determined by dividing future book accruals (original cost less book reserve) by the average remaining life of the vintage. The average remaining life is a directly weighted average derived from the estimated future survivor curve in accordance with the average service life procedure.

The calculated accrued depreciation for each depreciable property group represents that portion of the depreciable cost of the group which would not be allocated to expense through future whole life depreciation accruals if current forecasts of life characteristics are used as the basis for such accruals. The accrued depreciation calculation consists of applying an appropriate ratio to the surviving original cost of each vintage of each account, based upon the attained age and service life. The straight line accrued depreciation ratios are calculated as follows for the average service life procedure:

$$Ratio = 1 - \frac{Average\ Remaining\ Life\ Expectancy}{Average\ Service\ Life}.$$

Equal Life Group Procedure

In the equal life group procedure, the remaining life annual accrual for each vintage is determined by dividing future book accruals (original cost less book reserve) by the composite remaining life for the surviving original cost of that vintage. The composite remaining life is derived by compositing the individual equal life group remaining lives in accordance with the following equation:

$$\text{Composite Remaining Life} = \frac{\left(\frac{\text{Book Cost}}{\text{Life}} \times \text{Remaining Life}\right)}{\frac{\text{Book Cost}}{\text{Life}}}$$

The book costs and lives of the several equal life groups which are summed in the foregoing equation are defined by the estimated future survivor curve.

Inasmuch as book cost divided by life equals the whole life annual accrual, the foregoing equation reduces to the following form:

$$\text{Composite Remaining LIfe} = \frac{\sum \text{Whole Life Future Accruals}}{\sum \text{Whole Life Annual Accruals}}$$

or

$$\text{Composite Remaining Life} = \frac{\sum \text{Book Cost} - \text{Calc. Reserve}}{\sum \text{Whole Life Annual Accrual}}.$$

The annual accrual rate for each account is equal to the sum of the remaining life annual accruals for all vintages divided by the account's total original cost. The account's "composite remaining life" is calculated by dividing the sum of the future book accruals for all vintages by the sum of the remaining life annual accruals for all vintages.

The calculated accrued depreciation in the equal life group procedure also represents that portion of depreciable cost which will not be allocated to expense through

future accruals. However, the calculation is based at the equal life group level rather than the vintage group level and does not require the use of averages. The equal life group accrued depreciation ratio is calculated as follows:

$$Ratio = \frac{Remaining\ Life}{Average\ Service\ Life}.$$

Inasmuch as service life minus remaining life equals age, when averages are not employed, the foregoing equation reduces to:

$$Ratio = \frac{Age}{Service\ Life}.$$

The table on the following page illustrates the procedure for calculating straight line equal life group accrued depreciation, using an Iowa 6-L2.5 Survivor curve and a August 31, 2024 calculation date.

In the table, each equal life group is defined by the age interval shown in columns 1 and 2, which identify the ages at which the first and last retirement of each group occur. The group's designated life, shown in column 3, is the midpoint of the interval. In the calculation, the equal life groups of each vintage are arranged such that the midpoint of each one-year age interval coincides with the calculation date, e.g., August 31, 2024 in this case. This enables the calculation of annual accruals which are centered on, or as of, the same date as the calculation of accrued depreciation.

The retirement during each age interval, shown in column 4, is the size of each equal life group. It is derived from the Iowa 6-L2.5 survivor curve and is the difference between the percents surviving (not shown) at the beginning and end of the age interval.

DETAILED COMPUTATION OF ANNUAL AND ACCRUED FACTORS USING THE EQUAL LIFE GROUP PROCEDURE

INPUT PARAMETERS:
CALCULATION DATE.. 8-31-2024
SURVIVOR CURVE.... 6-L2.5

AGE INTERVAL BEG (1)	END (2)	LIFE (3)	RETIREMENTS DURING INTERVAL (4)	GROUP ANNUAL ACCRUAL (5)=(4)/(3)	YEAR INST (6)	SUMMATION OF ANNUAL ACCRUALS (7)	AVERAGE PERCENT SURVIVING (8)	ANNUAL FACTOR (9)	ACCRUED FACTOR (10)
0.000	0.667	0.333	0.07579	0.07579000000	2024	16.63611148259	83.299209	0.1997	0.0665
0.667	1.667	1.167	1.09358	0.93708654670	2023	19.41179464092	99.377422	0.1953	0.2279
1.667	2.667	2.167	3.64008	1.67977849562	2022	18.10336211976	97.010590	0.1866	0.4044
2.667	3.667	3.167	9.03598	2.85316703505	2021	15.83688935442	90.672557	0.1747	0.5533
3.667	4.667	4.167	16.38954	3.93317494600	2020	12.44371836390	77.959796	0.1596	0.6651
4.667	5.667	5.167	19.68621	3.80998838785	2019	8.57213669697	59.921925	0.1431	0.7394
5.667	6.667	6.167	16.44066	2.66590886979	2018	5.33418806815	41.858495	0.1274	0.7857
6.667	7.667	7.167	11.65307	1.62593414260	2017	3.18826656196	27.811625	0.1146	0.8213
7.667	8.667	8.167	8.31879	1.01858577201	2016	1.86600660465	17.825693	0.1047	0.8551
8.667	9.667	9.167	5.92202	0.64601505400	2015	1.03370619165	10.705288	0.0966	0.8855
9.667	10.667	10.167	3.87772	0.38140257696	2014	0.51999737617	5.805416	0.0896	0.9110
10.667	11.667	11.167	2.21374	0.19823945554	2013	0.23017635992	2.759689	0.0834	0.9313
11.667	12.667	12.167	1.06171	0.08726144489	2012	0.08742590970	1.121966	0.0779	0.9478
12.667	13.667	13.167	0.41876	0.03180375180	2011	0.02789331136	0.381731	0.0731	0.9625
13.667	14.667	14.167	0.13754	0.00970847745	2010	0.00713719673	0.103582	0.0689	0.9761
14.667	15.667	15.167	0.03184	0.00209929452	2009	0.00123331075	0.018891	0.0653	0.9904
15.667	16.667	16.167	0.00295	0.00018247046	2008	0.00009242826	0.001495	0.0618	0.9991
16.667	16.860	16.764	0.00002	0.00000119303	2007	0.00000011572	0.000002	0.0579	1.0000
TOTAL			100.00000						

Each equal life group's whole life annual accrual, shown in column 5, equals the group's size (column 4) divided by its life (column 3), except that for the first age interval, the annual accrual is set equal to the group's size.

Columns 6 through 10 show the derivation of the whole life annual factor and accrued factor for each vintage based on the data developed in the first five columns. The year installed is shown in column 6. For all vintages other than the first year (2024), the summation of annual accruals for each year installed, shown in column 7, is calculated by adding one-half of the group annual accrual (column 5) for that vintage's current age interval plus the group annual accruals for all succeeding age intervals. For example, the figure 19.41179464092 for 2023 equals one-half of 0.93708654670 plus all of the succeeding figures in column 5. Only two-thirds of the annual accrual for the vintage's current age interval group is included in the summation because the equal life group for that interval expires at the midpoint of the current year.

The summation of annual accruals (column 7) for installations during 2024 is calculated on the basis of an in-service date at the midpoint of twelve months, i.e., six months prior to August 31. Inasmuch as the overall calculation is centered on August 31, 2024, the accrual for 2024 installations (during the twelve months) represents only one-half of one year, one-third of the year prior to August 31 plus two thirds year following August 31. For this reason, the first figure in column 7, for vintage 2024, equals the group annual accrual for 2024 plus one-half of the group annual accruals for each of the subsequent years.

The average percent surviving, derived from the Iowa 6-L2.5 survivor curve, is shown in column 8 for each age interval. The annual factor, shown in column 9, is the result of dividing the summation of annual accruals (column 7) by the average percent surviving (column 8).

The accrued depreciation factor, shown in column 10, equals the annual factor multiplied by the age of the group as of August 31, 2024.

CALCULATION OF ANNUAL AND ACCRUED AMORTIZATION

Amortization, as defined in the Uniform System of Accounts, is the gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized. Normally, the distribution of the amount is in equal amounts to each year of the amortization period.

The calculation of annual and accrued amortization requires the selection of an amortization period. The amortization periods used in this report were based on judgment which incorporated a consideration of the period during which the assets will

render most of their service, the amortization periods and service lives used by other utilities, and the service life estimates previously used for the asset under depreciation accounting.

Amortization accounting is appropriate for certain General Plant accounts that represent numerous units of property, but a very small portion of depreciable gas plant in service. The accounts and their amortization periods are as follows:

Account		Amortization Period, Years
391.00,	Office Furniture and Equipment	
	Furniture	20
	Computers	5
	Equipment	15
394.00,	Tools, Shop and Garage Equipment	25
394.01,	Dual Fuel Stations	15
397.00,	Communication Equipment	
	Radio	10
	Telephone	15
	Microwave	18
398.00,	Miscellaneous Equipment	15

For the purpose of calculating annual amortization amounts as of August 31, 2024, the book depreciation reserve for each plant account or subaccount is assigned or allocated to vintages. The book reserve assigned to vintages with an age greater than the amortization period is equal to the vintage's original cost. The remaining book reserve is allocated among vintages with an age less than the amortization period in proportion to the calculated accrued amortization. The calculated accrued amortization is equal to the original cost multiplied by the ratio of the vintage's age to its amortization period. The annual amortization amount is determined by dividing the future amortizations (original cost less allocated book reserve) by the remaining period of amortization for the vintage.

AMORTIZATION OF NET SALVAGE

Experienced salvage is incorporated in the results of the study, as it was reported on the Company's books and records for the period January 1, 2019 through August 31, 2023. The data for the last four months of 2023 are based on estimated experience. Results of the calculations are shown in Table 4.

Net salvage experienced during the five-year period is presented in this manner to determine the amount of negative net salvage to be amortized for book purposes. In developing the amount to be amortized, the data for the accounts which experienced positive net salvage have been netted with those for accounts which experienced negative net salvage.

In order to be consistent with this manner of recognizing salvage, no adjustments for salvage were made to the annual accruals and accrued depreciation calculated for each individual account. There were no exclusions from the 2019 through 2023 net salvage accrual.

PART V. RESULTS OF STUDY

PART V. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

Tables 1 through 4 presented on pages V-4 through V-11 summarize the results of the depreciation study as of August 31, 2024. Table 1 sets forth, by depreciable group, the estimated survivor curve, original cost, book depreciation reserve as of August 31, 2024, future book accruals, calculated annual accrual amount and rate, and composite remaining life for plant in service. Table 2 presents the bringforward of the book reserve to August 31, 2024.. Table 3 sets forth the calculation of the depreciation accruals for the twelve months ended August 31, 2024. Table 4 presents the annual amortization of experienced and estimated net salvage based on the period 2019 through 2023.

DESCRIPTION OF DETAILED TABULATIONS

Supporting statistical data for the estimates of average service lives and survivor curves, the annual depreciation calculations, and gross salvage and cost of removal for the years 2019-2023 are presented in three sections.

The section beginning on page VI-2 sets forth, for each depreciable group analyzed by the retirement rate method, a chart depicting the original and estimated survivor curves followed by a tabular presentation of the original life table(s) plotted on the chart. A cumulative summary, by year installed, for gas plant and the supporting data for the original cost depreciation calculations are presented in the section beginning on page VII-2. The tabulations of experienced and estimated net salvage by year by account for the five-year period, 2019-2023, are presented in the section beginning on page VIII-2.

In the first section, the survivor curves estimated for the depreciable groups are shown as dark smooth curves on the charts. Each smooth survivor curve is denoted by a numeral followed by the type curve designation. The numeral used is the average life derived from the entire curve from 100 percent to zero percent surviving. In cases where only a segment of the estimated curve is used in the depreciation calculation, the numeral used for identification purposes is not a designation of the average life of the group. The titles of the charts indicate the group, the symbol used to plot the points of the original life table, and the experience and placement bands of the life tables which were plotted. The experience band indicates the range of years for which the retirements were used to develop the stub survivor curve. The placements indicate, for the related experience band, the range of years of installations which appear in the experience.

The tables of the calculated annual depreciation related to original cost are presented in the second section and indicate the estimated average survivor curves used in the calculations. The tables set forth, for each installation year, the original cost, calculated accrued depreciation, allocated book reserve, future book accruals, remaining life expectancy and the calculated annual accrual.

Detailed tabulations setting forth the cost of removal and salvage amounts, by plant account for each year, are presented beginning on page VIII-2. The total salvage and removal costs, by year, were used to calculate the five-year net salvage amortization presented in Table 4 on page V-11.

PEOPLES NATURAL GAS COMPANY LLC

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF AUGUST 31, 2024

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF AUGUST 31, 2024	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)=(5)/(6)
	DEPRECIABLE GAS PLANT							
	INTANGIBLE PLANT							
303.00	MISCELLANEOUS INTANGIBLE PLANT							
	CIAC	40-SQ	5,169,725.88	314,499	4,855,227	158,761	3.07	30.6
	OTHER	5-SQ	34,140,318.90	15,443,556	18,696,763	7,204,581	21.10	2.6
	MAJOR	15-SQ	26,465,029.21	5,653,619	20,811,410	2,206,400	8.34	9.4
	SAP	10-SQ	14,276,633.27	10,350,841	3,925,792	454,352	3.18	8.6
	TOTAL MISCELLANEOUS INTANGIBLE PLANT		**80,051,707.26**	**31,762,515**	**48,289,192**	**10,024,094**	**12.52**	
	PRODUCTION PLANT							
325.01	PRODUCING LANDS	75-R4	139,440.21	80,023	59,417	1,085	0.78	54.8
325.02	PRODUCING LEASEHOLDS	45-L0	14,480.68	10,203	4,278	181	1.25	23.6
325.03	GAS RIGHTS	65-R2.5	20,984.28	13,277	7,707	220	1.05	35.0
325.04	RIGHTS OF WAY	75-R2.5	1,628,852.90	999,623	629,230	14,799	0.91	42.5
327.00	FIELD COMPRESSOR STATION EQUIPMENT	50-S0.5	11,650,037.03	4,849,602	6,800,435	240,131	2.06	28.3
328.00	FIELD MEASURING AND REGULATING STATION STRUCTURES	33-S0	368,277.66	50,746	317,532	18,549	5.04	17.1
329.00	OTHER STRUCTURES	60-R2.5	1,918,701.49	985,073	933,628	24,198	1.26	38.6
330.00	PRODUCING GAS WELLS - WELL CONSTRUCTION	25-L1	9,221.39	8,464	757	133	1.44	5.7
331.00	PRODUCING GAS WELLS - WELL EQUIPMENT	26-L1	2,984.12	2,719	265	140	4.69	1.9
332.00	FIELD LINES	65-R1.5	89,105,836.08	31,590,625	57,515,211	1,530,153	1.72	37.6
333.00	FIELD COMPRESSOR STATION EQUIPMENT	35-S0.5	42,250,333.91	16,257,239	25,993,095	1,395,230	3.30	18.6
334.00	FIELD MEASURING AND REGULATING STATION EQUIPMENT	20-L0	4,880,606.93	2,804,058	2,076,549	213,735	4.38	9.7
337.00	OTHER EQUIPMENT	23-L1	65,543.71	38,984	26,560	2,687	4.10	9.9
	TOTAL PRODUCTION PLANT		**152,055,300.39**	**57,690,636**	**94,364,664**	**3,441,241**	**2.27**	
	UNDERGROUND STORAGE PLANT							
350.11	LAND - GAS	55-L4	16,823.84	10,996	5,828	448	2.66	13.0
350.21	RIGHTS OF WAY	65-R3	46,800.39	25,934	20,866	511	1.09	40.8
351.00	STRUCTURES AND IMPROVEMENTS	60-R2	1,800,679.17	1,101,914	698,765	19,893	1.10	35.1
352.01	WELLS - CONSTRUCTION	50-R1.5	1,390,218.99	743,787	646,432	23,046	1.66	28.0
352.02	WELLS - EQUIPMENT	55-R1	282,543.02	234,071	48,472	1,457	0.52	33.3
352.11	LEASEHOLDS	60-R3	161,936.70	161,937	0	0	-	-
352.12	STORAGE RIGHTS	65-R5	20,734.05	20,734	0	0	-	-
352.21	RESERVOIRS	40-SQ	433,138.50	184,297	248,842	9,639	2.23	25.8
352.31	NON-RECOVERABLE NATURAL GAS	37-SQ	205,250.77	205,251	0	0	-	-
353.00	LINES	50-R2	2,895,258.85	1,368,630	1,526,629	49,441	1.71	30.9
354.00	COMPRESSOR STATION EQUIPMENT	45-R1.5	7,574,440.99	2,773,977	4,800,464	203,595	2.69	23.6
355.00	MEASURING AND REGULATING STATION EQUIPMENT	60-R2.5	402,058.01	74,510	327,548	7,535	1.87	43.5
357.00	OTHER EQUIPMENT	30-R2.5	30,183.87	30,184	0	0	-	-
	TOTAL UNDERGROUND STORAGE PLANT		**15,260,067.15**	**6,936,222**	**8,323,846**	**315,565**	**2.07**	

PEOPLES NATURAL GAS COMPANY LLC

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF AUGUST 31, 2024

	DEPRECIABLE GROUP	SURVIVOR CURVE		ORIGINAL COST AS OF AUGUST 31, 2024	BOOK DEPRECIATION RESERVE	FUTURE ACCURALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)=(5)/(6)
	TRANSMISSION PLANT								
365.02	RIGHTS OF WAY	80-R4		2,438,718.03	1,344,811	1,093,907	23,571	0.97	46.4
366.01	STRUCTURES AND IMPROVEMENTS - COMPRESSOR STATION	60-R3		1,397,311.49	870,778	526,533	14,940	1.07	35.2
366.02	STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING	55-R2.5		1,653,727.20	996,185	657,542	18,015	1.09	36.5
366.03	STRUCTURES AND IMPROVEMENTS - OTHER	45-R1.5		49,995.58	47,669	2,327	152	0.30	15.3
367.00	MAINS	80-R2.5		258,894,350.97	61,166,663	197,727,688	3,562,508	1.38	55.5
368.00	COMPRESSOR STATION EQUIPMENT	35-S1		20,925,158.68	6,540,860	14,384,299	658,667	3.15	21.8
369.00	MEASURING AND REGULATING STATION EQUIPMENT	50-R1		38,098,474.23	13,615,808	24,482,666	835,493	2.19	29.3
371.00	OTHER EQUIPMENT	35-R1		2,640,712.31	1,138,205	1,502,507	71,971	2.73	20.9
	TOTAL TRANSMISSION PLANT			**326,098,448.49**	**85,720,979**	**240,377,469**	**5,185,317**	**1.59**	
	DISTRIBUTION PLANT								
374.02	RIGHTS OF WAY	80-R4		5,734,940.08	2,616,502	3,118,438	64,941	1.13	48.0
375.00	STRUCTURES AND IMPROVEMENTS								
	MEASURING AND REGULATING	65-R2		3,995,140.53	2,042,362	1,952,779	56,646	1.42	34.5
	OTHER								
	MAJOR STRUCTURES	85-R1	*	24,518,354.03	17,820,394	6,697,960	752,717	3.07	8.9
	MINOR STRUCTURES	65-R2		113,241.63	59,539	53,703	1,582	1.40	33.9
	TOTAL OTHER			24,631,595.66	17,879,933	6,751,663	754,299	3.52	8.7
	TOTAL STRUCTURES AND IMPROVEMENTS			28,626,736.19	19,922,295	8,704,442	810,945	3.23	10.2
376.00	MAINS								
	LOW PRESSURE	73-S0.5		1,224,387,299.76	203,221,968	1,021,165,332	21,826,830	1.78	46.8
	REGULAR PRESSURE	75-S0.5		1,291,382,509.81	299,334,180	992,048,330	21,318,212	1.65	46.5
	TOTAL MAINS			2,515,769,809.57	502,556,148	2,013,213,662	43,145,042	1.72	46.7
378.00	MEASURING AND REGULATING STATION EQUIPMENT - GENERAL	50-R1.5		85,558,767.45	30,973,967	54,584,800	1,872,058	2.19	29.2
380.00	SERVICES	55-R2		828,329,283.58	294,284,683	534,044,601	15,868,393	1.92	33.7
381.00	METERS	32-S0.5		126,745,549.73	46,493,984	80,251,566	4,148,111	3.27	19.3
382.00	METER INSTALLATIONS	55-R2		89,897,357.70	41,827,179	48,070,179	1,490,917	1.66	32.2
385.00	INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT	50-R0.5		12,710,090.86	5,822,979	6,887,112	250,130	1.97	27.5
386.00	OTHER PROPERTY ON CUSTOMER PREMISES	20-S4		14,644,532.28	14,644,532	0	0	-	-
387.00	OTHER EQUIPMENT	26-R2.5		16,052,276.68	2,921,397	13,130,880	757,092	4.72	17.3
	TOTAL DISTRIBUTION PLANT			**3,724,069,344.12**	**962,063,666**	**2,762,005,680**	**68,407,629**	**1.84**	
	GENERAL PLANT								
389.02	LAND RIGHTS AND RIGHTS OF WAY	60-R3		52,996.00	38,737	14,259	518	0.98	27.5
390.00	STRUCTURES AND IMPROVEMENTS								
	OWNED	55-R1		40,367,890.17	2,931,890	37,436,000	1,363,977	3.38	27.4
	LEASED - NORTH SHORE	75-R0.5		8,112,867.83	5,865,821	2,247,047	516,443	6.37	4.4
	TOTAL STRUCTURES AND IMPROVEMENTS			48,480,758.00	8,797,711	39,683,047	1,880,420	3.88	21.1

PEOPLES NATURAL GAS COMPANY LLC

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF AUGUST 31, 2024

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF AUGUST 31, 2024	BOOK DEPRECIATION RESERVE	FUTURE ACCURALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)=(5)/(6)
391.01	OFFICE FURNITURE AND EQUIPMENT - FURNITURE	20-SQ	2,575,974.65	1,708,558	867,417	83,071	3.22	10.4
391.02	OFFICE FURNITURE AND EQUIPMENT - COMPUTERS	5-SQ	14,871,389.82	11,237,290	3,634,100	1,396,768	9.39	2.6
391.03	OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT	15-SQ	302,923.77	120,142	182,782	23,151	7.64	7.9
392.00	TRANSPORTATION EQUIPMENT							
	AUTOMOBILES	6-L2.5	1,875.41	1,875	0	0	-	-
	TRUCKS	10-L2.5	70,574,597.43	20,614,898	49,959,699	9,540,467	13.52	5.2
	TRAILERS	15-L2	2,786,243.63	586,962	2,199,282	271,657	9.75	8.1
	TOTAL TRANSPORTATION EQUIPMENT		73,362,716.47	21,203,735	52,158,981	9,812,124	13.30	5.3
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT	25-SQ	6,514,626.61	3,237,407	3,277,220	250,613	3.85	13.1
394.01	DUAL FUEL STATIONS	15-SQ	381,191.13	183,852	197,339	25,918	6.80	7.6
396.00	POWER OPERATED EQUIPMENT	14-L2	14,650,478.39	6,946,580	7,703,898	1,031,592	7.04	7.5
397.01	COMMUNICATION EQUIPMENT - RADIO	10-SQ	484,962.23	272,380	212,582	65,133	13.43	3.3
397.02	COMMUNICATION EQUIPMENT - TELEPHONE	15-SQ	19,325,799.24	10,021,935	9,303,864	1,352,648	7.00	6.9
397.03	COMMUNICATION EQUIPMENT - MICROWAVE	18-SQ	18,271,355.17	7,676,775	10,594,580	925,345	5.06	11.4
398.00	MISCELLANEOUS EQUIPMENT	15-SQ	52,706.86	38,348	14,359	1,591	3.02	9.0
	TOTAL GENERAL PLANT		**199,327,878.34**	**71,483,450**	**127,844,428**	**16,848,892**	**8.45**	
	AMORTIZATION OF NET SALVAGE					**6,414,018**		
	TOTAL DEPRECIABLE GAS PLANT		**4,496,862,745.75**	**1,215,657,468**	**3,281,205,279**	**110,636,756**	**2.46**	
	NONDEPRECIABLE GAS PLANT							
301.00	ORGANIZATION		49,770.42					
325.51	OTHER LAND AND LAND RIGHTS		47,094.57	2,031				
365.11	LAND		261,389.12					
374.01	LAND AND LAND RIGHTS - LAND		1,047,916.85	30,228				
389.01	LAND AND LAND RIGHTS - LAND		259,215.74					
	TOTAL NONDEPRECIABLE GAS PLANT		**1,665,386.70**	**32,259**				
	TOTAL GAS PLANT		**4,498,528,132.45**	**1,215,689,727**				

* LIFESPAN PROCEDURE IS USED. SURVIVOR CURVE SHOWN IS INTERIM CURVE.

PEOPLES NATURAL GAS COMPANY LLC

TABLE 2. BRINGFORWARD TO AUGUST 31, 2024 OF THE BOOK RESERVE AS OF AUGUST 31, 2023

ACCOUNT	BOOK RESERVE AS OF AUGUST 31, 2023	+	DEPRECIATION ACCRUALS	+	AMORTIZATION OF NET SALVAGE	-	PROJECTED RETIREMENTS	+	PROJECTED GROSS SALVAGE	-	PROJECTED COST OF REMOVAL	+	ADJUSTMENTS AND ACQUISITIONS	=	PROJECTED BOOK RESERVE AS OF AUGUST 31, 2024
(1)	(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)
DEPRECIABLE GAS PLANT															
303.00	1,389,569		137,323				1,212,393								314,499
303.01	17,297,721		6,565,019				8,419,184								15,443,556
303.02	13,561,243		1,933,797				9,841,421								5,653,619
303.03	20,033,255		199,624				9,882,038								10,350,841
325.01	78,935		1,088												80,023
325.02	10,016		187												10,203
325.03	13,052		225												13,277
325.04	984,638		14,985												999,623
327.00	4,629,210		244,908				24,517								4,849,602
328.00	50,628		399				281								50,746
329.00	968,363		24,223				7,512								985,073
330.00	8,307		157												8,464
331.00	2,419		300												2,719
332.00	30,690,727		1,339,325		201,910		296,915		2,969		347,391				31,590,625
333.00	16,232,151		1,419,092		174,769		1,245,058		24,901		348,616				16,257,239
334.00	2,532,096		234,429		40,202		1,745				925				2,804,058
337.00	36,721		2,911				649								38,984
350.11	10,525		471												10,996
350.21	25,424		510												25,934
351.00	1,081,746		20,168												1,101,914
352.01	754,732		2,194				13,139								743,787
352.02	232,574		1,497												234,071
352.11	161,937														161,937
352.12	20,734														20,734
352.21	174,638		9,659												184,297
352.31	205,251														205,251
353.00	1,337,126		31,718				214								1,368,630
354.00	2,564,165		209,812												2,773,977
355.00	75,749						1,239								74,510
357.00	30,184														30,184
365.02	1,661,425		22,169				338,783								1,344,811
366.01	855,827		14,951												870,778
366.02	976,582		18,358		1,608		331				33				996,185
366.03	47,509		160												47,669
367.00	58,599,920		2,711,211		1,176		142,788				2,856				61,166,663
368.00	6,146,003		455,659		4,803		58,057				7,547				6,540,860
369.00	12,835,686		849,896		32,092		66,579				35,287				13,615,808
371.00	1,072,874		75,404				10,073								1,138,205
374.02	2,551,124		65,378												2,616,502
375.01	2,023,904		57,409				38,951								2,042,362
375.32	17,290,050		763,004				232,660								17,820,394
375.31	57,931		1,608												59,539
376.01	184,595,403		20,803,473		1,205,913		2,332,980				1,049,841				203,221,968
376.02	280,647,217		20,147,054		2,363,462		2,636,934				1,186,620				299,334,180
378.00	29,661,973		1,800,232		61,111		465,550				83,799				30,973,967
380.00	276,421,417		14,770,379		3,515,350		281,642				140,821				294,284,683

PEOPLES NATURAL GAS COMPANY LLC

TABLE 2. BRINGFORWARD TO AUGUST 31, 2024 OF THE BOOK RESERVE AS OF AUGUST 31, 2023

ACCOUNT	BOOK RESERVE AS OF AUGUST 31, 2023	+	DEPRECIATION ACCRUALS	+	AMORTIZATION OF NET SALVAGE	-	PROJECTED RETIREMENTS	+	PROJECTED GROSS SALVAGE	-	PROJECTED COST OF REMOVAL	+	ADJUSTMENTS AND ACQUISITIONS	=	PROJECTED BOOK RESERVE AS OF AUGUST 31, 2024
(1)	(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)
381.00	44,356,242		3,904,036				1,766,295								46,493,984
382.00	40,505,033		1,511,789		138,239		180,155				147,727				41,827,179
385.00	5,612,634		249,931		421		38,467				1,539				5,822,979
386.00	14,644,532														14,644,532
387.00	3,037,998		728,478				845,079								2,921,397
389.02	38,207		530												38,737
390.00	2,705,551		746,745				520,406								2,931,890
390.01	5,344,164		521,657												5,865,821
391.01	1,636,970		82,870				11,282								1,708,558
391.02	10,729,904		1,315,203				807,817								11,237,290
391.03	115,771		22,818				18,447								120,142
392.01	2,040						165								1,875
392.02	16,757,598		9,453,602		(677,358)		5,032,038		113,094						20,614,898
392.03	558,820		266,021		(20,759)		219,703		2,583						586,962
394.00	3,306,508		218,012				287,113								3,237,407
394.01	175,217		25,561				16,926								183,852
396.00	6,379,683		997,314		(116,374)		402,621		88,577						6,946,580
397.01	238,070		61,630				27,320								272,380
397.02	8,935,941		1,309,784		(580)		223,210								10,021,935
397.03	7,005,482		870,915				199,622								7,676,775
398.00	38,972		1,555				2,179								38,348
TOTAL DEPRECIABLE GAS PLANT	**1,162,764,018**		**97,238,817**		**6,925,985**		**48,150,474**		**232,124**		**3,353,002**		**0**		**1,215,657,468**

PEOPLES NATURAL GAS COMPANY LLC

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED AUGUST 31, 2024

	DEPRECIABLE GROUP	ORIGINAL COST AS OF AUGUST 31, 2023	ORIGINAL COST AS OF AUGUST 31, 2024	COMPOSITE ACCRUAL RATE	ANNUAL ACCRUAL AMOUNT
	(1)	(2)	(3)	(4)	(5)
	DEPRECIABLE GAS PLANT				
	INTANGIBLE PLANT				
303.00	MISCELLANEOUS INTANGIBLE PLANT				
	CIAC	5,904,747.33	5,169,725.88	2.48	137,323
	OTHER	39,376,126.11	34,140,318.90	17.86	6,565,019
	MAJOR	33,590,790.88	26,465,029.21	6.44	1,933,797
	SAP	22,351,644.60	14,276,633.27	1.09	199,624
	TOTAL MISCELLANEOUS INTANGIBLE PLANT	**101,223,308.92**	**80,051,707.26**		**8,835,763**
	PRODUCTION PLANT				
325.01	PRODUCING LANDS	139,440.21	139,440.21	0.78	1,088
325.02	PRODUCING LEASEHOLDS	14,480.68	14,480.68	1.29	187
325.03	GAS RIGHTS	20,984.28	20,984.28	1.07	225
325.04	RIGHTS OF WAY	1,628,852.90	1,628,852.90	0.92	14,985
327.00	FIELD COMPRESSOR STATION EQUIPMENT	11,674,553.60	11,650,037.03	2.10	244,908
328.00	FIELD MEASURING AND REGULATING STATION STRUCTURES	51,358.18	368,277.66	0.19	399
329.00	OTHER STRUCTURES	1,926,213.73	1,918,701.49	1.26	24,223
330.00	PRODUCING GAS WELLS - WELL CONSTRUCTION	9,221.39	9,221.39	1.70	157
331.00	PRODUCING GAS WELLS - WELL EQUIPMENT	2,984.12	2,984.12	10.05	300
332.00	FIELD LINES	78,309,827.93	89,105,836.08	1.60	1,339,325
333.00	FIELD COMPRESSOR STATION EQUIPMENT	43,495,391.65	42,250,333.91	3.31	1,419,092
334.00	FIELD MEASURING AND REGULATING STATION EQUIPMENT	4,668,451.79	4,880,606.93	4.91	234,429
337.00	OTHER EQUIPMENT	66,192.40	65,543.71	4.42	2,911
	TOTAL PRODUCTION PLANT	**142,007,952.86**	**152,055,300.39**		**3,282,229**
	UNDERGROUND STORAGE PLANT				
350.11	LAND - GAS	16,823.84	16,823.84	2.80	471
350.21	RIGHTS OF WAY	46,800.39	46,800.39	1.09	510
351.00	STRUCTURES AND IMPROVEMENTS	1,800,679.17	1,800,679.17	1.12	20,168
352.01	WELLS - CONSTRUCTION	803,281.15	1,390,218.99	0.20	2,194
352.02	WELLS - EQUIPMENT	282,543.02	282,543.02	0.53	1,497
352.11	LEASEHOLDS	161,936.70	161,936.70	-	0
352.12	STORAGE RIGHTS	20,734.05	20,734.05	-	0
352.21	RESERVOIRS	433,138.50	433,138.50	2.23	9,659
352.31	NON-RECOVERABLE NATURAL GAS	205,250.77	205,250.77	-	0
353.00	LINES	2,139,392.79	2,895,258.85	1.26	31,718
354.00	COMPRESSOR STATION EQUIPMENT	7,574,440.99	7,574,440.99	2.77	209,812
355.00	MEASURING AND REGULATING STATION EQUIPMENT	75,749.16	402,058.01	-	0
357.00	OTHER EQUIPMENT	30,183.87	30,183.87	-	0
	TOTAL UNDERGROUND STORAGE PLANT	**13,590,954.40**	**15,260,067.15**		**276,029**
	TRANSMISSION PLANT				
365.02	RIGHTS OF WAY	2,777,500.74	2,438,718.03	0.85	22,169
366.01	STRUCTURES AND IMPROVEMENTS - COMPRESSOR STATION	1,397,311.49	1,397,311.49	1.07	14,951
366.02	STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING	1,654,058.01	1,653,727.20	1.11	18,358
366.03	STRUCTURES AND IMPROVEMENTS - OTHER	49,995.58	49,995.58	0.32	160
367.00	MAINS	178,397,820.17	258,894,350.97	1.24	2,711,211
368.00	COMPRESSOR STATION EQUIPMENT	11,621,894.34	20,925,158.68	2.80	455,659
369.00	MEASURING AND REGULATING STATION EQUIPMENT	36,782,203.49	38,098,474.23	2.27	849,896
371.00	OTHER EQUIPMENT	2,650,785.29	2,640,712.31	2.85	75,404
	TOTAL TRANSMISSION PLANT	**235,331,569.11**	**326,098,448.49**		**4,147,808**
	DISTRIBUTION PLANT				
374.02	RIGHTS OF WAY	5,734,940.08	5,734,940.08	1.14	65,378
375.00	STRUCTURES AND IMPROVEMENTS				
	MEASURING AND REGULATING	4,034,091.94	3,995,140.53	1.43	57,409
	OTHER				
	MAJOR STRUCTURES	24,751,013.56	24,518,354.03	3.10	763,004
	MINOR STRUCTURES	113,241.63	113,241.63	1.42	1,608
	TOTAL OTHER	24,864,255.19	24,631,595.66		764,612
	TOTAL STRUCTURES AND IMPROVEMENTS	28,898,347.13	28,626,736.19		822,021
376.00	MAINS				
	LOW PRESSURE	1,113,081,583.49	1,224,387,299.76	1.78	20,803,473
	REGULAR PRESSURE	1,165,575,266.51	1,291,382,509.81	1.64	20,147,054
	TOTAL MAINS	2,278,656,850.00	2,515,769,809.57		40,950,527

PEOPLES NATURAL GAS COMPANY LLC

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED AUGUST 31, 2024

	DEPRECIABLE GROUP	ORIGINAL COST AS OF AUGUST 31, 2023	ORIGINAL COST AS OF AUGUST 31, 2024	COMPOSITE ACCRUAL RATE	ANNUAL ACCRUAL AMOUNT
	(1)	(2)	(3)	(4)	(5)
378.00	MEASURING AND REGULATING STATION EQUIPMENT - GENERAL	80,361,194.90	85,558,767.45	2.17	1,800,232
380.00	SERVICES	742,987,648.81	828,329,283.58	1.88	14,770,379
381.00	METERS	117,256,692.59	126,745,549.73	3.20	3,904,036
382.00	METER INSTALLATIONS	90,077,512.73	89,897,357.70	1.68	1,511,789
385.00	INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT	12,408,558.21	12,710,090.86	1.99	249,931
386.00	OTHER PROPERTY ON CUSTOMER PREMISES	14,644,532.28	14,644,532.28	-	0
387.00	OTHER EQUIPMENT	15,620,698.73	16,052,276.68	4.60	728,478
	TOTAL DISTRIBUTION PLANT	**3,386,646,975.46**	**3,724,069,344.12**		**64,802,771**
	GENERAL PLANT				
389.02	LAND RIGHTS AND RIGHTS OF WAY	52,996.00	52,996.00	1.00	530
390.00	STRUCTURES AND IMPROVEMENTS				
	OWNED	12,592,730.88	40,367,890.17	2.82	746,745
	LEASED - NORTH SHORE	8,112,867.83	8,112,867.83	6.43	521,657
	TOTAL STRUCTURES AND IMPROVEMENTS	20,705,598.71	48,480,758.00		1,268,402
391.01	OFFICE FURNITURE AND EQUIPMENT - FURNITURE	2,587,256.76	2,575,974.65	3.21	82,870
391.02	OFFICE FURNITURE AND EQUIPMENT - COMPUTERS	15,679,206.37	14,871,389.82	8.61	1,315,203
391.03	OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT	321,370.44	302,923.77	7.31	22,818
392	TRANSPORTATION EQUIPMENT				
	AUTOMOBILES	2,040.49	1,875.41	-	0
	TRUCKS	62,200,717.48	70,574,597.43	14.24	9,453,602
	TRAILERS	2,715,736.21	2,786,243.63	9.67	266,021
	TOTAL TRANSPORTATION EQUIPMENT	64,918,494.18	73,362,716.47		9,719,623
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT	5,464,050.56	6,514,626.61	3.64	218,012
394.01	DUAL FUEL STATIONS	398,116.81	381,191.13	6.56	25,561
396.00	POWER OPERATED EQUIPMENT	13,602,046.57	14,650,478.39	7.06	997,314
397.01	COMMUNICATION EQUIPMENT - RADIO	512,281.75	484,962.23	12.36	61,630
397.02	COMMUNICATION EQUIPMENT - TELEPHONE	18,916,082.37	19,325,799.24	6.85	1,309,784
397.03	COMMUNICATION EQUIPMENT - MICROWAVE	16,917,130.74	18,271,355.17	4.95	870,915
398.00	MISCELLANEOUS EQUIPMENT	54,885.82	52,706.86	2.89	1,555
	TOTAL GENERAL PLANT	**160,129,517.08**	**199,327,878.34**		**15,894,217**
	TOTAL DEPRECIABLE GAS PLANT	**4,038,930,277.83**	**4,496,862,745.75**		**97,238,817**

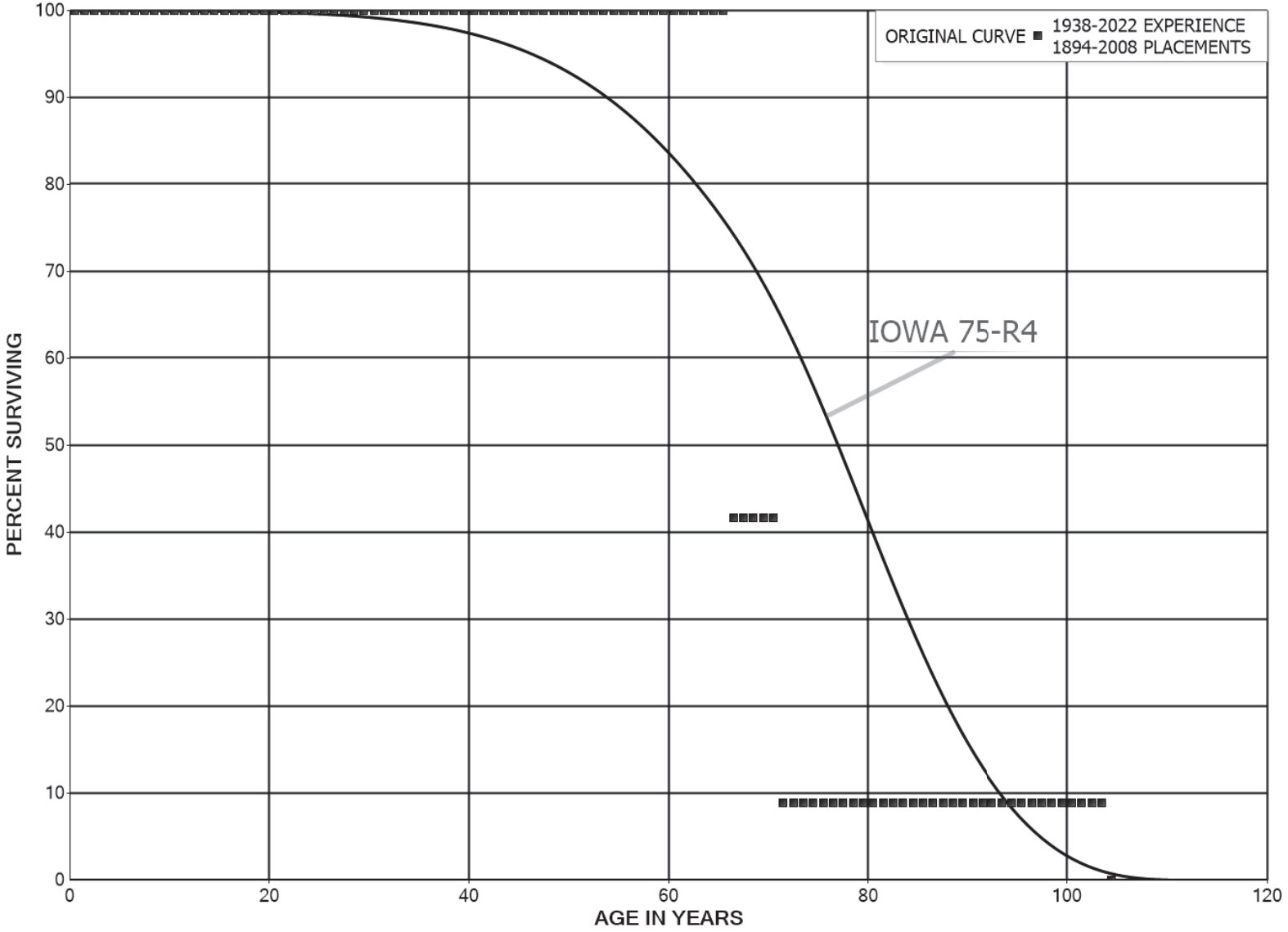
PEOPLES NATURAL GAS COMPANY LLC

TABLE 4. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

	2019		2020		2021		2022		2023			
ACCOUNT	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE	SALVAGE ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)=(12)/5
332.00	163,483		354,270		283,431	5,356	1,324		248,812	2,127	(1,043,838)	(208,768)
333.00	27,646		49,796	(399)	598,259		128,575		116,205	8,300	(912,579)	(182,516)
334.00			6,415		193,592				308		(200,315)	(40,063)
366.02	5,102		2,930						11		(8,043)	(1,609)
367.00									1,771		(1,771)	(354)
368.00	13,412		8,925						2,516		(24,853)	(4,971)
369.00			149,913						11,762		(161,675)	(32,335)
376.00	5,865,944	11,161	5,481,114	5,448	2,963,188	23,652	215,592	(11,206)	2,121,408		(16,618,192)	(3,323,638)
378.00	10,946		133,252		111,985				49,382		(305,564)	(61,113)
380.00	5,241,626		7,218,286		2,895,377				918,364		(16,273,653)	(3,254,731)
382.00	222,228		179,486		203,907		3,689		49,242		(658,552)	(131,710)
385.00									513		(513)	(103)
392.02		652,921		740,403		1,222,609				873,369	3,489,302	697,860
392.03		17,165		62,343						20,140	99,648	19,930
396.00		117,395		244,664						185,558	547,616	109,523
397.02						2,900					2,900	580
TOTAL	**11,550,388**	**798,643**	**13,584,387**	**1,052,459**	**7,249,739**	**1,254,516**	**349,180**	**(11,206)**	**3,520,296**	**1,089,494**	**(32,070,084)**	**(6,414,018)**

PART VI. SERVICE LIFE STATISTICS

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 325.01 PRODUCING LANDS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.01 PRODUCING LANDS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1894-2008 EXPERIENCE BAND 1938-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	150,430		0.0000	1.0000	100.00
0.5	150,539		0.0000	1.0000	100.00
1.5	140,212		0.0000	1.0000	100.00
2.5	79,212		0.0000	1.0000	100.00
3.5	18,103		0.0000	1.0000	100.00
4.5	99,854		0.0000	1.0000	100.00
5.5	94,244		0.0000	1.0000	100.00
6.5	94,244		0.0000	1.0000	100.00
7.5	94,244		0.0000	1.0000	100.00
8.5	94,244		0.0000	1.0000	100.00
9.5	94,906		0.0000	1.0000	100.00
10.5	104,000		0.0000	1.0000	100.00
11.5	103,900		0.0000	1.0000	100.00
12.5	103,900		0.0000	1.0000	100.00
13.5	106,642		0.0000	1.0000	100.00
14.5	37,362		0.0000	1.0000	100.00
15.5	37,362		0.0000	1.0000	100.00
16.5	37,362		0.0000	1.0000	100.00
17.5	37,362		0.0000	1.0000	100.00
18.5	37,362		0.0000	1.0000	100.00
19.5	37,362		0.0000	1.0000	100.00
20.5	37,362		0.0000	1.0000	100.00
21.5	37,362		0.0000	1.0000	100.00
22.5	37,362		0.0000	1.0000	100.00
23.5	37,362		0.0000	1.0000	100.00
24.5	37,362		0.0000	1.0000	100.00
25.5	37,362		0.0000	1.0000	100.00
26.5	37,362		0.0000	1.0000	100.00
27.5	37,362		0.0000	1.0000	100.00
28.5	37,359		0.0000	1.0000	100.00
29.5	35,082		0.0000	1.0000	100.00
30.5	34,808		0.0000	1.0000	100.00
31.5	34,808		0.0000	1.0000	100.00
32.5	34,808		0.0000	1.0000	100.00
33.5	34,808		0.0000	1.0000	100.00
34.5	34,808		0.0000	1.0000	100.00
35.5	34,808		0.0000	1.0000	100.00
36.5	34,808		0.0000	1.0000	100.00
37.5	34,808		0.0000	1.0000	100.00
38.5	34,808		0.0000	1.0000	100.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.01 PRODUCING LANDS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2008 EXPERIENCE BAND 1938-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	29,151		0.0000	1.0000	100.00
40.5	29,151		0.0000	1.0000	100.00
41.5	29,151		0.0000	1.0000	100.00
42.5	29,151		0.0000	1.0000	100.00
43.5	29,157		0.0000	1.0000	100.00
44.5	29,157		0.0000	1.0000	100.00
45.5	29,157		0.0000	1.0000	100.00
46.5	29,157		0.0000	1.0000	100.00
47.5	29,157		0.0000	1.0000	100.00
48.5	29,157		0.0000	1.0000	100.00
49.5	29,157		0.0000	1.0000	100.00
50.5	29,157		0.0000	1.0000	100.00
51.5	29,157		0.0000	1.0000	100.00
52.5	29,157		0.0000	1.0000	100.00
53.5	29,157		0.0000	1.0000	100.00
54.5	29,157		0.0000	1.0000	100.00
55.5	29,349		0.0000	1.0000	100.00
56.5	28,965		0.0000	1.0000	100.00
57.5	28,965		0.0000	1.0000	100.00
58.5	29,030		0.0000	1.0000	100.00
59.5	29,030		0.0000	1.0000	100.00
60.5	29,030		0.0000	1.0000	100.00
61.5	29,030		0.0000	1.0000	100.00
62.5	29,030		0.0000	1.0000	100.00
63.5	29,030		0.0000	1.0000	100.00
64.5	29,030		0.0000	1.0000	100.00
65.5	29,030	16,938	0.5835	0.4165	100.00
66.5	12,093		0.0000	1.0000	41.65
67.5	12,093		0.0000	1.0000	41.65
68.5	11,430		0.0000	1.0000	41.65
69.5	11,430		0.0000	1.0000	41.65
70.5	11,430	8,993	0.7868	0.2132	41.65
71.5	2,437		0.0000	1.0000	8.88
72.5	71		0.0000	1.0000	8.88
73.5	71		0.0000	1.0000	8.88
74.5	71		0.0000	1.0000	8.88
75.5	71		0.0000	1.0000	8.88
76.5	71		0.0000	1.0000	8.88
77.5	71		0.0000	1.0000	8.88
78.5	71		0.0000	1.0000	8.88

PEOPLES NATURAL GAS COMPANY LLC

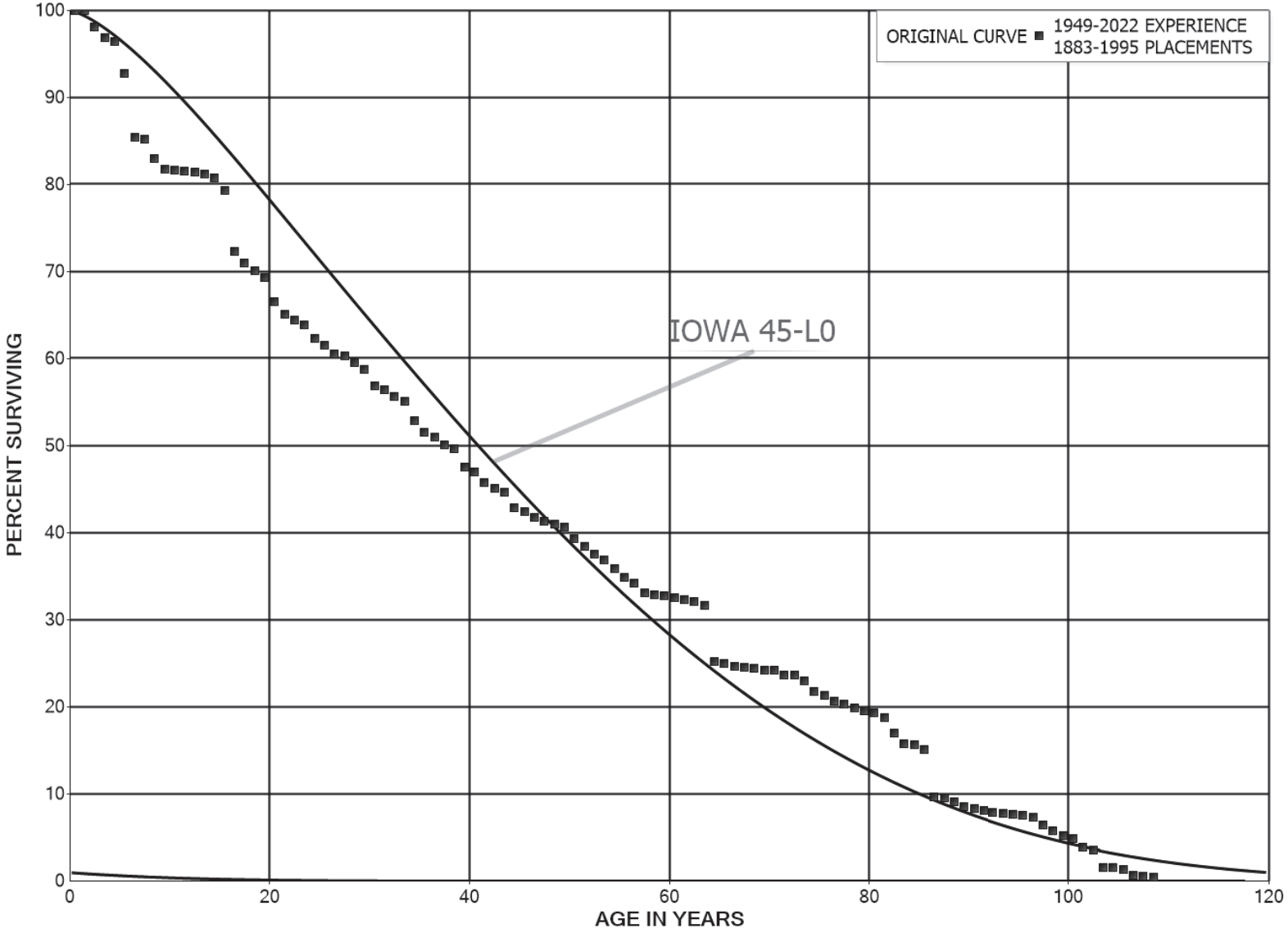
ACCOUNT 325.01 PRODUCING LANDS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2008 EXPERIENCE BAND 1938-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	71		0.0000	1.0000	8.88
80.5	71		0.0000	1.0000	8.88
81.5	71		0.0000	1.0000	8.88
82.5	71		0.0000	1.0000	8.88
83.5	71		0.0000	1.0000	8.88
84.5	71		0.0000	1.0000	8.88
85.5	71		0.0000	1.0000	8.88
86.5	71		0.0000	1.0000	8.88
87.5	71		0.0000	1.0000	8.88
88.5	71		0.0000	1.0000	8.88
89.5	71		0.0000	1.0000	8.88
90.5	71		0.0000	1.0000	8.88
91.5	71		0.0000	1.0000	8.88
92.5	71		0.0000	1.0000	8.88
93.5	71		0.0000	1.0000	8.88
94.5	71		0.0000	1.0000	8.88
95.5	71		0.0000	1.0000	8.88
96.5	71		0.0000	1.0000	8.88
97.5	71		0.0000	1.0000	8.88
98.5	71		0.0000	1.0000	8.88
99.5	71		0.0000	1.0000	8.88
100.5	71		0.0000	1.0000	8.88
101.5	71		0.0000	1.0000	8.88
102.5	71		0.0000	1.0000	8.88
103.5	71	71	1.0000		8.88
104.5					

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 325.02 PRODUCING LEASEHOLDS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.02 PRODUCING LEASEHOLDS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1883-1995 EXPERIENCE BAND 1949-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	4,942,658		0.0000	1.0000	100.00
0.5	5,128,111	1,325	0.0003	0.9997	100.00
1.5	1,415,847	27,078	0.0191	0.9809	99.97
2.5	919,202	11,403	0.0124	0.9876	98.06
3.5	1,006,321	4,918	0.0049	0.9951	96.85
4.5	999,779	37,723	0.0377	0.9623	96.37
5.5	978,857	76,977	0.0786	0.9214	92.74
6.5	905,474	3,163	0.0035	0.9965	85.44
7.5	911,528	23,996	0.0263	0.9737	85.14
8.5	893,187	12,244	0.0137	0.9863	82.90
9.5	890,644	1,910	0.0021	0.9979	81.77
10.5	890,950	697	0.0008	0.9992	81.59
11.5	899,408	1,050	0.0012	0.9988	81.53
12.5	902,200	3,337	0.0037	0.9963	81.43
13.5	925,039	4,977	0.0054	0.9946	81.13
14.5	918,423	15,447	0.0168	0.9832	80.69
15.5	918,673	81,418	0.0886	0.9114	79.34
16.5	840,570	15,970	0.0190	0.9810	72.31
17.5	855,943	10,160	0.0119	0.9881	70.93
18.5	848,426	10,113	0.0119	0.9881	70.09
19.5	840,921	33,729	0.0401	0.9599	69.26
20.5	812,739	16,928	0.0208	0.9792	66.48
21.5	796,841	9,023	0.0113	0.9887	65.09
22.5	788,107	6,131	0.0078	0.9922	64.36
23.5	785,038	19,569	0.0249	0.9751	63.86
24.5	791,574	9,919	0.0125	0.9875	62.26
25.5	794,035	12,258	0.0154	0.9846	61.48
26.5	783,527	3,100	0.0040	0.9960	60.53
27.5	784,093	10,969	0.0140	0.9860	60.29
28.5	778,500	10,060	0.0129	0.9871	59.45
29.5	769,068	23,825	0.0310	0.9690	58.68
30.5	746,600	5,602	0.0075	0.9925	56.86
31.5	742,643	11,446	0.0154	0.9846	56.44
32.5	738,145	6,124	0.0083	0.9917	55.57
33.5	736,819	31,114	0.0422	0.9578	55.11
34.5	706,898	17,563	0.0248	0.9752	52.78
35.5	692,790	7,055	0.0102	0.9898	51.47
36.5	687,580	12,469	0.0181	0.9819	50.94
37.5	678,287	5,982	0.0088	0.9912	50.02
38.5	674,025	27,590	0.0409	0.9591	49.58

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.02 PRODUCING LEASEHOLDS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-1995 EXPERIENCE BAND 1949-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	649,000	7,988	0.0123	0.9877	47.55
40.5	640,371	17,418	0.0272	0.9728	46.97
41.5	623,362	8,679	0.0139	0.9861	45.69
42.5	582,621	5,381	0.0092	0.9908	45.05
43.5	249,718	9,931	0.0398	0.9602	44.64
44.5	149,553	1,562	0.0104	0.9896	42.86
45.5	147,599	2,245	0.0152	0.9848	42.41
46.5	146,452	1,570	0.0107	0.9893	41.77
47.5	147,472	1,323	0.0090	0.9910	41.32
48.5	142,509	1,119	0.0079	0.9921	40.95
49.5	146,515	4,754	0.0324	0.9676	40.63
50.5	141,446	3,374	0.0239	0.9761	39.31
51.5	143,512	3,111	0.0217	0.9783	38.37
52.5	142,149	2,869	0.0202	0.9798	37.54
53.5	144,112	3,782	0.0262	0.9738	36.78
54.5	142,555	3,747	0.0263	0.9737	35.82
55.5	139,431	2,717	0.0195	0.9805	34.88
56.5	138,557	4,415	0.0319	0.9681	34.20
57.5	134,061	1,092	0.0081	0.9919	33.11
58.5	132,977	375	0.0028	0.9972	32.84
59.5	136,181	1,129	0.0083	0.9917	32.74
60.5	131,305	692	0.0053	0.9947	32.47
61.5	130,086	859	0.0066	0.9934	32.30
62.5	129,038	1,855	0.0144	0.9856	32.09
63.5	126,632	25,727	0.2032	0.7968	31.63
64.5	100,658	889	0.0088	0.9912	25.20
65.5	99,946	1,258	0.0126	0.9874	24.98
66.5	98,011	461	0.0047	0.9953	24.66
67.5	96,903	800	0.0083	0.9917	24.55
68.5	95,822	463	0.0048	0.9952	24.35
69.5	95,063	386	0.0041	0.9959	24.23
70.5	91,437	1,841	0.0201	0.9799	24.13
71.5	89,749	291	0.0032	0.9968	23.64
72.5	88,152	2,093	0.0237	0.9763	23.57
73.5	85,247	4,588	0.0538	0.9462	23.01
74.5	79,460	1,699	0.0214	0.9786	21.77
75.5	75,855	2,463	0.0325	0.9675	21.30
76.5	73,003	1,328	0.0182	0.9818	20.61
77.5	72,644	1,593	0.0219	0.9781	20.24
78.5	68,799	1,175	0.0171	0.9829	19.79

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.02 PRODUCING LEASEHOLDS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-1995 EXPERIENCE BAND 1949-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	53,252	438	0.0082	0.9918	19.46
80.5	38,500	1,057	0.0275	0.9725	19.30
81.5	51,497	4,971	0.0965	0.9035	18.77
82.5	46,125	3,202	0.0694	0.9306	16.95
83.5	42,964	371	0.0086	0.9914	15.78
84.5	42,593	1,422	0.0334	0.9666	15.64
85.5	41,131	14,880	0.3618	0.6382	15.12
86.5	26,182	534	0.0204	0.9796	9.65
87.5	25,717	1,198	0.0466	0.9534	9.45
88.5	24,578	1,481	0.0603	0.9397	9.01
89.5	23,062	442	0.0192	0.9808	8.47
90.5	22,605	522	0.0231	0.9769	8.31
91.5	22,058	857	0.0388	0.9612	8.11
92.5	21,168	343	0.0162	0.9838	7.80
93.5	20,758	272	0.0131	0.9869	7.67
94.5	20,354	288	0.0141	0.9859	7.57
95.5	19,989	615	0.0308	0.9692	7.47
96.5	19,493	2,317	0.1189	0.8811	7.24
97.5	17,176	1,690	0.0984	0.9016	6.38
98.5	15,481	1,677	0.1083	0.8917	5.75
99.5	13,608	716	0.0526	0.9474	5.13
100.5	12,588	2,575	0.2046	0.7954	4.86
101.5	9,991	977	0.0978	0.9022	3.86
102.5	9,040	5,021	0.5554	0.4446	3.48
103.5	4,056	87	0.0215	0.9785	1.55
104.5	3,968	541	0.1364	0.8636	1.52
105.5	3,424	1,956	0.5711	0.4289	1.31
106.5	1,418	230	0.1623	0.8377	0.56
107.5	1,112	93	0.0836	0.9164	0.47
108.5	1,070		0.0000	1.0000	0.43
109.5	1,070		0.0000	1.0000	0.43
110.5	1,070		0.0000	1.0000	0.43
111.5	1,070		0.0000	1.0000	0.43
112.5	1,070	51	0.0472	0.9528	0.43
113.5	974		0.0000	1.0000	0.41
114.5	974		0.0000	1.0000	0.41
115.5	974		0.0000	1.0000	0.41
116.5	974		0.0000	1.0000	0.41
117.5	974		0.0000	1.0000	0.41
118.5	974		0.0000	1.0000	0.41

PEOPLES NATURAL GAS COMPANY LLC

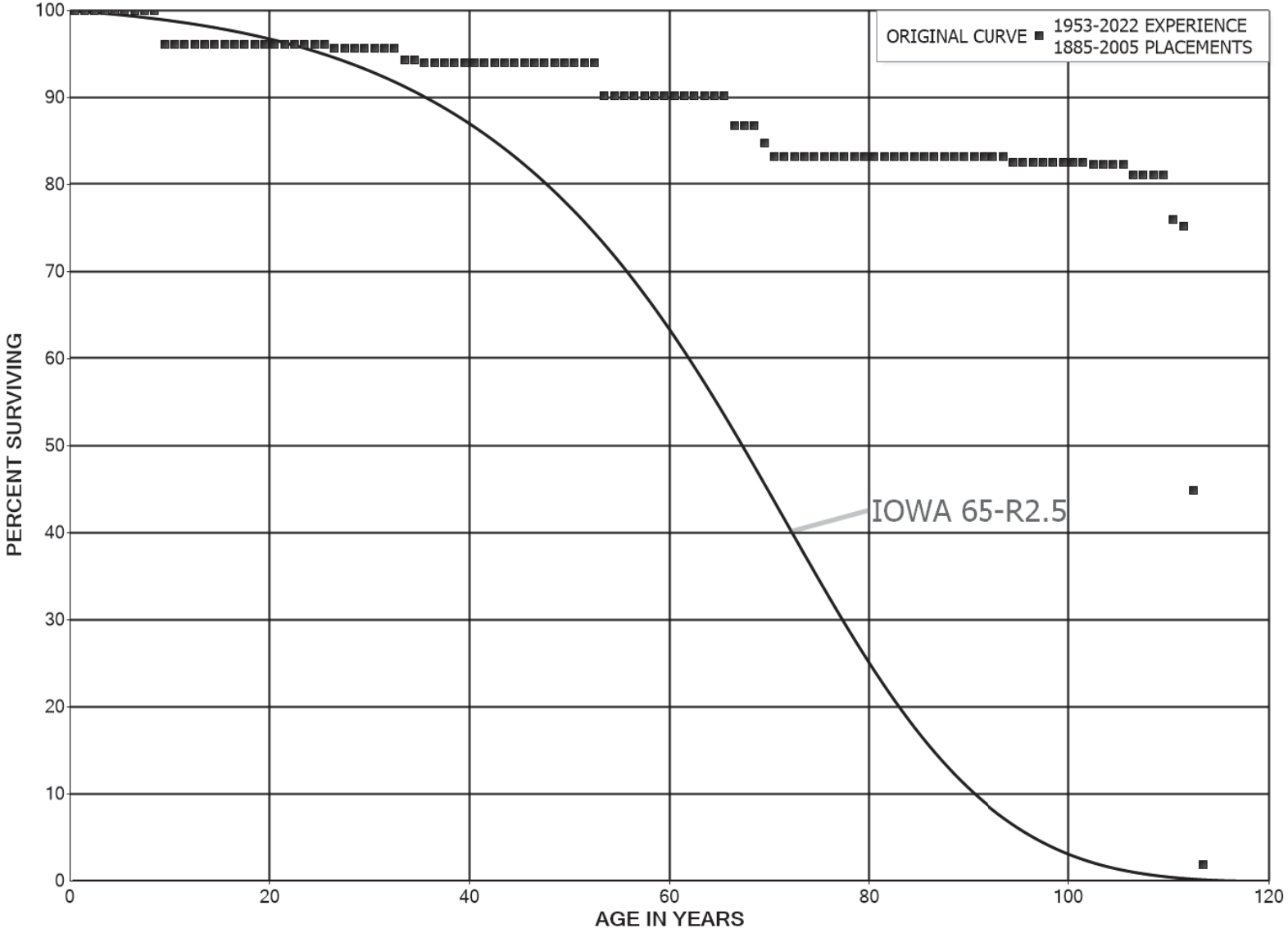
ACCOUNT 325.02 PRODUCING LEASEHOLDS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-1995 EXPERIENCE BAND 1949-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	974		0.0000	1.0000	0.41
120.5	974		0.0000	1.0000	0.41
121.5	634		0.0000	1.0000	0.41
122.5	634		0.0000	1.0000	0.41
123.5	634		0.0000	1.0000	0.41
124.5	634		0.0000	1.0000	0.41
125.5	13		0.0000	1.0000	0.41
126.5	13		0.0000	1.0000	0.41
127.5	13		0.0000	1.0000	0.41
128.5	13		0.0000	1.0000	0.41
129.5	13		0.0000	1.0000	0.41
130.5	13		0.0000	1.0000	0.41
131.5	13		0.0000	1.0000	0.41
132.5					0.41

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 325.03 GAS RIGHTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.03 GAS RIGHTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1885-2005 EXPERIENCE BAND 1953-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	36,407		0.0000	1.0000	100.00
0.5	36,392		0.0000	1.0000	100.00
1.5	24,468		0.0000	1.0000	100.00
2.5	24,468		0.0000	1.0000	100.00
3.5	24,172		0.0000	1.0000	100.00
4.5	24,943		0.0000	1.0000	100.00
5.5	24,943		0.0000	1.0000	100.00
6.5	24,943		0.0000	1.0000	100.00
7.5	27,811		0.0000	1.0000	100.00
8.5	27,811	1,103	0.0397	0.9603	100.00
9.5	26,708		0.0000	1.0000	96.03
10.5	26,708		0.0000	1.0000	96.03
11.5	26,708		0.0000	1.0000	96.03
12.5	26,708		0.0000	1.0000	96.03
13.5	26,708		0.0000	1.0000	96.03
14.5	28,745		0.0000	1.0000	96.03
15.5	28,745		0.0000	1.0000	96.03
16.5	28,745		0.0000	1.0000	96.03
17.5	19,625		0.0000	1.0000	96.03
18.5	19,625		0.0000	1.0000	96.03
19.5	19,625		0.0000	1.0000	96.03
20.5	18,439		0.0000	1.0000	96.03
21.5	18,439		0.0000	1.0000	96.03
22.5	18,439		0.0000	1.0000	96.03
23.5	19,555		0.0000	1.0000	96.03
24.5	20,366		0.0000	1.0000	96.03
25.5	20,453	100	0.0049	0.9951	96.03
26.5	20,353		0.0000	1.0000	95.56
27.5	19,457		0.0000	1.0000	95.56
28.5	21,785		0.0000	1.0000	95.56
29.5	25,074		0.0000	1.0000	95.56
30.5	22,643		0.0000	1.0000	95.56
31.5	23,070		0.0000	1.0000	95.56
32.5	24,577	333	0.0135	0.9865	95.56
33.5	23,233		0.0000	1.0000	94.27
34.5	22,775	65	0.0029	0.9971	94.27
35.5	22,192		0.0000	1.0000	94.00
36.5	19,344		0.0000	1.0000	94.00
37.5	15,993		0.0000	1.0000	94.00
38.5	19,360		0.0000	1.0000	94.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.03 GAS RIGHTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1885-2005 EXPERIENCE BAND 1953-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	19,360		0.0000	1.0000	94.00
40.5	19,360		0.0000	1.0000	94.00
41.5	21,612		0.0000	1.0000	94.00
42.5	20,150		0.0000	1.0000	94.00
43.5	20,090		0.0000	1.0000	94.00
44.5	20,090		0.0000	1.0000	94.00
45.5	20,090		0.0000	1.0000	94.00
46.5	19,572		0.0000	1.0000	94.00
47.5	19,572		0.0000	1.0000	94.00
48.5	16,801		0.0000	1.0000	94.00
49.5	16,801		0.0000	1.0000	94.00
50.5	16,785		0.0000	1.0000	94.00
51.5	19,724		0.0000	1.0000	94.00
52.5	19,313	787	0.0407	0.9593	94.00
53.5	15,761		0.0000	1.0000	90.17
54.5	15,761		0.0000	1.0000	90.17
55.5	16,761		0.0000	1.0000	90.17
56.5	14,426		0.0000	1.0000	90.17
57.5	14,426		0.0000	1.0000	90.17
58.5	14,456		0.0000	1.0000	90.17
59.5	14,456		0.0000	1.0000	90.17
60.5	15,556		0.0000	1.0000	90.17
61.5	15,556		0.0000	1.0000	90.17
62.5	15,170		0.0000	1.0000	90.17
63.5	14,374		0.0000	1.0000	90.17
64.5	26,473		0.0000	1.0000	90.17
65.5	26,473	1,000	0.0378	0.9622	90.17
66.5	43,122		0.0000	1.0000	86.76
67.5	46,749		0.0000	1.0000	86.76
68.5	46,749	1,116	0.0239	0.9761	86.76
69.5	45,634	812	0.0178	0.9822	84.69
70.5	44,822		0.0000	1.0000	83.19
71.5	44,822	4	0.0001	0.9999	83.19
72.5	44,001		0.0000	1.0000	83.18
73.5	42,982		0.0000	1.0000	83.18
74.5	43,615		0.0000	1.0000	83.18
75.5	43,615		0.0000	1.0000	83.18
76.5	44,240		0.0000	1.0000	83.18
77.5	39,389		0.0000	1.0000	83.18
78.5	39,389		0.0000	1.0000	83.18

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.03 GAS RIGHTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1885-2005 EXPERIENCE BAND 1953-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	76,934		0.0000	1.0000	83.18
80.5	86,485		0.0000	1.0000	83.18
81.5	83,983		0.0000	1.0000	83.18
82.5	82,731		0.0000	1.0000	83.18
83.5	82,688		0.0000	1.0000	83.18
84.5	81,626		0.0000	1.0000	83.18
85.5	81,669		0.0000	1.0000	83.18
86.5	81,644		0.0000	1.0000	83.18
87.5	79,649		0.0000	1.0000	83.18
88.5	76,761		0.0000	1.0000	83.18
89.5	78,730		0.0000	1.0000	83.18
90.5	78,730		0.0000	1.0000	83.18
91.5	78,730		0.0000	1.0000	83.18
92.5	78,730		0.0000	1.0000	83.18
93.5	78,730	595	0.0076	0.9924	83.18
94.5	78,135		0.0000	1.0000	82.55
95.5	78,092		0.0000	1.0000	82.55
96.5	78,092		0.0000	1.0000	82.55
97.5	78,092		0.0000	1.0000	82.55
98.5	78,066		0.0000	1.0000	82.55
99.5	76,097		0.0000	1.0000	82.55
100.5	76,075		0.0000	1.0000	82.55
101.5	76,052	211	0.0028	0.9972	82.55
102.5	75,864		0.0000	1.0000	82.32
103.5	75,864	30	0.0004	0.9996	82.32
104.5	75,833		0.0000	1.0000	82.29
105.5	75,833	1,100	0.0145	0.9855	82.29
106.5	74,733		0.0000	1.0000	81.10
107.5	74,733		0.0000	1.0000	81.10
108.5	74,733		0.0000	1.0000	81.10
109.5	73,059	4,666	0.0639	0.9361	81.10
110.5	66,718	625	0.0094	0.9906	75.92
111.5	67,768	27,401	0.4043	0.5957	75.21
112.5	40,344	38,670	0.9585	0.0415	44.80
113.5	1,675		0.0000	1.0000	1.86
114.5	1,675		0.0000	1.0000	1.86
115.5	1,675		0.0000	1.0000	1.86
116.5	1,675		0.0000	1.0000	1.86
117.5	1,675		0.0000	1.0000	1.86
118.5	1,675		0.0000	1.0000	1.86

PEOPLES NATURAL GAS COMPANY LLC

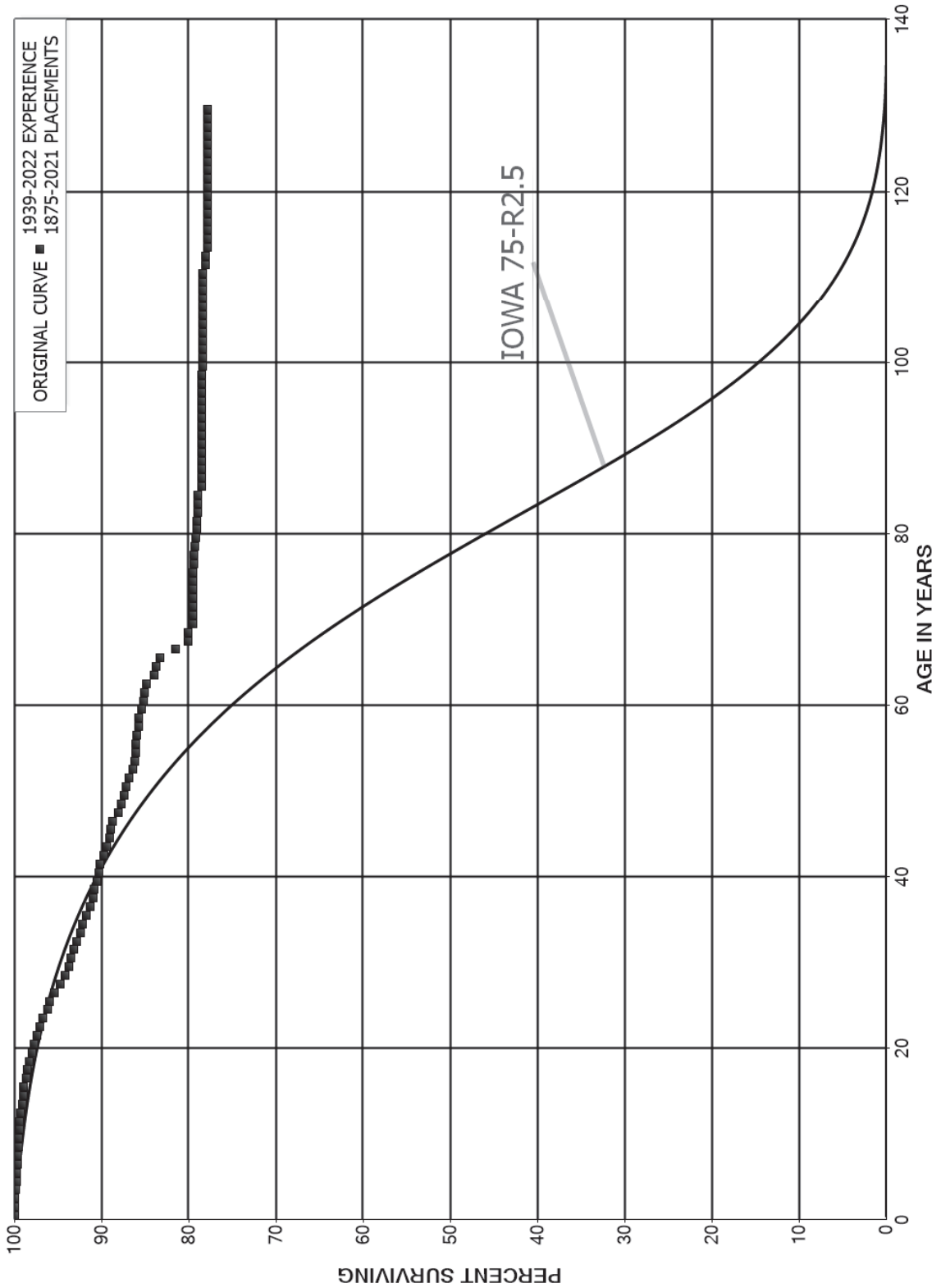
ACCOUNT 325.03 GAS RIGHTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1885-2005 EXPERIENCE BAND 1953-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	1,675		0.0000	1.0000	1.86
120.5	1,675		0.0000	1.0000	1.86
121.5					1.86

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 325.04 RIGHTS OF WAY
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.04 RIGHTS OF WAY

ORIGINAL LIFE TABLE

PLACEMENT BAND 1875-2021 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,715,666		0.0000	1.0000	100.00
0.5	1,732,053	902	0.0005	0.9995	100.00
1.5	1,746,851	994	0.0006	0.9994	99.95
2.5	1,674,362	850	0.0005	0.9995	99.89
3.5	1,603,327	1,051	0.0007	0.9993	99.84
4.5	1,672,544	1,003	0.0006	0.9994	99.77
5.5	1,665,144	990	0.0006	0.9994	99.72
6.5	1,674,761	1,143	0.0007	0.9993	99.66
7.5	1,661,990	734	0.0004	0.9996	99.59
8.5	1,690,787	613	0.0004	0.9996	99.54
9.5	1,717,251	1,324	0.0008	0.9992	99.51
10.5	1,692,803	1,226	0.0007	0.9993	99.43
11.5	1,658,651	1,388	0.0008	0.9992	99.36
12.5	1,701,004	3,374	0.0020	0.9980	99.28
13.5	1,678,491	1,753	0.0010	0.9990	99.08
14.5	1,654,885	1,297	0.0008	0.9992	98.98
15.5	1,673,252	4,411	0.0026	0.9974	98.90
16.5	1,645,982	2,395	0.0015	0.9985	98.64
17.5	1,658,610	3,086	0.0019	0.9981	98.49
18.5	1,596,318	5,065	0.0032	0.9968	98.31
19.5	1,407,240	3,425	0.0024	0.9976	98.00
20.5	1,079,809	4,047	0.0037	0.9963	97.76
21.5	1,091,599	4,052	0.0037	0.9963	97.39
22.5	1,049,218	3,489	0.0033	0.9967	97.03
23.5	1,022,340	5,186	0.0051	0.9949	96.71
24.5	1,040,485	3,487	0.0034	0.9966	96.22
25.5	1,020,741	5,581	0.0055	0.9945	95.90
26.5	1,009,713	6,656	0.0066	0.9934	95.37
27.5	1,007,170	5,608	0.0056	0.9944	94.74
28.5	975,004	4,731	0.0049	0.9951	94.22
29.5	1,023,539	3,162	0.0031	0.9969	93.76
30.5	976,734	3,495	0.0036	0.9964	93.47
31.5	951,655	2,779	0.0029	0.9971	93.13
32.5	944,208	5,017	0.0053	0.9947	92.86
33.5	941,228	2,106	0.0022	0.9978	92.37
34.5	911,732	3,996	0.0044	0.9956	92.16
35.5	910,425	4,888	0.0054	0.9946	91.76
36.5	895,111	2,553	0.0029	0.9971	91.27
37.5	890,463	1,857	0.0021	0.9979	91.01
38.5	831,354	3,083	0.0037	0.9963	90.82

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.04 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1875-2021 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	784,445	2,013	0.0026	0.9974	90.48
40.5	737,985	894	0.0012	0.9988	90.25
41.5	756,705	3,853	0.0051	0.9949	90.14
42.5	743,393	2,730	0.0037	0.9963	89.68
43.5	721,843	2,221	0.0031	0.9969	89.35
44.5	706,770	1,110	0.0016	0.9984	89.07
45.5	696,987	1,438	0.0021	0.9979	88.93
46.5	667,986	5,219	0.0078	0.9922	88.75
47.5	649,135	2,223	0.0034	0.9966	88.06
48.5	635,920	2,939	0.0046	0.9954	87.76
49.5	611,234	1,463	0.0024	0.9976	87.35
50.5	583,596	2,417	0.0041	0.9959	87.14
51.5	525,556	2,328	0.0044	0.9956	86.78
52.5	496,698	974	0.0020	0.9980	86.40
53.5	491,470	717	0.0015	0.9985	86.23
54.5	487,000	459	0.0009	0.9991	86.10
55.5	481,314	452	0.0009	0.9991	86.02
56.5	467,317	889	0.0019	0.9981	85.94
57.5	460,158	491	0.0011	0.9989	85.78
58.5	452,398	1,696	0.0037	0.9963	85.68
59.5	443,177	1,054	0.0024	0.9976	85.36
60.5	435,248	371	0.0009	0.9991	85.16
61.5	429,419	1,362	0.0032	0.9968	85.09
62.5	424,336	4,273	0.0101	0.9899	84.82
63.5	410,482	1,076	0.0026	0.9974	83.96
64.5	402,990	2,213	0.0055	0.9945	83.74
65.5	394,674	8,510	0.0216	0.9784	83.28
66.5	372,137	6,345	0.0170	0.9830	81.49
67.5	362,327	25	0.0001	0.9999	80.10
68.5	359,974	2,416	0.0067	0.9933	80.09
69.5	354,466		0.0000	1.0000	79.56
70.5	348,596		0.0000	1.0000	79.56
71.5	341,387	331	0.0010	0.9990	79.56
72.5	337,635	31	0.0001	0.9999	79.48
73.5	332,474		0.0000	1.0000	79.47
74.5	333,292	12	0.0000	1.0000	79.47
75.5	331,112	222	0.0007	0.9993	79.47
76.5	327,058	67	0.0002	0.9998	79.41
77.5	322,363	443	0.0014	0.9986	79.40
78.5	314,578	262	0.0008	0.9992	79.29

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.04 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1875-2021 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	307,218	580	0.0019	0.9981	79.22
80.5	298,559		0.0000	1.0000	79.07
81.5	293,573	248	0.0008	0.9992	79.07
82.5	289,067	147	0.0005	0.9995	79.01
83.5	286,038	54	0.0002	0.9998	78.97
84.5	282,188	1,455	0.0052	0.9948	78.95
85.5	278,132		0.0000	1.0000	78.54
86.5	275,550		0.0000	1.0000	78.54
87.5	273,938	29	0.0001	0.9999	78.54
88.5	272,577	70	0.0003	0.9997	78.54
89.5	271,117	14	0.0001	0.9999	78.52
90.5	270,368		0.0000	1.0000	78.51
91.5	269,532		0.0000	1.0000	78.51
92.5	260,751	30	0.0001	0.9999	78.51
93.5	255,543		0.0000	1.0000	78.50
94.5	251,141	11	0.0000	1.0000	78.50
95.5	239,996		0.0000	1.0000	78.50
96.5	227,566		0.0000	1.0000	78.50
97.5	215,803		0.0000	1.0000	78.50
98.5	192,820	134	0.0007	0.9993	78.50
99.5	179,794		0.0000	1.0000	78.45
100.5	164,869		0.0000	1.0000	78.45
101.5	154,939	16	0.0001	0.9999	78.45
102.5	145,534	6	0.0000	1.0000	78.44
103.5	136,450		0.0000	1.0000	78.43
104.5	131,524		0.0000	1.0000	78.43
105.5	119,109	45	0.0004	0.9996	78.43
106.5	108,201		0.0000	1.0000	78.40
107.5	104,156		0.0000	1.0000	78.40
108.5	98,113		0.0000	1.0000	78.40
109.5	89,238		0.0000	1.0000	78.40
110.5	79,520	290	0.0036	0.9964	78.40
111.5	81,690		0.0000	1.0000	78.12
112.5	78,330	298	0.0038	0.9962	78.12
113.5	71,208		0.0000	1.0000	77.82
114.5	68,139		0.0000	1.0000	77.82
115.5	63,354		0.0000	1.0000	77.82
116.5	56,627		0.0000	1.0000	77.82
117.5	46,694		0.0000	1.0000	77.82
118.5	40,434		0.0000	1.0000	77.82

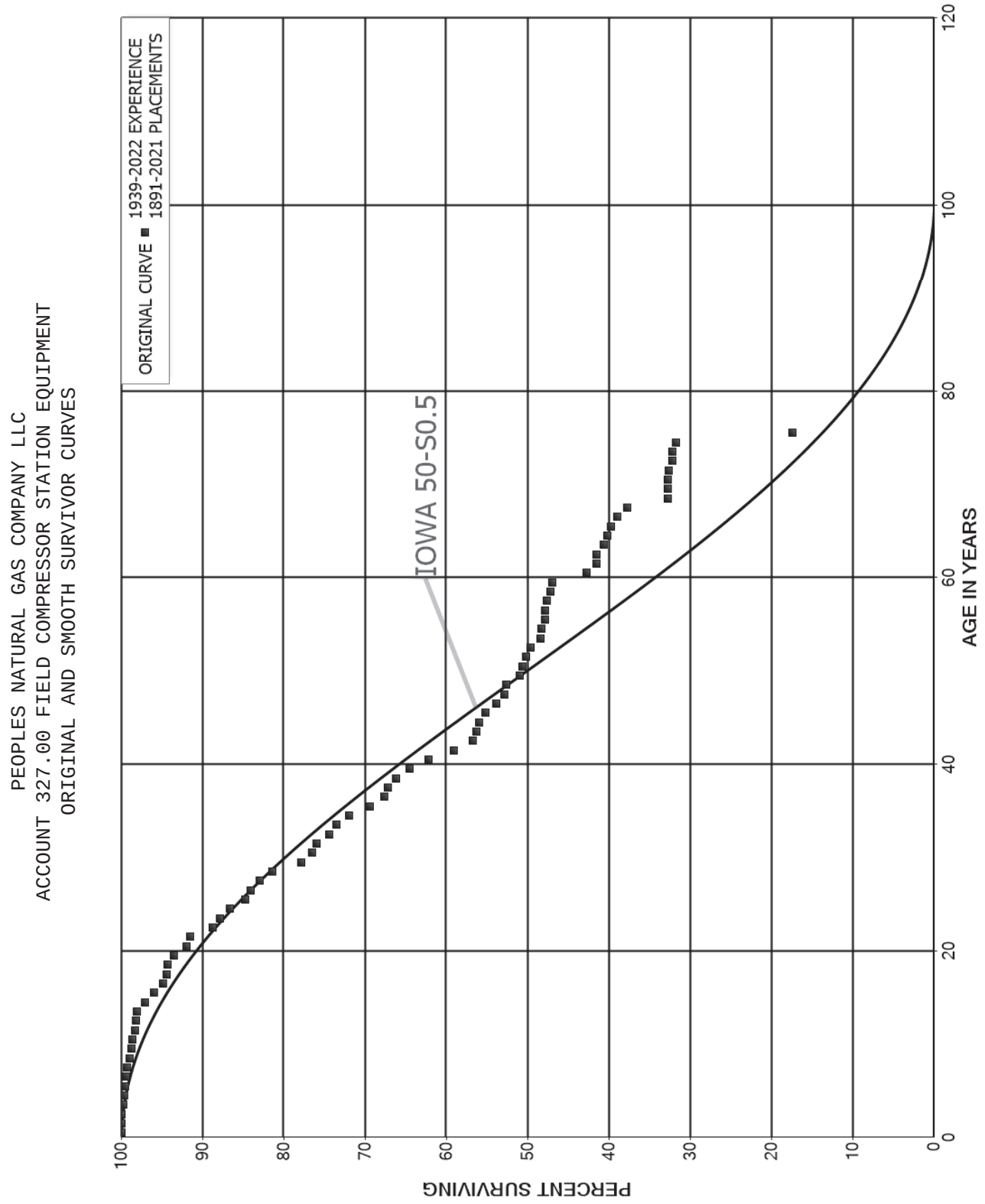
PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.04 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1875-2021 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	32,930		0.0000	1.0000	77.82
120.5	28,473		0.0000	1.0000	77.82
121.5	18,465		0.0000	1.0000	77.82
122.5	15,590		0.0000	1.0000	77.82
123.5	12,692		0.0000	1.0000	77.82
124.5	11,283		0.0000	1.0000	77.82
125.5	9,640		0.0000	1.0000	77.82
126.5	8,381		0.0000	1.0000	77.82
127.5	8,162		0.0000	1.0000	77.82
128.5	5,139		0.0000	1.0000	77.82
129.5	4,440		0.0000	1.0000	77.82
130.5	3,515		0.0000	1.0000	77.82
131.5	2,142		0.0000	1.0000	77.82
132.5	269		0.0000	1.0000	77.82
133.5	138		0.0000	1.0000	77.82
134.5	1		0.0000	1.0000	77.82
135.5	1		0.0000	1.0000	77.82
136.5	1		0.0000	1.0000	77.82
137.5	1		0.0000	1.0000	77.82
138.5	1		0.0000	1.0000	77.82
139.5	1		0.0000	1.0000	77.82
140.5	1		0.0000	1.0000	77.82
141.5	1		0.0000	1.0000	77.82
142.5	1		0.0000	1.0000	77.82
143.5	1		0.0000	1.0000	77.82
144.5	1		0.0000	1.0000	77.82
145.5	1		0.0000	1.0000	77.82
146.5	1		0.0000	1.0000	77.82
147.5					77.82


PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 327.00 FIELD COMPRESSOR STATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES
ORIGINAL CURVE ■ 1939-2022 EXPERIENCE
1891-2021 PLACEMENTS
IOWA 50-S0.5
PERCENT SURVIVING
AGE IN YEARS
100
90
80
70
60
50
40
30
20
10
0
0
20
40
60
80
100
120

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 327.00 FIELD COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1891-2021 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	21,711,178	633	0.0000	1.0000	100.00
0.5	21,727,284	2,643	0.0001	0.9999	100.00
1.5	12,595,976	2,082	0.0002	0.9998	99.98
2.5	4,115,699	9,736	0.0024	0.9976	99.97
3.5	12,588,232	9,851	0.0008	0.9992	99.73
4.5	12,604,590	15,500	0.0012	0.9988	99.65
5.5	12,332,979	21,040	0.0017	0.9983	99.53
6.5	12,288,944	12,543	0.0010	0.9990	99.36
7.5	12,243,803	36,190	0.0030	0.9970	99.26
8.5	12,123,101	26,057	0.0021	0.9979	98.97
9.5	12,087,761	16,609	0.0014	0.9986	98.75
10.5	12,042,105	36,827	0.0031	0.9969	98.62
11.5	11,669,279	15,982	0.0014	0.9986	98.32
12.5	11,477,734	18,491	0.0016	0.9984	98.18
13.5	2,751,065	26,967	0.0098	0.9902	98.02
14.5	2,472,525	26,924	0.0109	0.9891	97.06
15.5	2,470,311	31,294	0.0127	0.9873	96.01
16.5	2,307,234	9,181	0.0040	0.9960	94.79
17.5	2,235,388	3,734	0.0017	0.9983	94.41
18.5	2,214,318	18,248	0.0082	0.9918	94.25
19.5	2,056,944	33,383	0.0162	0.9838	93.48
20.5	1,494,947	6,691	0.0045	0.9955	91.96
21.5	1,538,713	47,613	0.0309	0.9691	91.55
22.5	1,487,717	14,831	0.0100	0.9900	88.72
23.5	1,473,472	19,797	0.0134	0.9866	87.83
24.5	1,279,680	29,165	0.0228	0.9772	86.65
25.5	1,191,114	8,839	0.0074	0.9926	84.68
26.5	1,114,697	14,991	0.0134	0.9866	84.05
27.5	1,031,378	18,482	0.0179	0.9821	82.92
28.5	957,201	42,376	0.0443	0.9557	81.43
29.5	1,060,402	17,876	0.0169	0.9831	77.83
30.5	1,009,926	6,835	0.0068	0.9932	76.52
31.5	965,449	20,938	0.0217	0.9783	76.00
32.5	916,457	10,184	0.0111	0.9889	74.35
33.5	925,283	20,334	0.0220	0.9780	73.52
34.5	894,191	31,490	0.0352	0.9648	71.91
35.5	862,018	22,412	0.0260	0.9740	69.38
36.5	841,182	4,930	0.0059	0.9941	67.57
37.5	767,289	11,007	0.0143	0.9857	67.18
38.5	751,239	19,683	0.0262	0.9738	66.21

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 327.00 FIELD COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1891-2021 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	681,717	24,489	0.0359	0.9641	64.48
40.5	610,606	30,804	0.0504	0.9496	62.16
41.5	602,714	23,060	0.0383	0.9617	59.03
42.5	568,274	4,653	0.0082	0.9918	56.77
43.5	560,121	4,045	0.0072	0.9928	56.30
44.5	548,348	6,925	0.0126	0.9874	55.90
45.5	539,001	13,582	0.0252	0.9748	55.19
46.5	513,346	9,263	0.0180	0.9820	53.80
47.5	519,277	1,775	0.0034	0.9966	52.83
48.5	377,215	12,537	0.0332	0.9668	52.65
49.5	364,233	2,317	0.0064	0.9936	50.90
50.5	252,467	1,962	0.0078	0.9922	50.57
51.5	220,618	2,604	0.0118	0.9882	50.18
52.5	211,372	4,982	0.0236	0.9764	49.59
53.5	209,853	622	0.0030	0.9970	48.42
54.5	199,418	1,997	0.0100	0.9900	48.28
55.5	192,692		0.0000	1.0000	47.79
56.5	190,892	772	0.0040	0.9960	47.79
57.5	190,120	1,911	0.0100	0.9900	47.60
58.5	144,731	439	0.0030	0.9970	47.12
59.5	141,214	12,692	0.0899	0.9101	46.98
60.5	125,921	3,638	0.0289	0.9711	42.76
61.5	122,283		0.0000	1.0000	41.52
62.5	121,679	2,722	0.0224	0.9776	41.52
63.5	118,943	1,213	0.0102	0.9898	40.59
64.5	116,754	1,416	0.0121	0.9879	40.18
65.5	113,870	2,109	0.0185	0.9815	39.69
66.5	86,713	2,703	0.0312	0.9688	38.96
67.5	84,010	11,097	0.1321	0.8679	37.74
68.5	72,649		0.0000	1.0000	32.76
69.5	72,385		0.0000	1.0000	32.76
70.5	66,406	248	0.0037	0.9963	32.76
71.5	66,157	902	0.0136	0.9864	32.63
72.5	33,543		0.0000	1.0000	32.19
73.5	1,766	23	0.0131	0.9869	32.19
74.5	33,389	15,073	0.4514	0.5486	31.77
75.5	18,272		0.0000	1.0000	17.43
76.5	18,272		0.0000	1.0000	17.43
77.5	18,210	19	0.0011	0.9989	17.43
78.5	18,165	849	0.0467	0.9533	17.41

PEOPLES NATURAL GAS COMPANY LLC

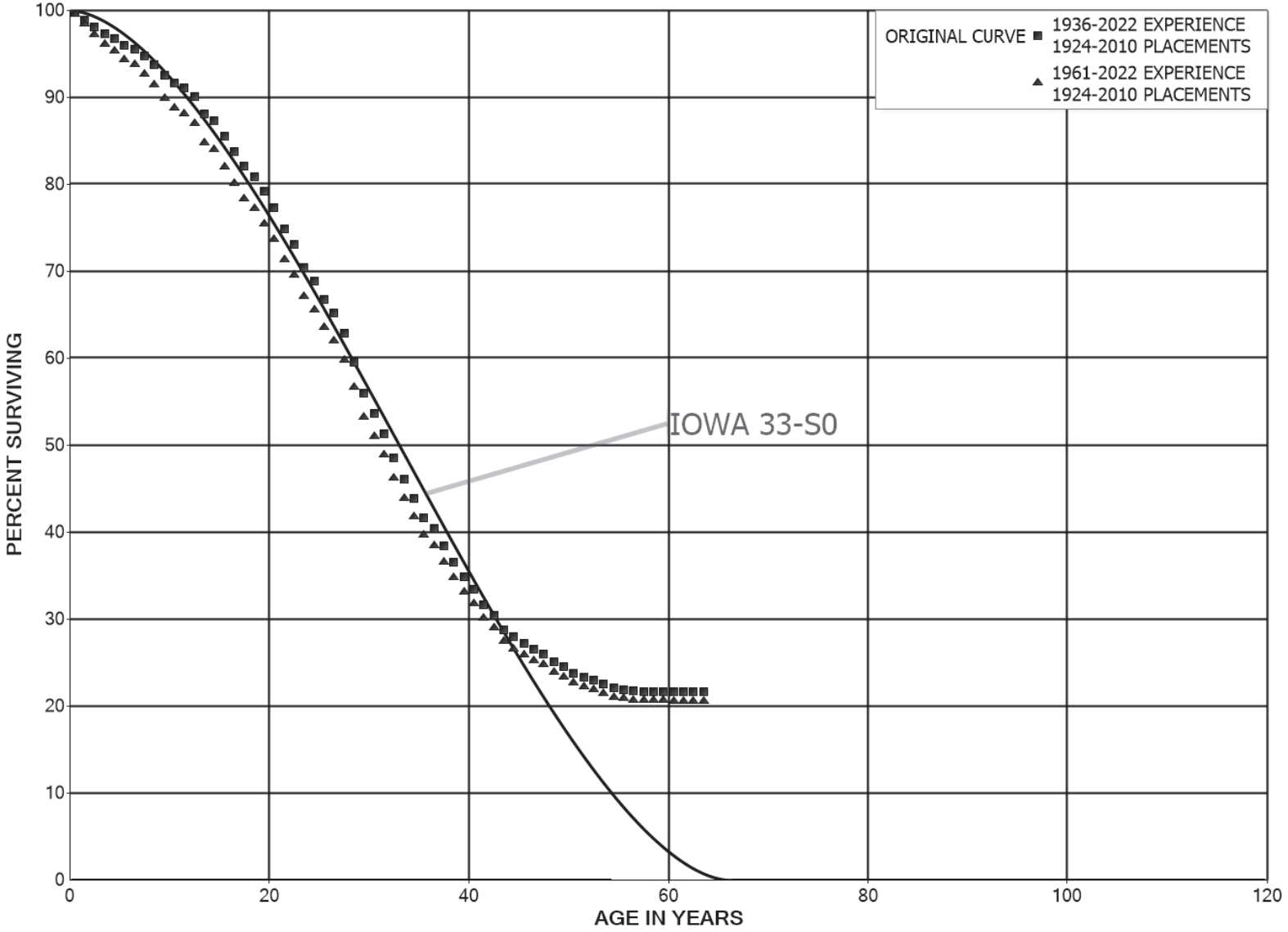
ACCOUNT 327.00 FIELD COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1891-2021 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	17,316		0.0000	1.0000	16.59
80.5	17,301	217	0.0125	0.9875	16.59
81.5	17,053		0.0000	1.0000	16.39
82.5	17,022		0.0000	1.0000	16.39
83.5	17,053		0.0000	1.0000	16.39
84.5	1,263	157	0.1247	0.8753	16.39
85.5	1,040	21	0.0206	0.9794	14.34
86.5	1,018		0.0000	1.0000	14.05
87.5	1,018		0.0000	1.0000	14.05
88.5	1,018		0.0000	1.0000	14.05
89.5	1,018		0.0000	1.0000	14.05
90.5	1,018		0.0000	1.0000	14.05
91.5	1,018		0.0000	1.0000	14.05
92.5	1,018		0.0000	1.0000	14.05
93.5	987		0.0000	1.0000	14.05
94.5	987		0.0000	1.0000	14.05
95.5	987		0.0000	1.0000	14.05
96.5	987		0.0000	1.0000	14.05
97.5	987		0.0000	1.0000	14.05
98.5	987		0.0000	1.0000	14.05
99.5	987		0.0000	1.0000	14.05
100.5	987		0.0000	1.0000	14.05
101.5	987		0.0000	1.0000	14.05
102.5	987		0.0000	1.0000	14.05
103.5	987		0.0000	1.0000	14.05
104.5	531		0.0000	1.0000	14.05
105.5	74		0.0000	1.0000	14.05
106.5	531		0.0000	1.0000	14.05
107.5	531		0.0000	1.0000	14.05
108.5	531		0.0000	1.0000	14.05
109.5	531		0.0000	1.0000	14.05
110.5	531		0.0000	1.0000	14.05
111.5	531		0.0000	1.0000	14.05
112.5	457		0.0000	1.0000	14.05
113.5	457		0.0000	1.0000	14.05
114.5	457		0.0000	1.0000	14.05
115.5	457		0.0000	1.0000	14.05
116.5					14.05

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 328.00 FIELD MEASURING AND REGULATING STATION STRUCTURES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 328.00 FIELD MEASURING AND REGULATING STATION STRUCTURES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1924-2010 EXPERIENCE BAND 1936-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	487,275	1,535	0.0032	0.9968	100.00
0.5	449,794	3,639	0.0081	0.9919	99.68
1.5	375,538	3,042	0.0081	0.9919	98.88
2.5	372,541	2,901	0.0078	0.9922	98.08
3.5	369,660	2,039	0.0055	0.9945	97.31
4.5	367,569	3,051	0.0083	0.9917	96.78
5.5	360,515	1,597	0.0044	0.9956	95.97
6.5	281,524	2,521	0.0090	0.9910	95.55
7.5	278,945	2,812	0.0101	0.9899	94.69
8.5	275,840	3,622	0.0131	0.9869	93.74
9.5	273,630	2,690	0.0098	0.9902	92.51
10.5	267,626	1,658	0.0062	0.9938	91.60
11.5	267,986	2,731	0.0102	0.9898	91.03
12.5	265,970	5,918	0.0223	0.9777	90.10
13.5	259,337	2,239	0.0086	0.9914	88.10
14.5	257,098	5,288	0.0206	0.9794	87.34
15.5	251,918	5,379	0.0214	0.9786	85.54
16.5	249,317	5,033	0.0202	0.9798	83.71
17.5	242,146	3,354	0.0138	0.9862	82.02
18.5	238,076	5,116	0.0215	0.9785	80.89
19.5	231,274	5,597	0.0242	0.9758	79.15
20.5	224,465	7,017	0.0313	0.9687	77.23
21.5	218,219	5,179	0.0237	0.9763	74.82
22.5	212,874	7,697	0.0362	0.9638	73.04
23.5	201,590	4,574	0.0227	0.9773	70.40
24.5	197,937	6,021	0.0304	0.9696	68.81
25.5	191,338	4,546	0.0238	0.9762	66.71
26.5	182,406	6,536	0.0358	0.9642	65.13
27.5	171,111	8,873	0.0519	0.9481	62.79
28.5	163,437	9,847	0.0602	0.9398	59.54
29.5	154,257	6,422	0.0416	0.9584	55.95
30.5	147,148	6,286	0.0427	0.9573	53.62
31.5	141,018	7,678	0.0544	0.9456	51.33
32.5	131,932	6,788	0.0514	0.9486	48.54
33.5	127,261	6,031	0.0474	0.9526	46.04
34.5	121,847	6,082	0.0499	0.9501	43.86
35.5	114,870	3,452	0.0300	0.9700	41.67
36.5	110,498	5,667	0.0513	0.9487	40.42
37.5	104,527	4,916	0.0470	0.9530	38.34
38.5	95,317	4,527	0.0475	0.9525	36.54

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 328.00 FIELD MEASURING AND REGULATING STATION STRUCTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1924-2010 EXPERIENCE BAND 1936-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	88,636	3,726	0.0420	0.9580	34.80
40.5	85,971	4,578	0.0533	0.9467	33.34
41.5	78,845	2,851	0.0362	0.9638	31.57
42.5	74,157	4,048	0.0546	0.9454	30.42
43.5	70,254	2,052	0.0292	0.9708	28.76
44.5	67,270	1,860	0.0277	0.9723	27.92
45.5	64,480	1,511	0.0234	0.9766	27.15
46.5	63,919	1,343	0.0210	0.9790	26.52
47.5	61,919	2,135	0.0345	0.9655	25.96
48.5	57,792	1,406	0.0243	0.9757	25.06
49.5	54,543	1,632	0.0299	0.9701	24.45
50.5	51,309	857	0.0167	0.9833	23.72
51.5	49,040	842	0.0172	0.9828	23.33
52.5	46,348	827	0.0178	0.9822	22.92
53.5	42,526	830	0.0195	0.9805	22.52
54.5	39,955	380	0.0095	0.9905	22.08
55.5	38,271	331	0.0087	0.9913	21.87
56.5	35,578	67	0.0019	0.9981	21.68
57.5	34,237		0.0000	1.0000	21.64
58.5	31,581		0.0000	1.0000	21.64
59.5	29,702	91	0.0030	0.9970	21.64
60.5	27,717		0.0000	1.0000	21.57
61.5	25,243		0.0000	1.0000	21.57
62.5	22,714		0.0000	1.0000	21.57
63.5	19,285		0.0000	1.0000	21.57
64.5	16,627		0.0000	1.0000	21.57
65.5	14,322		0.0000	1.0000	21.57
66.5	12,909		0.0000	1.0000	21.57
67.5	12,219		0.0000	1.0000	21.57
68.5	11,545		0.0000	1.0000	21.57
69.5	10,753		0.0000	1.0000	21.57
70.5	9,686		0.0000	1.0000	21.57
71.5	9,092		0.0000	1.0000	21.57
72.5	8,575		0.0000	1.0000	21.57
73.5	7,204		0.0000	1.0000	21.57
74.5	5,714		0.0000	1.0000	21.57
75.5	4,991		0.0000	1.0000	21.57
76.5	4,207		0.0000	1.0000	21.57
77.5	3,990		0.0000	1.0000	21.57
78.5	3,729		0.0000	1.0000	21.57

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 328.00 FIELD MEASURING AND REGULATING STATION STRUCTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1924-2010 EXPERIENCE BAND 1936-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	3,480		0.0000	1.0000	21.57
80.5	2,850		0.0000	1.0000	21.57
81.5	1,952		0.0000	1.0000	21.57
82.5	995		0.0000	1.0000	21.57
83.5	895		0.0000	1.0000	21.57
84.5	895		0.0000	1.0000	21.57
85.5	363		0.0000	1.0000	21.57
86.5	290		0.0000	1.0000	21.57
87.5	290		0.0000	1.0000	21.57
88.5	290		0.0000	1.0000	21.57
89.5	245		0.0000	1.0000	21.57
90.5	245		0.0000	1.0000	21.57
91.5	26		0.0000	1.0000	21.57
92.5	26		0.0000	1.0000	21.57
93.5	26		0.0000	1.0000	21.57
94.5	26		0.0000	1.0000	21.57
95.5	26		0.0000	1.0000	21.57
96.5					21.57

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 328.00 FIELD MEASURING AND REGULATING STATION STRUCTURES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1924-2010 EXPERIENCE BAND 1961-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	335,473	1,535	0.0046	0.9954	100.00
0.5	308,283	3,639	0.0118	0.9882	99.54
1.5	247,923	3,042	0.0123	0.9877	98.37
2.5	258,689	2,901	0.0112	0.9888	97.16
3.5	266,360	2,039	0.0077	0.9923	96.07
4.5	274,865	3,051	0.0111	0.9889	95.34
5.5	278,889	1,597	0.0057	0.9943	94.28
6.5	207,311	2,521	0.0122	0.9878	93.74
7.5	214,132	2,812	0.0131	0.9869	92.60
8.5	215,575	3,622	0.0168	0.9832	91.38
9.5	218,264	2,690	0.0123	0.9877	89.85
10.5	217,673	1,658	0.0076	0.9924	88.74
11.5	224,362	2,731	0.0122	0.9878	88.06
12.5	228,392	5,918	0.0259	0.9741	86.99
13.5	227,049	2,239	0.0099	0.9901	84.74
14.5	230,518	5,288	0.0229	0.9771	83.90
15.5	229,041	5,379	0.0235	0.9765	81.98
16.5	231,292	5,033	0.0218	0.9782	80.05
17.5	228,143	3,354	0.0147	0.9853	78.31
18.5	228,839	5,116	0.0224	0.9776	77.16
19.5	226,772	5,597	0.0247	0.9753	75.43
20.5	222,272	7,017	0.0316	0.9684	73.57
21.5	216,863	5,179	0.0239	0.9761	71.25
22.5	211,518	7,697	0.0364	0.9636	69.55
23.5	201,002	4,574	0.0228	0.9772	67.02
24.5	197,461	6,021	0.0305	0.9695	65.49
25.5	190,862	4,546	0.0238	0.9762	63.49
26.5	181,929	6,536	0.0359	0.9641	61.98
27.5	170,680	8,873	0.0520	0.9480	59.76
28.5	163,026	9,847	0.0604	0.9396	56.65
29.5	154,063	6,422	0.0417	0.9583	53.23
30.5	146,955	6,286	0.0428	0.9572	51.01
31.5	140,859	7,678	0.0545	0.9455	48.83
32.5	131,816	6,788	0.0515	0.9485	46.17
33.5	127,144	6,031	0.0474	0.9526	43.79
34.5	121,847	6,082	0.0499	0.9501	41.71
35.5	114,870	3,452	0.0300	0.9700	39.63
36.5	110,498	5,667	0.0513	0.9487	38.44
37.5	104,527	4,916	0.0470	0.9530	36.47
38.5	95,317	4,527	0.0475	0.9525	34.75

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 328.00 FIELD MEASURING AND REGULATING STATION STRUCTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1924-2010 EXPERIENCE BAND 1961-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	88,636	3,726	0.0420	0.9580	33.10
40.5	85,971	4,578	0.0533	0.9467	31.71
41.5	78,845	2,851	0.0362	0.9638	30.02
42.5	74,157	4,048	0.0546	0.9454	28.94
43.5	70,254	2,052	0.0292	0.9708	27.36
44.5	67,270	1,860	0.0277	0.9723	26.56
45.5	64,480	1,511	0.0234	0.9766	25.82
46.5	63,919	1,343	0.0210	0.9790	25.22
47.5	61,919	2,135	0.0345	0.9655	24.69
48.5	57,792	1,406	0.0243	0.9757	23.84
49.5	54,543	1,632	0.0299	0.9701	23.26
50.5	51,309	857	0.0167	0.9833	22.56
51.5	49,040	842	0.0172	0.9828	22.18
52.5	46,348	827	0.0178	0.9822	21.80
53.5	42,526	830	0.0195	0.9805	21.41
54.5	39,955	380	0.0095	0.9905	21.00
55.5	38,271	331	0.0087	0.9913	20.80
56.5	35,578	67	0.0019	0.9981	20.62
57.5	34,237		0.0000	1.0000	20.58
58.5	31,581		0.0000	1.0000	20.58
59.5	29,702	91	0.0030	0.9970	20.58
60.5	27,717		0.0000	1.0000	20.51
61.5	25,243		0.0000	1.0000	20.51
62.5	22,714		0.0000	1.0000	20.51
63.5	19,285		0.0000	1.0000	20.51
64.5	16,627		0.0000	1.0000	20.51
65.5	14,322		0.0000	1.0000	20.51
66.5	12,909		0.0000	1.0000	20.51
67.5	12,219		0.0000	1.0000	20.51
68.5	11,545		0.0000	1.0000	20.51
69.5	10,753		0.0000	1.0000	20.51
70.5	9,686		0.0000	1.0000	20.51
71.5	9,092		0.0000	1.0000	20.51
72.5	8,575		0.0000	1.0000	20.51
73.5	7,204		0.0000	1.0000	20.51
74.5	5,714		0.0000	1.0000	20.51
75.5	4,991		0.0000	1.0000	20.51
76.5	4,207		0.0000	1.0000	20.51
77.5	3,990		0.0000	1.0000	20.51
78.5	3,729		0.0000	1.0000	20.51

PEOPLES NATURAL GAS COMPANY LLC

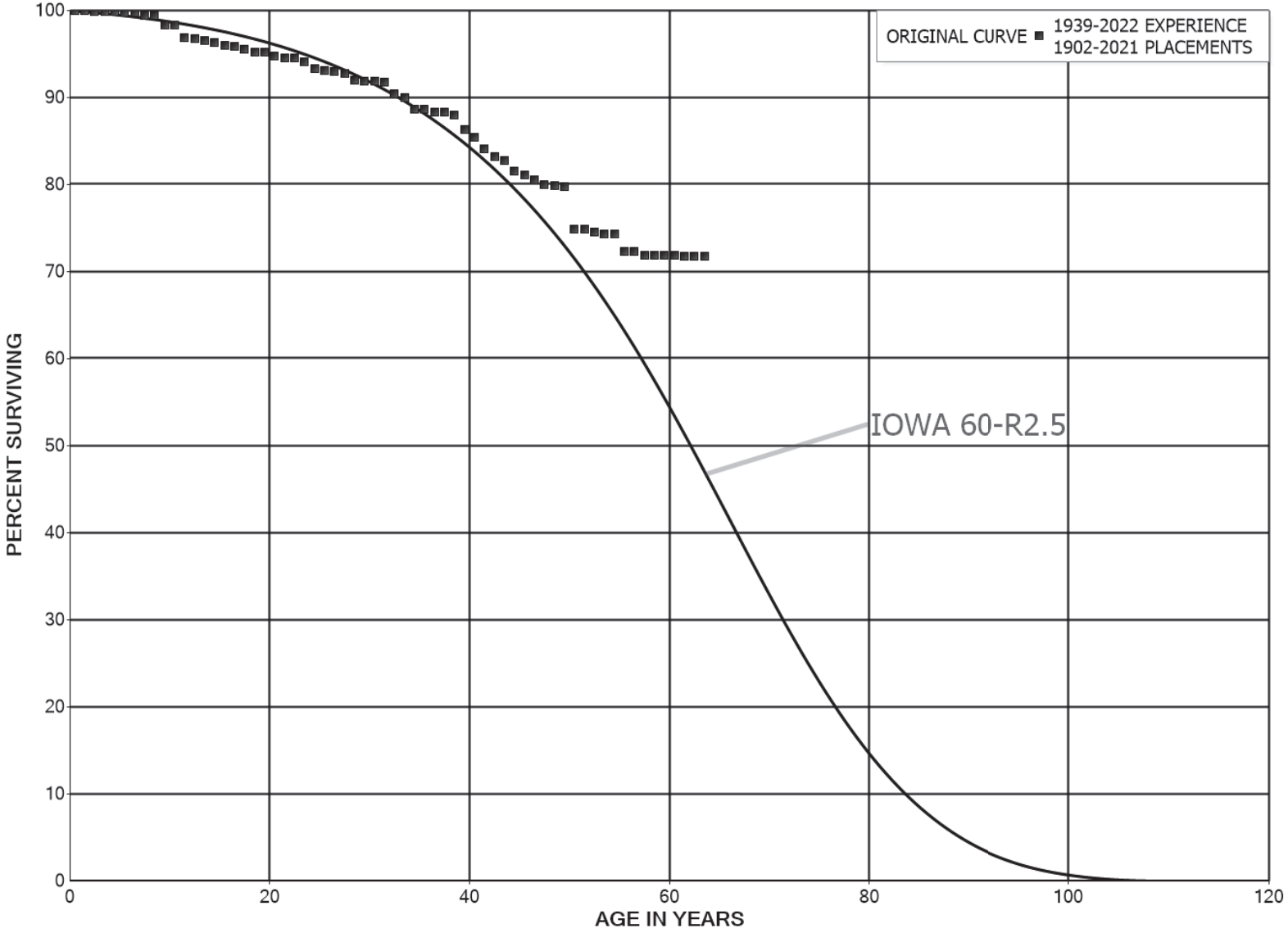
ACCOUNT 328.00 FIELD MEASURING AND REGULATING STATION STRUCTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1924-2010 EXPERIENCE BAND 1961-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	3,480		0.0000	1.0000	20.51
80.5	2,850		0.0000	1.0000	20.51
81.5	1,952		0.0000	1.0000	20.51
82.5	995		0.0000	1.0000	20.51
83.5	895		0.0000	1.0000	20.51
84.5	895		0.0000	1.0000	20.51
85.5	363		0.0000	1.0000	20.51
86.5	290		0.0000	1.0000	20.51
87.5	290		0.0000	1.0000	20.51
88.5	290		0.0000	1.0000	20.51
89.5	245		0.0000	1.0000	20.51
90.5	245		0.0000	1.0000	20.51
91.5	26		0.0000	1.0000	20.51
92.5	26		0.0000	1.0000	20.51
93.5	26		0.0000	1.0000	20.51
94.5	26		0.0000	1.0000	20.51
95.5	26		0.0000	1.0000	20.51
96.5					20.51

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 329.00 OTHER STRUCTURES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 329.00 OTHER STRUCTURES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1902-2021 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	2,487,669	1,797	0.0007	0.9993	100.00
0.5	2,418,042	457	0.0002	0.9998	99.93
1.5	2,383,417	1,130	0.0005	0.9995	99.91
2.5	2,379,355	484	0.0002	0.9998	99.86
3.5	2,375,791	760	0.0003	0.9997	99.84
4.5	2,381,399	978	0.0004	0.9996	99.81
5.5	2,344,092	2,187	0.0009	0.9991	99.77
6.5	2,336,998	5,533	0.0024	0.9976	99.68
7.5	2,238,553	1,796	0.0008	0.9992	99.44
8.5	2,132,609	22,694	0.0106	0.9894	99.36
9.5	2,074,912	973	0.0005	0.9995	98.30
10.5	1,048,803	15,251	0.0145	0.9855	98.26
11.5	910,143	1,383	0.0015	0.9985	96.83
12.5	878,997	1,982	0.0023	0.9977	96.68
13.5	883,205	2,089	0.0024	0.9976	96.46
14.5	836,662	2,911	0.0035	0.9965	96.23
15.5	866,655	1,027	0.0012	0.9988	95.90
16.5	862,770	2,400	0.0028	0.9972	95.79
17.5	856,135	2,750	0.0032	0.9968	95.52
18.5	853,477	367	0.0004	0.9996	95.21
19.5	855,442	4,139	0.0048	0.9952	95.17
20.5	825,261	1,661	0.0020	0.9980	94.71
21.5	806,298	248	0.0003	0.9997	94.52
22.5	807,181	3,592	0.0045	0.9955	94.49
23.5	782,798	6,523	0.0083	0.9917	94.07
24.5	774,108	2,110	0.0027	0.9973	93.29
25.5	762,331	598	0.0008	0.9992	93.03
26.5	762,877	1,929	0.0025	0.9975	92.96
27.5	742,630	6,221	0.0084	0.9916	92.72
28.5	612,201	521	0.0009	0.9991	91.95
29.5	611,047	592	0.0010	0.9990	91.87
30.5	503,033	568	0.0011	0.9989	91.78
31.5	463,148	6,468	0.0140	0.9860	91.68
32.5	451,822	2,164	0.0048	0.9952	90.40
33.5	387,814	5,907	0.0152	0.9848	89.96
34.5	370,225	49	0.0001	0.9999	88.59
35.5	355,648	989	0.0028	0.9972	88.58
36.5	351,744	13	0.0000	1.0000	88.34
37.5	346,327	1,666	0.0048	0.9952	88.33
38.5	319,948	5,826	0.0182	0.9818	87.91

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 329.00 OTHER STRUCTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1902-2021 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	310,021	3,261	0.0105	0.9895	86.31
40.5	298,282	4,722	0.0158	0.9842	85.40
41.5	292,584	3,180	0.0109	0.9891	84.05
42.5	187,786	896	0.0048	0.9952	83.13
43.5	184,189	2,745	0.0149	0.9851	82.74
44.5	180,896	905	0.0050	0.9950	81.50
45.5	152,719	1,123	0.0074	0.9926	81.10
46.5	151,388	990	0.0065	0.9935	80.50
47.5	145,712	204	0.0014	0.9986	79.97
48.5	122,885	199	0.0016	0.9984	79.86
49.5	123,000	7,617	0.0619	0.9381	79.73
50.5	114,771		0.0000	1.0000	74.79
51.5	112,457	425	0.0038	0.9962	74.79
52.5	112,032	387	0.0035	0.9965	74.51
53.5	111,400		0.0000	1.0000	74.25
54.5	70,488	1,885	0.0267	0.9733	74.25
55.5	68,603		0.0000	1.0000	72.27
56.5	67,901	418	0.0061	0.9939	72.27
57.5	66,652		0.0000	1.0000	71.82
58.5	62,140		0.0000	1.0000	71.82
59.5	60,818		0.0000	1.0000	71.82
60.5	59,068	85	0.0014	0.9986	71.82
61.5	50,462		0.0000	1.0000	71.72
62.5	48,891		0.0000	1.0000	71.72
63.5	17,182		0.0000	1.0000	71.72
64.5	16,037	625	0.0390	0.9610	71.72
65.5	15,412		0.0000	1.0000	68.92
66.5	15,412		0.0000	1.0000	68.92
67.5	15,001		0.0000	1.0000	68.92
68.5	15,001		0.0000	1.0000	68.92
69.5	15,001		0.0000	1.0000	68.92
70.5	14,429		0.0000	1.0000	68.92
71.5	14,363		0.0000	1.0000	68.92
72.5	14,363		0.0000	1.0000	68.92
73.5	14,141		0.0000	1.0000	68.92
74.5	13,029		0.0000	1.0000	68.92
75.5	12,124		0.0000	1.0000	68.92
76.5	9,665		0.0000	1.0000	68.92
77.5	9,213		0.0000	1.0000	68.92
78.5	9,213		0.0000	1.0000	68.92

PEOPLES NATURAL GAS COMPANY LLC

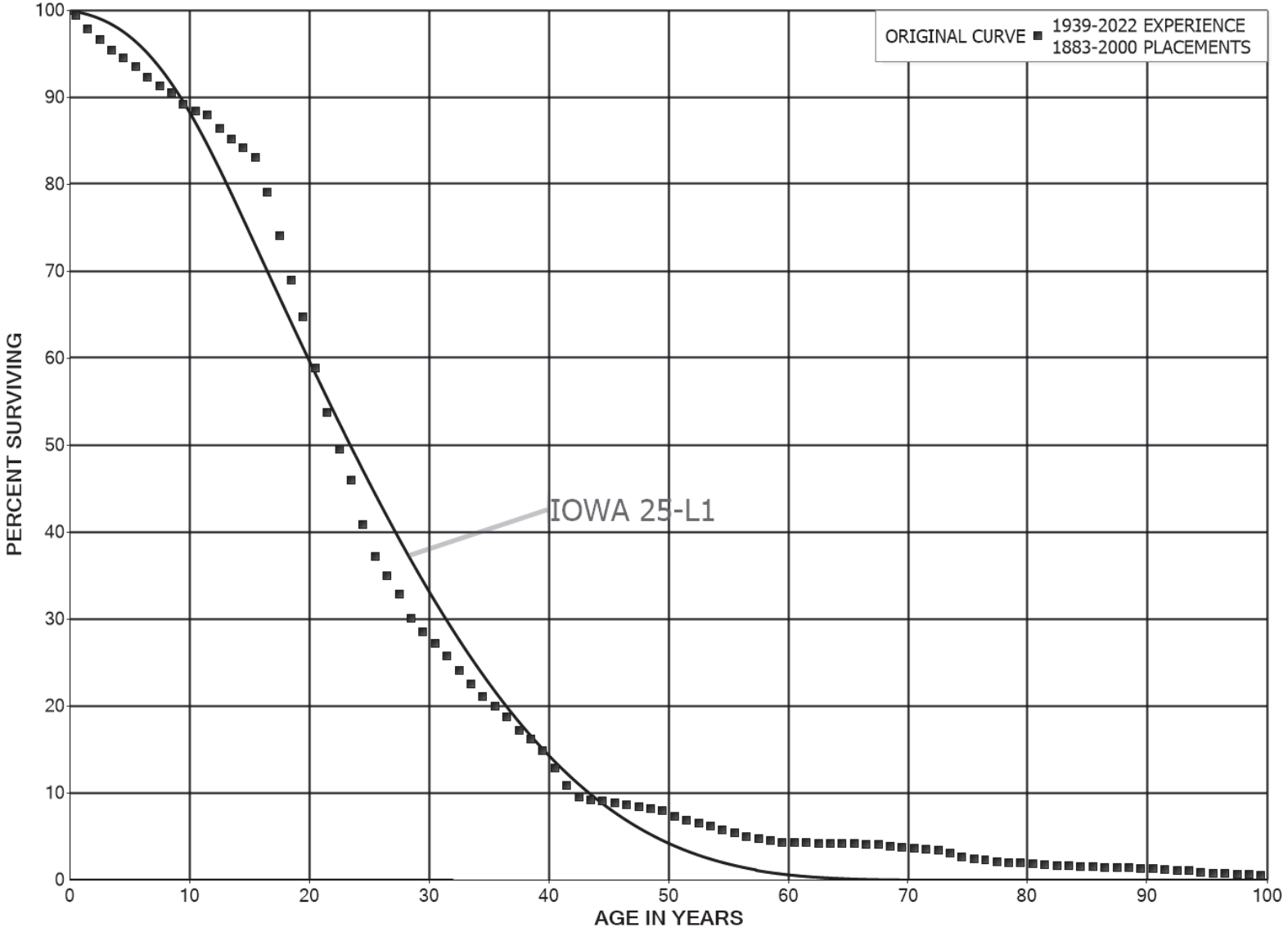
ACCOUNT 329.00 OTHER STRUCTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1902-2021 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	7,196		0.0000	1.0000	68.92
80.5	7,118		0.0000	1.0000	68.92
81.5	7,118		0.0000	1.0000	68.92
82.5	6,482		0.0000	1.0000	68.92
83.5	6,292		0.0000	1.0000	68.92
84.5	5,641		0.0000	1.0000	68.92
85.5	4,355		0.0000	1.0000	68.92
86.5	4,355		0.0000	1.0000	68.92
87.5	4,355		0.0000	1.0000	68.92
88.5	3,753		0.0000	1.0000	68.92
89.5	3,753		0.0000	1.0000	68.92
90.5	3,753		0.0000	1.0000	68.92
91.5	3,318		0.0000	1.0000	68.92
92.5	511		0.0000	1.0000	68.92
93.5	511		0.0000	1.0000	68.92
94.5	511		0.0000	1.0000	68.92
95.5	511		0.0000	1.0000	68.92
96.5	511		0.0000	1.0000	68.92
97.5	126		0.0000	1.0000	68.92
98.5	126		0.0000	1.0000	68.92
99.5	30		0.0000	1.0000	68.92
100.5	30		0.0000	1.0000	68.92
101.5	30		0.0000	1.0000	68.92
102.5	30		0.0000	1.0000	68.92
103.5	30		0.0000	1.0000	68.92
104.5	30		0.0000	1.0000	68.92
105.5	30		0.0000	1.0000	68.92
106.5	30		0.0000	1.0000	68.92
107.5	30		0.0000	1.0000	68.92
108.5	30		0.0000	1.0000	68.92
109.5	30		0.0000	1.0000	68.92
110.5	30		0.0000	1.0000	68.92
111.5	30		0.0000	1.0000	68.92
112.5	30		0.0000	1.0000	68.92
113.5	30		0.0000	1.0000	68.92
114.5	30		0.0000	1.0000	68.92
115.5	30		0.0000	1.0000	68.92
116.5					68.92

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 330.00 PRODUCING GAS WELLS - WELL CONSTRUCTION
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 330.00 PRODUCING GAS WELLS - WELL CONSTRUCTION

ORIGINAL LIFE TABLE

PLACEMENT BAND 1883-2000 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	31,844,812	202,885	0.0064	0.9936	100.00
0.5	45,786,431	688,117	0.0150	0.9850	99.36
1.5	48,402,739	632,754	0.0131	0.9869	97.87
2.5	48,839,511	620,640	0.0127	0.9873	96.59
3.5	47,944,751	457,578	0.0095	0.9905	95.36
4.5	47,286,430	489,406	0.0103	0.9897	94.45
5.5	46,802,384	582,529	0.0124	0.9876	93.48
6.5	45,988,422	486,539	0.0106	0.9894	92.31
7.5	45,617,196	427,637	0.0094	0.9906	91.33
8.5	45,487,310	628,482	0.0138	0.9862	90.48
9.5	45,084,774	403,753	0.0090	0.9910	89.23
10.5	44,876,250	269,306	0.0060	0.9940	88.43
11.5	44,818,978	770,708	0.0172	0.9828	87.90
12.5	44,257,876	636,756	0.0144	0.9856	86.39
13.5	44,117,216	512,229	0.0116	0.9884	85.14
14.5	44,029,575	549,701	0.0125	0.9875	84.16
15.5	43,902,594	2,157,750	0.0491	0.9509	83.11
16.5	41,974,148	2,629,152	0.0626	0.9374	79.02
17.5	39,901,688	2,743,110	0.0687	0.9313	74.07
18.5	37,573,286	2,334,916	0.0621	0.9379	68.98
19.5	35,264,952	3,169,194	0.0899	0.9101	64.69
20.5	32,070,480	2,805,438	0.0875	0.9125	58.88
21.5	29,209,941	2,286,212	0.0783	0.9217	53.73
22.5	26,731,795	1,922,343	0.0719	0.9281	49.52
23.5	24,964,652	2,762,468	0.1107	0.8893	45.96
24.5	21,950,241	1,997,367	0.0910	0.9090	40.88
25.5	19,951,463	1,199,423	0.0601	0.9399	37.16
26.5	18,651,129	1,130,483	0.0606	0.9394	34.92
27.5	17,502,055	1,454,926	0.0831	0.9169	32.81
28.5	15,961,829	820,977	0.0514	0.9486	30.08
29.5	15,208,426	744,492	0.0490	0.9510	28.53
30.5	14,530,012	784,285	0.0540	0.9460	27.13
31.5	13,917,200	850,206	0.0611	0.9389	25.67
32.5	13,061,813	854,413	0.0654	0.9346	24.10
33.5	12,752,397	816,476	0.0640	0.9360	22.53
34.5	11,915,507	654,150	0.0549	0.9451	21.08
35.5	11,304,040	682,957	0.0604	0.9396	19.93
36.5	10,547,476	868,524	0.0823	0.9177	18.72
37.5	9,651,301	582,800	0.0604	0.9396	17.18
38.5	9,045,558	702,343	0.0776	0.9224	16.14

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 330.00 PRODUCING GAS WELLS - WELL CONSTRUCTION

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2000 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	8,413,578	1,186,021	0.1410	0.8590	14.89
40.5	7,065,888	1,057,428	0.1497	0.8503	12.79
41.5	6,022,603	735,367	0.1221	0.8779	10.88
42.5	5,309,551	199,762	0.0376	0.9624	9.55
43.5	5,093,409	64,054	0.0126	0.9874	9.19
44.5	4,955,962	111,343	0.0225	0.9775	9.07
45.5	4,795,393	120,268	0.0251	0.9749	8.87
46.5	4,677,436	135,900	0.0291	0.9709	8.65
47.5	4,494,248	102,058	0.0227	0.9773	8.40
48.5	4,402,181	137,329	0.0312	0.9688	8.21
49.5	4,163,323	343,140	0.0824	0.9176	7.95
50.5	3,833,597	244,264	0.0637	0.9363	7.29
51.5	3,530,280	193,549	0.0548	0.9452	6.83
52.5	3,261,095	148,184	0.0454	0.9546	6.46
53.5	3,100,861	209,229	0.0675	0.9325	6.16
54.5	2,832,764	177,042	0.0625	0.9375	5.75
55.5	2,643,729	186,011	0.0704	0.9296	5.39
56.5	2,458,087	154,801	0.0630	0.9370	5.01
57.5	2,298,094	100,918	0.0439	0.9561	4.69
58.5	2,203,758	75,544	0.0343	0.9657	4.49
59.5	2,151,523	10,302	0.0048	0.9952	4.33
60.5	2,107,968	18,901	0.0090	0.9910	4.31
61.5	2,078,489	25,609	0.0123	0.9877	4.27
62.5	2,045,618	7,548	0.0037	0.9963	4.22
63.5	2,032,102	6,686	0.0033	0.9967	4.20
64.5	2,017,317	15,884	0.0079	0.9921	4.19
65.5	1,988,198	25,929	0.0130	0.9870	4.16
66.5	1,897,186	20,595	0.0109	0.9891	4.10
67.5	1,816,950	102,944	0.0567	0.9433	4.06
68.5	1,726,224	46,565	0.0270	0.9730	3.83
69.5	1,682,132	71,407	0.0425	0.9575	3.73
70.5	1,613,730	51,432	0.0319	0.9681	3.57
71.5	1,545,627	45,220	0.0293	0.9707	3.45
72.5	1,486,214	147,087	0.0990	0.9010	3.35
73.5	1,274,556	159,815	0.1254	0.8746	3.02
74.5	1,099,970	105,689	0.0961	0.9039	2.64
75.5	981,332	41,168	0.0420	0.9580	2.39
76.5	975,838	89,654	0.0919	0.9081	2.29
77.5	885,137	46,301	0.0523	0.9477	2.08
78.5	836,414	26,773	0.0320	0.9680	1.97

PEOPLES NATURAL GAS COMPANY LLC

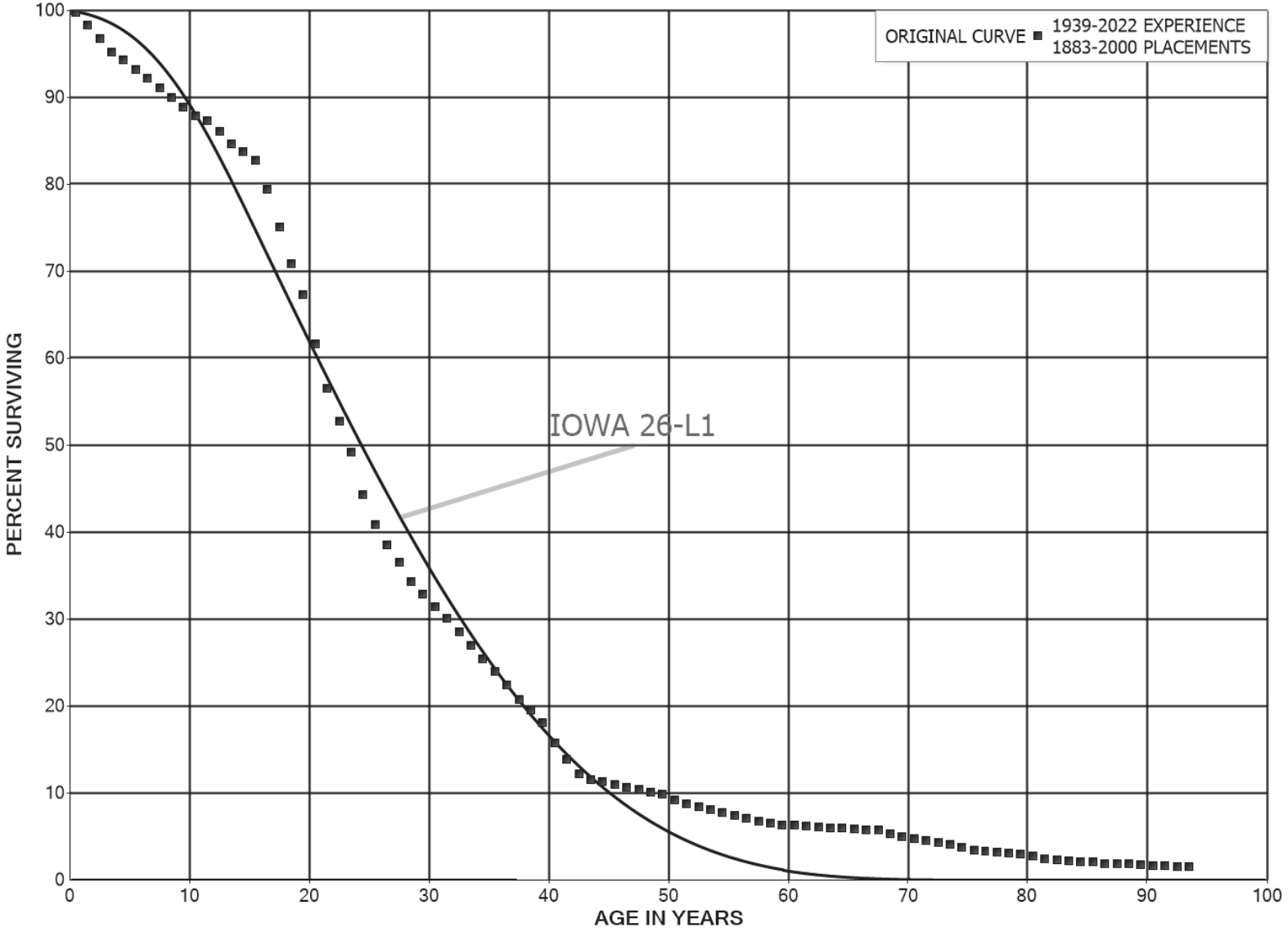
ACCOUNT 330.00 PRODUCING GAS WELLS - WELL CONSTRUCTION

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2000 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	772,900	26,291	0.0340	0.9660	1.91
80.5	710,585	24,657	0.0347	0.9653	1.84
81.5	713,349	47,192	0.0662	0.9338	1.78
82.5	669,219	33,258	0.0497	0.9503	1.66
83.5	624,624	22,017	0.0352	0.9648	1.58
84.5	574,500	14,966	0.0261	0.9739	1.52
85.5	549,063	25,377	0.0462	0.9538	1.48
86.5	498,654	18,683	0.0375	0.9625	1.41
87.5	479,010	4,637	0.0097	0.9903	1.36
88.5	473,346	18,778	0.0397	0.9603	1.35
89.5	451,623	10,763	0.0238	0.9762	1.29
90.5	417,947	26,872	0.0643	0.9357	1.26
91.5	369,000	23,757	0.0644	0.9356	1.18
92.5	312,532	9,659	0.0309	0.9691	1.11
93.5	275,503	67,790	0.2461	0.7539	1.07
94.5	229,150	15,682	0.0684	0.9316	0.81
95.5	221,158	11,379	0.0515	0.9485	0.75
96.5	200,423	13,346	0.0666	0.9334	0.71
97.5	180,518	12,308	0.0682	0.9318	0.67
98.5	156,695	17,619	0.1124	0.8876	0.62
99.5	100,906	4,079	0.0404	0.9596	0.55
100.5	102,122	7	0.0001	0.9999	0.53
101.5	79,470	6,877	0.0865	0.9135	0.53
102.5	62,885	6,511	0.1035	0.8965	0.48
103.5	63,929	996	0.0156	0.9844	0.43
104.5	60,322	1,747	0.0290	0.9710	0.43
105.5	50,669	1,709	0.0337	0.9663	0.41
106.5	47,447	3,261	0.0687	0.9313	0.40
107.5	41,100	1,555	0.0378	0.9622	0.37
108.5	31,833		0.0000	1.0000	0.36
109.5	17,222		0.0000	1.0000	0.36
110.5	2,610		0.0000	1.0000	0.36
111.5	14,612		0.0000	1.0000	0.36
112.5	14,612		0.0000	1.0000	0.36
113.5	14,612		0.0000	1.0000	0.36
114.5	14,612		0.0000	1.0000	0.36
115.5	14,612		0.0000	1.0000	0.36
116.5					0.36

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 331.00 PRODUCING GAS WELLS - WELL EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 331.00 PRODUCING GAS WELLS - WELL EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1883-2000 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	10,722,263	29,152	0.0027	0.9973	100.00
0.5	14,676,310	218,602	0.0149	0.9851	99.73
1.5	15,234,179	240,542	0.0158	0.9842	98.24
2.5	15,063,931	238,011	0.0158	0.9842	96.69
3.5	14,788,426	129,013	0.0087	0.9913	95.16
4.5	14,650,780	183,532	0.0125	0.9875	94.33
5.5	14,317,288	158,492	0.0111	0.9889	93.15
6.5	14,078,555	160,356	0.0114	0.9886	92.12
7.5	13,999,258	167,826	0.0120	0.9880	91.07
8.5	14,072,579	185,669	0.0132	0.9868	89.98
9.5	14,044,442	145,678	0.0104	0.9896	88.79
10.5	14,074,492	89,489	0.0064	0.9936	87.87
11.5	14,147,180	207,120	0.0146	0.9854	87.31
12.5	14,028,483	224,733	0.0160	0.9840	86.03
13.5	13,958,201	157,933	0.0113	0.9887	84.66
14.5	13,985,277	155,399	0.0111	0.9889	83.70
15.5	13,952,236	572,086	0.0410	0.9590	82.77
16.5	13,455,055	739,386	0.0550	0.9450	79.37
17.5	12,901,825	709,957	0.0550	0.9450	75.01
18.5	12,276,322	623,986	0.0508	0.9492	70.88
19.5	11,767,226	990,668	0.0842	0.9158	67.28
20.5	10,849,885	895,059	0.0825	0.9175	61.62
21.5	10,059,379	681,227	0.0677	0.9323	56.53
22.5	9,377,562	632,172	0.0674	0.9326	52.71
23.5	8,790,641	880,398	0.1002	0.8998	49.15
24.5	7,900,443	600,665	0.0760	0.9240	44.23
25.5	7,344,477	416,013	0.0566	0.9434	40.87
26.5	6,898,937	367,766	0.0533	0.9467	38.55
27.5	6,553,016	405,204	0.0618	0.9382	36.50
28.5	6,133,380	255,035	0.0416	0.9584	34.24
29.5	5,929,241	247,265	0.0417	0.9583	32.82
30.5	5,721,654	247,806	0.0433	0.9567	31.45
31.5	5,476,099	279,812	0.0511	0.9489	30.09
32.5	5,173,288	286,063	0.0553	0.9447	28.55
33.5	4,875,624	284,686	0.0584	0.9416	26.97
34.5	4,603,811	269,184	0.0585	0.9415	25.40
35.5	4,368,541	269,874	0.0618	0.9382	23.91
36.5	4,082,290	307,368	0.0753	0.9247	22.43
37.5	3,749,256	220,269	0.0588	0.9412	20.74
38.5	3,537,660	255,971	0.0724	0.9276	19.53

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 331.00 PRODUCING GAS WELLS - WELL EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2000 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	3,304,936	435,654	0.1318	0.8682	18.11
40.5	2,854,525	343,703	0.1204	0.8796	15.73
41.5	2,510,751	296,577	0.1181	0.8819	13.83
42.5	2,221,918	126,361	0.0569	0.9431	12.20
43.5	2,072,809	42,055	0.0203	0.9797	11.50
44.5	2,014,176	58,765	0.0292	0.9708	11.27
45.5	1,932,860	64,819	0.0335	0.9665	10.94
46.5	1,872,541	38,670	0.0207	0.9793	10.58
47.5	1,815,500	42,221	0.0233	0.9767	10.36
48.5	1,766,430	57,139	0.0323	0.9677	10.12
49.5	1,681,835	105,463	0.0627	0.9373	9.79
50.5	1,580,417	74,737	0.0473	0.9527	9.17
51.5	1,488,429	50,560	0.0340	0.9660	8.74
52.5	1,420,747	56,872	0.0400	0.9600	8.44
53.5	1,352,471	65,700	0.0486	0.9514	8.11
54.5	1,263,237	51,422	0.0407	0.9593	7.71
55.5	1,198,970	57,819	0.0482	0.9518	7.40
56.5	1,141,148	52,214	0.0458	0.9542	7.04
57.5	1,097,964	35,288	0.0321	0.9679	6.72
58.5	1,063,541	27,333	0.0257	0.9743	6.50
59.5	1,034,136	13,286	0.0128	0.9872	6.34
60.5	1,019,158	10,190	0.0100	0.9900	6.25
61.5	1,003,676	22,231	0.0222	0.9778	6.19
62.5	983,349	9,139	0.0093	0.9907	6.06
63.5	971,469	12,474	0.0128	0.9872	6.00
64.5	954,079	13,224	0.0139	0.9861	5.92
65.5	936,839	12,733	0.0136	0.9864	5.84
66.5	881,505	9,326	0.0106	0.9894	5.76
67.5	824,082	62,268	0.0756	0.9244	5.70
68.5	782,242	41,068	0.0525	0.9475	5.27
69.5	737,109	37,770	0.0512	0.9488	4.99
70.5	699,236	36,376	0.0520	0.9480	4.74
71.5	648,731	23,116	0.0356	0.9644	4.49
72.5	621,199	36,098	0.0581	0.9419	4.33
73.5	543,497	44,464	0.0818	0.9182	4.08
74.5	485,517	39,088	0.0805	0.9195	3.74
75.5	442,168	19,050	0.0431	0.9569	3.44
76.5	433,081	16,769	0.0387	0.9613	3.29
77.5	414,470	12,393	0.0299	0.9701	3.17
78.5	398,457	14,108	0.0354	0.9646	3.07

PEOPLES NATURAL GAS COMPANY LLC

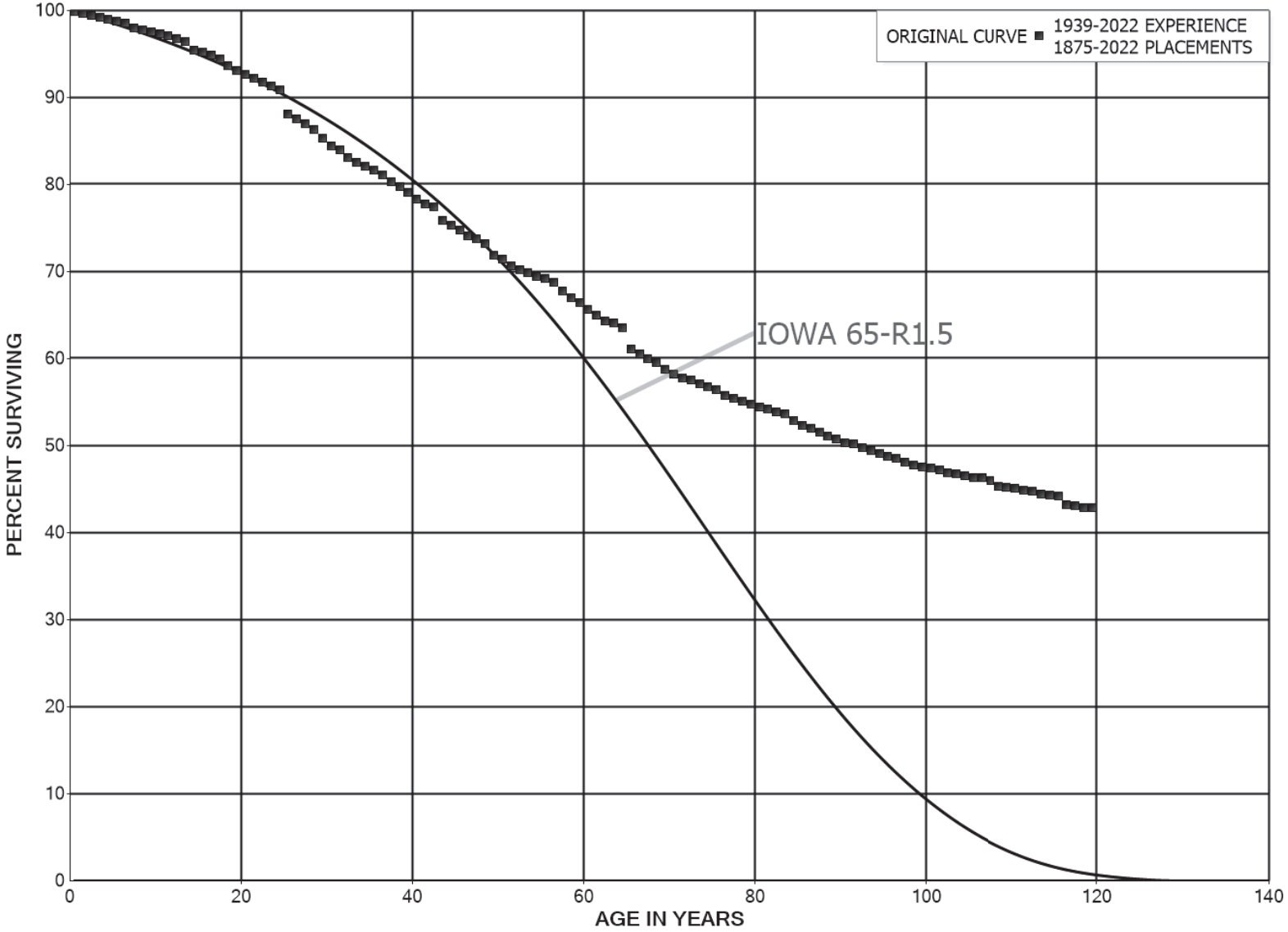
ACCOUNT 331.00 PRODUCING GAS WELLS - WELL EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2000 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	373,568	32,891	0.0880	0.9120	2.96
80.5	325,652	31,813	0.0977	0.9023	2.70
81.5	301,450	23,855	0.0791	0.9209	2.44
82.5	280,831	11,732	0.0418	0.9582	2.25
83.5	265,668	12,195	0.0459	0.9541	2.15
84.5	241,709	4,101	0.0170	0.9830	2.05
85.5	233,170	14,971	0.0642	0.9358	2.02
86.5	212,575	3,396	0.0160	0.9840	1.89
87.5	203,054	4,069	0.0200	0.9800	1.86
88.5	198,936	11,600	0.0583	0.9417	1.82
89.5	185,660	7,505	0.0404	0.9596	1.72
90.5	170,537	2,104	0.0123	0.9877	1.65
91.5	162,196	8,165	0.0503	0.9497	1.63
92.5	124,626	3,818	0.0306	0.9694	1.54
93.5	97,826	16,154	0.1651	0.8349	1.50
94.5	101,161	8,042	0.0795	0.9205	1.25
95.5	97,149	905	0.0093	0.9907	1.15
96.5	90,846	7,124	0.0784	0.9216	1.14
97.5	83,244	2,892	0.0347	0.9653	1.05
98.5	75,272	8,870	0.1178	0.8822	1.01
99.5	39,734	643	0.0162	0.9838	0.89
100.5	37,590	3,197	0.0850	0.9150	0.88
101.5	26,449	1,722	0.0651	0.9349	0.80
102.5	21,546	1,090	0.0506	0.9494	0.75
103.5	24,401		0.0000	1.0000	0.71
104.5	21,289	16	0.0008	0.9992	0.71
105.5	17,029	280	0.0165	0.9835	0.71
106.5	18,230	605	0.0332	0.9668	0.70
107.5	16,028	323	0.0202	0.9798	0.68
108.5	11,283		0.0000	1.0000	0.66
109.5	7,197		0.0000	1.0000	0.66
110.5	3,112		0.0000	1.0000	0.66
111.5	4,085		0.0000	1.0000	0.66
112.5	4,085		0.0000	1.0000	0.66
113.5	4,085		0.0000	1.0000	0.66
114.5	4,085		0.0000	1.0000	0.66
115.5	4,085		0.0000	1.0000	0.66
116.5					0.66

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 332.00 FIELD LINES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 332.00 FIELD LINES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1875-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	91,425,377	113,969	0.0012	0.9988	100.00
0.5	83,533,509	242,749	0.0029	0.9971	99.88
1.5	84,404,402	170,681	0.0020	0.9980	99.59
2.5	80,493,950	200,711	0.0025	0.9975	99.38
3.5	76,736,369	128,872	0.0017	0.9983	99.14
4.5	74,272,463	183,709	0.0025	0.9975	98.97
5.5	74,802,987	167,344	0.0022	0.9978	98.72
6.5	75,442,074	391,805	0.0052	0.9948	98.50
7.5	74,558,751	199,004	0.0027	0.9973	97.99
8.5	72,620,179	169,283	0.0023	0.9977	97.73
9.5	69,665,682	139,112	0.0020	0.9980	97.50
10.5	65,814,349	148,409	0.0023	0.9977	97.31
11.5	61,220,782	229,600	0.0038	0.9962	97.09
12.5	60,680,370	215,740	0.0036	0.9964	96.72
13.5	58,319,938	616,430	0.0106	0.9894	96.38
14.5	56,259,889	131,096	0.0023	0.9977	95.36
15.5	54,435,564	180,710	0.0033	0.9967	95.14
16.5	53,522,451	239,049	0.0045	0.9955	94.82
17.5	52,159,988	446,101	0.0086	0.9914	94.40
18.5	51,641,942	271,967	0.0053	0.9947	93.59
19.5	48,980,583	278,842	0.0057	0.9943	93.10
20.5	47,506,999	222,668	0.0047	0.9953	92.57
21.5	47,946,812	223,035	0.0047	0.9953	92.14
22.5	46,599,512	191,715	0.0041	0.9959	91.71
23.5	45,376,049	263,638	0.0058	0.9942	91.33
24.5	45,037,595	1,336,653	0.0297	0.9703	90.80
25.5	41,941,597	264,700	0.0063	0.9937	88.10
26.5	40,650,506	257,165	0.0063	0.9937	87.55
27.5	39,838,426	315,394	0.0079	0.9921	87.00
28.5	33,290,386	410,868	0.0123	0.9877	86.31
29.5	32,828,398	311,161	0.0095	0.9905	85.24
30.5	30,648,735	186,269	0.0061	0.9939	84.43
31.5	29,358,070	296,809	0.0101	0.9899	83.92
32.5	28,389,254	191,730	0.0068	0.9932	83.07
33.5	27,938,384	166,089	0.0059	0.9941	82.51
34.5	25,494,708	136,790	0.0054	0.9946	82.02
35.5	25,237,185	147,122	0.0058	0.9942	81.58
36.5	24,249,258	228,685	0.0094	0.9906	81.10
37.5	21,989,592	159,031	0.0072	0.9928	80.34
38.5	21,185,110	181,698	0.0086	0.9914	79.76

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 332.00 FIELD LINES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1875-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	20,629,994	210,131	0.0102	0.9898	79.07
40.5	19,081,498	127,067	0.0067	0.9933	78.27
41.5	18,561,281	96,641	0.0052	0.9948	77.75
42.5	17,521,237	330,679	0.0189	0.9811	77.34
43.5	16,637,179	132,848	0.0080	0.9920	75.88
44.5	15,847,058	107,784	0.0068	0.9932	75.28
45.5	14,607,207	128,570	0.0088	0.9912	74.77
46.5	13,917,651	78,612	0.0056	0.9944	74.11
47.5	12,810,082	89,759	0.0070	0.9930	73.69
48.5	12,041,864	215,174	0.0179	0.9821	73.17
49.5	11,254,843	68,939	0.0061	0.9939	71.86
50.5	9,886,119	112,255	0.0114	0.9886	71.42
51.5	9,261,488	63,957	0.0069	0.9931	70.61
52.5	9,010,594	37,036	0.0041	0.9959	70.13
53.5	8,353,251	50,980	0.0061	0.9939	69.84
54.5	8,072,445	32,900	0.0041	0.9959	69.41
55.5	7,780,684	43,912	0.0056	0.9944	69.13
56.5	7,541,209	114,743	0.0152	0.9848	68.74
57.5	7,218,370	73,851	0.0102	0.9898	67.69
58.5	6,893,408	67,184	0.0097	0.9903	67.00
59.5	6,544,838	75,441	0.0115	0.9885	66.35
60.5	6,348,352	59,467	0.0094	0.9906	65.58
61.5	6,103,125	59,911	0.0098	0.9902	64.97
62.5	5,814,329	24,757	0.0043	0.9957	64.33
63.5	5,439,155	45,537	0.0084	0.9916	64.06
64.5	5,179,308	203,952	0.0394	0.9606	63.52
65.5	4,482,791	41,735	0.0093	0.9907	61.02
66.5	4,084,082	34,657	0.0085	0.9915	60.45
67.5	4,008,484	28,639	0.0071	0.9929	59.94
68.5	3,928,321	53,030	0.0135	0.9865	59.51
69.5	3,677,561	31,389	0.0085	0.9915	58.71
70.5	3,552,468	30,588	0.0086	0.9914	58.21
71.5	3,545,212	14,182	0.0040	0.9960	57.70
72.5	3,387,863	24,210	0.0071	0.9929	57.47
73.5	3,267,110	19,458	0.0060	0.9940	57.06
74.5	3,233,541	16,145	0.0050	0.9950	56.72
75.5	3,136,087	36,908	0.0118	0.9882	56.44
76.5	3,026,451	19,143	0.0063	0.9937	55.78
77.5	2,898,998	21,366	0.0074	0.9926	55.42
78.5	2,743,217	15,769	0.0057	0.9943	55.01

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 332.00 FIELD LINES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1875-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	2,645,614	14,723	0.0056	0.9944	54.70
80.5	2,572,260	8,680	0.0034	0.9966	54.39
81.5	2,364,891	18,092	0.0077	0.9923	54.21
82.5	2,271,124	8,984	0.0040	0.9960	53.79
83.5	2,186,083	32,497	0.0149	0.9851	53.58
84.5	2,065,580	18,857	0.0091	0.9909	52.79
85.5	2,030,611	14,265	0.0070	0.9930	52.30
86.5	2,017,296	17,361	0.0086	0.9914	51.94
87.5	1,991,547	17,993	0.0090	0.9910	51.49
88.5	1,960,634	11,611	0.0059	0.9941	51.02
89.5	1,936,259	16,920	0.0087	0.9913	50.72
90.5	1,898,154	5,121	0.0027	0.9973	50.28
91.5	1,852,124	13,894	0.0075	0.9925	50.14
92.5	1,789,967	12,124	0.0068	0.9932	49.77
93.5	1,739,672	10,943	0.0063	0.9937	49.43
94.5	1,688,397	12,311	0.0073	0.9927	49.12
95.5	1,711,650	9,258	0.0054	0.9946	48.76
96.5	1,699,771	16,819	0.0099	0.9901	48.50
97.5	1,612,940	9,768	0.0061	0.9939	48.02
98.5	1,645,946	8,205	0.0050	0.9950	47.73
99.5	1,730,998	4,186	0.0024	0.9976	47.49
100.5	1,606,797	6,576	0.0041	0.9959	47.37
101.5	1,488,223	10,969	0.0074	0.9926	47.18
102.5	1,443,100	4,918	0.0034	0.9966	46.83
103.5	1,416,012	6,308	0.0045	0.9955	46.67
104.5	1,286,174	4,503	0.0035	0.9965	46.46
105.5	1,102,761	864	0.0008	0.9992	46.30
106.5	1,074,210	8,539	0.0079	0.9921	46.27
107.5	1,033,351	13,506	0.0131	0.9869	45.90
108.5	984,293	2,150	0.0022	0.9978	45.30
109.5	867,580	2,497	0.0029	0.9971	45.20
110.5	792,969	3,364	0.0042	0.9958	45.07
111.5	863,045	2,796	0.0032	0.9968	44.88
112.5	829,076	6,313	0.0076	0.9924	44.73
113.5	797,977	1,663	0.0021	0.9979	44.39
114.5	706,684	1,878	0.0027	0.9973	44.30
115.5	598,268	13,795	0.0231	0.9769	44.18
116.5	565,838	1,758	0.0031	0.9969	43.16
117.5	457,283	1,606	0.0035	0.9965	43.03
118.5	409,358	694	0.0017	0.9983	42.88

PEOPLES NATURAL GAS COMPANY LLC

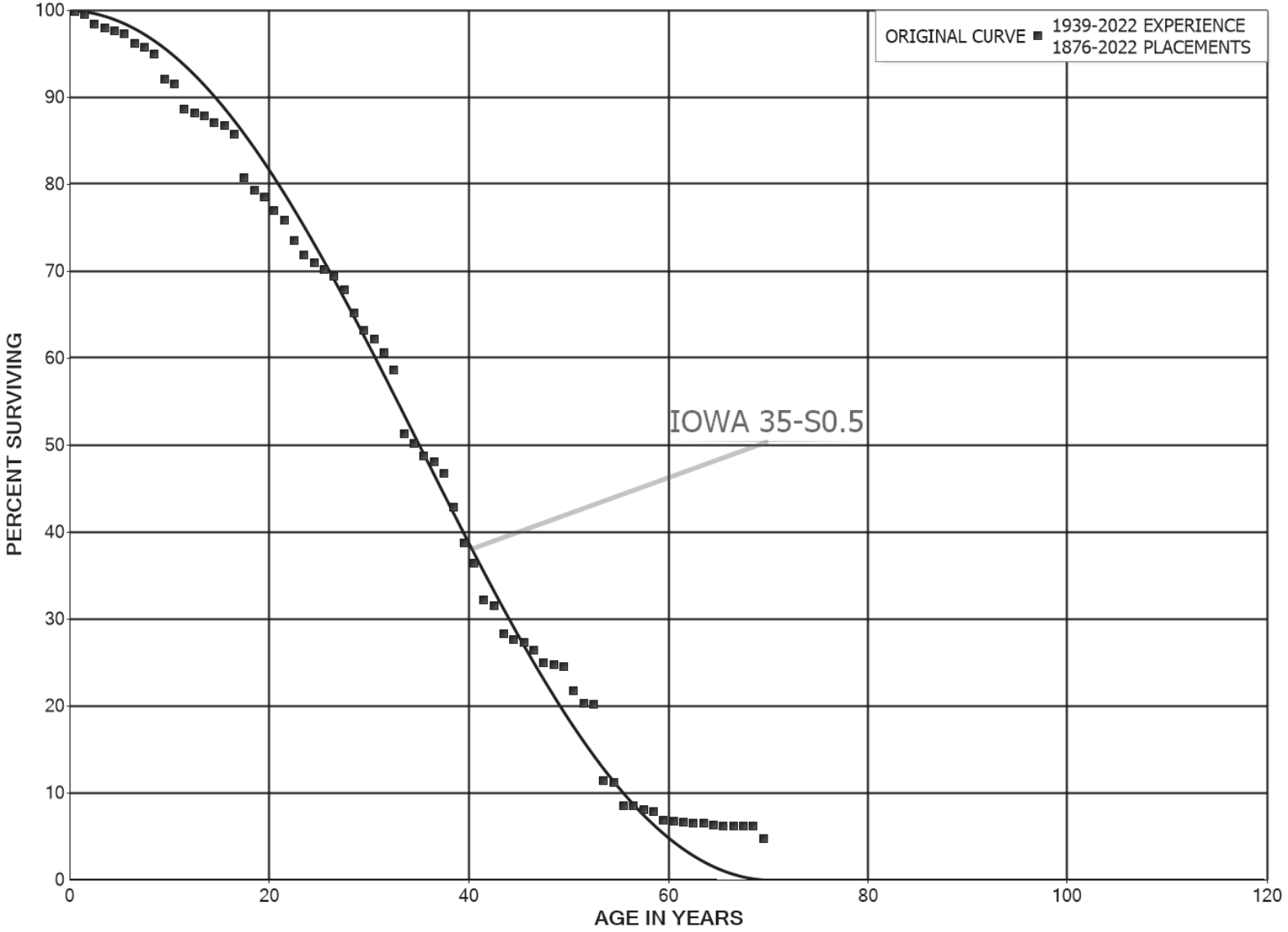
ACCOUNT 332.00 FIELD LINES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1875-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	344,632		0.0000	1.0000	42.80
120.5	281,884	1,229	0.0044	0.9956	42.80
121.5	202,974	102	0.0005	0.9995	42.62
122.5	155,713	187	0.0012	0.9988	42.60
123.5	110,141	648	0.0059	0.9941	42.55
124.5	80,892		0.0000	1.0000	42.30
125.5	74,292		0.0000	1.0000	42.30
126.5	71,478		0.0000	1.0000	42.30
127.5	63,704		0.0000	1.0000	42.30
128.5	45,891		0.0000	1.0000	42.30
129.5	41,295		0.0000	1.0000	42.30
130.5	38,792		0.0000	1.0000	42.30
131.5	38,652		0.0000	1.0000	42.30
132.5	2,176		0.0000	1.0000	42.30
133.5	1,024		0.0000	1.0000	42.30
134.5	1,024		0.0000	1.0000	42.30
135.5	1,024		0.0000	1.0000	42.30
136.5	502		0.0000	1.0000	42.30
137.5	502		0.0000	1.0000	42.30
138.5	502		0.0000	1.0000	42.30
139.5	502		0.0000	1.0000	42.30
140.5	502		0.0000	1.0000	42.30
141.5	502		0.0000	1.0000	42.30
142.5	502		0.0000	1.0000	42.30
143.5	502		0.0000	1.0000	42.30
144.5	502		0.0000	1.0000	42.30
145.5	502	163	0.3241	0.6759	42.30
146.5	339		0.0000	1.0000	28.59
147.5					28.59

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 333.00 FIELD COMPRESSOR STATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 333.00 FIELD COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1876-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	63,331,221	116,507	0.0018	0.9982	100.00
0.5	58,597,917	201,735	0.0034	0.9966	99.82
1.5	51,001,041	554,113	0.0109	0.9891	99.47
2.5	43,912,098	186,744	0.0043	0.9957	98.39
3.5	43,941,608	184,477	0.0042	0.9958	97.97
4.5	45,641,030	151,782	0.0033	0.9967	97.56
5.5	44,241,974	475,509	0.0107	0.9893	97.24
6.5	43,470,288	228,469	0.0053	0.9947	96.19
7.5	42,849,001	332,362	0.0078	0.9922	95.69
8.5	42,510,688	1,265,888	0.0298	0.9702	94.94
9.5	41,007,571	249,394	0.0061	0.9939	92.12
10.5	40,717,004	1,327,798	0.0326	0.9674	91.56
11.5	36,866,335	172,717	0.0047	0.9953	88.57
12.5	34,338,417	119,084	0.0035	0.9965	88.16
13.5	29,790,332	248,133	0.0083	0.9917	87.85
14.5	27,393,899	128,712	0.0047	0.9953	87.12
15.5	22,205,007	247,526	0.0111	0.9889	86.71
16.5	19,518,960	1,150,501	0.0589	0.9411	85.74
17.5	17,153,099	294,400	0.0172	0.9828	80.69
18.5	16,209,786	153,433	0.0095	0.9905	79.30
19.5	14,581,165	289,671	0.0199	0.9801	78.55
20.5	7,678,150	118,975	0.0155	0.9845	76.99
21.5	7,555,902	225,144	0.0298	0.9702	75.80
22.5	7,253,762	166,100	0.0229	0.9771	73.54
23.5	6,911,423	81,638	0.0118	0.9882	71.86
24.5	6,736,786	84,204	0.0125	0.9875	71.01
25.5	6,423,585	62,097	0.0097	0.9903	70.12
26.5	6,097,360	136,477	0.0224	0.9776	69.44
27.5	4,478,135	177,396	0.0396	0.9604	67.89
28.5	4,223,858	133,926	0.0317	0.9683	65.20
29.5	4,058,927	62,208	0.0153	0.9847	63.13
30.5	4,049,889	100,154	0.0247	0.9753	62.16
31.5	3,930,965	131,400	0.0334	0.9666	60.63
32.5	3,566,548	445,935	0.1250	0.8750	58.60
33.5	3,170,738	68,145	0.0215	0.9785	51.27
34.5	3,034,321	87,618	0.0289	0.9711	50.17
35.5	2,970,186	41,266	0.0139	0.9861	48.72
36.5	2,915,905	81,541	0.0280	0.9720	48.05
37.5	2,608,599	217,085	0.0832	0.9168	46.70
38.5	2,384,624	230,268	0.0966	0.9034	42.82

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 333.00 FIELD COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1876-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,965,168	115,746	0.0589	0.9411	38.68
40.5	1,642,196	190,165	0.1158	0.8842	36.40
41.5	1,614,936	35,793	0.0222	0.9778	32.19
42.5	1,572,577	157,252	0.1000	0.9000	31.47
43.5	1,403,371	37,458	0.0267	0.9733	28.33
44.5	1,349,755	14,540	0.0108	0.9892	27.57
45.5	1,301,327	44,399	0.0341	0.9659	27.27
46.5	1,253,051	64,595	0.0516	0.9484	26.34
47.5	1,189,629	11,311	0.0095	0.9905	24.99
48.5	746,399	6,999	0.0094	0.9906	24.75
49.5	738,401	82,928	0.1123	0.8877	24.52
50.5	653,580	44,275	0.0677	0.9323	21.76
51.5	428,920	1,614	0.0038	0.9962	20.29
52.5	414,446	180,110	0.4346	0.5654	20.21
53.5	229,204	5,291	0.0231	0.9769	11.43
54.5	223,362	52,512	0.2351	0.7649	11.16
55.5	170,850	1,740	0.0102	0.9898	8.54
56.5	169,110	7,035	0.0416	0.9584	8.45
57.5	162,120	4,647	0.0287	0.9713	8.10
58.5	157,053	20,801	0.1324	0.8676	7.87
59.5	133,351	1,359	0.0102	0.9898	6.83
60.5	131,663	3,817	0.0290	0.9710	6.76
61.5	127,899	173	0.0014	0.9986	6.56
62.5	127,796	726	0.0057	0.9943	6.55
63.5	126,970	5,067	0.0399	0.9601	6.52
64.5	121,892	494	0.0041	0.9959	6.26
65.5	116,028	235	0.0020	0.9980	6.23
66.5	81,718	61	0.0007	0.9993	6.22
67.5	80,913	45	0.0006	0.9994	6.21
68.5	80,897	19,014	0.2350	0.7650	6.21
69.5	9,135		0.0000	1.0000	4.75
70.5	9,391	13	0.0013	0.9987	4.75
71.5	9,378		0.0000	1.0000	4.74
72.5	5,737	71	0.0123	0.9877	4.74
73.5	2,026		0.0000	1.0000	4.68
74.5	5,361	470	0.0876	0.9124	4.68
75.5	4,586	212	0.0462	0.9538	4.27
76.5	4,669		0.0000	1.0000	4.08
77.5	4,669		0.0000	1.0000	4.08
78.5	4,384		0.0000	1.0000	4.08

PEOPLES NATURAL GAS COMPANY LLC

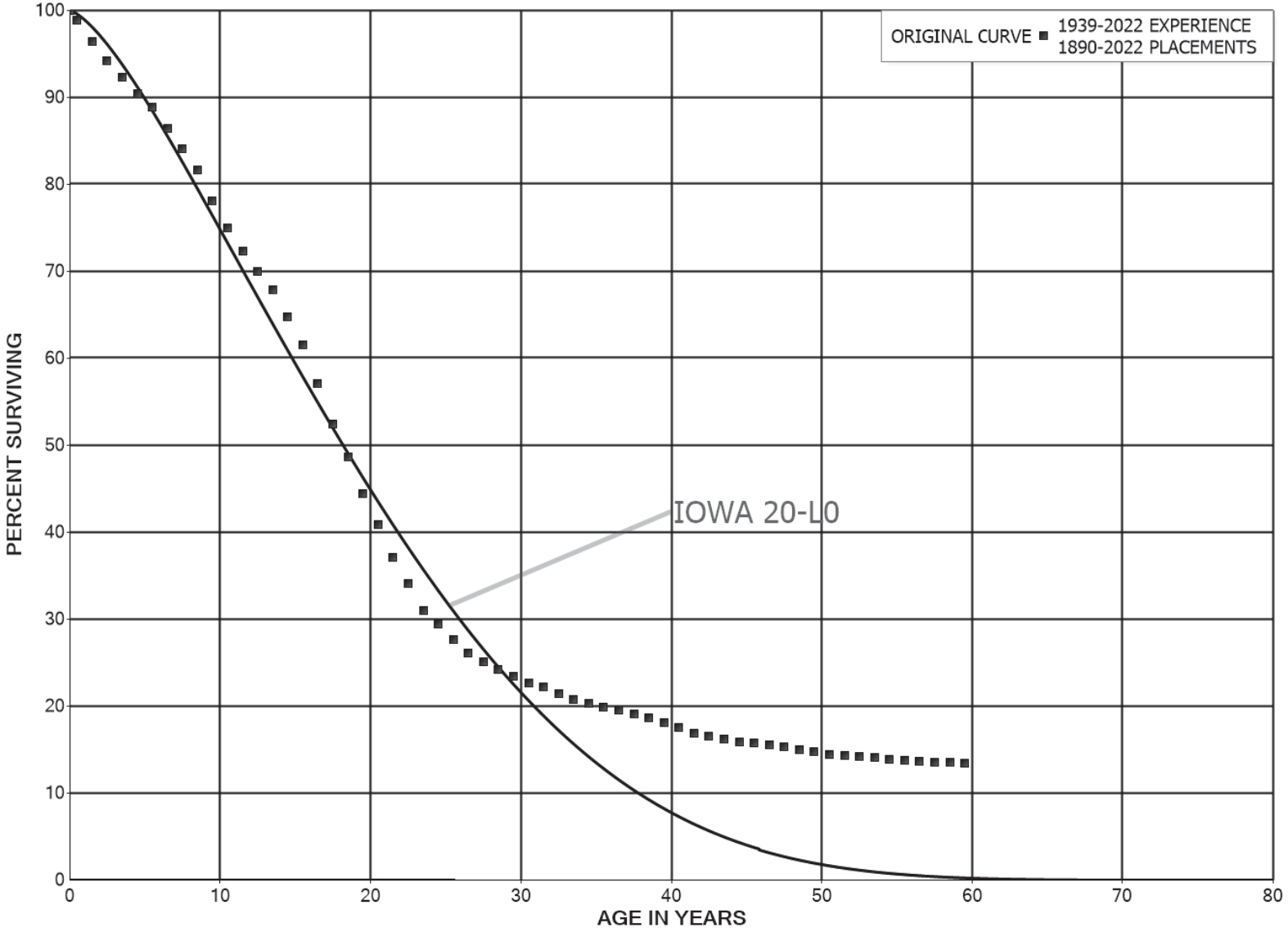
ACCOUNT 333.00 FIELD COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1876-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	4,384		0.0000	1.0000	4.08
80.5	4,129		0.0000	1.0000	4.08
81.5	4,129		0.0000	1.0000	4.08
82.5	4,129		0.0000	1.0000	4.08
83.5	4,129	4	0.0010	0.9990	4.08
84.5	953		0.0000	1.0000	4.07
85.5	953	17	0.0175	0.9825	4.07
86.5	631	72	0.1146	0.8854	4.00
87.5	559		0.0000	1.0000	3.54
88.5	559		0.0000	1.0000	3.54
89.5	559		0.0000	1.0000	3.54
90.5	559		0.0000	1.0000	3.54
91.5	559		0.0000	1.0000	3.54
92.5	559		0.0000	1.0000	3.54
93.5	559		0.0000	1.0000	3.54
94.5	559		0.0000	1.0000	3.54
95.5	559		0.0000	1.0000	3.54
96.5	559		0.0000	1.0000	3.54
97.5	559		0.0000	1.0000	3.54
98.5	559		0.0000	1.0000	3.54
99.5	559		0.0000	1.0000	3.54
100.5	559		0.0000	1.0000	3.54
101.5	559		0.0000	1.0000	3.54
102.5	559		0.0000	1.0000	3.54
103.5	559	55	0.0986	0.9014	3.54
104.5	504	429	0.8522	0.1478	3.19
105.5	74	74	1.0000		0.47
106.5					

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 334.00 FIELD MEASURING AND REGULATING STATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 334.00 FIELD MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1890-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	14,145,903	157,113	0.0111	0.9889	100.00
0.5	14,607,352	371,412	0.0254	0.9746	98.89
1.5	13,488,997	307,485	0.0228	0.9772	96.37
2.5	12,376,813	248,698	0.0201	0.9799	94.18
3.5	13,149,196	270,237	0.0206	0.9794	92.29
4.5	12,885,590	225,729	0.0175	0.9825	90.39
5.5	12,650,126	338,608	0.0268	0.9732	88.81
6.5	12,395,765	336,531	0.0271	0.9729	86.43
7.5	12,027,979	359,482	0.0299	0.9701	84.08
8.5	11,649,794	506,576	0.0435	0.9565	81.57
9.5	11,122,114	432,994	0.0389	0.9611	78.02
10.5	10,653,065	375,766	0.0353	0.9647	74.98
11.5	10,130,210	327,911	0.0324	0.9676	72.34
12.5	9,772,455	303,056	0.0310	0.9690	70.00
13.5	8,422,262	384,348	0.0456	0.9544	67.83
14.5	8,004,486	403,300	0.0504	0.9496	64.73
15.5	7,552,183	542,426	0.0718	0.9282	61.47
16.5	6,916,935	566,911	0.0820	0.9180	57.06
17.5	6,262,858	444,218	0.0709	0.9291	52.38
18.5	5,733,662	500,615	0.0873	0.9127	48.66
19.5	5,080,927	411,102	0.0809	0.9191	44.42
20.5	4,480,776	415,794	0.0928	0.9072	40.82
21.5	4,157,201	337,937	0.0813	0.9187	37.03
22.5	3,789,662	340,787	0.0899	0.9101	34.02
23.5	3,441,944	175,357	0.0509	0.9491	30.96
24.5	3,224,697	196,760	0.0610	0.9390	29.39
25.5	2,990,820	160,227	0.0536	0.9464	27.59
26.5	2,794,344	111,305	0.0398	0.9602	26.11
27.5	2,680,066	91,377	0.0341	0.9659	25.07
28.5	2,473,306	89,352	0.0361	0.9639	24.22
29.5	2,363,993	73,854	0.0312	0.9688	23.34
30.5	2,250,576	49,016	0.0218	0.9782	22.62
31.5	2,042,691	64,053	0.0314	0.9686	22.12
32.5	1,872,050	61,664	0.0329	0.9671	21.43
33.5	1,759,081	37,085	0.0211	0.9789	20.72
34.5	1,603,777	39,863	0.0249	0.9751	20.29
35.5	1,526,739	23,145	0.0152	0.9848	19.78
36.5	1,399,410	28,379	0.0203	0.9797	19.48
37.5	1,310,062	34,989	0.0267	0.9733	19.09
38.5	1,169,594	32,842	0.0281	0.9719	18.58

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 334.00 FIELD MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1890-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,068,770	33,933	0.0317	0.9683	18.06
40.5	962,347	35,441	0.0368	0.9632	17.48
41.5	850,473	17,934	0.0211	0.9789	16.84
42.5	787,853	14,060	0.0178	0.9822	16.48
43.5	677,677	13,471	0.0199	0.9801	16.19
44.5	564,847	6,096	0.0108	0.9892	15.87
45.5	501,785	4,950	0.0099	0.9901	15.70
46.5	451,941	6,233	0.0138	0.9862	15.54
47.5	381,597	9,176	0.0240	0.9760	15.33
48.5	346,441	5,082	0.0147	0.9853	14.96
49.5	322,437	6,467	0.0201	0.9799	14.74
50.5	303,830	2,819	0.0093	0.9907	14.44
51.5	280,086	2,746	0.0098	0.9902	14.31
52.5	269,103	1,958	0.0073	0.9927	14.17
53.5	250,857	3,906	0.0156	0.9844	14.07
54.5	237,365	2,674	0.0113	0.9887	13.85
55.5	225,792	1,016	0.0045	0.9955	13.69
56.5	218,869	1,927	0.0088	0.9912	13.63
57.5	211,243	518	0.0025	0.9975	13.51
58.5	201,192	610	0.0030	0.9970	13.48
59.5	192,941	660	0.0034	0.9966	13.44
60.5	183,435	528	0.0029	0.9971	13.39
61.5	174,311	754	0.0043	0.9957	13.35
62.5	166,718	394	0.0024	0.9976	13.29
63.5	161,798	537	0.0033	0.9967	13.26
64.5	153,285	604	0.0039	0.9961	13.22
65.5	145,326	291	0.0020	0.9980	13.17
66.5	137,529	484	0.0035	0.9965	13.14
67.5	133,968	769	0.0057	0.9943	13.09
68.5	121,869	9,661	0.0793	0.9207	13.02
69.5	102,405	19,179	0.1873	0.8127	11.99
70.5	79,629	26,903	0.3379	0.6621	9.74
71.5	51,986	9,777	0.1881	0.8119	6.45
72.5	41,532	11,258	0.2711	0.7289	5.24
73.5	28,135	5,102	0.1814	0.8186	3.82
74.5	21,686	5,266	0.2428	0.7572	3.13
75.5	15,574	4,665	0.2995	0.7005	2.37
76.5	9,780	1,340	0.1370	0.8630	1.66
77.5	7,505	525	0.0700	0.9300	1.43
78.5	7,109	29	0.0041	0.9959	1.33

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 334.00 FIELD MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1890-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	6,680	718	0.1075	0.8925	1.32
80.5	4,595	1	0.0001	0.9999	1.18
81.5	4,019	3	0.0009	0.9991	1.18
82.5	3,287		0.0000	1.0000	1.18
83.5	3,039	2	0.0008	0.9992	1.18
84.5	2,689	23	0.0084	0.9916	1.18
85.5	2,274		0.0000	1.0000	1.17
86.5	2,058	1	0.0007	0.9993	1.17
87.5	1,959		0.0000	1.0000	1.17
88.5	1,187		0.0000	1.0000	1.17
89.5	1,212		0.0000	1.0000	1.17
90.5	1,178		0.0000	1.0000	1.17
91.5	1,098		0.0000	1.0000	1.17
92.5	1,069		0.0000	1.0000	1.17
93.5	849		0.0000	1.0000	1.17
94.5	784		0.0000	1.0000	1.17
95.5	687		0.0000	1.0000	1.17
96.5	127		0.0000	1.0000	1.17
97.5	152		0.0000	1.0000	1.17
98.5	108		0.0000	1.0000	1.17
99.5	101		0.0000	1.0000	1.17
100.5	101		0.0000	1.0000	1.17
101.5	82		0.0000	1.0000	1.17
102.5	72		0.0000	1.0000	1.17
103.5	72		0.0000	1.0000	1.17
104.5	64		0.0000	1.0000	1.17
105.5	64		0.0000	1.0000	1.17
106.5	64		0.0000	1.0000	1.17
107.5	64		0.0000	1.0000	1.17
108.5	64		0.0000	1.0000	1.17
109.5	64		0.0000	1.0000	1.17
110.5	64		0.0000	1.0000	1.17
111.5	64		0.0000	1.0000	1.17
112.5	64		0.0000	1.0000	1.17
113.5	64		0.0000	1.0000	1.17
114.5	64		0.0000	1.0000	1.17
115.5	64		0.0000	1.0000	1.17
116.5	64		0.0000	1.0000	1.17
117.5	64		0.0000	1.0000	1.17
118.5	64		0.0000	1.0000	1.17

PEOPLES NATURAL GAS COMPANY LLC

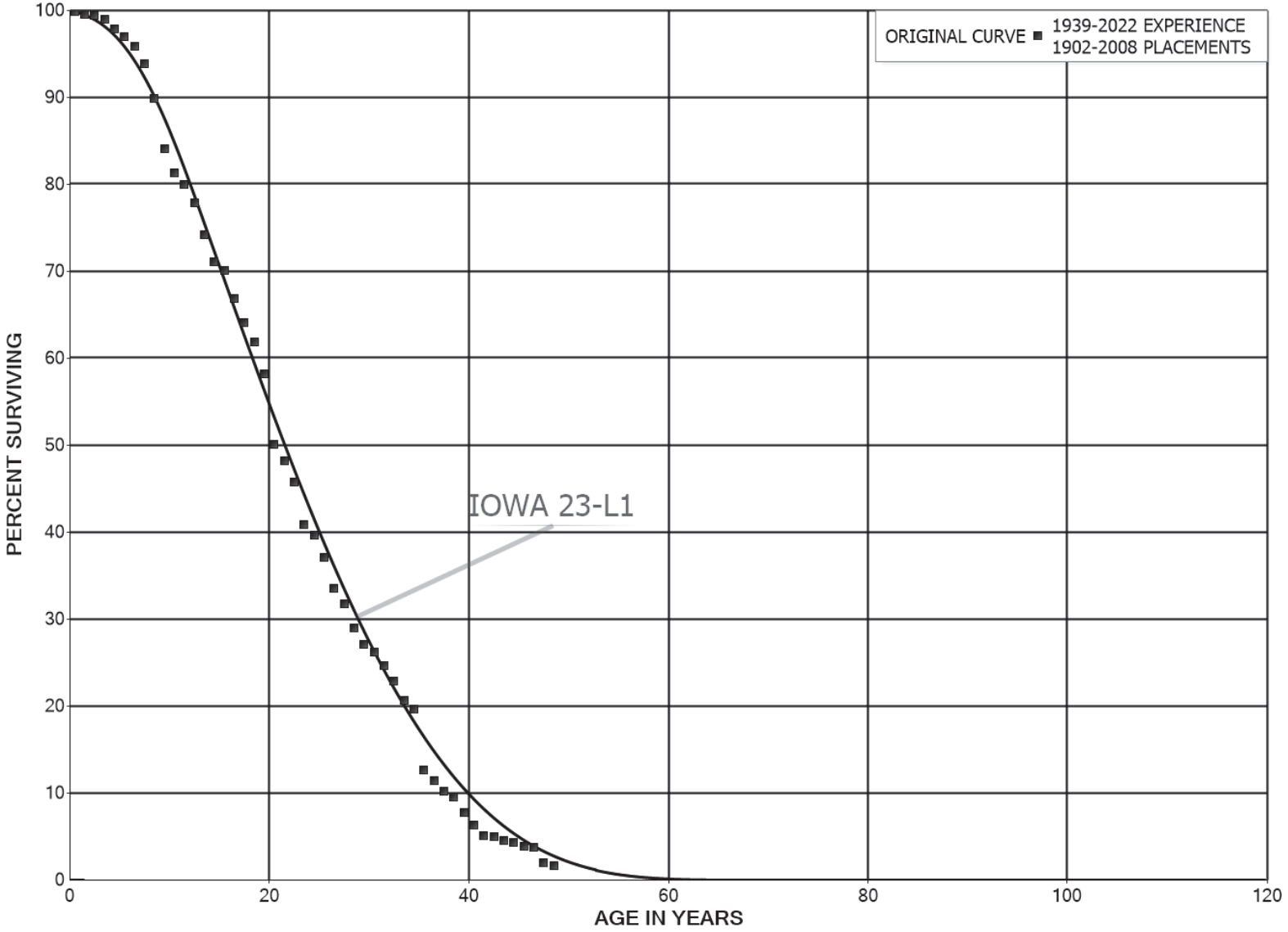
ACCOUNT 334.00 FIELD MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1890-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	64		0.0000	1.0000	1.17
120.5	64		0.0000	1.0000	1.17
121.5	64		0.0000	1.0000	1.17
122.5	64		0.0000	1.0000	1.17
123.5	64		0.0000	1.0000	1.17
124.5					1.17

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 337.00 OTHER EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 337.00 OTHER EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1902-2008 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	858,875	1,171	0.0014	0.9986	100.00
0.5	843,576	2,834	0.0034	0.9966	99.86
1.5	811,965	932	0.0011	0.9989	99.53
2.5	802,488	4,141	0.0052	0.9948	99.41
3.5	772,760	8,415	0.0109	0.9891	98.90
4.5	751,544	7,050	0.0094	0.9906	97.82
5.5	699,009	7,570	0.0108	0.9892	96.91
6.5	676,371	13,973	0.0207	0.9793	95.86
7.5	643,328	27,466	0.0427	0.9573	93.88
8.5	607,789	39,061	0.0643	0.9357	89.87
9.5	555,918	18,432	0.0332	0.9668	84.09
10.5	510,753	8,584	0.0168	0.9832	81.30
11.5	498,130	13,359	0.0268	0.9732	79.94
12.5	479,805	22,295	0.0465	0.9535	77.79
13.5	451,362	19,016	0.0421	0.9579	74.18
14.5	409,424	5,470	0.0134	0.9866	71.05
15.5	406,619	18,931	0.0466	0.9534	70.11
16.5	370,952	15,562	0.0420	0.9580	66.84
17.5	329,642	11,151	0.0338	0.9662	64.04
18.5	301,414	18,020	0.0598	0.9402	61.87
19.5	286,833	39,718	0.1385	0.8615	58.17
20.5	251,542	9,606	0.0382	0.9618	50.12
21.5	243,886	12,518	0.0513	0.9487	48.20
22.5	228,483	24,669	0.1080	0.8920	45.73
23.5	201,779	5,551	0.0275	0.9725	40.79
24.5	171,837	11,074	0.0644	0.9356	39.67
25.5	158,019	15,418	0.0976	0.9024	37.11
26.5	143,109	7,554	0.0528	0.9472	33.49
27.5	135,495	11,610	0.0857	0.9143	31.72
28.5	123,782	8,276	0.0669	0.9331	29.01
29.5	116,392	3,894	0.0335	0.9665	27.07
30.5	111,676	6,585	0.0590	0.9410	26.16
31.5	105,134	7,715	0.0734	0.9266	24.62
32.5	97,677	9,610	0.0984	0.9016	22.81
33.5	88,016	4,183	0.0475	0.9525	20.57
34.5	83,968	30,004	0.3573	0.6427	19.59
35.5	53,965	5,283	0.0979	0.9021	12.59
36.5	48,369	4,805	0.0993	0.9007	11.36
37.5	43,466	2,924	0.0673	0.9327	10.23
38.5	40,376	7,602	0.1883	0.8117	9.54

PEOPLES NATURAL GAS COMPANY LLC

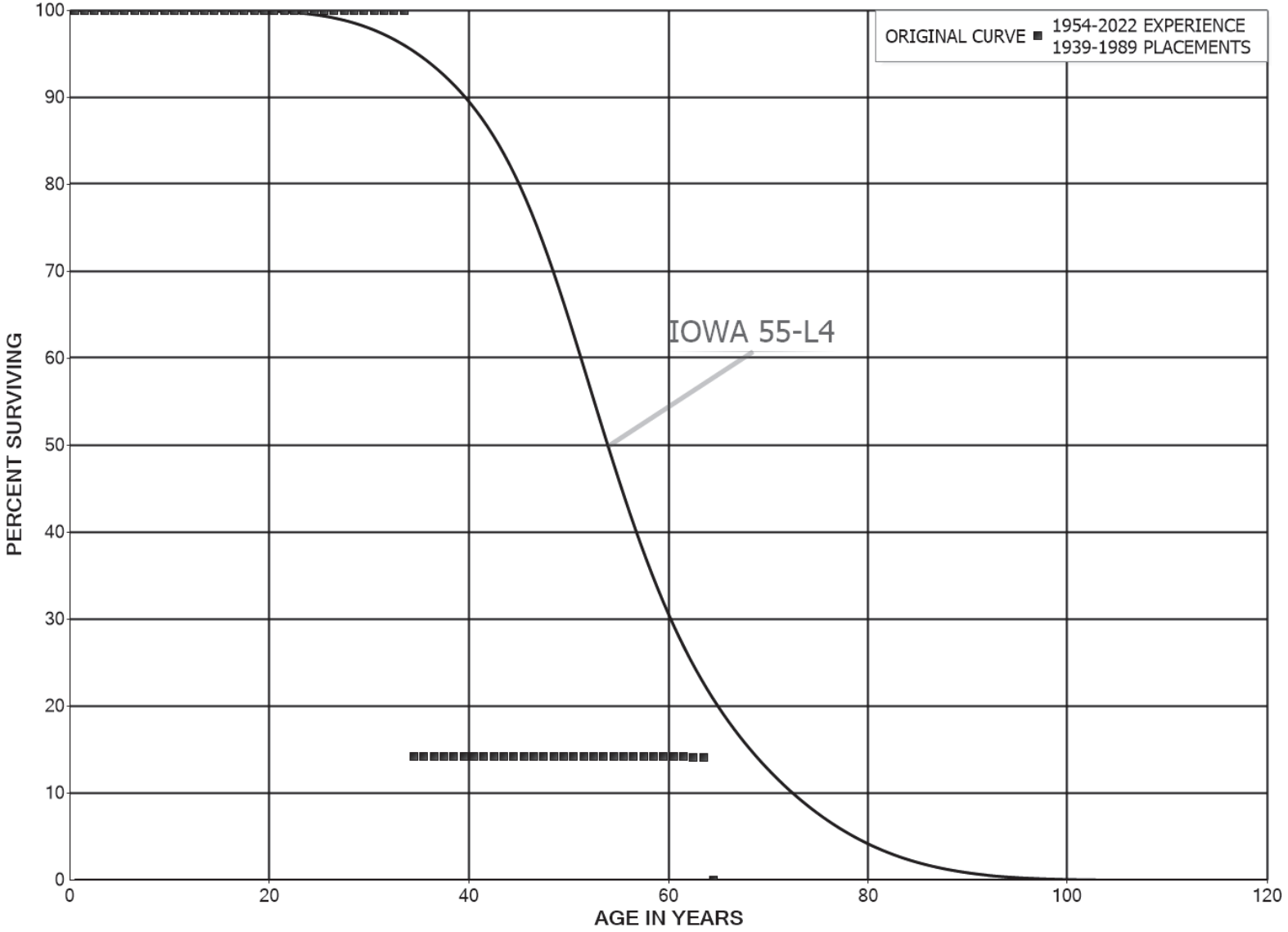
ACCOUNT 337.00 OTHER EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1902-2008 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	32,677	6,339	0.1940	0.8060	7.74
40.5	26,189	4,872	0.1860	0.8140	6.24
41.5	22,243	559	0.0251	0.9749	5.08
42.5	21,332	2,143	0.1004	0.8996	4.95
43.5	18,893	560	0.0296	0.9704	4.46
44.5	18,459	2,231	0.1208	0.8792	4.32
45.5	16,229	134	0.0083	0.9917	3.80
46.5	16,036	7,963	0.4966	0.5034	3.77
47.5	8,073	1,092	0.1353	0.8647	1.90
48.5	6,980	293	0.0420	0.9580	1.64
49.5	6,519	1,285	0.1972	0.8028	1.57
50.5	5,215	925	0.1775	0.8225	1.26
51.5	4,289	281	0.0655	0.9345	1.04
52.5	4,008	684	0.1706	0.8294	0.97
53.5	3,324	439	0.1322	0.8678	0.80
54.5	2,885		0.0000	1.0000	0.70
55.5	2,885	278	0.0963	0.9037	0.70
56.5	2,607	193	0.0742	0.9258	0.63
57.5	2,414		0.0000	1.0000	0.58
58.5	2,414	49	0.0202	0.9798	0.58
59.5	2,365		0.0000	1.0000	0.57
60.5	2,365	49	0.0206	0.9794	0.57
61.5	2,316	77	0.0334	0.9666	0.56
62.5	2,239	29	0.0130	0.9870	0.54
63.5	2,210	46	0.0210	0.9790	0.53
64.5	2,163		0.0000	1.0000	0.52
65.5	2,163		0.0000	1.0000	0.52
66.5	2,163		0.0000	1.0000	0.52
67.5					0.52

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 350.11 LAND - GAS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 350.11 LAND - GAS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1939-1989 EXPERIENCE BAND 1954-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	13,098		0.0000	1.0000	100.00
0.5	13,098		0.0000	1.0000	100.00
1.5	13,098		0.0000	1.0000	100.00
2.5	13,125		0.0000	1.0000	100.00
3.5	13,193		0.0000	1.0000	100.00
4.5	24,522		0.0000	1.0000	100.00
5.5	46,790		0.0000	1.0000	100.00
6.5	43,197		0.0000	1.0000	100.00
7.5	43,197		0.0000	1.0000	100.00
8.5	43,172		0.0000	1.0000	100.00
9.5	43,172		0.0000	1.0000	100.00
10.5	43,172		0.0000	1.0000	100.00
11.5	43,172		0.0000	1.0000	100.00
12.5	43,598		0.0000	1.0000	100.00
13.5	43,598		0.0000	1.0000	100.00
14.5	43,571		0.0000	1.0000	100.00
15.5	39,516		0.0000	1.0000	100.00
16.5	39,497		0.0000	1.0000	100.00
17.5	39,497		0.0000	1.0000	100.00
18.5	39,497		0.0000	1.0000	100.00
19.5	39,497		0.0000	1.0000	100.00
20.5	39,497		0.0000	1.0000	100.00
21.5	39,497		0.0000	1.0000	100.00
22.5	39,497		0.0000	1.0000	100.00
23.5	39,116		0.0000	1.0000	100.00
24.5	39,116		0.0000	1.0000	100.00
25.5	39,116		0.0000	1.0000	100.00
26.5	39,116		0.0000	1.0000	100.00
27.5	39,116		0.0000	1.0000	100.00
28.5	39,116		0.0000	1.0000	100.00
29.5	39,116		0.0000	1.0000	100.00
30.5	39,116		0.0000	1.0000	100.00
31.5	39,116		0.0000	1.0000	100.00
32.5	39,116		0.0000	1.0000	100.00
33.5	26,032	22,334	0.8579	0.1421	100.00
34.5	3,698		0.0000	1.0000	14.21
35.5	3,698		0.0000	1.0000	14.21
36.5	3,698		0.0000	1.0000	14.21
37.5	3,698		0.0000	1.0000	14.21
38.5	3,698	1	0.0003	0.9997	14.21

PEOPLES NATURAL GAS COMPANY LLC

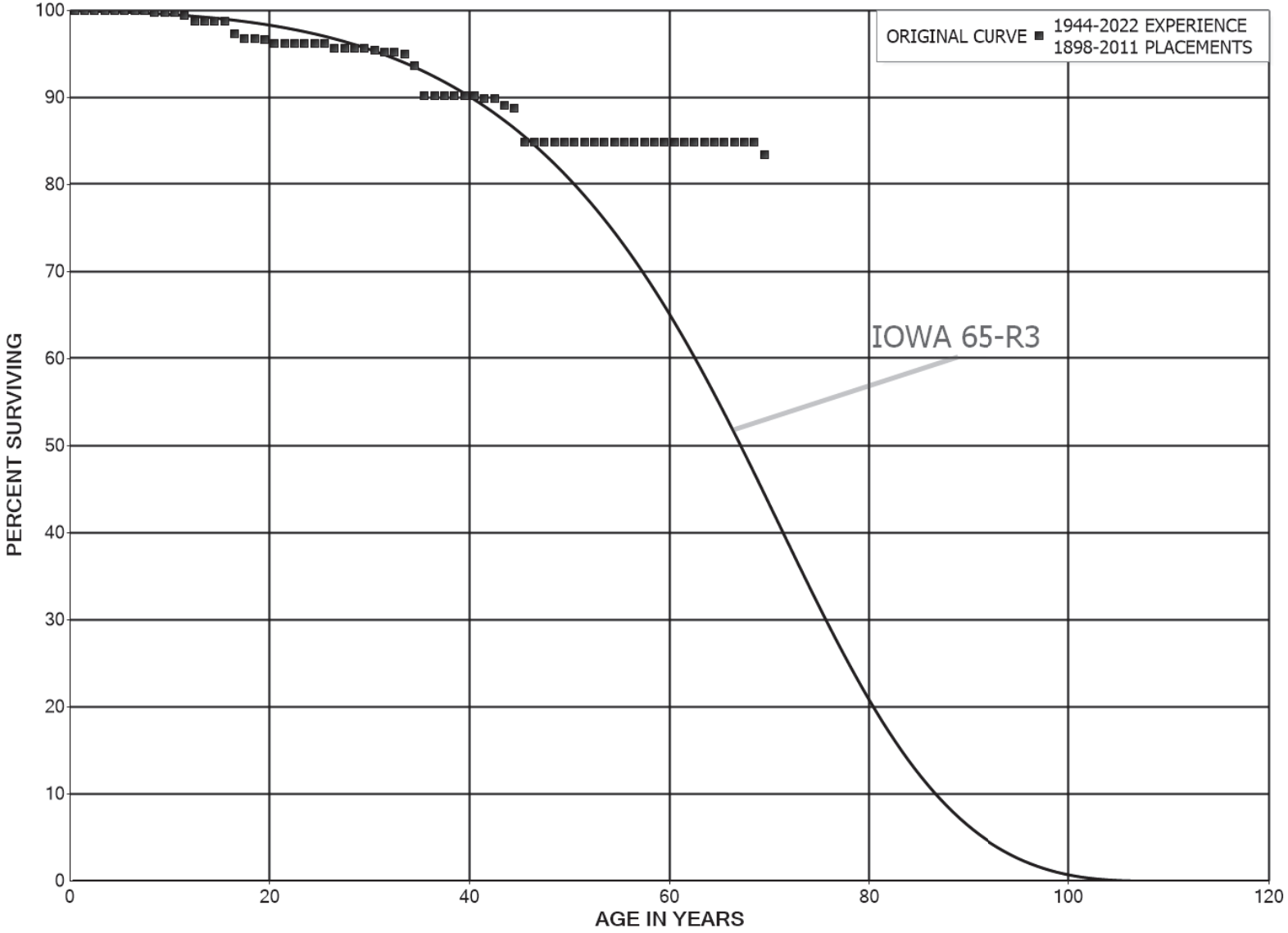
ACCOUNT 350.11 LAND - GAS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1939-1989 EXPERIENCE BAND 1954-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	3,697		0.0000	1.0000	14.20
40.5	3,697		0.0000	1.0000	14.20
41.5	3,697		0.0000	1.0000	14.20
42.5	3,697		0.0000	1.0000	14.20
43.5	3,697		0.0000	1.0000	14.20
44.5	3,697		0.0000	1.0000	14.20
45.5	3,697		0.0000	1.0000	14.20
46.5	3,697		0.0000	1.0000	14.20
47.5	3,697	3	0.0007	0.9993	14.20
48.5	3,694		0.0000	1.0000	14.19
49.5	3,694		0.0000	1.0000	14.19
50.5	3,694	3	0.0007	0.9993	14.19
51.5	3,692		0.0000	1.0000	14.18
52.5	3,692		0.0000	1.0000	14.18
53.5	3,692		0.0000	1.0000	14.18
54.5	3,692		0.0000	1.0000	14.18
55.5	3,692		0.0000	1.0000	14.18
56.5	3,692		0.0000	1.0000	14.18
57.5	3,692		0.0000	1.0000	14.18
58.5	3,692	8	0.0023	0.9977	14.18
59.5	3,683		0.0000	1.0000	14.15
60.5	3,683		0.0000	1.0000	14.15
61.5	3,683	28	0.0075	0.9925	14.15
62.5	3,656		0.0000	1.0000	14.04
63.5	3,656	3,656	1.0000		14.04
64.5					

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 350.21 RIGHTS OF WAY
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 350.21 RIGHTS OF WAY

ORIGINAL LIFE TABLE

PLACEMENT BAND 1898-2011 EXPERIENCE BAND 1944-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	150,739		0.0000	1.0000	100.00
0.5	152,128		0.0000	1.0000	100.00
1.5	154,091	143	0.0009	0.9991	100.00
2.5	138,657		0.0000	1.0000	99.91
3.5	139,194		0.0000	1.0000	99.91
4.5	139,576		0.0000	1.0000	99.91
5.5	139,663		0.0000	1.0000	99.91
6.5	139,663		0.0000	1.0000	99.91
7.5	136,190	201	0.0015	0.9985	99.91
8.5	134,508		0.0000	1.0000	99.76
9.5	122,982	43	0.0003	0.9997	99.76
10.5	67,073	236	0.0035	0.9965	99.72
11.5	66,837	453	0.0068	0.9932	99.37
12.5	66,384		0.0000	1.0000	98.70
13.5	65,890		0.0000	1.0000	98.70
14.5	65,954		0.0000	1.0000	98.70
15.5	65,954	972	0.0147	0.9853	98.70
16.5	45,705	228	0.0050	0.9950	97.25
17.5	46,006		0.0000	1.0000	96.76
18.5	29,426	52	0.0018	0.9982	96.76
19.5	30,734	138	0.0045	0.9955	96.59
20.5	33,173		0.0000	1.0000	96.16
21.5	33,177		0.0000	1.0000	96.16
22.5	33,177		0.0000	1.0000	96.16
23.5	33,336		0.0000	1.0000	96.16
24.5	33,270		0.0000	1.0000	96.16
25.5	29,977	177	0.0059	0.9941	96.16
26.5	29,800	4	0.0001	0.9999	95.59
27.5	32,119		0.0000	1.0000	95.57
28.5	31,936		0.0000	1.0000	95.57
29.5	32,422	56	0.0017	0.9983	95.57
30.5	32,366	94	0.0029	0.9971	95.41
31.5	31,963		0.0000	1.0000	95.13
32.5	32,286	70	0.0022	0.9978	95.13
33.5	32,217	443	0.0137	0.9863	94.93
34.5	31,774	1,155	0.0363	0.9637	93.62
35.5	30,619		0.0000	1.0000	90.22
36.5	30,619		0.0000	1.0000	90.22
37.5	30,619		0.0000	1.0000	90.22
38.5	30,746		0.0000	1.0000	90.22

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 350.21 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1898-2011 EXPERIENCE BAND 1944-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	30,692		0.0000	1.0000	90.22
40.5	30,692	140	0.0045	0.9955	90.22
41.5	30,552		0.0000	1.0000	89.81
42.5	30,493	243	0.0080	0.9920	89.81
43.5	29,032	125	0.0043	0.9957	89.10
44.5	27,558	1,209	0.0439	0.9561	88.71
45.5	26,282		0.0000	1.0000	84.82
46.5	26,282		0.0000	1.0000	84.82
47.5	26,282		0.0000	1.0000	84.82
48.5	26,282		0.0000	1.0000	84.82
49.5	26,186		0.0000	1.0000	84.82
50.5	25,903		0.0000	1.0000	84.82
51.5	23,609		0.0000	1.0000	84.82
52.5	22,192		0.0000	1.0000	84.82
53.5	21,735		0.0000	1.0000	84.82
54.5	19,424		0.0000	1.0000	84.82
55.5	19,355		0.0000	1.0000	84.82
56.5	17,016		0.0000	1.0000	84.82
57.5	16,360		0.0000	1.0000	84.82
58.5	15,049		0.0000	1.0000	84.82
59.5	14,661		0.0000	1.0000	84.82
60.5	14,056		0.0000	1.0000	84.82
61.5	13,166		0.0000	1.0000	84.82
62.5	13,190		0.0000	1.0000	84.82
63.5	13,265		0.0000	1.0000	84.82
64.5	11,699		0.0000	1.0000	84.82
65.5	9,887		0.0000	1.0000	84.82
66.5	9,826		0.0000	1.0000	84.82
67.5	9,826		0.0000	1.0000	84.82
68.5	9,802	159	0.0162	0.9838	84.82
69.5	9,568		0.0000	1.0000	83.45
70.5	9,515		0.0000	1.0000	83.45
71.5	9,390		0.0000	1.0000	83.45
72.5	9,390		0.0000	1.0000	83.45
73.5	8,259		0.0000	1.0000	83.45
74.5	7,916		0.0000	1.0000	83.45
75.5	6,476		0.0000	1.0000	83.45
76.5	5,918		0.0000	1.0000	83.45
77.5	5,851		0.0000	1.0000	83.45
78.5	5,851		0.0000	1.0000	83.45

PEOPLES NATURAL GAS COMPANY LLC

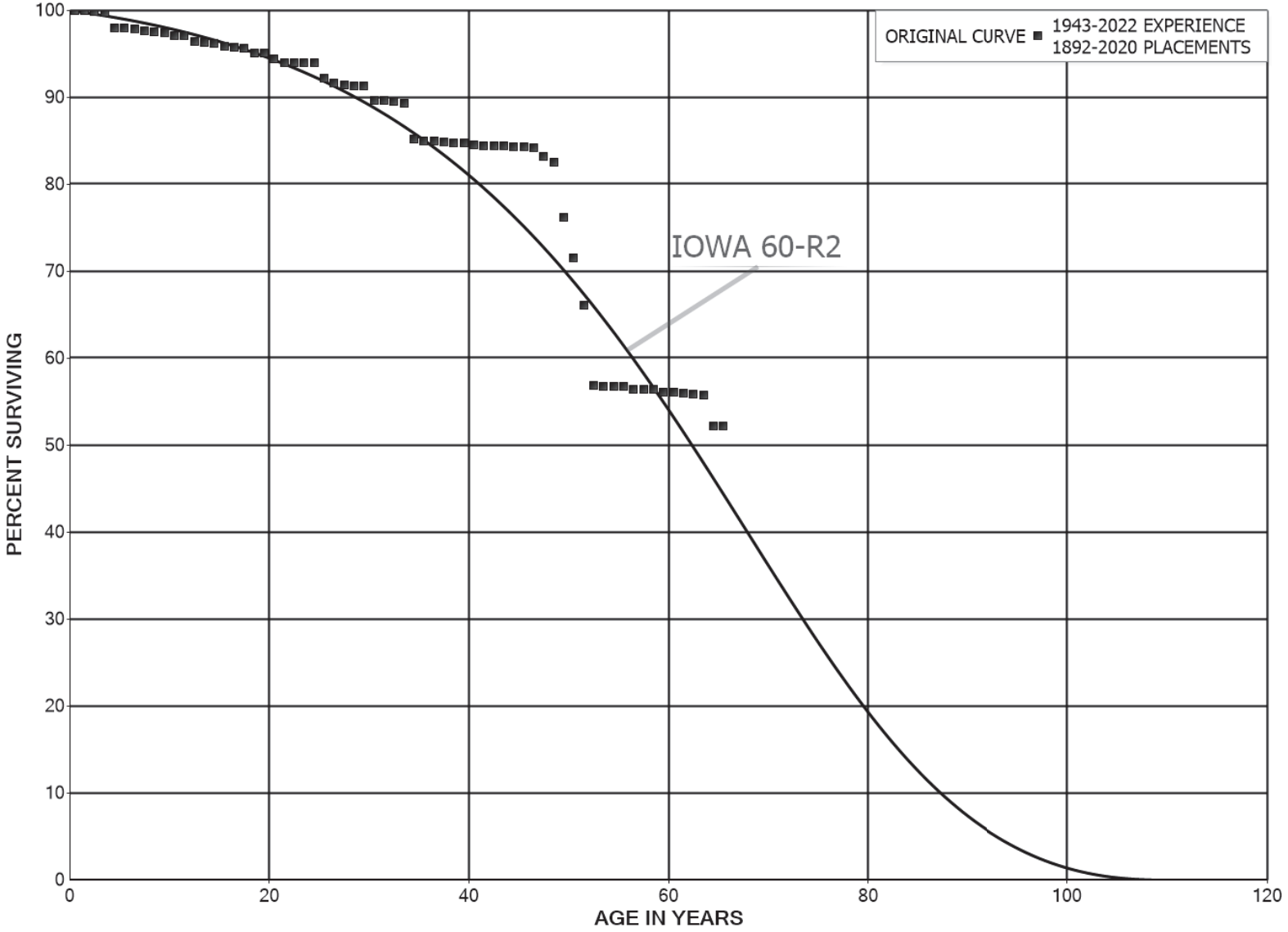
ACCOUNT 350.21 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1898-2011 EXPERIENCE BAND 1944-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	5,685		0.0000	1.0000	83.45
80.5	5,242		0.0000	1.0000	83.45
81.5	5,168		0.0000	1.0000	83.45
82.5	4,970		0.0000	1.0000	83.45
83.5	4,936		0.0000	1.0000	83.45
84.5	4,936		0.0000	1.0000	83.45
85.5	4,936		0.0000	1.0000	83.45
86.5	4,936		0.0000	1.0000	83.45
87.5	4,936		0.0000	1.0000	83.45
88.5	4,936		0.0000	1.0000	83.45
89.5	4,408		0.0000	1.0000	83.45
90.5	1,704		0.0000	1.0000	83.45
91.5	1,704		0.0000	1.0000	83.45
92.5	1,704		0.0000	1.0000	83.45
93.5	1,640		0.0000	1.0000	83.45
94.5	1,640		0.0000	1.0000	83.45
95.5	1,640		0.0000	1.0000	83.45
96.5	1,181		0.0000	1.0000	83.45
97.5	923		0.0000	1.0000	83.45
98.5	923		0.0000	1.0000	83.45
99.5	923		0.0000	1.0000	83.45
100.5	923		0.0000	1.0000	83.45
101.5	923		0.0000	1.0000	83.45
102.5	923		0.0000	1.0000	83.45
103.5	923		0.0000	1.0000	83.45
104.5	923		0.0000	1.0000	83.45
105.5	923		0.0000	1.0000	83.45
106.5					83.45

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 351.00 STRUCTURES AND IMPROVEMENTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 351.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1892-2020 EXPERIENCE BAND 1943-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	6,735,952	4,983	0.0007	0.9993	100.00
0.5	6,707,391	734	0.0001	0.9999	99.93
1.5	6,713,139	5,047	0.0008	0.9992	99.92
2.5	5,391,853	5,247	0.0010	0.9990	99.84
3.5	5,369,831	96,214	0.0179	0.9821	99.74
4.5	5,275,719	3,522	0.0007	0.9993	97.96
5.5	5,241,789	4,040	0.0008	0.9992	97.89
6.5	5,216,574	13,006	0.0025	0.9975	97.81
7.5	5,197,799	5,539	0.0011	0.9989	97.57
8.5	5,118,903	2,465	0.0005	0.9995	97.47
9.5	4,669,015	16,206	0.0035	0.9965	97.42
10.5	4,606,777	755	0.0002	0.9998	97.08
11.5	4,606,921	34,392	0.0075	0.9925	97.07
12.5	4,573,264	5,151	0.0011	0.9989	96.34
13.5	4,485,212	981	0.0002	0.9998	96.23
14.5	4,215,160	17,038	0.0040	0.9960	96.21
15.5	4,109,435	3,425	0.0008	0.9992	95.82
16.5	3,940,852	5,703	0.0014	0.9986	95.74
17.5	3,935,276	20,460	0.0052	0.9948	95.60
18.5	3,537,638	1,823	0.0005	0.9995	95.11
19.5	2,929,516	18,926	0.0065	0.9935	95.06
20.5	2,860,099	14,775	0.0052	0.9948	94.44
21.5	2,796,418	178	0.0001	0.9999	93.96
22.5	2,694,609	157	0.0001	0.9999	93.95
23.5	2,668,487		0.0000	1.0000	93.94
24.5	2,058,637	39,744	0.0193	0.9807	93.94
25.5	2,010,488	11,047	0.0055	0.9945	92.13
26.5	1,933,889	5,641	0.0029	0.9971	91.62
27.5	1,899,968	987	0.0005	0.9995	91.36
28.5	1,882,721	709	0.0004	0.9996	91.31
29.5	1,842,277	32,995	0.0179	0.9821	91.28
30.5	1,768,016	144	0.0001	0.9999	89.64
31.5	1,767,449	2,742	0.0016	0.9984	89.63
32.5	1,707,782	4,366	0.0026	0.9974	89.49
33.5	1,679,487	76,955	0.0458	0.9542	89.27
34.5	1,602,809	4,446	0.0028	0.9972	85.18
35.5	1,599,236	754	0.0005	0.9995	84.94
36.5	1,586,111	459	0.0003	0.9997	84.90
37.5	1,649,144	1,990	0.0012	0.9988	84.87
38.5	1,580,339		0.0000	1.0000	84.77

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 351.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1892-2020 EXPERIENCE BAND 1943-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,580,339	5,050	0.0032	0.9968	84.77
40.5	1,553,559	1,517	0.0010	0.9990	84.50
41.5	1,546,208	1,424	0.0009	0.9991	84.42
42.5	847,838		0.0000	1.0000	84.34
43.5	625,090	658	0.0011	0.9989	84.34
44.5	618,547		0.0000	1.0000	84.25
45.5	618,593	921	0.0015	0.9985	84.25
46.5	616,353	7,152	0.0116	0.9884	84.13
47.5	603,080	4,609	0.0076	0.9924	83.15
48.5	597,574	45,826	0.0767	0.9233	82.52
49.5	547,039	33,794	0.0618	0.9382	76.19
50.5	492,924	37,680	0.0764	0.9236	71.48
51.5	454,693	63,356	0.1393	0.8607	66.02
52.5	390,800	400	0.0010	0.9990	56.82
53.5	389,129	5	0.0000	1.0000	56.76
54.5	387,328	114	0.0003	0.9997	56.76
55.5	384,344	2,255	0.0059	0.9941	56.74
56.5	381,475	218	0.0006	0.9994	56.41
57.5	379,311	37	0.0001	0.9999	56.38
58.5	380,790	1,736	0.0046	0.9954	56.37
59.5	376,472	392	0.0010	0.9990	56.11
60.5	374,594	1,057	0.0028	0.9972	56.06
61.5	368,676	213	0.0006	0.9994	55.90
62.5	368,047	716	0.0019	0.9981	55.87
63.5	318,418	20,591	0.0647	0.9353	55.76
64.5	294,833		0.0000	1.0000	52.15
65.5	14,804		0.0000	1.0000	52.15
66.5	14,647		0.0000	1.0000	52.15
67.5	14,647		0.0000	1.0000	52.15
68.5	14,647	115	0.0079	0.9921	52.15
69.5	11,631		0.0000	1.0000	51.74
70.5	12,381		0.0000	1.0000	51.74
71.5	7,821		0.0000	1.0000	51.74
72.5	2,584		0.0000	1.0000	51.74
73.5	1,041		0.0000	1.0000	51.74
74.5	1,041		0.0000	1.0000	51.74
75.5	885		0.0000	1.0000	51.74
76.5	826		0.0000	1.0000	51.74
77.5	400		0.0000	1.0000	51.74
78.5	400		0.0000	1.0000	51.74

PEOPLES NATURAL GAS COMPANY LLC

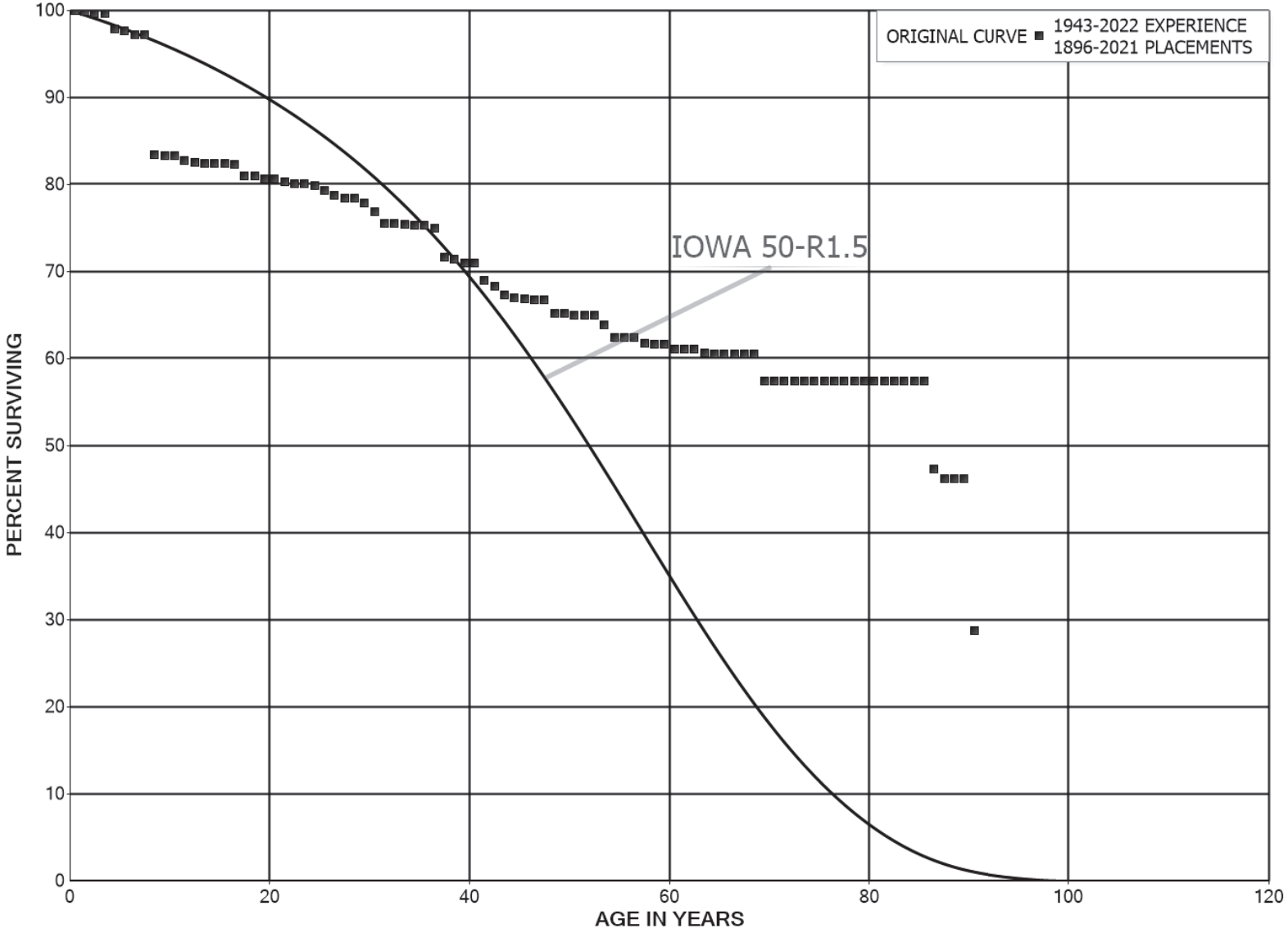
ACCOUNT 351.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1892-2020 EXPERIENCE BAND 1943-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	400		0.0000	1.0000	51.74
80.5	400		0.0000	1.0000	51.74
81.5	400		0.0000	1.0000	51.74
82.5					51.74

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 352.01 WELLS - CONSTRUCTION
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.01 WELLS - CONSTRUCTION

ORIGINAL LIFE TABLE

PLACEMENT BAND 1896-2021 EXPERIENCE BAND 1943-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	17,487,398		0.0000	1.0000	100.00
0.5	17,536,290	35,551	0.0020	0.9980	100.00
1.5	17,452,809	23,661	0.0014	0.9986	99.80
2.5	10,326,415	686	0.0001	0.9999	99.66
3.5	9,821,086	178,458	0.0182	0.9818	99.66
4.5	9,564,345	22,998	0.0024	0.9976	97.84
5.5	9,519,887	37,591	0.0039	0.9961	97.61
6.5	9,448,364	1,988	0.0002	0.9998	97.22
7.5	8,438,899	1,197,446	0.1419	0.8581	97.20
8.5	6,764,183	9,040	0.0013	0.9987	83.41
9.5	6,656,036	4,408	0.0007	0.9993	83.30
10.5	6,815,726	40,159	0.0059	0.9941	83.24
11.5	6,665,513	21,395	0.0032	0.9968	82.75
12.5	6,655,799	5,298	0.0008	0.9992	82.49
13.5	6,666,650	2,305	0.0003	0.9997	82.42
14.5	6,267,955	119	0.0000	1.0000	82.39
15.5	6,185,567	5,980	0.0010	0.9990	82.39
16.5	5,273,244	83,740	0.0159	0.9841	82.31
17.5	5,145,130	6,176	0.0012	0.9988	81.01
18.5	4,753,958	15,444	0.0032	0.9968	80.91
19.5	4,073,462	3,085	0.0008	0.9992	80.65
20.5	3,169,829	11,844	0.0037	0.9963	80.58
21.5	3,053,894	7,293	0.0024	0.9976	80.28
22.5	2,775,871	46	0.0000	1.0000	80.09
23.5	2,774,125	7,595	0.0027	0.9973	80.09
24.5	2,584,054	19,724	0.0076	0.9924	79.87
25.5	2,275,753	15,095	0.0066	0.9934	79.26
26.5	2,232,559	8,235	0.0037	0.9963	78.74
27.5	2,284,876	2,934	0.0013	0.9987	78.44
28.5	2,291,268	14,672	0.0064	0.9936	78.34
29.5	2,284,481	30,108	0.0132	0.9868	77.84
30.5	2,226,110	36,418	0.0164	0.9836	76.82
31.5	1,959,467	1,678	0.0009	0.9991	75.56
32.5	1,926,602	1,387	0.0007	0.9993	75.50
33.5	1,925,509	4,982	0.0026	0.9974	75.44
34.5	1,624,522	62	0.0000	1.0000	75.25
35.5	1,630,539	7,170	0.0044	0.9956	75.24
36.5	1,624,779	70,912	0.0436	0.9564	74.91
37.5	1,553,600	6,135	0.0039	0.9961	71.64
38.5	1,542,085	7,758	0.0050	0.9950	71.36

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.01 WELLS - CONSTRUCTION

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1896-2021 EXPERIENCE BAND 1943-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,388,685	1,020	0.0007	0.9993	71.00
40.5	1,384,422	38,448	0.0278	0.9722	70.95
41.5	1,293,256	13,513	0.0104	0.9896	68.98
42.5	1,074,188	14,949	0.0139	0.9861	68.26
43.5	1,058,538	5,411	0.0051	0.9949	67.31
44.5	1,053,344	2,277	0.0022	0.9978	66.96
45.5	963,799	1,065	0.0011	0.9989	66.82
46.5	827,445	66	0.0001	0.9999	66.74
47.5	680,694	15,691	0.0231	0.9769	66.74
48.5	488,436		0.0000	1.0000	65.20
49.5	476,344	2,111	0.0044	0.9956	65.20
50.5	474,456		0.0000	1.0000	64.91
51.5	475,599		0.0000	1.0000	64.91
52.5	475,969	8,193	0.0172	0.9828	64.91
53.5	475,454	10,402	0.0219	0.9781	63.79
54.5	464,565	88	0.0002	0.9998	62.40
55.5	464,136	88	0.0002	0.9998	62.39
56.5	453,943	5,121	0.0113	0.9887	62.38
57.5	418,795	115	0.0003	0.9997	61.67
58.5	418,679	38	0.0001	0.9999	61.65
59.5	418,641	3,684	0.0088	0.9912	61.65
60.5	414,292	47	0.0001	0.9999	61.11
61.5	402,610	592	0.0015	0.9985	61.10
62.5	402,019	2,816	0.0070	0.9930	61.01
63.5	352,303	410	0.0012	0.9988	60.58
64.5	239,445		0.0000	1.0000	60.51
65.5	227,582		0.0000	1.0000	60.51
66.5	214,681		0.0000	1.0000	60.51
67.5	213,627	55	0.0003	0.9997	60.51
68.5	213,568	10,820	0.0507	0.9493	60.50
69.5	202,724		0.0000	1.0000	57.43
70.5	198,183		0.0000	1.0000	57.43
71.5	170,381		0.0000	1.0000	57.43
72.5	143,515		0.0000	1.0000	57.43
73.5	140,242		0.0000	1.0000	57.43
74.5	108,203	5	0.0000	1.0000	57.43
75.5	74,830		0.0000	1.0000	57.43
76.5	61,189		0.0000	1.0000	57.43
77.5	60,868		0.0000	1.0000	57.43
78.5	60,868		0.0000	1.0000	57.43

PEOPLES NATURAL GAS COMPANY LLC

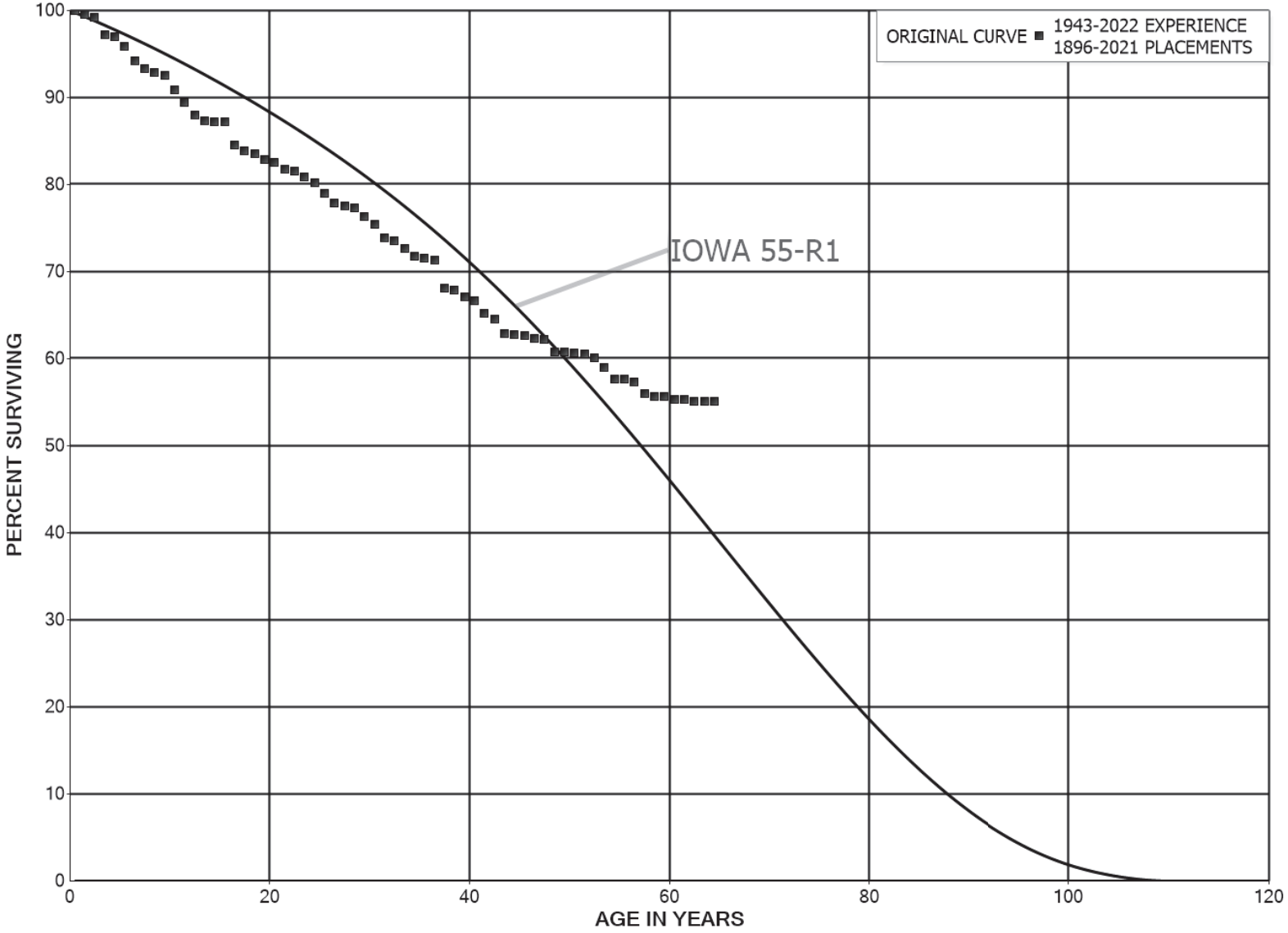
ACCOUNT 352.01 WELLS - CONSTRUCTION

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1896-2021 EXPERIENCE BAND 1943-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	54,548		0.0000	1.0000	57.43
80.5	46,787		0.0000	1.0000	57.43
81.5	46,787		0.0000	1.0000	57.43
82.5	46,787		0.0000	1.0000	57.43
83.5	45,804		0.0000	1.0000	57.43
84.5	45,804		0.0000	1.0000	57.43
85.5	45,804	8,061	0.1760	0.8240	57.43
86.5	32,080	757	0.0236	0.9764	47.32
87.5	31,323		0.0000	1.0000	46.21
88.5	31,323		0.0000	1.0000	46.21
89.5	31,323	11,826	0.3776	0.6224	46.21
90.5	19,497		0.0000	1.0000	28.76
91.5	19,497		0.0000	1.0000	28.76
92.5	19,497		0.0000	1.0000	28.76
93.5	19,497		0.0000	1.0000	28.76
94.5	19,497		0.0000	1.0000	28.76
95.5	19,300		0.0000	1.0000	28.76
96.5	14,264		0.0000	1.0000	28.76
97.5	8,363		0.0000	1.0000	28.76
98.5	2,544		0.0000	1.0000	28.76
99.5	2,544		0.0000	1.0000	28.76
100.5	2,544		0.0000	1.0000	28.76
101.5	2,544		0.0000	1.0000	28.76
102.5	2,544		0.0000	1.0000	28.76
103.5	2,544		0.0000	1.0000	28.76
104.5	2,544		0.0000	1.0000	28.76
105.5	2,539		0.0000	1.0000	28.76
106.5					28.76

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 352.02 WELLS - EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.02 WELLS - EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1896-2021 EXPERIENCE BAND 1943-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	3,207,400	1,062	0.0003	0.9997	100.00
0.5	3,104,638	14,091	0.0045	0.9955	99.97
1.5	2,752,277	9,189	0.0033	0.9967	99.51
2.5	1,849,263	37,011	0.0200	0.9800	99.18
3.5	1,859,137	5,836	0.0031	0.9969	97.20
4.5	1,875,287	20,407	0.0109	0.9891	96.89
5.5	1,841,370	31,019	0.0168	0.9832	95.84
6.5	1,819,170	18,092	0.0099	0.9901	94.22
7.5	1,799,153	9,440	0.0052	0.9948	93.28
8.5	1,755,017	4,605	0.0026	0.9974	92.80
9.5	1,744,563	31,463	0.0180	0.9820	92.55
10.5	1,695,461	28,366	0.0167	0.9833	90.88
11.5	1,571,242	24,584	0.0156	0.9844	89.36
12.5	1,471,837	11,558	0.0079	0.9921	87.96
13.5	1,445,590	1,710	0.0012	0.9988	87.27
14.5	1,388,010	614	0.0004	0.9996	87.17
15.5	1,395,756	42,084	0.0302	0.9698	87.13
16.5	1,353,779	10,390	0.0077	0.9923	84.50
17.5	1,336,443	5,380	0.0040	0.9960	83.86
18.5	1,327,456	10,352	0.0078	0.9922	83.52
19.5	1,320,836	6,043	0.0046	0.9954	82.87
20.5	1,291,193	12,575	0.0097	0.9903	82.49
21.5	1,254,104	2,425	0.0019	0.9981	81.68
22.5	1,228,816	10,315	0.0084	0.9916	81.53
23.5	1,217,520	9,610	0.0079	0.9921	80.84
24.5	868,681	13,745	0.0158	0.9842	80.20
25.5	837,404	11,623	0.0139	0.9861	78.94
26.5	835,231	4,166	0.0050	0.9950	77.84
27.5	858,920	1,379	0.0016	0.9984	77.45
28.5	863,524	11,694	0.0135	0.9865	77.33
29.5	851,165	10,086	0.0118	0.9882	76.28
30.5	840,202	17,032	0.0203	0.9797	75.38
31.5	824,559	4,399	0.0053	0.9947	73.85
32.5	777,355	9,163	0.0118	0.9882	73.45
33.5	765,046	9,654	0.0126	0.9874	72.59
34.5	706,317	2,077	0.0029	0.9971	71.67
35.5	703,468	1,587	0.0023	0.9977	71.46
36.5	700,708	31,341	0.0447	0.9553	71.30
37.5	668,424	3,140	0.0047	0.9953	68.11
38.5	660,290	6,802	0.0103	0.9897	67.79

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.02 WELLS - EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1896-2021 EXPERIENCE BAND 1943-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	608,492	4,587	0.0075	0.9925	67.09
40.5	568,149	12,223	0.0215	0.9785	66.59
41.5	542,584	5,776	0.0106	0.9894	65.15
42.5	466,495	11,973	0.0257	0.9743	64.46
43.5	451,367	216	0.0005	0.9995	62.81
44.5	456,402	1,058	0.0023	0.9977	62.78
45.5	426,557	2,430	0.0057	0.9943	62.63
46.5	358,550	590	0.0016	0.9984	62.27
47.5	304,584	6,936	0.0228	0.9772	62.17
48.5	231,588		0.0000	1.0000	60.76
49.5	211,105	357	0.0017	0.9983	60.76
50.5	211,017	380	0.0018	0.9982	60.65
51.5	211,532	1,729	0.0082	0.9918	60.54
52.5	210,082	3,666	0.0174	0.9826	60.05
53.5	206,248	4,793	0.0232	0.9768	59.00
54.5	201,448		0.0000	1.0000	57.63
55.5	200,320	1,306	0.0065	0.9935	57.63
56.5	192,587	4,359	0.0226	0.9774	57.25
57.5	171,474	925	0.0054	0.9946	55.96
58.5	170,549		0.0000	1.0000	55.66
59.5	170,549	1,024	0.0060	0.9940	55.66
60.5	169,351	133	0.0008	0.9992	55.32
61.5	161,122	665	0.0041	0.9959	55.28
62.5	159,705	79	0.0005	0.9995	55.05
63.5	147,850		0.0000	1.0000	55.02
64.5	100,803		0.0000	1.0000	55.02
65.5	94,825		0.0000	1.0000	55.02
66.5	88,647		0.0000	1.0000	55.02
67.5	88,647	288	0.0032	0.9968	55.02
68.5	85,721	2,594	0.0303	0.9697	54.85
69.5	82,866		0.0000	1.0000	53.19
70.5	78,884		0.0000	1.0000	53.19
71.5	64,723		0.0000	1.0000	53.19
72.5	54,087		0.0000	1.0000	53.19
73.5	54,050		0.0000	1.0000	53.19
74.5	42,506	1,424	0.0335	0.9665	53.19
75.5	31,420	25	0.0008	0.9992	51.40
76.5	26,195		0.0000	1.0000	51.36
77.5	23,540		0.0000	1.0000	51.36
78.5	23,540		0.0000	1.0000	51.36

PEOPLES NATURAL GAS COMPANY LLC

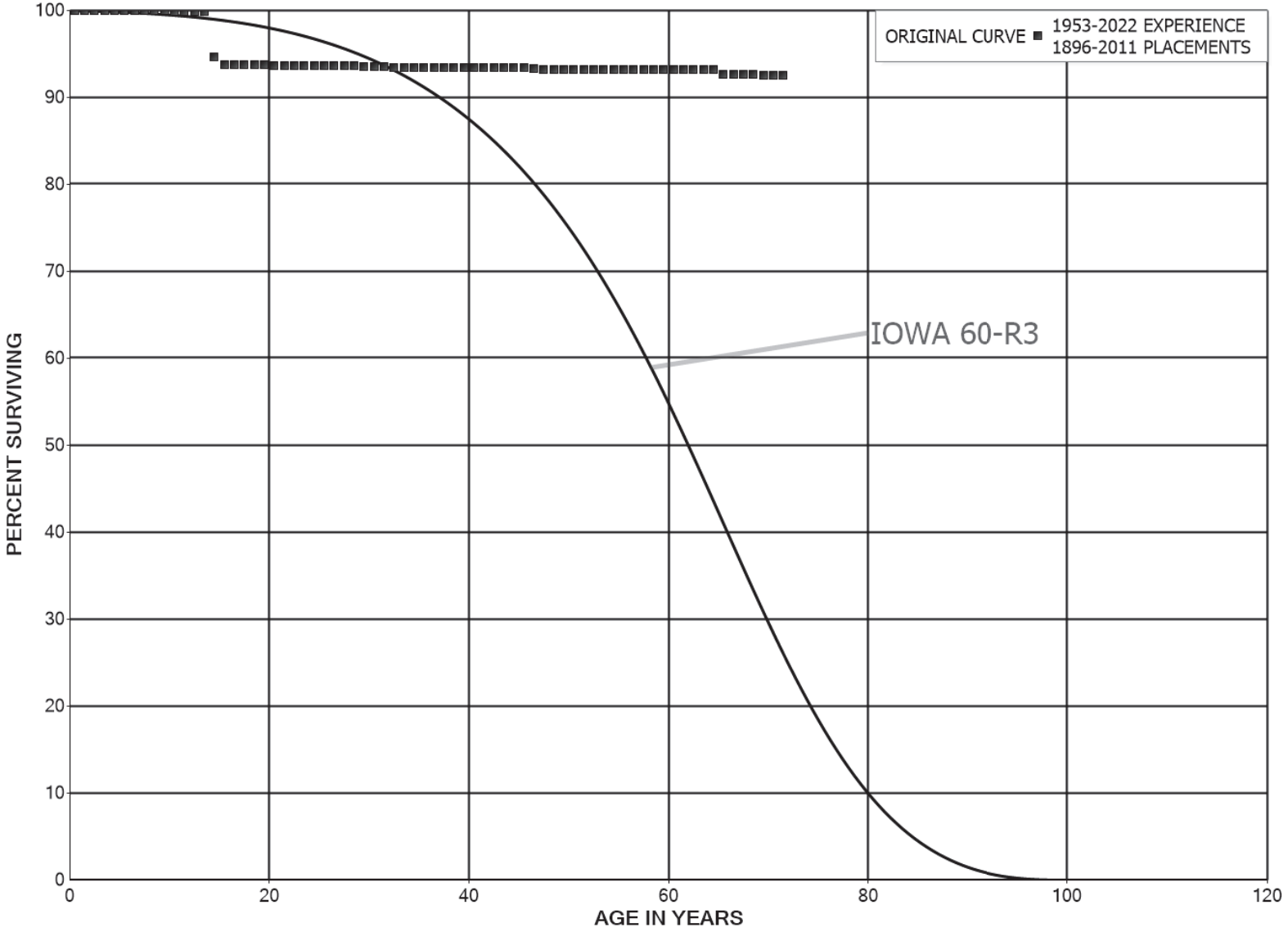
ACCOUNT 352.02 WELLS - EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1896-2021 EXPERIENCE BAND 1943-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	13,920		0.0000	1.0000	51.36
80.5	13,907		0.0000	1.0000	51.36
81.5	13,907		0.0000	1.0000	51.36
82.5	13,907		0.0000	1.0000	51.36
83.5	13,907		0.0000	1.0000	51.36
84.5	13,907		0.0000	1.0000	51.36
85.5	13,907		0.0000	1.0000	51.36
86.5	13,144		0.0000	1.0000	51.36
87.5	13,144		0.0000	1.0000	51.36
88.5	13,144		0.0000	1.0000	51.36
89.5	13,144		0.0000	1.0000	51.36
90.5	8,020		0.0000	1.0000	51.36
91.5	8,020		0.0000	1.0000	51.36
92.5	8,020		0.0000	1.0000	51.36
93.5	8,020		0.0000	1.0000	51.36
94.5	8,020		0.0000	1.0000	51.36
95.5	8,020		0.0000	1.0000	51.36
96.5	7,214		0.0000	1.0000	51.36
97.5	4,728		0.0000	1.0000	51.36
98.5	2,095		0.0000	1.0000	51.36
99.5	2,095		0.0000	1.0000	51.36
100.5	2,095		0.0000	1.0000	51.36
101.5	2,095		0.0000	1.0000	51.36
102.5	2,095		0.0000	1.0000	51.36
103.5	2,095		0.0000	1.0000	51.36
104.5	2,095		0.0000	1.0000	51.36
105.5	606		0.0000	1.0000	51.36
106.5					51.36

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 352.11 LEASEHOLDS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.11 LEASEHOLDS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1896-2011 EXPERIENCE BAND 1953-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	4,680,838	223	0.0000	1.0000	100.00
0.5	4,682,256		0.0000	1.0000	100.00
1.5	4,744,977	318	0.0001	0.9999	100.00
2.5	4,776,785	1,150	0.0002	0.9998	99.99
3.5	4,449,516		0.0000	1.0000	99.96
4.5	4,371,307	2,651	0.0006	0.9994	99.96
5.5	4,376,478	193	0.0000	1.0000	99.90
6.5	4,377,825		0.0000	1.0000	99.90
7.5	4,376,230	52	0.0000	1.0000	99.90
8.5	4,377,221	151	0.0000	1.0000	99.90
9.5	4,393,042	2,039	0.0005	0.9995	99.89
10.5	4,392,222	1,062	0.0002	0.9998	99.85
11.5	4,391,251	1,162	0.0003	0.9997	99.82
12.5	4,390,269	176	0.0000	1.0000	99.80
13.5	4,395,758	229,504	0.0522	0.9478	99.79
14.5	4,361,358	37,588	0.0086	0.9914	94.58
15.5	4,142,566	1,689	0.0004	0.9996	93.77
16.5	4,092,600	226	0.0001	0.9999	93.73
17.5	4,092,376	972	0.0002	0.9998	93.73
18.5	4,083,527	1,365	0.0003	0.9997	93.70
19.5	4,082,201	2,305	0.0006	0.9994	93.67
20.5	4,079,422	733	0.0002	0.9998	93.62
21.5	4,078,886	111	0.0000	1.0000	93.60
22.5	4,087,070	40	0.0000	1.0000	93.60
23.5	4,087,247	37	0.0000	1.0000	93.60
24.5	4,087,248	453	0.0001	0.9999	93.60
25.5	4,087,151	225	0.0001	0.9999	93.59
26.5	4,085,727		0.0000	1.0000	93.58
27.5	4,082,676	6	0.0000	1.0000	93.58
28.5	4,082,559	1,516	0.0004	0.9996	93.58
29.5	4,081,445	380	0.0001	0.9999	93.55
30.5	4,082,144		0.0000	1.0000	93.54
31.5	4,082,118	6,006	0.0015	0.9985	93.54
32.5	4,078,055		0.0000	1.0000	93.40
33.5	4,078,223	100	0.0000	1.0000	93.40
34.5	4,098,253	432	0.0001	0.9999	93.40
35.5	4,098,793	130	0.0000	1.0000	93.39
36.5	4,101,808		0.0000	1.0000	93.39
37.5	4,092,938		0.0000	1.0000	93.39
38.5	4,090,531		0.0000	1.0000	93.39

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.11 LEASEHOLDS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1896-2011 EXPERIENCE BAND 1953-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,092,150	39	0.0000	1.0000	93.39
40.5	4,086,621	26	0.0000	1.0000	93.38
41.5	4,097,287		0.0000	1.0000	93.38
42.5	4,042,911		0.0000	1.0000	93.38
43.5	966,829	50	0.0001	0.9999	93.38
44.5	253,735	14	0.0001	0.9999	93.38
45.5	252,961	230	0.0009	0.9991	93.37
46.5	252,579	353	0.0014	0.9986	93.29
47.5	239,271	3	0.0000	1.0000	93.16
48.5	234,035		0.0000	1.0000	93.16
49.5	231,661		0.0000	1.0000	93.16
50.5	231,644		0.0000	1.0000	93.16
51.5	226,223		0.0000	1.0000	93.16
52.5	226,032		0.0000	1.0000	93.16
53.5	225,462		0.0000	1.0000	93.16
54.5	225,462		0.0000	1.0000	93.16
55.5	225,357		0.0000	1.0000	93.16
56.5	225,465	11	0.0000	1.0000	93.16
57.5	225,454		0.0000	1.0000	93.15
58.5	225,314		0.0000	1.0000	93.15
59.5	209,305		0.0000	1.0000	93.15
60.5	209,305		0.0000	1.0000	93.15
61.5	207,975		0.0000	1.0000	93.15
62.5	207,538	70	0.0003	0.9997	93.15
63.5	175,651		0.0000	1.0000	93.12
64.5	171,800	1,000	0.0058	0.9942	93.12
65.5	167,094		0.0000	1.0000	92.58
66.5	165,567		0.0000	1.0000	92.58
67.5	164,811	20	0.0001	0.9999	92.58
68.5	164,791	50	0.0003	0.9997	92.57
69.5	164,687		0.0000	1.0000	92.54
70.5	146,847		0.0000	1.0000	92.54
71.5	86,240		0.0000	1.0000	92.54
72.5	16,421	90	0.0055	0.9945	92.54
73.5	15,779		0.0000	1.0000	92.03
74.5	11,065	58	0.0053	0.9947	92.03
75.5	9,712		0.0000	1.0000	91.55
76.5	9,597		0.0000	1.0000	91.55
77.5	2,431		0.0000	1.0000	91.55
78.5	2,329	64	0.0273	0.9727	91.55

PEOPLES NATURAL GAS COMPANY LLC

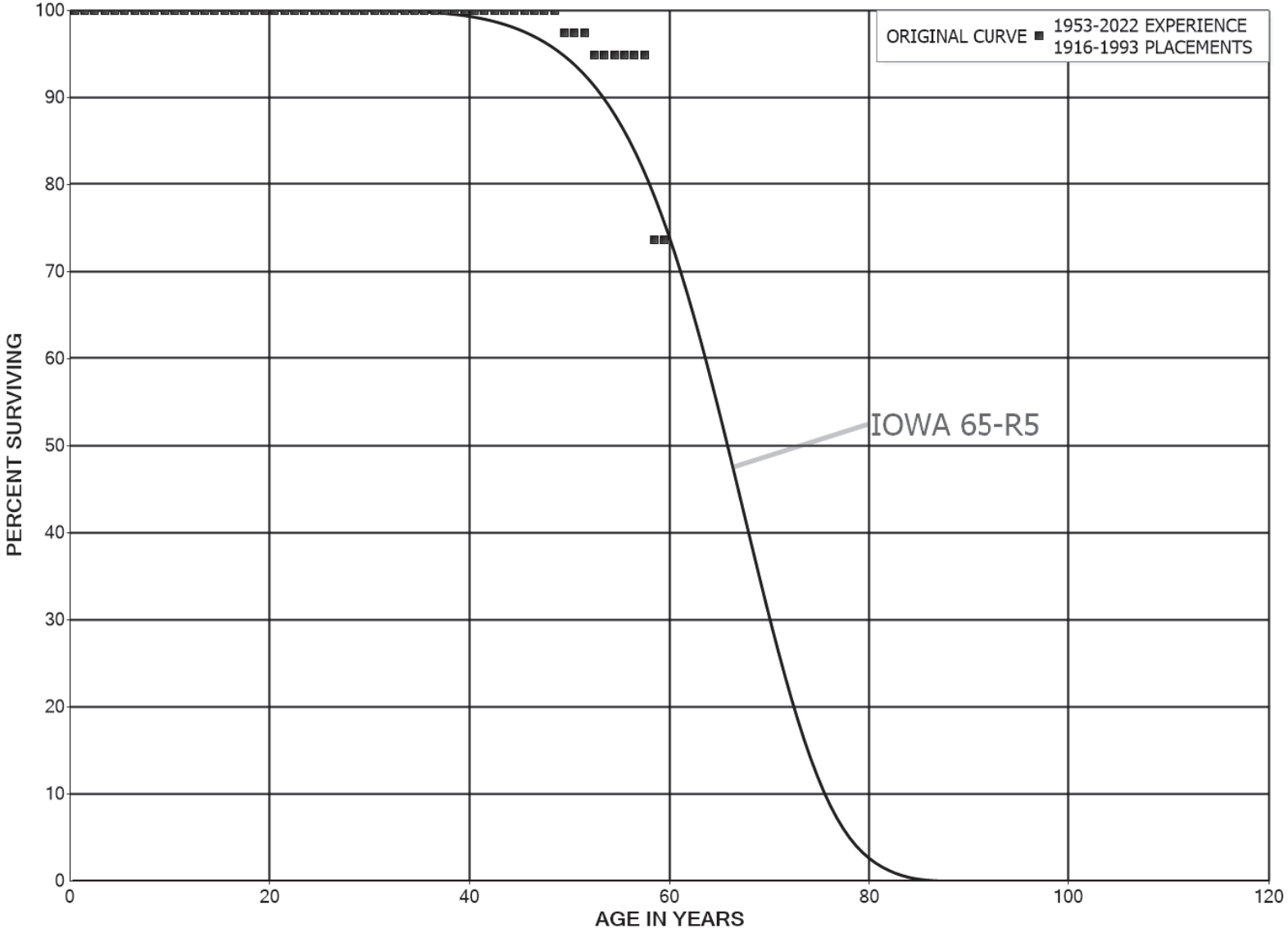
ACCOUNT 352.11 LEASEHOLDS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1896-2011 EXPERIENCE BAND 1953-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	2,237		0.0000	1.0000	89.05
80.5	2,174		0.0000	1.0000	89.05
81.5	1,972		0.0000	1.0000	89.05
82.5	1,953		0.0000	1.0000	89.05
83.5	1,622		0.0000	1.0000	89.05
84.5	1,564		0.0000	1.0000	89.05
85.5	1,564		0.0000	1.0000	89.05
86.5	1,564		0.0000	1.0000	89.05
87.5	1,564		0.0000	1.0000	89.05
88.5	1,564	25	0.0158	0.9842	89.05
89.5	1,539		0.0000	1.0000	87.64
90.5	1,030		0.0000	1.0000	87.64
91.5	1,030		0.0000	1.0000	87.64
92.5	1,030		0.0000	1.0000	87.64
93.5	1,030		0.0000	1.0000	87.64
94.5	914		0.0000	1.0000	87.64
95.5	914		0.0000	1.0000	87.64
96.5	914		0.0000	1.0000	87.64
97.5	844		0.0000	1.0000	87.64
98.5	844		0.0000	1.0000	87.64
99.5	844		0.0000	1.0000	87.64
100.5	844		0.0000	1.0000	87.64
101.5	826		0.0000	1.0000	87.64
102.5	826		0.0000	1.0000	87.64
103.5	776		0.0000	1.0000	87.64
104.5	776		0.0000	1.0000	87.64
105.5	712		0.0000	1.0000	87.64
106.5	653		0.0000	1.0000	87.64
107.5	627		0.0000	1.0000	87.64
108.5	627		0.0000	1.0000	87.64
109.5	321		0.0000	1.0000	87.64
110.5	321		0.0000	1.0000	87.64
111.5	321		0.0000	1.0000	87.64
112.5	110		0.0000	1.0000	87.64
113.5	35		0.0000	1.0000	87.64
114.5	35		0.0000	1.0000	87.64
115.5	35		0.0000	1.0000	87.64
116.5	35		0.0000	1.0000	87.64
117.5	35		0.0000	1.0000	87.64
118.5					87.64

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 352.12 STORAGE RIGHTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.12 STORAGE RIGHTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1916-1993 EXPERIENCE BAND 1953-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	81,302		0.0000	1.0000	100.00
0.5	188,104		0.0000	1.0000	100.00
1.5	188,133		0.0000	1.0000	100.00
2.5	209,337		0.0000	1.0000	100.00
3.5	210,668		0.0000	1.0000	100.00
4.5	210,845	29	0.0001	0.9999	100.00
5.5	214,881		0.0000	1.0000	99.99
6.5	214,881		0.0000	1.0000	99.99
7.5	220,748		0.0000	1.0000	99.99
8.5	222,290		0.0000	1.0000	99.99
9.5	223,857		0.0000	1.0000	99.99
10.5	225,775		0.0000	1.0000	99.99
11.5	225,775		0.0000	1.0000	99.99
12.5	225,775		0.0000	1.0000	99.99
13.5	225,820		0.0000	1.0000	99.99
14.5	226,460		0.0000	1.0000	99.99
15.5	226,478		0.0000	1.0000	99.99
16.5	226,478		0.0000	1.0000	99.99
17.5	226,064		0.0000	1.0000	99.99
18.5	226,064		0.0000	1.0000	99.99
19.5	226,064		0.0000	1.0000	99.99
20.5	226,064		0.0000	1.0000	99.99
21.5	225,424		0.0000	1.0000	99.99
22.5	223,507		0.0000	1.0000	99.99
23.5	223,507		0.0000	1.0000	99.99
24.5	223,507		0.0000	1.0000	99.99
25.5	223,507		0.0000	1.0000	99.99
26.5	223,507		0.0000	1.0000	99.99
27.5	223,507		0.0000	1.0000	99.99
28.5	223,588	65	0.0003	0.9997	99.99
29.5	211,507		0.0000	1.0000	99.96
30.5	209,055		0.0000	1.0000	99.96
31.5	209,447		0.0000	1.0000	99.96
32.5	209,406		0.0000	1.0000	99.96
33.5	207,463	35	0.0002	0.9998	99.96
34.5	208,428		0.0000	1.0000	99.94
35.5	188,305		0.0000	1.0000	99.94
36.5	188,306		0.0000	1.0000	99.94
37.5	188,331		0.0000	1.0000	99.94
38.5	188,304		0.0000	1.0000	99.94

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.12 STORAGE RIGHTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1916-1993 EXPERIENCE BAND 1953-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	188,304		0.0000	1.0000	99.94
40.5	182,756		0.0000	1.0000	99.94
41.5	181,677		0.0000	1.0000	99.94
42.5	180,464		0.0000	1.0000	99.94
43.5	17,732		0.0000	1.0000	99.94
44.5	11,303		0.0000	1.0000	99.94
45.5	11,303		0.0000	1.0000	99.94
46.5	11,303		0.0000	1.0000	99.94
47.5	11,303		0.0000	1.0000	99.94
48.5	11,303	285	0.0252	0.9748	99.94
49.5	11,018		0.0000	1.0000	97.42
50.5	11,018		0.0000	1.0000	97.42
51.5	11,018	291	0.0264	0.9736	97.42
52.5	10,727		0.0000	1.0000	94.85
53.5	10,727		0.0000	1.0000	94.85
54.5	10,727		0.0000	1.0000	94.85
55.5	10,727		0.0000	1.0000	94.85
56.5	10,727		0.0000	1.0000	94.85
57.5	10,727	2,403	0.2240	0.7760	94.85
58.5	7,881		0.0000	1.0000	73.61
59.5	7,881		0.0000	1.0000	73.61
60.5	7,881		0.0000	1.0000	73.61
61.5	7,881		0.0000	1.0000	73.61
62.5	7,869		0.0000	1.0000	73.61
63.5	7,181		0.0000	1.0000	73.61
64.5	6,523		0.0000	1.0000	73.61
65.5	6,523	1	0.0002	0.9998	73.61
66.5	6,497		0.0000	1.0000	73.59
67.5	6,497		0.0000	1.0000	73.59
68.5	6,202		0.0000	1.0000	73.59
69.5	6,148		0.0000	1.0000	73.59
70.5	6,148		0.0000	1.0000	73.59
71.5	5,794		0.0000	1.0000	73.59
72.5	5,397		0.0000	1.0000	73.59
73.5	1,766		0.0000	1.0000	73.59
74.5	1,691		0.0000	1.0000	73.59
75.5	1,662		0.0000	1.0000	73.59
76.5	1,662		0.0000	1.0000	73.59
77.5	1,662		0.0000	1.0000	73.59
78.5	199		0.0000	1.0000	73.59

PEOPLES NATURAL GAS COMPANY LLC

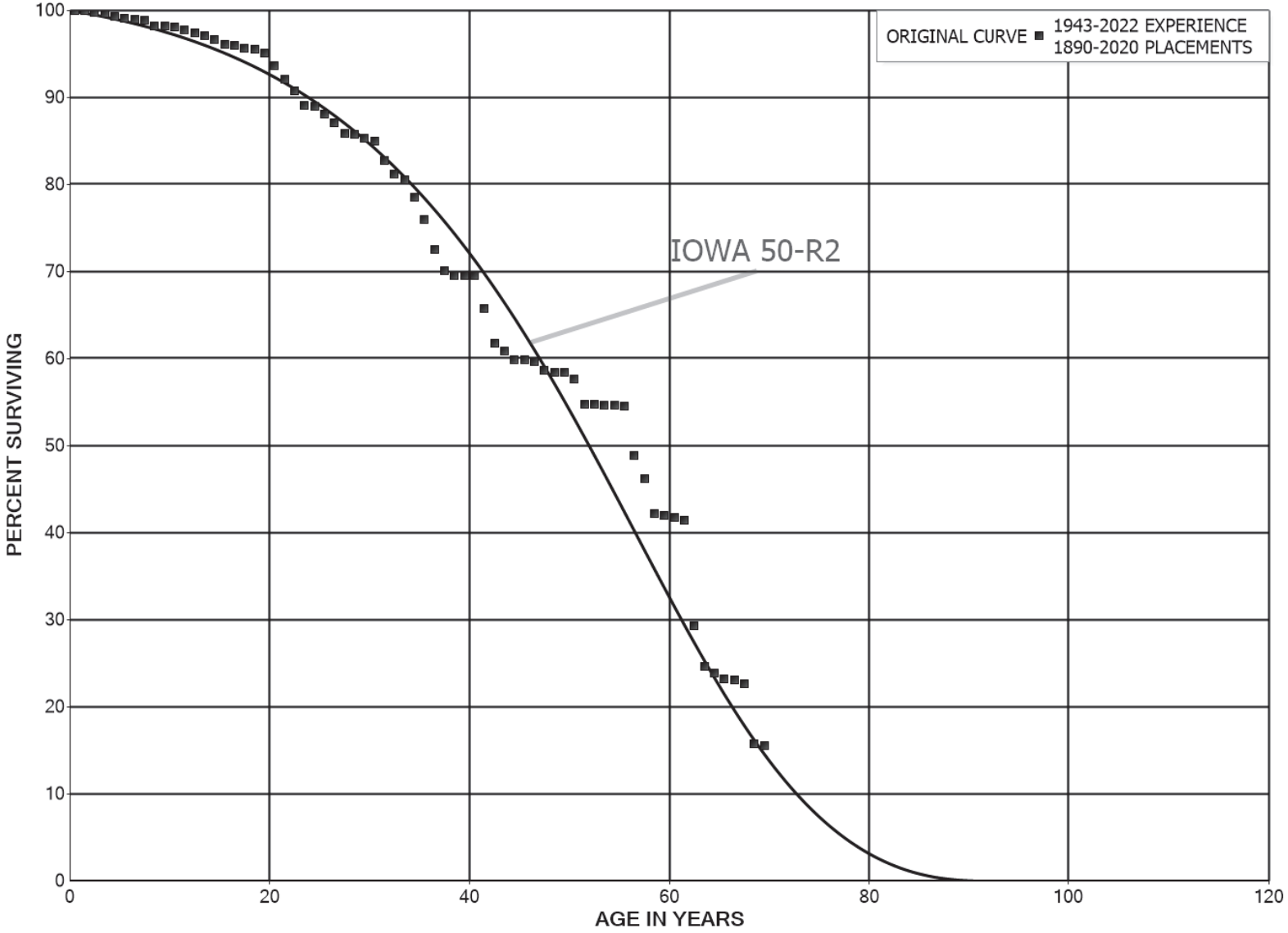
ACCOUNT 352.12 STORAGE RIGHTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1916-1993 EXPERIENCE BAND 1953-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	199		0.0000	1.0000	73.59
80.5	199		0.0000	1.0000	73.59
81.5	100		0.0000	1.0000	73.59
82.5	100		0.0000	1.0000	73.59
83.5					73.59

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 353.00 LINES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 353.00 LINES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1890-2020 EXPERIENCE BAND 1943-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	22,553,566	457	0.0000	1.0000	100.00
0.5	22,057,852	19,107	0.0009	0.9991	100.00
1.5	19,659,763	45,020	0.0023	0.9977	99.91
2.5	14,324,531	13,499	0.0009	0.9991	99.68
3.5	10,676,681	33,475	0.0031	0.9969	99.59
4.5	8,191,884	17,510	0.0021	0.9979	99.28
5.5	7,925,718	9,698	0.0012	0.9988	99.06
6.5	7,819,870	11,707	0.0015	0.9985	98.94
7.5	6,831,734	39,558	0.0058	0.9942	98.79
8.5	6,306,992	5,861	0.0009	0.9991	98.22
9.5	4,859,487	3,887	0.0008	0.9992	98.13
10.5	4,827,873	13,656	0.0028	0.9972	98.05
11.5	4,741,334	18,987	0.0040	0.9960	97.78
12.5	4,688,290	13,547	0.0029	0.9971	97.38
13.5	4,689,940	22,982	0.0049	0.9951	97.10
14.5	4,509,427	23,898	0.0053	0.9947	96.63
15.5	4,438,642	7,800	0.0018	0.9982	96.11
16.5	3,074,013	9,262	0.0030	0.9970	95.95
17.5	3,074,939	4,074	0.0013	0.9987	95.66
18.5	2,665,725	12,690	0.0048	0.9952	95.53
19.5	2,681,858	40,443	0.0151	0.9849	95.08
20.5	2,593,942	43,751	0.0169	0.9831	93.64
21.5	2,521,493	35,260	0.0140	0.9860	92.06
22.5	2,440,863	45,335	0.0186	0.9814	90.77
23.5	2,383,211	4,881	0.0020	0.9980	89.09
24.5	2,248,603	22,054	0.0098	0.9902	88.91
25.5	2,210,230	23,814	0.0108	0.9892	88.03
26.5	2,184,581	32,008	0.0147	0.9853	87.09
27.5	2,159,574	2,457	0.0011	0.9989	85.81
28.5	1,612,931	8,901	0.0055	0.9945	85.71
29.5	1,489,180	5,399	0.0036	0.9964	85.24
30.5	1,449,859	38,348	0.0264	0.9736	84.93
31.5	1,376,457	25,745	0.0187	0.9813	82.68
32.5	1,328,986	9,769	0.0074	0.9926	81.14
33.5	1,318,539	33,631	0.0255	0.9745	80.54
34.5	1,286,446	42,172	0.0328	0.9672	78.49
35.5	1,239,600	56,202	0.0453	0.9547	75.91
36.5	1,132,135	38,141	0.0337	0.9663	72.47
37.5	1,047,477	7,188	0.0069	0.9931	70.03
38.5	1,039,159	643	0.0006	0.9994	69.55

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 353.00 LINES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1890-2020 EXPERIENCE BAND 1943-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	982,447	313	0.0003	0.9997	69.51
40.5	957,145	52,147	0.0545	0.9455	69.48
41.5	889,124	54,256	0.0610	0.9390	65.70
42.5	808,520	10,793	0.0133	0.9867	61.69
43.5	649,639	10,469	0.0161	0.9839	60.87
44.5	620,949	294	0.0005	0.9995	59.89
45.5	623,283	2,475	0.0040	0.9960	59.86
46.5	614,015	10,004	0.0163	0.9837	59.62
47.5	603,180	2,133	0.0035	0.9965	58.65
48.5	599,913	453	0.0008	0.9992	58.44
49.5	578,373	8,238	0.0142	0.9858	58.40
50.5	561,573	27,769	0.0494	0.9506	57.56
51.5	533,708	338	0.0006	0.9994	54.72
52.5	374,349	199	0.0005	0.9995	54.68
53.5	369,245	7	0.0000	1.0000	54.65
54.5	276,587	570	0.0021	0.9979	54.65
55.5	270,578	28,208	0.1043	0.8957	54.54
56.5	235,565	12,776	0.0542	0.9458	48.85
57.5	216,343	19,072	0.0882	0.9118	46.21
58.5	188,183	564	0.0030	0.9970	42.13
59.5	195,451	1,342	0.0069	0.9931	42.01
60.5	196,066	1,731	0.0088	0.9912	41.72
61.5	190,040	55,235	0.2907	0.7093	41.35
62.5	134,834	21,469	0.1592	0.8408	29.33
63.5	113,366	3,919	0.0346	0.9654	24.66
64.5	109,447	3,120	0.0285	0.9715	23.81
65.5	105,881	306	0.0029	0.9971	23.13
66.5	105,530	1,808	0.0171	0.9829	23.06
67.5	101,494	30,864	0.3041	0.6959	22.67
68.5	70,660	1,163	0.0165	0.9835	15.77
69.5	69,437	1,268	0.0183	0.9817	15.51
70.5	55,998	666	0.0119	0.9881	15.23
71.5	55,067		0.0000	1.0000	15.05
72.5	55,067		0.0000	1.0000	15.05
73.5	55,046		0.0000	1.0000	15.05
74.5	35,911	0	0.0000	1.0000	15.05
75.5	26,980		0.0000	1.0000	15.05
76.5	12,074		0.0000	1.0000	15.05
77.5	11,928		0.0000	1.0000	15.05
78.5	11,590		0.0000	1.0000	15.05

PEOPLES NATURAL GAS COMPANY LLC

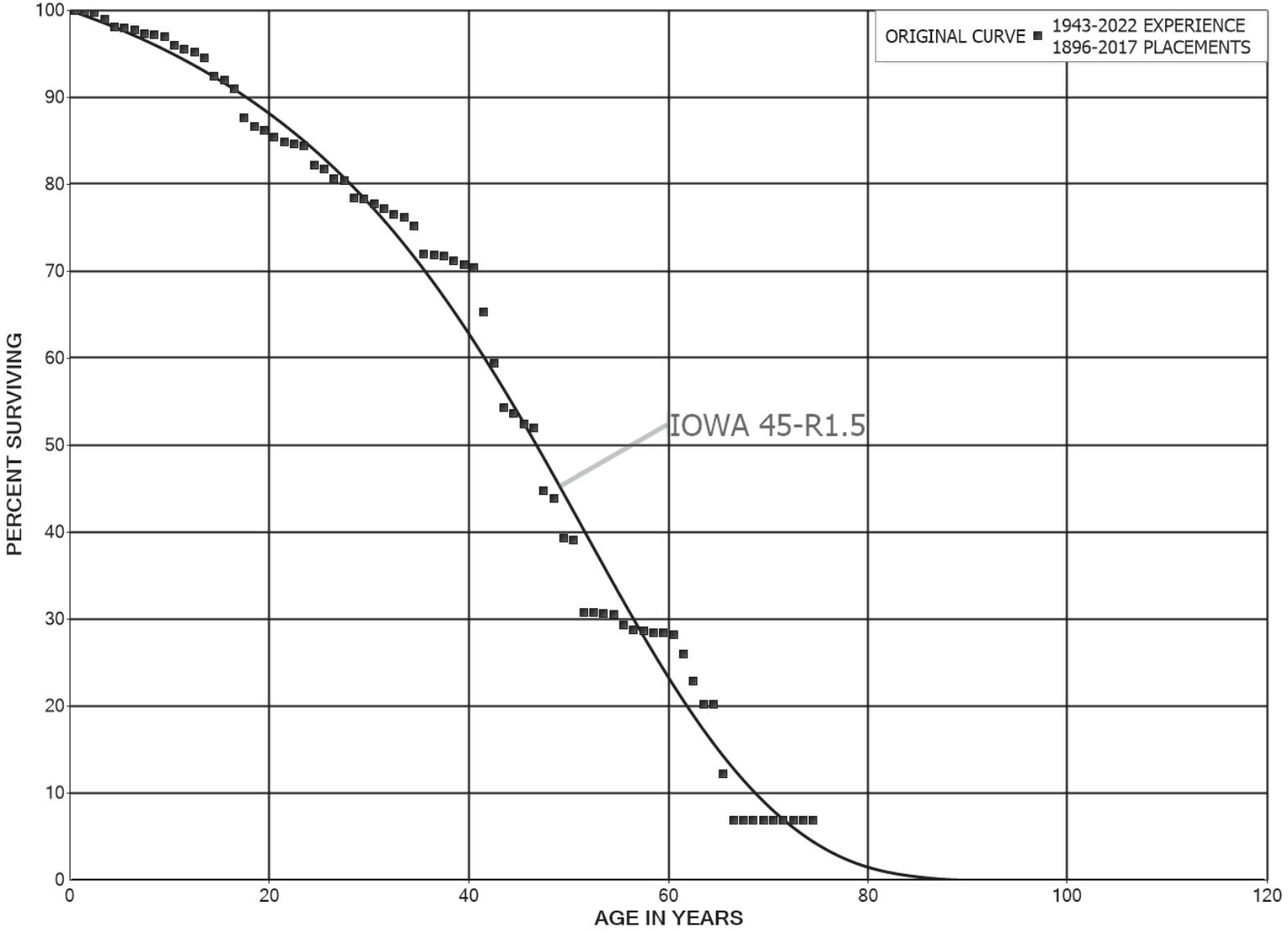
ACCOUNT 353.00 LINES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1890-2020 EXPERIENCE BAND 1943-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	11,019		0.0000	1.0000	15.05
80.5	11,019		0.0000	1.0000	15.05
81.5	9,932		0.0000	1.0000	15.05
82.5	11,479	9	0.0008	0.9992	15.05
83.5	11,386		0.0000	1.0000	15.04
84.5	11,382		0.0000	1.0000	15.04
85.5	11,362		0.0000	1.0000	15.04
86.5	11,362		0.0000	1.0000	15.04
87.5	11,362		0.0000	1.0000	15.04
88.5	11,305	45	0.0040	0.9960	15.04
89.5	11,240		0.0000	1.0000	14.98
90.5	11,240	2,121	0.1887	0.8113	14.98
91.5	9,119		0.0000	1.0000	12.15
92.5	9,119		0.0000	1.0000	12.15
93.5	9,119		0.0000	1.0000	12.15
94.5	9,119		0.0000	1.0000	12.15
95.5	9,119		0.0000	1.0000	12.15
96.5	9,056		0.0000	1.0000	12.15
97.5	7,822		0.0000	1.0000	12.15
98.5	2,229		0.0000	1.0000	12.15
99.5	2,229		0.0000	1.0000	12.15
100.5	2,184		0.0000	1.0000	12.15
101.5	2,184		0.0000	1.0000	12.15
102.5	2,184		0.0000	1.0000	12.15
103.5	2,184		0.0000	1.0000	12.15
104.5	2,158		0.0000	1.0000	12.15
105.5	1,795		0.0000	1.0000	12.15
106.5	9		0.0000	1.0000	12.15
107.5	9		0.0000	1.0000	12.15
108.5	9		0.0000	1.0000	12.15
109.5	9		0.0000	1.0000	12.15
110.5					12.15

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 354.00 COMPRESSOR STATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 354.00 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1896-2017 EXPERIENCE BAND 1943-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	39,396,308	21,197	0.0005	0.9995	100.00
0.5	35,587,705	56,638	0.0016	0.9984	99.95
1.5	32,819,347	20,905	0.0006	0.9994	99.79
2.5	26,674,494	210,158	0.0079	0.9921	99.72
3.5	26,105,256	221,440	0.0085	0.9915	98.94
4.5	25,795,565	31,655	0.0012	0.9988	98.10
5.5	25,541,219	78,234	0.0031	0.9969	97.98
6.5	25,306,415	88,427	0.0035	0.9965	97.68
7.5	24,896,791	27,894	0.0011	0.9989	97.34
8.5	21,426,479	56,694	0.0026	0.9974	97.23
9.5	20,580,016	215,598	0.0105	0.9895	96.97
10.5	20,286,156	102,521	0.0051	0.9949	95.95
11.5	19,764,287	54,067	0.0027	0.9973	95.47
12.5	19,677,754	136,542	0.0069	0.9931	95.21
13.5	19,132,663	438,979	0.0229	0.9771	94.55
14.5	18,690,577	94,503	0.0051	0.9949	92.38
15.5	18,455,114	191,798	0.0104	0.9896	91.91
16.5	17,365,259	642,048	0.0370	0.9630	90.96
17.5	16,424,997	174,605	0.0106	0.9894	87.59
18.5	14,974,691	77,493	0.0052	0.9948	86.66
19.5	14,010,314	131,187	0.0094	0.9906	86.21
20.5	12,350,275	76,076	0.0062	0.9938	85.41
21.5	11,833,651	43,364	0.0037	0.9963	84.88
22.5	11,749,499	30,734	0.0026	0.9974	84.57
23.5	9,402,194	248,319	0.0264	0.9736	84.35
24.5	9,035,350	47,139	0.0052	0.9948	82.12
25.5	8,757,558	111,364	0.0127	0.9873	81.69
26.5	8,593,426	23,317	0.0027	0.9973	80.65
27.5	8,508,295	216,970	0.0255	0.9745	80.43
28.5	7,868,819	4,456	0.0006	0.9994	78.38
29.5	7,219,014	52,385	0.0073	0.9927	78.34
30.5	7,129,065	55,808	0.0078	0.9922	77.77
31.5	6,845,594	58,211	0.0085	0.9915	77.16
32.5	5,862,014	28,148	0.0048	0.9952	76.51
33.5	5,815,638	76,678	0.0132	0.9868	76.14
34.5	5,713,280	238,207	0.0417	0.9583	75.13
35.5	5,240,125	14,920	0.0028	0.9972	72.00
36.5	4,996,887	4,377	0.0009	0.9991	71.80
37.5	5,186,110	39,280	0.0076	0.9924	71.73
38.5	4,868,223	28,175	0.0058	0.9942	71.19

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 354.00 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1896-2017 EXPERIENCE BAND 1943-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,531,466	21,538	0.0048	0.9952	70.78
40.5	4,475,508	329,587	0.0736	0.9264	70.44
41.5	4,092,309	364,198	0.0890	0.9110	65.25
42.5	1,488,615	128,163	0.0861	0.9139	59.45
43.5	1,362,242	17,207	0.0126	0.9874	54.33
44.5	1,339,510	32,504	0.0243	0.9757	53.64
45.5	1,274,286	8,576	0.0067	0.9933	52.34
46.5	1,241,957	172,414	0.1388	0.8612	51.99
47.5	1,038,377	20,471	0.0197	0.9803	44.77
48.5	1,017,248	106,793	0.1050	0.8950	43.89
49.5	907,019	5,204	0.0057	0.9943	39.28
50.5	901,830	191,333	0.2122	0.7878	39.06
51.5	711,018	761	0.0011	0.9989	30.77
52.5	710,145	3,201	0.0045	0.9955	30.74
53.5	690,752	2,432	0.0035	0.9965	30.60
54.5	688,320	26,954	0.0392	0.9608	30.49
55.5	659,306	14,095	0.0214	0.9786	29.30
56.5	643,856	2,051	0.0032	0.9968	28.67
57.5	641,669	4,583	0.0071	0.9929	28.58
58.5	636,942	477	0.0007	0.9993	28.37
59.5	637,115	4,458	0.0070	0.9930	28.35
60.5	632,779	50,046	0.0791	0.9209	28.16
61.5	582,772	68,426	0.1174	0.8826	25.93
62.5	513,860	60,713	0.1182	0.8818	22.88
63.5	435,509	759	0.0017	0.9983	20.18
64.5	430,020	170,277	0.3960	0.6040	20.15
65.5	259,597	114,147	0.4397	0.5603	12.17
66.5	139,622		0.0000	1.0000	6.82
67.5	139,290		0.0000	1.0000	6.82
68.5	139,270	60	0.0004	0.9996	6.82
69.5	139,210		0.0000	1.0000	6.81
70.5	139,210		0.0000	1.0000	6.81
71.5	138,576		0.0000	1.0000	6.81
72.5	136,264	50	0.0004	0.9996	6.81
73.5	136,130		0.0000	1.0000	6.81
74.5	360		0.0000	1.0000	6.81
75.5	332	49	0.1459	0.8541	6.81
76.5	310		0.0000	1.0000	5.82
77.5	310	93	0.3012	0.6988	5.82
78.5	217		0.0000	1.0000	4.07

PEOPLES NATURAL GAS COMPANY LLC

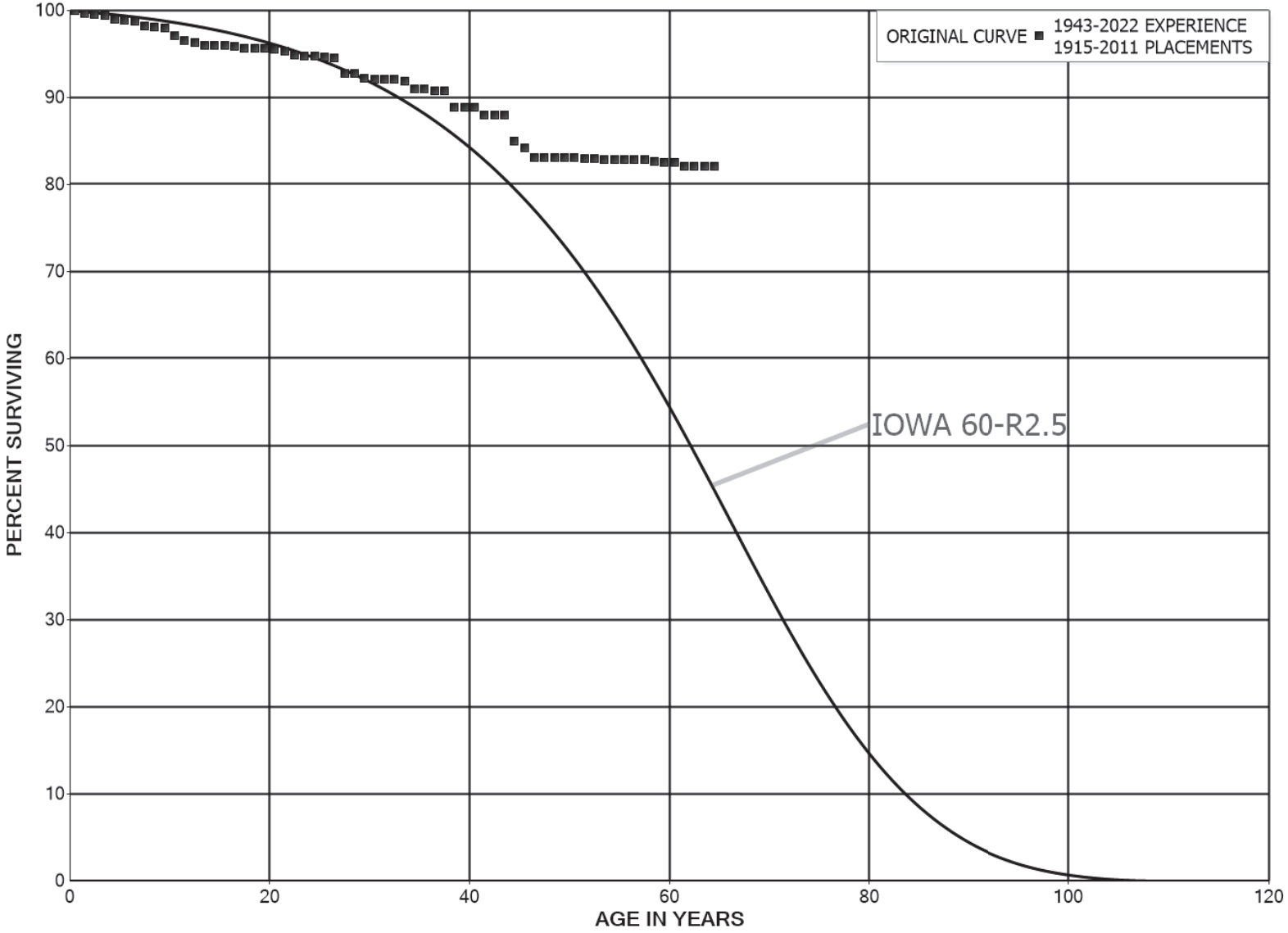
ACCOUNT 354.00 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1896-2017 EXPERIENCE BAND 1943-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	217		0.0000	1.0000	4.07
80.5	217		0.0000	1.0000	4.07
81.5	124		0.0000	1.0000	4.07
82.5	85		0.0000	1.0000	4.07
83.5	85		0.0000	1.0000	4.07
84.5	85		0.0000	1.0000	4.07
85.5	85		0.0000	1.0000	4.07
86.5	85	26	0.3104	0.6896	4.07
87.5	59		0.0000	1.0000	2.80
88.5	59		0.0000	1.0000	2.80
89.5	59		0.0000	1.0000	2.80
90.5	59		0.0000	1.0000	2.80
91.5	59		0.0000	1.0000	2.80
92.5	59		0.0000	1.0000	2.80
93.5	59	59	1.0000		2.80
94.5					

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 355.00 MEASURING AND REGULATING STATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 355.00 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1915-2011 EXPERIENCE BAND 1943-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	4,217,231	2,606	0.0006	0.9994	100.00
0.5	4,393,561	13,791	0.0031	0.9969	99.94
1.5	4,377,109	5,018	0.0011	0.9989	99.62
2.5	4,195,032	4,884	0.0012	0.9988	99.51
3.5	4,191,401	18,571	0.0044	0.9956	99.39
4.5	4,176,953	5,330	0.0013	0.9987	98.95
5.5	4,124,268	4,697	0.0011	0.9989	98.83
6.5	4,120,976	23,215	0.0056	0.9944	98.72
7.5	4,025,773	2,899	0.0007	0.9993	98.16
8.5	3,729,168	7,024	0.0019	0.9981	98.09
9.5	709,805	5,838	0.0082	0.9918	97.90
10.5	395,173	2,475	0.0063	0.9937	97.10
11.5	392,374	942	0.0024	0.9976	96.49
12.5	391,759	1,076	0.0027	0.9973	96.26
13.5	390,359		0.0000	1.0000	95.99
14.5	390,448		0.0000	1.0000	95.99
15.5	390,668	706	0.0018	0.9982	95.99
16.5	390,175	766	0.0020	0.9980	95.82
17.5	389,589		0.0000	1.0000	95.63
18.5	389,545		0.0000	1.0000	95.63
19.5	389,531	545	0.0014	0.9986	95.63
20.5	389,472	914	0.0023	0.9977	95.50
21.5	388,645	1,849	0.0048	0.9952	95.27
22.5	385,371	201	0.0005	0.9995	94.82
23.5	384,941		0.0000	1.0000	94.77
24.5	380,616	542	0.0014	0.9986	94.77
25.5	380,278	452	0.0012	0.9988	94.64
26.5	379,617	7,351	0.0194	0.9806	94.52
27.5	372,486		0.0000	1.0000	92.69
28.5	372,486	1,980	0.0053	0.9947	92.69
29.5	369,986	674	0.0018	0.9982	92.20
30.5	362,675		0.0000	1.0000	92.03
31.5	362,896		0.0000	1.0000	92.03
32.5	362,896	939	0.0026	0.9974	92.03
33.5	361,681	3,562	0.0098	0.9902	91.80
34.5	357,960		0.0000	1.0000	90.89
35.5	357,942	549	0.0015	0.9985	90.89
36.5	357,382		0.0000	1.0000	90.75
37.5	355,992	7,350	0.0206	0.9794	90.75
38.5	348,642	77	0.0002	0.9998	88.88

PEOPLES NATURAL GAS COMPANY LLC

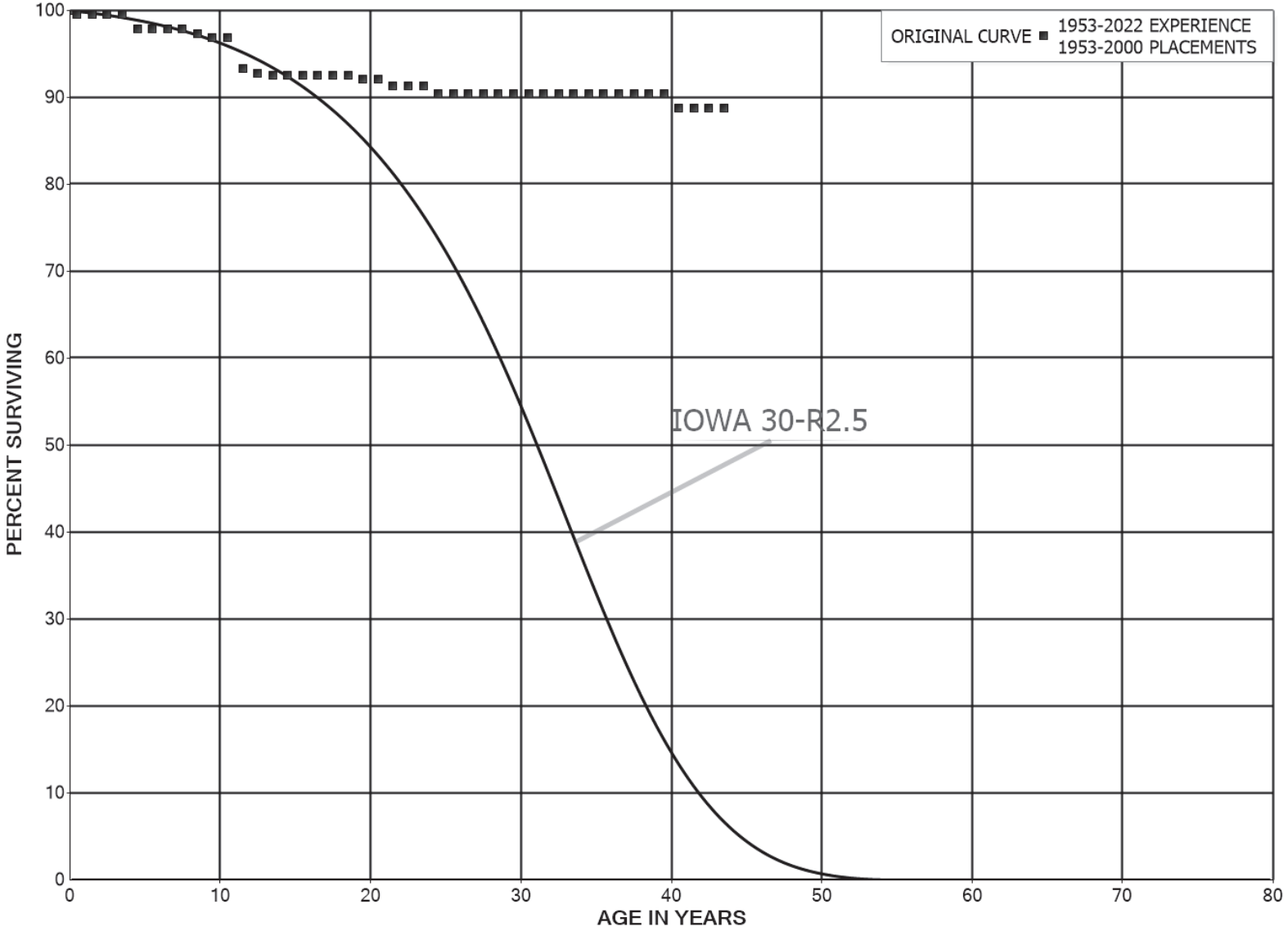
ACCOUNT 355.00 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1915-2011 EXPERIENCE BAND 1943-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	348,564	235	0.0007	0.9993	88.86
40.5	348,109	3,235	0.0093	0.9907	88.80
41.5	344,709	319	0.0009	0.9991	87.97
42.5	340,526		0.0000	1.0000	87.89
43.5	83,475	2,803	0.0336	0.9664	87.89
44.5	80,672	758	0.0094	0.9906	84.94
45.5	79,915	990	0.0124	0.9876	84.14
46.5	78,276		0.0000	1.0000	83.10
47.5	71,334		0.0000	1.0000	83.10
48.5	71,086	0	0.0000	1.0000	83.10
49.5	71,086	20	0.0003	0.9997	83.10
50.5	71,065	95	0.0013	0.9987	83.08
51.5	64,243		0.0000	1.0000	82.97
52.5	51,230	58	0.0011	0.9989	82.97
53.5	51,289		0.0000	1.0000	82.87
54.5	45,827		0.0000	1.0000	82.87
55.5	45,827		0.0000	1.0000	82.87
56.5	46,038		0.0000	1.0000	82.87
57.5	46,038	117	0.0025	0.9975	82.87
58.5	45,921	107	0.0023	0.9977	82.66
59.5	45,814		0.0000	1.0000	82.47
60.5	44,999	211	0.0047	0.9953	82.47
61.5	21,781		0.0000	1.0000	82.08
62.5	12,934		0.0000	1.0000	82.08
63.5	12,934		0.0000	1.0000	82.08
64.5	1,814		0.0000	1.0000	82.08
65.5	1,814		0.0000	1.0000	82.08
66.5	1,814		0.0000	1.0000	82.08
67.5	1,814		0.0000	1.0000	82.08
68.5	1,814		0.0000	1.0000	82.08
69.5	1,398		0.0000	1.0000	82.08
70.5					82.08

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 357.00 OTHER EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 357.00 OTHER EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1953-2000 EXPERIENCE BAND 1953-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	95,590	476	0.0050	0.9950	100.00
0.5	104,697		0.0000	1.0000	99.50
1.5	103,636		0.0000	1.0000	99.50
2.5	102,432		0.0000	1.0000	99.50
3.5	102,432	1,728	0.0169	0.9831	99.50
4.5	100,703		0.0000	1.0000	97.82
5.5	100,703		0.0000	1.0000	97.82
6.5	100,703		0.0000	1.0000	97.82
7.5	100,703	574	0.0057	0.9943	97.82
8.5	100,129	474	0.0047	0.9953	97.26
9.5	99,655		0.0000	1.0000	96.80
10.5	99,655	3,672	0.0368	0.9632	96.80
11.5	95,983	495	0.0052	0.9948	93.24
12.5	95,489	244	0.0026	0.9974	92.76
13.5	54,893		0.0000	1.0000	92.52
14.5	53,677	21	0.0004	0.9996	92.52
15.5	53,657		0.0000	1.0000	92.48
16.5	53,657		0.0000	1.0000	92.48
17.5	53,657		0.0000	1.0000	92.48
18.5	53,657	227	0.0042	0.9958	92.48
19.5	53,430		0.0000	1.0000	92.09
20.5	53,430	475	0.0089	0.9911	92.09
21.5	52,954		0.0000	1.0000	91.27
22.5	52,954		0.0000	1.0000	91.27
23.5	52,954	486	0.0092	0.9908	91.27
24.5	52,469		0.0000	1.0000	90.44
25.5	51,988		0.0000	1.0000	90.44
26.5	51,988		0.0000	1.0000	90.44
27.5	51,988		0.0000	1.0000	90.44
28.5	51,988		0.0000	1.0000	90.44
29.5	51,988		0.0000	1.0000	90.44
30.5	51,988		0.0000	1.0000	90.44
31.5	51,988		0.0000	1.0000	90.44
32.5	22,427		0.0000	1.0000	90.44
33.5	22,427		0.0000	1.0000	90.44
34.5	22,427		0.0000	1.0000	90.44
35.5	22,427		0.0000	1.0000	90.44
36.5	22,427		0.0000	1.0000	90.44
37.5	21,117		0.0000	1.0000	90.44
38.5	21,117		0.0000	1.0000	90.44

PEOPLES NATURAL GAS COMPANY LLC

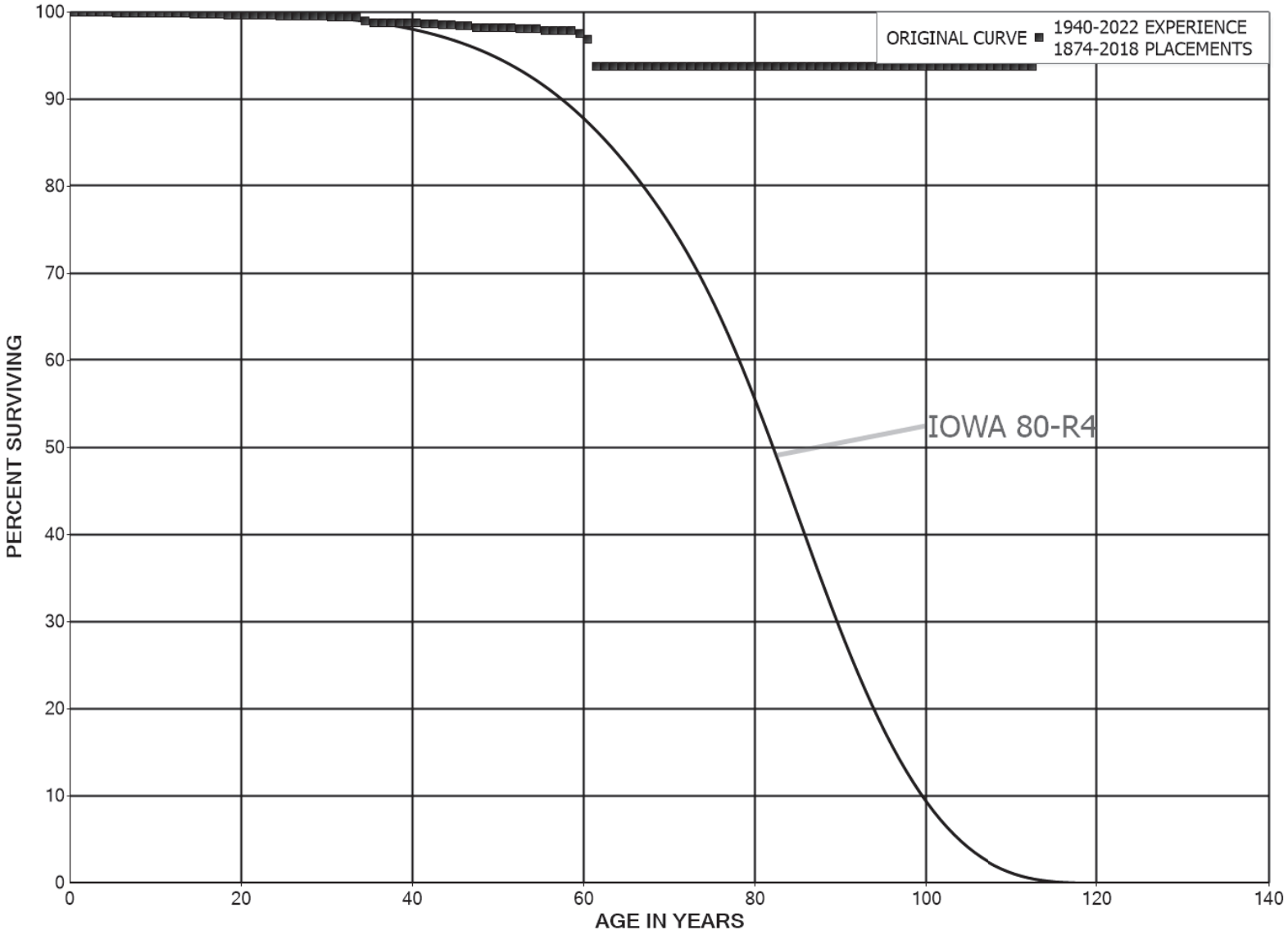
ACCOUNT 357.00 OTHER EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1953-2000 EXPERIENCE BAND 1953-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	20,932	389	0.0186	0.9814	90.44
40.5	18,865		0.0000	1.0000	88.76
41.5	15,972		0.0000	1.0000	88.76
42.5	15,972		0.0000	1.0000	88.76
43.5	8,561	8	0.0009	0.9991	88.76
44.5	8,553		0.0000	1.0000	88.68
45.5	8,553		0.0000	1.0000	88.68
46.5	8,553		0.0000	1.0000	88.68
47.5	8,553		0.0000	1.0000	88.68
48.5	8,553		0.0000	1.0000	88.68
49.5	6,856		0.0000	1.0000	88.68
50.5	737		0.0000	1.0000	88.68
51.5	737		0.0000	1.0000	88.68
52.5	737		0.0000	1.0000	88.68
53.5	737		0.0000	1.0000	88.68
54.5	737		0.0000	1.0000	88.68
55.5	737		0.0000	1.0000	88.68
56.5	737		0.0000	1.0000	88.68
57.5	737		0.0000	1.0000	88.68
58.5	737		0.0000	1.0000	88.68
59.5	737		0.0000	1.0000	88.68
60.5	737		0.0000	1.0000	88.68
61.5	737		0.0000	1.0000	88.68
62.5	737		0.0000	1.0000	88.68
63.5	737		0.0000	1.0000	88.68
64.5	737		0.0000	1.0000	88.68
65.5	597		0.0000	1.0000	88.68
66.5	597		0.0000	1.0000	88.68
67.5	597		0.0000	1.0000	88.68
68.5	597		0.0000	1.0000	88.68
69.5					88.68

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 365.02 RIGHTS OF WAY
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 365.02 RIGHTS OF WAY

ORIGINAL LIFE TABLE

PLACEMENT BAND 1874-2018 EXPERIENCE BAND 1940-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	3,428,074		0.0000	1.0000	100.00
0.5	3,404,046		0.0000	1.0000	100.00
1.5	3,402,007	306	0.0001	0.9999	100.00
2.5	3,336,767	599	0.0002	0.9998	99.99
3.5	3,329,417	1,975	0.0006	0.9994	99.97
4.5	3,282,236	1,228	0.0004	0.9996	99.91
5.5	3,190,961	254	0.0001	0.9999	99.88
6.5	3,109,193	659	0.0002	0.9998	99.87
7.5	2,907,389	692	0.0002	0.9998	99.85
8.5	2,840,705		0.0000	1.0000	99.82
9.5	2,791,984	241	0.0001	0.9999	99.82
10.5	2,823,840		0.0000	1.0000	99.81
11.5	2,774,161	267	0.0001	0.9999	99.81
12.5	2,774,078	167	0.0001	0.9999	99.81
13.5	2,772,869	3,241	0.0012	0.9988	99.80
14.5	2,738,020	84	0.0000	1.0000	99.68
15.5	2,744,605	130	0.0000	1.0000	99.68
16.5	2,761,033		0.0000	1.0000	99.67
17.5	2,640,468	144	0.0001	0.9999	99.67
18.5	2,640,063	45	0.0000	1.0000	99.67
19.5	2,564,806	188	0.0001	0.9999	99.67
20.5	2,437,637	602	0.0002	0.9998	99.66
21.5	1,931,839	12	0.0000	1.0000	99.64
22.5	2,002,331	632	0.0003	0.9997	99.64
23.5	1,880,036	1,646	0.0009	0.9991	99.60
24.5	1,849,008		0.0000	1.0000	99.52
25.5	1,826,661	96	0.0001	0.9999	99.52
26.5	1,852,009	286	0.0002	0.9998	99.51
27.5	1,856,101	385	0.0002	0.9998	99.50
28.5	1,862,799		0.0000	1.0000	99.48
29.5	1,873,672	830	0.0004	0.9996	99.48
30.5	1,840,364	655	0.0004	0.9996	99.43
31.5	1,812,092	419	0.0002	0.9998	99.40
32.5	1,774,431	175	0.0001	0.9999	99.37
33.5	1,755,289	6,726	0.0038	0.9962	99.36
34.5	1,736,584	4,069	0.0023	0.9977	98.98
35.5	1,721,971	45	0.0000	1.0000	98.75
36.5	1,842,000	136	0.0001	0.9999	98.75
37.5	1,822,150		0.0000	1.0000	98.74
38.5	1,815,040	259	0.0001	0.9999	98.74

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 365.02 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1874-2018 EXPERIENCE BAND 1940-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,795,238	302	0.0002	0.9998	98.73
40.5	1,774,815	1,507	0.0008	0.9992	98.71
41.5	1,760,260	604	0.0003	0.9997	98.63
42.5	1,728,540	728	0.0004	0.9996	98.59
43.5	1,708,322	132	0.0001	0.9999	98.55
44.5	1,616,390	1,924	0.0012	0.9988	98.54
45.5	1,602,622		0.0000	1.0000	98.43
46.5	1,578,681	3,502	0.0022	0.9978	98.43
47.5	1,534,923		0.0000	1.0000	98.21
48.5	1,422,234	104	0.0001	0.9999	98.21
49.5	1,358,445	486	0.0004	0.9996	98.20
50.5	1,355,506	87	0.0001	0.9999	98.16
51.5	1,308,750	586	0.0004	0.9996	98.16
52.5	1,254,707	557	0.0004	0.9996	98.11
53.5	1,233,107	284	0.0002	0.9998	98.07
54.5	1,197,198	2,140	0.0018	0.9982	98.05
55.5	1,169,140	25	0.0000	1.0000	97.87
56.5	1,149,648	68	0.0001	0.9999	97.87
57.5	1,126,070	974	0.0009	0.9991	97.87
58.5	1,066,856	2,632	0.0025	0.9975	97.78
59.5	1,020,035	7,713	0.0076	0.9924	97.54
60.5	972,671	30,559	0.0314	0.9686	96.80
61.5	887,446		0.0000	1.0000	93.76
62.5	847,320	134	0.0002	0.9998	93.76
63.5	732,967	3	0.0000	1.0000	93.75
64.5	646,742		0.0000	1.0000	93.75
65.5	620,207	116	0.0002	0.9998	93.75
66.5	598,524		0.0000	1.0000	93.73
67.5	524,616		0.0000	1.0000	93.73
68.5	502,002		0.0000	1.0000	93.73
69.5	466,010		0.0000	1.0000	93.73
70.5	446,901		0.0000	1.0000	93.73
71.5	431,067		0.0000	1.0000	93.73
72.5	424,137		0.0000	1.0000	93.73
73.5	391,989		0.0000	1.0000	93.73
74.5	361,302		0.0000	1.0000	93.73
75.5	354,969		0.0000	1.0000	93.73
76.5	352,465		0.0000	1.0000	93.73
77.5	350,154		0.0000	1.0000	93.73
78.5	341,229		0.0000	1.0000	93.73

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 365.02 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1874-2018 EXPERIENCE BAND 1940-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	334,289	19	0.0001	0.9999	93.73
80.5	323,197		0.0000	1.0000	93.72
81.5	307,809		0.0000	1.0000	93.72
82.5	301,206		0.0000	1.0000	93.72
83.5	297,326		0.0000	1.0000	93.72
84.5	297,055		0.0000	1.0000	93.72
85.5	296,936		0.0000	1.0000	93.72
86.5	295,342		0.0000	1.0000	93.72
87.5	288,615		0.0000	1.0000	93.72
88.5	288,440		0.0000	1.0000	93.72
89.5	286,814		0.0000	1.0000	93.72
90.5	285,837		0.0000	1.0000	93.72
91.5	284,166		0.0000	1.0000	93.72
92.5	279,059		0.0000	1.0000	93.72
93.5	278,256		0.0000	1.0000	93.72
94.5	277,797		0.0000	1.0000	93.72
95.5	275,065		0.0000	1.0000	93.72
96.5	275,007		0.0000	1.0000	93.72
97.5	274,515		0.0000	1.0000	93.72
98.5	267,540		0.0000	1.0000	93.72
99.5	257,286		0.0000	1.0000	93.72
100.5	254,671		0.0000	1.0000	93.72
101.5	242,100		0.0000	1.0000	93.72
102.5	242,061		0.0000	1.0000	93.72
103.5	241,766		0.0000	1.0000	93.72
104.5	226,039		0.0000	1.0000	93.72
105.5	223,613		0.0000	1.0000	93.72
106.5	215,462		0.0000	1.0000	93.72
107.5	211,922		0.0000	1.0000	93.72
108.5	173,907		0.0000	1.0000	93.72
109.5	127,878		0.0000	1.0000	93.72
110.5	121,167		0.0000	1.0000	93.72
111.5	112,182		0.0000	1.0000	93.72
112.5	97,942		0.0000	1.0000	93.72
113.5	93,580		0.0000	1.0000	93.72
114.5	92,436		0.0000	1.0000	93.72
115.5	91,576		0.0000	1.0000	93.72
116.5	87,379		0.0000	1.0000	93.72
117.5	84,254		0.0000	1.0000	93.72
118.5	75,897		0.0000	1.0000	93.72

PEOPLES NATURAL GAS COMPANY LLC

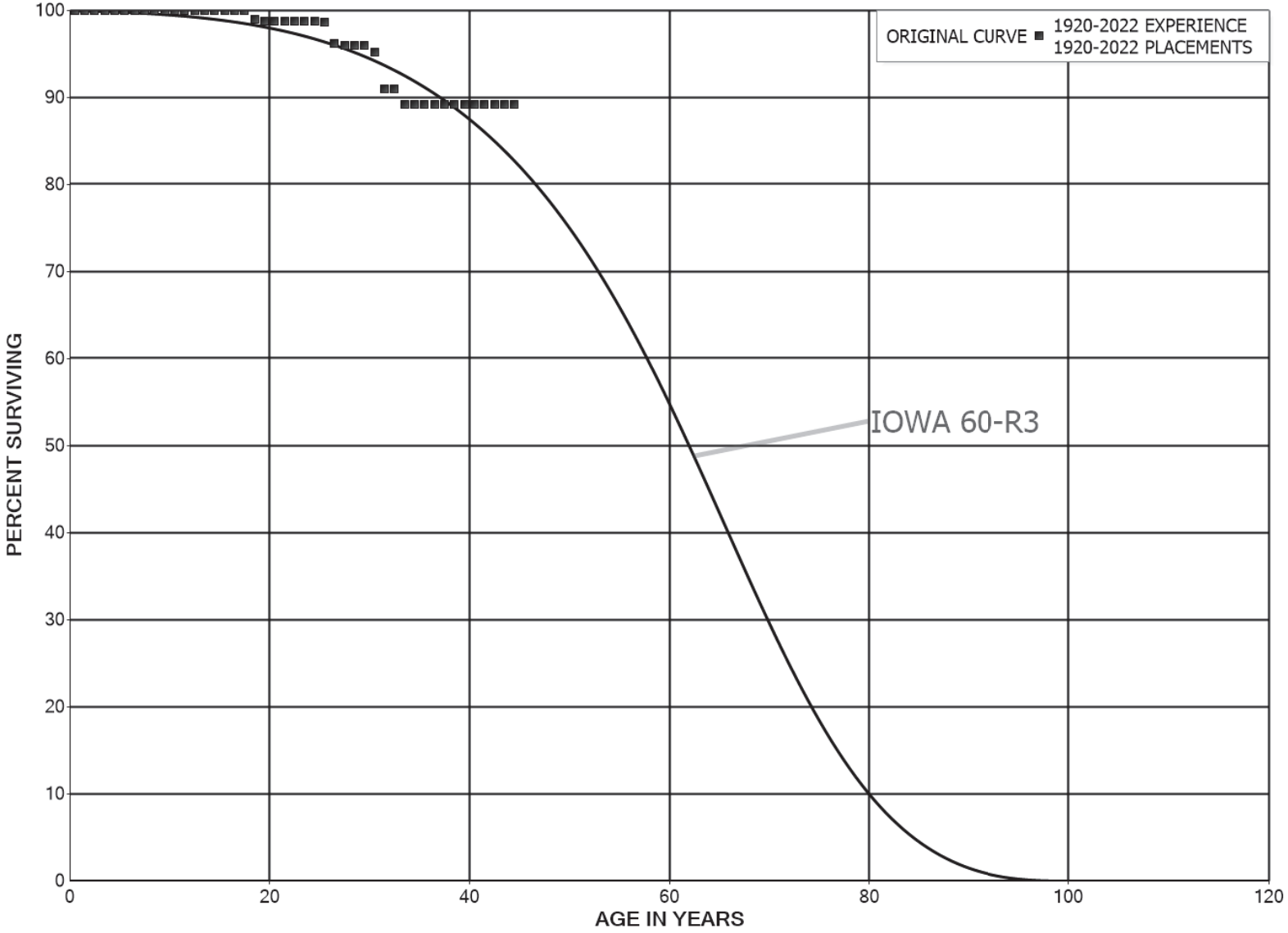
ACCOUNT 365.02 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1874-2018 EXPERIENCE BAND 1940-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	59,946		0.0000	1.0000	93.72
120.5	48,276		0.0000	1.0000	93.72
121.5	39,961		0.0000	1.0000	93.72
122.5	32,743		0.0000	1.0000	93.72
123.5	31,015		0.0000	1.0000	93.72
124.5	28,672		0.0000	1.0000	93.72
125.5	25,648		0.0000	1.0000	93.72
126.5	16,970		0.0000	1.0000	93.72
127.5	16,435		0.0000	1.0000	93.72
128.5	15,773		0.0000	1.0000	93.72
129.5	15,104		0.0000	1.0000	93.72
130.5	12,212		0.0000	1.0000	93.72
131.5	10,331		0.0000	1.0000	93.72
132.5	9,494		0.0000	1.0000	93.72
133.5	7,218		0.0000	1.0000	93.72
134.5	6,737		0.0000	1.0000	93.72
135.5	6,385		0.0000	1.0000	93.72
136.5	4,038		0.0000	1.0000	93.72
137.5	4,038		0.0000	1.0000	93.72
138.5	4,038		0.0000	1.0000	93.72
139.5	4,038		0.0000	1.0000	93.72
140.5	4,038		0.0000	1.0000	93.72
141.5	4,038		0.0000	1.0000	93.72
142.5	4,038		0.0000	1.0000	93.72
143.5	4,038		0.0000	1.0000	93.72
144.5	4,038		0.0000	1.0000	93.72
145.5	3,916		0.0000	1.0000	93.72
146.5	3,517		0.0000	1.0000	93.72
147.5	5		0.0000	1.0000	93.72
148.5					93.72

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 366.01 STRUCTURES AND IMPROVEMENTS - COMPRESSOR STATION
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.01 STRUCTURES AND IMPROVEMENTS - COMPRESSOR STATION

ORIGINAL LIFE TABLE

PLACEMENT BAND 1920-2022 EXPERIENCE BAND 1920-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,972,443		0.0000	1.0000	100.00
0.5	1,810,048		0.0000	1.0000	100.00
1.5	1,622,816		0.0000	1.0000	100.00
2.5	1,622,816		0.0000	1.0000	100.00
3.5	1,622,816		0.0000	1.0000	100.00
4.5	1,622,816		0.0000	1.0000	100.00
5.5	1,632,286		0.0000	1.0000	100.00
6.5	1,622,816		0.0000	1.0000	100.00
7.5	1,628,323		0.0000	1.0000	100.00
8.5	1,622,816		0.0000	1.0000	100.00
9.5	1,622,816		0.0000	1.0000	100.00
10.5	1,622,816		0.0000	1.0000	100.00
11.5	1,624,959		0.0000	1.0000	100.00
12.5	1,622,816		0.0000	1.0000	100.00
13.5	1,417,682		0.0000	1.0000	100.00
14.5	1,417,682		0.0000	1.0000	100.00
15.5	1,036,535		0.0000	1.0000	100.00
16.5	951,233		0.0000	1.0000	100.00
17.5	955,063	10,284	0.0108	0.9892	100.00
18.5	1,136,806	2,143	0.0019	0.9981	98.92
19.5	928,676		0.0000	1.0000	98.74
20.5	940,211		0.0000	1.0000	98.74
21.5	928,159		0.0000	1.0000	98.74
22.5	1,429,018		0.0000	1.0000	98.74
23.5	928,159		0.0000	1.0000	98.74
24.5	928,159	1,589	0.0017	0.9983	98.74
25.5	926,570	22,903	0.0247	0.9753	98.57
26.5	903,666	2,248	0.0025	0.9975	96.13
27.5	895,360		0.0000	1.0000	95.89
28.5	895,360		0.0000	1.0000	95.89
29.5	893,647	7,038	0.0079	0.9921	95.89
30.5	883,997	39,109	0.0442	0.9558	95.14
31.5	799,386		0.0000	1.0000	90.93
32.5	799,386	15,688	0.0196	0.9804	90.93
33.5	780,712		0.0000	1.0000	89.14
34.5	780,712		0.0000	1.0000	89.14
35.5	660,183		0.0000	1.0000	89.14
36.5	660,183		0.0000	1.0000	89.14
37.5	660,183		0.0000	1.0000	89.14
38.5	653,269		0.0000	1.0000	89.14

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.01 STRUCTURES AND IMPROVEMENTS - COMPRESSOR STATION

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1920-2022 EXPERIENCE BAND 1920-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	647,814		0.0000	1.0000	89.14
40.5	503,322		0.0000	1.0000	89.14
41.5	503,322		0.0000	1.0000	89.14
42.5	491,270		0.0000	1.0000	89.14
43.5	491,270		0.0000	1.0000	89.14
44.5	4,934		0.0000	1.0000	89.14
45.5	4,934		0.0000	1.0000	89.14
46.5	4,934		0.0000	1.0000	89.14
47.5	4,934		0.0000	1.0000	89.14
48.5	4,934		0.0000	1.0000	89.14
49.5	4,934		0.0000	1.0000	89.14
50.5	4,934		0.0000	1.0000	89.14
51.5	4,934		0.0000	1.0000	89.14
52.5	4,934		0.0000	1.0000	89.14
53.5	4,934		0.0000	1.0000	89.14
54.5	4,934		0.0000	1.0000	89.14
55.5	4,934		0.0000	1.0000	89.14
56.5	4,934		0.0000	1.0000	89.14
57.5	4,934		0.0000	1.0000	89.14
58.5	4,934		0.0000	1.0000	89.14
59.5	4,934		0.0000	1.0000	89.14
60.5	4,934		0.0000	1.0000	89.14
61.5	4,934		0.0000	1.0000	89.14
62.5	4,934		0.0000	1.0000	89.14
63.5	4,934		0.0000	1.0000	89.14
64.5	4,934		0.0000	1.0000	89.14
65.5	4,934		0.0000	1.0000	89.14
66.5	4,934		0.0000	1.0000	89.14
67.5	5,014		0.0000	1.0000	89.14
68.5	4,934		0.0000	1.0000	89.14
69.5	4,934		0.0000	1.0000	89.14
70.5	4,934		0.0000	1.0000	89.14
71.5	4,934		0.0000	1.0000	89.14
72.5	4,934		0.0000	1.0000	89.14
73.5	4,934		0.0000	1.0000	89.14
74.5	4,934		0.0000	1.0000	89.14
75.5	4,934		0.0000	1.0000	89.14
76.5	4,934		0.0000	1.0000	89.14
77.5	4,934		0.0000	1.0000	89.14
78.5	4,934		0.0000	1.0000	89.14

PEOPLES NATURAL GAS COMPANY LLC

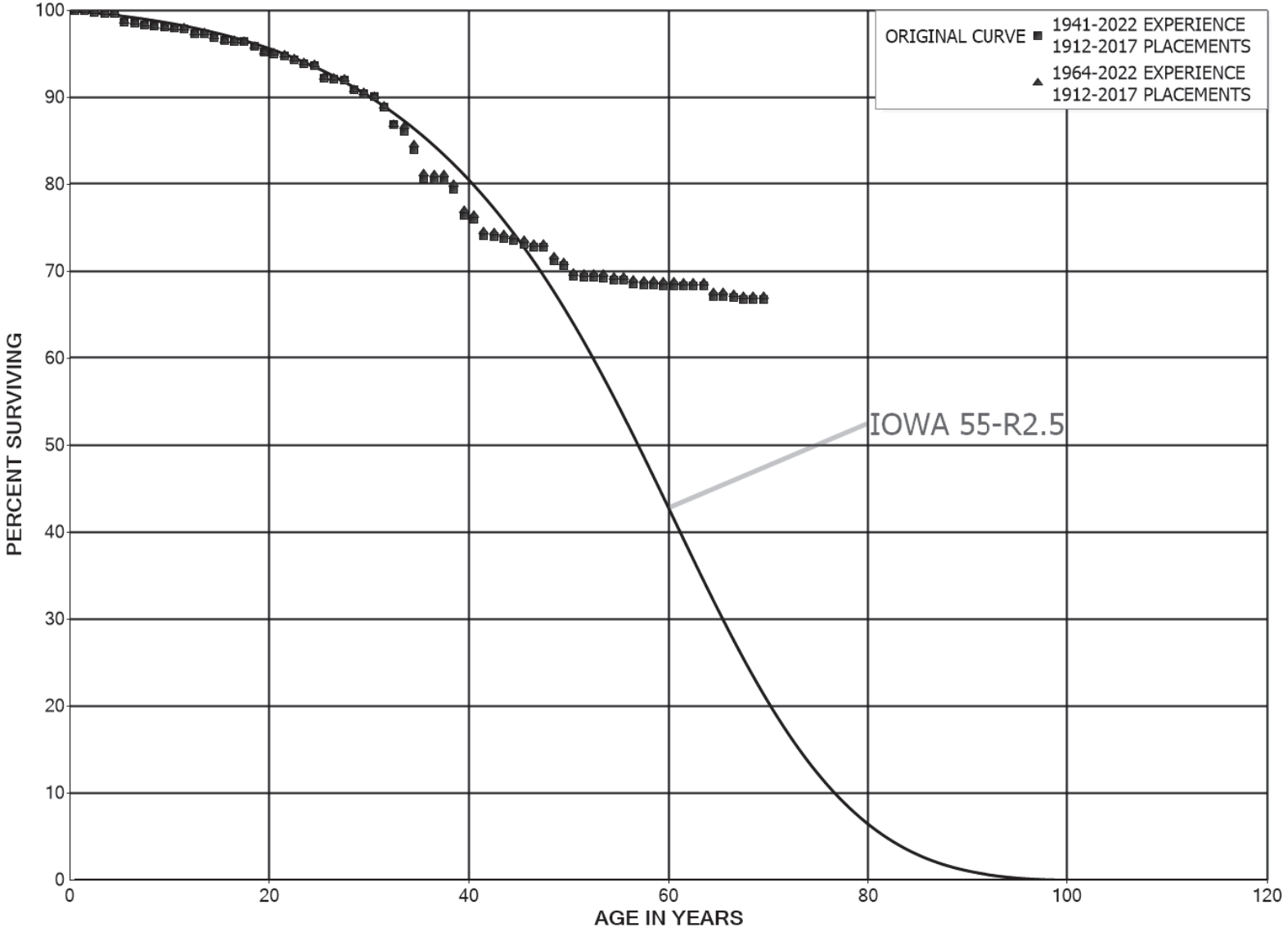
ACCOUNT 366.01 STRUCTURES AND IMPROVEMENTS - COMPRESSOR STATION

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1920-2022 EXPERIENCE BAND 1920-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	4,934	80	0.0162	0.9838	89.14
80.5	8,708		0.0000	1.0000	87.70
81.5	4,834		0.0000	1.0000	87.70
82.5	4,834		0.0000	1.0000	87.70
83.5	4,834		0.0000	1.0000	87.70
84.5	4,834		0.0000	1.0000	87.70
85.5	4,834		0.0000	1.0000	87.70
86.5	4,834		0.0000	1.0000	87.70
87.5	4,834		0.0000	1.0000	87.70
88.5	4,834		0.0000	1.0000	87.70
89.5	4,834		0.0000	1.0000	87.70
90.5	4,834		0.0000	1.0000	87.70
91.5	4,834		0.0000	1.0000	87.70
92.5	4,834	3,874	0.8014	0.1986	87.70
93.5					17.42

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 366.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE

PLACEMENT BAND 1912-2017 EXPERIENCE BAND 1941-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,989,049	98	0.0000	1.0000	100.00
0.5	1,993,081	682	0.0003	0.9997	100.00
1.5	1,986,194	4,939	0.0025	0.9975	99.96
2.5	2,002,024	1,880	0.0009	0.9991	99.71
3.5	1,733,991	348	0.0002	0.9998	99.62
4.5	1,733,145	16,421	0.0095	0.9905	99.60
5.5	1,565,552	2,252	0.0014	0.9986	98.66
6.5	1,560,918	3,535	0.0023	0.9977	98.51
7.5	1,559,224	2,003	0.0013	0.9987	98.29
8.5	1,334,079	2,085	0.0016	0.9984	98.16
9.5	1,331,774	1,551	0.0012	0.9988	98.01
10.5	1,328,560	588	0.0004	0.9996	97.90
11.5	1,327,973	7,154	0.0054	0.9946	97.85
12.5	1,204,689	535	0.0004	0.9996	97.33
13.5	1,197,669	5,397	0.0045	0.9955	97.28
14.5	822,711	3,263	0.0040	0.9960	96.84
15.5	819,687	294	0.0004	0.9996	96.46
16.5	800,025	542	0.0007	0.9993	96.43
17.5	755,583	4,282	0.0057	0.9943	96.36
18.5	678,189	4,823	0.0071	0.9929	95.81
19.5	559,172	985	0.0018	0.9982	95.13
20.5	553,892	1,311	0.0024	0.9976	94.97
21.5	552,595	2,722	0.0049	0.9951	94.74
22.5	573,951	2,357	0.0041	0.9959	94.27
23.5	497,497	1,238	0.0025	0.9975	93.89
24.5	491,592	7,606	0.0155	0.9845	93.65
25.5	483,732	596	0.0012	0.9988	92.20
26.5	482,653	605	0.0013	0.9987	92.09
27.5	482,276	6,151	0.0128	0.9872	91.97
28.5	470,696	2,070	0.0044	0.9956	90.80
29.5	387,201	1,488	0.0038	0.9962	90.40
30.5	385,558	5,047	0.0131	0.9869	90.06
31.5	379,175	8,585	0.0226	0.9774	88.88
32.5	370,474	3,380	0.0091	0.9909	86.86
33.5	359,361	9,109	0.0253	0.9747	86.07
34.5	350,254	13,722	0.0392	0.9608	83.89
35.5	326,364	276	0.0008	0.9992	80.60
36.5	334,001	273	0.0008	0.9992	80.54
37.5	311,419	3,979	0.0128	0.9872	80.47
38.5	266,447	10,054	0.0377	0.9623	79.44

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1912-2017 EXPERIENCE BAND 1941-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	254,071	1,647	0.0065	0.9935	76.44
40.5	252,424	6,279	0.0249	0.9751	75.95
41.5	219,105	207	0.0009	0.9991	74.06
42.5	218,860	651	0.0030	0.9970	73.99
43.5	206,887	873	0.0042	0.9958	73.77
44.5	173,923	979	0.0056	0.9944	73.46
45.5	172,729	808	0.0047	0.9953	73.04
46.5	170,801	51	0.0003	0.9997	72.70
47.5	170,115	3,408	0.0200	0.9800	72.68
48.5	164,715	1,491	0.0091	0.9909	71.22
49.5	158,886	2,703	0.0170	0.9830	70.58
50.5	156,183	264	0.0017	0.9983	69.38
51.5	148,427		0.0000	1.0000	69.26
52.5	146,884	80	0.0005	0.9995	69.26
53.5	143,329	558	0.0039	0.9961	69.22
54.5	131,247		0.0000	1.0000	68.95
55.5	131,143	818	0.0062	0.9938	68.95
56.5	130,325	154	0.0012	0.9988	68.52
57.5	129,821		0.0000	1.0000	68.44
58.5	115,444	225	0.0019	0.9981	68.44
59.5	114,864		0.0000	1.0000	68.31
60.5	114,143	20	0.0002	0.9998	68.31
61.5	109,220		0.0000	1.0000	68.30
62.5	101,457		0.0000	1.0000	68.30
63.5	95,193	1,682	0.0177	0.9823	68.30
64.5	92,738		0.0000	1.0000	67.09
65.5	92,276	226	0.0024	0.9976	67.09
66.5	88,095	269	0.0031	0.9969	66.93
67.5	84,537		0.0000	1.0000	66.72
68.5	80,354		0.0000	1.0000	66.72
69.5	66,770		0.0000	1.0000	66.72
70.5	56,976		0.0000	1.0000	66.72
71.5	44,577		0.0000	1.0000	66.72
72.5	35,953	379	0.0105	0.9895	66.72
73.5	13,939		0.0000	1.0000	66.02
74.5	9,449		0.0000	1.0000	66.02
75.5	8,981		0.0000	1.0000	66.02
76.5	8,948		0.0000	1.0000	66.02
77.5	8,948		0.0000	1.0000	66.02
78.5	8,948		0.0000	1.0000	66.02

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1912-2017 EXPERIENCE BAND 1941-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	8,948		0.0000	1.0000	66.02
80.5	4,381		0.0000	1.0000	66.02
81.5	4,381		0.0000	1.0000	66.02
82.5	4,381	67	0.0152	0.9848	66.02
83.5	4,314		0.0000	1.0000	65.01
84.5	4,219		0.0000	1.0000	65.01
85.5	4,219		0.0000	1.0000	65.01
86.5	4,189		0.0000	1.0000	65.01
87.5	4,189		0.0000	1.0000	65.01
88.5	4,189		0.0000	1.0000	65.01
89.5	3,881		0.0000	1.0000	65.01
90.5	3,881		0.0000	1.0000	65.01
91.5	3,881	1,152	0.2970	0.7030	65.01
92.5	2,728		0.0000	1.0000	45.71
93.5	2,728		0.0000	1.0000	45.71
94.5	2,728		0.0000	1.0000	45.71
95.5	2,728		0.0000	1.0000	45.71
96.5	2,054		0.0000	1.0000	45.71
97.5	2,054		0.0000	1.0000	45.71
98.5	2,054		0.0000	1.0000	45.71
99.5	2,054		0.0000	1.0000	45.71
100.5	2,054		0.0000	1.0000	45.71
101.5	2,039		0.0000	1.0000	45.71
102.5	2,039		0.0000	1.0000	45.71
103.5	2,039		0.0000	1.0000	45.71
104.5	2,039		0.0000	1.0000	45.71
105.5	2,039		0.0000	1.0000	45.71
106.5	2,039		0.0000	1.0000	45.71
107.5					45.71

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE

PLACEMENT BAND 1912-2017 EXPERIENCE BAND 1964-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,779,133		0.0000	1.0000	100.00
0.5	1,782,423		0.0000	1.0000	100.00
1.5	1,776,563	2,325	0.0013	0.9987	100.00
2.5	1,805,399	1,663	0.0009	0.9991	99.87
3.5	1,549,934	1	0.0000	1.0000	99.78
4.5	1,558,944	16,338	0.0105	0.9895	99.78
5.5	1,392,759	1,960	0.0014	0.9986	98.73
6.5	1,400,544	3,359	0.0024	0.9976	98.59
7.5	1,411,560	2,003	0.0014	0.9986	98.36
8.5	1,192,424	1,650	0.0014	0.9986	98.22
9.5	1,194,642	1,432	0.0012	0.9988	98.08
10.5	1,220,046	392	0.0003	0.9997	97.96
11.5	1,241,164	6,921	0.0056	0.9944	97.93
12.5	1,135,832	349	0.0003	0.9997	97.39
13.5	1,142,435	5,328	0.0047	0.9953	97.36
14.5	795,400	3,263	0.0041	0.9959	96.90
15.5	805,774	294	0.0004	0.9996	96.50
16.5	786,957	485	0.0006	0.9994	96.47
17.5	743,932	4,282	0.0058	0.9942	96.41
18.5	666,777	4,693	0.0070	0.9930	95.85
19.5	548,039	941	0.0017	0.9983	95.18
20.5	543,034	1,195	0.0022	0.9978	95.02
21.5	548,358	2,578	0.0047	0.9953	94.81
22.5	570,681	2,357	0.0041	0.9959	94.36
23.5	494,328	1,238	0.0025	0.9975	93.97
24.5	487,531	7,606	0.0156	0.9844	93.74
25.5	475,051	596	0.0013	0.9987	92.27
26.5	473,973	605	0.0013	0.9987	92.16
27.5	473,584	6,092	0.0129	0.9871	92.04
28.5	461,822	2,062	0.0045	0.9955	90.86
29.5	378,335	1,488	0.0039	0.9961	90.45
30.5	377,279	4,967	0.0132	0.9868	90.10
31.5	370,977	8,585	0.0231	0.9769	88.91
32.5	362,275	905	0.0025	0.9975	86.85
33.5	353,637	8,775	0.0248	0.9752	86.63
34.5	345,208	13,488	0.0391	0.9609	84.48
35.5	321,552	276	0.0009	0.9991	81.18
36.5	329,189	273	0.0008	0.9992	81.11
37.5	307,609	3,979	0.0129	0.9871	81.05
38.5	262,637	10,054	0.0383	0.9617	80.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1912-2017 EXPERIENCE BAND 1964-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	250,639	1,647	0.0066	0.9934	76.94
40.5	249,217	6,279	0.0252	0.9748	76.43
41.5	215,898	207	0.0010	0.9990	74.50
42.5	215,668	651	0.0030	0.9970	74.43
43.5	203,696	873	0.0043	0.9957	74.21
44.5	170,731	979	0.0057	0.9943	73.89
45.5	169,538	808	0.0048	0.9952	73.47
46.5	167,610	51	0.0003	0.9997	73.12
47.5	168,076	3,408	0.0203	0.9797	73.09
48.5	164,715	1,491	0.0091	0.9909	71.61
49.5	158,886	2,703	0.0170	0.9830	70.96
50.5	156,183	264	0.0017	0.9983	69.76
51.5	148,427		0.0000	1.0000	69.64
52.5	146,884	80	0.0005	0.9995	69.64
53.5	143,329	558	0.0039	0.9961	69.60
54.5	131,247		0.0000	1.0000	69.33
55.5	131,143	818	0.0062	0.9938	69.33
56.5	130,325	154	0.0012	0.9988	68.90
57.5	129,821		0.0000	1.0000	68.82
58.5	115,444	225	0.0019	0.9981	68.82
59.5	114,864		0.0000	1.0000	68.68
60.5	114,143	20	0.0002	0.9998	68.68
61.5	109,220		0.0000	1.0000	68.67
62.5	101,457		0.0000	1.0000	68.67
63.5	95,193	1,682	0.0177	0.9823	68.67
64.5	92,738		0.0000	1.0000	67.46
65.5	92,276	226	0.0024	0.9976	67.46
66.5	88,095	269	0.0031	0.9969	67.29
67.5	84,537		0.0000	1.0000	67.09
68.5	80,354		0.0000	1.0000	67.09
69.5	66,770		0.0000	1.0000	67.09
70.5	56,976		0.0000	1.0000	67.09
71.5	44,577		0.0000	1.0000	67.09
72.5	35,953	379	0.0105	0.9895	67.09
73.5	13,939		0.0000	1.0000	66.38
74.5	9,449		0.0000	1.0000	66.38
75.5	8,981		0.0000	1.0000	66.38
76.5	8,948		0.0000	1.0000	66.38
77.5	8,948		0.0000	1.0000	66.38
78.5	8,948		0.0000	1.0000	66.38

PEOPLES NATURAL GAS COMPANY LLC

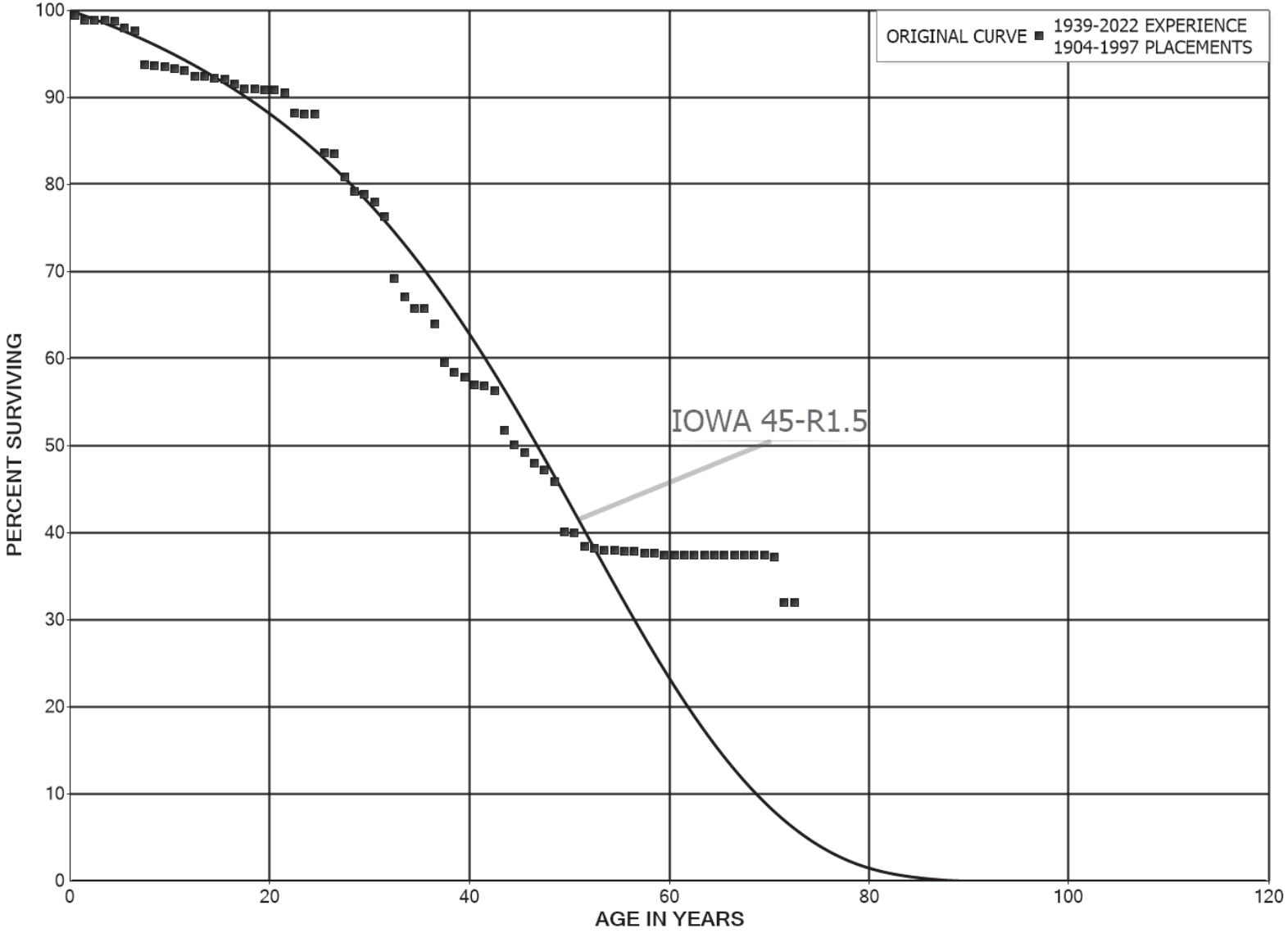
ACCOUNT 366.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1912-2017 EXPERIENCE BAND 1964-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	8,948		0.0000	1.0000	66.38
80.5	4,381		0.0000	1.0000	66.38
81.5	4,381		0.0000	1.0000	66.38
82.5	4,381	67	0.0152	0.9848	66.38
83.5	4,314		0.0000	1.0000	65.37
84.5	4,219		0.0000	1.0000	65.37
85.5	4,219		0.0000	1.0000	65.37
86.5	4,189		0.0000	1.0000	65.37
87.5	4,189		0.0000	1.0000	65.37
88.5	4,189		0.0000	1.0000	65.37
89.5	3,881		0.0000	1.0000	65.37
90.5	3,881		0.0000	1.0000	65.37
91.5	3,881	1,152	0.2970	0.7030	65.37
92.5	2,728		0.0000	1.0000	45.96
93.5	2,728		0.0000	1.0000	45.96
94.5	2,728		0.0000	1.0000	45.96
95.5	2,728		0.0000	1.0000	45.96
96.5	2,054		0.0000	1.0000	45.96
97.5	2,054		0.0000	1.0000	45.96
98.5	2,054		0.0000	1.0000	45.96
99.5	2,054		0.0000	1.0000	45.96
100.5	2,054		0.0000	1.0000	45.96
101.5	2,039		0.0000	1.0000	45.96
102.5	2,039		0.0000	1.0000	45.96
103.5	2,039		0.0000	1.0000	45.96
104.5	2,039		0.0000	1.0000	45.96
105.5	2,039		0.0000	1.0000	45.96
106.5	2,039		0.0000	1.0000	45.96
107.5					45.96

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 366.03 STRUCTURES AND IMPROVEMENTS - OTHER
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.03 STRUCTURES AND IMPROVEMENTS - OTHER

ORIGINAL LIFE TABLE

PLACEMENT BAND 1904-1997 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	126,007	740	0.0059	0.9941	100.00
0.5	125,486	740	0.0059	0.9941	99.41
1.5	124,983		0.0000	1.0000	98.83
2.5	126,813	47	0.0004	0.9996	98.83
3.5	126,708	34	0.0003	0.9997	98.79
4.5	125,713	1,035	0.0082	0.9918	98.76
5.5	125,448	458	0.0037	0.9963	97.95
6.5	125,128	4,994	0.0399	0.9601	97.59
7.5	133,798	151	0.0011	0.9989	93.70
8.5	134,864	150	0.0011	0.9989	93.59
9.5	136,928	303	0.0022	0.9978	93.49
10.5	144,855	278	0.0019	0.9981	93.28
11.5	145,997	1,030	0.0071	0.9929	93.10
12.5	152,381	156	0.0010	0.9990	92.45
13.5	156,275	280	0.0018	0.9982	92.35
14.5	155,995	128	0.0008	0.9992	92.18
15.5	156,421	974	0.0062	0.9938	92.11
16.5	155,447	986	0.0063	0.9937	91.54
17.5	154,238		0.0000	1.0000	90.95
18.5	154,368	210	0.0014	0.9986	90.95
19.5	150,540	74	0.0005	0.9995	90.83
20.5	143,017	496	0.0035	0.9965	90.79
21.5	142,521	3,676	0.0258	0.9742	90.47
22.5	132,530	134	0.0010	0.9990	88.14
23.5	135,209	46	0.0003	0.9997	88.05
24.5	135,163	6,800	0.0503	0.9497	88.02
25.5	127,969	117	0.0009	0.9991	83.59
26.5	127,853	4,149	0.0324	0.9676	83.52
27.5	129,517	2,597	0.0200	0.9800	80.81
28.5	126,493	503	0.0040	0.9960	79.19
29.5	121,706	1,491	0.0123	0.9877	78.87
30.5	120,215	2,437	0.0203	0.9797	77.90
31.5	117,778	11,043	0.0938	0.9062	76.32
32.5	107,545	3,295	0.0306	0.9694	69.17
33.5	104,250	2,124	0.0204	0.9796	67.05
34.5	102,273		0.0000	1.0000	65.68
35.5	102,220	2,715	0.0266	0.9734	65.68
36.5	98,711	6,870	0.0696	0.9304	63.94
37.5	91,605	1,755	0.0192	0.9808	59.49
38.5	76,840	737	0.0096	0.9904	58.35

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.03 STRUCTURES AND IMPROVEMENTS - OTHER

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1904-1997 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	75,667	1,163	0.0154	0.9846	57.79
40.5	74,505	23	0.0003	0.9997	56.90
41.5	60,544	645	0.0107	0.9893	56.88
42.5	53,787	4,394	0.0817	0.9183	56.28
43.5	49,393	1,563	0.0316	0.9684	51.68
44.5	50,272	909	0.0181	0.9819	50.04
45.5	49,363	1,140	0.0231	0.9769	49.14
46.5	48,224	807	0.0167	0.9833	48.01
47.5	47,417	1,351	0.0285	0.9715	47.20
48.5	45,761	5,772	0.1261	0.8739	45.86
49.5	39,989	64	0.0016	0.9984	40.07
50.5	39,924	1,613	0.0404	0.9596	40.01
51.5	32,498	157	0.0048	0.9952	38.39
52.5	32,341	202	0.0062	0.9938	38.21
53.5	31,963		0.0000	1.0000	37.97
54.5	31,963	100	0.0031	0.9969	37.97
55.5	31,863		0.0000	1.0000	37.85
56.5	31,863	229	0.0072	0.9928	37.85
57.5	31,634		0.0000	1.0000	37.58
58.5	31,634	135	0.0043	0.9957	37.58
59.5	31,499		0.0000	1.0000	37.42
60.5	31,499		0.0000	1.0000	37.42
61.5	31,499	51	0.0016	0.9984	37.42
62.5	31,448		0.0000	1.0000	37.36
63.5	30,720		0.0000	1.0000	37.36
64.5	27,581		0.0000	1.0000	37.36
65.5	27,581		0.0000	1.0000	37.36
66.5	27,512		0.0000	1.0000	37.36
67.5	25,824		0.0000	1.0000	37.36
68.5	23,320		0.0000	1.0000	37.36
69.5	20,569	92	0.0045	0.9955	37.36
70.5	15,112	2,133	0.1412	0.8588	37.19
71.5	11,957		0.0000	1.0000	31.94
72.5	8,432		0.0000	1.0000	31.94
73.5	8,015		0.0000	1.0000	31.94
74.5	8,015		0.0000	1.0000	31.94
75.5	7,486		0.0000	1.0000	31.94
76.5	7,486		0.0000	1.0000	31.94
77.5	7,486		0.0000	1.0000	31.94
78.5	7,486		0.0000	1.0000	31.94

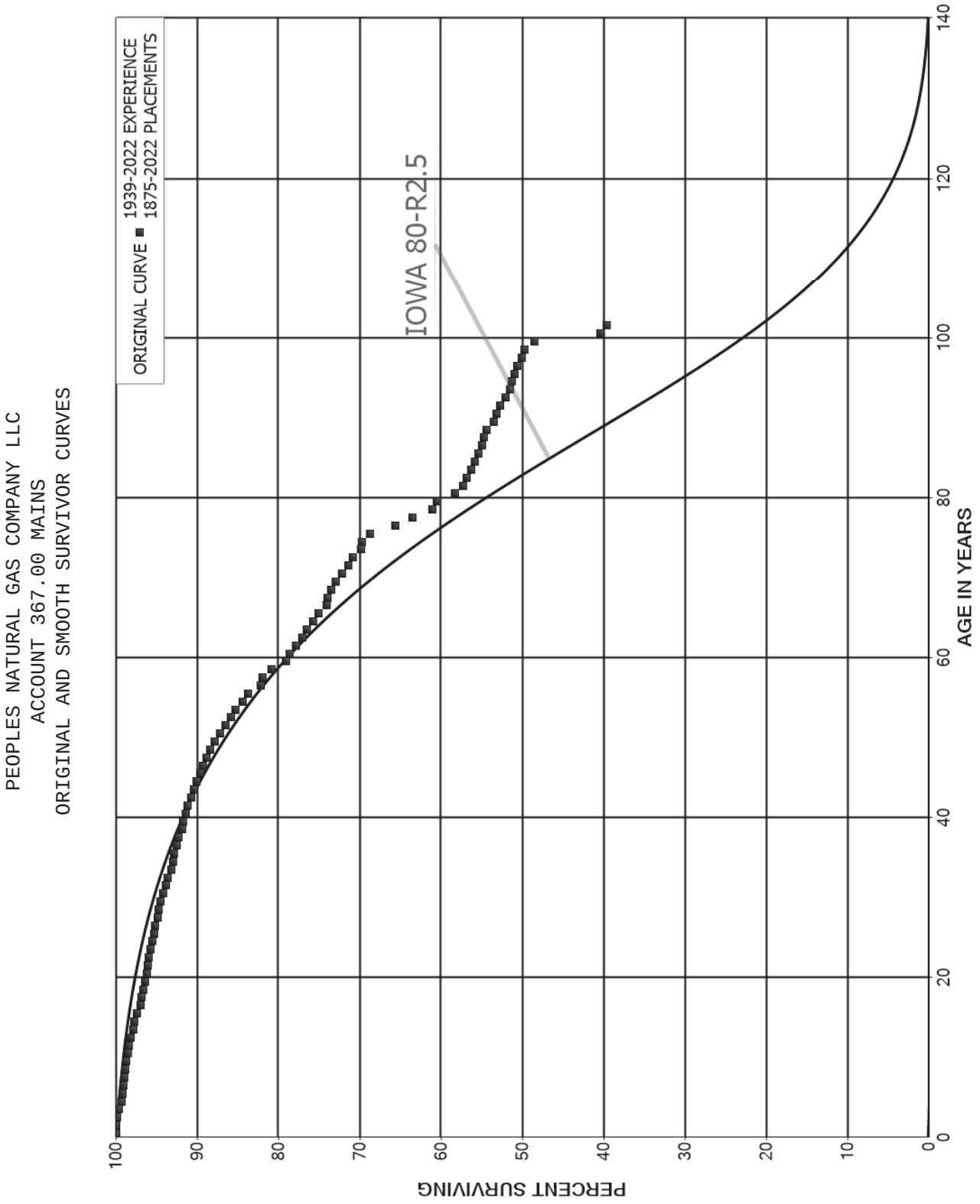
PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.03 STRUCTURES AND IMPROVEMENTS - OTHER

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1904-1997 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	7,486		0.0000	1.0000	31.94
80.5	7,486		0.0000	1.0000	31.94
81.5	4,554		0.0000	1.0000	31.94
82.5	4,554		0.0000	1.0000	31.94
83.5	4,535		0.0000	1.0000	31.94
84.5	4,535		0.0000	1.0000	31.94
85.5	4,297		0.0000	1.0000	31.94
86.5	4,297		0.0000	1.0000	31.94
87.5	4,297		0.0000	1.0000	31.94
88.5	4,297		0.0000	1.0000	31.94
89.5	4,297		0.0000	1.0000	31.94
90.5	4,202		0.0000	1.0000	31.94
91.5	4,202		0.0000	1.0000	31.94
92.5	3,908		0.0000	1.0000	31.94
93.5	3,646		0.0000	1.0000	31.94
94.5	3,646		0.0000	1.0000	31.94
95.5	3,574		0.0000	1.0000	31.94
96.5	3,574		0.0000	1.0000	31.94
97.5	3,574		0.0000	1.0000	31.94
98.5	3,574		0.0000	1.0000	31.94
99.5	3,170		0.0000	1.0000	31.94
100.5	3,170		0.0000	1.0000	31.94
101.5	3,170		0.0000	1.0000	31.94
102.5	98		0.0000	1.0000	31.94
103.5	98		0.0000	1.0000	31.94
104.5	98		0.0000	1.0000	31.94
105.5	98		0.0000	1.0000	31.94
106.5	98		0.0000	1.0000	31.94
107.5	98		0.0000	1.0000	31.94
108.5	98		0.0000	1.0000	31.94
109.5	98		0.0000	1.0000	31.94
110.5	98		0.0000	1.0000	31.94
111.5	98		0.0000	1.0000	31.94
112.5	98		0.0000	1.0000	31.94
113.5	98		0.0000	1.0000	31.94
114.5	98		0.0000	1.0000	31.94
115.5	98		0.0000	1.0000	31.94
116.5	98		0.0000	1.0000	31.94
117.5	98		0.0000	1.0000	31.94
118.5					31.94


PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 367.00 MAINS
ORIGINAL AND SMOOTH SURVIVOR CURVES
ORIGINAL CURVE ■ 1939-2022 EXPERIENCE
1875-2022 PLACEMENTS
IOWA 80-R2.5
PERCENT SURVIVING
AGE IN YEARS
100
90
80
70
60
50
40
30
20
10
0
0
20
40
60
80
100
120
140

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 367.00 MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1875-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	255,764,187	92,640	0.0004	0.9996	100.00
0.5	212,763,672	119,915	0.0006	0.9994	99.96
1.5	209,652,637	189,267	0.0009	0.9991	99.91
2.5	203,763,284	349,573	0.0017	0.9983	99.82
3.5	190,837,416	604,292	0.0032	0.9968	99.65
4.5	185,075,837	277,440	0.0015	0.9985	99.33
5.5	173,372,471	199,484	0.0012	0.9988	99.18
6.5	167,523,351	176,348	0.0011	0.9989	99.07
7.5	159,234,044	164,312	0.0010	0.9990	98.96
8.5	156,144,114	272,715	0.0017	0.9983	98.86
9.5	144,485,900	312,229	0.0022	0.9978	98.69
10.5	136,576,096	165,617	0.0012	0.9988	98.48
11.5	127,333,631	225,203	0.0018	0.9982	98.36
12.5	120,314,133	407,098	0.0034	0.9966	98.18
13.5	115,717,253	150,603	0.0013	0.9987	97.85
14.5	110,551,172	381,182	0.0034	0.9966	97.72
15.5	105,664,699	463,748	0.0044	0.9956	97.39
16.5	100,050,355	141,189	0.0014	0.9986	96.96
17.5	93,176,414	156,338	0.0017	0.9983	96.82
18.5	92,128,589	202,668	0.0022	0.9978	96.66
19.5	90,640,091	236,887	0.0026	0.9974	96.45
20.5	87,429,161	102,665	0.0012	0.9988	96.19
21.5	86,850,540	154,399	0.0018	0.9982	96.08
22.5	88,133,750	157,640	0.0018	0.9982	95.91
23.5	85,372,028	207,426	0.0024	0.9976	95.74
24.5	79,515,001	160,054	0.0020	0.9980	95.51
25.5	74,895,691	91,445	0.0012	0.9988	95.31
26.5	73,473,815	287,862	0.0039	0.9961	95.20
27.5	71,966,906	81,076	0.0011	0.9989	94.82
28.5	69,962,900	136,886	0.0020	0.9980	94.72
29.5	67,974,186	238,898	0.0035	0.9965	94.53
30.5	66,302,301	288,680	0.0044	0.9956	94.20
31.5	61,961,297	132,419	0.0021	0.9979	93.79
32.5	58,714,007	264,557	0.0045	0.9955	93.59
33.5	57,771,075	119,359	0.0021	0.9979	93.17
34.5	56,541,470	78,744	0.0014	0.9986	92.98
35.5	55,344,471	188,751	0.0034	0.9966	92.85
36.5	54,664,963	175,721	0.0032	0.9968	92.53
37.5	53,137,998	204,136	0.0038	0.9962	92.23
38.5	52,298,253	88,971	0.0017	0.9983	91.88

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 367.00 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1875-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	51,774,941	156,831	0.0030	0.9970	91.72
40.5	50,425,316	130,645	0.0026	0.9974	91.44
41.5	48,354,849	244,527	0.0051	0.9949	91.21
42.5	47,842,650	199,430	0.0042	0.9958	90.75
43.5	45,863,220	176,613	0.0039	0.9961	90.37
44.5	41,343,669	204,644	0.0049	0.9951	90.02
45.5	39,013,413	127,095	0.0033	0.9967	89.57
46.5	38,661,656	202,734	0.0052	0.9948	89.28
47.5	37,132,517	194,287	0.0052	0.9948	88.81
48.5	34,966,463	214,399	0.0061	0.9939	88.35
49.5	33,652,086	248,325	0.0074	0.9926	87.81
50.5	31,416,661	243,324	0.0077	0.9923	87.16
51.5	30,681,867	249,627	0.0081	0.9919	86.48
52.5	29,845,227	181,154	0.0061	0.9939	85.78
53.5	28,292,788	270,186	0.0095	0.9905	85.26
54.5	25,630,486	217,998	0.0085	0.9915	84.45
55.5	21,469,448	409,008	0.0191	0.9809	83.73
56.5	20,452,019	59,807	0.0029	0.9971	82.13
57.5	19,727,552	259,141	0.0131	0.9869	81.89
58.5	17,942,455	386,373	0.0215	0.9785	80.82
59.5	16,821,297	98,845	0.0059	0.9941	79.08
60.5	15,145,069	143,849	0.0095	0.9905	78.61
61.5	13,187,914	140,669	0.0107	0.9893	77.86
62.5	12,394,558	79,497	0.0064	0.9936	77.03
63.5	10,676,251	120,988	0.0113	0.9887	76.54
64.5	9,808,654	73,997	0.0075	0.9925	75.67
65.5	8,602,683	112,700	0.0131	0.9869	75.10
66.5	8,142,807	22,247	0.0027	0.9973	74.12
67.5	7,458,411	41,015	0.0055	0.9945	73.92
68.5	6,809,904	52,337	0.0077	0.9923	73.51
69.5	6,097,158	68,032	0.0112	0.9888	72.94
70.5	4,756,836	46,180	0.0097	0.9903	72.13
71.5	4,536,465	37,218	0.0082	0.9918	71.43
72.5	4,282,040	60,353	0.0141	0.9859	70.84
73.5	2,995,533	5,796	0.0019	0.9981	69.85
74.5	2,334,214	33,924	0.0145	0.9855	69.71
75.5	2,261,131	100,034	0.0442	0.9558	68.70
76.5	2,103,939	69,512	0.0330	0.9670	65.66
77.5	1,999,653	77,711	0.0389	0.9611	63.49
78.5	1,800,516	15,870	0.0088	0.9912	61.02

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 367.00 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1875-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	1,760,317	65,302	0.0371	0.9629	60.48
80.5	1,634,201	27,335	0.0167	0.9833	58.24
81.5	1,532,725	11,788	0.0077	0.9923	57.27
82.5	1,603,075	15,350	0.0096	0.9904	56.82
83.5	1,466,670	10,824	0.0074	0.9926	56.28
84.5	1,433,278	12,356	0.0086	0.9914	55.87
85.5	1,400,832	11,364	0.0081	0.9919	55.38
86.5	1,375,836	6,206	0.0045	0.9955	54.93
87.5	1,364,812	8,335	0.0061	0.9939	54.69
88.5	1,351,846	20,803	0.0154	0.9846	54.35
89.5	1,325,410	8,577	0.0065	0.9935	53.52
90.5	1,315,635	11,596	0.0088	0.9912	53.17
91.5	1,275,333	15,574	0.0122	0.9878	52.70
92.5	1,214,934	13,993	0.0115	0.9885	52.06
93.5	1,195,413	3,037	0.0025	0.9975	51.46
94.5	1,179,719	9,618	0.0082	0.9918	51.33
95.5	1,161,659	5,680	0.0049	0.9951	50.91
96.5	1,154,225	13,715	0.0119	0.9881	50.66
97.5	1,090,773	6,428	0.0059	0.9941	50.06
98.5	1,043,453	25,997	0.0249	0.9751	49.76
99.5	1,075,312	180,721	0.1681	0.8319	48.52
100.5	882,691	15,283	0.0173	0.9827	40.37
101.5	765,360	3,927	0.0051	0.9949	39.67
102.5	759,843	16,845	0.0222	0.9778	39.47
103.5	729,180	1,828	0.0025	0.9975	38.59
104.5	725,151	5,243	0.0072	0.9928	38.49
105.5	622,983	24,481	0.0393	0.9607	38.22
106.5	597,102	10,700	0.0179	0.9821	36.71
107.5	585,988	3,622	0.0062	0.9938	36.06
108.5	562,076	8,566	0.0152	0.9848	35.83
109.5	487,497	4,470	0.0092	0.9908	35.29
110.5	489,465	17,941	0.0367	0.9633	34.96
111.5	470,181	1,120	0.0024	0.9976	33.68
112.5	460,890	1,282	0.0028	0.9972	33.60
113.5	458,043	347	0.0008	0.9992	33.51
114.5	457,615	294	0.0006	0.9994	33.48
115.5	458,827	692	0.0015	0.9985	33.46
116.5	403,069	168	0.0004	0.9996	33.41
117.5	397,048	3,537	0.0089	0.9911	33.40
118.5	393,361		0.0000	1.0000	33.10

PEOPLES NATURAL GAS COMPANY LLC

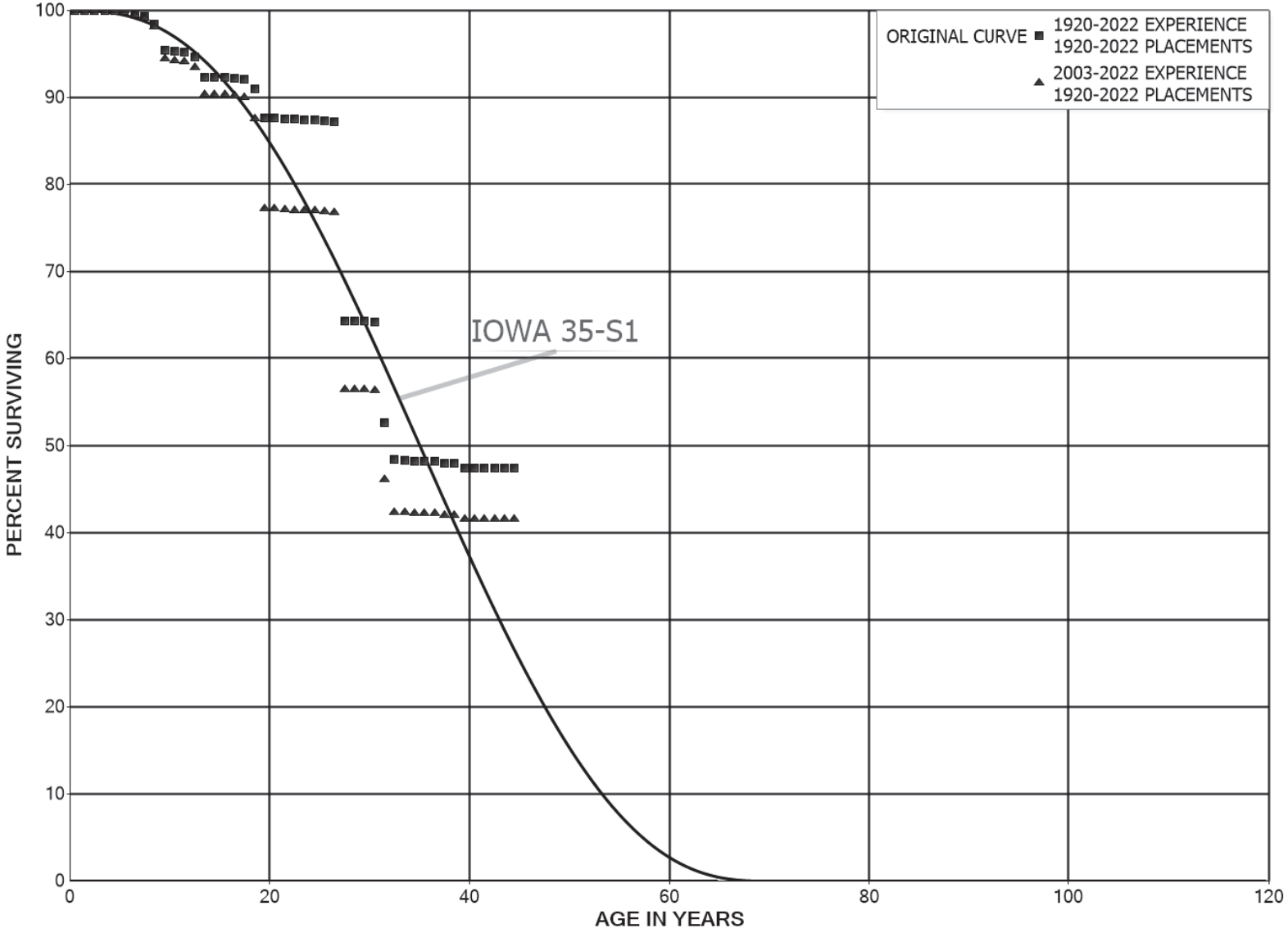
ACCOUNT 367.00 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1875-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	372,741	1,006	0.0027	0.9973	33.10
120.5	218,241		0.0000	1.0000	33.01
121.5	189,283	1,552	0.0082	0.9918	33.01
122.5	108,919		0.0000	1.0000	32.74
123.5	88,675	48	0.0005	0.9995	32.74
124.5	88,627		0.0000	1.0000	32.72
125.5	79,194		0.0000	1.0000	32.72
126.5	77,472		0.0000	1.0000	32.72
127.5	77,472	23	0.0003	0.9997	32.72
128.5	76,022		0.0000	1.0000	32.71
129.5	61,387		0.0000	1.0000	32.71
130.5	53,163		0.0000	1.0000	32.71
131.5	41,604	4,218	0.1014	0.8986	32.71
132.5	29,832		0.0000	1.0000	29.40
133.5	28,614		0.0000	1.0000	29.40
134.5	23,563		0.0000	1.0000	29.40
135.5	10,580		0.0000	1.0000	29.40
136.5	8,543		0.0000	1.0000	29.40
137.5	8,543		0.0000	1.0000	29.40
138.5	8,543		0.0000	1.0000	29.40
139.5	8,543		0.0000	1.0000	29.40
140.5	8,543		0.0000	1.0000	29.40
141.5	8,543	453	0.0530	0.9470	29.40
142.5	8,090		0.0000	1.0000	27.84
143.5	8,090		0.0000	1.0000	27.84
144.5	8,090		0.0000	1.0000	27.84
145.5	8,090		0.0000	1.0000	27.84
146.5	8,090		0.0000	1.0000	27.84
147.5					27.84

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 368.00 COMPRESSOR STATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 368.00 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1920-2022 EXPERIENCE BAND 1920-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	20,058,480		0.0000	1.0000	100.00
0.5	17,772,085		0.0000	1.0000	100.00
1.5	17,868,670		0.0000	1.0000	100.00
2.5	16,665,316	10,509	0.0006	0.9994	100.00
3.5	14,543,238		0.0000	1.0000	99.94
4.5	13,500,815		0.0000	1.0000	99.94
5.5	13,158,572	55,559	0.0042	0.9958	99.94
6.5	11,699,484	26,823	0.0023	0.9977	99.51
7.5	12,895,861	112,878	0.0088	0.9912	99.29
8.5	11,394,780	346,186	0.0304	0.9696	98.42
9.5	10,933,555	18,506	0.0017	0.9983	95.43
10.5	10,312,129	10,737	0.0010	0.9990	95.27
11.5	9,518,389	54,386	0.0057	0.9943	95.17
12.5	9,334,249	231,925	0.0248	0.9752	94.62
13.5	8,624,830		0.0000	1.0000	92.27
14.5	7,905,973	3,360	0.0004	0.9996	92.27
15.5	5,711,642	283	0.0000	1.0000	92.23
16.5	5,452,996	11,404	0.0021	0.9979	92.23
17.5	3,730,574	43,386	0.0116	0.9884	92.04
18.5	5,109,311	189,830	0.0372	0.9628	90.97
19.5	4,590,167		0.0000	1.0000	87.59
20.5	4,582,574	3,841	0.0008	0.9992	87.59
21.5	4,104,590	1,565	0.0004	0.9996	87.51
22.5	6,930,434	2,780	0.0004	0.9996	87.48
23.5	6,931,578	367	0.0001	0.9999	87.44
24.5	6,888,001	9,286	0.0013	0.9987	87.44
25.5	6,859,550	8,796	0.0013	0.9987	87.32
26.5	6,579,371	1,731,581	0.2632	0.7368	87.21
27.5	4,714,516	1,103	0.0002	0.9998	64.26
28.5	4,159,629	664	0.0002	0.9998	64.24
29.5	3,523,994	3,660	0.0010	0.9990	64.23
30.5	4,021,060	725,107	0.1803	0.8197	64.17
31.5	3,364,505	272,043	0.0809	0.9191	52.59
32.5	1,810,574	3,043	0.0017	0.9983	48.34
33.5	534,513	648	0.0012	0.9988	48.26
34.5	1,799,970	1,137	0.0006	0.9994	48.20
35.5	1,793,500		0.0000	1.0000	48.17
36.5	1,781,340	8,002	0.0045	0.9955	48.17
37.5	1,768,372		0.0000	1.0000	47.96
38.5	1,747,618	18,750	0.0107	0.9893	47.96

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 368.00 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1920-2022 EXPERIENCE BAND 1920-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,710,659	1,281	0.0007	0.9993	47.44
40.5	1,387,786		0.0000	1.0000	47.41
41.5	1,315,981		0.0000	1.0000	47.41
42.5	1,313,774		0.0000	1.0000	47.41
43.5	1,311,540		0.0000	1.0000	47.41
44.5	65,175		0.0000	1.0000	47.41
45.5	65,210		0.0000	1.0000	47.41
46.5	64,360		0.0000	1.0000	47.41
47.5	63,364		0.0000	1.0000	47.41
48.5	34,064		0.0000	1.0000	47.41
49.5	4,097		0.0000	1.0000	47.41
50.5	33,596		0.0000	1.0000	47.41
51.5	32,661		0.0000	1.0000	47.41
52.5	33,042		0.0000	1.0000	47.41
53.5	33,042		0.0000	1.0000	47.41
54.5	32,617		0.0000	1.0000	47.41
55.5	32,157		0.0000	1.0000	47.41
56.5	32,512		0.0000	1.0000	47.41
57.5	32,511		0.0000	1.0000	47.41
58.5	31,661		0.0000	1.0000	47.41
59.5	31,552		0.0000	1.0000	47.41
60.5	1,475		0.0000	1.0000	47.41
61.5	1,475		0.0000	1.0000	47.41
62.5	1,094		0.0000	1.0000	47.41
63.5	1,094		0.0000	1.0000	47.41
64.5	1,094		0.0000	1.0000	47.41
65.5	1,094		0.0000	1.0000	47.41
66.5	669		0.0000	1.0000	47.41
67.5	635		0.0000	1.0000	47.41
68.5	599		0.0000	1.0000	47.41
69.5	599		0.0000	1.0000	47.41
70.5	599		0.0000	1.0000	47.41
71.5	599		0.0000	1.0000	47.41
72.5	599		0.0000	1.0000	47.41
73.5	599		0.0000	1.0000	47.41
74.5	599		0.0000	1.0000	47.41
75.5	599		0.0000	1.0000	47.41
76.5	599		0.0000	1.0000	47.41
77.5	599		0.0000	1.0000	47.41
78.5	599		0.0000	1.0000	47.41

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 368.00 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1920-2022 EXPERIENCE BAND 1920-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	599		0.0000	1.0000	47.41
80.5	1,199		0.0000	1.0000	47.41
81.5	1,199		0.0000	1.0000	47.41
82.5	1,199		0.0000	1.0000	47.41
83.5	1,199		0.0000	1.0000	47.41
84.5	1,199		0.0000	1.0000	47.41
85.5	1,199		0.0000	1.0000	47.41
86.5	1,199		0.0000	1.0000	47.41
87.5	1,199		0.0000	1.0000	47.41
88.5	1,199		0.0000	1.0000	47.41
89.5	1,199		0.0000	1.0000	47.41
90.5	599		0.0000	1.0000	47.41
91.5					47.41
92.5	599		0.0000		
93.5	599		0.0000		
94.5	599		0.0000		
95.5	599		0.0000		
96.5	599		0.0000		
97.5	599		0.0000		
98.5	599		0.0000		
99.5	599		0.0000		
100.5	599		0.0000		
101.5	599		0.0000		
102.5					

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 368.00 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1920-2022 EXPERIENCE BAND 2003-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	16,709,382		0.0000	1.0000	100.00
0.5	14,422,987		0.0000	1.0000	100.00
1.5	15,431,067		0.0000	1.0000	100.00
2.5	14,189,147	10,509	0.0007	0.9993	100.00
3.5	12,066,035		0.0000	1.0000	99.93
4.5	10,273,265		0.0000	1.0000	99.93
5.5	9,870,836	55,559	0.0056	0.9944	99.93
6.5	9,423,289	26,823	0.0028	0.9972	99.36
7.5	10,740,729	112,878	0.0105	0.9895	99.08
8.5	9,294,012	346,186	0.0372	0.9628	98.04
9.5	8,836,234	18,506	0.0021	0.9979	94.39
10.5	8,162,390	10,737	0.0013	0.9987	94.19
11.5	7,167,929	54,386	0.0076	0.9924	94.07
12.5	7,053,531	231,925	0.0329	0.9671	93.35
13.5	6,549,327		0.0000	1.0000	90.28
14.5	5,811,660	3,360	0.0006	0.9994	90.28
15.5	3,622,866	283	0.0001	0.9999	90.23
16.5	3,341,738	11,404	0.0034	0.9966	90.22
17.5	1,600,227	43,386	0.0271	0.9729	89.92
18.5	1,605,596	189,830	0.1182	0.8818	87.48
19.5	1,060,195		0.0000	1.0000	77.14
20.5	3,120,564	3,841	0.0012	0.9988	77.14
21.5	2,786,612	1,565	0.0006	0.9994	77.04
22.5	2,790,461	2,780	0.0010	0.9990	77.00
23.5	2,800,788	367	0.0001	0.9999	76.92
24.5	6,854,149	9,286	0.0014	0.9986	76.91
25.5	6,825,698	8,796	0.0013	0.9987	76.81
26.5	6,545,518	1,731,581	0.2645	0.7355	76.71
27.5	4,680,664	1,103	0.0002	0.9998	56.41
28.5	4,125,580	664	0.0002	0.9998	56.40
29.5	3,489,944	3,660	0.0010	0.9990	56.39
30.5	3,987,406	725,107	0.1818	0.8182	56.33
31.5	3,331,958	272,043	0.0816	0.9184	46.09
32.5	1,778,027	3,043	0.0017	0.9983	42.33
33.5	501,966	648	0.0013	0.9987	42.25
34.5	1,767,423	1,137	0.0006	0.9994	42.20
35.5	1,760,953		0.0000	1.0000	42.17
36.5	1,747,907	8,002	0.0046	0.9954	42.17
37.5	1,734,831		0.0000	1.0000	41.98
38.5	1,685,771	18,750	0.0111	0.9889	41.98

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 368.00 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1920-2022 EXPERIENCE BAND 2003-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,649,031	1,281	0.0008	0.9992	41.51
40.5	1,385,930		0.0000	1.0000	41.48
41.5	1,314,125		0.0000	1.0000	41.48
42.5	1,312,679		0.0000	1.0000	41.48
43.5	1,310,446		0.0000	1.0000	41.48
44.5	63,656		0.0000	1.0000	41.48
45.5	63,656		0.0000	1.0000	41.48
46.5	63,620		0.0000	1.0000	41.48
47.5	62,694		0.0000	1.0000	41.48
48.5	33,465		0.0000	1.0000	41.48
49.5	3,498		0.0000	1.0000	41.48
50.5	32,996		0.0000	1.0000	41.48
51.5	32,062		0.0000	1.0000	41.48
52.5	32,442		0.0000	1.0000	41.48
53.5	32,442		0.0000	1.0000	41.48
54.5	32,017		0.0000	1.0000	41.48
55.5	31,558		0.0000	1.0000	41.48
56.5	31,913		0.0000	1.0000	41.48
57.5	31,912		0.0000	1.0000	41.48
58.5	31,061		0.0000	1.0000	41.48
59.5	30,952		0.0000	1.0000	41.48
60.5	876		0.0000	1.0000	41.48
61.5	876		0.0000	1.0000	41.48
62.5	495		0.0000	1.0000	41.48
63.5	495		0.0000	1.0000	41.48
64.5	495		0.0000	1.0000	41.48
65.5	495		0.0000	1.0000	41.48
66.5	70		0.0000	1.0000	41.48
67.5	35		0.0000	1.0000	41.48
68.5					41.48
69.5					
70.5					
71.5					
72.5					
73.5					
74.5					
75.5					
76.5					
77.5					
78.5					

PEOPLES NATURAL GAS COMPANY LLC

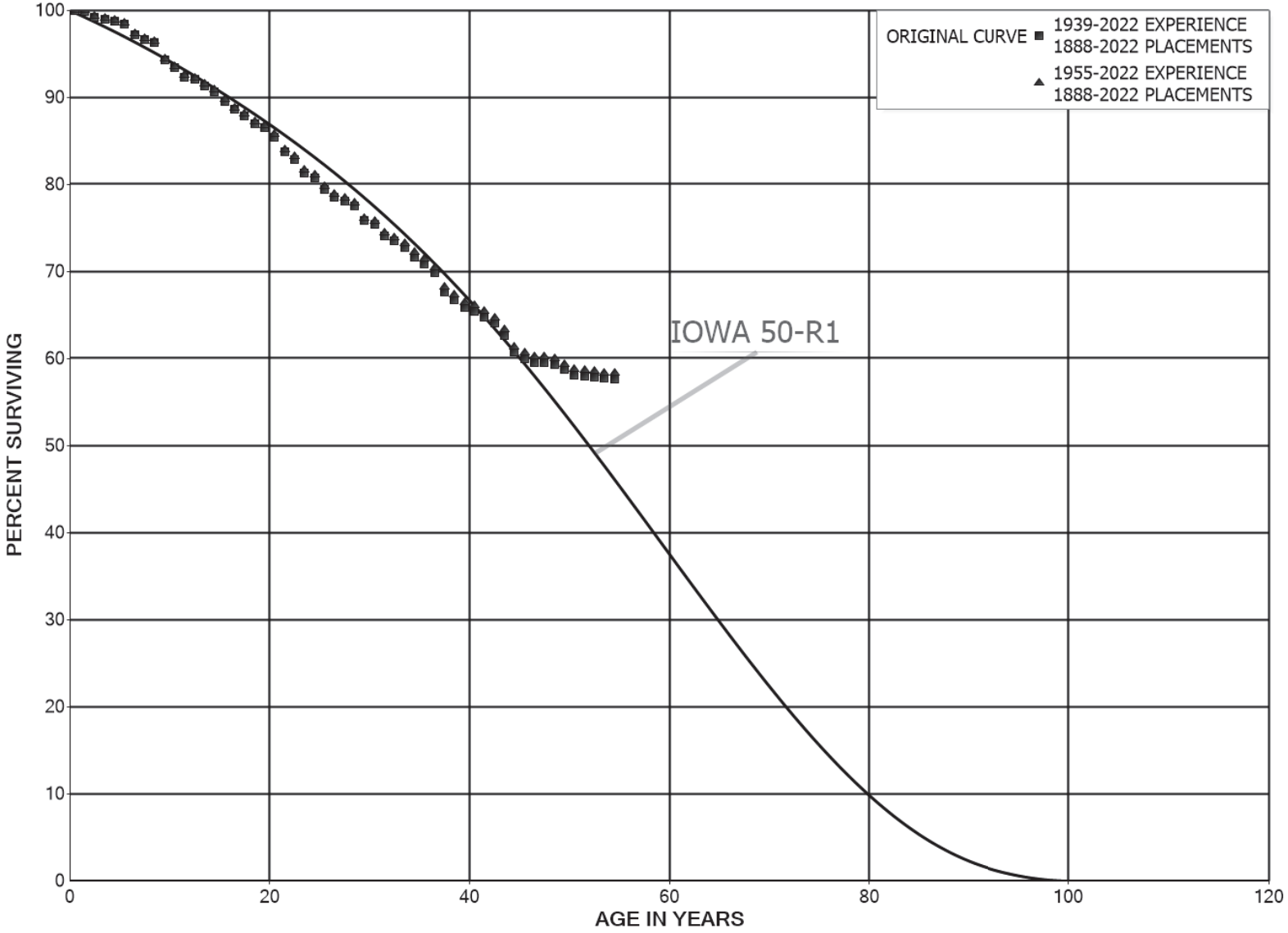
ACCOUNT 368.00 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1920-2022 EXPERIENCE BAND 2003-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5					
80.5					
81.5					
82.5	1,199		0.0000		
83.5	1,199		0.0000		
84.5	1,199		0.0000		
85.5	1,199		0.0000		
86.5	1,199		0.0000		
87.5	1,199		0.0000		
88.5	1,199		0.0000		
89.5	1,199		0.0000		
90.5	599		0.0000		
91.5					
92.5	599		0.0000		
93.5	599		0.0000		
94.5	599		0.0000		
95.5	599		0.0000		
96.5	599		0.0000		
97.5	599		0.0000		
98.5	599		0.0000		
99.5	599		0.0000		
100.5	599		0.0000		
101.5	599		0.0000		
102.5					

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 369.00 MEASURING AND REGULATING STATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 369.00 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1888-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	36,448,458	10,082	0.0003	0.9997	100.00
0.5	34,561,300	44,071	0.0013	0.9987	99.97
1.5	34,746,998	223,970	0.0064	0.9936	99.84
2.5	34,607,943	72,712	0.0021	0.9979	99.20
3.5	33,931,664	96,763	0.0029	0.9971	98.99
4.5	33,280,098	107,488	0.0032	0.9968	98.71
5.5	22,406,161	271,709	0.0121	0.9879	98.39
6.5	20,588,238	123,123	0.0060	0.9940	97.20
7.5	19,124,599	64,427	0.0034	0.9966	96.62
8.5	17,665,250	375,271	0.0212	0.9788	96.29
9.5	16,754,659	150,900	0.0090	0.9910	94.25
10.5	14,522,050	168,517	0.0116	0.9884	93.40
11.5	13,199,489	41,883	0.0032	0.9968	92.31
12.5	12,577,153	94,890	0.0075	0.9925	92.02
13.5	12,324,083	95,502	0.0077	0.9923	91.33
14.5	12,191,607	148,884	0.0122	0.9878	90.62
15.5	11,226,002	118,613	0.0106	0.9894	89.51
16.5	10,095,835	83,120	0.0082	0.9918	88.57
17.5	9,927,084	104,402	0.0105	0.9895	87.84
18.5	8,484,327	43,371	0.0051	0.9949	86.91
19.5	7,828,529	93,412	0.0119	0.9881	86.47
20.5	6,786,118	134,743	0.0199	0.9801	85.44
21.5	6,409,732	65,761	0.0103	0.9897	83.74
22.5	6,331,503	117,987	0.0186	0.9814	82.88
23.5	5,882,723	40,328	0.0069	0.9931	81.34
24.5	5,490,631	91,229	0.0166	0.9834	80.78
25.5	5,191,046	58,629	0.0113	0.9887	79.44
26.5	5,025,574	27,936	0.0056	0.9944	78.54
27.5	4,733,800	33,534	0.0071	0.9929	78.10
28.5	4,550,774	101,301	0.0223	0.9777	77.55
29.5	3,889,469	19,650	0.0051	0.9949	75.82
30.5	3,723,648	66,591	0.0179	0.9821	75.44
31.5	3,304,393	24,463	0.0074	0.9926	74.09
32.5	3,145,878	36,013	0.0114	0.9886	73.54
33.5	2,892,696	42,352	0.0146	0.9854	72.70
34.5	2,778,646	31,589	0.0114	0.9886	71.64
35.5	2,373,651	34,402	0.0145	0.9855	70.82
36.5	2,425,170	75,659	0.0312	0.9688	69.80
37.5	2,164,544	27,654	0.0128	0.9872	67.62
38.5	2,077,087	28,583	0.0138	0.9862	66.75

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 369.00 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1888-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,922,464	11,385	0.0059	0.9941	65.84
40.5	1,790,193	18,290	0.0102	0.9898	65.45
41.5	1,543,244	17,987	0.0117	0.9883	64.78
42.5	1,508,252	32,392	0.0215	0.9785	64.02
43.5	1,331,537	40,939	0.0307	0.9693	62.65
44.5	1,084,210	14,476	0.0134	0.9866	60.72
45.5	1,059,717	6,415	0.0061	0.9939	59.91
46.5	1,025,946	916	0.0009	0.9991	59.55
47.5	1,016,909	3,370	0.0033	0.9967	59.50
48.5	985,820	10,226	0.0104	0.9896	59.30
49.5	933,453	9,271	0.0099	0.9901	58.68
50.5	912,838	2,336	0.0026	0.9974	58.10
51.5	842,082	1,599	0.0019	0.9981	57.95
52.5	833,153	2,257	0.0027	0.9973	57.84
53.5	720,997	1,031	0.0014	0.9986	57.68
54.5	490,582	3,258	0.0066	0.9934	57.60
55.5	452,128	3,493	0.0077	0.9923	57.22
56.5	432,251	11,655	0.0270	0.9730	56.78
57.5	380,996		0.0000	1.0000	55.25
58.5	289,593	2,148	0.0074	0.9926	55.25
59.5	281,600	890	0.0032	0.9968	54.84
60.5	261,086	43	0.0002	0.9998	54.66
61.5	248,239	7,931	0.0319	0.9681	54.65
62.5	238,942	156	0.0007	0.9993	52.91
63.5	230,967	511	0.0022	0.9978	52.87
64.5	188,010	132	0.0007	0.9993	52.76
65.5	146,142		0.0000	1.0000	52.72
66.5	134,935	72	0.0005	0.9995	52.72
67.5	107,431	629	0.0059	0.9941	52.69
68.5	105,397	7	0.0001	0.9999	52.38
69.5	80,613	54	0.0007	0.9993	52.38
70.5	72,717	12	0.0002	0.9998	52.34
71.5	71,541	42	0.0006	0.9994	52.34
72.5	28,200	248	0.0088	0.9912	52.30
73.5	4,043	41	0.0101	0.9899	51.85
74.5	2,841		0.0000	1.0000	51.32
75.5	1,088		0.0000	1.0000	51.32
76.5	1,088		0.0000	1.0000	51.32
77.5	964	50	0.0521	0.9479	51.32
78.5	914		0.0000	1.0000	48.65

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 369.00 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1888-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	914		0.0000	1.0000	48.65
80.5	914		0.0000	1.0000	48.65
81.5	914	21	0.0225	0.9775	48.65
82.5	893		0.0000	1.0000	47.56
83.5	893	60	0.0668	0.9332	47.56
84.5	834		0.0000	1.0000	44.38
85.5	722		0.0000	1.0000	44.38
86.5	722		0.0000	1.0000	44.38
87.5	722		0.0000	1.0000	44.38
88.5	261		0.0000	1.0000	44.38
89.5	261		0.0000	1.0000	44.38
90.5	261		0.0000	1.0000	44.38
91.5	261		0.0000	1.0000	44.38
92.5	261		0.0000	1.0000	44.38
93.5	261		0.0000	1.0000	44.38
94.5	261		0.0000	1.0000	44.38
95.5	221		0.0000	1.0000	44.38
96.5	189		0.0000	1.0000	44.38
97.5	189		0.0000	1.0000	44.38
98.5	76		0.0000	1.0000	44.38
99.5	76		0.0000	1.0000	44.38
100.5	76		0.0000	1.0000	44.38
101.5	76		0.0000	1.0000	44.38
102.5					44.38

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 369.00 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1888-2022 EXPERIENCE BAND 1955-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	35,818,742	4,107	0.0001	0.9999	100.00
0.5	33,965,749	29,463	0.0009	0.9991	99.99
1.5	34,282,108	207,397	0.0060	0.9940	99.90
2.5	34,219,824	71,007	0.0021	0.9979	99.30
3.5	33,565,538	92,592	0.0028	0.9972	99.09
4.5	33,037,773	104,975	0.0032	0.9968	98.82
5.5	22,217,261	268,958	0.0121	0.9879	98.50
6.5	20,483,262	120,247	0.0059	0.9941	97.31
7.5	19,079,093	62,476	0.0033	0.9967	96.74
8.5	17,623,502	374,004	0.0212	0.9788	96.42
9.5	16,713,871	150,417	0.0090	0.9910	94.38
10.5	14,481,168	165,084	0.0114	0.9886	93.53
11.5	13,162,797	40,186	0.0031	0.9969	92.46
12.5	12,544,216	92,043	0.0073	0.9927	92.18
13.5	12,301,366	92,392	0.0075	0.9925	91.50
14.5	12,173,256	148,511	0.0122	0.9878	90.82
15.5	11,212,571	118,057	0.0105	0.9895	89.71
16.5	10,082,244	82,267	0.0082	0.9918	88.76
17.5	9,914,753	102,947	0.0104	0.9896	88.04
18.5	8,473,310	40,151	0.0047	0.9953	87.12
19.5	7,821,422	93,356	0.0119	0.9881	86.71
20.5	6,779,281	134,479	0.0198	0.9802	85.68
21.5	6,403,197	65,253	0.0102	0.9898	83.98
22.5	6,325,667	117,316	0.0185	0.9815	83.12
23.5	5,866,721	40,078	0.0068	0.9932	81.58
24.5	5,474,817	90,873	0.0166	0.9834	81.02
25.5	5,170,993	57,877	0.0112	0.9888	79.68
26.5	5,005,287	27,634	0.0055	0.9945	78.79
27.5	4,714,582	32,890	0.0070	0.9930	78.35
28.5	4,532,106	101,127	0.0223	0.9777	77.80
29.5	3,870,513	19,395	0.0050	0.9950	76.07
30.5	3,705,329	65,794	0.0178	0.9822	75.69
31.5	3,287,149	24,455	0.0074	0.9926	74.34
32.5	3,128,948	26,468	0.0085	0.9915	73.79
33.5	2,885,394	38,256	0.0133	0.9867	73.17
34.5	2,775,500	31,145	0.0112	0.9888	72.20
35.5	2,370,903	32,628	0.0138	0.9862	71.39
36.5	2,423,052	75,458	0.0311	0.9689	70.40
37.5	2,162,626	27,654	0.0128	0.9872	68.21
38.5	2,075,110	28,394	0.0137	0.9863	67.34

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 369.00 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1888-2022 EXPERIENCE BAND 1955-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,919,096	11,385	0.0059	0.9941	66.42
40.5	1,786,838	18,208	0.0102	0.9898	66.02
41.5	1,540,014	16,888	0.0110	0.9890	65.35
42.5	1,506,122	32,361	0.0215	0.9785	64.63
43.5	1,329,438	40,871	0.0307	0.9693	63.25
44.5	1,082,199	12,883	0.0119	0.9881	61.30
45.5	1,059,535	6,415	0.0061	0.9939	60.57
46.5	1,025,713	878	0.0009	0.9991	60.20
47.5	1,016,714	3,370	0.0033	0.9967	60.15
48.5	985,617	10,226	0.0104	0.9896	59.95
49.5	933,251	9,271	0.0099	0.9901	59.33
50.5	912,623	2,251	0.0025	0.9975	58.74
51.5	841,953	1,599	0.0019	0.9981	58.60
52.5	833,084	2,257	0.0027	0.9973	58.49
53.5	720,928	1,031	0.0014	0.9986	58.33
54.5	490,512	3,258	0.0066	0.9934	58.24
55.5	452,059	3,493	0.0077	0.9923	57.86
56.5	432,182	11,655	0.0270	0.9730	57.41
57.5	380,927		0.0000	1.0000	55.86
58.5	289,524	2,148	0.0074	0.9926	55.86
59.5	281,530	890	0.0032	0.9968	55.45
60.5	261,016	43	0.0002	0.9998	55.27
61.5	248,170	7,931	0.0320	0.9680	55.26
62.5	238,923	156	0.0007	0.9993	53.50
63.5	230,947	511	0.0022	0.9978	53.46
64.5	187,997	132	0.0007	0.9993	53.34
65.5	146,130		0.0000	1.0000	53.31
66.5	134,935	72	0.0005	0.9995	53.31
67.5	107,431	629	0.0059	0.9941	53.28
68.5	105,397	7	0.0001	0.9999	52.97
69.5	80,613	54	0.0007	0.9993	52.96
70.5	72,717	12	0.0002	0.9998	52.93
71.5	71,541	42	0.0006	0.9994	52.92
72.5	28,200	248	0.0088	0.9912	52.89
73.5	4,043	41	0.0101	0.9899	52.42
74.5	2,841		0.0000	1.0000	51.89
75.5	1,088		0.0000	1.0000	51.89
76.5	1,088		0.0000	1.0000	51.89
77.5	964	50	0.0521	0.9479	51.89
78.5	914		0.0000	1.0000	49.19

PEOPLES NATURAL GAS COMPANY LLC

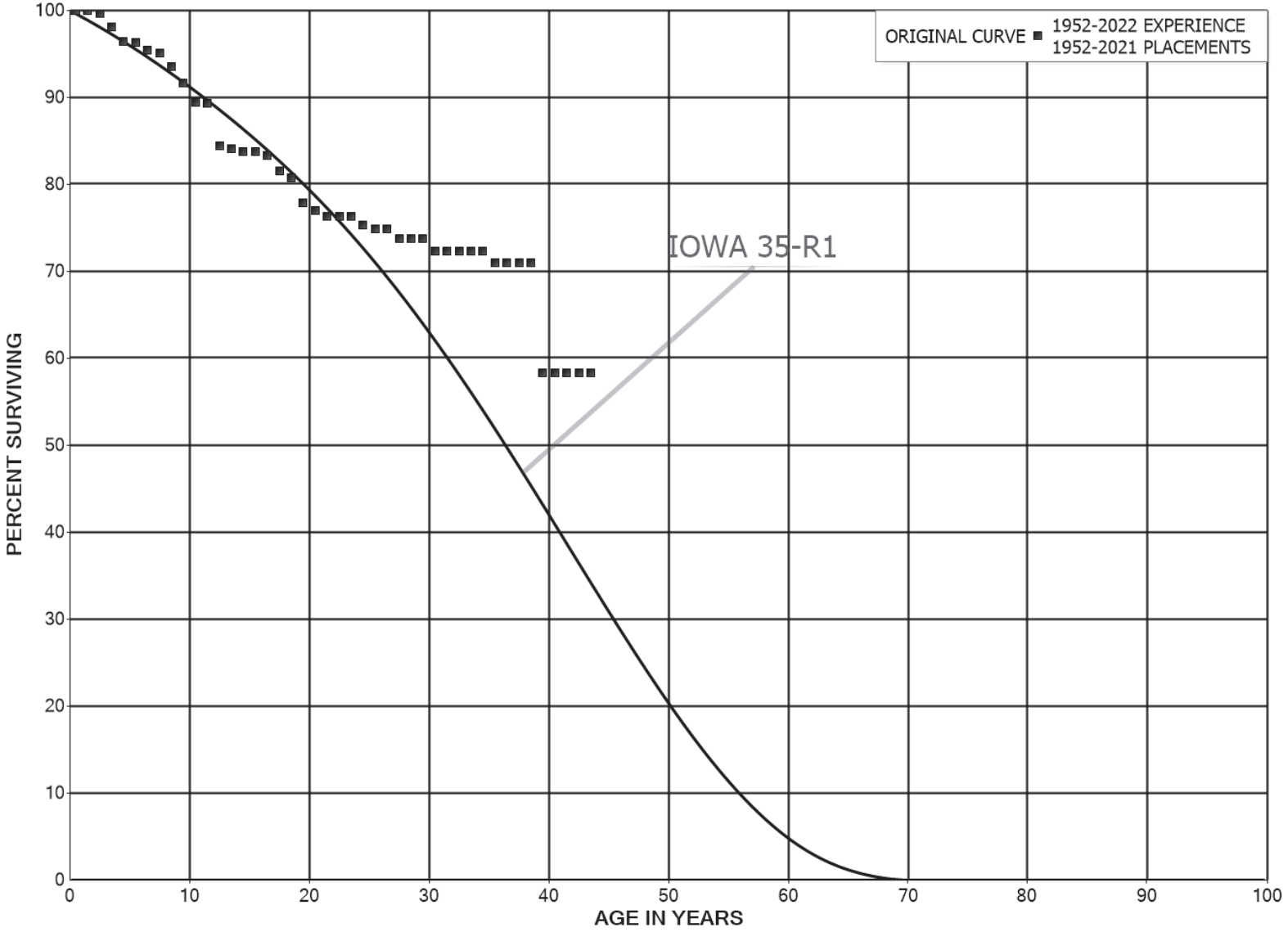
ACCOUNT 369.00 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1888-2022 EXPERIENCE BAND 1955-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	914		0.0000	1.0000	49.19
80.5	914		0.0000	1.0000	49.19
81.5	914	21	0.0225	0.9775	49.19
82.5	893		0.0000	1.0000	48.09
83.5	893	60	0.0668	0.9332	48.09
84.5	834		0.0000	1.0000	44.87
85.5	722		0.0000	1.0000	44.87
86.5	722		0.0000	1.0000	44.87
87.5	722		0.0000	1.0000	44.87
88.5	261		0.0000	1.0000	44.87
89.5	261		0.0000	1.0000	44.87
90.5	261		0.0000	1.0000	44.87
91.5	261		0.0000	1.0000	44.87
92.5	261		0.0000	1.0000	44.87
93.5	261		0.0000	1.0000	44.87
94.5	261		0.0000	1.0000	44.87
95.5	221		0.0000	1.0000	44.87
96.5	189		0.0000	1.0000	44.87
97.5	189		0.0000	1.0000	44.87
98.5	76		0.0000	1.0000	44.87
99.5	76		0.0000	1.0000	44.87
100.5	76		0.0000	1.0000	44.87
101.5	76		0.0000	1.0000	44.87
102.5					44.87

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 371.00 OTHER EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 371.00 OTHER EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1952-2021 EXPERIENCE BAND 1952-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	3,256,191		0.0000	1.0000	100.00
0.5	3,256,229	317	0.0001	0.9999	100.00
1.5	3,095,460	10,216	0.0033	0.9967	99.99
2.5	3,085,059	50,558	0.0164	0.9836	99.66
3.5	3,029,865	49,657	0.0164	0.9836	98.03
4.5	2,735,075	4,167	0.0015	0.9985	96.42
5.5	2,098,981	18,766	0.0089	0.9911	96.27
6.5	1,786,170	7,515	0.0042	0.9958	95.41
7.5	1,223,617	20,079	0.0164	0.9836	95.01
8.5	1,198,638	23,442	0.0196	0.9804	93.45
9.5	1,169,957	28,147	0.0241	0.9759	91.62
10.5	1,145,239	2,139	0.0019	0.9981	89.42
11.5	995,837	53,933	0.0542	0.9458	89.25
12.5	937,612	4,331	0.0046	0.9954	84.42
13.5	914,569	3,134	0.0034	0.9966	84.03
14.5	802,309		0.0000	1.0000	83.74
15.5	800,277	4,078	0.0051	0.9949	83.74
16.5	767,757	16,673	0.0217	0.9783	83.31
17.5	751,084	7,419	0.0099	0.9901	81.51
18.5	719,103	25,958	0.0361	0.9639	80.70
19.5	646,766	7,309	0.0113	0.9887	77.79
20.5	524,319	3,952	0.0075	0.9925	76.91
21.5	505,651		0.0000	1.0000	76.33
22.5	389,549		0.0000	1.0000	76.33
23.5	361,525	5,066	0.0140	0.9860	76.33
24.5	297,023	1,865	0.0063	0.9937	75.26
25.5	186,510		0.0000	1.0000	74.79
26.5	168,864	2,456	0.0145	0.9855	74.79
27.5	148,916		0.0000	1.0000	73.70
28.5	113,452		0.0000	1.0000	73.70
29.5	101,300	1,906	0.0188	0.9812	73.70
30.5	91,321		0.0000	1.0000	72.31
31.5	86,464		0.0000	1.0000	72.31
32.5	86,449		0.0000	1.0000	72.31
33.5	59,967		0.0000	1.0000	72.31
34.5	56,913	1,026	0.0180	0.9820	72.31
35.5	55,630		0.0000	1.0000	71.01
36.5	53,494		0.0000	1.0000	71.01
37.5	53,494		0.0000	1.0000	71.01
38.5	53,494	9,616	0.1798	0.8202	71.01

PEOPLES NATURAL GAS COMPANY LLC

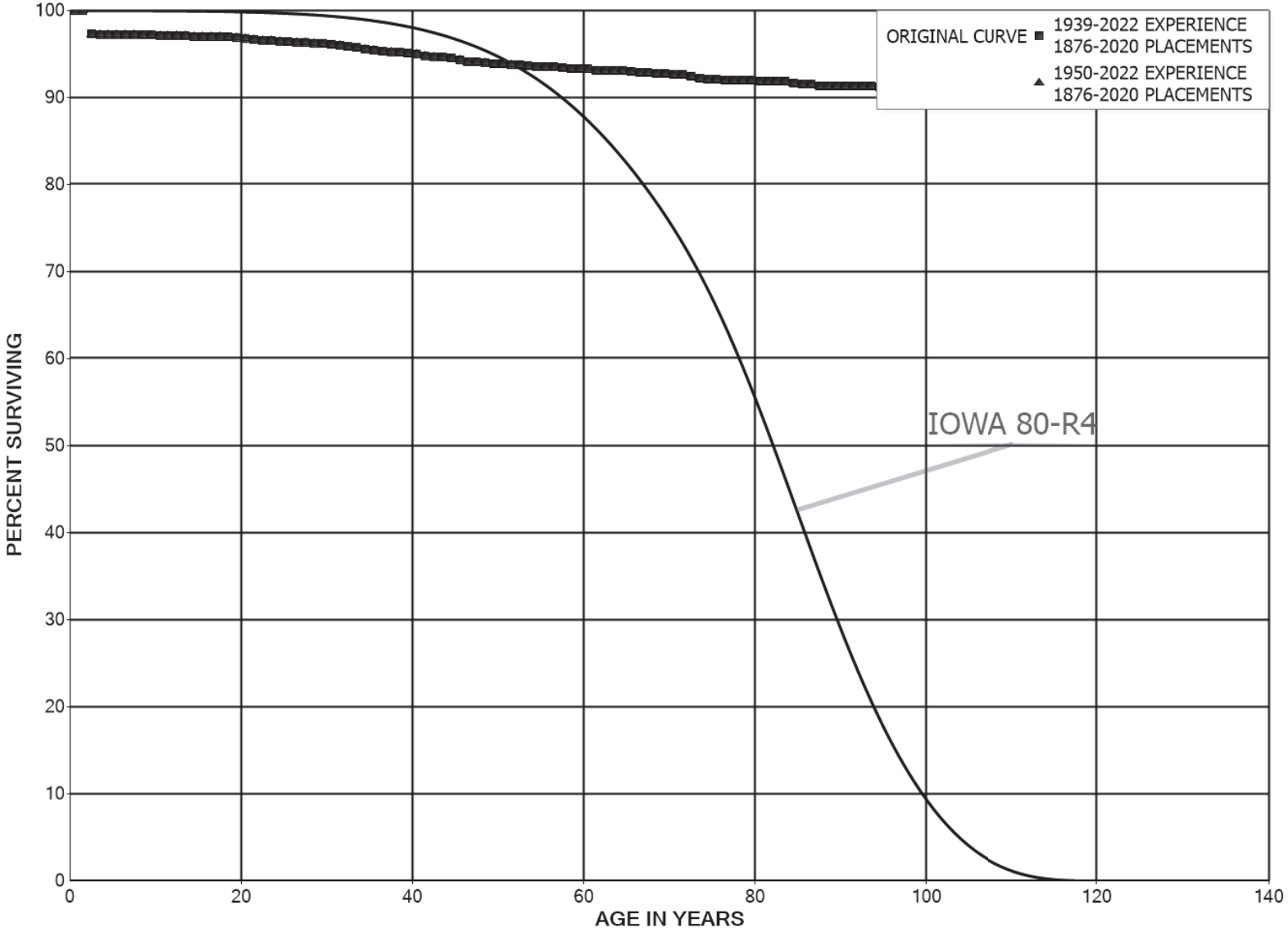
ACCOUNT 371.00 OTHER EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1952-2021 EXPERIENCE BAND 1952-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	43,878		0.0000	1.0000	58.24
40.5	39,374		0.0000	1.0000	58.24
41.5	39,374		0.0000	1.0000	58.24
42.5	39,374		0.0000	1.0000	58.24
43.5	21,723		0.0000	1.0000	58.24
44.5	21,723		0.0000	1.0000	58.24
45.5	21,723		0.0000	1.0000	58.24
46.5	20,507	249	0.0122	0.9878	58.24
47.5	20,021		0.0000	1.0000	57.53
48.5	19,443		0.0000	1.0000	57.53
49.5	19,443		0.0000	1.0000	57.53
50.5	19,443	2,220	0.1142	0.8858	57.53
51.5	14,201		0.0000	1.0000	50.96
52.5	11,680		0.0000	1.0000	50.96
53.5	8,948		0.0000	1.0000	50.96
54.5	7,313		0.0000	1.0000	50.96
55.5	7,313		0.0000	1.0000	50.96
56.5	7,313		0.0000	1.0000	50.96
57.5	3,884		0.0000	1.0000	50.96
58.5	3,884		0.0000	1.0000	50.96
59.5	3,884		0.0000	1.0000	50.96
60.5	3,884		0.0000	1.0000	50.96
61.5	3,127		0.0000	1.0000	50.96
62.5	3,127		0.0000	1.0000	50.96
63.5	3,127		0.0000	1.0000	50.96
64.5	3,127		0.0000	1.0000	50.96
65.5	3,127		0.0000	1.0000	50.96
66.5	3,127		0.0000	1.0000	50.96
67.5	2,776		0.0000	1.0000	50.96
68.5	2,741		0.0000	1.0000	50.96
69.5					50.96

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 374.02 RIGHTS OF WAY
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 374.02 RIGHTS OF WAY

ORIGINAL LIFE TABLE

PLACEMENT BAND 1876-2020 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	5,971,034	1,442	0.0002	0.9998	100.00
0.5	5,980,034	1,163	0.0002	0.9998	99.98
1.5	5,955,648	162,000	0.0272	0.9728	99.96
2.5	5,878,551	890	0.0002	0.9998	97.24
3.5	5,780,953	350	0.0001	0.9999	97.22
4.5	5,778,424	1,898	0.0003	0.9997	97.22
5.5	5,602,751	1,171	0.0002	0.9998	97.18
6.5	5,497,571	916	0.0002	0.9998	97.16
7.5	5,488,823	838	0.0002	0.9998	97.15
8.5	5,493,440	528	0.0001	0.9999	97.13
9.5	5,465,553	610	0.0001	0.9999	97.12
10.5	5,364,274	1,036	0.0002	0.9998	97.11
11.5	4,751,767	1,001	0.0002	0.9998	97.09
12.5	4,754,021	1,704	0.0004	0.9996	97.07
13.5	4,722,053	1,980	0.0004	0.9996	97.04
14.5	4,652,231	1,237	0.0003	0.9997	97.00
15.5	4,586,531	442	0.0001	0.9999	96.97
16.5	4,226,292	476	0.0001	0.9999	96.96
17.5	4,001,825	1,939	0.0005	0.9995	96.95
18.5	3,813,468	3,093	0.0008	0.9992	96.91
19.5	3,332,952	2,714	0.0008	0.9992	96.83
20.5	3,131,259	4,949	0.0016	0.9984	96.75
21.5	2,758,211	1,922	0.0007	0.9993	96.60
22.5	2,667,781	1,249	0.0005	0.9995	96.53
23.5	2,593,349	2,785	0.0011	0.9989	96.48
24.5	2,561,725	839	0.0003	0.9997	96.38
25.5	2,432,928	1,210	0.0005	0.9995	96.35
26.5	2,399,274	884	0.0004	0.9996	96.30
27.5	2,343,157	863	0.0004	0.9996	96.26
28.5	2,245,470	2,014	0.0009	0.9991	96.23
29.5	2,166,818	2,305	0.0011	0.9989	96.14
30.5	2,063,697	1,723	0.0008	0.9992	96.04
31.5	1,994,547	3,340	0.0017	0.9983	95.96
32.5	1,893,556	1,700	0.0009	0.9991	95.80
33.5	1,846,314	3,163	0.0017	0.9983	95.71
34.5	1,769,241	2,553	0.0014	0.9986	95.55
35.5	1,717,420	2,389	0.0014	0.9986	95.41
36.5	1,675,705	1,268	0.0008	0.9992	95.28
37.5	1,626,234	1,224	0.0008	0.9992	95.21
38.5	1,579,924	1,689	0.0011	0.9989	95.13

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 374.02 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1876-2020 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,512,927	719	0.0005	0.9995	95.03
40.5	1,451,765	3,728	0.0026	0.9974	94.99
41.5	1,374,955	1,193	0.0009	0.9991	94.74
42.5	1,317,577	1,131	0.0009	0.9991	94.66
43.5	1,268,267	1,274	0.0010	0.9990	94.58
44.5	1,225,199	2,242	0.0018	0.9982	94.49
45.5	1,209,905	2,947	0.0024	0.9976	94.31
46.5	1,190,790	507	0.0004	0.9996	94.08
47.5	1,141,028	637	0.0006	0.9994	94.04
48.5	1,113,818	1,785	0.0016	0.9984	93.99
49.5	1,087,903	331	0.0003	0.9997	93.84
50.5	1,108,089	380	0.0003	0.9997	93.81
51.5	1,084,763	680	0.0006	0.9994	93.78
52.5	1,057,232	1,443	0.0014	0.9986	93.72
53.5	1,033,469	578	0.0006	0.9994	93.59
54.5	995,838	709	0.0007	0.9993	93.54
55.5	947,219	45	0.0000	1.0000	93.47
56.5	917,551	422	0.0005	0.9995	93.47
57.5	882,509	927	0.0011	0.9989	93.43
58.5	849,854	645	0.0008	0.9992	93.33
59.5	817,409	212	0.0003	0.9997	93.26
60.5	795,167	1,331	0.0017	0.9983	93.23
61.5	740,691	170	0.0002	0.9998	93.08
62.5	714,096	120	0.0002	0.9998	93.06
63.5	690,949	116	0.0002	0.9998	93.04
64.5	603,200	279	0.0005	0.9995	93.02
65.5	583,344	607	0.0010	0.9990	92.98
66.5	599,529	335	0.0006	0.9994	92.88
67.5	571,866	326	0.0006	0.9994	92.83
68.5	550,101	1	0.0000	1.0000	92.78
69.5	534,015	848	0.0016	0.9984	92.78
70.5	509,322	119	0.0002	0.9998	92.63
71.5	470,051	1,201	0.0026	0.9974	92.61
72.5	439,269	974	0.0022	0.9978	92.37
73.5	428,314	410	0.0010	0.9990	92.17
74.5	417,785	45	0.0001	0.9999	92.08
75.5	406,279	355	0.0009	0.9991	92.07
76.5	397,941		0.0000	1.0000	91.99
77.5	381,478	75	0.0002	0.9998	91.99
78.5	379,012	118	0.0003	0.9997	91.97

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 374.02 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1876-2020 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	382,447	234	0.0006	0.9994	91.94
80.5	377,340		0.0000	1.0000	91.89
81.5	351,720	43	0.0001	0.9999	91.89
82.5	339,591		0.0000	1.0000	91.88
83.5	330,402	916	0.0028	0.9972	91.88
84.5	326,272	368	0.0011	0.9989	91.62
85.5	321,971		0.0000	1.0000	91.52
86.5	325,203	725	0.0022	0.9978	91.52
87.5	327,057		0.0000	1.0000	91.31
88.5	328,032		0.0000	1.0000	91.31
89.5	327,575	18	0.0001	0.9999	91.31
90.5	324,650		0.0000	1.0000	91.31
91.5	319,831		0.0000	1.0000	91.31
92.5	313,841	118	0.0004	0.9996	91.31
93.5	310,532	227	0.0007	0.9993	91.28
94.5	308,968	24	0.0001	0.9999	91.21
95.5	371,901	169	0.0005	0.9995	91.20
96.5	368,037		0.0000	1.0000	91.16
97.5	360,952		0.0000	1.0000	91.16
98.5	356,285		0.0000	1.0000	91.16
99.5	346,421		0.0000	1.0000	91.16
100.5	393,340		0.0000	1.0000	91.16
101.5	320,785		0.0000	1.0000	91.16
102.5	307,728	18	0.0001	0.9999	91.16
103.5	300,301		0.0000	1.0000	91.15
104.5	296,682		0.0000	1.0000	91.15
105.5	280,628		0.0000	1.0000	91.15
106.5	267,367		0.0000	1.0000	91.15
107.5	245,113		0.0000	1.0000	91.15
108.5	228,728		0.0000	1.0000	91.15
109.5	218,283		0.0000	1.0000	91.15
110.5	204,814		0.0000	1.0000	91.15
111.5	197,642		0.0000	1.0000	91.15
112.5	193,640		0.0000	1.0000	91.15
113.5	191,578		0.0000	1.0000	91.15
114.5	187,895		0.0000	1.0000	91.15
115.5	183,904		0.0000	1.0000	91.15
116.5	171,275		0.0000	1.0000	91.15
117.5	150,522		0.0000	1.0000	91.15
118.5	143,615		0.0000	1.0000	91.15

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 374.02 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1876-2020 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	87,925		0.0000	1.0000	91.15
120.5	66,973		0.0000	1.0000	91.15
121.5	9,289		0.0000	1.0000	91.15
122.5	7,802		0.0000	1.0000	91.15
123.5	6,477		0.0000	1.0000	91.15
124.5	6,290		0.0000	1.0000	91.15
125.5	5,748		0.0000	1.0000	91.15
126.5	5,735		0.0000	1.0000	91.15
127.5	5,619		0.0000	1.0000	91.15
128.5	4,200		0.0000	1.0000	91.15
129.5	4,200		0.0000	1.0000	91.15
130.5	3,867		0.0000	1.0000	91.15
131.5	3,612		0.0000	1.0000	91.15
132.5	3,145		0.0000	1.0000	91.15
133.5	1,505		0.0000	1.0000	91.15
134.5	1,201		0.0000	1.0000	91.15
135.5	899		0.0000	1.0000	91.15
136.5	899		0.0000	1.0000	91.15
137.5	547		0.0000	1.0000	91.15
138.5	547		0.0000	1.0000	91.15
139.5	547		0.0000	1.0000	91.15
140.5	547		0.0000	1.0000	91.15
141.5	535		0.0000	1.0000	91.15
142.5	535		0.0000	1.0000	91.15
143.5	535		0.0000	1.0000	91.15
144.5	535		0.0000	1.0000	91.15
145.5	535		0.0000	1.0000	91.15
146.5					91.15

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 374.02 RIGHTS OF WAY

ORIGINAL LIFE TABLE

PLACEMENT BAND 1876-2020 EXPERIENCE BAND 1950-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	5,866,811	1,442	0.0002	0.9998	100.00
0.5	5,882,346	1,163	0.0002	0.9998	99.98
1.5	5,860,236	161,732	0.0276	0.9724	99.96
2.5	5,788,583	677	0.0001	0.9999	97.20
3.5	5,696,634	313	0.0001	0.9999	97.19
4.5	5,711,428	1,459	0.0003	0.9997	97.18
5.5	5,539,973	1,143	0.0002	0.9998	97.16
6.5	5,433,662	808	0.0001	0.9999	97.14
7.5	5,427,204	816	0.0002	0.9998	97.12
8.5	5,444,818	528	0.0001	0.9999	97.11
9.5	5,426,087	610	0.0001	0.9999	97.10
10.5	5,332,787	1,036	0.0002	0.9998	97.09
11.5	4,720,122	1,001	0.0002	0.9998	97.07
12.5	4,726,697	1,704	0.0004	0.9996	97.05
13.5	4,696,300	1,980	0.0004	0.9996	97.01
14.5	4,622,992	1,174	0.0003	0.9997	96.97
15.5	4,551,171	442	0.0001	0.9999	96.95
16.5	4,191,516	476	0.0001	0.9999	96.94
17.5	3,966,914	1,939	0.0005	0.9995	96.93
18.5	3,777,852	3,093	0.0008	0.9992	96.88
19.5	3,300,568	2,714	0.0008	0.9992	96.80
20.5	3,098,808	4,949	0.0016	0.9984	96.72
21.5	2,724,569	1,922	0.0007	0.9993	96.56
22.5	2,633,113	1,249	0.0005	0.9995	96.50
23.5	2,550,276	2,785	0.0011	0.9989	96.45
24.5	2,513,021	839	0.0003	0.9997	96.35
25.5	2,386,898	1,210	0.0005	0.9995	96.31
26.5	2,350,096	832	0.0004	0.9996	96.26
27.5	2,288,691	822	0.0004	0.9996	96.23
28.5	2,190,879	2,014	0.0009	0.9991	96.20
29.5	2,115,316	2,305	0.0011	0.9989	96.11
30.5	2,007,682	1,723	0.0009	0.9991	96.00
31.5	1,935,974	3,340	0.0017	0.9983	95.92
32.5	1,835,245	1,700	0.0009	0.9991	95.76
33.5	1,773,162	3,163	0.0018	0.9982	95.67
34.5	1,702,237	2,553	0.0015	0.9985	95.50
35.5	1,645,082	2,389	0.0015	0.9985	95.35
36.5	1,590,270	1,268	0.0008	0.9992	95.21
37.5	1,548,205	1,201	0.0008	0.9992	95.14
38.5	1,506,643	1,009	0.0007	0.9993	95.06

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 374.02 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1876-2020 EXPERIENCE BAND 1950-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,443,147	719	0.0005	0.9995	95.00
40.5	1,382,462	3,728	0.0027	0.9973	94.95
41.5	1,307,941	1,193	0.0009	0.9991	94.70
42.5	1,253,243	1,131	0.0009	0.9991	94.61
43.5	1,205,799	1,274	0.0011	0.9989	94.53
44.5	1,179,237	2,242	0.0019	0.9981	94.43
45.5	1,160,069	2,947	0.0025	0.9975	94.25
46.5	1,147,631	507	0.0004	0.9996	94.01
47.5	1,110,226	637	0.0006	0.9994	93.97
48.5	1,072,445	1,785	0.0017	0.9983	93.91
49.5	1,038,489	331	0.0003	0.9997	93.76
50.5	1,052,919	380	0.0004	0.9996	93.73
51.5	1,023,785	680	0.0007	0.9993	93.69
52.5	995,332	1,443	0.0014	0.9986	93.63
53.5	971,989	578	0.0006	0.9994	93.49
54.5	933,901	709	0.0008	0.9992	93.44
55.5	886,193	45	0.0001	0.9999	93.37
56.5	864,286	422	0.0005	0.9995	93.36
57.5	835,775	927	0.0011	0.9989	93.32
58.5	805,845	645	0.0008	0.9992	93.21
59.5	786,828	212	0.0003	0.9997	93.14
60.5	774,609	1,331	0.0017	0.9983	93.11
61.5	726,311	170	0.0002	0.9998	92.95
62.5	707,526	120	0.0002	0.9998	92.93
63.5	687,708	116	0.0002	0.9998	92.92
64.5	601,072	279	0.0005	0.9995	92.90
65.5	582,271	607	0.0010	0.9990	92.86
66.5	599,529	335	0.0006	0.9994	92.76
67.5	571,866	326	0.0006	0.9994	92.71
68.5	550,101	1	0.0000	1.0000	92.66
69.5	534,015	848	0.0016	0.9984	92.66
70.5	509,322	119	0.0002	0.9998	92.51
71.5	470,051	1,201	0.0026	0.9974	92.49
72.5	439,269	974	0.0022	0.9978	92.25
73.5	428,314	410	0.0010	0.9990	92.05
74.5	417,785	45	0.0001	0.9999	91.96
75.5	406,279	355	0.0009	0.9991	91.95
76.5	397,941		0.0000	1.0000	91.87
77.5	381,478	75	0.0002	0.9998	91.87
78.5	379,012	118	0.0003	0.9997	91.85

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 374.02 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1876-2020 EXPERIENCE BAND 1950-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	382,447	234	0.0006	0.9994	91.82
80.5	377,340		0.0000	1.0000	91.76
81.5	351,720	43	0.0001	0.9999	91.76
82.5	339,591		0.0000	1.0000	91.75
83.5	330,402	916	0.0028	0.9972	91.75
84.5	326,272	368	0.0011	0.9989	91.50
85.5	321,971		0.0000	1.0000	91.40
86.5	325,203	725	0.0022	0.9978	91.40
87.5	327,057		0.0000	1.0000	91.19
88.5	328,032		0.0000	1.0000	91.19
89.5	327,575	18	0.0001	0.9999	91.19
90.5	324,650		0.0000	1.0000	91.19
91.5	319,831		0.0000	1.0000	91.19
92.5	313,841	118	0.0004	0.9996	91.19
93.5	310,532	227	0.0007	0.9993	91.15
94.5	308,968	24	0.0001	0.9999	91.09
95.5	371,901	169	0.0005	0.9995	91.08
96.5	368,037		0.0000	1.0000	91.04
97.5	360,952		0.0000	1.0000	91.04
98.5	356,285		0.0000	1.0000	91.04
99.5	346,421		0.0000	1.0000	91.04
100.5	393,340		0.0000	1.0000	91.04
101.5	320,785		0.0000	1.0000	91.04
102.5	307,728	18	0.0001	0.9999	91.04
103.5	300,301		0.0000	1.0000	91.03
104.5	296,682		0.0000	1.0000	91.03
105.5	280,628		0.0000	1.0000	91.03
106.5	267,367		0.0000	1.0000	91.03
107.5	245,113		0.0000	1.0000	91.03
108.5	228,728		0.0000	1.0000	91.03
109.5	218,283		0.0000	1.0000	91.03
110.5	204,814		0.0000	1.0000	91.03
111.5	197,642		0.0000	1.0000	91.03
112.5	193,640		0.0000	1.0000	91.03
113.5	191,578		0.0000	1.0000	91.03
114.5	187,895		0.0000	1.0000	91.03
115.5	183,904		0.0000	1.0000	91.03
116.5	171,275		0.0000	1.0000	91.03
117.5	150,522		0.0000	1.0000	91.03
118.5	143,615		0.0000	1.0000	91.03

PEOPLES NATURAL GAS COMPANY LLC

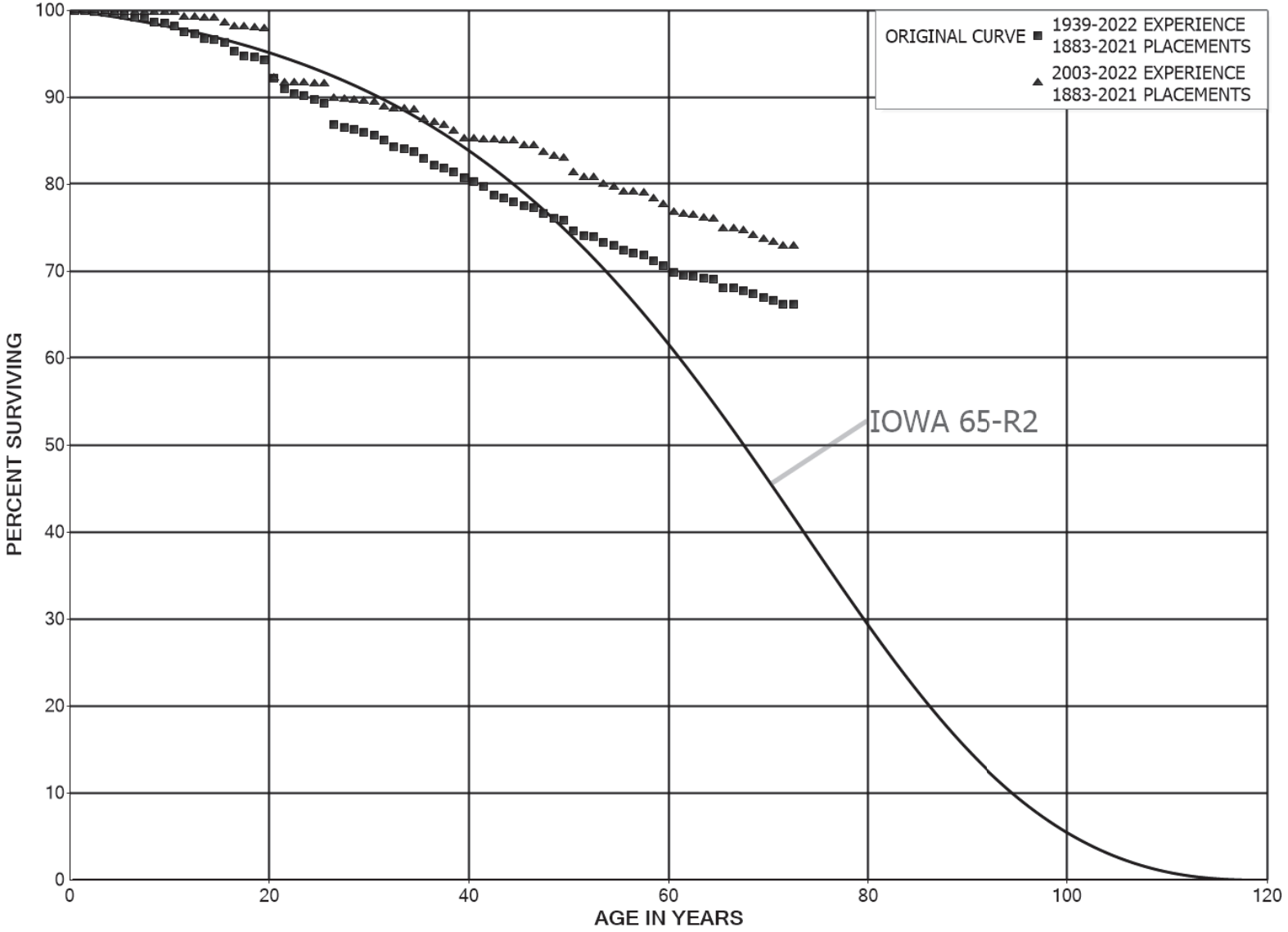
ACCOUNT 374.02 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1876-2020 EXPERIENCE BAND 1950-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	87,925		0.0000	1.0000	91.03
120.5	66,973		0.0000	1.0000	91.03
121.5	9,289		0.0000	1.0000	91.03
122.5	7,802		0.0000	1.0000	91.03
123.5	6,477		0.0000	1.0000	91.03
124.5	6,290		0.0000	1.0000	91.03
125.5	5,748		0.0000	1.0000	91.03
126.5	5,735		0.0000	1.0000	91.03
127.5	5,619		0.0000	1.0000	91.03
128.5	4,200		0.0000	1.0000	91.03
129.5	4,200		0.0000	1.0000	91.03
130.5	3,867		0.0000	1.0000	91.03
131.5	3,612		0.0000	1.0000	91.03
132.5	3,145		0.0000	1.0000	91.03
133.5	1,505		0.0000	1.0000	91.03
134.5	1,201		0.0000	1.0000	91.03
135.5	899		0.0000	1.0000	91.03
136.5	899		0.0000	1.0000	91.03
137.5	547		0.0000	1.0000	91.03
138.5	547		0.0000	1.0000	91.03
139.5	547		0.0000	1.0000	91.03
140.5	547		0.0000	1.0000	91.03
141.5	535		0.0000	1.0000	91.03
142.5	535		0.0000	1.0000	91.03
143.5	535		0.0000	1.0000	91.03
144.5	535		0.0000	1.0000	91.03
145.5	535		0.0000	1.0000	91.03
146.5					91.03

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNTS 375.01 AND 375.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING - OTHER - MINOR
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNTS 375.01 AND 375.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING - OTHER - MINOR

ORIGINAL LIFE TABLE

PLACEMENT BAND 1883-2021 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	7,540,227	1,949	0.0003	0.9997	100.00
0.5	7,561,702	4,659	0.0006	0.9994	99.97
1.5	7,569,043	8,182	0.0011	0.9989	99.91
2.5	7,561,525	6,695	0.0009	0.9991	99.80
3.5	7,522,110	11,640	0.0015	0.9985	99.72
4.5	7,357,933	13,675	0.0019	0.9981	99.56
5.5	7,338,549	12,122	0.0017	0.9983	99.38
6.5	7,339,451	6,526	0.0009	0.9991	99.21
7.5	6,897,266	36,357	0.0053	0.9947	99.12
8.5	6,839,398	7,371	0.0011	0.9989	98.60
9.5	6,687,516	25,110	0.0038	0.9962	98.50
10.5	6,255,721	37,702	0.0060	0.9940	98.13
11.5	6,096,196	15,215	0.0025	0.9975	97.53
12.5	6,036,136	31,926	0.0053	0.9947	97.29
13.5	5,750,685	8,962	0.0016	0.9984	96.78
14.5	5,315,548	17,257	0.0032	0.9968	96.63
15.5	5,104,053	56,276	0.0110	0.9890	96.31
16.5	4,743,553	23,461	0.0049	0.9951	95.25
17.5	4,612,836	9,380	0.0020	0.9980	94.78
18.5	4,488,498	13,273	0.0030	0.9970	94.59
19.5	4,226,384	96,523	0.0228	0.9772	94.31
20.5	3,834,609	48,758	0.0127	0.9873	92.15
21.5	3,751,809	22,553	0.0060	0.9940	90.98
22.5	3,666,149	10,391	0.0028	0.9972	90.43
23.5	3,623,948	18,789	0.0052	0.9948	90.18
24.5	3,554,147	18,534	0.0052	0.9948	89.71
25.5	3,640,529	100,210	0.0275	0.9725	89.24
26.5	3,293,993	9,934	0.0030	0.9970	86.79
27.5	3,208,656	9,820	0.0031	0.9969	86.52
28.5	3,165,684	13,418	0.0042	0.9958	86.26
29.5	3,108,341	11,401	0.0037	0.9963	85.89
30.5	3,075,714	18,527	0.0060	0.9940	85.58
31.5	2,998,862	26,421	0.0088	0.9912	85.06
32.5	2,936,644	8,895	0.0030	0.9970	84.31
33.5	2,768,170	9,872	0.0036	0.9964	84.06
34.5	2,690,869	26,154	0.0097	0.9903	83.76
35.5	2,624,401	24,136	0.0092	0.9908	82.94
36.5	2,569,983	11,056	0.0043	0.9957	82.18
37.5	2,317,614	12,659	0.0055	0.9945	81.83
38.5	2,184,229	16,355	0.0075	0.9925	81.38

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNTS 375.01 AND 375.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING - OTHER - MINOR

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2021 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,969,373	10,899	0.0055	0.9945	80.77
40.5	1,912,317	13,943	0.0073	0.9927	80.32
41.5	1,748,107	23,195	0.0133	0.9867	79.74
42.5	1,674,051	5,981	0.0036	0.9964	78.68
43.5	1,604,166	9,694	0.0060	0.9940	78.40
44.5	1,578,423	9,077	0.0058	0.9942	77.93
45.5	1,543,519	3,029	0.0020	0.9980	77.48
46.5	1,476,789	12,735	0.0086	0.9914	77.33
47.5	1,389,624	11,532	0.0083	0.9917	76.66
48.5	1,321,607	4,211	0.0032	0.9968	76.02
49.5	1,273,526	19,503	0.0153	0.9847	75.78
50.5	1,214,229	8,207	0.0068	0.9932	74.62
51.5	1,180,120	1,999	0.0017	0.9983	74.12
52.5	1,133,808	10,223	0.0090	0.9910	73.99
53.5	1,101,340	5,679	0.0052	0.9948	73.32
54.5	1,069,165	7,564	0.0071	0.9929	72.95
55.5	1,046,496	4,592	0.0044	0.9956	72.43
56.5	1,006,032	4,167	0.0041	0.9959	72.11
57.5	963,063	7,955	0.0083	0.9917	71.81
58.5	918,222	7,843	0.0085	0.9915	71.22
59.5	873,237	10,240	0.0117	0.9883	70.61
60.5	854,270	3,142	0.0037	0.9963	69.78
61.5	781,921	1,039	0.0013	0.9987	69.53
62.5	760,412	2,592	0.0034	0.9966	69.43
63.5	682,730	1,559	0.0023	0.9977	69.20
64.5	600,521	8,544	0.0142	0.9858	69.04
65.5	549,401	274	0.0005	0.9995	68.06
66.5	510,686	2,004	0.0039	0.9961	68.02
67.5	457,311	2,795	0.0061	0.9939	67.76
68.5	431,288	2,406	0.0056	0.9944	67.34
69.5	355,491	2,041	0.0057	0.9943	66.97
70.5	266,859	1,434	0.0054	0.9946	66.58
71.5	214,165	57	0.0003	0.9997	66.22
72.5	178,775	180	0.0010	0.9990	66.21
73.5	146,060	518	0.0035	0.9965	66.14
74.5	118,305		0.0000	1.0000	65.91
75.5	107,753	510	0.0047	0.9953	65.91
76.5	96,050	411	0.0043	0.9957	65.59
77.5	93,590	1,434	0.0153	0.9847	65.31
78.5	85,302	136	0.0016	0.9984	64.31

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNTS 375.01 AND 375.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING - OTHER - MINOR

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2021 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	82,428	666	0.0081	0.9919	64.21
80.5	70,434	790	0.0112	0.9888	63.69
81.5	67,422	308	0.0046	0.9954	62.98
82.5	65,282	360	0.0055	0.9945	62.69
83.5	63,145		0.0000	1.0000	62.34
84.5	60,800		0.0000	1.0000	62.34
85.5	56,468		0.0000	1.0000	62.34
86.5	50,936		0.0000	1.0000	62.34
87.5	49,069	33	0.0007	0.9993	62.34
88.5	48,708		0.0000	1.0000	62.30
89.5	48,300		0.0000	1.0000	62.30
90.5	46,289		0.0000	1.0000	62.30
91.5	45,553	123	0.0027	0.9973	62.30
92.5	41,214	157	0.0038	0.9962	62.13
93.5	37,902		0.0000	1.0000	61.90
94.5	32,637	93	0.0029	0.9971	61.90
95.5	28,026		0.0000	1.0000	61.72
96.5	26,577	164	0.0062	0.9938	61.72
97.5	21,561		0.0000	1.0000	61.34
98.5	20,921		0.0000	1.0000	61.34
99.5	20,284		0.0000	1.0000	61.34
100.5	18,456		0.0000	1.0000	61.34
101.5	16,627		0.0000	1.0000	61.34
102.5	16,256		0.0000	1.0000	61.34
103.5	13,475		0.0000	1.0000	61.34
104.5	10,652	230	0.0216	0.9784	61.34
105.5	8,926		0.0000	1.0000	60.01
106.5	8,926		0.0000	1.0000	60.01
107.5	6,779		0.0000	1.0000	60.01
108.5	4,898		0.0000	1.0000	60.01
109.5	3,060		0.0000	1.0000	60.01
110.5	2,481		0.0000	1.0000	60.01
111.5	1,835		0.0000	1.0000	60.01
112.5	1,530		0.0000	1.0000	60.01
113.5	1,139		0.0000	1.0000	60.01
114.5	1,119		0.0000	1.0000	60.01
115.5	290	20	0.0686	0.9314	60.01
116.5	88		0.0000	1.0000	55.89
117.5	88		0.0000	1.0000	55.89
118.5	88		0.0000	1.0000	55.89
119.5					55.89

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNTS 375.01 AND 375.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING - OTHER - MINOR

ORIGINAL LIFE TABLE

PLACEMENT BAND 1883-2021 EXPERIENCE BAND 2003-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	2,377,760		0.0000	1.0000	100.00
0.5	2,380,223		0.0000	1.0000	100.00
1.5	2,373,649	1,316	0.0006	0.9994	100.00
2.5	2,413,866	2,353	0.0010	0.9990	99.94
3.5	2,412,649	1,934	0.0008	0.9992	99.85
4.5	2,315,953		0.0000	1.0000	99.77
5.5	2,382,635		0.0000	1.0000	99.77
6.5	2,416,661		0.0000	1.0000	99.77
7.5	2,070,084		0.0000	1.0000	99.77
8.5	2,084,343		0.0000	1.0000	99.77
9.5	2,038,253		0.0000	1.0000	99.77
10.5	1,684,234	10,414	0.0062	0.9938	99.77
11.5	1,674,505		0.0000	1.0000	99.15
12.5	1,692,399	930	0.0005	0.9995	99.15
13.5	1,539,507		0.0000	1.0000	99.10
14.5	1,385,603	8,660	0.0062	0.9938	99.10
15.5	1,436,264	5,222	0.0036	0.9964	98.48
16.5	1,531,160		0.0000	1.0000	98.12
17.5	1,483,195	3,369	0.0023	0.9977	98.12
18.5	1,433,824	351	0.0002	0.9998	97.90
19.5	1,364,726	79,506	0.0583	0.9417	97.87
20.5	1,071,478	6,674	0.0062	0.9938	92.17
21.5	1,178,435		0.0000	1.0000	91.60
22.5	1,273,268		0.0000	1.0000	91.60
23.5	1,296,410	687	0.0005	0.9995	91.60
24.5	1,262,834	820	0.0006	0.9994	91.55
25.5	1,172,482	21,873	0.0187	0.9813	91.49
26.5	1,370,856	1,092	0.0008	0.9992	89.78
27.5	1,414,212	1,029	0.0007	0.9993	89.71
28.5	1,438,774	2,296	0.0016	0.9984	89.64
29.5	1,478,911	2,501	0.0017	0.9983	89.50
30.5	1,494,786	9,285	0.0062	0.9938	89.35
31.5	1,460,847	2,547	0.0017	0.9983	88.79
32.5	1,450,677	1,107	0.0008	0.9992	88.64
33.5	1,312,006	453	0.0003	0.9997	88.57
34.5	1,277,096	17,141	0.0134	0.9866	88.54
35.5	1,249,003	4,614	0.0037	0.9963	87.35
36.5	1,252,492	4,644	0.0037	0.9963	87.03
37.5	1,050,973	8,131	0.0077	0.9923	86.71
38.5	967,133	9,357	0.0097	0.9903	86.04

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNTS 375.01 AND 375.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING - OTHER - MINOR

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2021 EXPERIENCE BAND 2003-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	837,308		0.0000	1.0000	85.20
40.5	825,414	1,255	0.0015	0.9985	85.20
41.5	818,623	107	0.0001	0.9999	85.08
42.5	791,651	951	0.0012	0.9988	85.06
43.5	804,269	638	0.0008	0.9992	84.96
44.5	874,353	5,250	0.0060	0.9940	84.89
45.5	889,747	181	0.0002	0.9998	84.38
46.5	864,199	7,979	0.0092	0.9908	84.37
47.5	837,599	3,986	0.0048	0.9952	83.59
48.5	822,748	2,098	0.0025	0.9975	83.19
49.5	870,398	18,033	0.0207	0.9793	82.98
50.5	913,566	5,462	0.0060	0.9940	81.26
51.5	938,179	108	0.0001	0.9999	80.77
52.5	939,658	8,970	0.0095	0.9905	80.76
53.5	940,359	4,880	0.0052	0.9948	79.99
54.5	937,814	5,954	0.0063	0.9937	79.58
55.5	920,755	721	0.0008	0.9992	79.07
56.5	895,069	1,277	0.0014	0.9986	79.01
57.5	860,354	7,123	0.0083	0.9917	78.90
58.5	823,199	6,559	0.0080	0.9920	78.25
59.5	783,847	9,551	0.0122	0.9878	77.62
60.5	776,211	2,258	0.0029	0.9971	76.68
61.5	707,377	912	0.0013	0.9987	76.45
62.5	687,828	2,317	0.0034	0.9966	76.35
63.5	612,894	1,559	0.0025	0.9975	76.10
64.5	533,112	7,671	0.0144	0.9856	75.90
65.5	487,198	202	0.0004	0.9996	74.81
66.5	454,734	1,178	0.0026	0.9974	74.78
67.5	404,549	2,795	0.0069	0.9931	74.59
68.5	378,928	2,406	0.0063	0.9937	74.07
69.5	303,248	1,166	0.0038	0.9962	73.60
70.5	217,692	1,412	0.0065	0.9935	73.32
71.5	165,603	57	0.0003	0.9997	72.84
72.5	134,428	30	0.0002	0.9998	72.82
73.5	105,224	407	0.0039	0.9961	72.80
74.5	83,091		0.0000	1.0000	72.52
75.5	77,010	510	0.0066	0.9934	72.52
76.5	66,856	411	0.0061	0.9939	72.04
77.5	69,245	76	0.0011	0.9989	71.60
78.5	63,011	136	0.0022	0.9978	71.52

PEOPLES NATURAL GAS COMPANY LLC

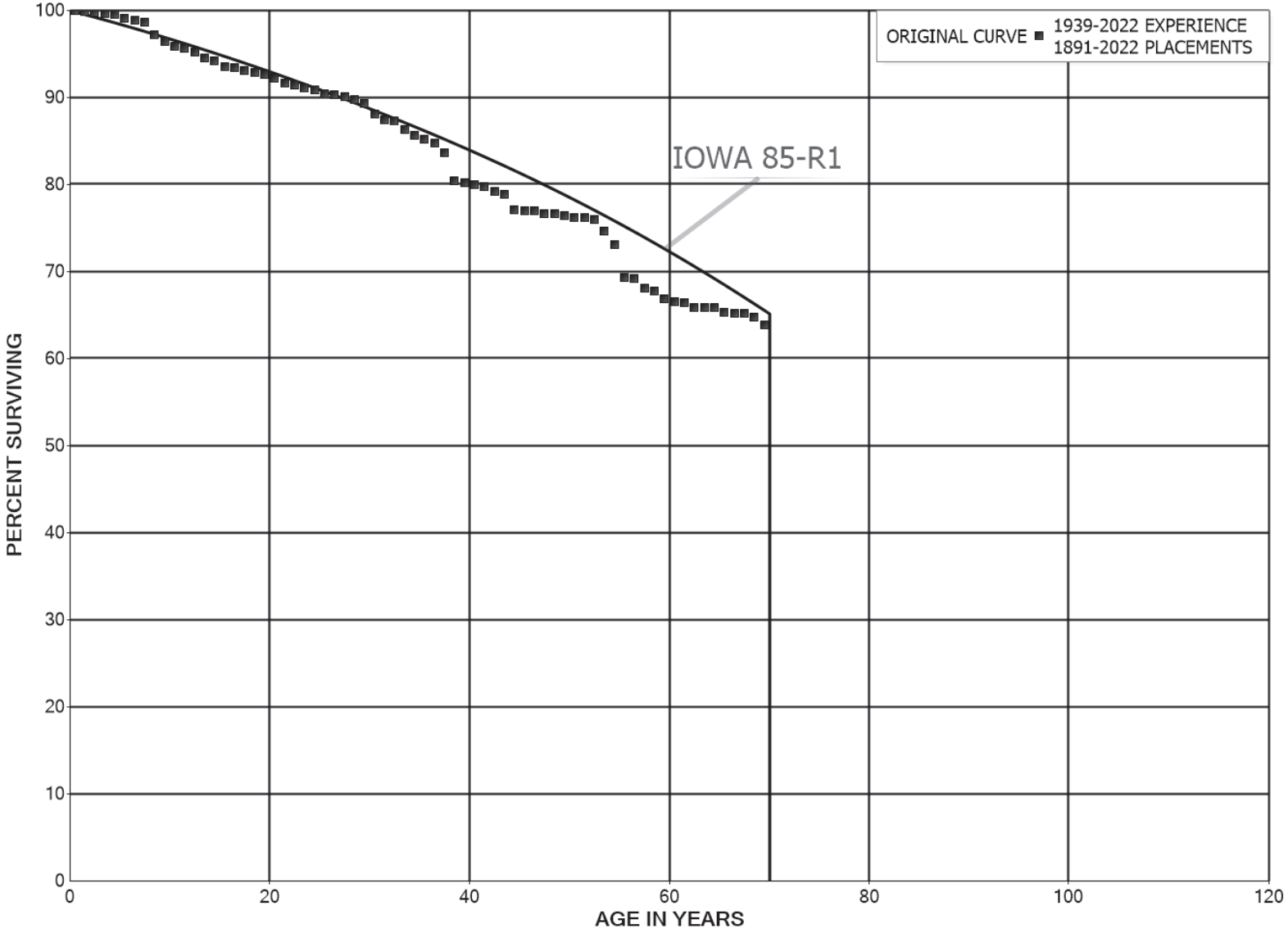
ACCOUNTS 375.01 AND 375.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING - OTHER - MINOR

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2021 EXPERIENCE BAND 2003-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	60,437	361	0.0060	0.9940	71.36
80.5	50,599		0.0000	1.0000	70.94
81.5	50,206		0.0000	1.0000	70.94
82.5	48,744	360	0.0074	0.9926	70.94
83.5	49,343		0.0000	1.0000	70.41
84.5	49,915		0.0000	1.0000	70.41
85.5	47,078		0.0000	1.0000	70.41
86.5	41,546		0.0000	1.0000	70.41
87.5	41,886	33	0.0008	0.9992	70.41
88.5	43,547		0.0000	1.0000	70.36
89.5	44,978		0.0000	1.0000	70.36
90.5	43,775		0.0000	1.0000	70.36
91.5	43,687	123	0.0028	0.9972	70.36
92.5	39,653	157	0.0040	0.9960	70.16
93.5	36,731		0.0000	1.0000	69.88
94.5	31,487	93	0.0030	0.9970	69.88
95.5	27,686		0.0000	1.0000	69.68
96.5	26,493	164	0.0062	0.9938	69.68
97.5	21,477		0.0000	1.0000	69.24
98.5	20,813		0.0000	1.0000	69.24
99.5	20,284		0.0000	1.0000	69.24
100.5	18,456		0.0000	1.0000	69.24
101.5	16,627		0.0000	1.0000	69.24
102.5	16,256		0.0000	1.0000	69.24
103.5	13,475		0.0000	1.0000	69.24
104.5	10,652	230	0.0216	0.9784	69.24
105.5	8,926		0.0000	1.0000	67.75
106.5	8,926		0.0000	1.0000	67.75
107.5	6,779		0.0000	1.0000	67.75
108.5	4,898		0.0000	1.0000	67.75
109.5	3,060		0.0000	1.0000	67.75
110.5	2,481		0.0000	1.0000	67.75
111.5	1,835		0.0000	1.0000	67.75
112.5	1,530		0.0000	1.0000	67.75
113.5	1,139		0.0000	1.0000	67.75
114.5	1,119		0.0000	1.0000	67.75
115.5	290	20	0.0686	0.9314	67.75
116.5	88		0.0000	1.0000	63.10
117.5	88		0.0000	1.0000	63.10
118.5	88		0.0000	1.0000	63.10
119.5					63.10

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING - OTHER - MAJOR
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING - OTHER - MAJOR

ORIGINAL LIFE TABLE

PLACEMENT BAND 1891-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	28,593,797	778	0.0000	1.0000	100.00
0.5	28,594,042	32,930	0.0012	0.9988	100.00
1.5	26,951,850	46,282	0.0017	0.9983	99.88
2.5	26,425,789	16,960	0.0006	0.9994	99.71
3.5	24,934,340	31,725	0.0013	0.9987	99.65
4.5	22,640,189	115,638	0.0051	0.9949	99.52
5.5	22,217,215	50,700	0.0023	0.9977	99.01
6.5	21,954,165	30,637	0.0014	0.9986	98.79
7.5	21,782,494	314,234	0.0144	0.9856	98.65
8.5	21,413,965	177,079	0.0083	0.9917	97.22
9.5	21,224,182	126,572	0.0060	0.9940	96.42
10.5	20,746,900	58,111	0.0028	0.9972	95.85
11.5	20,151,832	84,453	0.0042	0.9958	95.58
12.5	20,010,139	137,710	0.0069	0.9931	95.18
13.5	19,588,016	66,855	0.0034	0.9966	94.52
14.5	18,701,861	128,988	0.0069	0.9931	94.20
15.5	18,446,185	29,598	0.0016	0.9984	93.55
16.5	17,649,450	63,410	0.0036	0.9964	93.40
17.5	17,376,291	46,351	0.0027	0.9973	93.06
18.5	16,655,591	34,460	0.0021	0.9979	92.82
19.5	15,223,770	68,781	0.0045	0.9955	92.62
20.5	14,363,329	84,271	0.0059	0.9941	92.20
21.5	12,913,268	33,512	0.0026	0.9974	91.66
22.5	12,637,046	46,759	0.0037	0.9963	91.43
23.5	12,570,596	34,499	0.0027	0.9973	91.09
24.5	11,598,875	58,367	0.0050	0.9950	90.84
25.5	11,342,700	13,413	0.0012	0.9988	90.38
26.5	11,262,723	29,698	0.0026	0.9974	90.27
27.5	10,788,418	40,916	0.0038	0.9962	90.04
28.5	10,413,549	46,574	0.0045	0.9955	89.69
29.5	10,199,918	141,753	0.0139	0.9861	89.29
30.5	9,943,210	72,074	0.0072	0.9928	88.05
31.5	9,626,944	18,505	0.0019	0.9981	87.41
32.5	8,590,521	93,088	0.0108	0.9892	87.25
33.5	7,453,336	61,734	0.0083	0.9917	86.30
34.5	6,770,219	33,042	0.0049	0.9951	85.59
35.5	6,510,540	33,094	0.0051	0.9949	85.17
36.5	6,063,370	80,489	0.0133	0.9867	84.74
37.5	5,639,241	218,333	0.0387	0.9613	83.61
38.5	5,310,460	14,369	0.0027	0.9973	80.37

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING - OTHER - MAJOR

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1891-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	5,158,616	15,714	0.0030	0.9970	80.16
40.5	5,006,797	12,423	0.0025	0.9975	79.91
41.5	4,917,205	32,284	0.0066	0.9934	79.71
42.5	4,866,064	22,105	0.0045	0.9955	79.19
43.5	4,786,181	106,971	0.0223	0.9777	78.83
44.5	4,638,895	5,331	0.0011	0.9989	77.07
45.5	4,054,226	4,607	0.0011	0.9989	76.98
46.5	3,998,912	12,631	0.0032	0.9968	76.89
47.5	3,980,926	4,232	0.0011	0.9989	76.65
48.5	3,940,930	11,142	0.0028	0.9972	76.57
49.5	3,904,411	6,340	0.0016	0.9984	76.35
50.5	3,856,366	1,651	0.0004	0.9996	76.23
51.5	3,791,147	10,724	0.0028	0.9972	76.19
52.5	3,743,908	68,192	0.0182	0.9818	75.98
53.5	3,665,959	73,761	0.0201	0.9799	74.60
54.5	3,575,460	188,527	0.0527	0.9473	73.09
55.5	3,371,709	4,773	0.0014	0.9986	69.24
56.5	3,032,464	49,232	0.0162	0.9838	69.14
57.5	2,953,092	11,576	0.0039	0.9961	68.02
58.5	2,765,472	39,414	0.0143	0.9857	67.75
59.5	2,290,285	11,170	0.0049	0.9951	66.79
60.5	2,264,832	2,177	0.0010	0.9990	66.46
61.5	1,992,824	16,793	0.0084	0.9916	66.40
62.5	1,896,561	425	0.0002	0.9998	65.84
63.5	1,823,169	203	0.0001	0.9999	65.82
64.5	1,806,449	13,779	0.0076	0.9924	65.82
65.5	1,792,670	2,880	0.0016	0.9984	65.31
66.5	1,789,790	1,695	0.0009	0.9991	65.21
67.5	1,788,095	11,276	0.0063	0.9937	65.15
68.5	1,774,463	25,597	0.0144	0.9856	64.74
69.5	1,723,813	1,395	0.0008	0.9992	63.80
70.5	1,577,569	87,935	0.0557	0.9443	63.75
71.5	1,482,338	102	0.0001	0.9999	60.20
72.5	200,233		0.0000	1.0000	60.19
73.5	196,595	37	0.0002	0.9998	60.19
74.5	166,010		0.0000	1.0000	60.18
75.5	108,843	501	0.0046	0.9954	60.18
76.5	108,342		0.0000	1.0000	59.91
77.5	107,849	487	0.0045	0.9955	59.91
78.5	107,362	486	0.0045	0.9955	59.63

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING - OTHER - MAJOR

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1891-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	16,484		0.0000	1.0000	59.36
80.5	16,484		0.0000	1.0000	59.36
81.5	16,484	420	0.0255	0.9745	59.36
82.5	16,064	50	0.0031	0.9969	57.85
83.5	16,014		0.0000	1.0000	57.67
84.5	16,014	146	0.0091	0.9909	57.67
85.5	15,868		0.0000	1.0000	57.15
86.5	15,868		0.0000	1.0000	57.15
87.5	15,868		0.0000	1.0000	57.15
88.5	15,868	142	0.0089	0.9911	57.15
89.5	15,726		0.0000	1.0000	56.64
90.5	15,726		0.0000	1.0000	56.64
91.5	15,726		0.0000	1.0000	56.64
92.5	15,726	90	0.0057	0.9943	56.64
93.5	15,636	87	0.0056	0.9944	56.31
94.5	15,550	330	0.0212	0.9788	56.00
95.5	15,220		0.0000	1.0000	54.81
96.5	15,220	125	0.0082	0.9918	54.81
97.5	15,095	942	0.0624	0.9376	54.36
98.5	13,718		0.0000	1.0000	50.97
99.5	13,718		0.0000	1.0000	50.97
100.5	13,718		0.0000	1.0000	50.97
101.5	13,718		0.0000	1.0000	50.97
102.5	13,718		0.0000	1.0000	50.97
103.5	13,718	45	0.0033	0.9967	50.97
104.5	13,673	191	0.0140	0.9860	50.80
105.5	13,481		0.0000	1.0000	50.09
106.5	13,481		0.0000	1.0000	50.09
107.5	13,481		0.0000	1.0000	50.09
108.5	13,481		0.0000	1.0000	50.09
109.5	13,481		0.0000	1.0000	50.09
110.5	13,481		0.0000	1.0000	50.09
111.5	13,481		0.0000	1.0000	50.09
112.5	13,481		0.0000	1.0000	50.09
113.5	13,481		0.0000	1.0000	50.09
114.5	13,481		0.0000	1.0000	50.09
115.5	13,481		0.0000	1.0000	50.09
116.5	13,481		0.0000	1.0000	50.09
117.5	13,481		0.0000	1.0000	50.09
118.5	13,481		0.0000	1.0000	50.09

PEOPLES NATURAL GAS COMPANY LLC

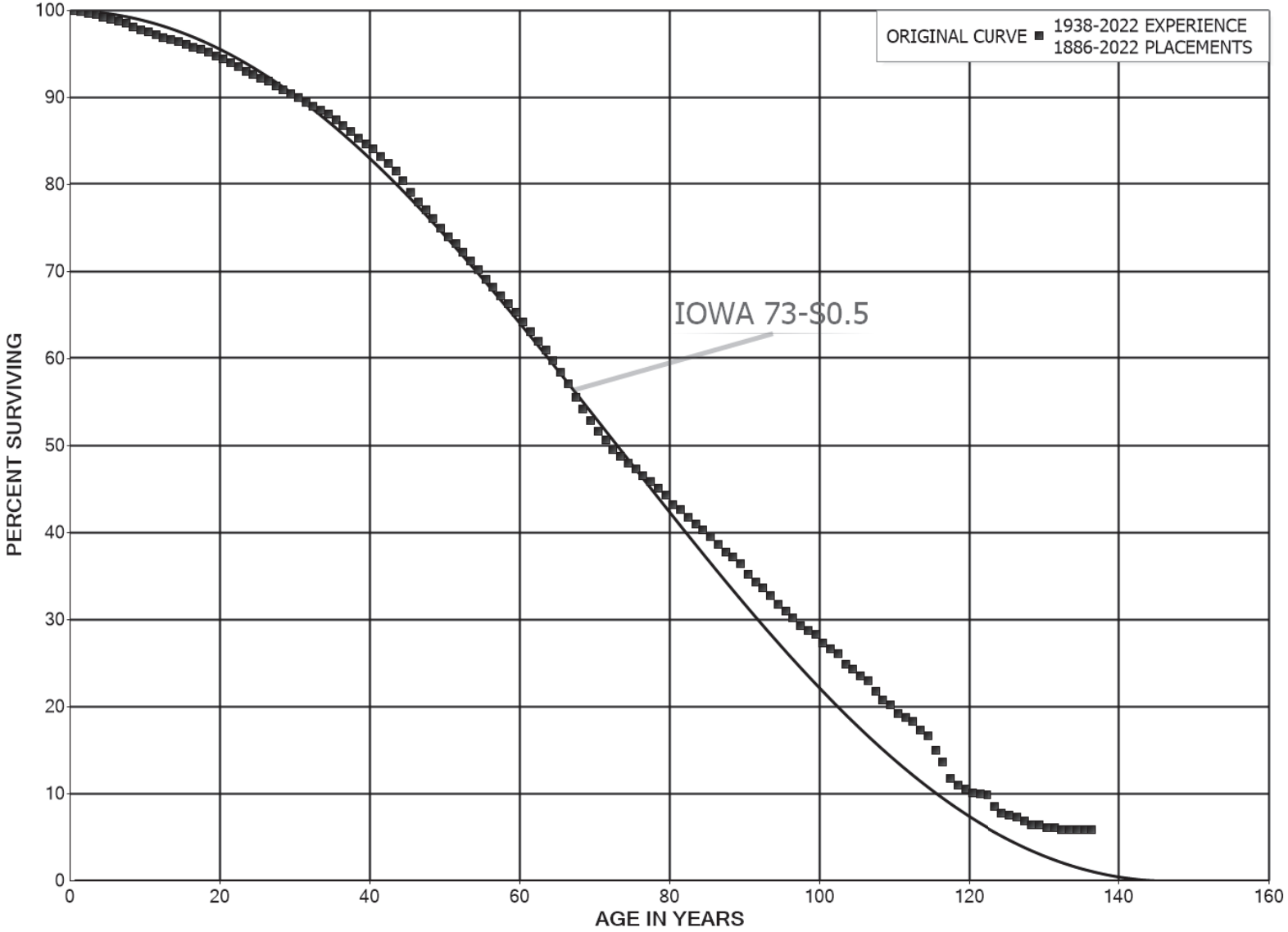
ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING - OTHER - MAJOR

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1891-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	13,481		0.0000	1.0000	50.09
120.5	13,481		0.0000	1.0000	50.09
121.5	13,481		0.0000	1.0000	50.09
122.5	13,481		0.0000	1.0000	50.09
123.5	13,481		0.0000	1.0000	50.09
124.5	13,481		0.0000	1.0000	50.09
125.5	13,481		0.0000	1.0000	50.09
126.5	13,481		0.0000	1.0000	50.09
127.5	13,481		0.0000	1.0000	50.09
128.5	13,141		0.0000	1.0000	50.09
129.5	13,141		0.0000	1.0000	50.09
130.5	13,141		0.0000	1.0000	50.09
131.5					50.09

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 376.01 MAINS - LOW PRESSURE
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.01 MAINS - LOW PRESSURE

ORIGINAL LIFE TABLE

PLACEMENT BAND 1886-2022 EXPERIENCE BAND 1938-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,075,273,510	224,025	0.0002	0.9998	100.00
0.5	957,489,012	1,500,413	0.0016	0.9984	99.98
1.5	859,091,429	1,484,641	0.0017	0.9983	99.82
2.5	791,561,148	1,536,401	0.0019	0.9981	99.65
3.5	728,698,323	1,719,740	0.0024	0.9976	99.46
4.5	658,549,867	1,575,503	0.0024	0.9976	99.22
5.5	616,460,617	1,375,327	0.0022	0.9978	98.98
6.5	588,534,632	1,793,744	0.0030	0.9970	98.76
7.5	563,623,375	2,471,178	0.0044	0.9956	98.46
8.5	543,229,059	1,523,038	0.0028	0.9972	98.03
9.5	524,351,175	1,349,240	0.0026	0.9974	97.76
10.5	491,922,566	1,504,520	0.0031	0.9969	97.50
11.5	471,111,861	1,582,815	0.0034	0.9966	97.21
12.5	455,332,685	1,264,068	0.0028	0.9972	96.88
13.5	440,553,410	1,028,194	0.0023	0.9977	96.61
14.5	427,865,426	1,292,066	0.0030	0.9970	96.39
15.5	412,634,148	1,368,551	0.0033	0.9967	96.09
16.5	395,178,694	1,228,175	0.0031	0.9969	95.78
17.5	374,672,869	1,377,747	0.0037	0.9963	95.48
18.5	356,735,392	1,489,040	0.0042	0.9958	95.13
19.5	340,341,487	1,203,942	0.0035	0.9965	94.73
20.5	324,302,305	1,509,146	0.0047	0.9953	94.39
21.5	311,997,236	1,634,070	0.0052	0.9948	93.96
22.5	303,575,948	1,524,599	0.0050	0.9950	93.46
23.5	291,980,180	1,162,459	0.0040	0.9960	92.99
24.5	284,885,573	1,329,736	0.0047	0.9953	92.62
25.5	273,539,341	1,172,138	0.0043	0.9957	92.19
26.5	264,647,877	1,398,253	0.0053	0.9947	91.80
27.5	252,110,115	1,169,137	0.0046	0.9954	91.31
28.5	240,661,774	1,303,481	0.0054	0.9946	90.89
29.5	230,030,537	1,138,071	0.0049	0.9951	90.40
30.5	216,815,307	1,265,150	0.0058	0.9942	89.95
31.5	205,313,602	1,067,813	0.0052	0.9948	89.42
32.5	193,314,732	1,006,510	0.0052	0.9948	88.96
33.5	183,345,643	979,695	0.0053	0.9947	88.50
34.5	174,567,850	1,299,554	0.0074	0.9926	88.02
35.5	162,599,313	1,264,734	0.0078	0.9922	87.37
36.5	154,382,224	1,149,951	0.0074	0.9926	86.69
37.5	142,422,546	1,243,866	0.0087	0.9913	86.04
38.5	134,512,268	978,608	0.0073	0.9927	85.29

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.01 MAINS - LOW PRESSURE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1886-2022 EXPERIENCE BAND 1938-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	129,399,131	996,953	0.0077	0.9923	84.67
40.5	121,563,071	1,171,791	0.0096	0.9904	84.02
41.5	110,576,373	1,088,109	0.0098	0.9902	83.21
42.5	101,901,769	1,134,105	0.0111	0.9889	82.39
43.5	95,113,639	1,224,623	0.0129	0.9871	81.47
44.5	90,629,226	1,488,554	0.0164	0.9836	80.42
45.5	84,926,328	1,190,988	0.0140	0.9860	79.10
46.5	81,704,182	999,432	0.0122	0.9878	77.99
47.5	78,154,858	933,436	0.0119	0.9881	77.04
48.5	73,369,173	1,134,894	0.0155	0.9845	76.12
49.5	67,088,298	892,339	0.0133	0.9867	74.94
50.5	61,677,008	676,314	0.0110	0.9890	73.94
51.5	58,398,139	781,611	0.0134	0.9866	73.13
52.5	55,746,070	755,499	0.0136	0.9864	72.15
53.5	52,203,543	725,157	0.0139	0.9861	71.18
54.5	48,263,994	760,844	0.0158	0.9842	70.19
55.5	44,562,316	617,250	0.0139	0.9861	69.08
56.5	41,269,578	578,782	0.0140	0.9860	68.12
57.5	38,388,152	486,933	0.0127	0.9873	67.17
58.5	36,129,055	591,876	0.0164	0.9836	66.32
59.5	33,721,080	542,165	0.0161	0.9839	65.23
60.5	31,493,309	551,594	0.0175	0.9825	64.18
61.5	28,603,911	485,589	0.0170	0.9830	63.06
62.5	26,507,280	460,787	0.0174	0.9826	61.99
63.5	24,010,688	474,958	0.0198	0.9802	60.91
64.5	21,816,553	480,559	0.0220	0.9780	59.71
65.5	20,172,104	456,874	0.0226	0.9774	58.39
66.5	18,567,863	507,434	0.0273	0.9727	57.07
67.5	17,116,083	424,794	0.0248	0.9752	55.51
68.5	16,273,276	380,021	0.0234	0.9766	54.13
69.5	14,856,455	338,086	0.0228	0.9772	52.87
70.5	13,544,688	279,233	0.0206	0.9794	51.66
71.5	12,374,303	259,492	0.0210	0.9790	50.60
72.5	11,634,669	192,540	0.0165	0.9835	49.54
73.5	11,693,210	190,648	0.0163	0.9837	48.72
74.5	11,338,170	162,460	0.0143	0.9857	47.92
75.5	10,974,399	170,713	0.0156	0.9844	47.24
76.5	10,621,503	142,791	0.0134	0.9866	46.50
77.5	10,418,706	192,337	0.0185	0.9815	45.88
78.5	10,211,691	173,149	0.0170	0.9830	45.03

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.01 MAINS - LOW PRESSURE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1886-2022 EXPERIENCE BAND 1938-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	10,002,485	243,457	0.0243	0.9757	44.27
80.5	9,677,448	138,747	0.0143	0.9857	43.19
81.5	9,314,621	188,403	0.0202	0.9798	42.57
82.5	8,990,947	154,497	0.0172	0.9828	41.71
83.5	8,561,256	142,251	0.0166	0.9834	40.99
84.5	8,329,893	172,908	0.0208	0.9792	40.31
85.5	8,062,343	178,907	0.0222	0.9778	39.47
86.5	7,844,439	177,091	0.0226	0.9774	38.60
87.5	7,641,447	113,880	0.0149	0.9851	37.73
88.5	7,517,696	162,663	0.0216	0.9784	37.16
89.5	7,357,312	230,082	0.0313	0.9687	36.36
90.5	7,090,620	194,324	0.0274	0.9726	35.22
91.5	6,845,002	124,516	0.0182	0.9818	34.26
92.5	6,625,203	178,191	0.0269	0.9731	33.63
93.5	6,364,694	190,030	0.0299	0.9701	32.73
94.5	6,093,481	144,698	0.0237	0.9763	31.75
95.5	5,852,932	162,728	0.0278	0.9722	31.00
96.5	5,564,468	158,288	0.0284	0.9716	30.14
97.5	5,236,964	98,346	0.0188	0.9812	29.28
98.5	5,043,533	70,826	0.0140	0.9860	28.73
99.5	5,027,377	177,269	0.0353	0.9647	28.33
100.5	4,742,983	121,555	0.0256	0.9744	27.33
101.5	4,494,088	88,473	0.0197	0.9803	26.63
102.5	4,387,221	205,002	0.0467	0.9533	26.10
103.5	4,133,440	98,815	0.0239	0.9761	24.88
104.5	3,977,249	122,456	0.0308	0.9692	24.29
105.5	3,543,572	88,381	0.0249	0.9751	23.54
106.5	3,341,110	173,274	0.0519	0.9481	22.95
107.5	2,922,594	146,165	0.0500	0.9500	21.76
108.5	2,340,948	59,344	0.0254	0.9746	20.67
109.5	1,931,764	93,638	0.0485	0.9515	20.15
110.5	1,781,249	40,271	0.0226	0.9774	19.17
111.5	1,747,821	41,895	0.0240	0.9760	18.74
112.5	1,658,693	87,898	0.0530	0.9470	18.29
113.5	1,552,980	59,672	0.0384	0.9616	17.32
114.5	1,453,159	147,498	0.1015	0.8985	16.66
115.5	1,279,489	118,461	0.0926	0.9074	14.97
116.5	1,119,771	149,821	0.1338	0.8662	13.58
117.5	933,352	64,048	0.0686	0.9314	11.76
118.5	839,531	37,239	0.0444	0.9556	10.96

PEOPLES NATURAL GAS COMPANY LLC

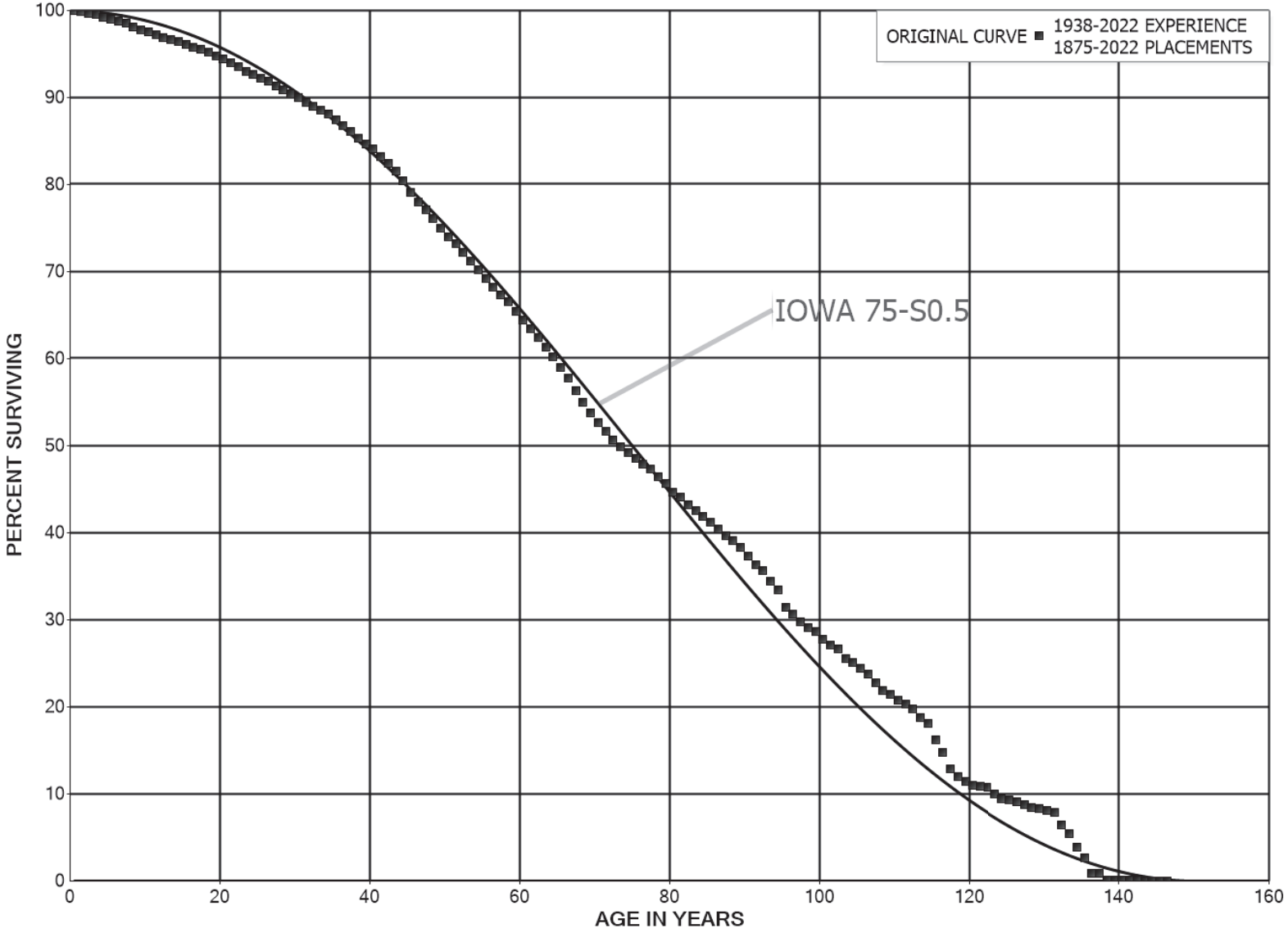
ACCOUNT 376.01 MAINS - LOW PRESSURE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1886-2022 EXPERIENCE BAND 1938-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	748,205	28,228	0.0377	0.9623	10.47
120.5	636,495	4,727	0.0074	0.9926	10.07
121.5	608,171	9,900	0.0163	0.9837	10.00
122.5	58,791	7,757	0.1319	0.8681	9.84
123.5	47,070	4,706	0.1000	0.9000	8.54
124.5	42,233	1,048	0.0248	0.9752	7.69
125.5	40,425	1,322	0.0327	0.9673	7.49
126.5	32,896	1,779	0.0541	0.9459	7.25
127.5	30,853	1,882	0.0610	0.9390	6.86
128.5	28,577	343	0.0120	0.9880	6.44
129.5	28,216	1,222	0.0433	0.9567	6.36
130.5	26,994	45	0.0017	0.9983	6.09
131.5	14,018	450	0.0321	0.9679	6.08
132.5	13,495		0.0000	1.0000	5.88
133.5	3,715		0.0000	1.0000	5.88
134.5	44		0.0000	1.0000	5.88
135.5	44		0.0000	1.0000	5.88
136.5					5.88

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 376.02 MAINS - REGULAR PRESSURE
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.02 MAINS - REGULAR PRESSURE

ORIGINAL LIFE TABLE

PLACEMENT BAND 1875-2022 EXPERIENCE BAND 1938-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,119,162,225	233,169	0.0002	0.9998	100.00
0.5	996,570,196	1,561,655	0.0016	0.9984	99.98
1.5	894,156,386	1,545,239	0.0017	0.9983	99.82
2.5	823,869,766	1,599,111	0.0019	0.9981	99.65
3.5	758,441,112	1,789,934	0.0024	0.9976	99.46
4.5	685,429,453	1,639,810	0.0024	0.9976	99.22
5.5	641,622,274	1,431,463	0.0022	0.9978	98.98
6.5	612,556,454	1,866,958	0.0030	0.9970	98.76
7.5	586,628,410	2,572,042	0.0044	0.9956	98.46
8.5	565,401,673	1,585,203	0.0028	0.9972	98.03
9.5	545,753,263	1,404,311	0.0026	0.9974	97.76
10.5	512,001,037	1,565,930	0.0031	0.9969	97.50
11.5	490,340,915	1,647,420	0.0034	0.9966	97.21
12.5	473,917,692	1,315,662	0.0028	0.9972	96.88
13.5	458,535,181	1,070,161	0.0023	0.9977	96.61
14.5	445,329,320	1,344,803	0.0030	0.9970	96.39
15.5	429,476,357	1,424,411	0.0033	0.9967	96.09
16.5	411,308,435	1,278,304	0.0031	0.9969	95.78
17.5	389,965,639	1,433,982	0.0037	0.9963	95.48
18.5	371,296,019	1,549,817	0.0042	0.9958	95.13
19.5	354,232,975	1,253,082	0.0035	0.9965	94.73
20.5	337,539,132	1,570,744	0.0047	0.9953	94.39
21.5	324,731,816	1,700,766	0.0052	0.9948	93.96
22.5	315,966,802	1,586,828	0.0050	0.9950	93.46
23.5	303,897,738	1,209,906	0.0040	0.9960	92.99
24.5	296,513,554	1,384,011	0.0047	0.9953	92.62
25.5	284,704,211	1,219,980	0.0043	0.9957	92.19
26.5	275,449,830	1,455,325	0.0053	0.9947	91.80
27.5	262,400,322	1,216,857	0.0046	0.9954	91.31
28.5	250,484,702	1,356,684	0.0054	0.9946	90.89
29.5	239,419,536	1,184,523	0.0049	0.9951	90.40
30.5	225,664,910	1,316,788	0.0058	0.9942	89.95
31.5	213,693,747	1,111,397	0.0052	0.9948	89.42
32.5	201,205,127	1,047,592	0.0052	0.9948	88.96
33.5	190,829,137	1,019,682	0.0053	0.9947	88.50
34.5	181,693,067	1,352,596	0.0074	0.9926	88.02
35.5	169,236,019	1,316,355	0.0078	0.9922	87.37
36.5	160,683,538	1,196,888	0.0074	0.9926	86.69
37.5	148,235,709	1,294,636	0.0087	0.9913	86.04
38.5	140,002,563	1,018,552	0.0073	0.9927	85.29

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.02 MAINS - REGULAR PRESSURE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1875-2022 EXPERIENCE BAND 1938-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	134,680,727	1,037,645	0.0077	0.9923	84.67
40.5	126,524,827	1,219,619	0.0096	0.9904	84.02
41.5	115,089,693	1,132,521	0.0098	0.9902	83.21
42.5	106,061,023	1,180,395	0.0111	0.9889	82.39
43.5	98,995,827	1,274,607	0.0129	0.9871	81.47
44.5	94,328,377	1,549,311	0.0164	0.9836	80.42
45.5	88,392,707	1,239,600	0.0140	0.9860	79.10
46.5	85,039,046	1,040,225	0.0122	0.9878	77.99
47.5	81,344,850	971,535	0.0119	0.9881	77.04
48.5	76,363,831	1,181,216	0.0155	0.9845	76.12
49.5	69,826,595	928,760	0.0133	0.9867	74.94
50.5	64,194,435	703,919	0.0110	0.9890	73.94
51.5	60,781,736	813,513	0.0134	0.9866	73.13
52.5	58,021,419	786,336	0.0136	0.9864	72.15
53.5	55,992,702	754,755	0.0135	0.9865	71.18
54.5	51,921,918	791,899	0.0153	0.9847	70.22
55.5	48,074,301	642,444	0.0134	0.9866	69.15
56.5	44,647,166	602,405	0.0135	0.9865	68.22
57.5	41,648,131	506,808	0.0122	0.9878	67.30
58.5	39,296,827	616,034	0.0157	0.9843	66.48
59.5	36,790,567	564,294	0.0153	0.9847	65.44
60.5	34,471,866	574,108	0.0167	0.9833	64.44
61.5	31,464,534	505,409	0.0161	0.9839	63.36
62.5	29,287,799	479,595	0.0164	0.9836	62.35
63.5	26,691,523	494,344	0.0185	0.9815	61.33
64.5	24,407,831	500,983	0.0205	0.9795	60.19
65.5	22,695,451	475,818	0.0210	0.9790	58.95
66.5	21,025,436	531,138	0.0253	0.9747	57.72
67.5	19,511,407	444,709	0.0228	0.9772	56.26
68.5	18,631,624	419,542	0.0225	0.9775	54.98
69.5	17,132,964	356,307	0.0208	0.9792	53.74
70.5	15,765,122	293,851	0.0186	0.9814	52.62
71.5	14,543,747	292,695	0.0201	0.9799	51.64
72.5	13,763,288	200,525	0.0146	0.9854	50.60
73.5	13,824,092	203,337	0.0147	0.9853	49.86
74.5	13,449,161	170,037	0.0126	0.9874	49.13
75.5	13,069,596	178,427	0.0137	0.9863	48.51
76.5	12,709,726	160,799	0.0127	0.9873	47.85
77.5	12,513,844	228,160	0.0182	0.9818	47.24
78.5	12,270,406	189,677	0.0155	0.9845	46.38

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.02 MAINS - REGULAR PRESSURE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1875-2022 EXPERIENCE BAND 1938-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	12,043,181	263,836	0.0219	0.9781	45.66
80.5	11,694,436	170,539	0.0146	0.9854	44.66
81.5	11,291,481	210,673	0.0187	0.9813	44.01
82.5	10,940,016	169,942	0.0155	0.9845	43.19
83.5	10,483,647	157,741	0.0150	0.9850	42.52
84.5	10,233,156	180,948	0.0177	0.9823	41.88
85.5	9,953,704	188,323	0.0189	0.9811	41.14
86.5	9,724,792	185,371	0.0191	0.9809	40.36
87.5	9,512,463	125,639	0.0132	0.9868	39.59
88.5	9,376,551	190,404	0.0203	0.9797	39.07
89.5	9,188,518	243,183	0.0265	0.9735	38.28
90.5	8,907,231	241,202	0.0271	0.9729	37.26
91.5	8,612,641	148,398	0.0172	0.9828	36.25
92.5	8,365,072	290,372	0.0347	0.9653	35.63
93.5	7,989,022	228,447	0.0286	0.9714	34.39
94.5	7,676,079	457,994	0.0597	0.9403	33.41
95.5	7,118,321	185,896	0.0261	0.9739	31.42
96.5	6,801,558	191,069	0.0281	0.9719	30.60
97.5	6,434,366	134,421	0.0209	0.9791	29.74
98.5	6,200,979	110,044	0.0177	0.9823	29.11
99.5	6,147,837	192,289	0.0313	0.9687	28.60
100.5	6,001,488	143,024	0.0238	0.9762	27.70
101.5	5,725,926	92,218	0.0161	0.9839	27.04
102.5	5,614,564	225,783	0.0402	0.9598	26.61
103.5	5,338,012	108,595	0.0203	0.9797	25.54
104.5	5,169,699	127,999	0.0248	0.9752	25.02
105.5	4,717,776	131,058	0.0278	0.9722	24.40
106.5	4,467,980	183,887	0.0412	0.9588	23.72
107.5	4,028,843	153,410	0.0381	0.9619	22.74
108.5	3,441,986	80,767	0.0235	0.9765	21.88
109.5	2,997,100	97,460	0.0325	0.9675	21.37
110.5	1,972,799	41,914	0.0212	0.9788	20.67
111.5	1,891,200	45,324	0.0240	0.9760	20.23
112.5	1,792,227	92,400	0.0516	0.9484	19.75
113.5	1,681,286	62,108	0.0369	0.9631	18.73
114.5	1,577,391	161,276	0.1022	0.8978	18.04
115.5	1,388,874	129,093	0.0929	0.9071	16.19
116.5	1,216,840	156,192	0.1284	0.8716	14.69
117.5	1,022,556	66,811	0.0653	0.9347	12.80
118.5	929,490	44,341	0.0477	0.9523	11.97

PEOPLES NATURAL GAS COMPANY LLC

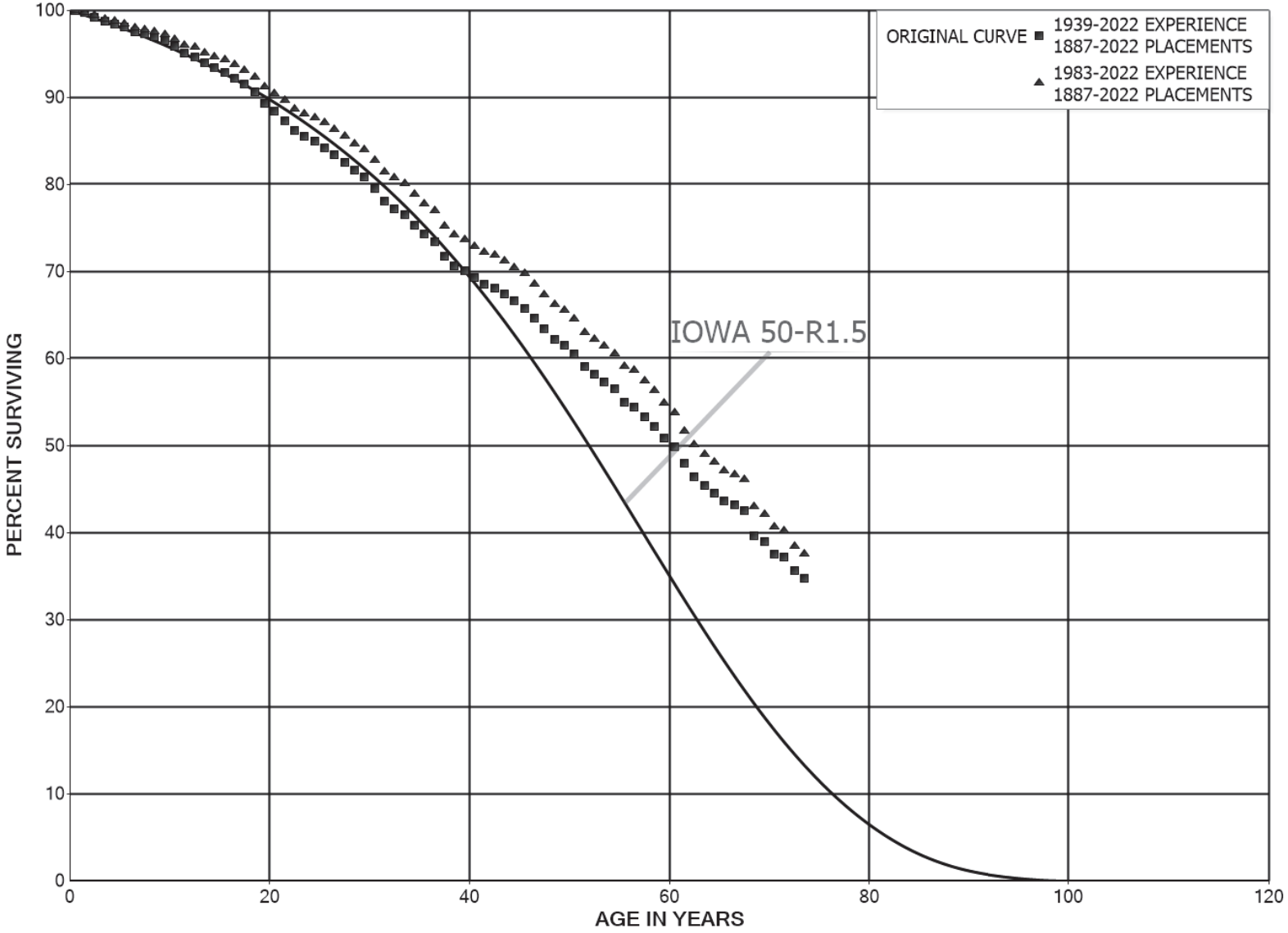
ACCOUNT 376.02 MAINS - REGULAR PRESSURE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1875-2022 EXPERIENCE BAND 1938-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	828,854	30,850	0.0372	0.9628	11.39
120.5	711,114	6,300	0.0089	0.9911	10.97
121.5	680,254	10,304	0.0151	0.9849	10.87
122.5	108,452	8,098	0.0747	0.9253	10.71
123.5	96,228	4,921	0.0511	0.9489	9.91
124.5	91,171	1,178	0.0129	0.9871	9.40
125.5	89,201	2,538	0.0285	0.9715	9.28
126.5	80,203	2,179	0.0272	0.9728	9.02
127.5	77,749	3,472	0.0447	0.9553	8.77
128.5	73,867	1,238	0.0168	0.9832	8.38
129.5	72,610	1,604	0.0221	0.9779	8.24
130.5	71,006	1,715	0.0242	0.9758	8.06
131.5	55,833	10,084	0.1806	0.8194	7.86
132.5	45,672	7,588	0.1661	0.8339	6.44
133.5	27,906	7,939	0.2845	0.7155	5.37
134.5	16,146	5,343	0.3309	0.6691	3.84
135.5	10,803	7,489	0.6933	0.3067	2.57
136.5	3,268	5	0.0016	0.9984	0.79
137.5	286	282	0.9847	0.0153	0.79
138.5	4		0.0000	1.0000	0.01
139.5	4		0.0000	1.0000	0.01
140.5	4		0.0000	1.0000	0.01
141.5	4		0.0000	1.0000	0.01
142.5	4	1	0.3075	0.6925	0.01
143.5	3		0.0000	1.0000	0.01
144.5	3		0.0000	1.0000	0.01
145.5	3		0.0000	1.0000	0.01
146.5					0.01

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1887-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	86,902,830	30,865	0.0004	0.9996	100.00
0.5	82,100,404	236,935	0.0029	0.9971	99.96
1.5	75,244,813	342,278	0.0045	0.9955	99.68
2.5	72,464,028	362,022	0.0050	0.9950	99.22
3.5	70,574,749	203,307	0.0029	0.9971	98.73
4.5	69,354,860	298,608	0.0043	0.9957	98.44
5.5	63,056,066	300,517	0.0048	0.9952	98.02
6.5	61,554,227	184,678	0.0030	0.9970	97.55
7.5	59,119,613	220,733	0.0037	0.9963	97.26
8.5	57,855,191	216,801	0.0037	0.9963	96.90
9.5	55,056,854	417,402	0.0076	0.9924	96.53
10.5	53,894,047	402,203	0.0075	0.9925	95.80
11.5	50,632,463	225,001	0.0044	0.9956	95.09
12.5	50,560,359	383,725	0.0076	0.9924	94.66
13.5	46,931,649	298,851	0.0064	0.9936	93.94
14.5	41,921,585	244,330	0.0058	0.9942	93.35
15.5	40,351,264	256,755	0.0064	0.9936	92.80
16.5	36,626,513	300,847	0.0082	0.9918	92.21
17.5	35,119,524	329,459	0.0094	0.9906	91.45
18.5	33,824,769	485,541	0.0144	0.9856	90.60
19.5	32,291,779	314,573	0.0097	0.9903	89.30
20.5	30,851,186	387,114	0.0125	0.9875	88.43
21.5	28,655,415	364,274	0.0127	0.9873	87.32
22.5	27,562,457	219,417	0.0080	0.9920	86.21
23.5	26,717,043	194,705	0.0073	0.9927	85.52
24.5	25,979,365	215,974	0.0083	0.9917	84.90
25.5	25,333,025	240,532	0.0095	0.9905	84.19
26.5	24,181,843	249,362	0.0103	0.9897	83.39
27.5	23,140,308	267,995	0.0116	0.9884	82.53
28.5	21,715,535	208,187	0.0096	0.9904	81.58
29.5	20,788,543	331,959	0.0160	0.9840	80.79
30.5	19,513,199	365,236	0.0187	0.9813	79.50
31.5	17,741,607	187,952	0.0106	0.9894	78.02
32.5	16,717,242	136,820	0.0082	0.9918	77.19
33.5	15,723,694	258,621	0.0164	0.9836	76.56
34.5	14,495,632	203,555	0.0140	0.9860	75.30
35.5	13,331,777	152,795	0.0115	0.9885	74.24
36.5	12,260,009	282,872	0.0231	0.9769	73.39
37.5	10,813,482	157,637	0.0146	0.9854	71.70
38.5	9,859,904	84,896	0.0086	0.9914	70.65

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1887-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	9,043,622	101,103	0.0112	0.9888	70.04
40.5	7,909,459	81,286	0.0103	0.9897	69.26
41.5	6,455,687	41,477	0.0064	0.9936	68.55
42.5	6,006,001	58,590	0.0098	0.9902	68.11
43.5	5,511,870	66,324	0.0120	0.9880	67.44
44.5	5,016,942	66,079	0.0132	0.9868	66.63
45.5	4,691,223	83,618	0.0178	0.9822	65.75
46.5	4,076,693	78,307	0.0192	0.9808	64.58
47.5	3,719,682	71,112	0.0191	0.9809	63.34
48.5	3,353,520	32,636	0.0097	0.9903	62.13
49.5	3,095,335	50,113	0.0162	0.9838	61.53
50.5	2,747,226	66,379	0.0242	0.9758	60.53
51.5	2,520,301	39,702	0.0158	0.9842	59.07
52.5	2,375,795	33,399	0.0141	0.9859	58.14
53.5	2,212,503	31,307	0.0141	0.9859	57.32
54.5	2,004,197	56,258	0.0281	0.9719	56.51
55.5	1,849,066	17,992	0.0097	0.9903	54.92
56.5	1,750,703	36,460	0.0208	0.9792	54.39
57.5	1,638,585	33,034	0.0202	0.9798	53.26
58.5	1,526,089	39,198	0.0257	0.9743	52.18
59.5	1,400,500	26,876	0.0192	0.9808	50.84
60.5	1,256,592	49,747	0.0396	0.9604	49.87
61.5	1,121,639	33,950	0.0303	0.9697	47.89
62.5	1,025,593	23,231	0.0227	0.9773	46.44
63.5	925,298	17,207	0.0186	0.9814	45.39
64.5	736,277	14,838	0.0202	0.9798	44.55
65.5	653,627	6,683	0.0102	0.9898	43.65
66.5	582,001	9,248	0.0159	0.9841	43.20
67.5	481,476	32,233	0.0669	0.9331	42.52
68.5	413,203	8,000	0.0194	0.9806	39.67
69.5	280,251	9,822	0.0350	0.9650	38.90
70.5	193,378	1,885	0.0097	0.9903	37.54
71.5	144,192	6,167	0.0428	0.9572	37.17
72.5	112,524	2,542	0.0226	0.9774	35.58
73.5	97,805	3,933	0.0402	0.9598	34.78
74.5	90,630	5,272	0.0582	0.9418	33.38
75.5	82,344	3,062	0.0372	0.9628	31.44
76.5	80,299	2,108	0.0263	0.9737	30.27
77.5	78,667	7,014	0.0892	0.9108	29.47
78.5	71,524	4,869	0.0681	0.9319	26.85

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1887-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	64,837	3,533	0.0545	0.9455	25.02
80.5	59,263	7,765	0.1310	0.8690	23.66
81.5	50,717	2,142	0.0422	0.9578	20.56
82.5	45,444	1,324	0.0291	0.9709	19.69
83.5	43,841	3,297	0.0752	0.9248	19.11
84.5	39,508	1,785	0.0452	0.9548	17.68
85.5	32,641	223	0.0068	0.9932	16.88
86.5	32,844	673	0.0205	0.9795	16.76
87.5	35,929	1,361	0.0379	0.9621	16.42
88.5	33,226	2,286	0.0688	0.9312	15.80
89.5	30,878	2,777	0.0899	0.9101	14.71
90.5	27,936	2,272	0.0813	0.9187	13.39
91.5	25,739	1,592	0.0619	0.9381	12.30
92.5	22,702	393	0.0173	0.9827	11.54
93.5	21,326	2,207	0.1035	0.8965	11.34
94.5	16,495	2,769	0.1678	0.8322	10.16
95.5	12,726	1,356	0.1066	0.8934	8.46
96.5	11,342	134	0.0118	0.9882	7.56
97.5	10,671	277	0.0260	0.9740	7.47
98.5	10,106	41	0.0040	0.9960	7.27
99.5	10,065	272	0.0270	0.9730	7.25
100.5	9,271	5	0.0006	0.9994	7.05
101.5	9,061	199	0.0219	0.9781	7.05
102.5	8,862		0.0000	1.0000	6.89
103.5	8,043	510	0.0634	0.9366	6.89
104.5	7,448	819	0.1099	0.8901	6.45
105.5	6,499	376	0.0579	0.9421	5.74
106.5	6,122	3,246	0.5302	0.4698	5.41
107.5	2,118	121	0.0570	0.9430	2.54
108.5	1,520	351	0.2310	0.7690	2.40
109.5	730		0.0000	1.0000	1.84
110.5	700		0.0000	1.0000	1.84
111.5	622		0.0000	1.0000	1.84
112.5	622		0.0000	1.0000	1.84
113.5	622	11	0.0180	0.9820	1.84
114.5	611		0.0000	1.0000	1.81
115.5	578		0.0000	1.0000	1.81
116.5	511		0.0000	1.0000	1.81
117.5	510	60	0.1170	0.8830	1.81
118.5	450		0.0000	1.0000	1.60

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1887-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	450		0.0000	1.0000	1.60
120.5	329		0.0000	1.0000	1.60
121.5	239		0.0000	1.0000	1.60
122.5	99		0.0000	1.0000	1.60
123.5	99		0.0000	1.0000	1.60
124.5					1.60

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1887-2022 EXPERIENCE BAND 1983-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	71,825,383	12,435	0.0002	0.9998	100.00
0.5	68,287,822	148,858	0.0022	0.9978	99.98
1.5	63,228,226	258,506	0.0041	0.9959	99.76
2.5	61,046,658	271,478	0.0044	0.9956	99.36
3.5	59,979,386	120,437	0.0020	0.9980	98.92
4.5	59,452,493	220,191	0.0037	0.9963	98.72
5.5	53,520,542	232,971	0.0044	0.9956	98.35
6.5	52,234,006	98,298	0.0019	0.9981	97.92
7.5	50,720,716	127,289	0.0025	0.9975	97.74
8.5	49,922,346	141,602	0.0028	0.9972	97.49
9.5	47,654,501	289,966	0.0061	0.9939	97.22
10.5	47,024,626	305,449	0.0065	0.9935	96.63
11.5	44,273,556	137,744	0.0031	0.9969	96.00
12.5	44,498,826	301,365	0.0068	0.9932	95.70
13.5	41,149,897	181,653	0.0044	0.9956	95.05
14.5	36,535,908	154,800	0.0042	0.9958	94.63
15.5	35,195,536	189,589	0.0054	0.9946	94.23
16.5	31,741,893	210,418	0.0066	0.9934	93.72
17.5	30,481,420	255,426	0.0084	0.9916	93.10
18.5	29,511,626	368,528	0.0125	0.9875	92.32
19.5	28,403,902	234,230	0.0082	0.9918	91.17
20.5	27,280,848	256,546	0.0094	0.9906	90.42
21.5	25,459,294	282,663	0.0111	0.9889	89.57
22.5	24,629,598	142,403	0.0058	0.9942	88.57
23.5	24,087,240	135,437	0.0056	0.9944	88.06
24.5	23,773,896	148,024	0.0062	0.9938	87.56
25.5	23,398,985	189,367	0.0081	0.9919	87.02
26.5	22,488,703	207,057	0.0092	0.9908	86.32
27.5	21,668,001	220,273	0.0102	0.9898	85.52
28.5	20,439,521	160,260	0.0078	0.9922	84.65
29.5	19,789,030	287,906	0.0145	0.9855	83.99
30.5	18,764,011	315,806	0.0168	0.9832	82.77
31.5	17,183,391	145,376	0.0085	0.9915	81.37
32.5	16,260,253	115,816	0.0071	0.9929	80.68
33.5	15,329,686	242,091	0.0158	0.9842	80.11
34.5	14,134,454	190,830	0.0135	0.9865	78.84
35.5	12,997,157	135,201	0.0104	0.9896	77.78
36.5	11,947,315	271,232	0.0227	0.9773	76.97
37.5	10,519,080	147,460	0.0140	0.9860	75.22
38.5	9,579,462	69,892	0.0073	0.9927	74.17

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1887-2022 EXPERIENCE BAND 1983-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	8,786,249	88,638	0.0101	0.9899	73.63
40.5	7,672,652	73,897	0.0096	0.9904	72.88
41.5	6,233,424	32,170	0.0052	0.9948	72.18
42.5	5,802,847	50,168	0.0086	0.9914	71.81
43.5	5,319,020	56,540	0.0106	0.9894	71.19
44.5	4,847,369	51,604	0.0106	0.9894	70.43
45.5	4,542,068	74,469	0.0164	0.9836	69.68
46.5	3,941,797	70,892	0.0180	0.9820	68.54
47.5	3,597,130	62,576	0.0174	0.9826	67.31
48.5	3,245,178	28,326	0.0087	0.9913	66.14
49.5	2,992,087	45,721	0.0153	0.9847	65.56
50.5	2,651,588	63,718	0.0240	0.9760	64.56
51.5	2,430,303	30,926	0.0127	0.9873	63.01
52.5	2,300,052	29,891	0.0130	0.9870	62.20
53.5	2,148,521	29,904	0.0139	0.9861	61.40
54.5	1,947,737	45,766	0.0235	0.9765	60.54
55.5	1,806,293	16,667	0.0092	0.9908	59.12
56.5	1,710,354	34,783	0.0203	0.9797	58.57
57.5	1,604,252	31,378	0.0196	0.9804	57.38
58.5	1,497,554	38,568	0.0258	0.9742	56.26
59.5	1,374,518	26,292	0.0191	0.9809	54.81
60.5	1,232,921	49,141	0.0399	0.9601	53.76
61.5	1,099,618	33,655	0.0306	0.9694	51.62
62.5	1,005,146	22,590	0.0225	0.9775	50.04
63.5	906,565	16,463	0.0182	0.9818	48.92
64.5	720,012	14,154	0.0197	0.9803	48.03
65.5	638,176	6,260	0.0098	0.9902	47.08
66.5	567,162	7,424	0.0131	0.9869	46.62
67.5	470,631	31,918	0.0678	0.9322	46.01
68.5	408,148	7,706	0.0189	0.9811	42.89
69.5	276,381	9,815	0.0355	0.9645	42.08
70.5	189,549	1,834	0.0097	0.9903	40.59
71.5	141,008	6,161	0.0437	0.9563	40.19
72.5	109,696	2,521	0.0230	0.9770	38.44
73.5	95,530	3,922	0.0411	0.9589	37.55
74.5	88,391	5,272	0.0596	0.9404	36.01
75.5	80,204	3,059	0.0381	0.9619	33.86
76.5	78,335	2,108	0.0269	0.9731	32.57
77.5	77,194	7,011	0.0908	0.9092	31.70
78.5	70,222	4,658	0.0663	0.9337	28.82

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1887-2022 EXPERIENCE BAND 1983-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	63,757	3,533	0.0554	0.9446	26.91
80.5	58,203	7,765	0.1334	0.8666	25.42
81.5	49,663	2,113	0.0426	0.9574	22.02
82.5	44,620	1,278	0.0287	0.9713	21.09
83.5	43,320	3,297	0.0761	0.9239	20.48
84.5	38,970	1,669	0.0428	0.9572	18.92
85.5	32,247	223	0.0069	0.9931	18.11
86.5	32,449	673	0.0208	0.9792	17.99
87.5	35,685	1,361	0.0381	0.9619	17.62
88.5	32,982	2,286	0.0693	0.9307	16.94
89.5	30,634	2,731	0.0892	0.9108	15.77
90.5	27,738	2,272	0.0819	0.9181	14.36
91.5	25,540	1,592	0.0623	0.9377	13.19
92.5	22,503	393	0.0175	0.9825	12.36
93.5	21,127	2,207	0.1045	0.8955	12.15
94.5	16,297	2,769	0.1699	0.8301	10.88
95.5	12,726	1,356	0.1066	0.8934	9.03
96.5	11,342	134	0.0118	0.9882	8.07
97.5	10,671	277	0.0260	0.9740	7.97
98.5	10,106	41	0.0040	0.9960	7.77
99.5	10,065	272	0.0270	0.9730	7.74
100.5	9,271	5	0.0006	0.9994	7.53
101.5	9,061	199	0.0219	0.9781	7.52
102.5	8,862		0.0000	1.0000	7.36
103.5	8,043	510	0.0634	0.9366	7.36
104.5	7,448	819	0.1099	0.8901	6.89
105.5	6,499	376	0.0579	0.9421	6.13
106.5	6,122	3,246	0.5302	0.4698	5.78
107.5	2,118	121	0.0570	0.9430	2.71
108.5	1,520	351	0.2310	0.7690	2.56
109.5	730		0.0000	1.0000	1.97
110.5	700		0.0000	1.0000	1.97
111.5	622		0.0000	1.0000	1.97
112.5	622		0.0000	1.0000	1.97
113.5	622	11	0.0180	0.9820	1.97
114.5	611		0.0000	1.0000	1.93
115.5	578		0.0000	1.0000	1.93
116.5	511		0.0000	1.0000	1.93
117.5	510	60	0.1170	0.8830	1.93
118.5	450		0.0000	1.0000	1.71

PEOPLES NATURAL GAS COMPANY LLC

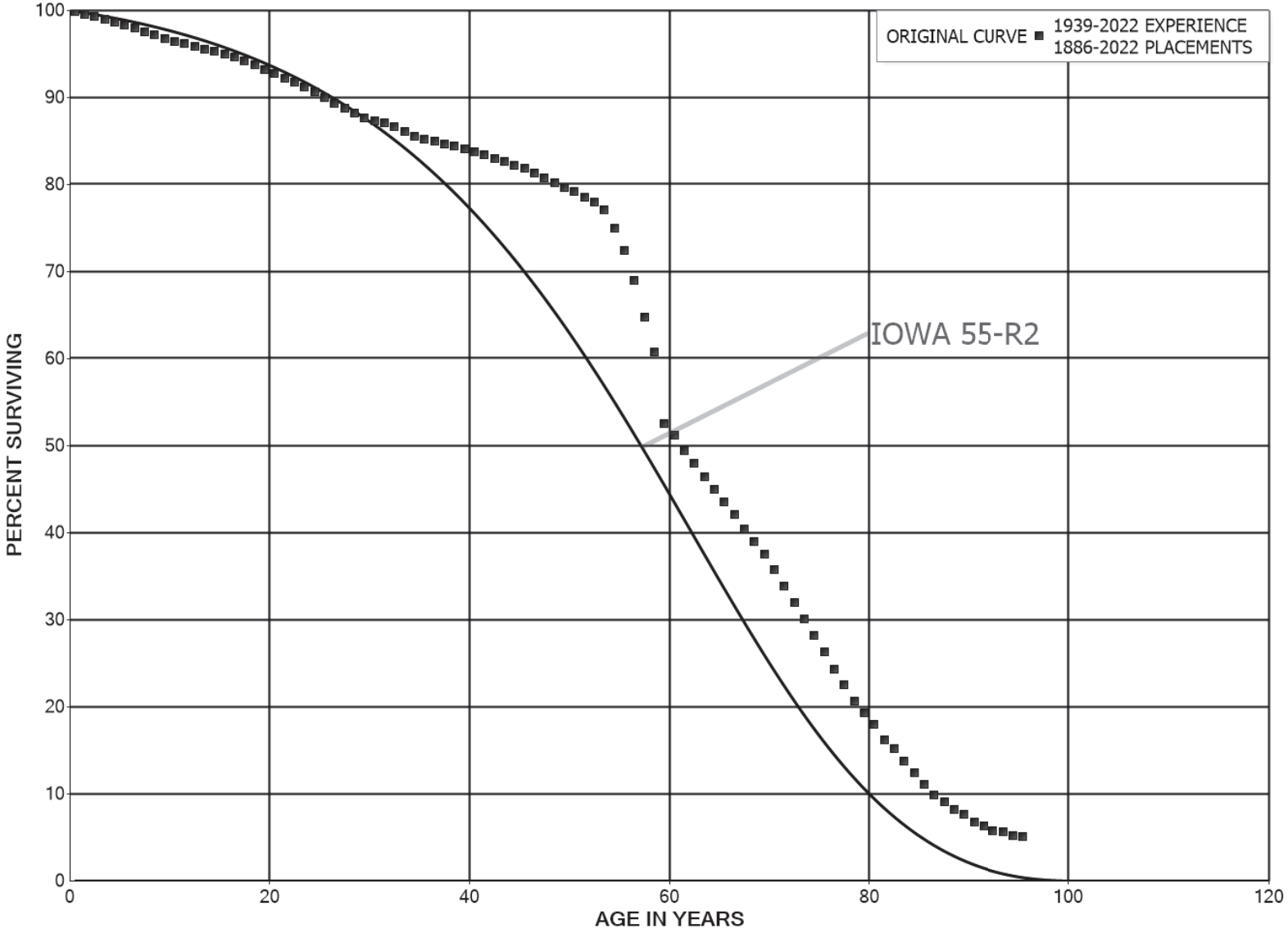
ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1887-2022 EXPERIENCE BAND 1983-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	450		0.0000	1.0000	1.71
120.5	329		0.0000	1.0000	1.71
121.5	239		0.0000	1.0000	1.71
122.5	99		0.0000	1.0000	1.71
123.5	99		0.0000	1.0000	1.71
124.5					1.71

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 380.00 SERVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 380.00 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1886-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	772,933,353	971,486	0.0013	0.9987	100.00
0.5	731,966,121	2,442,554	0.0033	0.9967	99.87
1.5	687,747,085	2,027,054	0.0029	0.9971	99.54
2.5	652,594,366	2,108,215	0.0032	0.9968	99.25
3.5	611,126,420	1,994,780	0.0033	0.9967	98.93
4.5	570,777,057	1,944,066	0.0034	0.9966	98.60
5.5	546,672,671	1,971,914	0.0036	0.9964	98.27
6.5	523,657,870	2,239,802	0.0043	0.9957	97.91
7.5	501,847,431	1,572,302	0.0031	0.9969	97.50
8.5	484,696,009	2,227,693	0.0046	0.9954	97.19
9.5	472,628,176	1,603,469	0.0034	0.9966	96.74
10.5	451,395,362	1,361,711	0.0030	0.9970	96.41
11.5	438,290,545	1,388,171	0.0032	0.9968	96.12
12.5	431,219,092	1,308,822	0.0030	0.9970	95.82
13.5	419,054,419	1,219,702	0.0029	0.9971	95.53
14.5	407,453,847	1,409,234	0.0035	0.9965	95.25
15.5	396,129,750	1,348,024	0.0034	0.9966	94.92
16.5	381,004,150	1,722,456	0.0045	0.9955	94.60
17.5	364,048,756	1,755,203	0.0048	0.9952	94.17
18.5	345,952,309	2,011,543	0.0058	0.9942	93.72
19.5	332,452,010	1,668,508	0.0050	0.9950	93.17
20.5	319,109,751	1,664,531	0.0052	0.9948	92.70
21.5	303,705,216	1,702,015	0.0056	0.9944	92.22
22.5	298,075,288	1,703,044	0.0057	0.9943	91.70
23.5	284,307,038	1,744,976	0.0061	0.9939	91.18
24.5	274,887,188	1,893,176	0.0069	0.9931	90.62
25.5	255,952,613	1,881,201	0.0073	0.9927	90.00
26.5	243,497,310	1,580,882	0.0065	0.9935	89.33
27.5	229,650,971	1,505,227	0.0066	0.9934	88.75
28.5	214,354,952	1,326,579	0.0062	0.9938	88.17
29.5	202,061,394	708,745	0.0035	0.9965	87.63
30.5	185,265,663	593,216	0.0032	0.9968	87.32
31.5	174,931,848	823,804	0.0047	0.9953	87.04
32.5	161,119,042	1,117,010	0.0069	0.9931	86.63
33.5	154,506,870	952,821	0.0062	0.9938	86.03
34.5	143,402,215	579,675	0.0040	0.9960	85.50
35.5	125,883,702	388,217	0.0031	0.9969	85.15
36.5	120,475,819	387,978	0.0032	0.9968	84.89
37.5	108,561,061	289,337	0.0027	0.9973	84.62
38.5	96,815,752	343,919	0.0036	0.9964	84.39

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 380.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1886-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	90,426,523	384,187	0.0042	0.9958	84.09
40.5	80,740,779	341,579	0.0042	0.9958	83.73
41.5	68,942,419	323,808	0.0047	0.9953	83.38
42.5	61,722,040	286,151	0.0046	0.9954	82.99
43.5	55,341,721	257,186	0.0046	0.9954	82.60
44.5	48,142,865	255,064	0.0053	0.9947	82.22
45.5	44,427,375	275,790	0.0062	0.9938	81.78
46.5	40,602,723	293,530	0.0072	0.9928	81.28
47.5	37,635,811	236,740	0.0063	0.9937	80.69
48.5	34,716,487	235,958	0.0068	0.9932	80.18
49.5	31,842,569	192,618	0.0060	0.9940	79.64
50.5	28,891,775	224,150	0.0078	0.9922	79.16
51.5	25,834,527	207,635	0.0080	0.9920	78.54
52.5	22,860,474	246,526	0.0108	0.9892	77.91
53.5	20,341,146	549,785	0.0270	0.9730	77.07
54.5	17,554,561	615,119	0.0350	0.9650	74.99
55.5	15,343,877	723,004	0.0471	0.9529	72.36
56.5	12,870,763	790,328	0.0614	0.9386	68.95
57.5	10,376,831	631,782	0.0609	0.9391	64.72
58.5	8,284,692	1,124,902	0.1358	0.8642	60.78
59.5	5,719,063	144,915	0.0253	0.9747	52.52
60.5	4,540,495	162,285	0.0357	0.9643	51.19
61.5	3,482,241	99,695	0.0286	0.9714	49.36
62.5	2,975,530	96,445	0.0324	0.9676	47.95
63.5	2,510,423	75,869	0.0302	0.9698	46.40
64.5	2,182,440	71,805	0.0329	0.9671	44.99
65.5	1,912,957	62,118	0.0325	0.9675	43.51
66.5	1,690,082	68,152	0.0403	0.9597	42.10
67.5	1,504,496	53,933	0.0358	0.9642	40.40
68.5	1,355,901	49,539	0.0365	0.9635	38.95
69.5	1,248,632	60,597	0.0485	0.9515	37.53
70.5	1,145,517	60,523	0.0528	0.9472	35.71
71.5	1,045,359	58,795	0.0562	0.9438	33.82
72.5	952,808	54,772	0.0575	0.9425	31.92
73.5	861,623	55,554	0.0645	0.9355	30.09
74.5	771,165	51,794	0.0672	0.9328	28.15
75.5	696,180	50,977	0.0732	0.9268	26.26
76.5	629,018	47,701	0.0758	0.9242	24.33
77.5	577,467	47,208	0.0817	0.9183	22.49
78.5	523,107	34,525	0.0660	0.9340	20.65

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 380.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1886-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	484,351	34,091	0.0704	0.9296	19.29
80.5	440,781	42,876	0.0973	0.9027	17.93
81.5	385,099	23,819	0.0619	0.9381	16.18
82.5	355,283	34,358	0.0967	0.9033	15.18
83.5	316,578	31,578	0.0997	0.9003	13.72
84.5	283,386	29,365	0.1036	0.8964	12.35
85.5	250,761	27,427	0.1094	0.8906	11.07
86.5	220,260	17,570	0.0798	0.9202	9.86
87.5	200,938	19,698	0.0980	0.9020	9.07
88.5	179,856	12,720	0.0707	0.9293	8.18
89.5	165,319	18,910	0.1144	0.8856	7.60
90.5	144,033	9,158	0.0636	0.9364	6.73
91.5	132,533	11,368	0.0858	0.9142	6.31
92.5	117,659	4,011	0.0341	0.9659	5.76
93.5	110,949	7,043	0.0635	0.9365	5.57
94.5	100,959	3,194	0.0316	0.9684	5.21
95.5	96,256	2,831	0.0294	0.9706	5.05
96.5	90,247	2,633	0.0292	0.9708	4.90
97.5	85,784	1,001	0.0117	0.9883	4.76
98.5	83,627	4,085	0.0488	0.9512	4.70
99.5	78,077	4,617	0.0591	0.9409	4.47
100.5	72,236	5,266	0.0729	0.9271	4.21
101.5	63,195	8,460	0.1339	0.8661	3.90
102.5	53,840	9,092	0.1689	0.8311	3.38
103.5	44,748	6,106	0.1365	0.8635	2.81
104.5	38,642	5,527	0.1430	0.8570	2.43
105.5	33,115	4,951	0.1495	0.8505	2.08
106.5	28,164	7,578	0.2691	0.7309	1.77
107.5	20,586	1,405	0.0683	0.9317	1.29
108.5	19,181	324	0.0169	0.9831	1.20
109.5	18,857	16	0.0009	0.9991	1.18
110.5	18,840		0.0000	1.0000	1.18
111.5	18,840	1	0.0000	1.0000	1.18
112.5	18,840		0.0000	1.0000	1.18
113.5	18,496		0.0000	1.0000	1.18
114.5	15,511		0.0000	1.0000	1.18
115.5	11,377		0.0000	1.0000	1.18
116.5	7,552		0.0000	1.0000	1.18
117.5	3,539		0.0000	1.0000	1.18
118.5	2,595		0.0000	1.0000	1.18

PEOPLES NATURAL GAS COMPANY LLC

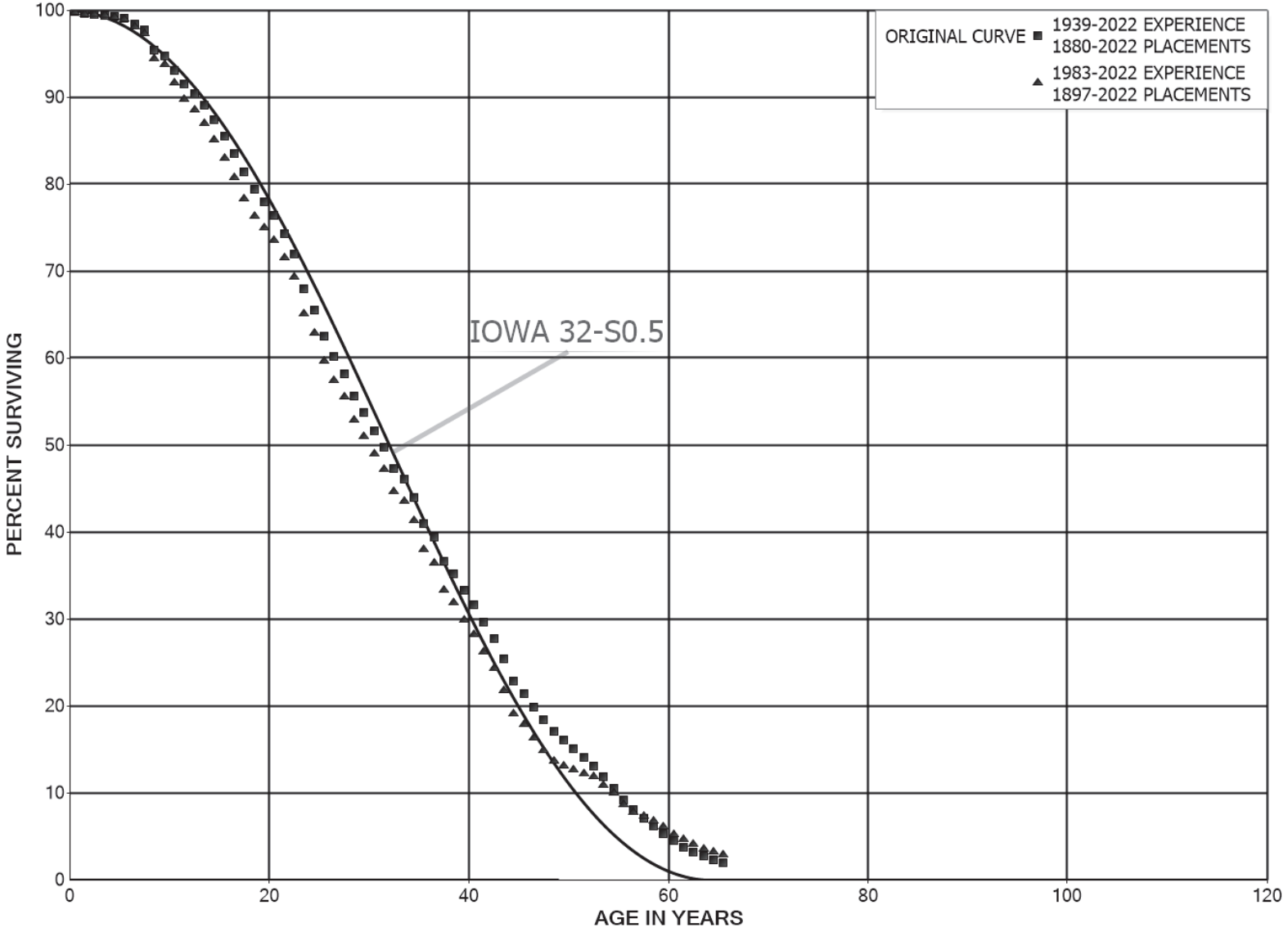
ACCOUNT 380.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1886-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	2,052		0.0000	1.0000	1.18
120.5	1,653		0.0000	1.0000	1.18
121.5	15		0.0000	1.0000	1.18
122.5					1.18

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 381.00 METERS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 381.00 METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1880-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	156,234,321	340,536	0.0022	0.9978	100.00
0.5	149,508,367	254,680	0.0017	0.9983	99.78
1.5	144,554,369	97,686	0.0007	0.9993	99.61
2.5	128,004,537	129,118	0.0010	0.9990	99.54
3.5	114,094,551	233,853	0.0020	0.9980	99.44
4.5	99,960,695	201,334	0.0020	0.9980	99.24
5.5	89,185,538	613,112	0.0069	0.9931	99.04
6.5	82,593,261	544,747	0.0066	0.9934	98.36
7.5	78,964,698	1,854,177	0.0235	0.9765	97.71
8.5	74,648,348	516,030	0.0069	0.9931	95.42
9.5	72,518,724	1,309,824	0.0181	0.9819	94.76
10.5	68,461,147	1,142,448	0.0167	0.9833	93.05
11.5	65,270,528	817,799	0.0125	0.9875	91.49
12.5	60,664,258	891,378	0.0147	0.9853	90.35
13.5	58,308,895	1,093,977	0.0188	0.9812	89.02
14.5	55,901,297	1,172,871	0.0210	0.9790	87.35
15.5	53,003,020	1,221,042	0.0230	0.9770	85.52
16.5	50,638,846	1,301,225	0.0257	0.9743	83.55
17.5	48,468,772	1,179,175	0.0243	0.9757	81.40
18.5	46,595,342	855,326	0.0184	0.9816	79.42
19.5	44,717,673	894,490	0.0200	0.9800	77.96
20.5	42,381,868	1,167,567	0.0275	0.9725	76.40
21.5	39,700,608	1,283,933	0.0323	0.9677	74.30
22.5	37,923,669	2,094,492	0.0552	0.9448	71.89
23.5	35,511,263	1,242,135	0.0350	0.9650	67.92
24.5	33,558,317	1,583,552	0.0472	0.9528	65.55
25.5	31,209,431	1,151,687	0.0369	0.9631	62.45
26.5	29,722,515	953,041	0.0321	0.9679	60.15
27.5	28,187,664	1,260,510	0.0447	0.9553	58.22
28.5	26,127,134	874,382	0.0335	0.9665	55.62
29.5	24,078,092	944,261	0.0392	0.9608	53.76
30.5	22,581,861	824,375	0.0365	0.9635	51.65
31.5	21,273,496	1,048,237	0.0493	0.9507	49.76
32.5	19,577,045	521,153	0.0266	0.9734	47.31
33.5	18,391,002	825,191	0.0449	0.9551	46.05
34.5	16,720,248	1,161,397	0.0695	0.9305	43.98
35.5	14,610,183	556,993	0.0381	0.9619	40.93
36.5	13,563,621	950,456	0.0701	0.9299	39.37
37.5	12,326,453	486,657	0.0395	0.9605	36.61
38.5	11,784,983	640,191	0.0543	0.9457	35.17

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 381.00 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1880-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	11,108,175	536,062	0.0483	0.9517	33.25
40.5	10,247,863	643,948	0.0628	0.9372	31.65
41.5	9,490,369	616,715	0.0650	0.9350	29.66
42.5	8,469,096	726,846	0.0858	0.9142	27.73
43.5	7,486,695	735,785	0.0983	0.9017	25.35
44.5	6,381,722	413,221	0.0648	0.9352	22.86
45.5	5,737,075	422,574	0.0737	0.9263	21.38
46.5	5,106,304	369,355	0.0723	0.9277	19.81
47.5	4,392,722	316,338	0.0720	0.9280	18.37
48.5	3,849,372	222,858	0.0579	0.9421	17.05
49.5	3,413,117	208,345	0.0610	0.9390	16.06
50.5	2,896,193	196,828	0.0680	0.9320	15.08
51.5	2,548,782	182,703	0.0717	0.9283	14.06
52.5	2,206,000	209,446	0.0949	0.9051	13.05
53.5	1,800,626	192,189	0.1067	0.8933	11.81
54.5	1,480,979	188,738	0.1274	0.8726	10.55
55.5	1,294,665	162,156	0.1252	0.8748	9.21
56.5	1,133,681	133,876	0.1181	0.8819	8.05
57.5	989,305	126,576	0.1279	0.8721	7.10
58.5	854,902	122,959	0.1438	0.8562	6.19
59.5	680,561	107,039	0.1573	0.8427	5.30
60.5	532,816	84,581	0.1587	0.8413	4.47
61.5	447,719	69,648	0.1556	0.8444	3.76
62.5	367,363	57,247	0.1558	0.8442	3.17
63.5	293,597	45,033	0.1534	0.8466	2.68
64.5	230,834	37,703	0.1633	0.8367	2.27
65.5	172,841	29,950	0.1733	0.8267	1.90
66.5	138,853	26,179	0.1885	0.8115	1.57
67.5	112,147	22,285	0.1987	0.8013	1.27
68.5	90,208	17,403	0.1929	0.8071	1.02
69.5	74,353	19,060	0.2563	0.7437	0.82
70.5	56,873	17,881	0.3144	0.6856	0.61
71.5	39,313	9,394	0.2390	0.7610	0.42
72.5	31,301	6,427	0.2053	0.7947	0.32
73.5	25,277	4,681	0.1852	0.8148	0.25
74.5	20,856	3,895	0.1868	0.8132	0.21
75.5	17,119	4,183	0.2444	0.7556	0.17
76.5	13,086	4,505	0.3443	0.6557	0.13
77.5	8,581	2,804	0.3268	0.6732	0.08
78.5	5,777	2,062	0.3570	0.6430	0.06

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 381.00 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1880-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	3,715	747	0.2011	0.7989	0.04
80.5	2,992	766	0.2561	0.7439	0.03
81.5	2,226	755	0.3392	0.6608	0.02
82.5	1,471	213	0.1448	0.8552	0.01
83.5	1,258	171	0.1356	0.8644	0.01
84.5	1,087	63	0.0575	0.9425	0.01
85.5	1,081	575	0.5313	0.4687	0.01
86.5	507	276	0.5443	0.4557	0.00
87.5	238	17	0.0731	0.9269	0.00
88.5	221	1	0.0045	0.9955	0.00
89.5	192	64	0.3323	0.6677	0.00
90.5	128	15	0.1146	0.8854	0.00
91.5	113	7	0.0608	0.9392	0.00
92.5	106		0.0000	1.0000	0.00
93.5	106	7	0.0679	0.9321	0.00
94.5	56	24	0.4241	0.5759	0.00
95.5	32		0.0000	1.0000	0.00
96.5	32	32	0.9997	0.0003	0.00
97.5					0.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 381.00 METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1897-2022 EXPERIENCE BAND 1983-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	129,269,099	334,979	0.0026	0.9974	100.00
0.5	124,602,082	235,686	0.0019	0.9981	99.74
1.5	121,193,840	83,106	0.0007	0.9993	99.55
2.5	106,179,420	112,859	0.0011	0.9989	99.48
3.5	93,326,720	213,517	0.0023	0.9977	99.38
4.5	80,110,373	181,586	0.0023	0.9977	99.15
5.5	70,252,564	589,011	0.0084	0.9916	98.93
6.5	64,345,763	522,088	0.0081	0.9919	98.10
7.5	61,573,725	1,813,885	0.0295	0.9705	97.30
8.5	57,934,034	465,362	0.0080	0.9920	94.43
9.5	56,508,628	1,264,291	0.0224	0.9776	93.68
10.5	53,513,320	1,052,029	0.0197	0.9803	91.58
11.5	51,154,797	743,342	0.0145	0.9855	89.78
12.5	47,016,858	807,136	0.0172	0.9828	88.47
13.5	45,278,087	973,115	0.0215	0.9785	86.96
14.5	43,318,955	1,062,001	0.0245	0.9755	85.09
15.5	40,852,100	1,106,886	0.0271	0.9729	83.00
16.5	39,180,469	1,171,155	0.0299	0.9701	80.75
17.5	37,493,443	1,000,674	0.0267	0.9733	78.34
18.5	36,036,583	629,224	0.0175	0.9825	76.25
19.5	34,772,663	630,474	0.0181	0.9819	74.92
20.5	33,167,206	915,603	0.0276	0.9724	73.56
21.5	31,242,002	988,554	0.0316	0.9684	71.53
22.5	30,219,029	1,829,382	0.0605	0.9395	69.26
23.5	28,390,347	990,476	0.0349	0.9651	65.07
24.5	26,965,784	1,357,277	0.0503	0.9497	62.80
25.5	25,221,679	968,173	0.0384	0.9616	59.64
26.5	24,203,545	783,986	0.0324	0.9676	57.35
27.5	23,132,467	1,121,391	0.0485	0.9515	55.49
28.5	21,296,144	731,653	0.0344	0.9656	52.80
29.5	19,501,098	784,761	0.0402	0.9598	50.99
30.5	18,258,827	672,417	0.0368	0.9632	48.94
31.5	17,213,650	920,466	0.0535	0.9465	47.13
32.5	15,710,787	405,808	0.0258	0.9742	44.61
33.5	14,681,023	718,061	0.0489	0.9511	43.46
34.5	13,128,980	1,062,980	0.0810	0.9190	41.34
35.5	11,140,627	463,188	0.0416	0.9584	37.99
36.5	10,178,144	861,170	0.0846	0.9154	36.41
37.5	8,986,584	399,154	0.0444	0.9556	33.33
38.5	8,501,225	541,718	0.0637	0.9363	31.85

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 381.00 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1897-2022 EXPERIENCE BAND 1983-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	7,911,989	424,442	0.0536	0.9464	29.82
40.5	7,130,786	519,222	0.0728	0.9272	28.22
41.5	6,467,556	473,763	0.0733	0.9267	26.16
42.5	5,573,621	576,165	0.1034	0.8966	24.25
43.5	4,739,976	579,406	0.1222	0.8778	21.74
44.5	3,793,246	255,120	0.0673	0.9327	19.08
45.5	3,308,191	284,035	0.0859	0.9141	17.80
46.5	2,821,019	239,639	0.0849	0.9151	16.27
47.5	2,233,597	186,267	0.0834	0.9166	14.89
48.5	1,808,799	77,847	0.0430	0.9570	13.65
49.5	1,510,612	53,668	0.0355	0.9645	13.06
50.5	1,142,744	42,422	0.0371	0.9629	12.60
51.5	947,985	26,562	0.0280	0.9720	12.13
52.5	769,711	60,173	0.0782	0.9218	11.79
53.5	517,585	43,750	0.0845	0.9155	10.87
54.5	355,485	46,848	0.1318	0.8682	9.95
55.5	332,801	35,570	0.1069	0.8931	8.64
56.5	330,427	19,224	0.0582	0.9418	7.71
57.5	314,867	22,151	0.0703	0.9297	7.27
58.5	306,065	33,501	0.1095	0.8905	6.75
59.5	242,141	32,085	0.1325	0.8675	6.02
60.5	187,700	23,677	0.1261	0.8739	5.22
61.5	181,210	21,835	0.1205	0.8795	4.56
62.5	164,553	18,898	0.1148	0.8852	4.01
63.5	138,414	14,728	0.1064	0.8936	3.55
64.5	111,548	10,666	0.0956	0.9044	3.17
65.5	87,347	8,264	0.0946	0.9054	2.87
66.5	80,581	11,428	0.1418	0.8582	2.60
67.5	73,668	12,020	0.1632	0.8368	2.23
68.5	66,439	11,748	0.1768	0.8232	1.87
69.5	57,357	15,523	0.2706	0.7294	1.54
70.5	44,324	15,906	0.3589	0.6411	1.12
71.5	29,388	7,731	0.2631	0.7369	0.72
72.5	23,906	5,394	0.2256	0.7744	0.53
73.5	19,765	4,318	0.2184	0.7816	0.41
74.5	16,452	3,442	0.2092	0.7908	0.32
75.5	13,400	3,628	0.2707	0.7293	0.25
76.5	10,547	4,285	0.4062	0.5938	0.18
77.5	7,068	2,527	0.3575	0.6425	0.11
78.5	4,680	1,998	0.4269	0.5731	0.07

PEOPLES NATURAL GAS COMPANY LLC

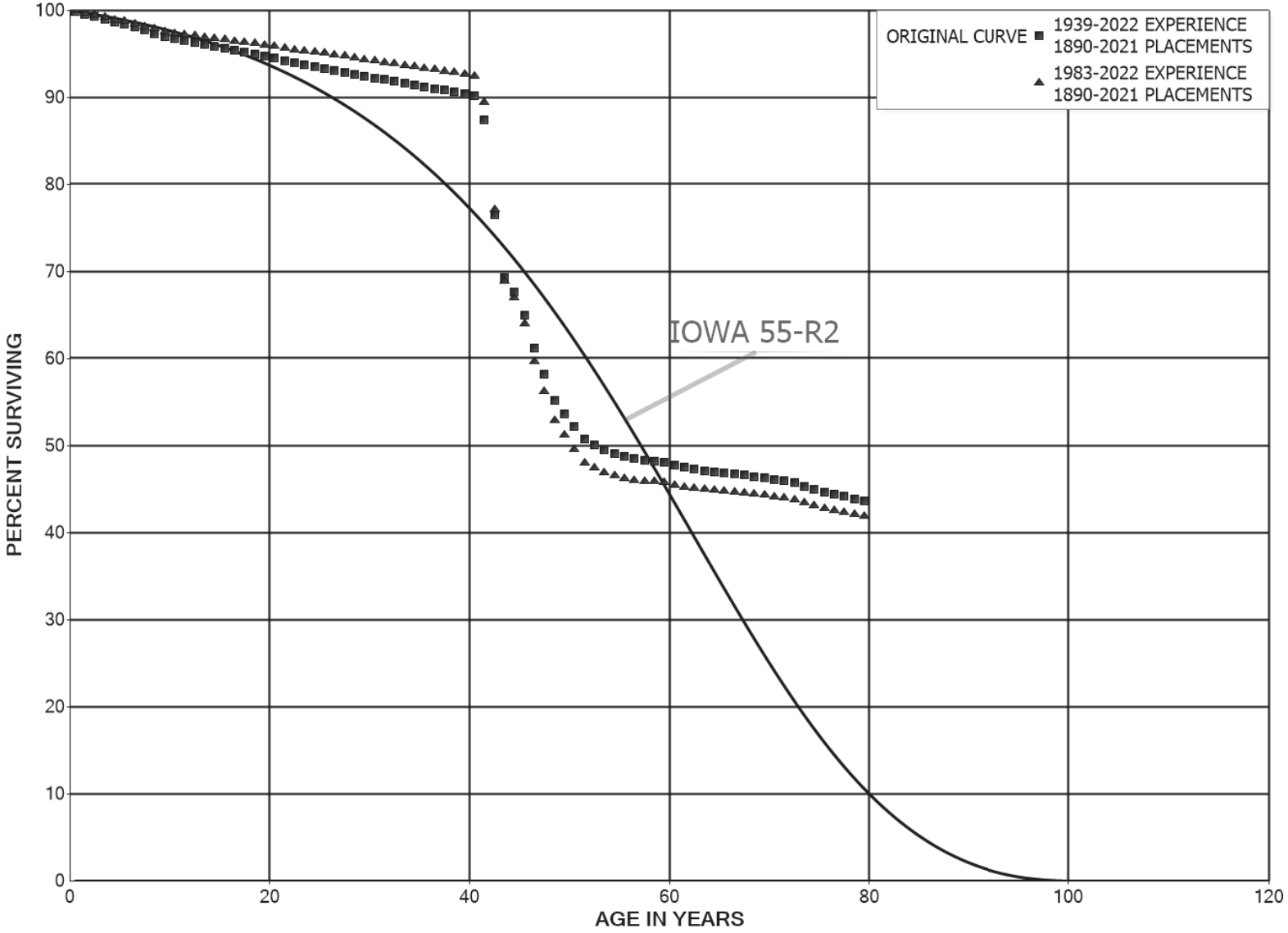
ACCOUNT 381.00 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1897-2022 EXPERIENCE BAND 1983-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	2,856	705	0.2467	0.7533	0.04
80.5	2,274	705	0.3103	0.6897	0.03
81.5	1,716	726	0.4230	0.5770	0.02
82.5	1,167	185	0.1588	0.8412	0.01
83.5	998	171	0.1711	0.8289	0.01
84.5	827	63	0.0756	0.9244	0.01
85.5	1,060	575	0.5420	0.4580	0.01
86.5	486	265	0.5461	0.4539	0.00
87.5	227	7	0.0297	0.9703	0.00
88.5	221	1	0.0045	0.9955	0.00
89.5	192	64	0.3323	0.6677	0.00
90.5	128	15	0.1146	0.8854	0.00
91.5	113	7	0.0608	0.9392	0.00
92.5	106		0.0000	1.0000	0.00
93.5	106	7	0.0679	0.9321	0.00
94.5	56	24	0.4241	0.5759	0.00
95.5	32		0.0000	1.0000	0.00
96.5	32	32	0.9997	0.0003	0.00
97.5					0.00

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 382.00 METER INSTALLATIONS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 382.00 METER INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1890-2021 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	89,602,413	101,335	0.0011	0.9989	100.00
0.5	89,624,778	318,158	0.0035	0.9965	99.89
1.5	85,600,468	246,085	0.0029	0.9971	99.53
2.5	82,595,983	243,821	0.0030	0.9970	99.25
3.5	79,467,781	244,249	0.0031	0.9969	98.95
4.5	76,984,207	207,567	0.0027	0.9973	98.65
5.5	73,907,567	230,163	0.0031	0.9969	98.38
6.5	71,233,631	280,370	0.0039	0.9961	98.08
7.5	68,952,044	253,773	0.0037	0.9963	97.69
8.5	67,130,493	263,601	0.0039	0.9961	97.33
9.5	65,871,300	147,616	0.0022	0.9978	96.95
10.5	63,888,646	144,578	0.0023	0.9977	96.73
11.5	61,882,170	139,781	0.0023	0.9977	96.51
12.5	59,122,173	134,607	0.0023	0.9977	96.29
13.5	56,005,546	125,963	0.0022	0.9978	96.08
14.5	53,063,937	126,199	0.0024	0.9976	95.86
15.5	50,604,840	121,832	0.0024	0.9976	95.63
16.5	48,372,135	119,449	0.0025	0.9975	95.40
17.5	45,629,240	100,839	0.0022	0.9978	95.17
18.5	43,096,499	95,658	0.0022	0.9978	94.96
19.5	41,323,148	97,481	0.0024	0.9976	94.74
20.5	38,780,634	150,749	0.0039	0.9961	94.52
21.5	37,202,281	96,059	0.0026	0.9974	94.15
22.5	36,295,298	76,296	0.0021	0.9979	93.91
23.5	35,158,636	77,841	0.0022	0.9978	93.71
24.5	33,930,842	73,260	0.0022	0.9978	93.51
25.5	32,257,041	72,180	0.0022	0.9978	93.30
26.5	30,600,097	74,080	0.0024	0.9976	93.09
27.5	29,158,297	72,686	0.0025	0.9975	92.87
28.5	27,630,287	66,337	0.0024	0.9976	92.64
29.5	26,269,269	57,002	0.0022	0.9978	92.42
30.5	24,324,751	52,119	0.0021	0.9979	92.22
31.5	22,784,176	50,443	0.0022	0.9978	92.02
32.5	21,566,209	50,944	0.0024	0.9976	91.81
33.5	20,578,261	46,969	0.0023	0.9977	91.60
34.5	19,412,001	46,020	0.0024	0.9976	91.39
35.5	18,445,271	39,805	0.0022	0.9978	91.17
36.5	17,556,092	36,702	0.0021	0.9979	90.97
37.5	16,491,367	37,502	0.0023	0.9977	90.78
38.5	15,480,964	31,909	0.0021	0.9979	90.58

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 382.00 METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1890-2021 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	14,663,616	43,754	0.0030	0.9970	90.39
40.5	13,548,932	412,637	0.0305	0.9695	90.12
41.5	12,225,037	1,516,481	0.1240	0.8760	87.38
42.5	10,120,781	954,906	0.0944	0.9056	76.54
43.5	8,413,943	206,894	0.0246	0.9754	69.32
44.5	7,408,863	289,147	0.0390	0.9610	67.61
45.5	6,689,703	391,902	0.0586	0.9414	64.97
46.5	6,167,844	303,552	0.0492	0.9508	61.17
47.5	5,619,044	287,783	0.0512	0.9488	58.16
48.5	5,164,127	145,203	0.0281	0.9719	55.18
49.5	4,749,763	127,418	0.0268	0.9732	53.63
50.5	4,355,206	121,243	0.0278	0.9722	52.19
51.5	4,041,689	54,292	0.0134	0.9866	50.74
52.5	3,846,162	44,545	0.0116	0.9884	50.05
53.5	3,688,452	31,076	0.0084	0.9916	49.47
54.5	3,553,035	24,860	0.0070	0.9930	49.06
55.5	3,447,945	15,832	0.0046	0.9954	48.71
56.5	3,366,801	10,977	0.0033	0.9967	48.49
57.5	3,264,701	7,974	0.0024	0.9976	48.33
58.5	3,136,711	11,798	0.0038	0.9962	48.21
59.5	3,020,829	20,124	0.0067	0.9933	48.03
60.5	2,864,210	15,405	0.0054	0.9946	47.71
61.5	2,702,244	9,987	0.0037	0.9963	47.46
62.5	2,567,571	9,393	0.0037	0.9963	47.28
63.5	2,416,653	9,404	0.0039	0.9961	47.11
64.5	2,256,291	6,540	0.0029	0.9971	46.92
65.5	2,088,755	5,106	0.0024	0.9976	46.79
66.5	1,907,655	4,657	0.0024	0.9976	46.67
67.5	1,757,130	4,694	0.0027	0.9973	46.56
68.5	1,638,469	5,571	0.0034	0.9966	46.44
69.5	1,541,780	6,326	0.0041	0.9959	46.28
70.5	1,469,173	5,819	0.0040	0.9960	46.09
71.5	1,372,733	6,636	0.0048	0.9952	45.91
72.5	1,278,895	9,858	0.0077	0.9923	45.68
73.5	1,170,055	10,721	0.0092	0.9908	45.33
74.5	1,110,624	6,425	0.0058	0.9942	44.92
75.5	1,071,423	7,127	0.0067	0.9933	44.66
76.5	1,040,131	4,807	0.0046	0.9954	44.36
77.5	1,027,322	6,424	0.0063	0.9937	44.15
78.5	1,012,505	5,586	0.0055	0.9945	43.88

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 382.00 METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1890-2021 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	993,565	5,267	0.0053	0.9947	43.64
80.5	965,388	6,035	0.0063	0.9937	43.40
81.5	933,730	1,425	0.0015	0.9985	43.13
82.5	914,641	1,369	0.0015	0.9985	43.07
83.5	903,190	779	0.0009	0.9991	43.00
84.5	842,213	1,595	0.0019	0.9981	42.97
85.5	796,326	1,811	0.0023	0.9977	42.88
86.5	755,394	1,119	0.0015	0.9985	42.79
87.5	731,644	2,900	0.0040	0.9960	42.72
88.5	693,052	1,736	0.0025	0.9975	42.55
89.5	656,769	1,051	0.0016	0.9984	42.45
90.5	622,041	2,192	0.0035	0.9965	42.38
91.5	588,440	2,751	0.0047	0.9953	42.23
92.5	540,873	2,270	0.0042	0.9958	42.03
93.5	488,388	23,857	0.0488	0.9512	41.86
94.5	414,429	33,224	0.0802	0.9198	39.81
95.5	324,179	70,723	0.2182	0.7818	36.62
96.5	202,114	31,935	0.1580	0.8420	28.63
97.5	115,374	501	0.0043	0.9957	24.11
98.5	64,182	365	0.0057	0.9943	24.00
99.5	7,546	200	0.0265	0.9735	23.87
100.5	1,709	646	0.3779	0.6221	23.23
101.5	1,078	165	0.1529	0.8471	14.45
102.5	938	192	0.2047	0.7953	12.24
103.5	803	59	0.0738	0.9262	9.74
104.5	751	139	0.1851	0.8149	9.02
105.5	612	29	0.0475	0.9525	7.35
106.5	654	496	0.7593	0.2407	7.00
107.5	166	103	0.6184	0.3816	1.69
108.5	103	57	0.5522	0.4478	0.64
109.5	46	40	0.8612	0.1388	0.29
110.5	82	6	0.0780	0.9220	0.04
111.5	85	76	0.8961	0.1039	0.04
112.5	23	9	0.3900	0.6100	0.00
113.5	14	14	1.0000		0.00
114.5					

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 382.00 METER INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1890-2021 EXPERIENCE BAND 1983-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	75,343,642	78,770	0.0010	0.9990	100.00
0.5	76,317,762	219,419	0.0029	0.9971	99.90
1.5	73,284,815	168,634	0.0023	0.9977	99.61
2.5	70,821,015	170,937	0.0024	0.9976	99.38
3.5	68,458,173	173,951	0.0025	0.9975	99.14
4.5	66,668,330	137,471	0.0021	0.9979	98.89
5.5	64,173,379	166,134	0.0026	0.9974	98.68
6.5	61,897,438	211,074	0.0034	0.9966	98.43
7.5	60,132,030	188,540	0.0031	0.9969	98.09
8.5	58,757,093	197,291	0.0034	0.9966	97.78
9.5	57,982,346	88,699	0.0015	0.9985	97.46
10.5	56,437,448	83,733	0.0015	0.9985	97.31
11.5	54,849,296	85,859	0.0016	0.9984	97.16
12.5	52,419,755	78,989	0.0015	0.9985	97.01
13.5	49,611,059	74,065	0.0015	0.9985	96.86
14.5	46,982,573	72,357	0.0015	0.9985	96.72
15.5	44,773,626	69,211	0.0015	0.9985	96.57
16.5	42,756,239	71,790	0.0017	0.9983	96.42
17.5	40,227,837	54,043	0.0013	0.9987	96.26
18.5	37,934,326	49,979	0.0013	0.9987	96.13
19.5	36,480,576	53,342	0.0015	0.9985	96.00
20.5	34,250,508	106,979	0.0031	0.9969	95.86
21.5	32,992,005	51,461	0.0016	0.9984	95.56
22.5	32,413,138	41,955	0.0013	0.9987	95.42
23.5	31,603,560	45,832	0.0015	0.9985	95.29
24.5	30,670,623	45,588	0.0015	0.9985	95.15
25.5	29,295,781	45,139	0.0015	0.9985	95.01
26.5	27,920,855	54,792	0.0020	0.9980	94.87
27.5	26,723,120	52,300	0.0020	0.9980	94.68
28.5	25,380,485	49,761	0.0020	0.9980	94.49
29.5	24,180,396	40,957	0.0017	0.9983	94.31
30.5	22,360,064	37,232	0.0017	0.9983	94.15
31.5	20,942,802	36,735	0.0018	0.9982	93.99
32.5	19,844,322	34,981	0.0018	0.9982	93.83
33.5	18,984,197	34,207	0.0018	0.9982	93.66
34.5	17,901,755	34,308	0.0019	0.9981	93.49
35.5	17,013,268	30,645	0.0018	0.9982	93.31
36.5	16,162,873	28,414	0.0018	0.9982	93.15
37.5	15,105,846	28,548	0.0019	0.9981	92.98
38.5	14,112,376	21,535	0.0015	0.9985	92.81

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 382.00 METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1890-2021 EXPERIENCE BAND 1983-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	13,319,704	34,117	0.0026	0.9974	92.66
40.5	12,241,757	404,591	0.0331	0.9669	92.43
41.5	10,959,853	1,507,868	0.1376	0.8624	89.37
42.5	8,891,857	946,449	0.1064	0.8936	77.08
43.5	7,209,578	198,887	0.0276	0.9724	68.87
44.5	6,262,039	280,106	0.0447	0.9553	66.97
45.5	5,601,428	382,818	0.0683	0.9317	63.98
46.5	5,132,141	295,973	0.0577	0.9423	59.60
47.5	4,633,246	276,688	0.0597	0.9403	56.17
48.5	4,227,520	135,000	0.0319	0.9681	52.81
49.5	3,859,778	118,407	0.0307	0.9693	51.13
50.5	3,511,296	110,046	0.0313	0.9687	49.56
51.5	3,251,695	43,221	0.0133	0.9867	48.00
52.5	3,118,349	33,842	0.0109	0.9891	47.37
53.5	3,029,356	23,270	0.0077	0.9923	46.85
54.5	2,962,596	19,049	0.0064	0.9936	46.49
55.5	2,932,455	12,271	0.0042	0.9958	46.19
56.5	2,915,106	7,756	0.0027	0.9973	46.00
57.5	2,884,144	4,896	0.0017	0.9983	45.88
58.5	2,821,470	7,786	0.0028	0.9972	45.80
59.5	2,775,326	15,551	0.0056	0.9944	45.67
60.5	2,711,642	11,673	0.0043	0.9957	45.42
61.5	2,632,275	7,364	0.0028	0.9972	45.22
62.5	2,521,323	8,292	0.0033	0.9967	45.10
63.5	2,372,559	8,098	0.0034	0.9966	44.95
64.5	2,214,989	5,477	0.0025	0.9975	44.79
65.5	2,049,163	4,166	0.0020	0.9980	44.68
66.5	1,870,460	3,895	0.0021	0.9979	44.59
67.5	1,723,063	3,899	0.0023	0.9977	44.50
68.5	1,606,342	4,844	0.0030	0.9970	44.40
69.5	1,513,855	5,724	0.0038	0.9962	44.27
70.5	1,443,682	5,238	0.0036	0.9964	44.10
71.5	1,348,341	6,126	0.0045	0.9955	43.94
72.5	1,256,928	9,393	0.0075	0.9925	43.74
73.5	1,149,527	10,382	0.0090	0.9910	43.41
74.5	1,093,845	6,090	0.0056	0.9944	43.02
75.5	1,059,978	6,828	0.0064	0.9936	42.78
76.5	1,030,146	4,633	0.0045	0.9955	42.50
77.5	1,020,664	6,255	0.0061	0.9939	42.31
78.5	1,006,884	5,455	0.0054	0.9946	42.05

PEOPLES NATURAL GAS COMPANY LLC

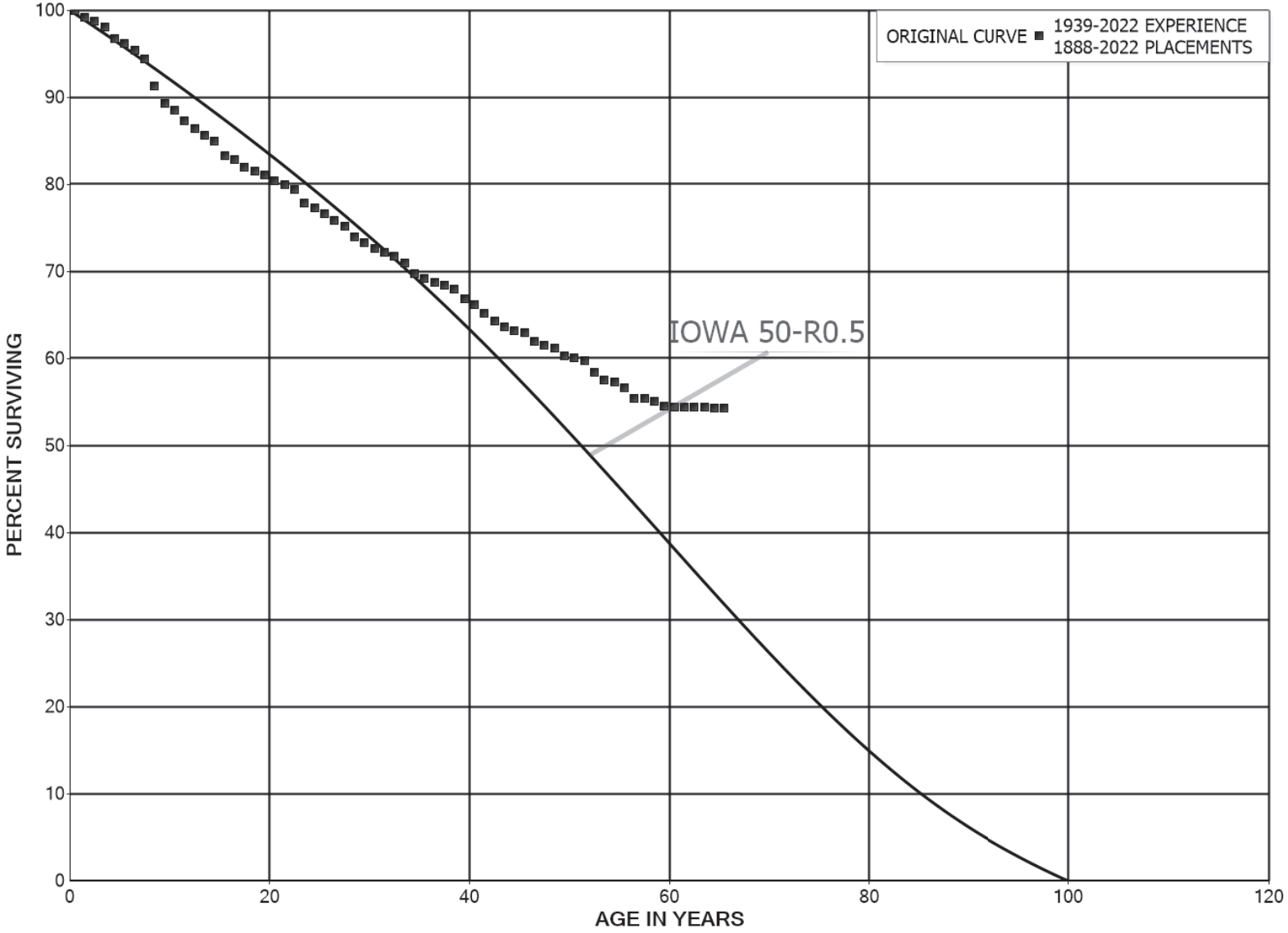
ACCOUNT 382.00 METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1890-2021 EXPERIENCE BAND 1983-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	988,679	5,167	0.0052	0.9948	41.83
80.5	961,596	5,949	0.0062	0.9938	41.61
81.5	930,819	1,357	0.0015	0.9985	41.35
82.5	912,953	1,335	0.0015	0.9985	41.29
83.5	901,806	754	0.0008	0.9992	41.23
84.5	841,367	1,582	0.0019	0.9981	41.19
85.5	795,822	1,802	0.0023	0.9977	41.12
86.5	754,999	1,114	0.0015	0.9985	41.02
87.5	731,385	2,888	0.0039	0.9961	40.96
88.5	692,852	1,733	0.0025	0.9975	40.80
89.5	656,603	1,047	0.0016	0.9984	40.70
90.5	621,899	2,188	0.0035	0.9965	40.64
91.5	588,320	2,751	0.0047	0.9953	40.49
92.5	540,873	2,270	0.0042	0.9958	40.30
93.5	488,388	23,857	0.0488	0.9512	40.13
94.5	414,429	33,224	0.0802	0.9198	38.17
95.5	324,179	70,723	0.2182	0.7818	35.11
96.5	202,114	31,935	0.1580	0.8420	27.45
97.5	115,374	501	0.0043	0.9957	23.11
98.5	64,182	365	0.0057	0.9943	23.01
99.5	7,546	200	0.0265	0.9735	22.88
100.5	1,709	646	0.3779	0.6221	22.28
101.5	1,078	165	0.1529	0.8471	13.86
102.5	938	192	0.2047	0.7953	11.74
103.5	803	59	0.0738	0.9262	9.34
104.5	751	139	0.1851	0.8149	8.65
105.5	612	29	0.0475	0.9525	7.05
106.5	654	496	0.7593	0.2407	6.71
107.5	166	103	0.6184	0.3816	1.62
108.5	103	57	0.5522	0.4478	0.62
109.5	46	40	0.8612	0.1388	0.28
110.5	82	6	0.0780	0.9220	0.04
111.5	85	76	0.8961	0.1039	0.04
112.5	23	9	0.3900	0.6100	0.00
113.5	14	14	1.0000		0.00
114.5					

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1888-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	14,627,986	11,843	0.0008	0.9992	100.00
0.5	14,738,871	117,135	0.0079	0.9921	99.92
1.5	13,654,093	57,625	0.0042	0.9958	99.12
2.5	13,296,548	92,474	0.0070	0.9930	98.71
3.5	12,973,651	165,791	0.0128	0.9872	98.02
4.5	12,176,679	71,942	0.0059	0.9941	96.77
5.5	10,450,968	86,748	0.0083	0.9917	96.20
6.5	9,789,988	100,127	0.0102	0.9898	95.40
7.5	9,335,082	307,563	0.0329	0.9671	94.42
8.5	8,856,165	198,434	0.0224	0.9776	91.31
9.5	7,551,204	67,336	0.0089	0.9911	89.26
10.5	7,030,135	90,225	0.0128	0.9872	88.47
11.5	6,913,091	75,991	0.0110	0.9890	87.33
12.5	6,844,223	57,253	0.0084	0.9916	86.37
13.5	6,797,734	59,114	0.0087	0.9913	85.65
14.5	6,706,794	125,383	0.0187	0.9813	84.91
15.5	6,446,906	40,583	0.0063	0.9937	83.32
16.5	6,409,656	68,920	0.0108	0.9892	82.79
17.5	6,360,680	33,356	0.0052	0.9948	81.90
18.5	6,146,464	33,014	0.0054	0.9946	81.47
19.5	5,919,700	50,674	0.0086	0.9914	81.04
20.5	5,739,677	31,734	0.0055	0.9945	80.34
21.5	5,610,991	32,424	0.0058	0.9942	79.90
22.5	5,437,804	110,156	0.0203	0.9797	79.44
23.5	5,199,360	39,130	0.0075	0.9925	77.83
24.5	5,073,438	44,422	0.0088	0.9912	77.24
25.5	4,876,386	49,562	0.0102	0.9898	76.57
26.5	4,696,361	40,162	0.0086	0.9914	75.79
27.5	4,464,148	68,491	0.0153	0.9847	75.14
28.5	4,226,224	38,941	0.0092	0.9908	73.99
29.5	4,115,062	40,270	0.0098	0.9902	73.31
30.5	3,970,489	21,560	0.0054	0.9946	72.59
31.5	3,551,750	23,592	0.0066	0.9934	72.19
32.5	3,290,742	37,005	0.0112	0.9888	71.71
33.5	2,816,046	47,126	0.0167	0.9833	70.91
34.5	2,298,270	16,708	0.0073	0.9927	69.72
35.5	2,154,052	15,368	0.0071	0.9929	69.21
36.5	1,775,946	9,508	0.0054	0.9946	68.72
37.5	1,621,594	10,798	0.0067	0.9933	68.35
38.5	1,513,166	24,052	0.0159	0.9841	67.90

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1888-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,404,489	14,406	0.0103	0.9897	66.82
40.5	1,224,089	18,167	0.0148	0.9852	66.13
41.5	1,083,329	13,574	0.0125	0.9875	65.15
42.5	963,544	10,944	0.0114	0.9886	64.33
43.5	833,836	5,714	0.0069	0.9931	63.60
44.5	810,393	2,434	0.0030	0.9970	63.17
45.5	796,023	13,029	0.0164	0.9836	62.98
46.5	747,372	5,518	0.0074	0.9926	61.95
47.5	725,772	4,227	0.0058	0.9942	61.49
48.5	709,210	10,394	0.0147	0.9853	61.13
49.5	648,324	1,808	0.0028	0.9972	60.24
50.5	603,525	3,157	0.0052	0.9948	60.07
51.5	518,767	11,865	0.0229	0.9771	59.75
52.5	473,580	7,007	0.0148	0.9852	58.39
53.5	430,855	1,804	0.0042	0.9958	57.52
54.5	399,838	4,657	0.0116	0.9884	57.28
55.5	375,441	8,020	0.0214	0.9786	56.62
56.5	332,617	344	0.0010	0.9990	55.41
57.5	281,443	1,251	0.0044	0.9956	55.35
58.5	265,008	3,119	0.0118	0.9882	55.10
59.5	243,082	89	0.0004	0.9996	54.45
60.5	210,300	120	0.0006	0.9994	54.43
61.5	193,215	23	0.0001	0.9999	54.40
62.5	173,583	11	0.0001	0.9999	54.40
63.5	142,545	254	0.0018	0.9982	54.39
64.5	126,543	89	0.0007	0.9993	54.30
65.5	99,494	89	0.0009	0.9991	54.26
66.5	69,521		0.0000	1.0000	54.21
67.5	49,701	264	0.0053	0.9947	54.21
68.5	35,739	30	0.0008	0.9992	53.92
69.5	25,279	2,227	0.0881	0.9119	53.88
70.5	14,677		0.0000	1.0000	49.13
71.5	13,471		0.0000	1.0000	49.13
72.5	11,544		0.0000	1.0000	49.13
73.5	9,465		0.0000	1.0000	49.13
74.5	9,316	54	0.0058	0.9942	49.13
75.5	8,429		0.0000	1.0000	48.84
76.5	8,107		0.0000	1.0000	48.84
77.5	7,097		0.0000	1.0000	48.84
78.5	7,120		0.0000	1.0000	48.84

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1888-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	4,571		0.0000	1.0000	48.84
80.5	3,461		0.0000	1.0000	48.84
81.5	2,139		0.0000	1.0000	48.84
82.5	2,136	36	0.0166	0.9834	48.84
83.5	2,019		0.0000	1.0000	48.03
84.5	2,019		0.0000	1.0000	48.03
85.5	1,917		0.0000	1.0000	48.03
86.5	1,845		0.0000	1.0000	48.03
87.5	1,845		0.0000	1.0000	48.03
88.5	1,706		0.0000	1.0000	48.03
89.5	1,706		0.0000	1.0000	48.03
90.5	1,706		0.0000	1.0000	48.03
91.5	1,706		0.0000	1.0000	48.03
92.5	1,630		0.0000	1.0000	48.03
93.5	1,630		0.0000	1.0000	48.03
94.5	1,588		0.0000	1.0000	48.03
95.5	1,463		0.0000	1.0000	48.03
96.5	1,349		0.0000	1.0000	48.03
97.5	1,053		0.0000	1.0000	48.03
98.5	1,053		0.0000	1.0000	48.03
99.5	134		0.0000	1.0000	48.03
100.5	134		0.0000	1.0000	48.03
101.5	134		0.0000	1.0000	48.03
102.5	134		0.0000	1.0000	48.03
103.5	134		0.0000	1.0000	48.03
104.5	134		0.0000	1.0000	48.03
105.5	112		0.0000	1.0000	48.03
106.5	112		0.0000	1.0000	48.03
107.5	112		0.0000	1.0000	48.03
108.5	112		0.0000	1.0000	48.03
109.5	112		0.0000	1.0000	48.03
110.5	112		0.0000	1.0000	48.03
111.5	112		0.0000	1.0000	48.03
112.5	112		0.0000	1.0000	48.03
113.5	112		0.0000	1.0000	48.03
114.5	112		0.0000	1.0000	48.03
115.5	112		0.0000	1.0000	48.03
116.5	112		0.0000	1.0000	48.03
117.5	112		0.0000	1.0000	48.03
118.5	112		0.0000	1.0000	48.03

PEOPLES NATURAL GAS COMPANY LLC

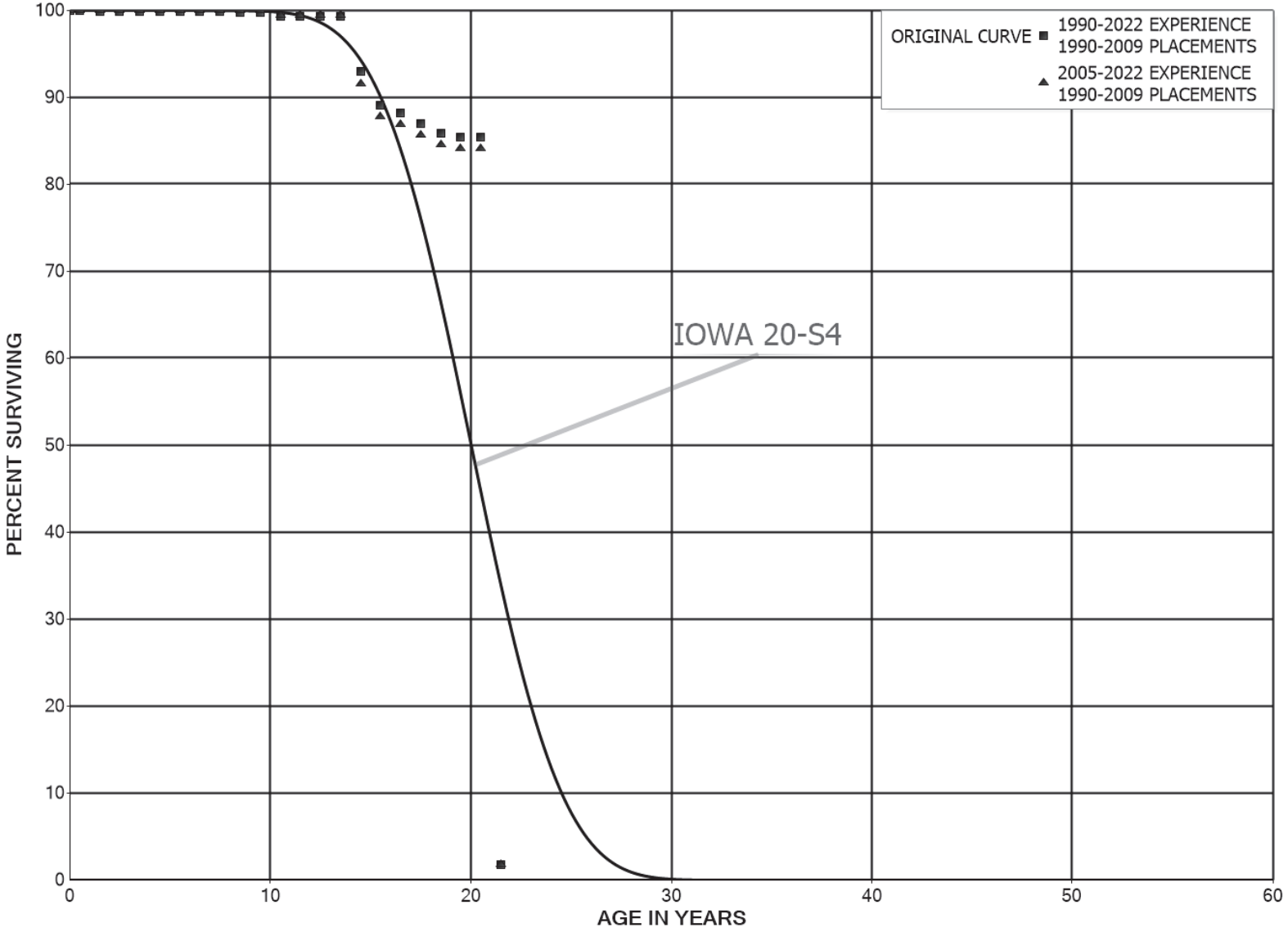
ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1888-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	93		0.0000	1.0000	48.03
120.5	93		0.0000	1.0000	48.03
121.5	93		0.0000	1.0000	48.03
122.5	93		0.0000	1.0000	48.03
123.5	93		0.0000	1.0000	48.03
124.5	93		0.0000	1.0000	48.03
125.5	93		0.0000	1.0000	48.03
126.5	93		0.0000	1.0000	48.03
127.5	93		0.0000	1.0000	48.03
128.5	93		0.0000	1.0000	48.03
129.5	93		0.0000	1.0000	48.03
130.5	93		0.0000	1.0000	48.03
131.5	93		0.0000	1.0000	48.03
132.5	93		0.0000	1.0000	48.03
133.5	93		0.0000	1.0000	48.03
134.5					48.03

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 386.00 OTHER PROPERTY ON CUSTOMER PREMISES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 386.00 OTHER PROPERTY ON CUSTOMER PREMISES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1990-2009 EXPERIENCE BAND 1990-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	21,352,257	4,028	0.0002	0.9998	100.00
0.5	21,346,069	41,511	0.0019	0.9981	99.98
1.5	21,491,726		0.0000	1.0000	99.79
2.5	21,444,607		0.0000	1.0000	99.79
3.5	21,266,837		0.0000	1.0000	99.79
4.5	21,091,945		0.0000	1.0000	99.79
5.5	21,091,945		0.0000	1.0000	99.79
6.5	21,257,439		0.0000	1.0000	99.79
7.5	21,257,439	5,136	0.0002	0.9998	99.79
8.5	21,252,303		0.0000	1.0000	99.76
9.5	21,252,303	97,666	0.0046	0.9954	99.76
10.5	21,154,636		0.0000	1.0000	99.30
11.5	21,154,636		0.0000	1.0000	99.30
12.5	21,154,636		0.0000	1.0000	99.30
13.5	21,154,636	1,364,818	0.0645	0.9355	99.30
14.5	19,789,818	808,644	0.0409	0.9591	92.90
15.5	18,981,174	203,634	0.0107	0.9893	89.10
16.5	18,777,540	243,958	0.0130	0.9870	88.15
17.5	3,966,769	51,879	0.0131	0.9869	87.00
18.5	3,914,891	20,604	0.0053	0.9947	85.86
19.5	3,894,287		0.0000	1.0000	85.41
20.5	3,894,287	3,816,567	0.9800	0.0200	85.41
21.5	77,720		0.0000	1.0000	1.70
22.5	77,720		0.0000	1.0000	1.70
23.5	77,720		0.0000	1.0000	1.70
24.5	53,681		0.0000	1.0000	1.70
25.5					1.70

PEOPLES NATURAL GAS COMPANY LLC

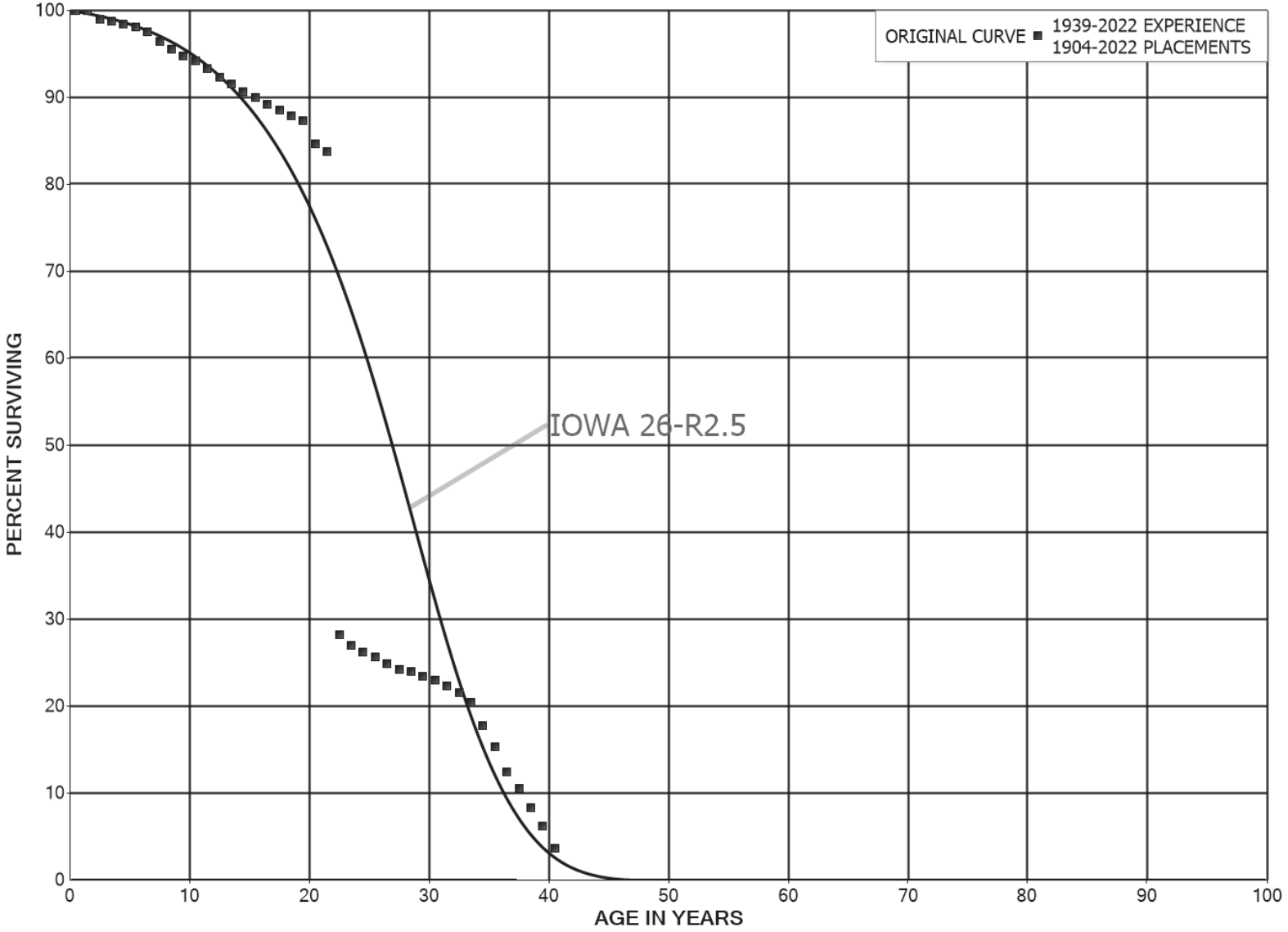
ACCOUNT 386.00 OTHER PROPERTY ON CUSTOMER PREMISES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1990-2009 EXPERIENCE BAND 2005-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	14,619,068		0.0000	1.0000	100.00
0.5	14,619,068		0.0000	1.0000	100.00
1.5	14,619,068		0.0000	1.0000	100.00
2.5	14,571,949		0.0000	1.0000	100.00
3.5	14,571,949		0.0000	1.0000	100.00
4.5	14,571,949		0.0000	1.0000	100.00
5.5	14,571,949		0.0000	1.0000	100.00
6.5	14,595,987		0.0000	1.0000	100.00
7.5	16,014,487	5,136	0.0003	0.9997	100.00
8.5	16,915,661		0.0000	1.0000	99.97
9.5	17,119,295	97,666	0.0057	0.9943	99.97
10.5	17,021,629		0.0000	1.0000	99.40
11.5	17,073,507		0.0000	1.0000	99.40
12.5	17,094,111		0.0000	1.0000	99.40
13.5	17,094,111	1,364,818	0.0798	0.9202	99.40
14.5	19,789,818	808,644	0.0409	0.9591	91.46
15.5	18,981,174	203,634	0.0107	0.9893	87.72
16.5	18,777,540	243,958	0.0130	0.9870	86.78
17.5	3,966,769	51,879	0.0131	0.9869	85.66
18.5	3,914,891	20,604	0.0053	0.9947	84.54
19.5	3,894,287		0.0000	1.0000	84.09
20.5	3,894,287	3,816,567	0.9800	0.0200	84.09
21.5	77,720		0.0000	1.0000	1.68
22.5	77,720		0.0000	1.0000	1.68
23.5	77,720		0.0000	1.0000	1.68
24.5	53,681		0.0000	1.0000	1.68
25.5					1.68

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 387.00 OTHER EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 387.00 OTHER EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1904-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	21,714,350	5,586	0.0003	0.9997	100.00
0.5	20,709,701	8,795	0.0004	0.9996	99.97
1.5	15,342,268	154,912	0.0101	0.9899	99.93
2.5	13,947,627	33,638	0.0024	0.9976	98.92
3.5	13,667,556	42,806	0.0031	0.9969	98.68
4.5	11,977,574	40,867	0.0034	0.9966	98.38
5.5	9,886,677	56,356	0.0057	0.9943	98.04
6.5	9,234,476	106,306	0.0115	0.9885	97.48
7.5	7,908,047	70,683	0.0089	0.9911	96.36
8.5	7,411,288	57,048	0.0077	0.9923	95.50
9.5	7,294,487	42,734	0.0059	0.9941	94.76
10.5	6,993,280	71,482	0.0102	0.9898	94.21
11.5	6,530,148	65,181	0.0100	0.9900	93.24
12.5	6,355,522	57,622	0.0091	0.9909	92.31
13.5	6,302,265	60,262	0.0096	0.9904	91.48
14.5	6,139,159	43,119	0.0070	0.9930	90.60
15.5	5,924,683	50,938	0.0086	0.9914	89.97
16.5	5,650,242	40,633	0.0072	0.9928	89.19
17.5	5,503,684	47,133	0.0086	0.9914	88.55
18.5	5,370,429	33,587	0.0063	0.9937	87.79
19.5	5,310,224	156,976	0.0296	0.9704	87.24
20.5	5,082,930	54,635	0.0107	0.9893	84.66
21.5	4,879,016	3,238,396	0.6637	0.3363	83.75
22.5	1,641,801	67,473	0.0411	0.9589	28.16
23.5	1,579,706	51,747	0.0328	0.9672	27.01
24.5	1,529,885	28,690	0.0188	0.9812	26.12
25.5	1,500,144	48,185	0.0321	0.9679	25.63
26.5	1,451,042	35,445	0.0244	0.9756	24.81
27.5	1,412,767	16,665	0.0118	0.9882	24.20
28.5	1,396,733	31,211	0.0223	0.9777	23.92
29.5	1,367,741	23,865	0.0174	0.9826	23.38
30.5	1,342,536	37,301	0.0278	0.9722	22.97
31.5	1,308,271	48,723	0.0372	0.9628	22.34
32.5	1,254,482	65,184	0.0520	0.9480	21.50
33.5	1,189,552	156,436	0.1315	0.8685	20.39
34.5	1,032,582	140,162	0.1357	0.8643	17.71
35.5	890,961	169,792	0.1906	0.8094	15.30
36.5	721,295	109,336	0.1516	0.8484	12.39
37.5	612,891	128,551	0.2097	0.7903	10.51
38.5	480,893	121,152	0.2519	0.7481	8.30

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 387.00 OTHER EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1904-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	361,164	148,503	0.4112	0.5888	6.21
40.5	212,364	48,490	0.2283	0.7717	3.66
41.5	164,385	15,144	0.0921	0.9079	2.82
42.5	148,949	11,590	0.0778	0.9222	2.56
43.5	139,406	30,864	0.2214	0.7786	2.36
44.5	107,982	18,251	0.1690	0.8310	1.84
45.5	89,585	6,833	0.0763	0.9237	1.53
46.5	82,680	3,637	0.0440	0.9560	1.41
47.5	79,043	4,398	0.0556	0.9444	1.35
48.5	74,432	5,295	0.0711	0.9289	1.28
49.5	69,550	5,337	0.0767	0.9233	1.18
50.5	64,213	2,657	0.0414	0.9586	1.09
51.5	61,446	8,166	0.1329	0.8671	1.05
52.5	53,355	6,902	0.1294	0.8706	0.91
53.5	46,572	9,312	0.2000	0.8000	0.79
54.5	37,259	1,095	0.0294	0.9706	0.63
55.5	36,165	2,769	0.0766	0.9234	0.61
56.5	33,201	1,051	0.0316	0.9684	0.57
57.5	32,070	659	0.0205	0.9795	0.55
58.5	31,329	2,912	0.0930	0.9070	0.54
59.5	29,258	1,291	0.0441	0.9559	0.49
60.5	28,315	7,540	0.2663	0.7337	0.47
61.5	20,860	5,166	0.2476	0.7524	0.34
62.5	15,694	797	0.0508	0.9492	0.26
63.5	15,497	681	0.0439	0.9561	0.24
64.5	13,858	442	0.0319	0.9681	0.23
65.5	13,068	1,327	0.1015	0.8985	0.23
66.5	11,656	1,436	0.1232	0.8768	0.20
67.5	10,221	1,477	0.1445	0.8555	0.18
68.5	7,877	481	0.0610	0.9390	0.15
69.5	7,397	1,022	0.1381	0.8619	0.14
70.5	6,375	1,025	0.1607	0.8393	0.12
71.5	5,350	1,983	0.3707	0.6293	0.10
72.5	3,367	347	0.1032	0.8968	0.07
73.5	3,019	652	0.2160	0.7840	0.06
74.5	2,367	31	0.0132	0.9868	0.05
75.5	2,317	1,578	0.6810	0.3190	0.05
76.5	964	159	0.1654	0.8346	0.01
77.5	580	7	0.0123	0.9877	0.01
78.5	573		0.0000	1.0000	0.01

PEOPLES NATURAL GAS COMPANY LLC

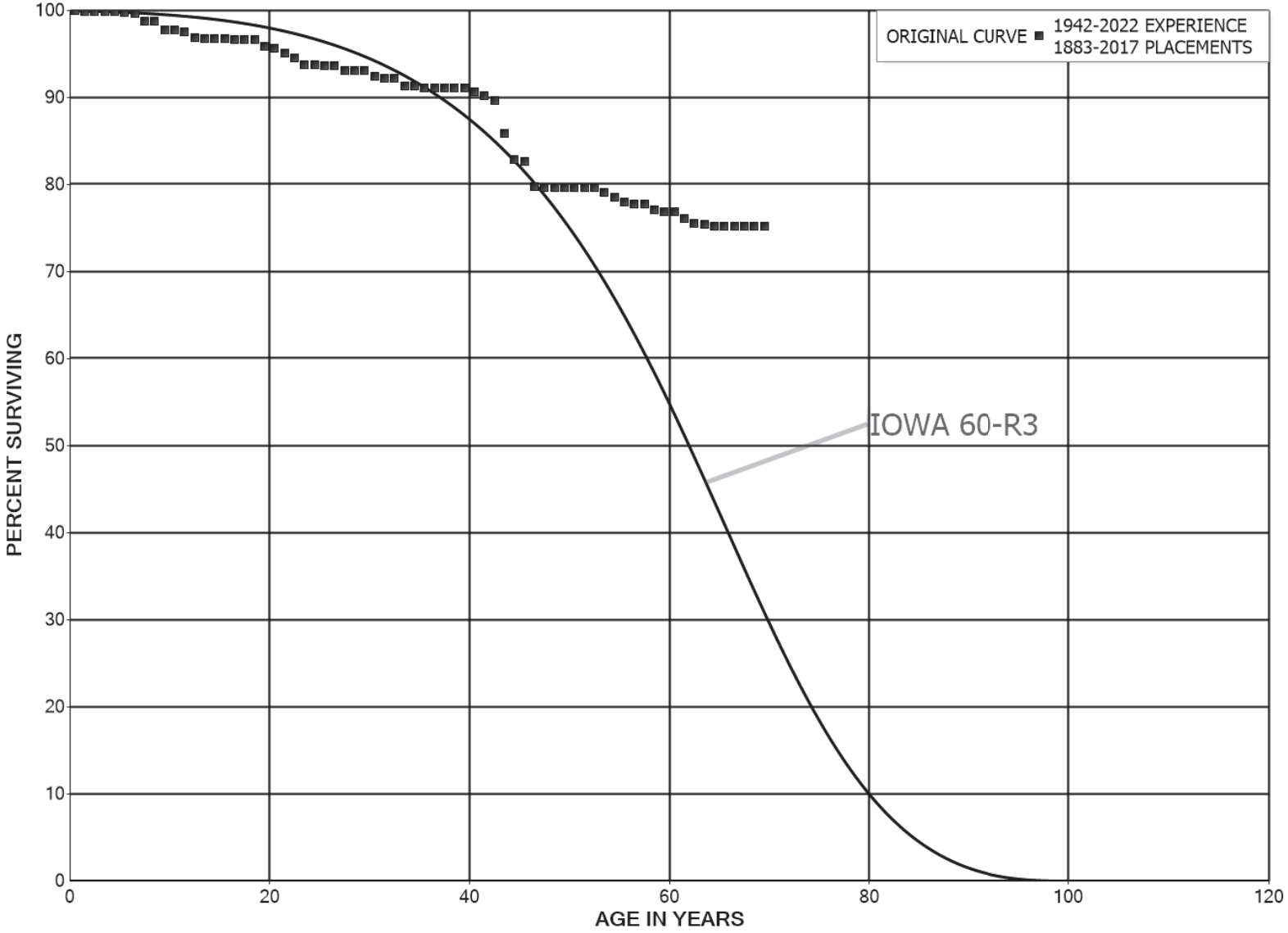
ACCOUNT 387.00 OTHER EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1904-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	573	205	0.3579	0.6421	0.01
80.5	368	257	0.6973	0.3027	0.01
81.5	111		0.0000	1.0000	0.00
82.5	111		0.0000	1.0000	0.00
83.5	111		0.0000	1.0000	0.00
84.5	111	16	0.1434	0.8566	0.00
85.5	95	85	0.8863	0.1137	0.00
86.5	11		0.0000	1.0000	0.00
87.5	11		0.0000	1.0000	0.00
88.5	11		0.0000	1.0000	0.00
89.5	11		0.0000	1.0000	0.00
90.5	11		0.0000	1.0000	0.00
91.5	11		0.0000	1.0000	0.00
92.5	11		0.0000	1.0000	0.00
93.5	11		0.0000	1.0000	0.00
94.5	11		0.0000	1.0000	0.00
95.5	11		0.0000	1.0000	0.00
96.5	22	0	0.0055	0.9945	0.00
97.5	22		0.0000	1.0000	0.00
98.5	22		0.0000	1.0000	0.00
99.5	22		0.0000	1.0000	0.00
100.5	22		0.0000	1.0000	0.00
101.5	11		0.0000	1.0000	0.00
102.5	11		0.0000	1.0000	0.00
103.5	11		0.0000	1.0000	0.00
104.5	11		0.0000	1.0000	0.00
105.5	11		0.0000	1.0000	0.00
106.5	11		0.0000	1.0000	0.00
107.5	11		0.0000	1.0000	0.00
108.5	11	11	1.0000		0.00
109.5					

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 389.02 LAND RIGHTS AND RIGHTS OF WAY
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 389.02 LAND RIGHTS AND RIGHTS OF WAY

ORIGINAL LIFE TABLE

PLACEMENT BAND 1883-2017 EXPERIENCE BAND 1942-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	54,679		0.0000	1.0000	100.00
0.5	54,803	68	0.0012	0.9988	100.00
1.5	54,764		0.0000	1.0000	99.88
2.5	54,764		0.0000	1.0000	99.88
3.5	55,403		0.0000	1.0000	99.88
4.5	55,529	80	0.0014	0.9986	99.88
5.5	47,437	41	0.0009	0.9991	99.73
6.5	47,651	463	0.0097	0.9903	99.65
7.5	47,413		0.0000	1.0000	98.68
8.5	46,847	439	0.0094	0.9906	98.68
9.5	46,628		0.0000	1.0000	97.75
10.5	46,692	131	0.0028	0.9972	97.75
11.5	46,625	287	0.0062	0.9938	97.48
12.5	46,452	88	0.0019	0.9981	96.88
13.5	46,426		0.0000	1.0000	96.70
14.5	45,288		0.0000	1.0000	96.70
15.5	44,970	38	0.0008	0.9992	96.70
16.5	45,190		0.0000	1.0000	96.61
17.5	45,412		0.0000	1.0000	96.61
18.5	45,840	393	0.0086	0.9914	96.61
19.5	45,505	79	0.0017	0.9983	95.79
20.5	45,852	263	0.0057	0.9943	95.62
21.5	46,688	267	0.0057	0.9943	95.07
22.5	45,111	390	0.0087	0.9913	94.53
23.5	45,774		0.0000	1.0000	93.71
24.5	45,961	36	0.0008	0.9992	93.71
25.5	46,246	28	0.0006	0.9994	93.64
26.5	46,365	275	0.0059	0.9941	93.58
27.5	45,352		0.0000	1.0000	93.02
28.5	45,907		0.0000	1.0000	93.02
29.5	56,173	364	0.0065	0.9935	93.02
30.5	56,260	148	0.0026	0.9974	92.42
31.5	56,112	20	0.0003	0.9997	92.18
32.5	56,313	524	0.0093	0.9907	92.15
33.5	56,355		0.0000	1.0000	91.29
34.5	56,947	108	0.0019	0.9981	91.29
35.5	47,768		0.0000	1.0000	91.12
36.5	48,436		0.0000	1.0000	91.12
37.5	48,313		0.0000	1.0000	91.12
38.5	46,950	43	0.0009	0.9991	91.12

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 389.02 LAND RIGHTS AND RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2017 EXPERIENCE BAND 1942-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	39,827	190	0.0048	0.9952	91.03
40.5	40,237	202	0.0050	0.9950	90.60
41.5	27,151	167	0.0061	0.9939	90.14
42.5	27,406	1,133	0.0413	0.9587	89.59
43.5	26,809	967	0.0361	0.9639	85.89
44.5	25,470	59	0.0023	0.9977	82.79
45.5	26,059	911	0.0350	0.9650	82.60
46.5	25,354	39	0.0015	0.9985	79.71
47.5	25,315		0.0000	1.0000	79.59
48.5	21,815	0	0.0000	1.0000	79.59
49.5	21,552		0.0000	1.0000	79.59
50.5	21,354		0.0000	1.0000	79.59
51.5	21,416		0.0000	1.0000	79.59
52.5	21,432	140	0.0065	0.9935	79.59
53.5	21,024	158	0.0075	0.9925	79.07
54.5	20,255	121	0.0060	0.9940	78.47
55.5	20,058	64	0.0032	0.9968	78.00
56.5	17,408		0.0000	1.0000	77.76
57.5	16,292	144	0.0088	0.9912	77.76
58.5	16,071	53	0.0033	0.9967	77.07
59.5	15,875		0.0000	1.0000	76.82
60.5	15,848	166	0.0105	0.9895	76.82
61.5	15,534	93	0.0060	0.9940	76.01
62.5	14,527	23	0.0016	0.9984	75.56
63.5	13,874	46	0.0033	0.9967	75.44
64.5	10,015		0.0000	1.0000	75.19
65.5	9,992		0.0000	1.0000	75.19
66.5	9,542		0.0000	1.0000	75.19
67.5	9,542		0.0000	1.0000	75.19
68.5	9,488		0.0000	1.0000	75.19
69.5	9,449		0.0000	1.0000	75.19
70.5	9,426		0.0000	1.0000	75.19
71.5	9,305		0.0000	1.0000	75.19
72.5	9,984		0.0000	1.0000	75.19
73.5	9,892		0.0000	1.0000	75.19
74.5	9,876	108	0.0109	0.9891	75.19
75.5	9,229		0.0000	1.0000	74.36
76.5	9,171		0.0000	1.0000	74.36
77.5	9,014		0.0000	1.0000	74.36
78.5	8,521		0.0000	1.0000	74.36

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 389.02 LAND RIGHTS AND RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2017 EXPERIENCE BAND 1942-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	8,387		0.0000	1.0000	74.36
80.5	10,840		0.0000	1.0000	74.36
81.5	11,156		0.0000	1.0000	74.36
82.5	10,643		0.0000	1.0000	74.36
83.5	10,536	158	0.0150	0.9850	74.36
84.5	10,413		0.0000	1.0000	73.25
85.5	10,422		0.0000	1.0000	73.25
86.5	9,691		0.0000	1.0000	73.25
87.5	9,782		0.0000	1.0000	73.25
88.5	10,201	1,837	0.1801	0.8199	73.25
89.5	8,471		0.0000	1.0000	60.06
90.5	8,301		0.0000	1.0000	60.06
91.5	8,301		0.0000	1.0000	60.06
92.5	8,211		0.0000	1.0000	60.06
93.5	7,469		0.0000	1.0000	60.06
94.5	6,862		0.0000	1.0000	60.06
95.5	6,522		0.0000	1.0000	60.06
96.5	6,572		0.0000	1.0000	60.06
97.5	6,238		0.0000	1.0000	60.06
98.5	5,167		0.0000	1.0000	60.06
99.5	4,830		0.0000	1.0000	60.06
100.5	5,843		0.0000	1.0000	60.06
101.5	5,843		0.0000	1.0000	60.06
102.5	5,095		0.0000	1.0000	60.06
103.5	5,075		0.0000	1.0000	60.06
104.5	5,075		0.0000	1.0000	60.06
105.5	5,038		0.0000	1.0000	60.06
106.5	4,689		0.0000	1.0000	60.06
107.5	4,630		0.0000	1.0000	60.06
108.5	4,387		0.0000	1.0000	60.06
109.5	3,968		0.0000	1.0000	60.06
110.5	3,861		0.0000	1.0000	60.06
111.5	3,861		0.0000	1.0000	60.06
112.5	3,794		0.0000	1.0000	60.06
113.5	3,789		0.0000	1.0000	60.06
114.5	3,788		0.0000	1.0000	60.06
115.5	3,272		0.0000	1.0000	60.06
116.5	3,272		0.0000	1.0000	60.06
117.5	3,001		0.0000	1.0000	60.06
118.5	2,896		0.0000	1.0000	60.06

PEOPLES NATURAL GAS COMPANY LLC

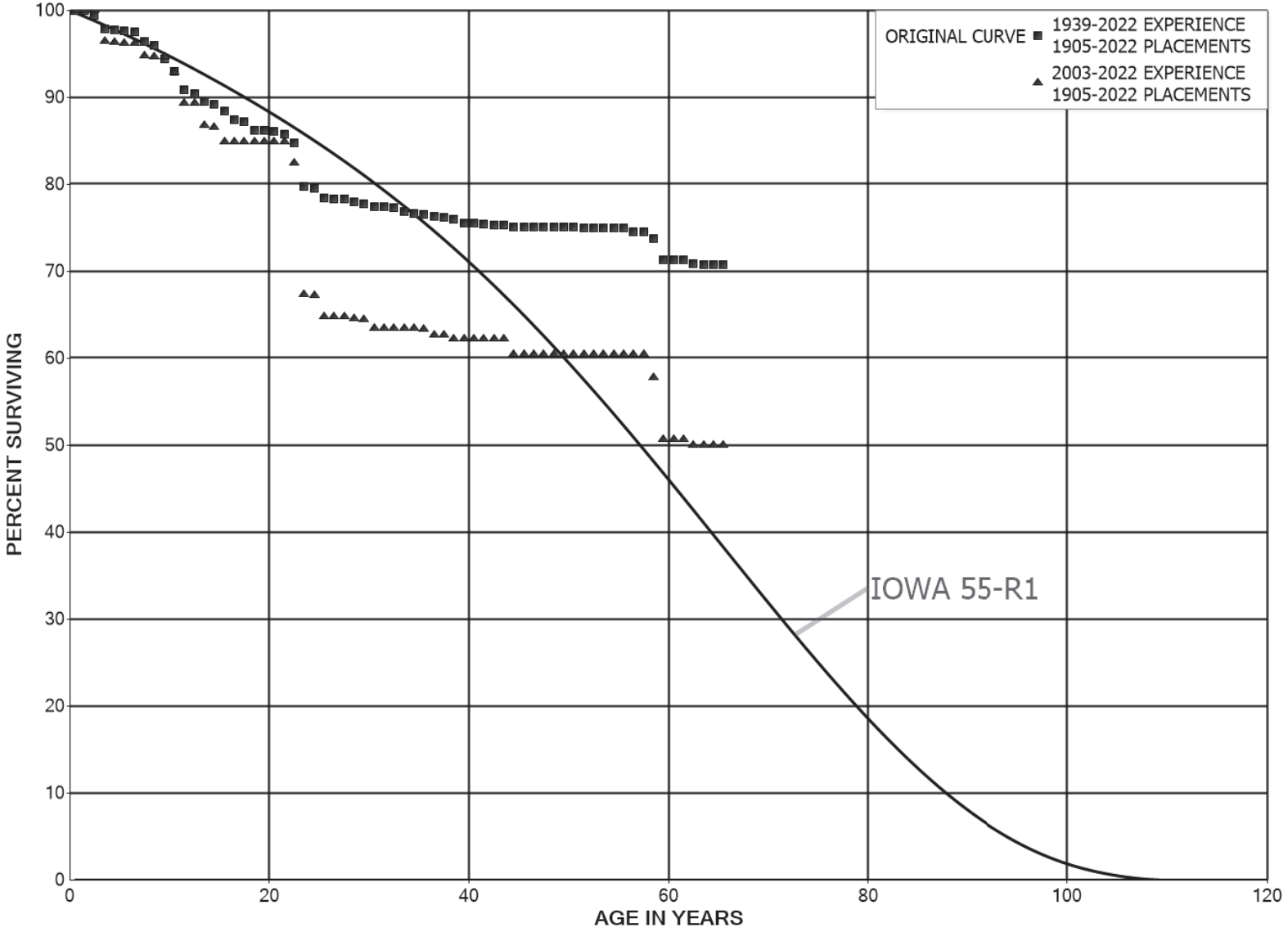
ACCOUNT 389.02 LAND RIGHTS AND RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2017 EXPERIENCE BAND 1942-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	2,540		0.0000	1.0000	60.06
120.5	2,530		0.0000	1.0000	60.06
121.5	1,487		0.0000	1.0000	60.06
122.5	1,408		0.0000	1.0000	60.06
123.5	1,188		0.0000	1.0000	60.06
124.5	1,065		0.0000	1.0000	60.06
125.5	799		0.0000	1.0000	60.06
126.5	221		0.0000	1.0000	60.06
127.5					60.06

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS - OWNED
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS - OWNED

ORIGINAL LIFE TABLE

PLACEMENT BAND 1905-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	28,944,158	2,286	0.0001	0.9999	100.00
0.5	26,002,888	15,768	0.0006	0.9994	99.99
1.5	25,657,871	136,901	0.0053	0.9947	99.93
2.5	23,880,966	379,538	0.0159	0.9841	99.40
3.5	22,899,752	21,630	0.0009	0.9991	97.82
4.5	21,364,181	32,436	0.0015	0.9985	97.73
5.5	19,949,170	11,001	0.0006	0.9994	97.58
6.5	16,856,071	201,128	0.0119	0.9881	97.52
7.5	15,507,431	65,276	0.0042	0.9958	96.36
8.5	12,228,884	205,687	0.0168	0.9832	95.95
9.5	11,016,815	159,073	0.0144	0.9856	94.34
10.5	9,296,902	217,239	0.0234	0.9766	92.98
11.5	7,557,353	30,977	0.0041	0.9959	90.81
12.5	4,967,190	53,237	0.0107	0.9893	90.43
13.5	4,541,330	14,089	0.0031	0.9969	89.46
14.5	4,454,138	40,191	0.0090	0.9910	89.19
15.5	4,348,615	46,204	0.0106	0.9894	88.38
16.5	4,190,015	12,413	0.0030	0.9970	87.44
17.5	4,049,174	47,327	0.0117	0.9883	87.18
18.5	3,820,153	591	0.0002	0.9998	86.17
19.5	4,232,796	2,169	0.0005	0.9995	86.15
20.5	4,094,597	16,403	0.0040	0.9960	86.11
21.5	4,174,291	49,841	0.0119	0.9881	85.76
22.5	4,013,853	236,112	0.0588	0.9412	84.74
23.5	3,734,611	9,887	0.0026	0.9974	79.75
24.5	3,254,304	44,795	0.0138	0.9862	79.54
25.5	2,736,792	5,075	0.0019	0.9981	78.45
26.5	2,500,025		0.0000	1.0000	78.30
27.5	2,089,903	7,853	0.0038	0.9962	78.30
28.5	2,330,605	8,490	0.0036	0.9964	78.01
29.5	2,260,034	9,219	0.0041	0.9959	77.72
30.5	2,284,079	654	0.0003	0.9997	77.41
31.5	1,724,277	3,001	0.0017	0.9983	77.38
32.5	1,762,909	9,756	0.0055	0.9945	77.25
33.5	1,747,143	5,797	0.0033	0.9967	76.82
34.5	1,708,314	1,861	0.0011	0.9989	76.57
35.5	1,609,615	4,598	0.0029	0.9971	76.48
36.5	1,567,961	1,761	0.0011	0.9989	76.27
37.5	1,461,581	4,698	0.0032	0.9968	76.18
38.5	1,366,862	8,020	0.0059	0.9941	75.94

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS - OWNED

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1905-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,134,202		0.0000	1.0000	75.49
40.5	753,424	413	0.0005	0.9995	75.49
41.5	623,226	1,350	0.0022	0.9978	75.45
42.5	327,930		0.0000	1.0000	75.28
43.5	274,173	751	0.0027	0.9973	75.28
44.5	271,994		0.0000	1.0000	75.08
45.5	134,667	12	0.0001	0.9999	75.08
46.5	135,413		0.0000	1.0000	75.07
47.5	129,336		0.0000	1.0000	75.07
48.5	126,767		0.0000	1.0000	75.07
49.5	125,366		0.0000	1.0000	75.07
50.5	123,429	277	0.0022	0.9978	75.07
51.5	118,681		0.0000	1.0000	74.90
52.5	116,793		0.0000	1.0000	74.90
53.5	114,593		0.0000	1.0000	74.90
54.5	117,932		0.0000	1.0000	74.90
55.5	112,003	562	0.0050	0.9950	74.90
56.5	107,286		0.0000	1.0000	74.53
57.5	106,720	1,218	0.0114	0.9886	74.53
58.5	98,256	3,219	0.0328	0.9672	73.68
59.5	93,618		0.0000	1.0000	71.26
60.5	54,309		0.0000	1.0000	71.26
61.5	52,641	308	0.0059	0.9941	71.26
62.5	45,691	74	0.0016	0.9984	70.85
63.5	44,878		0.0000	1.0000	70.73
64.5	44,319		0.0000	1.0000	70.73
65.5	37,628		0.0000	1.0000	70.73
66.5	37,688		0.0000	1.0000	70.73
67.5	36,396		0.0000	1.0000	70.73
68.5	35,840		0.0000	1.0000	70.73
69.5	34,121		0.0000	1.0000	70.73
70.5	32,275		0.0000	1.0000	70.73
71.5	31,593		0.0000	1.0000	70.73
72.5	10,998		0.0000	1.0000	70.73
73.5	11,216		0.0000	1.0000	70.73
74.5	11,216	75	0.0067	0.9933	70.73
75.5	10,512		0.0000	1.0000	70.26
76.5	4,548		0.0000	1.0000	70.26
77.5	4,257		0.0000	1.0000	70.26
78.5	4,257	125	0.0294	0.9706	70.26

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS - OWNED

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1905-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	4,132	936	0.2265	0.7735	68.20
80.5	3,196	363	0.1136	0.8864	52.75
81.5	2,833		0.0000	1.0000	46.76
82.5	2,833		0.0000	1.0000	46.76
83.5	2,833		0.0000	1.0000	46.76
84.5	6,651		0.0000	1.0000	46.76
85.5	11,319		0.0000	1.0000	46.76
86.5	11,319		0.0000	1.0000	46.76
87.5	11,319		0.0000	1.0000	46.76
88.5	11,319	906	0.0800	0.9200	46.76
89.5	9,826		0.0000	1.0000	43.02
90.5	6,008		0.0000	1.0000	43.02
91.5	6,008		0.0000	1.0000	43.02
92.5	6,008		0.0000	1.0000	43.02
93.5	6,008	4,764	0.7930	0.2070	43.02
94.5	218		0.0000	1.0000	8.91
95.5	218		0.0000	1.0000	8.91
96.5	218		0.0000	1.0000	8.91
97.5	218		0.0000	1.0000	8.91
98.5	218		0.0000	1.0000	8.91
99.5	218		0.0000	1.0000	8.91
100.5	218		0.0000	1.0000	8.91
101.5	218		0.0000	1.0000	8.91
102.5	218		0.0000	1.0000	8.91
103.5	218		0.0000	1.0000	8.91
104.5	218		0.0000	1.0000	8.91
105.5	218		0.0000	1.0000	8.91
106.5	218		0.0000	1.0000	8.91
107.5	218		0.0000	1.0000	8.91
108.5	218		0.0000	1.0000	8.91
109.5	218		0.0000	1.0000	8.91
110.5	218		0.0000	1.0000	8.91
111.5	218		0.0000	1.0000	8.91
112.5	218		0.0000	1.0000	8.91
113.5	218		0.0000	1.0000	8.91
114.5	218		0.0000	1.0000	8.91
115.5	218		0.0000	1.0000	8.91
116.5	218		0.0000	1.0000	8.91
117.5					8.91

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS - OWNED

ORIGINAL LIFE TABLE

PLACEMENT BAND 1905-2022 EXPERIENCE BAND 2003-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	14,625,648		0.0000	1.0000	100.00
0.5	11,240,671		0.0000	1.0000	100.00
1.5	11,282,566		0.0000	1.0000	100.00
2.5	10,185,845	363,336	0.0357	0.9643	100.00
3.5	9,589,100	16,747	0.0017	0.9983	96.43
4.5	10,134,935	5,250	0.0005	0.9995	96.26
5.5	9,983,687		0.0000	1.0000	96.21
6.5	7,014,235	108,630	0.0155	0.9845	96.21
7.5	6,441,334	4,924	0.0008	0.9992	94.72
8.5	5,196,517		0.0000	1.0000	94.65
9.5	5,133,050	95,838	0.0187	0.9813	94.65
10.5	4,982,723	193,133	0.0388	0.9612	92.88
11.5	3,641,735		0.0000	1.0000	89.28
12.5	1,550,905	43,901	0.0283	0.9717	89.28
13.5	1,362,008	4,111	0.0030	0.9970	86.76
14.5	1,326,658	25,595	0.0193	0.9807	86.50
15.5	1,376,423		0.0000	1.0000	84.83
16.5	1,209,949		0.0000	1.0000	84.83
17.5	1,239,278		0.0000	1.0000	84.83
18.5	1,142,828		0.0000	1.0000	84.83
19.5	1,185,310		0.0000	1.0000	84.83
20.5	1,259,862		0.0000	1.0000	84.83
21.5	1,256,282	35,571	0.0283	0.9717	84.83
22.5	1,275,439	234,716	0.1840	0.8160	82.42
23.5	1,132,426	925	0.0008	0.9992	67.26
24.5	1,087,527	40,000	0.0368	0.9632	67.20
25.5	917,670		0.0000	1.0000	64.73
26.5	761,799		0.0000	1.0000	64.73
27.5	664,258	2,096	0.0032	0.9968	64.73
28.5	597,558	1,537	0.0026	0.9974	64.53
29.5	525,727	8,133	0.0155	0.9845	64.36
30.5	552,540		0.0000	1.0000	63.36
31.5	502,333		0.0000	1.0000	63.36
32.5	508,409		0.0000	1.0000	63.36
33.5	505,714		0.0000	1.0000	63.36
34.5	497,634	712	0.0014	0.9986	63.36
35.5	416,326	4,125	0.0099	0.9901	63.27
36.5	415,497		0.0000	1.0000	62.65
37.5	323,974	2,634	0.0081	0.9919	62.65
38.5	241,738		0.0000	1.0000	62.14

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS - OWNED

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1905-2022 EXPERIENCE BAND 2003-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	98,066		0.0000	1.0000	62.14
40.5	29,417		0.0000	1.0000	62.14
41.5	32,322		0.0000	1.0000	62.14
42.5	23,734		0.0000	1.0000	62.14
43.5	26,248	751	0.0286	0.9714	62.14
44.5	28,164		0.0000	1.0000	60.36
45.5	30,622		0.0000	1.0000	60.36
46.5	28,162		0.0000	1.0000	60.36
47.5	23,935		0.0000	1.0000	60.36
48.5	25,953		0.0000	1.0000	60.36
49.5	26,371		0.0000	1.0000	60.36
50.5	26,491		0.0000	1.0000	60.36
51.5	25,878		0.0000	1.0000	60.36
52.5	26,436		0.0000	1.0000	60.36
53.5	24,800		0.0000	1.0000	60.36
54.5	22,722		0.0000	1.0000	60.36
55.5	24,192		0.0000	1.0000	60.36
56.5	28,025		0.0000	1.0000	60.36
57.5	28,025	1,218	0.0435	0.9565	60.36
58.5	26,220	3,219	0.1228	0.8772	57.73
59.5	21,582		0.0000	1.0000	50.65
60.5	21,582		0.0000	1.0000	50.65
61.5	20,945	308	0.0147	0.9853	50.65
62.5	19,754		0.0000	1.0000	49.90
63.5	19,015		0.0000	1.0000	49.90
64.5	18,456		0.0000	1.0000	49.90
65.5	11,705		0.0000	1.0000	49.90
66.5	11,705		0.0000	1.0000	49.90
67.5	10,548		0.0000	1.0000	49.90
68.5	9,991		0.0000	1.0000	49.90
69.5	8,172		0.0000	1.0000	49.90
70.5	7,992		0.0000	1.0000	49.90
71.5	6,494		0.0000	1.0000	49.90
72.5	7,728		0.0000	1.0000	49.90
73.5	8,382		0.0000	1.0000	49.90
74.5	8,662	75	0.0087	0.9913	49.90
75.5	7,959		0.0000	1.0000	49.47
76.5	1,995		0.0000	1.0000	49.47
77.5	1,704		0.0000	1.0000	49.47
78.5	1,704	125	0.0734	0.9266	49.47

PEOPLES NATURAL GAS COMPANY LLC

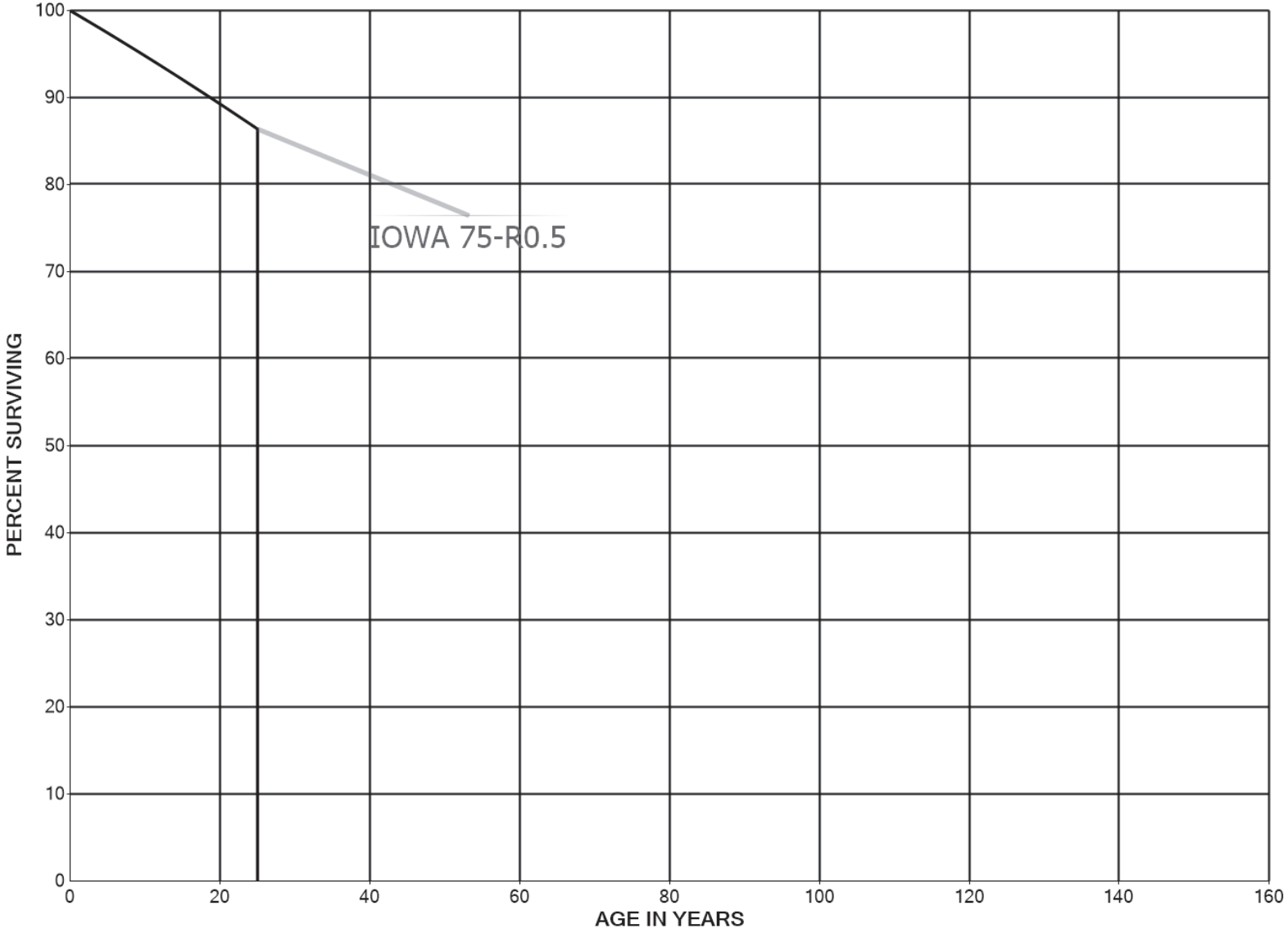
ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS - OWNED

ORIGINAL LIFE TABLE, CONT.

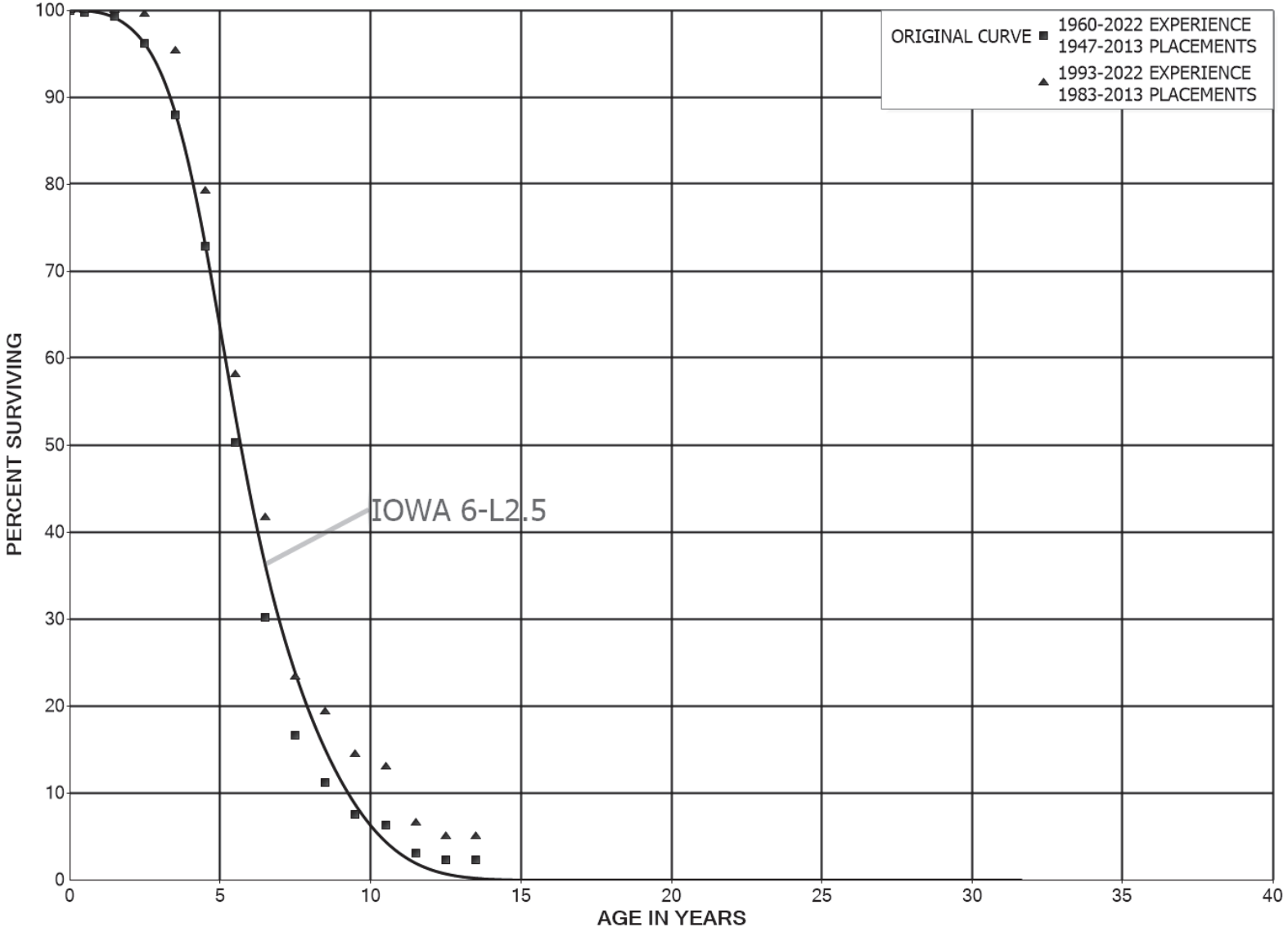
PLACEMENT BAND 1905-2022 EXPERIENCE BAND 2003-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	1,579	936	0.5928	0.4072	45.84
80.5	643	363	0.5645	0.4355	18.67
81.5	280		0.0000	1.0000	8.13
82.5	280		0.0000	1.0000	8.13
83.5	280		0.0000	1.0000	8.13
84.5	280		0.0000	1.0000	8.13
85.5	224		0.0000	1.0000	8.13
86.5	8,806		0.0000	1.0000	8.13
87.5	9,712		0.0000	1.0000	8.13
88.5	9,712	906	0.0932	0.9068	8.13
89.5	8,806		0.0000	1.0000	7.37
90.5	4,988		0.0000	1.0000	7.37
91.5	5,790		0.0000	1.0000	7.37
92.5	5,790		0.0000	1.0000	7.37
93.5	5,790	4,764	0.8228	0.1772	7.37
94.5					1.31
95.5					
96.5					
97.5	218		0.0000		
98.5	218		0.0000		
99.5	218		0.0000		
100.5	218		0.0000		
101.5	218		0.0000		
102.5	218		0.0000		
103.5	218		0.0000		
104.5	218		0.0000		
105.5	218		0.0000		
106.5	218		0.0000		
107.5	218		0.0000		
108.5	218		0.0000		
109.5	218		0.0000		
110.5	218		0.0000		
111.5	218		0.0000		
112.5	218		0.0000		
113.5	218		0.0000		
114.5	218		0.0000		
115.5	218		0.0000		
116.5	218		0.0000		
117.5					

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 390.01 STRUCTURES AND IMPROVEMENTS - LEASED - NORTH SHORE
SMOOTH SURVIVOR CURVE



PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 392.01 TRANSPORTATION EQUIPMENT - AUTOMOBILES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 392.01 TRANSPORTATION EQUIPMENT - AUTOMOBILES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1947-2013 EXPERIENCE BAND 1960-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	2,627,057	5,966	0.0023	0.9977	100.00
0.5	2,900,111	13,017	0.0045	0.9955	99.77
1.5	2,826,226	88,107	0.0312	0.9688	99.33
2.5	2,813,854	241,910	0.0860	0.9140	96.23
3.5	2,696,478	461,972	0.1713	0.8287	87.96
4.5	2,237,384	693,706	0.3101	0.6899	72.89
5.5	1,475,168	589,988	0.3999	0.6001	50.29
6.5	842,167	377,859	0.4487	0.5513	30.18
7.5	461,359	151,327	0.3280	0.6720	16.64
8.5	313,140	102,794	0.3283	0.6717	11.18
9.5	217,447	35,698	0.1642	0.8358	7.51
10.5	132,464	68,606	0.5179	0.4821	6.28
11.5	63,940	14,999	0.2346	0.7654	3.03
12.5	46,794	100	0.0021	0.9979	2.32
13.5	17,512	875	0.0500	0.9500	2.31
14.5	16,638	1,755	0.1055	0.8945	2.20
15.5	14,883	608	0.0408	0.9592	1.96
16.5	14,276	889	0.0623	0.9377	1.88
17.5	13,386	35	0.0026	0.9974	1.77
18.5	13,351	95	0.0071	0.9929	1.76
19.5	13,256		0.0000	1.0000	1.75
20.5	13,256		0.0000	1.0000	1.75
21.5	13,256		0.0000	1.0000	1.75
22.5	13,256		0.0000	1.0000	1.75
23.5	13,256	1,306	0.0985	0.9015	1.75
24.5	11,950		0.0000	1.0000	1.58
25.5	11,950		0.0000	1.0000	1.58
26.5	11,950		0.0000	1.0000	1.58
27.5	11,950	10,519	0.8803	0.1197	1.58
28.5	1,431		0.0000	1.0000	0.19
29.5	1,431		0.0000	1.0000	0.19
30.5	1,431		0.0000	1.0000	0.19
31.5	1,431		0.0000	1.0000	0.19
32.5	1,431		0.0000	1.0000	0.19
33.5	1,431	1,431	1.0000		0.19
34.5					

PEOPLES NATURAL GAS COMPANY LLC

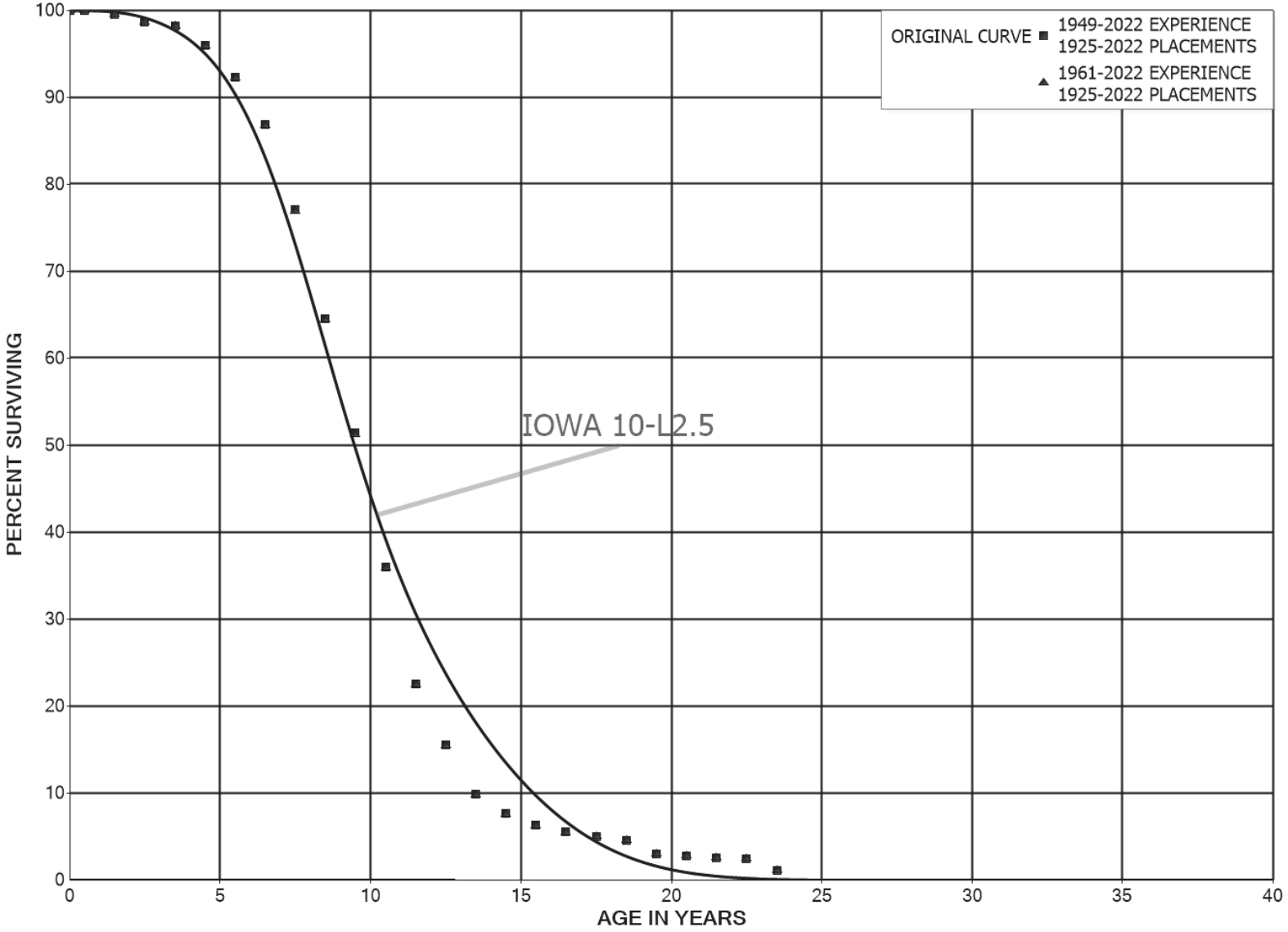
ACCOUNT 392.01 TRANSPORTATION EQUIPMENT - AUTOMOBILES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1983-2013 EXPERIENCE BAND 1993-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	93,034		0.0000	1.0000	100.00
0.5	93,034		0.0000	1.0000	100.00
1.5	269,270	1,306	0.0048	0.9952	100.00
2.5	490,536	20,818	0.0424	0.9576	99.52
3.5	819,289	138,925	0.1696	0.8304	95.29
4.5	1,016,998	270,889	0.2664	0.7336	79.13
5.5	706,987	200,396	0.2835	0.7165	58.06
6.5	496,936	218,956	0.4406	0.5594	41.60
7.5	279,541	47,692	0.1706	0.8294	23.27
8.5	232,005	58,792	0.2534	0.7466	19.30
9.5	195,120	19,024	0.0975	0.9025	14.41
10.5	126,792	63,647	0.5020	0.4980	13.00
11.5	63,151	14,999	0.2375	0.7625	6.48
12.5	46,005		0.0000	1.0000	4.94
13.5	16,824	855	0.0508	0.9492	4.94
14.5	15,969	1,668	0.1044	0.8956	4.69
15.5	14,302	156	0.0109	0.9891	4.20
16.5	14,146	889	0.0629	0.9371	4.15
17.5	13,256		0.0000	1.0000	3.89
18.5	13,256		0.0000	1.0000	3.89
19.5	13,256		0.0000	1.0000	3.89
20.5	13,256		0.0000	1.0000	3.89
21.5	13,256		0.0000	1.0000	3.89
22.5	13,256		0.0000	1.0000	3.89
23.5	13,256	1,306	0.0985	0.9015	3.89
24.5	11,950		0.0000	1.0000	3.51
25.5	11,950		0.0000	1.0000	3.51
26.5	11,950		0.0000	1.0000	3.51
27.5	11,950	10,519	0.8803	0.1197	3.51
28.5	1,431		0.0000	1.0000	0.42
29.5	1,431		0.0000	1.0000	0.42
30.5	1,431		0.0000	1.0000	0.42
31.5	1,431		0.0000	1.0000	0.42
32.5	1,431		0.0000	1.0000	0.42
33.5	1,431	1,431	1.0000		0.42
34.5					

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 392.02 TRANSPORTATION EQUIPMENT - TRUCKS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 392.02 TRANSPORTATION EQUIPMENT - TRUCKS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1925-2022 EXPERIENCE BAND 1949-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	107,741,597	13,885	0.0001	0.9999	100.00
0.5	105,425,634	546,859	0.0052	0.9948	99.99
1.5	94,063,051	778,103	0.0083	0.9917	99.47
2.5	84,425,879	398,216	0.0047	0.9953	98.65
3.5	75,725,517	1,745,864	0.0231	0.9769	98.18
4.5	67,115,310	2,563,741	0.0382	0.9618	95.92
5.5	61,217,741	3,568,232	0.0583	0.9417	92.25
6.5	56,070,345	6,341,794	0.1131	0.8869	86.88
7.5	50,994,595	8,266,290	0.1621	0.8379	77.05
8.5	40,453,859	8,278,171	0.2046	0.7954	64.56
9.5	31,299,595	9,367,573	0.2993	0.7007	51.35
10.5	21,574,263	8,095,972	0.3753	0.6247	35.98
11.5	13,859,715	4,290,481	0.3096	0.6904	22.48
12.5	9,900,793	3,645,659	0.3682	0.6318	15.52
13.5	6,349,964	1,425,569	0.2245	0.7755	9.81
14.5	7,088,696	1,277,175	0.1802	0.8198	7.60
15.5	5,853,534	723,905	0.1237	0.8763	6.23
16.5	5,063,118	450,035	0.0889	0.9111	5.46
17.5	4,615,386	420,702	0.0912	0.9088	4.98
18.5	4,215,189	1,422,085	0.3374	0.6626	4.52
19.5	2,766,769	285,956	0.1034	0.8966	3.00
20.5	2,459,586	126,889	0.0516	0.9484	2.69
21.5	2,331,136	129,460	0.0555	0.9445	2.55
22.5	2,211,786	1,269,480	0.5740	0.4260	2.41
23.5	288,307	7,152	0.0248	0.9752	1.03
24.5	282,563	3,603	0.0128	0.9872	1.00
25.5	277,252	1,986	0.0072	0.9928	0.99
26.5	275,865	59,338	0.2151	0.7849	0.98
27.5	215,927	121,929	0.5647	0.4353	0.77
28.5	94,800	3,010	0.0318	0.9682	0.33
29.5	90,988	2,211	0.0243	0.9757	0.32
30.5	88,777	3,833	0.0432	0.9568	0.32
31.5	84,945	975	0.0115	0.9885	0.30
32.5	84,841	13,339	0.1572	0.8428	0.30
33.5	70,631	2,455	0.0348	0.9652	0.25
34.5	68,176	26,545	0.3894	0.6106	0.24
35.5	41,631		0.0000	1.0000	0.15
36.5	41,631	24,444	0.5872	0.4128	0.15
37.5	17,187	15,319	0.8913	0.1087	0.06
38.5	1,868		0.0000	1.0000	0.01

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 392.02 TRANSPORTATION EQUIPMENT - TRUCKS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1925-2022 EXPERIENCE BAND 1949-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,868		0.0000	1.0000	0.01
40.5	1,868	300	0.1606	0.8394	0.01
41.5	1,568	50	0.0319	0.9681	0.01
42.5	1,518	638	0.4201	0.5799	0.01
43.5	880		0.0000	1.0000	0.00
44.5	880	220	0.2499	0.7501	0.00
45.5	660	186	0.2817	0.7183	0.00
46.5	474	346	0.7301	0.2699	0.00
47.5	128		0.0000	1.0000	0.00
48.5	128		0.0000	1.0000	0.00
49.5	128	128	1.0000		0.00
50.5					

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 392.02 TRANSPORTATION EQUIPMENT - TRUCKS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1925-2022 EXPERIENCE BAND 1961-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	105,443,061	13,885	0.0001	0.9999	100.00
0.5	103,473,861	546,859	0.0053	0.9947	99.99
1.5	92,504,238	778,103	0.0084	0.9916	99.46
2.5	83,236,990	398,216	0.0048	0.9952	98.62
3.5	74,918,214	1,745,864	0.0233	0.9767	98.15
4.5	66,602,209	2,563,741	0.0385	0.9615	95.86
5.5	60,783,164	3,568,232	0.0587	0.9413	92.17
6.5	55,701,395	6,341,794	0.1139	0.8861	86.76
7.5	50,751,757	8,266,290	0.1629	0.8371	76.88
8.5	40,298,928	8,278,171	0.2054	0.7946	64.36
9.5	31,222,214	9,367,573	0.3000	0.7000	51.14
10.5	21,556,606	8,095,972	0.3756	0.6244	35.80
11.5	13,847,286	4,290,481	0.3098	0.6902	22.35
12.5	9,898,221	3,645,659	0.3683	0.6317	15.43
13.5	6,349,080	1,425,569	0.2245	0.7755	9.74
14.5	7,087,812	1,277,175	0.1802	0.8198	7.56
15.5	5,852,650	723,905	0.1237	0.8763	6.20
16.5	5,062,234	450,035	0.0889	0.9111	5.43
17.5	4,614,502	420,702	0.0912	0.9088	4.95
18.5	4,214,305	1,422,085	0.3374	0.6626	4.50
19.5	2,765,885	285,956	0.1034	0.8966	2.98
20.5	2,459,586	126,889	0.0516	0.9484	2.67
21.5	2,331,136	129,460	0.0555	0.9445	2.53
22.5	2,211,786	1,269,480	0.5740	0.4260	2.39
23.5	288,307	7,152	0.0248	0.9752	1.02
24.5	282,563	3,603	0.0128	0.9872	0.99
25.5	277,252	1,986	0.0072	0.9928	0.98
26.5	275,865	59,338	0.2151	0.7849	0.97
27.5	215,927	121,929	0.5647	0.4353	0.76
28.5	94,800	3,010	0.0318	0.9682	0.33
29.5	90,988	2,211	0.0243	0.9757	0.32
30.5	88,777	3,833	0.0432	0.9568	0.31
31.5	84,945	975	0.0115	0.9885	0.30
32.5	84,841	13,339	0.1572	0.8428	0.30
33.5	70,631	2,455	0.0348	0.9652	0.25
34.5	68,176	26,545	0.3894	0.6106	0.24
35.5	41,631		0.0000	1.0000	0.15
36.5	41,631	24,444	0.5872	0.4128	0.15
37.5	17,187	15,319	0.8913	0.1087	0.06
38.5	1,868		0.0000	1.0000	0.01

PEOPLES NATURAL GAS COMPANY LLC

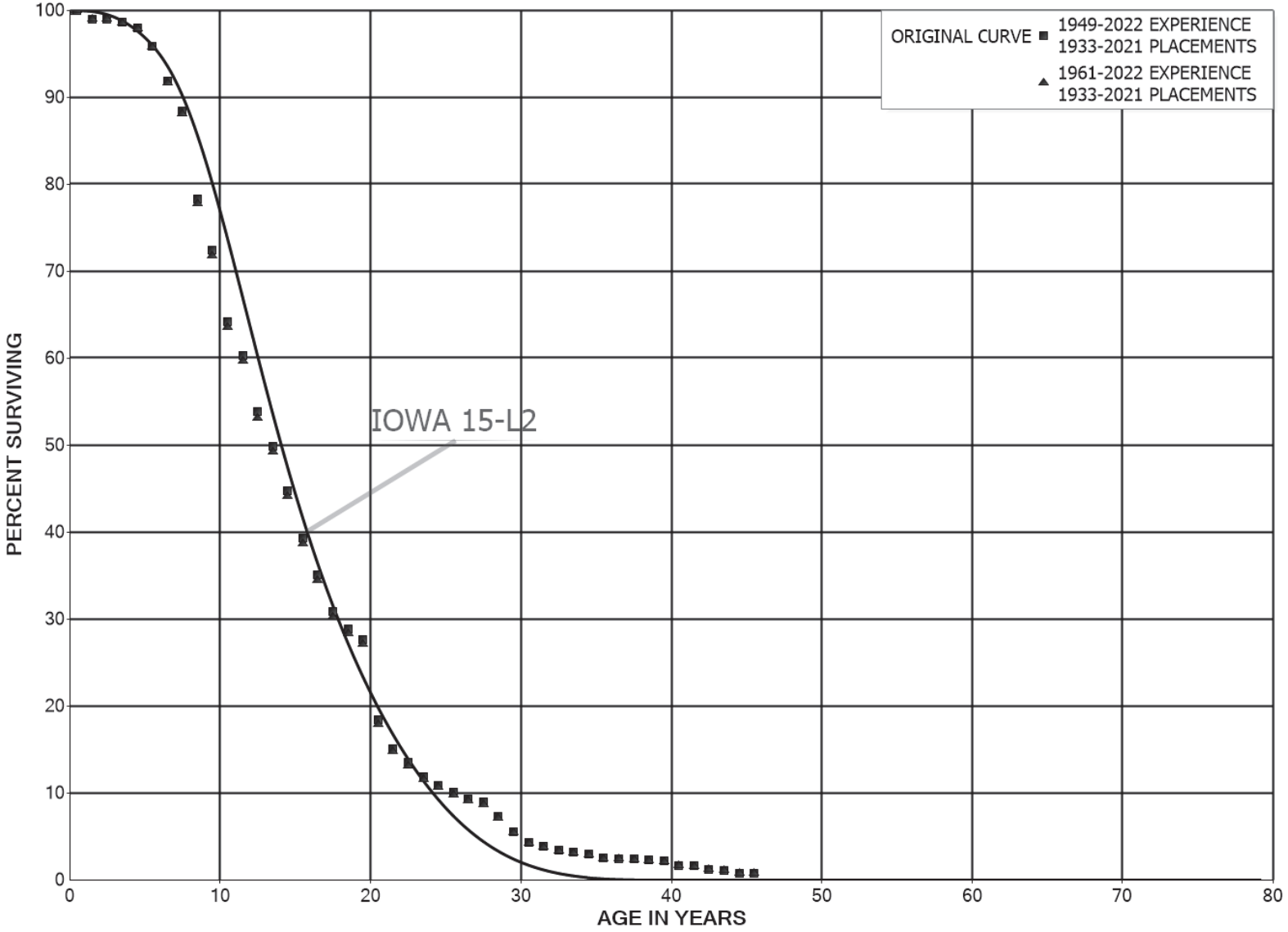
ACCOUNT 392.02 TRANSPORTATION EQUIPMENT - TRUCKS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1925-2022 EXPERIENCE BAND 1961-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,868		0.0000	1.0000	0.01
40.5	1,868	300	0.1606	0.8394	0.01
41.5	1,568	50	0.0319	0.9681	0.01
42.5	1,518	638	0.4201	0.5799	0.01
43.5	880		0.0000	1.0000	0.00
44.5	880	220	0.2499	0.7501	0.00
45.5	660	186	0.2817	0.7183	0.00
46.5	474	346	0.7301	0.2699	0.00
47.5	128		0.0000	1.0000	0.00
48.5	128		0.0000	1.0000	0.00
49.5	128	128	1.0000		0.00
50.5					

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 392.03 TRANSPORTATION EQUIPMENT - TRAILERS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 392.03 TRANSPORTATION EQUIPMENT - TRAILERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1933-2021 EXPERIENCE BAND 1949-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	4,462,065	883	0.0002	0.9998	100.00
0.5	4,491,572	46,757	0.0104	0.9896	99.98
1.5	4,164,741		0.0000	1.0000	98.94
2.5	3,713,412	13,345	0.0036	0.9964	98.94
3.5	3,075,188	20,749	0.0067	0.9933	98.58
4.5	2,770,841	59,197	0.0214	0.9786	97.92
5.5	2,317,713	96,230	0.0415	0.9585	95.83
6.5	2,045,587	77,972	0.0381	0.9619	91.85
7.5	1,934,044	220,786	0.1142	0.8858	88.35
8.5	1,688,374	127,146	0.0753	0.9247	78.26
9.5	1,553,725	176,563	0.1136	0.8864	72.37
10.5	1,226,833	74,093	0.0604	0.9396	64.14
11.5	1,087,118	117,004	0.1076	0.8924	60.27
12.5	964,208	70,632	0.0733	0.9267	53.78
13.5	871,377	88,949	0.1021	0.8979	49.84
14.5	773,992	94,098	0.1216	0.8784	44.76
15.5	671,373	73,320	0.1092	0.8908	39.31
16.5	546,438	65,606	0.1201	0.8799	35.02
17.5	464,106	29,487	0.0635	0.9365	30.82
18.5	437,195	18,943	0.0433	0.9567	28.86
19.5	418,252	140,111	0.3350	0.6650	27.61
20.5	278,140	49,173	0.1768	0.8232	18.36
21.5	228,968	24,797	0.1083	0.8917	15.11
22.5	197,914	23,358	0.1180	0.8820	13.48
23.5	164,972	13,832	0.0838	0.9162	11.89
24.5	151,140	12,162	0.0805	0.9195	10.89
25.5	138,978	10,065	0.0724	0.9276	10.01
26.5	128,913	5,445	0.0422	0.9578	9.29
27.5	123,468	21,639	0.1753	0.8247	8.90
28.5	102,019	25,117	0.2462	0.7538	7.34
29.5	76,713	16,808	0.2191	0.7809	5.53
30.5	60,392	6,295	0.1042	0.8958	4.32
31.5	54,222	6,860	0.1265	0.8735	3.87
32.5	46,750	2,972	0.0636	0.9364	3.38
33.5	43,778	3,123	0.0713	0.9287	3.16
34.5	40,655	6,400	0.1574	0.8426	2.94
35.5	34,255	652	0.0190	0.9810	2.48
36.5	33,603	284	0.0084	0.9916	2.43
37.5	33,319	2,383	0.0715	0.9285	2.41
38.5	32,871	1,589	0.0483	0.9517	2.24

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 392.03 TRANSPORTATION EQUIPMENT - TRAILERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1933-2021 EXPERIENCE BAND 1949-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	31,948	7,616	0.2384	0.7616	2.13
40.5	24,332	426	0.0175	0.9825	1.62
41.5	23,906	6,305	0.2637	0.7363	1.59
42.5	17,171	872	0.0508	0.9492	1.17
43.5	16,298	4,915	0.3016	0.6984	1.11
44.5	11,383	674	0.0592	0.9408	0.78
45.5	10,709	481	0.0449	0.9551	0.73
46.5	10,228	2,223	0.2173	0.7827	0.70
47.5	8,006	1,060	0.1325	0.8675	0.55
48.5	6,945	226	0.0326	0.9674	0.47
49.5	6,719	602	0.0896	0.9104	0.46
50.5	6,117		0.0000	1.0000	0.42
51.5	6,117		0.0000	1.0000	0.42
52.5	6,117		0.0000	1.0000	0.42
53.5	6,117	311	0.0509	0.9491	0.42
54.5	6,169	1,347	0.2183	0.7817	0.40
55.5	4,822	2,012	0.4173	0.5827	0.31
56.5	2,810		0.0000	1.0000	0.18
57.5	2,810		0.0000	1.0000	0.18
58.5	2,810	612	0.2178	0.7822	0.18
59.5	2,198	363	0.1650	0.8350	0.14
60.5	1,835		0.0000	1.0000	0.12
61.5	1,835	618	0.3368	0.6632	0.12
62.5	1,217		0.0000	1.0000	0.08
63.5	1,217	542	0.4450	0.5550	0.08
64.5	676		0.0000	1.0000	0.04
65.5	676	363	0.5373	0.4627	0.04
66.5	313		0.0000	1.0000	0.02
67.5	313	313	1.0000		0.02
68.5					

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 392.03 TRANSPORTATION EQUIPMENT - TRAILERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1933-2021 EXPERIENCE BAND 1961-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	4,335,599	842	0.0002	0.9998	100.00
0.5	4,368,486	46,757	0.0107	0.9893	99.98
1.5	4,066,968		0.0000	1.0000	98.91
2.5	3,621,054	13,345	0.0037	0.9963	98.91
3.5	2,987,014	20,749	0.0069	0.9931	98.55
4.5	2,690,978	59,197	0.0220	0.9780	97.86
5.5	2,252,650	96,230	0.0427	0.9573	95.71
6.5	1,994,385	77,972	0.0391	0.9609	91.62
7.5	1,886,504	220,786	0.1170	0.8830	88.04
8.5	1,653,185	127,146	0.0769	0.9231	77.73
9.5	1,528,951	176,563	0.1155	0.8845	71.76
10.5	1,210,582	74,093	0.0612	0.9388	63.47
11.5	1,073,636	117,004	0.1090	0.8910	59.59
12.5	952,668	70,632	0.0741	0.9259	53.09
13.5	861,673	88,949	0.1032	0.8968	49.16
14.5	764,684	94,098	0.1231	0.8769	44.08
15.5	665,028	73,320	0.1103	0.8897	38.66
16.5	540,093	65,606	0.1215	0.8785	34.39
17.5	457,761	29,487	0.0644	0.9356	30.22
18.5	430,850	18,943	0.0440	0.9560	28.27
19.5	413,579	140,111	0.3388	0.6612	27.03
20.5	274,614	49,173	0.1791	0.8209	17.87
21.5	228,571	24,797	0.1085	0.8915	14.67
22.5	197,651	23,358	0.1182	0.8818	13.08
23.5	164,929	13,832	0.0839	0.9161	11.53
24.5	151,097	12,162	0.0805	0.9195	10.57
25.5	138,934	10,065	0.0724	0.9276	9.72
26.5	128,870	5,445	0.0423	0.9577	9.01
27.5	123,468	21,639	0.1753	0.8247	8.63
28.5	102,019	25,117	0.2462	0.7538	7.12
29.5	76,713	16,808	0.2191	0.7809	5.37
30.5	60,392	6,295	0.1042	0.8958	4.19
31.5	54,222	6,860	0.1265	0.8735	3.75
32.5	46,750	2,972	0.0636	0.9364	3.28
33.5	43,778	3,123	0.0713	0.9287	3.07
34.5	40,655	6,400	0.1574	0.8426	2.85
35.5	34,255	652	0.0190	0.9810	2.40
36.5	33,603	284	0.0084	0.9916	2.36
37.5	33,319	2,383	0.0715	0.9285	2.34
38.5	32,871	1,589	0.0483	0.9517	2.17

PEOPLES NATURAL GAS COMPANY LLC

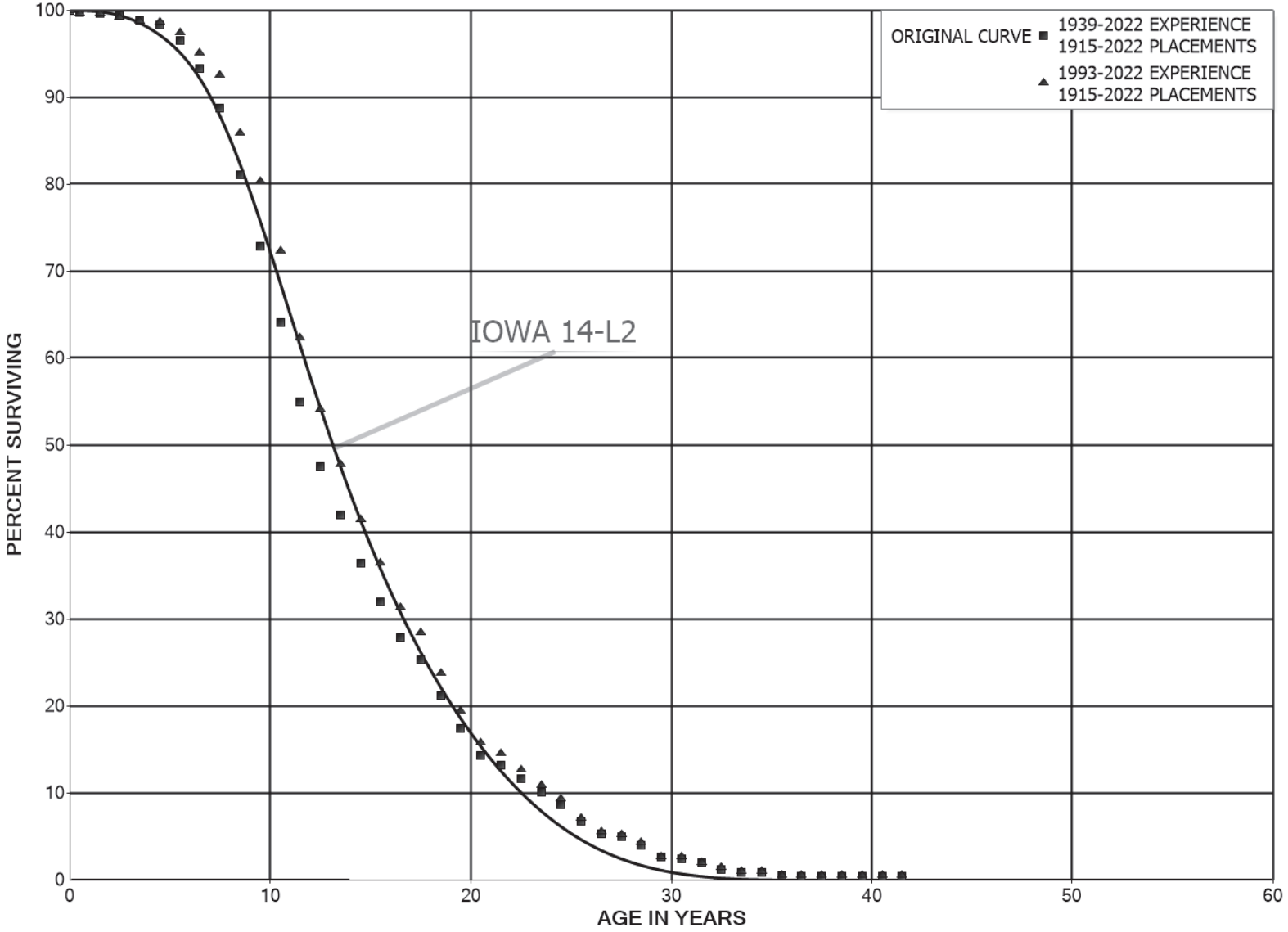
ACCOUNT 392.03 TRANSPORTATION EQUIPMENT - TRAILERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1933-2021 EXPERIENCE BAND 1961-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	31,948	7,616	0.2384	0.7616	2.06
40.5	24,332	426	0.0175	0.9825	1.57
41.5	23,906	6,305	0.2637	0.7363	1.54
42.5	17,171	872	0.0508	0.9492	1.14
43.5	16,298	4,915	0.3016	0.6984	1.08
44.5	11,383	674	0.0592	0.9408	0.75
45.5	10,709	481	0.0449	0.9551	0.71
46.5	10,228	2,223	0.2173	0.7827	0.68
47.5	8,006	1,060	0.1325	0.8675	0.53
48.5	6,945	226	0.0326	0.9674	0.46
49.5	6,719	602	0.0896	0.9104	0.45
50.5	6,117		0.0000	1.0000	0.41
51.5	6,117		0.0000	1.0000	0.41
52.5	6,117		0.0000	1.0000	0.41
53.5	6,117	311	0.0509	0.9491	0.41
54.5	6,169	1,347	0.2183	0.7817	0.38
55.5	4,822	2,012	0.4173	0.5827	0.30
56.5	2,810		0.0000	1.0000	0.18
57.5	2,810		0.0000	1.0000	0.18
58.5	2,810	612	0.2178	0.7822	0.18
59.5	2,198	363	0.1650	0.8350	0.14
60.5	1,835		0.0000	1.0000	0.11
61.5	1,835	618	0.3368	0.6632	0.11
62.5	1,217		0.0000	1.0000	0.08
63.5	1,217	542	0.4450	0.5550	0.08
64.5	676		0.0000	1.0000	0.04
65.5	676	363	0.5373	0.4627	0.04
66.5	313		0.0000	1.0000	0.02
67.5	313	313	1.0000		0.02
68.5					

PEOPLES NATURAL GAS COMPANY LLC
ACCOUNT 396.00 POWER OPERATED EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1915-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	39,202,036	110,253	0.0028	0.9972	100.00
0.5	38,147,967	25,256	0.0007	0.9993	99.72
1.5	37,153,404	114,590	0.0031	0.9969	99.65
2.5	35,051,602	168,920	0.0048	0.9952	99.35
3.5	33,657,487	206,137	0.0061	0.9939	98.87
4.5	31,550,838	567,902	0.0180	0.9820	98.26
5.5	29,213,729	975,693	0.0334	0.9666	96.49
6.5	27,468,414	1,331,081	0.0485	0.9515	93.27
7.5	24,788,211	2,151,862	0.0868	0.9132	88.75
8.5	21,962,908	2,211,745	0.1007	0.8993	81.05
9.5	19,205,409	2,328,771	0.1213	0.8787	72.88
10.5	16,143,583	2,301,060	0.1425	0.8575	64.05
11.5	13,269,700	1,778,260	0.1340	0.8660	54.92
12.5	11,419,597	1,360,684	0.1192	0.8808	47.56
13.5	10,082,360	1,333,248	0.1322	0.8678	41.89
14.5	8,495,460	1,022,879	0.1204	0.8796	36.35
15.5	7,203,601	944,304	0.1311	0.8689	31.97
16.5	6,249,420	571,458	0.0914	0.9086	27.78
17.5	5,729,143	922,134	0.1610	0.8390	25.24
18.5	4,560,410	812,719	0.1782	0.8218	21.18
19.5	3,682,813	654,656	0.1778	0.8222	17.41
20.5	2,945,504	233,219	0.0792	0.9208	14.31
21.5	2,676,781	320,517	0.1197	0.8803	13.18
22.5	2,265,576	305,875	0.1350	0.8650	11.60
23.5	1,546,333	212,302	0.1373	0.8627	10.03
24.5	1,339,708	295,301	0.2204	0.7796	8.66
25.5	983,865	214,424	0.2179	0.7821	6.75
26.5	768,289	54,174	0.0705	0.9295	5.28
27.5	701,452	138,839	0.1979	0.8021	4.91
28.5	541,979	188,281	0.3474	0.6526	3.93
29.5	348,761	17,581	0.0504	0.9496	2.57
30.5	331,180	73,323	0.2214	0.7786	2.44
31.5	257,914	97,572	0.3783	0.6217	1.90
32.5	160,342	40,593	0.2532	0.7468	1.18
33.5	119,807	12,036	0.1005	0.8995	0.88
34.5	107,922	44,148	0.4091	0.5909	0.79
35.5	63,774	4,733	0.0742	0.9258	0.47
36.5	59,040	4,195	0.0710	0.9290	0.43
37.5	54,846	4,810	0.0877	0.9123	0.40
38.5	50,035		0.0000	1.0000	0.37

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1915-2022 EXPERIENCE BAND 1939-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	50,035		0.0000	1.0000	0.37
40.5	50,035		0.0000	1.0000	0.37
41.5	50,135	30,717	0.6127	0.3873	0.37
42.5	19,490	14,093	0.7231	0.2769	0.14
43.5	5,443	71	0.0131	0.9869	0.04
44.5	5,401	46	0.0085	0.9915	0.04
45.5	5,355	30	0.0055	0.9945	0.04
46.5	5,326		0.0000	1.0000	0.04
47.5	5,326		0.0000	1.0000	0.04
48.5	5,326	180	0.0337	0.9663	0.04
49.5	5,146	5,146	1.0000		0.04
50.5					

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1915-2022 EXPERIENCE BAND 1993-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	24,790,400	90,465	0.0036	0.9964	100.00
0.5	24,057,454		0.0000	1.0000	99.64
1.5	24,045,846	100,113	0.0042	0.9958	99.64
2.5	22,177,479	109,732	0.0049	0.9951	99.22
3.5	21,525,590	14,901	0.0007	0.9993	98.73
4.5	20,275,505	270,508	0.0133	0.9867	98.66
5.5	19,013,747	446,836	0.0235	0.9765	97.34
6.5	18,360,538	498,061	0.0271	0.9729	95.06
7.5	17,022,459	1,228,014	0.0721	0.9279	92.48
8.5	15,848,235	1,021,850	0.0645	0.9355	85.81
9.5	14,732,240	1,469,018	0.0997	0.9003	80.27
10.5	12,587,649	1,747,325	0.1388	0.8612	72.27
11.5	10,330,225	1,361,160	0.1318	0.8682	62.24
12.5	8,927,297	1,048,224	0.1174	0.8826	54.04
13.5	7,964,755	1,048,603	0.1317	0.8683	47.69
14.5	6,680,040	813,187	0.1217	0.8783	41.41
15.5	5,625,474	794,042	0.1412	0.8588	36.37
16.5	4,902,054	441,272	0.0900	0.9100	31.24
17.5	4,555,231	749,444	0.1645	0.8355	28.43
18.5	3,565,222	656,485	0.1841	0.8159	23.75
19.5	2,924,143	543,439	0.1858	0.8142	19.38
20.5	2,412,054	188,897	0.0783	0.9217	15.78
21.5	2,195,236	296,274	0.1350	0.8650	14.54
22.5	1,810,545	251,775	0.1391	0.8609	12.58
23.5	1,152,904	164,121	0.1424	0.8576	10.83
24.5	1,056,216	253,154	0.2397	0.7603	9.29
25.5	776,828	168,926	0.2175	0.7825	7.06
26.5	617,808	36,855	0.0597	0.9403	5.53
27.5	571,304	94,475	0.1654	0.8346	5.20
28.5	457,853	178,931	0.3908	0.6092	4.34
29.5	278,922	6,223	0.0223	0.9777	2.64
30.5	272,699	66,326	0.2432	0.7568	2.58
31.5	207,748	64,315	0.3096	0.6904	1.95
32.5	145,565	39,316	0.2701	0.7299	1.35
33.5	106,249	7,642	0.0719	0.9281	0.99
34.5	98,607	40,950	0.4153	0.5847	0.91
35.5	57,657	2,953	0.0512	0.9488	0.53
36.5	54,704	1,375	0.0251	0.9749	0.51
37.5	53,329	3,702	0.0694	0.9306	0.49
38.5	49,627		0.0000	1.0000	0.46

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1915-2022 EXPERIENCE BAND 1993-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	49,627		0.0000	1.0000	0.46
40.5	49,627		0.0000	1.0000	0.46
41.5	49,627	30,309	0.6107	0.3893	0.46
42.5	19,319	13,993	0.7243	0.2757	0.18
43.5	5,326		0.0000	1.0000	0.05
44.5	5,326		0.0000	1.0000	0.05
45.5	5,326		0.0000	1.0000	0.05
46.5	5,326		0.0000	1.0000	0.05
47.5	5,326		0.0000	1.0000	0.05
48.5	5,326	180	0.0337	0.9663	0.05
49.5	5,146	5,146	1.0000		0.05
50.5					

PART VII. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

PEOPLES NATURAL GAS COMPANY LLC

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1875	8,355	8,355			0.0
1876	535	535			0.0
1881	12	12			0.0
1885	6,559	6,478	81	81	0.0
1886	2,538	2,538		81	0.0
1887	13,227	13,227		81	0.0
1888	12,996	12,792	204	285	0.0
1889	19,659	19,163	496	781	0.0
1890	45,632	45,630	2	783	0.0
1891	39,472	38,390	1,082	1,865	0.0
1892	11,901	11,901		1,865	0.0
1893	19,815	19,813	2	1,867	0.0
1894	24,120	24,076	44	1,911	0.0
1895	8,182	8,183	1-	1,910	0.0
1896	12,919	12,494	425	2,335	0.0
1897	20,412	20,311	101	2,436	0.0
1898	30,084	30,067	17	2,453	0.0
1899	77,364	76,747	617	3,070	0.0
1900	1,080,947	1,008,717	72,230	75,300	0.0
1901	219,667	216,128	3,539	78,839	0.0
1902	384,166	371,793	12,373	91,212	0.0
1903	246,412	237,209	9,203	100,415	0.0
1904	117,613	112,008	5,605	106,020	0.0
1905	219,805	212,897	6,908	112,928	0.0
1906	166,475	158,716	7,759	120,687	0.0
1907	162,830	157,689	5,141	125,828	0.0
1908	174,136	164,894	9,242	135,070	0.0
1909	68,969	64,936	4,033	139,103	0.0
1910	70,251	67,244	3,007	142,110	0.0
1911	58,149	52,490	5,659	147,769	0.0
1912	56,777	52,535	4,242	152,011	0.0
1913	194,221	174,833	19,388	171,399	0.0
1914	210,527	191,339	19,188	190,587	0.0
1915	80,732	73,377	7,355	197,942	0.0
1916	92,669	84,060	8,609	206,551	0.0
1917	138,685	131,791	6,894	213,445	0.0
1918	83,222	75,800	7,422	220,867	0.0
1919	84,565	79,096	5,469	226,336	0.0
1920	57,488	56,271	1,217	227,553	0.0
1921	118,965	107,060	11,905	239,458	0.0
1922	177,825	168,445	9,380	248,838	0.0
1923	210,571	193,002	17,569	266,407	0.0
1924	299,618	275,473	24,145	290,552	0.0
1925	406,477	362,249	44,228	334,780	0.0
1926	250,916	218,449	32,467	367,247	0.0
1927	334,759	296,212	38,547	405,794	0.0

PEOPLES NATURAL GAS COMPANY LLC

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1928	290,721	250,563	40,158	445,952	0.0
1929	273,390	239,379	34,011	479,963	0.0
1930	324,428	282,827	41,601	521,564	0.0
1931	262,856	224,596	38,260	559,824	0.0
1932	178,706	149,333	29,373	589,197	0.0
1933	109,569	96,560	13,009	602,206	0.0
1934	83,868	74,989	8,879	611,085	0.0
1935	104,362	87,927	16,435	627,520	0.0
1936	155,626	135,072	20,554	648,074	0.0
1937	296,922	244,056	52,866	700,940	0.0
1938	335,517	284,956	50,561	751,501	0.0
1939	433,666	357,894	75,772	827,273	0.0
1940	519,771	402,431	117,340	944,613	0.0
1941	788,278	627,874	160,404	1,105,017	0.0
1942	429,662	355,822	73,840	1,178,857	0.0
1943	294,281	263,655	30,626	1,209,483	0.0
1944	428,203	365,007	63,196	1,272,679	0.0
1945	282,265	232,062	50,203	1,322,882	0.0
1946	547,826	420,675	127,151	1,450,033	0.0
1947	681,658	551,048	130,610	1,580,643	0.0
1948	1,381,177	1,203,916	177,261	1,757,904	0.1
1949	2,408,970	2,014,318	394,652	2,152,556	0.1
1950	2,934,511	2,446,152	488,359	2,640,915	0.1
1951	2,511,004	1,813,755	697,249	3,338,164	0.1
1952	3,909,373	3,034,167	875,206	4,213,370	0.1
1953	3,529,610	2,594,349	935,261	5,148,631	0.2
1954	2,383,640	1,814,732	568,908	5,717,539	0.2
1955	3,337,668	2,443,574	894,094	6,611,633	0.2
1956	3,605,341	2,581,754	1,023,587	7,635,220	0.2
1957	4,650,228	3,437,102	1,213,126	8,848,346	0.3
1958	5,471,414	3,861,566	1,609,848	10,458,194	0.3
1959	7,316,809	5,216,481	2,100,328	12,558,522	0.4
1960	5,066,054	3,510,298	1,555,756	14,114,278	0.4
1961	7,153,897	4,984,080	2,169,817	16,284,095	0.5
1962	6,366,327	4,393,403	1,972,924	18,257,019	0.6
1963	6,425,089	4,514,664	1,910,425	20,167,444	0.6
1964	7,635,112	5,370,605	2,264,507	22,431,951	0.7
1965	7,573,975	5,143,242	2,430,733	24,862,684	0.8
1966	8,599,127	5,754,135	2,844,992	27,707,676	0.8
1967	9,135,570	5,886,131	3,249,439	30,957,115	0.9
1968	11,031,606	7,295,058	3,736,548	34,693,663	1.1
1969	9,866,002	6,491,408	3,374,594	38,068,257	1.2
1970	8,757,809	5,810,177	2,947,632	41,015,889	1.3
1971	12,165,917	7,858,455	4,307,462	45,323,351	1.4
1972	16,603,811	10,307,433	6,296,378	51,619,729	1.6
1973	16,707,699	9,890,984	6,816,715	58,436,444	1.8

PEOPLES NATURAL GAS COMPANY LLC

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1974	14,904,538	8,913,097	5,991,441	64,427,885	2.0
1975	10,722,072	6,712,437	4,009,635	68,437,520	2.1
1976	9,852,476	6,263,235	3,589,241	72,026,761	2.2
1977	16,045,733	9,549,056	6,496,677	78,523,438	2.4
1978	22,436,443	14,622,123	7,814,320	86,337,758	2.6
1979	21,801,300	12,744,787	9,056,513	95,394,271	2.9
1980	25,010,034	14,057,280	10,952,754	106,347,025	3.2
1981	37,394,437	21,073,383	16,321,054	122,668,079	3.7
1982	29,244,420	16,684,701	12,559,719	135,227,798	4.1
1983	19,762,145	13,103,254	6,658,891	141,886,689	4.3
1984	29,527,489	19,551,990	9,975,499	151,862,188	4.6
1985	41,593,848	26,321,122	15,272,726	167,134,914	5.1
1986	27,594,264	16,945,873	10,648,391	177,783,305	5.4
1987	46,361,222	29,018,057	17,343,165	195,126,470	5.9
1988	34,824,076	21,533,776	13,290,300	208,416,770	6.4
1989	32,176,140	18,897,881	13,278,259	221,695,029	6.8
1990	44,788,309	26,163,449	18,624,860	240,319,889	7.3
1991	41,142,686	23,375,628	17,767,058	258,086,947	7.9
1992	49,288,285	27,551,648	21,736,637	279,823,584	8.5
1993	38,198,835	21,079,768	17,119,067	296,942,651	9.0
1994	42,782,586	23,156,728	19,625,858	316,568,509	9.6
1995	43,379,580	22,688,651	20,690,929	337,259,438	10.3
1996	32,723,665	16,739,689	15,983,976	353,243,414	10.8
1997	43,243,264	22,425,632	20,817,632	374,061,046	11.4
1998	27,985,315	14,088,714	13,896,601	387,957,647	11.8
1999	33,356,053	15,889,675	17,466,378	405,424,025	12.4
2000	24,890,902	11,281,124	13,609,778	419,033,803	12.8
2001	47,649,851	21,629,072	26,020,779	445,054,582	13.6
2002	60,171,002	26,371,016	33,799,986	478,854,568	14.6
2003	54,157,174	22,498,002	31,659,172	510,513,740	15.6
2004	62,506,633	24,869,374	37,637,259	548,150,999	16.7
2005	88,974,532	43,366,052	45,608,480	593,759,479	18.1
2006	67,376,624	25,003,894	42,372,730	636,132,209	19.4
2007	60,786,052	22,004,195	38,781,857	674,914,066	20.6
2008	57,823,959	19,942,022	37,881,937	712,796,003	21.7
2009	67,900,299	23,001,287	44,899,012	757,695,015	23.1
2010	58,375,810	18,363,947	40,011,863	797,706,878	24.3
2011	77,730,636	25,277,659	52,452,977	850,159,855	25.9
2012	102,277,868	26,393,142	75,884,726	926,044,581	28.2
2013	69,224,952	16,822,281	52,402,671	978,447,252	29.8
2014	80,793,144	18,251,482	62,541,662	1,040,988,914	31.7
2015	103,986,752	27,286,811	76,699,941	1,117,688,855	34.1
2016	103,542,387	23,919,535	79,622,852	1,197,311,707	36.5
2017	184,278,036	39,904,204	144,373,832	1,341,685,539	40.9
2018	211,852,328	33,290,396	178,561,932	1,520,247,471	46.3
2019	218,492,723	31,991,369	186,501,354	1,706,748,825	52.0

PEOPLES NATURAL GAS COMPANY LLC

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
2020	236,016,223	34,392,596	201,623,627	1,908,372,452	58.2
2021	322,552,292	36,617,185	285,935,107	2,194,307,559	66.9
2022	361,170,733	22,753,085	338,417,648	2,532,725,207	77.2
2023	431,448,961	18,541,340	412,907,621	2,945,632,828	89.8
2024	337,273,119	1,700,670	335,572,449	3,281,205,277	100.0
TOTAL	4,496,862,741	1,215,657,464	3,281,205,277		

UTILITY PLANT IN SERVICE

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 303.00 MISCELLANEOUS INTANGIBLE PLANT - CIAC

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 40-SQUARE						
2014	4,633,354.50	1,177,660	309,589	4,323,766	29.83	144,947
2016	59,000.00	12,046	3,167	55,833	31.83	1,754
2023	159,123.79	5,304	1,394	157,730	38.67	4,079
2024	318,247.59	1,327	349	317,899	39.83	7,981
	5,169,725.88	1,196,337	314,499	4,855,227		158,761
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					30.6	3.07

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 303.01 MISCELLANEOUS INTANGIBLE PLANT - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
2020	7,746,600.83	6,455,475	6,066,827	1,679,774	0.83	1,679,774
2021	6,387,363.64	4,045,309	3,801,763	2,585,601	1.83	1,412,897
2022	6,553,557.26	2,839,853	2,668,881	3,884,676	2.83	1,372,677
2023	11,330,545.97	3,021,517	2,839,609	8,490,937	3.67	2,313,607
2024	2,122,251.20	70,735	66,476	2,055,775	4.83	425,626
	34,140,318.90	16,432,889	15,443,556	18,696,763		7,204,581
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					2.6	21.10

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 303.02 MISCELLANEOUS INTANGIBLE PLANT - MAJOR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
2015	7,114,072.55	4,347,481	2,726,560	4,387,513	5.83	752,575
2016	1,017.41	554	347	670	6.83	98
2017	221,052.47	105,614	66,237	154,815	7.83	19,772
2019	3,789,607.75	1,305,292	818,625	2,970,983	9.83	302,236
2020	9,018,329.45	2,505,112	1,571,103	7,447,226	10.83	687,648
2021	1,939,034.59	409,350	256,727	1,682,308	11.83	142,207
2022	1,666,255.65	240,674	150,941	1,515,315	12.83	118,107
2023	905,219.78	80,465	50,464	854,756	13.67	62,528
2024	1,810,439.56	20,114	12,615	1,797,825	14.83	121,229
	26,465,029.21	9,014,656	5,653,619	20,811,410		2,206,400

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.4 8.34

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 303.03 MISCELLANEOUS INTANGIBLE PLANT - SAP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
2015	3,398,477.83	3,115,283	3,398,478			
2016	1,870,338.32	1,527,449	1,870,338			
2017	252,022.09	180,617	252,022			
2019	2,950,462.07	1,524,415	2,950,462			
2020	294,433.01	122,681	243,369	51,064	5.83	8,759
2021	1,256,704.23	397,961	789,456	467,248	6.83	68,411
2023	3,050,814.24	406,765	806,922	2,243,892	8.67	258,811
2024	1,203,381.48	20,060	39,794	1,163,587	9.83	118,371
	14,276,633.27	7,295,231	10,350,841	3,925,792		454,352
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					8.6	3.18

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.01 PRODUCING LANDS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R4						
1938	2,365.49	2,149	2,365			
1954	662.55	543	663			
1966	474.91	339	475			
1983	5,657.27	3,168	5,657			
2008	130,279.99	29,704	70,863	59,417	54.75	1,085
	139,440.21	35,903	80,023	59,417		1,085

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 54.8 0.78

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.02 PRODUCING LEASEHOLDS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-L0						
1890	13.00	11	13			
1897	620.75	498	621			
1899	305.00	243	305			
1900	263.11	209	263			
1901	378.47	299	378			
1908	11.01	8	11			
1909	45.50	35	46			
1910	1.00	1	1			
1914	105.50	78	103	2	11.53	
1915	25.11	19	25			
1916	58.60	43	57	2	11.86	
1917	2.75	2	3			
1919	56.45	41	54	2	12.37	
1921	34.54	25	33	2	12.71	
1922	16.94	12	16	1	12.89	
1926	110.00	77	101	9	13.60	1
1931	44.62	30	40	5	14.52	
1937	39.01	25	33	6	15.67	
1941	198.30	126	166	32	16.47	2
1943	103.13	64	84	19	16.88	1
1945	15.81	10	13	3	17.30	
1946	4.87	3	4	1	17.52	
1947	22.60	14	18	5	17.73	
1948	100.00	60	79	21	17.95	1
1950	70.00	41	54	16	18.38	1
1953	166.24	96	126	40	19.06	2
1955	8.17	5	7	1	19.52	
1956	95.00	53	70	25	19.75	1
1957	187.00	104	137	50	19.99	3
1958	235.50	130	171	64	20.22	3
1959	280.00	153	202	78	20.46	4
1960	81.57	44	58	24	20.70	1
1961	332.30	178	234	98	20.95	5
1965	440.34	226	298	142	21.95	6
1966	37.55	19	25	13	22.21	1
1968	218.17	108	142	76	22.73	3
1970	23.61	11	14	10	23.26	
1971	728.26	347	457	271	23.53	12
1972	2,608.99	1,229	1,619	990	23.80	42
1973	116.76	54	71	46	24.08	2
1974	969.05	444	585	384	24.36	16
1975	72.25	33	43	29	24.64	1
1977	1,441.00	634	835	606	25.21	24
1978	765.00	331	436	329	25.50	13

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.02 PRODUCING LEASEHOLDS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-L0						
1979	82.70	35	46	37	25.80	1
1980	91.23	38	50	41	26.09	2
1982	195.00	79	104	91	26.70	3
1995	2,658.92	1,481	1,952	707	23.19	30
	14,480.68	7,806	10,203	4,278		181

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.6 1.25

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.03 GAS RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
1901	1,674.68	1,675	1,675			
1910	22.78	22	23			
1923	1,969.07	1,817	1,969			
1924	25.41	23	25			
1927	43.28	39	43			
1938	1,018.56	886	1,019			
1948	385.48	319	367	18	11.22	2
1959	410.49	313	360	50	15.46	3
1974	3,366.13	2,137	2,459	907	23.74	38
1976	518.00	318	366	152	25.04	6
1980	1,507.30	864	994	513	27.76	18
1981	923.36	519	597	326	28.46	11
2005	9,119.74	2,937	3,380	5,740	40.36	142
	20,984.28	11,869	13,277	7,707		220

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 35.0 1.05

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.04 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
1875	1.00	1	1			
1888	137.42	136	137			
1889	130.52	129	131			
1890	1,873.28	1,840	1,873			
1891	1,372.99	1,344	1,373			
1892	924.40	902	924			
1893	699.05	679	699			
1894	3,023.40	2,928	3,023			
1895	218.54	211	219			
1896	1,259.83	1,211	1,260			
1897	1,642.16	1,573	1,642			
1898	1,409.64	1,345	1,410			
1899	2,897.90	2,753	2,898			
1900	2,874.97	2,721	2,875			
1901	10,007.57	9,438	10,008			
1902	4,457.09	4,188	4,457			
1903	7,504.57	7,027	7,505			
1904	5,966.84	5,567	5,967			
1905	9,920.15	9,226	9,920			
1906	6,726.76	6,235	6,727			
1907	4,784.95	4,421	4,785			
1908	3,068.84	2,827	3,069			
1909	6,824.39	6,266	6,824			
1910	3,360.27	3,075	3,360			
1911	2,637.18	2,406	2,637			
1912	5,250.72	4,775	5,251			
1913	3,998.45	3,625	3,998			
1914	5,211.01	4,709	5,211			
1915	3,526.25	3,176	3,526			
1916	9,327.91	8,373	9,328			
1917	11,339.21	10,143	11,339			
1918	5,939.02	5,295	5,939			
1919	10,034.15	8,916	10,034			
1920	8,068.68	7,143	8,069			
1921	9,874.37	8,712	9,874			
1922	13,323.29	11,712	13,323			
1923	12,530.40	10,975	12,530			
1924	23,943.35	20,895	23,943			
1925	11,074.30	9,627	11,074			
1926	10,137.05	8,779	10,137			
1927	11,336.06	9,779	11,336			
1928	3,835.08	3,295	3,835			
1929	3,297.79	2,822	3,298			
1930	7,617.74	6,491	7,618			

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.04 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
1931	362.17	307	362			
1932	666.58	563	667			
1933	1,250.79	1,052	1,251			
1934	192.41	161	192			
1935	1,203.89	1,003	1,204			
1936	3,095.27	2,565	3,095			
1937	896.03	739	896			
1938	3,164.87	2,595	3,165			
1939	2,701.60	2,203	2,702			
1940	3,447.99	2,795	3,448			
1941	4,750.60	3,828	4,751			
1942	8,225.90	6,588	8,203	23	14.93	2
1943	7,793.53	6,203	7,724	70	15.31	5
1944	6,457.05	5,105	6,357	100	15.70	6
1945	4,000.28	3,141	3,911	89	16.11	6
1946	3,848.61	3,000	3,736	113	16.53	7
1947	1,792.72	1,388	1,728	65	16.95	4
1948	2,046.38	1,572	1,957	89	17.39	5
1949	1,945.89	1,483	1,847	99	17.84	6
1950	1,033.21	781	972	61	18.31	3
1951	6,743.01	5,055	6,294	449	18.78	24
1952	5,227.54	3,884	4,836	392	19.27	20
1953	3,419.00	2,518	3,135	284	19.77	14
1954	4,135.13	3,017	3,757	378	20.28	19
1955	3,153.08	2,279	2,838	315	20.80	15
1956	13,433.71	9,613	11,970	1,464	21.33	69
1957	5,931.14	4,202	5,232	699	21.87	32
1958	7,746.35	5,431	6,763	983	22.42	44
1959	8,167.31	5,664	7,053	1,114	22.99	48
1960	3,263.45	2,238	2,787	476	23.56	20
1961	4,069.92	2,759	3,435	635	24.15	26
1962	5,795.30	3,884	4,836	959	24.74	39
1963	5,947.65	3,937	4,902	1,046	25.35	41
1964	7,158.88	4,681	5,829	1,330	25.96	51
1965	5,532.56	3,572	4,448	1,085	26.58	41
1966	11,080.22	7,059	8,790	2,290	27.22	84
1967	5,622.33	3,534	4,400	1,222	27.86	44
1968	3,247.97	2,013	2,507	741	28.51	26
1969	4,053.75	2,477	3,084	970	29.17	33
1970	25,742.29	15,504	19,305	6,437	29.83	216
1971	51,947.30	30,815	38,370	13,577	30.51	445
1972	27,208.63	15,893	19,789	7,420	31.19	238
1973	21,080.78	12,120	15,091	5,990	31.88	188
1974	11,679.68	6,606	8,226	3,454	32.58	106

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.04 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
1975	15,635.72	8,695	10,827	4,809	33.29	144
1976	24,795.30	13,555	16,878	7,917	34.00	233
1977	9,701.66	5,210	6,487	3,215	34.72	93
1978	12,975.14	6,842	8,519	4,456	35.45	126
1979	18,968.48	9,816	12,223	6,745	36.19	186
1980	8,113.79	4,119	5,129	2,985	36.93	81
1981	16,632.83	8,276	10,305	6,328	37.68	168
1982	8,839.18	4,310	5,367	3,472	38.43	90
1983	11,652.16	6,380	7,944	3,708	34.02	109
1984	61,906.30	33,070	41,178	20,728	35.02	592
1985	15,651.08	8,214	10,228	5,423	35.46	153
1986	17,645.91	9,024	11,236	6,410	36.46	176
1987	4,920.02	2,469	3,074	1,846	36.90	50
1988	38,191.05	18,786	23,392	14,799	37.36	396
1989	8,167.54	3,907	4,865	3,303	38.36	86
1990	1,377.08	645	803	574	38.82	15
1991	28,921.57	13,237	16,482	12,440	39.30	317
1992	11,012.64	4,924	6,131	4,882	39.78	123
1993	5,340.25	2,313	2,880	2,460	40.78	60
1994	15,466.03	6,531	8,132	7,334	41.26	178
1995	5,379.78	2,212	2,754	2,626	41.76	63
1996	12,980.22	5,156	6,420	6,560	42.75	153
1997	7,464.80	2,880	3,586	3,879	43.25	90
1998	3,484.33	1,304	1,624	1,860	43.76	43
1999	15.50	6	7	8	44.76	
2000	16,002.37	5,569	6,934	9,068	45.28	200
2001	26,595.59	8,933	11,123	15,473	45.80	338
2002	309,217.69	99,383	123,750	185,468	46.80	3,963
2003	155,944.14	48,187	60,002	95,942	47.33	2,027
2004	64,143.30	19,012	23,673	40,470	47.86	846
2005	520.27	148	184	336	48.40	7
2006	25,903.77	6,966	8,674	17,230	49.40	349
2007	586.03	150	187	399	49.95	8
2008	82,248.26	19,945	24,836	57,412	50.50	1,137
2009	356.34	82	102	254	51.06	5
2010	4.00	1	1	3	51.62	
2011	17,137.51	3,451	4,297	12,841	52.20	246
2012	44.11	8	10	34	52.77	1
2015	567.59	82	102	466	54.53	9
2021	692.28	36	45	647	57.07	11
	1,628,852.90	827,352	999,623	629,230		14,799

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 42.5 0.91

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 327.00 FIELD COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S0.5						
1906	447.51	448	448			
1910	72.71	73	73			
1929	30.42	29	30			
1937	64.94	59	65			
1938	15,595.31	14,111	15,595			
1942	15.30	13	15			
1944	25.81	22	26			
1945	61.34	53	61			
1947	107.88	91	106	2	7.79	
1952	6,181.03	5,005	5,806	375	9.51	39
1956	24,815.84	19,391	22,493	2,323	10.93	213
1957	1,340.86	1,038	1,204	137	11.29	12
1958	34.68	27	31	4	11.65	
1959	13.74	10	12	2	12.01	
1960	598.19	450	522	76	12.38	6
1962	2,002.00	1,476	1,712	290	13.13	22
1963	1,521.25	1,111	1,289	232	13.50	17
1964	43,130.69	31,158	36,142	6,989	13.88	504
1967	3,602.08	2,519	2,922	680	15.04	45
1968	5,726.16	3,958	4,591	1,135	15.44	74
1969	476.37	325	377	99	15.84	6
1970	1,375.45	929	1,078	297	16.24	18
1971	23,164.08	15,450	17,921	5,243	16.65	315
1972	3,100.64	2,043	2,370	731	17.06	43
1973	780.95	508	589	192	17.47	11
1974	138,984.37	89,228	103,501	35,483	17.90	1,982
1975	605.40	384	445	160	18.32	9
1976	700.78	438	508	193	18.75	10
1977	3,016.82	1,859	2,156	861	19.19	45
1978	6,830.01	4,149	4,813	2,017	19.63	103
1980	11,149.85	6,572	7,623	3,527	20.53	172
1982	699.72	400	464	236	21.45	11
1983	604.16	415	481	123	18.71	7
1985	67,432.01	44,896	52,078	15,354	19.66	781
1987	2,614.11	1,691	1,961	653	20.30	32
1988	1,268.19	807	936	332	20.65	16
1990	13,292.33	8,175	9,483	3,809	21.39	178
1991	32,626.65	19,693	22,843	9,784	21.78	449
1992	26,591.16	15,824	18,355	8,236	21.89	376
1994	42,119.16	24,016	27,858	14,261	22.74	627
1995	117,826.94	65,641	76,141	41,686	23.19	1,798
1996	9,421.07	5,148	5,971	3,450	23.38	148
1997	5,413.76	2,883	3,344	2,070	23.85	87
1998	169,216.20	88,111	102,205	67,011	24.09	2,782

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 327.00 FIELD COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S0.5						
2002	497,083.26	230,299	267,137	229,946	25.68	8,954
2003	112,989.19	50,698	58,808	54,181	26.00	2,084
2004	63,829.20	27,549	31,956	31,873	26.56	1,200
2005	70,055.36	29,136	33,797	36,258	26.92	1,347
2006	87,441.68	34,950	40,541	46,901	27.29	1,719
2007	44,755.08	17,132	19,872	24,883	27.68	899
2008	259,669.92	94,883	110,060	149,610	28.08	5,328
2009	8,602,579.77	2,987,676	3,465,582	5,136,998	28.50	180,246
2010	201,624.59	66,274	76,875	124,750	28.94	4,311
2011	226,225.80	70,288	81,531	144,695	29.21	4,954
2014	43,982.88	11,000	12,760	31,223	30.48	1,024
2017	195,354.90	35,984	41,740	153,615	31.74	4,840
2018	68,882.58	11,090	12,864	56,019	32.15	1,742
2019	1,394.06	191	222	1,172	32.57	36
2021	389,470.84	33,806	39,213	350,258	33.33	10,509
	11,650,037.03	4,181,583	4,849,602	6,800,435		240,131

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 28.3 2.06

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 328.00 FIELD MEASURING AND REGULATING STATION STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 33-S0						
1926	26.11	26	26			
1931	217.01	217	217			
1933	44.65	45	45			
1936	73.18	73	73			
1937	528.56	529	529			
1939	99.43	99	99			
1940	950.46	950	950			
1941	893.47	893	893			
1942	625.93	626	626			
1943	247.35	247	247			
1944	259.68	260	260			
1945	216.04	216	216			
1946	816.21	816	816			
1947	916.74	917	917			
1948	1,209.54	1,210	1,210			
1949	1,128.11	1,128	1,128			
1950	563.99	564	564			
1951	541.01	541	541			
1952	1,047.80	1,048	1,048			
1953	1,063.66	1,064	1,064			
1954	630.23	630	630			
1955	737.84	738	738			
1956	1,387.88	1,388	1,388			
1957	2,334.97	2,335	2,335			
1958	2,192.28	2,192	2,192			
1959	3,258.15	3,228	2,742	516	0.31	516
1960	2,515.89	2,465	2,094	422	0.67	422
1961	2,547.20	2,467	2,096	451	1.04	434
1962	1,865.06	1,785	1,517	348	1.41	247
1963	2,019.97	1,911	1,624	396	1.78	222
1964	2,603.79	2,434	2,068	536	2.15	249
1965	1,267.92	1,171	995	273	2.52	108
1966	2,259.29	2,061	1,751	508	2.90	175
1967	1,318.47	1,188	1,009	309	3.27	94
1968	1,726.53	1,536	1,305	422	3.65	116
1969	3,410.39	2,994	2,544	866	4.03	215
1970	1,281.22	1,110	943	338	4.42	76
1971	665.21	568	483	182	4.80	38
1972	1,377.87	1,161	986	392	5.19	76
1973	758.07	630	535	223	5.58	40
1974	716.33	587	499	217	5.97	36
1975	959.41	775	658	301	6.36	47
1977	534.30	418	355	179	7.16	25
1978	214.94	166	141	74	7.56	10

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 328.00 FIELD MEASURING AND REGULATING STATION STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 33-S0						
1980	9.45	7	6	3	8.37	
1981	87.49	64	54	33	8.77	4
1983	39.48	33	28	11	8.84	1
1984	99.16	81	69	30	9.09	3
1988	14.07	11	9	5	10.56	
1990	20.55	15	13	8	11.29	1
1991	95.71	71	60	36	11.68	3
1996	73.52	50	42	32	13.33	2
1999	616.71	394	335	282	14.20	20
2023	105,715.69	6,544	5,560	100,156	20.22	4,953
2024	211,453.69	1,734	1,473	209,981	20.16	10,416
	368,277.66	56,411	50,746	317,532		18,549

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.1 5.04

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 329.00 OTHER STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2.5						
1906	25.67	26	26			
1923	89.05	85	89			
1925	360.51	341	361			
1930	2,654.77	2,457	2,655			
1931	412.22	380	412			
1934	573.54	522	574			
1937	1,232.02	1,109	1,232			
1938	624.80	560	625			
1939	182.52	163	183			
1940	612.46	544	612			
1942	75.19	66	75			
1943	1,950.07	1,710	1,950			
1945	438.70	381	439			
1946	2,386.37	2,063	2,386			
1947	879.46	756	879			
1948	1,082.34	926	1,082			
1949	216.13	184	216			
1951	64.67	54	65			
1952	558.30	467	558			
1955	403.23	331	403			
1958	1,124.10	903	1,124			
1959	31,160.70	24,845	31,161			
1960	1,544.44	1,221	1,544			
1961	3,567.26	2,797	3,567			
1962	1,060.23	824	1,060			
1963	670.31	516	670			
1964	4,447.77	3,391	4,448			
1965	820.09	619	820			
1966	112.87	84	113			
1968	36,544.49	26,677	36,544			
1969	242.43	175	242			
1971	2,289.00	1,610	2,289			
1972	606.16	421	606			
1974	22,407.22	15,114	21,934	473	19.53	24
1975	3,865.50	2,569	3,728	138	20.13	7
1976	206.27	135	196	10	20.75	
1977	26,122.58	16,819	24,408	1,715	21.37	80
1979	2,195.60	1,367	1,984	212	22.65	9
1980	96,937.17	59,277	86,024	10,913	23.31	468
1981	638.85	384	557	82	23.98	3
1982	5,110.87	3,010	4,368	743	24.66	30
1983	4,043.94	2,614	3,793	251	22.53	11
1984	20,289.59	12,876	18,686	1,604	23.13	69
1985	5,106.09	3,180	4,615	491	23.72	21

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 329.00 OTHER STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2.5						
1986	3,282.44	2,005	2,910	372	24.33	15
1987	20,373.94	12,192	17,693	2,681	24.94	107
1988	10,424.65	6,108	8,864	1,561	25.56	61
1989	22,530.46	12,914	18,741	3,789	26.18	145
1990	2,539.49	1,423	2,065	474	26.81	18
1991	40,823.28	22,338	32,417	8,406	27.44	306
1992	105,819.61	56,508	82,005	23,815	28.07	848
1994	130,128.10	66,339	96,272	33,856	29.01	1,167
1995	18,307.97	9,077	13,173	5,135	29.66	173
1997	10,243.00	4,787	6,947	3,296	30.97	106
1999	18,089.59	7,921	11,495	6,595	32.30	204
2001	18,491.70	7,539	10,941	7,551	33.65	224
2002	28,877.01	11,331	16,444	12,433	34.33	362
2005	7,886.97	2,721	3,949	3,938	36.39	108
2006	7,353.87	2,418	3,509	3,845	37.08	104
2008	46,082.37	13,710	19,896	26,186	38.18	686
2012	1,026,719.81	236,146	342,699	684,021	40.74	16,790
2013	4,362.42	926	1,344	3,018	41.46	73
2014	54,296.32	10,544	15,301	38,995	42.19	924
2017	33,391.08	4,691	6,808	26,583	43.85	606
2019	2,786.17	288	418	2,368	44.84	53
2021	19,955.69	1,295	1,879	18,077	45.61	396
	1,918,701.49	687,774	985,073	933,628		24,198

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 38.6 1.26

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 330.00 PRODUCING GAS WELLS - WELL CONSTRUCTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 25-L1						
1921	6,345.86	6,346	6,346			
1933	5.00	5	5			
1942	29.81	30	30			
1965	620.40	531	489	131	3.59	36
1974	1,086.16	854	787	299	5.34	56
1981	177.94	129	119	59	6.85	9
1982	113.94	82	76	38	7.08	5
1985	312.58	264	243	70	7.13	10
1994	198.47	154	142	56	8.74	6
1995	16.42	13	12	4	9.00	
1997	314.81	233	215	100	9.47	11
	9,221.39	8,641	8,464	757		133

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.7 1.44

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 331.00 PRODUCING GAS WELLS - WELL EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 26-L1						
1921	1,243.54	1,244	1,244			
1945	420.81	408	374	47	0.77	47
1954	1,258.20	1,151	1,056	202	2.22	91
1979	31.01	23	21	10	7.06	1
1984	30.56	26	24	7	7.45	1
	2,984.12	2,852	2,719	265		140

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.9 4.69

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 332.00 FIELD LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R1.5						
1875	315.73	316	316			
1886	510.25	510	510			
1889	1,127.84	1,128	1,128			
1890	35,718.76	35,719	35,719			
1891	137.68	138	138			
1892	2,452.81	2,453	2,453			
1893	4,505.31	4,505	4,505			
1894	17,468.67	17,404	17,469			
1895	7,626.70	7,567	7,627			
1896	2,761.45	2,726	2,761			
1897	6,479.11	6,364	6,479			
1898	28,086.14	27,447	28,086			
1899	44,584.20	43,343	44,584			
1900	46,341.39	44,808	46,341			
1901	76,319.92	73,396	76,320			
1902	61,698.53	59,012	61,699			
1903	62,981.15	59,919	62,981			
1904	45,559.71	43,114	45,560			
1905	105,108.57	98,964	105,109			
1906	18,318.05	17,165	18,318			
1907	104,913.43	97,876	104,913			
1908	88,104.87	81,856	88,105			
1909	24,421.66	22,599	24,422			
1910	30,722.57	28,322	30,723			
1911	3,719.37	3,416	3,719			
1912	3,114.46	2,849	3,114			
1913	36,087.19	32,889	36,087			
1914	39,685.52	36,034	39,686			
1915	6,867.17	6,211	6,867			
1916	15,480.08	13,946	15,480			
1917	40,025.54	35,912	40,026			
1918	25,052.64	22,382	25,053			
1919	23,409.55	20,824	23,410			
1920	30,871.28	27,342	30,871			
1921	9,590.90	8,456	9,591			
1922	85,400.34	74,955	85,400			
1923	34,471.65	30,112	34,472			
1924	38,661.29	33,611	38,661			
1925	45,803.03	39,630	45,803			
1926	17,871.80	15,386	17,872			
1927	60,509.04	51,833	60,509			
1928	24,553.83	20,927	24,554			
1929	46,054.50	39,047	45,814	240	9.89	24
1930	31,900.34	26,904	31,567	333	10.18	33

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 332.00 FIELD LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R1.5						
1931	30,662.91	25,724	30,182	481	10.47	46
1932	8,815.04	7,354	8,628	187	10.77	17
1933	12,853.88	10,665	12,513	341	11.07	31
1934	4,048.21	3,339	3,918	130	11.38	11
1935	8,547.84	7,011	8,226	322	11.69	28
1936	4,010.50	3,270	3,837	174	12.00	14
1937	16,790.15	13,610	15,969	821	12.31	67
1938	43,883.85	35,357	41,484	2,400	12.63	190
1939	84,189.04	67,403	79,084	5,105	12.96	394
1940	33,104.03	26,336	30,900	2,204	13.29	166
1941	186,685.84	147,540	173,109	13,577	13.63	996
1942	51,096.43	40,115	47,067	4,029	13.97	288
1943	39,545.89	30,840	36,185	3,361	14.31	235
1944	130,271.09	100,870	118,351	11,920	14.67	813
1945	97,093.76	74,643	87,579	9,515	15.03	633
1946	54,614.29	41,683	48,907	5,707	15.39	371
1947	55,028.72	41,678	48,901	6,128	15.77	389
1948	20,398.04	15,333	17,990	2,408	16.14	149
1949	56,832.67	42,380	49,725	7,108	16.53	430
1950	58,611.65	43,346	50,858	7,754	16.93	458
1951	55,029.65	40,358	47,352	7,678	17.33	443
1952	65,208.07	47,411	55,627	9,581	17.74	540
1953	101,006.06	72,802	85,419	15,587	18.15	859
1954	56,554.44	40,388	47,387	9,167	18.58	493
1955	53,503.49	37,856	44,417	9,086	19.01	478
1956	314,528.47	220,412	258,610	55,918	19.45	2,875
1957	485,822.38	337,088	395,506	90,316	19.90	4,538
1958	190,784.02	131,053	153,765	37,019	20.35	1,819
1959	354,516.60	240,961	282,720	71,797	20.82	3,448
1960	244,106.86	164,152	192,600	51,507	21.29	2,419
1961	98,773.00	65,692	77,077	21,696	21.77	997
1962	179,375.95	117,947	138,388	40,988	22.26	1,841
1963	242,344.88	157,524	184,823	57,522	22.75	2,528
1964	250,801.62	161,052	188,963	61,839	23.26	2,659
1965	159,733.11	101,320	118,879	40,854	23.77	1,719
1966	209,107.84	130,966	153,663	55,445	24.29	2,283
1967	274,148.95	169,465	198,834	75,315	24.82	3,034
1968	196,235.90	119,674	140,414	55,822	25.36	2,201
1969	621,358.61	373,772	438,548	182,811	25.90	7,058
1970	109,245.70	64,791	76,020	33,226	26.45	1,256
1971	489,188.20	285,911	335,460	153,728	27.01	5,692
1972	1,343,696.08	773,552	907,611	436,085	27.58	15,812
1973	535,087.78	303,352	355,924	179,164	28.15	6,365
1974	701,996.65	391,609	459,476	242,521	28.74	8,438

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 332.00 FIELD LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R1.5						
1975	996,076.42	546,617	641,348	354,728	29.33	12,094
1976	577,961.96	311,920	365,977	211,985	29.92	7,085
1977	1,244,499.65	659,971	774,346	470,154	30.53	15,400
1978	603,770.16	314,516	369,023	234,747	31.14	7,538
1979	711,869.16	364,150	427,258	284,611	31.75	8,964
1980	851,416.06	427,283	501,333	350,083	32.38	10,812
1981	733,523.34	361,004	423,567	309,956	33.01	9,390
1982	754,742.12	364,020	427,106	327,636	33.65	9,737
1983	507,873.70	296,903	348,357	159,517	29.25	5,454
1984	877,271.43	503,905	591,233	286,038	29.76	9,611
1985	2,104,411.02	1,186,888	1,392,580	711,831	30.28	23,508
1986	826,362.23	457,309	536,562	289,800	30.80	9,409
1987	327,643.51	177,779	208,589	119,055	31.33	3,800
1988	2,093,103.28	1,112,694	1,305,528	787,575	31.86	24,720
1989	774,419.00	403,085	472,941	301,478	32.40	9,305
1990	599,523.55	305,217	358,112	241,412	32.95	7,327
1991	1,289,073.01	645,568	757,447	531,626	33.06	16,081
1992	1,526,279.45	746,198	875,517	650,762	33.62	19,356
1993	521,667.14	248,731	291,837	229,830	34.20	6,720
1994	609,411.38	283,133	332,201	277,210	34.77	7,973
1995	605,805.15	273,885	321,350	284,455	35.35	8,047
1996	937,471.47	414,550	486,393	451,078	35.53	12,696
1997	2,108,104.59	904,798	1,061,603	1,046,502	36.13	28,965
1998	446,394.02	185,700	217,882	228,512	36.73	6,221
1999	539,752.94	218,708	256,611	283,142	36.94	7,665
2000	849,845.41	332,714	390,374	459,471	37.56	12,233
2001	931,612.98	353,920	415,256	516,357	37.81	13,657
2002	256,914.06	93,979	110,266	146,648	38.44	3,815
2003	1,238,091.47	437,665	513,514	724,577	38.71	18,718
2004	516,663.05	175,045	205,381	311,282	39.36	7,909
2005	832,089.59	271,095	318,077	514,013	39.66	12,960
2006	562,209.91	175,691	206,139	356,071	39.97	8,908
2007	1,599,626.45	477,808	560,614	1,039,012	40.30	25,782
2008	2,425,268.19	689,989	809,566	1,615,702	40.65	39,747
2009	1,477,193.34	398,842	467,963	1,009,230	41.01	24,609
2010	1,883,239.93	480,226	563,451	1,319,789	41.39	31,887
2011	5,118,200.48	1,226,321	1,438,846	3,679,354	41.78	88,065
2012	2,281,224.30	510,766	599,283	1,681,941	42.18	39,875
2013	2,980,106.11	622,246	730,083	2,250,023	42.31	53,179
2014	2,166,954.12	418,656	491,210	1,675,744	42.46	39,466
2015	1,592,138.30	281,649	330,460	1,261,678	42.65	29,582
2016	288,731.29	46,226	54,237	234,494	42.85	5,472
2017	1,088,742.05	156,017	183,055	905,687	42.84	21,141
2018	1,702,239.15	215,163	252,452	1,449,787	42.61	34,025

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 332.00 FIELD LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R1.5						
2019	4,735,566.74	513,809	602,854	4,132,713	42.45	97,355
2020	2,587,275.36	232,855	273,209	2,314,066	42.13	54,927
2021	1,409,467.66	99,508	116,753	1,292,715	41.68	31,015
2022	4,176,167.33	211,732	248,426	3,927,741	40.57	96,814
2023	6,083,240.16	201,355	236,251	5,846,989	38.99	149,961
2024	7,389,970.75	36,211	42,486	7,347,485	34.08	215,595
	89,105,836.08	27,020,942	31,590,625	57,515,211		1,530,153
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					37.6	1.72

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 333.00 FIELD COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S0.5						
1956	1,655.20	1,624	1,498	157	0.66	157
1957	1,643.36	1,596	1,472	171	1.01	169
1959	56.00	53	49	7	1.70	4
1963	1,341.01	1,224	1,129	212	3.05	70
1964	314.83	284	262	53	3.38	16
1968	471.07	408	376	95	4.72	20
1969	182.16	156	144	38	5.06	8
1970	1,021.63	864	797	225	5.40	42
1971	149,473.03	124,959	115,278	34,195	5.74	5,957
1972	92.03	76	70	22	6.09	4
1973	578.73	472	435	144	6.43	22
1974	372,637.09	300,454	277,177	95,460	6.78	14,080
1976	3,205.85	2,520	2,325	881	7.49	118
1977	30,330.69	23,528	21,705	8,626	7.85	1,099
1978	11,958.32	9,153	8,444	3,514	8.21	428
1979	5,475.24	4,135	3,815	1,660	8.57	194
1980	168.77	126	116	53	8.94	6
1981	7,816.90	5,735	5,291	2,526	9.32	271
1982	3,175.15	2,295	2,117	1,058	9.70	109
1984	1,168.34	943	870	298	9.58	31
1985	196,620.08	157,099	144,928	51,692	9.85	5,248
1986	16,245.47	12,834	11,840	4,405	10.14	434
1987	2,572.36	2,008	1,852	720	10.45	69
1988	45,612.16	35,140	32,418	13,194	10.78	1,224
1989	55,084.43	41,842	38,600	16,484	11.13	1,481
1990	120,585.35	90,222	83,232	37,353	11.50	3,248
1991	6,245.20	4,619	4,261	1,984	11.68	170
1992	205,248.49	149,216	137,656	67,592	12.08	5,595
1993	43,939.84	31,360	28,931	15,009	12.50	1,201
1994	120,336.91	84,585	78,032	42,305	12.75	3,318
1995	1,625,039.31	1,123,227	1,036,209	588,830	13.03	45,190
1996	70,465.51	47,635	43,945	26,521	13.50	1,965
1997	19,197.91	12,726	11,740	7,458	13.82	540
1998	104,527.26	67,828	62,573	41,954	14.16	2,963
1999	174,383.90	110,594	102,026	72,358	14.52	4,983
2000	126,163.46	78,057	72,010	54,153	14.89	3,637
2001	33,432.87	20,214	18,648	14,785	15.15	976
2002	6,432,374.39	3,778,377	3,485,662	2,946,712	15.57	189,256
2003	1,404,270.07	802,540	740,366	663,904	15.87	41,834
2004	792,370.12	439,448	405,403	386,967	16.20	23,887
2005	1,356,467.93	725,439	669,238	687,230	16.67	41,226
2006	1,901,921.44	981,201	905,186	996,735	17.05	58,460
2007	5,163,151.17	2,570,217	2,371,100	2,792,051	17.32	161,204
2008	2,234,381.79	1,065,577	983,026	1,251,356	17.73	70,578

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 333.00 FIELD COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S0.5						
2009	3,505,985.32	1,595,223	1,471,639	2,034,346	18.17	111,962
2010	1,934,336.15	838,535	773,573	1,160,763	18.51	62,710
2011	1,117,559.08	459,093	423,527	694,032	18.88	36,760
2012	156,970.69	60,732	56,027	100,944	19.28	5,236
2013	282,974.37	102,380	94,449	188,525	19.70	9,570
2014	150,512.91	50,648	46,724	103,789	20.05	5,177
2015	162,006.51	50,044	46,167	115,840	20.51	5,648
2016	172,560.70	48,472	44,717	127,844	20.90	6,117
2017	1,154,754.27	290,536	268,028	886,726	21.32	41,591
2018	188,723.01	41,783	38,546	150,177	21.69	6,924
2019	1,180,950.33	223,318	206,017	974,933	22.16	43,995
2020	438,603.27	68,334	63,040	375,563	22.57	16,640
2021	4,002,728.55	485,531	447,916	3,554,813	22.94	154,961
2022	4,139,143.60	351,413	324,189	3,814,955	23.34	163,451
2023	819,122.33	43,823	40,428	778,694	23.60	32,996
	42,250,333.91	17,622,475	16,257,239	25,993,095		1,395,230

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.6 3.30

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 334.00 FIELD MEASURING AND STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-L0						
1934	288.52	289	289			
1935	11.22	11	11			
1936	501.94	502	502			
1937	181.49	181	181			
1938	145.26	145	145			
1939	247.53	248	248			
1940	728.96	729	729			
1941	611.58	612	612			
1942	1,316.26	1,316	1,316			
1943	347.71	342	348			
1944	332.65	319	333			
1945	472.30	450	472			
1946	1,151.21	1,086	1,151			
1947	507.27	475	507			
1948	796.24	740	796			
1949	2,093.31	1,935	2,093			
1950	440.30	404	440			
1951	535.45	489	535			
1952	3,734.08	3,385	3,734			
1953	9,873.74	8,886	9,874			
1954	10,638.98	9,511	10,639			
1955	2,384.74	2,118	2,385			
1956	6,064.18	5,346	6,064			
1957	4,932.69	4,316	4,933			
1958	6,369.67	5,535	6,370			
1959	2,764.71	2,385	2,765			
1960	3,812.13	3,261	3,812			
1961	5,498.39	4,668	5,498			
1962	4,594.65	3,871	4,562	33	3.15	10
1963	3,696.81	3,089	3,641	56	3.29	17
1964	5,113.80	4,237	4,994	120	3.43	35
1965	4,173.68	3,429	4,042	132	3.57	37
1966	4,430.39	3,609	4,254	176	3.71	47
1967	5,043.03	4,070	4,797	246	3.86	64
1968	8,020.16	6,416	7,562	458	4.00	114
1969	12,602.57	9,988	11,772	831	4.15	200
1970	4,759.17	3,736	4,403	356	4.30	83
1971	14,785.42	11,496	13,550	1,235	4.45	278
1972	7,088.03	5,454	6,428	660	4.61	143
1973	12,894.47	9,819	11,573	1,321	4.77	277
1974	23,255.32	17,523	20,653	2,602	4.93	528
1975	63,281.47	47,176	55,603	7,678	5.09	1,508
1976	40,036.32	29,507	34,778	5,258	5.26	1,000
1977	54,856.30	39,990	47,133	7,723	5.42	1,425

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 334.00 FIELD MEASURING AND STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-L0						
1978	96,184.07	69,301	81,680	14,504	5.59	2,595
1979	96,189.25	68,439	80,664	15,525	5.77	2,691
1980	30,973.93	21,759	25,646	5,328	5.95	895
1981	71,976.20	49,915	58,831	13,145	6.13	2,144
1982	70,222.41	48,067	56,653	13,569	6.31	2,150
1983	64,615.14	56,390	64,615			
1984	30,308.54	26,296	30,309			
1985	61,790.08	53,245	61,790			
1986	102,499.87	87,627	102,500			
1987	35,766.84	30,441	35,767			
1988	115,418.15	97,263	114,902	516	6.75	76
1989	65,185.78	54,560	64,455	731	6.85	107
1990	96,724.79	80,301	94,864	1,861	6.99	266
1991	158,119.23	130,053	153,639	4,480	7.16	626
1992	29,377.62	23,908	28,244	1,134	7.36	154
1993	19,402.45	15,662	18,502	900	7.44	121
1994	106,062.04	84,468	99,787	6,275	7.71	814
1995	11,890.54	9,364	11,062	829	7.87	105
1996	7,154.07	5,582	6,594	560	7.94	71
1997	13,306.12	10,230	12,085	1,221	8.17	149
1998	8,035.94	6,098	7,204	832	8.32	100
1999	91.55	68	80	12	8.51	1
2000	1,544.13	1,138	1,344	200	8.62	23
2002	8,688.46	6,183	7,304	1,384	8.98	154
2003	6,821.77	4,765	5,629	1,193	9.14	131
2004	8,162.73	5,580	6,592	1,571	9.33	168
2005	9,288.88	6,213	7,340	1,949	9.49	205
2006	6,911.05	4,520	5,340	1,571	9.61	163
2007	42.13	27	32	10	9.79	1
2008	11,306.98	7,001	8,271	3,036	9.94	305
2009	1,030,626.43	618,994	731,255	299,371	10.09	29,670
2010	91,350.96	53,057	62,679	28,672	10.22	2,805
2011	188,760.14	105,876	125,078	63,682	10.31	6,177
2013	28,500.44	14,641	17,296	11,204	10.57	1,060
2017	17,701.28	7,066	8,348	9,353	10.79	867
2020	20,439.63	5,723	6,761	13,679	10.71	1,277
2021	227,237.22	52,310	61,797	165,440	10.59	15,622
2022	422,877.29	73,200	86,476	336,401	10.35	32,503
2023	1,031,038.70	121,147	143,118	887,921	10.02	88,615
2024	142,600.00	2,538	2,998	139,602	9.21	15,158
	4,880,606.93	2,382,110	2,804,058	2,076,549		213,735

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.7 4.38

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 337.00 OTHER EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 23-L1						
2004	16,092.57	10,904	9,914	6,179	9.60	644
2005	25,874.97	17,109	15,555	10,320	9.82	1,051
2006	14,008.79	9,034	8,214	5,795	10.00	580
2008	9,567.38	5,831	5,301	4,266	10.36	412
	65,543.71	42,878	38,984	26,560		2,687

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.9 4.10

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 350.11 LAND - GAS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-L4						
1967	764.79	619	531	234	10.50	22
1969	4,194.89	3,371	2,891	1,304	10.80	121
1970	49.41	40	34	15	10.97	1
1976	93.45	72	62	31	12.67	2
1977	2,088.06	1,591	1,364	724	13.10	55
1979	9,290.53	6,907	5,923	3,368	14.11	239
1989	342.71	223	191	152	18.89	8
	16,823.84	12,823	10,996	5,828		448

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.0 2.66

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 350.21 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R3						
1916	922.66	916	923			
1925	257.87	248	258			
1926	459.25	439	459			
1929	64.04	61	64			
1940	198.63	179	199			
1941	73.96	66	74			
1942	442.68	395	443			
1943	166.39	148	166			
1945	66.96	59	67			
1946	558.07	488	558			
1947	1,439.75	1,253	1,440			
1948	342.95	297	343			
1949	1,130.71	973	1,131			
1961	890.72	699	891			
1962	39.11	30	39			
1965	87.33	66	87			
1966	1,016.02	756	1,016			
1967	69.49	51	69			
1968	1,932.65	1,403	1,894	39	17.83	2
1973	95.09	64	86	9	20.97	
1979	60.66	37	50	11	25.11	
2004	17,233.24	5,770	7,791	9,442	40.07	236
2006	19,252.16	5,841	7,886	11,366	41.71	273
	46,800.39	20,239	25,934	20,866		511

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 40.8 1.09

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 351.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2						
1940	400.17	349	400			
1945	426.05	361	426			
1946	58.82	50	59			
1947	155.46	130	155			
1949	1,543.88	1,275	1,544			
1950	5,236.77	4,293	5,237			
1951	3,014.62	2,454	3,015			
1952	535.96	433	536			
1953	2,900.60	2,326	2,901			
1956	157.70	123	158			
1958	1,371.20	1,055	1,371			
1959	1,334.85	1,017	1,335			
1963	3,163.12	2,317	3,163			
1964	41.65	30	42			
1965	1,891.52	1,356	1,892			
1967	126.88	89	127			
1968	1,796.46	1,243	1,796			
1969	756.00	516	756			
1970	537.68	363	538			
1971	551.41	367	551			
1972	347.83	228	348			
1973	2,622.77	1,696	2,623			
1976	85.52	53	83	3	22.92	
1977	200.66	122	191	10	23.51	
1981	1,050.11	595	932	118	25.99	5
1982	80.70	45	70	11	26.63	
1986	5,020.51	3,008	4,711	310	25.53	12
1989	4,130.40	2,339	3,663	467	26.94	17
1992	40,631.25	21,433	33,567	7,064	28.81	245
1993	41,380.63	21,278	33,324	8,057	29.44	274
1994	10,078.67	5,078	7,953	2,126	29.71	72
1995	2,597.85	1,273	1,994	604	30.36	20
1996	67,731.62	32,240	50,491	17,241	31.01	556
1997	126.45	58	91	35	31.66	1
1998	585,144.97	263,374	412,473	172,672	31.97	5,401
1999	21,627.73	9,417	14,748	6,880	32.64	211
2000	86,632.93	36,429	57,052	29,581	33.30	888
2003	329,014.65	123,973	194,156	134,859	35.01	3,852
2004	145,420.89	52,788	82,672	62,749	35.39	1,773
2006	152,337.02	50,637	79,303	73,034	36.48	2,002
2007	103,552.40	32,712	51,231	52,321	37.18	1,407
2014	82,977.62	16,620	26,029	56,949	40.59	1,403

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 351.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2						
2015	4,292.00	783	1,226	3,066	41.09	75
2017	52,907.60	7,735	12,114	40,794	41.85	975
2020	34,685.59	3,108	4,867	29,819	42.34	704
	1,800,679.17	707,169	1,101,914	698,765		19,893
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 35.1						1.10

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.01 WELLS - CONSTRUCTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1.5						
1916	2,291.72	2,292	2,292			
1917	4.52	5	5			
1924	5,365.86	5,348	5,366			
1925	5,454.81	5,406	5,455			
1926	4,665.79	4,594	4,666			
1927	182.64	179	183			
1939	933.73	850	934			
1942	7,400.37	6,629	7,400			
1943	6,035.95	5,378	6,036			
1945	307.31	271	307			
1946	13,080.90	11,451	13,081			
1947	32,039.63	27,874	32,040			
1948	30,802.29	26,632	30,802			
1949	3,150.18	2,706	3,150			
1950	9,851.97	8,408	9,852			
1951	0.95	1	1			
1952	2,920.54	2,459	2,921			
1953	22.64	19	23			
1957	409.17	332	409			
1961	200.22	157	200			
1962	649.60	505	650			
1966	2.74	2	3			
1967	285.70	212	286			
1968	477.48	350	477			
1970	280.00	200	280			
1972	11.32	8	11			
1973	11,880.33	8,190	11,880			
1974	11,674.64	7,939	11,675			
1975	13,211.33	8,860	13,211			
1979	652.11	411	652			
1981	11,251.08	6,856	11,251			
1983	172.84	120	173			
1984	220.93	151	221			
1985	78.72	53	79			
1991	51,635.17	31,167	51,635			
1992	31,743.54	18,789	31,744			
1993	389.57	225	390			
1995	559.13	308	559			
1997	271,380.18	142,285	270,547	833	24.65	34
2000	69,336.92	33,344	63,402	5,935	26.09	227
2002	3,092.54	1,392	2,647	446	27.09	16
2004	18,234.99	7,611	14,472	3,763	28.14	134
2005	63,136.41	25,292	48,091	15,045	28.68	525
2006	81,524.42	31,395	59,695	21,829	29.00	753

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.01 WELLS - CONSTRUCTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1.5						
2021	24,334.27	2,166	4,118	20,216	32.42	624
2023	199,325.82	8,312	15,805	183,521	30.62	5,994
2024	399,556.02	2,477	4,710	394,846	26.79	14,739
	1,390,218.99	449,611	743,787	646,432		23,046
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 28.0						1.66

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.02 WELLS - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R1						
1916	605.74	597	606			
1917	1,489.21	1,459	1,489			
1924	2,632.59	2,468	2,633			
1925	2,486.30	2,318	2,486			
1926	805.94	747	806			
1942	13.91	12	14			
1943	7,491.00	6,212	7,491			
1945	2,654.21	2,167	2,654			
1946	5,200.82	4,212	5,201			
1947	9,662.56	7,762	9,663			
1948	11,543.94	9,195	11,544			
1949	37.27	29	37			
1950	2,967.75	2,323	2,968			
1952	1,916.83	1,474	1,917			
1953	260.58	199	261			
1957	733.74	537	734			
1961	964.56	676	965			
1962	174.36	121	174			
1966	137.13	91	137			
1967	870.46	567	870			
1968	7.19	5	7			
1971	198.43	122	198			
1973	20,483.30	12,249	20,483			
1974	18,787.75	11,061	18,788			
1975	11,012.38	6,379	11,012			
1979	2,655.00	1,435	2,655			
1981	693.40	361	693			
1982	32,980.62	16,820	32,639	342	26.95	13
1984	737.19	462	737			
1985	398.44	245	398			
1992	7,004.82	3,785	7,005			
1993	485.00	255	485			
1994	287.22	148	287			
1995	846.49	427	834	12	28.64	
1997	13,420.80	6,416	12,536	885	29.65	30
1998	23,638.35	11,011	21,513	2,125	30.01	71
2000	14,821.28	6,518	12,735	2,086	30.78	68
2008	30,882.48	10,086	19,706	11,176	33.34	335

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.02 WELLS - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R1						
2014	34,845.40	7,934	15,502	19,343	34.48	561
2019	5,714.85	756	1,477	4,238	33.89	125
2021	9,993.73	886	1,731	8,263	32.55	254
	282,543.02	140,527	234,071	48,472		1,457

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 33.3 0.52

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.11 LEASEHOLDS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R3						
1904	35.14	35	35			
1909	75.00	75	75			
1910	211.00	211	211			
1915	26.50	26	26			
1916	58.95	59	59			
1921	17.70	18	18			
1938	58.48	55	58			
1939	330.37	308	330			
1940	19.39	18	19			
1941	201.71	187	202			
1942	29.19	27	29			
1943	27.92	26	28			
1944	102.32	93	102			
1945	7,165.82	6,504	7,166			
1946	114.97	104	115			
1947	1,278.03	1,149	1,278			
1948	4,414.39	3,948	4,414			
1949	330.99	295	331			
1950	69,383.58	61,416	69,384			
1951	60,361.90	53,138	60,362			
1952	1,628.76	1,426	1,629			
1953	40.65	35	41			
1955	52.58	45	53			
1958	453.12	381	453			
1969	320.54	243	321			
1970	249.81	187	250			
1974	465.47	330	465			
1975	12,797.48	8,937	12,797			
1979	1,684.94	1,103	1,686			
	161,936.70	140,379	161,937			

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.12 STORAGE RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R5						
1939	100.32	99	100			
1941	98.88	97	99			
1944	1,462.95	1,415	1,463			
1947	29.25	28	29			
1948	75.00	72	75			
1949	3,618.25	3,442	3,618			
1950	371.91	352	372			
1960	11.75	11	12			
1964	443.26	382	443			
1992	2,452.89	1,239	2,453			
1993	12,069.59	5,906	12,070			
	20,734.05	13,043	20,734			

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.21 RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 40-SQUARE						
1969	7,545.31	7,545	7,545			
1970	116.00	116	116			
1971	9,081.22	9,081	9,081			
1972	5,737.14	5,737	5,737			
1975	23,910.35	23,910	23,910			
1994	10,285.35	7,757	7,796	2,489	9.83	253
1997	15,806.90	10,736	10,791	5,016	12.83	391
2011	360,656.23	118,717	119,321	241,335	26.83	8,995
	433,138.50	183,599	184,297	248,842		9,639

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 25.8 2.23

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.31 NON-RECOVERABLE NATURAL GAS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 37-SQUARE						
1971	205,250.77	205,251	205,251			
	205,250.77	205,251	205,251			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					0.0	0.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 353.00 LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2						
1916	1,581.07	1,581	1,581			
1917	363.37	363	363			
1918	25.48	25	25			
1922	45.18	45	45			
1924	5,593.24	5,593	5,593			
1925	1,233.42	1,233	1,233			
1926	63.48	63	63			
1933	19.78	20	20			
1934	57.37	57	57			
1937	19.93	19	20			
1938	3.19	3	3			
1939	84.73	81	85			
1940	573.99	548	574			
1941	1,087.17	1,031	1,087			
1943	570.69	535	571			
1944	337.97	315	338			
1945	146.21	135	146			
1946	14,905.54	13,713	14,906			
1947	8,931.03	8,165	8,931			
1948	19,135.23	17,382	19,135			
1949	20.86	19	21			
1951	265.03	236	265			
1952	12,170.84	10,771	12,171			
1955	2,228.25	1,932	2,228			
1956	44.62	38	45			
1957	445.55	381	446			
1961	568.38	471	568			
1963	70.50	57	70			
1965	42.48	34	42			
1967	2,981.95	2,343	2,982			
1968	94,202.26	73,252	94,202			
1969	2,017.45	1,552	2,017			
1970	25,791.64	19,627	25,792			
1973	20,201.24	14,836	20,201			
1974	893.39	648	893			
1976	580.66	410	581			
1981	1,605.42	1,048	1,605			
1983	2,071.35	1,475	2,071			
1986	263.84	179	264			
1991	3,151.27	1,944	3,024	127	20.60	6
1996	5,529.70	3,037	4,724	806	23.12	35
2004	314,099.14	132,393	205,915	108,184	27.68	3,908
2005	13,478.65	5,451	8,478	5,001	28.23	177
2006	1,330,175.45	514,778	800,650	529,525	28.78	18,399

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 353.00 LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2						
2009	574.94	191	297	278	30.49	9
2010	35,995.76	11,321	17,608	18,388	30.88	595
2011	68,674.32	20,252	31,499	37,175	31.48	1,181
2012	22,387.48	6,157	9,576	12,811	32.08	399
2013	102,485.49	26,206	40,759	61,726	32.50	1,899
2015	16,105.17	3,455	5,374	10,731	33.57	320
2020	5,277.70	558	868	4,410	35.20	125
2023	252,026.67	9,350	14,542	237,485	34.64	6,856
2024	504,053.33	2,621	4,076	499,977	32.19	15,532
	2,895,258.85	917,930	1,368,630	1,526,629		49,441

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 30.9 1.71

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 354.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R1.5						
1940	38.38	37	31	7	2.10	3
1941	93.26	88	74	19	2.42	8
1947	27.71	25	21	7	3.94	2
1948	135,769.71	123,219	103,982	31,788	4.16	7,641
1949	84.84	77	65	20	4.40	5
1950	2,311.41	2,074	1,750	561	4.63	121
1951	634.60	566	478	157	4.88	32
1954	20.31	18	15	5	5.65	1
1955	425.47	369	311	114	5.92	19
1956	5,827.33	5,024	4,240	1,587	6.20	256
1957	145.59	125	105	41	6.48	6
1958	4,730.84	4,019	3,392	1,339	6.77	198
1959	17,637.66	14,870	12,548	5,090	7.06	721
1960	535.88	448	378	158	7.35	21
1961	920.95	764	645	276	7.65	36
1963	108.84	89	75	34	8.27	4
1964	203.72	165	139	65	8.58	8
1965	136.24	109	92	44	8.90	5
1966	1,354.68	1,077	909	446	9.23	48
1967	2,060.99	1,623	1,370	691	9.57	72
1969	16,191.83	12,497	10,546	5,646	10.27	550
1970	111.84	85	72	40	10.64	4
1971	453.19	342	289	164	11.01	15
1973	3,435.73	2,536	2,140	1,296	11.79	110
1974	657.34	479	404	253	12.19	21
1975	31,166.51	22,433	18,931	12,236	12.61	970
1976	23,406.17	16,624	14,029	9,377	13.04	719
1977	33,074.71	23,167	19,550	13,525	13.48	1,003
1978	5,618.23	3,879	3,273	2,345	13.93	168
1979	813.20	553	467	346	14.39	24
1981	2,202.06	1,451	1,224	978	15.35	64
1982	30,538.76	19,789	16,699	13,840	15.84	874
1983	4,725.24	3,501	2,954	1,771	14.39	123
1984	105.21	76	64	41	15.08	3
1985	72,682.63	52,099	43,965	28,718	15.48	1,855
1986	216,409.53	152,807	128,950	87,460	15.89	5,504
1987	51,910.04	36,077	30,445	21,465	16.31	1,316
1988	27,704.51	18,939	15,982	11,723	16.74	700
1989	14,761.27	9,915	8,367	6,394	17.19	372
1990	523,871.27	345,441	291,510	232,361	17.65	13,165
1992	13,256.56	8,401	7,089	6,168	18.59	332
1993	627,180.32	388,977	328,249	298,931	19.09	15,659
1994	244,309.75	148,149	125,020	119,290	19.58	6,092
1995	41,444.32	24,659	20,809	20,635	19.85	1,040

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 354.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R1.5						
1996	49,392.46	28,658	24,184	25,208	20.38	1,237
1997	122,261.90	69,090	58,304	63,958	20.91	3,059
1998	77,154.52	42,396	35,777	41,378	21.45	1,929
1999	59,564.52	31,778	26,817	32,748	22.00	1,489
2000	1,384.13	719	607	777	22.34	35
2001	11,860.86	5,962	5,031	6,830	22.92	298
2002	469,373.17	228,913	193,174	276,199	23.29	11,859
2003	594,368.52	279,294	235,690	358,679	23.88	15,020
2004	189,460.43	85,977	72,554	116,906	24.28	4,815
2005	5,302.15	2,307	1,947	3,355	24.89	135
2006	325,656.73	136,059	114,817	210,840	25.31	8,330
2007	7,253.51	2,901	2,448	4,806	25.75	187
2008	6,793.61	2,592	2,187	4,607	26.21	176
2009	2,806.17	1,017	858	1,948	26.67	73
2011	90,346.36	29,263	24,694	65,652	27.48	2,389
2012	2,472.89	752	635	1,838	27.83	66
2013	104,644.56	29,677	25,044	79,601	28.20	2,823
2014	3,235,313.59	848,623	716,134	2,519,180	28.59	88,114
2015	33,936.60	8,182	6,905	27,032	28.86	937
2016	11,255.01	2,464	2,079	9,176	29.15	315
2017	14,740.67	2,895	2,443	12,298	29.33	419
	7,574,440.99	3,287,181	2,773,977	4,800,464		203,595

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.6 2.69

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 355.00 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2.5						
1952	1,364.02	1,142	1,364			
1953	406.78	338	407			
1958	10,909.18	8,767	10,909			
1960	8,692.95	6,875	8,693			
1961	22,621.28	17,735	22,621			
1962	802.31	623	802			
1968	5,498.08	4,014	5,319	179	16.20	11
1971	6,651.58	4,677	6,197	455	17.81	26
1975	5,522.66	3,670	4,863	660	20.13	33
1976	283.26	185	245	38	20.75	2
1992	6,604.21	3,527	4,673	1,931	28.07	69
1998	5,329.86	2,413	3,197	2,133	31.64	67
2023	109,078.36	3,109	4,120	104,958	45.40	2,312
2024	218,293.48	830	1,100	217,193	43.31	5,015
	402,058.01	57,905	74,510	327,548		7,535

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 43.5 1.87

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 357.00 OTHER EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-R2.5						
1953	597.38	597	597			
1957	139.38	139	139			
1972	6,119.04	5,931	6,119			
1973	1,697.11	1,630	1,697			
1979	1,203.92	1,098	1,204			
1981	2,893.23	2,595	2,893			
1990	17,052.58	14,856	17,053			
1997	481.23	374	482			
	30,183.87	27,220	30,184			

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 365.02 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R4						
1931	20.16	18	20			
1932	18.80	17	19			
1933	86.25	78	86			
1934	17.92	16	18			
1935	142.75	128	143			
1936	648.22	579	648			
1937	61.95	55	62			
1938	154.33	137	154			
1939	2,347.23	2,067	2,347			
1940	4,048.21	3,546	4,048			
1941	9,225.13	8,034	9,225			
1942	7,750.08	6,709	7,750			
1943	4,647.20	3,998	4,647			
1944	6,449.61	5,512	6,450			
1945	1,202.87	1,021	1,203			
1946	1,837.83	1,548	1,838			
1947	4,664.07	3,900	4,641	23	13.11	2
1948	24,567.88	20,379	24,253	315	13.64	23
1949	24,009.10	19,750	23,505	504	14.19	36
1950	5,956.60	4,857	5,780	177	14.77	12
1951	13,456.43	10,873	12,940	516	15.36	34
1952	16,004.21	12,809	15,244	760	15.97	48
1953	30,494.88	24,167	28,761	1,734	16.60	104
1954	18,324.06	14,375	17,108	1,216	17.24	71
1955	26,956.06	20,928	24,907	2,049	17.89	115
1956	14,458.61	11,104	13,215	1,244	18.56	67
1957	15,537.59	11,803	14,047	1,491	19.23	78
1958	69,810.82	52,436	62,405	7,406	19.91	372
1959	99,961.47	74,209	88,317	11,644	20.61	565
1960	27,986.73	20,532	24,435	3,552	21.31	167
1961	45,007.28	32,625	38,828	6,179	22.01	281
1962	32,201.11	23,052	27,435	4,766	22.73	210
1963	41,766.88	29,519	35,131	6,636	23.46	283
1964	54,162.59	37,785	44,968	9,195	24.19	380
1965	21,314.13	14,669	17,458	3,856	24.94	155
1966	17,302.79	11,747	13,980	3,323	25.69	129
1967	3,716.24	2,487	2,960	756	26.46	29
1968	29,721.82	19,605	23,332	6,390	27.23	235
1969	13,923.94	9,049	10,769	3,155	28.01	113
1970	30,646.08	19,610	23,338	7,308	28.81	254
1971	47,702.45	30,047	35,759	11,943	29.61	403
1972	16,609.51	10,294	12,251	4,359	30.42	143
1973	5,422.73	3,305	3,933	1,490	31.24	48
1974	86,035.83	51,546	61,346	24,690	32.07	770

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 365.02 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R4						
1975	796.37	469	558	238	32.91	7
1976	7,238.60	4,185	4,981	2,258	33.75	67
1977	3,527.43	2,001	2,381	1,146	34.61	33
1978	81,503.90	45,367	53,992	27,512	35.47	776
1979	11,416.50	6,231	7,416	4,000	36.34	110
1980	18,381.91	9,830	11,699	6,683	37.22	180
1981	10,133.30	5,306	6,315	3,818	38.11	100
1982	20,297.76	10,403	12,381	7,917	39.00	203
1983	26,245.80	13,829	16,458	9,788	36.96	265
1984	16,595.05	8,600	10,235	6,360	37.35	170
1985	6,301.24	3,183	3,788	2,513	38.36	66
1986	4,513.16	2,222	2,644	1,869	39.35	47
1987	12,799.52	6,136	7,303	5,497	40.36	136
1988	28,775.18	13,530	16,102	12,673	40.75	311
1989	14,553.49	6,654	7,919	6,634	41.75	159
1990	58,436.43	25,957	30,892	27,544	42.75	644
1991	34,502.63	14,878	17,707	16,796	43.75	384
1992	19,812.89	8,286	9,861	9,952	44.75	222
1993	19,185.74	7,834	9,323	9,863	45.17	218
1994	6,347.86	2,509	2,986	3,362	46.17	73
1995	10,870.56	4,154	4,944	5,927	47.17	126
1996	11,622.83	4,289	5,104	6,519	48.17	135
1997	33,618.63	11,965	14,240	19,379	49.17	394
1998	15,238.90	5,224	6,217	9,022	50.17	180
1999	13,983.69	4,610	5,486	8,498	51.17	166
2000	1,555.30	496	590	965	51.59	19
2001	488,500.79	149,384	177,785	310,716	52.59	5,908
2002	134,741.02	39,425	46,920	87,821	53.59	1,639
2003	58,230.39	16,270	19,363	38,867	54.59	712
2005	130,584.68	33,038	39,319	91,266	56.59	1,613
2006	3,016.82	723	860	2,157	57.59	37
2007	714.47	162	193	521	58.59	9
2008	31,142.14	6,646	7,910	23,232	59.59	390
2011	17,281.36	3,004	3,575	13,706	62.59	219
2012	1,098.47	176	209	889	63.59	14
2013	15,153.15	2,250	2,678	12,475	64.02	195
2014	29,179.09	3,945	4,695	24,484	65.02	377
2015	36,569.78	4,458	5,306	31,264	66.02	474
2016	34,364.58	3,732	4,442	29,923	67.02	446

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 365.02 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R4						
2017	85,113.02	8,111	9,653	75,460	68.02	1,109
2018	6,158.32	505	601	5,557	69.02	81
2022	2,234.85	64	76	2,159	73.02	30
	2,438,718.03	1,130,966	1,344,811	1,093,907		23,571
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					46.4	0.97

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.01 STRUCTURES AND IMPROVEMENTS - COMPRESSOR STATION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R3						
1978	486,335.94	323,739	440,439	45,897	20.06	2,288
1980	12,052.02	7,747	10,540	1,512	21.43	71
1982	144,492.45	89,489	121,748	22,744	22.84	996
1983	5,454.59	3,593	4,888	567	21.33	27
1984	6,913.86	4,471	6,083	831	21.94	38
1995	6,058.20	3,022	4,111	1,947	29.31	66
2006	93,601.90	30,608	41,641	51,961	37.39	1,390
2007	381,147.00	118,422	161,110	220,037	38.08	5,778
2009	205,133.93	56,617	77,026	128,108	39.78	3,220
2022	56,121.60	2,346	3,192	52,930	49.65	1,066
	1,397,311.49	640,054	870,778	526,533		14,940

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 35.2 1.07

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2.5						
1915	1,708.21	1,708	1,708			
1921	15.25	15	15			
1926	674.20	662	674			
1933	308.06	292	308			
1936	30.20	28	30			
1938	94.77	88	95			
1942	4,567.33	4,152	4,567			
1946	33.12	30	33			
1947	467.40	415	467			
1948	4,490.90	3,972	4,491			
1949	21,634.60	19,042	21,635			
1950	8,623.70	7,553	8,624			
1951	12,398.99	10,803	12,399			
1952	9,794.83	8,491	9,795			
1953	13,583.85	11,712	13,584			
1954	4,182.81	3,587	4,183			
1955	3,289.22	2,804	3,289			
1956	3,955.53	3,353	3,956			
1957	461.88	389	462			
1958	773.26	647	773			
1959	6,263.37	5,209	6,263			
1960	7,763.15	6,411	7,763			
1961	4,903.21	4,020	4,903			
1962	720.58	586	721			
1963	354.80	286	355			
1964	14,377.38	11,507	14,377			
1965	349.99	278	350			
1967	104.28	81	104			
1968	11,523.59	8,880	11,524			
1969	3,475.25	2,649	3,475			
1970	1,542.20	1,163	1,542			
1971	7,492.16	5,584	7,492			
1973	1,761.32	1,280	1,761			
1974	1,991.11	1,429	1,991			
1975	635.87	450	636			
1976	1,120.08	781	1,120			
1978	32,091.49	21,705	32,091			
1979	11,321.38	7,534	11,321			
1980	0.01					
1981	27,039.82	17,389	27,040			
1983	2,322.66	1,597	2,323			
1984	35,381.35	23,875	35,381			
1985	11,908.81	7,929	11,909			
1986	2,486.58	1,623	2,487			

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2.5						
1987	1,364.96	873	1,365			
1988	1,833.40	1,147	1,833			
1989	6,868.66	4,227	6,869			
1990	443.70	267	444			
1991	1,335.51	784	1,336			
1993	81,579.75	45,513	80,093	1,487	24.70	60
1994	5,801.95	3,168	5,575	227	25.08	9
1997	3,622.95	1,811	3,187	436	27.18	16
1998	5,820.43	2,833	4,985	835	27.60	30
1999	42,005.79	19,768	34,787	7,219	28.31	255
2000	2,641.28	1,200	2,112	529	29.03	18
2002	4,331.23	1,834	3,227	1,104	30.19	37
2003	112,488.50	45,715	80,448	32,040	30.92	1,036
2004	74,594.44	29,032	51,090	23,504	31.65	743
2005	44,125.47	16,494	29,026	15,099	32.11	470
2006	18,974.80	6,757	11,891	7,084	32.85	216
2008	369,366.95	118,234	208,066	161,301	34.34	4,697
2010	119,355.96	33,993	59,820	59,536	35.58	1,673
2014	222,953.81	46,909	82,550	140,404	38.14	3,681
2017	149,925.02	22,879	40,262	109,663	39.78	2,757
2022	106,274.09	5,229	9,202	97,072	41.89	2,317
	1,653,727.20	620,656	996,185	657,542		18,015

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 36.5 1.09

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.03 STRUCTURES AND IMPROVEMENTS - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R1.5						
1904	97.85	98	98			
1920	3,071.90	3,072	3,072			
1923	403.86	404	404			
1927	72.55	73	73			
1929	261.39	261	261			
1930	294.47	294	294			
1932	95.28	95	95			
1937	237.51	232	238			
1939	19.57	19	20			
1941	2,931.40	2,774	2,931			
1947	529.70	483	530			
1949	416.19	375	416			
1950	3,524.86	3,162	3,525			
1951	1,022.22	911	1,022			
1952	5,364.58	4,753	5,365			
1953	2,751.48	2,422	2,751			
1954	2,503.83	2,189	2,504			
1955	1,688.17	1,466	1,688			
1956	69.33	60	69			
1958	3,139.09	2,667	3,139			
1959	727.82	614	728			
1969	176.01	136	171	5	10.27	
1974	304.86	222	279	26	12.19	2
1980	5,852.63	3,920	4,925	928	14.86	62
1983	414.15	307	386	28	14.39	2
1984	12,992.80	9,446	11,867	1,126	15.08	75
1986	483.17	341	428	55	15.89	3
1997	548.91	310	390	159	20.91	8
	49,995.58	41,106	47,669	2,327		152

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.3 0.30

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
1875	8,038.47	8,038	8,038			
1886	2,028.17	1,959	2,028			
1887	12,924.66	12,443	12,925			
1888	5,029.48	4,825	5,029			
1889	1,212.60	1,159	1,213			
1890	7,521.77	7,164	7,522			
1891	11,509.92	10,923	11,510			
1892	8,190.65	7,745	8,191			
1893	14,574.62	13,735	14,575			
1894	1,421.68	1,335	1,422			
1896	1,715.42	1,601	1,715			
1897	9,396.75	8,740	9,397			
1899	20,168.81	18,646	20,169			
1900	78,526.53	72,382	78,527			
1901	28,853.87	26,517	28,854			
1902	152,957.17	140,147	152,957			
1903	18,190.56	16,619	18,191			
1904	149.17	136	149			
1905	3,986.48	3,620	3,986			
1906	53,383.58	48,332	53,384			
1908	7.79	7	8			
1909	1,559.41	1,399	1,559			
1910	8,146.47	7,285	8,146			
1911	854.60	762	855			
1912	3,514.21	3,122	3,514			
1913	1,834.56	1,625	1,835			
1914	18,230.12	16,090	18,230			
1915	412.36	363	412			
1916	1,225.86	1,075	1,226			
1917	36,976.18	32,303	36,976			
1918	2,194.88	1,911	2,195			
1919	13,780.33	11,954	13,780			
1920	1,551.94	1,341	1,552			
1921	20,119.44	17,325	20,119			
1922	12,504.83	10,728	12,505			
1923	1,726.41	1,475	1,726			
1924	40,790.02	34,717	40,790			
1925	49,005.10	41,538	49,005			
1926	1,749.10	1,476	1,749			
1927	10,951.84	9,205	10,952			
1928	12,627.91	10,566	12,628			
1929	9,756.23	8,127	9,756			
1930	41,901.87	34,742	41,902			
1931	28,642.88	23,634	28,643			

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
1932	5,411.08	4,442	5,411			
1933	6,372.40	5,205	6,372			
1934	4,577.75	3,719	4,578			
1935	4,539.68	3,668	4,540			
1936	19,758.87	15,874	19,759			
1937	20,137.67	16,082	20,138			
1938	21,057.48	16,717	21,057			
1939	60,958.66	48,089	60,959			
1940	25,802.86	20,223	25,726	77	17.30	4
1941	15,524.09	12,086	15,375	149	17.72	8
1942	71,162.94	55,017	69,988	1,175	18.15	65
1943	28,462.24	21,848	27,793	669	18.59	36
1944	105,719.76	80,558	102,480	3,240	19.04	170
1945	13,256.98	10,026	12,754	503	19.50	26
1946	21,354.03	16,021	20,381	973	19.98	49
1947	58,561.27	43,584	55,444	3,117	20.46	152
1948	709,839.71	523,862	666,418	43,422	20.96	2,072
1949	1,213,956.07	888,312	1,130,044	83,912	21.46	3,910
1950	169,692.07	123,069	156,559	13,133	21.98	597
1951	176,169.84	126,599	161,050	15,120	22.51	672
1952	1,227,532.43	874,003	1,111,841	115,691	23.04	5,021
1953	547,776.98	386,249	491,357	56,420	23.59	2,392
1954	662,234.83	462,319	588,128	74,107	24.15	3,069
1955	610,938.01	422,158	537,038	73,900	24.72	2,989
1956	303,898.98	207,830	264,386	39,513	25.29	1,562
1957	1,058,398.87	716,007	910,850	147,549	25.88	5,701
1958	711,152.38	475,761	605,227	105,925	26.48	4,000
1959	1,660,629.40	1,098,506	1,397,437	263,192	27.08	9,719
1960	634,144.54	414,572	527,387	106,758	27.70	3,854
1961	1,228,081.20	793,340	1,009,228	218,853	28.32	7,728
1962	1,335,884.02	852,454	1,084,428	251,456	28.95	8,686
1963	716,770.38	451,651	574,556	142,214	29.59	4,806
1964	1,501,058.13	933,658	1,187,730	313,328	30.24	10,361
1965	641,235.10	393,558	500,655	140,580	30.90	4,550
1966	519,373.14	314,480	400,058	119,315	31.56	3,781
1967	777,934.92	464,427	590,809	187,126	32.24	5,804
1968	864,460.96	508,839	647,307	217,154	32.91	6,598
1969	533,382.63	309,362	393,547	139,836	33.60	4,162
1970	398,695.34	227,755	289,733	108,962	34.30	3,177
1971	450,491.12	253,401	322,358	128,133	35.00	3,661
1972	1,526,927.77	845,338	1,075,376	451,552	35.71	12,645
1973	758,441.02	413,161	525,592	232,849	36.42	6,393
1974	232,968.72	124,813	158,778	74,191	37.14	1,998
1975	374,491.59	197,215	250,882	123,610	37.87	3,264

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
1976	124,890.34	64,616	82,200	42,690	38.61	1,106
1977	600,489.37	305,121	388,152	212,337	39.35	5,396
1978	4,214,314.55	2,101,889	2,673,865	1,540,450	40.10	38,415
1979	1,437,629.35	703,547	895,000	542,629	40.85	13,283
1980	390,232.60	187,265	238,224	152,009	41.61	3,653
1981	1,756,854.49	826,161	1,050,980	705,874	42.38	16,656
1982	1,364,344.86	628,445	799,461	564,884	43.15	13,091
1983	358,252.50	185,826	236,394	121,858	38.20	3,190
1984	686,489.82	347,432	441,977	244,513	39.20	6,238
1985	1,225,122.26	609,376	775,202	449,920	39.57	11,370
1986	1,259,240.49	615,139	782,534	476,706	39.96	11,930
1987	1,577,436.84	750,387	954,586	622,851	40.96	15,206
1988	1,305,165.78	608,990	774,711	530,455	41.35	12,828
1989	1,645,501.85	746,400	949,514	695,988	42.36	16,430
1990	2,506,127.99	1,113,222	1,416,157	1,089,971	42.75	25,496
1991	3,123,965.94	1,357,363	1,726,735	1,397,231	43.17	32,366
1992	1,688,884.86	711,696	905,366	783,519	44.17	17,739
1993	1,626,753.38	669,246	851,364	775,389	44.59	17,389
1994	1,060,511.59	422,296	537,213	523,299	45.59	11,478
1995	1,210,411.86	469,519	597,287	613,125	46.02	13,323
1996	1,166,988.56	440,421	560,271	606,718	46.46	13,059
1997	2,249,299.39	818,745	1,041,546	1,207,753	47.46	25,448
1998	1,105,443.04	390,442	496,691	608,752	47.91	12,706
1999	1,030,792.87	350,263	445,578	585,215	48.90	11,968
2000	1,300,623.24	427,515	543,852	756,771	49.36	15,332
2001	771,861.75	244,989	311,657	460,205	49.82	9,237
2002	1,981,261.27	601,709	765,449	1,215,812	50.82	23,924
2003	380,499.93	111,144	141,389	239,111	51.30	4,661
2004	1,479,574.03	414,725	527,582	951,992	51.78	18,385
2005	5,999,439.03	1,598,251	2,033,175	3,966,264	52.78	75,147
2006	4,775,418.91	1,214,389	1,544,855	3,230,564	53.26	60,656
2007	4,295,652.40	1,039,548	1,322,435	2,973,217	53.76	55,305
2008	5,139,909.67	1,171,899	1,490,802	3,649,108	54.75	66,650
2009	3,423,198.49	737,357	938,010	2,485,188	55.25	44,981
2010	6,576,755.96	1,332,451	1,695,044	4,881,712	55.76	87,549
2011	8,631,961.94	1,636,620	2,081,985	6,549,977	56.28	116,382
2012	5,768,418.40	1,017,549	1,294,449	4,473,969	56.80	78,767
2013	7,249,005.16	1,173,614	1,492,984	5,756,021	57.80	99,585
2014	2,050,220.17	304,253	387,048	1,663,172	58.33	28,513
2015	3,911,230.88	527,234	670,707	3,240,524	58.86	55,055
2016	2,748,722.19	332,321	422,754	2,325,968	59.40	39,158
2017	10,855,536.51	1,166,970	1,484,532	9,371,005	59.50	157,496
2018	2,595,964.11	241,684	307,452	2,288,512	60.06	38,104
2019	8,209,266.81	644,427	819,792	7,389,475	60.62	121,898

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
2020	3,719,760.78	238,809	303,795	3,415,966	60.77	56,211
2021	893,217.61	44,125	56,132	837,086	60.94	13,736
2022	25,076,561.43	862,634	1,097,378	23,979,183	60.73	394,849
2023	29,803,801.21	646,742	822,737	28,981,064	60.02	482,857
2024	53,752,281.90	155,882	198,301	53,553,981	57.30	934,624
	258,894,350.97	48,165,342	61,166,663	197,727,688		3,562,508
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					55.5	1.38

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 368.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1						
1920	550.88	551	551			
1954	34.36	34	34			
1955	33.46	33	33			
1956	412.52	407	413			
1960	370.54	354	371			
1962	29,316.16	27,540	28,994	322	2.12	152
1963	106.65	99	104	3	2.40	1
1964	864.57	798	840	25	2.68	9
1971	542.98	469	494	49	4.76	10
1972	193.57	165	174	20	5.08	4
1978	1,226,884.94	980,109	1,031,856	195,029	7.04	27,703
1979	2,199.45	1,736	1,828	371	7.38	50
1980	2,174.21	1,694	1,783	391	7.73	51
1981	71,316.03	54,832	57,727	13,589	8.09	1,680
1982	317,145.97	240,577	253,279	63,867	8.45	7,558
1983	17,223.52	14,394	15,154	2,070	8.09	256
1984	49,980.31	41,354	43,537	6,443	8.38	769
1985	5,012.06	4,103	4,320	692	8.68	80
1986	12,889.90	10,429	10,980	1,910	9.00	212
1987	5,272.15	4,213	4,435	837	9.34	90
1988	565.00	445	468	97	9.71	10
1989	9,725.06	7,558	7,957	1,768	10.08	175
1990	11,977.60	9,208	9,694	2,284	10.28	222
1992	2,195.11	1,638	1,724	471	10.94	43
1994	16,235.28	11,706	12,324	3,911	11.67	335
1995	61,767.62	43,781	46,093	15,675	11.98	1,308
1996	224,349.95	156,080	164,321	60,029	12.32	4,872
1997	1,027.64	698	735	293	12.83	23
1998	19,926.62	13,295	13,997	5,930	13.05	454
2001	453,285.65	280,403	295,207	158,079	14.28	11,070
2003	398,866.94	233,018	245,321	153,546	15.07	10,189
2004	87,263.24	49,452	52,063	35,200	15.42	2,283
2005	1,777,839.04	971,056	1,022,325	755,514	15.92	47,457
2006	455,152.58	239,774	252,433	202,720	16.32	12,422
2007	1,901,145.64	962,740	1,013,570	887,576	16.73	53,053
2008	525,413.88	254,826	268,280	257,134	17.17	14,976
2009	460,502.75	212,338	223,549	236,954	17.73	13,365
2010	110,007.10	48,161	50,704	59,303	18.19	3,260
2011	1,436,485.49	593,843	625,196	811,289	18.68	43,431
2012	203,651.44	79,037	83,210	120,441	19.18	6,280
2013	59,937.19	21,685	22,830	37,107	19.70	1,884
2014	1,075,910.36	359,892	378,893	697,017	20.23	34,455
2015	76,687.14	23,482	24,722	51,965	20.77	2,502
2017	62,831.44	15,444	16,259	46,572	21.99	2,118

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 368.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1						
2019	126,017.80	22,860	24,067	101,951	23.32	4,372
2021	206,179.45	23,381	24,615	181,564	24.77	7,330
2022	45,950.41	3,593	3,783	42,167	25.53	1,652
2023	3,130,866.32	151,534	159,534	2,971,332	26.21	113,366
2024	6,240,870.71	38,069	40,079	6,200,792	27.30	227,135
	20,925,158.68	6,212,888	6,540,860	14,384,299		658,667
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					21.8	3.15

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 369.00 MEASURING AND REGULATING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1						
1949	5,609.48	4,705	5,609			
1950	43,224.19	35,954	43,224			
1951	1,162.17	959	1,162			
1952	7,829.02	6,403	7,829			
1953	24,735.18	20,050	24,735			
1954	1,403.22	1,127	1,403			
1955	27,846.58	22,166	27,847			
1956	11,188.24	8,823	11,188			
1957	41,667.16	32,542	41,667			
1958	42,488.56	32,852	42,489			
1959	7,806.61	5,975	7,807			
1960	1,364.39	1,034	1,364			
1961	12,782.59	9,582	12,783			
1962	19,592.79	14,526	19,593			
1963	5,835.82	4,279	5,836			
1964	91,149.17	66,065	91,149			
1965	39,538.25	28,325	39,153	385	14.18	27
1966	16,482.35	11,666	16,126	356	14.61	24
1967	32,809.91	22,934	31,701	1,109	15.05	74
1968	229,029.40	158,076	218,506	10,523	15.49	679
1969	109,730.30	74,748	103,323	6,407	15.94	402
1970	7,184.12	4,828	6,674	510	16.40	31
1971	68,570.95	45,449	62,824	5,747	16.86	341
1972	11,468.08	7,493	10,357	1,111	17.33	64
1973	19,882.94	12,805	17,700	2,183	17.80	123
1974	26,510.48	16,818	23,247	3,263	18.28	179
1975	6,848.91	4,278	5,913	936	18.77	50
1976	22,335.71	13,728	18,976	3,360	19.27	174
1977	9,973.38	6,030	8,335	1,638	19.77	83
1978	205,097.50	121,910	168,514	36,584	20.28	1,804
1979	135,490.43	79,154	109,413	26,077	20.79	1,254
1980	33,233.48	19,069	26,359	6,874	21.31	323
1981	232,949.24	131,197	181,352	51,597	21.84	2,362
1982	120,271.54	66,438	91,836	28,436	22.38	1,271
1983	132,497.71	89,449	123,644	8,854	19.81	447
1984	64,894.56	43,012	59,455	5,440	20.44	266
1985	67,288.10	44,013	60,839	6,449	20.71	311
1986	34,174.24	21,913	30,290	3,884	21.36	182
1987	323,345.96	204,290	282,387	40,959	21.66	1,891
1988	58,615.57	36,465	50,405	8,211	21.97	374
1989	226,343.02	137,707	190,350	35,993	22.64	1,590
1990	127,848.14	76,440	105,662	22,186	22.98	965
1991	341,913.35	200,703	277,429	64,484	23.33	2,764
1992	126,332.10	72,742	100,550	25,782	23.70	1,088

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 369.00 MEASURING AND REGULATING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1						
1993	564,112.69	318,216	439,866	124,247	24.08	5,160
1994	164,730.76	90,931	125,693	39,038	24.48	1,595
1995	259,866.72	139,470	192,787	67,080	25.18	2,664
1996	86,021.40	45,067	62,295	23,726	25.60	927
1997	214,370.06	110,058	152,132	62,238	25.75	2,417
1998	342,483.33	171,173	236,610	105,873	26.19	4,042
1999	140,978.65	68,473	94,649	46,330	26.65	1,738
2000	142,334.53	67,068	92,707	49,628	27.12	1,830
2001	208,722.90	95,261	131,678	77,045	27.59	2,792
2002	917,435.53	406,699	562,174	355,262	27.84	12,761
2003	516,584.62	220,892	305,336	211,249	28.34	7,454
2004	1,402,468.51	579,780	801,422	601,047	28.61	21,008
2005	61,360.66	24,464	33,816	27,545	28.91	953
2006	982,464.58	376,579	520,540	461,925	29.23	15,803
2007	822,540.57	302,201	417,728	404,813	29.56	13,695
2008	22,700.20	7,963	11,007	11,693	29.92	391
2009	175,580.81	58,591	80,990	94,591	30.29	3,123
2010	480,603.64	152,496	210,793	269,811	30.48	8,852
2011	1,140,236.67	342,299	473,155	667,082	30.69	21,736
2012	2,145,545.57	605,688	837,234	1,308,312	30.94	42,285
2013	758,975.13	200,825	277,598	481,377	31.03	15,513
2014	1,366,720.90	336,213	464,743	901,978	31.16	28,947
2015	1,232,963.14	279,143	385,855	847,108	31.32	27,047
2016	1,640,453.75	338,918	468,482	1,171,972	31.36	37,372
2017	10,740,798.70	2,001,011	2,765,970	7,974,829	31.30	254,787
2018	437,447.15	72,310	99,953	337,494	31.15	10,834
2019	434,109.64	62,121	85,869	348,241	30.94	11,255
2020	513,612.41	61,633	85,194	428,418	30.56	14,019
2021	128,856.68	12,370	17,099	111,758	29.83	3,746
2022	721,909.64	50,534	69,852	652,058	28.79	22,649
2023	5,233,740.44	243,369	336,406	4,897,334	27.32	179,258
2024	921,399.36	6,634	9,170	912,229	22.98	39,697
	38,098,474.23	9,867,172	13,615,808	24,482,666		835,493

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 29.3 2.19

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 371.00 OTHER EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-R1						
1953	2,720.79	2,721	2,721			
1954	35.34	35	35			
1955	348.55	345	349			
1961	751.29	701	751			
1965	3,408.34	3,063	3,408			
1968	1,624.74	1,417	1,625			
1969	2,716.13	2,344	2,716			
1970	2,506.13	2,140	2,506			
1974	575.31	468	575			
1975	234.79	189	235			
1976	1,209.18	959	1,195	14	7.23	2
1979	17,556.89	13,353	16,635	922	8.38	110
1982	4,480.98	3,251	4,050	431	9.61	45
1986	2,125.18	1,671	2,082	43	10.38	4
1987	255.09	198	247	8	10.68	1
1989	26,355.04	19,927	24,824	1,531	11.34	135
1990	14.77	11	14	1	11.92	
1991	4,833.89	3,527	4,394	440	12.29	36
1992	8,035.32	5,764	7,181	854	12.68	67
1993	12,095.50	8,520	10,614	1,482	13.08	113
1994	35,301.78	24,386	30,379	4,923	13.50	365
1995	17,412.57	11,783	14,679	2,734	13.94	196
1996	17,566.84	11,677	14,547	3,020	14.21	213
1997	108,165.30	70,232	87,492	20,673	14.67	1,409
1998	56,234.82	35,608	44,359	11,876	15.16	783
1999	27,889.23	17,266	21,509	6,380	15.48	412
2000	85,769.32	51,616	64,301	21,468	15.99	1,343
2002	78,416.82	44,674	55,653	22,764	16.74	1,360
2003	46,184.55	25,512	31,782	14,403	17.15	840
2004	24,459.96	13,071	16,283	8,177	17.57	465
2008	110,717.22	50,476	62,880	47,837	19.29	2,480
2011	19,785.17	7,764	9,672	10,113	20.39	496
2013	5,219.67	1,813	2,259	2,961	20.99	141
2014	4,881.80	1,578	1,966	2,916	21.28	137
2015	551,596.06	164,817	205,320	346,276	21.51	16,098
2016	294,385.53	80,544	100,337	194,049	21.68	8,951
2017	629,346.96	155,575	193,807	435,540	21.82	19,961
2018	240,289.87	52,744	65,706	174,584	21.92	7,965

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 371.00 OTHER EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-R1						
2019	4,620.06	881	1,098	3,522	21.93	161
2021	159,884.77	20,561	25,613	134,272	21.46	6,257
2023	30,700.76	1,931	2,406	28,295	19.85	1,425
	2,640,712.31	915,113	1,138,205	1,502,507		71,971
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					20.9	2.73

PEOPLES NATURAL GAS COMPANY LLC

ACOUNT 374.02 LAND RIGHTS AND RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R4						
1876	535.18	535	535			
1881	11.59	12	12			
1885	352.00	352	352			
1887	302.11	302	302			
1888	303.80	304	304			
1889	1,640.73	1,641	1,641			
1890	466.90	467	467			
1891	254.53	255	255			
1892	332.92	333	333			
1894	1,419.69	1,420	1,420			
1895	115.83	116	116			
1896	12.76	13	13			
1897	541.59	542	542			
1898	187.32	187	187			
1899	1,325.25	1,325	1,325			
1900	1,487.01	1,487	1,487			
1901	57,683.41	57,683	57,683			
1902	20,951.96	20,921	20,952			
1903	55,690.50	55,502	55,690			
1904	6,907.11	6,866	6,907			
1905	20,752.66	20,581	20,753			
1906	12,629.15	12,501	12,629			
1907	3,991.47	3,942	3,991			
1908	3,682.91	3,627	3,683			
1909	2,061.23	2,024	2,061			
1910	3,098.35	3,036	3,098			
1911	6,116.69	5,976	6,117			
1912	12,356.15	12,038	12,356			
1913	7,234.15	7,027	7,234			
1914	8,650.32	8,379	8,650			
1915	16,443.73	15,881	16,444			
1916	3,735.88	3,597	3,736			
1917	3,095.78	2,971	3,096			
1918	1,347.79	1,289	1,348			
1919	1,673.56	1,596	1,674			
1920	5,367.89	5,102	5,368			
1921	3,010.45	2,851	3,010			
1922	6,721.09	6,345	6,721			
1923	7,711.85	7,255	7,712			
1924	3,446.87	3,231	3,447			
1925	4,176.63	3,901	4,177			
1926	2,132.54	1,985	2,133			
1927	3,524.17	3,268	3,524			
1928	1,429.17	1,320	1,427		2	6.09

PEOPLES NATURAL GAS COMPANY LLC

ACOUNT 374.02 LAND RIGHTS AND RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R4						
1929	3,267.47	3,007	3,250	17	6.37	3
1930	5,668.14	5,197	5,618	50	6.65	8
1931	4,731.61	4,321	4,671	61	6.94	9
1932	2,851.42	2,594	2,804	47	7.23	7
1933	851.21	771	833	18	7.53	2
1934	850.90	768	830	21	7.84	3
1935	908.21	816	882	26	8.16	3
1936	3,346.94	2,992	3,234	113	8.49	13
1937	4,482.64	3,988	4,311	172	8.83	19
1938	3,424.14	3,031	3,276	148	9.18	16
1939	8,945.92	7,878	8,516	430	9.55	45
1940	12,479.23	10,930	11,815	664	9.93	67
1941	25,816.38	22,483	24,303	1,513	10.33	146
1942	6,103.48	5,283	5,711	392	10.75	36
1943	1,364.06	1,173	1,268	96	11.18	9
1944	3,124.90	2,671	2,887	238	11.63	20
1945	16,033.54	13,608	14,710	1,324	12.10	109
1946	8,601.73	7,247	7,834	768	12.60	61
1947	11,568.51	9,673	10,456	1,113	13.11	85
1948	11,280.16	9,357	10,114	1,166	13.64	85
1949	10,146.57	8,347	9,023	1,124	14.19	79
1950	29,692.99	24,211	26,171	3,522	14.77	238
1951	38,944.81	31,467	34,014	4,931	15.36	321
1952	23,874.50	19,109	20,656	3,218	15.97	202
1953	16,201.83	12,840	13,879	2,323	16.60	140
1954	21,913.55	17,191	18,583	3,331	17.24	193
1955	27,482.14	21,337	23,064	4,418	17.89	247
1956	27,191.78	20,883	22,573	4,619	18.56	249
1957	24,312.10	18,468	19,963	4,349	19.23	226
1958	90,945.11	68,311	73,841	17,104	19.91	859
1959	31,221.29	23,178	25,054	6,167	20.61	299
1960	26,962.73	19,780	21,381	5,582	21.31	262
1961	55,962.03	40,566	43,850	12,112	22.01	550
1962	22,170.68	15,872	17,157	5,014	22.73	221
1963	31,787.88	22,466	24,285	7,503	23.46	320
1964	33,329.08	23,251	25,133	8,196	24.19	339
1965	34,496.80	23,742	25,664	8,833	24.94	354
1966	29,075.86	19,739	21,337	7,739	25.69	301
1967	49,650.46	33,229	35,919	13,731	26.46	519
1968	45,755.37	30,181	32,624	13,131	27.23	482
1969	26,644.17	17,316	18,718	7,926	28.01	283
1970	32,271.75	20,650	22,322	9,950	28.81	345
1971	32,255.69	20,317	21,962	10,294	29.61	348
1972	24,125.77	14,952	16,162	7,964	30.42	262

PEOPLES NATURAL GAS COMPANY LLC

ACOUNT 374.02 LAND RIGHTS AND RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R4						
1973	45,249.32	27,579	29,811	15,438	31.24	494
1974	41,949.25	25,133	27,167	14,782	32.07	461
1975	26,525.73	15,614	16,878	9,648	32.91	293
1976	18,098.73	10,463	11,310	6,789	33.75	201
1977	27,541.25	15,626	16,891	10,650	34.61	308
1978	39,100.45	21,764	23,526	15,574	35.47	439
1979	58,508.29	31,931	34,516	23,992	36.34	660
1980	59,975.41	32,072	34,668	25,307	37.22	680
1981	77,970.45	40,827	44,132	33,838	38.11	888
1982	63,421.48	32,504	35,135	28,286	39.00	725
1983	69,166.25	36,444	39,394	29,772	36.96	806
1984	47,160.28	24,438	26,416	20,744	37.35	555
1985	52,608.15	26,578	28,729	23,879	38.36	622
1986	55,195.81	27,178	29,378	25,818	39.35	656
1987	63,004.82	30,205	32,650	30,355	40.36	752
1988	79,849.02	37,545	40,584	39,265	40.75	964
1989	65,470.12	29,933	32,356	33,114	41.75	793
1990	101,734.15	45,190	48,848	52,886	42.75	1,237
1991	72,361.59	31,202	33,728	38,634	43.75	883
1992	107,686.91	45,035	48,681	59,006	44.75	1,319
1993	91,020.76	37,164	40,172	50,849	45.17	1,126
1994	102,018.79	40,318	43,582	58,437	46.17	1,266
1995	64,390.93	24,604	26,596	37,795	47.17	801
1996	37,560.34	13,860	14,982	22,578	48.17	469
1997	139,492.30	49,645	53,664	85,828	49.17	1,746
1998	41,423.54	14,200	15,349	26,075	50.17	520
1999	86,614.37	28,557	30,869	55,745	51.17	1,089
2000	101,982.41	32,532	35,165	66,817	51.59	1,295
2001	362,660.06	110,901	119,878	242,782	52.59	4,617
2002	217,151.26	63,538	68,681	148,470	53.59	2,770
2003	479,909.66	134,087	144,942	334,968	54.59	6,136
2004	191,941.78	51,095	55,231	136,711	55.59	2,459
2005	240,384.90	60,817	65,740	174,645	56.59	3,086
2006	361,866.00	86,775	93,800	268,066	57.59	4,655
2007	75,344.24	17,073	18,455	56,889	58.59	971
2008	72,502.45	15,472	16,724	55,778	59.59	936
2009	32,891.55	6,585	7,118	25,774	60.59	425
2010	1,368.29	256	277	1,091	61.59	18
2011	215,289.34	37,417	40,446	174,843	62.59	2,793
2012	101,513.39	16,303	17,623	83,890	63.59	1,319
2013	30,336.74	4,505	4,870	25,467	64.02	398
2015	12,300.58	1,499	1,620	10,681	66.02	162
2016	107,526.45	11,677	12,622	94,904	67.02	1,416

PEOPLES NATURAL GAS COMPANY LLC

ACOUNT 374.02 LAND RIGHTS AND RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R4						
2017	162,500.44	15,486	16,740	145,760	68.02	2,143
2018	2,388.00	196	212	2,176	69.02	32
2020	12,955.85	718	776	12,180	71.02	172
	5,734,940.08	2,437,718	2,616,502	3,118,438		64,941
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					48.0	1.13

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.01 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2						
1903	74.98	75	75			
1906	165.14	163	165			
1907	469.35	463	469			
1908	18.65	18	19			
1909	357.13	349	357			
1910	279.19	272	279			
1911	594.21	576	594			
1912	532.69	514	533			
1913	1,697.20	1,632	1,697			
1914	1,740.58	1,666	1,741			
1915	1,991.23	1,898	1,991			
1917	1,392.71	1,315	1,393			
1918	2,635.85	2,478	2,636			
1919	798.82	747	799			
1920	347.34	324	347			
1921	1,717.72	1,592	1,718			
1922	1,342.44	1,238	1,342			
1923	600.39	551	600			
1924	626.38	572	626			
1925	4,589.34	4,172	4,589			
1926	1,302.89	1,179	1,303			
1927	3,593.20	3,234	3,593			
1928	5,004.35	4,482	4,982	22	6.78	3
1929	3,004.22	2,677	2,976	28	7.07	4
1930	4,020.26	3,564	3,962	58	7.37	8
1931	701.79	619	688	14	7.66	2
1932	1,923.76	1,688	1,876	48	7.96	6
1933	389.86	340	378	12	8.26	1
1934	315.33	274	305	10	8.56	1
1935	1,734.74	1,498	1,665	70	8.86	8
1936	3,706.74	3,184	3,539	168	9.16	18
1937	4,170.42	3,563	3,961	209	9.47	22
1938	2,260.03	1,920	2,134	126	9.79	13
1939	1,758.42	1,485	1,651	107	10.10	11
1940	1,770.30	1,487	1,653	117	10.42	11
1941	2,149.35	1,794	1,994	155	10.75	14
1942	10,967.67	9,096	10,111	857	11.09	77
1943	2,134.22	1,759	1,955	179	11.43	16
1944	6,649.35	5,445	6,053	596	11.77	51
1945	1,439.47	1,171	1,302	137	12.12	11
1946	10,864.27	8,778	9,758	1,106	12.48	89
1947	10,354.24	8,307	9,234	1,120	12.85	87
1948	26,171.50	20,845	23,172	3,000	13.23	227
1949	31,042.73	24,543	27,282	3,761	13.61	276

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.01 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2						
1950	34,467.25	27,044	30,062	4,405	14.00	315
1951	50,191.90	39,072	43,433	6,759	14.40	469
1952	83,072.29	64,158	71,319	11,753	14.80	794
1953	71,163.58	54,501	60,584	10,580	15.22	695
1954	22,612.85	17,172	19,089	3,524	15.64	225
1955	49,755.94	37,447	41,626	8,130	16.08	506
1956	37,540.37	27,999	31,124	6,416	16.52	388
1957	41,793.20	30,882	34,329	7,464	16.97	440
1958	78,233.59	57,255	63,645	14,589	17.43	837
1959	73,433.38	53,211	59,150	14,283	17.90	798
1960	19,924.94	14,291	15,886	4,039	18.38	220
1961	65,236.73	46,298	51,465	13,772	18.87	730
1962	9,749.34	6,844	7,608	2,141	19.37	111
1963	36,381.15	25,260	28,079	8,302	19.87	418
1964	36,204.85	24,848	27,621	8,584	20.39	421
1965	37,448.95	25,402	28,237	9,212	20.91	441
1966	35,854.29	24,022	26,703	9,151	21.45	427
1967	21,441.56	14,188	15,772	5,670	21.99	258
1968	19,527.52	12,756	14,180	5,348	22.54	237
1969	17,656.94	11,382	12,652	5,005	23.10	217
1970	22,283.47	14,169	15,750	6,533	23.67	276
1971	25,261.71	15,837	17,605	7,657	24.25	316
1972	34,694.94	21,436	23,828	10,867	24.84	437
1973	43,839.69	26,688	29,667	14,173	25.43	557
1974	54,059.95	32,411	36,028	18,032	26.03	693
1975	73,345.39	43,274	48,104	25,241	26.65	947
1976	25,356.73	14,719	16,362	8,995	27.27	330
1977	10,425.05	5,950	6,614	3,811	27.90	137
1978	13,881.71	7,789	8,658	5,224	28.53	183
1979	63,536.77	35,014	38,922	24,615	29.18	844
1980	48,743.43	26,374	29,318	19,425	29.83	651
1981	112,220.37	59,580	66,230	45,990	30.49	1,508
1982	25,440.94	13,245	14,723	10,718	31.16	344
1983	181,053.64	108,071	120,133	60,921	27.80	2,191
1984	52,287.24	30,661	34,083	18,204	28.33	643
1985	45,507.52	26,203	29,128	16,380	28.86	568
1986	32,101.06	18,134	20,158	11,943	29.40	406
1987	28,074.73	15,548	17,283	10,792	29.95	360
1988	38,662.66	20,974	23,315	15,348	30.50	503
1989	64,074.67	34,024	37,821	26,254	31.06	845
1990	34,157.69	17,738	19,718	14,440	31.62	457
1991	32,260.41	16,369	18,196	14,064	32.20	437
1992	13,053.00	6,466	7,188	5,865	32.77	179
1993	41,169.09	19,889	22,109	19,060	33.35	572

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.01 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2						
1994	35,188.09	16,665	18,525	16,663	33.53	497
1995	67,614.36	31,157	34,634	32,980	34.13	966
1996	11,715.73	5,246	5,832	5,884	34.73	169
1997	22,485.80	9,775	10,866	11,620	35.33	329
1998	41,930.76	17,665	19,637	22,294	35.94	620
1999	35,425.94	14,443	16,055	19,371	36.56	530
2000	44,890.93	17,683	19,657	25,234	37.18	679
2002	2,452.07	902	1,003	1,449	38.07	38
2003	2,141.98	757	841	1,301	38.71	34
2004	46,770.15	15,846	17,615	29,155	39.36	741
2005	65,892.01	21,342	23,724	42,168	40.01	1,054
2006	176,288.50	54,755	60,866	115,422	40.32	2,863
2007	5,766.75	1,703	1,893	3,874	40.97	95
2008	281,923.73	79,305	88,156	193,768	41.30	4,692
2009	2,104.58	559	621	1,484	41.98	35
2010	47,581.68	11,933	13,265	34,317	42.33	811
2011	53,546.36	12,551	13,952	39,594	43.01	921
2012	56,454.60	12,364	13,744	42,711	43.39	984
2013	167,645.67	34,066	37,868	129,778	43.78	2,964
2014	22,460.73	4,178	4,644	17,817	44.48	401
2015	437,883.40	74,659	82,991	354,892	44.60	7,957
2017	6,483.11	883	982	5,501	45.46	121
2018	147,324.64	17,532	19,488	127,837	45.65	2,800
2019	17,143.65	1,737	1,931	15,213	45.85	332
2023	79,442.38	2,312	2,570	76,872	44.54	1,726
	3,995,140.53	1,838,160	2,042,362	1,952,779		56,646

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 34.5 1.42

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MINOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2						
1928	674.17	604	674			
1939	488.17	412	461	27	10.10	3
1940	123.50	104	116	8	10.42	1
1941	132.11	110	123	9	10.75	1
1942	1,264.96	1,049	1,173	92	11.09	8
1943	140.00	115	129	11	11.43	1
1949	954.21	754	843	111	13.61	8
1952	1,195.33	923	1,032	163	14.80	11
1953	887.37	680	760	127	15.22	8
1955	3,586.28	2,699	3,017	569	16.08	35
1956	1,642.45	1,225	1,369	273	16.52	17
1957	599.42	443	495	104	16.97	6
1958	1,541.06	1,128	1,261	280	17.43	16
1959	113.77	82	92	22	17.90	1
1960	1,611.87	1,156	1,292	320	18.38	17
1962	1,581.69	1,110	1,241	341	19.37	18
1963	790.86	549	614	177	19.87	9
1965	1,487.12	1,009	1,128	359	20.91	17
1967	2,579.81	1,707	1,908	672	21.99	31
1968	337.93	221	247	91	22.54	4
1970	4,106.41	2,611	2,918	1,188	23.67	50
1971	251.50	158	177	74	24.25	3
1972	1,984.00	1,226	1,370	614	24.84	25
1976	3,842.94	2,231	2,494	1,349	27.27	49
1979	1,163.04	641	716	447	29.18	15
1980	14,273.99	7,723	8,632	5,642	29.83	189
1982	2,997.89	1,561	1,745	1,253	31.16	40
1986	3,142.75	1,775	1,984	1,159	29.40	39
1987	1,943.61	1,076	1,203	741	29.95	25
1988	3,243.38	1,760	1,967	1,276	30.50	42
1990	168.09	87	97	71	31.62	2
1997	4,333.64	1,884	2,106	2,228	35.33	63
1999	21,270.29	8,672	9,693	11,577	36.56	317
2012	25,400.00	5,563	6,217	19,183	43.39	442
2021	3,388.02	219	245	3,143	45.85	69
	113,241.63	53,267	59,539	53,703		1,582

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 33.9 1.40

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PITTSBURGH DIV AND CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2035						
1905	12,523.73	11,211	12,276	248	8.72	28
1919	1,835.00	1,623	1,777	58	9.30	6
1922	383.11	338	370	13	9.40	1
1927	721.33	633	693	28	9.55	3
1936	1,624.35	1,413	1,547	77	9.78	8
1943	849.50	732	802	48	9.93	5
1945	555.49	478	523	32	9.97	3
1948	232.23	199	218	14	10.02	1
1949	676.10	578	633	43	10.04	4
1950	1,216,746.78	1,038,031	1,136,645	80,102	10.06	7,962
1951	1,177.33	1,003	1,098	79	10.07	8
1952	3,764.31	3,201	3,505	259	10.09	26
1953	879.14	746	817	62	10.11	6
1958	874.73	736	806	69	10.18	7
1960	1,137.76	953	1,044	94	10.21	9
1961	1,027.22	858	940	88	10.22	9
1962	1,066.49	889	973	93	10.24	9
1963	649.53	540	591	58	10.25	6
1964	171,166.63	142,024	155,516	15,650	10.26	1,525
1965	18,695.86	15,472	16,942	1,754	10.28	171
1966	4,648.49	3,837	4,202	447	10.29	43
1967	3,827.42	3,151	3,450	377	10.30	37
1968	11,007.83	9,038	9,897	1,111	10.31	108
1969	31.48	26	28	3	10.32	
1970	2,246.95	1,834	2,008	239	10.33	23
1971	21,432.83	17,445	19,102	2,331	10.34	225
1972	12,111.12	9,827	10,761	1,351	10.35	131
1973	11,488.65	9,291	10,174	1,315	10.36	127
1974	1,352.88	1,090	1,194	159	10.37	15
1975	6,902.21	5,544	6,071	832	10.38	80
1976	2,244.28	1,796	1,967	278	10.39	27
1977	5,675.32	4,524	4,954	722	10.40	69
1979	12,468.26	9,859	10,796	1,673	10.42	161
1981	3,022.23	2,369	2,594	428	10.44	41
1982	70,756.84	55,212	60,457	10,300	10.44	987
1983	34,715.54	27,724	30,358	4,358	10.38	420
1984	12,961.32	10,308	11,287	1,674	10.34	162
1985	59,537.35	47,106	51,581	7,956	10.34	769
1986	229,146.44	180,155	197,270	31,877	10.38	3,071
1987	43,372.31	33,852	37,068	6,304	10.45	603
1988	245,421.32	190,840	208,970	36,451	10.34	3,525
1989	20,807.75	16,026	17,548	3,259	10.49	311

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PITTSBURGH DIV AND CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2035						
1990	893,027.44	683,434	748,361	144,667	10.48	13,804
1991	7,845.26	5,958	6,524	1,321	10.50	126
1992	9,935.56	7,510	8,223	1,712	10.39	165
1993	27,681.84	20,706	22,673	5,009	10.50	477
1994	47,774.73	35,454	38,822	8,953	10.48	854
1995	24,317.98	17,874	19,572	4,746	10.52	451
1996	20,074.30	14,644	16,035	4,039	10.44	387
1997	47,721.27	34,483	37,759	9,962	10.43	955
1998	369.60	264	289	81	10.46	8
1999	141.75	100	110	32	10.42	3
2000	168,020.18	117,345	128,493	39,527	10.44	3,786
2001	1,309,970.75	901,260	986,881	323,090	10.51	30,741
2002	184,320.90	125,025	136,902	47,418	10.51	4,512
2003	858,593.24	574,313	628,873	229,720	10.48	21,920
2004	694,217.80	456,379	499,735	194,482	10.51	18,504
2005	84,827.59	54,790	59,995	24,832	10.51	2,363
2006	645,507.45	409,252	448,131	197,376	10.49	18,816
2007	24,120.17	14,988	16,412	7,708	10.46	737
2008	161,284.65	97,771	107,059	54,225	10.50	5,164
2009	165,730.44	98,030	107,343	58,388	10.47	5,577
2011	589,307.13	328,244	359,427	229,880	10.47	21,956
2012	268,385.68	144,016	157,698	110,688	10.51	10,532
2013	3,429.79	1,769	1,937	1,493	10.48	142
2014	62,655.05	30,833	33,762	28,893	10.49	2,754
2016	252,287.98	110,426	120,917	131,371	10.49	12,523
2017	191,061.28	77,647	85,024	106,038	10.47	10,128
2018	1,695,519.92	629,377	689,168	1,006,352	10.45	96,302
2019	778,756.64	257,924	282,427	496,330	10.43	47,587
2020	30,156.22	8,619	9,438	20,718	10.41	1,990
2021	408,326.27	95,426	104,492	303,835	10.38	29,271
	11,907,134.30	7,216,373	7,901,935	4,005,199		383,267
CENT DIV AND GREENSBURG CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2028						
1949	2,316.41	2,183	2,316			
1959	2,059.67	1,928	2,060			
1963	423,731.90	395,414	423,732			
1964	1,514.89	1,412	1,515			

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CENT DIV AND GREENSBURG CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2028						
1965	644.25	600	644			
1966	961.75	895	962			
1967	4,060.35	3,774	4,060			
1968	637.53	592	638			
1969	6,562.66	6,087	6,563			
1971	10,673.37	9,877	10,673			
1972	22,265.74	20,575	22,266			
1973	3,658.24	3,376	3,658			
1974	3,394.55	3,129	3,395			
1976	908.28	835	908			
1977	1,206.51	1,107	1,207			
1978	1,578.78	1,447	1,579			
1979	4,736.42	4,333	4,736			
1980	710.05	648	710			
1981	1,859.02	1,694	1,859			
1982	8,172.75	7,435	8,173			
1983	59,527.02	54,402	59,527			
1984	17,184.86	15,738	17,185			
1985	89,215.23	81,418	89,215			
1986	12,435.25	11,296	12,435			
1987	8,847.72	8,024	8,846	2	3.82	1
1988	55,141.40	49,859	54,966	175	3.83	46
1989	29,185.92	26,378	29,080	106	3.74	28
1990	18,320.05	16,462	18,148	172	3.86	45
1991	118,283.91	106,314	117,204	1,080	3.73	290
1992	14,758.40	13,197	14,549	210	3.81	55
1993	21,193.26	18,892	20,827	366	3.80	96
1994	186,304.29	165,233	182,159	4,146	3.85	1,077
1995	33,271.22	29,405	32,417	854	3.83	223
1996	53,824.06	47,451	52,312	1,512	3.78	400
1997	38,989.05	34,213	37,718	1,271	3.79	335
1998	66,511.78	58,131	64,086	2,426	3.77	644
2002	8,239.45	7,032	7,752	487	3.81	128
2003	303,948.56	257,992	284,419	19,529	3.77	5,180
2005	143,293.39	119,478	131,717	11,577	3.82	3,031
2007	40,596.23	33,240	36,645	3,951	3.80	1,040
2014	37,417.38	27,236	30,026	7,391	3.80	1,945
2017	6,733.54	4,401	4,852	1,882	3.80	495
2018	194,455.35	120,387	132,719	61,737	3.79	16,289

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CENT DIV AND GREENSBURG CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2028						
2019	102,524.91	59,116	65,171	37,353	3.79	9,856
2020	273,787.28	143,273	157,949	115,838	3.80	30,484
2021	13,461.10	6,125	6,752	6,709	3.79	1,770
	2,449,103.73	1,982,034	2,170,329	278,775		73,458
JOHNSTOWN DIVISION AND CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2031						
1943	88,415.43	80,235	87,857	558	6.48	86
1966	314,626.75	277,605	303,978	10,649	6.62	1,609
1967	4,019.14	3,540	3,876	143	6.62	22
1971	2,504.27	2,189	2,397	107	6.64	16
1972	1,682.22	1,467	1,606	76	6.65	11
1975	1,024.42	887	971	53	6.66	8
1976	3,789.55	3,275	3,586	203	6.66	30
1978	1,838.60	1,581	1,731	107	6.67	16
1979	1,876.35	1,609	1,762	114	6.67	17
1980	2,717.72	2,323	2,544	174	6.68	26
1981	3,433.47	2,926	3,204	229	6.68	34
1984	3,661.61	3,148	3,447	215	6.56	33
1985	10,197.77	8,707	9,534	664	6.71	99
1986	8,309.15	7,072	7,744	565	6.68	85
1987	57,341.48	48,591	53,207	4,134	6.69	618
1988	101,470.44	85,509	93,632	7,838	6.75	1,161
1989	36,110.38	30,351	33,234	2,876	6.67	431
1991	54,682.52	45,523	49,848	4,835	6.67	725
1993	25,445.70	20,937	22,926	2,520	6.71	376
1994	27,014.53	22,084	24,182	2,833	6.73	421
1995	17,293.64	14,074	15,411	1,883	6.67	282
1996	27,895.97	22,551	24,693	3,203	6.68	479
1998	46,447.70	36,949	40,459	5,988	6.73	890
1999	7,595.43	6,002	6,572	1,023	6.68	153
2000	21,327.23	16,699	18,285	3,042	6.70	454
2002	47,338.96	36,309	39,758	7,581	6.73	1,126
2005	6,901.34	5,106	5,591	1,310	6.74	194
2006	2,363.06	1,726	1,890	473	6.71	70
2007	26,250.74	18,882	20,676	5,575	6.70	832
2009	70,905.49	49,145	53,814	17,092	6.72	2,543
2012	5,216.98	3,364	3,684	1,533	6.70	229

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
JOHNSTOWN DIVISION AND CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2031						
2016	15,655.55	8,592	9,408	6,247	6.71	931
2018	92,648.85	44,397	48,615	44,034	6.70	6,572
2019	247,450.72	107,790	118,030	129,421	6.70	19,317
2020	10,738.50	4,121	4,513	6,226	6.69	931
2021	74,079.86	23,831	26,095	47,985	6.68	7,183
2022	1,731.40	425	465	1,266	6.66	190
	1,472,002.92	1,049,522	1,149,228	322,775		48,200
ALTOONA DIVISION, CITY PLANT H.Q. AND WAREHOUSE						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2032						
1924	417.35	379	415	2	7.11	
1945	481.48	430	471	11	7.38	1
1948	2,826.72	2,518	2,757	70	7.41	9
1950	23,124.71	20,555	22,508	617	7.43	83
1951	5,970.50	5,300	5,804	167	7.44	22
1952	139,601.15	123,780	135,539	4,062	7.45	545
1953	22,695.00	20,097	22,006	689	7.46	92
1958	799.78	703	770	30	7.50	4
1961	2,287.54	2,002	2,192	95	7.52	13
1963	2,819.86	2,460	2,694	126	7.53	17
1966	8,041.33	6,975	7,638	404	7.55	54
1968	980.19	847	927	53	7.56	7
1969	516.36	445	487	29	7.57	4
1970	0.69	1	1			
1971	3,284.88	2,819	3,087	198	7.58	26
1972	2,414.36	2,067	2,263	151	7.59	20
1973	6,375.70	5,445	5,962	413	7.59	54
1976	2,911.36	2,466	2,700	211	7.61	28
1977	1,482.70	1,253	1,372	111	7.61	15
1978	11,923.28	10,041	10,995	928	7.62	122
1979	8,547.53	7,177	7,859	689	7.62	90
1981	14,623.40	12,196	13,355	1,269	7.63	166
1982	9,569.43	7,954	8,710	860	7.63	113
1983	4,434.26	3,742	4,097	337	7.61	44
1984	26,977.52	22,648	24,800	2,178	7.68	284
1985	1,251.15	1,049	1,149	102	7.56	13
1986	3,172.05	2,639	2,890	282	7.71	37
1989	775,699.19	638,323	698,964	76,735	7.57	10,137

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ALTOONA DIVISION, CITY PLANT H.Q. AND WAREHOUSE						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2032						
1990	32,374.43	26,437	28,949	3,426	7.67	447
1994	11,273.92	8,979	9,832	1,442	7.71	187
1995	364,961.89	289,524	317,029	47,933	7.60	6,307
1997	13,139.18	10,245	11,218	1,921	7.68	250
1998	44,591.96	34,536	37,817	6,775	7.62	889
2000	1,431.65	1,086	1,189	242	7.68	32
2002	15,343.70	11,394	12,476	2,867	7.68	373
2003	11,972.35	8,794	9,629	2,343	7.65	306
2004	3,648.08	2,641	2,892	756	7.69	98
2005	6,899.58	4,933	5,402	1,498	7.64	196
2008	146,077.19	99,186	108,609	37,468	7.64	4,904
2009	116,137.86	77,150	84,479	31,659	7.66	4,133
2012	39,171.18	24,020	26,302	12,869	7.67	1,678
2017	124,084.73	59,933	65,627	58,458	7.67	7,622
2019	116,037.89	46,763	51,206	64,832	7.65	8,475
	2,130,375.06	1,611,932	1,765,067	365,308		47,897
WEST DIV OFFICE & GIB CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2030						
1960	75,530.60	68,359	74,853	677	5.66	120
1961	19,665.29	17,777	19,466	199	5.66	35
1962	2,561.09	2,312	2,532	29	5.66	5
1970	881.78	787	862	20	5.69	4
1972	1,705.43	1,516	1,660	45	5.70	8
1973	757.59	672	736	22	5.70	4
1974	8,628.90	7,641	8,367	262	5.70	46
1975	1,596.43	1,411	1,545	51	5.71	9
1976	914.96	807	884	31	5.71	5
1977	421.11	371	406	15	5.71	3
1978	2,122.93	1,864	2,041	82	5.71	14
1981	7,177.29	6,253	6,847	330	5.72	58
1982	7,008.61	6,089	6,667	341	5.72	60
1983	8,004.55	7,018	7,685	320	5.78	55
1984	8,446.15	7,395	8,098	349	5.71	61
1985	177.67	155	170	8	5.68	1
1986	4,573.72	3,980	4,358	216	5.69	38
1987	15,860.42	13,735	15,040	821	5.75	143
1988	16,925.53	14,630	16,020	906	5.67	160

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WEST DIV OFFICE & GIB CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2030						
1989	146,927.08	126,592	138,618	8,309	5.65	1,471
1993	6,329.38	5,346	5,854	476	5.73	83
1994	7,997.14	6,730	7,369	628	5.68	111
1995	8,806.62	7,372	8,072	734	5.68	129
1997	873.79	722	791	83	5.73	14
1998	547,292.84	448,233	490,816	56,477	5.78	9,771
1999	47,716.20	38,908	42,604	5,112	5.70	897
2000	12,759.36	10,299	11,277	1,482	5.77	257
2002	34,985.10	27,764	30,402	4,583	5.77	794
2003	39,562.02	31,151	34,110	5,452	5.72	953
2004	26,411.42	20,559	22,512	3,899	5.74	679
2007	9,860.76	7,381	8,082	1,779	5.77	308
2008	91,463.21	67,427	73,833	17,631	5.76	3,061
2009	65,760.56	47,676	52,205	13,555	5.75	2,357
2013	88,115.20	58,156	63,681	24,434	5.75	4,249
2014	46,550.50	29,722	32,546	14,005	5.76	2,431
2017	32,533.37	18,046	19,760	12,773	5.75	2,221
2018	87,710.11	45,434	49,750	37,960	5.74	6,613
2019	102,492.24	48,561	53,174	49,318	5.74	8,592
2020	17,605.74	7,408	8,112	9,494	5.73	1,657
	1,604,712.69	1,216,259	1,331,805	272,908		47,477
HOPEWELL CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2031						
1961	235,685.82	209,631	229,546	6,140	6.59	932
1962	7,090.75	6,297	6,895	196	6.60	30
1963	1,664.35	1,476	1,616	48	6.60	7
1965	1,079.56	954	1,045	35	6.62	5
1968	712.72	627	687	26	6.63	4
1969	970.61	852	933	38	6.63	6
1971	573.56	501	549	25	6.64	4
1974	9,410.01	8,172	8,948	462	6.65	69
1975	9,793.33	8,483	9,289	504	6.66	76
1976	1,050.49	908	994	56	6.66	8
1978	927.93	798	874	54	6.67	8
1979	10,611.45	9,098	9,962	649	6.67	97
1980	13,330.62	11,394	12,476	854	6.68	128
1981	1,278.77	1,090	1,194	85	6.68	13

PEOPLES NATURAL GAS COMPANY LLC

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
HOPEWELL CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2031						
1982	1,125.99	957	1,048	78	6.68	12
1984	12,386.35	10,647	11,658	728	6.56	111
1985	21,085.31	18,003	19,713	1,372	6.71	204
1986	10,997.59	9,360	10,249	748	6.68	112
1987	8,483.73	7,189	7,872	612	6.69	91
1988	73,431.99	61,881	67,760	5,672	6.75	840
1989	375.16	315	345	30	6.67	4
1990	39,131.79	32,757	35,869	3,263	6.65	491
1991	17,548.82	14,609	15,997	1,552	6.67	233
1992	13,679.48	11,309	12,383	1,296	6.74	192
1993	10,154.36	8,355	9,149	1,006	6.71	150
1994	10,579.13	8,648	9,470	1,110	6.73	165
1995	11,275.13	9,176	10,048	1,227	6.67	184
1998	70,020.78	55,702	60,994	9,027	6.73	1,341
2000	46,098.47	36,095	39,524	6,574	6.70	981
2001	36,208.91	28,102	30,772	5,437	6.68	814
2002	13,727.06	10,529	11,529	2,198	6.73	327
2003	33,774.53	25,665	28,103	5,671	6.69	848
2005	53,743.63	39,760	43,537	10,206	6.74	1,514
2006	189,195.77	138,170	151,296	37,900	6.71	5,648
2007	24,319.99	17,493	19,155	5,165	6.70	771
2008	11,447.11	8,087	8,855	2,592	6.72	386
2009	14,734.41	10,212	11,182	3,552	6.72	529
2014	12,384.56	7,454	8,162	4,222	6.72	628
2018	218,134.67	104,530	114,460	103,674	6.70	15,474
2019	15,177.44	6,611	7,239	7,938	6.70	1,185
2020	97,649.87	37,478	41,038	56,611	6.69	8,462
2021	68,469.45	22,027	24,120	44,350	6.68	6,639
	1,429,521.45	1,001,402	1,096,536	332,985		49,723
SOUTHERN DIV AND MON CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2027						
1947	56,007.39	53,639	56,007			
1948	27,111.68	25,955	27,112			
1949	1,242.14	1,189	1,242			
1953	1,883.28	1,799	1,883			
1954	2,314.22	2,209	2,314			
1959	64,479.62	61,394	64,480			

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SOUTHERN DIV AND MON CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2027						
1960	1,165.92	1,109	1,166			
1961	5,487.37	5,219	5,487			
1962	3,333.75	3,168	3,334			
1964	469.34	445	469			
1966	1,660.53	1,574	1,661			
1969	1,539.83	1,456	1,540			
1971	11,635.03	10,981	11,635			
1972	6,080.03	5,733	6,080			
1973	2,361.81	2,225	2,362			
1975	1,233.58	1,160	1,234			
1978	2,363.52	2,214	2,364			
1979	8,617.46	8,062	8,617			
1981	1,850.06	1,726	1,850			
1982	11,661.92	10,866	11,662			
1983	19,735.19	18,443	19,735			
1984	15,654.37	14,651	15,654			
1985	108,509.17	101,152	108,509			
1986	55,605.65	51,786	55,606			
1987	81,309.99	75,553	81,310			
1988	21,406.47	19,897	21,406			
1989	14,595.84	13,500	14,596			
1990	3,166.08	2,921	3,166			
1992	42,691.15	39,276	42,691			
1993	3,732.36	3,420	3,732			
1994	5,084.83	4,648	5,085			
1996	9,376.69	8,531	9,377			
1997	1,563.75	1,419	1,564			
1998	63,520.34	57,346	63,520			
2000	12,992.85	11,649	12,993			
2001	7,519.93	6,707	7,520			
2002	355,015.00	314,792	355,015			
2008	19,309.01	16,451	18,622	687	2.81	244
2009	28,552.52	24,078	27,255	1,298	2.82	460
2019	49,931.65	32,326	36,591	13,340	2.81	4,747
2020	1.00	1	1			
2021	60,689.53	32,135	36,375	24,314	2.81	8,653
	1,192,461.85	1,052,805	1,152,822	39,640		14,104

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
GROVE CITY - LEASED						
FULLY ACCRUED						
1982	20,774.82	20,775	20,775			
1985	335.13	335	335			
1987	6,381.82	6,382	6,382			
1989	1,068.50	1,068	1,069			
1997	8,903.57	8,904	8,904			
	37,463.84	37,464	37,464			
NORTHERN DIVISION H.Q. - KISKI						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2037						
1977	566,111.41	434,915	476,232	89,879	12.22	7,355
1978	6,427.25	4,915	5,382	1,045	12.24	85
1979	9,216.47	7,014	7,680	1,536	12.25	125
1981	15,910.14	11,989	13,128	2,782	12.27	227
1983	3,944.26	3,036	3,324	620	12.31	50
1984	8,386.97	6,434	7,045	1,342	12.19	110
1985	30,317.02	23,156	25,356	4,961	12.11	410
1986	11,777.75	8,900	9,746	2,032	12.34	165
1987	22,833.70	17,144	18,773	4,061	12.34	329
1988	6,365.81	4,765	5,218	1,148	12.14	95
1990	1,855.06	1,363	1,492	363	12.34	29
1991	72.10	53	58	14	12.29	1
1994	22,524.70	16,035	17,558	4,966	12.21	407
1997	155,273.29	106,719	116,857	38,416	12.36	3,108
1998	10,086.54	6,862	7,514	2,573	12.30	209
1999	2,694.12	1,810	1,982	712	12.28	58
2002	37,319.72	23,989	26,268	11,052	12.32	897
2008	373,818.13	212,104	232,254	141,564	12.32	11,491
2012	5,851.92	2,905	3,181	2,671	12.34	216
2013	466.86	222	243	224	12.31	18
2017	9,434.81	3,476	3,806	5,629	12.29	458
2019	51,506.47	15,277	16,728	34,778	12.25	2,839

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NORTHERN DIVISION H.Q. - KISKI						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2037						
2020	35,616.84	9,068	9,929	25,687	12.20	2,105
2021	905,952.55	187,351	205,150	700,803	12.15	57,679
2022	1,814.30	276	302	1,512	12.06	125
	2,295,578.19	1,109,778	1,215,208	1,080,370		88,591
	24,518,354.03	16,277,569	17,820,394	6,697,960		752,717
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					8.9	3.07

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.01 MAINS - LOW PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 73-S0.5						
1897	37.86	34	35	3	6.49	
1898	165.04	150	155	10	6.83	1
1899	24.39	22	23	1	7.16	
1900	662,139.53	594,111	613,919	48,221	7.50	6,429
1901	28,263.99	25,232	26,073	2,191	7.83	280
1902	91,834.90	81,557	84,276	7,559	8.17	925
1903	65,152.43	57,566	59,485	5,667	8.50	667
1904	37,852.48	33,269	34,378	3,474	8.84	393
1905	49,710.13	43,466	44,915	4,795	9.17	523
1906	55,062.45	47,889	49,486	5,576	9.51	586
1907	44,600.36	38,582	39,868	4,732	9.85	480
1908	31,248.63	26,891	27,788	3,461	10.18	340
1909	18,308.16	15,670	16,192	2,116	10.52	201
1910	16,165.98	13,761	14,220	1,946	10.86	179
1911	30,474.09	25,799	26,659	3,815	11.20	341
1912	21,960.38	18,489	19,105	2,855	11.54	247
1913	130,884.32	109,584	113,238	17,646	11.88	1,485
1914	127,462.26	106,109	109,647	17,815	12.23	1,457
1915	31,182.38	25,813	26,674	4,508	12.57	359
1916	48,362.48	39,803	41,130	7,232	12.92	560
1917	31,741.86	25,976	26,842	4,900	13.26	370
1918	36,291.42	29,525	30,509	5,782	13.61	425
1919	27,768.31	22,458	23,207	4,561	13.96	327
1920	1,639.32	1,318	1,362	277	14.31	19
1921	36,636.23	29,279	30,255	6,381	14.66	435
1922	41,997.42	33,362	34,474	7,523	15.01	501
1923	66,733.87	52,683	54,439	12,295	15.37	800
1924	102,451.92	80,390	83,070	19,382	15.72	1,233
1925	202,577.97	157,956	163,222	39,356	16.08	2,448
1926	141,669.28	109,764	113,424	28,245	16.44	1,718
1927	133,000.93	102,392	105,806	27,195	16.80	1,619
1928	164,415.14	125,743	129,935	34,480	17.17	2,008
1929	124,717.61	94,768	97,928	26,790	17.53	1,528
1930	113,559.86	85,714	88,572	24,988	17.90	1,396
1931	119,386.67	89,508	92,492	26,895	18.27	1,472
1932	97,771.37	72,806	75,233	22,538	18.64	1,209
1933	34,917.10	25,824	26,685	8,232	19.01	433
1934	24,798.64	18,212	18,819	5,980	19.39	308
1935	44,414.09	32,392	33,472	10,942	19.76	554
1936	61,448.06	44,495	45,978	15,470	20.14	768
1937	141,230.09	101,512	104,896	36,334	20.53	1,770
1938	121,208.53	86,490	89,374	31,835	20.91	1,522
1939	207,278.02	146,798	151,692	55,586	21.30	2,610
1940	291,125.92	204,627	211,449	79,677	21.69	3,673

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.01 MAINS - LOW PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 73-S0.5						
1941	230,848.78	161,024	166,393	64,456	22.08	2,919
1942	128,046.15	88,614	91,568	36,478	22.48	1,623
1943	43,941.97	30,175	31,181	12,761	22.87	558
1944	75,680.89	51,556	53,275	22,406	23.27	963
1945	59,117.76	39,941	41,273	17,845	23.68	754
1946	232,232.84	155,629	160,818	71,415	24.08	2,966
1947	218,873.55	145,446	150,295	68,579	24.49	2,800
1948	137,021.98	90,284	93,294	43,728	24.90	1,756
1949	551,892.76	360,469	372,487	179,406	25.32	7,086
1950	759,290.37	491,565	507,954	251,336	25.74	9,764
1951	850,441.28	545,677	563,870	286,571	26.16	10,955
1952	1,375,807.89	874,862	904,030	471,778	26.58	17,749
1953	1,523,101.48	959,554	991,546	531,555	27.01	19,680
1954	844,675.09	527,052	544,624	300,051	27.45	10,931
1955	1,105,117.28	683,051	705,824	399,293	27.88	14,322
1956	1,533,307.11	938,461	969,750	563,557	28.32	19,900
1957	1,163,656.65	705,211	728,723	434,934	28.76	15,123
1958	1,430,451.95	858,071	886,679	543,773	29.21	18,616
1959	1,196,658.06	710,456	734,143	462,515	29.66	15,594
1960	1,078,944.79	633,912	655,047	423,898	30.11	14,078
1961	1,381,442.92	802,936	829,706	551,737	30.57	18,048
1962	1,360,013.57	781,722	807,785	552,229	31.04	17,791
1963	1,477,851.57	840,144	868,155	609,697	31.50	19,355
1964	1,450,542.77	815,278	842,460	608,083	31.97	19,020
1965	1,668,476.76	926,805	957,705	710,772	32.45	21,904
1966	1,910,822.67	1,048,851	1,083,820	827,003	32.93	25,114
1967	1,973,482.10	1,070,279	1,105,962	867,520	33.41	25,966
1968	2,295,235.57	1,229,374	1,270,362	1,024,874	33.90	30,232
1969	1,861,337.65	984,220	1,017,034	844,304	34.40	24,544
1970	1,873,262.80	977,693	1,010,290	862,973	34.90	24,727
1971	2,575,414.87	1,326,519	1,370,745	1,204,670	35.40	34,030
1972	3,187,980.71	1,619,749	1,673,752	1,514,229	35.91	42,167
1973	3,918,704.61	1,963,663	2,029,132	1,889,573	36.42	51,883
1974	3,521,767.39	1,739,647	1,797,647	1,724,120	36.94	46,674
1975	2,106,691.08	1,025,348	1,059,533	1,047,158	37.47	27,947
1976	1,644,817.71	788,608	814,900	829,918	38.00	21,840
1977	3,946,666.96	1,863,024	1,925,138	2,021,529	38.54	52,453
1978	3,034,581.87	1,410,049	1,457,060	1,577,522	39.08	40,366
1979	3,554,259.25	1,624,723	1,678,892	1,875,367	39.63	47,322
1980	4,789,305.69	2,153,224	2,225,013	2,564,293	40.18	63,820
1981	5,680,705.96	2,510,418	2,594,116	3,086,590	40.74	75,763
1982	4,897,072.75	2,125,868	2,196,745	2,700,328	41.31	65,367
1983	3,530,296.30	1,932,837	1,997,278	1,533,018	34.02	45,062
1984	4,929,879.70	2,653,261	2,741,721	2,188,159	34.46	63,499

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.01 MAINS - LOW PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 73-S0.5						
1985	5,736,003.73	3,033,199	3,134,327	2,601,677	34.90	74,547
1986	5,011,838.23	2,601,645	2,688,385	2,323,453	35.36	65,709
1987	5,663,709.66	2,883,961	2,980,113	2,683,597	35.82	74,919
1988	4,437,607.11	2,214,810	2,288,652	2,148,955	36.30	59,200
1989	5,049,524.86	2,485,881	2,568,761	2,480,764	36.26	68,416
1990	6,464,632.32	3,114,660	3,218,504	3,246,128	36.75	88,330
1991	5,795,335.53	2,729,603	2,820,609	2,974,727	37.25	79,858
1992	7,818,182.10	3,596,364	3,716,268	4,101,914	37.76	108,631
1993	7,039,418.88	3,181,113	3,287,172	3,752,247	37.80	99,266
1994	8,426,218.92	3,710,907	3,834,630	4,591,589	38.33	119,791
1995	7,893,012.95	3,384,524	3,497,365	4,395,648	38.86	113,115
1996	5,593,325.87	2,347,519	2,425,786	3,167,540	38.95	81,323
1997	5,055,539.85	2,060,132	2,128,817	2,926,723	39.50	74,094
1998	2,930,434.84	1,157,815	1,196,417	1,734,018	40.06	43,286
1999	4,943,073.77	1,903,083	1,966,532	2,976,542	40.20	74,043
2000	4,348,228.08	1,618,410	1,672,368	2,675,860	40.77	65,633
2001	5,469,067.39	1,976,521	2,042,419	3,426,648	40.94	83,699
2002	7,590,941.91	2,641,648	2,729,721	4,861,221	41.53	117,053
2003	10,086,726.72	3,395,192	3,508,389	6,578,338	41.72	157,678
2004	12,085,361.46	3,899,946	4,029,971	8,055,390	42.33	190,300
2005	15,299,752.53	4,750,573	4,908,958	10,390,795	42.56	244,145
2006	12,761,653.11	3,778,725	3,904,709	8,856,944	43.18	205,117
2007	8,749,963.90	2,477,990	2,560,607	6,189,357	43.44	142,481
2008	7,991,785.23	2,144,995	2,216,510	5,775,275	44.07	131,048
2009	11,761,229.38	2,996,761	3,096,674	8,664,555	44.36	195,324
2010	10,733,929.30	2,584,730	2,670,906	8,063,023	44.66	180,542
2011	16,196,785.69	3,647,516	3,769,125	12,427,661	45.31	274,281
2012	43,823,561.46	9,224,860	9,532,419	34,291,142	45.64	751,340
2013	21,334,200.52	4,168,703	4,307,689	17,026,512	45.98	370,303
2014	26,502,243.35	4,770,404	4,929,450	21,572,793	46.33	465,633
2015	33,640,973.06	5,520,484	5,704,538	27,936,435	46.70	598,211
2016	31,848,910.22	4,707,269	4,864,210	26,984,700	47.08	573,167
2017	51,389,330.05	6,701,169	6,924,588	44,464,742	47.78	930,614
2018	77,906,151.00	8,889,092	9,185,456	68,720,695	47.89	1,434,970
2019	64,007,524.70	6,183,127	6,389,274	57,618,251	48.31	1,192,678
2020	69,810,954.61	5,501,103	5,684,511	64,126,444	48.74	1,315,684
2021	128,787,995.71	7,791,674	8,051,450	120,736,546	49.19	2,454,494
2022	152,338,569.38	6,398,220	6,611,538	145,727,031	49.38	2,951,135
2023	149,338,846.01	3,897,744	4,027,696	145,311,150	49.69	2,924,354
2024	75,755,362.64	249,993	258,328	75,497,035	49.84	1,514,788
	1,224,387,299.76	196,665,104	203,221,968	1,021,165,332		21,826,830

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 46.8 1.78

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.02 MAINS - REGULAR PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-S0.5						
1885	6,207.15	5,893	6,126	81	3.80	21
1888	7,433.77	6,956	7,231	203	4.82	42
1889	15,547.51	14,478	15,050	498	5.16	97
1890	37.86	35	36	2	5.49	
1891	26,196.63	24,160	25,114	1,083	5.83	186
1893	36.13	33	34	2	6.50	
1894	786.08	714	742	44	6.83	6
1896	6,591.83	5,933	6,167	425	7.50	57
1897	1,428.32	1,279	1,329	99	7.84	13
1898	88.49	79	82	6	8.17	1
1899	7,838.46	6,949	7,223	615	8.51	72
1900	289,107.94	255,031	265,098	24,010	8.84	2,716
1901	15,359.10	13,479	14,011	1,348	9.18	147
1902	52,144.87	45,533	47,330	4,815	9.51	506
1903	36,442.83	31,657	32,907	3,536	9.85	359
1904	20,939.67	18,095	18,809	2,131	10.19	209
1905	17,529.80	15,069	15,664	1,866	10.53	177
1906	19,654.17	16,808	17,471	2,183	10.86	201
1907	3,525.00	2,999	3,117	408	11.20	36
1908	47,991.69	40,607	42,210	5,782	11.54	501
1909	15,311.53	12,886	13,395	1,917	11.88	161
1910	8,171.04	6,840	7,110	1,061	12.22	87
1911	13,678.95	11,386	11,835	1,844	12.57	147
1912	9,940.72	8,230	8,555	1,386	12.91	107
1913	12,066.68	9,933	10,325	1,742	13.26	131
1914	9,199.69	7,532	7,829	1,371	13.60	101
1915	18,489.59	15,051	15,645	2,845	13.95	204
1916	8,669.07	7,016	7,293	1,376	14.30	96
1917	12,194.18	9,812	10,199	1,995	14.65	136
1918	9,734.74	7,788	8,095	1,640	15.00	109
1919	4,896.10	3,894	4,048	848	15.35	55
1920	5,270.76	4,167	4,331	940	15.71	60
1921	30,164.74	23,706	24,642	5,523	16.06	344
1922	9,792.85	7,649	7,951	1,842	16.42	112
1923	27,311.06	21,201	22,038	5,273	16.78	314
1924	24,028.32	18,537	19,269	4,759	17.14	278
1925	23,991.77	18,394	19,120	4,872	17.50	278
1926	20,231.60	15,411	16,019	4,213	17.87	236
1927	53,119.47	40,208	41,795	11,324	18.23	621
1928	25,891.60	19,470	20,239	5,653	18.60	304
1929	31,032.89	23,184	24,099	6,934	18.97	366
1930	70,748.13	52,504	54,577	16,171	19.34	836
1931	46,212.37	34,062	35,407	10,805	19.72	548
1932	27,409.24	20,064	20,856	6,553	20.10	326

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.02 MAINS - REGULAR PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-S0.5						
1933	18,040.08	13,116	13,634	4,406	20.47	215
1934	10,969.92	7,919	8,232	2,738	20.86	131
1935	19,912.85	14,274	14,837	5,076	21.24	239
1936	17,494.30	12,451	12,942	4,552	21.62	211
1937	57,700.66	40,767	42,376	15,325	22.01	696
1938	59,232.64	41,542	43,182	16,051	22.40	717
1939	52,498.42	36,539	37,981	14,517	22.80	637
1940	122,668.63	84,739	88,084	34,585	23.19	1,491
1941	280,002.22	191,933	199,509	80,493	23.59	3,412
1942	105,084.59	71,471	74,292	30,793	23.99	1,284
1943	43,054.56	29,053	30,200	12,855	24.39	527
1944	81,175.99	54,334	56,479	24,697	24.80	996
1945	66,778.41	44,332	46,082	20,696	25.21	821
1946	149,130.44	98,187	102,063	47,067	25.62	1,837
1947	156,960.01	102,463	106,508	50,452	26.04	1,937
1948	156,521.46	101,301	105,300	51,221	26.46	1,936
1949	355,659.42	228,191	237,199	118,460	26.88	4,407
1950	372,838.93	237,126	246,486	126,353	27.30	4,628
1951	1,084,065.67	683,254	710,225	373,841	27.73	13,481
1952	725,204.53	452,912	470,790	254,415	28.16	9,035
1953	868,441.66	537,279	558,488	309,954	28.60	10,838
1954	471,077.59	288,676	300,071	171,007	29.04	5,889
1955	1,041,083.49	631,865	656,807	384,276	29.48	13,035
1956	880,145.83	528,906	549,784	330,362	29.93	11,038
1957	1,321,250.91	786,052	817,081	504,170	30.38	16,595
1958	2,180,831.60	1,284,357	1,335,056	845,776	30.83	27,434
1959	3,101,884.41	1,807,778	1,879,138	1,222,746	31.29	39,078
1960	2,276,233.06	1,312,635	1,364,450	911,783	31.75	28,718
1961	3,118,957.25	1,779,459	1,849,702	1,269,255	32.21	39,406
1962	2,521,547.27	1,422,833	1,478,998	1,042,549	32.68	31,902
1963	2,307,729.70	1,287,413	1,338,232	969,498	33.16	29,237
1964	2,516,649.03	1,387,856	1,442,640	1,074,009	33.64	31,927
1965	2,949,324.33	1,607,588	1,671,046	1,278,278	34.12	37,464
1966	3,530,321.81	1,901,184	1,976,232	1,554,090	34.61	44,903
1967	4,115,824.13	2,189,618	2,276,051	1,839,773	35.10	52,415
1968	4,440,064.93	2,333,121	2,425,219	2,014,846	35.59	56,613
1969	3,831,878.58	1,987,480	2,065,934	1,765,945	36.10	48,918
1970	2,976,544.61	1,523,991	1,584,149	1,392,396	36.60	38,044
1971	4,501,947.56	2,274,384	2,364,163	2,137,785	37.11	57,607
1972	6,681,600.90	3,329,241	3,460,660	3,220,941	37.63	85,595
1973	7,825,059.07	3,844,686	3,996,452	3,828,607	38.15	100,357
1974	6,215,855.10	3,010,152	3,128,975	3,086,880	38.68	79,806
1975	3,382,503.06	1,614,130	1,677,846	1,704,657	39.21	43,475
1976	2,846,141.42	1,337,686	1,390,490	1,455,651	39.75	36,620

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.02 MAINS - REGULAR PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-S0.5						
1977	5,035,817.28	2,329,922	2,421,894	2,613,923	40.30	64,862
1978	3,772,940.97	1,717,933	1,785,747	1,987,194	40.85	48,646
1979	7,920,091.43	3,548,201	3,688,263	4,231,828	41.40	102,218
1980	10,139,571.38	4,466,785	4,643,107	5,496,464	41.96	130,993
1981	14,417,232.19	6,241,652	6,488,036	7,929,196	42.53	186,438
1982	9,220,590.14	3,921,794	4,076,603	5,143,987	43.10	119,350
1983	6,844,013.30	3,662,916	3,807,506	3,036,507	35.75	84,937
1984	8,919,592.14	4,693,489	4,878,760	4,040,832	36.17	111,718
1985	17,170,323.49	8,877,057	9,227,471	7,942,852	36.59	217,077
1986	11,766,906.10	6,017,596	6,255,135	5,511,771	36.46	151,173
1987	17,811,343.57	8,937,732	9,290,541	8,520,803	36.90	230,916
1988	12,309,680.23	6,055,132	6,294,153	6,015,527	37.36	161,015
1989	14,421,670.86	6,948,361	7,222,641	7,199,030	37.82	190,350
1990	17,006,686.24	8,018,653	8,335,182	8,671,504	38.30	226,410
1991	15,956,013.03	7,355,722	7,646,083	8,309,930	38.78	214,284
1992	17,695,094.75	8,026,495	8,343,334	9,351,761	38.75	241,336
1993	12,854,163.83	5,689,253	5,913,831	6,940,333	39.25	176,824
1994	13,528,979.67	5,836,402	6,066,789	7,462,191	39.76	187,681
1995	15,451,321.88	6,489,555	6,745,725	8,705,597	40.28	216,127
1996	10,853,710.29	4,463,046	4,639,221	6,214,489	40.33	154,091
1997	11,432,331.99	4,566,073	4,746,315	6,686,017	40.86	163,632
1998	10,571,708.32	4,094,423	4,256,047	6,315,661	41.40	152,552
1999	11,201,942.87	4,228,733	4,395,659	6,806,284	41.50	164,007
2000	9,783,063.40	3,569,840	3,710,756	6,072,307	42.06	144,372
2001	18,123,849.71	6,381,407	6,633,307	11,490,543	42.62	269,604
2002	23,345,700.97	7,970,222	8,284,840	15,060,861	42.77	352,136
2003	20,230,155.39	6,637,514	6,899,524	13,330,631	43.35	307,512
2004	22,519,831.34	7,129,779	7,411,221	15,108,610	43.53	347,085
2005	24,973,118.77	7,561,860	7,860,358	17,112,761	44.13	387,781
2006	21,107,486.97	6,135,946	6,378,157	14,729,330	44.33	332,266
2007	20,747,606.52	5,734,638	5,961,008	14,786,599	44.94	329,030
2008	16,794,187.73	4,425,268	4,599,951	12,194,237	45.18	269,903
2009	16,943,715.91	4,213,902	4,380,242	12,563,474	45.81	274,252
2010	19,756,093.05	4,646,633	4,830,055	14,926,038	46.07	323,986
2011	14,579,881.20	3,206,116	3,332,675	11,247,206	46.71	240,788
2012	20,497,917.10	4,214,372	4,380,731	16,117,186	47.01	342,846
2013	17,375,838.40	3,318,785	3,449,791	13,926,047	47.31	294,357
2014	14,414,699.10	2,535,546	2,635,634	11,779,065	47.64	247,252
2015	16,999,594.90	2,711,435	2,818,466	14,181,129	48.30	293,605
2016	23,951,139.08	3,441,779	3,577,640	20,373,499	48.65	418,777
2017	34,157,392.79	4,358,483	4,530,530	29,626,863	49.01	604,506
2018	58,527,985.40	6,496,606	6,753,054	51,774,931	49.39	1,048,288
2019	66,397,696.01	6,241,383	6,487,756	59,909,940	49.78	1,203,494
2020	63,222,482.96	4,849,164	5,040,581	58,181,902	50.18	1,159,464

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.02 MAINS - REGULAR PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-S0.5						
2021	87,550,998.36	5,156,754	5,360,312	82,190,686	50.60	1,624,322
2022	102,466,378.03	4,201,121	4,366,957	98,099,421	50.74	1,933,374
2023	114,057,865.24	2,908,476	3,023,285	111,034,580	51.02	2,176,295
2024	85,625,770.11	274,002	284,818	85,340,952	51.12	1,669,424
	1,291,382,509.81	287,966,942	299,334,180	992,048,330		21,318,212
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					46.5	1.65

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1.5						
1898	23.44	23	23			
1900	128.30	128	128			
1901	82.90	83	83			
1902	112.12	112	112			
1905	1.59	2	2			
1906	62.29	62	62			
1907	30.59	31	31			
1911	73.51	74	74			
1919	292.85	293	293			
1921	194.61	195	195			
1922	641.05	641	641			
1924	275.48	275	275			
1925	514.93	510	515			
1926	37.48	37	37			
1927	959.86	939	960			
1928	2,519.41	2,447	2,519			
1929	945.07	912	945			
1930	1,390.48	1,332	1,390			
1931	266.75	254	267			
1932	275.17	260	275			
1933	89.29	84	89			
1934	1,439.40	1,343	1,439			
1935	296.26	275	296			
1936	575.16	531	575			
1937	4,924.04	4,524	4,924			
1938	1,118.44	1,023	1,118			
1939	264.50	241	264			
1940	3,651.88	3,306	3,652			
1941	799.03	720	799			
1942	1,610.53	1,443	1,611			
1943	2,547.58	2,270	2,548			
1944	1,446.98	1,282	1,447			
1945	2,191.37	1,930	2,191			
1946	2,001.45	1,752	2,001			
1947	3,300.50	2,871	3,300			
1948	4,088.95	3,535	4,088	1	6.77	
1949	15,654.44	13,447	15,551	103	7.05	15
1950	24,752.68	21,124	24,430	323	7.33	44
1951	43,516.88	36,885	42,657	860	7.62	113
1952	75,473.31	63,533	73,475	1,998	7.91	253
1953	120,965.36	101,103	116,924	4,041	8.21	492
1954	35,364.12	29,345	33,937	1,427	8.51	168
1955	87,290.20	71,910	83,163	4,127	8.81	468
1956	61,267.57	50,092	57,930	3,338	9.12	366

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1.5						
1957	66,160.96	53,683	62,083	4,078	9.43	432
1958	171,332.53	137,888	159,465	11,868	9.76	1,216
1959	73,516.92	58,696	67,881	5,636	10.08	559
1960	60,861.45	48,178	55,717	5,144	10.42	494
1961	83,805.63	65,771	76,063	7,743	10.76	720
1962	108,991.90	84,774	98,040	10,952	11.11	986
1963	84,099.31	64,824	74,968	9,131	11.46	797
1964	66,169.85	50,514	58,419	7,751	11.83	655
1965	74,044.60	55,978	64,738	9,307	12.20	763
1966	75,049.39	56,167	64,956	10,093	12.58	802
1967	92,189.47	68,276	78,960	13,229	12.97	1,020
1968	177,200.82	129,817	150,131	27,070	13.37	2,025
1969	130,370.92	94,415	109,189	21,182	13.79	1,536
1970	102,896.19	73,653	85,178	17,718	14.21	1,247
1971	157,536.44	111,410	128,844	28,692	14.64	1,960
1972	277,613.46	193,885	224,224	53,389	15.08	3,540
1973	229,848.98	158,458	183,254	46,595	15.53	3,000
1974	269,188.99	183,049	211,693	57,496	16.00	3,594
1975	274,030.24	183,765	212,521	61,509	16.47	3,735
1976	520,372.51	343,966	397,790	122,583	16.95	7,232
1977	261,800.54	170,432	197,102	64,699	17.45	3,708
1978	418,870.06	268,496	310,511	108,359	17.95	6,037
1979	418,603.49	263,971	305,278	113,325	18.47	6,136
1980	409,440.61	253,935	293,671	115,770	18.99	6,096
1981	1,347,899.93	821,410	949,946	397,954	19.53	20,377
1982	1,016,349.26	608,387	703,588	312,761	20.07	15,584
1983	726,763.00	505,609	584,728	142,035	18.01	7,886
1984	773,471.39	528,126	610,768	162,703	18.66	8,719
1985	1,130,686.54	761,744	880,943	249,744	18.97	13,165
1986	896,197.85	591,759	684,359	211,839	19.64	10,786
1987	927,166.47	603,029	697,392	229,774	19.98	11,500
1988	943,598.77	604,092	698,621	244,978	20.33	12,050
1989	835,510.16	523,029	604,874	230,636	21.01	10,977
1990	812,304.65	499,567	577,740	234,565	21.39	10,966
1991	1,375,394.49	830,188	960,097	415,297	21.78	19,068
1992	946,838.08	560,433	648,131	298,707	22.18	13,467
1993	697,494.72	402,175	465,108	232,387	22.89	10,152
1994	1,075,383.58	606,624	701,550	373,834	23.31	16,037
1995	736,105.15	405,741	469,232	266,873	23.75	11,237
1996	343,180.25	184,631	213,522	129,658	24.19	5,360
1997	890,000.38	466,627	539,646	350,354	24.65	14,213
1998	519,725.01	265,164	306,657	213,068	25.12	8,482
1999	595,225.31	295,113	341,293	253,932	25.59	9,923
2000	684,118.20	328,992	380,473	303,645	26.09	11,638

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1.5						
2001	1,771,192.46	824,667	953,712	817,480	26.59	30,744
2002	1,081,305.83	486,588	562,730	518,576	27.09	19,143
2003	1,000,881.82	434,283	502,240	498,642	27.61	18,060
2004	858,954.60	358,528	414,631	444,324	28.14	15,790
2005	1,250,176.61	500,821	579,190	670,987	28.68	23,396
2006	3,408,410.34	1,312,579	1,517,974	1,890,436	29.00	65,187
2007	1,284,508.95	471,929	545,777	738,732	29.56	24,991
2008	4,706,535.62	1,651,053	1,909,413	2,797,123	29.92	93,487
2009	3,220,516.93	1,074,686	1,242,855	1,977,662	30.29	65,291
2010	707,621.22	223,538	258,518	449,103	30.68	14,638
2011	2,001,130.62	595,536	688,727	1,312,404	31.08	42,227
2012	770,480.41	214,656	248,246	522,234	31.50	16,579
2013	2,638,734.26	686,599	794,039	1,844,695	31.75	58,101
2014	1,071,267.86	258,176	298,576	772,692	32.03	24,124
2015	2,292,579.55	506,431	585,678	1,706,902	32.33	52,796
2016	1,179,354.47	235,989	272,917	906,437	32.65	27,762
2017	6,017,402.36	1,078,319	1,247,056	4,770,346	32.83	145,304
2018	771,834.96	121,873	140,944	630,891	32.89	19,182
2019	1,574,410.34	213,962	247,443	1,326,967	32.86	40,382
2020	2,392,299.66	270,091	312,355	2,079,945	32.73	63,549
2021	6,864,365.64	610,929	706,529	6,157,837	32.42	189,939
2022	5,294,170.89	338,298	391,236	4,902,935	31.73	154,520
2023	7,248,494.42	302,262	349,560	6,898,934	30.62	225,308
2024	3,771,271.38	23,382	27,041	3,744,230	26.79	139,762
	85,558,767.45	26,784,795	30,973,967	54,584,800		1,872,058

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 29.2 2.19

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 380.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
1951	10,920.83	9,293	10,799	122	8.20	15
1952	42,488.45	35,907	41,728	760	8.52	89
1953	58,868.84	49,407	57,416	1,453	8.84	164
1954	95,279.86	79,394	92,264	3,016	9.17	329
1955	119,119.59	98,544	114,518	4,602	9.50	484
1956	163,428.40	134,189	155,942	7,486	9.84	761
1957	200,653.31	163,442	189,937	10,716	10.20	1,051
1958	255,772.74	206,710	240,219	15,554	10.55	1,474
1959	367,463.93	294,504	342,245	25,219	10.92	2,309
1960	402,483.27	319,793	371,633	30,850	11.30	2,730
1961	573,815.64	451,960	525,225	48,591	11.68	4,160
1962	483,039.66	376,945	438,050	44,990	12.08	3,724
1963	823,683.56	636,782	740,008	83,676	12.48	6,705
1964	1,194,893.05	914,631	1,062,897	131,996	12.90	10,232
1965	1,703,524.39	1,290,658	1,499,880	203,644	13.33	15,277
1966	1,748,943.85	1,311,393	1,523,977	224,967	13.76	16,349
1967	1,596,980.51	1,184,385	1,376,380	220,601	14.21	15,524
1968	2,237,624.89	1,640,783	1,906,762	330,863	14.67	22,554
1969	2,275,665.64	1,649,243	1,916,594	359,072	15.14	23,717
1970	2,766,769.60	1,981,007	2,302,139	464,631	15.62	29,746
1971	2,831,485.74	2,002,115	2,326,668	504,818	16.11	31,336
1972	2,760,027.51	1,926,499	2,238,795	521,233	16.61	31,381
1973	2,633,549.18	1,813,804	2,107,831	525,718	17.12	30,708
1974	2,678,534.15	1,819,448	2,114,390	564,144	17.64	31,981
1975	2,671,149.97	1,788,709	2,078,668	592,482	18.17	32,608
1976	3,553,566.55	2,344,075	2,724,062	829,505	18.72	44,311
1977	3,460,167.52	2,247,863	2,612,253	847,915	19.27	44,002
1978	6,947,492.62	4,441,324	5,161,286	1,786,207	19.84	90,031
1979	6,095,616.78	3,833,594	4,455,040	1,640,577	20.41	80,381
1980	6,891,277.50	4,260,050	4,950,626	1,940,652	21.00	92,412
1981	11,455,887.05	6,956,817	8,084,553	3,371,334	21.60	156,080
1982	9,299,460.06	5,545,826	6,444,833	2,854,627	22.20	128,587
1983	6,047,927.07	4,058,159	4,716,008	1,331,919	20.18	66,002
1984	11,481,081.09	7,562,588	8,788,523	2,692,558	20.81	129,388
1985	11,642,556.13	7,569,990	8,797,125	2,845,431	21.07	135,047
1986	5,123,056.76	3,265,436	3,794,780	1,328,277	21.71	61,183
1987	16,987,086.45	10,606,737	12,326,145	4,660,941	22.36	208,450
1988	10,221,234.10	6,284,015	7,302,687	2,918,547	22.66	128,797
1989	5,565,456.23	3,347,065	3,889,642	1,675,814	23.31	71,892
1990	13,080,588.86	7,731,936	8,985,323	4,095,266	23.64	173,235
1991	9,866,978.75	5,694,233	6,617,298	3,249,681	24.30	133,732
1992	16,148,767.35	9,090,141	10,563,700	5,585,067	24.98	223,582
1993	11,062,672.23	6,102,170	7,091,364	3,971,308	25.33	156,783
1994	13,897,797.57	7,463,117	8,672,927	5,224,871	26.01	200,879

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 380.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
1995	12,351,821.10	6,484,706	7,535,911	4,815,910	26.39	182,490
1996	10,667,297.00	5,438,188	6,319,747	4,347,550	27.08	160,545
1997	17,158,082.16	8,530,998	9,913,917	7,244,165	27.48	263,616
1998	7,865,418.99	3,787,199	4,401,124	3,464,295	28.18	122,935
1999	12,165,675.99	5,694,753	6,617,902	5,547,774	28.60	193,978
2000	4,588,180.69	2,073,399	2,409,508	2,178,673	29.31	74,332
2001	13,813,666.20	6,047,623	7,027,974	6,785,692	29.75	228,090
2002	11,222,903.54	4,727,087	5,493,372	5,729,532	30.46	188,100
2003	12,090,124.20	4,913,426	5,709,918	6,380,206	30.92	206,346
2004	16,392,402.56	6,379,923	7,414,142	8,978,261	31.65	283,673
2005	15,137,599.65	5,658,435	6,575,697	8,561,903	32.11	266,643
2006	13,779,857.12	4,931,811	5,731,283	8,048,574	32.59	246,965
2007	9,952,393.97	3,399,738	3,950,853	6,001,541	33.09	181,370
2008	10,555,381.13	3,412,555	3,965,748	6,589,633	33.84	194,729
2009	11,049,807.62	3,385,661	3,934,494	7,115,314	34.34	207,202
2010	5,822,612.69	1,682,735	1,955,515	3,867,098	34.85	110,964
2011	13,994,221.54	3,795,233	4,410,460	9,583,762	35.38	270,881
2012	17,669,063.72	4,472,040	5,196,981	12,472,083	35.91	347,315
2013	10,030,361.25	2,363,153	2,746,233	7,284,128	36.23	201,052
2014	15,877,791.47	3,439,130	3,996,631	11,881,160	36.78	323,033
2015	19,709,572.77	3,884,757	4,514,496	15,195,077	37.34	406,938
2016	21,146,278.32	3,764,038	4,374,208	16,772,070	37.71	444,765
2017	22,265,483.44	3,526,853	4,098,574	18,166,909	38.08	477,072
2018	38,465,497.55	5,312,085	6,173,202	32,292,296	38.48	839,197
2019	35,766,048.72	4,213,241	4,896,230	30,869,819	38.69	797,876
2020	37,217,468.07	3,598,929	4,182,334	33,035,134	38.94	848,360
2021	42,023,197.46	3,168,549	3,682,188	38,341,009	38.85	986,899
2022	41,932,025.95	2,226,591	2,587,533	39,344,493	38.65	1,017,969
2023	61,012,026.78	2,068,308	2,403,591	58,608,436	38.04	1,540,705
2024	57,082,184.70	268,286	311,777	56,770,408	35.17	1,614,171
	828,329,283.58	253,234,111	294,284,683	534,044,601		15,868,393

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 33.7 1.92

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 381.00 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 32-S0.5						
1953	691.33	691	691			
1954	30.77	31	31			
1955	2,764.28	2,764	2,764			
1956	5,264.84	5,265	5,265			
1957	17,936.12	17,936	17,936			
1958	16,899.42	16,899	16,899			
1959	14,910.18	14,910	14,910			
1960	10,419.92	10,420	10,420			
1961	2,613.21	2,588	2,613			
1962	38,269.02	37,480	38,269			
1963	48,079.97	46,563	48,080			
1964	10,893.47	10,434	10,893			
1965	14,224.50	13,469	14,224			
1966	670.67	628	671			
1968	119,013.42	108,971	119,013			
1969	179,613.48	162,550	179,613			
1970	147,945.00	132,365	147,945			
1971	139,859.32	123,644	139,859			
1972	286,375.24	250,132	286,375			
1973	200,775.82	173,294	200,776			
1974	233,289.86	198,880	233,290			
1975	317,221.18	267,062	315,391	1,830	5.06	362
1976	197,543.67	164,208	193,924	3,620	5.40	670
1977	213,221.48	174,908	206,561	6,660	5.75	1,158
1978	330,340.65	267,371	315,756	14,585	6.10	2,391
1979	242,151.58	193,344	228,333	13,819	6.45	2,142
1980	400,933.55	315,735	372,873	28,061	6.80	4,127
1981	146,999.50	114,108	134,758	12,242	7.16	1,710
1982	344,461.91	263,513	311,200	33,262	7.52	4,423
1983	40,940.24	34,717	40,940			
1984	85,282.23	71,594	84,550	732	7.68	95
1985	313,968.70	260,688	307,864	6,105	8.00	763
1986	508,445.20	417,230	492,736	15,709	8.34	1,884
1987	927,774.83	755,209	891,878	35,897	8.49	4,228
1988	845,571.64	678,909	801,770	43,802	8.88	4,933
1989	705,957.81	558,554	659,635	46,323	9.28	4,992
1990	673,925.84	527,280	622,701	51,225	9.50	5,392
1991	558,002.18	431,224	509,262	48,740	9.75	4,999
1992	550,723.87	418,054	493,709	57,015	10.21	5,584
1993	1,162,408.03	869,481	1,026,830	135,578	10.50	12,912
1994	913,313.87	672,290	793,953	119,361	10.82	11,032
1995	628,751.80	454,776	537,076	91,676	11.16	8,215
1996	418,099.95	296,767	350,473	67,627	11.52	5,870
1997	836,926.23	584,342	690,090	146,836	11.74	12,507

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 381.00 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 32-S0.5						
1998	801,687.42	547,553	646,643	155,044	12.15	12,761
1999	447,861.85	299,799	354,053	93,809	12.43	7,547
2000	593,830.18	387,474	457,595	136,235	12.87	10,585
2001	1,566,920.52	998,285	1,178,943	387,978	13.20	29,392
2002	1,506,241.23	934,924	1,104,116	402,125	13.55	29,677
2003	1,081,572.26	652,404	770,469	311,103	13.92	22,349
2004	783,302.28	459,642	542,823	240,479	14.20	16,935
2005	1,033,616.08	586,370	692,485	341,131	14.62	23,333
2006	1,262,806.45	692,776	818,147	444,659	14.95	29,743
2007	1,929,394.89	1,020,071	1,204,672	724,723	15.30	47,368
2008	1,540,030.41	781,719	923,186	616,844	15.68	39,340
2009	1,631,948.79	791,985	935,309	696,640	16.08	43,323
2010	3,427,434.07	1,587,587	1,874,890	1,552,544	16.42	94,552
2011	2,431,391.82	1,065,922	1,258,820	1,172,572	16.86	69,548
2012	2,665,690.76	1,102,796	1,302,367	1,363,324	17.24	79,079
2013	1,725,122.02	668,485	789,460	935,662	17.65	53,012
2014	2,524,473.24	911,082	1,075,959	1,448,514	18.00	80,473
2015	3,127,100.11	1,040,699	1,229,033	1,898,067	18.38	103,268
2016	5,840,735.77	1,769,743	2,090,011	3,750,725	18.79	199,613
2017	10,440,627.20	2,835,674	3,348,842	7,091,785	19.22	368,979
2018	12,284,676.85	2,931,124	3,461,565	8,823,112	19.67	448,557
2019	13,759,200.59	2,815,132	3,324,583	10,434,618	20.09	519,394
2020	17,194,539.93	2,909,316	3,435,811	13,758,729	20.46	672,470
2021	4,163,179.41	548,291	647,514	3,515,665	20.87	168,455
2022	5,377,966.60	497,462	587,487	4,790,480	21.25	225,434
2023	7,248,558.90	422,591	499,067	6,749,492	21.55	313,201
2024	7,502,134.32	57,016	67,334	7,434,800	21.91	339,334
	126,745,549.73	39,437,200	46,493,984	80,251,566		4,148,111

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 19.3 3.27

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 382.00 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
1922	5,656.93	5,650	5,657			
1923	55,771.32	55,477	55,771			
1924	50,261.86	49,787	50,262			
1925	54,399.40	53,648	54,399			
1926	48,833.67	47,928	48,834			
1927	56,519.46	55,204	56,519			
1928	49,690.35	48,290	49,690			
1929	50,216.68	48,555	50,217			
1930	44,532.71	42,840	44,533			
1931	31,195.02	29,856	31,195			
1932	33,443.64	31,838	33,444			
1933	34,340.99	32,518	34,341			
1934	35,599.03	33,528	35,599			
1935	22,644.25	21,207	22,644			
1936	39,217.55	36,529	39,218			
1937	43,996.93	40,749	43,997			
1938	60,106.91	55,353	60,107			
1939	10,238.09	9,374	10,238			
1940	17,931.29	16,324	17,931			
1941	24,714.39	22,369	24,714			
1942	22,634.64	20,367	22,635			
1943	11,928.01	10,670	11,928			
1944	8,248.85	7,335	8,249			
1945	6,449.91	5,701	6,450			
1946	24,650.88	21,657	24,651			
1947	46,721.64	40,792	46,722			
1948	48,758.61	42,305	48,759			
1949	98,547.82	84,966	98,548			
1950	90,113.40	77,187	90,113			
1951	93,101.06	79,221	93,101			
1952	61,504.98	51,977	61,505			
1953	91,581.01	76,861	91,237	344	8.84	39
1954	114,141.76	95,111	112,901	1,241	9.17	135
1955	147,724.63	122,208	145,066	2,659	9.50	280
1956	163,576.58	134,311	159,433	4,144	9.84	421
1957	166,871.24	135,925	161,349	5,522	10.20	541
1958	170,854.35	138,081	163,908	6,946	10.55	658
1959	164,533.61	131,865	156,529	8,005	10.92	733
1960	153,532.13	121,989	144,806	8,726	11.30	772
1961	158,389.03	124,754	148,088	10,301	11.68	882
1962	160,274.60	125,072	148,466	11,809	12.08	978
1963	140,034.12	108,259	128,508	11,526	12.48	924
1964	162,254.68	124,198	147,428	14,827	12.90	1,149
1965	139,441.43	105,646	125,406	14,035	13.33	1,053

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 382.00 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
1966	116,559.75	87,399	103,746	12,814	13.76	931
1967	139,726.33	103,627	123,010	16,716	14.21	1,176
1968	161,014.16	118,067	140,151	20,863	14.67	1,422
1969	160,548.39	116,354	138,117	22,431	15.14	1,482
1970	183,991.32	131,738	156,379	27,612	15.62	1,768
1971	241,909.16	171,052	203,046	38,863	16.11	2,412
1972	307,930.20	214,935	255,137	52,793	16.61	3,178
1973	318,459.38	219,333	260,358	58,101	17.12	3,394
1974	202,790.41	137,749	163,514	39,276	17.64	2,227
1975	273,125.15	182,896	217,106	56,019	18.17	3,083
1976	167,125.02	110,242	130,862	36,263	18.72	1,937
1977	479,872.06	311,744	370,054	109,818	19.27	5,699
1978	854,235.96	546,087	648,229	206,007	19.84	10,383
1979	806,348.47	507,121	601,975	204,373	20.41	10,013
1980	660,656.20	408,404	484,793	175,863	21.00	8,374
1981	1,019,947.21	619,383	735,235	284,712	21.60	13,181
1982	1,154,970.53	688,778	817,609	337,362	22.20	15,196
1983	850,350.72	570,585	677,309	173,042	20.18	8,575
1984	1,096,562.40	722,306	857,409	239,153	20.81	11,492
1985	1,108,650.32	720,844	855,673	252,977	21.07	12,007
1986	1,002,515.02	639,003	758,524	243,991	21.71	11,239
1987	1,114,951.49	696,176	826,391	288,560	22.36	12,905
1988	1,224,061.00	752,553	893,313	330,748	22.66	14,596
1989	1,128,574.78	678,725	805,676	322,899	23.31	13,852
1990	1,308,073.35	773,202	917,824	390,249	23.64	16,508
1991	1,723,497.77	994,631	1,180,670	542,828	24.30	22,339
1992	1,958,851.17	1,102,637	1,308,878	649,973	24.98	26,020
1993	1,496,672.64	825,565	979,982	516,691	25.33	20,398
1994	1,735,909.92	932,184	1,106,543	629,367	26.01	24,197
1995	1,547,964.51	812,681	964,688	583,277	26.39	22,102
1996	1,781,822.15	908,373	1,078,278	703,544	27.08	25,980
1997	1,855,353.14	922,482	1,095,026	760,327	27.48	27,668
1998	1,288,436.05	620,382	736,420	552,016	28.18	19,589
1999	1,277,797.09	598,137	710,015	567,782	28.60	19,853
2000	1,372,780.33	620,359	736,393	636,387	29.31	21,712
2001	1,873,464.84	820,203	973,617	899,848	29.75	30,247
2002	2,721,419.32	1,146,262	1,360,663	1,360,756	30.46	44,674
2003	2,046,667.34	831,766	987,343	1,059,324	30.92	34,260
2004	2,701,379.04	1,051,377	1,248,030	1,453,349	31.65	45,919
2005	2,875,357.62	1,074,809	1,275,845	1,599,513	32.11	49,814
2006	2,433,540.84	870,964	1,033,872	1,399,669	32.59	42,948
2007	2,537,170.44	866,697	1,028,807	1,508,363	33.09	45,584
2008	2,958,474.58	956,475	1,135,378	1,823,097	33.84	53,874
2009	3,130,447.55	959,169	1,138,575	1,991,873	34.34	58,004

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 382.00 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
2010	3,065,515.21	885,934	1,051,642	2,013,873	34.85	57,787
2011	2,098,065.58	568,995	675,422	1,422,644	35.38	40,210
2012	2,108,861.80	533,753	633,588	1,475,274	35.91	41,083
2013	1,382,865.12	325,803	386,742	996,123	36.23	27,494
2014	1,923,839.42	416,704	494,646	1,429,193	36.78	38,858
2015	2,193,334.83	432,306	513,166	1,680,169	37.34	44,996
2016	2,720,067.75	484,172	574,733	2,145,335	37.71	56,890
2017	3,189,050.81	505,146	599,631	2,589,420	38.08	67,999
2018	2,707,367.26	373,887	443,820	2,263,547	38.48	58,824
2019	3,133,666.01	369,146	438,193	2,695,473	38.69	69,668
2020	2,967,587.98	286,966	340,641	2,626,947	38.94	67,461
2021	3,792,001.37	285,917	339,396	3,452,605	38.85	88,870
	89,897,357.70	35,335,667	41,827,179	48,070,179		1,490,917

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 32.2 1.66

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R0.5						
1888	91.17	91	91			
1903	19.13	19	19			
1917	22.59	23	23			
1923	915.00	915	915			
1925	294.21	292	294			
1926	114.19	112	114			
1927	123.91	120	124			
1928	41.81	40	42			
1930	75.43	71	75			
1934	139.08	126	139			
1936	71.99	64	72			
1937	101.54	89	102			
1941	1,316.83	1,117	1,317			
1942	1,106.33	930	1,106			
1943	2,516.62	2,095	2,517			
1945	1,005.78	821	1,006			
1946	320.22	259	320			
1947	830.79	665	831			
1948	147.82	117	148			
1949	2,987.17	2,345	2,987			
1950	1,557.67	1,210	1,558			
1951	1,236.99	951	1,237			
1952	8,343.78	6,350	8,344			
1953	10,391.20	7,825	10,322	69	12.35	6
1954	13,557.57	10,100	13,323	235	12.75	18
1955	19,747.46	14,550	19,194	553	13.16	42
1956	29,674.04	21,621	28,521	1,153	13.57	85
1957	26,862.47	19,352	25,528	1,334	13.98	95
1958	15,645.92	11,143	14,699	947	14.39	66
1959	30,914.41	21,758	28,702	2,212	14.81	149
1960	19,538.53	13,587	17,923	1,616	15.23	106
1961	16,893.65	11,606	15,310	1,584	15.65	101
1962	32,490.20	22,041	29,076	3,414	16.08	212
1963	19,942.17	13,357	17,620	2,322	16.51	141
1964	15,110.74	9,991	13,180	1,931	16.94	114
1965	49,979.06	32,606	43,012	6,967	17.38	401
1966	35,096.23	22,588	29,797	5,299	17.82	297
1967	20,014.39	12,701	16,755	3,259	18.27	178
1968	29,080.80	18,193	23,999	5,082	18.72	271
1969	35,583.78	21,941	28,944	6,640	19.17	346
1970	33,449.59	20,317	26,801	6,649	19.63	339
1971	80,272.11	48,019	63,345	16,927	20.09	843
1972	41,985.55	24,721	32,611	9,375	20.56	456
1973	50,087.05	29,020	38,282	11,805	21.03	561

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R0.5						
1974	5,603.56	3,193	4,212	1,392	21.51	65
1975	15,806.12	8,855	11,681	4,125	21.99	188
1976	34,764.85	19,142	25,251	9,514	22.47	423
1977	13,273.62	7,176	9,466	3,808	22.97	166
1978	10,928.11	5,801	7,652	3,276	23.46	140
1979	118,160.83	61,538	81,178	36,983	23.96	1,544
1980	103,684.85	52,962	69,865	33,820	24.46	1,383
1981	123,030.54	61,589	81,246	41,785	24.97	1,673
1982	168,672.34	82,683	109,072	59,600	25.49	2,338
1983	85,812.06	55,812	73,625	12,187	22.13	551
1984	100,029.41	63,879	84,266	15,763	22.73	693
1985	154,129.52	97,194	128,214	25,916	22.94	1,130
1986	355,205.51	219,624	289,719	65,487	23.56	2,780
1987	160,752.07	97,978	129,248	31,504	23.81	1,323
1988	473,714.48	284,418	375,192	98,522	24.07	4,093
1989	440,415.04	260,197	343,241	97,174	24.36	3,989
1990	238,327.58	137,610	181,529	56,799	25.01	2,271
1991	394,887.56	223,980	295,465	99,423	25.31	3,928
1992	104,401.55	58,099	76,642	27,760	25.64	1,083
1993	82,289.20	44,881	59,205	23,084	25.98	889
1994	153,965.31	82,217	108,457	45,508	26.33	1,728
1995	168,439.63	88,431	116,654	51,786	26.39	1,962
1996	141,996.58	72,787	96,017	45,980	26.78	1,717
1997	162,573.16	81,270	107,208	55,365	27.18	2,037
1998	82,330.29	40,070	52,859	29,471	27.60	1,068
1999	118,364.54	56,294	74,261	44,104	27.75	1,589
2000	154,754.35	71,435	94,234	60,520	28.19	2,147
2001	96,718.89	43,465	57,337	39,382	28.38	1,388
2002	125,916.65	54,988	72,538	53,379	28.59	1,867
2003	196,917.44	83,355	109,958	86,959	28.84	3,015
2004	185,930.18	76,120	100,414	85,516	29.09	2,940
2006	21,895.79	8,353	11,019	10,877	29.45	369
2007	144,120.75	52,691	69,508	74,613	29.78	2,505
2008	45,087.79	15,817	20,865	24,223	29.92	810
2010	1,287.86	412	543	745	30.08	25
2011	26,953.26	8,199	10,816	16,137	30.12	536
2012	473,720.55	136,005	179,412	294,309	30.21	9,742
2013	1,053,466.81	284,647	375,494	677,973	30.16	22,479
2014	144,678.31	36,473	48,114	96,564	30.16	3,202
2015	360,258.58	84,228	111,110	249,149	30.05	8,291
2016	610,569.76	131,150	173,007	437,563	29.86	14,654
2017	1,643,309.76	320,281	422,501	1,220,809	29.60	41,244
2018	611,910.93	106,411	140,373	471,538	29.29	16,099
2019	226,916.63	34,582	45,619	181,298	28.73	6,310

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R0.5						
2020	443,544.60	57,306	75,596	367,949	28.09	13,099
2021	910,758.51	95,174	125,549	785,210	27.14	28,932
2022	23,202.16	1,800	2,374	20,828	25.77	808
2023	320,461.15	16,888	22,278	298,183	23.98	12,435
2024	226,454.87	1,948	2,570	223,885	19.21	11,655
	12,710,090.86	4,415,267	5,822,979	6,887,112		250,130

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 27.5 1.97

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 386.00 OTHER PROPERTY ON CUSTOMER PREMISES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-S4						
1997	53,681.30	51,915	53,681			
1998	24,038.51	23,022	24,039			
2005	14,566,812.47	12,646,907	14,566,812			
	14,644,532.28	12,721,844	14,644,532			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					0.0	0.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 387.00 OTHER EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 26-R2.5						
2001	46,579.02	35,824	28,026	18,553	6.95	2,669
2002	31,447.89	23,561	18,433	13,015	7.42	1,754
2003	23,188.68	16,884	13,209	9,980	7.90	1,263
2004	45,241.59	31,932	24,982	20,260	8.41	2,409
2005	63,980.37	43,532	34,057	29,923	9.00	3,325
2006	149,131.83	97,801	76,513	72,619	9.53	7,620
2007	121,391.11	76,270	59,669	61,722	10.16	6,075
2008	81,924.14	49,269	38,545	43,379	10.72	4,047
2010	102,786.29	55,772	43,632	59,154	11.94	4,954
2011	348,230.90	177,911	139,186	209,045	12.61	16,578
2012	209,142.16	100,263	78,439	130,703	13.21	9,894
2013	55,998.15	24,953	19,522	36,476	13.89	2,626
2014	404,555.05	166,596	130,334	274,221	14.52	18,886
2015	1,176,802.20	443,419	346,903	829,899	15.16	54,743
2016	585,923.61	199,566	156,128	429,796	15.81	27,185
2017	1,998,519.52	605,951	474,057	1,524,463	16.47	92,560
2018	1,640,889.33	434,179	339,674	1,301,215	17.14	75,917
2019	233,564.39	52,622	41,168	192,396	17.77	10,827
2020	1,202,207.89	221,928	173,622	1,028,586	18.41	55,871
2021	5,247,563.98	750,926	587,476	4,660,088	18.96	245,785
2022	731,333.65	73,353	57,386	673,948	19.43	34,686
2023	702,456.63	44,466	34,788	667,669	19.72	33,857
2024	849,418.30	7,220	5,648	843,770	19.37	43,561
	16,052,276.68	3,734,198	2,921,397	13,130,880		757,092

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.3 4.72

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 389.02 LAND RIGHTS AND RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R3						
1895	221.00	221	221			
1896	578.00	578	578			
1897	265.80	266	266			
1898	123.55	124	124			
1899	219.60	220	220			
1900	78.67	79	79			
1901	1,043.20	1,043	1,043			
1902	9.85	10	10			
1903	356.24	356	356			
1904	105.00	105	105			
1905	271.56	272	272			
1907	515.26	515	515			
1908	1.22	1	1			
1909	5.00	5	5			
1912	107.28	107	107			
1913	418.90	419	419			
1914	242.34	242	242			
1915	59.34	59	59			
1916	348.78	349	349			
1917	37.03	37	37			
1919	20.00	20	20			
1920	747.78	748	748			
1923	337.00	336	337			
1924	1,098.02	1,091	1,098			
1925	257.57	255	258			
1926	32.00	32	32			
1927	101.50	100	102			
1928	38.20	37	38			
1929	741.31	723	741			
1930	63.71	62	64			
1932	25.00	24	25			
1935	6.60	6	7			
1936	23.00	22	23			
1937	126.06	119	126			
1940	94.65	88	95			
1941	123.94	115	124			
1942	91.94	85	92			
1944	457.06	417	457			
1945	266.11	242	266			
1946	58.28	53	58			
1948	15.96	14	16			
1949	91.53	81	92			
1950	62.45	55	62			
1951	36.13	32	36			

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 389.02 LAND RIGHTS AND RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R3						
1952	23.18	20	23			
1953	38.67	34	39			
1954	53.96	47	53	1	8.11	
1956	308.81	264	300	9	8.78	1
1958	3,915.91	3,296	3,744	172	9.50	18
1959	630.52	527	599	32	9.89	3
1960	914.07	757	860	54	10.28	5
1961	147.59	121	137	11	10.70	1
1962	74.23	60	68	6	11.12	1
1963	124.21	100	114	10	11.57	1
1964	42.01	34	39	3	12.03	
1965	515.64	408	463	53	12.50	4
1966	2,820.19	2,210	2,510	310	12.99	24
1967	76.52	59	67	10	13.50	1
1968	563.97	432	491	73	14.02	5
1969	267.27	202	229	38	14.56	3
1973	263.19	189	215	48	16.87	3
1977	149.17	101	115	34	19.40	2
1978	842.86	561	637	206	20.06	10
1980	349.81	225	256	94	21.43	4
1981	13,624.82	8,600	9,768	3,857	22.13	174
1983	6,888.56	4,537	5,153	1,736	21.33	81
1984	1,771.57	1,146	1,301	471	21.94	21
1987	565.85	345	392	174	23.81	7
2017	8,100.00	1,091	1,239	6,861	46.03	149
	52,996.00	35,131	38,737	14,259		518

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 27.5 0.98

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS - OWNED

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R1						
1966	801.63	529	647	155	18.69	8
1967	237.72	155	189	49	19.16	3
1968	382.78	246	301	82	19.64	4
1969	58.10	37	45	13	20.12	1
1971	392.19	242	296	96	21.10	5
1972	41.56	25	31	11	21.60	1
1974	750.24	442	540	210	22.62	9
1976	359.03	205	251	108	23.67	5
1977	2,044.66	1,145	1,399	646	24.20	27
1978	1,501.08	826	1,010	491	24.74	20
1980	12,769.21	6,772	8,277	4,492	25.83	174
1982	44,179.93	22,532	27,538	16,642	26.95	618
1983	104,706.79	66,384	81,133	23,574	23.77	992
1984	69,327.61	43,441	53,093	16,235	23.94	678
1985	78,673.24	48,376	59,124	19,549	24.53	797
1987	64,141.99	38,145	46,620	17,522	25.33	692
1989	746.97	428	523	224	26.18	9
1991	52,279.58	28,785	35,180	17,100	27.07	632
1992	12,339.47	6,668	8,149	4,190	27.36	153
1993	1,407.06	741	906	501	28.01	18
1996	97,016.47	47,548	58,112	38,904	29.30	1,328
1997	119,515.43	57,140	69,835	49,680	29.65	1,676
1998	1,266.77	590	721	546	30.01	18
2000	13,469.59	5,924	7,240	6,230	30.78	202
2001	5,589.44	2,383	2,912	2,677	31.18	86
2002	107,563.94	44,349	54,202	53,362	31.60	1,689
2003	103,928.74	41,571	50,807	53,122	31.75	1,673
2004	181,676.83	69,982	85,530	96,147	32.19	2,987
2005	60,608.60	22,534	27,541	33,068	32.38	1,021
2009	132,209.90	41,104	50,236	81,974	33.61	2,439
2010	1,302,797.21	383,934	469,235	833,562	33.91	24,582
2011	931,663.23	260,027	317,799	613,864	34.00	18,055
2012	48,969.61	12,869	15,728	33,242	34.13	974
2014	229,788.67	52,323	63,948	165,841	34.48	4,810
2015	364,773.51	76,566	93,577	271,197	34.50	7,861
2017	140,476.39	24,260	29,650	110,826	34.33	3,228
2018	748,267.70	114,410	139,829	608,439	34.16	17,811
2019	318,997.03	42,203	51,579	267,418	33.89	7,891
2020	5,855.60	651	796	5,060	33.29	152
2021	220,925.46	19,596	23,950	196,975	32.55	6,051

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS - OWNED

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R1						
2022	109,266.00	7,059	8,627	100,639	31.39	3,206
2023	15,892,555.09	681,791	833,268	15,059,287	29.72	506,705
2024	18,783,568.12	123,972	151,516	18,632,052	25.02	744,686
	40,367,890.17	2,398,910	2,931,890	37,436,000		1,363,977
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					27.4	3.38

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 390.01 STRUCTURES AND IMPROVEMENTS - LEASED - NORTH SHORE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 75-R0.5						
PROBABLE RETIREMENT YEAR.. 1-2029						
2005	2,439,832.84	1,987,488	2,014,054	425,779	4.36	97,656
2007	2,391.03	1,909	1,935	456	4.34	105
2010	127,711.52	97,699	99,005	28,707	4.35	6,599
2011	713,419.33	536,349	543,518	169,901	4.35	39,058
2012	95,432.57	70,362	71,302	24,131	4.33	5,573
2014	39,512.90	27,679	28,049	11,464	4.35	2,635
2015	1,401,257.57	950,473	963,177	438,081	4.35	100,708
2016	2,970,840.94	1,938,474	1,964,385	1,006,456	4.35	231,369
2017	143,613.75	89,443	90,638	52,976	4.34	12,206
2018	17,834.81	10,471	10,611	7,224	4.34	1,665
2020	149,234.52	73,125	74,102	75,133	4.34	17,312
2021	11,786.05	4,978	5,045	6,741	4.33	1,557
	8,112,867.83	5,788,450	5,865,821	2,247,047		516,443

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.4 6.37

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 391.01 OFFICE FURNITURE AND EQUIPMENT - FURNITURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
2007	15,372.00	13,194	15,372			
2008	723.62	585	724			
2009	42,018.52	31,864	41,953	66	4.83	14
2010	17,167.62	12,160	16,010	1,158	5.83	199
2011	526,944.52	346,903	456,742	70,203	6.83	10,279
2013	34,396.55	19,205	25,286	9,111	8.83	1,032
2014	156,256.18	79,430	104,580	51,676	9.83	5,257
2015	1,434,510.51	657,479	865,653	568,858	10.83	52,526
2016	308,359.05	125,912	165,779	142,580	11.83	12,052
2017	30,662.08	10,987	14,466	16,196	12.83	1,262
2021	9,564.00	1,514	1,993	7,571	16.83	450
	2,575,974.65	1,299,233	1,708,558	867,417		83,071

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.4 3.22

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 391.02 OFFICE FURNITURE AND EQUIPMENT - COMPUTER HARDWARE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
2020	1,183,128.34	985,936	1,183,128			
2021	8,068,734.90	5,110,172	7,060,083	1,008,652	1.83	551,176
2022	4,011,706.71	1,738,393	2,401,719	1,609,988	2.83	568,900
2023	1,607,819.87	428,757	592,360	1,015,460	3.67	276,692
	14,871,389.82	8,263,258	11,237,290	3,634,100		1,396,768
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					2.6	9.39

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 391.03 OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
2016	170,927.25	93,060	78,778	92,149	6.83	13,492
2017	52,750.52	25,203	21,335	31,416	7.83	4,012
2018	20,040.00	8,239	6,975	13,065	8.83	1,480
2019	15,022.00	5,174	4,380	10,642	9.83	1,083
2020	13,792.00	3,831	3,243	10,549	10.83	974
2021	30,392.00	6,416	5,431	24,961	11.83	2,110
	302,923.77	141,923	120,142	182,782		23,151

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.9 7.64

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 392.01 TRANSPORTATION EQUIPMENT - AUTOMOBILES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 6-L2.5						
2010	1,875.41	1,831	1,875			
	1,875.41	1,831	1,875			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					0.0	0.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 392.02 TRANSPORTATION EQUIPMENT - TRUCKS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L2.5						
1999	54,867.79	53,990	39,065	15,803	0.41	15,803
2007	5,098.86	4,639	3,357	1,742	1.70	1,025
2008	9,536.80	8,541	6,180	3,357	1.88	1,786
2009	18,015.55	15,848	11,467	6,549	2.07	3,164
2010	1,092.18	941	681	411	2.28	180
2011	41,243.87	34,756	25,148	16,096	2.46	6,543
2012	56,642.36	46,588	33,710	22,932	2.63	8,719
2013	139,272.82	111,502	80,679	58,594	2.78	21,077
2014	715,639.34	557,340	403,274	312,365	2.89	108,085
2015	541,854.96	408,288	295,425	246,430	3.00	82,143
2016	3,310,911.91	2,384,850	1,725,604	1,585,308	3.17	500,097
2017	7,285,619.55	4,928,722	3,566,271	3,719,349	3.43	1,084,358
2018	6,474,761.46	4,004,640	2,897,634	3,577,127	3.80	941,349
2019	7,789,495.99	4,246,054	3,072,314	4,717,182	4.31	1,094,474
2020	11,620,926.09	5,321,222	3,850,272	7,770,654	4.93	1,576,198
2021	10,350,776.90	3,723,174	2,693,974	7,656,803	5.64	1,357,589
2022	3,928,517.93	992,344	718,029	3,210,489	6.41	500,856
2023	9,293,667.61	1,468,399	1,062,488	8,231,180	7.11	1,157,691
2024	8,936,655.46	178,733	129,326	8,807,329	8.16	1,079,330
	70,574,597.43	28,490,571	20,614,898	49,959,699		9,540,467

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.2 13.52

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 392.03 TRANSPORTATION EQUIPMENT - TRAILERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-L2						
1999	4,405.98	3,925	2,264	2,142	3.08	695
2000	581.47	512	295	286	3.30	87
2006	34,310.64	27,551	15,895	18,416	4.46	4,129
2007	6,694.51	5,275	3,043	3,652	4.62	790
2008	5,965.19	4,610	2,660	3,305	4.75	696
2009	18,603.25	14,051	8,106	10,497	4.91	2,138
2010	3,516.76	2,591	1,495	2,022	5.06	400
2011	52,444.46	37,634	21,712	30,732	5.18	5,933
2012	71,963.82	49,993	28,843	43,121	5.35	8,060
2013	4,225.72	2,827	1,631	2,595	5.53	469
2014	15,285.37	9,775	5,640	9,645	5.73	1,683
2015	40,868.31	24,689	14,244	26,624	6.01	4,430
2016	150,581.72	84,732	48,885	101,697	6.35	16,015
2017	340,288.47	174,840	100,871	239,417	6.78	35,312
2018	212,070.57	97,043	55,987	156,084	7.31	21,352
2019	594,142.80	234,805	135,466	458,677	7.91	57,987
2020	397,510.36	130,185	75,108	322,402	8.56	37,664
2021	267,290.49	68,213	39,354	227,936	9.24	24,668
2023	372,038.01	41,408	23,889	348,149	10.64	32,721
2024	193,455.73	2,728	1,574	191,882	11.68	16,428
	2,786,243.63	1,017,387	586,962	2,199,282		271,657

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.1 9.75

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 394.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
2000	206,628.32	199,741	202,131	4,497	0.83	4,497
2001	194,842.63	180,555	182,715	12,128	1.83	6,627
2002	342,377.53	303,576	307,208	35,170	2.83	12,428
2003	194,692.15	164,840	166,812	27,880	3.83	7,279
2004	407,591.88	328,792	332,725	74,867	4.83	15,500
2005	76,325.20	58,516	59,216	17,109	5.83	2,935
2006	185,927.78	135,108	136,724	49,204	6.83	7,204
2007	597,992.98	410,624	415,536	182,457	7.83	23,302
2008	475,653.28	307,591	311,271	164,382	8.83	18,616
2009	531,371.14	322,367	326,224	205,147	9.83	20,869
2010	339,822.19	192,567	194,871	144,951	10.83	13,384
2011	211,403.92	111,340	112,672	98,732	11.83	8,346
2012	250,479.58	121,901	123,359	127,121	12.83	9,908
2013	446,160.84	199,287	201,671	244,490	13.83	17,678
2014	20,034.77	8,148	8,245	11,790	14.83	795
2017	117,295.27	33,625	34,027	83,268	17.83	4,670
2018	272,935.60	67,325	68,131	204,805	18.83	10,877
2019	5,749.93	1,188	1,202	4,548	19.83	229
2022	190,034.82	16,470	16,667	173,368	22.83	7,594
2023	555,514.36	29,626	29,981	525,533	23.67	22,202
2024	891,792.44	5,948	6,019	885,773	24.83	35,673
	6,514,626.61	3,199,135	3,237,407	3,277,220		250,613

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.1 3.85

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 394.01 DUAL FUEL STATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
2014	113,934.57	77,223	75,884	38,051	4.83	7,878
2018	267,256.56	109,872	107,968	159,289	8.83	18,040
	381,191.13	187,095	183,852	197,339		25,918
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					7.6	6.80

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 14-L2						
1994	17,644.93	16,766	17,645			
1995	11,470.92	10,807	11,471			
1997	48,309.45	44,754	47,658	651	2.16	301
1999	275,587.30	250,371	266,618	8,969	2.53	3,545
2000	37,109.98	33,362	35,527	1,583	2.72	582
2001	27,235.56	24,166	25,734	1,502	2.94	511
2002	57,483.39	50,332	53,598	3,885	3.15	1,233
2003	18,062.40	15,599	16,611	1,451	3.34	434
2004	167,902.52	142,885	152,157	15,746	3.53	4,461
2005	188,839.52	158,172	168,436	20,404	3.72	5,485
2006	13,056.79	10,746	11,443	1,614	3.91	413
2007	165,526.27	133,547	142,213	23,313	4.11	5,672
2008	65,116.77	51,481	54,822	10,295	4.28	2,405
2009	29,460.11	22,787	24,266	5,194	4.44	1,170
2010	17,584.62	13,278	14,140	3,445	4.59	751
2011	400,386.52	294,684	313,806	86,581	4.72	18,343
2012	507,524.05	362,474	385,996	121,528	4.87	24,954
2013	280,792.77	193,775	206,349	74,444	5.01	14,859
2014	573,460.53	378,943	403,533	169,928	5.22	32,553
2015	972,805.94	610,825	650,462	322,344	5.43	59,364
2016	497,723.11	292,263	311,228	186,495	5.74	32,490
2017	1,587,123.95	856,412	911,986	675,138	6.11	110,497
2018	1,662,944.16	804,034	856,209	806,735	6.59	122,418
2019	1,103,746.74	462,470	492,481	611,266	7.16	85,372
2020	2,045,274.53	711,551	757,725	1,287,550	7.81	164,859
2021	757,415.56	206,017	219,386	538,030	8.47	63,522
2022	1,401,276.99	266,803	284,116	1,117,161	9.21	121,299
2023	752,264.07	89,595	95,409	656,855	9.86	66,618
2024	967,348.94	14,607	15,555	951,794	10.88	87,481
	14,650,478.39	6,523,506	6,946,580	7,703,898		1,031,592

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.5 7.04

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 397.01 COMMUNICATION EQUIPMENT - RADIO

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
2013	25,393.44	25,393	25,393			
2016	174,220.55	142,281	118,695	55,526	1.83	30,342
2018	213,939.58	131,930	110,061	103,879	3.83	27,122
2021	63,825.10	20,211	16,860	46,965	6.83	6,876
2022	7,583.56	1,643	1,371	6,213	7.83	793
	484,962.23	321,458	272,380	212,582		65,133
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					3.3	13.43

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 397.02 COMMUNICATION EQUIPMENT - TELEPHONE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
2009	9,598.25	9,598	9,598			
2010	1,464,738.55	1,383,358	1,356,844	107,895	0.83	107,895
2011	3,885,016.65	3,410,190	3,344,830	540,187	1.83	295,184
2012	917,890.69	744,510	730,241	187,650	2.83	66,307
2013	816,765.14	608,033	596,379	220,386	3.83	57,542
2014	732,112.11	496,211	486,701	245,411	4.83	50,810
2015	1,149,637.60	702,555	689,090	460,548	5.83	78,996
2016	579,545.18	315,528	309,480	270,065	6.83	39,541
2017	685,878.19	327,699	321,418	364,460	7.83	46,547
2018	1,323,607.81	544,148	533,719	789,889	8.83	89,455
2019	636,787.28	219,335	215,131	421,656	9.83	42,895
2020	1,291,886.68	358,860	351,982	939,905	10.83	86,787
2021	4,842,033.02	1,022,202	1,002,610	3,839,423	11.83	324,550
2022	360,670.22	52,095	51,097	309,573	12.83	24,129
2023	209,127.12	18,589	18,233	190,894	13.67	13,964
2024	420,504.75	4,672	4,582	415,923	14.83	28,046
	19,325,799.24	10,217,583	10,021,935	9,303,864		1,352,648

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.9 7.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 397.04 COMMUNICATION EQUIPMENT - MICROWAVE TOWERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 18-SQUARE						
2017	16,698,062.68	6,648,334	7,618,455	9,079,608	10.83	838,376
2022	27,431.11	3,302	3,784	23,647	15.83	1,494
2023	513,463.19	38,032	43,581	469,882	16.67	28,187
2024	1,032,398.19	9,560	10,955	1,021,443	17.83	57,288
	18,271,355.17	6,699,228	7,676,775	10,594,580		925,345
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					11.4	5.06

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 398.00 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
2018	44,471.04	18,282	33,197	11,274	8.83	1,277
2019	8,235.82	2,837	5,151	3,085	9.83	314
	52,706.86	21,119	38,348	14,359		1,591
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					9.0	3.02

PART VIII. EXPERIENCED AND ESTIMATED NET SALVAGE

PEOPLES NATURAL GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2019 TRANSACTION YEAR				
303.01	7,016,849.73			
327.00	412.50			
329.00	2,540.99			
332.00	426,749.78	163,482.96		163,482.96-
333.00	2,483,303.08	27,645.66		27,645.66-
334.00	4,499.84			
335.00	18,641.92			
352.01	154.63			
352.02	910.97			
366.02	1,682.01	5,101.88		5,101.88-
367.00	330,132.80			
368.00	112,877.98	13,412.04		13,412.04-
369.00	29,369.33			
374.01	160,658.33			
375.00	350,319.31			
376.00	3,766,252.94	5,865,944.45	11,161.33	5,854,783.12-
378.00	540,252.37	10,946.28		10,946.28-
380.00	668,226.19	5,241,626.46		5,241,626.46-
381.00	3,076,370.11			
382.00	346,112.83	222,227.95		222,227.95-
385.00	71,718.45			
387.00	265,911.05			
390.00	26,625.10			
391.01	1,672.81			
391.02	1,488,636.08			
391.03	8,927.24			
392.02	5,238,075.08		652,921.34	652,921.34
392.03	127,177.30		17,165.00	17,165.00
394.00	118,350.37			
396.00	365,760.88		117,395.00	117,395.00
398.00	14,608.00			
	27,063,780.00	11,550,387.68	798,642.67	10,751,745.01-

PEOPLES NATURAL GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2020 TRANSACTION YEAR				
303.01	3,182,564.17			
332.00	312,037.52	354,270.18		354,270.18-
333.00	147,310.45	49,795.88	398.67-	50,194.55-
334.00		6,414.69		6,414.69-
337.00	3,065.97			
353.00	331.76			
365.02	62.90			
366.02		2,930.29		2,930.29-
367.00	56,129.57			
368.00		8,925.19		8,925.19-
369.00	41,435.12	149,912.81		149,912.81-
375.00	137,699.00			
376.00	2,924,766.75	5,481,114.21	5,447.75	5,475,666.46-
378.00	247,415.34	133,251.85		133,251.85-
380.00	25,391.15	7,218,285.86		7,218,285.86-
382.00	77,330.11	179,485.81		179,485.81-
385.00	11,801.29			
387.00	1,139,893.47			
390.00	4,124.92			
390.01	5,616.43			
391.02	1,682,079.07			
391.03	2,281,202.94			
391.04	9,942.78			
392.02	4,933,097.97		740,403.03	740,403.03
392.03	324,315.66		62,342.60	62,342.60
394.00	111,132.66			
396.00	309,807.97		244,663.79	244,663.79
398.00	133,852.65			
	18,102,407.62	13,584,386.77	1,052,458.50	12,531,928.27-

PEOPLES NATURAL GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2021 TRANSACTION YEAR				
303.01	4,236,928.71			
303.02	688,465.65			
303.03	30,357,603.06			
325.04	842.82			
327.00	72,320.90			
329.00	19,981.66			
332.00	49,572.41	283,430.53	5,355.59	278,074.94-
333.00	393,210.79	598,258.96		598,258.96-
334.00		193,592.24		193,592.24-
352.01	247.67			
352.02	315.72			
367.00	25,087.30			
368.00	60,222.15			
369.00	104,960.48			
371.00	29,956.66			
374.02	65.83			
375.00	302,534.97			
376.00	6,155,363.71	2,963,187.81	23,652.10	2,939,535.71-
378.00	401,683.16	111,984.58		111,984.58-
380.00		2,895,377.06		2,895,377.06-
381.00	1,520,996.65			
382.00	79,377.04	203,907.37		203,907.37-
385.00	19,167.76			
387.00	275,471.62			
390.00	52,628.44			
391.01	2,870.77			
391.02	553,407.37			
391.03	1,989.70			
392.02	3,573,699.45		1,222,608.54	1,222,608.54
392.03	76,012.45			
394.00	181,272.53			
396.00	489,723.91			
397.01	1,032,019.73			
397.02	270,725.48		2,900.00	2,900.00
398.00	2,939.36			
	51,031,665.91	7,249,738.55	1,254,516.23	5,995,222.32-

PEOPLES NATURAL GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2022 TRANSACTION YEAR				
303.01	12,622,314.16			
332.00		1,324.31		1,324.31-
333.00	12,996.49	128,574.90		128,574.90-
337.00	11,276.88			
367.00	122,214.21			
369.00	93,926.26			
375.00	3,029.15			
376.00	4,857,456.40	215,592.11	11,205.71-	226,797.82-
378.00	397,251.67			
380.00	641,920.05			
381.00	105,869.13			
382.00	77,284.99	3,688.77		3,688.77-
387.00	198,953.28			
390.00	12,751.86			
390.01	1,649,167.38			
391.01	44,984.79			
391.02	8,852,331.02			
391.03	404,099.91			
392.01	51,430.57			
392.02	6,677,435.30			
392.03	172,345.94			
392.04	6,344.73			
394.00	101,958.56			
396.00	1,258,914.62			
397.01	19,826.01			
397.02	682,272.80			
398.00	8,672.53			
	39,087,028.69	349,180.09	11,205.71-	360,385.80-

PEOPLES NATURAL GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2023 TRANSACTION YEAR				
303.00	11,410,716.70			
327.00	8,172.19			
328.00	93.51			
329.00	2,504.08			
332.00	212,660.11	248,812.33	2,126.60	246,685.73-
333.00	415,019.25	116,205.39	8,300.39	107,905.00-
334.00	581.62	308.26		308.26-
337.00	27,521.63			
352.01	4,379.81			
353.00	71.31			
355.00	413.02			
365.20	112,927.57			
366.02	110.27	11.03		11.03-
367.00	136,165.38	1,771.39		1,771.39-
368.00	19,352.36	2,515.81		2,515.81-
369.00	22,193.01	11,762.30		11,762.30-
371.00	3,357.66			
375.00	105,085.85			
376.00	4,714,240.94	2,121,408.43		2,121,408.43-
378.00	274,342.80	49,381.70		49,381.70-
380.00	1,836,728.02	918,364.01		918,364.01-
381.00	588,764.88			
382.00	60,051.68	49,242.38		49,242.38-
385.00	12,822.45	512.90		512.90-
387.00	281,692.92			
390.00	232,852.06			
391.01	5,945.22			
391.02	460,225.76			
391.10	3,760.70			
391.20	269,272.18			
391.30	6,148.89			
392.01	28,182.66			
392.02	6,238,347.58		873,368.66	873,368.66
392.03	143,858.86		20,140.24	20,140.24
394.00	95,704.20			
394.30	5,641.89			
396.00	843,443.82		185,557.64	185,557.64
397.00	334,012.40			
398.00	726.32			
	28,918,091.56	3,520,295.93	1,089,493.53	2,430,802.40-
TOTAL	164,202,973.78	36,253,989.02	4,183,905.22	32,070,083.80-

PEOPLES NATURAL GAS COMPANY LLC

PITTSBURGH, PENNSYLVANIA

PEOPLES NATURAL GAS DIVISION

2025 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION
ACCRUALS RELATED TO GAS PLANT
AS OF SEPTEMBER 30, 2025

Prepared by:

GANNETT FLEMING

Excellence Delivered As Promised

PEOPLES NATURAL GAS COMPANY LLC

Pittsburgh, Pennsylvania

PEOPLES NATURAL GAS DIVISION

2025 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO GAS PLANT
AS OF SEPTEMBER 30, 2025

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | **F** 717.763.8150

gannettfleming.com

December 14, 2023

Peoples Natural Gas Company, LLC
375 North Shore Drive, Suite 600
Pittsburgh, PA 15212-5322

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to gas plant as of September 30, 2025. The results of our study as of August 31, 2024 are presented in our report titled "2024 Depreciation Study - Calculated Annual Depreciation Accruals Related to Gas Plant as of August 31, 2024". The same methods, procedures and estimates are used in both studies.

The attached report sets forth a description of the methods and procedures upon which the studies were based, the estimates of survivor curves and the calculated annual depreciation rates as of September 30, 2025.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS
President

JJS:mle

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PART I. RESULTS OF STUDY

PEOPLES NATURAL GAS COMPANY LLC
PEOPLES NATURAL GAS DIVISION
DEPRECIATION STUDY

PART I. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

Tables 1 through 4 presented on pages I-3 through I-10 summarize the results of the depreciation study as of September 30, 2025. Table 1 sets forth, by depreciable group, the estimated survivor curve, original cost, book depreciation reserve as of September 30, 2025, future book accruals, calculated annual accrual amount and rate, and composite remaining life for plant in service. Table 2 presents the bringforward of the book reserve to September 30, 2025. Table 3 sets forth the calculations of the depreciation accruals for the thirteen months ended September 30, 2025. Table 4 presents the annual amortization of experienced and estimated net salvage based on the period 2020 through 2024.

DESCRIPTION OF DETAILED TABULATIONS

The supporting data for the depreciation calculations are presented in account sequence in the section beginning on page II-7. The original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual are shown for each vintage of each account or subaccount. The amounts of regular retirements, gross salvage and cost of removal are set forth by account for the years 2020 through 2024, beginning on pages III-2 through III-5.

PEOPLES NATURAL GAS COMPANY LLC

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF SEPTEMBER 30, 2025

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF SEPTEMBER 30, 2025	BOOK DEPRECIATION RESERVE	FUTURE ACCURALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)=(5)/(6)
	DEPRECIABLE GAS PLANT							
	INTANGIBLE PLANT							
303.00	MISCELLANEOUS INTANGIBLE PLANT							
	CIAC	40-SQ	5,950,306.62	448,943	5,501,364	179,383	3.01	30.7
	OTHER	5-SQ	27,509,546.99	10,355,851	17,153,696	6,391,242	23.23	2.7
	MAJOR	15-SQ	25,941,291.14	2,770,666	23,170,625	2,166,068	8.35	10.7
	SAP	10-SQ	10,032,044.24	3,388,437	6,643,607	853,049	8.50	7.8
	TOTAL MISCELLANEOUS INTANGIBLE PLANT		**69,433,188.99**	**16,963,897**	**52,469,292**	**9,589,742**	**13.81**	
	PRODUCTION PLANT							
325.01	PRODUCING LANDS	75-R4	139,440.21	81,226	58,214	1,085	0.78	53.7
325.02	PRODUCING LEASEHOLDS	45-L0	14,480.68	10,400	4,081	174	1.20	23.5
325.03	GAS RIGHTS	65-R2.5	20,984.28	13,511	7,473	218	1.04	34.3
325.04	RIGHTS OF WAY	75-R2.5	1,628,852.90	1,015,678	613,175	14,687	0.90	41.7
327.00	FIELD COMPRESSOR STATION EQUIPMENT	50-S0.5	11,623,537.47	5,082,793	6,540,744	234,961	2.02	27.8
328.00	FIELD MEASURING AND REGULATING STATION STRUCTURES	33-S0	580,795.00	75,110	505,685	26,115	4.50	19.4
329.00	OTHER STRUCTURES	60-R2.5	1,910,597.40	1,003,103	907,494	23,906	1.25	38.0
330.00	PRODUCING GAS WELLS - WELL CONSTRUCTION	25-L1	9,221.39	8,607	614	112	1.21	5.5
331.00	PRODUCING GAS WELLS - WELL EQUIPMENT	26-L1	2,984.12	2,875	109	53	1.78	2.1
332.00	FIELD LINES	65-R1.5	96,714,715.32	32,745,872	63,968,843	1,688,076	1.75	37.9
333.00	FIELD COMPRESSOR STATION EQUIPMENT	35-S0.5	40,943,124.58	16,330,902	24,612,223	1,346,652	3.29	18.3
334.00	FIELD MEASURING AND REGULATING STATION EQUIPMENT	20-L0	5,146,889.18	3,082,520	2,064,369	207,985	4.04	9.9
337.00	OTHER EQUIPMENT	23-L1	64,848.38	41,185	23,663	2,446	3.77	9.7
	TOTAL PRODUCTION PLANT		**158,800,470.91**	**59,493,782**	**99,306,687**	**3,546,470**	**2.23**	
	UNDERGROUND STORAGE PLANT							
350.11	LAND - GAS	55-L4	16,823.84	11,481	5,343	425	2.53	12.6
350.21	RIGHTS OF WAY	65-R3	46,800.39	26,493	20,307	505	1.08	40.2
351.00	STRUCTURES AND IMPROVEMENTS	60-R2	1,800,679.17	1,123,377	677,302	19,591	1.09	34.6
352.01	WELLS - CONSTRUCTION	50-R1.5	2,073,608.38	749,520	1,324,088	45,358	2.19	29.2
352.02	WELLS - EQUIPMENT	55-R1	282,543.02	235,657	46,886	1,411	0.50	33.2
352.11	LEASEHOLDS	60-R3	161,936.70	161,937	0	0	-	-
352.12	STORAGE RIGHTS	65-R5	20,734.05	20,734	0	0	-	-
352.21	RESERVOIRS	40-SQ	433,138.50	194,762	238,376	9,637	2.22	24.7
352.31	NON-RECOVERABLE NATURAL GAS	37-SQ	205,250.77	205,251	0	0	-	-
353.00	LINES	50-R2	5,210,428.56	1,442,811	3,767,618	116,569	2.24	32.3
354.00	COMPRESSOR STATION EQUIPMENT	45-R1.5	7,574,440.99	2,994,704	4,579,737	196,976	2.60	23.3
355.00	MEASURING AND REGULATING STATION EQUIPMENT	60-R2.5	394,942.37	75,467	319,475	7,175	1.82	44.5
357.00	OTHER EQUIPMENT	30-R2.5	30,183.87	30,184	0	0	-	-
	TOTAL UNDERGROUND STORAGE PLANT		**18,251,510.61**	**7,272,378**	**10,979,132**	**397,647**	**2.18**	

PEOPLES NATURAL GAS COMPANY LLC

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF SEPTEMBER 30, 2025

	DEPRECIABLE GROUP	SURVIVOR CURVE		ORIGINAL COST AS OF SEPTEMBER 30, 2025	BOOK DEPRECIATION RESERVE	FUTURE ACCURALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)=(5)/(6)
	TRANSMISSION PLANT								
365.02	RIGHTS OF WAY	80-R4		2,119,493.17	1,049,535	1,069,958	23,224	1.10	46.1
366.01	STRUCTURES AND IMPROVEMENTS - COMPRESSOR STATION	60-R3		1,397,311.49	886,976	510,335	14,816	1.06	34.4
366.02	STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING	55-R2.5		1,653,368.91	1,016,236	637,133	17,840	1.08	35.7
366.03	STRUCTURES AND IMPROVEMENTS - OTHER	45-R1.5		49,995.58	47,825	2,171	147	0.29	14.8
367.00	MAINS	80-R2.5		393,279,347.90	65,799,579	327,479,769	5,762,278	1.47	56.8
368.00	COMPRESSOR STATION EQUIPMENT	35-S1		23,490,766.90	7,173,142	16,317,625	743,207	3.16	22.0
369.00	MEASURING AND REGULATING STATION EQUIPMENT	50-R1		41,212,983.57	14,482,608	26,730,376	918,662	2.23	29.1
371.00	OTHER EQUIPMENT	35-R1		2,629,844.55	1,205,276	1,424,569	68,780	2.62	20.7
	TOTAL TRANSMISSION PLANT			**465,833,112.07**	**91,661,177**	**374,171,936**	**7,548,954**	**1.62**	
	DISTRIBUTION PLANT								
374.02	RIGHTS OF WAY	80-R4		5,734,940.08	2,686,702	3,048,238	64,782	1.13	47.1
375.00	STRUCTURES AND IMPROVEMENTS								
	MEASURING AND REGULATING	65-R2		3,953,370.05	2,061,729	1,891,641	55,543	1.40	34.1
	OTHER								
	MAJOR STRUCTURES	85-R1	*	24,268,855.98	18,382,357	5,886,499	746,210	3.07	7.9
	MINOR STRUCTURES	65-R2		113,241.63	61,255	51,987	1,556	1.37	33.4
	TOTAL OTHER			24,382,097.61	18,443,612	5,938,486	747,766	3.53	7.6
	TOTAL STRUCTURES AND IMPROVEMENTS			28,335,467.66	20,505,341	7,830,127	803,309	3.23	9.2
376.00	MAINS								
	LOW PRESSURE	73-S0.5		1,351,309,568.78	224,924,262	1,126,385,307	24,069,065	1.78	46.8
	REGULAR PRESSURE	75-S0.5		1,434,840,917.09	320,984,897	1,113,856,020	23,821,070	1.66	46.8
	TOTAL MAINS			2,786,150,485.87	545,909,159	2,240,241,327	47,890,135	1.72	46.8
378.00	MEASURING AND REGULATING STATION EQUIPMENT - GENERAL	50-R1.5		97,423,055.26	32,575,671	64,847,384	2,225,784	2.28	29.1
380.00	SERVICES	55-R2		932,382,261.43	314,782,799	617,599,462	18,130,859	1.94	34.1
381.00	METERS	32-S0.5		137,177,076.52	49,075,568	88,101,509	4,581,875	3.34	19.2
382.00	METER INSTALLATIONS	55-R2		89,702,610.06	43,219,810	46,482,800	1,465,276	1.63	31.7
385.00	INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT	50-R0.5		13,327,105.43	6,056,722	7,270,383	266,722	2.00	27.3
386.00	OTHER PROPERTY ON CUSTOMER PREMISES	20-S4		14,644,532.28	14,644,532	0	0	-	-
387.00	OTHER EQUIPMENT	26-R2.5		17,042,703.56	2,821,570	14,221,134	824,947	4.84	17.2
	TOTAL DISTRIBUTION PLANT			**4,121,920,238.15**	**1,032,277,874**	**3,089,642,364**	**76,253,689**	**1.85**	
	GENERAL PLANT								
389.02	LAND RIGHTS AND RIGHTS OF WAY	60-R3		52,996.00	39,296	13,700	511	0.96	26.8
390.00	STRUCTURES AND IMPROVEMENTS								
	OWNED	55-R1		54,596,210.41	2,743,281	51,852,929	1,763,588	3.23	29.4
	LEASED - NORTH SHORE	75-R0.5		8,112,867.83	6,425,679	1,687,189	512,028	6.31	3.3
	TOTAL STRUCTURES AND IMPROVEMENTS			62,709,078.24	9,168,960	53,540,118	2,275,616	3.63	23.5

PEOPLES NATURAL GAS COMPANY LLC

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF SEPTEMBER 30, 2025

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF SEPTEMBER 30, 2025	BOOK DEPRECIATION RESERVE	FUTURE ACCURALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)=(5)/(6)
391.01	OFFICE FURNITURE AND EQUIPMENT - FURNITURE	20-SQ	2,575,038.57	1,797,453	777,586	82,878	3.22	9.4
391.02	OFFICE FURNITURE AND EQUIPMENT - COMPUTERS	5-SQ	14,050,130.22	11,887,036	2,163,094	1,205,437	8.58	1.8
391.03	OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT	15-SQ	284,170.13	125,684	158,486	23,109	8.13	6.9
392.00	TRANSPORTATION EQUIPMENT							
	AUTOMOBILES	6-L2.5	1,712.08	1,712	0	0	-	-
	TRUCKS	10-L2.5	72,442,339.59	25,053,155	47,389,185	9,275,314	12.80	5.1
	TRAILERS	15-L2	2,868,891.35	653,936	2,214,955	276,236	9.63	8.0
	TOTAL TRANSPORTATION EQUIPMENT		75,312,943.02	25,708,803	49,604,140	9,551,550	12.68	5.2
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT	25-SQ	7,510,627.41	3,294,621	4,216,006	293,836	3.91	14.3
394.01	DUAL FUEL STATIONS	15-SQ	363,320.21	193,403	169,917	25,616	7.05	6.6
396.00	POWER OPERATED EQUIPMENT	14-L2	15,813,390.81	7,636,153	8,177,238	1,099,169	6.95	7.4
397.01	COMMUNICATION EQUIPMENT - RADIO	10-SQ	482,807.01	340,476	142,331	60,156	12.46	2.4
397.02	COMMUNICATION EQUIPMENT - TELEPHONE	15-SQ	20,887,264.49	11,297,661	9,589,603	1,341,253	6.42	7.1
397.03	COMMUNICATION EQUIPMENT - MICROWAVE	18-SQ	21,462,909.51	8,529,568	12,933,342	1,120,856	5.22	11.5
398.00	MISCELLANEOUS EQUIPMENT	15-SQ	50,446.96	37,775	12,672	1,594	3.16	7.9
	TOTAL GENERAL PLANT		**221,555,122.58**	**80,056,889**	**141,498,233**	**17,081,581**	**7.71**	
	AMORTIZATION OF NET SALVAGE					**4,700,911**		
	TOTAL DEPRECIABLE GAS PLANT		**5,055,793,643.31**	**1,287,725,997**	**3,768,067,644**	**119,118,994**	**2.36**	
	NONDEPRECIABLE GAS PLANT							
301.00	ORGANIZATION		49,770.42					
325.51	OTHER LAND AND LAND RIGHTS		47,094.57	2,031				
365.11	LAND		261,389.12					
374.01	LAND AND LAND RIGHTS - LAND		1,047,916.85	30,228				
389.01	LAND AND LAND RIGHTS - LAND		259,215.74					
	TOTAL NONDEPRECIABLE GAS PLANT		**1,665,386.70**	**32,259**				
	TOTAL GAS PLANT		**5,057,459,030.01**	**1,287,758,256**				

* LIFESPAN PROCEDURE IS USED. SURVIVOR CURVE SHOWN IS INTERIM CURVE.

PEOPLES NATURAL GAS COMPANY LLC

TABLE 2. BRINGFORWARD TO SEPTEMBER 30, 2025 OF THE BOOK RESERVE AS OF AUGUST 31, 2024

ACCOUNT	BOOK RESERVE AS OF AUGUST 31, 2024	+ DEPRECIATION ACCRUALS	+ AMORTIZATION OF NET SALVAGE	- PROJECTED RETIREMENTS	+ PROJECTED GROSS SALVAGE	- PROJECTED COST OF REMOVAL	+ ADJUSTMENTS AND ACQUISITIONS	= PROJECTED BOOK RESERVE AS OF SEPT 30, 2025
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
DEPRECIABLE GAS PLANT								
303.00	314,499	183,255		48,811				448,943
303.01	15,443,556	7,073,908		12,161,613				10,355,851
303.02	5,653,619	2,359,008		5,241,961				2,770,666
303.03	10,350,841	421,737		7,384,141				3,388,437
325.01	80,023	1,203						81,226
325.02	10,203	197						10,400
325.03	13,277	234						13,511
325.04	999,623	16,055						1,015,678
327.00	4,849,602	259,691		26,500				5,082,793
328.00	50,746	26,347		1,983				75,110
329.00	985,073	26,134		8,104				1,003,103
330.00	8,464	143						8,607
331.00	2,719	156						2,875
332.00	31,590,625	1,732,177	227,513	372,427	3,724	435,740		32,745,872
333.00	16,257,239	1,487,080	233,667	1,307,209	26,144	366,019		16,330,902
334.00	2,804,058	238,012	43,537	2,018		1,069		3,082,520
337.00	38,984	2,896		695				41,185
350.11	10,996	485						11,481
350.21	25,934	559						26,493
351.00	1,101,914	21,463						1,123,377
352.01	743,787	31,052		25,319				749,520
352.02	234,071	1,586						235,657
352.11	161,937							161,937
352.12	20,734							20,734
352.21	184,297	10,465						194,762
352.31	205,251							205,251
353.00	1,368,630	74,506		325				1,442,811
354.00	2,773,977	220,727						2,994,704
355.00	74,510	8,073		7,116				75,467
357.00	30,184							30,184
365.02	1,344,811	23,949		319,225				1,049,535
366.01	870,778	16,198						886,976
366.02	996,185	19,526	919	358		36		1,016,236
366.03	47,669	156						47,825
367.00	61,166,663	4,880,624	307	243,152		4,863		65,799,579
368.00	6,540,860	756,540	4,440	113,892		14,806		7,173,142
369.00	13,615,808	942,074	40,227	75,491		40,010		14,482,608
371.00	1,138,205	77,939		10,868				1,205,276
374.02	2,616,502	70,200						2,686,702
375.01	2,042,362	61,137		41,770				2,061,729
375.32	17,820,394	811,461		249,498				18,382,357
375.31	59,539	1,716						61,255
376.01	203,221,968	24,849,586	995,786	2,857,295		1,285,783		224,924,262
376.02	299,334,180	24,381,941	1,951,637	3,229,559		1,453,302		320,984,897
378.00	30,973,967	2,171,266	73,057	544,592		98,027		32,575,671
380.00	294,284,683	18,333,056	2,684,252	346,128		173,064		314,782,799
381.00	46,493,984	4,686,995		2,105,411				49,075,568

PEOPLES NATURAL GAS COMPANY LLC

TABLE 2. BRINGFORWARD TO SEPTEMBER 30, 2025 OF THE BOOK RESERVE AS OF AUGUST 31, 2024

ACCOUNT	BOOK RESERVE AS OF AUGUST 31, 2024	+	DEPRECIATION ACCRUALS	+	AMORTIZATION OF NET SALVAGE	-	PROJECTED RETIREMENTS	+	PROJECTED GROSS SALVAGE	-	PROJECTED COST OF REMOVAL	+	ADJUSTMENTS AND ACQUISITIONS	=	PROJECTED BOOK RESERVE AS OF SEPT 30, 2025
(1)	(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)
382.00	41,827,179		1,614,903		132,169		194,748				159,693				43,219,810
385.00	5,822,979		278,364		83		42,985				1,719				6,056,722
386.00	14,644,532														14,644,532
387.00	2,921,397		847,059				946,886								2,821,570
389.02	38,737		559												39,296
390.00	2,931,890		1,741,863				1,930,472								2,743,281
390.01	5,865,821		559,858												6,425,679
391.01	1,708,558		89,831				936								1,797,453
391.02	11,237,290		1,471,006				821,260								11,887,036
391.03	120,142		24,296				18,754								125,684
392.01	1,875						163								1,712
392.02	20,614,898		10,467,682		(705,721)		6,190,353		866,649						25,053,155
392.03	586,962		298,372		(21,333)		244,261		34,196						653,936
394.00	3,237,407		292,654				235,440								3,294,621
394.01	183,852		27,422				17,871								193,403
396.00	6,946,580		1,160,646		(103,202)		471,630		103,759						7,636,153
397.01	272,380		70,251				2,155								340,476
397.02	10,021,935		1,524,981		(716)		248,539								11,297,661
397.03	7,676,775		1,089,418				236,625								8,529,568
398.00	38,348		1,687				2,260								37,775
TOTAL DEPRECIABLE GAS PLANT	1,215,657,468		117,842,365		5,556,622		48,330,796		1,034,472		4,034,131		0		1,287,725,997

PEOPLES NATURAL GAS COMPANY LLC

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED SEPTEMBER 20, 2024

	DEPRECIABLE GROUP	ORIGINAL COST AS OF AUGUST 31, 2024	ORIGINAL COST AS OF SEPTEMBER 30, 2025	COMPOSITE ACCRUAL RATE	13-MONTH ACCRUAL AMOUNT *
	(1)	(2)	(3)	(4)	(5)
	DEPRECIABLE GAS PLANT				
	INTANGIBLE PLANT				
303.00	MISCELLANEOUS INTANGIBLE PLANT				
	CIAC	5,169,725.88	5,950,306.62	3.07	183,255
	OTHER	34,140,318.90	27,509,546.99	21.10	7,073,908
	MAJOR	26,465,029.21	25,941,291.14	8.34	2,359,008
	SAP	14,276,633.27	10,032,044.24	3.18	421,737
	TOTAL MISCELLANEOUS INTANGIBLE PLANT	**80,051,707.26**	**69,433,188.99**		**10,037,908**
	PRODUCTION PLANT				
325.01	PRODUCING LANDS	139,440.21	139,440.21	0.78	1,203
325.02	PRODUCING LEASEHOLDS	14,480.68	14,480.68	1.25	197
325.03	GAS RIGHTS	20,984.28	20,984.28	1.05	234
325.04	RIGHTS OF WAY	1,628,852.90	1,628,852.90	0.91	16,055
327.00	FIELD COMPRESSOR STATION EQUIPMENT	11,650,037.03	11,623,537.47	2.06	259,691
328.00	FIELD MEASURING AND REGULATING STATION STRUCTURES	368,277.66	580,795.00	5.04	26,347
329.00	OTHER STRUCTURES	1,918,701.49	1,910,597.40	1.26	26,134
330.00	PRODUCING GAS WELLS - WELL CONSTRUCTION	9,221.39	9,221.39	1.44	143
331.00	PRODUCING GAS WELLS - WELL EQUIPMENT	2,984.12	2,984.12	4.69	156
332.00	FIELD LINES	89,105,836.08	96,714,715.32	1.72	1,732,177
333.00	FIELD COMPRESSOR STATION EQUIPMENT	42,250,333.91	40,943,124.58	3.30	1,487,080
334.00	FIELD MEASURING AND REGULATING STATION EQUIPMENT	4,880,606.93	5,146,889.18	4.38	238,012
337.00	OTHER EQUIPMENT	65,543.71	64,848.38	4.10	2,896
	TOTAL PRODUCTION PLANT	**152,055,300.39**	**158,800,470.91**		**3,790,325**
	UNDERGROUND STORAGE PLANT				
350.11	LAND - GAS	16,823.84	16,823.84	2.66	485
350.21	RIGHTS OF WAY	46,800.39	46,800.39	1.09	559
351.00	STRUCTURES AND IMPROVEMENTS	1,800,679.17	1,800,679.17	1.10	21,463
352.01	WELLS - CONSTRUCTION	1,390,218.99	2,073,608.38	1.66	31,052
352.02	WELLS - EQUIPMENT	282,543.02	282,543.02	0.52	1,586
352.11	LEASEHOLDS	161,936.70	161,936.70	-	-
352.12	STORAGE RIGHTS	20,734.05	20,734.05	-	-
352.21	RESERVOIRS	433,138.50	433,138.50	2.23	10,465
352.31	NON-RECOVERABLE NATURAL GAS	205,250.77	205,250.77	-	-
353.00	LINES	2,895,258.85	5,210,428.56	1.71	74,506
354.00	COMPRESSOR STATION EQUIPMENT	7,574,440.99	7,574,440.99	2.69	220,727
355.00	MEASURING AND REGULATING STATION EQUIPMENT	402,058.01	394,942.37	1.87	8,073
357.00	OTHER EQUIPMENT	30,183.87	30,183.87	-	-
	TOTAL UNDERGROUND STORAGE PLANT	**15,260,067.15**	**18,251,510.61**		**368,916**
	TRANSMISSION PLANT				
365.02	RIGHTS OF WAY	2,438,718.03	2,119,493.17	0.97	23,949
366.01	STRUCTURES AND IMPROVEMENTS - COMPRESSOR STATION	1,397,311.49	1,397,311.49	1.07	16,198
366.02	STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING	1,653,727.20	1,653,368.91	1.09	19,526
366.03	STRUCTURES AND IMPROVEMENTS - OTHER	49,995.58	49,995.58	0.30	156
367.00	MAINS	258,894,350.97	393,279,347.90	1.38	4,880,624
368.00	COMPRESSOR STATION EQUIPMENT	20,925,158.68	23,490,766.90	3.15	756,540
369.00	MEASURING AND REGULATING STATION EQUIPMENT	38,098,474.23	41,212,983.57	2.19	942,074
371.00	OTHER EQUIPMENT	2,640,712.31	2,629,844.55	2.73	77,939
	TOTAL TRANSMISSION PLANT	**326,098,448.49**	**465,833,112.07**		**6,717,006**
	DISTRIBUTION PLANT				
374.02	RIGHTS OF WAY	5,734,940.08	5,734,940.08	1.13	70,200
375.00	STRUCTURES AND IMPROVEMENTS				
	MEASURING AND REGULATING	3,995,140.53	3,953,370.05	1.42	61,137
	OTHER				
	MAJOR STRUCTURES	24,518,354.03	24,268,855.98	2.93	811,461.00
	MINOR STRUCTURES	113,241.63	113,241.63	1.40	1,716
	TOTAL OTHER	24,631,595.66	24,382,097.61		813,177
	TOTAL STRUCTURES AND IMPROVEMENTS	28,626,736.19	28,335,467.66		874,314
376.00	MAINS				
	LOW PRESSURE	1,224,387,299.76	1,351,309,568.78	1.78	24,849,586
	REGULAR PRESSURE	1,291,382,509.81	1,434,840,917.09	1.65	24,381,941
	TOTAL MAINS	2,515,769,809.57	2,786,150,485.87		49,231,527

PEOPLES NATURAL GAS COMPANY LLC

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED SEPTEMBER 20, 2024

	DEPRECIABLE GROUP	ORIGINAL COST AS OF AUGUST 31, 2024	ORIGINAL COST AS OF SEPTEMBER 30, 2025	COMPOSITE ACCRUAL RATE	13-MONTH ACCRUAL AMOUNT *
	(1)	(2)	(3)	(4)	(5)
378.00	MEASURING AND REGULATING STATION EQUIPMENT - GENERAL	85,558,767.45	97,423,055.26	2.19	2,171,266
380.00	SERVICES	828,329,283.58	932,382,261.43	1.92	18,333,056
381.00	METERS	126,745,549.73	137,177,076.52	3.27	4,686,995
382.00	METER INSTALLATIONS	89,897,357.70	89,702,610.06	1.66	1,614,903
385.00	INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT	12,710,090.86	13,327,105.43	1.97	278,364
386.00	OTHER PROPERTY ON CUSTOMER PREMISES	14,644,532.28	14,644,532.28	-	-
387.00	OTHER EQUIPMENT	16,052,276.68	17,042,703.56	4.72	847,059
	TOTAL DISTRIBUTION PLANT	**3,724,069,344.12**	**4,121,920,238.15**		**78,107,684**
	GENERAL PLANT				
389.02	LAND RIGHTS AND RIGHTS OF WAY	52,996.00	52,996.00	0.98	559
390.00	STRUCTURES AND IMPROVEMENTS				
	OWNED	40,367,890.17	54,596,210.41	3.38	1,741,863
	LEASED - NORTH SHORE	8,112,867.83	8,112,867.83	6.37	559,858
	TOTAL STRUCTURES AND IMPROVEMENTS	48,480,758.00	62,709,078.24		2,301,721
391.01	OFFICE FURNITURE AND EQUIPMENT - FURNITURE	2,575,974.65	2,575,038.57	3.22	89,831
391.02	OFFICE FURNITURE AND EQUIPMENT - COMPUTERS	14,871,389.82	14,050,130.22	9.39	1,471,006
391.03	OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT	302,923.77	284,170.13	7.64	24,296
392	TRANSPORTATION EQUIPMENT				
	AUTOMOBILES	1,875.41	1,712.08	-	-
	TRUCKS	70,574,597.43	72,442,339.59	13.52	10,467,682
	TRAILERS	2,786,243.63	2,868,891.35	9.75	298,372
	TOTAL TRANSPORTATION EQUIPMENT	73,362,716.47	75,312,943.02		10,766,054
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT	6,514,626.61	7,510,627.41	3.85	292,654
394.01	DUAL FUEL STATIONS	381,191.13	363,320.21	6.80	27,422
396.00	POWER OPERATED EQUIPMENT	14,650,478.39	15,813,390.81	7.04	1,160,646
397.01	COMMUNICATION EQUIPMENT - RADIO	484,962.23	482,807.01	13.43	70,251
397.02	COMMUNICATION EQUIPMENT - TELEPHONE	19,325,799.24	20,887,264.49	7.00	1,524,981
397.03	COMMUNICATION EQUIPMENT - MICROWAVE	18,271,355.17	21,462,909.51	5.06	1,089,418
398.00	MISCELLANEOUS EQUIPMENT	52,706.86	50,446.96	3.02	1,687
	TOTAL GENERAL PLANT	**199,327,878.34**	**221,555,122.58**		**18,820,526**
	TOTAL DEPRECIABLE GAS PLANT	**4,496,862,745.75**	**5,055,793,643.31**		**117,842,365**

PEOPLES NATURAL GAS COMPANY LLC

TABLE 4. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

	2020		2021		2022		2023		2024			
ACCOUNT	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE	SALVAGE ACCRUAL
(1)	(5)	(4)	(7)	(6)	(9)	(8)	(11)	(10)	(11)	(10)	(12)	(13)=(12)/5
332.00	354,270		283,431	5,356	1,324		248,812	2,127	251,086	79,312	(1,052,130)	(210,426)
333.00	49,796	(399)	598,259		128,575		116,205	8,300	290,113	41,286	(1,133,760)	(226,752)
334.00	6,415		193,592				308		945	108	(201,152)	(40,230)
366.02	2,930						11		33	2	(2,972)	(594)
367.00							1,771			474	(1,297)	(259)
368.00	8,925						2,516		8,558	966	(19,033)	(3,807)
369.00	149,913						11,762		34,707	2,723	(193,659)	(38,732)
376.00	5,481,114	5,448	2,963,188	23,652	215,592	(11,206)	2,121,408		2,332,196	497,017	(12,598,588)	(2,519,718)
378.00	133,252		111,985				49,382		65,765	12,656	(347,727)	(69,545)
380.00	7,218,286		2,895,377				918,364		147,015	85,122	(11,093,920)	(2,218,784)
382.00	179,486		203,907		3,689		49,242		171,350	13,844	(593,830)	(118,766)
385.00							513			171	(342)	(68)
392.02		740,403		1,222,609				873,369	172,499	515,920	3,179,801	635,960
392.03		62,343						20,140	5,297	20,877	98,063	19,613
396.00		244,664						185,558	23,483	45,807	452,546	90,509
397.02				2,900						540	3,440	688
TOTAL	**13,584,387**	**1,052,459**	**7,249,739**	**1,254,516**	**349,180**	**(11,206)**	**3,520,296**	**1,089,494**	**3,503,046**	**1,316,826**	**(23,504,559)**	**(4,700,911)**

PART II. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

PEOPLES NATURAL GAS COMPANY LLC

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1875	8,239	8,239			0.0
1876	535	535			0.0
1881	12	12			0.0
1885	6,228	6,196	32	32	0.0
1886	2,504	2,504		32	0.0
1887	13,116	13,116		32	0.0
1888	12,749	12,605	144	176	0.0
1889	19,195	18,827	368	544	0.0
1890	44,487	44,484	3	547	0.0
1891	38,688	37,827	861	1,408	0.0
1892	11,766	11,765	1	1,409	0.0
1893	19,574	19,572	2	1,411	0.0
1894	23,598	23,562	36	1,447	0.0
1895	7,972	7,972		1,447	0.0
1896	12,670	12,304	366	1,813	0.0
1897	20,102	20,017	85	1,898	0.0
1898	29,162	29,156	6	1,904	0.0
1899	75,893	75,349	544	2,448	0.0
1900	1,049,873	984,526	65,347	67,795	0.0
1901	216,297	213,085	3,212	71,007	0.0
1902	377,481	366,205	11,276	82,283	0.0
1903	241,863	233,434	8,429	90,712	0.0
1904	114,883	109,738	5,145	95,857	0.0
1905	214,297	207,864	6,433	102,290	0.0
1906	163,582	156,395	7,187	109,477	0.0
1907	159,056	154,272	4,784	114,261	0.0
1908	170,306	161,760	8,546	122,807	0.0
1909	67,554	63,805	3,749	126,556	0.0
1910	68,911	66,105	2,806	129,362	0.0
1911	56,855	51,567	5,288	134,650	0.0
1912	55,829	51,856	3,973	138,623	0.0
1913	189,477	171,228	18,249	156,872	0.0
1914	205,853	187,775	18,078	174,950	0.0
1915	78,883	71,967	6,916	181,866	0.0
1916	90,002	81,877	8,125	189,991	0.0
1917	136,628	130,115	6,513	196,504	0.0
1918	81,459	74,441	7,018	203,522	0.0
1919	83,123	77,936	5,187	208,709	0.0
1920	56,669	55,523	1,146	209,855	0.0
1921	117,151	105,874	11,277	221,132	0.0
1922	174,982	166,068	8,914	230,046	0.0
1923	207,310	190,621	16,689	246,735	0.0
1924	294,435	271,440	22,995	269,730	0.0
1925	398,601	356,434	42,167	311,897	0.0
1926	245,691	214,716	30,975	342,872	0.0
1927	329,103	292,092	37,011	379,883	0.0

PEOPLES NATURAL GAS COMPANY LLC

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1928	285,374	246,811	38,563	418,446	0.0
1929	268,811	235,893	32,918	451,364	0.0
1930	319,440	279,425	40,015	491,379	0.0
1931	258,712	221,837	36,875	528,254	0.0
1932	175,691	147,485	28,206	556,460	0.0
1933	107,989	95,412	12,577	569,037	0.0
1934	82,426	73,878	8,548	577,585	0.0
1935	102,636	86,795	15,841	593,426	0.0
1936	152,342	132,578	19,764	613,190	0.0
1937	292,073	241,063	51,010	664,200	0.0
1938	330,683	281,481	49,202	713,402	0.0
1939	425,051	350,370	74,681	788,083	0.0
1940	507,208	393,497	113,711	901,794	0.0
1941	768,743	612,567	156,176	1,057,970	0.0
1942	416,149	343,231	72,918	1,130,888	0.0
1943	284,696	253,982	30,714	1,161,602	0.0
1944	417,450	353,330	64,120	1,225,722	0.0
1945	277,969	228,551	49,418	1,275,140	0.0
1946	537,909	414,379	123,530	1,398,670	0.0
1947	666,152	538,558	127,594	1,526,264	0.0
1948	1,346,866	1,165,448	181,418	1,707,682	0.0
1949	2,363,604	1,958,943	404,661	2,112,343	0.1
1950	2,860,291	2,385,488	474,803	2,587,146	0.1
1951	2,461,536	1,784,250	677,286	3,264,432	0.1
1952	3,816,662	2,947,615	869,047	4,133,479	0.1
1953	3,419,225	2,504,548	914,677	5,048,156	0.1
1954	2,353,048	1,791,033	562,015	5,610,171	0.1
1955	3,291,424	2,415,572	875,852	6,486,023	0.2
1956	3,558,455	2,560,980	997,475	7,483,498	0.2
1957	4,598,032	3,402,225	1,195,807	8,679,305	0.2
1958	5,390,619	3,819,577	1,571,042	10,250,347	0.3
1959	7,222,524	5,160,950	2,061,574	12,311,921	0.3
1960	5,010,552	3,493,109	1,517,443	13,829,364	0.4
1961	7,078,649	4,957,065	2,121,584	15,950,948	0.4
1962	6,300,826	4,367,228	1,933,598	17,884,546	0.5
1963	6,351,670	4,490,964	1,860,706	19,745,252	0.5
1964	7,569,451	5,355,219	2,214,232	21,959,484	0.6
1965	7,515,372	5,156,766	2,358,606	24,318,090	0.6
1966	8,531,699	5,772,533	2,759,166	27,077,256	0.7
1967	9,070,742	5,910,596	3,160,146	30,237,402	0.8
1968	10,938,276	7,306,855	3,631,421	33,868,823	0.9
1969	9,779,594	6,504,839	3,274,755	37,143,578	1.0
1970	8,685,946	5,834,577	2,851,369	39,994,947	1.1
1971	12,039,182	7,867,083	4,172,099	44,167,046	1.2
1972	16,467,456	10,330,293	6,137,163	50,304,209	1.3
1973	16,576,026	9,944,054	6,631,972	56,936,181	1.5

PEOPLES NATURAL GAS COMPANY LLC

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1974	14,715,080	8,907,454	5,807,626	62,743,807	1.7
1975	10,632,074	6,735,334	3,896,740	66,640,547	1.8
1976	9,784,396	6,310,268	3,474,128	70,114,675	1.9
1977	15,925,110	9,609,862	6,315,248	76,429,923	2.0
1978	22,289,778	14,685,912	7,603,866	84,033,789	2.2
1979	21,679,191	12,874,720	8,804,471	92,838,260	2.5
1980	24,842,181	14,205,371	10,636,810	103,475,070	2.7
1981	37,212,365	21,354,456	15,857,909	119,332,979	3.2
1982	29,044,122	16,861,148	12,182,974	131,515,953	3.5
1983	19,566,239	13,180,775	6,385,464	137,901,417	3.7
1984	29,339,090	19,804,089	9,535,001	147,436,418	3.9
1985	41,301,323	26,559,659	14,741,664	162,178,082	4.3
1986	27,435,115	17,109,989	10,325,126	172,503,208	4.6
1987	46,080,150	29,363,487	16,716,663	189,219,871	5.0
1988	34,641,273	21,780,980	12,860,293	202,080,164	5.4
1989	31,993,557	19,148,286	12,845,271	214,925,435	5.7
1990	44,584,915	26,575,455	18,009,460	232,934,895	6.2
1991	40,923,134	23,699,575	17,223,559	250,158,454	6.6
1992	49,080,915	28,067,426	21,013,489	271,171,943	7.2
1993	38,021,295	21,389,857	16,631,438	287,803,381	7.6
1994	42,596,948	23,679,787	18,917,161	306,720,542	8.1
1995	43,117,567	23,114,880	20,002,687	326,723,229	8.7
1996	32,574,304	17,052,116	15,522,188	342,245,417	9.1
1997	43,057,522	22,839,269	20,218,253	362,463,670	9.6
1998	27,872,626	14,416,285	13,456,341	375,920,011	10.0
1999	33,147,117	16,217,233	16,929,884	392,849,895	10.4
2000	24,576,757	11,341,548	13,235,209	406,085,104	10.8
2001	47,392,721	22,207,922	25,184,799	431,269,903	11.4
2002	59,654,133	26,903,669	32,750,464	464,020,367	12.3
2003	53,894,992	23,216,532	30,678,460	494,698,827	13.1
2004	62,235,046	25,721,214	36,513,832	531,212,659	14.1
2005	88,661,067	44,414,942	44,246,125	575,458,784	15.3
2006	67,048,336	25,870,707	41,177,629	616,636,413	16.4
2007	60,372,702	22,768,477	37,604,225	654,240,638	17.4
2008	57,550,105	20,787,965	36,762,140	691,002,778	18.3
2009	67,607,982	24,098,009	43,509,973	734,512,751	19.5
2010	58,004,881	19,096,931	38,907,950	773,420,701	20.5
2011	77,276,180	26,615,238	50,660,942	824,081,643	21.9
2012	101,927,807	28,137,825	73,789,982	897,871,625	23.8
2013	68,991,954	18,024,419	50,967,535	948,839,160	25.2
2014	80,244,506	19,684,697	60,559,809	1,009,398,969	26.8
2015	92,964,402	22,958,551	70,005,851	1,079,404,820	28.6
2016	100,493,300	23,960,890	76,532,410	1,155,937,230	30.7
2017	181,506,050	43,257,304	138,248,746	1,294,185,976	34.3
2018	210,333,414	37,819,881	172,513,533	1,466,699,509	38.9
2019	218,673,435	35,939,727	182,733,708	1,649,433,217	43.8

PEOPLES NATURAL GAS COMPANY LLC

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
2020	226,307,289	32,973,628	193,333,661	1,842,766,878	48.9
2021	316,281,945	42,116,751	274,165,194	2,116,932,072	56.2
2022	360,826,509	32,402,941	328,423,568	2,445,355,640	64.9
2023	430,629,060	29,064,058	401,565,002	2,846,920,642	75.6
2024	528,921,001	18,073,079	510,847,922	3,357,768,564	89.1
2025	414,692,809	4,393,726	410,299,083	3,768,067,647	100.0
TOTAL	5,055,793,645	1,287,725,998	3,768,067,647		

UTILITY PLANT IN SERVICE

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 303.00 MISCELLANEOUS INTANGIBLE PLANT - CIAC

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 40-SQUARE						
2014	4,584,543.83	1,289,403	433,465	4,151,079	28.75	144,385
2016	59,000.00	13,644	4,587	54,413	30.75	1,770
2023	159,123.79	8,951	3,009	156,115	37.75	4,135
2024	579,893.06	18,122	6,092	573,801	38.75	14,808
2025	567,745.94	5,325	1,790	565,956	39.62	14,285
	5,950,306.62	1,335,445	448,943	5,501,364		179,383
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					30.7	3.01

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 303.01 MISCELLANEOUS INTANGIBLE PLANT - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
2021	1,972,351.23	1,676,499	1,413,145	559,206	0.75	559,206
2022	6,553,557.26	4,259,812	3,590,656	2,962,901	1.75	1,693,086
2023	11,330,545.97	5,098,746	4,297,805	7,032,741	2.75	2,557,360
2024	3,867,048.11	966,762	814,897	3,052,151	3.75	813,907
2025	3,786,044.42	283,953	239,348	3,546,696	4.62	767,683
	27,509,546.99	12,285,772	10,355,851	17,153,696		6,391,242
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					2.7	23.23

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 303.02 MISCELLANEOUS INTANGIBLE PLANT - MAJOR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
2019	5,883,789.35	2,451,599	969,002	4,914,787	8.75	561,690
2020	9,018,329.45	3,156,415	1,247,583	7,770,746	9.75	797,000
2021	1,939,034.59	549,387	217,147	1,721,888	10.75	160,176
2022	1,666,255.65	361,028	142,697	1,523,559	11.75	129,665
2023	905,219.78	135,783	53,669	851,551	12.75	66,788
2024	3,298,882.28	274,896	108,653	3,190,229	13.75	232,017
2025	3,229,780.04	80,745	31,915	3,197,865	14.62	218,732
	25,941,291.14	7,009,853	2,770,666	23,170,625		2,166,068
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					10.7	8.35

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 303.03 MISCELLANEOUS INTANGIBLE PLANT - SAP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
2019	2,246,887.73	1,404,305	1,791,478	455,410	3.75	121,443
2020	253,253.41	132,958	169,615	83,638	4.75	17,608
2021	221,145.54	93,987	119,900	101,246	5.75	17,608
2023	2,988,098.73	672,322	857,683	2,130,416	7.75	274,892
2024	2,176,680.67	272,085	347,100	1,829,581	8.75	209,095
2025	2,145,978.16	80,474	102,661	2,043,317	9.62	212,403
	10,032,044.24	2,656,131	3,388,437	6,643,607		853,049
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					7.8	8.50

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.01 PRODUCING LANDS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R4						
1938	2,365.49	2,160	2,365			
1954	662.55	549	663			
1966	474.91	344	475			
1983	5,657.27	3,251	5,657			
2008	130,279.99	31,684	72,066	58,214	53.67	1,085
	139,440.21	37,988	81,226	58,214		1,085

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 53.7 0.78

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.02 PRODUCING LEASEHOLDS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-L0						
1890	13.00	11	13			
1897	620.75	500	621			
1899	305.00	244	305			
1900	263.11	209	263			
1901	378.47	300	378			
1908	11.01	8	11			
1909	45.50	35	46			
1910	1.00	1	1			
1914	105.50	79	105			
1915	25.11	19	25			
1916	58.60	43	57	2	11.68	
1917	2.75	2	3			
1919	56.45	41	54	2	12.18	
1921	34.54	25	33	2	12.52	
1922	16.94	12	16	1	12.70	
1926	110.00	77	102	8	13.40	1
1931	44.62	30	40	5	14.31	
1937	39.01	26	35	4	15.46	
1941	198.30	127	169	29	16.25	2
1943	103.13	65	86	17	16.66	1
1945	15.81	10	13	3	17.07	
1946	4.87	3	4	1	17.29	
1947	22.60	14	19	4	17.50	
1948	100.00	61	81	19	17.71	1
1950	70.00	42	56	14	18.15	1
1953	166.24	97	129	37	18.81	2
1955	8.17	5	7	1	19.27	
1956	95.00	54	72	23	19.50	1
1957	187.00	105	140	47	19.73	2
1958	235.50	131	174	62	19.97	3
1959	280.00	154	205	75	20.20	4
1960	81.57	45	60	22	20.44	1
1961	332.30	180	239	93	20.68	4
1965	440.34	228	303	137	21.68	6
1966	37.55	19	25	13	21.93	1
1968	218.17	109	145	73	22.45	3
1970	23.61	12	16	8	22.97	
1971	728.26	352	468	260	23.24	11
1972	2,608.99	1,246	1,656	953	23.51	41
1973	116.76	55	73	44	23.78	2
1974	969.05	451	599	370	24.06	15
1975	72.25	33	44	28	24.34	1
1977	1,441.00	644	856	585	24.90	23
1978	765.00	337	448	317	25.19	13

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.02 PRODUCING LEASEHOLDS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-L0						
1979	82.70	36	48	35	25.48	1
1980	91.23	39	52	39	25.77	2
1982	195.00	81	108	87	26.37	3
1995	2,658.92	1,504	1,997	662	23.22	29
	14,480.68	7,901	10,400	4,081		174

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.5 1.20

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.03 GAS RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
1901	1,674.68	1,675	1,675			
1910	22.78	22	23			
1923	1,969.07	1,824	1,969			
1924	25.41	23	25			
1927	43.28	40	43			
1938	1,018.56	891	1,019			
1948	385.48	321	369	16	10.88	1
1959	410.49	316	363	47	14.97	3
1974	3,366.13	2,172	2,493	873	23.06	38
1976	518.00	324	372	146	24.33	6
1980	1,507.30	881	1,011	496	27.01	18
1981	923.36	530	608	315	27.70	11
2005	9,119.74	3,084	3,541	5,579	39.63	141
	20,984.28	12,103	13,511	7,473		218

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 34.3 1.04

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.04 RIGHTS-OF-WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
1875	1.00	1	1			
1888	137.42	136	137			
1889	130.52	129	131			
1890	1,873.28	1,847	1,873			
1891	1,372.99	1,349	1,373			
1892	924.40	905	924			
1893	699.05	682	699			
1894	3,023.40	2,939	3,023			
1895	218.54	212	219			
1896	1,259.83	1,216	1,260			
1897	1,642.16	1,579	1,642			
1898	1,409.64	1,350	1,410			
1899	2,897.90	2,765	2,898			
1900	2,874.97	2,732	2,875			
1901	10,007.57	9,476	10,008			
1902	4,457.09	4,205	4,457			
1903	7,504.57	7,053	7,505			
1904	5,966.84	5,589	5,967			
1905	9,920.15	9,259	9,920			
1906	6,726.76	6,258	6,727			
1907	4,784.95	4,437	4,785			
1908	3,068.84	2,836	3,069			
1909	6,824.39	6,287	6,824			
1910	3,360.27	3,086	3,360			
1911	2,637.18	2,414	2,637			
1912	5,250.72	4,791	5,251			
1913	3,998.45	3,638	3,998			
1914	5,211.01	4,725	5,211			
1915	3,526.25	3,187	3,526			
1916	9,327.91	8,403	9,328			
1917	11,339.21	10,181	11,339			
1918	5,939.02	5,314	5,939			
1919	10,034.15	8,949	10,034			
1920	8,068.68	7,171	8,069			
1921	9,874.37	8,745	9,874			
1922	13,323.29	11,758	13,323			
1923	12,530.40	11,018	12,530			
1924	23,943.35	20,977	23,943			
1925	11,074.30	9,667	11,074			
1926	10,137.05	8,815	10,137			
1927	11,336.06	9,820	11,336			
1928	3,835.08	3,309	3,835			
1929	3,297.79	2,834	3,298			
1930	7,617.74	6,521	7,618			

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.04 RIGHTS-OF-WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
1931	362.17	309	362			
1932	666.58	566	667			
1933	1,250.79	1,057	1,251			
1934	192.41	162	192			
1935	1,203.89	1,008	1,204			
1936	3,095.27	2,579	3,095			
1937	896.03	743	896			
1938	3,164.87	2,610	3,165			
1939	2,701.60	2,216	2,702			
1940	3,447.99	2,813	3,448			
1941	4,750.60	3,853	4,751			
1942	8,225.90	6,632	8,203	23	14.53	2
1943	7,793.53	6,245	7,724	70	14.90	5
1944	6,457.05	5,142	6,360	97	15.28	6
1945	4,000.28	3,165	3,915	85	15.67	5
1946	3,848.61	3,023	3,739	110	16.08	7
1947	1,792.72	1,399	1,730	63	16.49	4
1948	2,046.38	1,585	1,960	86	16.92	5
1949	1,945.89	1,495	1,849	97	17.36	6
1950	1,033.21	788	975	58	17.81	3
1951	6,743.01	5,100	6,308	435	18.27	24
1952	5,227.54	3,921	4,850	378	18.74	20
1953	3,419.00	2,542	3,144	275	19.23	14
1954	4,135.13	3,048	3,770	365	19.72	19
1955	3,153.08	2,303	2,848	305	20.23	15
1956	13,433.71	9,717	12,018	1,416	20.75	68
1957	5,931.14	4,248	5,254	677	21.28	32
1958	7,746.35	5,493	6,794	952	21.82	44
1959	8,167.31	5,730	7,087	1,080	22.38	48
1960	3,263.45	2,265	2,801	462	22.94	20
1961	4,069.92	2,794	3,456	614	23.51	26
1962	5,795.30	3,933	4,864	931	24.10	39
1963	5,947.65	3,990	4,935	1,013	24.69	41
1964	7,158.88	4,745	5,869	1,290	25.29	51
1965	5,532.56	3,621	4,479	1,054	25.91	41
1966	11,080.22	7,161	8,857	2,223	26.53	84
1967	5,622.33	3,586	4,435	1,187	27.16	44
1968	3,247.97	2,044	2,528	720	27.80	26
1969	4,053.75	2,516	3,112	942	28.45	33
1970	25,742.29	15,751	19,481	6,261	29.11	215
1971	51,947.30	31,321	38,738	13,209	29.78	444
1972	27,208.63	16,162	19,989	7,220	30.45	237
1973	21,080.78	12,328	15,247	5,834	31.14	187
1974	11,679.68	6,723	8,315	3,365	31.83	106

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 325.04 RIGHTS-OF-WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
1975	15,635.72	8,856	10,953	4,683	32.52	144
1976	24,795.30	13,809	17,079	7,716	33.23	232
1977	9,701.66	5,311	6,569	3,133	33.94	92
1978	12,975.14	6,979	8,632	4,343	34.66	125
1979	18,968.48	10,018	12,390	6,578	35.39	186
1980	8,113.79	4,205	5,201	2,913	36.13	81
1981	16,632.83	8,456	10,459	6,174	36.87	167
1982	8,839.18	4,407	5,451	3,388	37.61	90
1983	11,652.16	6,498	8,037	3,615	33.51	108
1984	61,906.30	33,708	41,691	20,215	34.51	586
1985	15,651.08	8,378	10,362	5,289	34.94	151
1986	17,645.91	9,282	11,480	6,166	35.37	174
1987	4,920.02	2,522	3,119	1,801	36.37	50
1988	38,191.05	19,206	23,754	14,437	36.82	392
1989	8,167.54	4,027	4,981	3,187	37.28	85
1990	1,377.08	660	816	561	38.28	15
1991	28,921.57	13,570	16,784	12,138	38.74	313
1992	11,012.64	5,053	6,250	4,763	39.22	121
1993	5,340.25	2,376	2,939	2,401	40.22	60
1994	15,466.03	6,718	8,309	7,157	40.69	176
1995	5,379.78	2,278	2,817	2,563	41.18	62
1996	12,980.22	5,315	6,574	6,406	42.18	152
1997	7,464.80	2,973	3,677	3,788	42.67	89
1998	3,484.33	1,348	1,667	1,817	43.17	42
1999	15.50	6	7	8	43.68	
2000	16,002.37	5,778	7,146	8,856	44.68	198
2001	26,595.59	9,287	11,486	15,110	45.19	334
2002	309,217.69	104,237	128,922	180,296	45.72	3,943
2003	155,944.14	50,308	62,222	93,722	46.72	2,006
2004	64,143.30	19,897	24,609	39,534	47.25	837
2005	520.27	155	192	328	47.78	7
2006	25,903.77	7,380	9,128	16,776	48.32	347
2007	586.03	158	195	391	49.32	8
2008	82,248.26	21,138	26,144	56,104	49.87	1,125
2009	356.34	87	108	248	50.41	5
2010	4.00	1	1	3	50.97	
2011	17,137.51	3,712	4,591	12,547	51.54	243
2012	44.11	9	11	33	52.11	1
2015	567.59	90	112	456	54.26	8
2021	692.28	48	59	633	56.73	11
	1,628,852.90	845,241	1,015,678	613,175		14,687

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 41.7 0.90

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 327.00 FIELD COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S0.5						
1906	437.57	438	438			
1910	71.33	71	71			
1929	29.97	29	30			
1937	64.09	59	64			
1938	15,393.89	14,039	15,394			
1942	15.11	13	15			
1944	25.51	22	25	1	6.41	
1945	60.63	52	60	1	6.74	
1947	106.67	91	105	2	7.42	
1952	6,116.75	4,999	5,780	337	9.14	37
1956	24,575.06	19,395	22,424	2,151	10.54	204
1957	1,328.06	1,039	1,201	127	10.90	12
1958	34.35	27	31	3	11.26	
1959	13.61	10	12	2	11.62	
1960	592.79	451	521	72	11.98	6
1962	1,984.54	1,480	1,711	274	12.72	22
1963	1,508.24	1,113	1,287	221	13.09	17
1964	42,768.02	31,246	36,127	6,641	13.47	493
1967	3,573.54	2,529	2,924	650	14.62	44
1968	5,681.68	3,976	4,597	1,085	15.01	72
1969	472.74	327	378	95	15.41	6
1970	1,365.22	934	1,080	285	15.80	18
1971	22,994.81	15,540	17,967	5,028	16.21	310
1972	3,078.49	2,056	2,377	701	16.61	42
1973	775.48	512	592	183	17.02	11
1974	138,031.52	89,886	103,926	34,106	17.44	1,956
1975	601.35	387	447	154	17.86	9
1976	696.18	442	511	185	18.29	10
1977	2,997.55	1,875	2,168	830	18.72	44
1978	6,787.32	4,188	4,842	1,945	19.15	102
1980	11,083.47	6,641	7,678	3,405	20.04	170
1982	695.76	404	467	229	20.95	11
1983	600.82	419	484	117	18.36	6
1985	67,079.05	45,359	52,444	14,635	19.27	759
1987	2,601.17	1,711	1,978	623	19.89	31
1988	1,262.06	818	946	316	20.22	16
1990	13,231.83	8,302	9,599	3,633	20.93	174
1991	32,482.37	20,025	23,153	9,329	21.31	438
1992	26,477.84	16,024	18,527	7,951	21.69	367
1994	41,951.03	24,516	28,345	13,606	22.22	612
1995	117,370.66	67,101	77,582	39,789	22.66	1,756
1996	9,385.83	5,244	6,063	3,323	23.10	144
1997	5,394.25	2,956	3,418	1,976	23.30	85
1998	168,625.08	90,063	104,131	64,494	23.77	2,713

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 327.00 FIELD COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S0.5						
2002	495,615.49	237,400	274,481	221,134	25.29	8,744
2003	112,668.34	52,391	60,574	52,094	25.60	2,035
2004	63,657.20	28,544	33,002	30,655	26.14	1,173
2005	69,873.96	30,283	35,013	34,861	26.48	1,317
2006	87,227.26	36,435	42,126	45,101	26.83	1,681
2007	44,651.23	17,927	20,727	23,924	27.20	880
2008	259,097.54	99,675	115,244	143,854	27.59	5,214
2009	8,584,778.27	3,152,331	3,644,714	4,940,064	28.00	176,431
2010	201,227.98	70,269	81,245	119,983	28.42	4,222
2011	225,812.55	74,654	86,315	139,498	28.85	4,835
2014	43,918.54	11,955	13,822	30,097	30.07	1,001
2017	195,138.24	40,725	47,086	148,052	31.28	4,733
2018	68,815.01	12,820	14,822	53,993	31.66	1,705
2019	1,392.87	227	262	1,131	32.07	35
2021	389,239.70	44,490	51,440	337,800	32.93	10,258
	11,623,537.47	4,396,935	5,082,793	6,540,744		234,961

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 27.8 2.02

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 328.00 FIELD MEASURING AND REGULATING STATION STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 33-S0						
1926	24.29	24	24			
1931	205.29	205	205			
1933	42.35	42	42			
1936	69.66	70	70			
1937	503.71	504	504			
1939	94.95	95	95			
1940	908.57	909	909			
1941	854.91	855	855			
1942	599.48	599	599			
1943	237.10	237	237			
1944	249.14	249	249			
1945	207.45	207	207			
1946	784.40	784	784			
1947	881.72	882	882			
1948	1,164.23	1,164	1,164			
1949	1,086.68	1,087	1,087			
1950	543.66	544	544			
1951	521.89	522	522			
1952	1,011.47	1,011	1,011			
1953	1,027.49	1,027	1,027			
1954	609.20	609	609			
1955	713.68	714	714			
1956	1,343.28	1,343	1,343			
1957	2,261.33	2,261	2,261			
1958	2,124.41	2,124	2,124			
1959	3,159.15	3,159	3,159			
1960	2,440.86	2,420	2,339	102	0.28	102
1961	2,472.63	2,425	2,344	129	0.64	129
1962	1,811.47	1,756	1,698	113	1.01	112
1963	1,963.00	1,881	1,818	145	1.38	105
1964	2,531.71	2,397	2,317	215	1.75	123
1965	1,233.47	1,154	1,116	117	2.12	55
1966	2,199.03	2,033	1,965	234	2.49	94
1967	1,283.95	1,172	1,133	151	2.87	53
1968	1,682.18	1,517	1,467	215	3.24	66
1969	3,324.38	2,960	2,862	462	3.62	128
1970	1,249.52	1,098	1,061	189	4.00	47
1971	649.05	563	544	105	4.38	24
1972	1,345.04	1,151	1,113	232	4.77	49
1973	740.35	625	604	136	5.16	26
1974	699.91	582	563	137	5.54	25
1975	937.83	769	743	195	5.93	33
1977	522.74	416	402	121	6.72	18
1978	210.39	165	160	50	7.12	7

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 328.00 FIELD MEASURING AND REGULATING STATION STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 33-S0						
1980	9.26	7	7	2	7.93	
1981	85.74	64	62	24	8.33	3
1983	38.73	32	31	8	8.51	1
1984	97.30	80	77	20	8.75	2
1988	13.83	11	11	3	10.14	
1990	20.22	15	15	5	10.83	
1991	94.18	71	69	25	11.20	2
1996	72.48	50	48	24	12.95	2
1999	608.74	398	385	224	13.91	16
2023	105,539.51	10,596	10,243	95,297	20.17	4,725
2024	289,209.33	16,832	16,271	272,938	20.21	13,505
2025	136,478.68	2,498	2,415	134,064	20.12	6,663
	580,795.00	76,965	75,110	505,685		26,115

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 19.4 4.50

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 329.00 OTHER STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2.5						
1906	21.70	22	22			
1923	82.26	79	82			
1925	334.68	318	335			
1930	2,492.38	2,317	2,492			
1931	387.82	359	388			
1934	542.99	497	543			
1937	1,173.23	1,061	1,173			
1938	596.09	537	596			
1939	174.45	156	174			
1940	586.41	523	586			
1942	72.23	64	72			
1943	1,876.47	1,653	1,876			
1945	423.43	370	423			
1946	2,306.63	2,004	2,307			
1947	851.30	736	851			
1948	1,049.07	903	1,049			
1949	209.75	180	210			
1951	62.92	53	63			
1952	543.78	458	544			
1955	394.01	326	394			
1958	1,101.38	892	1,101			
1959	30,558.11	24,574	30,558			
1960	1,515.77	1,209	1,516			
1961	3,503.67	2,773	3,504			
1962	1,042.08	818	1,042			
1963	659.33	513	659			
1964	4,377.80	3,373	4,378			
1965	807.70	616	808			
1966	111.24	84	111			
1968	36,056.73	26,652	36,057			
1969	239.32	175	239			
1971	2,261.97	1,613	2,262			
1972	599.28	422	599			
1974	22,172.11	15,188	21,584	588	18.90	31
1975	3,826.65	2,584	3,672	155	19.48	8
1976	204.28	136	193	11	20.08	1
1977	25,880.18	16,952	24,091	1,789	20.70	86
1979	2,176.84	1,380	1,961	216	21.95	10
1980	96,141.16	59,928	85,165	10,976	22.60	486
1981	633.81	388	551	83	23.26	4
1982	5,072.09	3,050	4,334	738	23.92	31
1983	4,014.56	2,646	3,760	255	21.85	12
1984	20,148.00	13,048	18,543	1,605	22.45	71
1985	5,071.85	3,226	4,585	487	23.04	21

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 329.00 OTHER STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2.5						
1986	3,261.30	2,035	2,892	369	23.64	16
1987	20,248.42	12,392	17,610	2,638	24.25	109
1988	10,363.02	6,215	8,832	1,531	24.86	62
1989	22,402.54	13,155	18,695	3,708	25.48	146
1990	2,525.64	1,451	2,062	464	26.10	18
1991	40,610.35	22,811	32,417	8,193	26.73	307
1992	105,290.32	57,762	82,087	23,203	27.36	848
1994	129,528.67	67,601	96,069	33,460	28.63	1,169
1995	18,227.34	9,263	13,164	5,063	29.27	173
1997	10,201.56	4,899	6,962	3,240	30.58	106
1999	18,022.59	8,184	11,630	6,393	31.55	203
2001	18,428.86	7,821	11,115	7,314	32.89	222
2002	28,782.97	11,778	16,738	12,045	33.57	359
2005	7,864.49	2,851	4,052	3,812	35.61	107
2006	7,333.80	2,541	3,611	3,723	36.31	103
2008	45,967.72	14,434	20,512	25,456	37.69	675
2012	1,024,587.55	253,893	360,812	663,776	40.22	16,504
2013	4,353.75	1,003	1,425	2,929	40.94	72
2014	54,193.07	11,586	16,466	37,727	41.38	912
2017	33,335.76	5,334	7,580	25,756	43.30	595
2019	2,781.96	344	489	2,293	44.25	52
2021	19,928.21	1,710	2,430	17,498	45.26	387
	1,910,597.40	713,919	1,003,103	907,494		23,906

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 38.0 1.25

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 330.00 PRODUCING GAS WELLS - WELL CONSTRUCTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 25-L1						
1921	6,345.86	6,346	6,346			
1933	5.00	5	5			
1942	29.81	30	30			
1965	620.40	536	522	98	3.39	29
1974	1,086.16	864	841	245	5.12	48
1981	177.94	131	127	51	6.61	8
1982	113.94	83	81	33	6.83	5
1985	312.58	267	260	53	6.92	8
1994	198.47	156	152	46	8.59	5
1995	16.42	13	13	3	8.81	
1997	314.81	237	230	85	9.20	9
	9,221.39	8,668	8,607	614		112

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.5 1.21

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 331.00 PRODUCING GAS WELLS - WELL EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 26-L1						
1921	1,243.54	1,244	1,244			
1945	420.81	411	414	7	0.60	7
1954	1,258.20	1,159	1,168	90	2.04	44
1979	31.01	23	23	8	6.82	1
1984	30.56	26	26	5	7.29	1
	2,984.12	2,863	2,875	109		53

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.1 1.78

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 332.00 FIELD LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R1.5						
1875	298.10	298	298			
1886	493.55	494	494			
1889	1,092.97	1,093	1,093			
1890	34,635.23	34,635	34,635			
1891	133.58	134	134			
1892	2,381.19	2,381	2,381			
1893	4,376.13	4,376	4,376			
1894	16,977.76	16,978	16,978			
1895	7,416.28	7,393	7,416			
1896	2,686.75	2,666	2,687			
1897	6,307.19	6,230	6,307			
1898	27,355.19	26,884	27,355			
1899	43,446.93	42,478	43,447			
1900	45,181.38	43,944	45,181			
1901	74,448.79	72,020	74,449			
1902	60,214.01	57,935	60,214			
1903	61,496.75	58,847	61,497			
1904	44,506.45	42,363	44,506			
1905	102,727.15	97,244	102,727			
1906	17,911.29	16,872	17,911			
1907	102,629.68	96,203	102,630			
1908	86,226.53	80,469	86,227			
1909	23,910.87	22,222	23,911			
1910	30,093.70	27,857	30,094			
1911	3,644.68	3,361	3,645			
1912	3,053.22	2,805	3,053			
1913	35,391.55	32,391	35,392			
1914	38,935.97	35,498	38,936			
1915	6,740.11	6,122	6,740			
1916	15,199.26	13,752	15,199			
1917	39,314.78	35,432	39,315			
1918	24,616.54	22,090	24,617			
1919	23,010.82	20,565	23,011			
1920	30,355.59	27,012	30,356			
1921	9,434.03	8,359	9,434			
1922	84,031.39	74,116	84,031			
1923	33,930.21	29,791	33,930			
1924	38,066.59	33,270	38,067			
1925	45,112.14	39,241	45,112			
1926	17,607.98	15,240	17,608			
1927	59,632.79	51,366	59,394	239	9.01	27
1928	24,205.87	20,746	23,989	217	9.29	23
1929	45,414.88	38,722	44,774	641	9.58	67
1930	31,466.56	26,688	30,859	608	9.87	62

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 332.00 FIELD LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R1.5						
1931	30,254.30	25,525	29,514	740	10.16	73
1932	8,699.90	7,301	8,442	258	10.45	25
1933	12,689.46	10,591	12,246	443	10.75	41
1934	3,997.41	3,318	3,837	160	11.05	14
1935	8,442.89	6,969	8,058	385	11.35	34
1936	3,962.18	3,251	3,759	203	11.66	17
1937	16,592.09	13,537	15,653	939	11.97	78
1938	43,376.12	35,175	40,673	2,703	12.29	220
1939	83,234.61	67,087	77,572	5,663	12.61	449
1940	32,736.37	26,224	30,323	2,413	12.93	187
1941	184,653.78	146,984	169,957	14,697	13.26	1,108
1942	50,551.73	39,975	46,223	4,329	13.60	318
1943	39,132.03	30,740	35,545	3,587	13.94	257
1944	128,936.90	100,590	116,312	12,625	14.29	883
1945	96,117.44	74,469	86,108	10,009	14.64	684
1946	54,076.34	41,597	48,098	5,978	15.00	399
1947	54,496.94	41,619	48,124	6,373	15.36	415
1948	20,204.76	15,315	17,709	2,496	15.73	159
1949	56,304.72	42,350	48,969	7,336	16.11	455
1950	58,077.23	43,334	50,107	7,970	16.50	483
1951	54,538.17	40,366	46,675	7,863	16.89	466
1952	64,636.61	47,443	54,858	9,779	17.29	566
1953	100,139.19	72,870	84,259	15,880	17.70	897
1954	56,077.67	40,445	46,766	9,312	18.12	514
1955	53,061.29	37,927	43,855	9,206	18.54	497
1956	311,976.99	220,927	255,457	56,520	18.97	2,979
1957	481,954.60	338,033	390,866	91,089	19.41	4,693
1958	189,294.35	131,457	152,003	37,291	19.86	1,878
1959	351,796.87	241,874	279,678	72,119	20.31	3,551
1960	242,271.68	164,820	190,581	51,691	20.78	2,488
1961	98,042.96	65,991	76,305	21,738	21.25	1,023
1962	178,076.39	118,544	137,072	41,004	21.73	1,887
1963	240,620.91	158,365	183,117	57,504	22.22	2,588
1964	249,051.31	162,038	187,364	61,687	22.71	2,716
1965	158,638.34	101,968	117,905	40,733	23.22	1,754
1966	207,699.78	131,873	152,484	55,216	23.73	2,327
1967	272,337.49	170,734	197,419	74,918	24.25	3,089
1968	194,960.48	120,636	139,491	55,469	24.78	2,238
1969	617,398.95	376,996	435,919	181,480	25.31	7,170
1970	108,560.63	65,370	75,587	32,974	25.86	1,275
1971	486,178.04	288,639	333,752	152,426	26.41	5,772
1972	1,335,564.56	781,412	903,544	432,021	26.97	16,019
1973	531,906.59	306,623	354,547	177,360	27.53	6,442
1974	697,897.73	396,085	457,992	239,906	28.11	8,535

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 332.00 FIELD LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R1.5						
1975	990,359.25	553,234	639,702	350,657	28.69	12,222
1976	574,704.91	315,823	365,185	209,520	29.28	7,156
1977	1,237,592.84	668,869	773,411	464,182	29.87	15,540
1978	600,482.62	318,904	368,747	231,736	30.48	7,603
1979	708,051.28	369,383	427,116	280,935	31.09	9,036
1980	846,930.58	433,891	501,707	345,224	31.70	10,890
1981	729,720.27	366,772	424,097	305,623	32.33	9,453
1982	750,893.46	370,130	427,980	322,913	32.96	9,797
1983	505,327.34	301,023	348,072	157,255	28.67	5,485
1984	872,939.76	511,368	591,293	281,647	29.17	9,655
1985	2,094,205.41	1,205,425	1,393,828	700,377	29.68	23,598
1986	822,415.56	464,829	537,480	284,936	30.19	9,438
1987	326,106.77	180,859	209,127	116,980	30.72	3,808
1988	2,083,427.00	1,132,968	1,310,047	773,380	31.25	24,748
1989	770,898.62	410,812	475,020	295,879	31.78	9,310
1990	596,840.15	311,372	360,038	236,802	32.32	7,327
1991	1,283,392.32	654,915	757,276	526,116	32.87	16,006
1992	1,519,663.74	763,023	882,281	637,383	32.97	19,332
1993	519,437.88	254,628	294,425	225,013	33.54	6,709
1994	606,852.97	290,136	335,483	271,370	34.11	7,956
1995	603,296.37	281,015	324,937	278,359	34.69	8,024
1996	933,656.65	423,320	489,483	444,174	35.26	12,597
1997	2,099,655.71	931,197	1,076,739	1,022,917	35.45	28,855
1998	444,634.33	191,460	221,384	223,250	36.04	6,195
1999	537,658.15	224,419	259,495	278,163	36.64	7,592
2000	846,596.56	344,142	397,930	448,667	36.86	12,172
2001	928,111.19	364,562	421,542	506,569	37.48	13,516
2002	255,961.59	97,598	112,852	143,110	37.73	3,793
2003	1,233,584.50	452,849	523,628	709,956	38.36	18,508
2004	514,807.70	182,705	211,261	303,547	38.63	7,858
2005	829,153.20	282,078	326,166	502,987	39.27	12,808
2006	560,254.85	183,315	211,966	348,289	39.58	8,800
2007	1,594,153.05	500,405	578,616	1,015,537	39.89	25,458
2008	2,417,106.34	721,265	833,996	1,583,110	40.55	39,041
2009	1,472,298.39	418,722	484,167	988,131	40.89	24,166
2010	1,877,107.74	506,631	585,815	1,291,293	41.25	31,304
2011	5,101,760.10	1,308,601	1,513,130	3,588,630	41.31	86,871
2012	2,274,032.50	548,497	634,225	1,639,808	41.69	39,333
2013	2,970,839.85	669,627	774,287	2,196,553	42.10	52,175
2014	2,160,332.38	454,534	525,576	1,634,756	42.22	38,720
2015	1,587,346.68	309,215	357,544	1,229,803	42.38	29,018
2016	287,876.18	51,386	59,417	228,459	42.56	5,368
2017	1,085,571.20	175,537	202,973	882,598	42.77	20,636
2018	1,697,353.68	246,116	284,583	1,412,771	42.75	33,047

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 332.00 FIELD LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R1.5						
2019	4,722,224.95	602,084	696,188	4,026,037	42.77	94,132
2020	2,580,092.55	283,036	327,274	2,252,819	42.60	52,883
2021	1,405,627.68	128,474	148,554	1,257,074	42.26	29,746
2022	4,164,951.97	301,959	349,154	3,815,798	41.59	91,748
2023	6,067,185.78	317,921	367,611	5,699,575	40.67	140,142
2024	9,900,979.19	308,911	357,192	9,543,787	38.75	246,291
2025	5,444,930.39	57,716	66,737	5,378,193	34.84	154,368
	96,714,715.32	28,403,631	32,745,872	63,968,843		1,688,076
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					37.9	1.75

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 333.00 FIELD COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S0.5						
1963	225.82	208	190	36	2.69	13
1964	168.27	154	140	28	3.02	9
1968	342.96	300	273	70	4.36	16
1969	137.03	119	108	29	4.70	6
1970	788.98	676	616	173	5.03	34
1971	117,966.00	99,866	91,017	26,949	5.37	5,018
1972	73.97	62	57	17	5.71	3
1973	472.53	391	356	117	6.06	19
1974	308,440.46	252,039	229,707	78,733	6.40	12,302
1976	2,714.51	2,164	1,972	743	7.10	105
1977	25,931.50	20,404	18,596	7,336	7.46	983
1978	10,313.74	8,009	7,299	3,015	7.82	386
1979	4,760.10	3,648	3,325	1,435	8.18	175
1980	147.81	112	102	46	8.54	5
1981	6,892.25	5,138	4,683	2,209	8.91	248
1982	2,817.16	2,069	1,886	931	9.29	100
1984	1,048.37	856	780	268	9.25	29
1985	177,333.74	143,463	130,751	46,583	9.50	4,903
1986	14,722.96	11,789	10,744	3,979	9.77	407
1987	2,341.94	1,854	1,690	652	10.06	65
1988	41,705.91	32,622	29,732	11,974	10.37	1,155
1989	50,573.86	39,048	35,588	14,986	10.70	1,401
1990	111,145.34	84,626	77,128	34,017	11.05	3,078
1991	5,777.82	4,334	3,950	1,828	11.41	160
1992	190,566.32	140,676	128,211	62,355	11.79	5,289
1993	40,936.28	29,834	27,191	13,745	12.00	1,145
1994	112,480.72	80,491	73,359	39,122	12.42	3,150
1995	1,523,779.02	1,073,959	978,800	544,979	12.67	43,013
1996	66,276.24	45,750	41,696	24,580	13.12	1,873
1997	18,109.75	12,278	11,190	6,920	13.42	516
1998	98,883.56	65,748	59,922	38,962	13.73	2,838
1999	165,427.15	107,693	98,151	67,276	14.07	4,782
2000	120,003.55	76,358	69,592	50,412	14.43	3,494
2001	31,883.10	19,793	18,039	13,844	14.81	935
2002	6,149,697.13	3,717,492	3,388,103	2,761,594	15.21	181,564
2003	1,345,896.28	793,540	723,228	622,668	15.49	40,198
2004	761,254.37	435,133	396,578	364,676	15.93	22,892
2005	1,306,243.26	724,704	660,491	645,752	16.25	39,739
2006	1,835,673.44	985,940	898,581	937,092	16.59	56,485
2007	4,994,469.32	2,588,633	2,359,266	2,635,203	16.96	155,378
2008	2,166,110.23	1,079,806	984,130	1,181,980	17.35	68,126
2009	3,406,085.55	1,627,428	1,483,229	1,922,857	17.76	108,269
2010	1,883,128.04	861,531	785,195	1,097,933	18.08	60,726
2011	1,090,197.41	475,326	433,210	656,987	18.43	35,648

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 333.00 FIELD COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S0.5						
2012	153,437.26	63,231	57,628	95,809	18.90	5,069
2013	277,143.88	107,615	98,080	179,064	19.30	9,278
2014	147,693.03	53,834	49,064	98,629	19.61	5,030
2015	159,268.31	53,865	49,092	110,176	20.05	5,495
2016	169,958.53	52,976	48,282	121,677	20.42	5,959
2017	1,139,373.91	322,443	293,873	845,501	20.90	40,455
2018	186,535.03	47,473	43,267	143,268	21.24	6,745
2019	1,169,256.31	261,680	238,494	930,762	21.68	42,932
2020	434,996.96	83,606	76,198	358,799	22.07	16,257
2021	3,976,431.06	632,253	576,232	3,400,199	22.49	151,187
2022	4,118,666.81	511,538	466,212	3,652,455	22.93	159,287
2023	816,419.74	72,008	65,628	750,792	23.26	32,278
	40,943,124.58	17,918,586	16,330,902	24,612,223		1,346,652

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.3 3.29

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 334.00 FIELD MEASURING AND STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-L0						
1940	87.17	87	87			
1941	611.58	612	612			
1942	1,316.26	1,316	1,316			
1943	347.71	348	348			
1944	332.65	328	333			
1945	472.30	455	472			
1946	1,151.21	1,098	1,151			
1947	507.27	479	507			
1948	796.24	746	796			
1949	2,093.31	1,947	2,093			
1950	440.30	407	440			
1951	535.45	492	535			
1952	3,734.08	3,409	3,734			
1953	9,873.74	8,955	9,874			
1954	10,638.98	9,580	10,639			
1955	2,384.74	2,133	2,385			
1956	6,064.18	5,388	6,064			
1957	4,932.69	4,351	4,933			
1958	6,369.67	5,580	6,370			
1959	2,764.71	2,404	2,765			
1960	3,812.13	3,290	3,812			
1961	5,498.39	4,709	5,498			
1962	4,594.65	3,903	4,595			
1963	3,696.81	3,116	3,697			
1964	5,113.80	4,275	5,114			
1965	4,173.68	3,460	4,174			
1966	4,430.39	3,642	4,403	27	3.56	8
1967	5,043.03	4,110	4,969	74	3.70	20
1968	8,020.16	6,480	7,834	186	3.84	48
1969	12,602.57	10,088	12,196	407	3.99	102
1970	4,759.17	3,774	4,563	196	4.14	47
1971	14,785.42	11,614	14,041	744	4.29	173
1972	7,088.03	5,514	6,666	422	4.44	95
1973	12,894.47	9,929	12,004	890	4.60	193
1974	23,255.32	17,732	21,438	1,817	4.75	383
1975	63,281.47	47,746	57,724	5,557	4.91	1,132
1976	40,036.32	29,867	36,108	3,928	5.08	773
1977	54,856.30	40,484	48,944	5,912	5.24	1,128
1978	96,184.07	70,166	84,829	11,355	5.41	2,099
1979	96,189.25	69,352	83,845	12,344	5.58	2,212
1980	30,973.93	22,069	26,681	4,293	5.75	747
1981	71,976.20	50,635	61,216	10,760	5.93	1,815
1982	70,222.41	48,769	58,961	11,261	6.11	1,843
1983	64,615.14	56,784	64,615			

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 334.00 FIELD MEASURING AND STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-L0						
1984	30,308.54	26,505	30,309			
1985	61,790.08	53,720	61,790			
1986	102,499.87	88,509	102,500			
1987	35,766.84	30,645	35,767			
1988	115,418.15	98,025	115,418			
1989	65,185.78	55,056	65,186			
1990	96,724.79	81,152	96,725			
1991	158,119.23	131,049	158,119			
1992	29,377.62	24,128	29,378			
1993	19,402.45	15,830	19,375	27	7.28	4
1994	106,062.04	85,507	104,653	1,409	7.51	188
1995	11,890.54	9,496	11,622	269	7.63	35
1996	7,154.07	5,650	6,915	239	7.79	31
1997	13,306.12	10,375	12,698	608	7.98	76
1998	8,035.94	6,197	7,585	451	8.08	56
1999	91.55	69	84	8	8.35	1
2000	1,544.13	1,158	1,417	127	8.42	15
2002	8,688.46	6,303	7,714	974	8.80	111
2003	6,821.77	4,857	5,945	877	9.00	97
2004	8,162.73	5,707	6,985	1,178	9.15	129
2005	9,288.88	6,377	7,805	1,484	9.25	160
2006	6,911.05	4,630	5,667	1,244	9.49	131
2007	42.13	28	34	8	9.60	1
2008	11,306.98	7,216	8,832	2,475	9.78	253
2009	1,030,626.43	639,813	783,075	247,551	9.93	24,930
2010	91,350.96	55,030	67,352	23,999	10.07	2,383
2011	188,760.14	110,009	134,641	54,119	10.20	5,306
2013	28,500.44	15,396	18,843	9,657	10.43	926
2017	17,701.28	7,682	9,402	8,299	10.76	771
2020	20,439.63	6,696	8,195	12,245	10.78	1,136
2021	227,237.22	64,513	78,959	148,278	10.72	13,832
2022	422,877.29	99,207	121,421	301,456	10.60	28,439
2023	1,031,038.70	183,731	224,871	806,168	10.38	77,666
2024	228,650.00	25,494	31,203	197,447	9.96	19,824
2025	182,250.00	7,071	8,654	173,596	9.30	18,666
	5,146,889.18	2,554,454	3,082,520	2,064,369		207,985

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.9 4.04

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 337.00 OTHER EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 23-L1						
2004	15,906.40	11,020	10,419	5,487	9.42	582
2005	25,593.69	17,363	16,416	9,178	9.60	956
2006	13,865.94	9,208	8,706	5,160	9.74	530
2008	9,482.35	5,970	5,644	3,838	10.15	378
	64,848.38	43,561	41,185	23,663		2,446

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.7 3.77

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 350.11 LAND - GAS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-L4						
1967	764.79	621	550	215	10.35	21
1969	4,194.89	3,384	2,998	1,197	10.63	113
1970	49.41	40	35	14	10.79	1
1976	93.45	73	65	28	12.26	2
1977	2,088.06	1,608	1,425	663	12.64	52
1979	9,290.53	7,003	6,205	3,086	13.54	228
1989	342.71	229	203	140	18.10	8
	16,823.84	12,958	11,481	5,343		425

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.6 2.53

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 350.21 RIGHTS - OF - WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R3						
1916	922.66	918	923			
1925	257.87	249	258			
1926	459.25	441	459			
1929	64.04	61	64			
1940	198.63	180	199			
1941	73.96	67	74			
1942	442.68	397	443			
1943	166.39	149	166			
1945	66.96	59	67			
1946	558.07	491	558			
1947	1,439.75	1,261	1,440			
1948	342.95	299	343			
1949	1,130.71	979	1,131			
1961	890.72	706	891			
1962	39.11	31	39			
1965	87.33	66	87			
1966	1,016.02	765	1,016			
1967	69.49	52	69			
1968	1,932.65	1,422	1,893	40	17.19	2
1973	95.09	65	87	8	20.26	
1979	60.66	38	51	10	24.33	
2004	17,233.24	6,042	8,044	9,189	39.36	233
2006	19,252.16	6,153	8,191	11,061	40.99	270
	46,800.39	20,891	26,493	20,307		505

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 40.2 1.08

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 351.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2						
1940	400.17	351	400			
1945	426.05	363	426			
1946	58.82	50	59			
1947	155.46	131	155			
1949	1,543.88	1,284	1,544			
1950	5,236.77	4,326	5,237			
1951	3,014.62	2,473	3,015			
1952	535.96	437	536			
1953	2,900.60	2,345	2,901			
1956	157.70	125	158			
1958	1,371.20	1,065	1,371			
1959	1,334.85	1,027	1,335			
1963	3,163.12	2,343	3,163			
1964	41.65	31	42			
1965	1,891.52	1,372	1,892			
1967	126.88	90	127			
1968	1,796.46	1,259	1,796			
1969	756.00	524	756			
1970	537.68	368	538			
1971	551.41	372	551			
1972	347.83	232	348			
1973	2,622.77	1,723	2,623			
1976	85.52	54	83	3	22.28	
1977	200.66	124	190	11	22.87	
1981	1,050.11	607	932	118	25.30	5
1982	80.70	46	71	10	25.93	
1986	5,020.51	3,074	4,721	300	24.85	12
1989	4,130.40	2,381	3,657	473	26.64	18
1992	40,631.25	22,022	33,822	6,809	28.10	242
1993	41,380.63	21,886	33,613	7,768	28.73	270
1994	10,078.67	5,197	7,982	2,097	29.36	71
1995	2,597.85	1,312	2,015	583	29.63	20
1996	67,731.62	33,283	51,117	16,615	30.27	549
1997	126.45	60	92	34	30.92	1
1998	585,144.97	271,039	416,270	168,875	31.58	5,348
1999	21,627.73	9,765	14,997	6,631	31.89	208
2000	86,632.93	37,841	58,117	28,516	32.55	876
2003	329,014.65	129,566	198,991	130,024	34.25	3,796
2004	145,420.89	54,998	84,468	60,953	34.93	1,745
2006	152,337.02	53,074	81,513	70,824	36.00	1,967
2007	103,552.40	34,587	53,120	50,432	36.39	1,386
2014	82,977.62	18,205	27,959	55,019	40.03	1,374

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 351.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2						
2015	4,292.00	867	1,332	2,960	40.51	73
2017	52,907.60	8,772	13,472	39,436	41.50	950
2020	34,685.59	3,822	5,870	28,816	42.37	680
	1,800,679.17	734,873	1,123,377	677,302		19,591

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 34.6 1.09

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.01 WELLS - CONSTRUCTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1.5						
1916	1,692.35	1,692	1,692			
1917	3.43	3	3			
1924	4,372.37	4,372	4,372			
1925	4,480.62	4,470	4,481			
1926	3,865.56	3,833	3,866			
1927	152.57	150	153			
1939	835.00	764	835			
1942	6,692.90	6,030	6,693			
1943	5,478.24	4,910	5,478			
1945	280.75	249	281			
1946	11,987.05	10,563	11,987			
1947	29,450.54	25,799	29,451			
1948	28,396.98	24,722	28,397			
1949	2,912.07	2,519	2,912			
1950	9,132.90	7,849	9,133			
1951	0.88	1	1			
1952	2,721.62	2,308	2,722			
1953	21.15	18	21			
1957	385.87	316	386			
1961	190.38	151	190			
1962	618.87	486	619			
1966	2.63	2	3			
1967	274.53	206	275			
1968	459.52	341	460			
1970	270.25	196	270			
1972	10.95	8	11			
1973	11,512.12	8,049	11,512			
1974	11,326.58	7,818	11,327			
1975	12,832.39	8,736	12,832			
1979	636.06	408	636			
1981	10,994.92	6,828	10,995			
1983	169.19	119	169			
1984	216.44	151	216			
1985	77.18	53	77			
1991	50,823.61	31,333	50,824			
1992	31,261.77	18,920	31,262			
1993	383.86	227	384			
1995	551.49	312	537	14	23.22	1
1997	267,917.54	144,568	248,658	19,260	24.10	799
2000	68,536.02	33,918	58,339	10,197	25.77	396
2002	3,059.11	1,422	2,446	613	26.75	23
2004	18,049.76	7,862	13,523	4,527	27.53	164
2005	62,515.79	26,207	45,076	17,440	28.06	622
2006	80,746.83	32,484	55,873	24,874	28.60	870

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.01 WELLS - CONSTRUCTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1.5						
2021	24,188.96	2,777	4,776	19,413	32.79	592
2023	198,211.71	13,122	22,570	175,642	31.76	5,530
2024	606,889.69	23,972	41,232	565,658	30.40	18,607
2025	498,017.38	6,723	11,564	486,453	27.40	17,754
	2,073,608.38	477,967	749,520	1,324,088		45,358
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					29.2	2.19

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.02 WELLS - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R1						
1916	605.74	601	606			
1917	1,489.21	1,469	1,489			
1924	2,632.59	2,485	2,633			
1925	2,486.30	2,333	2,486			
1926	805.94	752	806			
1942	13.91	12	14			
1943	7,491.00	6,262	7,491			
1945	2,654.21	2,186	2,654			
1946	5,200.82	4,249	5,201			
1947	9,662.56	7,830	9,663			
1948	11,543.94	9,279	11,544			
1949	37.27	30	37			
1950	2,967.75	2,346	2,968			
1952	1,916.83	1,489	1,917			
1953	260.58	201	261			
1957	733.74	543	734			
1961	964.56	685	965			
1962	174.36	122	174			
1966	137.13	92	137			
1967	870.46	575	870			
1968	7.19	5	7			
1971	198.43	124	198			
1973	20,483.30	12,454	20,483			
1974	18,787.75	11,249	18,788			
1975	11,012.38	6,491	11,012			
1979	2,655.00	1,463	2,655			
1981	693.40	368	693			
1982	32,980.62	17,186	32,412	569	26.34	22
1984	737.19	468	737			
1985	398.44	249	398			
1992	7,004.82	3,867	7,005			
1993	485.00	261	485			
1994	287.22	152	287			
1995	846.49	438	831	15	28.23	1
1997	13,420.80	6,598	12,516	905	29.22	31
1998	23,638.35	11,337	21,507	2,131	29.57	72
2000	14,821.28	6,736	12,778	2,043	30.31	67
2008	30,882.48	10,602	20,112	10,770	33.00	326

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.02 WELLS - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R1						
2014	34,845.40	8,586	16,288	18,557	34.41	539
2019	5,714.85	882	1,673	4,042	34.23	118
2021	9,993.73	1,129	2,142	7,852	33.35	235
	282,543.02	144,186	235,657	46,886		1,411

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 33.2 0.50

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.11 LEASEHOLDS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R3						
1904	35.14	35	35			
1909	75.00	75	75			
1910	211.00	211	211			
1915	26.50	26	26			
1916	58.95	59	59			
1921	17.70	18	18			
1938	58.48	55	58			
1939	330.37	310	330			
1940	19.39	18	19			
1941	201.71	188	202			
1942	29.19	27	29			
1943	27.92	26	28			
1944	102.32	94	102			
1945	7,165.82	6,538	7,166			
1946	114.97	104	115			
1947	1,278.03	1,155	1,278			
1948	4,414.39	3,970	4,414			
1949	330.99	296	331			
1950	69,383.58	61,763	69,384			
1951	60,361.90	53,450	60,362			
1952	1,628.76	1,434	1,629			
1953	40.65	36	41			
1955	52.58	45	53			
1958	453.12	384	453			
1969	320.54	246	321			
1970	249.81	189	250			
1974	465.47	335	465			
1975	12,797.48	9,080	12,797			
1979	1,684.94	1,123	1,686			
	161,936.70	141,290	161,937			

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.12 STORAGE RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R5						
1939	100.32	99	100			
1941	98.88	97	99			
1944	1,462.95	1,420	1,463			
1947	29.25	28	29			
1948	75.00	72	75			
1949	3,618.25	3,454	3,618			
1950	371.91	354	372			
1960	11.75	11	12			
1964	443.26	386	443			
1992	2,452.89	1,280	2,453			
1993	12,069.59	6,111	12,070			
	20,734.05	13,312	20,734			

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.21 RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 40-SQUARE						
1969	7,545.31	7,545	7,545			
1970	116.00	116	116			
1971	9,081.22	9,081	9,081			
1972	5,737.14	5,737	5,737			
1975	23,910.35	23,910	23,910			
1994	10,285.35	8,035	8,073	2,212	8.75	253
1997	15,806.90	11,164	11,216	4,591	11.75	391
2011	360,656.23	128,484	129,084	231,572	25.75	8,993
	433,138.50	194,072	194,762	238,376		9,637

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 24.7 2.22

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 352.31 NON-RECOVERABLE NATURAL GAS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 37-SQUARE						
1971	205,250.77	205,251	205,251			
	205,250.77	205,251	205,251			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					0.0	0.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 353.00 LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2						
1916	1,255.78	1,256	1,256			
1917	363.37	363	363			
1918	25.48	25	25			
1922	45.18	45	45			
1924	5,593.24	5,593	5,593			
1925	1,233.42	1,233	1,233			
1926	63.48	63	63			
1933	19.78	20	20			
1934	57.37	57	57			
1937	19.93	19	20			
1938	3.19	3	3			
1939	84.73	82	85			
1940	573.99	551	574			
1941	1,087.17	1,038	1,087			
1943	570.69	538	571			
1944	337.97	317	338			
1945	146.21	136	146			
1946	14,905.54	13,806	14,906			
1947	8,931.03	8,220	8,931			
1948	19,135.23	17,501	19,135			
1949	20.86	19	21			
1951	265.03	238	265			
1952	12,170.84	10,849	12,171			
1955	2,228.25	1,947	2,228			
1956	44.62	39	45			
1957	445.55	384	446			
1961	568.38	475	568			
1963	70.50	58	70			
1965	42.48	34	42			
1967	2,981.95	2,368	2,982			
1968	94,202.26	74,062	94,202			
1969	2,017.45	1,570	2,017			
1970	25,791.64	19,860	25,792			
1973	20,201.24	15,034	20,201			
1974	893.39	657	893			
1976	580.66	416	581			
1981	1,605.42	1,067	1,557	48	16.76	3
1983	2,071.35	1,505	2,071			
1986	263.84	183	264			
1991	3,151.27	1,997	2,914	237	19.81	12
1996	5,529.70	3,122	4,555	975	22.56	43
2004	314,099.14	138,172	201,606	112,493	27.06	4,157
2005	13,478.65	5,704	8,323	5,156	27.60	187
2006	1,330,175.45	540,317	788,374	541,801	28.14	19,254

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 353.00 LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2						
2009	574.94	203	296	279	29.83	9
2010	35,995.76	12,023	17,543	18,453	30.41	607
2011	68,674.32	21,626	31,554	37,120	31.00	1,197
2012	22,387.48	6,645	9,696	12,691	31.39	404
2013	102,485.49	28,368	41,392	61,093	32.00	1,909
2015	16,105.17	3,814	5,565	10,540	33.04	319
2020	5,277.70	687	1,002	4,276	35.07	122
2023	252,026.67	15,147	22,101	229,926	35.20	6,532
2024	1,170,167.08	40,839	59,588	1,110,579	34.59	32,107
2025	1,649,381.25	18,803	27,435	1,621,946	32.63	49,707
	5,210,428.56	1,019,098	1,442,811	3,767,618		116,569

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 32.3 2.24

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 354.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R1.5						
1940	38.38	37	32	6	1.73	3
1941	93.26	89	78	15	2.07	7
1947	27.71	25	22	6	3.70	2
1948	135,769.71	123,943	108,314	27,456	3.92	7,004
1949	84.84	77	67	18	4.14	4
1950	2,311.41	2,086	1,823	488	4.38	111
1951	634.60	570	498	137	4.61	30
1954	20.31	18	16	4	5.37	1
1955	425.47	372	325	100	5.63	18
1956	5,827.33	5,063	4,425	1,402	5.90	238
1957	145.59	126	110	36	6.18	6
1958	4,730.84	4,052	3,541	1,190	6.46	184
1959	17,637.66	14,996	13,105	4,533	6.74	673
1960	535.88	452	395	141	7.03	20
1961	920.95	771	674	247	7.33	34
1963	108.84	90	79	30	7.93	4
1964	203.72	166	145	59	8.24	7
1965	136.24	110	96	40	8.56	5
1966	1,354.68	1,087	950	405	8.88	46
1967	2,060.99	1,639	1,432	629	9.21	68
1969	16,191.83	12,633	11,040	5,152	9.89	521
1970	111.84	86	75	37	10.24	4
1971	453.19	346	302	151	10.61	14
1973	3,435.73	2,568	2,244	1,192	11.36	105
1974	657.34	486	425	232	11.76	20
1975	31,166.51	22,745	19,877	11,290	12.16	928
1976	23,406.17	16,868	14,741	8,665	12.57	689
1977	33,074.71	23,520	20,554	12,521	13.00	963
1978	5,618.23	3,940	3,443	2,175	13.44	162
1979	813.20	562	491	322	13.89	23
1981	2,202.06	1,477	1,291	911	14.82	61
1982	30,538.76	20,149	17,608	12,931	15.31	845
1983	4,725.24	3,553	3,105	1,620	13.93	116
1984	105.21	78	68	37	14.61	3
1985	72,682.63	52,949	46,272	26,411	15.00	1,761
1986	216,409.53	155,447	135,845	80,565	15.39	5,235
1987	51,910.04	36,732	32,100	19,810	15.81	1,253
1988	27,704.51	19,299	16,865	10,840	16.22	668
1989	14,761.27	10,113	8,838	5,923	16.66	356
1990	523,871.27	352,723	308,245	215,626	17.10	12,610
1992	13,256.56	8,596	7,512	5,745	18.03	319
1993	627,180.32	398,448	348,204	278,976	18.51	15,072
1994	244,309.75	151,936	132,777	111,533	19.00	5,870
1995	41,444.32	25,198	22,021	19,423	19.50	996

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 354.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R1.5						
1996	49,392.46	29,329	25,631	23,761	20.01	1,187
1997	122,261.90	70,802	61,874	60,388	20.53	2,941
1998	77,154.52	43,731	38,217	38,938	20.83	1,869
1999	59,564.52	32,832	28,692	30,873	21.37	1,445
2000	1,384.13	741	648	736	21.92	34
2001	11,860.86	6,184	5,404	6,457	22.26	290
2002	469,373.17	236,799	206,939	262,434	22.83	11,495
2003	594,368.52	289,636	253,113	341,256	23.41	14,577
2004	189,460.43	89,387	78,115	111,345	23.79	4,680
2005	5,302.15	2,405	2,102	3,200	24.39	131
2006	325,656.73	142,312	124,367	201,290	24.80	8,117
2007	7,253.51	3,045	2,661	4,593	25.23	182
2008	6,793.61	2,730	2,386	4,408	25.67	172
2009	2,806.17	1,076	940	1,866	26.12	71
2011	90,346.36	31,151	27,223	63,123	27.07	2,332
2012	2,472.89	806	704	1,769	27.40	65
2013	104,644.56	31,917	27,892	76,753	27.91	2,750
2014	3,235,313.59	920,770	804,663	2,430,651	28.28	85,949
2015	33,936.60	8,973	7,841	26,096	28.51	915
2016	11,255.01	2,728	2,384	8,871	28.92	307
2017	14,740.67	3,247	2,838	11,903	29.20	408
	7,574,440.99	3,426,822	2,994,704	4,579,737		196,976

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.3 2.60

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 355.00 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2.5						
1952	1,138.57	959	1,139			
1953	342.94	287	343			
1958	9,525.98	7,718	9,526			
1960	7,687.81	6,134	7,668	20	12.13	2
1961	20,126.55	15,927	19,911	216	12.52	17
1962	718.14	564	705	13	12.92	1
1968	5,082.16	3,757	4,697	385	15.65	25
1971	6,231.36	4,444	5,556	675	17.21	39
1975	5,250.83	3,546	4,433	818	19.48	42
1976	270.19	180	225	45	20.08	2
1992	6,492.75	3,562	4,453	2,040	27.36	75
1998	5,267.96	2,469	3,086	2,182	30.89	71
2023	108,849.37	5,116	6,396	102,453	45.60	2,247
2024	217,957.76	5,863	7,329	210,629	45.26	4,654
	394,942.37	60,526	75,467	319,475		7,175

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 44.5 1.82

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 357.00 OTHER EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-R2.5						
1953	597.38	597	597			
1957	139.38	139	139			
1972	6,119.04	5,991	6,119			
1973	1,697.11	1,646	1,697			
1979	1,203.92	1,107	1,204			
1981	2,893.23	2,618	2,893			
1990	17,052.58	15,027	17,053			
1997	481.23	382	482			
	30,183.87	27,507	30,184			

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 365.02 RIGHTS - OF - WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R4						
1948	742.58	621	710	33	13.07	3
1949	3,144.79	2,610	2,984	161	13.60	12
1950	1,389.64	1,144	1,308	82	14.15	6
1951	4,330.92	3,534	4,041	290	14.72	20
1952	6,331.81	5,120	5,854	478	15.31	31
1953	13,929.43	11,157	12,756	1,173	15.92	74
1954	9,328.96	7,400	8,461	868	16.54	52
1955	14,928.71	11,723	13,403	1,526	17.18	89
1956	8,558.92	6,650	7,603	956	17.84	54
1957	9,717.13	7,470	8,541	1,176	18.50	64
1958	45,711.58	34,758	39,740	5,972	19.17	312
1959	68,040.53	51,149	58,480	9,561	19.86	481
1960	19,696.68	14,637	16,735	2,962	20.55	144
1961	32,617.86	23,954	27,387	5,231	21.25	246
1962	23,954.62	17,382	19,873	4,082	21.95	186
1963	31,822.54	22,805	26,074	5,749	22.67	254
1964	42,182.35	29,844	34,122	8,060	23.40	344
1965	16,940.02	11,831	13,527	3,413	24.13	141
1966	14,017.33	9,658	11,042	2,975	24.88	120
1967	3,065.43	2,083	2,382	683	25.63	27
1968	24,933.81	16,709	19,104	5,830	26.39	221
1969	11,868.46	7,838	8,961	2,907	27.17	107
1970	26,523.29	17,257	19,730	6,793	27.95	243
1971	41,866.86	26,826	30,671	11,196	28.74	390
1972	14,768.98	9,316	10,651	4,118	29.54	139
1973	4,881.00	3,029	3,463	1,418	30.35	47
1974	78,307.32	47,797	54,648	23,659	31.17	759
1975	732.21	439	502	230	32.00	7
1976	6,717.28	3,960	4,528	2,189	32.84	67
1977	3,301.06	1,911	2,185	1,116	33.68	33
1978	76,839.75	43,664	49,922	26,918	34.54	779
1979	10,832.78	6,039	6,905	3,928	35.40	111
1980	17,540.06	9,588	10,962	6,578	36.27	181
1981	9,714.51	5,203	5,949	3,766	37.15	101
1982	19,536.23	10,249	11,718	7,818	38.03	206
1983	25,350.69	13,710	15,675	9,676	35.88	270
1984	16,081.06	8,491	9,708	6,373	36.88	173
1985	6,124.15	3,180	3,636	2,488	37.27	67
1986	4,398.39	2,227	2,546	1,852	38.27	48
1987	12,506.61	6,171	7,055	5,452	39.27	139
1988	28,182.41	13,542	15,483	12,699	40.27	315
1989	14,284.39	6,731	7,696	6,588	40.68	162
1990	57,471.30	26,333	30,107	27,364	41.68	657
1991	33,994.79	15,134	17,303	16,692	42.68	391

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 365.02 RIGHTS - OF - WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R4						
1992	19,553.43	8,451	9,662	9,891	43.68	226
1993	18,963.07	7,949	9,088	9,875	44.68	221
1994	6,282.92	2,572	2,941	3,342	45.08	74
1995	10,772.56	4,269	4,881	5,892	46.08	128
1996	11,530.81	4,419	5,052	6,479	47.08	138
1997	33,386.46	12,356	14,127	19,259	48.08	401
1998	15,147.20	5,408	6,183	8,964	49.08	183
1999	13,910.56	4,784	5,470	8,441	50.08	169
2000	1,548.27	512	585	963	51.08	19
2001	486,602.42	155,761	178,087	308,515	51.51	5,989
2002	134,291.18	41,214	47,121	87,170	52.51	1,660
2003	58,064.08	17,053	19,497	38,567	53.51	721
2005	130,316.63	34,834	39,827	90,490	55.51	1,630
2006	3,011.59	765	875	2,137	56.51	38
2007	713.43	172	197	516	57.51	9
2008	31,104.28	7,082	8,097	23,007	58.51	393
2011	17,269.43	3,248	3,713	13,556	61.51	220
2012	1,097.85	192	220	878	62.51	14
2013	15,146.12	2,449	2,800	12,346	63.51	194
2014	29,168.15	4,364	4,989	24,179	63.94	378
2015	36,558.71	4,983	5,697	30,862	64.94	475
2016	34,356.22	4,226	4,832	29,524	65.94	448
2017	85,096.49	9,335	10,673	74,423	66.94	1,112
2018	6,157.37	594	679	5,478	67.94	81
2022	2,234.72	97	111	2,124	71.94	30
	2,119,493.17	917,963	1,049,535	1,069,958		23,224

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 46.1 1.10

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.01 STRUCTURES AND IMPROVEMENTS - COMPRESSOR STATION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R3						
1978	486,335.94	329,575	441,955	44,381	19.34	2,295
1980	12,052.02	7,898	10,591	1,461	20.68	71
1982	144,492.45	91,344	122,491	22,001	22.07	997
1983	5,454.59	3,664	4,913	542	20.64	26
1984	6,913.86	4,563	6,119	795	21.25	37
1995	6,058.20	3,115	4,177	1,881	28.58	66
2006	93,601.90	32,255	43,254	50,348	36.61	1,375
2007	381,147.00	125,207	167,901	213,246	37.31	5,716
2009	205,133.93	60,330	80,902	124,232	39.00	3,185
2022	56,121.60	3,485	4,673	51,449	49.10	1,048
	1,397,311.49	661,436	886,976	510,335		14,816

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 34.4 1.06

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2.5						
1915	1,349.92	1,350	1,350			
1921	15.25	15	15			
1926	674.20	665	674			
1933	308.06	293	308			
1936	30.20	28	30			
1938	94.77	88	95			
1942	4,567.33	4,172	4,567			
1946	33.12	30	33			
1947	467.40	418	467			
1948	4,490.90	3,993	4,491			
1949	21,634.60	19,141	21,635			
1950	8,623.70	7,594	8,624			
1951	12,398.99	10,864	12,399			
1952	9,794.83	8,538	9,795			
1953	13,583.85	11,781	13,584			
1954	4,182.81	3,608	4,183			
1955	3,289.22	2,822	3,289			
1956	3,955.53	3,374	3,956			
1957	461.88	392	462			
1958	773.26	652	773			
1959	6,263.37	5,246	6,263			
1960	7,763.15	6,459	7,763			
1961	4,903.21	4,051	4,903			
1962	720.58	591	721			
1963	354.80	289	355			
1964	14,377.38	11,612	14,377			
1965	349.99	280	350			
1967	104.28	82	104			
1968	11,523.59	8,978	11,524			
1969	3,475.25	2,680	3,475			
1970	1,542.20	1,177	1,542			
1971	7,492.16	5,655	7,492			
1973	1,761.32	1,298	1,761			
1974	1,991.11	1,449	1,991			
1975	635.87	457	636			
1976	1,120.08	793	1,120			
1978	32,091.49	22,073	32,091			
1979	11,321.38	7,668	11,321			
1980	0.01					
1981	27,039.82	17,718	27,040			
1983	2,322.66	1,629	2,323			
1984	35,381.35	24,374	35,381			
1985	11,908.81	8,053	11,909			
1986	2,486.58	1,659	2,487			

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.02 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2.5						
1987	1,364.96	893	1,365			
1988	1,833.40	1,175	1,833			
1989	6,868.66	4,307	6,869			
1990	443.70	272	444			
1991	1,335.51	805	1,336			
1993	81,579.75	46,827	79,419	2,161	23.93	90
1994	5,801.95	3,246	5,505	297	24.61	12
1997	3,622.95	1,873	3,177	446	26.39	17
1998	5,820.43	2,918	4,949	871	27.10	32
1999	42,005.79	20,507	34,780	7,226	27.52	263
2000	2,641.28	1,247	2,115	526	28.22	19
2002	4,331.23	1,903	3,227	1,104	29.66	37
2003	112,488.50	47,808	81,082	31,406	30.10	1,043
2004	74,594.44	30,435	51,618	22,976	30.83	745
2005	44,125.47	17,244	29,246	14,879	31.56	471
2006	18,974.80	7,085	12,016	6,959	32.30	215
2008	369,366.95	125,511	212,867	156,500	33.51	4,670
2010	119,355.96	36,404	61,741	57,615	34.75	1,658
2014	222,953.81	51,681	87,651	135,303	37.29	3,628
2017	149,925.02	26,102	44,269	105,656	39.14	2,699
2022	106,274.09	7,705	13,068	93,206	41.59	2,241
	1,653,368.91	650,037	1,016,236	637,133		17,840

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 35.7 1.08

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 366.03 STRUCTURES AND IMPROVEMENTS - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R1.5						
1904	97.85	98	98			
1920	3,071.90	3,072	3,072			
1923	403.86	404	404			
1927	72.55	73	73			
1929	261.39	261	261			
1930	294.47	294	294			
1932	95.28	95	95			
1937	237.51	234	238			
1939	19.57	19	20			
1941	2,931.40	2,797	2,931			
1947	529.70	486	530			
1949	416.19	378	416			
1950	3,524.86	3,182	3,525			
1951	1,022.22	918	1,022			
1952	5,364.58	4,785	5,365			
1953	2,751.48	2,439	2,751			
1954	2,503.83	2,205	2,504			
1955	1,688.17	1,477	1,688			
1956	69.33	60	69			
1958	3,139.09	2,688	3,139			
1959	727.82	619	728			
1969	176.01	137	171	5	9.89	1
1974	304.86	225	281	24	11.76	2
1980	5,852.63	3,986	4,970	883	14.35	62
1983	414.15	311	388	26	13.93	2
1984	12,992.80	9,594	11,963	1,030	14.61	70
1986	483.17	347	433	50	15.39	3
1997	548.91	318	396	153	20.53	7
	49,995.58	41,502	47,825	2,171		147

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.8 0.29

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
1875	7,940.24	7,940	7,940			
1886	2,010.46	1,950	2,010			
1887	12,814.21	12,383	12,814			
1888	4,987.39	4,803	4,987			
1889	1,202.61	1,154	1,203			
1890	7,461.31	7,134	7,461			
1891	11,418.86	10,879	11,419			
1892	8,127.33	7,716	8,127			
1893	14,464.07	13,681	14,464			
1894	1,411.09	1,330	1,411			
1896	1,703.11	1,595	1,703			
1897	9,330.98	8,709	9,331			
1899	20,032.73	18,580	20,033			
1900	78,007.09	72,137	78,007			
1901	28,666.19	26,430	28,666			
1902	151,986.54	139,714	151,987			
1903	18,076.90	16,567	18,077			
1904	148.26	135	148			
1905	3,962.53	3,610	3,963			
1906	53,068.79	48,207	53,069			
1908	7.75	7	8			
1909	1,550.76	1,396	1,551			
1910	8,101.98	7,270	8,102			
1911	850.03	760	850			
1912	3,495.81	3,117	3,496			
1913	1,825.09	1,622	1,825			
1914	18,138.37	16,066	18,138			
1915	410.31	362	410			
1916	1,219.91	1,073	1,220			
1917	36,800.13	32,269	36,800			
1918	2,184.58	1,909	2,185			
1919	13,717.38	11,944	13,717			
1920	1,544.93	1,341	1,545			
1921	20,030.78	17,317	20,031			
1922	12,450.68	10,725	12,451			
1923	1,719.04	1,475	1,719			
1924	40,620.83	34,721	40,621			
1925	48,803.74	41,551	48,804			
1926	1,742.10	1,477	1,742			
1927	10,908.72	9,211	10,909			
1928	12,578.95	10,577	12,579			
1929	9,719.44	8,136	9,719			
1930	41,745.30	34,790	41,745			
1931	28,538.83	23,673	28,539			

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
1932	5,391.71	4,451	5,392			
1933	6,349.96	5,216	6,350			
1934	4,562.06	3,728	4,562			
1935	4,524.26	3,677	4,524			
1936	19,693.73	15,920	19,694			
1937	20,072.17	16,133	19,960	112	15.70	7
1938	20,990.20	16,774	20,753	237	16.07	15
1939	60,768.84	48,266	59,714	1,055	16.46	64
1940	25,723.23	20,302	25,117	606	16.86	36
1941	15,477.67	12,138	15,017	461	17.26	27
1942	70,952.73	55,272	68,382	2,571	17.68	145
1943	28,379.77	21,955	27,162	1,218	18.11	67
1944	105,420.88	80,976	100,183	5,238	18.55	282
1945	13,219.84	10,080	12,471	749	19.00	39
1946	21,296.13	16,116	19,939	1,357	19.46	70
1947	58,404.27	43,847	54,247	4,157	19.94	208
1948	707,975.54	527,265	652,326	55,650	20.42	2,725
1949	1,210,842.54	894,353	1,106,483	104,360	20.91	4,991
1950	169,261.54	123,942	153,340	15,922	21.42	743
1951	175,736.47	127,564	157,821	17,915	21.93	817
1952	1,224,547.97	880,756	1,089,661	134,887	22.46	6,006
1953	546,474.28	389,363	481,715	64,759	23.00	2,816
1954	660,695.24	466,286	576,883	83,812	23.54	3,560
1955	609,535.50	425,913	526,934	82,602	24.10	3,427
1956	303,221.23	209,714	259,456	43,765	24.67	1,774
1957	1,056,067.38	722,751	894,179	161,888	25.25	6,411
1958	709,622.22	480,499	594,468	115,154	25.83	4,458
1959	1,657,133.01	1,109,649	1,372,845	284,288	26.43	10,756
1960	632,828.51	419,008	518,392	114,437	27.03	4,234
1961	1,225,600.21	802,008	992,235	233,365	27.65	8,440
1962	1,333,220.03	862,087	1,066,564	266,656	28.27	9,432
1963	715,376.26	456,947	565,329	150,047	28.90	5,192
1964	1,498,198.55	944,989	1,169,129	329,070	29.54	11,140
1965	640,033.25	398,498	493,017	147,016	30.19	4,870
1966	518,423.57	318,571	394,132	124,292	30.84	4,030
1967	776,531.97	470,672	582,310	194,222	31.51	6,164
1968	862,942.44	515,824	638,171	224,771	32.18	6,985
1969	532,464.04	313,754	388,173	144,291	32.86	4,391
1970	398,021.11	231,151	285,977	112,044	33.54	3,341
1971	449,746.34	257,255	318,273	131,473	34.24	3,840
1972	1,524,443.67	858,643	1,062,303	462,141	34.94	13,227
1973	757,236.87	419,797	519,368	237,869	35.65	6,672
1974	232,606.35	126,887	156,983	75,623	36.36	2,080
1975	373,920.68	200,608	248,190	125,731	37.08	3,391

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
1976	124,703.79	65,766	81,365	43,339	37.81	1,146
1977	599,609.09	310,669	384,356	215,253	38.55	5,584
1978	4,208,274.22	2,141,507	2,649,447	1,558,827	39.29	39,675
1979	1,435,610.15	717,260	887,386	548,224	40.03	13,695
1980	389,696.80	190,998	236,300	153,397	40.79	3,761
1981	1,754,485.33	843,241	1,043,248	711,237	41.55	17,118
1982	1,362,544.06	641,922	794,178	568,366	42.31	13,433
1983	357,789.31	188,949	233,765	124,024	37.75	3,285
1984	685,619.83	356,385	440,915	244,705	38.11	6,421
1985	1,223,608.41	620,614	767,816	455,792	39.11	11,654
1986	1,257,708.61	626,968	775,677	482,032	39.49	12,206
1987	1,575,563.75	771,396	954,362	621,202	39.88	15,577
1988	1,303,644.75	621,578	769,009	534,636	40.88	13,078
1989	1,643,621.63	768,557	950,850	692,772	41.27	16,786
1990	2,503,342.91	1,138,270	1,408,254	1,095,089	42.27	25,907
1991	3,120,539.71	1,389,264	1,718,781	1,401,759	42.68	32,843
1992	1,687,081.85	729,157	902,104	784,978	43.68	17,971
1993	1,625,045.67	686,582	849,431	775,615	44.08	17,596
1994	1,059,421.17	437,011	540,665	518,756	44.51	11,655
1995	1,209,201.07	482,834	597,356	611,845	45.51	13,444
1996	1,165,835.28	453,510	561,077	604,758	45.94	13,164
1997	2,247,141.92	844,251	1,044,497	1,202,645	46.94	25,621
1998	1,104,398.34	403,326	498,990	605,408	47.37	12,780
1999	1,029,840.14	364,975	451,543	578,297	47.82	12,093
2000	1,299,452.29	442,983	548,053	751,399	48.82	15,391
2001	771,174.80	254,333	314,658	456,517	49.28	9,264
2002	1,979,554.54	630,488	780,032	1,199,523	49.74	24,116
2003	380,176.34	115,878	143,363	236,813	50.74	4,667
2004	1,478,345.23	433,451	536,260	942,085	51.22	18,393
2005	5,994,579.90	1,687,474	2,087,723	3,906,857	51.69	75,582
2006	4,771,592.95	1,276,878	1,579,738	3,191,855	52.69	60,578
2007	4,292,330.91	1,096,691	1,356,813	2,935,518	53.18	55,200
2008	5,135,978.19	1,249,070	1,545,335	3,590,643	53.67	66,902
2009	3,420,644.65	783,670	969,547	2,451,098	54.67	44,834
2010	6,571,965.73	1,423,488	1,761,123	4,810,843	55.17	87,200
2011	8,625,738.07	1,757,925	2,174,884	6,450,854	55.68	115,856
2012	5,764,415.28	1,099,850	1,360,721	4,403,694	56.19	78,371
2013	7,244,019.12	1,286,538	1,591,690	5,652,329	56.72	99,653
2014	2,048,846.65	334,167	413,427	1,635,420	57.72	28,334
2015	3,908,669.83	584,737	723,430	3,185,240	58.25	54,682
2016	2,746,941.06	373,584	462,194	2,284,747	58.78	38,869
2017	10,848,769.68	1,324,635	1,638,823	9,209,947	59.32	155,259
2018	2,594,358.87	282,266	349,216	2,245,143	59.41	37,791
2019	8,204,328.59	774,489	958,189	7,246,140	59.97	120,829

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
2020	3,717,571.43	296,662	367,027	3,350,544	60.54	55,344
2021	892,697.88	58,382	72,230	820,468	60.69	13,519
2022	25,062,514.81	1,270,670	1,572,057	23,490,458	60.85	386,039
2023	29,787,239.68	1,066,383	1,319,316	28,467,924	60.64	469,458
2024	95,698,564.37	1,952,251	2,415,302	93,283,262	60.10	1,552,134
2025	92,625,088.91	592,801	733,406	91,891,683	57.77	1,590,647
	393,279,347.90	53,251,782	65,799,579	327,479,769		5,762,278
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					56.8	1.47

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 368.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1						
1920	415.06	415	415			
1954	32.27	32	32			
1955	31.48	31	31			
1956	388.77	386	389			
1960	351.48	339	351			
1962	27,890.74	26,440	27,891			
1963	101.61	96	101	1	2.10	
1964	824.85	769	811	14	2.38	6
1971	522.66	457	482	41	4.43	9
1972	186.54	161	170	17	4.74	4
1978	1,190,092.18	963,296	1,016,256	173,836	6.67	26,062
1979	2,135.62	1,708	1,802	334	7.01	48
1980	2,113.25	1,669	1,761	352	7.35	48
1981	69,385.64	54,121	57,096	12,290	7.70	1,596
1982	308,856.74	237,730	250,800	58,057	8.06	7,203
1983	16,789.33	14,187	14,967	1,822	7.75	235
1984	48,765.75	40,836	43,081	5,685	8.01	710
1985	4,894.86	4,059	4,282	613	8.29	74
1986	12,599.82	10,336	10,904	1,696	8.60	197
1987	5,158.13	4,183	4,413	745	8.92	84
1988	553.26	443	467	86	9.26	9
1989	9,531.35	7,532	7,946	1,585	9.62	165
1990	11,749.23	9,153	9,656	2,093	10.00	209
1992	2,156.79	1,635	1,725	432	10.61	41
1994	15,977.95	11,734	12,379	3,599	11.30	318
1995	60,835.17	43,984	46,402	14,433	11.59	1,245
1996	221,142.15	156,524	165,129	56,013	12.07	4,641
1997	1,013.73	705	744	270	12.40	22
1998	19,671.09	13,400	14,137	5,534	12.75	434
2001	448,452.28	284,947	300,613	147,839	13.92	10,621
2003	395,161.43	238,282	251,382	143,779	14.65	9,814
2004	86,510.80	50,739	53,529	32,982	14.98	2,202
2005	1,763,621.55	999,973	1,054,950	708,672	15.46	45,839
2006	451,809.02	247,862	261,489	190,320	15.84	12,015
2007	1,888,341.93	999,311	1,054,252	834,090	16.23	51,392
2008	522,188.63	264,854	279,415	242,774	16.76	14,485
2009	457,947.34	222,517	234,751	223,196	17.19	12,984
2010	109,457.71	50,745	53,535	55,923	17.64	3,170
2011	1,430,090.45	629,669	664,287	765,803	18.11	42,286
2012	202,852.53	84,387	89,026	113,827	18.60	6,120
2013	59,732.05	23,343	24,626	35,106	19.10	1,838
2014	1,072,720.78	391,007	412,504	660,217	19.61	33,667
2015	76,495.16	25,794	27,212	49,283	20.15	2,446
2017	62,724.94	17,488	18,449	44,276	21.34	2,075

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 368.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1						
2019	125,892.47	27,306	28,807	97,085	22.57	4,302
2021	206,080.08	31,097	32,807	173,273	23.92	7,244
2022	45,937.85	5,347	5,641	40,297	24.68	1,633
2023	3,130,476.42	254,195	268,171	2,862,305	25.45	112,468
2024	7,007,610.02	318,145	335,636	6,671,974	26.30	253,687
2025	1,912,495.96	26,010	27,440	1,885,056	27.10	69,559
	23,490,766.90	6,799,379	7,173,142	16,317,625		743,207
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					22.0	3.16

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 369.00 MEASURING AND REGULATING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1						
1950	25,591.99	21,477	25,592			
1951	1,159.91	966	1,160			
1952	7,813.89	6,450	7,814			
1953	24,687.54	20,204	24,688			
1954	1,400.54	1,136	1,401			
1955	27,793.59	22,346	27,794			
1956	11,167.18	8,896	11,167			
1957	41,588.92	32,822	41,589			
1958	42,409.51	33,147	42,410			
1959	7,792.14	6,031	7,792			
1960	1,361.88	1,043	1,362			
1961	12,759.21	9,674	12,759			
1962	19,557.17	14,672	19,557			
1963	5,825.28	4,324	5,825			
1964	90,985.33	66,765	90,506	479	13.31	36
1965	39,467.80	28,638	38,821	647	13.72	47
1966	16,453.06	11,797	15,992	461	14.15	33
1967	32,752.22	23,202	31,452	1,300	14.58	89
1968	228,627.37	159,993	216,885	11,742	15.01	782
1969	109,539.76	75,692	102,608	6,932	15.45	449
1970	7,171.68	4,891	6,630	542	15.90	34
1971	68,453.27	46,055	62,432	6,021	16.36	368
1972	11,448.48	7,597	10,298	1,150	16.82	68
1973	19,849.22	12,985	17,602	2,247	17.29	130
1974	26,465.78	17,065	23,133	3,333	17.76	188
1975	6,837.43	4,343	5,887	950	18.24	52
1976	22,298.56	13,946	18,905	3,394	18.73	181
1977	9,956.86	6,129	8,308	1,649	19.22	86
1978	204,760.97	123,962	168,042	36,719	19.73	1,861
1979	135,268.66	80,539	109,178	26,091	20.23	1,290
1980	33,179.70	19,410	26,312	6,868	20.75	331
1981	232,572.87	133,636	181,156	51,417	21.27	2,417
1982	120,079.41	67,725	91,808	28,271	21.80	1,297
1983	132,286.59	90,537	122,731	9,556	19.48	491
1984	64,792.15	43,566	59,058	5,734	20.10	285
1985	67,182.38	44,616	60,481	6,701	20.36	329
1986	34,120.96	22,366	30,319	3,802	20.63	184
1987	322,845.06	207,460	281,231	41,614	21.27	1,956
1988	58,525.31	37,058	50,236	8,289	21.58	384
1989	225,997.37	140,909	191,015	34,982	21.89	1,598
1990	127,653.70	77,843	105,523	22,131	22.55	981
1991	341,398.65	204,634	277,401	63,998	22.89	2,796
1992	126,142.34	74,235	100,632	25,510	23.25	1,097
1993	563,275.74	325,179	440,811	122,465	23.61	5,187

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 369.00 MEASURING AND REGULATING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1						
1994	164,486.72	92,524	125,425	39,062	24.31	1,607
1995	259,486.26	142,873	193,678	65,808	24.69	2,665
1996	85,895.81	46,229	62,668	23,228	25.10	925
1997	214,060.17	112,467	152,460	61,600	25.52	2,414
1998	341,990.62	175,202	237,503	104,488	25.94	4,028
1999	140,777.45	70,220	95,190	45,587	26.38	1,728
2000	142,132.79	69,261	93,890	48,243	26.56	1,816
2001	208,428.82	98,566	133,615	74,814	27.03	2,768
2002	916,154.54	419,599	568,806	347,349	27.51	12,626
2003	515,866.14	229,560	311,190	204,676	27.75	7,376
2004	1,400,539.63	601,112	814,863	585,677	28.26	20,725
2005	61,276.42	25,436	34,481	26,795	28.53	939
2006	981,133.86	392,846	532,539	448,595	28.83	15,560
2007	821,427.97	314,771	426,702	394,726	29.37	13,440
2008	22,669.87	8,329	11,291	11,379	29.70	383
2009	175,346.93	61,827	83,812	91,535	29.83	3,069
2010	479,970.00	161,030	218,291	261,679	30.20	8,665
2011	1,138,741.28	363,486	492,739	646,002	30.39	21,257
2012	2,142,754.45	647,326	877,511	1,265,243	30.61	41,334
2013	757,995.21	215,422	292,025	465,970	30.85	15,104
2014	1,364,966.74	362,399	491,266	873,701	31.12	28,075
2015	1,231,396.18	304,155	412,310	819,086	31.24	26,219
2016	1,638,376.60	374,369	507,492	1,130,885	31.23	36,211
2017	10,727,364.94	2,238,801	3,034,904	7,692,461	31.28	245,923
2018	436,900.79	82,050	111,226	325,675	31.36	10,385
2019	433,575.36	72,364	98,096	335,479	31.20	10,753
2020	512,981.06	74,331	100,763	412,218	30.98	13,306
2021	128,700.30	15,701	21,284	107,416	30.59	3,511
2022	721,036.53	70,517	95,592	625,445	29.97	20,869
2023	5,227,477.09	377,424	511,634	4,715,843	28.90	163,178
2024	1,979,041.96	87,078	118,042	1,861,000	27.16	68,520
2025	2,128,733.65	33,208	45,017	2,083,717	23.61	88,256
	41,212,983.57	10,696,444	14,482,608	26,730,376		918,662

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 29.1 2.23

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 371.00 OTHER EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-R1						
1953	2,697.55	2,698	2,698			
1954	35.04	35	35			
1955	345.70	345	346			
1961	745.66	703	746			
1965	3,384.20	3,073	3,384			
1968	1,613.67	1,423	1,614			
1969	2,697.90	2,355	2,698			
1970	2,489.51	2,150	2,490			
1974	571.69	472	572			
1975	233.33	190	233			
1976	1,201.76	967	1,193	9	6.83	1
1979	17,452.88	13,484	16,636	817	7.96	103
1982	4,455.37	3,289	4,058	397	9.16	43
1986	2,113.56	1,684	2,078	36	10.01	4
1987	253.71	200	247	7	10.29	1
1989	26,215.86	20,147	24,857	1,359	10.92	124
1990	14.69	11	14	1	11.48	
1991	4,808.90	3,574	4,410	399	11.83	34
1992	7,994.19	5,848	7,215	779	12.20	64
1993	12,034.25	8,655	10,678	1,356	12.59	108
1994	35,124.93	24,805	30,604	4,521	13.00	348
1995	17,326.24	12,002	14,808	2,518	13.42	188
1996	17,480.78	11,862	14,635	2,846	13.85	205
1997	107,640.36	71,462	88,169	19,471	14.30	1,362
1998	55,965.28	36,450	44,971	10,994	14.59	754
1999	27,756.79	17,631	21,753	6,004	15.07	398
2000	85,367.04	53,030	65,428	19,939	15.40	1,295
2002	78,056.88	45,913	56,647	21,410	16.28	1,315
2003	45,974.82	26,187	32,309	13,666	16.81	813
2004	24,350.12	13,453	16,598	7,752	17.21	450
2008	110,241.91	52,674	64,988	45,254	18.85	2,401
2011	19,703.26	8,199	10,116	9,587	20.00	479
2013	5,198.56	1,936	2,389	2,810	20.64	136
2014	4,862.28	1,696	2,092	2,770	21.01	132
2015	549,415.83	179,110	220,983	328,433	21.19	15,499
2016	293,236.74	88,147	108,754	184,483	21.52	8,573
2017	626,917.24	172,778	213,171	413,746	21.69	19,075
2018	239,374.97	59,700	73,657	165,718	21.82	7,595

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 371.00 OTHER EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-R1						
2019	4,602.66	1,021	1,260	3,343	21.92	153
2021	159,297.60	25,997	32,074	127,224	21.79	5,839
2023	30,590.84	2,973	3,668	26,923	20.90	1,288
	2,629,844.55	978,329	1,205,276	1,424,569		68,780
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					20.7	2.62

PEOPLES NATURAL GAS COMPANY LLC

ACOUNT 374.02 LAND RIGHTS AND RIGHTS - OF - WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R4						
1876	535.18	535	535			
1881	11.59	12	12			
1885	352.00	352	352			
1887	302.11	302	302			
1888	303.80	304	304			
1889	1,640.73	1,641	1,641			
1890	466.90	467	467			
1891	254.53	255	255			
1892	332.92	333	333			
1894	1,419.69	1,420	1,420			
1895	115.83	116	116			
1896	12.76	13	13			
1897	541.59	542	542			
1898	187.32	187	187			
1899	1,325.25	1,325	1,325			
1900	1,487.01	1,487	1,487			
1901	57,683.41	57,683	57,683			
1902	20,951.96	20,952	20,952			
1903	55,690.50	55,641	55,690			
1904	6,907.11	6,887	6,907			
1905	20,752.66	20,641	20,753			
1906	12,629.15	12,527	12,629			
1907	3,991.47	3,952	3,991			
1908	3,682.91	3,638	3,683			
1909	2,061.23	2,031	2,061			
1910	3,098.35	3,044	3,098			
1911	6,116.69	5,994	6,117			
1912	12,356.15	12,075	12,356			
1913	7,234.15	7,050	7,234			
1914	8,650.32	8,405	8,650			
1915	16,443.73	15,932	16,444			
1916	3,735.88	3,609	3,736			
1917	3,095.78	2,981	3,096			
1918	1,347.79	1,294	1,348			
1919	1,673.56	1,601	1,674			
1920	5,367.89	5,120	5,368			
1921	3,010.45	2,862	3,010			
1922	6,721.09	6,367	6,721			
1923	7,711.85	7,282	7,712			
1924	3,446.87	3,244	3,447			
1925	4,176.63	3,917	4,177			
1926	2,132.54	1,993	2,133			
1927	3,524.17	3,281	3,524			
1928	1,429.17	1,326	1,429			

PEOPLES NATURAL GAS COMPANY LLC

ACOUNT 374.02 LAND RIGHTS AND RIGHTS - OF - WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R4						
1929	3,267.47	3,020	3,257	10	6.06	2
1930	5,668.14	5,219	5,628	40	6.34	6
1931	4,731.61	4,340	4,680	52	6.62	8
1932	2,851.42	2,605	2,809	42	6.91	6
1933	851.21	774	835	16	7.21	2
1934	850.90	771	831	20	7.51	3
1935	908.21	819	883	25	7.82	3
1936	3,346.94	3,007	3,242	105	8.13	13
1937	4,482.64	4,009	4,323	160	8.46	19
1938	3,424.14	3,047	3,286	138	8.80	16
1939	8,945.92	7,923	8,543	403	9.15	44
1940	12,479.23	10,994	11,855	624	9.52	66
1941	25,816.38	22,622	24,394	1,422	9.90	144
1942	6,103.48	5,318	5,734	369	10.30	36
1943	1,364.06	1,181	1,273	91	10.71	8
1944	3,124.90	2,690	2,901	224	11.14	20
1945	16,033.54	13,711	14,785	1,249	11.59	108
1946	8,601.73	7,305	7,877	725	12.06	60
1947	11,568.51	9,754	10,518	1,051	12.55	84
1948	11,280.16	9,437	10,176	1,104	13.07	84
1949	10,146.57	8,422	9,082	1,065	13.60	78
1950	29,692.99	24,441	26,355	3,338	14.15	236
1951	38,944.81	31,779	34,268	4,677	14.72	318
1952	23,874.50	19,305	20,817	3,058	15.31	200
1953	16,201.83	12,978	13,994	2,208	15.92	139
1954	21,913.55	17,383	18,744	3,170	16.54	192
1955	27,482.14	21,580	23,270	4,212	17.18	245
1956	27,191.78	21,128	22,783	4,409	17.84	247
1957	24,312.10	18,690	20,154	4,158	18.50	225
1958	90,945.11	69,153	74,569	16,376	19.17	854
1959	31,221.29	23,471	25,309	5,912	19.86	298
1960	26,962.73	20,037	21,606	5,357	20.55	261
1961	55,962.03	41,097	44,315	11,647	21.25	548
1962	22,170.68	16,087	17,347	4,824	21.95	220
1963	31,787.88	22,780	24,564	7,224	22.67	319
1964	33,329.08	23,580	25,427	7,902	23.40	338
1965	34,496.80	24,092	25,979	8,518	24.13	353
1966	29,075.86	20,033	21,602	7,474	24.88	300
1967	49,650.46	33,743	36,385	13,265	25.63	518
1968	45,755.37	30,662	33,063	12,692	26.39	481
1969	26,644.17	17,595	18,973	7,671	27.17	282
1970	32,271.75	20,997	22,641	9,631	27.95	345
1971	32,255.69	20,668	22,287	9,969	28.74	347
1972	24,125.77	15,217	16,409	7,717	29.54	261

PEOPLES NATURAL GAS COMPANY LLC

ACOUNT 374.02 LAND RIGHTS AND RIGHTS - OF - WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R4						
1973	45,249.32	28,083	30,282	14,967	30.35	493
1974	41,949.25	25,605	27,610	14,339	31.17	460
1975	26,525.73	15,915	17,161	9,365	32.00	293
1976	18,098.73	10,669	11,505	6,594	32.84	201
1977	27,541.25	15,946	17,195	10,346	33.68	307
1978	39,100.45	22,219	23,959	15,141	34.54	438
1979	58,508.29	32,618	35,172	23,336	35.40	659
1980	59,975.41	32,784	35,351	24,624	36.27	679
1981	77,970.45	41,763	45,034	32,936	37.15	887
1982	63,421.48	33,272	35,878	27,543	38.03	724
1983	69,166.25	37,405	40,334	28,832	35.88	804
1984	47,160.28	24,901	26,851	20,309	36.88	551
1985	52,608.15	27,314	29,453	23,155	37.27	621
1986	55,195.81	27,946	30,135	25,061	38.27	655
1987	63,004.82	31,087	33,521	29,484	39.27	751
1988	79,849.02	38,367	41,372	38,477	40.27	955
1989	65,470.12	30,850	33,266	32,204	40.68	792
1990	101,734.15	46,615	50,266	51,468	41.68	1,235
1991	72,361.59	32,215	34,738	37,624	42.68	882
1992	107,686.91	46,542	50,187	57,500	43.68	1,316
1993	91,020.76	38,156	41,144	49,877	44.68	1,116
1994	102,018.79	41,766	45,037	56,982	45.08	1,264
1995	64,390.93	25,518	27,516	36,875	46.08	800
1996	37,560.34	14,393	15,520	22,040	47.08	468
1997	139,492.30	51,626	55,669	83,823	48.08	1,743
1998	41,423.54	14,788	15,946	25,478	49.08	519
1999	86,614.37	29,787	32,120	54,494	50.08	1,088
2000	101,982.41	33,736	36,378	65,604	51.08	1,284
2001	362,660.06	116,087	125,178	237,482	51.51	4,610
2002	217,151.26	66,644	71,863	145,288	52.51	2,767
2003	479,909.66	140,949	151,987	327,923	53.51	6,128
2004	191,941.78	53,840	58,056	133,886	54.51	2,456
2005	240,384.90	64,255	69,287	171,098	55.51	3,082
2006	361,866.00	91,950	99,150	262,716	56.51	4,649
2007	75,344.24	18,150	19,571	55,773	57.51	970
2008	72,502.45	16,509	17,802	54,700	58.51	935
2009	32,891.55	7,055	7,608	25,284	59.51	425
2010	1,368.29	275	297	1,071	60.51	18
2011	215,289.34	40,496	43,667	171,622	61.51	2,790
2012	101,513.39	17,755	19,145	82,368	62.51	1,318
2013	30,336.74	4,905	5,289	25,048	63.51	394
2015	12,300.58	1,677	1,808	10,493	64.94	162
2016	107,526.45	13,226	14,262	93,264	65.94	1,414

PEOPLES NATURAL GAS COMPANY LLC

ACOUNT 374.02 LAND RIGHTS AND RIGHTS - OF - WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R4						
2017	162,500.44	17,826	19,222	143,278	66.94	2,140
2018	2,388.00	230	248	2,140	67.94	31
2020	12,955.85	904	975	11,981	69.94	171
	5,734,940.08	2,508,703	2,686,702	3,048,238		64,782
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					47.1	1.13

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.01 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2						
1903	60.79	61	61			
1906	147.41	147	147			
1907	420.65	416	421			
1908	16.78	17	17			
1909	322.40	317	322			
1910	252.77	247	253			
1911	539.73	526	540			
1912	485.35	471	485			
1913	1,550.79	1,498	1,551			
1914	1,594.44	1,534	1,594			
1915	1,829.07	1,752	1,829			
1917	1,285.84	1,221	1,286			
1918	2,439.09	2,304	2,439			
1919	740.97	697	741			
1920	322.94	302	323			
1921	1,600.45	1,491	1,600			
1922	1,253.40	1,162	1,253			
1923	561.76	518	562			
1924	587.29	539	587			
1925	4,311.30	3,940	4,311			
1926	1,226.27	1,115	1,226			
1927	3,388.31	3,066	3,388			
1928	4,727.72	4,257	4,717	11	6.47	2
1929	2,843.14	2,547	2,822	21	6.76	3
1930	3,811.23	3,398	3,765	46	7.05	7
1931	666.42	591	655	11	7.35	1
1932	1,829.82	1,615	1,789	41	7.64	5
1933	371.41	326	361	10	7.93	1
1934	300.87	263	291	10	8.23	1
1935	1,657.69	1,440	1,596	62	8.53	7
1936	3,547.27	3,065	3,396	151	8.83	17
1937	3,996.69	3,435	3,806	191	9.14	21
1938	2,168.87	1,854	2,054	115	9.45	12
1939	1,689.74	1,436	1,591	99	9.76	10
1940	1,703.36	1,439	1,594	109	10.08	11
1941	2,070.71	1,739	1,927	144	10.40	14
1942	10,579.32	8,833	9,787	792	10.73	74
1943	2,061.08	1,710	1,895	166	11.06	15
1944	6,428.76	5,301	5,873	556	11.40	49
1945	1,393.31	1,142	1,265	128	11.74	11
1946	10,527.24	8,569	9,494	1,033	12.09	85
1947	10,043.39	8,120	8,997	1,046	12.45	84
1948	25,411.13	20,399	22,602	2,809	12.82	219
1949	30,171.38	24,049	26,646	3,525	13.19	267

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.01 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2						
1950	33,531.22	26,526	29,390	4,141	13.58	305
1951	48,872.97	38,369	42,512	6,361	13.97	455
1952	80,959.98	63,074	69,885	11,075	14.36	771
1953	69,416.36	53,643	59,436	9,980	14.77	676
1954	22,075.66	16,917	18,744	3,332	15.19	219
1955	48,612.24	36,938	40,927	7,685	15.61	492
1956	36,705.57	27,648	30,634	6,072	16.04	379
1957	40,895.91	30,527	33,824	7,072	16.48	429
1958	76,608.35	56,655	62,773	13,835	16.93	817
1959	71,957.24	52,706	58,398	13,559	17.39	780
1960	19,537.54	14,169	15,699	3,839	17.86	215
1961	64,012.04	45,951	50,913	13,099	18.34	714
1962	9,572.24	6,799	7,533	2,039	18.83	108
1963	35,741.81	25,118	27,830	7,912	19.32	410
1964	35,589.59	24,732	27,403	8,187	19.83	413
1965	36,834.38	25,308	28,041	8,793	20.34	432
1966	35,284.85	23,956	26,543	8,742	20.87	419
1967	21,111.99	14,161	15,690	5,422	21.40	253
1968	19,237.29	12,744	14,120	5,117	21.94	233
1969	17,403.46	11,382	12,611	4,792	22.49	213
1970	21,973.84	14,181	15,712	6,262	23.05	272
1971	24,921.97	15,866	17,579	7,343	23.62	311
1972	34,243.85	21,495	23,816	10,428	24.20	431
1973	43,288.97	26,779	29,671	13,618	24.79	549
1974	53,402.59	32,551	36,066	17,337	25.38	683
1975	72,482.08	43,512	48,211	24,271	25.98	934
1976	25,068.26	14,810	16,409	8,659	26.60	326
1977	10,310.43	5,993	6,640	3,670	27.22	135
1978	13,733.97	7,852	8,700	5,034	27.84	181
1979	62,882.17	35,330	39,145	23,737	28.48	833
1980	48,258.26	26,639	29,516	18,742	29.12	644
1981	111,140.99	60,222	66,725	44,416	29.78	1,491
1982	25,204.07	13,401	14,848	10,356	30.44	340
1983	179,421.86	109,160	120,948	58,474	27.19	2,151
1984	51,832.05	31,001	34,349	17,483	27.72	631
1985	45,124.48	26,515	29,378	15,746	28.25	557
1986	31,839.54	18,371	20,355	11,485	28.78	399
1987	27,853.35	15,768	17,471	10,382	29.32	354
1988	38,368.31	21,294	23,594	14,774	29.87	495
1989	63,602.98	34,587	38,322	25,281	30.41	831
1990	33,914.34	18,053	20,003	13,911	30.97	449
1991	32,038.01	16,679	18,480	13,558	31.54	430
1992	12,966.17	6,596	7,308	5,658	32.11	176
1993	40,904.26	20,313	22,507	18,397	32.69	563

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.01 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2						
1994	34,969.10	16,939	18,768	16,201	33.26	487
1995	67,207.27	31,715	35,140	32,067	33.85	947
1996	11,647.71	5,384	5,965	5,683	34.04	167
1997	22,359.56	10,044	11,129	11,231	34.64	324
1998	41,703.22	18,183	20,147	21,556	35.25	612
1999	35,240.05	14,892	16,500	18,740	35.86	523
2000	44,663.96	18,268	20,241	24,423	36.48	669
2002	2,440.48	931	1,032	1,408	37.73	37
2003	2,132.20	788	873	1,259	37.99	33
2004	46,564.46	16,526	18,311	28,253	38.63	731
2005	65,611.98	22,321	24,731	40,881	39.27	1,041
2006	175,564.69	57,111	63,278	112,287	39.92	2,813
2007	5,743.89	1,793	1,987	3,757	40.23	93
2008	280,847.70	83,328	92,326	188,522	40.89	4,610
2009	2,096.82	589	653	1,444	41.55	35
2010	47,412.36	12,654	14,020	33,392	41.89	797
2011	53,362.56	13,383	14,828	38,535	42.57	905
2012	56,268.13	13,268	14,701	41,567	42.93	968
2013	167,111.30	36,848	40,827	126,284	43.31	2,916
2014	22,391.65	4,559	5,051	17,341	44.00	394
2015	436,586.24	81,904	90,749	345,837	44.39	7,791
2017	6,465.31	998	1,106	5,359	45.22	119
2018	146,934.69	20,248	22,435	124,500	45.38	2,743
2019	17,099.98	2,062	2,285	14,815	45.56	325
2023	79,268.90	3,726	4,128	75,141	45.60	1,648
	3,953,370.05	1,861,622	2,061,729	1,891,641		55,543

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 34.1 1.40

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MINOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2						
1928	674.17	607	674			
1939	488.17	415	465	23	9.76	2
1940	123.50	104	116	8	10.08	1
1941	132.11	111	124	8	10.40	1
1942	1,264.96	1,056	1,182	83	10.73	8
1943	140.00	116	130	10	11.06	1
1949	954.21	761	852	102	13.19	8
1952	1,195.33	931	1,043	152	14.36	11
1953	887.37	686	768	119	14.77	8
1955	3,586.28	2,725	3,051	535	15.61	34
1956	1,642.45	1,237	1,385	257	16.04	16
1957	599.42	447	501	98	16.48	6
1958	1,541.06	1,140	1,277	264	16.93	16
1959	113.77	83	93	21	17.39	1
1960	1,611.87	1,169	1,309	303	17.86	17
1962	1,581.69	1,123	1,258	324	18.83	17
1963	790.86	556	623	168	19.32	9
1965	1,487.12	1,022	1,144	343	20.34	17
1967	2,579.81	1,730	1,937	643	21.40	30
1968	337.93	224	251	87	21.94	4
1970	4,106.41	2,650	2,967	1,139	23.05	49
1971	251.50	160	179	72	23.62	3
1972	1,984.00	1,245	1,394	590	24.20	24
1976	3,842.94	2,270	2,542	1,301	26.60	49
1979	1,163.04	653	731	432	28.48	15
1980	14,273.99	7,879	8,823	5,451	29.12	187
1982	2,997.89	1,594	1,785	1,213	30.44	40
1986	3,142.75	1,813	2,030	1,113	28.78	39
1987	1,943.61	1,100	1,232	712	29.32	24
1988	3,243.38	1,800	2,016	1,227	29.87	41
1990	168.09	89	100	68	30.97	2
1997	4,333.64	1,947	2,180	2,154	34.64	62
1999	21,270.29	8,989	10,065	11,205	35.86	312
2012	25,400.00	5,989	6,707	18,693	42.93	435
2021	3,388.02	287	321	3,067	46.00	67
	113,241.63	54,708	61,255	51,987		1,556

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 33.4 1.37

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PITTSBURGH DIV AND CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2035						
1905	11,372.62	10,282	11,092	281	7.98	35
1919	1,728.70	1,547	1,669	60	8.47	7
1922	362.73	324	350	13	8.56	2
1927	687.91	612	660	28	8.68	3
1936	1,564.84	1,380	1,489	76	8.87	9
1943	823.40	720	777	47	9.00	5
1945	539.24	471	508	31	9.03	3
1948	225.92	196	211	14	9.08	2
1949	658.20	572	617	41	9.09	5
1950	1,185,284.95	1,027,630	1,108,577	76,708	9.11	8,420
1951	1,147.61	994	1,072	75	9.12	8
1952	3,671.63	3,174	3,424	248	9.13	27
1953	858.01	741	799	59	9.15	6
1958	856.10	733	791	65	9.21	7
1960	1,114.67	951	1,026	89	9.23	10
1961	1,006.85	857	925	82	9.25	9
1962	1,045.85	888	958	88	9.26	10
1963	637.26	540	583	55	9.27	6
1964	168,005.16	142,132	153,328	14,677	9.28	1,582
1965	18,358.84	15,498	16,719	1,640	9.29	177
1966	4,566.62	3,846	4,149	418	9.30	45
1967	3,761.56	3,161	3,410	352	9.31	38
1968	10,822.96	9,072	9,787	1,036	9.32	111
1969	30.96	26	28	3	9.33	
1970	2,210.90	1,844	1,989	222	9.34	24
1971	21,096.88	17,547	18,929	2,168	9.35	232
1972	11,925.41	9,893	10,672	1,253	9.35	134
1973	11,316.60	9,361	10,098	1,218	9.36	130
1974	1,333.07	1,099	1,186	148	9.37	16
1975	6,803.33	5,593	6,034	770	9.38	82
1976	2,212.87	1,813	1,956	257	9.39	27
1977	5,597.58	4,572	4,932	665	9.39	71
1979	12,304.84	9,979	10,765	1,540	9.41	164
1981	2,984.28	2,402	2,591	393	9.42	42
1982	69,886.92	56,019	60,432	9,455	9.43	1,003
1983	34,297.20	28,110	30,324	3,973	9.30	427
1984	12,808.51	10,408	11,228	1,581	9.51	166
1985	58,848.99	47,609	51,359	7,490	9.50	788
1986	226,549.57	183,188	197,618	28,932	9.29	3,114
1987	42,890.89	34,450	37,164	5,727	9.37	611
1988	242,748.09	193,519	208,763	33,986	9.48	3,585
1989	20,585.56	16,343	17,630	2,955	9.41	314

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PITTSBURGH DIV AND CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2035						
1990	883,670.32	697,746	752,708	130,963	9.39	13,947
1991	7,764.52	6,090	6,570	1,195	9.42	127
1992	9,835.30	7,652	8,255	1,581	9.49	167
1993	27,407.36	21,213	22,884	4,523	9.42	480
1994	47,309.63	36,372	39,237	8,073	9.40	859
1995	24,085.53	18,360	19,806	4,279	9.43	454
1996	19,885.61	15,006	16,188	3,698	9.51	389
1997	47,280.57	35,394	38,182	9,099	9.49	959
1998	366.25	271	292	74	9.51	8
1999	140.48	103	111	29	9.46	3
2000	166,545.37	121,112	130,652	35,893	9.47	3,790
2001	1,298,658.73	935,294	1,008,967	289,691	9.42	30,753
2002	182,754.71	130,012	140,253	42,502	9.43	4,507
2003	851,419.07	596,760	643,767	207,652	9.50	21,858
2004	688,506.49	475,483	512,937	175,570	9.52	18,442
2005	84,141.19	57,250	61,760	22,382	9.51	2,354
2006	640,368.99	428,983	462,774	177,595	9.49	18,714
2007	23,931.23	15,766	17,008	6,923	9.45	733
2008	160,043.74	103,260	111,394	48,650	9.49	5,126
2009	164,475.83	103,965	112,154	52,321	9.46	5,531
2011	584,996.68	350,940	378,584	206,413	9.50	21,728
2012	266,454.64	155,343	167,579	98,875	9.48	10,430
2013	3,405.54	1,919	2,070	1,335	9.49	141
2014	62,220.10	33,736	36,393	25,827	9.50	2,719
2016	250,598.55	123,796	133,547	117,051	9.48	12,347
2017	189,804.01	88,316	95,273	94,531	9.48	9,972
2018	1,684,559.02	730,425	787,961	896,598	9.47	94,678
2019	773,818.22	308,057	332,323	441,496	9.45	46,719
2020	29,968.34	10,714	11,558	18,410	9.43	1,952
2021	405,832.14	126,092	136,024	269,808	9.43	28,612
	11,785,782.24	7,595,526	8,193,827	3,591,955		379,956
CENT DIV AND GREENSBURG CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2028						
1949	2,254.29	2,161	2,254			
1959	2,018.75	1,926	2,019			
1963	416,061.22	396,020	416,061			
1964	1,488.12	1,416	1,488			

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CENT DIV AND GREENSBURG CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2028						
1965	633.12	602	633			
1966	945.50	898	946			
1967	3,993.38	3,790	3,993			
1968	627.25	595	627			
1969	6,459.16	6,121	6,459			
1971	10,512.52	9,947	10,513			
1972	21,937.51	20,739	21,938			
1973	3,605.55	3,406	3,606			
1974	3,346.71	3,158	3,347			
1976	896.03	844	896			
1977	1,190.58	1,120	1,191			
1978	1,558.37	1,465	1,558			
1979	4,676.51	4,390	4,677			
1980	701.25	657	701			
1981	1,836.48	1,720	1,836			
1982	8,075.65	7,551	8,061	15	2.73	5
1983	58,833.48	55,186	58,833			
1984	16,988.81	15,908	16,983	6	2.80	2
1985	88,217.16	82,730	88,217			
1986	12,298.79	11,490	12,267	32	2.76	12
1987	8,752.61	8,169	8,721	31	2.73	11
1988	54,559.41	50,806	54,242	318	2.75	116
1989	28,883.46	26,908	28,728	156	2.66	59
1990	18,133.87	16,812	17,949	185	2.77	67
1991	117,102.96	108,297	115,621	1,482	2.79	531
1992	14,613.72	13,509	14,423	191	2.72	70
1993	20,989.31	19,361	20,670	319	2.71	118
1994	184,541.37	169,557	181,023	3,518	2.76	1,275
1995	32,961.81	30,213	32,256	706	2.75	257
1996	53,332.17	48,826	52,128	1,204	2.70	446
1997	38,638.52	35,258	37,642	996	2.71	368
1998	65,924.15	60,004	64,062	1,862	2.69	692
2002	8,171.21	7,314	7,809	363	2.72	133
2003	301,470.03	268,308	286,452	15,018	2.75	5,461
2005	142,162.59	125,231	133,700	8,463	2.74	3,089
2007	40,286.18	35,069	37,441	2,846	2.71	1,050
2014	37,163.20	29,894	31,916	5,248	2.74	1,915
2017	6,690.17	5,023	5,363	1,327	2.74	484
2018	193,225.67	140,359	149,851	43,375	2.73	15,888

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CENT DIV AND GREENSBURG CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2028						
2019	101,888.17	70,873	75,666	26,222	2.73	9,605
2020	272,116.26	178,998	191,103	81,014	2.73	29,675
2021	13,380.55	8,143	8,694	4,687	2.73	1,717
	2,424,143.58	2,090,772	2,224,560	199,584		73,046
JOHNSTOWN DIVISION AND CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2031						
1943	86,217.15	79,459	85,378	839	5.49	153
1966	309,934.42	279,084	299,874	10,060	5.60	1,796
1967	3,960.43	3,561	3,826	134	5.60	24
1971	2,470.65	2,208	2,372	98	5.61	17
1972	1,660.10	1,481	1,591	69	5.61	12
1975	1,011.74	898	965	47	5.62	8
1976	3,743.65	3,314	3,561	183	5.63	33
1978	1,817.17	1,602	1,721	96	5.63	17
1979	1,854.90	1,632	1,754	101	5.63	18
1980	2,687.27	2,358	2,534	154	5.64	27
1981	3,395.73	2,972	3,193	202	5.64	36
1984	3,623.56	3,184	3,421	202	5.70	35
1985	10,093.64	8,856	9,516	578	5.62	103
1986	8,225.83	7,200	7,736	489	5.59	87
1987	56,777.07	49,515	53,204	3,573	5.61	637
1988	100,488.66	87,214	93,711	6,778	5.67	1,195
1989	35,766.78	30,988	33,296	2,470	5.59	442
1991	54,180.06	46,579	50,049	4,131	5.59	739
1993	25,219.28	21,472	23,072	2,148	5.63	382
1994	26,778.07	22,678	24,367	2,411	5.65	427
1995	17,144.69	14,470	15,548	1,597	5.59	286
1996	27,659.46	23,140	24,864	2,796	5.71	490
1998	46,066.15	38,161	41,004	5,062	5.64	898
1999	7,533.96	6,190	6,651	883	5.70	155
2000	21,157.15	17,309	18,598	2,559	5.61	456
2002	46,973.12	37,785	40,600	6,373	5.65	1,128
2005	6,850.34	5,354	5,753	1,097	5.66	194
2006	2,345.88	1,811	1,946	400	5.69	70
2007	26,062.76	19,881	21,362	4,701	5.67	829
2009	70,413.57	52,176	56,063	14,351	5.68	2,527
2012	5,182.49	3,632	3,903	1,280	5.65	227

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
JOHNSTOWN DIVISION AND CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2031						
2016	15,558.63	9,643	10,361	5,197	5.67	917
2018	92,094.60	51,683	55,533	36,562	5.67	6,448
2019	245,994.68	129,000	138,610	107,385	5.67	18,939
2020	10,676.47	5,140	5,523	5,154	5.66	911
2021	73,659.09	31,614	33,969	39,690	5.65	7,025
2022	1,721.74	629	676	1,046	5.65	185
	1,457,000.94	1,103,873	1,186,105	270,896		47,873
ALTOONA DIVISION, CITY PLANT H.Q. AND WAREHOUSE						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2032						
1924	398.72	367	396	2	6.20	
1945	468.89	426	460	9	6.41	1
1948	2,757.88	2,497	2,696	62	6.43	10
1950	22,587.40	20,412	22,038	550	6.44	85
1951	5,834.93	5,267	5,686	148	6.45	23
1952	136,505.03	123,091	132,894	3,611	6.46	559
1953	22,203.52	20,002	21,595	608	6.46	94
1958	784.34	702	758	26	6.49	4
1961	2,246.31	2,004	2,164	83	6.51	13
1963	2,771.33	2,465	2,661	110	6.52	17
1966	7,911.99	7,003	7,561	351	6.54	54
1968	965.12	851	919	46	6.55	7
1969	508.59	448	484	25	6.55	4
1970	0.68	1	1			
1971	3,237.59	2,840	3,066	171	6.56	26
1972	2,380.35	2,084	2,250	130	6.56	20
1973	6,287.79	5,494	5,932	356	6.57	54
1976	2,873.70	2,494	2,693	181	6.58	28
1977	1,463.92	1,267	1,368	96	6.58	15
1978	11,775.48	10,168	10,978	798	6.59	121
1979	8,443.70	7,273	7,852	591	6.59	90
1981	14,452.93	12,378	13,364	1,089	6.60	165
1982	9,460.00	8,078	8,721	739	6.60	112
1983	4,384.53	3,797	4,099	285	6.53	44
1984	26,681.21	23,002	24,834	1,847	6.60	280
1985	1,237.67	1,061	1,146	92	6.70	14
1986	3,138.48	2,685	2,899	240	6.62	36
1989	767,933.34	648,596	700,253	67,680	6.67	10,147

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ALTOONA DIVISION, CITY PLANT H.Q. AND WAREHOUSE						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2032						
1990	32,056.55	27,008	29,159	2,898	6.59	440
1994	11,170.59	9,216	9,950	1,221	6.63	184
1995	361,672.63	296,499	320,113	41,559	6.65	6,249
1997	13,024.64	10,560	11,401	1,624	6.59	246
1998	44,209.27	35,540	38,371	5,839	6.65	878
2000	1,419.76	1,126	1,216	204	6.60	31
2002	15,220.22	11,855	12,799	2,421	6.60	367
2003	11,877.47	9,143	9,871	2,006	6.65	302
2004	3,619.61	2,761	2,981	639	6.60	97
2005	6,846.60	5,158	5,569	1,278	6.63	193
2008	145,008.02	104,812	113,160	31,848	6.62	4,811
2009	115,301.64	81,876	88,397	26,905	6.63	4,058
2012	38,902.94	25,929	27,994	10,909	6.63	1,645
2017	123,304.43	68,360	73,804	49,500	6.63	7,466
2019	115,333.45	56,006	60,467	54,867	6.62	8,288
	2,108,663.24	1,662,602	1,795,018	313,645		47,278
WEST DIV OFFICE & GIB CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2030						
1960	73,732.46	68,006	72,937	795	4.63	172
1961	19,209.78	17,701	18,985	225	4.63	49
1962	2,503.24	2,304	2,471	32	4.64	7
1970	865.53	789	846	19	4.65	4
1972	1,675.53	1,523	1,633	42	4.66	9
1973	744.64	676	725	20	4.66	4
1974	8,484.99	7,691	8,249	236	4.66	51
1975	1,570.45	1,421	1,524	46	4.66	10
1976	900.43	813	872	28	4.67	6
1977	414.58	374	401	13	4.67	3
1978	2,090.81	1,882	2,018	72	4.67	15
1981	7,076.07	6,332	6,791	285	4.67	61
1982	6,912.16	6,170	6,617	295	4.68	63
1983	7,896.76	7,106	7,621	275	4.70	59
1984	8,335.12	7,495	8,038	297	4.62	64
1985	175.39	157	168	7	4.59	2
1986	4,516.22	4,042	4,335	181	4.61	39
1987	15,665.18	13,961	14,973	692	4.67	148
1988	16,721.77	14,887	15,967	755	4.59	164

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WEST DIV OFFICE & GIB CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2030						
1989	145,195.50	128,425	137,738	7,458	4.73	1,577
1993	6,260.72	5,472	5,869	392	4.65	84
1994	7,912.06	6,874	7,372	540	4.72	114
1995	8,714.79	7,540	8,087	628	4.71	133
1997	865.03	743	797	68	4.64	15
1998	541,900.15	462,187	495,702	46,198	4.70	9,829
1999	47,255.06	40,068	42,973	4,282	4.71	909
2000	12,638.15	10,659	11,432	1,206	4.69	257
2002	34,664.38	28,855	30,947	3,717	4.68	794
2003	39,205.89	32,364	34,711	4,495	4.70	956
2004	26,177.64	21,416	22,969	3,209	4.72	680
2007	9,777.95	7,780	8,344	1,434	4.69	306
2008	90,708.42	71,351	76,525	14,183	4.68	3,031
2009	65,227.36	50,558	54,224	11,003	4.71	2,336
2013	87,450.80	63,209	67,793	19,658	4.70	4,183
2014	46,206.22	32,594	34,958	11,249	4.70	2,393
2017	32,305.78	20,576	22,068	10,238	4.70	2,178
2018	87,108.93	52,858	56,691	30,418	4.70	6,472
2019	101,802.54	58,150	62,367	39,436	4.69	8,409
2020	17,489.71	9,238	9,908	7,582	4.69	1,617
	1,588,358.19	1,274,247	1,366,648	221,711		47,203
HOPEWELL CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2031						
1961	231,065.41	209,435	224,977	6,088	5.58	1,091
1962	6,955.10	6,297	6,764	191	5.58	34
1963	1,633.24	1,477	1,587	47	5.59	8
1965	1,060.32	956	1,027	33	5.59	6
1968	700.88	629	676	25	5.60	4
1969	954.83	856	920	35	5.61	6
1971	564.66	505	542	22	5.61	4
1974	9,273.55	8,242	8,854	420	5.62	75
1975	9,654.54	8,565	9,201	454	5.62	81
1976	1,035.93	917	985	51	5.63	9
1978	915.63	807	867	49	5.63	9
1979	10,473.67	9,212	9,896	578	5.63	103
1980	13,161.15	11,546	12,403	758	5.64	134
1981	1,262.87	1,105	1,187	76	5.64	13

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
HOPEWELL CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2031						
1982	1,112.27	971	1,043	69	5.64	12
1984	12,241.61	10,755	11,553	688	5.70	121
1985	20,843.67	18,288	19,645	1,199	5.62	213
1986	10,874.17	9,518	10,224	650	5.59	116
1987	8,390.33	7,317	7,860	530	5.61	94
1988	72,638.75	63,043	67,721	4,917	5.67	867
1989	371.19	322	346	25	5.59	4
1990	38,725.18	33,443	35,925	2,800	5.57	503
1991	17,369.86	14,933	16,041	1,329	5.59	238
1992	13,542.58	11,572	12,431	1,112	5.66	196
1993	10,054.49	8,560	9,195	859	5.63	153
1994	10,476.98	8,873	9,531	946	5.65	167
1995	11,168.17	9,426	10,126	1,043	5.59	187
1998	69,389.93	57,483	61,749	7,641	5.64	1,355
2000	45,696.87	37,385	40,159	5,538	5.61	987
2001	35,898.38	29,078	31,236	4,663	5.69	820
2002	13,611.34	10,949	11,762	1,850	5.65	327
2003	33,494.40	26,682	28,662	4,832	5.68	851
2005	53,312.09	41,669	44,761	8,551	5.66	1,511
2006	187,700.51	144,886	155,638	32,063	5.69	5,635
2007	24,130.83	18,407	19,773	4,358	5.67	769
2008	11,359.64	8,544	9,178	2,182	5.69	383
2009	14,623.65	10,836	11,640	2,984	5.68	525
2014	12,299.12	8,178	8,785	3,514	5.67	620
2018	216,733.76	121,631	130,657	86,077	5.67	15,181
2019	15,081.80	7,909	8,496	6,586	5.67	1,162
2020	97,045.28	46,718	50,185	46,860	5.66	8,279
2021	68,053.79	29,209	31,377	36,677	5.65	6,492
	1,414,952.42	1,057,134	1,135,584	279,368		49,345
SOUTHERN DIV AND MON CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2027						
1947	54,715.00	53,275	54,715			
1948	26,500.46	25,797	26,500			
1949	1,214.76	1,182	1,215			
1953	1,845.38	1,794	1,845			
1954	2,268.67	2,205	2,269			
1959	63,343.83	61,464	63,344			

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SOUTHERN DIV AND MON CITY PLANT H.Q.						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2027						
1960	1,145.84	1,111	1,146			
1961	5,394.95	5,231	5,395			
1962	3,278.82	3,178	3,279			
1964	461.94	447	462			
1966	1,635.44	1,582	1,635			
1969	1,518.02	1,466	1,518			
1971	11,477.16	11,076	11,477			
1972	5,999.24	5,786	5,999			
1973	2,331.05	2,247	2,331			
1975	1,218.17	1,173	1,218			
1978	2,335.74	2,244	2,336			
1979	8,518.10	8,178	8,518			
1981	1,829.53	1,754	1,830			
1982	11,535.10	11,048	11,535			
1983	19,524.46	18,726	19,524			
1984	15,490.20	14,888	15,490			
1985	107,393.21	102,883	107,393			
1986	55,043.78	52,715	55,044			
1987	80,503.03	76,977	80,503			
1988	21,197.79	20,214	21,198			
1989	14,456.06	13,782	14,456			
1990	3,136.26	2,985	3,136			
1992	42,302.85	40,230	42,303			
1993	3,698.95	3,507	3,699			
1994	5,040.03	4,772	5,040			
1996	9,296.73	8,784	9,297			
1997	1,550.62	1,459	1,551			
1998	62,995.21	59,222	62,995			
2000	12,888.72	12,041	12,889			
2001	7,460.55	6,965	7,461			
2002	352,256.13	327,598	351,525	732	1.75	418
2008	19,172.22	17,429	18,702	470	1.72	273
2009	28,353.41	25,617	27,488	865	1.74	497
2019	49,636.79	38,811	41,646	7,991	1.74	4,593
2020	1.00	1	1			
2021	60,343.62	42,802	45,928	14,415	1.74	8,284
	1,180,308.82	1,094,646	1,155,835	24,474		14,065

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
GROVE CITY - LEASED						
FULLY ACCRUED						
1982	20,774.82	20,775	20,775			
1985	335.13	335	335			
1987	6,381.82	6,382	6,382			
1989	1,068.50	1,068	1,069			
1997	8,903.57	8,904	8,904			
	37,463.84	37,464	37,464			
NORTHERN DIVISION H.Q. - KISKI						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2037						
1977	556,725.14	438,159	471,816	84,910	11.23	7,561
1978	6,323.48	4,957	5,338	986	11.24	88
1979	9,071.17	7,081	7,625	1,446	11.25	129
1981	15,671.34	12,124	13,055	2,616	11.27	232
1983	3,887.85	3,072	3,308	580	11.22	52
1984	8,269.90	6,516	7,017	1,253	11.10	113
1985	29,903.49	23,349	25,143	4,761	11.30	421
1986	11,620.84	9,032	9,726	1,895	11.25	168
1987	22,536.33	17,412	18,749	3,787	11.26	336
1988	6,284.80	4,823	5,193	1,091	11.29	97
1990	1,832.48	1,389	1,496	337	11.26	30
1991	71.24	54	58	13	11.20	1
1994	22,272.80	16,357	17,613	4,659	11.30	412
1997	153,639.24	109,806	118,241	35,399	11.28	3,138
1998	9,982.41	7,046	7,587	2,395	11.36	211
1999	2,666.85	1,862	2,005	662	11.35	58
2002	36,962.35	24,835	26,743	10,220	11.35	900
2008	370,603.69	223,771	240,960	129,644	11.32	11,453
2012	5,805.20	3,131	3,372	2,434	11.32	215
2013	463.20	241	260	204	11.33	18
2017	9,366.44	3,949	4,252	5,114	11.32	452
2019	51,147.92	18,219	19,618	31,529	11.29	2,793

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 375.02 STRUCTURES AND IMPROVEMENTS - OTHER - MAJOR STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NORTHERN DIVISION H.Q. - KISKI						
INTERIM SURVIVOR CURVE.. IOWA 85-R1						
PROBABLE RETIREMENT YEAR.. 6-2037						
2020	35,373.81	11,235	12,098	23,276	11.28	2,063
2021	899,898.32	246,662	265,609	634,289	11.25	56,381
2022	1,802.42	405	436	1,366	11.20	122
	2,272,182.71	1,195,487	1,287,317	984,866		87,444
	24,268,855.98	17,111,751	18,382,357	5,886,499		746,210
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					7.9	3.07

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.01 MAINS - LOW PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 73-S0.5						
1899	12.22	11	11	1	6.80	
1900	639,578.72	577,111	595,577	44,002	7.13	6,171
1901	27,315.73	24,521	25,306	2,010	7.47	269
1902	88,801.16	79,313	81,851	6,950	7.80	891
1903	63,033.47	56,005	57,797	5,236	8.14	643
1904	36,640.04	32,389	33,425	3,215	8.47	380
1905	48,141.86	42,332	43,686	4,456	8.81	506
1906	53,352.17	46,665	48,158	5,194	9.15	568
1907	43,235.87	37,621	38,825	4,411	9.48	465
1908	30,306.89	26,230	27,069	3,238	9.82	330
1909	17,764.76	15,292	15,781	1,984	10.16	195
1910	15,693.45	13,438	13,868	1,825	10.49	174
1911	29,596.52	25,206	26,013	3,584	10.83	331
1912	21,337.33	18,073	18,651	2,686	11.17	240
1913	127,228.25	107,168	110,597	16,631	11.51	1,445
1914	123,954.28	103,833	107,155	16,799	11.85	1,418
1915	30,336.82	25,267	26,075	4,262	12.20	349
1916	47,070.91	38,985	40,232	6,839	12.54	545
1917	30,906.90	25,449	26,263	4,644	12.89	360
1918	35,350.81	28,944	29,870	5,481	13.23	414
1919	27,059.26	22,025	22,730	4,329	13.58	319
1920	1,598.11	1,293	1,334	264	13.93	19
1921	35,728.69	28,739	29,659	6,070	14.28	425
1922	40,972.36	32,761	33,809	7,163	14.63	490
1923	65,130.11	51,765	53,421	11,709	14.98	782
1924	100,026.72	79,007	81,535	18,492	15.34	1,205
1925	197,853.29	155,329	160,299	37,554	15.69	2,393
1926	138,414.86	107,983	111,438	26,977	16.05	1,681
1927	129,993.12	100,772	103,996	25,997	16.41	1,584
1928	160,752.00	123,822	127,784	32,968	16.77	1,966
1929	121,980.11	93,340	96,327	25,653	17.14	1,497
1930	111,106.84	84,471	87,174	23,933	17.50	1,368
1931	116,846.70	88,244	91,068	25,779	17.87	1,443
1932	95,722.36	71,805	74,103	21,619	18.24	1,185
1933	34,196.70	25,479	26,294	7,903	18.61	425
1934	24,295.09	17,978	18,553	5,742	18.98	303
1935	43,525.87	31,982	33,005	10,521	19.36	543
1936	60,237.81	43,957	45,363	14,875	19.73	754
1937	138,494.70	100,342	103,553	34,942	20.11	1,738
1938	118,896.83	85,525	88,262	30,635	20.49	1,495
1939	203,385.52	145,211	149,857	53,529	20.88	2,564
1940	285,747.78	202,489	208,968	76,780	21.27	3,610
1941	226,653.18	159,403	164,503	62,150	21.66	2,869
1942	125,755.23	87,771	90,579	35,176	22.05	1,595

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.01 MAINS - LOW PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 73-S0.5						
1943	43,168.27	29,898	30,855	12,313	22.44	549
1944	74,371.26	51,102	52,737	21,634	22.84	947
1945	58,110.98	39,611	40,878	17,233	23.24	742
1946	228,340.96	154,395	159,335	69,006	23.64	2,919
1947	215,268.98	144,349	148,968	66,301	24.05	2,757
1948	134,803.12	89,635	92,503	42,300	24.46	1,729
1949	543,101.13	358,077	369,534	173,567	24.87	6,979
1950	747,399.41	488,575	504,208	243,191	25.28	9,620
1951	837,361.68	542,569	559,929	277,433	25.70	10,795
1952	1,355,000.45	870,168	898,011	456,989	26.12	17,496
1953	1,500,452.58	954,738	985,287	515,166	26.55	19,404
1954	832,349.18	524,721	541,510	290,839	26.98	10,780
1955	1,089,271.62	680,272	702,039	387,233	27.41	14,127
1956	1,511,700.24	935,183	965,106	546,594	27.84	19,633
1957	1,147,558.51	702,994	725,488	422,071	28.28	14,925
1958	1,411,036.75	855,709	883,089	527,948	28.73	18,376
1959	1,180,703.80	708,906	731,589	449,115	29.17	15,396
1960	1,064,816.93	632,767	653,013	411,804	29.62	13,903
1961	1,363,724.04	801,802	827,457	536,267	30.08	17,828
1962	1,342,889.37	781,266	806,264	536,625	30.53	17,577
1963	1,459,587.16	839,759	866,629	592,958	31.00	19,128
1964	1,432,976.03	815,421	841,512	591,464	31.46	18,801
1965	1,648,676.85	927,546	957,224	691,453	31.93	21,655
1966	1,888,580.34	1,050,107	1,083,707	804,873	32.41	24,834
1967	1,950,962.02	1,071,956	1,106,255	844,707	32.89	25,683
1968	2,269,623.24	1,232,133	1,271,557	998,066	33.37	29,909
1969	1,840,979.63	987,060	1,018,643	822,337	33.86	24,286
1970	1,853,186.11	980,928	1,012,315	840,871	34.36	24,472
1971	2,548,433.16	1,331,480	1,374,083	1,174,350	34.86	33,688
1972	3,155,305.05	1,626,938	1,678,995	1,476,310	35.36	41,751
1973	3,879,381.86	1,973,170	2,036,305	1,843,077	35.87	51,382
1974	3,487,209.04	1,749,324	1,805,297	1,681,912	36.38	46,232
1975	2,086,516.78	1,031,824	1,064,839	1,021,678	36.90	27,688
1976	1,629,412.37	793,947	819,351	810,061	37.43	21,642
1977	3,910,526.01	1,877,052	1,937,112	1,973,414	37.96	51,987
1978	3,007,505.59	1,421,768	1,467,260	1,540,246	38.49	40,017
1979	3,523,298.76	1,639,532	1,691,992	1,831,307	39.03	46,920
1980	4,748,564.97	2,173,941	2,243,500	2,505,065	39.58	63,291
1981	5,633,607.84	2,535,912	2,617,053	3,016,555	40.14	75,151
1982	4,857,558.21	2,149,324	2,218,095	2,639,463	40.70	64,852
1983	3,502,516.38	1,938,643	2,000,673	1,501,843	34.08	44,068
1984	4,892,064.68	2,683,787	2,769,659	2,122,406	33.94	62,534
1985	5,693,320.48	3,070,977	3,169,238	2,524,082	34.37	73,439
1986	4,975,531.96	2,636,534	2,720,895	2,254,637	34.82	64,751

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.01 MAINS - LOW PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 73-S0.5						
1987	5,623,782.07	2,925,491	3,019,097	2,604,685	35.28	73,829
1988	4,407,258.15	2,249,024	2,320,985	2,086,273	35.74	58,374
1989	5,016,037.74	2,509,022	2,589,303	2,426,735	36.22	67,000
1990	6,422,991.76	3,169,746	3,271,168	3,151,824	36.18	87,115
1991	5,759,120.14	2,781,079	2,870,065	2,889,055	36.67	78,785
1992	7,771,027.25	3,669,479	3,786,890	3,984,137	37.17	107,187
1993	6,998,273.11	3,227,604	3,330,877	3,667,396	37.68	97,330
1994	8,378,527.91	3,796,311	3,917,781	4,460,747	37.72	118,259
1995	7,849,975.18	3,466,549	3,577,467	4,272,508	38.25	111,700
1996	5,563,911.17	2,392,482	2,469,034	3,094,877	38.78	79,806
1997	5,029,868.99	2,102,988	2,170,277	2,859,592	39.32	72,726
1998	2,916,104.32	1,192,103	1,230,246	1,685,858	39.41	42,777
1999	4,919,907.90	1,950,251	2,012,653	2,907,255	39.97	72,736
2000	4,328,620.66	1,672,146	1,725,649	2,602,972	40.11	64,896
2001	5,445,367.89	2,033,300	2,098,359	3,347,009	40.69	82,256
2002	7,559,571.97	2,724,470	2,811,644	4,747,928	41.26	115,073
2003	10,046,856.14	3,509,367	3,621,655	6,425,201	41.45	155,011
2004	12,039,672.62	4,042,922	4,172,282	7,867,391	42.04	187,141
2005	15,244,711.12	4,939,286	5,097,327	10,147,384	42.25	240,175
2006	12,718,165.07	3,941,359	4,067,470	8,650,695	42.86	201,836
2007	8,721,621.50	2,594,682	2,677,703	6,043,918	43.10	140,230
2008	7,967,237.03	2,267,476	2,340,028	5,627,209	43.36	129,779
2009	11,727,410.91	3,164,055	3,265,295	8,462,116	43.99	192,365
2010	10,704,857.23	2,742,584	2,830,338	7,874,519	44.27	177,875
2011	16,155,576.87	3,912,881	4,038,080	12,117,497	44.58	271,815
2012	43,719,923.15	9,906,935	10,223,925	33,495,998	45.23	740,570
2013	21,287,544.94	4,510,831	4,655,163	16,632,382	45.55	365,146
2014	26,448,570.01	5,207,723	5,374,353	21,074,217	45.89	459,233
2015	33,578,343.98	6,091,112	6,286,008	27,292,336	46.25	590,105
2016	31,795,682.51	5,233,569	5,401,026	26,394,657	46.93	562,426
2017	51,311,719.14	7,619,790	7,863,599	43,448,120	47.31	918,371
2018	77,801,053.79	10,269,739	10,598,337	67,202,717	47.69	1,409,157
2019	63,932,936.76	7,352,288	7,587,537	56,345,400	48.10	1,171,422
2020	69,741,958.41	6,806,815	7,024,611	62,717,347	48.52	1,292,608
2021	128,682,413.25	10,333,198	10,663,827	118,018,586	48.66	2,425,372
2022	152,241,278.43	9,454,183	9,756,686	142,484,592	49.10	2,901,927
2023	149,276,957.80	6,508,475	6,716,725	142,560,233	49.30	2,891,688
2024	116,871,255.94	2,863,346	2,954,964	113,916,292	49.77	2,288,855
2025	88,632,690.79	664,745	686,015	87,946,676	49.87	1,763,519
	1,351,309,568.78	217,950,552	224,924,262	1,126,385,307		24,069,065

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 46.8 1.78

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.02 MAINS - REGULAR PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-S0.5						
1885	5,876.15	5,607	5,844	32	3.44	9
1888	7,230.25	6,800	7,087	143	4.46	32
1889	15,127.68	14,161	14,759	369	4.79	77
1890	36.85	34	35	2	5.13	
1891	25,507.74	23,647	24,646	862	5.47	158
1893	35.20	32	33	2	6.14	
1894	766.22	700	730	36	6.47	6
1896	6,429.56	5,817	6,063	367	7.14	51
1897	1,393.64	1,255	1,308	86	7.48	11
1898	86.37	77	80	6	7.81	1
1899	7,653.06	6,822	7,110	543	8.14	67
1900	282,360.42	250,434	261,015	21,345	8.48	2,517
1901	15,005.17	13,243	13,803	1,202	8.81	136
1902	50,959.77	44,743	46,633	4,327	9.15	473
1903	35,625.06	31,117	32,432	3,193	9.49	336
1904	20,475.87	17,795	18,547	1,929	9.82	196
1905	17,146.77	14,824	15,450	1,697	10.16	167
1906	19,230.12	16,538	17,237	1,993	10.50	190
1907	3,449.99	2,952	3,077	373	10.83	34
1908	46,983.62	39,986	41,675	5,309	11.17	475
1909	14,994.05	12,693	13,229	1,765	11.51	153
1910	8,003.96	6,739	7,024	980	11.85	83
1911	13,402.75	11,223	11,697	1,706	12.20	140
1912	9,742.72	8,114	8,457	1,286	12.54	103
1913	11,829.52	9,798	10,212	1,618	12.88	126
1914	9,021.17	7,430	7,744	1,277	13.23	97
1915	18,135.93	14,855	15,483	2,653	13.57	196
1916	8,505.35	6,927	7,220	1,285	13.92	92
1917	11,966.99	9,690	10,099	1,868	14.27	131
1918	9,555.85	7,693	8,018	1,538	14.62	105
1919	4,807.27	3,848	4,011	796	14.97	53
1920	5,176.51	4,119	4,293	884	15.32	58
1921	29,632.35	23,437	24,427	5,205	15.68	332
1922	9,622.35	7,566	7,886	1,736	16.03	108
1923	26,842.33	20,976	21,862	4,980	16.39	304
1924	23,621.23	18,346	19,121	4,500	16.75	269
1925	23,591.17	18,209	18,978	4,613	17.11	270
1926	19,898.35	15,263	15,908	3,990	17.47	228
1927	52,256.12	39,826	41,509	10,747	17.84	602
1928	25,477.07	19,295	20,110	5,367	18.20	295
1929	30,542.50	22,980	23,951	6,592	18.57	355
1930	69,646.45	52,059	54,259	15,387	18.94	812
1931	45,503.16	33,787	35,215	10,288	19.31	533
1932	26,994.14	19,907	20,748	6,246	19.69	317

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.02 MAINS - REGULAR PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-S0.5						
1933	17,771.19	13,018	13,568	4,203	20.06	210
1934	10,808.59	7,863	8,195	2,614	20.44	128
1935	19,624.25	14,177	14,776	4,848	20.82	233
1936	17,244.55	12,368	12,891	4,354	21.21	205
1937	56,888.03	40,512	42,224	14,664	21.59	679
1938	58,411.76	41,293	43,038	15,374	21.98	699
1939	51,781.21	36,336	37,871	13,910	22.37	622
1940	121,017.83	84,293	87,854	33,164	22.76	1,457
1941	276,294.51	190,975	199,044	77,251	23.16	3,336
1942	103,712.40	71,133	74,138	29,574	23.56	1,255
1943	42,501.45	28,924	30,146	12,355	23.96	516
1944	80,148.83	54,116	56,402	23,747	24.36	975
1945	65,945.70	44,166	46,032	19,914	24.77	804
1946	147,302.83	97,849	101,983	45,320	25.18	1,800
1947	155,064.03	102,156	106,472	48,592	25.59	1,899
1948	154,661.93	101,045	105,314	49,348	26.00	1,898
1949	351,505.31	227,681	237,301	114,204	26.42	4,323
1950	368,548.12	236,656	246,655	121,893	26.84	4,541
1951	1,071,818.78	682,105	710,925	360,894	27.27	13,234
1952	717,135.40	452,276	471,385	245,750	27.70	8,872
1953	858,938.42	536,776	559,456	299,482	28.13	10,646
1954	466,013.51	288,556	300,748	165,266	28.56	5,787
1955	1,030,063.15	631,769	658,462	371,601	29.00	12,814
1956	871,003.58	529,109	551,465	319,539	29.44	10,854
1957	1,307,755.01	786,575	819,809	487,946	29.89	16,325
1958	2,158,947.41	1,285,588	1,339,906	819,041	30.34	26,995
1959	3,071,358.39	1,810,474	1,886,969	1,184,389	30.79	38,467
1960	2,254,193.34	1,314,939	1,370,497	883,696	31.25	28,278
1961	3,089,337.63	1,783,166	1,858,507	1,230,831	31.71	38,815
1962	2,498,033.80	1,426,552	1,486,826	1,011,208	32.17	31,433
1963	2,286,574.95	1,291,458	1,346,024	940,551	32.64	28,816
1964	2,494,069.60	1,392,688	1,451,531	1,042,539	33.12	31,478
1965	2,923,313.31	1,613,669	1,681,849	1,241,464	33.60	36,948
1966	3,499,806.76	1,909,495	1,990,174	1,509,633	34.08	44,297
1967	4,081,000.82	2,199,945	2,292,896	1,788,105	34.57	51,724
1968	4,403,161.77	2,344,816	2,443,888	1,959,274	35.06	55,883
1969	3,800,756.23	1,999,198	2,083,667	1,717,089	35.55	48,301
1970	2,952,819.20	1,533,488	1,598,280	1,354,539	36.05	37,574
1971	4,466,790.90	2,289,364	2,386,093	2,080,698	36.56	56,912
1972	6,630,592.15	3,353,289	3,494,970	3,135,622	37.07	84,587
1973	7,766,450.70	3,873,906	4,037,584	3,728,867	37.59	99,198
1974	6,170,401.31	3,035,035	3,163,269	3,007,132	38.11	78,907
1975	3,358,291.93	1,628,100	1,696,889	1,661,403	38.64	42,997
1976	2,826,226.27	1,350,173	1,407,220	1,419,006	39.17	36,227

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.02 MAINS - REGULAR PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-S0.5						
1977	5,001,472.00	2,353,343	2,452,775	2,548,697	39.71	64,183
1978	3,747,735.38	1,736,438	1,809,805	1,937,930	40.25	48,147
1979	7,868,493.04	3,588,033	3,739,632	4,128,861	40.80	101,198
1980	10,075,089.25	4,520,390	4,711,383	5,363,706	41.35	129,715
1981	14,327,538.86	6,319,448	6,586,453	7,741,086	41.92	184,663
1982	9,164,878.04	3,973,891	4,141,793	5,023,085	42.48	118,246
1983	6,803,584.81	3,707,954	3,864,620	2,938,965	35.27	83,328
1984	8,868,290.94	4,755,178	4,956,091	3,912,200	35.68	109,647
1985	17,074,470.15	9,003,368	9,383,772	7,690,698	36.08	213,157
1986	11,702,775.16	6,063,208	6,319,387	5,383,388	36.51	147,450
1987	17,717,300.91	9,012,791	9,393,594	8,323,707	36.94	225,330
1988	12,246,363.50	6,158,696	6,418,909	5,827,454	36.82	158,269
1989	14,349,552.95	7,074,330	7,373,230	6,976,323	37.28	187,133
1990	16,924,360.86	8,172,774	8,518,085	8,406,276	37.74	222,742
1991	15,880,816.50	7,505,274	7,822,382	8,058,434	38.22	210,843
1992	17,614,512.97	8,141,428	8,485,414	9,129,099	38.69	235,955
1993	12,797,425.02	5,778,037	6,022,167	6,775,258	39.18	172,926
1994	13,471,201.30	5,978,519	6,231,119	7,240,082	39.17	184,837
1995	15,387,840.90	6,656,780	6,938,038	8,449,803	39.68	212,949
1996	10,810,463.03	4,553,367	4,745,753	6,064,710	40.19	150,901
1997	11,388,465.55	4,664,715	4,861,806	6,526,660	40.72	160,281
1998	10,532,635.30	4,219,374	4,397,648	6,134,987	40.78	150,441
1999	11,161,901.18	4,336,399	4,519,618	6,642,283	41.32	160,752
2000	9,749,689.64	3,667,833	3,822,804	5,926,886	41.87	141,554
2001	18,064,205.01	6,615,112	6,894,609	11,169,596	41.97	266,133
2002	23,272,079.30	8,224,353	8,571,843	14,700,236	42.54	345,563
2003	20,169,497.69	6,910,070	7,202,030	12,967,468	42.69	303,759
2004	22,454,953.58	7,396,662	7,709,181	14,745,773	43.26	340,864
2005	24,904,972.47	7,867,481	8,199,893	16,705,079	43.85	380,960
2006	21,052,487.70	6,404,167	6,674,752	14,377,736	44.04	326,470
2007	20,696,158.54	6,006,025	6,259,788	14,436,371	44.64	323,395
2008	16,754,997.78	4,652,863	4,849,453	11,905,545	44.86	265,393
2009	16,906,106.67	4,449,687	4,637,692	12,268,415	45.48	269,754
2010	19,715,043.84	4,930,732	5,139,062	14,575,982	45.73	318,740
2011	14,551,437.87	3,442,870	3,588,336	10,963,102	45.99	238,380
2012	20,460,551.94	4,527,920	4,719,231	15,741,321	46.63	337,579
2013	17,346,771.58	3,590,782	3,742,497	13,604,275	46.92	289,946
2014	14,392,191.93	2,769,058	2,886,054	11,506,138	47.23	243,619
2015	16,975,320.22	2,992,749	3,119,197	13,856,123	47.89	289,332
2016	23,920,100.66	3,851,136	4,013,852	19,906,249	48.22	412,821
2017	34,116,930.10	4,953,778	5,163,082	28,953,848	48.57	596,126
2018	58,467,649.82	7,542,327	7,861,000	50,606,650	48.93	1,034,266
2019	66,336,936.85	7,462,905	7,778,223	58,558,714	49.31	1,187,563
2020	63,172,919.36	6,039,331	6,294,501	56,878,418	49.69	1,144,665

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 376.02 MAINS - REGULAR PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-S0.5						
2021	87,496,492.33	6,842,226	7,131,319	80,365,173	50.10	1,604,095
2022	102,415,170.28	6,185,876	6,447,237	95,967,933	50.52	1,899,603
2023	114,021,187.12	4,845,900	5,050,646	108,970,541	50.66	2,151,017
2024	132,104,737.23	3,157,303	3,290,703	128,814,034	51.10	2,520,823
2025	100,180,924.34	731,321	762,220	99,418,704	51.17	1,942,910
	1,434,840,917.09	307,972,636	320,984,897	1,113,856,020		23,821,070
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					46.8	1.66

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1.5						
1900	42.00	42	42			
1901	74.23	74	74			
1902	100.77	101	101			
1905	1.44	1	1			
1906	56.75	57	57			
1907	27.94	28	28			
1911	67.84	68	68			
1919	274.67	275	275			
1921	183.14	183	183			
1922	604.22	604	604			
1924	260.45	260	260			
1925	487.58	486	488			
1926	35.54	35	36			
1927	911.44	898	911			
1928	2,395.71	2,344	2,396			
1929	899.85	875	900			
1930	1,325.75	1,280	1,326			
1931	254.66	244	255			
1932	263.02	250	263			
1933	85.45	81	85			
1934	1,379.32	1,295	1,379			
1935	284.23	265	284			
1936	552.45	513	552			
1937	4,734.93	4,374	4,735			
1938	1,076.67	990	1,077			
1939	254.90	233	255			
1940	3,523.10	3,207	3,523			
1941	771.65	699	772			
1942	1,556.90	1,403	1,557			
1943	2,465.14	2,209	2,465			
1944	1,401.50	1,249	1,402			
1945	2,124.51	1,883	2,125			
1946	1,942.13	1,711	1,942			
1947	3,205.54	2,808	3,206			
1948	3,974.70	3,460	3,951	24	6.47	4
1949	15,229.50	13,174	15,044	186	6.75	28
1950	24,100.73	20,712	23,653	448	7.03	64
1951	42,404.74	36,205	41,346	1,059	7.31	145
1952	73,599.54	62,427	71,291	2,309	7.59	304
1953	118,051.02	99,423	113,539	4,512	7.89	572
1954	34,537.14	28,887	32,988	1,549	8.18	189
1955	85,307.18	70,839	80,897	4,410	8.48	520
1956	59,917.68	49,396	56,409	3,509	8.78	400
1957	64,746.55	52,976	60,498	4,249	9.09	467

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1.5						
1958	167,773.76	136,199	155,537	12,237	9.41	1,300
1959	72,034.73	58,017	66,254	5,781	9.73	594
1960	59,670.80	47,665	54,433	5,238	10.06	521
1961	82,212.86	65,129	74,376	7,837	10.39	754
1962	106,981.83	84,024	95,954	11,028	10.73	1,028
1963	82,594.40	64,291	73,419	9,175	11.08	828
1964	65,018.91	50,156	57,277	7,742	11.43	677
1965	72,793.66	55,614	63,510	9,284	11.80	787
1966	73,819.15	55,852	63,782	10,037	12.17	825
1967	90,721.26	67,950	77,598	13,123	12.55	1,046
1968	174,458.70	129,309	147,669	26,790	12.94	2,070
1969	128,413.29	94,153	107,521	20,892	13.34	1,566
1970	101,393.36	73,510	83,947	17,446	13.75	1,269
1971	155,299.32	111,287	127,088	28,211	14.17	1,991
1972	273,789.07	193,843	221,366	52,423	14.60	3,591
1973	226,769.60	158,557	181,070	45,700	15.04	3,039
1974	265,680.23	183,372	209,408	56,272	15.49	3,633
1975	270,563.23	184,199	210,352	60,211	15.96	3,773
1976	513,963.24	345,075	394,070	119,893	16.43	7,297
1977	258,661.25	171,182	195,487	63,174	16.91	3,736
1978	413,998.05	269,927	308,252	105,746	17.40	6,077
1979	413,861.33	265,616	303,329	110,532	17.91	6,172
1980	404,922.08	255,749	292,061	112,861	18.42	6,127
1981	1,333,450.02	828,072	945,645	387,805	18.95	20,465
1982	1,005,732.03	613,899	701,063	304,669	19.48	15,640
1983	719,366.54	507,585	579,654	139,713	17.63	7,925
1984	765,822.56	533,855	609,654	156,169	17.92	8,715
1985	1,119,786.73	766,158	874,940	244,847	18.58	13,178
1986	887,771.93	599,335	684,431	203,341	18.89	10,764
1987	918,684.70	607,894	694,205	224,480	19.55	11,482
1988	935,180.67	609,644	696,204	238,977	19.89	12,015
1989	828,243.69	531,401	606,852	221,392	20.25	10,933
1990	805,424.77	505,324	577,072	228,353	20.93	10,910
1991	1,364,029.26	840,924	960,322	403,707	21.31	18,944
1992	939,198.04	568,403	649,107	290,091	21.69	13,374
1993	692,009.09	408,424	466,414	225,595	22.39	10,076
1994	1,067,133.88	616,910	704,502	362,632	22.81	15,898
1995	730,590.38	413,295	471,976	258,614	23.22	11,138
1996	340,672.20	188,324	215,063	125,609	23.66	5,309
1997	883,649.14	476,817	544,518	339,131	24.10	14,072
1998	516,099.01	270,023	308,362	207,737	24.83	8,366
1999	591,171.55	301,025	343,766	247,406	25.30	9,779
2000	679,572.13	336,320	384,072	295,500	25.77	11,467
2001	1,759,680.22	844,998	964,975	794,705	26.25	30,274

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1.5						
2002	1,074,439.95	499,615	570,553	503,887	26.75	18,837
2003	994,672.56	449,294	513,087	481,586	27.01	17,830
2004	853,740.93	371,890	424,693	429,048	27.53	15,585
2005	1,242,766.81	520,968	594,937	647,830	28.06	23,087
2006	3,388,685.35	1,363,268	1,556,831	1,831,854	28.60	64,051
2007	1,277,235.73	494,163	564,326	712,910	28.92	24,651
2008	4,680,488.64	1,728,036	1,973,390	2,707,099	29.48	91,828
2009	3,203,109.67	1,129,416	1,289,775	1,913,335	29.83	64,141
2010	703,880.09	236,152	269,682	434,198	30.20	14,377
2011	1,990,801.38	632,677	722,507	1,268,294	30.59	41,461
2012	766,597.27	229,519	262,107	504,490	31.00	16,274
2013	2,625,724.59	736,516	841,090	1,784,635	31.42	56,799
2014	1,066,104.84	278,253	317,761	748,344	31.85	23,496
2015	2,281,795.16	551,966	630,336	1,651,459	32.12	51,415
2016	1,173,933.72	260,613	297,616	876,318	32.42	27,030
2017	5,990,376.61	1,210,655	1,382,549	4,607,828	32.57	141,475
2018	768,452.77	139,244	159,014	609,439	32.75	18,609
2019	1,567,663.51	250,826	286,439	1,281,225	32.81	39,050
2020	2,382,277.81	327,801	374,344	2,007,934	32.92	60,994
2021	6,836,331.94	784,811	896,242	5,940,090	32.79	181,156
2022	5,273,056.84	479,848	547,979	4,725,078	32.46	145,566
2023	7,220,235.82	477,980	545,846	6,674,390	31.76	210,151
2024	7,606,193.80	300,445	343,103	7,263,091	30.40	238,917
2025	8,540,332.62	115,294	131,664	8,408,669	27.40	306,886
	97,423,055.26	28,527,080	32,575,671	64,847,384		2,225,784

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 29.1 2.28

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 380.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
1953	6,004.73	5,078	5,915	90	8.49	11
1954	95,240.69	79,985	93,164	2,077	8.81	236
1955	119,070.64	99,283	115,642	3,429	9.14	375
1956	163,362.51	135,235	157,518	5,845	9.47	617
1957	200,573.38	164,761	191,909	8,664	9.82	882
1958	255,670.89	208,395	242,732	12,939	10.17	1,272
1959	367,317.66	297,061	346,008	21,310	10.52	2,026
1960	402,325.78	322,665	375,831	26,495	10.89	2,433
1961	573,594.25	456,059	531,204	42,390	11.27	3,761
1962	482,853.37	380,575	443,283	39,570	11.65	3,397
1963	823,366.01	642,975	748,918	74,448	12.05	6,178
1964	1,194,439.38	924,066	1,076,325	118,114	12.45	9,487
1965	1,702,888.02	1,304,412	1,519,341	183,547	12.87	14,262
1966	1,748,290.76	1,325,834	1,544,292	203,999	13.29	15,350
1967	1,596,384.39	1,197,863	1,395,236	201,148	13.73	14,650
1968	2,236,800.63	1,660,511	1,934,114	302,687	14.17	21,361
1969	2,274,842.63	1,669,734	1,944,857	329,986	14.63	22,555
1970	2,765,769.34	2,006,427	2,337,027	428,742	15.10	28,394
1971	2,830,462.43	2,029,187	2,363,537	466,925	15.57	29,989
1972	2,759,041.28	1,953,401	2,275,264	483,777	16.06	30,123
1973	2,632,627.29	1,839,970	2,143,143	489,484	16.56	29,558
1974	2,677,596.81	1,846,578	2,150,840	526,757	17.07	30,859
1975	2,670,215.57	1,815,747	2,114,929	555,287	17.60	31,550
1976	3,552,335.00	2,381,343	2,773,718	778,617	18.13	42,946
1977	3,458,995.18	2,284,839	2,661,313	797,682	18.67	42,725
1978	6,945,139.54	4,516,841	5,261,084	1,684,056	19.23	87,574
1979	6,093,552.93	3,900,971	4,543,736	1,549,817	19.79	78,313
1980	6,888,961.29	4,337,566	5,052,269	1,836,692	20.37	90,167
1981	11,452,131.60	7,089,900	8,258,107	3,194,025	20.95	152,459
1982	9,296,412.43	5,653,892	6,585,487	2,710,925	21.55	125,797
1983	6,045,945.75	4,137,845	4,819,640	1,226,306	19.48	62,952
1984	11,477,339.53	7,717,363	8,988,957	2,488,383	20.10	123,800
1985	11,638,863.41	7,682,814	8,948,716	2,690,147	20.73	129,771
1986	5,121,432.32	3,337,125	3,886,985	1,234,447	20.99	58,811
1987	16,981,701.83	10,847,911	12,635,328	4,346,374	21.63	200,942
1988	10,218,004.66	6,394,427	7,448,040	2,769,965	22.27	124,381
1989	5,563,748.91	3,428,382	3,993,279	1,570,470	22.58	69,551
1990	13,076,577.35	7,882,561	9,181,375	3,895,202	23.23	167,680
1991	9,863,953.60	5,810,855	6,768,313	3,095,641	23.89	129,579
1992	16,143,822.00	9,340,815	10,879,907	5,263,915	24.22	217,338
1993	11,059,390.18	6,241,920	7,270,405	3,788,985	24.89	152,229
1994	13,893,675.62	7,684,592	8,950,787	4,942,889	25.25	195,758
1995	12,348,158.64	6,648,249	7,743,685	4,604,474	25.93	177,573
1996	10,664,135.06	5,583,741	6,503,777	4,160,358	26.61	156,346

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 380.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
1997	17,153,153.77	8,770,408	10,215,513	6,937,641	27.00	256,950
1998	7,863,163.27	3,900,129	4,542,756	3,320,407	27.69	119,914
1999	12,162,188.00	5,874,337	6,842,255	5,319,933	28.10	189,321
2000	4,586,865.60	2,142,525	2,495,550	2,091,316	28.81	72,590
2001	13,809,822.05	6,262,754	7,294,672	6,515,150	29.22	222,969
2002	11,219,792.17	4,904,171	5,712,234	5,507,558	29.94	183,953
2003	12,086,773.34	5,110,288	5,952,313	6,134,460	30.38	201,924
2004	16,387,860.39	6,686,247	7,787,944	8,599,916	30.83	278,946
2005	15,133,518.72	5,914,179	6,888,662	8,244,857	31.56	261,244
2006	13,776,164.26	5,171,572	6,023,695	7,752,469	32.03	242,038
2007	9,949,727.54	3,576,927	4,166,299	5,783,429	32.51	177,897
2008	10,552,553.91	3,604,752	4,198,709	6,353,845	33.25	191,093
2009	11,046,922.72	3,590,250	4,181,818	6,865,105	33.75	203,411
2010	5,821,104.95	1,792,900	2,088,317	3,732,788	34.26	108,955
2011	13,990,598.73	4,067,067	4,737,200	9,253,399	34.77	266,132
2012	17,664,490.75	4,822,406	5,616,997	12,047,494	35.29	341,385
2013	10,027,825.47	2,555,090	2,976,094	7,051,731	35.83	196,811
2014	15,873,819.31	3,749,396	4,367,186	11,506,633	36.37	316,377
2015	19,704,643.05	4,301,524	5,010,289	14,694,354	36.70	400,391
2016	21,140,990.79	4,204,943	4,897,794	16,243,197	37.26	435,942
2017	22,260,033.85	4,002,354	4,661,824	17,598,210	37.62	467,789
2018	38,456,202.32	6,160,684	7,175,783	31,280,419	38.00	823,169
2019	35,757,407.90	5,006,037	5,830,884	29,926,524	38.39	779,540
2020	37,208,478.77	4,453,855	5,187,719	32,020,760	38.61	829,339
2021	42,013,241.18	4,142,506	4,825,069	37,188,172	38.85	957,225
2022	41,922,240.02	3,228,012	3,759,893	38,162,347	38.95	979,778
2023	60,997,791.96	3,348,779	3,900,560	57,097,232	38.73	1,474,238
2024	90,745,371.88	2,903,852	3,382,321	87,363,051	37.81	2,310,581
2025	70,706,499.49	735,348	856,512	69,849,987	35.73	1,954,939
	932,382,261.43	270,253,046	314,782,799	617,599,462		18,130,859

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 34.1 1.94

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 381.00 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 32-S0.5						
1955	1,403.22	1,403	1,403			
1956	3,474.89	3,475	3,475			
1957	12,548.46	12,548	12,548			
1958	12,324.59	12,325	12,325			
1959	11,238.10	11,238	11,238			
1960	8,063.76	8,064	8,064			
1961	2,065.68	2,066	2,066			
1962	30,796.65	30,527	30,797			
1963	39,298.21	38,524	39,298			
1964	9,023.31	8,747	9,023			
1965	11,919.03	11,427	11,919			
1966	567.91	538	568			
1968	102,567.68	95,068	102,568			
1969	155,991.92	142,928	155,992			
1970	129,396.52	117,225	129,397			
1971	123,105.73	110,218	123,106			
1972	253,574.51	224,413	253,575			
1973	178,771.09	156,314	178,771			
1974	208,791.43	180,408	207,834	957	4.35	220
1975	285,273.37	243,464	280,476	4,797	4.69	1,023
1976	178,460.00	150,408	173,273	5,187	5.03	1,031
1977	193,449.03	160,986	185,459	7,990	5.37	1,488
1978	300,907.23	247,120	284,688	16,219	5.72	2,835
1979	221,424.36	179,422	206,698	14,726	6.07	2,426
1980	367,952.12	294,134	338,849	29,103	6.42	4,533
1981	135,371.19	106,732	122,958	12,413	6.77	1,834
1982	318,262.74	247,351	284,954	33,309	7.13	4,672
1983	37,946.17	32,546	37,494	452	7.01	64
1984	79,283.83	67,375	77,617	1,667	7.29	229
1985	292,732.13	246,246	283,681	9,051	7.60	1,191
1986	475,377.95	395,562	455,696	19,682	7.92	2,485
1987	869,764.77	715,295	824,035	45,730	8.26	5,536
1988	794,753.85	645,340	743,446	51,308	8.62	5,952
1989	665,190.11	535,345	616,729	48,461	8.79	5,513
1990	636,541.96	504,841	581,588	54,954	9.20	5,973
1991	528,285.92	414,335	477,323	50,963	9.42	5,410
1992	522,578.15	403,117	464,399	58,179	9.85	5,906
1993	1,105,427.15	841,341	969,243	136,184	10.12	13,457
1994	870,409.07	652,807	752,048	118,361	10.42	11,359
1995	600,464.13	443,203	510,579	89,885	10.73	8,377
1996	400,097.42	290,231	334,352	65,745	11.07	5,939
1997	802,475.84	571,283	658,130	144,346	11.43	12,629
1998	770,176.73	537,275	618,952	151,225	11.81	12,805
1999	431,066.27	295,324	340,220	90,846	12.07	7,527

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 381.00 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 32-S0.5						
2000	572,610.46	383,134	441,379	131,231	12.49	10,507
2001	1,513,674.57	991,154	1,141,831	371,844	12.79	29,073
2002	1,457,610.73	931,996	1,073,679	383,932	13.11	29,285
2003	1,048,451.49	653,185	752,483	295,968	13.46	21,989
2004	760,615.48	460,629	530,654	229,961	13.84	16,616
2005	1,005,339.43	590,335	680,079	325,260	14.23	22,857
2006	1,230,245.21	700,994	807,560	422,685	14.53	29,091
2007	1,882,660.20	1,034,145	1,191,357	691,303	14.97	46,179
2008	1,505,087.24	797,094	918,269	586,818	15.32	38,304
2009	1,597,354.24	812,414	935,918	661,436	15.70	42,130
2010	3,359,834.62	1,639,599	1,888,853	1,470,982	16.00	91,936
2011	2,387,002.02	1,109,001	1,277,593	1,109,409	16.42	67,564
2012	2,620,799.63	1,156,297	1,332,079	1,288,721	16.78	76,801
2013	1,698,472.35	707,414	814,956	883,516	17.16	51,487
2014	2,489,015.45	971,712	1,119,433	1,369,582	17.57	77,950
2015	3,087,383.05	1,120,103	1,290,383	1,797,000	18.00	99,833
2016	5,774,264.95	1,933,224	2,227,116	3,547,149	18.38	192,990
2017	10,335,606.15	3,154,427	3,633,968	6,701,638	18.78	356,850
2018	12,176,884.02	3,336,466	3,843,681	8,333,203	19.21	433,795
2019	13,655,714.85	3,303,317	3,805,492	9,850,223	19.59	502,819
2020	17,086,693.05	3,552,323	4,092,352	12,994,341	20.00	649,717
2021	4,142,233.46	712,878	821,251	3,320,982	20.44	162,475
2022	5,357,474.53	722,723	832,592	4,524,883	20.85	217,021
2023	7,230,037.21	692,638	797,934	6,432,103	21.23	302,972
2024	11,863,563.89	650,123	748,956	11,114,608	21.58	515,042
2025	8,159,854.06	137,902	158,866	8,000,988	21.85	366,178
	137,177,076.52	42,643,766	49,075,568	88,101,509		4,581,875
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					19.2	3.34

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 382.00 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
1922	5,578.52	5,579	5,579			
1923	55,181.63	55,151	55,182			
1924	49,741.71	49,489	49,742			
1925	53,847.31	53,368	53,847			
1926	48,348.38	47,698	48,348			
1927	55,971.05	54,953	55,971			
1928	49,218.00	48,090	49,218			
1929	49,748.92	48,365	49,749			
1930	44,126.14	42,690	44,126			
1931	30,916.28	29,758	30,916			
1932	33,151.58	31,741	33,152			
1933	34,047.35	32,432	34,047			
1934	35,300.39	33,439	35,300			
1935	22,458.34	21,160	22,458			
1936	38,902.01	36,455	38,902			
1937	43,651.56	40,675	43,652			
1938	59,643.47	55,273	59,643			
1939	10,160.90	9,363	10,161			
1940	17,798.44	16,307	17,798			
1941	24,535.92	22,350	24,536			
1942	22,474.28	20,354	22,474			
1943	11,845.39	10,665	11,845			
1944	8,192.72	7,332	8,193			
1945	6,406.98	5,700	6,407			
1946	24,490.31	21,658	24,490			
1947	46,424.07	40,803	46,424			
1948	48,453.79	42,331	48,454			
1949	97,944.50	85,033	97,944			
1950	89,572.19	77,260	89,572			
1951	92,555.69	79,329	92,556			
1952	61,151.72	52,068	61,152			
1953	91,065.33	77,008	90,803	262	8.49	31
1954	113,511.87	95,330	112,408	1,104	8.81	125
1955	146,925.65	122,510	144,457	2,469	9.14	270
1956	162,713.37	134,697	158,827	3,886	9.47	410
1957	166,006.88	136,366	160,795	5,212	9.82	531
1958	169,988.02	138,556	163,377	6,611	10.17	650
1959	163,714.27	132,401	156,120	7,594	10.52	722
1960	152,785.48	122,534	144,485	8,300	10.89	762
1961	157,634.32	125,333	147,786	9,848	11.27	874
1962	159,527.93	125,737	148,262	11,266	11.65	967
1963	139,392.58	108,853	128,353	11,040	12.05	916
1964	161,528.42	124,965	147,352	14,176	12.45	1,139
1965	138,829.16	106,343	125,394	13,435	12.87	1,044

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 382.00 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
1966	116,060.75	88,016	103,783	12,278	13.29	924
1967	139,138.06	104,404	123,107	16,031	13.73	1,168
1968	160,351.46	119,039	140,364	19,987	14.17	1,411
1969	159,898.98	117,366	138,391	21,508	14.63	1,470
1970	183,266.07	132,950	156,767	26,499	15.10	1,755
1971	240,973.68	172,756	203,704	37,270	15.57	2,394
1972	306,764.71	217,189	256,097	50,668	16.06	3,155
1973	317,276.31	221,748	261,473	55,803	16.56	3,370
1974	202,052.60	139,344	164,306	37,747	17.07	2,211
1975	272,155.18	185,066	218,219	53,936	17.60	3,065
1976	166,543.48	111,644	131,644	34,899	18.13	1,925
1977	478,235.43	315,898	372,489	105,746	18.67	5,664
1978	851,379.01	553,703	652,895	198,484	19.23	10,322
1979	803,709.38	514,519	606,691	197,018	19.79	9,955
1980	658,543.49	414,645	488,926	169,617	20.37	8,327
1981	1,016,755.28	629,463	742,227	274,528	20.95	13,104
1982	1,151,421.19	700,271	825,720	325,701	21.55	15,114
1983	847,795.49	580,231	684,175	163,620	19.48	8,399
1984	1,093,330.22	735,155	866,853	226,477	20.10	11,268
1985	1,105,468.53	729,720	860,444	245,025	20.73	11,820
1986	999,685.56	651,395	768,088	231,598	20.99	11,034
1987	1,111,879.81	710,269	837,509	274,371	21.63	12,685
1988	1,220,742.62	763,941	900,796	319,947	22.27	14,367
1989	1,125,598.97	693,594	817,846	307,753	22.58	13,629
1990	1,304,687.77	786,466	927,356	377,332	23.23	16,243
1991	1,719,143.70	1,012,748	1,194,175	524,969	23.89	21,974
1992	1,953,985.99	1,130,576	1,333,111	620,875	24.22	25,635
1993	1,493,042.22	842,673	993,632	499,410	24.89	20,065
1994	1,731,789.65	957,853	1,129,445	602,345	25.25	23,855
1995	1,544,378.61	831,493	980,449	563,930	25.93	21,748
1996	1,777,771.09	930,841	1,097,595	680,176	26.61	25,561
1997	1,851,227.66	946,533	1,116,098	735,130	27.00	27,227
1998	1,285,626.95	637,671	751,905	533,722	27.69	19,275
1999	1,275,083.93	615,866	726,194	548,890	28.10	19,533
2000	1,369,925.82	639,892	754,524	615,402	28.81	21,361
2001	1,869,649.19	847,886	999,779	869,870	29.22	29,770
2002	2,715,995.26	1,187,162	1,399,833	1,316,162	29.94	43,960
2003	2,042,671.31	863,641	1,018,356	1,024,315	30.38	33,717
2004	2,696,247.12	1,100,069	1,297,138	1,399,109	30.83	45,381
2005	2,869,998.31	1,121,595	1,322,521	1,547,477	31.56	49,033
2006	2,429,111.21	911,888	1,075,246	1,353,865	32.03	42,269
2007	2,532,636.08	910,483	1,073,590	1,459,046	32.51	44,880
2008	2,953,325.71	1,008,856	1,189,585	1,763,741	33.25	53,045
2009	3,125,113.30	1,015,662	1,197,611	1,927,502	33.75	57,111

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 382.00 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
2010	3,060,425.04	942,611	1,111,473	1,948,952	34.26	56,887
2011	2,094,638.82	608,912	717,994	1,376,645	34.77	39,593
2012	2,105,509.67	574,804	677,776	1,427,734	35.29	40,457
2013	1,380,708.51	351,805	414,828	965,881	35.83	26,957
2014	1,920,926.59	453,723	535,004	1,385,923	36.37	38,106
2015	2,190,069.87	478,092	563,739	1,626,331	36.70	44,314
2016	2,716,123.28	540,237	637,017	2,079,106	37.26	55,800
2017	3,184,509.31	572,575	675,148	2,509,361	37.62	66,703
2018	2,703,622.93	433,120	510,710	2,192,913	38.00	57,708
2019	3,129,421.07	438,119	516,605	2,612,816	38.39	68,060
2020	2,963,665.10	354,751	418,302	2,545,363	38.61	65,925
2021	3,787,089.91	373,407	440,300	3,346,790	38.85	86,146
	89,702,610.06	36,751,838	43,219,810	46,482,800		1,465,276

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.7 1.63

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R0.5						
1888	89.78	90	90			
1903	19.02	19	19			
1917	22.48	22	22			
1923	910.68	911	911			
1925	292.83	292	293			
1926	113.66	113	114			
1927	123.34	121	123			
1928	41.62	40	42			
1930	75.09	72	75			
1934	138.46	127	138			
1936	71.67	64	72			
1937	101.10	90	101			
1941	1,311.17	1,124	1,311			
1942	1,101.59	935	1,102			
1943	2,505.89	2,108	2,506			
1945	1,001.54	826	1,002			
1946	318.87	261	319			
1947	827.32	670	827			
1948	147.21	118	147			
1949	2,974.78	2,361	2,975			
1950	1,551.25	1,219	1,551			
1951	1,231.91	958	1,232			
1952	8,309.71	6,395	8,310			
1953	10,348.90	7,882	10,282	67	11.92	6
1954	13,502.65	10,176	13,275	228	12.32	19
1955	19,667.74	14,664	19,130	538	12.72	42
1956	29,554.93	21,794	28,431	1,124	13.13	86
1957	26,755.06	19,515	25,458	1,297	13.53	96
1958	15,583.60	11,239	14,662	922	13.94	66
1959	30,791.85	21,948	28,632	2,160	14.36	150
1960	19,461.40	13,713	17,889	1,572	14.77	106
1961	16,827.28	11,715	15,283	1,544	15.19	102
1962	32,362.91	22,259	29,038	3,325	15.61	213
1963	19,864.49	13,492	17,601	2,263	16.04	141
1964	15,052.08	10,094	13,168	1,884	16.47	114
1965	49,785.95	32,958	42,995	6,791	16.90	402
1966	34,961.05	22,837	29,792	5,169	17.34	298
1967	19,937.69	12,848	16,761	3,177	17.78	179
1968	28,969.81	18,407	24,013	4,957	18.23	272
1969	35,448.46	22,205	28,967	6,481	18.68	347
1970	33,322.90	20,574	26,839	6,484	19.13	339
1971	79,969.35	48,637	63,449	16,520	19.59	843
1972	41,827.94	25,055	32,685	9,143	20.05	456
1973	49,899.54	29,421	38,381	11,519	20.52	561

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R0.5						
1974	5,582.69	3,239	4,225	1,358	20.99	65
1975	15,747.46	8,986	11,723	4,024	21.47	187
1976	34,636.43	19,431	25,348	9,288	21.95	423
1977	13,224.73	7,292	9,513	3,712	22.43	165
1978	10,888.04	5,897	7,693	3,195	22.92	139
1979	117,729.49	62,585	81,644	36,085	23.42	1,541
1980	103,307.75	53,885	70,295	33,013	23.92	1,380
1981	122,584.80	62,714	81,813	40,772	24.42	1,670
1982	168,063.51	84,267	109,929	58,135	24.93	2,332
1983	85,503.91	56,356	73,518	11,986	21.85	549
1984	99,671.18	64,547	84,204	15,467	22.45	689
1985	153,580.19	98,291	128,224	25,356	22.64	1,120
1986	353,943.69	223,657	291,768	62,176	22.86	2,720
1987	160,184.04	99,250	129,475	30,709	23.48	1,308
1988	472,045.23	288,372	376,191	95,854	23.73	4,039
1989	438,869.65	264,112	344,543	94,327	23.99	3,932
1990	237,494.90	139,813	182,391	55,104	24.63	2,237
1991	393,513.50	227,766	297,129	96,384	24.92	3,868
1992	104,039.62	59,157	77,172	26,868	25.23	1,065
1993	82,004.84	45,751	59,684	22,321	25.55	874
1994	153,436.24	83,914	109,469	43,967	25.89	1,698
1995	167,862.45	89,874	117,244	50,618	26.25	1,928
1996	141,512.28	74,096	96,661	44,851	26.61	1,685
1997	162,020.14	83,311	108,682	53,338	26.69	1,998
1998	82,051.91	41,141	53,670	28,382	27.10	1,047
1999	117,965.37	57,591	75,129	42,836	27.52	1,557
2000	154,234.69	73,601	96,015	58,220	27.66	2,105
2001	96,395.28	44,650	58,247	38,148	28.10	1,358
2002	125,497.32	56,599	73,835	51,662	28.30	1,826
2003	196,264.04	86,023	112,220	84,044	28.51	2,948
2004	185,315.25	78,759	102,744	82,571	28.75	2,872
2006	21,823.98	8,655	11,291	10,533	29.29	360
2007	143,650.22	54,788	71,473	72,177	29.60	2,438
2008	44,940.93	16,511	21,539	23,402	29.70	788
2010	1,283.70	433	565	719	30.00	24
2011	26,866.61	8,613	11,236	15,631	30.20	518
2012	472,202.26	143,927	187,758	284,444	30.23	9,409
2013	1,050,107.96	302,326	394,395	655,713	30.30	21,641
2014	144,218.67	39,098	51,005	93,214	30.24	3,082
2015	359,117.79	90,929	118,620	240,498	30.23	7,956
2016	608,644.37	143,031	186,589	422,055	30.12	14,012
2017	1,638,149.04	354,168	462,024	1,176,125	29.92	39,309
2018	609,997.88	119,865	156,368	453,630	29.65	15,299
2019	226,208.82	39,722	51,819	174,390	29.34	5,944

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R0.5						
2020	442,168.51	68,271	89,061	353,108	28.76	12,278
2021	907,942.43	119,213	155,517	752,425	28.11	26,767
2022	23,130.74	2,466	3,217	19,914	27.24	731
2023	319,477.40	25,526	33,300	286,177	25.92	11,041
2024	465,260.05	23,310	30,408	434,852	23.69	18,356
2025	419,566.90	7,762	10,126	409,441	19.87	20,606
	13,327,105.43	4,643,910	6,056,722	7,270,383		266,722

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 27.3 2.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 386.00 OTHER PROPERTY ON CUSTOMER PREMISES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-S4						
1997	53,681.30	52,167	53,681			
1998	24,038.51	23,255	24,039			
2005	14,566,812.47	12,949,896	14,566,812			
	14,644,532.28	13,025,318	14,644,532			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					0.0	0.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 387.00 OTHER EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 26-R2.5						
2001	4,412.40	3,488	2,442	1,970	6.42	307
2002	7,703.82	5,947	4,164	3,540	6.87	515
2003	7,761.58	5,837	4,087	3,675	7.34	501
2004	18,231.90	13,289	9,304	8,928	7.90	1,130
2005	29,919.36	21,144	14,804	15,115	8.40	1,799
2006	78,820.18	53,866	37,714	41,106	8.92	4,608
2007	71,046.28	46,677	32,681	38,365	9.53	4,026
2008	52,446.23	33,115	23,185	29,261	10.07	2,906
2010	76,707.33	44,099	30,876	45,831	11.28	4,063
2011	276,405.62	150,475	105,354	171,052	11.93	14,338
2012	174,611.63	89,768	62,851	111,761	12.52	8,927
2013	48,661.54	23,426	16,402	32,260	13.20	2,444
2014	362,610.22	162,776	113,967	248,643	13.81	18,005
2015	1,080,215.71	448,398	313,943	766,273	14.44	53,066
2016	547,852.10	207,746	145,452	402,400	15.14	26,579
2017	1,895,789.59	650,635	455,538	1,440,252	15.79	91,213
2018	1,574,407.64	481,769	337,307	1,237,101	16.45	75,204
2019	226,149.10	60,631	42,450	183,699	17.06	10,768
2020	1,172,530.35	267,806	187,503	985,027	17.74	55,526
2021	5,147,502.42	969,275	678,632	4,468,870	18.32	243,934
2022	720,635.78	105,645	73,967	646,669	18.92	34,179
2023	694,622.51	72,241	50,579	644,044	19.39	33,215
2024	1,462,160.48	87,145	61,014	1,401,146	19.71	71,088
2025	1,311,499.79	24,787	17,354	1,294,146	19.43	66,606
	17,042,703.56	4,029,985	2,821,570	14,221,134		824,947

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.2 4.84

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 389.02 LAND RIGHTS AND RIGHTS - OF - WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R3						
1895	221.00	221	221			
1896	578.00	578	578			
1897	265.80	266	266			
1898	123.55	124	124			
1899	219.60	220	220			
1900	78.67	79	79			
1901	1,043.20	1,043	1,043			
1902	9.85	10	10			
1903	356.24	356	356			
1904	105.00	105	105			
1905	271.56	272	272			
1907	515.26	515	515			
1908	1.22	1	1			
1909	5.00	5	5			
1912	107.28	107	107			
1913	418.90	419	419			
1914	242.34	242	242			
1915	59.34	59	59			
1916	348.78	349	349			
1917	37.03	37	37			
1919	20.00	20	20			
1920	747.78	748	748			
1923	337.00	337	337			
1924	1,098.02	1,097	1,098			
1925	257.57	256	258			
1926	32.00	32	32			
1927	101.50	100	102			
1928	38.20	38	38			
1929	741.31	726	741			
1930	63.71	62	64			
1932	25.00	24	25			
1935	6.60	6	7			
1936	23.00	22	23			
1937	126.06	119	126			
1940	94.65	88	95			
1941	123.94	115	124			
1942	91.94	85	92			
1944	457.06	419	457			
1945	266.11	243	266			
1946	58.28	53	58			
1948	15.96	14	16			
1949	91.53	82	92			
1950	62.45	56	62			
1951	36.13	32	36			

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 389.02 LAND RIGHTS AND RIGHTS - OF - WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R3						
1952	23.18	20	23			
1953	38.67	34	39			
1954	53.96	47	53	1	7.76	
1956	308.81	266	301	8	8.41	1
1958	3,915.91	3,321	3,763	153	9.11	17
1959	630.52	531	602	29	9.47	3
1960	914.07	764	866	48	9.85	5
1961	147.59	122	138	10	10.25	1
1962	74.23	61	69	5	10.66	
1963	124.21	101	114	10	11.09	1
1964	42.01	34	39	3	11.53	
1965	515.64	413	468	48	11.99	4
1966	2,820.19	2,235	2,533	287	12.46	23
1967	76.52	60	68	9	12.95	1
1968	563.97	437	495	69	13.46	5
1969	267.27	205	232	35	13.98	3
1973	263.19	192	218	45	16.22	3
1977	149.17	103	117	32	18.69	2
1978	842.86	571	647	196	19.34	10
1980	349.81	229	260	90	20.68	4
1981	13,624.82	8,772	9,940	3,685	21.37	172
1983	6,888.56	4,628	5,245	1,644	20.64	80
1984	1,771.57	1,169	1,325	447	21.25	21
1987	565.85	353	400	166	23.10	7
2017	8,100.00	1,250	1,416	6,684	45.22	148
	52,996.00	35,700	39,296	13,700		511

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 26.8 0.96

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS - OWNED

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R1						
1991	7,932.72	4,456	3,573	4,360	26.73	163
1992	4,386.11	2,421	1,941	2,445	26.99	91
1993	653.78	352	282	372	27.63	13
1996	62,295.54	31,522	25,277	37,019	28.55	1,297
1997	81,581.60	40,106	32,161	49,421	29.22	1,691
1998	908.17	436	350	558	29.57	19
2000	10,399.41	4,727	3,791	6,608	30.31	218
2001	4,441.18	1,960	1,572	2,869	30.69	93
2002	87,604.07	37,477	30,053	57,551	31.10	1,851
2003	86,488.17	35,789	28,699	57,789	31.52	1,833
2004	154,073.32	61,552	49,359	104,714	31.94	3,278
2005	52,265.92	20,216	16,211	36,055	32.10	1,123
2009	119,928.00	39,360	31,563	88,365	33.26	2,657
2010	1,193,016.71	372,937	299,058	893,959	33.53	26,661
2011	860,399.60	255,022	204,502	655,898	33.83	19,388
2012	45,567.35	12,800	10,264	35,303	33.92	1,041
2014	216,518.63	53,350	42,781	173,738	34.41	5,049
2015	345,484.78	79,323	63,609	281,876	34.39	8,196
2017	134,163.32	25,894	20,764	113,399	34.49	3,288
2018	717,070.39	124,770	100,053	617,017	34.42	17,926
2019	306,619.07	47,342	37,964	268,655	34.23	7,849
2020	5,643.69	759	609	5,035	33.81	149
2021	213,478.26	24,123	19,344	194,134	33.35	5,821
2022	105,845.53	9,568	7,673	98,173	32.72	3,000
2023	15,431,819.38	1,027,759	824,159	14,607,660	31.53	463,294
2024	23,372,263.73	948,914	760,933	22,611,331	29.52	765,966
2025	10,975,361.98	158,045	126,736	10,848,626	25.73	421,633
	54,596,210.41	3,420,980	2,743,281	51,852,929		1,763,588

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 29.4 3.23

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 390.01 STRUCTURES AND IMPROVEMENTS - LEASED - NORTH SHORE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 75-R0.5						
PROBABLE RETIREMENT YEAR.. 1-2029						
2005	2,439,832.84	2,099,720	2,122,610	317,223	3.28	96,714
2007	2,391.03	2,025	2,047	344	3.30	104
2010	127,711.52	104,979	106,123	21,589	3.30	6,542
2011	713,419.33	579,439	585,756	127,663	3.29	38,803
2012	95,432.57	76,375	77,208	18,225	3.31	5,506
2014	39,512.90	30,583	30,916	8,597	3.28	2,621
2015	1,401,257.57	1,059,911	1,071,466	329,792	3.30	99,937
2016	2,970,840.94	2,190,104	2,213,980	756,861	3.30	229,352
2017	143,613.75	102,598	103,717	39,897	3.30	12,090
2018	17,834.81	12,258	12,392	5,443	3.30	1,649
2020	149,234.52	91,749	92,749	56,486	3.29	17,169
2021	11,786.05	6,643	6,715	5,071	3.29	1,541
	8,112,867.83	6,356,384	6,425,679	1,687,189		512,028

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.3 6.31

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 391.01 OFFICE FURNITURE AND EQUIPMENT - FURNITURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
2007	14,435.92	13,173	14,436			
2008	723.62	624	724			
2009	42,018.52	34,140	42,019			
2010	17,167.62	13,090	16,389	779	4.75	164
2011	526,944.52	375,448	470,065	56,880	5.75	9,892
2013	34,396.55	21,068	26,377	8,020	7.75	1,035
2014	156,256.18	87,894	110,044	46,212	8.75	5,281
2015	1,434,510.51	735,187	920,463	514,048	9.75	52,723
2016	308,359.05	142,616	178,557	129,802	10.75	12,075
2017	30,662.08	12,648	15,835	14,827	11.75	1,262
2021	9,564.00	2,032	2,544	7,020	15.75	446
	2,575,038.57	1,437,920	1,797,453	777,586		82,878

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.4 3.22

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 391.02 OFFICE FURNITURE AND EQUIPMENT - COMPUTER HARDWARE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
2020	361,868.74	361,869	361,869			
2021	8,068,734.90	6,858,425	7,757,405	311,330	0.75	311,330
2022	4,011,706.71	2,607,609	2,949,406	1,062,301	1.75	607,029
2023	1,607,819.87	723,519	818,356	789,464	2.75	287,078
	14,050,130.22	10,551,422	11,887,036	2,163,094		1,205,437
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					1.8	8.58

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 391.03 OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
2016	152,173.61	93,841	77,473	74,701	5.75	12,991
2017	52,750.52	29,013	23,953	28,798	6.75	4,266
2018	20,040.00	9,686	7,997	12,043	7.75	1,554
2019	15,022.00	6,259	5,167	9,855	8.75	1,126
2020	13,792.00	4,827	3,985	9,807	9.75	1,006
2021	30,392.00	8,611	7,109	23,283	10.75	2,166
	284,170.13	152,237	125,684	158,486		23,109

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.9 8.13

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 392.01 TRANSPORTATION EQUIPMENT - AUTOMOBILES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 6-L2.5						
2010	1,712.08	1,697	1,712			
	1,712.08	1,697	1,712			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					0.0	0.00

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 392.02 TRANSPORTATION EQUIPMENT - TRUCKS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L2.5						
2009	9,830.64	8,818	7,074	2,757	1.87	1,474
2010	634.34	559	448	186	2.05	91
2011	24,921.65	21,522	17,265	7,657	2.25	3,403
2012	35,307.50	29,800	23,906	11,402	2.45	4,654
2013	89,252.84	73,473	58,941	30,312	2.63	11,525
2014	473,119.57	380,010	304,847	168,273	2.76	60,968
2015	373,622.46	291,799	234,084	139,538	2.87	48,620
2016	2,417,722.35	1,827,073	1,465,694	952,028	2.99	318,404
2017	5,703,842.34	4,126,730	3,310,500	2,393,342	3.15	759,791
2018	5,444,027.19	3,706,294	2,973,222	2,470,805	3.40	726,707
2019	6,967,541.98	4,346,353	3,486,684	3,480,858	3.77	923,305
2020	10,874,658.29	6,000,636	4,813,764	6,060,894	4.26	1,422,745
2021	9,976,754.83	4,647,172	3,728,003	6,248,752	4.87	1,283,111
2022	3,855,128.26	1,419,458	1,138,702	2,716,426	5.58	486,815
2023	9,221,958.43	2,415,231	1,937,520	7,284,438	6.34	1,148,965
2024	11,334,772.30	1,682,080	1,349,380	9,985,392	7.17	1,392,663
2025	5,639,244.62	253,202	203,121	5,436,124	7.97	682,073
	72,442,339.59	31,230,210	25,053,155	47,389,185		9,275,314

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.1 12.80

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 392.03 TRANSPORTATION EQUIPMENT - TRAILERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-L2						
1999	1,693.67	1,525	929	765	2.90	264
2000	270.25	241	147	123	3.08	40
2006	22,279.51	18,269	11,128	11,152	4.23	2,636
2007	4,485.21	3,610	2,199	2,286	4.43	516
2008	4,106.61	3,244	1,976	2,131	4.59	464
2009	13,109.24	10,140	6,176	6,933	4.76	1,457
2010	2,530.11	1,914	1,166	1,364	4.91	278
2011	38,452.47	28,386	17,290	21,162	5.05	4,190
2012	53,767.04	38,615	23,520	30,247	5.20	5,817
2013	3,221.67	2,246	1,368	1,854	5.33	348
2014	11,929.01	8,012	4,880	7,049	5.50	1,282
2015	32,791.55	21,039	12,815	19,977	5.73	3,486
2016	124,809.41	75,734	46,129	78,680	5.99	13,135
2017	292,436.79	165,519	100,817	191,620	6.33	30,272
2018	189,187.30	98,075	59,737	129,450	6.74	19,206
2019	548,537.62	253,699	154,527	394,011	7.26	54,271
2020	377,603.72	151,268	92,137	285,467	7.86	36,319
2021	259,066.69	86,321	52,578	206,489	8.51	24,264
2023	368,914.43	68,249	41,570	327,344	9.91	33,032
2024	289,274.09	30,229	18,412	270,862	10.71	25,291
2025	230,424.96	7,281	4,435	225,990	11.49	19,668
	2,868,891.35	1,073,616	653,936	2,214,955		276,236

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.0 9.63

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 394.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
2001	166,031.01	161,050	162,099	3,932	0.75	3,932
2002	342,377.53	318,411	320,485	21,893	1.75	12,510
2003	194,692.15	173,276	174,405	20,287	2.75	7,377
2004	407,591.88	346,453	348,710	58,882	3.75	15,702
2005	76,325.20	61,823	62,226	14,099	4.75	2,968
2006	185,927.78	143,164	144,097	41,831	5.75	7,275
2007	597,992.98	436,535	439,379	158,614	6.75	23,498
2008	475,653.28	328,201	330,339	145,314	7.75	18,750
2009	531,371.14	345,391	347,641	183,730	8.75	20,998
2010	339,822.19	207,292	208,642	131,180	9.75	13,454
2011	211,403.92	120,500	121,285	90,119	10.75	8,383
2012	250,479.58	132,754	133,619	116,861	11.75	9,946
2013	446,160.84	218,619	220,043	226,118	12.75	17,735
2014	20,034.77	9,016	9,075	10,960	13.75	797
2017	117,295.27	38,707	38,959	78,336	16.75	4,677
2018	272,935.60	79,151	79,667	193,269	17.75	10,888
2019	5,749.93	1,437	1,446	4,304	18.75	230
2022	190,034.82	24,705	24,866	165,169	21.75	7,594
2023	555,514.36	49,996	50,322	505,192	22.75	22,206
2024	1,284,782.37	64,239	64,657	1,220,125	23.75	51,374
2025	838,450.81	12,577	12,659	825,792	24.62	33,542
	7,510,627.41	3,273,297	3,294,621	4,216,006		293,836

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.3 3.91

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 394.01 DUAL FUEL STATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
2014	96,063.65	72,048	69,249	26,815	3.75	7,151
2018	267,256.56	129,173	124,154	143,103	7.75	18,465
	363,320.21	201,221	193,403	169,917		25,616
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					6.6	7.05

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 14-L2						
1994	13,688.48	13,089	13,688			
1995	9,212.37	8,750	9,212			
1997	39,433.70	36,874	39,386	48	1.96	24
1999	228,111.55	209,589	223,866	4,246	2.32	1,830
2000	30,912.82	28,100	30,014	899	2.53	355
2001	22,826.47	20,537	21,936	890	2.70	330
2002	48,471.80	43,053	45,986	2,486	2.93	848
2003	15,325.75	13,435	14,350	976	3.13	312
2004	143,397.97	124,025	132,473	10,925	3.32	3,291
2005	162,420.54	138,464	147,896	14,525	3.50	4,150
2006	11,317.41	9,477	10,123	1,194	3.74	319
2007	144,714.87	119,115	127,229	17,486	3.92	4,461
2008	57,473.11	46,496	49,663	7,810	4.07	1,919
2009	26,275.36	20,794	22,210	4,065	4.28	950
2010	15,861.03	12,288	13,125	2,736	4.44	616
2011	365,512.77	276,584	295,425	70,088	4.58	15,303
2012	469,121.13	346,211	369,794	99,327	4.70	21,133
2013	262,812.00	188,331	201,160	61,652	4.84	12,738
2014	543,229.83	375,861	401,464	141,766	5.01	28,297
2015	931,735.42	618,859	661,015	270,720	5.18	52,263
2016	481,327.28	303,621	324,303	157,024	5.41	29,025
2017	1,547,327.06	914,006	976,267	571,060	5.72	99,836
2018	1,631,401.08	887,156	947,588	683,813	6.08	112,469
2019	1,087,823.76	530,967	567,136	520,688	6.55	79,494
2020	2,023,803.64	859,509	918,058	1,105,746	7.11	155,520
2021	752,122.47	266,251	284,388	467,734	7.76	60,275
2022	1,395,625.44	388,682	415,159	980,466	8.42	116,445
2023	750,912.00	148,380	158,487	592,425	9.14	64,817
2024	1,448,982.48	161,996	173,031	1,275,951	9.94	128,365
2025	1,152,211.22	39,060	41,721	1,110,490	10.70	103,784
	15,813,390.81	7,149,560	7,636,153	8,177,238		1,099,169

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.4 6.95

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 397.01 COMMUNICATION EQUIPMENT - RADIO

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
2013	25,275.63	25,276	25,276			
2016	173,435.44	160,428	146,864	26,571	0.75	26,571
2018	212,993.69	154,420	141,364	71,630	2.75	26,047
2021	63,550.96	27,009	24,725	38,826	5.75	6,752
2022	7,551.29	2,454	2,247	5,304	6.75	786
	482,807.01	369,587	340,476	142,331		60,156

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.4 12.46

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 397.02 COMMUNICATION EQUIPMENT - TELEPHONE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
2009	9,449.13	9,449	9,449			
2010	1,444,944.27	1,444,944	1,444,944			
2011	3,833,262.56	3,641,599	3,562,784	270,479	0.75	270,479
2012	905,836.65	800,153	782,835	123,002	1.75	70,287
2013	806,191.15	658,392	644,142	162,049	2.75	58,927
2014	722,768.03	542,076	530,344	192,424	3.75	51,313
2015	1,135,171.50	775,697	758,909	376,262	4.75	79,213
2016	572,355.36	352,954	345,315	227,040	5.75	39,485
2017	677,488.77	372,619	364,554	312,935	6.75	46,361
2018	1,307,644.73	632,024	618,345	689,300	7.75	88,942
2019	629,214.83	262,175	256,501	372,714	8.75	42,596
2020	1,276,738.40	446,858	437,187	839,551	9.75	86,108
2021	4,786,046.70	1,356,031	1,326,682	3,459,365	10.75	321,801
2022	356,557.78	77,255	75,583	280,975	11.75	23,913
2023	206,775.62	31,016	30,345	176,431	12.75	13,838
2024	972,904.79	81,072	79,317	893,588	13.75	64,988
2025	1,243,914.22	31,098	30,425	1,213,489	14.62	83,002
	20,887,264.49	11,515,412	11,297,661	9,589,603		1,341,253

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.1 6.42

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 397.04 COMMUNICATION EQUIPMENT - MICROWAVE TOWERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 18-SQUARE						
2017	16,495,252.80	7,560,269	8,244,189	8,251,064	9.75	846,263
2022	27,120.24	4,897	5,340	21,780	14.75	1,477
2023	507,723.37	63,465	69,206	438,517	15.75	27,842
2024	2,077,904.85	144,290	157,343	1,920,562	16.75	114,660
2025	2,354,908.25	49,053	53,490	2,301,418	17.62	130,614
	21,462,909.51	7,821,974	8,529,568	12,933,342		1,120,856

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.5 5.22

PEOPLES NATURAL GAS COMPANY LLC

ACCOUNT 398.00 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
2018	42,211.14	20,402	32,336	9,875	7.75	1,274
2019	8,235.82	3,432	5,439	2,797	8.75	320
	50,446.96	23,834	37,775	12,672		1,594
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					7.9	3.16

PART III. EXPERIENCED AND ESTIMATED NET SALVAGE

PEOPLES NATURAL GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2020 TRANSACTION YEAR				
303.01	3,182,564.17			
332.00	312,037.52	354,270.18		354,270.18-
333.00	147,310.45	49,795.88	398.67-	50,194.55-
334.00		6,414.69		6,414.69-
337.00	3,065.97			
353.00	331.76			
365.02	62.90			
366.02		2,930.29		2,930.29-
367.00	56,129.57			
368.00		8,925.19		8,925.19-
369.00	41,435.12	149,912.81		149,912.81-
375.00	137,699.00			
376.00	2,924,766.75	5,481,114.21	5,447.75	5,475,666.46-
378.00	247,415.34	133,251.85		133,251.85-
380.00	25,391.15	7,218,285.86		7,218,285.86-
382.00	77,330.11	179,485.81		179,485.81-
385.00	11,801.29			
387.00	1,139,893.47			
390.00	4,124.92			
390.01	5,616.43			
391.02	1,682,079.07			
391.03	2,281,202.94			
391.04	9,942.78			
392.02	4,933,097.97		740,403.03	740,403.03
392.03	324,315.66		62,342.60	62,342.60
394.00	111,132.66			
396.00	309,807.97		244,663.79	244,663.79
398.00	133,852.65			
	18,102,407.62	13,584,386.77	1,052,458.50	12,531,928.27-

PEOPLES NATURAL GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2021 TRANSACTION YEAR				
303.01	4,236,928.71			
303.02	688,465.65			
303.03	30,357,603.06			
325.04	842.82			
327.00	72,320.90			
329.00	19,981.66			
332.00	49,572.41	283,430.53	5,355.59	278,074.94-
333.00	393,210.79	598,258.96		598,258.96-
334.00		193,592.24		193,592.24-
352.01	247.67			
352.02	315.72			
367.00	25,087.30			
368.00	60,222.15			
369.00	104,960.48			
371.00	29,956.66			
374.02	65.83			
375.00	302,534.97			
376.00	6,155,363.71	2,963,187.81	23,652.10	2,939,535.71-
378.00	401,683.16	111,984.58		111,984.58-
380.00		2,895,377.06		2,895,377.06-
381.00	1,520,996.65			
382.00	79,377.04	203,907.37		203,907.37-
385.00	19,167.76			
387.00	275,471.62			
390.00	52,628.44			
391.01	2,870.77			
391.02	553,407.37			
391.03	1,989.70			
392.02	3,573,699.45		1,222,608.54	1,222,608.54
392.03	76,012.45			
394.00	181,272.53			
396.00	489,723.91			
397.01	1,032,019.73			
397.02	270,725.48		2,900.00	2,900.00
398.00	2,939.36			
	51,031,665.91	7,249,738.55	1,254,516.23	5,995,222.32-

PEOPLES NATURAL GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2022 TRANSACTION YEAR				
303.01	12,622,314.16			
332.00		1,324.31		1,324.31-
333.00	12,996.49	128,574.90		128,574.90-
337.00	11,276.88			
367.00	122,214.21			
369.00	93,926.26			
375.00	3,029.15			
376.00	4,857,456.40	215,592.11	11,205.71-	226,797.82-
378.00	397,251.67			
380.00	641,920.05			
381.00	105,869.13			
382.00	77,284.99	3,688.77		3,688.77-
387.00	198,953.28			
390.00	12,751.86			
390.01	1,649,167.38			
391.01	44,984.79			
391.02	8,852,331.02			
391.03	404,099.91			
392.01	51,430.57			
392.02	6,677,435.30			
392.03	172,345.94			
392.04	6,344.73			
394.00	101,958.56			
396.00	1,258,914.62			
397.01	19,826.01			
397.02	682,272.80			
398.00	8,672.53			
	39,087,028.69	349,180.09	11,205.71-	360,385.80-

PEOPLES NATURAL GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2023 TRANSACTION YEAR				
303.00	11,410,716.70			
327.00	8,172.19			
328.00	93.51			
329.00	2,504.08			
332.00	212,660.11	248,812.33	2,126.60	246,685.73-
333.00	415,019.25	116,205.39	8,300.39	107,905.00-
334.00	581.62	308.26		308.26-
337.00	27,521.63			
352.01	4,379.81			
353.00	71.31			
355.00	413.02			
365.20	112,927.57			
366.02	110.27	11.03		11.03-
367.00	136,165.38	1,771.39		1,771.39-
368.00	19,352.36	2,515.81		2,515.81-
369.00	22,193.01	11,762.30		11,762.30-
371.00	3,357.66			
375.00	105,085.85			
376.00	4,714,240.94	2,121,408.43		2,121,408.43-
378.00	274,342.80	49,381.70		49,381.70-
380.00	1,836,728.02	918,364.01		918,364.01-
381.00	588,764.88			
382.00	60,051.68	49,242.38		49,242.38-
385.00	12,822.45	512.90		512.90-
387.00	281,692.92			
390.00	232,852.06			
391.01	5,945.22			
391.02	460,225.76			
391.10	3,760.70			
391.20	269,272.18			
391.30	6,148.89			
392.01	28,182.66			
392.02	6,238,347.58		873,368.66	873,368.66
392.03	143,858.86		20,140.24	20,140.24
394.00	95,704.20			
394.30	5,641.89			
396.00	843,443.82		185,557.64	185,557.64
397.00	334,012.40			
398.00	726.32			
	28,918,091.56	3,520,295.93	1,089,493.53	2,430,802.40-

PEOPLES NATURAL GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2024 TRANSACTION YEAR				
303.00	7,653,659.80			
327.00	8,153.96			
328.00	601.71			
329.00	2,493.71			
332.00	114,430.53	251,086.12	79,311.73	171,774.39-
333.00	402,385.12	290,112.52	41,286.19	248,826.33-
334.00	620.12	945.18	108.25	836.93-
337.00	213.98			
352.01	7,750.91			
353.00	99.42			
355.00	2,189.95			
365.20	98,397.47			
366.02	110.24	33.08	2.05	31.03-
367.00	74,240.21		474.41	474.41
368.00	35,008.78	8,558.14	965.65	7,592.49-
369.00	23,190.16	34,707.12	2,723.32	31,983.80-
371.00	3,344.11			
375.00	89,633.24			
376.00	1,869,381.97	2,332,196.01	497,016.88	1,835,179.13-
378.00	167,226.52	65,764.62	12,656.23	53,108.39-
380.00	106,268.29	147,014.91	85,121.63	61,893.28-
381.00	646,412.84			
382.00	59,924.08	171,350.11	13,844.11	157,506.00-
385.00	13,208.99		170.96	170.96
387.00	290,998.10			
390.00	590,796.19			
391.10	936.08			
391.20	252,905.39			
391.30	5,775.15			
392.01	50.31			
392.02	1,904,430.94	172,499.23	515,919.96	343,420.73
392.03	75,153.13	5,296.76	20,876.78	15,580.02
394.00	80,468.70			
394.30	5,500.62			
396.00	145,010.85	23,482.52	45,807.44	22,324.92
397.00	151,173.95		540.47	540.47
398.00	695.75			
	14,882,841.27	3,503,046.32	1,316,826.06	2,186,220.26-
TOTAL	152,022,035.05	28,206,647.66	4,702,088.61	23,504,559.05-

APPENDIX C

PEOPLES NATURAL GAS COMPANY LLC

PITTSBURGH, PENNSYLVANIA

PEOPLES GAS DIVISION

2023 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION
ACCRUALS RELATED TO GAS PLANT
AS OF AUGUST 31, 2023

Prepared by:

GANNETT FLEMING

Excellence Delivered As Promised

PEOPLES NATURAL GAS COMPANY LLC

Pittsburgh, Pennsylvania

PEOPLES GAS DIVISION

2023 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO GAS PLANT
AS OF AUGUST 31, 2023

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | **F** 717.763.8150

gannettfleming.com

December 14, 2023

Peoples Natural Gas Company, LLC
375 North Shore Drive, Suite 600
Pittsburgh, PA 15212-5322

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to gas plant as of August 31, 2023. Summaries of the original cost, annual accruals and the book depreciation reserve are presented in Tables 1 and 2, beginning on page I-3 of the attached report.

A description of the methods and procedures upon which the study was based is set forth in a companion report, "2024 Depreciation Study - Calculated Annual Depreciation Accruals Related to Gas Plant as of August 31, 2024".

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

John J Spanos

JOHN J. SPANOS
President

JJS:mle

075181.000

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PART I. RESULTS OF STUDY

PEOPLES NATURAL GAS COMPANY LLC
PEOPLES GAS DIVISION
DEPRECIATION STUDY

PART I. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

The results of the depreciation study are summarized in Table 1, which sets forth the calculated annual depreciation related to Gas Plant in Service as of August 31, 2023. Table 2 presents the experienced gross salvage and cost of removal associated with regular retirements during the five-year period, 2018-2022 and the annual amortization of net salvage.

DETAILED TABULATIONS OF DEPRECIATION CALCULATIONS

The supporting data for the depreciation calculations are presented in account sequence in the section beginning on II-6. The original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual are shown for each vintage of each account or subaccount. The amounts of regular retirements, gross salvage and cost of removal are set forth by account for the years 2018 through 2022, beginning on beginning on page III-2.

PEOPLES GAS COMPANY LLC

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF AUGUST 31, 2023

	DEPRECIABLE GROUP	SURVIVOR CURVE		ORIGINAL COST AS OF AUGUST 31, 2023	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)=(5)/(6)
	INTANGIBLE PLANT								
303.00	MISCELLANEOUS INTANGIBLE PLANT								
	CIAC	40-SQ		1,452,616.00	384,827	1,067,789	34,635	2.38	30.8
	OTHER	5-SQ		4,757,632.88	2,239,822	2,517,811	668,482	14.05	3.8
	MAJOR	15-SQ		4,617,647.02	1,959,570	2,658,077	273,381	5.92	9.7
	SAP	10-SQ		6,835,159.40	6,200,225	634,934	80,304	1.17	7.9
	TOTAL MISCELLANEOUS INTANGIBLE PLANT			**17,663,055.30**	**10,784,444**	**6,878,611**	**1,056,802**	**5.98**	
	UNDERGROUND STORAGE PLANT								
350.20	RIGHTS OF WAY	70-R4		15,669.82	11,971	3,699	110	0.70	33.6
351.00	STRUCTURES AND IMPROVEMENTS								
	MAJOR	75-R1.5	*	369,655.11	166,455	203,200	13,938	3.77	14.6
	FENCING	55-R2		155,691.71	55,233	100,459	3,173	2.04	31.7
	OTHER	55-R2		58,531.18	50,924	7,607	258	0.44	29.5
	TOTAL STRUCTURES AND IMPROVEMENTS			583,878.00	272,612	311,266	17,369	2.97	17.9
352.01	WELLS - CONSTRUCTION	70-R4		613,125.74	613,126	0	0	-	-
352.02	WELLS - EQUIPMENT	65-R3		475,820.59	(69,593)	545,414	17,066	3.59	32.0
352.12	STORAGE RIGHTS	65-R4		392,671.88	202,693	189,979	5,266	1.34	36.1
353.00	LINES	40-S0		1,510,796.58	749,541	761,256	36,151	2.39	21.1
354.00	COMPRESSOR STATION EQUIPMENT	55-R2.5		7,764,168.31	1,693,458	6,070,710	168,283	2.17	36.1
355.00	MEASURING AND REGULATING STATION EQUIPMENT	45-R2.5		859,908.66	492,181	367,728	14,390	1.67	25.6
	TOTAL UNDERGROUND STORAGE PLANT			**12,216,039.58**	**3,965,989**	**8,250,052**	**258,635**	**2.12**	
	TRANSMISSION PLANT								
365.20	RIGHTS OF WAY	70-R4		2,091,602.96	1,107,475	984,128	26,003	1.24	37.8
366.10	COMPRESSOR STATION STRUCTURES								
	MAJOR	75-R1.5	*	599,767.46	247,257	352,510	15,039	2.51	23.4
	OTHER	55-R2		100,566.96	48,276	52,291	2,133	2.12	24.5
	TOTAL COMPRESSOR STATION STRUCTURES			700,334.42	295,533	404,801	17,172	2.45	23.6
366.20	MEASURING AND REGULATING STATION STRUCTURES								
	MAJOR	SQUARE	*	20,010.60	17,394	2,617	296	1.48	8.8
	FENCING	35-SQ		41,252.80	30,283	10,970	568	1.38	19.3
	OTHER	55-R3		13,509.83	10,011	3,499	199	1.47	17.6
	TOTAL MEASURING AND REGULATION STATION STRUCTURES			74,773.23	57,688	17,086	1,063	1.42	16.1
366.30	OTHER STRUCTURES								
	OTHER	40-R2.5		44,793.38	27,554	17,239	1,001	2.23	17.2
367.00	MAINS	75-R2.5		90,560,985.19	33,439,110	57,121,875	1,203,573	1.33	47.5
368.00	COMPRESSOR STATION EQUIPMENT	48-S0.5		4,883,556.05	1,825,425	3,058,131	110,421	2.26	27.7
369.00	MEASURING AND REGULATING STATION EQUIPMENT	38-R1.5		7,791,231.05	4,325,963	3,465,268	162,955	2.09	21.3
	TOTAL TRANSMISSION PLANT			**106,147,276.28**	**41,078,748**	**65,068,528**	**1,522,188**	**1.43**	

PEOPLES GAS COMPANY LLC

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF AUGUST 31, 2023

	DEPRECIABLE GROUP	SURVIVOR CURVE		ORIGINAL COST AS OF AUGUST 31, 2023	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)=(5)/(6)
	DISTRIBUTION PLANT								
374.20	LAND AND LAND RIGHTS - LAND RIGHTS	70-R4		1,263,747.80	519,811	743,937	16,433	1.30	45.3
375.00	STRUCTURES AND IMPROVEMENTS								
	MAJOR	75-R1.5	*	64,034.92	64,035	0	0	-	-
	OTHER	55-R2		992,438.14	475,807	516,631	16,406	1.65	31.5
	TOTAL STRUCTURES AND IMPROVEMENTS			1,056,473.06	539,842	516,631	16,406	1.55	31.5
376.00	MAINS								
	LOW PRESSURE	65-R2.5		133,895,759.22	44,160,840	89,734,919	2,169,232	1.62	41.4
	REGULAR PRESSURE	65-R2.5		74,959,533.66	6,957,475	68,002,059	1,405,660	1.88	48.4
	TOTAL MAINS			208,855,292.88	51,118,315	157,736,978	3,574,892	1.71	44.1
378.00	MEASURING AND REGULATING STATION EQUIPMENT - GENERAL	55-R2		10,561,764.38	3,326,008	7,235,756	213,643	2.02	33.9
380.00	SERVICES	50-R2.5		52,275,768.50	18,362,210	33,913,558	1,096,309	2.10	30.9
381.00	METERS	28-R1.5		22,517,144.84	9,551,717	12,965,428	893,128	3.97	14.5
382.10	METER INSTALLATIONS	50-R1.5		4,656,737.54	1,965,823	2,690,915	89,706	1.93	30.0
	TOTAL DISTRIBUTION PLANT			**301,186,929.00**	**85,383,726**	**215,803,203**	**5,900,517**	**1.96**	
	GENERAL PLANT								
390.00	STRUCTURES AND IMPROVEMENTS								
	MAJOR	75-R1.5	*	5,306,926.74	3,388,025	1,918,902	266,323	5.02	7.2
	OTHER	55-R2		783,485.98	95,523	687,963	19,071	2.43	36.1
	TOTAL STRUCTURES AND IMPROVEMENTS			6,090,412.72	3,483,548	2,606,865	285,394	4.69	9.1
	OFFICE FURNITURE AND EQUIPMENT								
391.10	FURNITURE	20-SQ		203,500.19	163,790	39,710	4,313	2.12	9.2
391.20	EQUIPMENT	10-SQ		71,077.33	89,279	(18,202)	0	-	-
391.30	COMPUTER EQUIPMENT	5-SQ		34,425.52	89,595	(55,169)	0	-	-
	TOTAL OFFICE FURNITURE AND EQUIPMENT			309,003.04	342,664	(33,661)	4,313	1.40	(7.8)
	TRANSPORTATION EQUIPMENT								
392.20	LIGHT TRUCKS	9-L3		6,393,398.62	2,082,551	4,310,848	858,268	13.42	5.0
392.30	HEAVY TRUCKS	14-S1		3,291,153.53	582,264	2,708,890	398,696	12.11	6.8
	TOTAL TRANSPORTATION EQUIPMENT			9,684,552.15	2,664,815	7,019,738	1,256,964		
393.00	STORES EQUIPMENT	25-SQ		5,895.12	3,711	2,184	318	5.39	6.9
	TOOLS, SHOP AND GARAGE EQUIPMENT								
394.20	TOOLS AND WORK EQUIPMENT	15-SQ		2,322,954.83	1,362,723	960,232	147,685	6.36	6.5

PEOPLES GAS COMPANY LLC

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF AUGUST 31, 2023

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF AUGUST 31, 2023	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)=(5)/(6)
396.00	POWER OPERATED EQUIPMENT	18-L2.5	2,784,364.20	848,546	1,935,818	203,232	7.30	9.5
	COMMUNICATION EQUIPMENT							
397.10	STRUCTURES	25-SQ	28,654.98	(1,835)	30,490	2,793	9.75	10.9
397.20	RADIO	15-SQ	1,744,950.46	1,026,718	718,232	124,465	7.13	5.8
	TOTAL COMMUNICATION EQUIPMENT		1,773,605.44	1,024,883	748,722	127,258	7.18	5.9
	TOTAL GENERAL PLANT		**22,970,787.50**	**9,730,890**	**13,239,898**	**2,025,164**	**8.82**	
	AMORTIZATION OF NET SALVAGE					**529,548**		
	TOTAL DEPRECIABLE GAS PLANT		**460,184,087.66**	**150,943,797**	**309,240,292**	**11,292,854**	**2.45**	
	NONDEPRECIABLE GAS PLANT							
301.00	ORGANIZATION		128,115.45					
302.00	FRANCHISES AND CONSENTS		71,371.20					
350.10	LAND AND LAND RIGHTS - LAND		46,820.26					
365.10	LAND AND LAND RIGHTS - LAND		119,953.61					
374.10	LAND AND LAND RIGHTS - LAND		13,101.61					
389.00	LAND AND LAND RIGHTS		164,935.92					
	TOTAL NONDEPRECIABLE GAS PLANT		**544,298.05**					
	TOTAL GAS PLANT		**460,728,385.71**					

* LIFE SPAN PROCEDURE WAS USED. CURVE SHOWN IS INTERIM SURVIVOR CURVE.

PEOPLES GAS COMPANY LLC

TABLE 2. AMORTIZATION OF EXPERIENCED NET SALVAGE

	2018		2019		2020		2021		2022			
ACCOUNT	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE	SALVAGE ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)=(12)/5
352.00	84,574		216,163				1,982				(302,719)	(60,544)
353.00	11,839		3,444								(15,283)	(3,057)
354.00		5,840		464							6,304	1,261
365.20	600										(600)	(120)
367.00	92,473		104,641		99,744		215,555			6,939	(505,474)	(101,095)
368.00			27,275		31,881						(59,156)	(11,831)
376.00	164,351	4,091	227,525	2,643	342,321	8,316	241,723	5,566	46,553	10,879	(990,978)	(198,196)
378.00	2,755				4,249		56,011				(63,015)	(12,603)
380.00	235,141		335,890		424,224		189,733				(1,184,988)	(236,998)
382.10	12,098		8,747		9,887		11,196		1,495		(43,423)	(8,685)
392.00		96,263		146,103		139,251		103,133		5,644	490,394	98,079
394.20		5,700									5,700	1,140
396.00		15,000		500							15,500	3,100
TOTAL	**603,831**	**126,894**	**923,685**	**149,710**	**912,306**	**147,567**	**716,200**	**108,699**	**48,048**	**23,461**	**(2,647,739)**	**(529,548)**

PART II. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

PEOPLES GAS COMPANY LLC

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1891	39	39			0.0
1892	34	34			0.0
1894	297	297			0.0
1896	8,447	8,447			0.0
1897	186	186			0.0
1899	1,781	1,782	1-	1-	0.0
1900	3,382	3,382		1-	0.0
1901	3,615	3,615		1-	0.0
1902	10,138	10,139	1-	2-	0.0
1903	9,514	9,514		2-	0.0
1904	12,286	12,286		2-	0.0
1905	46,511	46,511		2-	0.0
1906	30,202	30,202		2-	0.0
1907	7,477	7,477		2-	0.0
1908	21,211	21,211		2-	0.0
1909	32,962	32,962		2-	0.0
1910	2,493	2,492	1	1-	0.0
1911	23,297	23,297		1-	0.0
1912	32,636	32,636		1-	0.0
1913	24,409	24,409		1-	0.0
1914	48,949	48,949		1-	0.0
1915	39,043	39,043		1-	0.0
1916	24,788	24,788		1-	0.0
1917	35,515	35,514	1		0.0
1918	8,566	8,566			0.0
1919	14,143	14,143			0.0
1920	822	822			0.0
1921	686	686			0.0
1922	9,803	9,787	16	16	0.0
1923	5,534	5,534		16	0.0
1924	53,426	53,426		16	0.0
1925	99,486	99,485	1	17	0.0
1926	171,156	170,587	569	586	0.0
1927	35,041	35,040	1	587	0.0
1928	408,196	403,205	4,991	5,578	0.0
1929	29,791	29,711	80	5,658	0.0
1930	3,198	3,181	17	5,675	0.0
1931	788	784	4	5,679	0.0
1932	5,594	5,508	86	5,765	0.0
1933	2,213	2,172	41	5,806	0.0
1934	969	914	55	5,861	0.0
1935	53,519	52,021	1,498	7,359	0.0
1936	29,032	28,098	934	8,293	0.0
1937	120,189	111,617	8,572	16,865	0.0
1938	40,145	38,415	1,730	18,595	0.0
1939	65,295	62,232	3,063	21,658	0.0

PEOPLES GAS COMPANY LLC

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1940	106,218	98,359	7,859	29,517	0.0
1941	27,565	25,978	1,587	31,104	0.0
1942	27,347	25,537	1,810	32,914	0.0
1943	15,496	14,413	1,083	33,997	0.0
1944	11,922	10,989	933	34,930	0.0
1945	4,337	3,966	371	35,301	0.0
1946	10,761	9,068	1,693	36,994	0.0
1947	11,772	10,277	1,495	38,489	0.0
1948	27,934	23,073	4,861	43,350	0.0
1949	66,076	57,540	8,536	51,886	0.0
1950	87,962	78,090	9,872	61,758	0.0
1951	97,406	86,046	11,360	73,118	0.0
1952	70,263	62,134	8,129	81,247	0.0
1953	114,132	93,283	20,849	102,096	0.0
1954	168,048	144,827	23,221	125,317	0.0
1955	420,479	358,798	61,681	186,998	0.1
1956	193,048	160,160	32,888	219,886	0.1
1957	314,164	260,683	53,481	273,367	0.1
1958	230,572	190,980	39,592	312,959	0.1
1959	358,662	290,204	68,458	381,417	0.1
1960	222,903	192,099	30,804	412,221	0.1
1961	553,003	439,094	113,909	526,130	0.2
1962	338,505	267,749	70,756	596,886	0.2
1963	1,356,685	1,051,093	305,592	902,478	0.3
1964	704,947	552,108	152,839	1,055,317	0.3
1965	600,749	468,636	132,113	1,187,430	0.4
1966	1,321,709	1,034,245	287,464	1,474,894	0.5
1967	775,806	584,592	191,214	1,666,108	0.5
1968	681,320	510,054	171,266	1,837,374	0.6
1969	1,365,848	997,506	368,342	2,205,716	0.7
1970	1,220,101	918,701	301,400	2,507,116	0.8
1971	872,282	625,974	246,308	2,753,424	0.9
1972	962,245	669,191	293,054	3,046,478	1.0
1973	992,661	694,432	298,229	3,344,707	1.1
1974	1,594,524	1,098,670	495,854	3,840,561	1.2
1975	830,236	594,905	235,331	4,075,892	1.3
1976	1,160,787	870,686	290,101	4,365,993	1.4
1977	1,226,154	892,208	333,946	4,699,939	1.5
1978	1,598,112	1,165,148	432,964	5,132,903	1.7
1979	2,162,431	1,574,963	587,468	5,720,371	1.8
1980	1,513,064	1,128,461	384,603	6,104,974	2.0
1981	1,943,006	1,378,346	564,660	6,669,634	2.2
1982	2,068,853	1,419,845	649,008	7,318,642	2.4
1983	2,247,173	1,521,597	725,576	8,044,218	2.6
1984	4,833,829	3,115,923	1,717,906	9,762,124	3.2
1985	2,815,996	1,826,876	989,120	10,751,244	3.5

PEOPLES GAS COMPANY LLC

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1986	3,502,705	2,247,905	1,254,800	12,006,044	3.9
1987	7,153,730	4,446,046	2,707,684	14,713,728	4.8
1988	2,579,766	1,611,768	967,998	15,681,726	5.1
1989	5,575,299	3,381,369	2,193,930	17,875,656	5.8
1990	8,069,163	4,618,896	3,450,267	21,325,923	6.9
1991	4,633,593	2,702,078	1,931,515	23,257,438	7.5
1992	6,077,056	3,537,808	2,539,248	25,796,686	8.3
1993	6,601,252	3,767,769	2,833,483	28,630,169	9.3
1994	5,006,657	2,792,110	2,214,547	30,844,716	10.0
1995	4,306,520	2,357,908	1,948,612	32,793,328	10.6
1996	4,929,452	2,617,365	2,312,087	35,105,415	11.4
1997	7,093,208	3,706,005	3,387,203	38,492,618	12.4
1998	7,146,453	3,750,964	3,395,489	41,888,107	13.5
1999	7,368,065	3,334,335	4,033,730	45,921,837	14.8
2000	7,868,297	3,619,945	4,248,352	50,170,189	16.2
2001	5,958,321	2,661,535	3,296,786	53,466,975	17.3
2002	7,108,549	3,041,907	4,066,642	57,533,617	18.6
2003	7,246,797	2,973,462	4,273,335	61,806,952	20.0
2004	8,397,103	3,642,841	4,754,262	66,561,214	21.5
2005	8,738,360	3,243,532	5,494,828	72,056,042	23.3
2006	8,547,612	3,198,578	5,349,034	77,405,076	25.0
2007	9,212,908	3,388,743	5,824,165	83,229,241	26.9
2008	11,316,223	4,064,011	7,252,212	90,481,453	29.3
2009	6,459,957	2,362,596	4,097,361	94,578,814	30.6
2010	6,988,133	2,211,587	4,776,546	99,355,360	32.1
2011	8,199,631	2,413,667	5,785,964	105,141,324	34.0
2012	9,932,761	2,650,241	7,282,520	112,423,844	36.4
2013	17,057,913	4,237,352	12,820,561	125,244,405	40.5
2014	25,522,207	9,724,408	15,797,799	141,042,204	45.6
2015	12,201,309	3,398,102	8,803,207	149,845,411	48.5
2016	18,564,858	3,249,972	15,314,886	165,160,297	53.4
2017	20,983,383	3,360,495	17,622,888	182,783,185	59.1
2018	21,531,153	3,534,617	17,996,536	200,779,721	64.9
2019	22,279,877	3,405,672	18,874,205	219,653,926	71.0
2020	22,630,898	3,064,928	19,565,970	239,219,896	77.4
2021	26,191,258	2,195,226	23,996,032	263,215,928	85.1
2022	29,390,528	896,469	28,494,059	291,709,987	94.3
2023	17,909,239	378,929	17,530,310	309,240,297	100.0
TOTAL	460,184,091	150,943,794	309,240,297		

UTILITY PLANT IN SERVICE

PEOPLES GAS COMPANY LLC

ACCOUNT 303.00 MISCELLANEOUS INTANGIBLE PLANT - CIAC

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 40-SQUARE						
NET SALVAGE PERCENT.. 0						
2014	1,452,616.00	332,896	384,827	1,067,789	30.83	34,635
	1,452,616.00	332,896	384,827	1,067,789		34,635

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 30.8 2.38

PEOPLES GAS COMPANY LLC

ACCOUNT 303.01 MISCELLANEOUS INTANGIBLE PLANT - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2018	552,628.34	552,628	552,628			
2019	298,573.35	248,810	298,573			
2020	1,035,670.52	655,921	801,694	233,977	1.83	127,856
2021	787,680.38	341,326	417,183	370,497	2.83	130,918
2023	2,083,080.29	138,879	169,744	1,913,336	4.67	409,708
	4,757,632.88	1,937,564	2,239,822	2,517,811		668,482

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.8 14.05

PEOPLES GAS COMPANY LLC

ACCOUNT 303.02 MISCELLANEOUS INTANGIBLE PLANT - MAJOR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2015	2,137,085.95	1,163,515	1,345,022	792,064	6.83	115,968
2016	315,993.54	150,975	174,527	141,467	7.83	18,067
2020	1,710,548.17	361,114	417,448	1,293,100	11.83	109,307
2021	77,229.59	11,155	12,895	64,335	12.83	5,014
2023	376,789.77	8,372	9,678	367,112	14.67	25,025
	4,617,647.02	1,695,131	1,959,570	2,658,077		273,381

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.7 5.92

PEOPLES GAS COMPANY LLC

ACCOUNT 303.03 MISCELLANEOUS INTANGIBLE PLANT - SAP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2014	5,293,409.61	4,852,310	5,293,410			
2015	76,911.58	62,811	76,912			
2016	9,946.99	7,129	9,947			
2017	50,958.64	31,425	50,959			
2019	899,766.02	374,906	703,437	196,329	5.83	33,676
2020	32,546.42	10,306	19,337	13,209	6.83	1,934
2021	48,329.71	10,472	19,649	28,681	7.83	3,663
2022	663.57	77	144	520	8.83	59
2023	422,626.86	14,086	26,430	396,197	9.67	40,972
	6,835,159.40	5,363,522	6,200,225	634,934		80,304

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.9 1.17

PEOPLES GAS COMPANY LLC

ACCOUNT 350.20 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1947	11.20	10	11			
1948	1,215.76	1,075	1,216			
1949	109.20	96	109			
1953	162.40	139	162			
1954	2,117.36	1,796	2,117			
1955	437.08	368	437			
1967	100.00	73	91	9	18.63	
1969	1,120.00	799	999	121	20.06	6
1970	644.80	453	567	78	20.79	4
1972	392.00	267	334	58	22.28	3
1973	1,064.00	714	893	171	23.04	7
1974	448.00	296	370	78	23.81	3
1977	280.00	184	230	50	24.25	2
1980	112.00	70	88	24	26.28	1
1983	1,456.00	848	1,060	396	28.80	14
1985	1,400.00	780	976	424	30.33	14
1986	409.02	222	278	131	31.33	4
1987	441.00	234	293	148	31.86	5
1993	875.00	393	491	384	36.95	10
2000	2,875.00	999	1,249	1,626	43.50	37
	15,669.82	9,816	11,971	3,699		110

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 33.6 0.70

PEOPLES GAS COMPANY LLC

ACCOUNT 351.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
FENCING						
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1986	2,159.71	1,349	1,256	903	22.36	40
1987	3,015.84	1,854	1,727	1,289	22.66	57
2000	87,678.55	38,386	35,747	51,932	29.75	1,746
2002	15,519.54	6,307	5,873	9,646	30.92	312
2004	4,097.17	1,532	1,427	2,671	32.11	83
2007	7,536.43	2,437	2,269	5,267	33.84	156
2008	3,484.86	1,068	995	2,490	34.34	73
2010	6,944.58	1,883	1,754	5,191	35.38	147
2015	25,255.03	4,495	4,186	21,069	37.71	559
	155,691.71	59,311	55,233	100,459		3,173
SPRANKLE COMPRESSOR STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2026						
NET SALVAGE PERCENT.. 0						
1926	27,541.11	26,519	27,164	377	2.66	142
1957	6,109.86	5,822	5,964	146	2.77	53
1966	509.61	483	495	15	2.78	5
1969	1,945.00	1,838	1,883	62	2.79	22
1975	218.60	205	210	9	2.80	3
1977	909.38	856	877	33	2.85	12
1992	1,768.44	1,620	1,659	109	2.85	38
1997	1,608.21	1,452	1,487	121	2.82	43
	40,610.21	38,795	39,739	871		318
VARDY COMPRESSOR STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2029						
NET SALVAGE PERCENT.. 0						
1974	28,324.75	25,065	25,675	2,650	5.67	467
1992	1,047.69	885	907	141	5.73	25
1997	20,000.00	16,380	16,779	3,221	5.78	557
2000	3,660.53	2,934	3,005	655	5.73	114
	53,032.97	45,264	46,366	6,667		1,163

PEOPLES GAS COMPANY LLC

ACCOUNT 351.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
KINTER COMPRESSOR STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2040						
NET SALVAGE PERCENT.. 0						
1937	16,189.19	13,386	13,712	2,477	12.52	198
1938	95.25	79	81	14	12.63	1
1952	204.04	162	166	38	13.92	3
1972	13,022.94	9,609	9,843	3,180	15.23	209
1973	180.36	132	135	45	15.28	3
1989	10,852.97	7,454	7,635	3,218	15.58	207
1996	12,117.50	7,670	7,857	4,261	15.75	271
1997	885.10	551	564	321	15.85	20
2006	6,265.06	3,248	3,327	2,938	15.95	184
2020	216,199.52	36,149	37,029	179,170	15.77	11,361
	276,011.93	78,440	80,350	195,662		12,457
OTHER						
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1922	2,829.48	2,815	2,829			
1947	1,046.82	908	1,047			
1955	19,384.40	15,916	19,384			
1956	3,625.00	2,953	3,625			
1973	756.00	514	756			
1989	8,610.52	5,090	8,015	595	23.64	25
1997	4,353.06	2,096	3,301	1,052	28.18	37
1998	1,704.04	798	1,257	447	28.60	16
2001	15,235.14	6,417	10,105	5,130	30.46	168
2003	986.72	384	605	382	31.65	12
	58,531.18	37,891	50,924	7,607		258
	583,878.00	259,701	272,612	311,266		17,369

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.9 2.97

PEOPLES GAS COMPANY LLC

ACCOUNT 352.01 WELLS - CONSTRUCTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1924	2,368.00	2,315	2,368			
1925	1,557.00	1,517	1,557			
1928	2,962.00	2,857	2,962			
1929	3,668.00	3,525	3,668			
1946	2,252.39	2,014	2,252			
1947	1,642.94	1,461	1,643			
1948	674.93	597	675			
1972	37,545.59	25,595	37,546			
1973	19,338.92	12,974	19,339			
1984	67,502.53	38,335	67,503			
1989	81,086.07	40,721	81,086			
1990	27,260.97	13,382	27,261			
1998	306,931.44	115,867	306,931			
1999	3,351.15	1,215	3,351			
2000	36,843.83	12,803	36,844			
2017	18,139.98	1,700	18,140			
	613,125.74	276,878	613,126			

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

PEOPLES GAS COMPANY LLC

ACCOUNT 352.02 WELLS - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R3						
NET SALVAGE PERCENT.. 0						
1946	889.56	774	248-	1,138	8.42	135
1947	563.82	488	156-	720	8.73	82
1948	506.41	436	139-	645	9.06	71
1971	5,292.75	3,639	1,164-	6,457	20.31	318
1972	20,815.26	14,100	4,509-	25,324	20.97	1,208
1973	7,161.22	4,778	1,528-	8,689	21.63	402
1977	14,646.32	9,939	3,179-	17,825	21.86	815
1981	16,059.66	10,158	3,249-	19,309	24.50	788
1984	26,750.00	15,924	5,093-	31,843	26.62	1,196
1986	16,462.41	9,423	3,014-	19,476	27.77	701
1989	24,459.08	13,037	4,169-	28,628	29.94	956
1991	10,795.83	5,486	1,755-	12,551	31.13	403
1999	281,659.19	110,946	35,482-	317,141	37.18	8,530
2000	47,959.20	18,220	5,827-	53,786	37.81	1,423
2015	1,799.88	254	81-	1,881	49.64	38
	475,820.59	217,602	69,593-	545,414		17,066

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 32.0 3.59

PEOPLES GAS COMPANY LLC

ACCOUNT 352.12 STORAGE RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R4						
NET SALVAGE PERCENT.. 0						
1982	40,000.00	25,360	30,684	9,316	23.77	392
1998	306,874.45	124,346	150,448	156,426	36.94	4,235
1999	45,797.43	17,820	21,561	24,236	37.94	639
	392,671.88	167,526	202,693	189,979		5,266

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 36.1 1.34

PEOPLES GAS COMPANY LLC

ACCOUNT 353.00 LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-S0						
NET SALVAGE PERCENT.. 0						
1955	59.12	53	58	1	4.40	
1967	1,408.59	1,089	1,184	225	9.08	25
1969	8,921.41	6,718	7,302	1,619	9.88	164
1973	20,092.47	14,301	15,543	4,549	11.53	395
1974	7,498.66	5,260	5,717	1,782	11.94	149
1975	1,320.10	912	991	329	12.36	27
1977	4,755.64	3,776	4,104	652	11.97	54
1978	92.88	73	79	14	12.30	1
1981	3,742.23	2,840	3,087	655	13.39	49
1983	53,524.02	39,560	42,997	10,527	14.18	742
1984	8,052.76	5,898	6,410	1,643	14.31	115
1986	1,982.44	1,407	1,529	453	15.19	30
1988	37,073.02	25,684	27,915	9,158	15.59	587
1990	7,473.03	5,007	5,442	2,031	16.34	124
1993	14,359.94	9,097	9,887	4,473	17.45	256
1998	350.78	200	217	134	18.89	7
1999	35,898.66	19,952	21,685	14,214	19.31	736
2000	69,766.68	37,821	41,107	28,660	19.57	1,464
2001	20,654.26	10,897	11,844	8,810	19.85	444
2002	1,771.09	907	986	785	20.16	39
2003	4,001.15	1,985	2,157	1,844	20.48	90
2004	109,713.02	52,783	57,368	52,345	20.67	2,532
2005	15,384.98	7,126	7,745	7,640	21.05	363
2006	271,381.14	121,117	131,638	139,743	21.30	6,561
2007	203,390.61	87,133	94,702	108,689	21.57	5,039
2008	443,981.80	181,811	197,605	246,377	21.87	11,266
2009	6,871.92	2,677	2,910	3,962	22.20	178
2010	204.21	76	83	121	22.42	5
2011	18,931.47	6,611	7,185	11,746	22.68	518
2012	12,627.08	4,132	4,491	8,136	22.96	354
2013	89,191.18	27,203	29,566	59,625	23.17	2,573
2015	20,667.31	5,316	5,778	14,889	23.58	631
2023	15,652.93	211	229	15,424	24.36	633
	1,510,796.58	689,633	749,541	761,256		36,151

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 21.1 2.39

PEOPLES GAS COMPANY LLC

ACCOUNT 354.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2.5						
NET SALVAGE PERCENT.. 0						
1922	200.56	200	185	16	0.29	16
1926	1,998.13	1,952	1,806	192	1.28	150
1934	391.52	367	340	52	3.43	15
1935	128.05	120	111	17	3.67	5
1937	22,511.68	20,821	19,262	3,250	4.13	787
1938	145.79	134	124	22	4.35	5
1940	427.87	391	362	66	4.78	14
1941	32.37	29	27	5	5.00	1
1942	572.30	518	479	93	5.22	18
1948	20,508.86	18,051	16,700	3,809	6.59	578
1949	25,655.00	22,469	20,787	4,868	6.83	713
1950	73.85	64	59	15	7.08	2
1952	12,244.29	10,557	9,767	2,477	7.58	327
1953	83,449.39	71,554	66,197	17,252	7.84	2,201
1954	18,684.13	15,929	14,737	3,947	8.11	487
1956	35,797.62	30,154	27,897	7,901	8.67	911
1959	8,431.19	6,963	6,442	1,989	9.58	208
1960	1,412.70	1,158	1,071	342	9.91	35
1962	792.58	640	592	201	10.61	19
1967	496.53	383	354	143	12.62	11
1970	40,341.91	30,066	27,815	12,527	14.01	894
1971	166.76	123	114	53	14.51	4
1972	6,122.50	4,451	4,118	2,004	15.02	133
1974	77,931.99	55,133	51,006	26,926	16.09	1,673
1975	875.46	611	565	310	16.64	19
1977	2,026.45	1,506	1,393	633	15.94	40
1979	160.41	115	106	54	17.18	3
1981	4,022.92	2,816	2,605	1,418	18.07	78
1982	43,067.23	29,609	27,392	15,675	18.71	838
1983	42,407.28	28,616	26,474	15,933	19.36	823
1984	5,284.91	3,519	3,256	2,029	19.66	103
1985	27,434.30	17,904	16,564	10,870	20.32	535
1986	15,814.31	10,110	9,353	6,461	20.97	308
1987	8,037.69	5,029	4,653	3,385	21.64	156
1988	2,100.43	1,293	1,196	904	21.98	41
1989	49,368.92	29,686	27,464	21,905	22.65	967
1990	36,627.90	21,501	19,891	16,737	23.33	717
1991	31,960.30	18,300	16,930	15,030	24.01	626
1992	75,494.17	42,118	38,965	36,529	24.70	1,479
1993	52,246.53	28,527	26,391	25,856	25.08	1,031
1994	61,709.98	32,756	30,304	31,406	25.78	1,218
1995	41,456.22	21,367	19,767	21,689	26.48	819
1996	15,565.75	7,781	7,199	8,367	27.18	308

PEOPLES GAS COMPANY LLC

ACCOUNT 354.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2.5						
NET SALVAGE PERCENT.. 0						
1997	45,828.13	22,305	20,635	25,193	27.60	913
1998	105,667.70	49,727	46,004	59,664	28.31	2,108
1999	278,086.71	126,335	116,878	161,209	29.03	5,553
2000	598,992.42	262,239	242,608	356,384	29.75	11,979
2001	5,364.07	2,271	2,101	3,263	30.19	108
2002	359,928.06	146,275	135,325	224,603	30.92	7,264
2004	40,349.59	15,083	13,954	26,396	32.11	822
2005	57,361.37	20,426	18,897	38,464	32.85	1,171
2008	4,056.99	1,230	1,138	2,919	34.84	84
2009	6,650.66	1,894	1,752	4,899	35.58	138
2010	500,623.36	133,817	123,799	376,824	36.09	10,441
2011	21,564.37	5,352	4,951	16,613	36.85	451
2013	67,515.83	14,205	13,142	54,374	38.14	1,426
2014	46,178.98	8,848	8,186	37,993	38.68	982
2015	33,682.52	5,803	5,369	28,314	39.23	722
2016	3,478.80	531	491	2,988	39.78	75
2017	43,929.26	5,825	5,389	38,540	40.34	955
2018	23,260.96	2,608	2,413	20,848	40.92	509
2019	4,053,777.39	371,731	343,902	3,709,875	41.29	89,849
2020	510,998.92	36,077	33,376	477,623	41.68	11,459
2021	44,843.19	2,206	2,041	42,802	41.89	1,022
2023	37,850.30	310	287	37,563	40.15	936
	7,764,168.31	1,830,489	1,693,458	6,070,710		168,283

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 36.1 2.17

PEOPLES GAS COMPANY LLC

ACCOUNT 355.00 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R2.5						
NET SALVAGE PERCENT.. 0						
1957	250.16	226	250			
1962	93.04	82	93			
1967	458.40	390	458			
1970	588.27	489	588			
1972	393.80	321	391	3	8.28	
1974	1,732.72	1,386	1,689	44	9.01	5
1975	64,607.38	51,112	62,291	2,316	9.40	246
1980	9,169.57	7,362	8,972	198	10.60	19
1984	2,323.50	1,765	2,151	172	12.38	14
1985	11,116.43	8,316	10,135	981	12.85	76
1986	69,529.45	51,167	62,358	7,171	13.34	538
1987	75,800.20	54,826	66,817	8,983	13.84	649
1988	3,284.80	2,322	2,830	455	14.59	31
1990	8,332.59	5,665	6,904	1,429	15.61	92
1994	9,462.50	5,878	7,164	2,298	17.78	129
1997	26,332.18	15,020	18,305	8,027	19.71	407
1998	18,471.36	10,228	12,465	6,006	20.29	296
1999	29,380.42	15,763	19,211	10,169	20.88	487
2000	131,222.25	68,091	82,983	48,239	21.48	2,246
2004	8,505.41	3,766	4,590	3,915	24.12	162
2006	5,117.06	2,064	2,515	2,602	25.39	102
2007	36,379.00	13,940	16,989	19,390	26.03	745
2008	19,914.99	7,219	8,798	11,117	26.67	417
2011	237,109.98	70,682	86,141	150,969	28.65	5,269
2015	9,627.81	1,997	2,434	7,194	31.20	231
2021	43,463.71	2,590	3,156	40,308	34.20	1,179
2022	37,241.68	1,233	1,503	35,739	34.05	1,050
	859,908.66	403,900	492,181	367,728		14,390

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 25.6 1.67

PEOPLES GAS COMPANY LLC

ACCOUNT 365.20 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1896	1,491.56	1,492	1,492			
1897	186.44	186	186			
1899	279.66	280	280			
1900	1,118.66	1,119	1,119			
1901	2,423.76	2,424	2,424			
1902	3,262.76	3,263	3,263			
1903	652.55	653	653			
1904	1,957.65	1,958	1,958			
1905	10,813.71	10,814	10,814			
1906	8,762.83	8,763	8,763			
1907	1,025.44	1,025	1,025			
1908	3,822.09	3,822	3,822			
1909	9,228.94	9,229	9,229			
1910	2,050.88	2,051	2,051			
1911	2,050.88	2,051	2,051			
1912	8,110.28	8,110	8,110			
1913	7,727.12	7,727	7,727			
1914	9,272.66	9,273	9,273			
1915	13,452.13	13,452	13,452			
1916	2,027.54	2,028	2,028			
1917	2,983.09	2,975	2,983			
1918	1,118.66	1,112	1,119			
1919	932.22	925	932			
1920	372.89	369	373			
1921	466.11	460	466			
1922	6,570.33	6,462	6,570			
1923	4,505.92	4,418	4,506			
1924	10,189.22	9,959	10,189			
1925	9,051.28	8,819	9,051			
1926	10,325.40	10,027	10,325			
1927	559.33	541	559			
1928	93.22	90	93			
1929	2,050.88	1,971	2,051			
1930	488.65	468	489			
1931	93.22	89	93			
1933	53.13	50	53			
1934	52.63	50	53			
1935	3,822.09	3,590	3,822			
1936	1,305.10	1,221	1,305			
1937	3,076.31	2,866	3,076			
1938	1,272.58	1,181	1,273			
1939	5,331.41	4,926	5,331			
1940	105.22	97	105			

PEOPLES GAS COMPANY LLC

ACCOUNT 365.20 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1941	2,620.80	2,401	2,598	23	5.88	4
1942	1,137.28	1,037	1,122	15	6.17	2
1943	853.78	775	839	15	6.47	2
1944	489.44	442	478	11	6.78	2
1945	79.23	71	77	2	7.09	
1946	1,182.16	1,057	1,144	38	7.42	5
1947	684.32	608	658	26	7.76	3
1948	90.72	80	87	4	8.12	
1949	1,862.56	1,637	1,772	91	8.49	11
1950	5,539.76	4,837	5,235	305	8.88	34
1951	5,307.52	4,603	4,981	327	9.29	35
1952	572.32	493	534	38	9.72	4
1953	313.96	268	290	24	10.17	2
1954	1,875.50	1,590	1,721	154	10.64	14
1955	2,017.97	1,697	1,836	182	11.14	16
1956	3,933.97	3,279	3,548	386	11.66	33
1957	3,389.26	2,799	3,029	360	12.20	30
1959	3,399.11	2,751	2,977	422	13.35	32
1960	808.64	647	700	109	13.96	8
1961	9,275.02	7,342	7,945	1,330	14.59	91
1962	4,755.09	3,721	4,027	728	15.23	48
1963	26,678.10	20,622	22,317	4,361	15.89	274
1964	15,046.30	11,487	12,431	2,615	16.56	158
1965	70,676.22	53,269	57,647	13,029	17.24	756
1966	28,093.08	20,897	22,614	5,479	17.93	306
1967	7,076.96	5,193	5,620	1,457	18.63	78
1968	8,527.45	6,171	6,678	1,849	19.34	96
1969	19,661.40	14,027	15,180	4,481	20.06	223
1970	6,915.20	4,861	5,261	1,654	20.79	80
1971	2,472.96	1,712	1,853	620	21.53	29
1972	4,981.44	3,396	3,675	1,306	22.28	59
1973	1,575.40	1,057	1,144	431	23.04	19
1974	4,088.00	2,698	2,920	1,168	23.81	49
1975	1,428.00	926	1,002	426	24.60	17
1976	960.20	643	696	264	23.25	11
1977	280.00	184	199	81	24.25	3
1978	1,344.00	868	939	405	24.76	16
1979	12,868.80	8,128	8,796	4,073	25.76	158
1980	39,489.72	24,547	26,564	12,926	26.28	492
1981	3,724.00	2,261	2,447	1,277	27.28	47
1982	17,016.00	10,157	10,992	6,024	27.80	217
1983	8,078.19	4,705	5,092	2,986	28.80	104
1984	55,490.60	31,513	34,103	21,388	29.80	718

PEOPLES GAS COMPANY LLC

ACCOUNT 365.20 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1985	14,290.20	7,962	8,616	5,674	30.33	187
1986	62,305.05	33,807	36,585	25,720	31.33	821
1987	194,908.23	103,613	112,128	82,780	31.86	2,598
1988	115,525.78	59,727	64,636	50,890	32.86	1,549
1989	123,238.75	61,891	66,978	56,261	33.86	1,662
1990	185,551.25	91,087	98,573	86,978	34.40	2,528
1991	32,183.75	15,323	16,582	15,602	35.40	441
1992	3,906.25	1,802	1,950	1,956	36.40	54
1993	44,606.25	20,051	21,699	22,907	36.95	620
1994	37,950.00	16,493	17,848	20,102	37.95	530
1995	63,750.00	26,756	28,955	34,795	38.95	893
1996	27,606.25	11,175	12,093	15,513	39.95	388
1997	31,875.00	12,428	13,449	18,426	40.95	450
1999	23,468.75	8,507	9,206	14,263	42.50	336
2000	48,556.25	16,873	18,260	30,296	43.50	696
2001	13,687.50	4,551	4,925	8,762	44.50	197
2002	15,664.48	4,973	5,382	10,282	45.50	226
2003	33,083.71	10,008	10,831	22,253	46.50	479
2004	52,145.60	15,091	16,331	35,815	47.06	761
2005	15,277.70	4,191	4,535	10,743	48.06	224
2006	24,609.40	6,379	6,903	17,706	49.06	361
2007	51,227.20	12,505	13,533	37,694	50.06	753
2008	133,150.55	30,491	32,997	100,154	51.06	1,961
2009	24,419.44	5,223	5,652	18,767	52.06	360
2010	43,311.35	8,610	9,318	33,993	53.06	641
2011	71,040.95	13,050	14,123	56,918	54.06	1,053
2012	12,523.32	2,111	2,285	10,238	55.06	186
2014	7,764.10	1,075	1,163	6,601	57.06	116
2018	42,779.04	3,358	3,634	39,145	60.62	646
	2,091,602.96	1,032,954	1,107,475	984,128		26,003

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 37.8 1.24

PEOPLES GAS COMPANY LLC

ACCOUNT 366.10 COMPRESSOR STATION STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
RUBRIGHT						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2049						
NET SALVAGE PERCENT.. 0						
2008	596,565.77	234,331	246,107	350,459	23.44	14,951
2011	3,201.69	1,095	1,150	2,052	23.42	88
	599,767.46	235,426	247,257	352,510		15,039
OTHER						
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1920	182.35	182	182			
1954	2,718.88	2,249	2,000	719	9.50	76
1955	5,528.42	4,539	4,036	1,492	9.84	152
1964	8,289.98	6,281	5,585	2,705	13.33	203
1991	6,596.96	3,713	3,302	3,295	24.98	132
1995	13,450.00	6,857	6,098	7,352	27.08	271
1996	34,710.81	17,258	15,347	19,364	27.48	705
1997	18,500.00	8,908	7,921	10,579	28.18	375
1999	1,169.44	528	470	700	29.31	24
2001	7,210.91	3,037	2,701	4,510	30.46	148
2007	2,209.21	714	635	1,574	33.84	47
	100,566.96	54,266	48,276	52,291		2,133
	700,334.42	289,692	295,533	404,801		17,172

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.6 2.45

PEOPLES GAS COMPANY LLC

ACCOUNT 366.20 MEASURING AND REGULATING STATION STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
FENCING						
SURVIVOR CURVE.. 35-SQUARE						
NET SALVAGE PERCENT.. 0						
1973	12,047.99	12,048	12,048			
1985	957.93	958	958			
1986	494.00	494	494			
1987	4,188.49	4,188	4,188			
1995	1,205.33	970	1,116	89	6.83	13
2002	3,077.66	1,861	2,142	936	13.83	68
2003	3,462.31	1,995	2,296	1,166	14.83	79
2006	4,144.29	2,033	2,340	1,804	17.83	101
2007	223.16	103	119	105	18.83	6
2011	11,451.64	3,981	4,582	6,870	22.83	301
	41,252.80	28,631	30,283	10,970		568
OTHER						
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
1936	183.71	179	184			
1950	293.68	267	283	11	4.92	2
1954	494.70	441	467	28	5.99	5
1957	347.94	305	323	25	6.85	4
1963	142.24	119	126	16	8.90	2
1964	370.68	308	326	45	9.29	5
1965	9.62	8	8	1	9.70	
1966	4,223.66	3,447	3,648	576	10.12	57
1967	102.35	83	88	15	10.56	1
1968	112.06	90	95	17	11.02	2
1971	998.68	772	817	182	12.50	15
1984	610.49	414	438	172	18.64	9
1993	4,502.56	2,485	2,630	1,873	24.48	77
1997	1,117.46	547	579	539	27.31	20
	13,509.83	9,465	10,011	3,499		199

PEOPLES GAS COMPANY LLC

ACCOUNT 366.20 MEASURING AND REGULATING STATION STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
I.U.P. METERING SITE						
INTERIM SURVIVOR CURVE.. SQUARE						
PROBABLE RETIREMENT YEAR.. 6-2032						
NET SALVAGE PERCENT.. 0						
1963	5,315.62	4,635	4,902	413	8.83	47
1987	14,694.98	11,810	12,492	2,203	8.83	249
	20,010.60	16,445	17,394	2,617		296
	74,773.23	54,541	57,688	17,086		1,063

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.1 1.42

PEOPLES GAS COMPANY LLC

ACCOUNT 366.30 OTHER STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-R2.5						
NET SALVAGE PERCENT.. 0						
1964	948.40	859	893	55	3.77	15
1989	6,269.91	4,713	4,901	1,369	11.29	121
1990	3,452.63	2,542	2,643	810	11.88	68
1991	4,259.48	3,083	3,206	1,053	12.28	86
1992	6,560.01	4,641	4,826	1,734	12.89	135
1993	1,344.70	929	966	379	13.50	28
1996	4,261.43	2,732	2,841	1,420	15.21	93
1998	1,713.94	1,040	1,081	633	16.33	39
2003	3,060.34	1,561	1,623	1,437	19.36	74
2010	5,254.57	1,861	1,935	3,320	24.01	138
2011	7,667.97	2,537	2,639	5,029	24.60	204
	44,793.38	26,498	27,554	17,239		1,001

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.2 2.23

PEOPLES GAS COMPANY LLC

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
NET SALVAGE PERCENT.. 0						
1896	354.66	340	355			
1900	160.17	151	160			
1901	51.22	48	51			
1904	322.30	300	322			
1905	29,145.93	27,016	29,146			
1906	17,676.35	16,333	17,676			
1907	6,106.02	5,624	6,106			
1908	14,415.34	13,235	14,415			
1909	19,936.20	18,246	19,936			
1910	347.93	317	348			
1911	16,857.01	15,331	16,857			
1912	17,646.71	15,997	17,647			
1913	1,817.97	1,643	1,818			
1914	36,274.90	32,672	36,275			
1915	24,819.64	22,278	24,820			
1916	21,236.45	18,997	21,236			
1917	28,438.25	25,356	28,438			
1918	82.61	73	83			
1919	5,686.51	5,034	5,687			
1920	34.70	31	35			
1921	152.77	134	153			
1923	991.42	865	991			
1924	37,785.61	32,848	37,786			
1925	87,532.26	75,803	87,532			
1926	128,117.66	110,523	128,118			
1927	33,074.16	28,417	33,074			
1928	1,890.28	1,617	1,890			
1929	23,522.03	20,044	23,441	81	11.09	7
1930	1,580.22	1,341	1,568	12	11.37	1
1931	252.70	213	249	4	11.65	
1932	5,155.04	4,334	5,069	86	11.94	7
1933	1,885.92	1,578	1,845	41	12.24	3
1934	127.45	106	124	3	12.54	
1935	47,948.76	39,734	46,468	1,481	12.85	115
1936	26,003.53	21,437	25,070	934	13.17	71
1937	35,847.44	29,390	34,371	1,476	13.51	109
1938	33,397.92	27,230	31,845	1,553	13.85	112
1939	56,965.16	46,180	54,007	2,958	14.20	208
1940	3,881.74	3,128	3,658	224	14.56	15
1941	24,564.20	19,674	23,008	1,556	14.93	104
1942	23,251.75	18,505	21,641	1,611	15.31	105
1943	13,639.59	10,784	12,612	1,028	15.70	65
1944	11,004.83	8,641	10,105	900	16.11	56

PEOPLES GAS COMPANY LLC

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
NET SALVAGE PERCENT.. 0						
1945	3,896.81	3,038	3,553	344	16.53	21
1946	2,621.97	2,029	2,373	249	16.95	15
1947	5,641.56	4,333	5,067	575	17.39	33
1948	461.66	352	412	50	17.84	3
1949	19,932.72	15,067	17,621	2,312	18.31	126
1950	66,153.93	49,589	57,993	8,161	18.78	435
1951	69,333.82	51,520	60,252	9,082	19.27	471
1952	8,068.24	5,941	6,948	1,120	19.77	57
1953	9,471.07	6,910	8,081	1,390	20.28	69
1954	95,605.13	69,091	80,801	14,804	20.80	712
1955	322,862.14	231,040	270,197	52,665	21.33	2,469
1956	132,928.57	94,167	110,126	22,803	21.87	1,043
1957	277,727.21	194,706	227,705	50,022	22.42	2,231
1958	163,659.49	113,493	132,728	30,931	22.99	1,345
1959	295,371.00	202,586	236,920	58,451	23.56	2,481
1960	75,227.79	51,004	59,648	15,580	24.15	645
1961	442,011.98	296,205	346,406	95,606	24.74	3,864
1962	223,188.14	147,751	172,792	50,396	25.35	1,988
1963	1,094,731.42	715,812	837,128	257,603	25.96	9,923
1964	312,452.34	201,719	235,906	76,546	26.58	2,880
1965	187,565.20	119,492	139,743	47,822	27.22	1,757
1966	747,190.63	469,632	549,225	197,966	27.86	7,106
1967	345,410.93	214,110	250,397	95,014	28.51	3,333
1968	213,861.46	130,684	152,832	61,029	29.17	2,092
1969	690,341.25	415,772	486,237	204,104	29.83	6,842
1970	387,772.86	230,027	269,012	118,761	30.51	3,893
1971	195,714.19	114,323	133,698	62,016	31.19	1,988
1972	396,569.46	228,000	266,641	129,928	31.88	4,076
1973	494,780.27	279,848	327,277	167,503	32.58	5,141
1974	619,662.42	344,613	403,018	216,644	33.29	6,508
1975	304,110.00	166,248	194,424	109,686	34.00	3,226
1976	441,397.18	268,546	314,059	127,338	30.36	4,194
1977	464,753.47	276,807	323,720	141,033	31.35	4,499
1978	591,908.04	347,568	406,474	185,434	31.75	5,840
1979	767,411.99	444,025	519,278	248,134	32.17	7,713
1980	388,938.49	219,945	257,221	131,717	33.17	3,971
1981	613,770.19	341,624	399,522	214,248	33.59	6,378
1982	788,600.89	431,759	504,933	283,668	34.02	8,338
1983	690,537.53	368,885	431,404	259,134	35.02	7,400
1984	2,729,966.31	1,432,686	1,675,498	1,054,468	35.46	29,737
1985	1,238,187.99	633,209	740,525	497,663	36.46	13,650
1986	1,285,550.77	645,089	754,419	531,132	36.90	14,394
1987	2,535,615.58	1,247,269	1,458,656	1,076,960	37.36	28,827

PEOPLES GAS COMPANY LLC

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
NET SALVAGE PERCENT.. 0						
1988	427,242.62	204,350	238,983	188,260	38.36	4,908
1989	1,433,568.60	671,053	784,783	648,786	38.82	16,713
1990	4,742,096.29	2,170,457	2,538,306	2,203,790	39.30	56,076
1991	1,172,252.17	524,114	612,941	559,311	39.78	14,060
1992	700,665.30	303,528	354,970	345,695	40.78	8,477
1993	1,374,880.23	580,612	679,014	695,866	41.26	16,865
1994	1,004,734.64	413,147	483,167	521,568	41.76	12,490
1995	953,597.38	378,769	442,963	510,634	42.75	11,945
1996	1,032,065.32	398,171	465,653	566,412	43.25	13,096
1997	1,613,116.01	603,628	705,931	907,185	43.76	20,731
1998	1,210,605.17	435,697	509,539	701,066	44.76	15,663
1999	1,639,353.73	570,495	667,182	972,172	45.28	21,470
2000	1,488,428.04	499,963	584,697	903,731	45.80	19,732
2001	1,464,607.73	470,725	550,503	914,105	46.80	19,532
2002	1,086,812.54	335,825	392,741	694,072	47.33	14,665
2003	1,935,151.95	573,579	670,789	1,264,363	47.86	26,418
2004	1,882,908.16	534,181	624,714	1,258,194	48.40	25,996
2005	2,666,929.15	717,137	838,677	1,828,252	49.40	37,009
2006	2,842,795.17	727,187	850,431	1,992,364	49.95	39,887
2007	2,544,357.75	617,007	721,577	1,822,781	50.50	36,095
2008	1,869,211.23	428,049	500,595	1,368,616	51.06	26,804
2009	1,031,366.10	222,053	259,686	771,680	51.62	14,949
2010	1,935,476.76	389,805	455,869	1,479,608	52.20	28,345
2011	2,612,018.54	489,492	572,451	2,039,568	52.77	38,650
2012	2,553,585.12	439,217	513,655	2,039,930	53.77	37,938
2013	3,237,885.62	510,291	596,775	2,641,111	54.35	48,594
2014	4,987,835.82	717,750	839,394	4,148,442	54.53	76,076
2015	1,665,162.50	214,806	251,211	1,413,952	55.13	25,648
2016	1,022,634.93	116,580	136,338	886,297	55.72	15,906
2017	3,489,208.76	344,385	402,752	3,086,457	56.33	54,792
2018	229,051.86	19,172	22,421	206,631	56.56	3,653
2019	3,331,455.70	227,538	266,102	3,065,354	56.81	53,958
2020	1,349,489.09	70,983	83,013	1,266,476	57.07	22,192
2021	660,093.72	24,159	28,253	631,841	57.01	11,083
2022	5,710,200.25	115,917	135,563	5,574,637	56.30	99,017
2023	79,193.84	483	565	78,629	54.31	1,448
	90,560,985.19	28,608,367	33,439,110	57,121,875		1,203,573

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 47.5 1.33

PEOPLES GAS COMPANY LLC

ACCOUNT 368.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 48-S0.5						
NET SALVAGE PERCENT.. 0						
1936	123.65	116	124			
1938	674.76	622	675			
1942	88.86	79	89			
1950	1,394.40	1,168	1,309	85	7.79	11
1952	24,987.70	20,573	23,063	1,925	8.48	227
1954	13,453.63	10,883	12,200	1,254	9.17	137
1955	47,147.18	37,796	42,371	4,776	9.52	502
1956	787.08	625	701	86	9.88	9
1957	57.14	45	50	7	10.23	1
1959	1,690.70	1,305	1,463	228	10.95	21
1963	3,529.95	2,617	2,934	596	12.42	48
1964	42,033.81	30,833	34,565	7,469	12.79	584
1965	764.19	555	622	142	13.17	11
1974	102.75	67	75	28	16.76	2
1975	911.97	586	657	255	17.18	15
1981	22,037.40	15,611	17,501	4,536	17.36	261
1983	16,630.42	11,490	12,881	3,749	17.97	209
1986	4,891.70	3,236	3,628	1,264	19.01	66
1987	9,268.79	6,034	6,764	2,505	19.39	129
1989	4,017.33	2,539	2,846	1,171	19.89	59
1990	32,982.23	20,456	22,932	10,050	20.31	495
1991	15,752.11	9,577	10,736	5,016	20.74	242
1992	1,875.71	1,122	1,258	618	20.92	30
1993	35,833.61	20,970	23,508	12,326	21.38	577
1994	10,205.01	5,834	6,540	3,665	21.85	168
1996	18,349.97	10,019	11,232	7,118	22.59	315
1997	9,619.16	5,135	5,757	3,862	22.85	169
1998	31,676.55	16,503	18,501	13,176	23.14	569
1999	8,752.28	4,421	4,956	3,796	23.68	160
2000	2,389.63	1,174	1,316	1,074	24.00	45
2002	49,333.60	22,763	25,518	23,816	24.71	964
2003	3,486.82	1,554	1,742	1,745	25.08	70
2005	5,302.50	2,187	2,452	2,850	25.89	110
2008	1,311,388.82	471,313	528,360	783,029	27.03	28,969
2009	1,422,393.76	483,614	542,151	880,243	27.50	32,009
2013	41,110.31	10,656	11,946	29,164	29.05	1,004
2014	1,625,016.05	385,779	432,473	1,192,543	29.44	40,508

PEOPLES GAS COMPANY LLC

ACCOUNT 368.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 48-S0.5						
NET SALVAGE PERCENT.. 0						
2017	23,765.16	3,971	4,452	19,313	30.73	628
2019	35,690.60	4,165	4,669	31,022	31.55	983
2020	4,038.76	364	408	3,631	31.92	114
	4,883,556.05	1,628,357	1,825,425	3,058,131		110,421
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					27.7	2.26

PEOPLES GAS COMPANY LLC

ACCOUNT 369.00 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 38-R1.5						
NET SALVAGE PERCENT.. 0						
1905	126.97	127	127			
1916	12.64	13	13			
1917	15.92	16	16			
1918	7.96	8	8			
1919	26.69	27	27			
1920	119.00	119	119			
1925	7.96	8	8			
1926	134.93	135	135			
1927	24.35	24	24			
1928	18.28	18	18			
1929	365.67	366	366			
1930	197.26	197	197			
1931	253.94	254	254			
1934	42.92	43	43			
1935	1,542.11	1,542	1,542			
1936	970.97	971	971			
1937	1,263.77	1,264	1,264			
1940	1,352.12	1,352	1,352			
1941	94.25	94	94			
1942	658.51	659	659			
1943	319.19	319	319			
1945	9.18	9	9			
1946	135.98	136	136			
1949	4,177.41	4,097	4,177			
1950	100.00	97	100			
1952	211.77	202	212			
1954	10,865.32	10,188	10,865			
1955	91.04	85	91			
1957	338.07	310	338			
1958	1,851.88	1,690	1,852			
1959	38.30	35	38			
1960	886.86	799	887			
1961	374.00	334	374			
1962	561.81	499	562			
1964	232.29	203	232			
1965	947.75	821	948			
1966	8,920.13	7,664	8,920			
1967	3,422.83	2,916	3,423			
1968	4,177.44	3,527	4,177			
1969	869.83	728	870			
1970	5,711.47	4,733	5,684	27	6.51	4
1971	2,122.17	1,741	2,091	31	6.82	5
1972	6,980.67	5,671	6,810	171	7.13	24

PEOPLES GAS COMPANY LLC

ACCOUNT 369.00 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 38-R1.5						
NET SALVAGE PERCENT.. 0						
1973	8,351.29	6,714	8,062	289	7.45	39
1974	12,066.91	9,596	11,523	544	7.78	70
1975	4,891.37	3,846	4,618	273	8.12	34
1976	7,095.98	6,091	7,096			
1977	6,135.63	5,212	6,136			
1978	20,174.01	17,039	20,174			
1979	74,483.85	62,179	74,484			
1980	194,710.69	160,539	192,819	1,892	9.19	206
1981	69,154.46	56,568	67,942	1,212	9.38	129
1982	42,128.61	33,994	40,829	1,300	9.85	132
1983	27,476.41	21,962	26,378	1,098	10.09	109
1984	67,761.13	53,342	64,068	3,693	10.59	349
1985	94,008.21	73,195	87,912	6,096	10.85	562
1986	31,941.51	24,454	29,371	2,571	11.38	226
1987	64,582.90	48,818	58,634	5,949	11.68	509
1988	16,326.18	12,171	14,618	1,708	12.00	142
1989	238.99	175	210	29	12.56	2
1990	39,266.21	28,260	33,942	5,324	12.92	412
1991	36,322.48	25,705	30,874	5,448	13.29	410
1992	38,416.91	26,581	31,926	6,491	13.88	468
1993	107,106.46	72,704	87,323	19,783	14.28	1,385
1994	129,293.01	85,980	103,268	26,025	14.69	1,772
1995	85,925.41	55,903	67,144	18,781	15.13	1,241
1996	58,873.65	37,426	44,951	13,923	15.57	894
1997	463,566.04	286,252	343,809	119,757	16.21	7,388
1998	396,598.86	238,554	286,520	110,079	16.67	6,603
1999	132,723.59	77,617	93,224	39,500	17.16	2,302
2000	134,942.24	76,593	91,994	42,948	17.65	2,433
2001	64,429.70	35,565	42,716	21,714	17.99	1,207
2002	192,050.47	102,440	123,038	69,012	18.52	3,726
2003	142,083.19	73,059	87,749	54,334	19.05	2,852
2004	259,291.45	128,220	154,001	105,290	19.59	5,375
2005	130,067.09	61,912	74,361	55,706	20.00	2,785
2006	248,306.75	113,377	136,174	112,133	20.43	5,489
2007	389,984.70	169,604	203,707	186,278	21.01	8,866
2008	494,061.49	204,541	245,668	248,393	21.47	11,569
2009	412,986.75	162,056	194,641	218,346	21.94	9,952
2010	687,304.55	255,196	306,509	380,796	22.29	17,084
2011	417,308.50	145,223	174,423	242,886	22.80	10,653
2012	286,635.04	93,156	111,887	174,748	23.20	7,532
2013	401,522.45	120,818	145,111	256,411	23.62	10,856
2014	124,487.46	34,458	41,386	83,101	23.95	3,470
2015	525,923.78	132,270	158,866	367,058	24.30	15,105

PEOPLES GAS COMPANY LLC

ACCOUNT 369.00 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 38-R1.5						
NET SALVAGE PERCENT.. 0						
2016	319,186.77	72,072	86,563	232,624	24.58	9,464
2017	156,167.55	31,109	37,364	118,804	24.79	4,792
2019	15,573.29	2,225	2,672	12,901	24.99	516
2020	38,001.39	4,294	5,158	32,843	24.85	1,322
2021	33,462.92	2,717	3,264	30,199	24.50	1,233
2023	27,251.16	420	504	26,747	21.27	1,257
	7,791,231.05	3,606,243	4,325,963	3,465,268		162,955

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 21.3 2.09

PEOPLES GAS COMPANY LLC

ACCOUNT 374.20 LAND AND LAND RIGHTS - LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1892	33.70	34	34			
1899	33.70	34	34			
1901	67.41	67	67			
1902	33.70	34	34			
1903	67.41	67	67			
1904	67.41	67	67			
1905	67.41	67	67			
1906	67.41	67	67			
1910	67.41	67	67			
1912	67.41	67	67			
1913	33.70	34	34			
1915	134.82	135	135			
1916	101.11	101	101			
1917	67.41	67	67			
1918	101.11	101	101			
1919	134.82	134	135			
1920	67.41	67	67			
1921	67.41	66	67			
1924	67.41	66	67			
1925	134.82	131	135			
1926	134.82	131	135			
1929	168.53	162	169			
1930	101.11	97	101			
1931	67.41	64	67			
1932	134.83	128	135			
1933	33.70	32	34			
1934	134.82	127	135			
1935	67.41	63	67			
1936	33.70	32	34			
1937	269.65	251	270			
1938	37.50	35	38			
1939	2.25	2	2			
1940	58.24	54	58			
1941	141.68	130	142			
1943	18.00	16	18			
1944	7.28	7	7			
1946	117.71	105	118			
1947	3.92	3	4			
1948	88.48	78	88			
1949	119.90	105	120			
1950	26.88	23	27			
1951	467.20	405	467			
1952	53.08	46	53			

PEOPLES GAS COMPANY LLC

ACCOUNT 374.20 LAND AND LAND RIGHTS - LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1953	199.36	170	199			
1954	392.00	332	392			
1955	72.80	61	73			
1956	375.20	313	375			
1957	448.00	370	446	2	12.20	
1958	4,158.55	3,400	4,099	60	12.77	5
1959	257.60	208	251	7	13.35	1
1960	112.00	90	108	4	13.96	
1961	604.80	479	577	28	14.59	2
1962	644.00	504	608	36	15.23	2
1963	840.00	649	782	58	15.89	4
1964	4,266.88	3,257	3,926	341	16.56	21
1965	2,598.40	1,958	2,360	238	17.24	14
1966	3,109.60	2,313	2,788	322	17.93	18
1967	6,719.55	4,931	5,944	776	18.63	42
1968	5,420.80	3,923	4,729	692	19.34	36
1969	4,416.01	3,151	3,798	618	20.06	31
1970	5,693.00	4,002	4,824	869	20.79	42
1971	9,401.80	6,510	7,848	1,554	21.53	72
1972	2,688.00	1,832	2,208	480	22.28	22
1973	6,438.52	4,319	5,206	1,233	23.04	54
1974	1,699.60	1,121	1,351	349	23.81	15
1975	448.00	291	351	97	24.60	4
1976	5,672.80	3,800	4,581	1,092	23.25	47
1977	2,292.64	1,503	1,812	481	24.25	20
1978	1,120.00	723	872	248	24.76	10
1979	1,297.20	819	987	310	25.76	12
1980	1,820.00	1,131	1,363	457	26.28	17
1981	2,469.60	1,500	1,808	662	27.28	24
1982	2,902.20	1,732	2,088	814	27.80	29
1983	6,537.44	3,807	4,589	1,948	28.80	68
1984	2,226.00	1,264	1,524	702	29.80	24
1985	4,077.60	2,272	2,739	1,339	30.33	44
1986	4,854.23	2,634	3,175	1,679	31.33	54
1987	33,826.34	17,982	21,677	12,149	31.86	381
1988	21,831.50	11,287	13,606	8,226	32.86	250
1989	33,538.13	16,843	20,304	13,234	33.86	391
1990	15,258.75	7,491	9,030	6,229	34.40	181
1991	16,245.00	7,734	9,323	6,922	35.40	196
1992	51,887.50	23,936	28,854	23,034	36.40	633
1993	54,150.00	24,340	29,341	24,809	36.95	671
1994	14,887.50	6,470	7,799	7,088	37.95	187
1995	31,322.50	13,146	15,847	15,476	38.95	397

PEOPLES GAS COMPANY LLC

ACCOUNT 374.20 LAND AND LAND RIGHTS - LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1996	11,575.00	4,686	5,649	5,926	39.95	148
1997	21,418.75	8,351	10,067	11,352	40.95	277
1998	37,106.25	14,008	16,886	20,220	41.50	487
1999	49,683.75	18,010	21,711	27,973	42.50	658
2000	19,871.25	6,905	8,324	11,547	43.50	265
2001	27,041.25	8,991	10,838	16,203	44.50	364
2002	31,151.64	9,891	11,923	19,229	45.50	423
2003	55,747.77	16,864	20,329	35,419	46.50	762
2004	45,724.62	13,233	15,952	29,773	47.06	633
2005	80,066.42	21,962	26,475	53,591	48.06	1,115
2006	137,562.35	35,656	42,982	94,580	49.06	1,928
2007	134,486.10	32,828	39,573	94,913	50.06	1,896
2008	39,166.78	8,969	10,812	28,355	51.06	555
2009	15,501.94	3,316	3,997	11,505	52.06	221
2010	43,716.72	8,691	10,477	33,240	53.06	626
2011	34,165.65	6,276	7,566	26,600	54.06	492
2012	64,213.52	10,826	13,050	51,164	55.06	929
2014	1,150.00	159	192	958	57.06	17
2017	41,405.55	3,880	4,677	36,729	59.62	616
	1,263,747.80	431,669	519,811	743,937		16,433

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 45.3 1.30

PEOPLES GAS COMPANY LLC

ACCOUNT 375.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BUTLER METER SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2021						
NET SALVAGE PERCENT.. 0						
1966	62,627.19	62,627	62,627			
1969	216.05	216	216			
1972	1,191.68	1,192	1,192			
	64,034.92	64,035	64,035			
OTHER						
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1905	18.93	19	19			
1906	10.01	10	10			
1907	41.85	42	42			
1909	16.66	17	17			
1910	5.15	5	5			
1911	36.07	36	36			
1912	10.16	10	10			
1913	103.24	103	103			
1914	13.64	14	14			
1915	7.21	7	7			
1917	11.97	12	12			
1922	15.26	15	15			
1925	26.38	26	26			
1927	26.62	26	27			
1929	15.51	15	16			
1930	30.33	29	30			
1933	10.71	10	11			
1938	156.55	143	157			
1939	53.04	48	53			
1940	101.74	92	102			
1947	28.90	25	29			
1948	119.32	103	119			
1950	473.04	403	473			
1951	1,426.28	1,205	1,417	9	8.52	1
1952	528.32	443	521	7	8.84	1
1953	951.00	792	931	20	9.17	2
1954	1,808.65	1,496	1,759	49	9.50	5
1955	532.78	437	514	19	9.84	2
1956	1,329.75	1,083	1,274	56	10.20	5
1958	551.78	442	520	32	10.92	3

PEOPLES GAS COMPANY LLC

ACCOUNT 375.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER						
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1959	991.41	788	927	65	11.30	6
1960	291.26	229	269	22	11.68	2
1961	655.47	512	602	53	12.08	4
1962	1,546.04	1,195	1,405	141	12.48	11
1963	1,476.23	1,130	1,329	147	12.90	11
1964	1,006.92	763	897	110	13.33	8
1965	3,673.60	2,755	3,240	434	13.76	32
1966	1,977.05	1,466	1,724	253	14.21	18
1967	1,427.45	1,047	1,231	196	14.67	13
1968	2,064.85	1,496	1,759	306	15.14	20
1969	2,104.83	1,507	1,772	333	15.62	21
1970	3,617.22	2,558	3,008	609	16.11	38
1971	3,132.57	2,187	2,572	561	16.61	34
1972	3,994.05	2,751	3,235	759	17.12	44
1973	4,798.08	3,259	3,833	965	17.64	55
1974	1,207.86	809	951	256	18.17	14
1976	4,652.79	3,402	4,001	652	17.35	38
1977	2,075.92	1,505	1,770	306	17.53	17
1978	1,584.85	1,131	1,330	255	18.13	14
1979	1,892.65	1,329	1,563	330	18.73	18
1980	1,481.66	1,023	1,203	279	19.33	14
1981	1,735.37	1,185	1,394	342	19.56	17
1982	4,479.78	3,006	3,535	945	20.18	47
1983	9,556.02	6,295	7,403	2,153	20.81	103
1984	10,545.06	6,856	8,063	2,482	21.07	118
1985	7,845.56	5,001	5,881	1,964	21.71	90
1986	10,691.34	6,676	7,851	2,840	22.36	127
1987	14,428.35	8,871	10,432	3,996	22.66	176
1988	21,550.53	12,960	15,241	6,309	23.31	271
1989	20,057.78	11,856	13,943	6,115	23.64	259
1990	10,080.63	5,818	6,842	3,239	24.30	133
1991	24,384.92	13,726	16,142	8,243	24.98	330
1992	32,716.16	18,046	21,222	11,494	25.33	454
1993	43,540.71	23,381	27,496	16,044	26.01	617
1994	13,356.35	7,012	8,246	5,110	26.39	194
1995	25,503.16	13,002	15,291	10,213	27.08	377
1996	17,361.84	8,632	10,151	7,210	27.48	262
1997	8,227.07	3,961	4,658	3,569	28.18	127
1998	19,747.96	9,244	10,871	8,877	28.60	310
1999	17,053.00	7,706	9,062	7,991	29.31	273
2000	17,222.31	7,540	8,867	8,355	29.75	281
2001	25,491.47	10,737	12,627	12,865	30.46	422

PEOPLES GAS COMPANY LLC

ACCOUNT 375.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER						
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
2002	30,061.47	12,217	14,367	15,694	30.92	508
2003	43,162.95	16,799	19,756	23,407	31.65	740
2004	46,337.65	17,321	20,370	25,968	32.11	809
2005	49,805.93	17,826	20,964	28,842	32.59	885
2006	39,229.62	13,401	15,760	23,470	33.09	709
2007	26,168.97	8,460	9,949	16,220	33.84	479
2008	38,476.67	11,789	13,864	24,613	34.34	717
2009	31,291.92	9,043	10,635	20,657	34.85	593
2010	56,436.18	15,305	17,999	38,437	35.38	1,086
2011	49,784.92	12,601	14,819	34,966	35.91	974
2012	89,735.23	21,142	24,863	64,872	36.23	1,791
2013	67,646.44	14,652	17,231	50,415	36.78	1,371
2014	7,717.64	1,521	1,789	5,929	37.34	159
2015	2,009.53	358	421	1,589	37.71	42
2016	4,884.04	774	910	3,974	38.08	104
	992,438.14	404,670	475,807	516,631		16,406
	1,056,473.06	468,705	539,842	516,631		16,406

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.5 1.55

PEOPLES GAS COMPANY LLC

ACCOUNT 376.10 MAINS - LOW PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. 0						
1894	297.37	297	297			
1896	6,600.38	6,600	6,600			
1899	1,467.97	1,468	1,468			
1900	2,103.33	2,103	2,103			
1901	1,072.97	1,073	1,073			
1902	6,841.56	6,842	6,842			
1903	8,793.96	8,771	8,794			
1904	9,672.97	9,612	9,673			
1905	6,338.12	6,274	6,338			
1906	3,658.94	3,608	3,659			
1907	144.08	141	144			
1908	2,915.61	2,851	2,916			
1909	3,695.97	3,600	3,696			
1910	0.92	1	1			
1911	4,352.87	4,204	4,353			
1912	6,801.71	6,540	6,802			
1913	14,626.95	14,004	14,627			
1914	3,365.38	3,207	3,365			
1915	535.94	509	536			
1916	1,388.39	1,312	1,388			
1917	3,998.24	3,761	3,998			
1918	7,123.24	6,674	7,123			
1919	7,362.47	6,871	7,362			
1922	142.59	132	143			
1923	5.87	5	6			
1924	3,016.16	2,763	3,016			
1925	1,176.05	1,073	1,176			
1926	2,904.06	2,640	2,904			
1927	1,333.30	1,208	1,333			
1928	47.77	43	48			
1930	800.19	717	796	4	6.79	1
1931	14.27	13	14			
1936	22.13	19	21	1	8.19	
1937	41,000.48	35,677	39,632	1,368	8.44	162
1938	3,753.85	3,252	3,613	141	8.69	16
1939	2,489.10	2,147	2,385	104	8.94	12
1940	899.22	772	858	41	9.20	4
1941	45.16	39	43	2	9.47	
1942	1,637.95	1,393	1,547	91	9.74	9
1943	665.05	563	625	40	10.02	4
1944	328.94	277	308	21	10.30	2
1945	351.83	294	327	25	10.60	2
1946	3,561.23	2,964	3,293	268	10.90	25

PEOPLES GAS COMPANY LLC

ACCOUNT 376.10 MAINS - LOW PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. 0						
1947	2,148.33	1,777	1,974	174	11.22	16
1948	3,979.46	3,273	3,636	343	11.54	30
1949	13,333.60	10,897	12,105	1,229	11.88	103
1950	10,891.72	8,844	9,825	1,067	12.22	87
1951	16,240.77	13,098	14,550	1,691	12.58	134
1952	22,175.47	17,757	19,726	2,449	12.95	189
1953	16,931.53	13,457	14,949	1,983	13.34	149
1954	15,653.31	12,345	13,714	1,939	13.74	141
1955	15,577.82	12,187	13,538	2,040	14.15	144
1956	7,925.77	6,149	6,831	1,095	14.57	75
1957	15,896.00	12,225	13,580	2,316	15.01	154
1958	51,863.76	39,528	43,910	7,954	15.46	514
1959	38,310.33	28,927	32,134	6,176	15.92	388
1960	79,132.56	59,167	65,727	13,406	16.40	817
1961	87,014.71	64,404	71,544	15,471	16.89	916
1962	95,233.80	69,755	77,489	17,745	17.39	1,020
1963	198,342.29	143,691	159,622	38,720	17.91	2,162
1964	304,378.60	218,029	242,201	62,178	18.44	3,372
1965	316,466.48	224,058	248,899	67,567	18.98	3,560
1966	363,320.94	254,158	282,336	80,985	19.53	4,147
1967	388,483.83	268,353	298,105	90,379	20.10	4,496
1968	428,769.57	292,357	324,770	104,000	20.68	5,029
1969	604,776.37	406,875	451,984	152,792	21.27	7,183
1970	543,749.06	360,799	400,800	142,949	21.87	6,536
1971	618,766.27	404,766	449,642	169,124	22.48	7,523
1972	437,201.06	281,759	312,997	124,204	23.11	5,374
1973	347,495.74	220,580	245,035	102,461	23.74	4,316
1974	736,448.59	460,111	511,123	225,326	24.39	9,238
1975	285,067.82	175,251	194,681	90,387	25.04	3,610
1976	551,913.46	372,266	413,538	138,375	22.76	6,080
1977	552,250.92	367,136	407,840	144,411	23.28	6,203
1978	784,692.72	513,895	570,870	213,823	23.80	8,984
1979	990,171.79	634,106	704,408	285,764	24.80	11,523
1980	636,078.00	400,856	445,298	190,780	25.33	7,532
1981	777,063.59	481,624	535,021	242,043	25.86	9,360
1982	808,968.37	492,904	547,551	261,417	26.40	9,902
1983	979,178.72	586,038	651,011	328,168	26.95	12,177
1984	1,411,591.82	829,310	921,254	490,338	27.50	17,830
1985	1,014,692.54	584,767	649,599	365,094	28.06	13,011
1986	1,347,368.89	761,129	845,514	501,855	28.62	17,535
1987	3,234,343.97	1,777,919	1,975,034	1,259,310	29.62	42,516
1988	1,358,954.07	731,117	812,175	546,779	30.20	18,105
1989	2,356,513.44	1,239,997	1,377,473	979,040	30.77	31,818

PEOPLES GAS COMPANY LLC

ACCOUNT 376.10 MAINS - LOW PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. 0						
1990	1,561,226.59	802,627	891,613	669,614	31.35	21,359
1991	1,893,741.21	950,279	1,055,635	838,106	31.94	26,240
1992	3,129,196.41	1,531,116	1,700,868	1,428,328	32.53	43,908
1993	2,634,030.79	1,255,379	1,394,560	1,239,471	33.13	37,412
1994	2,086,207.01	967,583	1,074,857	1,011,350	33.72	29,993
1995	1,403,848.58	632,715	702,863	700,986	34.33	20,419
1996	1,944,017.03	845,064	938,755	1,005,262	35.33	28,453
1997	2,791,343.42	1,175,993	1,306,373	1,484,970	35.94	41,318
1998	2,697,040.03	1,099,583	1,221,492	1,475,548	36.56	40,360
1999	2,860,591.29	1,126,787	1,251,712	1,608,879	37.18	43,273
2000	3,081,768.43	1,170,764	1,300,564	1,781,204	37.81	47,109
2001	2,377,820.57	869,807	966,241	1,411,580	38.44	36,722
2002	3,454,146.23	1,213,787	1,348,357	2,105,789	39.07	53,898
2003	2,831,871.98	953,774	1,059,517	1,772,355	39.71	44,632
2004	3,079,514.95	991,604	1,101,541	1,977,974	40.36	49,008
2005	3,671,506.57	1,127,153	1,252,118	2,419,389	41.01	58,995
2006	2,742,996.29	800,406	889,146	1,853,850	41.66	44,500
2007	3,123,706.61	863,393	959,116	2,164,591	42.32	51,148
2008	4,055,479.97	1,058,075	1,175,382	2,880,098	42.97	67,026
2009	1,777,463.05	435,656	483,956	1,293,507	43.64	29,640
2010	2,098,694.99	480,811	534,118	1,564,577	44.30	35,318
2011	2,647,974.59	563,754	626,256	2,021,719	44.98	44,947
2012	4,606,368.19	905,151	1,005,503	3,600,865	45.65	78,880
2013	4,802,852.88	869,316	965,695	3,837,158	46.01	83,398
2014	4,064,537.56	666,991	740,939	3,323,599	46.70	71,169
2015	2,035,905.21	299,278	332,458	1,703,447	47.39	35,945
2016	2,671,629.63	348,381	387,005	2,284,625	47.78	47,816
2017	4,271,788.33	484,848	538,602	3,733,186	48.18	77,484
2018	2,179,871.45	208,396	231,501	1,948,370	48.89	39,852
2019	2,463,001.28	192,853	214,234	2,248,767	49.03	45,865
2020	4,097,189.55	246,651	273,997	3,823,193	49.46	77,299
2021	8,932,878.00	375,181	416,777	8,516,101	49.38	172,461
2022	8,857,439.41	206,378	229,259	8,628,180	48.84	176,662
2023	3,931,398.74	27,520	30,571	3,900,828	47.29	82,487
	133,895,759.22	39,761,009	44,160,840	89,734,919		2,169,232

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 41.4 1.62

PEOPLES GAS COMPANY LLC

ACCOUNT 376.20 MAINS - REGULAR PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. 0						
2013	3,335,021.85	603,639	670,436	2,664,586	46.01	57,913
2014	3,570,790.03	585,967	650,808	2,919,982	46.70	62,526
2015	2,331,761.76	342,769	380,699	1,951,063	47.39	41,170
2016	10,337,569.88	1,348,019	1,497,187	8,840,383	47.78	185,023
2017	7,280,494.81	826,336	917,776	6,362,719	48.18	132,061
2018	11,127,710.40	1,063,809	1,181,527	9,946,183	48.89	203,440
2019	5,438,742.13	425,854	472,978	4,965,764	49.03	101,280
2020	7,927,690.00	477,247	530,057	7,397,633	49.46	149,568
2021	7,915,452.50	332,449	369,237	7,546,216	49.38	152,819
2022	9,100,538.21	212,043	235,507	8,865,031	48.84	181,512
2023	6,593,762.09	46,156	51,263	6,542,499	47.29	138,348
	74,959,533.66	6,264,288	6,957,475	68,002,059		1,405,660

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 48.4 1.88

PEOPLES GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1891	38.58	39	39			
1904	265.76	266	266			
1906	26.74	27	27			
1907	159.70	160	160			
1908	58.16	58	58			
1909	83.93	84	84			
1910	20.38	20	20			
1913	99.85	100	100			
1914	22.03	22	22			
1915	92.88	93	93			
1916	22.31	22	22			
1918	132.39	132	132			
1920	46.07	46	46			
1922	44.46	44	44			
1923	30.73	30	31			
1927	23.32	23	23			
1931	106.68	102	107			
1932	304.15	288	304			
1933	229.19	216	229			
1934	219.20	205	219			
1935	10.85	10	11			
1936	59.15	55	59			
1937	30.24	28	30			
1938	153.33	140	153			
1939	453.70	413	454			
1940	94.34	85	94			
1941	66.49	60	66			
1944	91.65	81	91	1	6.39	
1948	288.74	249	279	10	7.58	1
1949	885.58	759	849	37	7.89	5
1950	925.60	788	882	44	8.20	5
1951	4,630.29	3,913	4,379	251	8.52	29
1952	1,217.52	1,022	1,144	74	8.84	8
1953	2,653.41	2,211	2,474	179	9.17	20
1954	4,379.15	3,623	4,054	325	9.50	34
1955	5,952.64	4,888	5,470	483	9.84	49
1956	6,345.15	5,168	5,783	562	10.20	55
1957	4,645.21	3,754	4,201	444	10.55	42
1958	5,961.46	4,778	5,347	614	10.92	56
1959	10,109.78	8,033	8,989	1,121	11.30	99
1960	10,276.61	8,094	9,057	1,220	11.68	104
1961	10,863.45	8,477	9,486	1,377	12.08	114
1962	11,190.45	8,651	9,681	1,509	12.48	121

PEOPLES GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1963	25,629.55	19,618	21,953	3,677	12.90	285
1964	5,050.20	3,826	4,281	769	13.33	58
1965	17,804.99	13,351	14,940	2,865	13.76	208
1966	10,483.82	7,775	8,700	1,784	14.21	126
1967	15,609.16	11,446	12,808	2,801	14.67	191
1968	17,388.89	12,602	14,102	3,287	15.14	217
1969	12,198.93	8,734	9,773	2,426	15.62	155
1970	30,340.22	21,453	24,006	6,334	16.11	393
1971	17,164.64	11,981	13,407	3,758	16.61	226
1972	22,685.21	15,624	17,483	5,202	17.12	304
1973	14,216.15	9,657	10,806	3,410	17.64	193
1974	12,667.42	8,483	9,493	3,174	18.17	175
1975	15,657.01	10,328	11,557	4,100	18.72	219
1976	26,316.65	19,240	21,530	4,787	17.35	276
1977	13,067.99	9,472	10,599	2,469	17.53	141
1978	6,410.51	4,575	5,119	1,292	18.13	71
1979	14,020.07	9,845	11,017	3,003	18.73	160
1980	16,391.10	11,321	12,668	3,723	19.33	193
1981	145,073.43	99,100	110,894	34,179	19.56	1,747
1982	71,617.91	48,056	53,775	17,843	20.18	884
1983	182,908.14	120,482	134,820	48,088	20.81	2,311
1984	137,642.71	89,495	100,146	37,497	21.07	1,780
1985	73,804.90	47,043	52,642	21,163	21.71	975
1986	140,263.99	87,581	98,004	42,260	22.36	1,890
1987	136,905.45	84,169	94,186	42,719	22.66	1,885
1988	94,375.11	56,757	63,512	30,863	23.31	1,324
1989	245,526.03	145,130	162,402	83,124	23.64	3,516
1990	230,154.92	132,822	148,629	81,526	24.30	3,355
1991	226,675.93	127,596	142,781	83,895	24.98	3,358
1992	273,099.57	150,642	168,570	104,530	25.33	4,127
1993	231,037.08	124,067	138,832	92,205	26.01	3,545
1994	98,488.33	51,706	57,859	40,629	26.39	1,540
1995	260,498.78	132,802	148,607	111,892	27.08	4,132
1996	38,448.52	19,117	21,392	17,057	27.48	621
1997	60,186.12	28,980	32,429	27,757	28.18	985
1998	33,515.25	15,688	17,555	15,960	28.60	558
1999	93,768.50	42,374	47,417	46,352	29.31	1,581
2000	138,834.51	60,782	68,016	70,819	29.75	2,380
2001	162,127.31	68,288	76,415	85,712	30.46	2,814
2002	252,432.07	102,588	114,797	137,635	30.92	4,451
2003	228,070.17	88,765	99,329	128,741	31.65	4,068
2004	204,756.77	76,538	85,646	119,111	32.11	3,709
2005	163,769.63	58,613	65,588	98,182	32.59	3,013

PEOPLES GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
2006	194,358.88	66,393	74,294	120,065	33.09	3,628
2007	152,695.09	49,366	55,241	97,454	33.84	2,880
2008	55,371.95	16,966	18,985	36,387	34.34	1,060
2009	75,463.62	21,809	24,404	51,060	34.85	1,465
2010	209,602.32	56,844	63,609	145,993	35.38	4,126
2011	206,776.70	52,335	58,563	148,214	35.91	4,127
2012	71,162.81	16,766	18,761	52,402	36.23	1,446
2013	105,451.73	22,841	25,559	79,893	36.78	2,172
2014	192,216.37	37,886	42,395	149,821	37.34	4,012
2015	129,360.53	23,026	25,766	103,595	37.71	2,747
2016	101,947.51	16,148	18,070	83,878	38.08	2,203
2017	373,603.31	51,595	57,735	315,868	38.48	8,209
2018	502,367.59	59,179	66,222	436,146	38.69	11,273
2019	190,279.15	18,400	20,590	169,689	38.94	4,358
2020	264,248.17	19,924	22,295	241,953	38.85	6,228
2021	1,105,955.33	58,726	65,715	1,040,240	38.65	26,914
2022	1,295,445.30	38,863	43,488	1,251,957	37.74	33,173
2023	1,035,063.08	9,626	10,772	1,024,291	35.64	28,740
	10,561,764.38	2,972,462	3,326,008	7,235,756		213,643

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 33.9 2.02

PEOPLES GAS COMPANY LLC

ACCOUNT 380.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. 0						
1973	43,258.93	32,989	35,246	8,013	11.87	675
1974	85,147.80	64,133	68,521	16,627	12.34	1,347
1975	109,330.35	81,298	86,860	22,470	12.82	1,753
1976	116,613.48	92,953	99,312	17,301	12.01	1,441
1977	158,981.43	124,769	133,305	25,676	12.66	2,028
1978	176,543.56	137,157	146,540	30,004	12.97	2,313
1979	238,023.75	181,874	194,317	43,707	13.64	3,204
1980	214,277.09	161,865	172,939	41,338	13.98	2,957
1981	213,874.32	159,636	170,557	43,317	14.33	3,023
1982	236,098.67	173,013	184,849	51,250	15.01	3,414
1983	221,974.64	160,488	171,468	50,507	15.39	3,282
1984	283,528.57	200,993	214,744	68,785	16.08	4,278
1985	281,714.69	196,750	210,210	71,505	16.48	4,339
1986	365,966.05	250,284	267,407	98,559	17.18	5,737
1987	576,468.78	387,791	414,321	162,148	17.60	9,213
1988	323,918.42	213,009	227,582	96,336	18.31	5,261
1989	964,039.47	622,577	665,170	298,869	18.74	15,948
1990	988,225.14	622,779	665,385	322,840	19.46	16,590
1991	1,004,925.03	620,642	663,102	341,823	19.92	17,160
1992	1,299,813.03	781,838	835,326	464,487	20.65	22,493
1993	1,420,914.13	835,782	892,961	527,953	21.12	24,998
1994	1,083,091.07	619,203	661,565	421,526	21.85	19,292
1995	1,004,839.37	560,399	598,738	406,101	22.34	18,178
1996	1,115,656.76	603,124	644,386	471,271	23.09	20,410
1997	1,179,061.92	620,187	662,616	516,446	23.58	21,902
1998	1,243,283.05	632,085	675,328	567,955	24.34	23,334
1999	1,148,760.89	566,339	605,084	543,677	24.85	21,878
2000	1,205,462.30	572,474	611,639	593,823	25.61	23,187
2001	1,007,351.60	462,173	493,792	513,560	26.14	19,647
2002	928,512.26	408,824	436,793	491,719	26.91	18,273
2003	1,096,836.33	464,510	496,289	600,547	27.45	21,878
2004	1,165,066.23	471,153	503,386	661,680	28.23	23,439
2005	876,139.37	339,066	362,263	513,876	28.78	17,855
2006	766,746.97	281,703	300,975	465,772	29.56	15,757
2007	901,696.45	314,872	336,413	565,283	30.13	18,761
2008	948,157.84	313,461	334,906	613,252	30.71	19,969
2009	638,224.79	197,977	211,521	426,704	31.50	13,546
2010	571,047.33	166,175	177,544	393,503	32.08	12,266
2011	735,894.65	199,648	213,307	522,588	32.68	15,991
2012	902,866.25	225,807	241,255	661,611	33.48	19,761
2013	2,725,324.96	626,280	669,126	2,056,199	34.08	60,334
2014	2,455,059.27	513,107	548,210	1,906,849	34.69	54,968
2015	1,993,134.97	374,311	399,919	1,593,216	35.31	45,121

PEOPLES GAS COMPANY LLC

ACCOUNT 380.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. 0						
2016	1,716,894.29	285,520	305,053	1,411,841	35.94	39,283
2017	2,140,560.88	310,167	331,387	1,809,174	36.39	49,716
2018	2,934,482.97	359,181	383,754	2,550,729	37.03	68,883
2019	1,837,333.18	183,733	196,303	1,641,030	37.50	43,761
2020	2,289,313.66	176,964	189,070	2,100,244	37.82	55,533
2021	2,982,772.08	161,070	172,089	2,810,683	37.99	73,985
2022	2,098,431.22	62,953	67,260	2,031,171	37.74	53,820
2023	1,260,128.26	11,341	12,117	1,248,011	36.57	34,127
	52,275,768.50	17,186,427	18,362,210	33,913,558		1,096,309

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 30.9 2.10

PEOPLES GAS COMPANY LLC

ACCOUNT 381.00 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 28-R1.5						
NET SALVAGE PERCENT.. 0						
1957	102.72	103	103			
1964	10,738.43	10,738	10,738			
1966	17.59	18	18			
1968	280.02	276	257	23	0.37	23
1969	19,276.44	18,795	17,492	1,784	0.70	1,784
1970	84.51	81	75	10	1.03	10
1971	603.98	574	534	70	1.37	51
1972	782.60	735	684	99	1.69	59
1973	927.23	862	802	125	1.96	64
1974	63.69	59	55	9	2.19	4
1975	30,014.55	27,420	25,519	4,496	2.42	1,858
1976	609.17	577	537	72	2.59	28
1977	891.32	839	781	110	2.85	39
1978	1,267.49	1,191	1,108	159	2.91	55
1979	11,184.37	10,423	9,701	1,483	3.23	459
1980	5,461.05	5,045	4,695	766	3.56	215
1981	2,356.50	2,166	2,016	340	3.71	92
1982	301.87	276	257	45	3.88	12
1983	1,858.29	1,680	1,564	294	4.28	69
1984	378.15	339	316	62	4.50	14
1985	118.15	105	98	20	4.75	4
1988	16,908.19	14,568	13,558	3,350	5.65	593
1989	9,262.92	7,881	7,335	1,928	5.99	322
1990	78,927.58	66,489	61,880	17,048	6.20	2,750
1991	76,899.33	63,819	59,395	17,504	6.59	2,656
1992	204,886.60	167,946	156,304	48,583	6.86	7,082
1993	326,914.96	263,297	245,046	81,869	7.29	11,230
1994	294,337.78	233,498	217,313	77,025	7.60	10,135
1995	317,498.56	246,823	229,714	87,785	8.07	10,878
1996	465,480.29	355,348	330,716	134,764	8.42	16,005
1997	729,425.14	545,902	508,062	221,363	8.80	25,155
1998	518,084.54	379,445	353,143	164,942	9.20	17,928
1999	640,524.33	458,167	426,408	214,116	9.62	22,257
2000	508,183.82	354,357	329,794	178,390	10.06	17,733
2001	556,326.73	377,356	351,199	205,128	10.51	19,517
2002	542,266.17	356,974	332,230	210,036	10.99	19,112
2003	632,204.86	402,904	374,976	257,229	11.48	22,407
2004	932,628.02	573,753	533,982	398,646	11.99	33,248
2005	788,218.03	468,202	435,748	352,470	12.42	28,379
2006	974,088.29	556,789	518,194	455,894	12.86	35,451
2007	1,216,941.07	664,937	618,845	598,096	13.42	44,568
2008	947,424.03	494,271	460,010	487,414	13.90	35,066
2009	557,271.90	277,076	257,870	299,402	14.32	20,908

PEOPLES GAS COMPANY LLC

ACCOUNT 381.00 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 28-R1.5						
NET SALVAGE PERCENT.. 0						
2010	402,386.46	189,122	176,013	226,373	14.85	15,244
2011	599,058.80	265,323	246,931	352,128	15.30	23,015
2012	615,116.12	254,843	237,178	377,938	15.79	23,935
2013	260,771.52	100,475	93,510	167,262	16.22	10,312
2014	679,299.64	241,016	224,309	454,991	16.67	27,294
2015	743,729.51	240,522	223,850	519,880	17.09	30,420
2016	1,099,997.73	320,099	297,911	802,087	17.46	45,939
2017	1,404,318.23	361,191	336,154	1,068,164	17.81	59,976
2018	1,912,631.83	423,839	394,460	1,518,172	18.14	83,692
2019	1,682,377.59	311,913	290,292	1,392,086	18.31	76,029
2020	415,475.65	61,033	56,802	358,674	18.39	19,504
2021	367,161.34	38,919	36,221	330,940	18.28	18,104
2022	559,541.45	34,748	32,340	527,201	17.63	29,904
2023	353,257.71	7,171	6,674	346,584	16.09	21,540
	22,517,144.84	10,262,318	9,551,717	12,965,428		893,128

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.5 3.97

PEOPLES GAS COMPANY LLC

ACCOUNT 382.10 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1.5						
NET SALVAGE PERCENT.. 0						
1936	329.67	303	330			
1938	457.28	416	457			
1959	62.97	50	63			
1964	132.21	100	126	6	12.20	
1965	242.88	182	229	14	12.58	1
1966	255.85	189	238	18	12.97	1
1967	475.28	348	438	37	13.37	3
1968	717.92	520	654	64	13.79	5
1970	1,282.59	907	1,141	142	14.64	10
1971	3,027.09	2,114	2,660	367	15.08	24
1972	1,669.35	1,151	1,448	221	15.53	14
1973	2,378.16	1,617	2,035	343	16.00	21
1974	1,503.80	1,008	1,268	236	16.47	14
1975	681.42	450	566	115	16.95	7
1976	1,578.91	1,184	1,490	89	15.72	6
1977	2,742.92	2,039	2,566	177	15.94	11
1978	419.70	307	386	34	16.56	2
1979	3,000.26	2,173	2,735	265	16.81	16
1980	5,135.10	3,680	4,631	504	17.07	30
1981	8,384.49	5,904	7,430	954	17.71	54
1982	5,487.52	3,818	4,805	683	18.01	38
1983	3,634.53	2,482	3,123	512	18.66	27
1984	17,189.07	11,580	14,572	2,617	18.97	138
1985	13,263.50	8,758	11,021	2,242	19.64	114
1986	51,881.76	33,744	42,463	9,419	19.98	471
1987	153,591.63	98,329	123,737	29,855	20.33	1,469
1988	98,912.84	61,919	77,919	20,994	21.01	999
1989	90,602.07	55,720	70,118	20,484	21.39	958
1990	63,899.98	38,570	48,537	15,363	21.78	705
1991	60,953.52	36,078	45,401	15,553	22.18	701
1992	111,028.95	64,019	80,561	30,468	22.89	1,331
1993	148,481.71	83,759	105,402	43,080	23.31	1,848
1994	60,376.20	33,279	41,878	18,498	23.75	779
1995	44,641.88	24,017	30,223	14,419	24.19	596
1996	62,019.37	32,517	40,919	21,100	24.65	856
1997	63,402.54	32,348	40,707	22,696	25.12	904
1998	116,437.07	57,729	72,646	43,791	25.59	1,711
1999	67,986.92	32,695	41,143	26,844	26.09	1,029
2000	128,514.59	59,836	75,298	53,217	26.59	2,001
2001	129,550.75	58,298	73,362	56,189	27.09	2,074
2002	102,391.67	44,428	55,908	46,484	27.61	1,684
2003	88,566.60	36,968	46,521	42,046	28.14	1,494
2004	95,054.79	38,079	47,919	47,136	28.68	1,644

PEOPLES GAS COMPANY LLC

ACCOUNT 382.10 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1.5						
NET SALVAGE PERCENT.. 0						
2005	158,998.04	61,230	77,052	81,946	29.00	2,826
2006	118,424.92	43,509	54,752	63,673	29.56	2,154
2007	107,643.49	37,761	47,518	60,125	29.92	2,010
2008	82,018.39	27,370	34,442	47,576	30.29	1,571
2009	109,763.35	34,674	43,634	66,129	30.68	2,155
2010	63,943.75	19,030	23,947	39,997	31.08	1,287
2011	59,289.96	16,518	20,786	38,504	31.50	1,222
2012	91,374.79	23,776	29,920	61,455	31.75	1,936
2013	472,913.81	113,972	143,423	329,491	32.03	10,287
2014	130,669.94	28,865	36,324	94,346	32.33	2,918
2015	142,123.92	28,439	35,788	106,336	32.65	3,257
2016	179,142.64	32,102	40,397	138,746	32.83	4,226
2017	184,414.19	29,119	36,643	147,771	32.89	4,493
2018	222,318.68	30,213	38,020	184,299	32.86	5,609
2019	210,620.08	23,779	29,924	180,696	32.73	5,521
2020	225,112.48	20,035	25,212	199,900	32.42	6,166
2021	285,617.80	18,251	22,967	262,651	31.73	8,278
	4,656,737.54	1,562,255	1,965,823	2,690,915		89,706

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 30.0 1.93

PEOPLES GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BUTLER GENERAL OFFICE						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2028						
NET SALVAGE PERCENT.. 0						
1928	403,183.99	378,654	398,194	4,990	4.36	1,144
1955	816.00	754	793	23	4.62	5
1966	1,714.01	1,566	1,647	67	4.69	14
1967	4,033.87	3,681	3,871	163	4.69	35
1971	2,423.95	2,199	2,312	111	4.71	24
1978	2,965.69	2,679	2,817	148	4.84	31
1979	7,209.68	6,528	6,865	345	4.61	75
1983	1,415.10	1,268	1,333	82	4.68	18
1986	24,242.49	21,535	22,646	1,596	4.67	342
1988	1,663.50	1,468	1,544	120	4.67	26
1989	8,175.76	7,179	7,549	626	4.74	132
1990	1,603.25	1,404	1,476	127	4.71	27
1994	10,808.86	9,300	9,780	1,029	4.73	218
1996	1,872.50	1,592	1,674	198	4.78	41
2000	36,551.82	30,316	31,880	4,671	4.77	979
2003	2,236.36	1,809	1,902	334	4.77	70
2004	14,627.63	11,720	12,325	2,303	4.76	484
2005	4,426.56	3,506	3,687	740	4.77	155
2006	11,289.27	8,837	9,293	1,996	4.76	419
2007	61,350.64	47,314	49,756	11,595	4.80	2,416
2008	5,798.25	4,406	4,633	1,165	4.79	243
2009	3,228.95	2,415	2,540	689	4.77	144
2011	152,948.60	109,787	115,452	37,496	4.78	7,844
2012	237,398.86	166,227	174,805	62,594	4.78	13,095
2013	38,003.92	25,850	27,184	10,820	4.78	2,264
2017	4,950.00	2,787	2,931	2,019	4.79	422
2019	11,891.11	5,539	5,825	6,066	4.78	1,269
2020	15,909.12	6,343	6,670	9,239	4.78	1,933
2021	179,697.06	56,101	58,996	120,701	4.77	25,304
2023	435,887.85	28,769	30,254	405,634	4.72	85,939
	1,688,324.65	951,533	1,000,636	687,689		145,112
BUTLER WAREHOUSE AND AUTOMOTIVE SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2033						
NET SALVAGE PERCENT.. 0						
1940	99,297.14	87,267	91,770	7,527	8.45	891
1950	2,089.08	1,811	1,904	185	8.80	21

PEOPLES GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BUTLER WAREHOUSE AND AUTOMOTIVE SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2033						
NET SALVAGE PERCENT.. 0						
1957	1,584.70	1,357	1,427	158	9.00	18
1960	1,172.09	998	1,050	123	9.07	14
1961	410.75	349	367	44	9.10	5
1971	7,858.93	6,511	6,847	1,012	9.30	109
1974	104.70	86	90	14	9.34	1
1976	1,063.75	888	934	130	9.33	14
1977	63.84	53	56	8	9.39	1
1978	8,785.32	7,262	7,637	1,149	9.48	121
1985	4,473.00	3,585	3,770	703	9.45	74
1987	47,728.98	37,801	39,752	7,977	9.50	840
1988	9,152.80	7,210	7,582	1,571	9.48	166
1989	1,694.41	1,326	1,394	300	9.50	32
1990	20,116.53	15,612	16,418	3,699	9.57	387
1993	49,669.45	37,759	39,708	9,962	9.52	1,046
1995	16,022.61	11,959	12,576	3,446	9.57	360
1996	18,504.54	13,723	14,431	4,073	9.47	430
1997	3,342.55	2,449	2,575	767	9.55	80
1998	16,424.70	11,905	12,519	3,905	9.56	408
2002	3,847.80	2,647	2,784	1,064	9.60	111
2005	2,872.73	1,879	1,976	897	9.61	93
2010	5,517.06	3,189	3,354	2,163	9.61	225
2013	238,557.78	122,714	129,046	109,511	9.60	11,407
2014	56,812.82	27,759	29,191	27,621	9.59	2,880
2017	434,193.76	170,030	178,804	255,390	9.58	26,659
2019	613,778.79	186,466	196,088	417,690	9.55	43,737
2021	34,970.70	6,494	6,829	28,142	9.50	2,962
2022	14,050.41	1,548	1,628	12,423	9.42	1,319
	1,714,161.72	772,637	812,508	901,654		94,411
BUTLER WELDING, STORAGE AND RADIO SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2030						
NET SALVAGE PERCENT.. 0						
1970	76,065.13	66,609	70,046	6,019	6.57	916
1972	1,375.00	1,199	1,261	114	6.59	17
1986	11,191.91	9,484	9,973	1,219	6.69	182
1988	14,573.97	12,249	12,881	1,693	6.67	254
1990	7,718.75	6,426	6,758	961	6.67	144

PEOPLES GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BUTLER WELDING, STORAGE AND RADIO SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2030						
NET SALVAGE PERCENT.. 0						
1991	14,753.75	12,197	12,826	1,927	6.74	286
1992	29,439.75	24,223	25,473	3,967	6.71	591
1996	13,215.13	10,591	11,138	2,078	6.73	309
2000	3,181.25	2,469	2,596	585	6.68	88
2002	3,275.40	2,489	2,617	658	6.69	98
2004	1,119.19	828	871	248	6.74	37
2007	1,277.84	903	950	328	6.72	49
2012	34,948.75	21,815	22,941	12,008	6.72	1,787
2017	24,400.00	11,675	12,277	12,123	6.72	1,804
2021	4,260.35	1,042	1,096	3,165	6.69	473
	240,796.17	184,199	193,704	47,092		7,035
TARENTUM GARAGE AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2024						
NET SALVAGE PERCENT.. 0						
1966	63,790.24	62,761	63,790			
1972	3,834.59	3,767	3,835			
1974	940.00	923	940			
1975	4,390.52	4,309	4,391			
1979	14,518.41	14,235	14,518			
1985	2,084.86	2,037	2,085			
1986	30,754.00	30,062	30,754			
1992	3,544.98	3,458	3,545			
1993	5,540.63	5,399	5,541			
1994	1,728.79	1,679	1,729			
1995	9,736.43	9,462	9,736			
2002	22,444.54	21,616	22,445			
2004	403,589.41	386,760	403,589			
2005	24,609.69	23,517	24,610			
2006	36,164.06	34,519	36,164			
2007	5,235.62	4,977	5,236			
2012	34,744.46	32,319	34,744			
	667,651.23	641,800	667,651			

PEOPLES GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ALABRAN GARAGE AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1970	62,569.44	60,258	62,569			
1971	1,283.57	1,235	1,284			
1975	6,034.09	5,793	6,034			
1981	16,499.35	15,793	16,499			
1985	4,072.63	3,886	4,073			
1986	15,847.00	15,078	15,847			
1988	14,972.72	14,217	14,973			
1992	1,226.29	1,158	1,226			
1995	17,159.18	16,095	17,159			
1996	7,878.80	7,384	7,879			
2003	1,868.53	1,715	1,869			
2005	5,658.55	5,140	5,659			
2006	1,158.55	1,048	1,159			
2007	6,818.72	6,129	6,819			
2010	1,578.25	1,386	1,547	32	1.83	17
2011	31,794.42	27,658	30,864	930	1.82	511
	196,420.09	183,973	195,458	962		528
HOME GARAGE AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2040						
NET SALVAGE PERCENT.. 0						
1970	54,725.21	40,760	43,305	11,421	15.13	755
1971	1,851.86	1,373	1,459	393	15.18	26
1985	4,072.62	2,891	3,071	1,001	15.60	64
1987	14,396.71	10,049	10,676	3,720	15.65	238
1989	89,302.73	61,333	65,162	24,141	15.58	1,549
1990	8,907.58	6,056	6,434	2,474	15.61	158
1992	5,149.94	3,419	3,632	1,518	15.78	96
1993	5,663.25	3,724	3,956	1,707	15.71	109
1995	15,591.50	10,013	10,638	4,953	15.69	316
1996	20,668.06	13,083	13,900	6,768	15.75	430
2003	1,868.54	1,044	1,109	759	15.94	48
2004	1,119.19	611	649	470	15.92	30
2007	1,267.19	637	677	590	15.99	37
2019	93,732.62	19,525	20,744	72,989	15.83	4,611

PEOPLES GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
HOME GARAGE AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2040						
NET SALVAGE PERCENT.. 0						
2020	140,160.49	23,435	24,898	115,263	15.77	7,309
2021	2,107.48	257	273	1,834	15.63	117
2023	28,110.02	616	654	27,456	14.86	1,848
	488,694.99	198,826	211,238	277,457		17,741
WALKCHALK GARAGE AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1960	53,582.50	51,857	53,583			
1961	410.75	397	411			
1973	7,800.00	7,498	7,800			
1976	2,912.28	2,802	2,912			
1979	11,350.08	10,878	11,350			
1984	2,931.27	2,801	2,931			
1987	11,978.91	11,394	11,979			
1991	4,070.94	3,850	4,071			
1992	1,987.83	1,877	1,988			
1996	9,203.44	8,625	9,203			
1999	2,122.54	1,975	2,123			
2004	1,119.19	1,021	1,119			
2006	44,003.82	39,810	43,963	41	1.81	23
2007	2,740.61	2,464	2,721	20	1.82	11
2009	4,035.25	3,573	3,946	90	1.83	49
2011	3,788.80	3,296	3,640	149	1.82	82
	164,038.21	154,118	163,739	299		165
ANDERSON GARAGE AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2026						
NET SALVAGE PERCENT.. 0						
1966	25,475.19	24,135	25,475			
1967	580.41	549	580			
1979	14,837.92	13,960	14,838			
1981	43,038.75	40,289	42,873	166	2.88	58
1982	5,226.44	4,884	5,197	29	2.89	10

PEOPLES GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ANDERSON GARAGE AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2026						
NET SALVAGE PERCENT.. 0						
1986	8,103.37	7,530	8,013	91	2.83	32
1987	14,133.57	13,137	13,979	154	2.74	56
1992	1,901.06	1,742	1,854	47	2.85	16
1993	3,125.00	2,856	3,039	86	2.84	30
2004	4,637.50	4,044	4,303	334	2.81	119
2007	15,716.32	13,390	14,249	1,468	2.81	522
2009	3,641.80	3,039	3,234	408	2.81	145
2012	6,422.35	5,128	5,457	966	2.82	343
	146,839.68	134,683	143,091	3,749		1,331
OTHER						
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1957	3,267.93	2,641	3,268			
1958	2,524.69	2,023	2,525			
1974	2,884.42	1,932	2,884			
1978	802.85	573	803			
1982	2,957.32	1,984	2,957			
1984	4,054.25	2,636	4,039	16	21.07	1
1985	10,230.11	6,521	9,991	239	21.71	11
2003	4,886.81	1,902	2,914	1,973	31.65	62
2007	4,987.09	1,612	2,470	2,517	33.84	74
2012	50,976.41	12,010	18,400	32,576	36.23	899
2013	90,993.46	19,709	30,196	60,798	36.78	1,653
2014	1,202.96	237	363	840	37.34	22
2020	10,479.37	790	1,210	9,269	38.85	239
2021	71,279.85	3,785	5,799	65,481	38.65	1,694
2022	8,468.48	254	389	8,079	37.74	214
2023	513,489.98	4,775	7,316	506,174	35.64	14,202
	783,485.98	63,384	95,523	687,963		19,071
	6,090,412.72	3,285,153	3,483,548	2,606,865		285,394

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.1 4.69

PEOPLES GAS COMPANY LLC

ACCOUNT 391.10 OFFICE FURNITURE AND EQUIPMENT - FURNITURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
1993	550.95	551	551			
1995	472.76	473	473			
1999	0.01					
2004	6,417.77	6,150	6,418			
2005	18,544.44	16,844	18,544			
2006	17,798.10	15,277	17,798			
2007	49,898.90	40,335	49,090	809	3.83	211
2008	1,672.84	1,269	1,544	129	4.83	27
2009	1,248.83	885	1,077	172	5.83	30
2010	3,965.54	2,611	3,178	788	6.83	115
2011	6,120.39	3,723	4,531	1,589	7.83	203
2012	11,373.26	6,350	7,728	3,645	8.83	413
2013	85,436.40	43,430	52,858	32,578	9.83	3,314
	203,500.19	137,898	163,790	39,710		4,313

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.2 2.12

PEOPLES GAS COMPANY LLC

ACCOUNT 391.20 OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2012	9,207.66	9,208	9,208			
2013	48,423.28	48,423	48,423			
2019	6,450.00	2,688	6,450			
2020	6,996.39	2,216	25,198	18,202-		
	71,077.33	62,535	89,279	18,202-		

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

PEOPLES GAS COMPANY LLC

ACCOUNT 391.30 OFFICE FURNITURE AND EQUIPMENT - COMPUTER EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2018	34,425.52	34,426	89,595	55,169-		
	34,425.52	34,426	89,595	55,169-		

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

PEOPLES GAS COMPANY LLC

ACCOUNT 392.20 TRANSPORTATION EQUIPMENT - LIGHT TRUCKS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 9-L3						
NET SALVAGE PERCENT.. 0						
1999	6,472.44	6,472	6,472			
2004	38,379.35	37,811	32,386	5,993	0.29	5,993
2007	46,141.50	43,641	37,380	8,762	0.93	8,762
2008	0.01					
2014	173,138.78	138,719	118,817	54,322	2.27	23,930
2015	33,473.55	25,888	22,174	11,300	2.39	4,728
2016	105,034.00	77,011	65,962	39,072	2.61	14,970
2017	541,303.26	365,163	312,772	228,531	2.97	76,946
2018	685,011.09	407,719	349,222	335,789	3.51	95,666
2019	540,328.77	269,030	230,431	309,898	4.20	73,785
2020	961,032.03	373,457	319,876	641,156	4.98	128,746
2021	2,120,785.55	573,460	491,184	1,629,602	5.85	278,564
2022	610,287.63	89,590	76,737	533,551	6.78	78,695
2023	532,010.66	22,344	19,138	512,873	7.60	67,483
	6,393,398.62	2,430,305	2,082,551	4,310,848		858,268

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.0 13.42

PEOPLES GAS COMPANY LLC

ACCOUNT 392.30 TRANSPORTATION EQUIPMENT - HEAVY TRUCKS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 14-S1						
NET SALVAGE PERCENT.. 0						
1998	84,219.71	82,030	37,561	46,659	0.67	46,659
2002	810.66	746	342	469	1.82	258
2003	59,894.12	54,234	24,834	35,060	2.10	16,695
2011	0.01					
2016	322,239.35	168,112	76,978	245,261	6.57	37,330
2017	446,701.09	208,788	95,603	351,098	7.03	49,943
2018	901,310.79	367,374	168,219	733,092	7.51	97,615
2019	390,146.92	133,313	61,043	329,104	8.03	40,984
2020	923,121.52	248,135	113,620	809,502	8.61	94,019
2021	24,740.10	4,696	2,150	22,590	9.25	2,442
2023	137,969.26	4,180	1,914	136,055	10.67	12,751
	3,291,153.53	1,271,608	582,264	2,708,890		398,696

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.8 12.11

PEOPLES GAS COMPANY LLC

ACCOUNT 393.00 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2002	853.30	722	634	219	3.83	57
2003	60.31	49	43	17	4.83	4
2005	3,420.75	2,486	2,182	1,239	6.83	181
2006	1,008.00	692	607	401	7.83	51
2007	54.28	35	31	23	8.83	3
2010	41.71	22	19	23	11.83	2
2011	456.77	222	195	262	12.83	20
	5,895.12	4,228	3,711	2,184		318

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.9 5.39

PEOPLES GAS COMPANY LLC

ACCOUNT 394.20 TOOLS, SHOP AND GARAGE EQUIPMENT - TOOLS AND WORK EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2008	191,868.69	191,869	191,869			
2009	251,475.48	237,504	233,827	17,648	0.83	17,648
2010	287,460.88	252,327	248,421	39,040	1.83	21,333
2011	223,895.39	181,604	178,792	45,103	2.83	15,937
2012	234,880.05	174,854	172,147	62,733	3.83	16,379
2013	191,038.12	129,482	127,477	63,561	4.83	13,160
2014	54,908.82	33,555	33,036	21,873	5.83	3,752
2015	27,411.96	14,924	14,693	12,719	6.83	1,862
2016	162,142.32	77,468	76,269	85,873	7.83	10,967
2017	1,119.95	460	453	667	8.83	76
2018	30,205.91	10,404	10,243	19,963	9.83	2,031
2019	27,535.56	7,649	7,531	20,005	10.83	1,847
2020	54,112.57	11,424	11,247	42,866	11.83	3,623
2021	186,955.14	27,004	26,585	160,370	12.83	12,500
2022	391,734.22	30,469	29,997	361,737	13.83	26,156
2023	6,209.77	138	136	6,074	14.67	414
	2,322,954.83	1,381,135	1,362,723	960,232		147,685

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.5 6.36

PEOPLES GAS COMPANY LLC

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 18-L2.5						
NET SALVAGE PERCENT.. 0						
1961	1,382.14	1,382	1,382			
1962	500.32	500	500			
1975	249.00	241	188	61	0.58	61
1985	8,150.85	7,715	6,010	2,141	2.16	991
1987	5,373.47	5,033	3,921	1,452	2.44	595
1988	1,400.00	1,305	1,017	383	2.57	149
1989	14,875.00	13,823	10,769	4,106	2.60	1,579
1991	819.84	752	586	234	2.92	80
1992	101,443.89	92,324	71,923	29,521	3.08	9,585
1993	41,878.30	37,774	29,427	12,451	3.28	3,796
1994	90,019.55	80,604	62,793	27,227	3.41	7,984
1999	1,460.15	1,235	962	498	4.41	113
2000	75,392.50	62,877	48,983	26,410	4.61	5,729
2001	81,422.14	66,962	52,166	29,256	4.79	6,108
2002	12,198.78	9,890	7,705	4,494	4.94	910
2003	74,205.44	59,409	46,282	27,923	5.02	5,562
2007	17,270.13	12,899	10,049	7,221	5.48	1,318
2008	45,564.61	33,239	25,894	19,671	5.62	3,500
2013	185,882.26	108,295	84,365	101,517	7.28	13,945
2014	269,463.49	145,241	113,148	156,315	7.84	19,938
2015	175,211.29	86,134	67,101	108,110	8.45	12,794
2016	83,278.00	36,709	28,598	54,680	9.09	6,015
2017	51,960.00	20,057	15,625	36,335	9.81	3,704
2018	127,125.53	41,773	32,543	94,583	10.56	8,957
2019	33,512.68	9,008	7,018	26,495	11.34	2,336
2020	327,600.05	67,748	52,778	274,822	12.15	22,619
2021	210,732.09	30,135	23,476	187,256	12.98	14,427
2022	706,486.30	54,753	42,654	663,832	13.89	47,792
2023	39,506.40	877	683	38,823	14.68	2,645
	2,784,364.20	1,088,694	848,546	1,935,818		203,232

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.5 7.30

PEOPLES GAS COMPANY LLC

ACCOUNT 397.10 COMMUNICATION EQUIPMENT - STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2007	11,500.91	7,437	872-	12,373	8.83	1,401
2011	13,689.76	6,662	782-	14,472	12.83	1,128
2012	3,464.31	1,547	181-	3,645	13.83	264
	28,654.98	15,646	1,835-	30,490		2,793

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.9 9.75

PEOPLES GAS COMPANY LLC

ACCOUNT 397.20 COMMUNICATION EQUIPMENT - RADIO

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2006	60,163.72	60,164	60,164			
2007	90,002.57	90,003	90,003			
2008	29,406.65	29,407	29,407			
2009	86,657.98	81,843	75,164	11,494	0.83	11,494
2010	64,622.48	56,724	52,095	12,527	1.83	6,845
2011	33,696.54	27,332	25,102	8,595	2.83	3,037
2012	3,137.18	2,335	2,144	993	3.83	259
2013	572,369.14	387,940	356,283	216,086	4.83	44,738
2014	327,931.95	200,402	184,048	143,884	5.83	24,680
2015	91,070.54	49,582	45,536	45,535	6.83	6,667
2016	108,857.64	52,010	47,766	61,092	7.83	7,802
2018	25,970.74	8,945	8,215	17,756	9.83	1,806
2019	105,310.54	29,253	26,866	78,445	10.83	7,243
2020	74,963.75	15,826	14,534	60,430	11.83	5,108
2021	70,789.04	10,225	9,391	61,398	12.83	4,786
	1,744,950.46	1,101,991	1,026,718	718,232		124,465

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.8 7.13

PART III. EXPERIENCED NET SALVAGE

PEOPLES GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2018 TRANSACTION YEAR				
303.00	2,656,389.42			
352.00	3,426.40	84,574.00		84,574.00-
353.00	6,051.79	11,839.00		11,839.00-
354.00	2,107.83		5,840.00	5,840.00
365.20		600.00		600.00-
367.00	1,880.14	92,473.00		92,473.00-
369.00	24,716.03			
375.02	1,021.34			
376.00	190,906.51	164,351.00	4,091.00	160,260.00-
378.00	18,005.38	2,755.00		2,755.00-
380.00	89,247.85	235,141.00		235,141.00-
381.00	2,130,907.80			
382.10	10,777.23	12,098.00		12,098.00-
391.01	7,968.52			
391.02	382,055.48			
391.03	3,778.28			
392.00	765,488.22		96,263.00	96,263.00
394.20	191,196.57		5,700.00	5,700.00
396.00	74,205.44		15,000.00	15,000.00
397.20	34,824.07			
399.00	1,021.34			
	6,595,975.64	603,831.00	126,894.00	476,937.00-

PEOPLES GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2019 TRANSACTION YEAR				
303.00	706,507.19			
352.00	5,127.00	216,163.00		216,163.00-
353.00	4,175.49	3,444.00		3,444.00-
354.00	3,051.20		464.00	464.00
365.20	12,922.71			
366.01	2,598.75			
366.03	1,125.00			
367.00	14,289.08	104,641.00		104,641.00-
368.00	83,169.32	27,275.00		27,275.00-
375.02	4,244.02			
376.00	224,469.74	227,525.00	2,643.00	224,882.00-
378.00	16,212.01			
380.00	38,621.82	335,890.00		335,890.00-
381.00	738,574.24			
382.10	3,852.68	8,747.00		8,747.00-
390.00	27,583.67			
391.01	60,102.55			
391.02	120,825.79			
391.03	2,154.29			
392.00	1,113,880.79		146,103.00	146,103.00
396.00	38,744.45		500.00	500.00
397.20	30,568.40			
398.00	30,182.42			
399.00	4,244.02			
	3,287,226.63	923,685.00	149,710.00	773,975.00-

PEOPLES GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2020 TRANSACTION YEAR				
303.00	776,851.10			
351.00	798.05			
353.00	2,549.00			
355.00	12,378.93			
367.00	37,945.19	99,744.00		99,744.00-
368.00		31,881.00		31,881.00-
369.00	3,021.94			
375.02	3,080.25			
376.00	415,086.13	342,321.00	8,316.00	334,005.00-
378.00	11,443.00	4,249.00		4,249.00-
380.00	58,211.24	424,224.00		424,224.00-
382.10	5,055.86	9,887.00		9,887.00-
390.00	26,280.74			
391.01	9,316.58			
391.02	313,487.14			
391.03	14,189.00			
392.00	961,032.06		139,251.00	139,251.00
394.20	501,795.32			
396.00	43,163.20			
397.20	20,196.94			
	3,215,881.67	912,306.00	147,567.00	764,739.00-

PEOPLES GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2021 TRANSACTION YEAR				
303.00	379,965.27			
352.00		1,982.00		1,982.00-
354.00	1,857.17			
367.00	14,445.28	215,555.00		215,555.00-
369.00	33,570.20			
375.02	7,739.40			
376.00	1,030,456.79	241,723.00	5,566.00	236,157.00-
378.00	54,750.28	56,011.00		56,011.00-
380.00		189,733.00		189,733.00-
381.00	414,953.07			
382.10	3,974.15	11,196.00		11,196.00-
390.00	169,838.92			
391.01	9,927.25			
391.02	14,270.00			
391.03	450.32			
392.00	354,682.91		103,133.00	103,133.00
393.00	14,500.38			
394.20	282,035.93			
396.00	108,773.95			
397.20	369,560.42			
	3,265,751.69	716,200.00	108,699.00	607,501.00-
2022 TRANSACTION YEAR				
303.00	1,528,279.18			
352.00	93,477.72			
367.00	22,240.16		6,938.75	6,938.75
369.00	365.05			
375.02	2,349.51			
376.00	429,518.47	46,553.14	10,878.77	35,674.37-
378.00	173,173.04			
380.00	76,596.80			
381.00	342,674.32			
382.10	4,291.40	1,495.00		1,495.00-
391.01	8,457.12			
391.02	9,207.66			
392.00	1,735,740.32		5,643.60	5,643.60
393.00	10,559.15			
394.20	193,490.71			
396.00	260,936.19			
397.20	604,496.46			
	5,495,853.26	48,048.14	23,461.12	24,587.02-
TOTAL	21,860,688.89	3,204,070.14	556,331.12	2,647,739.02-

PEOPLES NATURAL GAS COMPANY LLC

PITTSBURGH, PENNSYLVANIA

PEOPLES GAS DIVISION

2024 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION
ACCRUALS RELATED TO GAS PLANT
AS OF AUGUST 31, 2024

Prepared by:

GANNETT FLEMING

Excellence Delivered As Promised

PEOPLES NATURAL GAS COMPANY LLC

Pittsburgh, Pennsylvania

PEOPLES GAS DIVISION

2024 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO GAS PLANT
AS OF AUGUST 31, 2024

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | **F** 717.763.8150

gannettfleming.com

December 14, 2023

Peoples Natural Gas Company, LLC
375 North Shore Drive, Suite 600
Pittsburgh, PA 15212-5322

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to gas plant in service. The results of our study as of August 31, 2024 are presented in the attached report. The results of our study as of August 31, 2023 are presented in our report titled "2023 Depreciation Study- Calculated Annual Depreciation Accruals Related to Gas Plant as of August 31, 2023". The same methods, procedures and estimates are used in both studies.

The attached report sets forth a description of the methods and procedures upon which the studies were based, the estimates of survivor curves and the calculated annual depreciation rates as of August 31, 2024.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS
President

JJS:mle

075181.000

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PART I. INTRODUCTION

PEOPLES NATURAL GAS COMPANY LLC
PEOPLES GAS DIVISION
DEPRECIATION STUDY

PART I. INTRODUCTION

SCOPE

This report sets forth the results of the depreciation study conducted for Peoples Natural Gas Company LLC to determine the annual depreciation accrual rates and amounts for ratemaking purposes applicable to the original cost of gas plant as of August 31, 2024 for the Peoples Gas division.

The depreciation accrual rates and amounts presented herein are based on estimated survivor curves and on methods and procedures set forth in previous orders approved by the Pennsylvania Public Utility Commission. The estimated survivor curves presented herein were based on the results of a service life study incorporating statistical analyses of data through 2019.

BASIS OF STUDY

Depreciation and Amortization

Depreciation, as defined in the Uniform System of Accounts, is the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of gas plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and requirements of public authorities.

Depreciation, as used in accounting, is a method of distributing fixed capital costs over a period of time by allocating annual amounts to expense. Each annual amount of such depreciation expense is part of that year's total cost of providing utility service. Normally, the period of time over which the fixed capital cost is allocated to the cost of service is equal to the period of time over which an item renders service, that is, the item's service life. The most prevalent method of allocation is to distribute an equal amount of cost to each year of service life. This method is known as the straight line method of depreciation.

The calculation of annual and accrued depreciation based on the straight line method requires the estimation of survivor curves and the selection of group depreciation procedures. These subjects are discussed in the sections which follow.

For most plant accounts, depreciation accruals and accrued depreciation were calculated using the straight line method, the remaining life basis, the average service life (ASL) procedure for plant installed prior to 1976 and the equal life group (ELG) procedure for property installed subsequent to 1975. The calculations were based on the attained ages and estimated service life characteristics for each depreciable group of gas property. For certain general plant accounts, the amortization amounts, annual and accrued, were based on the age of the vintage and the selected amortization period.

Survivor curves were used to reflect the expected dispersion of retirements, thus providing a consistent method of estimating service lives and depreciation for mass property. Iowa type curves were used to depict the estimated survivor curves. For life span groups, the estimate of life characteristics is consistent because the

calculated lives of the units within a group are obtained by employing a single probable retirement date for the entire group.

Service Life Estimates

The method of estimating service life consisted of compiling the service life history of the plant accounts, subaccounts or depreciable groups, reducing this history to trends through the use of acceptable actuarial techniques, and forecasting the trend of survivors for each depreciable group on the basis of interpretations of past trends and consideration of Company plans for the future. The combination of the historical trend and the estimated future trend yielded a complete pattern of life characteristics from which the average service life was derived.

The Company's service life estimates used in the depreciation calculation incorporated historical data compiled through 2019 from the property records of the Company. Such data included plant additions, retirements, transfers and other activity. Generally, retirement data for the years 1946 through 2019 were used in the actuarial life table computations which were the primary statistical support of the service life estimates.

A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirement was obtained through field trips conducted during the course of the service life study. Discussions with operating and management personnel also provided information regarding plans for the future which was incorporated in the interpretation and extrapolation of the statistical analyses.

AMORTIZATION OF NET SALVAGE

Inasmuch as this report relates primarily to Pennsylvania rate regulation practices, under which experienced costs of negative net salvage are amortized after their occurrence, no adjustments for expected salvage were made to either the annual depreciation accrual or the calculated accrued depreciation for the individual accounts. The annual provision for recovering negative net salvage is based on the amortization of net salvage over a five-year period.

PART II. ESTIMATION OF SURVIVOR CURVES

PART II. ESTIMATION OF SURVIVOR CURVES

The calculation of annual depreciation based on the straight line method requires the estimation of survivor curves and the selection of group depreciation procedures. The estimation of survivor curves is discussed below and the development of net salvage is discussed in later sections of this report.

SURVIVOR CURVES

The use of an average service life for a property group implies that the various units in the group have different lives. Thus, the average life may be obtained by determining the separate lives of each of the units or by constructing a survivor curve by plotting the number of units which survive at successive ages.

The survivor curve graphically depicts the amount of property existing at each age throughout the life of an original group. From the survivor curve, the average life of the group, the remaining life expectancy, the probable life, and the frequency curve can be calculated. In Figure 1, a typical smooth survivor curve and the derived curves are illustrated. The average life is obtained by calculating the area under the survivor curve, from age zero to the maximum age, and dividing this area by the ordinate at age zero. The remaining life expectancy at any age can be calculated by obtaining the area under the curve, from the observation age to the maximum age, and dividing this area by the percent surviving at the observation age. For example, in Figure 1, the remaining life at age 30 is equal to the crosshatched area under the survivor curve divided by 29.5 percent surviving at age 30. The probable life at any age is developed by adding the age and remaining life. If the probable life of the property is calculated for each year of age, the probable life curve shown in the chart can be developed. The frequency curve presents the number of units retired in each age interval. It is derived by obtaining the differences between the amount of property surviving at the beginning and at the end of each interval.

This study has incorporated the use of Iowa curves developed from a retirement rate analysis of historical retirement history. A discussion of the concepts of survivor curves and of the development of survivor curves using the retirement rate method is presented below.

Iowa Type Curves

The range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized survivor curves known as the Iowa type curves. There are four families in the Iowa system, labeled in accordance with the location of the modes of the retirements (or the portion of the frequency curve with the highest level of retirements) in relationship to the average life and the relative height of the modes. The left moded curves, presented in Figure 2, are those in which the greatest frequency of retirement occurs to the left of, or prior to, average service life. The symmetrical moded curves, presented in Figure 3, are those in which the greatest frequency of retirement occurs at average service life. The right moded curves, presented in Figure 4, are those in which the greatest frequency occurs to the right of, or after, average service life. The origin moded curves, presented in Figure 5, are those in which the greatest frequency of retirement occurs at the origin, or immediately after age zero. The letter designation of each family of curves (L, S, R or O) represents the location of the mode of the associated frequency curve with respect to the average service life. The numbers represent the relative heights of the modes of the frequency curves within each family. A higher number designates a higher mode curve.

The Iowa curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observation and classification of the ages at which industrial property had been retired. A report of the study which resulted in the classification of property survivor characteristics into 18 type curves, which constitute three of the four families, was published in 1935 in the form of the Experiment Station's Bulletin 125.

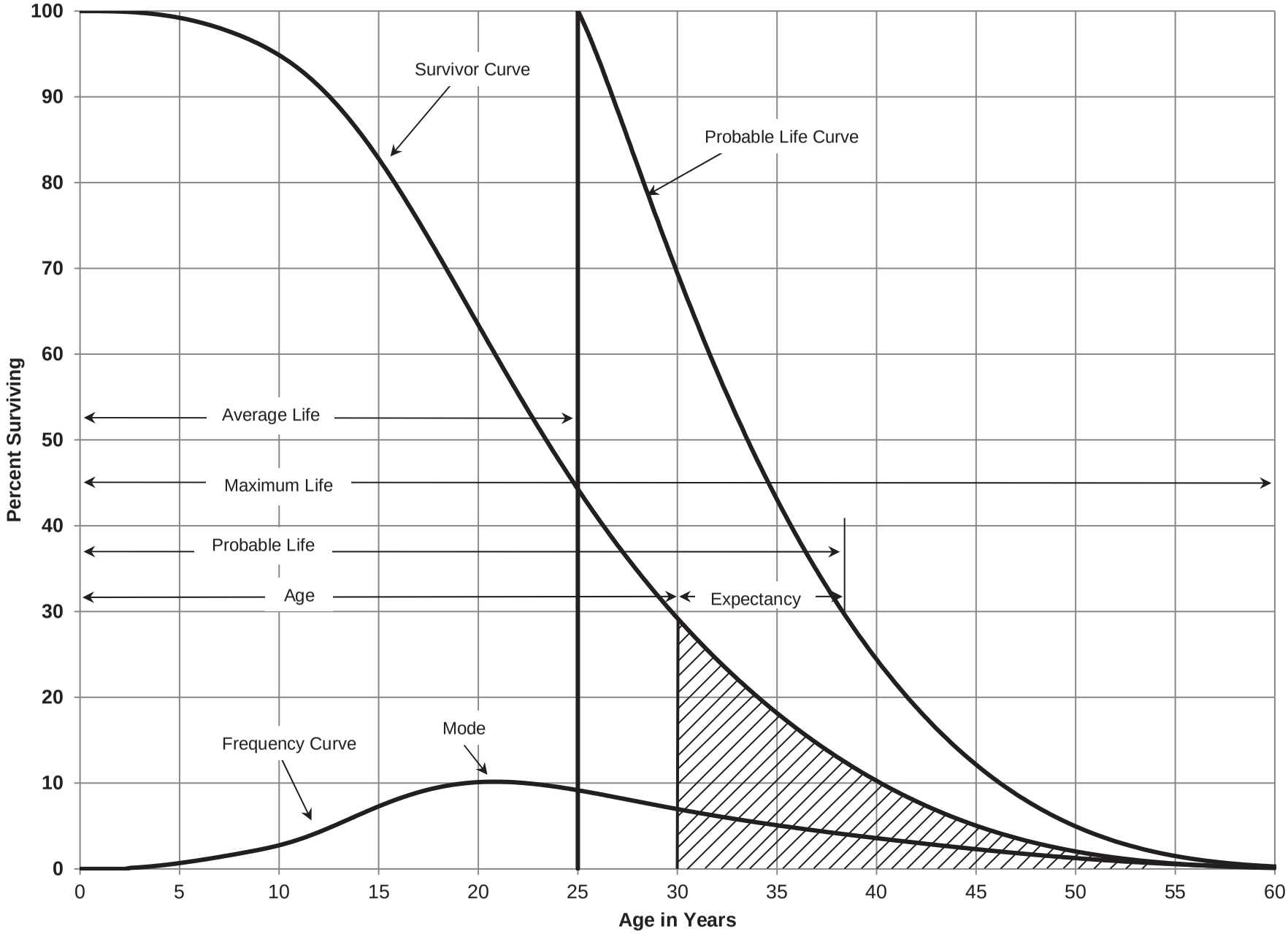


FIGURE 1. TYPICAL SURVIVOR CURVE AND DERIVED CURVES

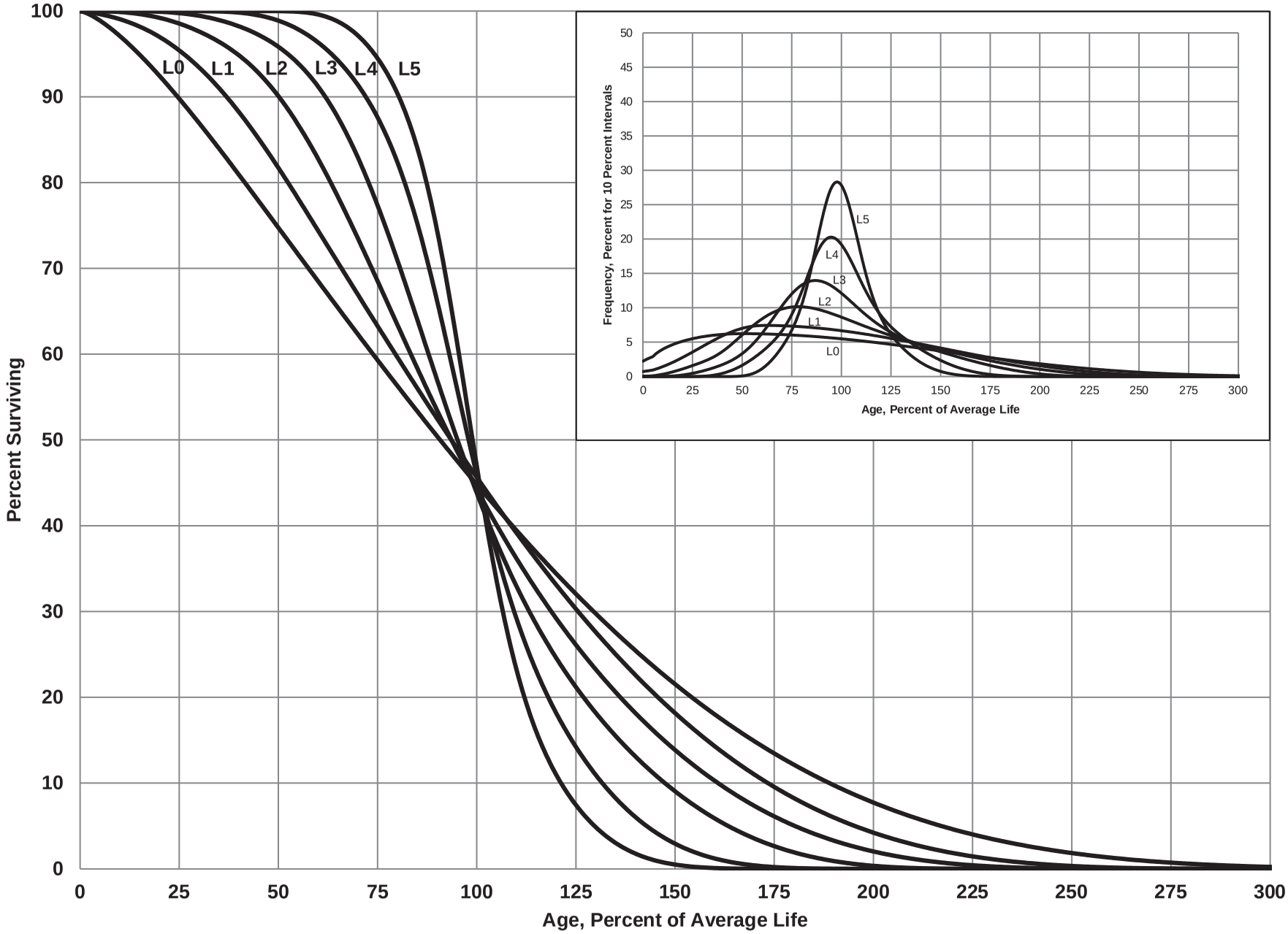


FIGURE 2. LEFT MODAL OR "L" IOWA TYPE SURVIVOR CURVES

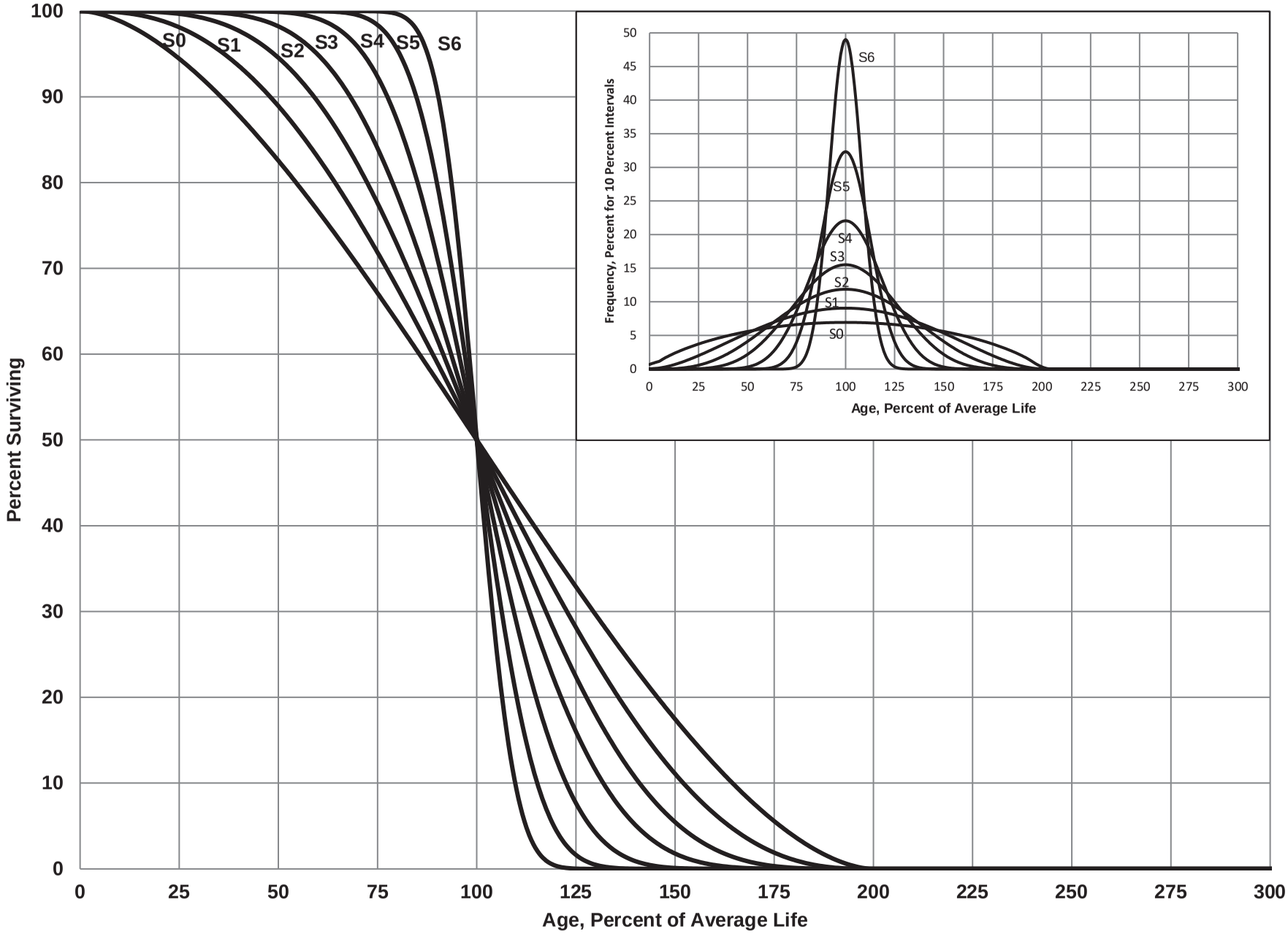


FIGURE 3. SYMMETRICAL OR "S" IOWA TYPE SURVIVOR CURVES

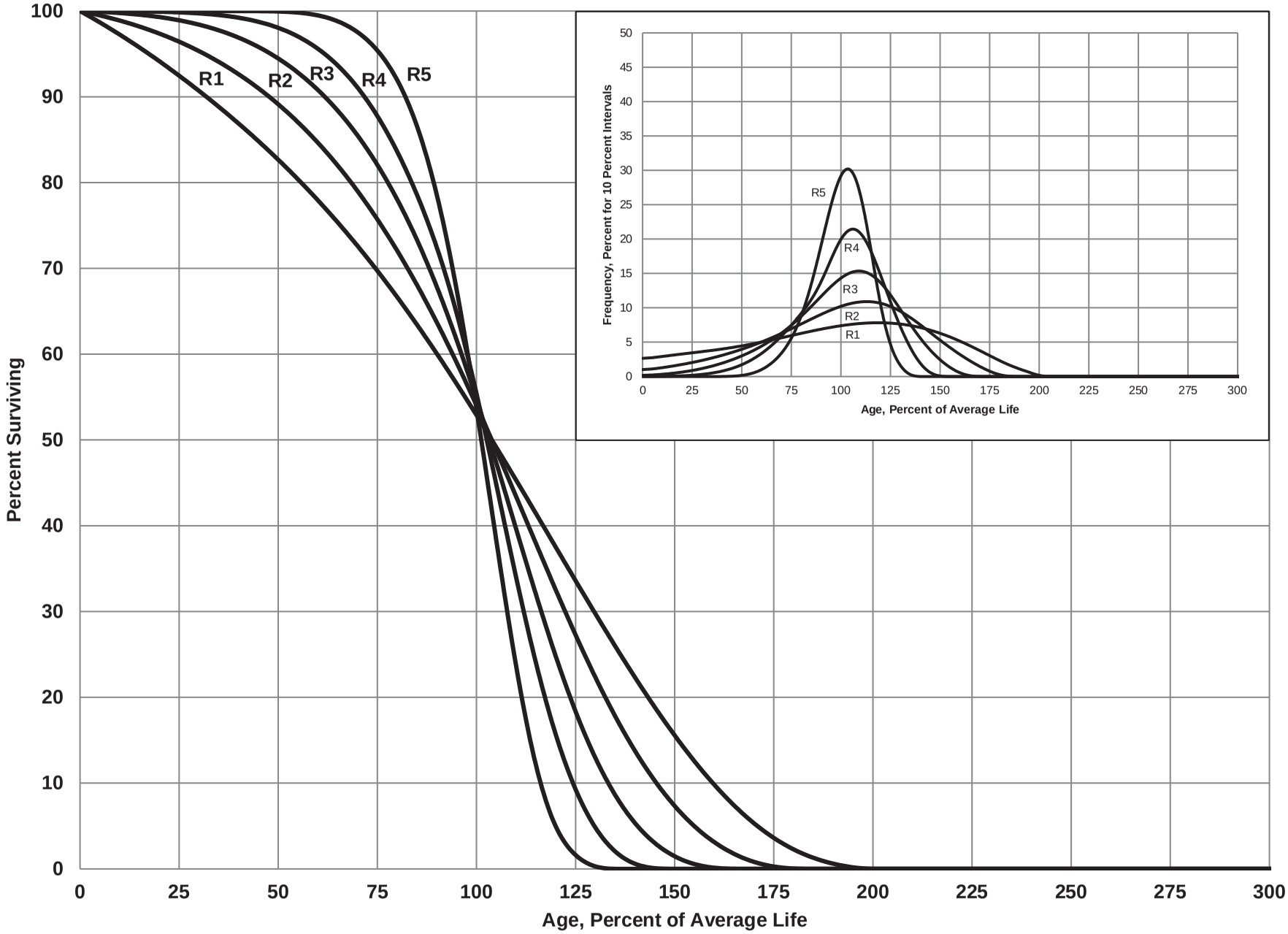


FIGURE 4. RIGHT MODAL OR "R" IOWA TYPE SURVIVOR CURVES

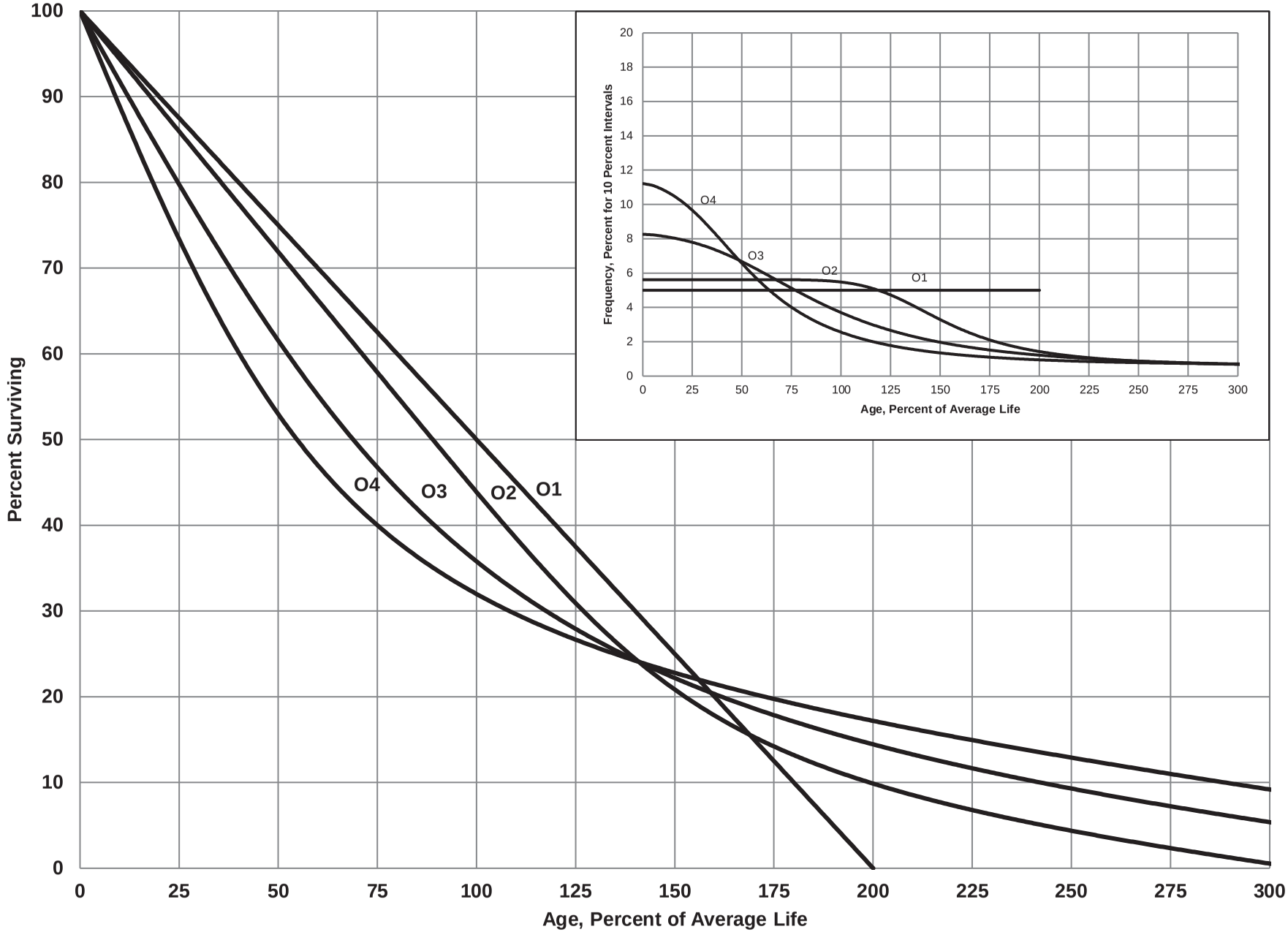


FIGURE 5. ORIGIN MODAL OR "O" IOWA TYPE SURVIVOR CURVES

These curve types have also been presented in subsequent Experiment Station bulletins and in the text, "Engineering Valuation and Depreciation."[1] In 1957, Frank V. B. Couch, Jr., an Iowa State College graduate student, submitted a thesis presenting his development of the fourth family consisting of the four O type survivor curves.

Retirement Rate Method of Analysis

The retirement rate method is an actuarial method of deriving survivor curves using the average rates at which property of each age group is retired. The method relates to property groups for which aged accounting experience is available and is the method used to develop the original stub survivor curves in this study. The method (also known as the annual rate method) is illustrated through the use of an example in the following text and is also explained in several publications including "Statistical Analyses of Industrial Property Retirements,"[2] "Engineering Valuation and Depreciation,"[3] and "Depreciation Systems."[4]

The average rate of retirement used in the calculation of the percent surviving for the survivor curve (life table) requires two sets of data: first, the property retired during a period of observation, identified by the property's age at retirement; and second, the property exposed to retirement at the beginning of the age intervals during the same period. The period of observation is referred to as the experience band. The band of years which represent the installation dates of the property exposed to retirement during the experience band is referred to as the placement band. An example of the calculations used in the development of a life table follows. The example includes schedules of annual aged property transactions, a schedule of plant exposed to retirement, a life table and illustrations of smoothing the stub survivor curve.

[1]Marston, Anson, Robley Winfrey and Jean C. Hempstead. Engineering Valuation and Depreciation, 2nd Edition. New York, McGraw-Hill Book Company. 1953.

[2]Winfrey, Robley, Statistical Analyses of Industrial Property Retirements. Iowa State College, Engineering Experiment Station, Bulletin 125. 1935.

[3]Marston, Anson, Robley Winfrey, and Jean C. Hempstead, Supra Note 1.

[4]Wolf, Frank K. and W. Chester Fitch. Depreciation Systems. Iowa State University Press. 1994.

Schedules of Annual Transactions in Plant Records

The property group used to illustrate the retirement rate method is observed for the experience band 2013-2022 for which there were placements during the years 2008-2022. In order to illustrate the summation of the aged data by age interval, the data were compiled in the manner presented in Schedules 1 and 2 on pages II-11 and II-12. In Schedule 1, the year of installation (year placed) and the year of retirement are shown. The age interval during which a retirement occurred is determined from this information. In the example which follows, $10,000 of the dollars invested in 2008 were retired in 2013. The $10,000 retirement occurred during the age interval between 4½ and 5½ years on the basis that approximately one-half of the amount of property was installed prior to and subsequent to July 1 of each year. That is, on the average, property installed during a year is placed in service at the midpoint of the year for the purpose of the analysis. All retirements also are stated as occurring at the midpoint of a one-year age interval of time, except the first age interval which encompasses only one-half year.

The total retirements occurring in each age interval in a band are determined by summing the amounts for each transaction year-installation year combination for that age interval. For example, the total of $143,000 retired for age interval 4½-5½ is the sum of the retirements entered on Schedule 1 immediately above the stair step line drawn on the table beginning with the 2013 retirements of 2008 installations and ending with the 2022 retirements of the 2017 installations. Thus, the total amount of 143 for age interval 4½-5½ equals the sum of:

$$10 + 12 + 13 + 11 + 13 + 13 + 15 + 17 + 19 + 20.$$

SCHEDULE 1. RETIREMENTS FOR EACH YEAR 2013-2022
SUMMARIZED BY AGE INTERVAL

Experience Band 2013-2022 Placement Band 2008-2022

Year Placed	Retirements, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2008	10	11	12	13	14	16	23	24	25	26	26	13½-14½
2009	11	12	13	15	16	18	20	21	22	19	44	12½-13½
2010	11	12	13	14	16	17	19	21	22	18	64	11½-12½
2011	8	9	10	11	11	13	14	15	16	17	83	10½-11½
2012	9	10	11	12	13	14	16	17	19	20	93	9½-10½
2013	4	9	10	11	12	13	14	15	16	20	105	8½-9½
2014		5	11	12	13	14	15	16	18	20	113	7½-8½
2015			6	12	13	15	16	17	19	19	124	6½-7½
2016				6	13	15	16	17	19	19	131	5½-6½
2017					7	14	16	17	19	20	143	4½-5½
2018						8	18	20	22	23	146	3½-4½
2019							9	20	22	25	150	2½-3½
2020								11	23	25	151	1½-2½
2021									11	24	153	½-1½
2022										13	80	0-½
Total	53	68	86	106	128	157	196	231	273	308	1,606	

SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2013-2022
SUMMARIZED BY AGE INTERVAL

Experience Band 2013-2022 Placement Band 2008-2022

Year Placed	Acquisitions, Transfers and Sales, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2008	-	-	-	-	-	-	60[a]	-	-	-	-	13½-14½
2009	-	-	-	-	-	-	-	-	-	-	-	12½-13½
2010	-	-	-	-	-	-	-	-	-	-	-	11½-12½
2011	-	-	-	-	-	-	-	(5)[b]	-	-	60	10½-11½
2012	-	-	-	-	-	-	-	6[a]	-	-	-	9½-10½
2013	-	-	-	-	-	-	-	-	-	-	(5)	8½-9½
2014		-	-	-	-	-	-	-	-	-	6	7½-8½
2015			-	-	-	-	-	-	-	-	-	6½-7½
2016				-	-	-	-	(12)[b]	-	-	-	5½-6½
2017					-	-	-	-	22[a]	-	-	4½-5½
2018						-	-	(19)[b]	-	-	10	3½-4½
2019							-	-	-	-	-	2½-3½
2020								-	-	(102)[c]	(121)	1½-2½
2021									-	-	-	½-1½
2022											-	0-½
Total	-	-	-	-	-	-	60	(30)	22	(102)	(50)	

[a] Transfer Affecting Exposures at Beginning of Year

[b] Transfer Affecting Exposures at End of Year

[c] Sale with Continued Use

Parentheses Denote Credit Amount.

In Schedule 2, other transactions which affect the group are recorded in a similar manner. The entries illustrated include transfers and sales. The entries which are credits to the plant account are shown in parentheses. The items recorded on this schedule are not totaled with the retirements, but are used in developing the exposures at the beginning of each age interval.

Schedule of Plant Exposed to Retirement

The development of the amount of plant exposed to retirement at the beginning of each age interval is illustrated in Schedule 3 on page II-14. The surviving plant at the beginning of each year from 2013 through 2022 is recorded by year in the portion of the table headed "Annual Survivors at the Beginning of the Year." The last amount entered in each column is the amount of new plant added to the group during the year. The amounts entered in Schedule 3 for each successive year following the beginning balance or addition are obtained by adding or subtracting the net entries shown on Schedules 1 and 2. For the purpose of determining the plant exposed to retirement, transfers-in are considered as being exposed to retirement in this group at the beginning of the year in which they occurred, and the sales and transfers-out are considered to be removed from the plant exposed to retirement at the beginning of the following year. Thus, the amounts of plant shown at the beginning of each year are the amounts of plant from each placement year considered to be exposed to retirement at the beginning of each successive transaction year. For example, the exposures for the installation year 2018 are calculated in the following manner:

Exposures at age 0	= amount of addition	= $750,000
Exposures at age ½	= $750,000 - $ 8,000	= $742,000
Exposures at age 1½	= $742,000 - $18,000	= $724,000
Exposures at age 2½	= $724,000 - $20,000 - $19,000	= $685,000
Exposures at age 3½	= $685,000 - $22,000	= $663,000

SCHEDULE 3. PLANT EXPOSED TO RETIREMENT
JANUARY 1 OF EACH YEAR 2013-2022
SUMMARIZED BY AGE INTERVAL

Experience Band 2013-2022 Placement Band 2008-2022

Year Placed	Exposures, Thousands of Dollars — Annual Survivors at the Beginning of the Year										Total at Beginning of Age Interval	Age Interval
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2008	255	245	234	222	209	195	239	216	192	167	167	13½-14½
2009	279	268	256	243	228	212	194	174	153	131	323	12½-13½
2010	307	296	284	271	257	241	224	205	184	162	531	11½-12½
2011	338	330	321	311	300	289	276	262	242	226	823	10½-11½
2012	376	367	357	346	334	321	307	297	280	261	1,097	9½-10½
2013	420[a]	416	407	397	386	374	361	347	332	316	1,503	8½-9½
2014		460[a]	455	444	432	419	405	390	374	356	1,952	7½-8½
2015			510[a]	504	492	479	464	448	431	412	2,463	6½-7½
2016				580[a]	574	561	546	530	501	482	3,057	5½-6½
2017					660[a]	653	639	623	628	609	3,789	4½-5½
2018						750[a]	742	724	685	663	4,332	3½-4½
2019							850[a]	841	821	799	4,955	2½-3½
2020								960[a]	949	926	5,719	1½-2½
2021									1,080[a]	1,069	6,579	½-1½
2022										1,220[a]	7,490	0-½
Total	1,975	2,382	2,824	3,318	3,872	4,494	5,247	6,017	6,852	7,799	44,780	

[a]Additions during the year

For the entire experience band 2013-2022, the total exposures at the beginning of an age interval are obtained by summing diagonally in a manner similar to the summing of the retirements during an age interval (Schedule 1). For example, the figure of 3,789, shown as the total exposures at the beginning of age interval 4½-5½, is obtained by summing:

255 + 268 + 284 + 311 + 334 + 374 + 405 + 448 + 501 + 609.

Original Life Table

The original life table, illustrated in Schedule 4 on page II-16, is developed from the totals shown on the schedules of retirements and exposures, Schedules 1 and 3, respectively. The exposures at the beginning of the age interval are obtained from the corresponding age interval of the exposure schedule, and the retirements during the age interval are obtained from the corresponding age interval of the retirement schedule. The retirement ratio is the result of dividing the retirements during the age interval by the exposures at the beginning of the age interval. The percent surviving at the beginning of each age interval is derived from survivor ratios, each of which equals one minus the retirement ratio. The percent surviving is developed by starting with 100% at age zero and successively multiplying the percent surviving at the beginning of each interval by the survivor ratio, i.e., one minus the retirement ratio for that age interval. The calculations necessary to determine the percent surviving at age 5½ are as follows:

Percent surviving at age 4½	=	88.15				
Exposures at age 4½	=	3,789,000				
Retirements from age 4½ to 5½	=	143,000				
Retirement Ratio	=	143,000	÷	3,789,000	=	0.0377
Survivor Ratio	=	1.000	-	0.0377	=	0.9623
Percent surviving at age 5½	=	(88.15)	x	(0.9623)	=	84.83

The totals of the exposures and retirements (columns 2 and 3) are shown for the purpose of checking with the respective totals in Schedules 1 and 3. The ratio of the total retirements to the total exposures, other than for each age interval, is meaningless.

SCHEDULE 4. ORIGINAL LIFE TABLE
CALCULATED BY THE RETIREMENT RATE METHOD

Experience Band 2013-2022 Placement Band 2008-2022

(Exposure and Retirement Amounts are in Thousands of Dollars)

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	Percent Surviving at Beginning of Age Interval
(1)	(2)	(3)	(4)	(5)	(6)
0.0	7,490	80	0.0107	0.9893	100.00
0.5	6,579	153	0.0233	0.9767	98.93
1.5	5,719	151	0.0264	0.9736	96.62
2.5	4,955	150	0.0303	0.9697	94.07
3.5	4,332	146	0.0337	0.9663	91.22
4.5	3,789	143	0.0377	0.9623	88.15
5.5	3,057	131	0.0429	0.9571	84.83
6.5	2,463	124	0.0503	0.9497	81.19
7.5	1,952	113	0.0579	0.9421	77.11
8.5	1,503	105	0.0699	0.9301	72.65
9.5	1,097	93	0.0848	0.9152	67.57
10.5	823	83	0.1009	0.8991	61.84
11.5	531	64	0.1205	0.8795	55.60
12.5	323	44	0.1362	0.8638	48.90
13.5	167	26	0.1557	0.8443	42.24
					35.66
Total	44,780	1,606			

Column 2 from Schedule 3, Column 12, Plant Exposed to Retirement.
Column 3 from Schedule 1, Column 12, Retirements for Each Year.
Column 4 = Column 3 Divided by Column 2.
Column 5 = 1.0000 Minus Column 4.
Column 6 = Column 5 Multiplied by Column 6 as of the Preceding Age Interval.

The original survivor curve is plotted from the original life table (column 6, Schedule 4). When the curve terminates at a percent surviving greater than zero, it is called a stub survivor curve. Survivor curves developed from retirement rate studies generally are stub curves.

Smoothing the Original Survivor Curve

The smoothing of the original survivor curve eliminates any irregularities and serves as the basis for the preliminary extrapolation to zero percent surviving of the original stub curve. Even if the original survivor curve is complete from 100% to zero percent, it is desirable to eliminate any irregularities, as there is still an extrapolation for the vintages which have not yet lived to the age at which the curve reaches zero percent. In this study, the smoothing of the original curve with established type curves was used to eliminate irregularities in the original curve.

The Iowa type curves are used in this study to smooth those original stub curves which are expressed as percents surviving at ages in years. Each original survivor curve was compared to the Iowa curves using visual and mathematical matching in order to determine the better fitting smooth curves. In Figures 6, 7, and 8, the original curve developed in Schedule 4 is compared with the L, S, and R Iowa type curves which most nearly fit the original survivor curve. In Figure 6, the L1 curve with an average life between 12 and 13 years appears to be the best fit. In Figure 7, the S0 type curve with a 12-year average life appears to be the best fit and appears to be better than the L1 fitting. In Figure 8, the R1 type curve with a 12-year average life appears to be the best fit and appears to be better than either the L1 or the S0.

In Figure 9, the three fittings, 12-L1, 12-S0 and 12-R1 are drawn for comparison purposes. It is probable that the 12-R1 Iowa curve would be selected as the most representative of the plotted survivor characteristics of the group.

FIGURE 6. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

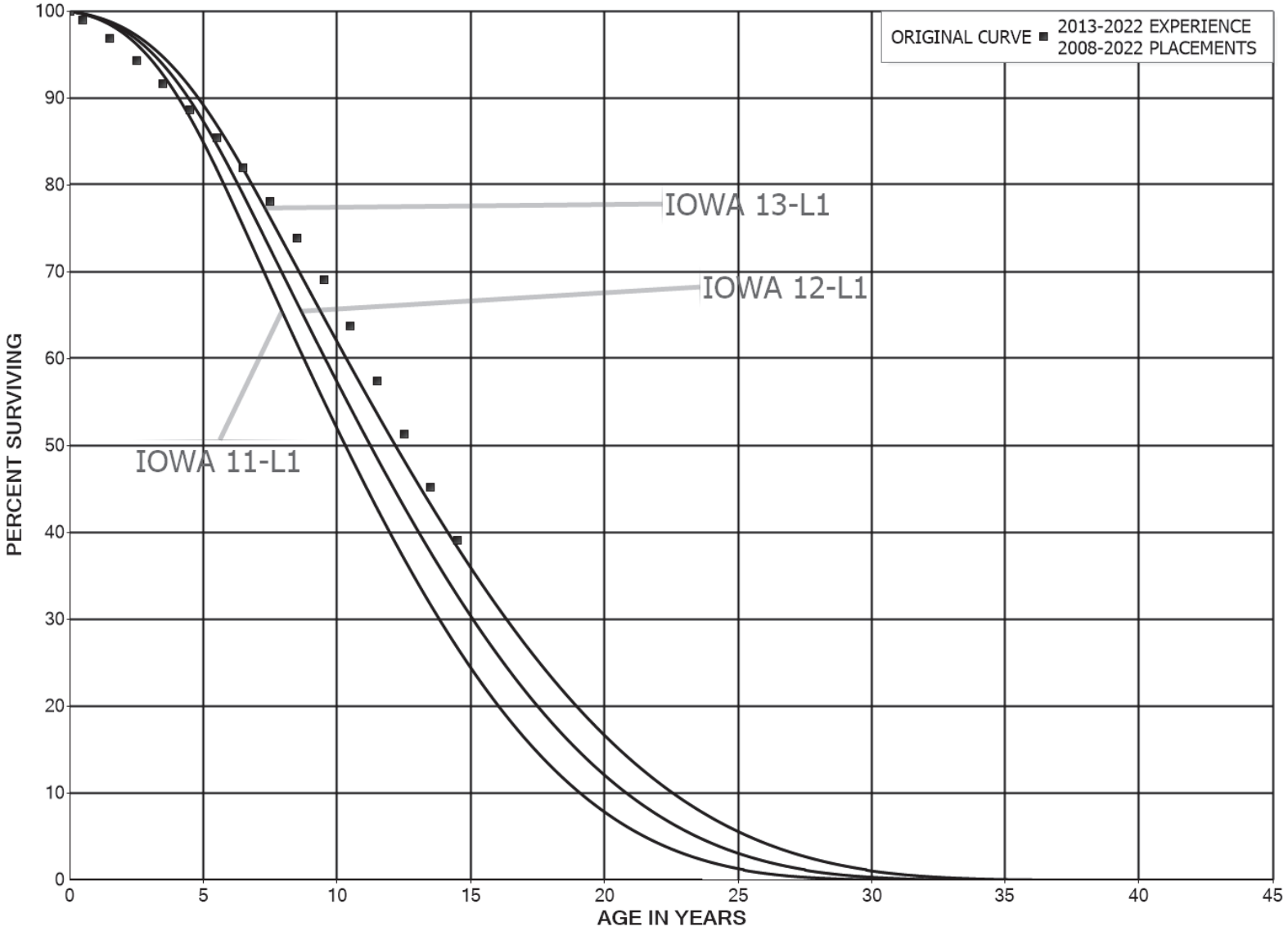


FIGURE 7. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN S0 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

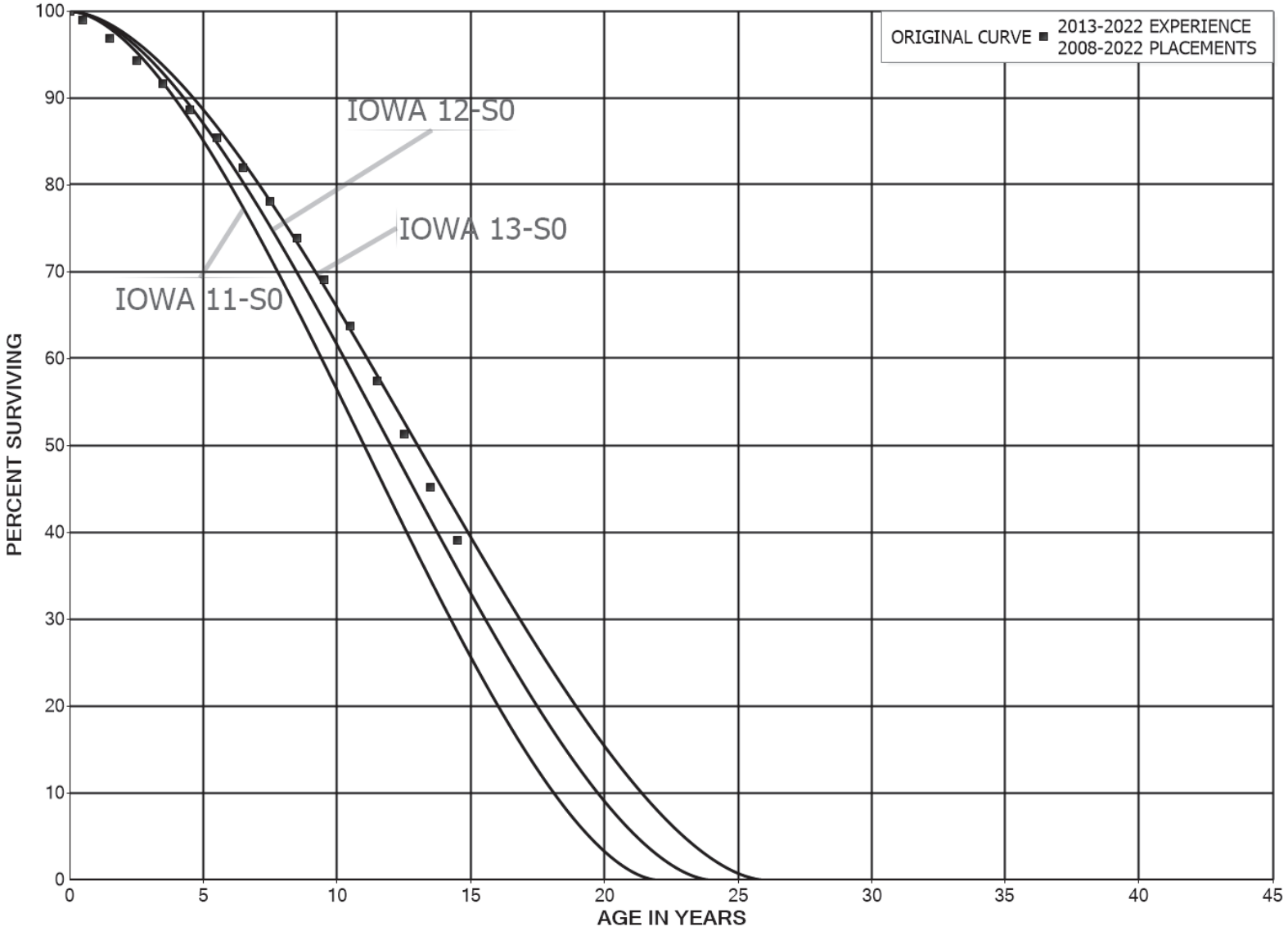


FIGURE 8. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN R1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

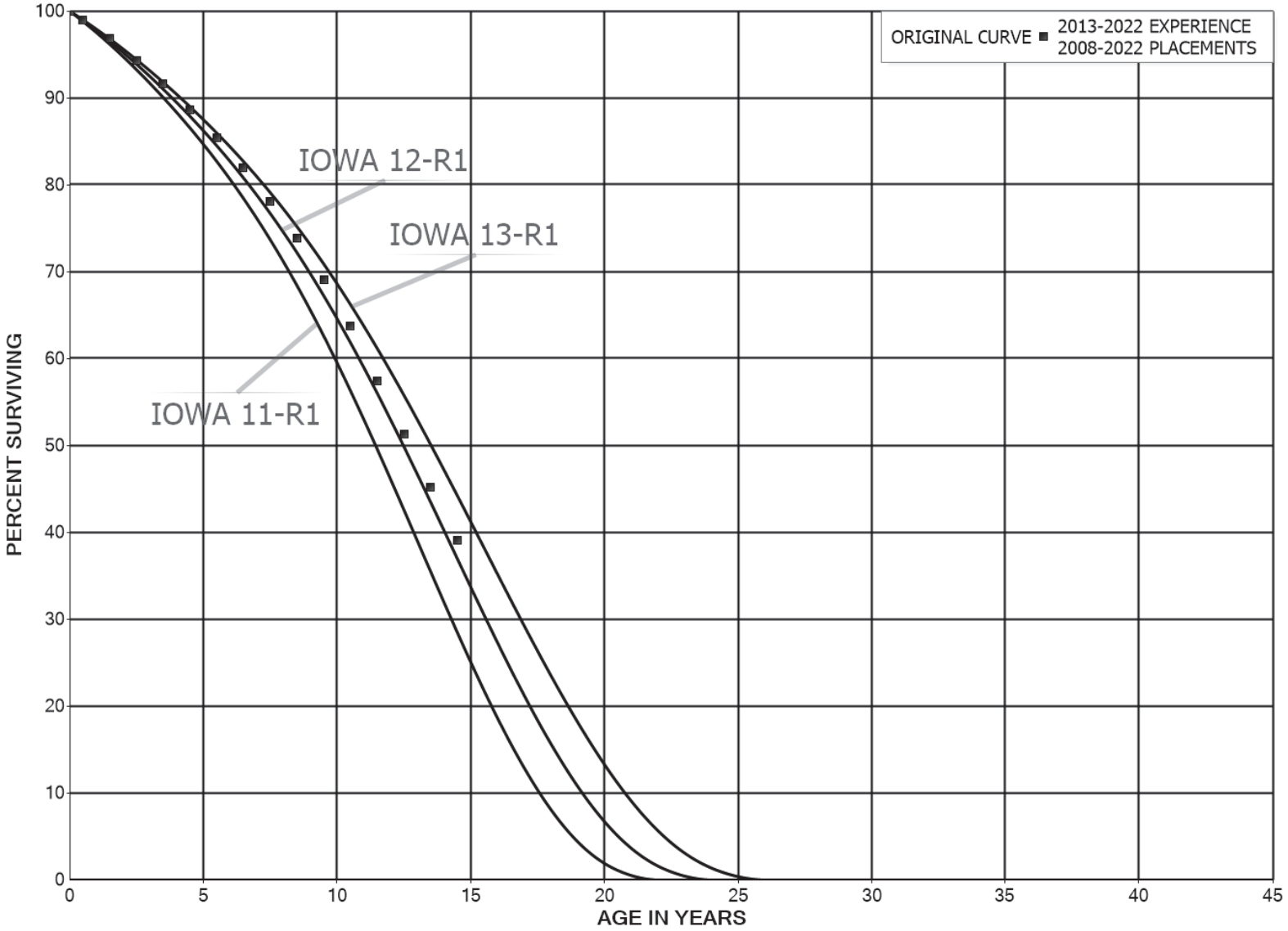
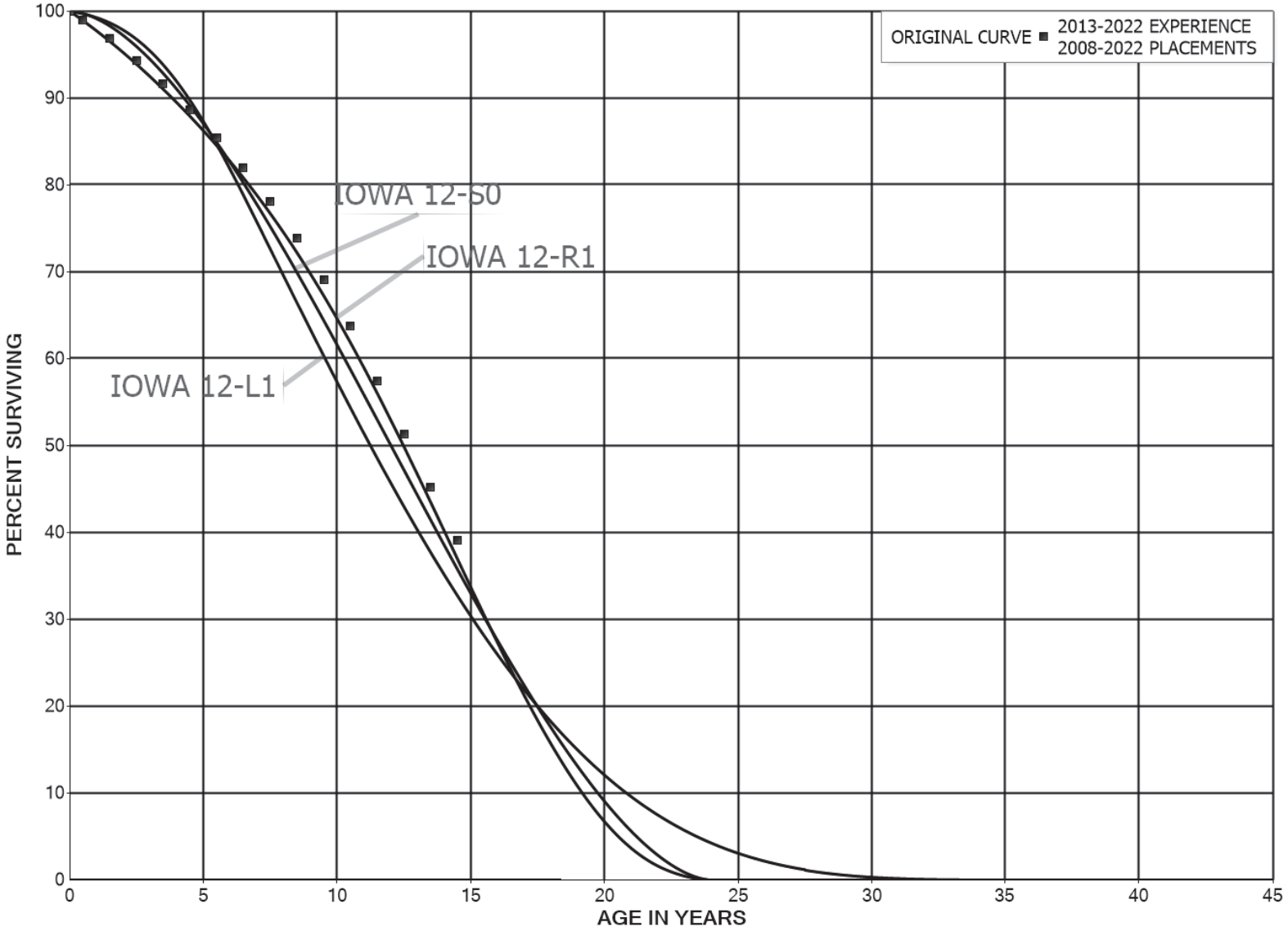


FIGURE 9. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1, S0 AND R1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES



PART III. SERVICE LIFE CONSIDERATIONS

PART III. SERVICE LIFE CONSIDERATIONS

Field Trips

In order to be familiar with the operation of the Company and observe representative portions of the plant, field trips have been conducted periodically. A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirements are obtained during these field trips. This knowledge and information were incorporated in the interpretation and extrapolation of the statistical analyses.

During the extensive period of years our firm has been conducting depreciation studies for the Company, the field trips have resulted in the review of operations of all the Company's facilities numerous times. The following is a list of the locations visited during the more recent field trips.

August 4, 2015

Beaver Street Regulator Station
Vogel/Austin Bleach Regulator Station
Vogel CNG Regulator Station
Armco Steel City Gate
Station Butler Warehouse
Complex Portmann
Compressor Station Vardy
Compressor Station

April 6, 2010

Butler General Office
Building Portmann
Compressor Station
Portmann Regulator Station
Vardy Compressor Station
Armstrong District Office and Garage
Chickasaw Interconnection
Jefferson Shop and District
Office Alabran Compressor
Station Home Shop and Office
Kinter Compressor Station
Rubright Compressor Station

Tarentum/Allegheny District Office
Butler Warehouse Complex

January 9 and 10, 2006

Butler General Office Building
Butler Warehouse Complex
Portmann Compressor Station
Portmann Regulating Station
Vardy Compressor Station
Hughes Compressor Station
Hughes Well
Peachtree Lane Regulating Station
Allegheny Garage and Office
Natrona Heights Connecting Site
Armstrong Office and Warehouse

September 21, 1993

Hughes Compressor Station
Freeport Tool House
New Kensington Office
Texas Drive Regulator
Delmont Station
Seanor Station
Seanor Storage Well
Elder Farm
Schmidt Compressor Station
Heckman Station
Walkchalk Warehouse
Fair Station
Petrolia Purchase Point
Vardy Compressor Station
Portmann Compressor Station

September 22, 1993

Beyer Regulating Station
Kinter Compressor Station
Home Shop
Clark Compressor Station
Front Street Regulating
Station Punxsutawney Shop
Sprankle Mills Compressor Station
Alabran Shop
Alabran Compressor Station
Anderson Meter Shop
Butler Warehouse and Meter Shop

September 23, 1993

Butler General Office

October 12, 1988

Butler General Office Building
Butler Warehouse Complex
Portmann Compressor Station
Vardy Compressor Station
Anderson Industrial Meter Shop
Hughes Compressor Station
Freeport Shop
New Kensington Office

October 13, 1988

Walkchalk Garage and Shop
Glycol Plant at Indiana University of Pennsylvania
Measuring and Regulating Station on IUP Campus for S. W. Jack Cogeneration Plant
Kinter Compressor Station
Metering Station at Kinter
Home Shop
Alabran Compressor Station
Alabran Shop
Sprankle Compressor Station
Punxsutawney Radio Tower
Punxsutawney Shop
Glen Campbell Compressor Station
Clarksburg Garage and Shop
Schmidt Compressor Station

Judgment

The survivor curve estimates were based on judgment which considered a number of factors. The primary factors were the statistical analyses of data; current Company policies and outlook as determined during the field trips and other conversations with management; and the survivor curve estimates from previous studies of this company and other gas companies.

For 23 plant accounts and subaccounts for which survivor curves were estimated, the statistical analyses resulted in good to excellent indications of the survivor patterns experienced. Generally, the information external to the statistics led to no significant departure from the indicated survivor curves for the following accounts:

Account No.	Account Title
351.00	Structures and Improvements - Major
351.00	Structures and Improvements - Other
353.00	Lines
366.10	Compressor Station Structures - Major
366.10	Structures and Improvements - Other
366.20	Measuring and Regulating Station Structures - Other
366.30	Other Structures
367.00	Mains
368.00	Compressor Station Equipment
369.00	Measuring and Regulating Station Equipment
375.00	Structures and Improvements - Major
375.00	Structures and Improvements - Other
376.00	Mains
378.00	Measuring and Regulating Station Equipment - General
380.00	Services
381.00	Meters
382.10	Meter Installations
390.00	Structures and Improvements - Major
390.00	Structures and Improvements - Other
392.10	Transportation Equipment - Cars
392.20	Transportation Equipment - Light Trucks
392.30	Transportation Equipment - Heavy Trucks
396.00	Power Operated Equipment

Account 376, Mains, which represents 42 percent of the total depreciable plant, is used to illustrate the manner in which the study was conducted for the groups for which the statistical analysis was a significant factor in the judgment of the prior and future survivor curves. Aged retirement and other plant accounting data were compiled for the years 1946 through 2019. These data were coded by type of transaction, year in which the transaction took place, and year in which the gas plant was placed in service. The data were analyzed by the retirement rate method.

The 1946-2019 and 1990-2019 experience bands provided the statistical bases for the survivor curve estimate. The experience bands selected for the analyses are long enough to smooth short-term fluctuations and provide an indicator of the probable retirement patterns to be experienced in the future.

The rates of retirements of distribution mains have remained relatively stable throughout the period of available data. Discussions with operating and management personnel related to the reasons for retirement indicated that, since 1959, only coated and protected pipe have been installed, and uncoated pipe is being replaced as needed. It is expected that in the future the rates of retirement during older age intervals will increase, as the majority of uncoated pipe attains these ages. Also, more stringent regulations regarding leak detection and elimination will tend to cause greater rates of retirement in the future.

The Iowa 65-R2.5 is a reasonable interpretation of the significant portions of the stub survivor curves through age 70. The Iowa 65-R2.5 and the original survivor curves are plotted on page VI-66. The calculations of the original survivor curves are presented on pages VI-67 through VI-74.

The major structures included in Accounts 351, Structures and Improvements; 366.1, Compressor Station Structures; 375, Structures and Improvements; and 390, Structures and Improvements, were separated from the smaller structures in those accounts for purposes of the study. The major structures group consists of 13 structures or complexes of significant size and of a nature that the life span procedure is appropriate. The life spans assigned to the major structures were typically 55 to 70 years from the date of the major installation and varied within this range based on individual circumstances, such as size, condition, type of construction, location, and management's plans.

The Iowa 75-R1.5 interim survivor curve was judged appropriate for the major structures based on a statistical analysis of the interim retirements experienced during 1962-2019, 1990-2019 and 2005-2019, our observations of the buildings, consideration of the type of facilities which will be retired during the estimated life spans, and a review of the interim survivor curves derived for similar structures of other gas companies. The Iowa 75-R1.5 and the original survivor curve are plotted on page VI-116. The calculation of the original survivor curve is presented on pages VI-117 through VI-125.

Generally, the survivor curve estimates for the remainder of the accounts, which comprise a minor portion of the total depreciable original cost, were based on judgments which considered the nature of the plant and equipment, reviews of available historical retirement data, and a general knowledge of the service lives for similar equipment in other gas companies.

PART IV. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

PART IV. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

Group Depreciation Procedures

A group procedure for depreciation is appropriate when considering more than a single item of property. Normally, the items within a group do not have identical service lives but have lives that are dispersed over a range of time. There are two primary group procedures, namely, average service life and equal life group.

In the average service life procedure, the rate of annual depreciation is based on the average life or average remaining life of the group, and this rate is applied to the surviving balances of the group's cost. A characteristic of this procedure is that the cost of plant retired prior to average life is not fully recouped at the time of retirement, whereas the cost of plant retired subsequent to average life is more than fully recouped. Over the entire life cycle, the portion of cost not recouped prior to average life is balanced by the cost recouped subsequent to average life.

In the equal life group procedure, the property group is subdivided according to service life. That is, each equal life group includes that portion of the property which experiences the life of that specific group. The relative size of each equal life group is determined from the property's life dispersion curve. This procedure eliminates the need to base depreciation on average lives, inasmuch as each group is equivalent to a unit having a single life. The full costs of short-lived units are accrued during their lives, leaving no deferral of accruals required to be added to the annual costs associated with long-lived units. The calculated depreciation for the property group is the summation of the calculated depreciation based on the service life of each equal life group.

Remaining Life Annual Accruals

For the purpose of calculating remaining life accrual rates as of August 31, 2024, the estimated book depreciation reserve for each plant account is allocated among vintages in proportion to the calculated accrued depreciation for the account. Explanations of remaining life accruals and calculated accrued depreciation for the vintages calculated by the average service life procedure and for the vintages calculated by the equal life group procedure follow. The detailed calculations are set forth in the Results of Study section of the report.

Average Service Life Procedure

In the average service life procedure, the remaining life annual accrual for each vintage is determined by dividing future book accruals (original cost less book reserve) by the average remaining life of the vintage. The average remaining life is a directly weighted average derived from the estimated future survivor curve in accordance with the average service life procedure.

The calculated accrued depreciation for each depreciable property group represents that portion of the depreciable cost of the group which would not be allocated to expense through future whole life depreciation accruals if current forecasts of life characteristics are used as the basis for such accruals. The accrued depreciation calculation consists of applying an appropriate ratio to the surviving original cost of each vintage of each account, based upon the attained age and service life. The straight line accrued depreciation ratios are calculated as follows for the average service life procedure:

$$Ratio = 1 - \frac{Average\ Remaining\ Life\ Expectancy}{Average\ Service\ Life}.$$

Equal Life Group Procedure

In the equal life group procedure, the remaining life annual accrual for each vintage is determined by dividing future book accruals (original cost less book reserve) by the composite remaining life for the surviving original cost of that vintage. The composite remaining life is derived by compositing the individual equal life group remaining lives in accordance with the following equation:

$$\text{Composite Remaining Life} = \frac{\left(\frac{\text{Book Cost}}{\text{Life}} \times \text{Remaining Life}\right)}{\frac{\text{Book Cost}}{\text{Life}}}$$

The book costs and lives of the several equal life groups which are summed in the foregoing equation are defined by the estimated future survivor curve.

Inasmuch as book cost divided by life equals the whole life annual accrual, the foregoing equation reduces to the following form:

$$\text{Composite Remaining LIfe} = \frac{\sum \text{Whole Life Future Accruals}}{\sum \text{Whole Life Annual Accruals}}$$

or

$$\text{Composite Remaining Life} = \frac{\sum \text{Book Cost} - \text{Calc. Reserve}}{\sum \text{Whole Life Annual Accrual}}.$$

The annual accrual rate for each account is equal to the sum of the remaining life annual accruals for all vintages divided by the account's total original cost. The account's "composite remaining life" is calculated by dividing the sum of the future book accruals for all vintages by the sum of the remaining life annual accruals for all vintages.

The calculated accrued depreciation in the equal life group procedure also represents that portion of depreciable cost which will not be allocated to expense through future accruals. However, the calculation is based at the equal life group level rather than the vintage group level and does not require the use of averages. The equal life group accrued depreciation ratio is calculated as follows:

$$Ratio = \frac{Remaining\ Life}{Average\ Service\ Life}.$$

Inasmuch as service life minus remaining life equals age, when averages are not employed, the foregoing equation reduces to:

$$Ratio = \frac{Age}{Service\ Life}.$$

The table on the following page illustrates the procedure for calculating straight line equal life group accrued depreciation, using an Iowa 9-L3 Survivor curve and an August 31, 2024 calculation date.

In the table, each equal life group is defined by the age interval shown in columns 1 and 2, which identify the ages at which the first and last retirement of each group occur. The group's designated life, shown in column 3, is the midpoint of the interval. In the calculation, the equal life groups of each vintage are arranged such that the midpoint of each one-year age interval coincides with the calculation date, e.g., August 31 in this case. This enables the calculation of annual accruals which are centered on, or as of, the same date as the calculation of accrued depreciation.

The retirement during each age interval, shown in column 4, is the size of each equal life group. It is derived from the Iowa 9-L3 survivor curve and is the difference between the percents surviving (not shown) at the beginning and end of the age interval.

DETAILED COMPUTATION OF ANNUAL AND ACCRUED FACTORS USING THE EQUAL LIFE GROUP PROCEDURE

INPUT PARAMETERS:
CALCULATION DATE.. 8-31-2024
SURVIVOR CURVE.... 9-L3

AGE INTERVAL BEG (1)	AGE INTERVAL END (2)	LIFE (3)	RETIREMENTS DURING INTERVAL (4)	GROUP ANNUAL ACCRUAL (5)=(4)/(3)	YEAR INST (6)	SUMMATION OF ANNUAL ACCRUALS (7)	AVERAGE PERCENT SURVIVING (8)	ANNUAL FACTOR (9)	ACCRUED (10)
0.000	0.667	0.333	0.00000	0.00000000000	2024	10.49467548965	83.331992	0.1259	0.0419
0.667	1.667	1.167	0.05287	0.04530419880	2023	12.57599794820	99.973568	0.1258	0.1468
1.667	2.667	2.167	0.47189	0.21776188279	2022	12.44446490740	99.711187	0.1248	0.2704
2.667	3.667	3.167	1.37577	0.43440795706	2021	12.11837998748	98.787356	0.1227	0.3886
3.667	4.667	4.167	2.91923	0.70055915527	2020	11.55089643131	96.639855	0.1195	0.4980
4.667	5.667	5.167	5.99666	1.16056899555	2019	10.62033235590	92.181909	0.1152	0.5952
5.667	6.667	6.167	10.74249	1.74193124696	2018	9.16908223465	83.812336	0.1094	0.6747
6.667	7.667	7.167	14.67836	2.04804799777	2017	7.27409261228	71.101909	0.1023	0.7332
7.667	8.667	8.167	15.28832	1.87196277703	2016	5.31408722488	56.118568	0.0947	0.7734
8.667	9.667	9.167	12.95194	1.41288753136	2015	3.67166207069	41.998438	0.0874	0.8012
9.667	10.667	10.167	9.81167	0.96505065408	2014	2.48269297797	30.616633	0.0811	0.8245
10.667	11.667	11.167	7.31781	0.65530670726	2013	1.67251429730	22.051895	0.0758	0.8465
11.667	12.667	12.167	5.62830	0.46258732637	2012	1.11356728048	15.578839	0.0715	0.8699
12.667	13.667	13.167	4.37367	0.33216905901	2011	0.71618908779	10.577854	0.0677	0.8914
13.667	14.667	14.167	3.28553	0.23191430790	2010	0.43414740434	6.748257	0.0643	0.9109
14.667	15.667	15.167	2.30297	0.15184083866	2009	0.24226983106	3.954007	0.0613	0.9297
15.667	16.667	16.167	1.46407	0.09055916373	2008	0.12106982986	2.070485	0.0585	0.9458
16.667	17.667	17.167	0.81462	0.04745267082	2007	0.05206391259	0.931138	0.0559	0.9596
17.667	18.667	18.167	0.37369	0.02056971432	2006	0.01805272002	0.336981	0.0536	0.9738
18.667	19.667	19.167	0.12567	0.00655658162	2005	0.00448957205	0.087303	0.0514	0.9852
19.667	20.667	20.167	0.02346	0.00116328656	2004	0.00062963796	0.012741	0.0494	0.9962
20.667	21.420	21.044	0.00101	0.00004799468	2003	0.00001809399	0.000381	0.0475	1.0000
TOTAL			100.00000						

Each equal life group's whole life annual accrual, shown in column 5, equals the group's size (column 4) divided by its life (column 3), except that for the first age interval, the annual accrual is set equal to the group's size.

Columns 6 through 10 show the derivation of the whole life annual factor and accrued factor for each vintage based on the data developed in the first five columns. The year installed is shown in column 6. For all vintages other than the first year (2024), the summation of annual accruals for each year installed, shown in column 7, is calculated by adding one-half of the group annual accrual (column 5) for that vintage's current age interval plus the group annual accruals for all succeeding age intervals. For example, the figure 12.57599794820 for 2023 equals one-half of 0.04530419880 plus all of the succeeding figures in column 5. Only two thirds of the annual accrual for the

vintage's current age interval group is included in the summation because the equal life group for that interval expires at the midpoint of the current year.

The summation of annual accruals (column 7) for installations during 2024 is calculated on the basis of an in-service date at the midpoint of twelve months, i.e., six months prior to August 31. Inasmuch as the overall calculation is centered on August 31, 2024, the accrual for 2024 installations (during the twelve months) represents only one-half of one year, one-third of the year prior to August 31 plus two-thirds year following August 31. For this reason, the first figure in column 7, for vintage 2024, equals the group annual accrual for 2024 plus one-half of the group annual accruals for each of the subsequent years.

The average percent surviving, derived from the Iowa 9-L3 survivor curve, is shown in column 8 for each age interval. The annual factor, shown in column 9, is the result of dividing the summation of annual accruals (column 7) by the average percent surviving (column 8).

The accrued depreciation factor, shown in column 10, equals the annual factor multiplied by the age of the group as of August 31, 2024.

CALCULATION OF ANNUAL AND ACCRUED AMORTIZATION

Amortization, as defined in the Uniform System of Accounts, is the gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized. Normally, the distribution of the amount is in equal amounts to each year of the amortization period.

The calculation of annual and accrued amortization requires the selection of an amortization period. The amortization periods used in this report were based on judgment which incorporated a consideration of the period during which the assets will render most of their service, the amortization periods and service lives used by other utilities, and the service life estimates previously used for the asset under depreciation accounting.

Amortization accounting is appropriate for certain General Plant accounts that represent numerous units of property, but a very small portion of depreciable gas plant in service. The accounts and their amortization periods are as follows:

Account	Amortization Period, Years
391.00, Office Furniture and Equipment	
Furniture	20
Equipment	10
Computer Equipment	5
393.00, Stores Equipment	25
394.00, Tools, Shop and Garage Equipment	
Tools and Work Equipment	15
397.00, Communication Equipment	
Structures	25
Radio	15

For the purpose of calculating annual amortization amounts as of August 31, 2024, the book depreciation reserve for each plant account or subaccount is assigned or allocated to vintages. The book reserve assigned to vintages with an age greater than the amortization period is equal to the vintage's original cost. The remaining book reserve is allocated among vintages with an age less than the amortization period in proportion to the calculated accrued amortization. The calculated accrued amortization is equal to the original cost multiplied by the ratio of the vintage's age to its amortization

period. The annual amortization amount is determined by dividing the future amortizations (original cost less allocated book reserve) by the remaining period of amortization for the vintage.

AMORTIZATION OF NET SALVAGE

Experienced salvage is incorporated in the results of the study, as it was reported on the Company's books and records for the period January 1, 2019 through August 31, 2023. The data for the last four months of 2023 are based on estimated experience. Results of the calculations are shown in Table 4.

Net salvage experienced during the five-year period is presented in this manner to determine the amount of negative net salvage to be amortized for book purposes. In developing the amount to be amortized, the data for the accounts which experienced positive net salvage have been netted with those for accounts which experienced negative net salvage.

In order to be consistent with this manner of recognizing salvage, no adjustments for salvage were made to the annual accruals and accrued depreciation calculated for each individual account. There were no exclusions from the 2019 through 2023 net salvage accrual.

PART V. RESULTS OF STUDY

PART V. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

Tables 1 through 4 presented on pages V-4 through V-10 summarize the results of the depreciation study as of August 31, 2024. Table 1 sets forth, by depreciable group, the estimated survivor curve, original cost, book depreciation reserve as of August 31, 2024, future book accruals, calculated annual accrual amount and rate, and composite remaining life for plant in service. Table 2 presents the bringforward of the book reserve to August 31, 2024. Table 3 sets forth the calculation of the depreciation accruals for the twelve months ended August 31, 2024. Table 4 presents the annual amortization of experienced and estimated net salvage based on the period 2019 through 2023.

DESCRIPTION OF DETAILED TABULATIONS

Supporting statistical data for the estimates of average service lives and survivor curves, the annual depreciation calculations, and gross salvage and cost of removal for the years 2019-2023 are presented in three sections.

The section beginning on page VI-2 sets forth, for each depreciable group analyzed by the retirement rate method, a chart depicting the original and estimated survivor curves followed by a tabular presentation of the original life table(s) plotted on the chart. A cumulative summary, by year installed, for gas plant and the supporting data for the original cost depreciation calculations are presented in the section beginning on page VII-2. The tabulations of experienced and estimated net salvage by year by account for the five-year period, 2019-2023, are presented in the section beginning on page VIII-2.

In the first section, the survivor curves estimated for the depreciable groups are shown as dark smooth curves on the charts. Each smooth survivor curve is denoted by a numeral followed by the type curve designation. The numeral used is the average life derived from the entire curve from 100 percent to zero percent surviving. In cases where only a segment of the estimated curve is used in the depreciation calculation, the numeral used for identification purposes is not a designation of the average life of the group. The titles of the charts indicate the group, the symbol used to plot the points of the original life table, and the experience and placement bands of the life tables which were plotted. The experience band indicates the range of years for which the retirements were used to develop the stub survivor curve. The placements indicate, for the related experience band, the range of years of installations which appear in the experience.

The tables of the calculated annual depreciation related to original cost are presented in the second section and indicate the estimated average survivor curves used in the calculations. The tables set forth, for each installation year, the original cost, calculated accrued depreciation, allocated book reserve, future book accruals, remaining life expectancy and the calculated annual accrual.

Detailed tabulations setting forth the cost of removal and salvage amounts, by plant account for each year, are presented beginning on page VIII-2. The total salvage and removal costs, by year, were used to calculate the five-year net salvage amortization presented in Table 4 on page V-10.

PEOPLES GAS COMPANY LLC

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF AUGUST 31, 2024

	DEPRECIABLE GROUP	SURVIVOR CURVE		ORIGINAL COST AS OF AUGUST 31, 2024	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)=(5)/(6)
	INTANGIBLE PLANT								
303.00	MISCELLANEOUS INTANGIBLE PLANT								
	CIAC	40-SQ		1,580,213.31	395,580	1,184,633	38,496	2.44	30.8
	OTHER	5-SQ		5,175,541.81	2,854,642	2,320,900	779,598	15.06	3.0
	MAJOR	15-SQ		5,023,259.64	2,164,397	2,858,863	310,547	6.18	9.2
	SAP	10-SQ		7,435,557.59	6,164,485	1,271,073	164,488	2.21	7.7
	TOTAL MISCELLANEOUS INTANGIBLE PLANT			**19,214,572.35**	**11,579,104**	**7,635,469**	**1,293,129**	**6.73**	
	UNDERGROUND STORAGE PLANT								
350.20	RIGHTS OF WAY	70-R4		15,669.82	12,081	3,589	110	0.70	32.6
351.00	STRUCTURES AND IMPROVEMENTS								
	MAJOR	75-R1.5	*	369,655.11	184,724	184,931	12,986	3.51	14.2
	FENCING	55-R2		155,691.71	64,677	91,015	2,906	1.87	31.3
	OTHER	55-R2		58,239.24	40,288	17,951	860	1.48	20.9
	TOTAL STRUCTURES AND IMPROVEMENTS			583,586.06	289,689	293,897	16,752	2.87	17.5
352.01	WELLS - CONSTRUCTION	70-R4		2,111,435.23	630,139	1,481,296	22,651	1.07	65.4
352.02	WELLS - EQUIPMENT	65-R3		475,154.44	(39,321)	514,475	16,371	3.45	31.4
352.12	STORAGE RIGHTS	65-R4		392,122.14	218,845	173,277	4,875	1.24	35.5
353.00	LINES	40-S0		1,744,828.87	785,110	959,719	44,507	2.55	21.6
354.00	COMPRESSOR STATION EQUIPMENT	55-R2.5		7,762,623.04	1,861,225	5,901,398	165,161	2.13	35.7
355.00	MEASURING AND REGULATING STATION EQUIPMENT	45-R2.5		888,000.62	502,416	385,585	15,119	1.70	25.5
	TOTAL UNDERGROUND STORAGE PLANT			**13,973,420.22**	**4,260,184**	**9,713,236**	**285,546**	**2.04**	
	TRANSMISSION PLANT								
365.20	RIGHTS OF WAY	70-R4		2,091,602.96	1,133,451	958,152	25,866	1.24	37.0
366.10	COMPRESSOR STATION STRUCTURES								
	MAJOR	75-R1.5	*	599,767.46	255,835	343,932	15,225	2.54	22.6
	OTHER	55-R2		100,566.96	56,884	43,683	1,761	1.75	24.8
	TOTAL COMPRESSOR STATION STRUCTURES			700,334.42	312,719	387,615	16,986	2.43	22.8
366.20	MEASURING AND REGULATING STATION STRUCTURES								
	MAJOR	SQUARE	*	20,010.60	17,747	2,264	289	1.44	7.8
	FENCING	35-SQ		41,252.80	30,864	10,389	566	1.37	18.4
	OTHER	55-R3		13,397.67	10,028	3,370	198	1.48	17.0
	TOTAL MEASURING AND REGULATION STATION STRUCTURES			74,661.07	58,639	16,023	1,053	1.41	15.2
366.30	OTHER STRUCTURES								
	OTHER	40-R2.5		44,793.38	28,553	16,240	970	2.17	16.7
367.00	MAINS	75-R2.5		93,833,167.93	34,590,767	59,242,401	1,251,933	1.33	47.3
368.00	COMPRESSOR STATION EQUIPMENT	48-S0.5		5,886,718.39	1,912,238	3,974,480	139,315	2.37	28.5
369.00	MEASURING AND REGULATING STATION EQUIPMENT	38-R1.5		8,191,709.94	4,480,519	3,711,191	177,395	2.17	20.9
	TOTAL TRANSMISSION PLANT			**110,822,988.09**	**42,516,886**	**68,306,102**	**1,613,518**	**1.46**	

PEOPLES GAS COMPANY LLC

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF AUGUST 31, 2024

	DEPRECIABLE GROUP	SURVIVOR CURVE		ORIGINAL COST AS OF AUGUST 31, 2024	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)=(5)/(6)
	DISTRIBUTION PLANT								
374.20	LAND AND LAND RIGHTS - LAND RIGHTS	70-R4		1,263,747.80	536,240	727,508	16,405	1.30	44.3
375.00	STRUCTURES AND IMPROVEMENTS								
	MAJOR	75-R1.5	*	64,034.92	64,035	0	0	-	-
	OTHER	55-R2		987,472.72	487,176	500,297	16,153	1.64	31.0
	TOTAL STRUCTURES AND IMPROVEMENTS			1,051,507.64	551,211	500,297	16,153	1.54	31.0
376.00	MAINS								
	LOW PRESSURE	65-R2.5		142,282,556.71	45,224,052	97,058,505	2,347,526	1.65	41.3
	REGULAR PRESSURE	65-R2.5		79,184,462.64	8,904,622	70,279,841	1,457,024	1.84	48.2
	TOTAL MAINS			221,467,019.35	54,128,674	167,338,346	3,804,550	1.72	44.0
378.00	MEASURING AND REGULATING STATION EQUIPMENT - GENERAL	55-R2		13,046,083.35	3,536,599	9,509,484	276,260	2.12	34.4
380.00	SERVICES	50-R2.5		61,892,623.56	19,578,585	42,314,039	1,335,792	2.16	31.7
381.00	METERS	28-R1.5		23,323,514.96	10,079,257	13,244,258	920,001	3.94	14.4
382.10	METER INSTALLATIONS	50-R1.5		4,652,080.80	2,051,328	2,600,753	87,247	1.88	29.8
387.00	OTHER EQUIPMENT - DISTRIBUTION	25-R2		103,512.86	1,123	102,390	6,077	5.87	16.8
	TOTAL DISTRIBUTION PLANT			**326,800,090.32**	**90,463,017**	**236,337,075**	**6,462,485**	**1.98**	
	GENERAL PLANT								
390.00	STRUCTURES AND IMPROVEMENTS								
	MAJOR	75-R1.5	*	6,777,764.28	3,649,418	3,128,345	543,583	8.02	5.8
	OTHER	55-R2		1,518,904.75	75,901	1,443,004	39,445	2.60	36.6
	TOTAL STRUCTURES AND IMPROVEMENTS			8,296,669.03	3,725,319	4,571,349	583,028	7.03	7.8
	OFFICE FURNITURE AND EQUIPMENT								
391.10	FURNITURE	20-SQ		196,058.70	160,584	35,475	4,180	2.13	8.5
391.20	EQUIPMENT	10-SQ		13,446.39	31,648	(18,202)	0	-	-
	TOTAL OFFICE FURNITURE AND EQUIPMENT			209,505.09	192,232	17,273	4,180	2.00	4.1
	TRANSPORTATION EQUIPMENT								
392.20	LIGHT TRUCKS	9-L3		7,771,925.00	2,465,321	5,306,604	1,006,686	12.95	5.3
392.30	HEAVY TRUCKS	14-S1		2,844,206.09	472,692	2,371,514	320,722	11.28	7.4
	TOTAL TRANSPORTATION EQUIPMENT			10,616,131.09	2,938,013	7,678,118	1,327,408		
393.00	STORES EQUIPMENT	25-SQ		5,895.12	4,029	1,866	321	5.45	5.8
	TOOLS, SHOP AND GARAGE EQUIPMENT								
394.20	TOOLS AND WORK EQUIPMENT	15-SQ		1,879,610.66	1,052,641	826,970	133,950	7.13	6.2

PEOPLES GAS COMPANY LLC

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF AUGUST 31, 2024

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF AUGUST 31, 2024	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)=(5)/(6)
396.00	POWER OPERATED EQUIPMENT	18-L2.5	3,098,559.04	994,006	2,104,553	211,960	6.84	9.9
	COMMUNICATION EQUIPMENT							
397.00	GENERATION	15-SQ	161,152.05	5,372	155,780	10,619	6.59	14.7
397.10	STRUCTURES	25-SQ	327,952.09	15,550	312,402	13,598	4.15	23.0
397.20	RADIO	15-SQ	1,478,719.54	875,411	603,309	115,690	7.82	5.2
	TOTAL COMMUNICATION EQUIPMENT		1,967,823.68	896,333	1,071,491	139,907	7.11	7.7
	TOTAL GENERAL PLANT		**26,074,193.71**	**9,802,573**	**16,271,620**	**2,400,754**	**9.21**	
	AMORTIZATION OF NET SALVAGE					**529,465**		
	TOTAL DEPRECIABLE GAS PLANT		**496,885,264.69**	**158,621,764**	**338,263,502**	**12,584,897**	**2.53**	
	NONDEPRECIABLE GAS PLANT							
301.00	ORGANIZATION		128,115.45					
302.00	FRANCHISES AND CONSENTS		71,371.20					
350.10	LAND AND LAND RIGHTS - LAND		46,820.26					
365.10	LAND AND LAND RIGHTS - LAND		119,953.61					
374.10	LAND AND LAND RIGHTS - LAND		13,101.61					
389.00	LAND AND LAND RIGHTS		164,935.92					
	TOTAL NONDEPRECIABLE GAS PLANT		544,298.05					
	TOTAL GAS PLANT IN SERVICE		**497,429,562.74**					

* LIFE SPAN PROCEDURE WAS USED. CURVE SHOWN IS INTERIM SURVIVOR CURVE.

PEOPLES GAS COMPANY LLC

TABLE 2. BRINGFORWARD TO AUGUST 31, 2024 OF THE BOOK RESERVE AS OF AUGUST 31, 2023

ACCOUNT	BOOK RESERVE AS OF AUGUST 31, 2023		DEPRECIATION ACCRUALS		AMORTIZATION OF NET SALVAGE		PROJECTED RETIREMENTS		PROJECTED GROSS SALVAGE		PROJECTED COST OF REMOVAL		ACQUISITIONS AND ADJUSTMENTS		PROJECTED BOOK RESERVE AS OF AUGUST 31, 2024
(1)	(2)	+	(3)	+	(4)	-	(5)	+	(6)	-	(7)	+	(8)	=	(9)
DEPRECIABLE PLANT															
303.00	384,827		36,091				25,338								395,580
303.01	2,239,822		697,806				82,986								2,854,642
303.02	1,959,570		285,371				80,544								2,164,397
303.03	6,200,225		83,484				119,224								6,164,485
350.20	11,971		110												12,081
351.00	272,612		17,369				292								289,689
352.01	613,126				20,506		858				2,635				630,139
352.02	(69,593)		17,070		15,913		666				2,045				(39,321)
352.12	202,693		5,258		13,132		550				1,688				218,845
353.00	749,541		38,905		1,598		2,243				2,691				785,110
354.00	1,693,458		168,466		(544)		1,545		1,391						1,861,225
355.00	492,181		14,595				4,360								502,416
365.20	1,107,475		25,936		40										1,133,451
366.10	295,533		17,186												312,719
366.20	57,688		1,063				112								58,639
366.30	27,554		999												28,553
367.00	33,439,110		1,226,221		95,158		25,872		2,070		145,920				34,590,767
368.00	1,825,425		121,704		12,710		27,836				19,764				1,912,238
369.00	4,325,963		167,022				12,466								4,480,519
374.20	519,811		16,429												536,240
375.00	539,842		16,334				4,965								551,211
376.10	43,436,308		2,237,044		152,130		417,659		4,176		187,947				45,224,052
376.20	7,682,007		1,448,954		76,637		210,400		2,104		94,680				8,904,622
378.00	3,326,008		238,439		12,572		32,862				7,558				3,536,599
380.00	18,362,210		1,198,768		213,463		35,545				160,310				19,578,585
381.00	9,551,717		909,937				382,397								10,079,257
382.10	1,965,823		89,830		7,550		4,657				7,218				2,051,328
387.00	0		1,123												1,123
390.00	3,483,548		331,300				89,529								3,725,319
391.10	163,790		4,235				7,441								160,584
391.20	89,279						57,631								31,648
391.30	89,595						34,426						(55,169)		0
392.20	2,082,551		950,493		(48,707)		576,685		57,669						2,465,321
392.30	582,264		371,496		(41,272)		488,662		48,866						472,692
393.00	3,711		318												4,029
394.20	1,362,723		133,642		(380)		443,344								1,052,641
396.00	848,546		214,727		(1,011)		66,268				1,988				994,006
397.00	0		5,372												5,372
397.10	(1,835)		17,385												15,550
397.20	1,026,718		114,924				266,231								875,411
TOTAL DEPRECIABLE GAS PLANT	**150,943,797**		**11,225,406**		**529,493**		**3,503,595**		**116,276**		**634,444**		**(55,169)**		**158,621,764**

PEOPLES GAS COMPANY LLC

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED AUGUST 31, 2024

	DEPRECIABLE GROUP	ORIGINAL COST AS OF AUGUST 31, 2023	ORIGINAL COST AS OF AUGUST 31, 2024	COMPOSITE ACCRUAL RATE	ANNUAL ACCRUAL AMOUNT
	(1)	(2)	(3)	(4)	(5)
303.00	MISCELLANEOUS INTANGIBLE PLANT				
	CIAC	1,452,616.00	1,580,213.31	2.38	36,091
	OTHER	4,757,632.88	5,175,541.81	14.05	697,806
	MAJOR	4,617,647.02	5,023,259.64	5.92	285,371
	SAP	6,835,159.40	7,435,557.59	1.17	83,484
	TOTAL MISCELLANEOUS INTANGIBLE PLANT	17,663,055.30	19,214,572.35		1,102,752
350.20	RIGHTS OF WAY	15,669.82	15,669.82	0.70	110
351.00	STRUCTURES AND IMPROVEMENTS				
	MAJOR	369,655.11	369,655.11	3.77	13,936
	FENCING	155,691.71	155,691.71	2.04	3,176
	OTHER	58,531.18	58,239.24	0.44	257
	TOTAL STRUCTURES AND IMPROVEMENTS	583,878.00	583,586.06		17,369
352.01	WELLS - CONSTRUCTION	613,125.74	2,111,435.23	-	-
352.02	WELLS - EQUIPMENT	475,820.59	475,154.44	3.59	17,070
352.12	STORAGE RIGHTS	392,671.88	392,122.14	1.34	5,258
353.00	LINES	1,510,796.58	1,744,828.87	2.39	38,905
354.00	COMPRESSOR STATION EQUIPMENT	7,764,168.31	7,762,623.04	2.17	168,466
355.00	MEASURING AND REGULATING STATION EQUIPMENT	859,908.66	888,000.62	1.67	14,595
365.20	RIGHTS OF WAY	2,091,602.96	2,091,602.96	1.24	25,936
366.10	COMPRESSOR STATION STRUCTURES				
	MAJOR	599,767.46	599,767.46	2.51	15,054
	OTHER	100,566.96	100,566.96	2.12	2,132
	TOTAL COMPRESSOR STATION STRUCTURES	700,334.42	700,334.42		17,186
366.20	MEASURING AND REGULATING STATION STRUCTURES				
	MAJOR	20,010.60	20,010.60	1.48	296
	FENCING	41,252.80	41,252.80	1.38	569
	OTHER	13,509.83	13,397.67	1.47	198
	TOTAL MEASURING AND REGULATION STATION STRUCTURES	74,773.23	74,661.07		1,063
366.30	OTHER STRUCTURES				
	OTHER	44,793.38	44,793.38	2.23	999
367.00	MAINS	90,560,985.19	93,833,167.93	1.33	1,226,221
368.00	COMPRESSOR STATION EQUIPMENT	4,883,556.05	5,886,718.39	2.26	121,704
369.00	MEASURING AND REGULATING STATION EQUIPMENT	7,791,231.05	8,191,709.94	2.09	167,022
374.20	LAND AND LAND RIGHTS - LAND RIGHTS	1,263,747.80	1,263,747.80	1.30	16,429
375.00	STRUCTURES AND IMPROVEMENTS				
	MAJOR	64,034.92	64,034.92	-	-
	OTHER	992,438.14	987,472.72	1.65	16,334
	TOTAL STRUCTURES AND IMPROVEMENTS	1,056,473.06	1,051,507.64		16,334
	MAINS				
376.10	LOW PRESSURE	133,895,759.22	142,282,556.71	1.62	2,237,044
376.20	REGULAR PRESSURE	74,959,533.66	79,184,462.64	1.88	1,448,954
	TOTAL MAINS	208,855,292.88	221,467,019.35		3,685,998
378.00	MEASURING AND REGULATING STATION EQUIPMENT - GENERAL	10,561,764.38	13,046,083.35	2.02	238,439
380.00	SERVICES	52,275,768.50	61,892,623.56	2.10	1,198,768
381.00	METERS	22,517,144.84	23,323,514.96	3.97	909,937
382.10	METER INSTALLATIONS	4,656,737.54	4,652,080.80	1.93	89,830
387.00	OTHER EQUIPMENT - DISTRIBUTION		103,512.86	2.17	1,123
390.00	STRUCTURES AND IMPROVEMENTS				
	MAJOR	5,306,926.74	6,777,764.28	5.02	303,326
	OTHER	783,485.98	1,518,904.75	2.43	27,974
	TOTAL STRUCTURES AND IMPROVEMENTS	6,090,412.72	8,296,669.03		331,300
	OFFICE FURNITURE AND EQUIPMENT				
391.10	FURNITURE	203,500.19	196,058.70	2.12	4,235
391.20	EQUIPMENT	71,077.33	13,446.39	-	-
391.30	COMPUTER EQUIPMENT	34,425.52	-	-	-
	TOTAL OFFICE FURNITURE AND EQUIPMENT	309,003.04	209,505.09		4,235
	TRANSPORTATION EQUIPMENT				
392.20	LIGHT TRUCKS	6,393,398.62	7,771,925.00	13.42	950,493
392.30	HEAVY TRUCKS	3,291,153.53	2,844,206.09	12.11	371,496
	TOTAL TRANSPORTATION EQUIPMENT	9,684,552.15	10,616,131.09		1,321,989
393.00	STORES EQUIPMENT	5,895.12	5,895.12	5.39	318
	TOOLS, SHOP AND GARAGE EQUIPMENT				

PEOPLES GAS COMPANY LLC

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED AUGUST 31, 2024

	DEPRECIABLE GROUP	ORIGINAL COST AS OF AUGUST 31, 2023	ORIGINAL COST AS OF AUGUST 31, 2024	COMPOSITE ACCRUAL RATE	ANNUAL ACCRUAL AMOUNT
	(1)	(2)	(3)	(4)	(5)
394.20	TOOLS AND WORK EQUIPMENT	2,322,954.83	1,879,610.66	6.36	133,642
396.00	POWER OPERATED EQUIPMENT	2,784,364.20	3,098,559.04	7.30	214,727
	COMMUNICATION EQUIPMENT				
397.00	GENERATION		161,152.05	6.67	5,372
397.10	STRUCTURES	28,654.98	327,952.09	9.75	17,385
397.20	RADIO	1,744,950.46	1,478,719.54	7.13	114,924
	TOTAL COMMUNICATION EQUIPMENT	1,773,605.44	1,967,823.68		137,681
	TOTAL DEPRECIABLE GAS PLANT	**460,184,087.66**	**496,885,264.69**		**11,225,406**

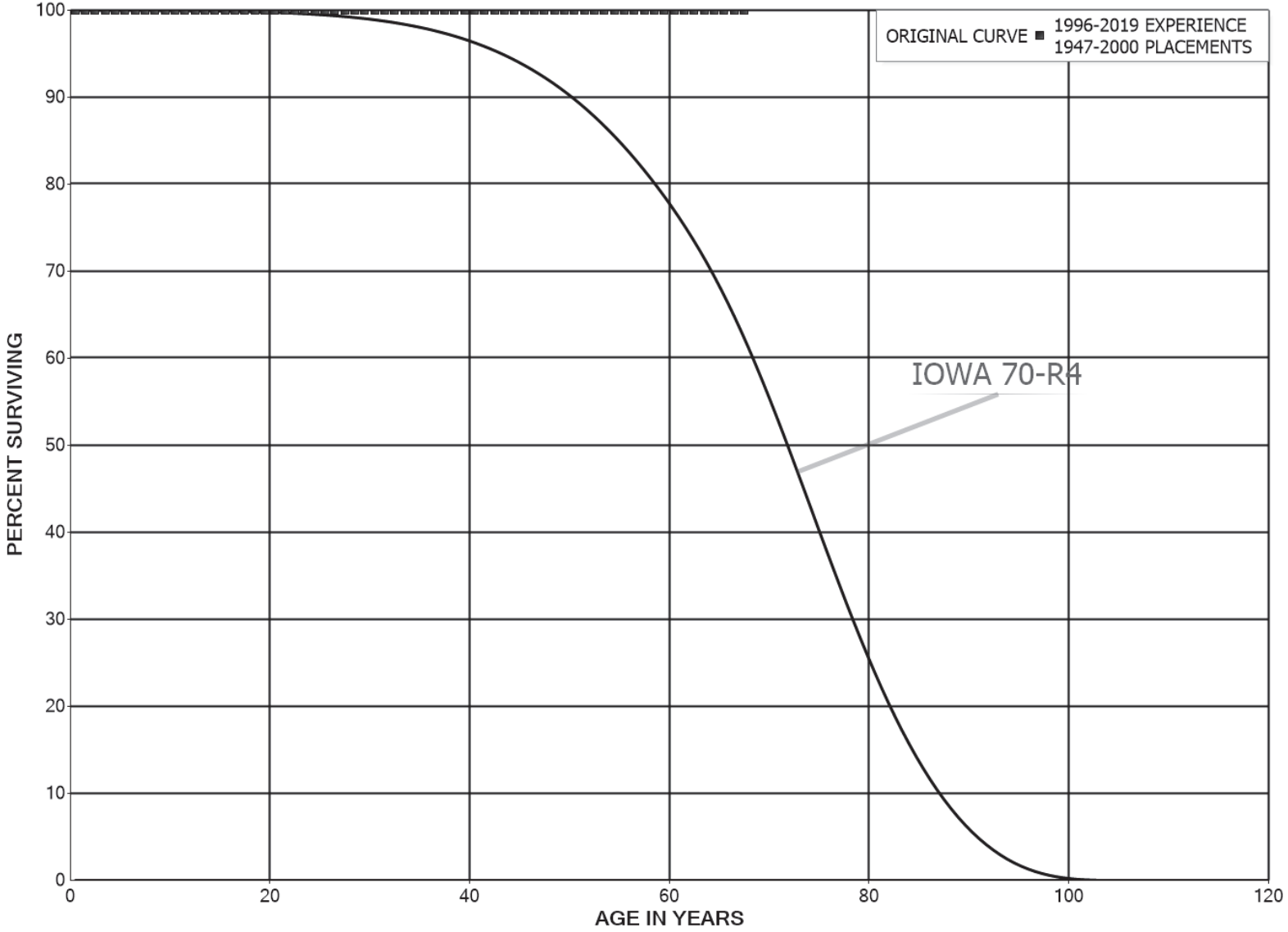
PEOPLES GAS COMPANY LLC

TABLE 4. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

	2019		2020		2021		2022		2023			
ACCOUNT	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE	SALVAGE ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)=(12)/5
352.00	216,163				1,982				2,123		(220,268)	(44,054)
353.00	3,444								897		(4,341)	(868)
354.00		464								464	928	186
367.00	104,641		99,744		215,555			6,939	48,640	690	(460,951)	(92,190)
368.00	27,275		31,881						6,588		(65,744)	(13,149)
376.00	227,525	2,643	342,321	8,316	241,723	5,566	46,553	10,879	391,642	2,093	(1,220,267)	(244,053)
378.00			4,249		56,011				2,519		(62,779)	(12,556)
380.00	335,890		424,224		189,733				58,628		(1,008,475)	(201,695)
382.10	8,747		9,887		11,196		1,495		3,584		(34,909)	(6,982)
392.00		146,103		139,251		103,133		5,644		35,512	429,643	85,929
396.00		500							663		(163)	(33)
TOTAL	**923,685**	**149,710**	**912,306**	**147,567**	**716,200**	**108,699**	**48,048**	**23,461**	**515,283**	**38,759**	**(2,647,326)**	**(529,465)**

PART VI. SERVICE LIFE STATISTICS

PEOPLES GAS COMPANY LLC
ACCOUNT 350.2 RIGHTS OF WAY
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 350.2 RIGHTS OF WAY

ORIGINAL LIFE TABLE

PLACEMENT BAND 1947-2000 EXPERIENCE BAND 1996-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	2,875		0.0000	1.0000	100.00
0.5	2,875		0.0000	1.0000	100.00
1.5	2,875		0.0000	1.0000	100.00
2.5	3,750		0.0000	1.0000	100.00
3.5	3,750		0.0000	1.0000	100.00
4.5	3,750		0.0000	1.0000	100.00
5.5	3,750		0.0000	1.0000	100.00
6.5	3,750		0.0000	1.0000	100.00
7.5	3,750		0.0000	1.0000	100.00
8.5	4,191		0.0000	1.0000	100.00
9.5	4,600		0.0000	1.0000	100.00
10.5	6,000		0.0000	1.0000	100.00
11.5	6,000		0.0000	1.0000	100.00
12.5	7,456		0.0000	1.0000	100.00
13.5	7,456		0.0000	1.0000	100.00
14.5	7,456		0.0000	1.0000	100.00
15.5	7,568		0.0000	1.0000	100.00
16.5	7,568		0.0000	1.0000	100.00
17.5	7,568		0.0000	1.0000	100.00
18.5	7,848		0.0000	1.0000	100.00
19.5	4,973		0.0000	1.0000	100.00
20.5	4,973		0.0000	1.0000	100.00
21.5	5,421		0.0000	1.0000	100.00
22.5	6,485		0.0000	1.0000	100.00
23.5	6,877		0.0000	1.0000	100.00
24.5	6,877		0.0000	1.0000	100.00
25.5	9,431		0.0000	1.0000	100.00
26.5	15,600		0.0000	1.0000	100.00
27.5	15,600		0.0000	1.0000	100.00
28.5	18,244		0.0000	1.0000	100.00
29.5	18,244		0.0000	1.0000	100.00
30.5	18,244		0.0000	1.0000	100.00
31.5	18,244		0.0000	1.0000	100.00
32.5	17,803		0.0000	1.0000	100.00
33.5	17,394		0.0000	1.0000	100.00
34.5	8,160		0.0000	1.0000	100.00
35.5	8,160		0.0000	1.0000	100.00
36.5	6,704		0.0000	1.0000	100.00
37.5	4,161		0.0000	1.0000	100.00
38.5	4,161		0.0000	1.0000	100.00

PEOPLES GAS COMPANY LLC

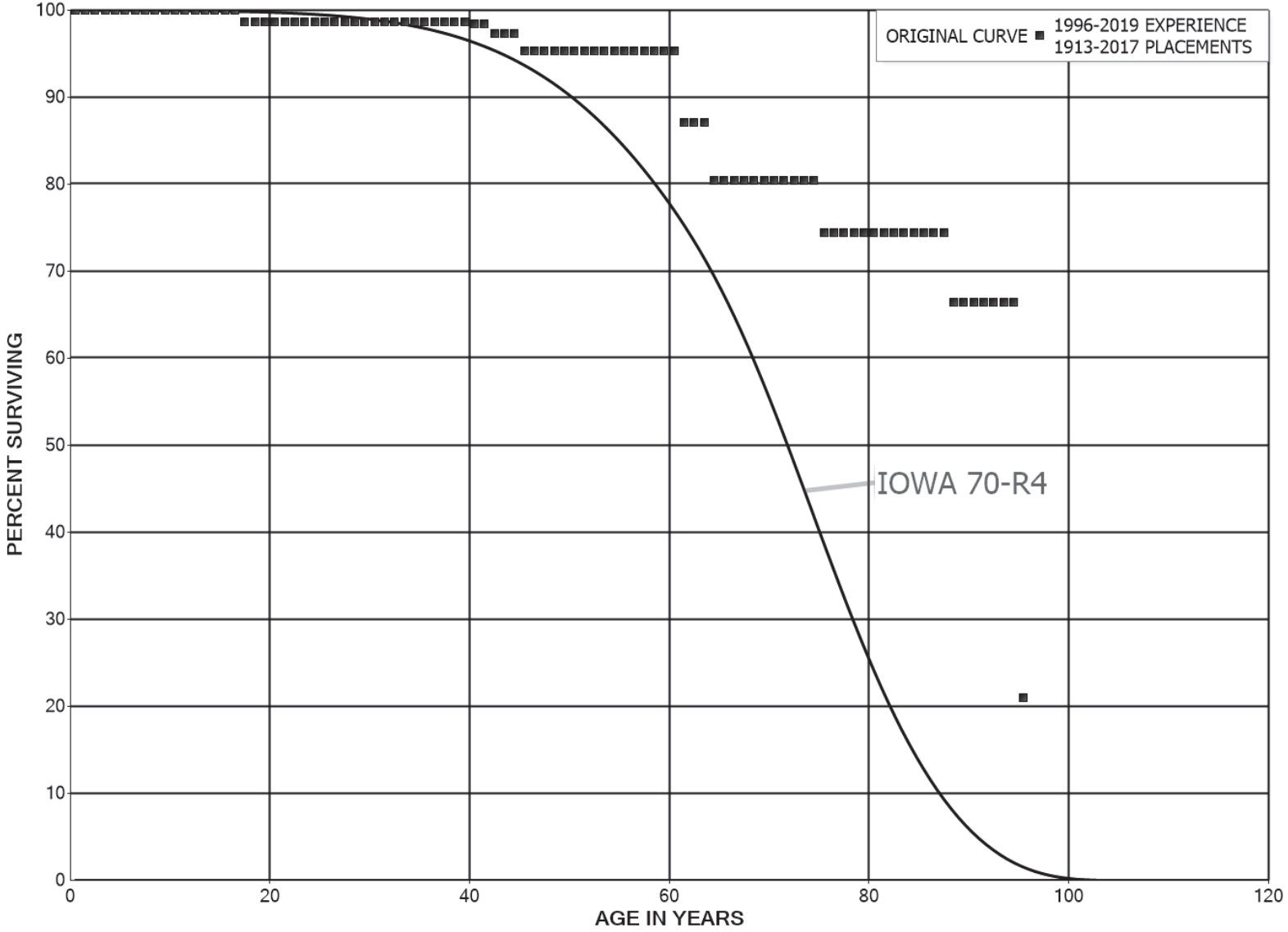
ACCOUNT 350.2 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1947-2000 EXPERIENCE BAND 1996-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,049		0.0000	1.0000	100.00
40.5	4,486		0.0000	1.0000	100.00
41.5	6,603		0.0000	1.0000	100.00
42.5	6,486		0.0000	1.0000	100.00
43.5	6,486		0.0000	1.0000	100.00
44.5	6,486		0.0000	1.0000	100.00
45.5	6,038		0.0000	1.0000	100.00
46.5	5,083		0.0000	1.0000	100.00
47.5	5,907		0.0000	1.0000	100.00
48.5	5,918		0.0000	1.0000	100.00
49.5	5,273		0.0000	1.0000	100.00
50.5	4,153		0.0000	1.0000	100.00
51.5	4,153		0.0000	1.0000	100.00
52.5	4,053		0.0000	1.0000	100.00
53.5	4,053		0.0000	1.0000	100.00
54.5	4,053		0.0000	1.0000	100.00
55.5	4,053		0.0000	1.0000	100.00
56.5	4,053		0.0000	1.0000	100.00
57.5	4,053		0.0000	1.0000	100.00
58.5	4,053		0.0000	1.0000	100.00
59.5	4,053		0.0000	1.0000	100.00
60.5	4,053		0.0000	1.0000	100.00
61.5	4,053		0.0000	1.0000	100.00
62.5	4,053		0.0000	1.0000	100.00
63.5	4,053		0.0000	1.0000	100.00
64.5	3,616		0.0000	1.0000	100.00
65.5	1,499		0.0000	1.0000	100.00
66.5	1,336		0.0000	1.0000	100.00
67.5	1,336		0.0000	1.0000	100.00
68.5	1,336		0.0000	1.0000	100.00
69.5	1,336		0.0000	1.0000	100.00
70.5	1,227		0.0000	1.0000	100.00
71.5	11		0.0000	1.0000	100.00
72.5					100.00

PEOPLES GAS COMPANY LLC
ACCOUNT 352.01 WELLS - CONSTRUCTION
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 352.01 WELLS - CONSTRUCTION

ORIGINAL LIFE TABLE

PLACEMENT BAND 1913-2017 EXPERIENCE BAND 1996-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	329,319		0.0000	1.0000	100.00
0.5	329,319		0.0000	1.0000	100.00
1.5	330,489		0.0000	1.0000	100.00
2.5	312,349		0.0000	1.0000	100.00
3.5	355,790		0.0000	1.0000	100.00
4.5	355,790		0.0000	1.0000	100.00
5.5	393,847		0.0000	1.0000	100.00
6.5	474,933		0.0000	1.0000	100.00
7.5	474,933		0.0000	1.0000	100.00
8.5	474,933		0.0000	1.0000	100.00
9.5	473,763		0.0000	1.0000	100.00
10.5	473,763		0.0000	1.0000	100.00
11.5	541,266		0.0000	1.0000	100.00
12.5	541,266		0.0000	1.0000	100.00
13.5	530,470		0.0000	1.0000	100.00
14.5	530,470		0.0000	1.0000	100.00
15.5	530,470		0.0000	1.0000	100.00
16.5	530,470	7,494	0.0141	0.9859	100.00
17.5	522,976		0.0000	1.0000	98.59
18.5	522,976		0.0000	1.0000	98.59
19.5	486,132		0.0000	1.0000	98.59
20.5	482,781		0.0000	1.0000	98.59
21.5	175,850		0.0000	1.0000	98.59
22.5	195,188		0.0000	1.0000	98.59
23.5	234,076		0.0000	1.0000	98.59
24.5	234,076		0.0000	1.0000	98.59
25.5	234,076		0.0000	1.0000	98.59
26.5	234,076		0.0000	1.0000	98.59
27.5	234,868		0.0000	1.0000	98.59
28.5	234,868		0.0000	1.0000	98.59
29.5	207,607		0.0000	1.0000	98.59
30.5	126,521		0.0000	1.0000	98.59
31.5	126,521		0.0000	1.0000	98.59
32.5	126,521		0.0000	1.0000	98.59
33.5	126,521		0.0000	1.0000	98.59
34.5	137,511		0.0000	1.0000	98.59
35.5	70,008		0.0000	1.0000	98.59
36.5	70,008		0.0000	1.0000	98.59
37.5	70,008		0.0000	1.0000	98.59
38.5	70,008		0.0000	1.0000	98.59

PEOPLES GAS COMPANY LLC

ACCOUNT 352.01 WELLS - CONSTRUCTION

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1913-2017 EXPERIENCE BAND 1996-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	70,008	142	0.0020	0.9980	98.59
40.5	69,866		0.0000	1.0000	98.39
41.5	69,866	792	0.0113	0.9887	98.39
42.5	61,775		0.0000	1.0000	97.27
43.5	64,465		0.0000	1.0000	97.27
44.5	64,290	1,342	0.0209	0.9791	97.27
45.5	62,948		0.0000	1.0000	95.24
46.5	43,609		0.0000	1.0000	95.24
47.5	6,738		0.0000	1.0000	95.24
48.5	13,303		0.0000	1.0000	95.24
49.5	15,556		0.0000	1.0000	95.24
50.5	15,556		0.0000	1.0000	95.24
51.5	12,182		0.0000	1.0000	95.24
52.5	10,476		0.0000	1.0000	95.24
53.5	12,280		0.0000	1.0000	95.24
54.5	12,280		0.0000	1.0000	95.24
55.5	15,686		0.0000	1.0000	95.24
56.5	12,503		0.0000	1.0000	95.24
57.5	21,686		0.0000	1.0000	95.24
58.5	35,103		0.0000	1.0000	95.24
59.5	36,542		0.0000	1.0000	95.24
60.5	39,674	3,406	0.0859	0.9141	95.24
61.5	33,481		0.0000	1.0000	87.07
62.5	33,481		0.0000	1.0000	87.07
63.5	33,481	2,551	0.0762	0.9238	87.07
64.5	29,190		0.0000	1.0000	80.43
65.5	26,206		0.0000	1.0000	80.43
66.5	20,595		0.0000	1.0000	80.43
67.5	29,953		0.0000	1.0000	80.43
68.5	29,953		0.0000	1.0000	80.43
69.5	32,154		0.0000	1.0000	80.43
70.5	35,818		0.0000	1.0000	80.43
71.5	45,753		0.0000	1.0000	80.43
72.5	49,915		0.0000	1.0000	80.43
73.5	41,464		0.0000	1.0000	80.43
74.5	41,464	3,132	0.0755	0.9245	80.43
75.5	38,332		0.0000	1.0000	74.36
76.5	36,745		0.0000	1.0000	74.36
77.5	28,910		0.0000	1.0000	74.36
78.5	26,803		0.0000	1.0000	74.36

PEOPLES GAS COMPANY LLC

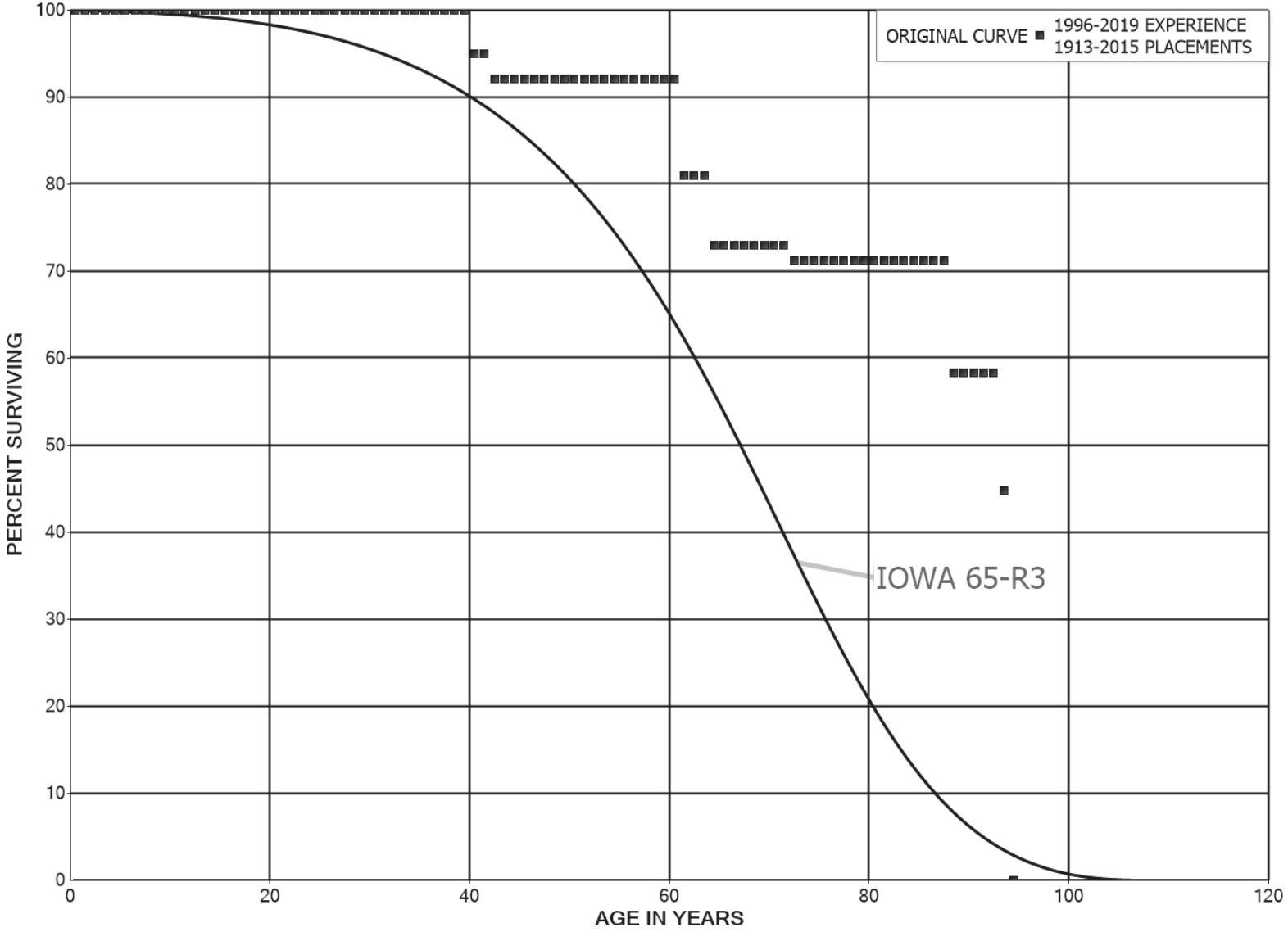
ACCOUNT 352.01 WELLS - CONSTRUCTION

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1913-2017 EXPERIENCE BAND 1996-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	24,602		0.0000	1.0000	74.36
80.5	24,602		0.0000	1.0000	74.36
81.5	21,487		0.0000	1.0000	74.36
82.5	17,562		0.0000	1.0000	74.36
83.5	17,562		0.0000	1.0000	74.36
84.5	17,562		0.0000	1.0000	74.36
85.5	17,562		0.0000	1.0000	74.36
86.5	17,562		0.0000	1.0000	74.36
87.5	17,562	1,880	0.1070	0.8930	74.36
88.5	15,682		0.0000	1.0000	66.40
89.5	15,682		0.0000	1.0000	66.40
90.5	12,014		0.0000	1.0000	66.40
91.5	9,052		0.0000	1.0000	66.40
92.5	9,052		0.0000	1.0000	66.40
93.5	9,052		0.0000	1.0000	66.40
94.5	7,495	5,127	0.6841	0.3159	66.40
95.5					20.98

PEOPLES GAS COMPANY LLC
ACCOUNT 352.02 WELLS - EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 352.02 WELLS - EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1913-2015 EXPERIENCE BAND 1996-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	282,563		0.0000	1.0000	100.00
0.5	282,563		0.0000	1.0000	100.00
1.5	352,826		0.0000	1.0000	100.00
2.5	352,826		0.0000	1.0000	100.00
3.5	401,682		0.0000	1.0000	100.00
4.5	410,678		0.0000	1.0000	100.00
5.5	448,950		0.0000	1.0000	100.00
6.5	542,561		0.0000	1.0000	100.00
7.5	542,561		0.0000	1.0000	100.00
8.5	563,693		0.0000	1.0000	100.00
9.5	509,892		0.0000	1.0000	100.00
10.5	509,892		0.0000	1.0000	100.00
11.5	536,642		0.0000	1.0000	100.00
12.5	553,791		0.0000	1.0000	100.00
13.5	553,791		0.0000	1.0000	100.00
14.5	562,808		0.0000	1.0000	100.00
15.5	562,808		0.0000	1.0000	100.00
16.5	541,676		0.0000	1.0000	100.00
17.5	541,676		0.0000	1.0000	100.00
18.5	541,676		0.0000	1.0000	100.00
19.5	493,717		0.0000	1.0000	100.00
20.5	212,057		0.0000	1.0000	100.00
21.5	212,057		0.0000	1.0000	100.00
22.5	197,905		0.0000	1.0000	100.00
23.5	218,720		0.0000	1.0000	100.00
24.5	215,981		0.0000	1.0000	100.00
25.5	215,981		0.0000	1.0000	100.00
26.5	230,628		0.0000	1.0000	100.00
27.5	233,108		0.0000	1.0000	100.00
28.5	205,163		0.0000	1.0000	100.00
29.5	166,891		0.0000	1.0000	100.00
30.5	104,375		0.0000	1.0000	100.00
31.5	104,375		0.0000	1.0000	100.00
32.5	109,668		0.0000	1.0000	100.00
33.5	93,205		0.0000	1.0000	100.00
34.5	108,497		0.0000	1.0000	100.00
35.5	81,163		0.0000	1.0000	100.00
36.5	81,163		0.0000	1.0000	100.00
37.5	81,163		0.0000	1.0000	100.00
38.5	65,103		0.0000	1.0000	100.00

PEOPLES GAS COMPANY LLC

ACCOUNT 352.02 WELLS - EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1913-2015 EXPERIENCE BAND 1996-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	65,103	3,269	0.0502	0.9498	100.00
40.5	61,835		0.0000	1.0000	94.98
41.5	61,835	1,896	0.0307	0.9693	94.98
42.5	39,282		0.0000	1.0000	92.07
43.5	41,316		0.0000	1.0000	92.07
44.5	37,009		0.0000	1.0000	92.07
45.5	37,009		0.0000	1.0000	92.07
46.5	29,848		0.0000	1.0000	92.07
47.5	9,539		0.0000	1.0000	92.07
48.5	5,534		0.0000	1.0000	92.07
49.5	6,702		0.0000	1.0000	92.07
50.5	6,702		0.0000	1.0000	92.07
51.5	6,702		0.0000	1.0000	92.07
52.5	4,995		0.0000	1.0000	92.07
53.5	2,962		0.0000	1.0000	92.07
54.5	2,962		0.0000	1.0000	92.07
55.5	4,254		0.0000	1.0000	92.07
56.5	4,681		0.0000	1.0000	92.07
57.5	7,868		0.0000	1.0000	92.07
58.5	9,937		0.0000	1.0000	92.07
59.5	10,681		0.0000	1.0000	92.07
60.5	10,681	1,292	0.1210	0.8790	92.07
61.5	9,389		0.0000	1.0000	80.93
62.5	9,389		0.0000	1.0000	80.93
63.5	9,389	921	0.0981	0.9019	80.93
64.5	7,317		0.0000	1.0000	72.99
65.5	6,102		0.0000	1.0000	72.99
66.5	5,734		0.0000	1.0000	72.99
67.5	6,718		0.0000	1.0000	72.99
68.5	6,718		0.0000	1.0000	72.99
69.5	7,478		0.0000	1.0000	72.99
70.5	9,008		0.0000	1.0000	72.99
71.5	10,918	278	0.0255	0.9745	72.99
72.5	11,451		0.0000	1.0000	71.13
73.5	8,589		0.0000	1.0000	71.13
74.5	8,589		0.0000	1.0000	71.13
75.5	8,589		0.0000	1.0000	71.13
76.5	7,809		0.0000	1.0000	71.13
77.5	6,081		0.0000	1.0000	71.13
78.5	5,283		0.0000	1.0000	71.13

PEOPLES GAS COMPANY LLC

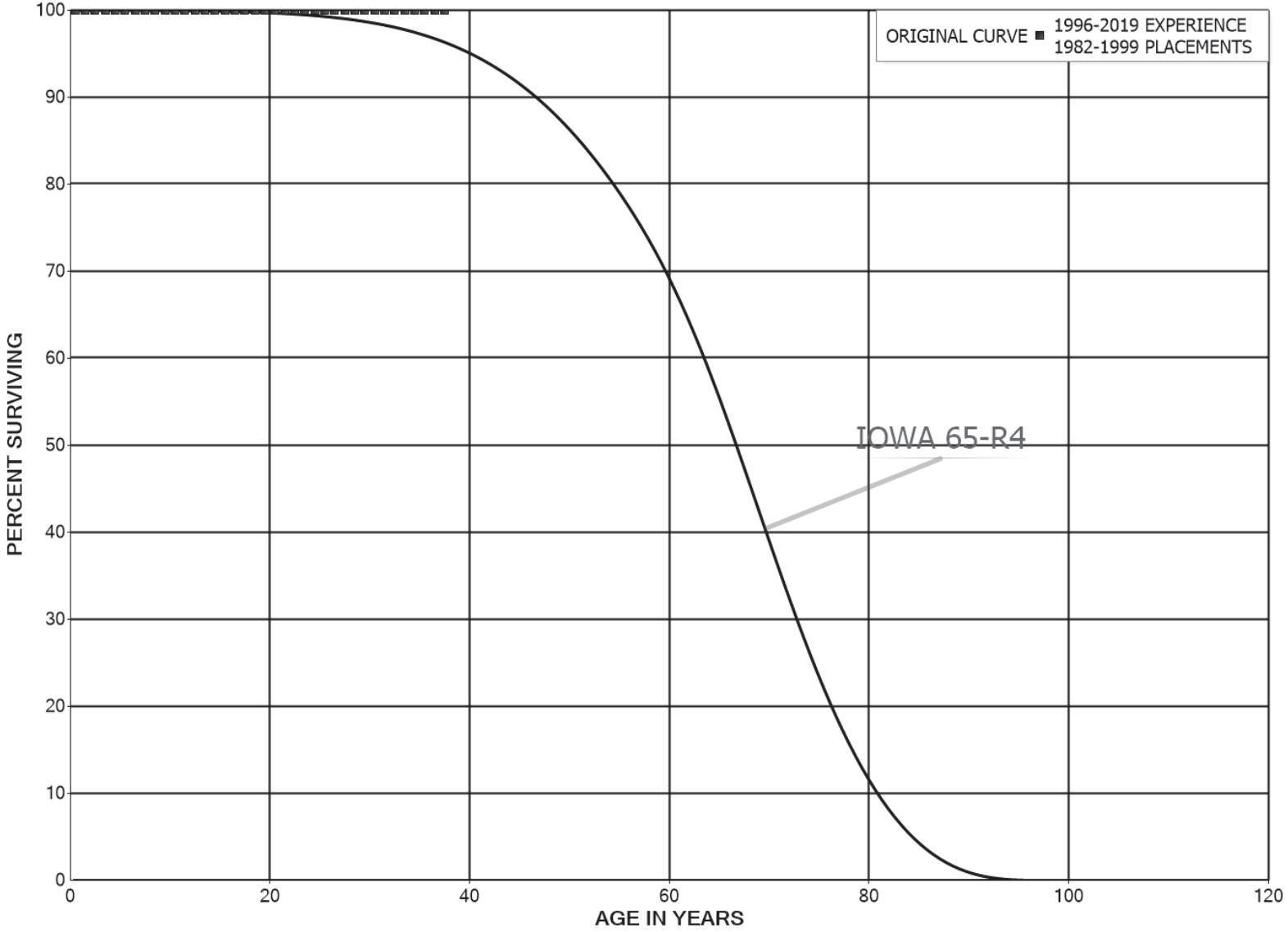
ACCOUNT 352.02 WELLS - EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1913-2015 EXPERIENCE BAND 1996-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	4,523		0.0000	1.0000	71.13
80.5	4,523		0.0000	1.0000	71.13
81.5	4,523		0.0000	1.0000	71.13
82.5	3,845		0.0000	1.0000	71.13
83.5	3,845		0.0000	1.0000	71.13
84.5	3,845		0.0000	1.0000	71.13
85.5	3,845		0.0000	1.0000	71.13
86.5	3,845		0.0000	1.0000	71.13
87.5	3,845	697	0.1813	0.8187	71.13
88.5	3,148		0.0000	1.0000	58.23
89.5	3,148		0.0000	1.0000	58.23
90.5	3,148		0.0000	1.0000	58.23
91.5	3,148		0.0000	1.0000	58.23
92.5	3,148	732	0.2325	0.7675	58.23
93.5	2,416	2,416	1.0000		44.69
94.5					

PEOPLES GAS COMPANY LLC
ACCOUNT 352.12 STORAGE RIGHTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

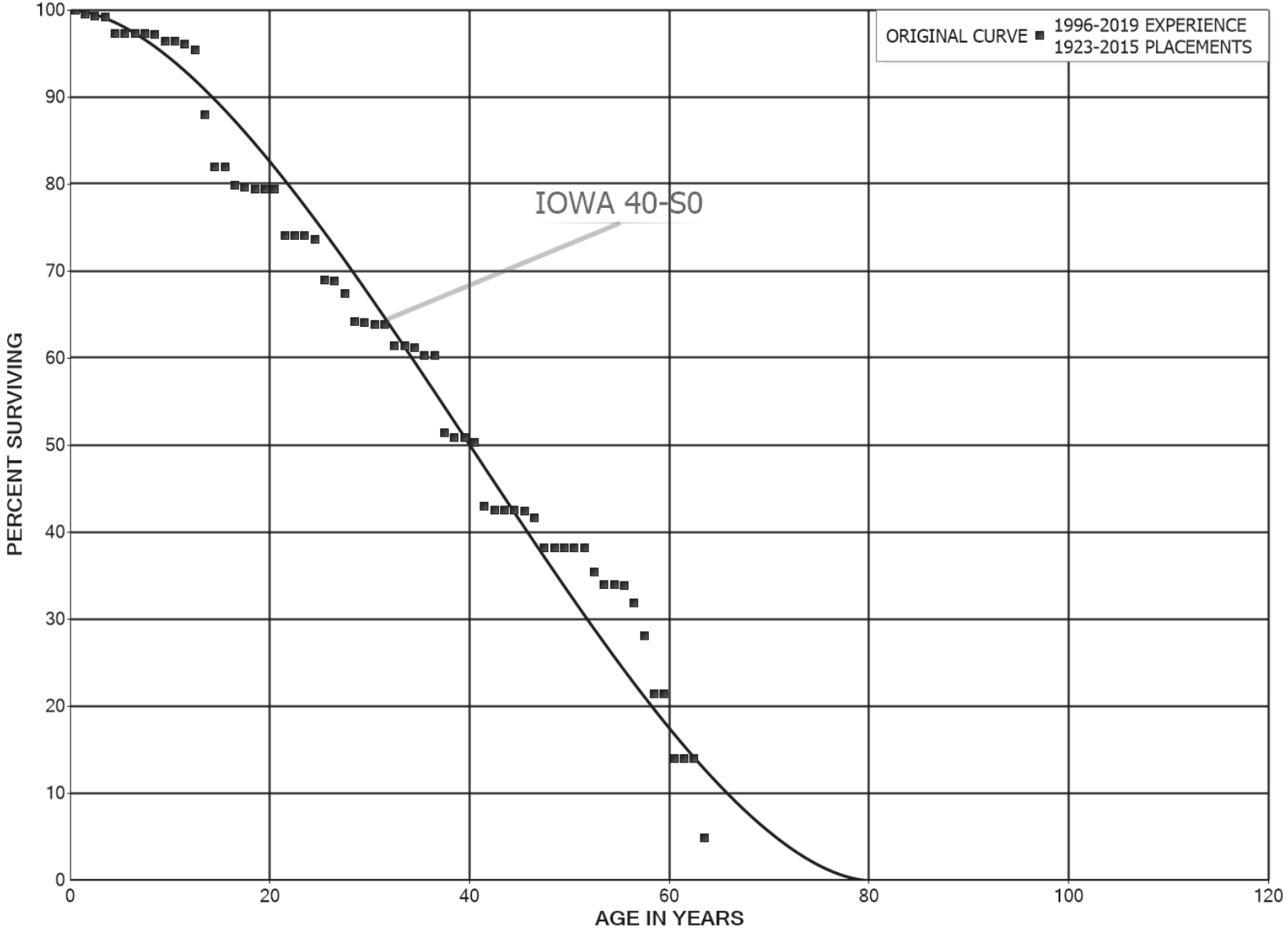
ACCOUNT 352.12 STORAGE RIGHTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1982-1999 EXPERIENCE BAND 1996-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	352,672		0.0000	1.0000	100.00
0.5	352,672		0.0000	1.0000	100.00
1.5	352,672		0.0000	1.0000	100.00
2.5	352,672		0.0000	1.0000	100.00
3.5	352,672		0.0000	1.0000	100.00
4.5	352,672		0.0000	1.0000	100.00
5.5	352,672		0.0000	1.0000	100.00
6.5	352,672		0.0000	1.0000	100.00
7.5	352,672		0.0000	1.0000	100.00
8.5	352,672		0.0000	1.0000	100.00
9.5	352,672		0.0000	1.0000	100.00
10.5	352,672		0.0000	1.0000	100.00
11.5	352,672		0.0000	1.0000	100.00
12.5	352,672		0.0000	1.0000	100.00
13.5	392,672		0.0000	1.0000	100.00
14.5	392,672		0.0000	1.0000	100.00
15.5	392,672		0.0000	1.0000	100.00
16.5	392,672		0.0000	1.0000	100.00
17.5	392,672		0.0000	1.0000	100.00
18.5	392,672		0.0000	1.0000	100.00
19.5	392,672		0.0000	1.0000	100.00
20.5	346,874		0.0000	1.0000	100.00
21.5	40,000		0.0000	1.0000	100.00
22.5	40,000		0.0000	1.0000	100.00
23.5	40,000		0.0000	1.0000	100.00
24.5	40,000		0.0000	1.0000	100.00
25.5	40,000		0.0000	1.0000	100.00
26.5	40,000		0.0000	1.0000	100.00
27.5	40,000		0.0000	1.0000	100.00
28.5	40,000		0.0000	1.0000	100.00
29.5	40,000		0.0000	1.0000	100.00
30.5	40,000		0.0000	1.0000	100.00
31.5	40,000		0.0000	1.0000	100.00
32.5	40,000		0.0000	1.0000	100.00
33.5	40,000		0.0000	1.0000	100.00
34.5	40,000		0.0000	1.0000	100.00
35.5	40,000		0.0000	1.0000	100.00
36.5	40,000		0.0000	1.0000	100.00
37.5					100.00

PEOPLES GAS COMPANY LLC
ACCOUNT 353 LINES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 353 LINES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1923-2015 EXPERIENCE BAND 1996-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,587,016	36	0.0000	1.0000	100.00
0.5	1,587,897	7,929	0.0050	0.9950	100.00
1.5	1,602,861	3,365	0.0021	0.9979	99.50
2.5	1,616,013	1,587	0.0010	0.9990	99.29
3.5	1,615,822	31,692	0.0196	0.9804	99.19
4.5	1,610,324		0.0000	1.0000	97.25
5.5	1,893,890		0.0000	1.0000	97.25
6.5	1,802,232		0.0000	1.0000	97.25
7.5	1,527,433	1,215	0.0008	0.9992	97.25
8.5	1,516,689	11,530	0.0076	0.9924	97.17
9.5	1,507,966		0.0000	1.0000	96.43
10.5	1,531,773	6,179	0.0040	0.9960	96.43
11.5	1,082,919	7,815	0.0072	0.9928	96.04
12.5	960,122	74,053	0.0771	0.9229	95.35
13.5	615,896	42,299	0.0687	0.9313	87.99
14.5	507,509		0.0000	1.0000	81.95
15.5	415,454	10,709	0.0258	0.9742	81.95
16.5	393,345	1,102	0.0028	0.9972	79.84
17.5	373,709	1,246	0.0033	0.9967	79.61
18.5	379,013	33	0.0001	0.9999	79.35
19.5	296,969		0.0000	1.0000	79.34
20.5	236,830	15,763	0.0666	0.9334	79.34
21.5	239,976		0.0000	1.0000	74.06
22.5	280,233		0.0000	1.0000	74.06
23.5	289,629	1,820	0.0063	0.9937	74.06
24.5	278,244	17,680	0.0635	0.9365	73.60
25.5	317,454	206	0.0006	0.9994	68.92
26.5	427,544	9,073	0.0212	0.9788	68.88
27.5	418,471	20,267	0.0484	0.9516	67.41
28.5	486,615	869	0.0018	0.9982	64.15
29.5	476,621	1,490	0.0031	0.9969	64.03
30.5	455,491		0.0000	1.0000	63.83
31.5	409,772	15,805	0.0386	0.9614	63.83
32.5	396,451		0.0000	1.0000	61.37
33.5	386,935	1,015	0.0026	0.9974	61.37
34.5	247,307	3,623	0.0146	0.9854	61.21
35.5	240,263	23	0.0001	0.9999	60.31
36.5	186,336	27,441	0.1473	0.8527	60.31
37.5	61,356	669	0.0109	0.9891	51.43
38.5	56,232		0.0000	1.0000	50.87

PEOPLES GAS COMPANY LLC

ACCOUNT 353 LINES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1923-2015 EXPERIENCE BAND 1996-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	56,232	606	0.0108	0.9892	50.87
40.5	66,672	9,723	0.1458	0.8542	50.32
41.5	80,291	806	0.0100	0.9900	42.98
42.5	82,134	4	0.0000	1.0000	42.55
43.5	85,306	164	0.0019	0.9981	42.55
44.5	83,821	133	0.0016	0.9984	42.46
45.5	76,071	1,428	0.0188	0.9812	42.40
46.5	53,113	4,358	0.0821	0.9179	41.60
47.5	76,739		0.0000	1.0000	38.19
48.5	71,857	68	0.0009	0.9991	38.19
49.5	71,789		0.0000	1.0000	38.15
50.5	62,171		0.0000	1.0000	38.15
51.5	34,789	2,533	0.0728	0.9272	38.15
52.5	30,847	1,286	0.0417	0.9583	35.37
53.5	30,263		0.0000	1.0000	33.90
54.5	30,263	25	0.0008	0.9992	33.90
55.5	29,537	1,794	0.0607	0.9393	33.87
56.5	24,961	2,929	0.1174	0.8826	31.81
57.5	22,593	5,346	0.2366	0.7634	28.08
58.5	19,952		0.0000	1.0000	21.44
59.5	19,952	6,923	0.3470	0.6530	21.44
60.5	15,248		0.0000	1.0000	14.00
61.5	15,248		0.0000	1.0000	14.00
62.5	15,248	9,997	0.6556	0.3444	14.00
63.5	4,690		0.0000	1.0000	4.82
64.5	2,762		0.0000	1.0000	4.82
65.5	2,762		0.0000	1.0000	4.82
66.5	1,528		0.0000	1.0000	4.82
67.5	3,097		0.0000	1.0000	4.82
68.5	6		0.0000	1.0000	4.82
69.5	6		0.0000	1.0000	4.82
70.5	6	6	1.0000		4.82
71.5	421		0.0000	1.0000	
72.5	1,587		0.0000		
73.5	1,587		0.0000		
74.5	1,587	10	0.0064		
75.5	1,577	57	0.0364		
76.5	1,519	308	0.2025		
77.5	1,212		0.0000		
78.5	1,212		0.0000		

PEOPLES GAS COMPANY LLC

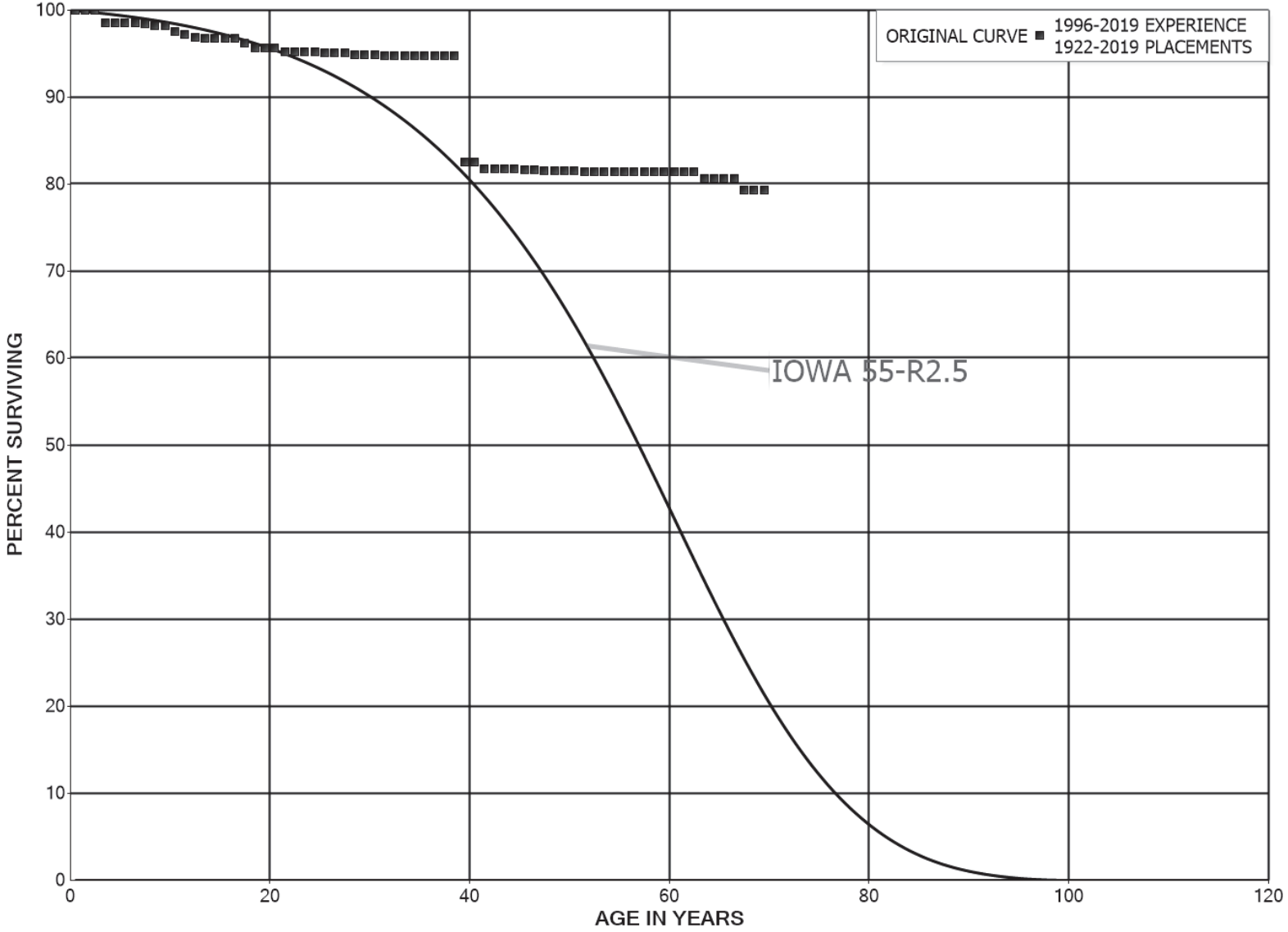
ACCOUNT 353 LINES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1923-2015 EXPERIENCE BAND 1996-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	1,212		0.0000		
80.5	1,212	4	0.0031		
81.5	841		0.0000		
82.5					

PEOPLES GAS COMPANY LLC
ACCOUNT 354 COMPRESSOR STATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 354 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1922-2019 EXPERIENCE BAND 1996-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	6,515,785		0.0000	1.0000	100.00
0.5	2,384,194		0.0000	1.0000	100.00
1.5	2,447,076		0.0000	1.0000	100.00
2.5	2,483,569	36,747	0.0148	0.9852	100.00
3.5	2,501,785		0.0000	1.0000	98.52
4.5	2,516,173		0.0000	1.0000	98.52
5.5	2,502,162		0.0000	1.0000	98.52
6.5	2,514,210	2,000	0.0008	0.9992	98.52
7.5	2,516,686	6,618	0.0026	0.9974	98.44
8.5	2,496,334		0.0000	1.0000	98.18
9.5	2,011,126	14,408	0.0072	0.9928	98.18
10.5	2,013,201	6,892	0.0034	0.9966	97.48
11.5	2,013,265	6,003	0.0030	0.9970	97.15
12.5	2,034,597	3,339	0.0016	0.9984	96.86
13.5	2,053,545		0.0000	1.0000	96.70
14.5	1,974,883		0.0000	1.0000	96.70
15.5	1,932,159		0.0000	1.0000	96.70
16.5	1,932,319	10,713	0.0055	0.9945	96.70
17.5	1,561,678	8,875	0.0057	0.9943	96.16
18.5	1,552,486		0.0000	1.0000	95.61
19.5	953,936		0.0000	1.0000	95.61
20.5	677,061	3,051	0.0045	0.9955	95.61
21.5	645,355		0.0000	1.0000	95.18
22.5	599,527		0.0000	1.0000	95.18
23.5	590,083		0.0000	1.0000	95.18
24.5	548,794	938	0.0017	0.9983	95.18
25.5	527,522		0.0000	1.0000	95.02
26.5	608,398		0.0000	1.0000	95.02
27.5	532,461	1,197	0.0022	0.9978	95.02
28.5	499,801		0.0000	1.0000	94.81
29.5	463,173		0.0000	1.0000	94.81
30.5	414,450	336	0.0008	0.9992	94.81
31.5	416,059		0.0000	1.0000	94.73
32.5	403,976		0.0000	1.0000	94.73
33.5	407,889		0.0000	1.0000	94.73
34.5	247,332		0.0000	1.0000	94.73
35.5	243,460		0.0000	1.0000	94.73
36.5	209,875		0.0000	1.0000	94.73
37.5	166,417		0.0000	1.0000	94.73
38.5	162,451	20,881	0.1285	0.8715	94.73

PEOPLES GAS COMPANY LLC

ACCOUNT 354 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1922-2019 EXPERIENCE BAND 1996-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	177,310		0.0000	1.0000	82.55
40.5	224,697	2,108	0.0094	0.9906	82.55
41.5	254,727		0.0000	1.0000	81.78
42.5	336,150		0.0000	1.0000	81.78
43.5	350,018	200	0.0006	0.9994	81.78
44.5	347,318	646	0.0019	0.9981	81.73
45.5	270,209		0.0000	1.0000	81.58
46.5	294,469	200	0.0007	0.9993	81.58
47.5	311,156		0.0000	1.0000	81.53
48.5	263,842		0.0000	1.0000	81.53
49.5	232,306		0.0000	1.0000	81.53
50.5	221,106	500	0.0023	0.9977	81.53
51.5	209,546		0.0000	1.0000	81.34
52.5	209,050		0.0000	1.0000	81.34
53.5	209,711		0.0000	1.0000	81.34
54.5	209,654		0.0000	1.0000	81.34
55.5	210,082		0.0000	1.0000	81.34
56.5	210,082		0.0000	1.0000	81.34
57.5	210,234		0.0000	1.0000	81.34
58.5	233,373		0.0000	1.0000	81.34
59.5	231,960		0.0000	1.0000	81.34
60.5	223,771		0.0000	1.0000	81.34
61.5	224,048		0.0000	1.0000	81.34
62.5	224,048	2,000	0.0089	0.9911	81.34
63.5	186,251		0.0000	1.0000	80.62
64.5	186,251		0.0000	1.0000	80.62
65.5	167,566	49	0.0003	0.9997	80.62
66.5	84,068	1,376	0.0164	0.9836	80.59
67.5	70,447		0.0000	1.0000	79.27
68.5	70,447		0.0000	1.0000	79.27
69.5	72,372		0.0000	1.0000	79.27
70.5	46,717		0.0000	1.0000	79.27
71.5	26,208		0.0000	1.0000	79.27
72.5	26,208		0.0000	1.0000	79.27
73.5	26,408		0.0000	1.0000	79.27
74.5	26,408		0.0000	1.0000	79.27
75.5	26,408		0.0000	1.0000	79.27
76.5	26,408		0.0000	1.0000	79.27
77.5	25,836		0.0000	1.0000	79.27
78.5	25,804		0.0000	1.0000	79.27

PEOPLES GAS COMPANY LLC

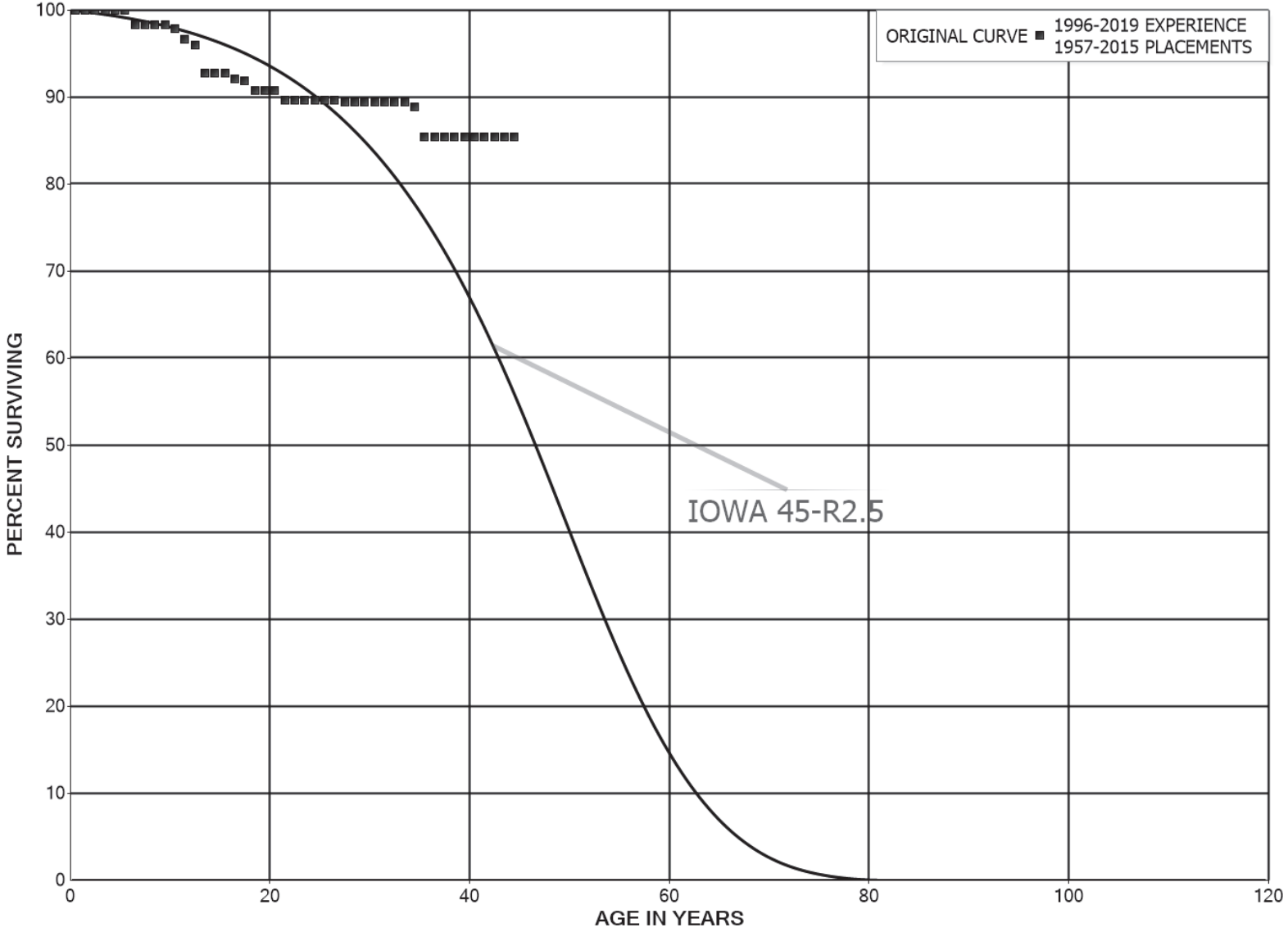
ACCOUNT 354 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1922-2019 EXPERIENCE BAND 1996-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	25,376		0.0000	1.0000	79.27
80.5	25,376		0.0000	1.0000	79.27
81.5	25,230		0.0000	1.0000	79.27
82.5	2,718		0.0000	1.0000	79.27
83.5	2,718		0.0000	1.0000	79.27
84.5	2,590		0.0000	1.0000	79.27
85.5	2,199		0.0000	1.0000	79.27
86.5	2,199		0.0000	1.0000	79.27
87.5	2,199		0.0000	1.0000	79.27
88.5	2,199		0.0000	1.0000	79.27
89.5	2,199		0.0000	1.0000	79.27
90.5	2,199		0.0000	1.0000	79.27
91.5	2,199		0.0000	1.0000	79.27
92.5	2,199		0.0000	1.0000	79.27
93.5	201		0.0000	1.0000	79.27
94.5	201		0.0000	1.0000	79.27
95.5	201		0.0000	1.0000	79.27
96.5	201		0.0000	1.0000	79.27
97.5					79.27

PEOPLES GAS COMPANY LLC
ACCOUNT 355 MEASURING AND REGULATING STATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 355 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1957-2015 EXPERIENCE BAND 1996-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,229,946		0.0000	1.0000	100.00
0.5	1,239,429	691	0.0006	0.9994	100.00
1.5	1,251,009		0.0000	1.0000	99.94
2.5	568,460		0.0000	1.0000	99.94
3.5	571,741		0.0000	1.0000	99.94
4.5	562,114		0.0000	1.0000	99.94
5.5	567,662	9,483	0.0167	0.9833	99.94
6.5	558,178		0.0000	1.0000	98.27
7.5	561,463		0.0000	1.0000	98.27
8.5	423,438		0.0000	1.0000	98.27
9.5	494,571	2,166	0.0044	0.9956	98.27
10.5	503,522	6,217	0.0123	0.9877	97.84
11.5	479,713	3,281	0.0068	0.9932	96.64
12.5	440,053	14,910	0.0339	0.9661	95.98
13.5	419,025		0.0000	1.0000	92.72
14.5	419,025		0.0000	1.0000	92.72
15.5	419,689	3,023	0.0072	0.9928	92.72
16.5	416,666	1,001	0.0024	0.9976	92.06
17.5	415,665	4,909	0.0118	0.9882	91.83
18.5	410,756		0.0000	1.0000	90.75
19.5	279,533	100	0.0004	0.9996	90.75
20.5	315,145	3,851	0.0122	0.9878	90.72
21.5	294,555		0.0000	1.0000	89.61
22.5	268,223		0.0000	1.0000	89.61
23.5	268,617		0.0000	1.0000	89.61
24.5	268,617		0.0000	1.0000	89.61
25.5	260,379		0.0000	1.0000	89.61
26.5	263,613	485	0.0018	0.9982	89.61
27.5	263,128		0.0000	1.0000	89.44
28.5	263,586		0.0000	1.0000	89.44
29.5	254,033		0.0000	1.0000	89.44
30.5	254,033		0.0000	1.0000	89.44
31.5	250,748		0.0000	1.0000	89.44
32.5	163,790		0.0000	1.0000	89.44
33.5	94,353	637	0.0067	0.9933	89.44
34.5	82,600	3,234	0.0391	0.9609	88.84
35.5	77,043		0.0000	1.0000	85.36
36.5	77,043		0.0000	1.0000	85.36
37.5	77,043		0.0000	1.0000	85.36
38.5	77,293		0.0000	1.0000	85.36

PEOPLES GAS COMPANY LLC

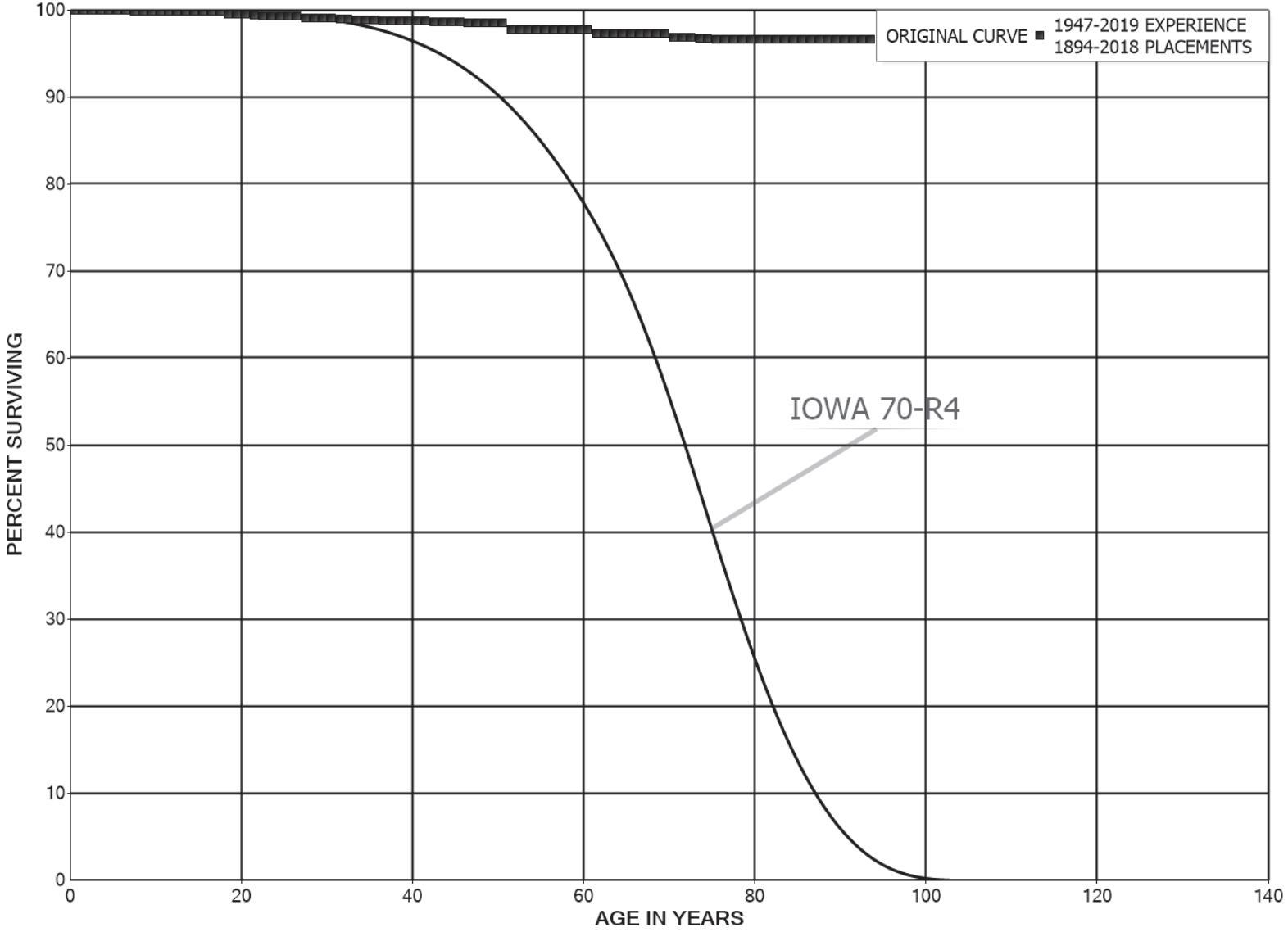
ACCOUNT 355 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1957-2015 EXPERIENCE BAND 1996-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	68,124		0.0000	1.0000	85.36
40.5	68,124		0.0000	1.0000	85.36
41.5	68,124		0.0000	1.0000	85.36
42.5	68,124		0.0000	1.0000	85.36
43.5	68,124		0.0000	1.0000	85.36
44.5	3,516		0.0000	1.0000	85.36
45.5	1,784		0.0000	1.0000	85.36
46.5	1,784		0.0000	1.0000	85.36
47.5	1,390		0.0000	1.0000	85.36
48.5	1,390		0.0000	1.0000	85.36
49.5	802		0.0000	1.0000	85.36
50.5	802		0.0000	1.0000	85.36
51.5	802		0.0000	1.0000	85.36
52.5	343		0.0000	1.0000	85.36
53.5	343		0.0000	1.0000	85.36
54.5	343		0.0000	1.0000	85.36
55.5	343		0.0000	1.0000	85.36
56.5	343		0.0000	1.0000	85.36
57.5	250		0.0000	1.0000	85.36
58.5	250		0.0000	1.0000	85.36
59.5	250		0.0000	1.0000	85.36
60.5	250		0.0000	1.0000	85.36
61.5	250		0.0000	1.0000	85.36
62.5					85.36

PEOPLES GAS COMPANY LLC
ACCOUNT 365.2 RIGHTS OF WAY
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 365.2 RIGHTS OF WAY

ORIGINAL LIFE TABLE

PLACEMENT BAND 1894-2018 EXPERIENCE BAND 1947-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,953,604	56	0.0000	1.0000	100.00
0.5	1,956,105		0.0000	1.0000	100.00
1.5	1,920,410	168	0.0001	0.9999	100.00
2.5	1,931,967	316	0.0002	0.9998	99.99
3.5	1,927,990	810	0.0004	0.9996	99.97
4.5	1,918,882		0.0000	1.0000	99.93
5.5	1,912,219	252	0.0001	0.9999	99.93
6.5	1,957,993	1,160	0.0006	0.9994	99.92
7.5	1,946,404	112	0.0001	0.9999	99.86
8.5	1,875,235		0.0000	1.0000	99.85
9.5	1,812,754	179	0.0001	0.9999	99.85
10.5	1,788,058	91	0.0001	0.9999	99.84
11.5	1,658,883	720	0.0004	0.9996	99.84
12.5	1,607,880	9	0.0000	1.0000	99.79
13.5	1,578,292	15	0.0000	1.0000	99.79
14.5	1,562,244	67	0.0000	1.0000	99.79
15.5	1,509,245	17	0.0000	1.0000	99.79
16.5	1,476,380		0.0000	1.0000	99.79
17.5	1,462,364	3,931	0.0027	0.9973	99.79
18.5	1,446,021	181	0.0001	0.9999	99.52
19.5	1,396,889	256	0.0002	0.9998	99.51
20.5	1,382,710	2,036	0.0015	0.9985	99.49
21.5	1,393,299	215	0.0002	0.9998	99.34
22.5	1,371,026	288	0.0002	0.9998	99.33
23.5	1,345,519		0.0000	1.0000	99.31
24.5	1,286,550	625	0.0005	0.9995	99.31
25.5	1,244,530	168	0.0001	0.9999	99.26
26.5	1,196,256	2,250	0.0019	0.9981	99.24
27.5	1,183,959	325	0.0003	0.9997	99.06
28.5	1,149,742		0.0000	1.0000	99.03
29.5	960,804		0.0000	1.0000	99.03
30.5	833,546	250	0.0003	0.9997	99.03
31.5	730,643	672	0.0009	0.9991	99.00
32.5	542,281	560	0.0010	0.9990	98.91
33.5	487,202		0.0000	1.0000	98.81
34.5	489,630	76	0.0002	0.9998	98.81
35.5	436,141	56	0.0001	0.9999	98.79
36.5	432,076		0.0000	1.0000	98.78
37.5	432,009		0.0000	1.0000	98.78
38.5	428,425		0.0000	1.0000	98.78

PEOPLES GAS COMPANY LLC

ACCOUNT 365.2 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2018 EXPERIENCE BAND 1947-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	390,230	269	0.0007	0.9993	98.78
40.5	385,855	134	0.0003	0.9997	98.71
41.5	395,190	93	0.0002	0.9998	98.68
42.5	396,774	93	0.0002	0.9998	98.65
43.5	396,391	28	0.0001	0.9999	98.63
44.5	398,198		0.0000	1.0000	98.62
45.5	396,533	280	0.0007	0.9993	98.62
46.5	395,903	168	0.0004	0.9996	98.55
47.5	390,940		0.0000	1.0000	98.51
48.5	387,363		0.0000	1.0000	98.51
49.5	379,888		0.0000	1.0000	98.51
50.5	361,779	2,817	0.0078	0.9922	98.51
51.5	350,435	56	0.0002	0.9998	97.74
52.5	344,048		0.0000	1.0000	97.73
53.5	315,955	112	0.0004	0.9996	97.73
54.5	245,219		0.0000	1.0000	97.69
55.5	230,226		0.0000	1.0000	97.69
56.5	203,548		0.0000	1.0000	97.69
57.5	198,793		0.0000	1.0000	97.69
58.5	189,913		0.0000	1.0000	97.69
59.5	189,104		0.0000	1.0000	97.69
60.5	185,705	677	0.0036	0.9964	97.69
61.5	185,029		0.0000	1.0000	97.34
62.5	181,641		0.0000	1.0000	97.34
63.5	177,716	93	0.0005	0.9995	97.34
64.5	175,633		0.0000	1.0000	97.29
65.5	174,255	93	0.0005	0.9995	97.29
66.5	173,986		0.0000	1.0000	97.24
67.5	173,413		0.0000	1.0000	97.24
68.5	168,106		0.0000	1.0000	97.24
69.5	162,566	746	0.0046	0.9954	97.24
70.5	159,958		0.0000	1.0000	96.79
71.5	159,867		0.0000	1.0000	96.79
72.5	161,117	65	0.0004	0.9996	96.79
73.5	159,870	50	0.0003	0.9997	96.75
74.5	159,741	104	0.0006	0.9994	96.72
75.5	159,148		0.0000	1.0000	96.66
76.5	158,295		0.0000	1.0000	96.66
77.5	157,157		0.0000	1.0000	96.66
78.5	154,536		0.0000	1.0000	96.66

PEOPLES GAS COMPANY LLC

ACCOUNT 365.2 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2018 EXPERIENCE BAND 1947-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	154,431		0.0000	1.0000	96.66
80.5	149,100		0.0000	1.0000	96.66
81.5	147,827		0.0000	1.0000	96.66
82.5	144,751		0.0000	1.0000	96.66
83.5	143,446		0.0000	1.0000	96.66
84.5	139,624		0.0000	1.0000	96.66
85.5	139,571		0.0000	1.0000	96.66
86.5	139,518		0.0000	1.0000	96.66
87.5	139,518		0.0000	1.0000	96.66
88.5	139,425		0.0000	1.0000	96.66
89.5	138,936		0.0000	1.0000	96.66
90.5	136,885		0.0000	1.0000	96.66
91.5	136,792		0.0000	1.0000	96.66
92.5	136,233		0.0000	1.0000	96.66
93.5	125,907		0.0000	1.0000	96.66
94.5	116,856		0.0000	1.0000	96.66
95.5	106,667		0.0000	1.0000	96.66
96.5	102,161		0.0000	1.0000	96.66
97.5	95,591		0.0000	1.0000	96.66
98.5	95,124		0.0000	1.0000	96.66
99.5	94,752		0.0000	1.0000	96.66
100.5	93,819		0.0000	1.0000	96.66
101.5	92,701		0.0000	1.0000	96.66
102.5	89,718		0.0000	1.0000	96.66
103.5	87,690		0.0000	1.0000	96.66
104.5	74,238		0.0000	1.0000	96.66
105.5	64,965		0.0000	1.0000	96.66
106.5	57,238		0.0000	1.0000	96.66
107.5	49,128		0.0000	1.0000	96.66
108.5	47,077		0.0000	1.0000	96.66
109.5	45,026		0.0000	1.0000	96.66
110.5	35,797		0.0000	1.0000	96.66
111.5	31,975		0.0000	1.0000	96.66
112.5	30,950		0.0000	1.0000	96.66
113.5	22,187		0.0000	1.0000	96.66
114.5	11,373		0.0000	1.0000	96.66
115.5	9,415		0.0000	1.0000	96.66
116.5	8,763		0.0000	1.0000	96.66
117.5	5,500		0.0000	1.0000	96.66
118.5	3,076		0.0000	1.0000	96.66

PEOPLES GAS COMPANY LLC

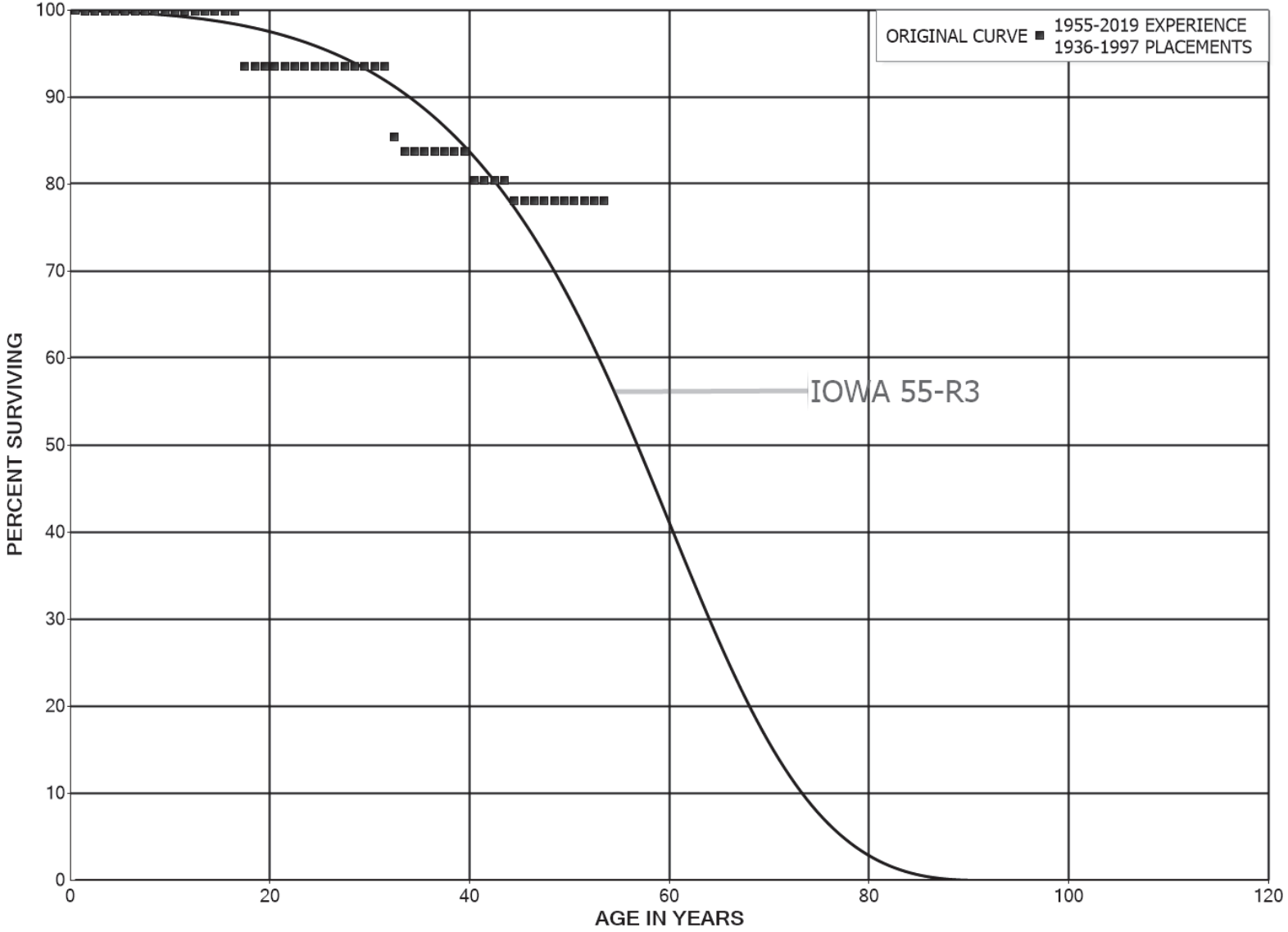
ACCOUNT 365.2 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2018 EXPERIENCE BAND 1947-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	1,958		0.0000	1.0000	96.66
120.5	1,678		0.0000	1.0000	96.66
121.5	1,678		0.0000	1.0000	96.66
122.5	1,492		0.0000	1.0000	96.66
123.5					96.66

PEOPLES GAS COMPANY LLC
ACCOUNT 366.2 MEASURING AND REGULATING STATION STRUCTURES - OTHER
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 366.2 MEASURING AND REGULATING STATION STRUCTURES - OTHER

ORIGINAL LIFE TABLE

PLACEMENT BAND 1936-1997 EXPERIENCE BAND 1955-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	15,246		0.0000	1.0000	100.00
0.5	15,740	19	0.0012	0.9988	100.00
1.5	15,721		0.0000	1.0000	99.88
2.5	15,721		0.0000	1.0000	99.88
3.5	15,721		0.0000	1.0000	99.88
4.5	16,015		0.0000	1.0000	99.88
5.5	16,015		0.0000	1.0000	99.88
6.5	16,015		0.0000	1.0000	99.88
7.5	16,015		0.0000	1.0000	99.88
8.5	16,015		0.0000	1.0000	99.88
9.5	16,015		0.0000	1.0000	99.88
10.5	16,015		0.0000	1.0000	99.88
11.5	16,015		0.0000	1.0000	99.88
12.5	16,015		0.0000	1.0000	99.88
13.5	16,015		0.0000	1.0000	99.88
14.5	16,015		0.0000	1.0000	99.88
15.5	16,015		0.0000	1.0000	99.88
16.5	16,015	1,023	0.0639	0.9361	99.88
17.5	14,992		0.0000	1.0000	93.50
18.5	15,176		0.0000	1.0000	93.50
19.5	15,176		0.0000	1.0000	93.50
20.5	15,176		0.0000	1.0000	93.50
21.5	15,176		0.0000	1.0000	93.50
22.5	14,058		0.0000	1.0000	93.50
23.5	14,058		0.0000	1.0000	93.50
24.5	14,058		0.0000	1.0000	93.50
25.5	14,058		0.0000	1.0000	93.50
26.5	9,556		0.0000	1.0000	93.50
27.5	9,556		0.0000	1.0000	93.50
28.5	9,556		0.0000	1.0000	93.50
29.5	9,556		0.0000	1.0000	93.50
30.5	9,556		0.0000	1.0000	93.50
31.5	9,556	831	0.0870	0.9130	93.50
32.5	8,724	169	0.0193	0.9807	85.36
33.5	8,556		0.0000	1.0000	83.71
34.5	8,556		0.0000	1.0000	83.71
35.5	7,945		0.0000	1.0000	83.71
36.5	7,945		0.0000	1.0000	83.71
37.5	7,945		0.0000	1.0000	83.71
38.5	7,945		0.0000	1.0000	83.71

PEOPLES GAS COMPANY LLC

ACCOUNT 366.2 MEASURING AND REGULATING STATION STRUCTURES - OTHER

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1936-1997 EXPERIENCE BAND 1955-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	7,945	314	0.0395	0.9605	83.71
40.5	7,631		0.0000	1.0000	80.41
41.5	7,631		0.0000	1.0000	80.41
42.5	7,631		0.0000	1.0000	80.41
43.5	7,631	221	0.0289	0.9711	80.41
44.5	7,411		0.0000	1.0000	78.08
45.5	7,411		0.0000	1.0000	78.08
46.5	7,411		0.0000	1.0000	78.08
47.5	7,411		0.0000	1.0000	78.08
48.5	6,412		0.0000	1.0000	78.08
49.5	6,412		0.0000	1.0000	78.08
50.5	6,412		0.0000	1.0000	78.08
51.5	6,300		0.0000	1.0000	78.08
52.5	6,197		0.0000	1.0000	78.08
53.5	1,974		0.0000	1.0000	78.08
54.5	1,964		0.0000	1.0000	78.08
55.5	1,593		0.0000	1.0000	78.08
56.5	1,451		0.0000	1.0000	78.08
57.5	1,451		0.0000	1.0000	78.08
58.5	1,451		0.0000	1.0000	78.08
59.5	1,451	131	0.0904	0.9096	78.08
60.5	1,320		0.0000	1.0000	71.02
61.5	1,320		0.0000	1.0000	71.02
62.5	972		0.0000	1.0000	71.02
63.5	972		0.0000	1.0000	71.02
64.5	972		0.0000	1.0000	71.02
65.5	477		0.0000	1.0000	71.02
66.5	477		0.0000	1.0000	71.02
67.5	477		0.0000	1.0000	71.02
68.5	477		0.0000	1.0000	71.02
69.5	184		0.0000	1.0000	71.02
70.5	184		0.0000	1.0000	71.02
71.5	184		0.0000	1.0000	71.02
72.5	184		0.0000	1.0000	71.02
73.5	184		0.0000	1.0000	71.02
74.5	184		0.0000	1.0000	71.02
75.5	184		0.0000	1.0000	71.02
76.5	184		0.0000	1.0000	71.02
77.5	184		0.0000	1.0000	71.02
78.5	184		0.0000	1.0000	71.02

PEOPLES GAS COMPANY LLC

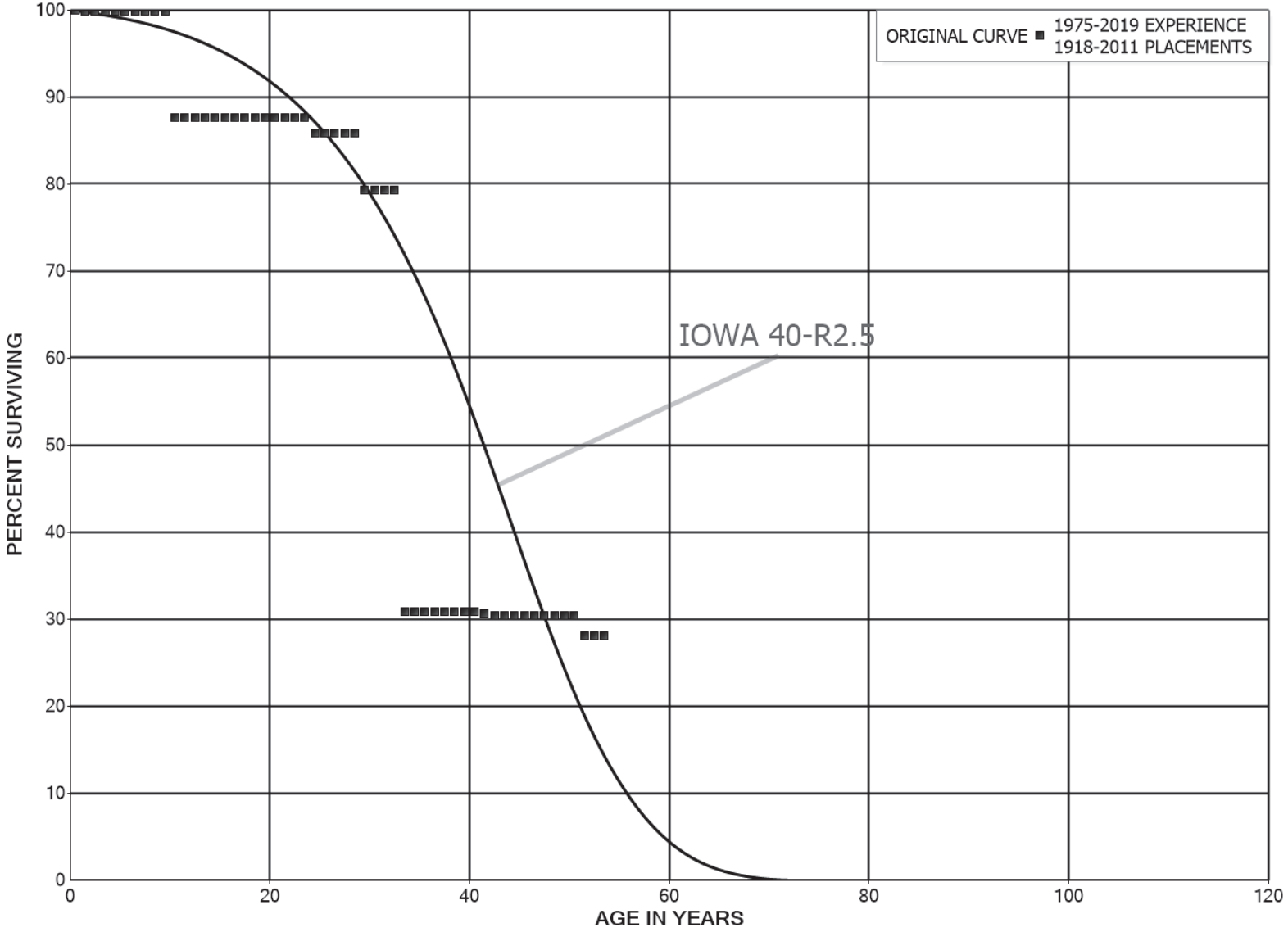
ACCOUNT 366.2 MEASURING AND REGULATING STATION STRUCTURES - OTHER

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1936-1997 EXPERIENCE BAND 1955-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	184		0.0000	1.0000	71.02
80.5	184		0.0000	1.0000	71.02
81.5	184		0.0000	1.0000	71.02
82.5	184		0.0000	1.0000	71.02
83.5					71.02

PEOPLES GAS COMPANY LLC
ACCOUNT 366.3 OTHER STRUCTURES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 366.3 OTHER STRUCTURES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1918-2011 EXPERIENCE BAND 1975-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	52,062		0.0000	1.0000	100.00
0.5	52,062	69	0.0013	0.9987	100.00
1.5	51,889		0.0000	1.0000	99.87
2.5	45,919		0.0000	1.0000	99.87
3.5	48,029		0.0000	1.0000	99.87
4.5	48,029		0.0000	1.0000	99.87
5.5	47,480		0.0000	1.0000	99.87
6.5	52,018		0.0000	1.0000	99.87
7.5	52,018		0.0000	1.0000	99.87
8.5	42,240		0.0000	1.0000	99.87
9.5	36,855	4,538	0.1231	0.8769	99.87
10.5	33,265		0.0000	1.0000	87.57
11.5	34,765		0.0000	1.0000	87.57
12.5	34,495		0.0000	1.0000	87.57
13.5	35,059		0.0000	1.0000	87.57
14.5	35,059		0.0000	1.0000	87.57
15.5	35,059		0.0000	1.0000	87.57
16.5	33,680		0.0000	1.0000	87.57
17.5	33,680		0.0000	1.0000	87.57
18.5	33,680		0.0000	1.0000	87.57
19.5	33,680		0.0000	1.0000	87.57
20.5	33,680		0.0000	1.0000	87.57
21.5	31,966		0.0000	1.0000	87.57
22.5	31,966		0.0000	1.0000	87.57
23.5	27,704	563	0.0203	0.9797	87.57
24.5	27,141		0.0000	1.0000	85.79
25.5	27,141		0.0000	1.0000	85.79
26.5	25,796		0.0000	1.0000	85.79
27.5	19,029		0.0000	1.0000	85.79
28.5	14,770	1,125	0.0762	0.9238	85.79
29.5	10,192		0.0000	1.0000	79.25
30.5	3,922		0.0000	1.0000	79.25
31.5	3,922		0.0000	1.0000	79.25
32.5	2,435	1,487	0.6106	0.3894	79.25
33.5	948		0.0000	1.0000	30.87
34.5	948		0.0000	1.0000	30.87
35.5	948		0.0000	1.0000	30.87
36.5	1,369		0.0000	1.0000	30.87
37.5	13,063		0.0000	1.0000	30.87
38.5	13,063		0.0000	1.0000	30.87

PEOPLES GAS COMPANY LLC

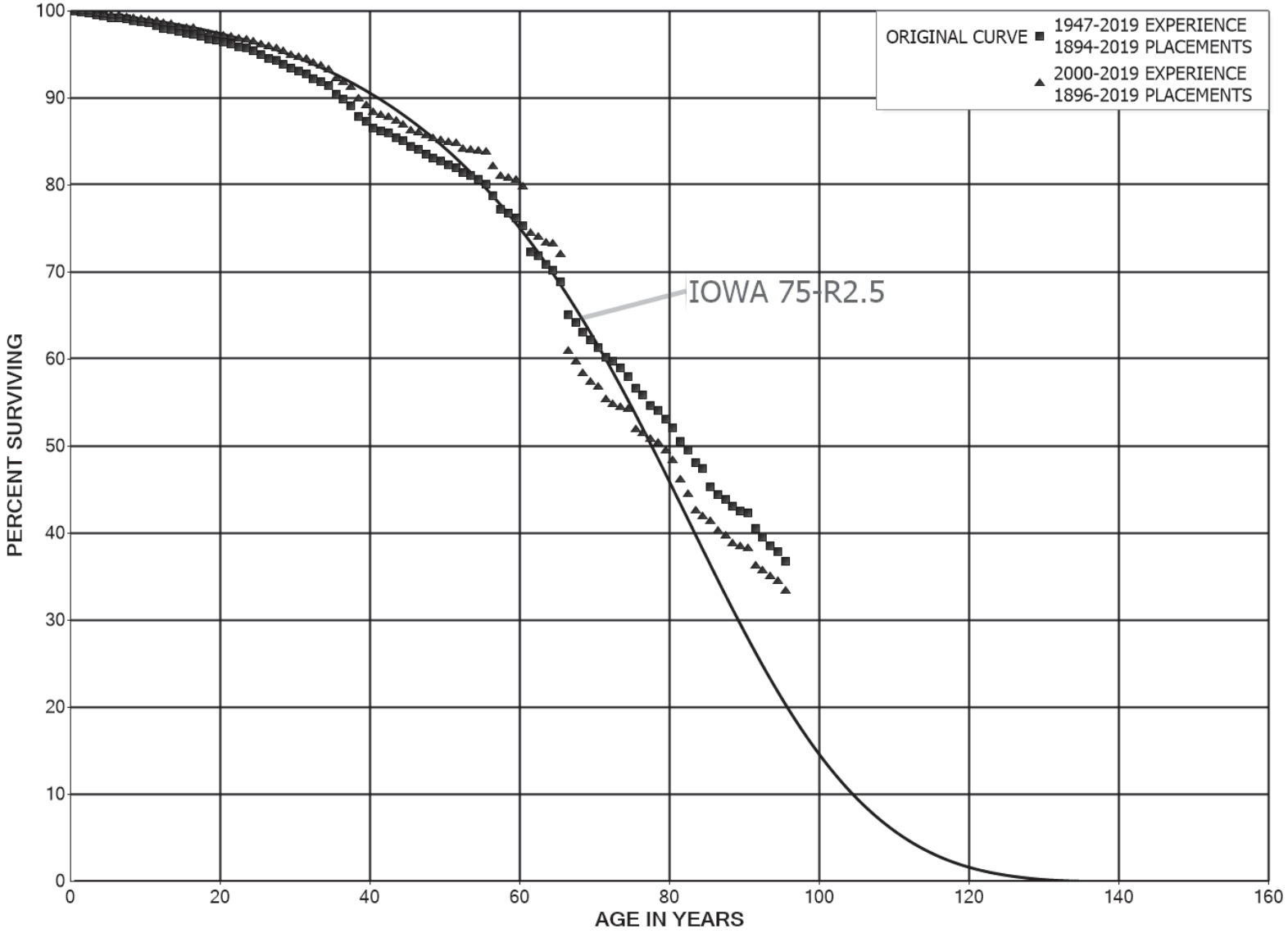
ACCOUNT 366.3 OTHER STRUCTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1918-2011 EXPERIENCE BAND 1975-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	13,063		0.0000	1.0000	30.87
40.5	13,063	100	0.0077	0.9923	30.87
41.5	12,963	100	0.0077	0.9923	30.63
42.5	12,863		0.0000	1.0000	30.39
43.5	12,863		0.0000	1.0000	30.39
44.5	12,863		0.0000	1.0000	30.39
45.5	12,863		0.0000	1.0000	30.39
46.5	12,863		0.0000	1.0000	30.39
47.5	12,863		0.0000	1.0000	30.39
48.5	12,863		0.0000	1.0000	30.39
49.5	12,863		0.0000	1.0000	30.39
50.5	12,863	1,000	0.0777	0.9223	30.39
51.5	11,863		0.0000	1.0000	28.03
52.5	11,443		0.0000	1.0000	28.03
53.5	948		0.0000	1.0000	28.03
54.5	948		0.0000	1.0000	28.03
55.5					28.03
56.5	4,780		0.0000		
57.5	4,780		0.0000		
58.5	4,780		0.0000		
59.5	4,780		0.0000		
60.5	4,780		0.0000		
61.5	2,431		0.0000		
62.5	2,431		0.0000		
63.5	2,431		0.0000		
64.5	2,431		0.0000		
65.5	2,431		0.0000		
66.5	2,431	2,431	1.0000		
67.5					

PEOPLES GAS COMPANY LLC
ACCOUNT 367 MAINS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 367 MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1894-2019 EXPERIENCE BAND 1947-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	90,217,706	24,159	0.0003	0.9997	100.00
0.5	86,920,654	139,005	0.0016	0.9984	99.97
1.5	86,470,420	57,352	0.0007	0.9993	99.81
2.5	83,108,301	181,338	0.0022	0.9978	99.75
3.5	81,822,567	138,110	0.0017	0.9983	99.53
4.5	79,626,231	105,588	0.0013	0.9987	99.36
5.5	74,229,032	62,844	0.0008	0.9992	99.23
6.5	70,790,522	86,165	0.0012	0.9988	99.15
7.5	68,454,963	100,461	0.0015	0.9985	99.03
8.5	65,605,682	112,984	0.0017	0.9983	98.88
9.5	62,031,093	59,712	0.0010	0.9990	98.71
10.5	60,869,994	194,468	0.0032	0.9968	98.61
11.5	59,118,592	181,658	0.0031	0.9969	98.30
12.5	56,218,085	101,938	0.0018	0.9982	98.00
13.5	52,995,037	108,786	0.0021	0.9979	97.82
14.5	50,127,291	118,820	0.0024	0.9976	97.62
15.5	47,919,871	29,380	0.0006	0.9994	97.39
16.5	45,960,952	149,434	0.0033	0.9967	97.33
17.5	44,520,152	139,281	0.0031	0.9969	97.01
18.5	42,881,502	63,744	0.0015	0.9985	96.71
19.5	41,305,454	73,766	0.0018	0.9982	96.56
20.5	39,877,483	104,069	0.0026	0.9974	96.39
21.5	39,444,904	110,623	0.0028	0.9972	96.14
22.5	38,087,035	67,041	0.0018	0.9982	95.87
23.5	37,054,188	109,258	0.0029	0.9971	95.70
24.5	36,083,377	171,051	0.0047	0.9953	95.42
25.5	34,825,286	159,189	0.0046	0.9954	94.97
26.5	33,203,286	86,145	0.0026	0.9974	94.53
27.5	32,111,654	144,233	0.0045	0.9955	94.29
28.5	30,728,876	155,221	0.0051	0.9949	93.86
29.5	25,602,520	97,270	0.0038	0.9962	93.39
30.5	24,009,144	77,004	0.0032	0.9968	93.04
31.5	23,540,336	143,093	0.0061	0.9939	92.74
32.5	20,807,595	83,725	0.0040	0.9960	92.17
33.5	19,622,786	86,620	0.0044	0.9956	91.80
34.5	18,593,537	209,862	0.0113	0.9887	91.40
35.5	15,651,831	97,565	0.0062	0.9938	90.37
36.5	14,817,635	117,991	0.0080	0.9920	89.80
37.5	14,397,602	193,772	0.0135	0.9865	89.09
38.5	13,615,838	91,585	0.0067	0.9933	87.89

PEOPLES GAS COMPANY LLC

ACCOUNT 367 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2019 EXPERIENCE BAND 1947-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	13,151,654	114,963	0.0087	0.9913	87.30
40.5	12,408,143	52,491	0.0042	0.9958	86.53
41.5	11,878,158	37,771	0.0032	0.9968	86.17
42.5	11,412,200	63,177	0.0055	0.9945	85.89
43.5	10,920,998	50,296	0.0046	0.9954	85.42
44.5	10,587,661	77,155	0.0073	0.9927	85.02
45.5	9,895,706	44,144	0.0045	0.9955	84.41
46.5	9,379,317	52,572	0.0056	0.9944	84.03
47.5	8,924,769	48,789	0.0055	0.9945	83.56
48.5	8,670,861	38,774	0.0045	0.9955	83.10
49.5	8,230,921	47,792	0.0058	0.9942	82.73
50.5	7,524,174	23,462	0.0031	0.9969	82.25
51.5	7,279,960	56,861	0.0078	0.9922	81.99
52.5	6,903,871	28,705	0.0042	0.9958	81.35
53.5	6,141,647	29,525	0.0048	0.9952	81.01
54.5	5,941,240	38,248	0.0064	0.9936	80.62
55.5	5,595,997	94,765	0.0169	0.9831	80.11
56.5	4,418,185	85,882	0.0194	0.9806	78.75
57.5	4,110,650	28,030	0.0068	0.9932	77.22
58.5	3,650,981	26,778	0.0073	0.9927	76.69
59.5	3,545,556	41,519	0.0117	0.9883	76.13
60.5	3,229,220	127,014	0.0393	0.9607	75.24
61.5	2,944,741	18,644	0.0063	0.9937	72.28
62.5	2,647,437	36,897	0.0139	0.9861	71.82
63.5	2,476,223	23,664	0.0096	0.9904	70.82
64.5	2,131,060	39,890	0.0187	0.9813	70.14
65.5	1,993,141	109,976	0.0552	0.9448	68.83
66.5	1,884,075	25,829	0.0137	0.9863	65.03
67.5	1,845,738	31,652	0.0171	0.9829	64.14
68.5	1,752,272	24,693	0.0141	0.9859	63.04
69.5	1,662,440	22,087	0.0133	0.9867	62.15
70.5	1,646,964	29,710	0.0180	0.9820	61.33
71.5	1,629,155	13,290	0.0082	0.9918	60.22
72.5	1,629,685	20,163	0.0124	0.9876	59.73
73.5	1,617,009	28,115	0.0174	0.9826	58.99
74.5	1,590,010	37,810	0.0238	0.9762	57.96
75.5	1,540,775	19,722	0.0128	0.9872	56.59
76.5	1,512,015	34,681	0.0229	0.9771	55.86
77.5	1,451,373	13,396	0.0092	0.9908	54.58
78.5	1,403,088	26,201	0.0187	0.9813	54.08

PEOPLES GAS COMPANY LLC

ACCOUNT 367 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2019 EXPERIENCE BAND 1947-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	1,371,944	26,662	0.0194	0.9806	53.07
80.5	1,288,920	36,795	0.0285	0.9715	52.04
81.5	1,217,588	25,449	0.0209	0.9791	50.55
82.5	1,149,840	32,513	0.0283	0.9717	49.49
83.5	1,067,485	14,595	0.0137	0.9863	48.09
84.5	1,002,235	45,489	0.0454	0.9546	47.44
85.5	952,281	18,206	0.0191	0.9809	45.28
86.5	937,135	13,408	0.0143	0.9857	44.42
87.5	905,338	14,780	0.0163	0.9837	43.78
88.5	886,276	11,664	0.0132	0.9868	43.07
89.5	873,703	4,527	0.0052	0.9948	42.50
90.5	851,233	35,487	0.0417	0.9583	42.28
91.5	786,318	20,434	0.0260	0.9740	40.52
92.5	698,311	17,517	0.0251	0.9749	39.46
93.5	542,691	8,916	0.0164	0.9836	38.47
94.5	428,168	12,716	0.0297	0.9703	37.84
95.5	372,153	9,744	0.0262	0.9738	36.72
96.5	351,710	6,804	0.0193	0.9807	35.76
97.5	344,906	18,765	0.0544	0.9456	35.07
98.5	325,988	4,658	0.0143	0.9857	33.16
99.5	321,296	5,610	0.0175	0.9825	32.68
100.5	308,006	6,882	0.0223	0.9777	32.11
101.5	301,041	8,795	0.0292	0.9708	31.40
102.5	261,727	9,353	0.0357	0.9643	30.48
103.5	231,007	7,554	0.0327	0.9673	29.39
104.5	196,509	5,762	0.0293	0.9707	28.43
105.5	149,600	1,147	0.0077	0.9923	27.59
106.5	145,030	4,357	0.0300	0.9700	27.38
107.5	123,026	1,038	0.0084	0.9916	26.56
108.5	105,106	3,278	0.0312	0.9688	26.34
109.5	101,480	4,439	0.0437	0.9563	25.52
110.5	77,105	2,323	0.0301	0.9699	24.40
111.5	60,366	622	0.0103	0.9897	23.66
112.5	53,638		0.0000	1.0000	23.42
113.5	35,962		0.0000	1.0000	23.42
114.5	6,816		0.0000	1.0000	23.42
115.5	6,494	1,655	0.2548	0.7452	23.42
116.5	4,839	24	0.0050	0.9950	17.45
117.5	4,815	3,075	0.6386	0.3614	17.36
118.5	1,689		0.0000	1.0000	6.28

PEOPLES GAS COMPANY LLC

ACCOUNT 367 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2019 EXPERIENCE BAND 1947-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	1,528	1,174	0.7680	0.2320	6.28
120.5	355		0.0000	1.0000	1.46
121.5	355		0.0000	1.0000	1.46
122.5	355		0.0000	1.0000	1.46
123.5					1.46

PEOPLES GAS COMPANY LLC

ACCOUNT 367 MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1896-2019 EXPERIENCE BAND 2000-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	44,120,212	12,350	0.0003	0.9997	100.00
0.5	42,446,734	57,809	0.0014	0.9986	99.97
1.5	43,535,663	6,522	0.0001	0.9999	99.84
2.5	41,712,890	91,941	0.0022	0.9978	99.82
3.5	41,655,135	25,299	0.0006	0.9994	99.60
4.5	41,027,428	58,707	0.0014	0.9986	99.54
5.5	37,027,882	10,602	0.0003	0.9997	99.40
6.5	35,116,693	57,406	0.0016	0.9984	99.37
7.5	33,276,005	52,597	0.0016	0.9984	99.21
8.5	31,783,601	33,465	0.0011	0.9989	99.05
9.5	34,523,140	19,841	0.0006	0.9994	98.95
10.5	35,358,578	75,437	0.0021	0.9979	98.89
11.5	33,883,293	69,960	0.0021	0.9979	98.68
12.5	33,837,466	27,758	0.0008	0.9992	98.47
13.5	32,259,934	92,138	0.0029	0.9971	98.39
14.5	30,740,054	60,714	0.0020	0.9980	98.11
15.5	31,612,461	8,009	0.0003	0.9997	97.92
16.5	30,445,984	131,970	0.0043	0.9957	97.89
17.5	30,018,569	52,945	0.0018	0.9982	97.47
18.5	29,114,590	24,447	0.0008	0.9992	97.30
19.5	28,088,686	37,977	0.0014	0.9986	97.22
20.5	27,220,532	37,368	0.0014	0.9986	97.08
21.5	26,677,747	67,756	0.0025	0.9975	96.95
22.5	25,515,383	14,445	0.0006	0.9994	96.71
23.5	24,956,960	51,784	0.0021	0.9979	96.65
24.5	24,330,891	98,388	0.0040	0.9960	96.45
25.5	24,027,078	65,335	0.0027	0.9973	96.06
26.5	23,129,164	32,178	0.0014	0.9986	95.80
27.5	22,806,793	94,093	0.0041	0.9959	95.67
28.5	21,774,906	96,905	0.0045	0.9955	95.27
29.5	17,327,423	48,388	0.0028	0.9972	94.85
30.5	16,535,194	39,440	0.0024	0.9976	94.58
31.5	16,430,788	70,650	0.0043	0.9957	94.36
32.5	14,071,503	48,300	0.0034	0.9966	93.95
33.5	13,516,460	59,354	0.0044	0.9956	93.63
34.5	12,647,796	139,083	0.0110	0.9890	93.22
35.5	10,176,737	51,888	0.0051	0.9949	92.19
36.5	10,542,095	57,164	0.0054	0.9946	91.72
37.5	10,035,821	157,270	0.0157	0.9843	91.22
38.5	9,740,143	75,568	0.0078	0.9922	89.79

PEOPLES GAS COMPANY LLC

ACCOUNT 367 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1896-2019 EXPERIENCE BAND 2000-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	9,367,711	89,561	0.0096	0.9904	89.10
40.5	8,843,018	28,013	0.0032	0.9968	88.25
41.5	8,426,144	22,849	0.0027	0.9973	87.97
42.5	8,236,446	43,448	0.0053	0.9947	87.73
43.5	7,920,227	35,829	0.0045	0.9955	87.27
44.5	7,926,567	60,654	0.0077	0.9923	86.87
45.5	7,345,766	23,069	0.0031	0.9969	86.21
46.5	6,838,995	23,795	0.0035	0.9965	85.94
47.5	6,437,311	24,429	0.0038	0.9962	85.64
48.5	6,311,942	18,429	0.0029	0.9971	85.31
49.5	6,219,511	18,795	0.0030	0.9970	85.06
50.5	5,536,207	5,658	0.0010	0.9990	84.81
51.5	5,304,709	38,126	0.0072	0.9928	84.72
52.5	4,919,804	7,132	0.0014	0.9986	84.11
53.5	4,175,525	6,102	0.0015	0.9985	83.99
54.5	3,983,515	5,461	0.0014	0.9986	83.86
55.5	3,680,931	72,894	0.0198	0.9802	83.75
56.5	2,533,610	36,926	0.0146	0.9854	82.09
57.5	2,302,392	6,345	0.0028	0.9972	80.89
58.5	1,895,261	4,307	0.0023	0.9977	80.67
59.5	1,819,402	16,161	0.0089	0.9911	80.49
60.5	1,599,554	108,198	0.0676	0.9324	79.77
61.5	1,363,338	7,668	0.0056	0.9944	74.38
62.5	1,124,264	10,267	0.0091	0.9909	73.96
63.5	1,008,662	1,928	0.0019	0.9981	73.28
64.5	735,777	11,828	0.0161	0.9839	73.14
65.5	626,307	97,043	0.1549	0.8451	71.97
66.5	522,948	9,998	0.0191	0.9809	60.82
67.5	499,897	11,910	0.0238	0.9762	59.65
68.5	416,930	6,706	0.0161	0.9839	58.23
69.5	346,029	3,414	0.0099	0.9901	57.30
70.5	355,739	9,098	0.0256	0.9744	56.73
71.5	351,602	3,364	0.0096	0.9904	55.28
72.5	383,078	2,113	0.0055	0.9945	54.75
73.5	525,071	2,977	0.0057	0.9943	54.45
74.5	659,657	27,558	0.0418	0.9582	54.14
75.5	717,149	6,557	0.0091	0.9909	51.88
76.5	711,566	9,359	0.0132	0.9868	51.40
77.5	702,050	5,417	0.0077	0.9923	50.73
78.5	677,162	12,223	0.0180	0.9820	50.34

PEOPLES GAS COMPANY LLC

ACCOUNT 367 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1896-2019 EXPERIENCE BAND 2000-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	659,294	15,319	0.0232	0.9768	49.43
80.5	600,222	27,992	0.0466	0.9534	48.28
81.5	543,932	18,659	0.0343	0.9657	46.03
82.5	520,019	23,064	0.0444	0.9556	44.45
83.5	490,626	6,902	0.0141	0.9859	42.48
84.5	484,732	7,516	0.0155	0.9845	41.88
85.5	532,135	13,317	0.0250	0.9750	41.23
86.5	560,510	7,526	0.0134	0.9866	40.20
87.5	583,143	13,385	0.0230	0.9770	39.66
88.5	585,238	5,926	0.0101	0.9899	38.75
89.5	578,681	3,334	0.0058	0.9942	38.36
90.5	577,526	29,336	0.0508	0.9492	38.14
91.5	559,139	8,656	0.0155	0.9845	36.20
92.5	525,765	10,989	0.0209	0.9791	35.64
93.5	417,744	6,061	0.0145	0.9855	34.89
94.5	388,315	12,716	0.0327	0.9673	34.39
95.5	337,927	9,196	0.0272	0.9728	33.26
96.5	327,740	6,804	0.0208	0.9792	32.36
97.5	320,936	17,738	0.0553	0.9447	31.68
98.5	303,354	4,658	0.0154	0.9846	29.93
99.5	298,886	4,479	0.0150	0.9850	29.47
100.5	288,622	6,882	0.0238	0.9762	29.03
101.5	281,657	8,724	0.0310	0.9690	28.34
102.5	246,102	7,572	0.0308	0.9692	27.46
103.5	231,007	7,554	0.0327	0.9673	26.62
104.5	196,509	5,762	0.0293	0.9707	25.75
105.5	149,600	1,147	0.0077	0.9923	24.99
106.5	145,030	4,357	0.0300	0.9700	24.80
107.5	123,026	1,038	0.0084	0.9916	24.05
108.5	105,106	3,278	0.0312	0.9688	23.85
109.5	101,480	4,439	0.0437	0.9563	23.11
110.5	77,105	2,323	0.0301	0.9699	22.10
111.5	60,366	622	0.0103	0.9897	21.43
112.5	53,638		0.0000	1.0000	21.21
113.5	35,962		0.0000	1.0000	21.21
114.5	6,816		0.0000	1.0000	21.21
115.5	6,494	1,655	0.2548	0.7452	21.21
116.5	4,839	24	0.0050	0.9950	15.81
117.5	4,815	3,075	0.6386	0.3614	15.73
118.5	1,689		0.0000	1.0000	5.68

PEOPLES GAS COMPANY LLC

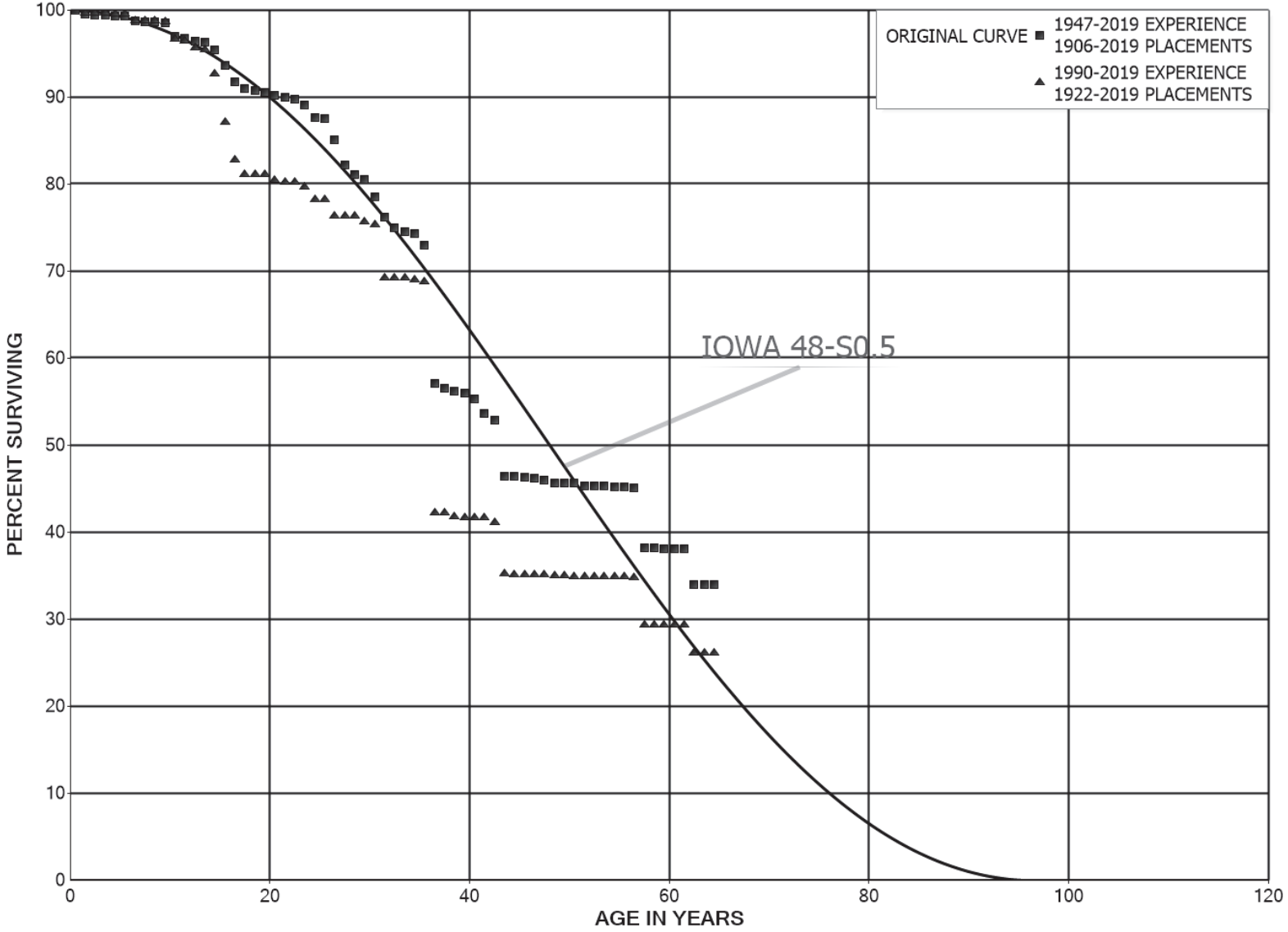
ACCOUNT 367 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1896-2019 EXPERIENCE BAND 2000-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	1,528	1,174	0.7680	0.2320	5.68
120.5	355		0.0000	1.0000	1.32
121.5	355		0.0000	1.0000	1.32
122.5	355		0.0000	1.0000	1.32
123.5					1.32

PEOPLES GAS COMPANY LLC
ACCOUNT 368 COMPRESSOR STATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 368 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1906-2019 EXPERIENCE BAND 1947-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	4,703,318		0.0000	1.0000	100.00
0.5	4,689,868	23,438	0.0050	0.9950	100.00
1.5	4,637,312	7,385	0.0016	0.9984	99.50
2.5	4,570,847		0.0000	1.0000	99.34
3.5	4,481,957	2,859	0.0006	0.9994	99.34
4.5	5,887,801	2,282	0.0004	0.9996	99.28
5.5	4,238,436	24,013	0.0057	0.9943	99.24
6.5	4,119,878	2,084	0.0005	0.9995	98.68
7.5	4,027,743		0.0000	1.0000	98.63
8.5	4,032,646	5,427	0.0013	0.9987	98.63
9.5	4,040,487	65,754	0.0163	0.9837	98.50
10.5	2,543,984	3,456	0.0014	0.9986	96.89
11.5	1,213,147	4,797	0.0040	0.9960	96.76
12.5	1,207,410	783	0.0006	0.9994	96.38
13.5	1,182,381	11,593	0.0098	0.9902	96.32
14.5	1,148,136	21,306	0.0186	0.9814	95.37
15.5	1,125,677	22,651	0.0201	0.9799	93.60
16.5	1,104,065	9,627	0.0087	0.9913	91.72
17.5	1,050,922	1,916	0.0018	0.9982	90.92
18.5	1,049,248	3,196	0.0030	0.9970	90.75
19.5	1,041,101	3,880	0.0037	0.9963	90.48
20.5	1,069,732	2,717	0.0025	0.9975	90.14
21.5	1,035,796	1,701	0.0016	0.9984	89.91
22.5	956,484	7,084	0.0074	0.9926	89.76
23.5	935,310	15,588	0.0167	0.9833	89.10
24.5	934,820	1,043	0.0011	0.9989	87.61
25.5	923,405	25,316	0.0274	0.9726	87.51
26.5	821,626	27,990	0.0341	0.9659	85.12
27.5	659,276	9,113	0.0138	0.9862	82.22
28.5	642,323	4,173	0.0065	0.9935	81.08
29.5	615,788	16,072	0.0261	0.9739	80.55
30.5	605,478	17,797	0.0294	0.9706	78.45
31.5	595,125	9,025	0.0152	0.9848	76.14
32.5	573,220	4,018	0.0070	0.9930	74.99
33.5	571,406	1,151	0.0020	0.9980	74.46
34.5	689,223	12,919	0.0187	0.9813	74.31
35.5	676,402	146,863	0.2171	0.7829	72.92
36.5	511,887	5,346	0.0104	0.9896	57.09
37.5	497,718	2,854	0.0057	0.9943	56.49
38.5	472,884	2,087	0.0044	0.9956	56.17

PEOPLES GAS COMPANY LLC

ACCOUNT 368 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1906-2019 EXPERIENCE BAND 1947-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	470,739	5,461	0.0116	0.9884	55.92
40.5	429,739	12,945	0.0301	0.9699	55.27
41.5	369,247	5,318	0.0144	0.9856	53.61
42.5	331,792	40,140	0.1210	0.8790	52.83
43.5	209,827	391	0.0019	0.9981	46.44
44.5	194,655	301	0.0015	0.9985	46.36
45.5	195,646	258	0.0013	0.9987	46.28
46.5	193,919	1,344	0.0069	0.9931	46.22
47.5	166,920	914	0.0055	0.9945	45.90
48.5	190,145	37	0.0002	0.9998	45.65
49.5	225,821	61	0.0003	0.9997	45.64
50.5	214,560	1,647	0.0077	0.9923	45.63
51.5	201,854		0.0000	1.0000	45.28
52.5	201,854		0.0000	1.0000	45.28
53.5	201,943	400	0.0020	0.9980	45.28
54.5	200,117	75	0.0004	0.9996	45.19
55.5	157,976	200	0.0013	0.9987	45.17
56.5	153,818	23,733	0.1543	0.8457	45.12
57.5	130,883	85	0.0006	0.9994	38.15
58.5	129,854	61	0.0005	0.9995	38.13
59.5	105,856	133	0.0013	0.9987	38.11
60.5	104,147	24	0.0002	0.9998	38.06
61.5	103,881	11,060	0.1065	0.8935	38.06
62.5	92,372		0.0000	1.0000	34.00
63.5	91,585		0.0000	1.0000	34.00
64.5	44,438		0.0000	1.0000	34.00
65.5	30,984		0.0000	1.0000	34.00
66.5	30,984	180	0.0058	0.9942	34.00
67.5	5,817	754	0.1297	0.8703	33.81
68.5	5,062		0.0000	1.0000	29.42
69.5	3,668		0.0000	1.0000	29.42
70.5	1,670	327	0.1960	0.8040	29.42
71.5	1,343	85	0.0631	0.9369	23.66
72.5	1,258		0.0000	1.0000	22.16
73.5	1,258		0.0000	1.0000	22.16
74.5	1,057		0.0000	1.0000	22.16
75.5	1,057		0.0000	1.0000	22.16
76.5	1,057		0.0000	1.0000	22.16
77.5	968		0.0000	1.0000	22.16
78.5	968	170	0.1756	0.8244	22.16

PEOPLES GAS COMPANY LLC

ACCOUNT 368 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1906-2019 EXPERIENCE BAND 1947-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	798		0.0000	1.0000	18.27
80.5	798		0.0000	1.0000	18.27
81.5	124		0.0000	1.0000	18.27
82.5	124		0.0000	1.0000	18.27
83.5					18.27

PEOPLES GAS COMPANY LLC

ACCOUNT 368 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1922-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	3,627,205		0.0000	1.0000	100.00
0.5	3,684,289	15,566	0.0042	0.9958	100.00
1.5	3,631,695		0.0000	1.0000	99.58
2.5	3,586,417		0.0000	1.0000	99.58
3.5	3,520,402	2,859	0.0008	0.9992	99.58
4.5	4,966,661	1,699	0.0003	0.9997	99.50
5.5	3,331,195	23,115	0.0069	0.9931	99.46
6.5	3,282,265	1,578	0.0005	0.9995	98.77
7.5	3,233,703		0.0000	1.0000	98.72
8.5	3,263,803	4,954	0.0015	0.9985	98.72
9.5	3,242,901	64,959	0.0200	0.9800	98.58
10.5	1,744,196	3,456	0.0020	0.9980	96.60
11.5	410,598	3,385	0.0082	0.9918	96.41
12.5	412,687	783	0.0019	0.9981	95.61
13.5	388,072	11,593	0.0299	0.9701	95.43
14.5	355,556	21,151	0.0595	0.9405	92.58
15.5	414,038	20,802	0.0502	0.9498	87.07
16.5	389,749	7,929	0.0203	0.9797	82.70
17.5	338,448		0.0000	1.0000	81.02
18.5	338,615		0.0000	1.0000	81.02
19.5	372,555	3,051	0.0082	0.9918	81.02
20.5	494,832	1,000	0.0020	0.9980	80.35
21.5	460,944	200	0.0004	0.9996	80.19
22.5	372,751	2,363	0.0063	0.9937	80.16
23.5	352,038	6,316	0.0179	0.9821	79.65
24.5	341,010	50	0.0001	0.9999	78.22
25.5	375,771	9,010	0.0240	0.9760	78.21
26.5	293,081	200	0.0007	0.9993	76.33
27.5	179,087		0.0000	1.0000	76.28
28.5	163,535	1,368	0.0084	0.9916	76.28
29.5	130,100	643	0.0049	0.9951	75.64
30.5	147,944	11,990	0.0810	0.9190	75.27
31.5	139,353		0.0000	1.0000	69.17
32.5	126,096		0.0000	1.0000	69.17
33.5	159,366	442	0.0028	0.9972	69.17
34.5	320,032	1,034	0.0032	0.9968	68.98
35.5	355,722	137,609	0.3868	0.6132	68.75
36.5	283,910	100	0.0004	0.9996	42.16
37.5	314,774	2,854	0.0091	0.9909	42.14
38.5	289,939	700	0.0024	0.9976	41.76

PEOPLES GAS COMPANY LLC

ACCOUNT 368 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1922-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	290,650	100	0.0003	0.9997	41.66
40.5	280,854	247	0.0009	0.9991	41.64
41.5	259,330	3,461	0.0133	0.9867	41.61
42.5	257,844	36,762	0.1426	0.8574	41.05
43.5	161,516	391	0.0024	0.9976	35.20
44.5	157,405		0.0000	1.0000	35.11
45.5	158,696		0.0000	1.0000	35.11
46.5	157,228		0.0000	1.0000	35.11
47.5	133,081	847	0.0064	0.9936	35.11
48.5	156,405		0.0000	1.0000	34.89
49.5	192,607	61	0.0003	0.9997	34.89
50.5	181,346		0.0000	1.0000	34.88
51.5	171,107		0.0000	1.0000	34.88
52.5	196,844		0.0000	1.0000	34.88
53.5	197,087	400	0.0020	0.9980	34.88
54.5	195,474		0.0000	1.0000	34.81
55.5	153,799	200	0.0013	0.9987	34.81
56.5	149,641	23,459	0.1568	0.8432	34.76
57.5	126,980		0.0000	1.0000	29.31
58.5	126,036		0.0000	1.0000	29.31
59.5	102,157	58	0.0006	0.9994	29.31
60.5	100,523		0.0000	1.0000	29.30
61.5	100,280	11,060	0.1103	0.8897	29.30
62.5	88,772		0.0000	1.0000	26.07
63.5	89,983		0.0000	1.0000	26.07
64.5	42,836		0.0000	1.0000	26.07
65.5	29,382		0.0000	1.0000	26.07
66.5	29,474	91	0.0031	0.9969	26.07
67.5	5,311	716	0.1348	0.8652	25.99
68.5	4,595		0.0000	1.0000	22.48
69.5	3,201		0.0000	1.0000	22.48
70.5	1,203	30	0.0250	0.9750	22.48
71.5	1,173	85	0.0722	0.9278	21.92
72.5	1,088		0.0000	1.0000	20.34
73.5	1,088		0.0000	1.0000	20.34
74.5	887		0.0000	1.0000	20.34
75.5	887		0.0000	1.0000	20.34
76.5	887		0.0000	1.0000	20.34
77.5	798		0.0000	1.0000	20.34
78.5	798		0.0000	1.0000	20.34

PEOPLES GAS COMPANY LLC

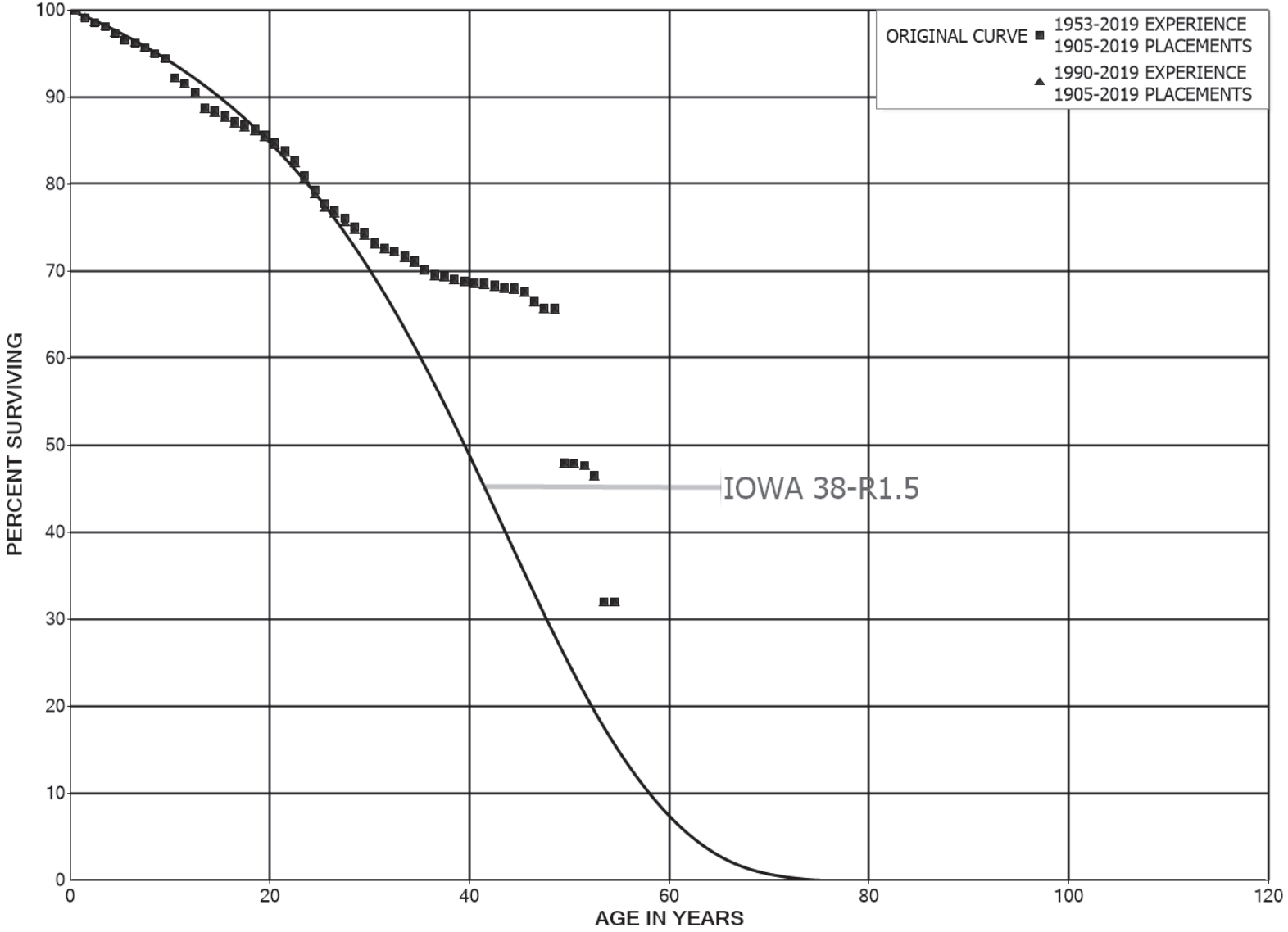
ACCOUNT 368 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1922-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	798		0.0000	1.0000	20.34
80.5	798		0.0000	1.0000	20.34
81.5	124		0.0000	1.0000	20.34
82.5	124		0.0000	1.0000	20.34
83.5					20.34

PEOPLES GAS COMPANY LLC
ACCOUNT 369 MEASURING AND REGULATING STATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 369 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1905-2019 EXPERIENCE BAND 1953-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	8,789,368	3,228	0.0004	0.9996	100.00
0.5	8,812,857	77,098	0.0087	0.9913	99.96
1.5	8,585,412	49,786	0.0058	0.9942	99.09
2.5	8,408,637	35,759	0.0043	0.9957	98.51
3.5	8,105,442	70,945	0.0088	0.9912	98.10
4.5	7,489,933	53,011	0.0071	0.9929	97.24
5.5	7,291,644	24,135	0.0033	0.9967	96.55
6.5	6,777,672	41,350	0.0061	0.9939	96.23
7.5	6,348,965	43,799	0.0069	0.9931	95.64
8.5	5,821,618	33,948	0.0058	0.9942	94.98
9.5	4,847,414	115,655	0.0239	0.9761	94.43
10.5	4,245,375	29,786	0.0070	0.9930	92.18
11.5	3,772,518	42,917	0.0114	0.9886	91.53
12.5	3,377,684	64,060	0.0190	0.9810	90.49
13.5	3,124,780	14,514	0.0046	0.9954	88.77
14.5	2,987,402	16,745	0.0056	0.9944	88.36
15.5	2,758,177	20,165	0.0073	0.9927	87.86
16.5	2,642,967	13,194	0.0050	0.9950	87.22
17.5	2,476,514	13,701	0.0055	0.9945	86.79
18.5	2,418,494	20,161	0.0083	0.9917	86.31
19.5	2,267,847	22,199	0.0098	0.9902	85.59
20.5	2,115,669	22,150	0.0105	0.9895	84.75
21.5	1,649,670	22,822	0.0138	0.9862	83.86
22.5	1,188,754	25,011	0.0210	0.9790	82.70
23.5	1,109,820	22,829	0.0206	0.9794	80.96
24.5	1,009,247	20,544	0.0204	0.9796	79.30
25.5	904,830	8,069	0.0089	0.9911	77.68
26.5	960,366	11,797	0.0123	0.9877	76.99
27.5	958,056	12,809	0.0134	0.9866	76.04
28.5	907,797	7,794	0.0086	0.9914	75.03
29.5	867,491	12,364	0.0143	0.9857	74.38
30.5	852,917	7,764	0.0091	0.9909	73.32
31.5	821,007	3,795	0.0046	0.9954	72.65
32.5	753,951	6,110	0.0081	0.9919	72.32
33.5	697,701	5,872	0.0084	0.9916	71.73
34.5	598,022	7,637	0.0128	0.9872	71.13
35.5	522,704	4,545	0.0087	0.9913	70.22
36.5	490,941	1,357	0.0028	0.9972	69.61
37.5	448,643	1,953	0.0044	0.9956	69.42
38.5	377,874	1,308	0.0035	0.9965	69.12

PEOPLES GAS COMPANY LLC

ACCOUNT 369 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1905-2019 EXPERIENCE BAND 1953-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	181,116	544	0.0030	0.9970	68.88
40.5	105,258	116	0.0011	0.9989	68.67
41.5	93,985	346	0.0037	0.9963	68.59
42.5	88,095	323	0.0037	0.9963	68.34
43.5	80,542	68	0.0008	0.9992	68.09
44.5	98,209	566	0.0058	0.9942	68.03
45.5	85,371	1,381	0.0162	0.9838	67.64
46.5	79,120	974	0.0123	0.9877	66.55
47.5	72,459	56	0.0008	0.9992	65.73
48.5	84,948	22,991	0.2706	0.7294	65.68
49.5	56,531	16	0.0003	0.9997	47.90
50.5	55,655	284	0.0051	0.9949	47.89
51.5	51,193	1,257	0.0246	0.9754	47.64
52.5	46,833	14,684	0.3135	0.6865	46.47
53.5	22,050		0.0000	1.0000	31.90
54.5	21,196	149	0.0070	0.9930	31.90
55.5	24,177		0.0000	1.0000	31.68
56.5	24,177		0.0000	1.0000	31.68
57.5	23,615	34	0.0015	0.9985	31.68
58.5	24,470		0.0000	1.0000	31.63
59.5	24,555		0.0000	1.0000	31.63
60.5	26,250		0.0000	1.0000	31.63
61.5	24,441		0.0000	1.0000	31.63
62.5	24,103		0.0000	1.0000	31.63
63.5	24,103	67	0.0028	0.9972	31.63
64.5	24,200	2,010	0.0831	0.9169	31.55
65.5	11,521	192	0.0167	0.9833	28.92
66.5	11,695		0.0000	1.0000	28.44
67.5	11,502		0.0000	1.0000	28.44
68.5	11,526		0.0000	1.0000	28.44
69.5	11,561		0.0000	1.0000	28.44
70.5	7,391		0.0000	1.0000	28.44
71.5	7,391		0.0000	1.0000	28.44
72.5	7,394		0.0000	1.0000	28.44
73.5	7,258		0.0000	1.0000	28.44
74.5	7,249		0.0000	1.0000	28.44
75.5	7,368		0.0000	1.0000	28.44
76.5	7,076		0.0000	1.0000	28.44
77.5	6,425		0.0000	1.0000	28.44
78.5	6,347		0.0000	1.0000	28.44

PEOPLES GAS COMPANY LLC

ACCOUNT 369 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1905-2019 EXPERIENCE BAND 1953-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	5,004		0.0000	1.0000	28.44
80.5	5,004		0.0000	1.0000	28.44
81.5	5,004		0.0000	1.0000	28.44
82.5	3,741		0.0000	1.0000	28.44
83.5	2,770		0.0000	1.0000	28.44
84.5	1,228		0.0000	1.0000	28.44
85.5	1,185		0.0000	1.0000	28.44
86.5	1,185		0.0000	1.0000	28.44
87.5	1,185		0.0000	1.0000	28.44
88.5	931		0.0000	1.0000	28.44
89.5	733		0.0000	1.0000	28.44
90.5	495		0.0000	1.0000	28.44
91.5	476		0.0000	1.0000	28.44
92.5	452		0.0000	1.0000	28.44
93.5	317		0.0000	1.0000	28.44
94.5	309		0.0000	1.0000	28.44
95.5	309		0.0000	1.0000	28.44
96.5	309		0.0000	1.0000	28.44
97.5	309		0.0000	1.0000	28.44
98.5	309		0.0000	1.0000	28.44
99.5	190		0.0000	1.0000	28.44
100.5	163		0.0000	1.0000	28.44
101.5	156		0.0000	1.0000	28.44
102.5	140		0.0000	1.0000	28.44
103.5	127		0.0000	1.0000	28.44
104.5	127		0.0000	1.0000	28.44
105.5	127		0.0000	1.0000	28.44
106.5	127		0.0000	1.0000	28.44
107.5	127		0.0000	1.0000	28.44
108.5	127		0.0000	1.0000	28.44
109.5	127		0.0000	1.0000	28.44
110.5	127		0.0000	1.0000	28.44
111.5	127		0.0000	1.0000	28.44
112.5	127		0.0000	1.0000	28.44
113.5	127		0.0000	1.0000	28.44
114.5					28.44

PEOPLES GAS COMPANY LLC

ACCOUNT 369 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1905-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	7,637,194	2,959	0.0004	0.9996	100.00
0.5	7,751,183	71,765	0.0093	0.9907	99.96
1.5	7,652,383	47,936	0.0063	0.9937	99.04
2.5	7,817,944	33,496	0.0043	0.9957	98.42
3.5	7,595,486	66,356	0.0087	0.9913	97.99
4.5	7,080,549	52,852	0.0075	0.9925	97.14
5.5	6,966,132	23,988	0.0034	0.9966	96.41
6.5	6,519,666	41,126	0.0063	0.9937	96.08
7.5	6,123,989	43,585	0.0071	0.9929	95.47
8.5	5,597,648	33,334	0.0060	0.9940	94.79
9.5	4,633,674	114,522	0.0247	0.9753	94.23
10.5	4,037,056	28,632	0.0071	0.9929	91.90
11.5	3,541,622	41,720	0.0118	0.9882	91.25
12.5	3,151,097	63,548	0.0202	0.9798	90.17
13.5	2,924,260	13,853	0.0047	0.9953	88.36
14.5	2,865,347	16,227	0.0057	0.9943	87.94
15.5	2,637,438	19,988	0.0076	0.9924	87.44
16.5	2,529,909	12,779	0.0051	0.9949	86.78
17.5	2,368,336	13,701	0.0058	0.9942	86.34
18.5	2,315,067	19,276	0.0083	0.9917	85.84
19.5	2,184,502	21,851	0.0100	0.9900	85.12
20.5	2,039,255	21,978	0.0108	0.9892	84.27
21.5	1,585,602	22,496	0.0142	0.9858	83.36
22.5	1,139,064	25,011	0.0220	0.9780	82.18
23.5	1,070,038	22,829	0.0213	0.9787	80.38
24.5	979,067	20,544	0.0210	0.9790	78.66
25.5	875,445	7,415	0.0085	0.9915	77.01
26.5	954,425	11,797	0.0124	0.9876	76.36
27.5	952,439	11,670	0.0123	0.9877	75.42
28.5	903,419	7,794	0.0086	0.9914	74.49
29.5	863,447	11,990	0.0139	0.9861	73.85
30.5	847,607	6,643	0.0078	0.9922	72.82
31.5	818,208	3,795	0.0046	0.9954	72.25
32.5	751,621	6,110	0.0081	0.9919	71.92
33.5	694,868	5,872	0.0085	0.9915	71.33
34.5	595,802	7,635	0.0128	0.9872	70.73
35.5	522,275	4,545	0.0087	0.9913	69.82
36.5	490,482	1,349	0.0027	0.9973	69.22
37.5	447,546	1,953	0.0044	0.9956	69.03
38.5	377,016	1,308	0.0035	0.9965	68.72

PEOPLES GAS COMPANY LLC

ACCOUNT 369 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1905-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	181,116	544	0.0030	0.9970	68.49
40.5	105,258	116	0.0011	0.9989	68.28
41.5	93,985	346	0.0037	0.9963	68.21
42.5	88,095	323	0.0037	0.9963	67.95
43.5	80,542	68	0.0008	0.9992	67.71
44.5	98,209	566	0.0058	0.9942	67.65
45.5	85,371	1,381	0.0162	0.9838	67.26
46.5	79,120	974	0.0123	0.9877	66.17
47.5	72,459	56	0.0008	0.9992	65.36
48.5	84,948	22,991	0.2706	0.7294	65.31
49.5	56,531	16	0.0003	0.9997	47.63
50.5	55,655	284	0.0051	0.9949	47.62
51.5	51,193	1,257	0.0246	0.9754	47.37
52.5	46,833	14,684	0.3135	0.6865	46.21
53.5	22,050		0.0000	1.0000	31.72
54.5	21,196	149	0.0070	0.9930	31.72
55.5	24,177		0.0000	1.0000	31.50
56.5	24,177		0.0000	1.0000	31.50
57.5	23,615	34	0.0015	0.9985	31.50
58.5	24,470		0.0000	1.0000	31.45
59.5	24,555		0.0000	1.0000	31.45
60.5	26,250		0.0000	1.0000	31.45
61.5	24,441		0.0000	1.0000	31.45
62.5	24,103		0.0000	1.0000	31.45
63.5	24,103	67	0.0028	0.9972	31.45
64.5	24,200	2,010	0.0831	0.9169	31.37
65.5	11,521	192	0.0167	0.9833	28.76
66.5	11,695		0.0000	1.0000	28.28
67.5	11,502		0.0000	1.0000	28.28
68.5	11,526		0.0000	1.0000	28.28
69.5	11,561		0.0000	1.0000	28.28
70.5	7,391		0.0000	1.0000	28.28
71.5	7,391		0.0000	1.0000	28.28
72.5	7,391		0.0000	1.0000	28.28
73.5	7,258		0.0000	1.0000	28.28
74.5	7,249		0.0000	1.0000	28.28
75.5	7,368		0.0000	1.0000	28.28
76.5	7,076		0.0000	1.0000	28.28
77.5	6,425		0.0000	1.0000	28.28
78.5	6,347		0.0000	1.0000	28.28

PEOPLES GAS COMPANY LLC

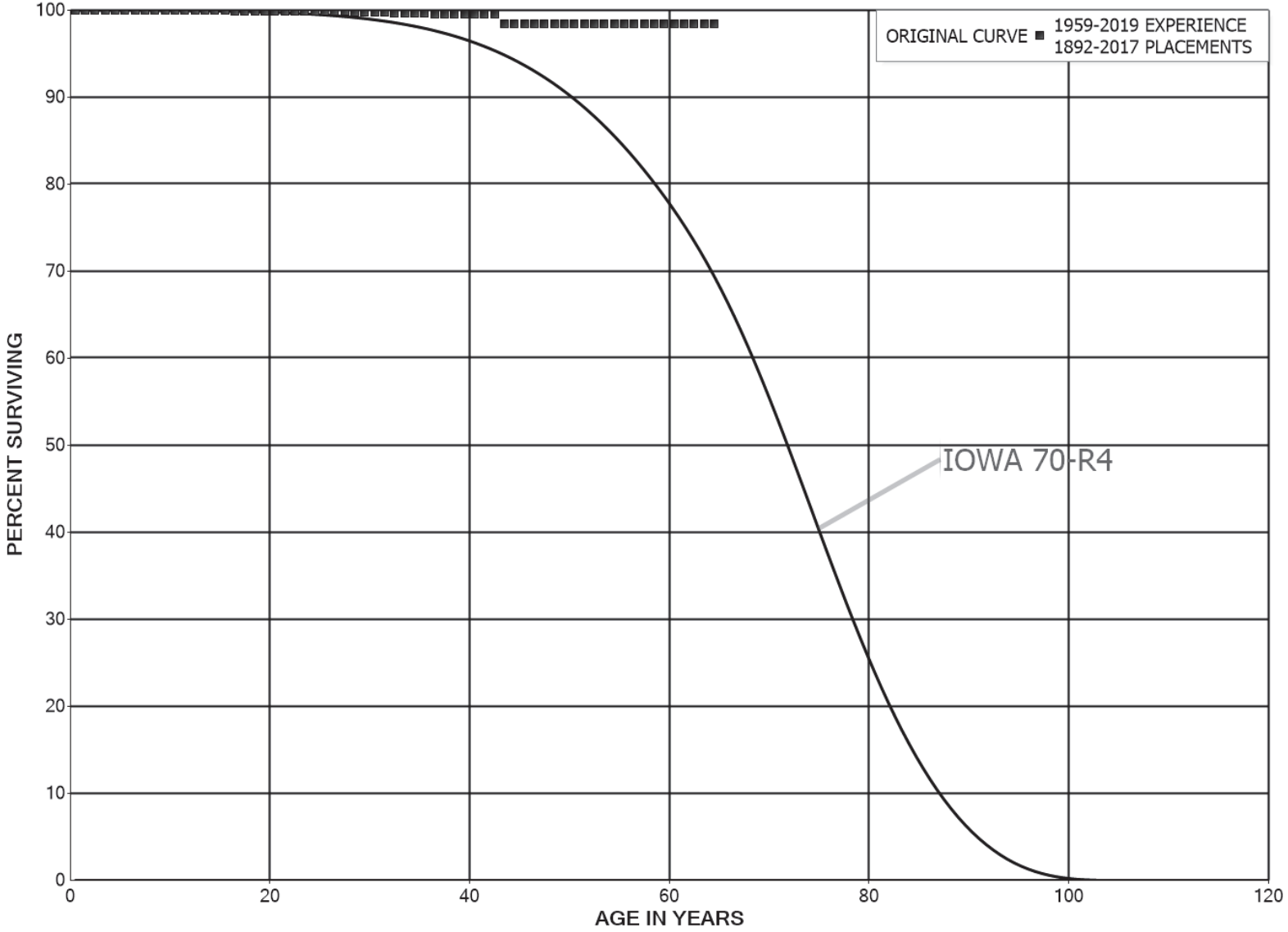
ACCOUNT 369 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1905-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	5,004		0.0000	1.0000	28.28
80.5	5,004		0.0000	1.0000	28.28
81.5	5,004		0.0000	1.0000	28.28
82.5	3,741		0.0000	1.0000	28.28
83.5	2,770		0.0000	1.0000	28.28
84.5	1,228		0.0000	1.0000	28.28
85.5	1,185		0.0000	1.0000	28.28
86.5	1,185		0.0000	1.0000	28.28
87.5	1,185		0.0000	1.0000	28.28
88.5	931		0.0000	1.0000	28.28
89.5	733		0.0000	1.0000	28.28
90.5	495		0.0000	1.0000	28.28
91.5	476		0.0000	1.0000	28.28
92.5	452		0.0000	1.0000	28.28
93.5	317		0.0000	1.0000	28.28
94.5	309		0.0000	1.0000	28.28
95.5	309		0.0000	1.0000	28.28
96.5	309		0.0000	1.0000	28.28
97.5	309		0.0000	1.0000	28.28
98.5	309		0.0000	1.0000	28.28
99.5	190		0.0000	1.0000	28.28
100.5	163		0.0000	1.0000	28.28
101.5	156		0.0000	1.0000	28.28
102.5	140		0.0000	1.0000	28.28
103.5	127		0.0000	1.0000	28.28
104.5	127		0.0000	1.0000	28.28
105.5	127		0.0000	1.0000	28.28
106.5	127		0.0000	1.0000	28.28
107.5	127		0.0000	1.0000	28.28
108.5	127		0.0000	1.0000	28.28
109.5	127		0.0000	1.0000	28.28
110.5	127		0.0000	1.0000	28.28
111.5	127		0.0000	1.0000	28.28
112.5	127		0.0000	1.0000	28.28
113.5	127		0.0000	1.0000	28.28
114.5					28.28

PEOPLES GAS COMPANY LLC
ACCOUNT 374.2 RIGHTS OF WAY
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 374.2 RIGHTS OF WAY

ORIGINAL LIFE TABLE

PLACEMENT BAND 1892-2017 EXPERIENCE BAND 1959-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,141,871		0.0000	1.0000	100.00
0.5	1,151,119		0.0000	1.0000	100.00
1.5	1,155,802		0.0000	1.0000	100.00
2.5	1,127,553	28	0.0000	1.0000	100.00
3.5	1,137,879		0.0000	1.0000	100.00
4.5	1,142,279	17	0.0000	1.0000	100.00
5.5	1,142,374		0.0000	1.0000	100.00
6.5	1,148,904	45	0.0000	1.0000	100.00
7.5	1,086,663	56	0.0001	0.9999	99.99
8.5	1,076,781		0.0000	1.0000	99.99
9.5	1,034,239		0.0000	1.0000	99.99
10.5	1,019,666	43	0.0000	1.0000	99.99
11.5	980,460	22	0.0000	1.0000	99.98
12.5	851,039	28	0.0000	1.0000	99.98
13.5	714,284		0.0000	1.0000	99.98
14.5	635,124	224	0.0004	0.9996	99.98
15.5	589,194	419	0.0007	0.9993	99.94
16.5	533,431		0.0000	1.0000	99.87
17.5	502,430		0.0000	1.0000	99.87
18.5	477,072		0.0000	1.0000	99.87
19.5	461,369	56	0.0001	0.9999	99.87
20.5	411,891		0.0000	1.0000	99.86
21.5	375,690		0.0000	1.0000	99.86
22.5	355,940		0.0000	1.0000	99.86
23.5	346,128	112	0.0003	0.9997	99.86
24.5	319,684	65	0.0002	0.9998	99.83
25.5	307,153		0.0000	1.0000	99.81
26.5	253,759	28	0.0001	0.9999	99.81
27.5	204,739	38	0.0002	0.9998	99.80
28.5	192,452		0.0000	1.0000	99.78
29.5	178,432	168	0.0009	0.9991	99.78
30.5	148,567		0.0000	1.0000	99.68
31.5	129,459	30	0.0002	0.9998	99.68
32.5	95,738	39	0.0004	0.9996	99.66
33.5	90,979		0.0000	1.0000	99.62
34.5	86,969		0.0000	1.0000	99.62
35.5	84,777	67	0.0008	0.9992	99.62
36.5	78,172		0.0000	1.0000	99.54
37.5	79,020		0.0000	1.0000	99.54
38.5	76,618		0.0000	1.0000	99.54

PEOPLES GAS COMPANY LLC

ACCOUNT 374.2 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1892-2017 EXPERIENCE BAND 1959-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	74,933	34	0.0004	0.9996	99.54
40.5	73,703		0.0000	1.0000	99.50
41.5	72,650		0.0000	1.0000	99.50
42.5	70,459	752	0.0107	0.9893	99.50
43.5	64,169		0.0000	1.0000	98.43
44.5	63,721		0.0000	1.0000	98.43
45.5	62,055		0.0000	1.0000	98.43
46.5	55,684		0.0000	1.0000	98.43
47.5	52,996		0.0000	1.0000	98.43
48.5	43,661		0.0000	1.0000	98.43
49.5	37,968		0.0000	1.0000	98.43
50.5	33,552		0.0000	1.0000	98.43
51.5	28,132		0.0000	1.0000	98.43
52.5	21,480		0.0000	1.0000	98.43
53.5	18,437		0.0000	1.0000	98.43
54.5	15,906		0.0000	1.0000	98.43
55.5	11,707		0.0000	1.0000	98.43
56.5	10,901		0.0000	1.0000	98.43
57.5	10,324		0.0000	1.0000	98.43
58.5	9,719		0.0000	1.0000	98.43
59.5	9,641		0.0000	1.0000	98.43
60.5	9,383		0.0000	1.0000	98.43
61.5	5,225		0.0000	1.0000	98.43
62.5	4,777		0.0000	1.0000	98.43
63.5	4,402		0.0000	1.0000	98.43
64.5	4,329		0.0000	1.0000	98.43
65.5	3,937		0.0000	1.0000	98.43
66.5	3,771		0.0000	1.0000	98.43
67.5	3,718		0.0000	1.0000	98.43
68.5	3,251		0.0000	1.0000	98.43
69.5	3,224		0.0000	1.0000	98.43
70.5	3,104		0.0000	1.0000	98.43
71.5	3,016		0.0000	1.0000	98.43
72.5	3,012		0.0000	1.0000	98.43
73.5	2,894		0.0000	1.0000	98.43
74.5	2,894		0.0000	1.0000	98.43
75.5	2,887		0.0000	1.0000	98.43
76.5	2,869		0.0000	1.0000	98.43
77.5	2,869		0.0000	1.0000	98.43
78.5	2,727		0.0000	1.0000	98.43

PEOPLES GAS COMPANY LLC

ACCOUNT 374.2 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1892-2017 EXPERIENCE BAND 1959-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	2,669		0.0000	1.0000	98.43
80.5	2,666		0.0000	1.0000	98.43
81.5	2,629		0.0000	1.0000	98.43
82.5	2,359		0.0000	1.0000	98.43
83.5	2,326		0.0000	1.0000	98.43
84.5	2,258		0.0000	1.0000	98.43
85.5	2,123		0.0000	1.0000	98.43
86.5	2,090		0.0000	1.0000	98.43
87.5	1,955		0.0000	1.0000	98.43
88.5	1,887		0.0000	1.0000	98.43
89.5	1,786		0.0000	1.0000	98.43
90.5	1,618		0.0000	1.0000	98.43
91.5	1,618		0.0000	1.0000	98.43
92.5	1,618		0.0000	1.0000	98.43
93.5	1,483		0.0000	1.0000	98.43
94.5	1,348		0.0000	1.0000	98.43
95.5	1,281		0.0000	1.0000	98.43
96.5	1,281		0.0000	1.0000	98.43
97.5	1,281		0.0000	1.0000	98.43
98.5	1,213		0.0000	1.0000	98.43
99.5	1,146		0.0000	1.0000	98.43
100.5	1,011		0.0000	1.0000	98.43
101.5	910		0.0000	1.0000	98.43
102.5	843		0.0000	1.0000	98.43
103.5	741		0.0000	1.0000	98.43
104.5	607		0.0000	1.0000	98.43
105.5	607		0.0000	1.0000	98.43
106.5	573		0.0000	1.0000	98.43
107.5	506		0.0000	1.0000	98.43
108.5	506		0.0000	1.0000	98.43
109.5	438		0.0000	1.0000	98.43
110.5	438		0.0000	1.0000	98.43
111.5	438		0.0000	1.0000	98.43
112.5	438		0.0000	1.0000	98.43
113.5	371		0.0000	1.0000	98.43
114.5	303		0.0000	1.0000	98.43
115.5	236		0.0000	1.0000	98.43
116.5	169		0.0000	1.0000	98.43
117.5	135		0.0000	1.0000	98.43
118.5	67		0.0000	1.0000	98.43

PEOPLES GAS COMPANY LLC

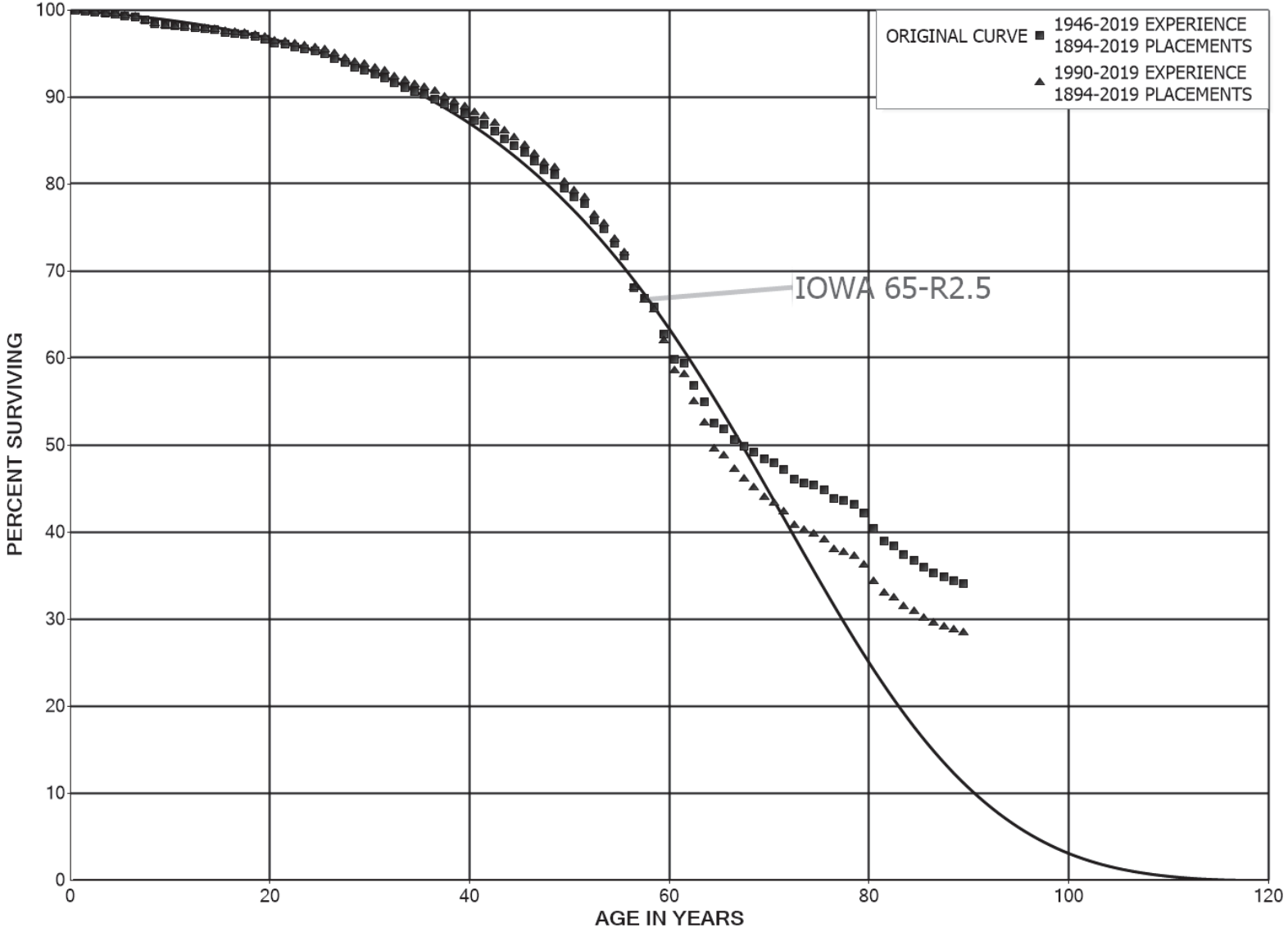
ACCOUNT 374.2 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1892-2017 EXPERIENCE BAND 1959-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	67		0.0000	1.0000	98.43
120.5	34		0.0000	1.0000	98.43
121.5	34		0.0000	1.0000	98.43
122.5	34		0.0000	1.0000	98.43
123.5	34		0.0000	1.0000	98.43
124.5	34		0.0000	1.0000	98.43
125.5	34		0.0000	1.0000	98.43
126.5	34		0.0000	1.0000	98.43
127.5					98.43

PEOPLES GAS COMPANY LLC
ACCOUNT 376 MAINS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 376 MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1894-2019 EXPERIENCE BAND 1946-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	147,249,537	65,673	0.0004	0.9996	100.00
0.5	139,593,993	194,451	0.0014	0.9986	99.96
1.5	126,816,107	135,624	0.0011	0.9989	99.82
2.5	115,824,341	168,187	0.0015	0.9985	99.71
3.5	103,351,840	106,896	0.0010	0.9990	99.56
4.5	99,319,366	207,068	0.0021	0.9979	99.46
5.5	91,690,955	100,920	0.0011	0.9989	99.25
6.5	83,779,720	304,727	0.0036	0.9964	99.15
7.5	79,122,414	272,955	0.0034	0.9966	98.78
8.5	77,910,865	138,216	0.0018	0.9982	98.44
9.5	76,058,568	100,452	0.0013	0.9987	98.27
10.5	74,397,695	48,290	0.0006	0.9994	98.14
11.5	70,594,019	84,538	0.0012	0.9988	98.08
12.5	67,771,478	83,614	0.0012	0.9988	97.96
13.5	65,059,410	103,284	0.0016	0.9984	97.84
14.5	61,579,356	148,657	0.0024	0.9976	97.68
15.5	58,498,881	75,480	0.0013	0.9987	97.45
16.5	55,967,360	75,734	0.0014	0.9986	97.32
17.5	52,685,588	156,423	0.0030	0.9970	97.19
18.5	50,364,568	135,380	0.0027	0.9973	96.90
19.5	47,381,126	206,886	0.0044	0.9956	96.64
20.5	44,429,507	93,776	0.0021	0.9979	96.22
21.5	41,820,698	110,702	0.0026	0.9974	96.01
22.5	39,022,256	85,293	0.0022	0.9978	95.76
23.5	37,264,753	109,589	0.0029	0.9971	95.55
24.5	35,998,732	107,507	0.0030	0.9970	95.27
25.5	33,911,246	197,870	0.0058	0.9942	94.99
26.5	31,367,356	171,048	0.0055	0.9945	94.43
27.5	28,181,990	147,040	0.0052	0.9948	93.92
28.5	26,339,656	91,737	0.0035	0.9965	93.43
29.5	24,819,744	120,387	0.0049	0.9951	93.10
30.5	23,120,202	107,032	0.0046	0.9954	92.65
31.5	21,869,209	143,216	0.0065	0.9935	92.22
32.5	18,339,535	110,180	0.0060	0.9940	91.62
33.5	16,931,484	87,202	0.0052	0.9948	91.07
34.5	15,816,627	61,173	0.0039	0.9961	90.60
35.5	14,419,694	74,785	0.0052	0.9948	90.25
36.5	13,368,179	92,998	0.0070	0.9930	89.78
37.5	12,488,616	82,486	0.0066	0.9934	89.15
38.5	11,596,788	67,305	0.0058	0.9942	88.57

PEOPLES GAS COMPANY LLC

ACCOUNT 376 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2019 EXPERIENCE BAND 1946-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	10,863,727	89,582	0.0082	0.9918	88.05
40.5	9,709,960	51,004	0.0053	0.9947	87.33
41.5	8,849,159	76,879	0.0087	0.9913	86.87
42.5	8,229,728	84,387	0.0103	0.9897	86.11
43.5	7,580,227	72,258	0.0095	0.9905	85.23
44.5	7,221,183	70,607	0.0098	0.9902	84.42
45.5	6,770,761	78,536	0.0116	0.9884	83.59
46.5	6,313,842	73,559	0.0117	0.9883	82.62
47.5	5,751,249	43,819	0.0076	0.9924	81.66
48.5	5,026,503	93,964	0.0187	0.9813	81.04
49.5	4,411,948	55,323	0.0125	0.9875	79.52
50.5	3,657,934	34,825	0.0095	0.9905	78.52
51.5	3,159,913	79,867	0.0253	0.9747	77.78
52.5	2,599,205	32,061	0.0123	0.9877	75.81
53.5	2,163,345	47,850	0.0221	0.9779	74.88
54.5	1,727,271	34,092	0.0197	0.9803	73.22
55.5	1,349,342	68,994	0.0511	0.9489	71.77
56.5	1,043,945	19,340	0.0185	0.9815	68.10
57.5	906,090	13,414	0.0148	0.9852	66.84
58.5	782,047	36,598	0.0468	0.9532	65.85
59.5	652,398	30,533	0.0468	0.9532	62.77
60.5	571,359	4,239	0.0074	0.9926	59.83
61.5	494,252	20,911	0.0423	0.9577	59.39
62.5	439,859	15,308	0.0348	0.9652	56.88
63.5	410,467	18,199	0.0443	0.9557	54.90
64.5	335,335	3,902	0.0116	0.9884	52.46
65.5	299,959	7,030	0.0234	0.9766	51.85
66.5	267,176	4,137	0.0155	0.9845	50.64
67.5	227,328	3,250	0.0143	0.9857	49.85
68.5	215,558	3,243	0.0150	0.9850	49.14
69.5	205,335	2,016	0.0098	0.9902	48.40
70.5	182,895	2,692	0.0147	0.9853	47.93
71.5	177,923	4,316	0.0243	0.9757	47.22
72.5	175,768	1,592	0.0091	0.9909	46.08
73.5	170,337	1,159	0.0068	0.9932	45.66
74.5	168,398	2,021	0.0120	0.9880	45.35
75.5	170,181	3,476	0.0204	0.9796	44.80
76.5	179,165	1,236	0.0069	0.9931	43.89
77.5	196,385	2,019	0.0103	0.9897	43.59
78.5	205,607	4,448	0.0216	0.9784	43.14

PEOPLES GAS COMPANY LLC

ACCOUNT 376 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2019 EXPERIENCE BAND 1946-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	208,589	9,015	0.0432	0.9568	42.20
80.5	214,615	7,760	0.0362	0.9638	40.38
81.5	214,258	2,997	0.0140	0.9860	38.92
82.5	237,883	6,376	0.0268	0.9732	38.38
83.5	241,769	4,362	0.0180	0.9820	37.35
84.5	248,592	5,155	0.0207	0.9793	36.67
85.5	244,680	4,047	0.0165	0.9835	35.91
86.5	253,499	3,776	0.0149	0.9851	35.32
87.5	254,321	2,611	0.0103	0.9897	34.79
88.5	249,315	3,053	0.0122	0.9878	34.44
89.5	257,303	5,976	0.0232	0.9768	34.01
90.5	268,678	2,814	0.0105	0.9895	33.22
91.5	299,766	3,846	0.0128	0.9872	32.88
92.5	299,964	3,656	0.0122	0.9878	32.45
93.5	313,530	5,072	0.0162	0.9838	32.06
94.5	308,706	3,788	0.0123	0.9877	31.54
95.5	313,437	14,611	0.0466	0.9534	31.15
96.5	293,127	9,824	0.0335	0.9665	29.70
97.5	282,882	16,935	0.0599	0.9401	28.71
98.5	262,926	15,106	0.0575	0.9425	26.99
99.5	241,264	8,531	0.0354	0.9646	25.44
100.5	221,150	8,229	0.0372	0.9628	24.54
101.5	198,794	8,527	0.0429	0.9571	23.62
102.5	175,855	6,179	0.0351	0.9649	22.61
103.5	158,750	3,781	0.0238	0.9762	21.82
104.5	142,655	3,778	0.0265	0.9735	21.30
105.5	126,631	2,805	0.0222	0.9778	20.73
106.5	106,917	3,165	0.0296	0.9704	20.27
107.5	100,139	10,232	0.1022	0.8978	19.67
108.5	80,404	1,940	0.0241	0.9759	17.66
109.5	75,597	3,032	0.0401	0.9599	17.24
110.5	66,365	4,365	0.0658	0.9342	16.55
111.5	57,085	6,487	0.1136	0.8864	15.46
112.5	48,367	15,110	0.3124	0.6876	13.70
113.5	33,257	4,323	0.1300	0.8700	9.42
114.5	10,794	3,868	0.3584	0.6416	8.20
115.5	6,573	661	0.1006	0.8994	5.26
116.5	5,911	1,339	0.2265	0.7735	4.73
117.5	4,572	2,468	0.5398	0.4602	3.66
118.5	2,104	2,079	0.9882	0.0118	1.68

PEOPLES GAS COMPANY LLC

ACCOUNT 376 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2019 EXPERIENCE BAND 1946-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	25	1	0.0581	0.9419	0.02
120.5	23		0.0000	1.0000	0.02
121.5	23	23	1.0000		0.02
122.5					

PEOPLES GAS COMPANY LLC

ACCOUNT 376 MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1894-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	128,616,457	62,882	0.0005	0.9995	100.00
0.5	122,660,434	182,522	0.0015	0.9985	99.95
1.5	111,129,514	123,230	0.0011	0.9989	99.80
2.5	102,102,602	145,998	0.0014	0.9986	99.69
3.5	90,738,069	86,552	0.0010	0.9990	99.55
4.5	87,614,941	187,511	0.0021	0.9979	99.45
5.5	81,128,588	93,391	0.0012	0.9988	99.24
6.5	73,835,449	285,092	0.0039	0.9961	99.13
7.5	69,841,288	253,856	0.0036	0.9964	98.74
8.5	69,134,843	121,514	0.0018	0.9982	98.39
9.5	67,814,852	78,285	0.0012	0.9988	98.21
10.5	66,846,033	26,210	0.0004	0.9996	98.10
11.5	63,728,364	69,409	0.0011	0.9989	98.06
12.5	61,306,844	64,466	0.0011	0.9989	97.95
13.5	58,959,379	77,880	0.0013	0.9987	97.85
14.5	55,705,866	130,025	0.0023	0.9977	97.72
15.5	52,938,515	54,681	0.0010	0.9990	97.49
16.5	50,717,210	50,805	0.0010	0.9990	97.39
17.5	47,791,850	123,850	0.0026	0.9974	97.30
18.5	46,018,253	115,254	0.0025	0.9975	97.04
19.5	43,476,660	178,028	0.0041	0.9959	96.80
20.5	41,032,237	60,555	0.0015	0.9985	96.40
21.5	38,838,594	84,957	0.0022	0.9978	96.26
22.5	36,413,075	61,521	0.0017	0.9983	96.05
23.5	35,054,727	89,421	0.0026	0.9974	95.89
24.5	34,171,782	87,446	0.0026	0.9974	95.64
25.5	32,340,451	170,564	0.0053	0.9947	95.40
26.5	30,019,545	148,137	0.0049	0.9951	94.90
27.5	27,007,924	126,998	0.0047	0.9953	94.43
28.5	25,328,317	76,576	0.0030	0.9970	93.98
29.5	23,938,585	103,584	0.0043	0.9957	93.70
30.5	22,310,305	96,360	0.0043	0.9957	93.29
31.5	21,167,321	134,744	0.0064	0.9936	92.89
32.5	17,720,546	98,750	0.0056	0.9944	92.30
33.5	16,354,028	76,765	0.0047	0.9953	91.79
34.5	15,338,065	56,761	0.0037	0.9963	91.35
35.5	13,990,578	70,118	0.0050	0.9950	91.02
36.5	12,992,572	87,088	0.0067	0.9933	90.56
37.5	12,169,045	78,415	0.0064	0.9936	89.95
38.5	11,335,798	63,441	0.0056	0.9944	89.37

PEOPLES GAS COMPANY LLC

ACCOUNT 376 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	10,630,537	87,225	0.0082	0.9918	88.87
40.5	9,514,581	48,718	0.0051	0.9949	88.14
41.5	8,670,896	73,259	0.0084	0.9916	87.69
42.5	8,064,722	83,328	0.0103	0.9897	86.95
43.5	7,424,895	70,741	0.0095	0.9905	86.05
44.5	7,070,058	69,700	0.0099	0.9901	85.23
45.5	6,620,737	77,454	0.0117	0.9883	84.39
46.5	6,163,972	71,803	0.0116	0.9884	83.41
47.5	5,598,716	43,284	0.0077	0.9923	82.43
48.5	4,883,928	93,631	0.0192	0.9808	81.80
49.5	4,276,936	54,590	0.0128	0.9872	80.23
50.5	3,526,264	34,825	0.0099	0.9901	79.21
51.5	3,033,741	79,867	0.0263	0.9737	78.42
52.5	2,480,290	32,061	0.0129	0.9871	76.36
53.5	2,048,260	47,850	0.0234	0.9766	75.37
54.5	1,614,219	34,092	0.0211	0.9789	73.61
55.5	1,241,418	68,994	0.0556	0.9444	72.06
56.5	937,949	19,340	0.0206	0.9794	68.05
57.5	797,872	13,414	0.0168	0.9832	66.65
58.5	677,226	36,598	0.0540	0.9460	65.53
59.5	551,449	30,533	0.0554	0.9446	61.99
60.5	474,291	4,239	0.0089	0.9911	58.55
61.5	398,246	20,911	0.0525	0.9475	58.03
62.5	346,053	15,308	0.0442	0.9558	54.98
63.5	316,512	18,199	0.0575	0.9425	52.55
64.5	247,365	3,902	0.0158	0.9842	49.53
65.5	214,431	7,030	0.0328	0.9672	48.75
66.5	183,366	4,137	0.0226	0.9774	47.15
67.5	145,729	3,250	0.0223	0.9777	46.09
68.5	136,766	3,243	0.0237	0.9763	45.06
69.5	130,622	2,016	0.0154	0.9846	43.99
70.5	116,528	2,692	0.0231	0.9769	43.31
71.5	114,430	4,316	0.0377	0.9623	42.31
72.5	113,027	1,592	0.0141	0.9859	40.72
73.5	114,034	1,159	0.0102	0.9898	40.14
74.5	116,307	2,021	0.0174	0.9826	39.73
75.5	124,179	3,476	0.0280	0.9720	39.04
76.5	137,238	1,236	0.0090	0.9910	37.95
77.5	159,676	2,019	0.0126	0.9874	37.61
78.5	171,502	4,448	0.0259	0.9741	37.13

PEOPLES GAS COMPANY LLC

ACCOUNT 376 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	177,570	9,015	0.0508	0.9492	36.17
80.5	185,875	7,760	0.0417	0.9583	34.33
81.5	187,792	2,997	0.0160	0.9840	32.90
82.5	213,295	6,376	0.0299	0.9701	32.37
83.5	219,947	4,362	0.0198	0.9802	31.41
84.5	229,437	5,155	0.0225	0.9775	30.78
85.5	225,902	4,047	0.0179	0.9821	30.09
86.5	235,095	3,776	0.0161	0.9839	29.55
87.5	235,917	2,611	0.0111	0.9889	29.08
88.5	231,258	3,053	0.0132	0.9868	28.76
89.5	241,482	5,976	0.0247	0.9753	28.38
90.5	259,732	2,814	0.0108	0.9892	27.67
91.5	292,667	3,846	0.0131	0.9869	27.38
92.5	293,306	3,656	0.0125	0.9875	27.02
93.5	311,426	5,072	0.0163	0.9837	26.68
94.5	306,603	3,788	0.0124	0.9876	26.24
95.5	313,437	14,611	0.0466	0.9534	25.92
96.5	293,127	9,824	0.0335	0.9665	24.71
97.5	282,882	16,935	0.0599	0.9401	23.88
98.5	262,926	15,106	0.0575	0.9425	22.45
99.5	241,264	8,531	0.0354	0.9646	21.16
100.5	221,150	8,229	0.0372	0.9628	20.42
101.5	198,794	8,527	0.0429	0.9571	19.66
102.5	175,855	6,179	0.0351	0.9649	18.81
103.5	158,750	3,781	0.0238	0.9762	18.15
104.5	142,655	3,778	0.0265	0.9735	17.72
105.5	126,631	2,805	0.0222	0.9778	17.25
106.5	106,917	3,165	0.0296	0.9704	16.87
107.5	100,139	10,232	0.1022	0.8978	16.37
108.5	80,404	1,940	0.0241	0.9759	14.70
109.5	75,597	3,032	0.0401	0.9599	14.34
110.5	66,365	4,365	0.0658	0.9342	13.77
111.5	57,085	6,487	0.1136	0.8864	12.86
112.5	48,367	15,110	0.3124	0.6876	11.40
113.5	33,257	4,323	0.1300	0.8700	7.84
114.5	10,794	3,868	0.3584	0.6416	6.82
115.5	6,573	661	0.1006	0.8994	4.38
116.5	5,911	1,339	0.2265	0.7735	3.94
117.5	4,572	2,468	0.5398	0.4602	3.04
118.5	2,104	2,079	0.9882	0.0118	1.40

PEOPLES GAS COMPANY LLC

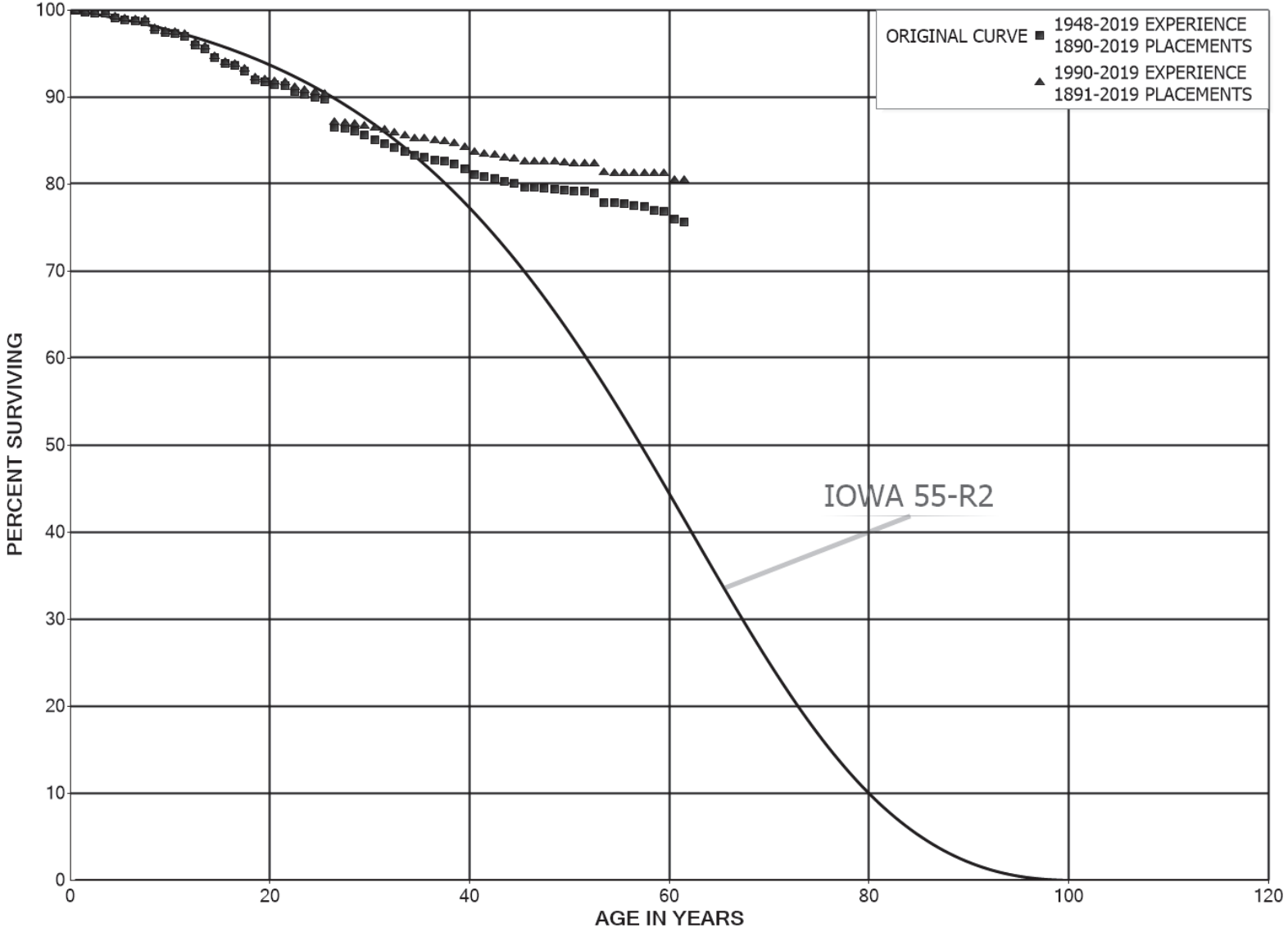
ACCOUNT 376 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	25	1	0.0581	0.9419	0.02
120.5	23		0.0000	1.0000	0.02
121.5	23	23	1.0000		0.02
122.5					

PEOPLES GAS COMPANY LLC
ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1890-2019 EXPERIENCE BAND 1948-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	6,351,848	6,385	0.0010	0.9990	100.00
0.5	6,346,650	7,674	0.0012	0.9988	99.90
1.5	5,868,114	9,584	0.0016	0.9984	99.78
2.5	5,534,542	2,335	0.0004	0.9996	99.62
3.5	5,479,733	26,726	0.0049	0.9951	99.57
4.5	5,426,733	14,773	0.0027	0.9973	99.09
5.5	5,351,026	5,949	0.0011	0.9989	98.82
6.5	5,384,436	4,895	0.0009	0.9991	98.71
7.5	5,437,015	49,939	0.0092	0.9908	98.62
8.5	5,389,722	17,893	0.0033	0.9967	97.71
9.5	5,226,267	7,211	0.0014	0.9986	97.39
10.5	5,184,874	13,321	0.0026	0.9974	97.25
11.5	5,182,793	53,978	0.0104	0.9896	97.00
12.5	5,036,648	23,228	0.0046	0.9954	95.99
13.5	4,851,181	55,087	0.0114	0.9886	95.55
14.5	4,634,985	31,382	0.0068	0.9932	94.47
15.5	4,400,318	11,674	0.0027	0.9973	93.83
16.5	4,169,294	29,309	0.0070	0.9930	93.58
17.5	3,888,816	41,441	0.0107	0.9893	92.92
18.5	3,688,786	9,278	0.0025	0.9975	91.93
19.5	3,549,146	10,784	0.0030	0.9970	91.70
20.5	3,451,546	6,894	0.0020	0.9980	91.42
21.5	3,413,215	22,824	0.0067	0.9933	91.24
22.5	3,335,315	12,859	0.0039	0.9961	90.63
23.5	3,276,303	11,915	0.0036	0.9964	90.28
24.5	3,007,816	8,364	0.0028	0.9972	89.95
25.5	2,898,886	102,126	0.0352	0.9648	89.70
26.5	2,528,487	5,450	0.0022	0.9978	86.54
27.5	2,242,282	8,528	0.0038	0.9962	86.35
28.5	2,004,003	9,902	0.0049	0.9951	86.02
29.5	1,765,833	10,750	0.0061	0.9939	85.60
30.5	1,505,118	7,732	0.0051	0.9949	85.08
31.5	1,403,383	8,304	0.0059	0.9941	84.64
32.5	1,265,794	6,748	0.0053	0.9947	84.14
33.5	1,114,599	5,833	0.0052	0.9948	83.69
34.5	1,019,872	2,970	0.0029	0.9971	83.25
35.5	877,361	2,544	0.0029	0.9971	83.01
36.5	685,384	1,252	0.0018	0.9982	82.77
37.5	592,238	2,371	0.0040	0.9960	82.62
38.5	437,579	3,138	0.0072	0.9928	82.29

PEOPLES GAS COMPANY LLC

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1890-2019 EXPERIENCE BAND 1948-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	418,935	3,385	0.0081	0.9919	81.70
40.5	402,122	1,011	0.0025	0.9975	81.04
41.5	394,964	1,056	0.0027	0.9973	80.83
42.5	381,172	1,699	0.0045	0.9955	80.62
43.5	349,602	885	0.0025	0.9975	80.26
44.5	333,397	1,775	0.0053	0.9947	80.06
45.5	319,631	261	0.0008	0.9992	79.63
46.5	305,154	195	0.0006	0.9994	79.56
47.5	282,274	448	0.0016	0.9984	79.51
48.5	264,199	402	0.0015	0.9985	79.39
49.5	232,605	272	0.0012	0.9988	79.27
50.5	218,702	96	0.0004	0.9996	79.17
51.5	200,064	586	0.0029	0.9971	79.14
52.5	182,168	2,447	0.0134	0.9866	78.91
53.5	167,979	139	0.0008	0.9992	77.85
54.5	148,222	175	0.0012	0.9988	77.78
55.5	139,798	280	0.0020	0.9980	77.69
56.5	113,973	283	0.0025	0.9975	77.54
57.5	100,345	481	0.0048	0.9952	77.34
58.5	86,019	93	0.0011	0.9989	76.97
59.5	73,305	884	0.0121	0.9879	76.89
60.5	62,312	282	0.0045	0.9955	75.96
61.5	56,093	301	0.0054	0.9946	75.62
62.5	48,105		0.0000	1.0000	75.21
63.5	39,822		0.0000	1.0000	75.21
64.5	30,904	109	0.0035	0.9965	75.21
65.5	25,155		0.0000	1.0000	74.95
66.5	22,584		0.0000	1.0000	74.95
67.5	19,620	23	0.0012	0.9988	74.95
68.5	12,418		0.0000	1.0000	74.86
69.5	9,239		0.0000	1.0000	74.86
70.5	6,176	162	0.0262	0.9738	74.86
71.5	5,636	9	0.0015	0.9985	72.90
72.5	5,497	60	0.0110	0.9890	72.79
73.5	5,436		0.0000	1.0000	71.98
74.5	5,436	70	0.0128	0.9872	71.98
75.5	5,275	157	0.0297	0.9703	71.06
76.5	5,118	329	0.0642	0.9358	68.95
77.5	4,789		0.0000	1.0000	64.52
78.5	4,723	50	0.0105	0.9895	64.52

PEOPLES GAS COMPANY LLC

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1890-2019 EXPERIENCE BAND 1948-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	4,579		0.0000	1.0000	63.84
80.5	4,125		0.0000	1.0000	63.84
81.5	3,972		0.0000	1.0000	63.84
82.5	3,720		0.0000	1.0000	63.84
83.5	3,415	97	0.0285	0.9715	63.84
84.5	3,088	20	0.0064	0.9936	62.03
85.5	2,806		0.0000	1.0000	61.63
86.5	2,544		0.0000	1.0000	61.63
87.5	2,197		0.0000	1.0000	61.63
88.5	1,911		0.0000	1.0000	61.63
89.5	1,858		0.0000	1.0000	61.63
90.5	1,736	11	0.0064	0.9936	61.63
91.5	1,725		0.0000	1.0000	61.23
92.5	1,580		0.0000	1.0000	61.23
93.5	1,494		0.0000	1.0000	61.23
94.5	1,416		0.0000	1.0000	61.23
95.5	1,416		0.0000	1.0000	61.23
96.5	1,252		0.0000	1.0000	61.23
97.5	1,149		0.0000	1.0000	61.23
98.5	1,149		0.0000	1.0000	61.23
99.5	1,103		0.0000	1.0000	61.23
100.5	1,103		0.0000	1.0000	61.23
101.5	971		0.0000	1.0000	61.23
102.5	971		0.0000	1.0000	61.23
103.5	948		0.0000	1.0000	61.23
104.5	855		0.0000	1.0000	61.23
105.5	833		0.0000	1.0000	61.23
106.5	734		0.0000	1.0000	61.23
107.5	734		0.0000	1.0000	61.23
108.5	734		0.0000	1.0000	61.23
109.5	633		0.0000	1.0000	61.23
110.5	549		0.0000	1.0000	61.23
111.5	491		0.0000	1.0000	61.23
112.5	331		0.0000	1.0000	61.23
113.5	304		0.0000	1.0000	61.23
114.5	304		0.0000	1.0000	61.23
115.5	39		0.0000	1.0000	61.23
116.5	39		0.0000	1.0000	61.23
117.5	39		0.0000	1.0000	61.23
118.5	39		0.0000	1.0000	61.23

PEOPLES GAS COMPANY LLC

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1890-2019 EXPERIENCE BAND 1948-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	39		0.0000	1.0000	61.23
120.5	39		0.0000	1.0000	61.23
121.5	39		0.0000	1.0000	61.23
122.5	39		0.0000	1.0000	61.23
123.5	39		0.0000	1.0000	61.23
124.5	39		0.0000	1.0000	61.23
125.5	39		0.0000	1.0000	61.23
126.5	39		0.0000	1.0000	61.23
127.5	39		0.0000	1.0000	61.23
128.5					61.23

PEOPLES GAS COMPANY LLC

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1891-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	5,017,994	6,117	0.0012	0.9988	100.00
0.5	5,134,561	5,619	0.0011	0.9989	99.88
1.5	4,708,400	2,288	0.0005	0.9995	99.77
2.5	4,458,218		0.0000	1.0000	99.72
3.5	4,533,920	22,632	0.0050	0.9950	99.72
4.5	4,542,475	13,655	0.0030	0.9970	99.22
5.5	4,558,288	2,908	0.0006	0.9994	98.92
6.5	4,736,292	2,891	0.0006	0.9994	98.86
7.5	4,860,919	48,391	0.0100	0.9900	98.80
8.5	4,966,232	15,120	0.0030	0.9970	97.82
9.5	4,822,542	6,045	0.0013	0.9987	97.52
10.5	4,793,226	11,698	0.0024	0.9976	97.40
11.5	4,803,813	51,112	0.0106	0.9894	97.16
12.5	4,674,024	20,817	0.0045	0.9955	96.13
13.5	4,499,777	53,083	0.0118	0.9882	95.70
14.5	4,293,900	27,787	0.0065	0.9935	94.57
15.5	4,075,951	8,034	0.0020	0.9980	93.96
16.5	3,852,457	24,777	0.0064	0.9936	93.77
17.5	3,597,371	40,013	0.0111	0.9889	93.17
18.5	3,418,488	4,648	0.0014	0.9986	92.13
19.5	3,301,285	8,747	0.0026	0.9974	92.01
20.5	3,219,298	5,320	0.0017	0.9983	91.76
21.5	3,194,803	19,628	0.0061	0.9939	91.61
22.5	3,135,689	10,427	0.0033	0.9967	91.05
23.5	3,087,976	7,080	0.0023	0.9977	90.75
24.5	2,839,186	6,937	0.0024	0.9976	90.54
25.5	2,740,620	98,686	0.0360	0.9640	90.32
26.5	2,382,109	1,687	0.0007	0.9993	87.06
27.5	2,114,011	3,523	0.0017	0.9983	87.00
28.5	1,894,590	4,354	0.0023	0.9977	86.86
29.5	1,675,005	5,406	0.0032	0.9968	86.66
30.5	1,428,004	2,785	0.0020	0.9980	86.38
31.5	1,337,243	5,802	0.0043	0.9957	86.21
32.5	1,210,059	5,116	0.0042	0.9958	85.84
33.5	1,064,305	3,962	0.0037	0.9963	85.47
34.5	980,927	370	0.0004	0.9996	85.15
35.5	846,683	2,111	0.0025	0.9975	85.12
36.5	658,490	326	0.0005	0.9995	84.91
37.5	567,522	1,669	0.0029	0.9971	84.87
38.5	420,986	2,154	0.0051	0.9949	84.62

PEOPLES GAS COMPANY LLC

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1891-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	405,554	2,935	0.0072	0.9928	84.19
40.5	392,148	904	0.0023	0.9977	83.58
41.5	384,684	348	0.0009	0.9991	83.38
42.5	371,122	1,363	0.0037	0.9963	83.31
43.5	339,448	699	0.0021	0.9979	83.00
44.5	323,332	1,401	0.0043	0.9957	82.83
45.5	309,983		0.0000	1.0000	82.47
46.5	296,069		0.0000	1.0000	82.47
47.5	273,406	50	0.0002	0.9998	82.47
48.5	255,965	238	0.0009	0.9991	82.46
49.5	224,630	181	0.0008	0.9992	82.38
50.5	211,309		0.0000	1.0000	82.31
51.5	192,921	48	0.0002	0.9998	82.31
52.5	175,728	2,157	0.0123	0.9877	82.29
53.5	162,135	139	0.0009	0.9991	81.28
54.5	142,681	48	0.0003	0.9997	81.21
55.5	134,646		0.0000	1.0000	81.19
56.5	109,279		0.0000	1.0000	81.19
57.5	96,080	55	0.0006	0.9994	81.19
58.5	82,465		0.0000	1.0000	81.14
59.5	69,898	647	0.0093	0.9907	81.14
60.5	59,262		0.0000	1.0000	80.39
61.5	53,301	44	0.0008	0.9992	80.39
62.5	45,729		0.0000	1.0000	80.32
63.5	37,532		0.0000	1.0000	80.32
64.5	28,691	60	0.0021	0.9979	80.32
65.5	22,991		0.0000	1.0000	80.16
66.5	20,503		0.0000	1.0000	80.16
67.5	17,683		0.0000	1.0000	80.16
68.5	10,504		0.0000	1.0000	80.16
69.5	7,371		0.0000	1.0000	80.16
70.5	4,307	162	0.0376	0.9624	80.16
71.5	3,900		0.0000	1.0000	77.14
72.5	3,769		0.0000	1.0000	77.14
73.5	3,791		0.0000	1.0000	77.14
74.5	3,884	23	0.0060	0.9940	77.14
75.5	3,792		0.0000	1.0000	76.68
76.5	3,891		0.0000	1.0000	76.68
77.5	3,891		0.0000	1.0000	76.68
78.5	3,825		0.0000	1.0000	76.68

PEOPLES GAS COMPANY LLC

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1891-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	3,842		0.0000	1.0000	76.68
80.5	3,472		0.0000	1.0000	76.68
81.5	3,377		0.0000	1.0000	76.68
82.5	3,286		0.0000	1.0000	76.68
83.5	3,013		0.0000	1.0000	76.68
84.5	2,784	20	0.0071	0.9929	76.68
85.5	2,767		0.0000	1.0000	76.14
86.5	2,505		0.0000	1.0000	76.14
87.5	2,158		0.0000	1.0000	76.14
88.5	1,873		0.0000	1.0000	76.14
89.5	1,819		0.0000	1.0000	76.14
90.5	1,698	11	0.0065	0.9935	76.14
91.5	1,687		0.0000	1.0000	75.64
92.5	1,541		0.0000	1.0000	75.64
93.5	1,456		0.0000	1.0000	75.64
94.5	1,378		0.0000	1.0000	75.64
95.5	1,378		0.0000	1.0000	75.64
96.5	1,213		0.0000	1.0000	75.64
97.5	1,110		0.0000	1.0000	75.64
98.5	1,149		0.0000	1.0000	75.64
99.5	1,103		0.0000	1.0000	75.64
100.5	1,103		0.0000	1.0000	75.64
101.5	971		0.0000	1.0000	75.64
102.5	971		0.0000	1.0000	75.64
103.5	948		0.0000	1.0000	75.64
104.5	855		0.0000	1.0000	75.64
105.5	833		0.0000	1.0000	75.64
106.5	734		0.0000	1.0000	75.64
107.5	734		0.0000	1.0000	75.64
108.5	734		0.0000	1.0000	75.64
109.5	633		0.0000	1.0000	75.64
110.5	549		0.0000	1.0000	75.64
111.5	491		0.0000	1.0000	75.64
112.5	331		0.0000	1.0000	75.64
113.5	304		0.0000	1.0000	75.64
114.5	304		0.0000	1.0000	75.64
115.5	39		0.0000	1.0000	75.64
116.5	39		0.0000	1.0000	75.64
117.5	39		0.0000	1.0000	75.64
118.5	39		0.0000	1.0000	75.64

PEOPLES GAS COMPANY LLC

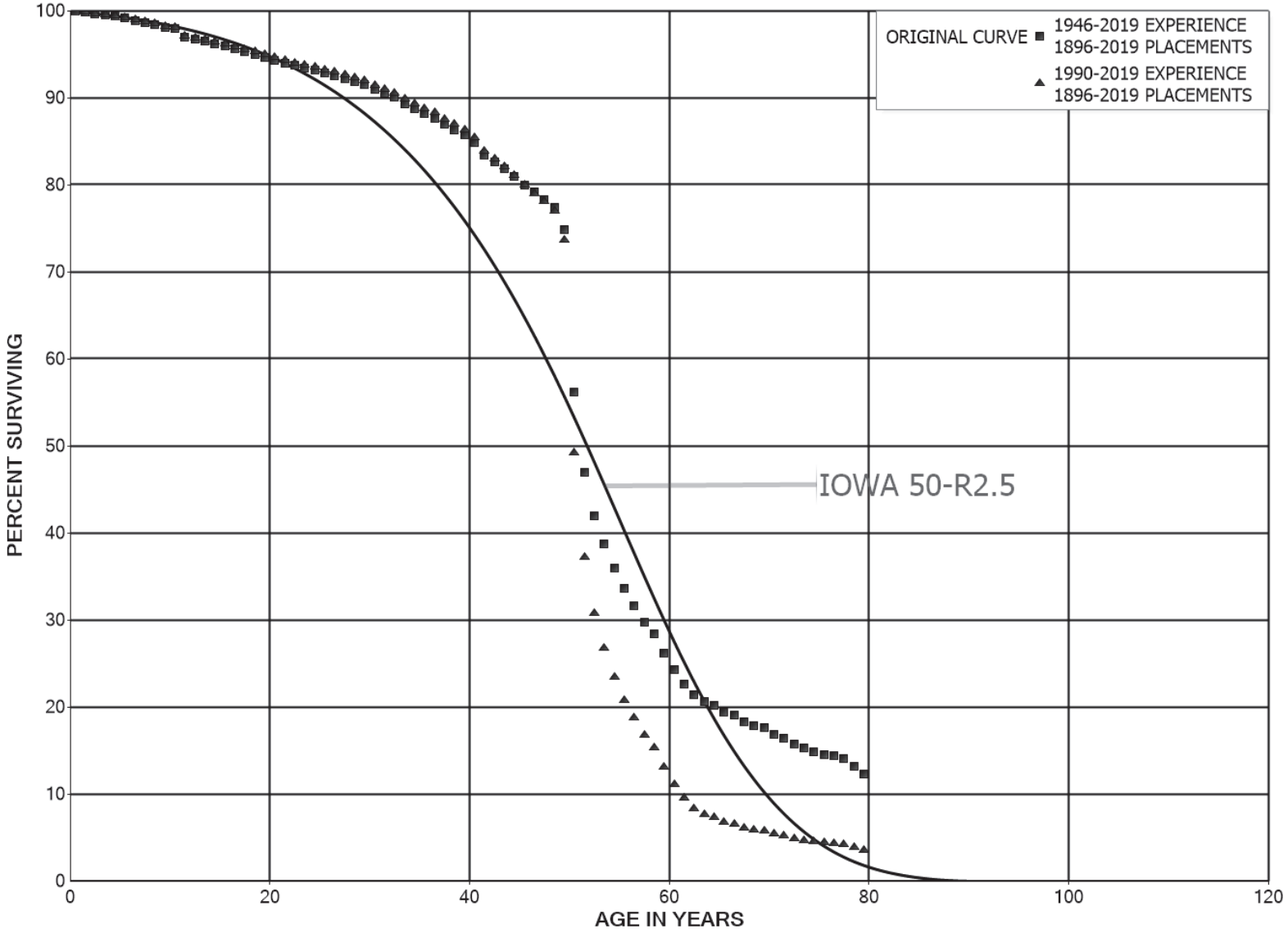
ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1891-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	39		0.0000	1.0000	75.64
120.5	39		0.0000	1.0000	75.64
121.5	39		0.0000	1.0000	75.64
122.5	39		0.0000	1.0000	75.64
123.5	39		0.0000	1.0000	75.64
124.5	39		0.0000	1.0000	75.64
125.5	39		0.0000	1.0000	75.64
126.5	39		0.0000	1.0000	75.64
127.5	39		0.0000	1.0000	75.64
128.5					75.64

PEOPLES GAS COMPANY LLC
ACCOUNT 380 SERVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 380 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1896-2019 EXPERIENCE BAND 1946-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	46,305,049	7,051	0.0002	0.9998	100.00
0.5	44,479,361	79,851	0.0018	0.9982	99.98
1.5	41,477,502	67,203	0.0016	0.9984	99.81
2.5	39,298,213	57,103	0.0015	0.9985	99.64
3.5	37,554,331	54,466	0.0015	0.9985	99.50
4.5	35,526,549	67,961	0.0019	0.9981	99.35
5.5	33,023,152	93,899	0.0028	0.9972	99.16
6.5	30,223,714	78,698	0.0026	0.9974	98.88
7.5	29,262,973	72,982	0.0025	0.9975	98.62
8.5	28,476,713	76,812	0.0027	0.9973	98.38
9.5	27,859,327	46,822	0.0017	0.9983	98.11
10.5	27,194,237	271,990	0.0100	0.9900	97.95
11.5	25,990,079	67,858	0.0026	0.9974	96.97
12.5	25,030,390	67,172	0.0027	0.9973	96.72
13.5	24,201,410	69,304	0.0029	0.9971	96.46
14.5	23,261,250	58,732	0.0025	0.9975	96.18
15.5	22,040,376	73,610	0.0033	0.9967	95.94
16.5	20,874,617	67,683	0.0032	0.9968	95.62
17.5	19,894,062	66,461	0.0033	0.9967	95.31
18.5	18,823,602	69,687	0.0037	0.9963	94.99
19.5	17,557,020	62,484	0.0036	0.9964	94.64
20.5	16,357,215	55,584	0.0034	0.9966	94.30
21.5	15,067,311	48,807	0.0032	0.9968	93.98
22.5	13,851,725	42,381	0.0031	0.9969	93.68
23.5	12,701,479	36,512	0.0029	0.9971	93.39
24.5	11,665,392	38,102	0.0033	0.9967	93.12
25.5	10,550,201	35,420	0.0034	0.9966	92.82
26.5	9,095,139	30,035	0.0033	0.9967	92.50
27.5	7,770,447	26,486	0.0034	0.9966	92.20
28.5	6,742,143	26,708	0.0040	0.9960	91.88
29.5	5,731,463	35,247	0.0061	0.9939	91.52
30.5	4,737,051	25,526	0.0054	0.9946	90.96
31.5	4,390,817	21,839	0.0050	0.9950	90.47
32.5	3,796,494	31,869	0.0084	0.9916	90.02
33.5	3,401,245	22,292	0.0066	0.9934	89.26
34.5	3,100,341	19,092	0.0062	0.9938	88.68
35.5	2,799,446	16,538	0.0059	0.9941	88.13
36.5	2,562,820	19,676	0.0077	0.9923	87.61
37.5	2,308,374	16,668	0.0072	0.9928	86.94
38.5	2,079,350	14,355	0.0069	0.9931	86.31

PEOPLES GAS COMPANY LLC

ACCOUNT 380 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1896-2019 EXPERIENCE BAND 1946-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,851,721	19,160	0.0103	0.9897	85.71
40.5	1,595,539	26,097	0.0164	0.9836	84.83
41.5	1,394,170	14,294	0.0103	0.9897	83.44
42.5	1,222,035	11,482	0.0094	0.9906	82.58
43.5	1,094,936	11,749	0.0107	0.9893	81.81
44.5	974,715	11,847	0.0122	0.9878	80.93
45.5	878,483	9,039	0.0103	0.9897	79.95
46.5	791,352	8,400	0.0106	0.9894	79.12
47.5	687,556	7,597	0.0110	0.9890	78.28
48.5	594,054	20,216	0.0340	0.9660	77.42
49.5	510,172	126,645	0.2482	0.7518	74.78
50.5	376,964	62,039	0.1646	0.8354	56.22
51.5	314,964	33,322	0.1058	0.8942	46.97
52.5	281,760	21,839	0.0775	0.9225	42.00
53.5	259,993	18,890	0.0727	0.9273	38.74
54.5	241,150	15,886	0.0659	0.9341	35.93
55.5	225,375	12,755	0.0566	0.9434	33.56
56.5	212,621	12,798	0.0602	0.9398	31.66
57.5	199,864	9,213	0.0461	0.9539	29.76
58.5	190,761	14,779	0.0775	0.9225	28.38
59.5	175,995	12,969	0.0737	0.9263	26.19
60.5	163,026	10,827	0.0664	0.9336	24.26
61.5	152,238	8,254	0.0542	0.9458	22.65
62.5	144,085	5,587	0.0388	0.9612	21.42
63.5	138,699	2,710	0.0195	0.9805	20.59
64.5	136,046	4,983	0.0366	0.9634	20.18
65.5	131,070	2,199	0.0168	0.9832	19.45
66.5	128,901	5,551	0.0431	0.9569	19.12
67.5	123,368	3,042	0.0247	0.9753	18.30
68.5	120,344	1,914	0.0159	0.9841	17.84
69.5	118,430	4,822	0.0407	0.9593	17.56
70.5	114,036	3,231	0.0283	0.9717	16.85
71.5	110,805	4,540	0.0410	0.9590	16.37
72.5	106,264	2,979	0.0280	0.9720	15.70
73.5	103,285	2,857	0.0277	0.9723	15.26
74.5	100,429	2,268	0.0226	0.9774	14.84
75.5	98,161	543	0.0055	0.9945	14.50
76.5	97,618	2,737	0.0280	0.9720	14.42
77.5	94,881	5,457	0.0575	0.9425	14.02
78.5	89,424	6,579	0.0736	0.9264	13.21

PEOPLES GAS COMPANY LLC

ACCOUNT 380 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1896-2019 EXPERIENCE BAND 1946-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	82,845	8,667	0.1046	0.8954	12.24
80.5	74,178	1,737	0.0234	0.9766	10.96
81.5	72,441	723	0.0100	0.9900	10.70
82.5	71,717	5,719	0.0797	0.9203	10.59
83.5	65,998	11,696	0.1772	0.8228	9.75
84.5	54,303	8,659	0.1595	0.8405	8.02
85.5	45,643	4,721	0.1034	0.8966	6.74
86.5	40,923	4,303	0.1052	0.8948	6.05
87.5	36,620	6,932	0.1893	0.8107	5.41
88.5	29,687	5,206	0.1754	0.8246	4.39
89.5	24,481	11,517	0.4704	0.5296	3.62
90.5	12,964	8,077	0.6230	0.3770	1.92
91.5	4,887	2,230	0.4563	0.5437	0.72
92.5	2,657	674	0.2536	0.7464	0.39
93.5	1,983	592	0.2986	0.7014	0.29
94.5	1,391	523	0.3760	0.6240	0.21
95.5	868	459	0.5282	0.4718	0.13
96.5	410	410	1.0000		0.06
97.5					

PEOPLES GAS COMPANY LLC

ACCOUNT 380 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1896-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	39,728,145	4,125	0.0001	0.9999	100.00
0.5	38,972,992	68,335	0.0018	0.9982	99.99
1.5	36,554,736	55,958	0.0015	0.9985	99.81
2.5	35,008,044	45,348	0.0013	0.9987	99.66
3.5	33,657,076	43,090	0.0013	0.9987	99.53
4.5	31,943,308	56,360	0.0018	0.9982	99.40
5.5	29,755,846	86,075	0.0029	0.9971	99.23
6.5	27,202,321	67,952	0.0025	0.9975	98.94
7.5	26,513,784	60,307	0.0023	0.9977	98.70
8.5	25,974,158	64,085	0.0025	0.9975	98.47
9.5	25,595,338	35,381	0.0014	0.9986	98.23
10.5	25,205,239	260,609	0.0103	0.9897	98.09
11.5	24,229,611	59,753	0.0025	0.9975	97.08
12.5	23,466,884	57,842	0.0025	0.9975	96.84
13.5	22,791,493	60,445	0.0027	0.9973	96.60
14.5	21,989,706	50,106	0.0023	0.9977	96.34
15.5	20,907,368	64,845	0.0031	0.9969	96.12
16.5	19,844,218	59,206	0.0030	0.9970	95.83
17.5	18,976,835	60,220	0.0032	0.9968	95.54
18.5	18,024,878	63,786	0.0035	0.9965	95.24
19.5	16,837,693	57,459	0.0034	0.9966	94.90
20.5	15,710,667	49,732	0.0032	0.9968	94.58
21.5	14,498,319	44,725	0.0031	0.9969	94.28
22.5	13,334,573	37,111	0.0028	0.9972	93.99
23.5	12,239,564	32,758	0.0027	0.9973	93.72
24.5	11,244,101	34,025	0.0030	0.9970	93.47
25.5	10,156,217	31,299	0.0031	0.9969	93.19
26.5	8,729,791	26,280	0.0030	0.9970	92.90
27.5	7,427,947	23,333	0.0031	0.9969	92.62
28.5	6,415,901	23,721	0.0037	0.9963	92.33
29.5	5,419,668	32,391	0.0060	0.9940	91.99
30.5	4,439,874	22,348	0.0050	0.9950	91.44
31.5	4,107,219	19,208	0.0047	0.9953	90.98
32.5	3,525,532	29,208	0.0083	0.9917	90.56
33.5	3,149,242	18,847	0.0060	0.9940	89.81
34.5	2,864,606	17,099	0.0060	0.9940	89.27
35.5	2,576,068	14,591	0.0057	0.9943	88.74
36.5	2,352,917	18,127	0.0077	0.9923	88.23
37.5	2,113,708	15,489	0.0073	0.9927	87.55
38.5	1,898,360	13,420	0.0071	0.9929	86.91

PEOPLES GAS COMPANY LLC

ACCOUNT 380 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1896-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,681,926	18,482	0.0110	0.9890	86.30
40.5	1,436,636	25,463	0.0177	0.9823	85.35
41.5	1,244,374	13,740	0.0110	0.9890	83.84
42.5	1,078,510	11,169	0.0104	0.9896	82.91
43.5	955,105	11,416	0.0120	0.9880	82.05
44.5	836,104	11,632	0.0139	0.9861	81.07
45.5	740,165	8,753	0.0118	0.9882	79.94
46.5	653,632	8,154	0.0125	0.9875	79.00
47.5	552,257	7,443	0.0135	0.9865	78.01
48.5	462,313	20,147	0.0436	0.9564	76.96
49.5	382,103	126,569	0.3312	0.6688	73.61
50.5	252,249	61,994	0.2458	0.7542	49.23
51.5	192,970	33,322	0.1727	0.8273	37.13
52.5	167,293	21,839	0.1305	0.8695	30.72
53.5	151,905	18,890	0.1244	0.8756	26.71
54.5	139,814	15,886	0.1136	0.8864	23.39
55.5	132,432	12,755	0.0963	0.9037	20.73
56.5	120,956	12,798	0.1058	0.8942	18.73
57.5	108,158	9,213	0.0852	0.9148	16.75
58.5	98,987	14,779	0.1493	0.8507	15.32
59.5	84,612	12,969	0.1533	0.8467	13.04
60.5	77,463	10,827	0.1398	0.8602	11.04
61.5	67,201	8,254	0.1228	0.8772	9.49
62.5	62,774	5,587	0.0890	0.9110	8.33
63.5	66,868	2,710	0.0405	0.9595	7.59
64.5	68,995	4,983	0.0722	0.9278	7.28
65.5	73,809	2,199	0.0298	0.9702	6.75
66.5	78,597	5,551	0.0706	0.9294	6.55
67.5	77,180	3,042	0.0394	0.9606	6.09
68.5	79,656	1,914	0.0240	0.9760	5.85
69.5	78,206	4,822	0.0617	0.9383	5.71
70.5	78,025	3,231	0.0414	0.9586	5.36
71.5	77,807	4,540	0.0584	0.9416	5.14
72.5	76,723	2,979	0.0388	0.9612	4.84
73.5	77,217	2,857	0.0370	0.9630	4.65
74.5	77,144	2,268	0.0294	0.9706	4.48
75.5	78,672	543	0.0069	0.9931	4.34
76.5	80,516	2,737	0.0340	0.9660	4.31
77.5	80,502	5,457	0.0678	0.9322	4.17
78.5	76,441	6,579	0.0861	0.9139	3.89

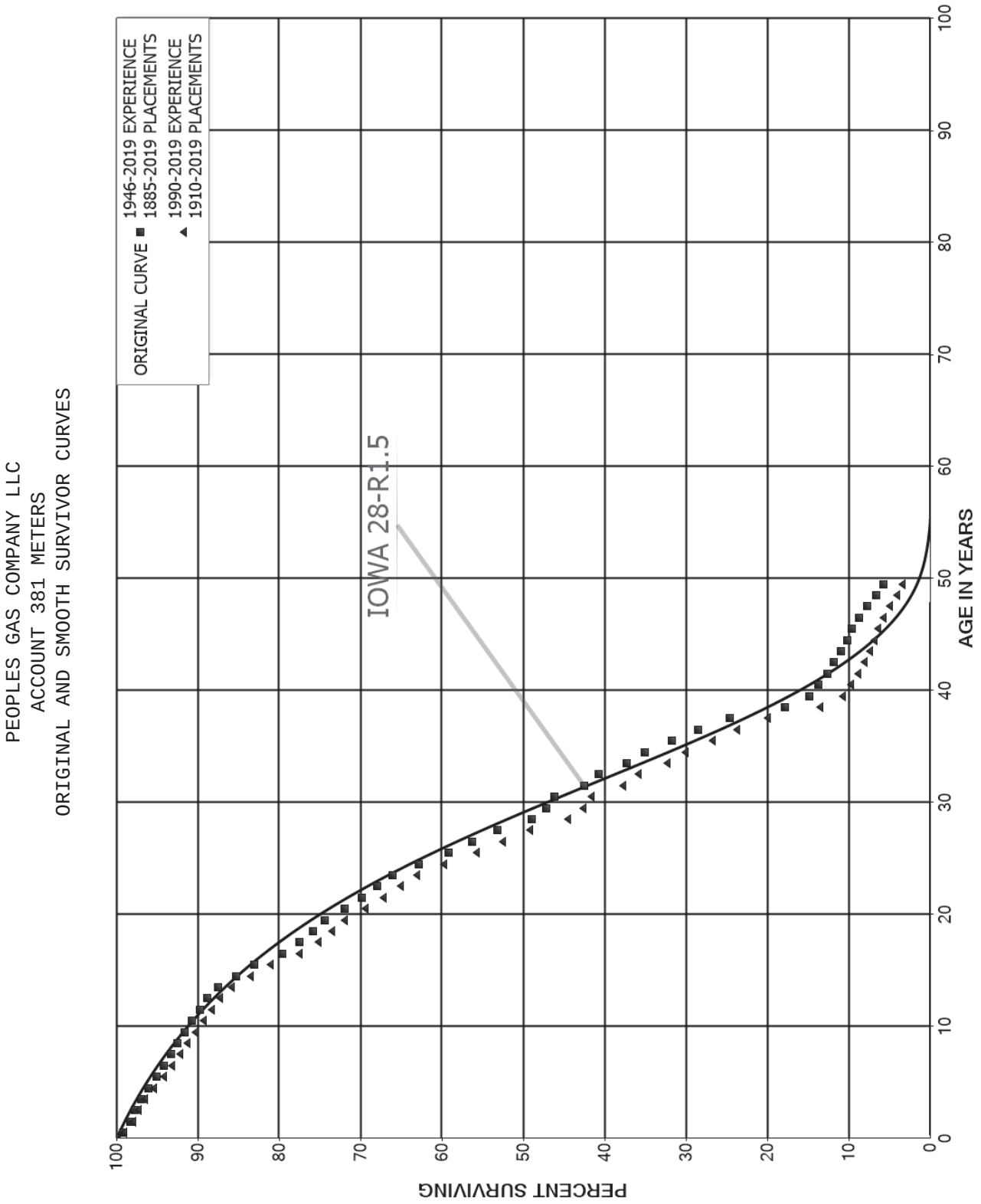
PEOPLES GAS COMPANY LLC

ACCOUNT 380 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1896-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	71,421	8,667	0.1214	0.8786	3.55
80.5	63,884	1,737	0.0272	0.9728	3.12
81.5	63,178	723	0.0114	0.9886	3.04
82.5	63,397	5,719	0.0902	0.9098	3.00
83.5	58,467	11,696	0.2000	0.8000	2.73
84.5	47,980	8,659	0.1805	0.8195	2.18
85.5	40,400	4,721	0.1168	0.8832	1.79
86.5	36,644	4,303	0.1174	0.8826	1.58
87.5	33,199	6,932	0.2088	0.7912	1.39
88.5	27,030	5,206	0.1926	0.8074	1.10
89.5	22,498	11,517	0.5119	0.4881	0.89
90.5	11,573	8,077	0.6979	0.3021	0.43
91.5	4,019	2,230	0.5549	0.4451	0.13
92.5	2,248	674	0.2998	0.7002	0.06
93.5	1,983	592	0.2986	0.7014	0.04
94.5	1,391	523	0.3760	0.6240	0.03
95.5	868	459	0.5282	0.4718	0.02
96.5	410	410	1.0000		0.01
97.5					


PEOPLES GAS COMPANY LLC
ACCOUNT 381 METERS
ORIGINAL AND SMOOTH SURVIVOR CURVES
ORIGINAL CURVE
1946-2019 EXPERIENCE
1885-2019 PLACEMENTS
1990-2019 EXPERIENCE
1910-2019 PLACEMENTS
IOWA 28-R1.5
PERCENT SURVIVING
AGE IN YEARS
100
90
80
70
60
50
40
30
20
10
0

PEOPLES GAS COMPANY LLC

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1885-2019 EXPERIENCE BAND 1946-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	33,043,180	275,370	0.0083	0.9917	100.00
0.5	31,089,847	287,618	0.0093	0.9907	99.17
1.5	28,940,828	167,760	0.0058	0.9942	98.25
2.5	27,370,394	191,207	0.0070	0.9930	97.68
3.5	26,057,277	239,534	0.0092	0.9908	97.00
4.5	25,055,659	281,326	0.0112	0.9888	96.11
5.5	24,135,518	209,042	0.0087	0.9913	95.03
6.5	23,658,509	217,980	0.0092	0.9908	94.20
7.5	22,831,377	193,393	0.0085	0.9915	93.34
8.5	22,032,629	226,586	0.0103	0.9897	92.55
9.5	21,388,050	205,860	0.0096	0.9904	91.59
10.5	20,621,858	217,543	0.0105	0.9895	90.71
11.5	19,443,399	208,710	0.0107	0.9893	89.75
12.5	18,008,545	259,161	0.0144	0.9856	88.79
13.5	16,778,363	433,860	0.0259	0.9741	87.51
14.5	15,473,629	405,664	0.0262	0.9738	85.25
15.5	14,043,616	577,108	0.0411	0.9589	83.02
16.5	12,768,963	338,580	0.0265	0.9735	79.60
17.5	11,859,485	252,744	0.0213	0.9787	77.49
18.5	11,015,928	210,082	0.0191	0.9809	75.84
19.5	10,266,285	336,960	0.0328	0.9672	74.40
20.5	9,251,091	268,561	0.0290	0.9710	71.95
21.5	8,407,569	232,969	0.0277	0.9723	69.86
22.5	7,393,871	206,211	0.0279	0.9721	67.93
23.5	6,687,460	318,977	0.0477	0.9523	66.03
24.5	6,028,819	353,285	0.0586	0.9414	62.88
25.5	5,363,106	263,525	0.0491	0.9509	59.20
26.5	4,742,297	264,965	0.0559	0.9441	56.29
27.5	4,258,143	340,528	0.0800	0.9200	53.15
28.5	3,831,356	136,644	0.0357	0.9643	48.90
29.5	3,609,655	78,486	0.0217	0.9783	47.15
30.5	3,528,119	272,995	0.0774	0.9226	46.13
31.5	3,242,014	141,090	0.0435	0.9565	42.56
32.5	3,107,648	259,010	0.0833	0.9167	40.71
33.5	2,852,859	172,556	0.0605	0.9395	37.31
34.5	2,683,495	256,641	0.0956	0.9044	35.06
35.5	2,427,643	241,129	0.0993	0.9007	31.70
36.5	2,189,955	303,400	0.1385	0.8615	28.55
37.5	1,893,552	517,030	0.2730	0.7270	24.60
38.5	1,377,019	231,365	0.1680	0.8320	17.88

PEOPLES GAS COMPANY LLC

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1885-2019 EXPERIENCE BAND 1946-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,136,062	89,640	0.0789	0.9211	14.88
40.5	1,041,159	78,577	0.0755	0.9245	13.70
41.5	963,984	66,296	0.0688	0.9312	12.67
42.5	899,514	65,263	0.0726	0.9274	11.80
43.5	834,343	56,769	0.0680	0.9320	10.94
44.5	749,385	43,866	0.0585	0.9415	10.20
45.5	706,263	67,243	0.0952	0.9048	9.60
46.5	638,533	71,529	0.1120	0.8880	8.69
47.5	566,973	82,481	0.1455	0.8545	7.71
48.5	484,772	62,827	0.1296	0.8704	6.59
49.5	423,776	43,897	0.1036	0.8964	5.74
50.5	362,628	24,558	0.0677	0.9323	5.14
51.5	338,788	35,057	0.1035	0.8965	4.79
52.5	303,996	29,683	0.0976	0.9024	4.30
53.5	274,627	22,079	0.0804	0.9196	3.88
54.5	254,727	28,311	0.1111	0.8889	3.57
55.5	216,495	15,698	0.0725	0.9275	3.17
56.5	207,109	17,838	0.0861	0.9139	2.94
57.5	189,456	21,552	0.1138	0.8862	2.69
58.5	167,924	6,404	0.0381	0.9619	2.38
59.5	161,875	15,388	0.0951	0.9049	2.29
60.5	146,627	16,388	0.1118	0.8882	2.07
61.5	134,328	29,031	0.2161	0.7839	1.84
62.5	104,904	20,375	0.1942	0.8058	1.44
63.5	84,574	10,731	0.1269	0.8731	1.16
64.5	73,854	6,349	0.0860	0.9140	1.02
65.5	67,537	12,528	0.1855	0.8145	0.93
66.5	55,009	4,094	0.0744	0.9256	0.76
67.5	50,800	4,347	0.0856	0.9144	0.70
68.5	46,478	4,484	0.0965	0.9035	0.64
69.5	41,994	6,059	0.1443	0.8557	0.58
70.5	35,991	3,343	0.0929	0.9071	0.49
71.5	32,681	1,753	0.0536	0.9464	0.45
72.5	31,007	2,419	0.0780	0.9220	0.42
73.5	28,677	2,642	0.0921	0.9079	0.39
74.5	26,035	4,757	0.1827	0.8173	0.36
75.5	21,278	2,189	0.1029	0.8971	0.29
76.5	19,088	316	0.0165	0.9835	0.26
77.5	18,773	267	0.0142	0.9858	0.26
78.5	18,506	243	0.0131	0.9869	0.25

PEOPLES GAS COMPANY LLC

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1885-2019 EXPERIENCE BAND 1946-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	18,263	233	0.0128	0.9872	0.25
80.5	18,029	887	0.0492	0.9508	0.25
81.5	17,142	1,570	0.0916	0.9084	0.23
82.5	15,572	783	0.0503	0.9497	0.21
83.5	14,789	2,013	0.1361	0.8639	0.20
84.5	12,775	2,293	0.1795	0.8205	0.17
85.5	10,482	1,438	0.1372	0.8628	0.14
86.5	9,044	1,463	0.1618	0.8382	0.12
87.5	7,581	1,307	0.1724	0.8276	0.10
88.5	6,274	438	0.0699	0.9301	0.09
89.5	5,835	1,039	0.1780	0.8220	0.08
90.5	4,796	1,703	0.3551	0.6449	0.07
91.5	3,093	799	0.2584	0.7416	0.04
92.5	2,294	279	0.1214	0.8786	0.03
93.5	2,015	922	0.4577	0.5423	0.03
94.5	1,093	323	0.2955	0.7045	0.01
95.5	770	465	0.6037	0.3963	0.01
96.5	305	305	1.0000		0.00
97.5					

PEOPLES GAS COMPANY LLC

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1910-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	26,871,046	271,221	0.0101	0.9899	100.00
0.5	25,377,003	283,166	0.0112	0.9888	98.99
1.5	23,545,398	161,007	0.0068	0.9932	97.89
2.5	22,366,969	189,418	0.0085	0.9915	97.22
3.5	21,563,813	237,476	0.0110	0.9890	96.39
4.5	20,789,357	279,649	0.0135	0.9865	95.33
5.5	20,236,436	204,733	0.0101	0.9899	94.05
6.5	20,040,338	215,899	0.0108	0.9892	93.10
7.5	19,593,010	192,161	0.0098	0.9902	92.10
8.5	19,084,690	222,217	0.0116	0.9884	91.19
9.5	19,031,309	204,245	0.0107	0.9893	90.13
10.5	18,923,325	213,272	0.0113	0.9887	89.16
11.5	17,854,722	207,133	0.0116	0.9884	88.16
12.5	16,479,135	257,712	0.0156	0.9844	87.14
13.5	15,324,689	430,696	0.0281	0.9719	85.77
14.5	14,156,571	403,826	0.0285	0.9715	83.36
15.5	12,791,293	574,785	0.0449	0.9551	80.98
16.5	11,580,557	336,630	0.0291	0.9709	77.34
17.5	10,756,749	248,027	0.0231	0.9769	75.10
18.5	9,970,278	206,641	0.0207	0.9793	73.36
19.5	9,288,567	335,690	0.0361	0.9639	71.84
20.5	8,355,346	266,112	0.0318	0.9682	69.25
21.5	7,561,958	231,395	0.0306	0.9694	67.04
22.5	6,584,392	205,699	0.0312	0.9688	64.99
23.5	5,899,339	318,423	0.0540	0.9460	62.96
24.5	5,282,006	352,665	0.0668	0.9332	59.56
25.5	4,647,165	262,529	0.0565	0.9435	55.59
26.5	4,035,193	261,068	0.0647	0.9353	52.45
27.5	3,577,402	338,463	0.0946	0.9054	49.05
28.5	3,168,460	134,443	0.0424	0.9576	44.41
29.5	2,973,688	73,742	0.0248	0.9752	42.53
30.5	2,901,226	267,213	0.0921	0.9079	41.47
31.5	2,642,029	134,952	0.0511	0.9489	37.65
32.5	2,539,917	249,435	0.0982	0.9018	35.73
33.5	2,318,024	161,654	0.0697	0.9303	32.22
34.5	2,217,427	245,355	0.1106	0.8894	29.97
35.5	2,041,222	234,290	0.1148	0.8852	26.66
36.5	1,840,469	296,940	0.1613	0.8387	23.60
37.5	1,574,041	510,257	0.3242	0.6758	19.79
38.5	1,083,865	225,113	0.2077	0.7923	13.37

PEOPLES GAS COMPANY LLC

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1910-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	865,952	84,274	0.0973	0.9027	10.60
40.5	801,457	72,834	0.0909	0.9091	9.57
41.5	747,505	61,771	0.0826	0.9174	8.70
42.5	693,673	59,795	0.0862	0.9138	7.98
43.5	639,738	49,940	0.0781	0.9219	7.29
44.5	562,298	36,903	0.0656	0.9344	6.72
45.5	525,828	59,721	0.1136	0.8864	6.28
46.5	467,129	63,499	0.1359	0.8641	5.57
47.5	405,534	72,621	0.1791	0.8209	4.81
48.5	343,200	55,509	0.1617	0.8383	3.95
49.5	293,267	38,262	0.1305	0.8695	3.31
50.5	240,791	20,004	0.0831	0.9169	2.88
51.5	222,738	31,374	0.1409	0.8591	2.64
52.5	195,726	24,714	0.1263	0.8737	2.27
53.5	176,885	17,783	0.1005	0.8995	1.98
54.5	162,086	23,471	0.1448	0.8552	1.78
55.5	128,687	10,706	0.0832	0.9168	1.52
56.5	118,002	11,952	0.1013	0.8987	1.40
57.5	106,076	15,610	0.1472	0.8528	1.26
58.5	90,726	1,424	0.0157	0.9843	1.07
59.5	90,679	10,396	0.1146	0.8854	1.05
60.5	82,727	11,725	0.1417	0.8583	0.93
61.5	72,326	24,695	0.3414	0.6586	0.80
62.5	50,329	14,992	0.2979	0.7021	0.53
63.5	38,996	4,981	0.1277	0.8723	0.37
64.5	38,428	1,660	0.0432	0.9568	0.32
65.5	41,266	9,735	0.2359	0.7641	0.31
66.5	34,370	2,248	0.0654	0.9346	0.24
67.5	33,381	2,626	0.0787	0.9213	0.22
68.5	32,552	2,781	0.0854	0.9146	0.20
69.5	32,431	4,658	0.1436	0.8564	0.19
70.5	29,602	2,747	0.0928	0.9072	0.16
71.5	27,631	1,308	0.0473	0.9527	0.14
72.5	27,470	1,976	0.0719	0.9281	0.14
73.5	26,223	2,400	0.0915	0.9085	0.13
74.5	24,402	4,166	0.1707	0.8293	0.12
75.5	20,870	1,984	0.0951	0.9049	0.10
76.5	18,886	300	0.0159	0.9841	0.09
77.5	18,585	252	0.0136	0.9864	0.09
78.5	18,333	243	0.0132	0.9868	0.08

PEOPLES GAS COMPANY LLC

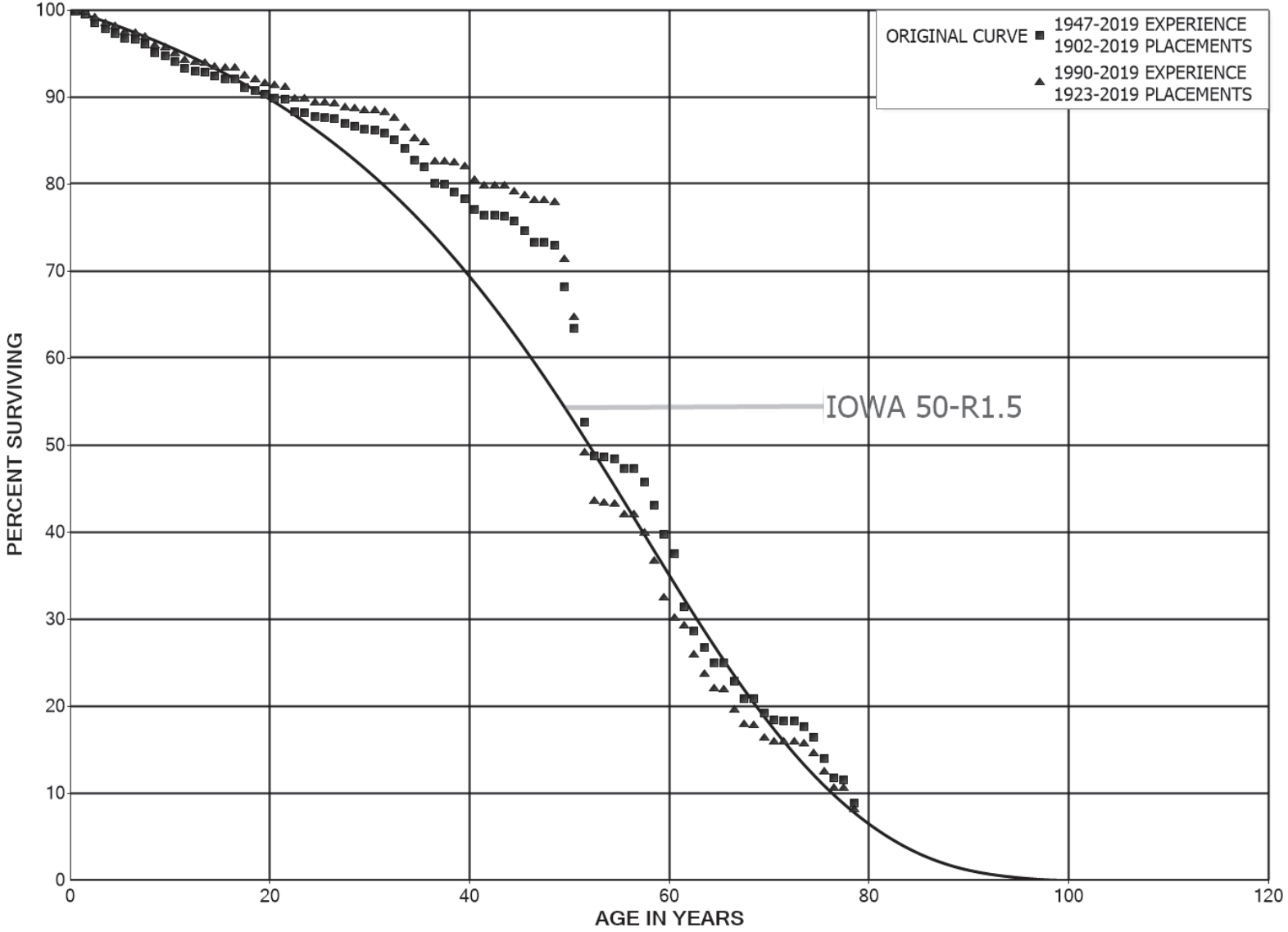
ACCOUNT 381 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1910-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	18,253	233	0.0128	0.9872	0.08
80.5	18,020	887	0.0492	0.9508	0.08
81.5	17,133	1,570	0.0916	0.9084	0.08
82.5	15,563	779	0.0500	0.9500	0.07
83.5	14,784	2,013	0.1362	0.8638	0.07
84.5	12,771	2,289	0.1792	0.8208	0.06
85.5	10,482	1,438	0.1372	0.8628	0.05
86.5	9,044	1,463	0.1618	0.8382	0.04
87.5	7,581	1,307	0.1724	0.8276	0.03
88.5	6,274	438	0.0699	0.9301	0.03
89.5	5,835	1,039	0.1780	0.8220	0.03
90.5	4,796	1,703	0.3551	0.6449	0.02
91.5	3,093	799	0.2584	0.7416	0.01
92.5	2,294	279	0.1214	0.8786	0.01
93.5	2,015	922	0.4577	0.5423	0.01
94.5	1,093	323	0.2955	0.7045	0.00
95.5	770	465	0.6037	0.3963	0.00
96.5	305	305	1.0000		0.00
97.5					

PEOPLES GAS COMPANY LLC
ACCOUNT 382.1 METER INSTALLATIONS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 382.1 METER INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1902-2019 EXPERIENCE BAND 1947-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	4,498,648	6,986	0.0016	0.9984	100.00
0.5	4,282,661	12,758	0.0030	0.9970	99.84
1.5	4,046,696	41,366	0.0102	0.9898	99.55
2.5	3,824,267	26,138	0.0068	0.9932	98.53
3.5	3,620,406	19,917	0.0055	0.9945	97.86
4.5	3,459,979	22,368	0.0065	0.9935	97.32
5.5	3,310,119	3,855	0.0012	0.9988	96.69
6.5	2,834,642	13,907	0.0049	0.9951	96.58
7.5	2,733,003	28,277	0.0103	0.9897	96.10
8.5	2,647,264	10,144	0.0038	0.9962	95.11
9.5	2,574,902	17,254	0.0067	0.9933	94.74
10.5	2,451,211	22,254	0.0091	0.9909	94.11
11.5	2,347,392	6,553	0.0028	0.9972	93.25
12.5	2,227,705	2,809	0.0013	0.9987	92.99
13.5	2,106,523	10,456	0.0050	0.9950	92.88
14.5	1,937,581	6,411	0.0033	0.9967	92.42
15.5	1,837,777	1,820	0.0010	0.9990	92.11
16.5	1,749,094	17,152	0.0098	0.9902	92.02
17.5	1,632,918	7,967	0.0049	0.9951	91.12
18.5	1,497,052	6,751	0.0045	0.9955	90.67
19.5	1,364,266	5,770	0.0042	0.9958	90.26
20.5	1,293,334	2,816	0.0022	0.9978	89.88
21.5	1,176,008	17,812	0.0151	0.9849	89.69
22.5	1,095,049	1,958	0.0018	0.9982	88.33
23.5	1,035,565	5,207	0.0050	0.9950	88.17
24.5	985,761	1,546	0.0016	0.9984	87.73
25.5	923,839	1,115	0.0012	0.9988	87.59
26.5	774,245	4,879	0.0063	0.9937	87.48
27.5	658,338	2,239	0.0034	0.9966	86.93
28.5	595,410	2,645	0.0044	0.9956	86.64
29.5	528,865	661	0.0012	0.9988	86.25
30.5	437,955	1,485	0.0034	0.9966	86.14
31.5	337,742	3,281	0.0097	0.9903	85.85
32.5	181,536	2,006	0.0110	0.9890	85.02
33.5	127,598	2,101	0.0165	0.9835	84.08
34.5	112,245	1,028	0.0092	0.9908	82.69
35.5	94,028	2,161	0.0230	0.9770	81.94
36.5	88,233	63	0.0007	0.9993	80.05
37.5	83,282	996	0.0120	0.9880	80.00
38.5	73,917	704	0.0095	0.9905	79.04

PEOPLES GAS COMPANY LLC

ACCOUNT 382.1 METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1902-2019 EXPERIENCE BAND 1947-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	68,078	1,061	0.0156	0.9844	78.29
40.5	64,962	560	0.0086	0.9914	77.07
41.5	63,983	12	0.0002	0.9998	76.40
42.5	61,542	61	0.0010	0.9990	76.39
43.5	59,902	439	0.0073	0.9927	76.31
44.5	58,917	855	0.0145	0.9855	75.75
45.5	56,558	1,024	0.0181	0.9819	74.65
46.5	51,701		0.0000	1.0000	73.30
47.5	47,204	262	0.0055	0.9945	73.30
48.5	41,001	2,685	0.0655	0.9345	72.90
49.5	35,220	2,426	0.0689	0.9311	68.12
50.5	28,649	4,876	0.1702	0.8298	63.43
51.5	22,889	1,679	0.0733	0.9267	52.63
52.5	20,735	61	0.0029	0.9971	48.77
53.5	20,418	121	0.0059	0.9941	48.63
54.5	20,055	417	0.0208	0.9792	48.34
55.5	19,506		0.0000	1.0000	47.34
56.5	19,506	680	0.0348	0.9652	47.34
57.5	18,826	1,089	0.0579	0.9421	45.69
58.5	17,737	1,387	0.0782	0.9218	43.05
59.5	16,349	911	0.0557	0.9443	39.68
60.5	15,375	2,486	0.1617	0.8383	37.47
61.5	12,889	1,143	0.0886	0.9114	31.41
62.5	11,747	797	0.0678	0.9322	28.63
63.5	10,950	688	0.0628	0.9372	26.68
64.5	10,263	38	0.0037	0.9963	25.01
65.5	10,225	873	0.0854	0.9146	24.92
66.5	9,351	794	0.0849	0.9151	22.79
67.5	8,558	7	0.0008	0.9992	20.85
68.5	8,551	674	0.0788	0.9212	20.84
69.5	7,877	336	0.0427	0.9573	19.20
70.5	7,541	15	0.0021	0.9979	18.38
71.5	7,525		0.0000	1.0000	18.34
72.5	7,525	297	0.0395	0.9605	18.34
73.5	7,228	523	0.0723	0.9277	17.61
74.5	6,706	990	0.1477	0.8523	16.34
75.5	5,715	888	0.1554	0.8446	13.93
76.5	4,827	118	0.0244	0.9756	11.76
77.5	4,709	1,085	0.2304	0.7696	11.48
78.5	3,625	794	0.2190	0.7810	8.83

PEOPLES GAS COMPANY LLC

ACCOUNT 382.1 METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1902-2019 EXPERIENCE BAND 1947-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	2,831	114	0.0403	0.9597	6.90
80.5	2,717	10	0.0038	0.9962	6.62
81.5	2,249		0.0000	1.0000	6.59
82.5	2,249		0.0000	1.0000	6.59
83.5	1,919		0.0000	1.0000	6.59
84.5	1,919	91	0.0472	0.9528	6.59
85.5	1,829		0.0000	1.0000	6.28
86.5	1,829		0.0000	1.0000	6.28
87.5	1,829	31	0.0169	0.9831	6.28
88.5	1,798	254	0.1413	0.8587	6.18
89.5	1,544	230	0.1491	0.8509	5.30
90.5	1,314	1,314	1.0000		4.51
91.5					

PEOPLES GAS COMPANY LLC

ACCOUNT 382.1 METER INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1923-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	3,829,991	4,461	0.0012	0.9988	100.00
0.5	3,743,413	4,904	0.0013	0.9987	99.88
1.5	3,615,897	25,461	0.0070	0.9930	99.75
2.5	3,595,940	23,728	0.0066	0.9934	99.05
3.5	3,475,665	13,141	0.0038	0.9962	98.40
4.5	3,334,731	20,825	0.0062	0.9938	98.02
5.5	3,200,424	2,716	0.0008	0.9992	97.41
6.5	2,728,430	13,097	0.0048	0.9952	97.33
7.5	2,629,479	26,911	0.0102	0.9898	96.86
8.5	2,556,845	8,098	0.0032	0.9968	95.87
9.5	2,492,226	15,471	0.0062	0.9938	95.57
10.5	2,369,992	20,860	0.0088	0.9912	94.97
11.5	2,267,534	5,609	0.0025	0.9975	94.14
12.5	2,151,142	2,291	0.0011	0.9989	93.91
13.5	2,032,439	9,595	0.0047	0.9953	93.81
14.5	1,866,648	2,543	0.0014	0.9986	93.36
15.5	1,770,554	85	0.0000	1.0000	93.24
16.5	1,685,736	15,678	0.0093	0.9907	93.23
17.5	1,572,854	7,254	0.0046	0.9954	92.36
18.5	1,442,507	5,974	0.0041	0.9959	91.94
19.5	1,312,773	4,425	0.0034	0.9966	91.56
20.5	1,249,966	1,921	0.0015	0.9985	91.25
21.5	1,133,734	16,723	0.0147	0.9853	91.11
22.5	1,059,284	534	0.0005	0.9995	89.76
23.5	998,445	4,329	0.0043	0.9957	89.72
24.5	949,889	1,036	0.0011	0.9989	89.33
25.5	890,680	406	0.0005	0.9995	89.23
26.5	743,830	3,471	0.0047	0.9953	89.19
27.5	630,411	1,194	0.0019	0.9981	88.78
28.5	569,082	1,105	0.0019	0.9981	88.61
29.5	505,967	307	0.0006	0.9994	88.44
30.5	417,082	1,042	0.0025	0.9975	88.38
31.5	317,492	2,491	0.0078	0.9922	88.16
32.5	162,241	2,006	0.0124	0.9876	87.47
33.5	108,714	1,552	0.0143	0.9857	86.39
34.5	95,471	430	0.0045	0.9955	85.15
35.5	78,634	2,118	0.0269	0.9731	84.77
36.5	73,509		0.0000	1.0000	82.49
37.5	68,297	92	0.0014	0.9986	82.49
38.5	60,790	304	0.0050	0.9950	82.38

PEOPLES GAS COMPANY LLC

ACCOUNT 382.1 METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1923-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	56,618	1,061	0.0187	0.9813	81.96
40.5	52,586	443	0.0084	0.9916	80.43
41.5	51,722		0.0000	1.0000	79.75
42.5	49,653		0.0000	1.0000	79.75
43.5	48,250	439	0.0091	0.9909	79.75
44.5	47,164	254	0.0054	0.9946	79.02
45.5	45,483	337	0.0074	0.9926	78.60
46.5	41,345		0.0000	1.0000	78.02
47.5	37,094	63	0.0017	0.9983	78.02
48.5	31,435	2,685	0.0854	0.9146	77.89
49.5	25,945	2,426	0.0935	0.9065	71.23
50.5	20,261	4,876	0.2407	0.7593	64.57
51.5	14,959	1,679	0.1122	0.8878	49.03
52.5	13,890	61	0.0044	0.9956	43.53
53.5	14,726	54	0.0037	0.9963	43.34
54.5	14,437	417	0.0289	0.9711	43.18
55.5	13,888		0.0000	1.0000	41.93
56.5	13,902	680	0.0489	0.9511	41.93
57.5	13,223	1,089	0.0824	0.9176	39.88
58.5	12,133	1,387	0.1143	0.8857	36.60
59.5	10,746	772	0.0718	0.9282	32.41
60.5	10,252	321	0.0313	0.9687	30.08
61.5	10,161	1,143	0.1124	0.8876	29.14
62.5	9,018	783	0.0868	0.9132	25.87
63.5	8,868	628	0.0708	0.9292	23.62
64.5	8,241	38	0.0046	0.9954	21.95
65.5	8,203	859	0.1047	0.8953	21.85
66.5	8,794	794	0.0902	0.9098	19.56
67.5	8,001	7	0.0008	0.9992	17.79
68.5	7,994	674	0.0843	0.9157	17.78
69.5	7,320	176	0.0240	0.9760	16.28
70.5	7,144		0.0000	1.0000	15.89
71.5	7,144		0.0000	1.0000	15.89
72.5	7,144	100	0.0140	0.9860	15.89
73.5	7,044	523	0.0742	0.9258	15.67
74.5	6,522	924	0.1417	0.8583	14.50
75.5	5,598	888	0.1587	0.8413	12.45
76.5	4,709		0.0000	1.0000	10.47
77.5	4,709	1,085	0.2304	0.7696	10.47
78.5	3,625	794	0.2190	0.7810	8.06

PEOPLES GAS COMPANY LLC

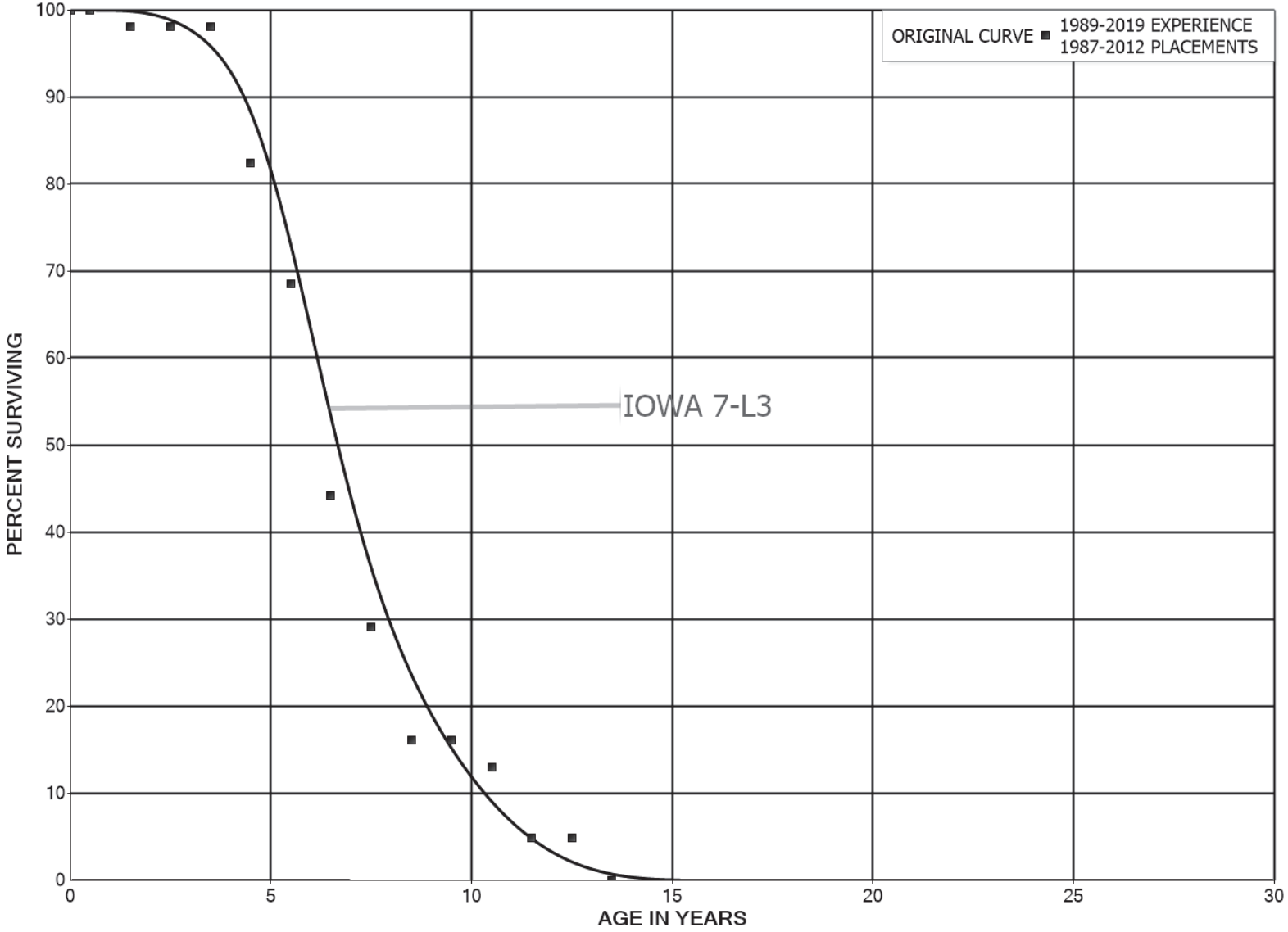
ACCOUNT 382.1 METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1923-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	2,831	114	0.0403	0.9597	6.30
80.5	2,717	10	0.0038	0.9962	6.04
81.5	2,249		0.0000	1.0000	6.02
82.5	2,249		0.0000	1.0000	6.02
83.5	1,919		0.0000	1.0000	6.02
84.5	1,919	91	0.0472	0.9528	6.02
85.5	1,829		0.0000	1.0000	5.73
86.5	1,829		0.0000	1.0000	5.73
87.5	1,829	31	0.0169	0.9831	5.73
88.5	1,798	254	0.1413	0.8587	5.64
89.5	1,544	230	0.1491	0.8509	4.84
90.5	1,314	1,314	1.0000		4.12
91.5					

PEOPLES GAS COMPANY LLC
ACCOUNT 392.1 TRANSPORTATION EQUIPMENT - CARS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

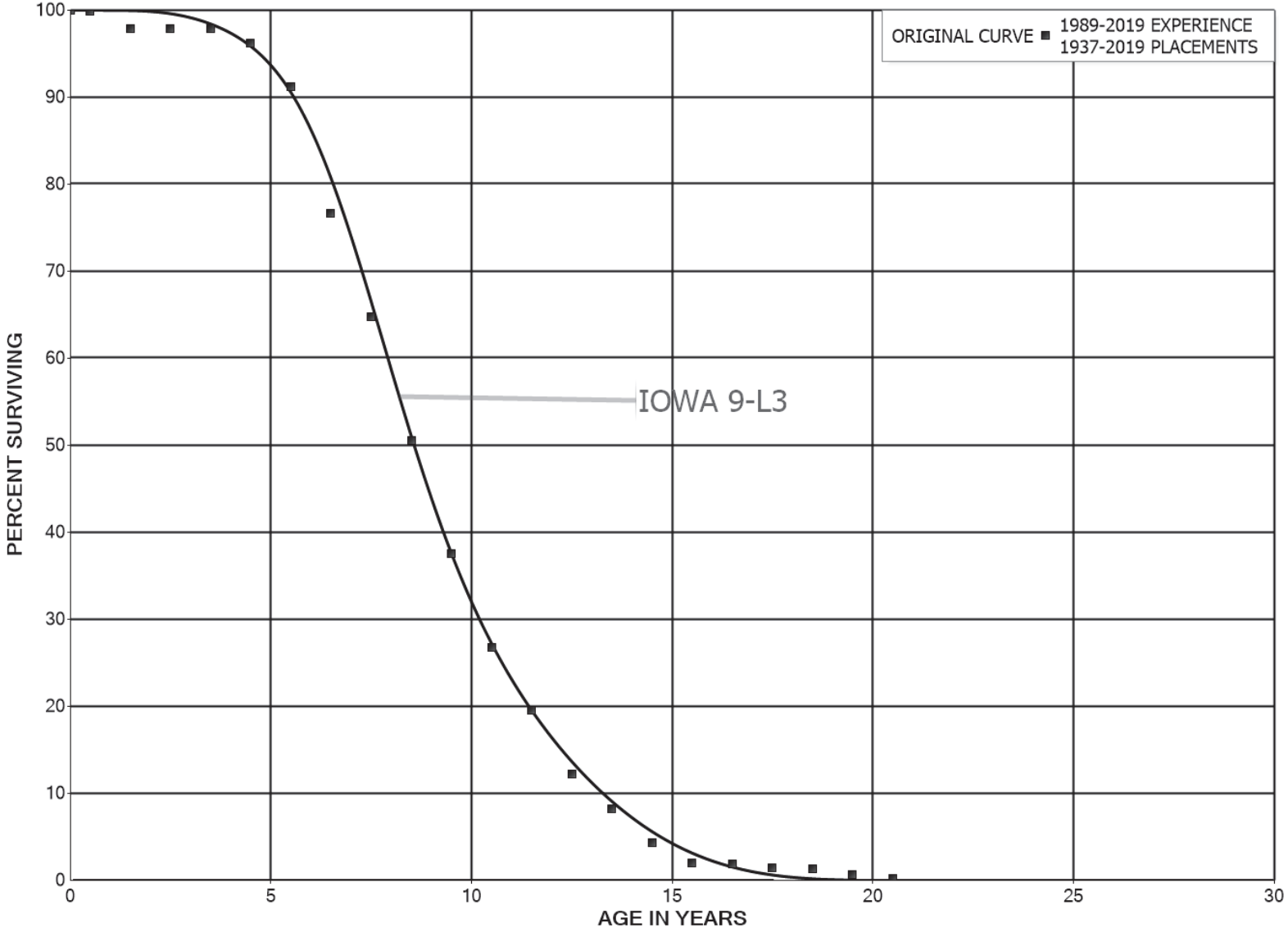
ACCOUNT 392.1 TRANSPORTATION EQUIPMENT - CARS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1987-2012 EXPERIENCE BAND 1989-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,143,719		0.0000	1.0000	100.00
0.5	1,133,257	21,598	0.0191	0.9809	100.00
1.5	1,300,805		0.0000	1.0000	98.09
2.5	1,301,217	156	0.0001	0.9999	98.09
3.5	1,301,061	208,031	0.1599	0.8401	98.08
4.5	1,116,728	188,864	0.1691	0.8309	82.40
5.5	927,864	329,833	0.3555	0.6445	68.46
6.5	598,031	204,433	0.3418	0.6582	44.13
7.5	296,466	132,179	0.4458	0.5542	29.04
8.5	91,327		0.0000	1.0000	16.09
9.5	91,327	18,015	0.1973	0.8027	16.09
10.5	73,312	45,904	0.6262	0.3738	12.92
11.5	27,407		0.0000	1.0000	4.83
12.5	27,407	27,407	1.0000		4.83
13.5					

PEOPLES GAS COMPANY LLC
ACCOUNT 392.2 TRANSPORTATION EQUIPMENT - LIGHT TRUCKS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 392.2 TRANSPORTATION EQUIPMENT - LIGHT TRUCKS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1937-2019 EXPERIENCE BAND 1989-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	12,004,229	25,763	0.0021	0.9979	100.00
0.5	11,945,056	234,430	0.0196	0.9804	99.79
1.5	11,141,955	3,374	0.0003	0.9997	97.83
2.5	10,615,008	1,730	0.0002	0.9998	97.80
3.5	10,684,290	176,159	0.0165	0.9835	97.78
4.5	10,643,780	557,689	0.0524	0.9476	96.17
5.5	9,624,062	1,530,716	0.1591	0.8409	91.13
6.5	7,916,933	1,230,496	0.1554	0.8446	76.64
7.5	6,329,539	1,390,754	0.2197	0.7803	64.72
8.5	4,656,980	1,197,631	0.2572	0.7428	50.50
9.5	3,416,513	983,446	0.2879	0.7121	37.52
10.5	2,464,904	667,031	0.2706	0.7294	26.72
11.5	1,663,394	624,547	0.3755	0.6245	19.49
12.5	849,768	281,940	0.3318	0.6682	12.17
13.5	567,828	267,137	0.4705	0.5295	8.13
14.5	300,692	165,809	0.5514	0.4486	4.31
15.5	97,325	2,318	0.0238	0.9762	1.93
16.5	95,397	27,564	0.2889	0.7111	1.89
17.5	67,833	785	0.0116	0.9884	1.34
18.5	63,781	34,447	0.5401	0.4599	1.33
19.5	29,334	21,651	0.7381	0.2619	0.61
20.5	1,211		0.0000	1.0000	0.16
21.5	1,211		0.0000	1.0000	0.16
22.5	1,211		0.0000	1.0000	0.16
23.5	1,211		0.0000	1.0000	0.16
24.5	1,211		0.0000	1.0000	0.16
25.5	1,211		0.0000	1.0000	0.16
26.5	1,211		0.0000	1.0000	0.16
27.5	1,211	1,211	1.0000		0.16
28.5					
29.5					
30.5					
31.5					
32.5					
33.5					
34.5					
35.5					
36.5					
37.5					
38.5					

PEOPLES GAS COMPANY LLC

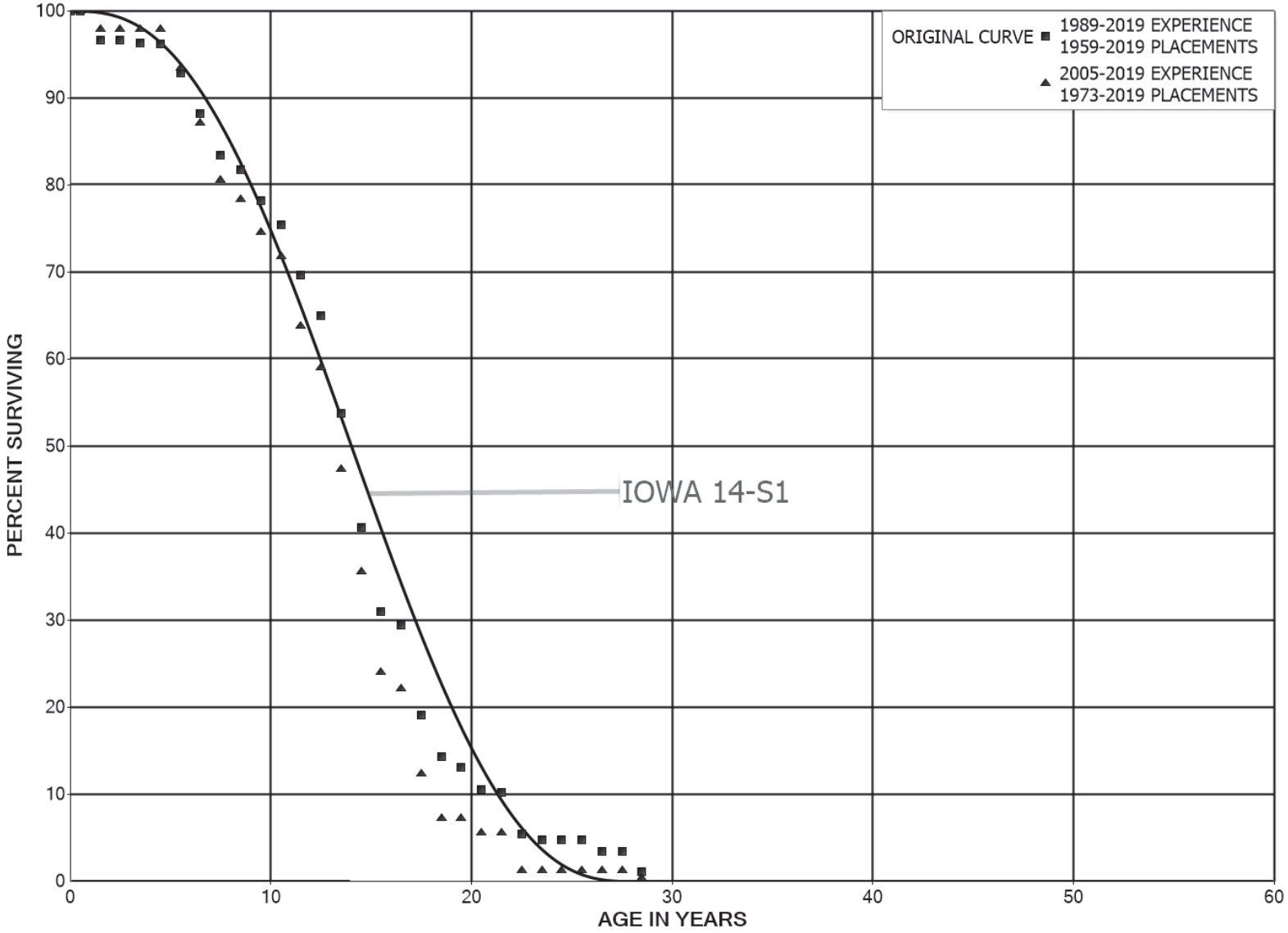
ACCOUNT 392.2 TRANSPORTATION EQUIPMENT - LIGHT TRUCKS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1937-2019 EXPERIENCE BAND 1989-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5					
40.5					
41.5					
42.5					
43.5					
44.5					
45.5					
46.5					
47.5					
48.5					
49.5					
50.5					
51.5	69		0.0000		
52.5	69		0.0000		
53.5	69		0.0000		
54.5	69		0.0000		
55.5	69		0.0000		
56.5	69		0.0000		
57.5	69		0.0000		
58.5	69		0.0000		
59.5	69	69	1.0000		
60.5					

PEOPLES GAS COMPANY LLC
ACCOUNT 392.3 TRANSPORTATION EQUIPMENT - HEAVY TRUCKS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 392.3 TRANSPORTATION EQUIPMENT - HEAVY TRUCKS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1959-2019 EXPERIENCE BAND 1989-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	6,985,838		0.0000	1.0000	100.00
0.5	6,318,272	215,331	0.0341	0.9659	100.00
1.5	5,185,140	344	0.0001	0.9999	96.59
2.5	4,834,370	14,243	0.0029	0.9971	96.59
3.5	4,558,059	6,847	0.0015	0.9985	96.30
4.5	4,583,600	158,641	0.0346	0.9654	96.16
5.5	4,209,515	211,598	0.0503	0.9497	92.83
6.5	3,719,111	200,483	0.0539	0.9461	88.16
7.5	3,064,926	59,970	0.0196	0.9804	83.41
8.5	3,087,363	137,262	0.0445	0.9555	81.78
9.5	2,510,151	89,958	0.0358	0.9642	78.14
10.5	2,402,255	181,921	0.0757	0.9243	75.34
11.5	2,234,218	152,200	0.0681	0.9319	69.64
12.5	1,993,451	341,675	0.1714	0.8286	64.89
13.5	1,504,377	366,995	0.2440	0.7560	53.77
14.5	1,171,635	280,640	0.2395	0.7605	40.65
15.5	904,717	46,045	0.0509	0.9491	30.92
16.5	794,457	279,285	0.3515	0.6485	29.34
17.5	514,361	127,813	0.2485	0.7515	19.03
18.5	386,548	33,190	0.0859	0.9141	14.30
19.5	355,267	70,902	0.1996	0.8004	13.07
20.5	299,696	8,214	0.0274	0.9726	10.46
21.5	207,262	96,538	0.4658	0.5342	10.18
22.5	115,961	15,809	0.1363	0.8637	5.44
23.5	100,153		0.0000	1.0000	4.70
24.5	100,153		0.0000	1.0000	4.70
25.5	100,153	26,661	0.2662	0.7338	4.70
26.5	73,492		0.0000	1.0000	3.45
27.5	73,492	51,830	0.7052	0.2948	3.45
28.5	21,662	685	0.0316	0.9684	1.02
29.5	23,165		0.0000	1.0000	0.98
30.5	23,165	7,425	0.3205	0.6795	0.98
31.5	15,740		0.0000	1.0000	0.67
32.5	15,740	5,300	0.3367	0.6633	0.67
33.5	10,440	10,440	1.0000		0.44
34.5					

PEOPLES GAS COMPANY LLC

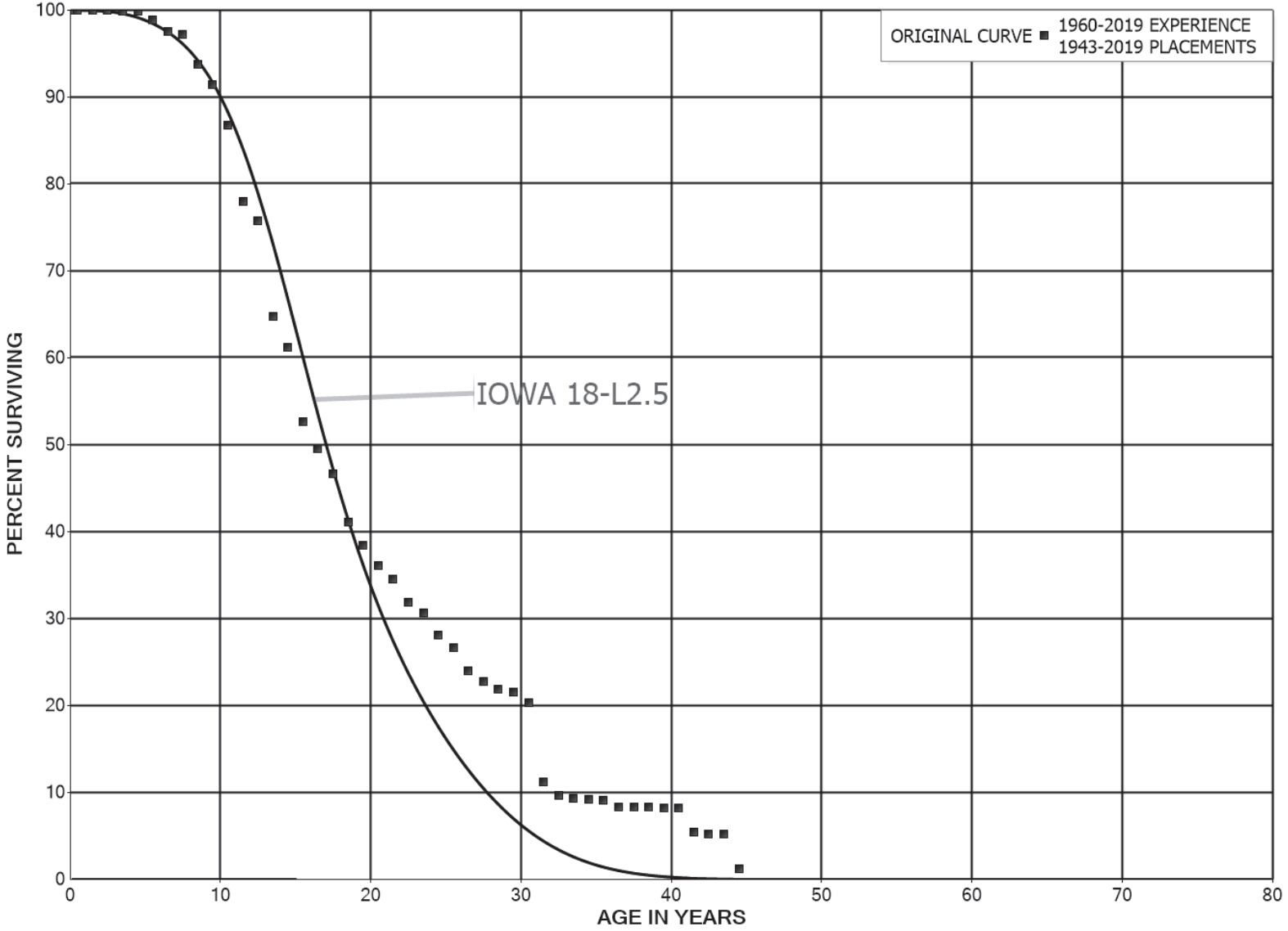
ACCOUNT 392.3 TRANSPORTATION EQUIPMENT - HEAVY TRUCKS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1973-2019 EXPERIENCE BAND 2005-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	5,343,401		0.0000	1.0000	100.00
0.5	4,853,883	105,712	0.0218	0.9782	100.00
1.5	3,975,542		0.0000	1.0000	97.82
2.5	3,584,496		0.0000	1.0000	97.82
3.5	3,435,441		0.0000	1.0000	97.82
4.5	3,548,114	158,641	0.0447	0.9553	97.82
5.5	3,079,805	211,597	0.0687	0.9313	93.45
6.5	2,673,621	199,437	0.0746	0.9254	87.03
7.5	2,012,651	55,160	0.0274	0.9726	80.54
8.5	1,994,445	98,696	0.0495	0.9505	78.33
9.5	1,692,262	61,268	0.0362	0.9638	74.45
10.5	1,577,107	176,096	0.1117	0.8883	71.76
11.5	1,387,371	105,184	0.0758	0.9242	63.75
12.5	1,247,771	247,107	0.1980	0.8020	58.91
13.5	953,409	235,841	0.2474	0.7526	47.25
14.5	858,921	280,640	0.3267	0.6733	35.56
15.5	592,261	46,045	0.0777	0.9223	23.94
16.5	547,136	244,050	0.4461	0.5539	22.08
17.5	302,275	124,742	0.4127	0.5873	12.23
18.5	177,534		0.0000	1.0000	7.18
19.5	236,705	55,947	0.2364	0.7636	7.18
20.5	205,839		0.0000	1.0000	5.49
21.5	121,619	96,538	0.7938	0.2062	5.49
22.5	25,081		0.0000	1.0000	1.13
23.5	25,081		0.0000	1.0000	1.13
24.5	25,081		0.0000	1.0000	1.13
25.5	25,081		0.0000	1.0000	1.13
26.5	53,243		0.0000	1.0000	1.13
27.5	53,929	42,804	0.7937	0.2063	1.13
28.5	11,125	685	0.0616	0.9384	0.23
29.5	10,440		0.0000	1.0000	0.22
30.5	10,440		0.0000	1.0000	0.22
31.5	15,740		0.0000	1.0000	0.22
32.5	15,740	5,300	0.3367	0.6633	0.22
33.5	10,440	10,440	1.0000		0.15
34.5					

PEOPLES GAS COMPANY LLC
ACCOUNT 396 POWER OPERATED EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 396 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1943-2019 EXPERIENCE BAND 1960-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	5,166,041		0.0000	1.0000	100.00
0.5	5,146,464	1,128	0.0002	0.9998	100.00
1.5	5,022,474	1,432	0.0003	0.9997	99.98
2.5	5,030,386	4,627	0.0009	0.9991	99.95
3.5	4,984,510		0.0000	1.0000	99.86
4.5	4,710,667	47,169	0.0100	0.9900	99.86
5.5	4,438,242	58,869	0.0133	0.9867	98.86
6.5	4,129,395	14,245	0.0034	0.9966	97.55
7.5	4,123,946	149,481	0.0362	0.9638	97.21
8.5	3,976,627	96,715	0.0243	0.9757	93.69
9.5	3,908,988	200,487	0.0513	0.9487	91.41
10.5	3,714,136	376,985	0.1015	0.8985	86.72
11.5	3,307,479	91,215	0.0276	0.9724	77.92
12.5	3,185,609	464,221	0.1457	0.8543	75.77
13.5	2,732,579	148,956	0.0545	0.9455	64.73
14.5	2,416,704	339,617	0.1405	0.8595	61.20
15.5	1,950,509	116,680	0.0598	0.9402	52.60
16.5	1,682,934	95,605	0.0568	0.9432	49.45
17.5	1,578,351	187,691	0.1189	0.8811	46.64
18.5	1,199,763	79,144	0.0660	0.9340	41.10
19.5	1,045,227	61,825	0.0592	0.9408	38.39
20.5	981,941	44,834	0.0457	0.9543	36.11
21.5	893,944	68,626	0.0768	0.9232	34.47
22.5	825,372	32,528	0.0394	0.9606	31.82
23.5	725,728	59,220	0.0816	0.9184	30.57
24.5	666,508	34,371	0.0516	0.9484	28.07
25.5	542,118	53,392	0.0985	0.9015	26.62
26.5	439,382	23,719	0.0540	0.9460	24.00
27.5	314,220	11,891	0.0378	0.9622	22.71
28.5	288,251	3,852	0.0134	0.9866	21.85
29.5	284,398	16,054	0.0564	0.9436	21.56
30.5	253,469	114,788	0.4529	0.5471	20.34
31.5	137,282	19,036	0.1387	0.8613	11.13
32.5	112,872	3,443	0.0305	0.9695	9.58
33.5	109,428	1,152	0.0105	0.9895	9.29
34.5	100,126	1,076	0.0107	0.9893	9.19
35.5	82,746	7,858	0.0950	0.9050	9.10
36.5	74,888		0.0000	1.0000	8.23
37.5	74,888		0.0000	1.0000	8.23
38.5	74,888	95	0.0013	0.9987	8.23

PEOPLES GAS COMPANY LLC

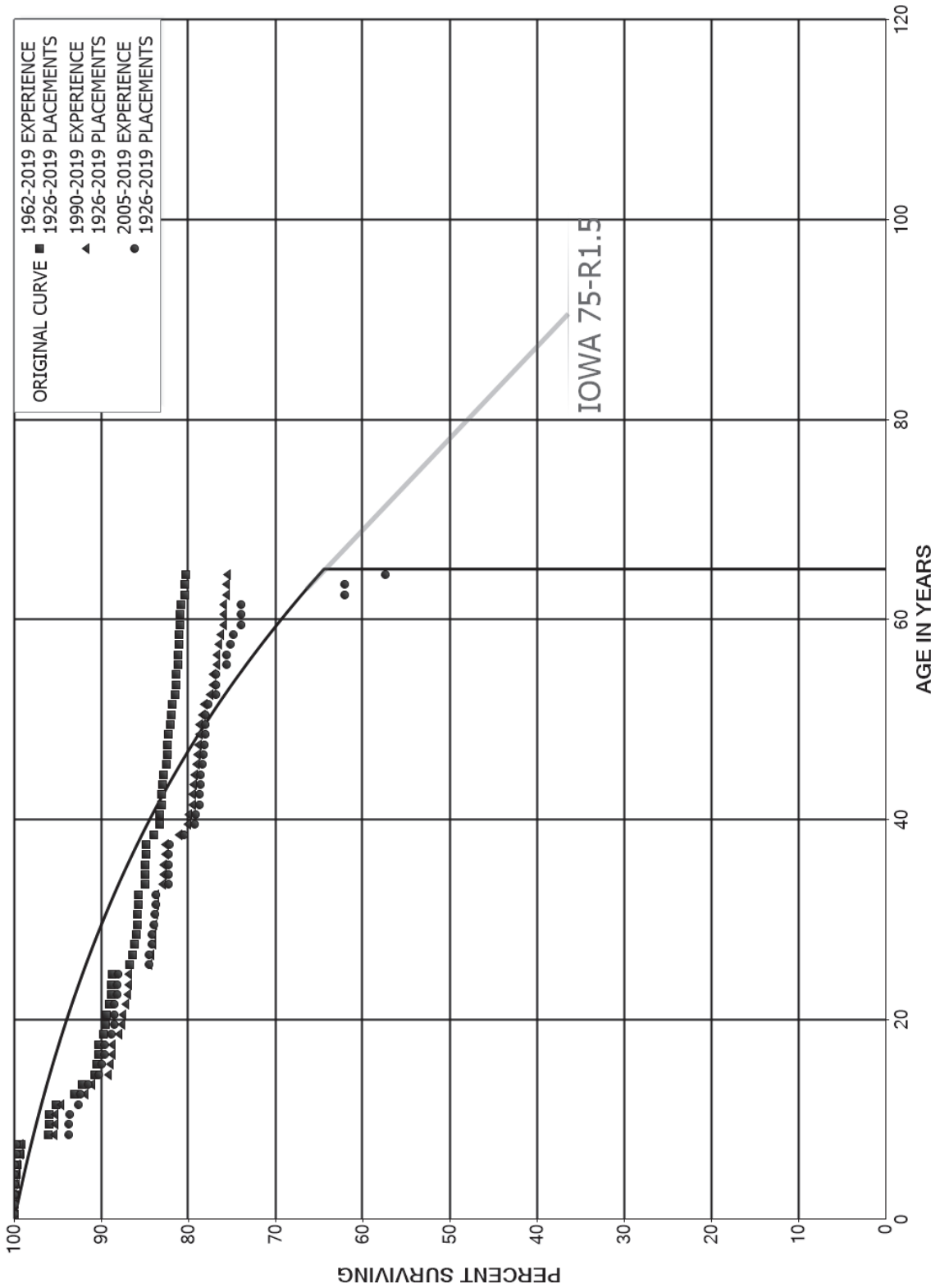
ACCOUNT 396 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1943-2019 EXPERIENCE BAND 1960-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	74,793	54	0.0007	0.9993	8.22
40.5	74,740	25,574	0.3422	0.6578	8.22
41.5	24,397	819	0.0336	0.9664	5.40
42.5	23,577		0.0000	1.0000	5.22
43.5	23,577	18,117	0.7684	0.2316	5.22
44.5	5,211		0.0000	1.0000	1.21
45.5	5,211		0.0000	1.0000	1.21
46.5	5,211		0.0000	1.0000	1.21
47.5	5,211		0.0000	1.0000	1.21
48.5	5,211	3,329	0.6388	0.3612	1.21
49.5	1,882		0.0000	1.0000	0.44
50.5	1,882		0.0000	1.0000	0.44
51.5	1,882		0.0000	1.0000	0.44
52.5	1,882		0.0000	1.0000	0.44
53.5	1,882		0.0000	1.0000	0.44
54.5	1,882		0.0000	1.0000	0.44
55.5	1,882		0.0000	1.0000	0.44
56.5	1,882		0.0000	1.0000	0.44
57.5	1,382		0.0000	1.0000	0.44
58.5					0.44

PEOPLES GAS COMPANY LLC
ACCOUNT 398 MAJOR STRUCTURES IN ACCOUNTS 351, 366.1 375 AND 390
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 398 MAJOR STRUCTURES IN ACCOUNTS 351, 366.1 375 AND 390

ORIGINAL LIFE TABLE

PLACEMENT BAND 1926-2019 EXPERIENCE BAND 1962-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	5,067,054		0.0000	1.0000	100.00
0.5	4,348,813	1,811	0.0004	0.9996	100.00
1.5	4,415,243		0.0000	1.0000	99.96
2.5	3,952,295	4,875	0.0012	0.9988	99.96
3.5	3,947,420	5,900	0.0015	0.9985	99.84
4.5	3,949,136	4,574	0.0012	0.9988	99.69
5.5	3,887,748	12,920	0.0033	0.9967	99.57
6.5	3,600,422	1,089	0.0003	0.9997	99.24
7.5	3,324,043	104,297	0.0314	0.9686	99.21
8.5	3,028,427	4,056	0.0013	0.9987	96.10
9.5	3,019,470	1,691	0.0006	0.9994	95.97
10.5	3,006,873	22,463	0.0075	0.9925	95.91
11.5	2,384,951	54,559	0.0229	0.9771	95.20
12.5	2,236,299	19,281	0.0086	0.9914	93.02
13.5	2,118,137	33,820	0.0160	0.9840	92.22
14.5	2,046,749	6,137	0.0030	0.9970	90.75
15.5	1,614,399	3,046	0.0019	0.9981	90.47
16.5	1,605,380		0.0000	1.0000	90.30
17.5	1,575,812	10,762	0.0068	0.9932	90.30
18.5	1,565,050	3,788	0.0024	0.9976	89.69
19.5	1,518,949	2,024	0.0013	0.9987	89.47
20.5	1,514,803	4,275	0.0028	0.9972	89.35
21.5	1,600,354	4,171	0.0026	0.9974	89.10
22.5	1,598,671	1,396	0.0009	0.9991	88.87
23.5	1,513,996	470	0.0003	0.9997	88.79
24.5	1,468,039	34,315	0.0234	0.9766	88.76
25.5	1,419,720	3,901	0.0027	0.9973	86.69
26.5	1,348,428	4,135	0.0031	0.9969	86.45
27.5	1,299,374	2,643	0.0020	0.9980	86.18
28.5	1,275,431	1,768	0.0014	0.9986	86.01
29.5	1,220,838	371	0.0003	0.9997	85.89
30.5	1,110,951	1,773	0.0016	0.9984	85.86
31.5	1,061,208		0.0000	1.0000	85.72
32.5	972,970	8,237	0.0085	0.9915	85.72
33.5	1,234,023	1,000	0.0008	0.9992	85.00
34.5	1,218,320		0.0000	1.0000	84.93
35.5	1,215,389	1,600	0.0013	0.9987	84.93
36.5	1,212,374	342	0.0003	0.9997	84.82
37.5	1,206,805	12,532	0.0104	0.9896	84.79
38.5	1,134,735	7,890	0.0070	0.9930	83.91

PEOPLES GAS COMPANY LLC

ACCOUNT 398 MAJOR STRUCTURES IN ACCOUNTS 351, 366.1 375 AND 390

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1926-2019 EXPERIENCE BAND 1962-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,132,956	760	0.0007	0.9993	83.33
40.5	1,055,748	3,181	0.0030	0.9970	83.27
41.5	1,040,816		0.0000	1.0000	83.02
42.5	1,039,843	1,505	0.0014	0.9986	83.02
43.5	1,034,361	1,200	0.0012	0.9988	82.90
44.5	1,022,722	4,144	0.0041	0.9959	82.81
45.5	989,209	860	0.0009	0.9991	82.47
46.5	980,368	415	0.0004	0.9996	82.40
47.5	960,529	697	0.0007	0.9993	82.36
48.5	946,413	2,249	0.0024	0.9976	82.31
49.5	745,805	1,200	0.0016	0.9984	82.11
50.5	742,444	950	0.0013	0.9987	81.98
51.5	741,494	3,031	0.0041	0.9959	81.87
52.5	733,849	1,500	0.0020	0.9980	81.54
53.5	578,233		0.0000	1.0000	81.37
54.5	578,233	1,083	0.0019	0.9981	81.37
55.5	577,149		0.0000	1.0000	81.22
56.5	577,149	970	0.0017	0.9983	81.22
57.5	576,179	340	0.0006	0.9994	81.08
58.5	575,113	822	0.0014	0.9986	81.03
59.5	535,776		0.0000	1.0000	80.92
60.5	535,776	800	0.0015	0.9985	80.92
61.5	534,976	2,776	0.0052	0.9948	80.80
62.5	524,505		0.0000	1.0000	80.38
63.5	524,505	383	0.0007	0.9993	80.38
64.5	523,306	100	0.0002	0.9998	80.32
65.5	523,206		0.0000	1.0000	80.30
66.5	523,206	297	0.0006	0.9994	80.30
67.5	522,705		0.0000	1.0000	80.26
68.5	522,705	866	0.0017	0.9983	80.26
69.5	519,750	314	0.0006	0.9994	80.13
70.5	546,986		0.0000	1.0000	80.08
71.5	546,986	500	0.0009	0.9991	80.08
72.5	546,486		0.0000	1.0000	80.00
73.5	546,486		0.0000	1.0000	80.00
74.5	546,486		0.0000	1.0000	80.00
75.5	546,486		0.0000	1.0000	80.00
76.5	546,486	171	0.0003	0.9997	80.00
77.5	546,315		0.0000	1.0000	79.98
78.5	546,315		0.0000	1.0000	79.98

PEOPLES GAS COMPANY LLC

ACCOUNT 398 MAJOR STRUCTURES IN ACCOUNTS 351, 366.1 375 AND 390

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1926-2019 EXPERIENCE BAND 1962-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	447,018		0.0000	1.0000	79.98
80.5	447,018	8	0.0000	1.0000	79.98
81.5	446,914		0.0000	1.0000	79.98
82.5	430,725		0.0000	1.0000	79.98
83.5	430,725		0.0000	1.0000	79.98
84.5	430,725		0.0000	1.0000	79.98
85.5	430,725		0.0000	1.0000	79.98
86.5	430,725		0.0000	1.0000	79.98
87.5	430,725		0.0000	1.0000	79.98
88.5	430,725		0.0000	1.0000	79.98
89.5	430,725		0.0000	1.0000	79.98
90.5	430,725		0.0000	1.0000	79.98
91.5	27,541		0.0000	1.0000	79.98
92.5	27,541		0.0000	1.0000	79.98
93.5					79.98

PEOPLES GAS COMPANY LLC

ACCOUNT 398 MAJOR STRUCTURES IN ACCOUNTS 351, 366.1 375 AND 390

ORIGINAL LIFE TABLE

PLACEMENT BAND 1926-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	3,948,736		0.0000	1.0000	100.00
0.5	3,328,877	1,811	0.0005	0.9995	100.00
1.5	3,394,852		0.0000	1.0000	99.95
2.5	3,021,955	4,875	0.0016	0.9984	99.95
3.5	3,244,157	5,900	0.0018	0.9982	99.78
4.5	3,263,082	4,574	0.0014	0.9986	99.60
5.5	3,214,298	9,076	0.0028	0.9972	99.46
6.5	2,930,075		0.0000	1.0000	99.18
7.5	2,632,982	102,471	0.0389	0.9611	99.18
8.5	2,399,234	2,471	0.0010	0.9990	95.32
9.5	2,391,553	1,691	0.0007	0.9993	95.22
10.5	2,456,163	17,276	0.0070	0.9930	95.16
11.5	1,856,696	54,093	0.0291	0.9709	94.49
12.5	1,708,260	14,281	0.0084	0.9916	91.73
13.5	1,599,875	33,820	0.0211	0.9789	90.97
14.5	1,538,912	4,137	0.0027	0.9973	89.04
15.5	1,111,972	3,046	0.0027	0.9973	88.81
16.5	1,123,636		0.0000	1.0000	88.56
17.5	1,107,723	9,562	0.0086	0.9914	88.56
18.5	1,112,277	3,788	0.0034	0.9966	87.80
19.5	1,276,083	2,024	0.0016	0.9984	87.50
20.5	1,272,152	4,200	0.0033	0.9967	87.36
21.5	1,252,484	3,875	0.0031	0.9969	87.07
22.5	1,258,694	982	0.0008	0.9992	86.80
23.5	1,332,804	470	0.0004	0.9996	86.73
24.5	1,286,847	34,315	0.0267	0.9733	86.70
25.5	1,239,612	3,901	0.0031	0.9969	84.39
26.5	1,168,319	2,858	0.0024	0.9976	84.13
27.5	1,121,012		0.0000	1.0000	83.92
28.5	1,100,873	1,768	0.0016	0.9984	83.92
29.5	1,104,356	371	0.0003	0.9997	83.79
30.5	994,469	1,773	0.0018	0.9982	83.76
31.5	944,726		0.0000	1.0000	83.61
32.5	860,489	8,237	0.0096	0.9904	83.61
33.5	713,199	1,000	0.0014	0.9986	82.81
34.5	698,695		0.0000	1.0000	82.69
35.5	695,763	1,600	0.0023	0.9977	82.69
36.5	692,748	342	0.0005	0.9995	82.50
37.5	689,374	12,532	0.0182	0.9818	82.46
38.5	617,305	7,890	0.0128	0.9872	80.96

PEOPLES GAS COMPANY LLC

ACCOUNT 398 MAJOR STRUCTURES IN ACCOUNTS 351, 366.1 375 AND 390

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1926-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	618,430	760	0.0012	0.9988	79.93
40.5	541,536	3,181	0.0059	0.9941	79.83
41.5	526,604		0.0000	1.0000	79.36
42.5	525,630	705	0.0013	0.9987	79.36
43.5	520,949	500	0.0010	0.9990	79.25
44.5	510,010	1,244	0.0024	0.9976	79.18
45.5	479,396	860	0.0018	0.9982	78.98
46.5	470,556	415	0.0009	0.9991	78.84
47.5	450,888	697	0.0015	0.9985	78.77
48.5	436,772	249	0.0006	0.9994	78.65
49.5	340,861	1,200	0.0035	0.9965	78.61
50.5	337,500	950	0.0028	0.9972	78.33
51.5	336,550	3,031	0.0090	0.9910	78.11
52.5	328,905	1,500	0.0046	0.9954	77.41
53.5	173,289		0.0000	1.0000	77.05
54.5	173,289	1,083	0.0063	0.9937	77.05
55.5	172,205		0.0000	1.0000	76.57
56.5	172,205	470	0.0027	0.9973	76.57
57.5	171,735	340	0.0020	0.9980	76.36
58.5	170,669	822	0.0048	0.9952	76.21
59.5	131,332		0.0000	1.0000	75.84
60.5	131,332		0.0000	1.0000	75.84
61.5	534,976	2,776	0.0052	0.9948	75.84
62.5	524,505		0.0000	1.0000	75.45
63.5	524,505	383	0.0007	0.9993	75.45
64.5	523,306	100	0.0002	0.9998	75.40
65.5	523,206		0.0000	1.0000	75.38
66.5	523,206	297	0.0006	0.9994	75.38
67.5	522,705		0.0000	1.0000	75.34
68.5	522,705	866	0.0017	0.9983	75.34
69.5	519,750	314	0.0006	0.9994	75.21
70.5	546,986		0.0000	1.0000	75.17
71.5	546,986	500	0.0009	0.9991	75.17
72.5	546,486		0.0000	1.0000	75.10
73.5	546,486		0.0000	1.0000	75.10
74.5	546,486		0.0000	1.0000	75.10
75.5	546,486		0.0000	1.0000	75.10
76.5	546,486	171	0.0003	0.9997	75.10
77.5	546,315		0.0000	1.0000	75.08
78.5	546,315		0.0000	1.0000	75.08

PEOPLES GAS COMPANY LLC

ACCOUNT 398 MAJOR STRUCTURES IN ACCOUNTS 351, 366.1 375 AND 390

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1926-2019 EXPERIENCE BAND 1990-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	447,018		0.0000	1.0000	75.08
80.5	447,018	8	0.0000	1.0000	75.08
81.5	446,914		0.0000	1.0000	75.07
82.5	430,725		0.0000	1.0000	75.07
83.5	430,725		0.0000	1.0000	75.07
84.5	430,725		0.0000	1.0000	75.07
85.5	430,725		0.0000	1.0000	75.07
86.5	430,725		0.0000	1.0000	75.07
87.5	430,725		0.0000	1.0000	75.07
88.5	430,725		0.0000	1.0000	75.07
89.5	430,725		0.0000	1.0000	75.07
90.5	430,725		0.0000	1.0000	75.07
91.5	27,541		0.0000	1.0000	75.07
92.5	27,541		0.0000	1.0000	75.07
93.5					75.07

PEOPLES GAS COMPANY LLC

ACCOUNT 398 MAJOR STRUCTURES IN ACCOUNTS 351, 366.1 375 AND 390

ORIGINAL LIFE TABLE

PLACEMENT BAND 1926-2019 EXPERIENCE BAND 2005-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	2,879,163		0.0000	1.0000	100.00
0.5	2,585,973	1,811	0.0007	0.9993	100.00
1.5	2,592,003		0.0000	1.0000	99.93
2.5	2,160,101		0.0000	1.0000	99.93
3.5	2,160,101		0.0000	1.0000	99.93
4.5	2,205,341		0.0000	1.0000	99.93
5.5	2,150,651	3,942	0.0018	0.9982	99.93
6.5	1,987,196		0.0000	1.0000	99.75
7.5	1,699,518	102,471	0.0603	0.9397	99.75
8.5	1,499,973		0.0000	1.0000	93.73
9.5	1,551,857	1,691	0.0011	0.9989	93.73
10.5	1,560,689	17,276	0.0111	0.9889	93.63
11.5	1,022,787	1,880	0.0018	0.9982	92.59
12.5	983,337	9,973	0.0101	0.9899	92.42
13.5	896,786	12,283	0.0137	0.9863	91.49
14.5	908,849	2,945	0.0032	0.9968	90.23
15.5	590,088	1,925	0.0033	0.9967	89.94
16.5	637,055		0.0000	1.0000	89.65
17.5	695,725	6,122	0.0088	0.9912	89.65
18.5	856,747	3,788	0.0044	0.9956	88.86
19.5	824,269		0.0000	1.0000	88.47
20.5	834,749		0.0000	1.0000	88.47
21.5	819,740	2,200	0.0027	0.9973	88.47
22.5	797,272	537	0.0007	0.9993	88.23
23.5	773,732	470	0.0006	0.9994	88.17
24.5	715,588	29,007	0.0405	0.9595	88.12
25.5	749,785	750	0.0010	0.9990	84.54
26.5	701,815	2,730	0.0039	0.9961	84.46
27.5	653,194		0.0000	1.0000	84.13
28.5	636,410	1,768	0.0028	0.9972	84.13
29.5	592,460	371	0.0006	0.9994	83.90
30.5	512,677	773	0.0015	0.9985	83.84
31.5	481,490		0.0000	1.0000	83.72
32.5	413,387	7,237	0.0175	0.9825	83.72
33.5	281,211		0.0000	1.0000	82.25
34.5	465,217		0.0000	1.0000	82.25
35.5	464,446	100	0.0002	0.9998	82.25
36.5	462,931	342	0.0007	0.9993	82.23
37.5	464,808	9,634	0.0207	0.9793	82.17
38.5	552,517	7,890	0.0143	0.9857	80.47

PEOPLES GAS COMPANY LLC

ACCOUNT 398 MAJOR STRUCTURES IN ACCOUNTS 351, 366.1 375 AND 390

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1926-2019 EXPERIENCE BAND 2005-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	544,627	760	0.0014	0.9986	79.32
40.5	468,503	3,181	0.0068	0.9932	79.21
41.5	453,571		0.0000	1.0000	78.67
42.5	453,067	205	0.0005	0.9995	78.67
43.5	450,048		0.0000	1.0000	78.64
44.5	494,980	1,244	0.0025	0.9975	78.64
45.5	464,367	860	0.0019	0.9981	78.44
46.5	455,526	415	0.0009	0.9991	78.29
47.5	445,798	697	0.0016	0.9984	78.22
48.5	431,683	249	0.0006	0.9994	78.10
49.5	234,273		0.0000	1.0000	78.06
50.5	232,112	950	0.0041	0.9959	78.06
51.5	231,162	2,831	0.0122	0.9878	77.74
52.5	224,218		0.0000	1.0000	76.78
53.5	70,102		0.0000	1.0000	76.78
54.5	73,007	1,083	0.0148	0.9852	76.78
55.5	72,237		0.0000	1.0000	75.65
56.5	72,237	470	0.0065	0.9935	75.65
57.5	71,767	340	0.0047	0.9953	75.15
58.5	70,606	822	0.0116	0.9884	74.80
59.5	15,029		0.0000	1.0000	73.93
60.5	15,029		0.0000	1.0000	73.93
61.5	15,029	2,416	0.1608	0.8392	73.93
62.5	5,090		0.0000	1.0000	62.04
63.5	5,090	383	0.0753	0.9247	62.04
64.5	103,688		0.0000	1.0000	57.37
65.5	103,688		0.0000	1.0000	57.37
66.5	103,783	297	0.0029	0.9971	57.37
67.5	119,521		0.0000	1.0000	57.21
68.5	119,521	866	0.0072	0.9928	57.21
69.5	116,566	314	0.0027	0.9973	56.79
70.5	116,253		0.0000	1.0000	56.64
71.5	116,253	500	0.0043	0.9957	56.64
72.5	115,753		0.0000	1.0000	56.40
73.5	115,753		0.0000	1.0000	56.40
74.5	115,753		0.0000	1.0000	56.40
75.5	115,753		0.0000	1.0000	56.40
76.5	518,937	171	0.0003	0.9997	56.40
77.5	518,766		0.0000	1.0000	56.38
78.5	546,315		0.0000	1.0000	56.38

PEOPLES GAS COMPANY LLC

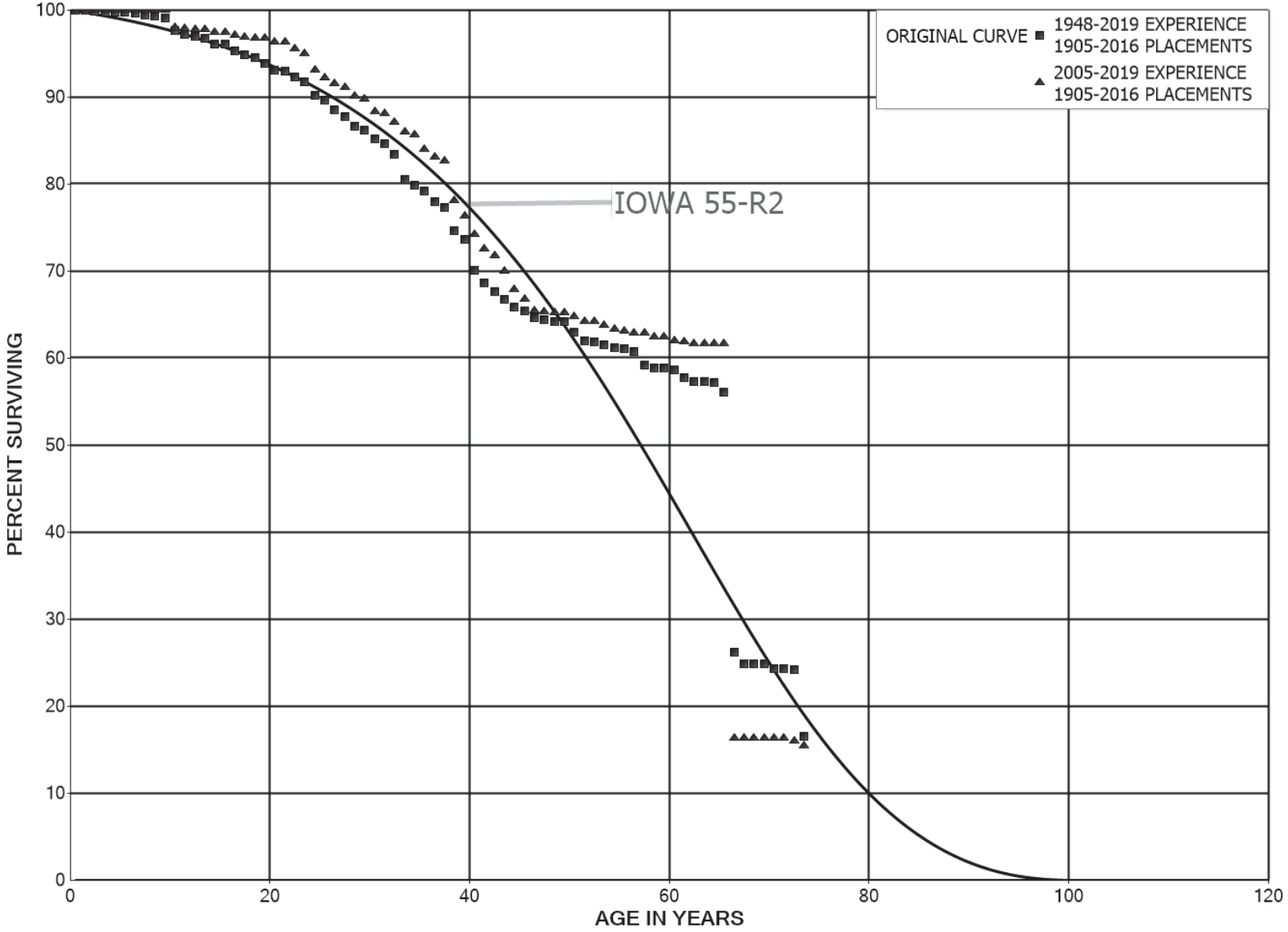
ACCOUNT 398 MAJOR STRUCTURES IN ACCOUNTS 351, 366.1 375 AND 390

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1926-2019 EXPERIENCE BAND 2005-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	447,018		0.0000	1.0000	56.38
80.5	447,018	8	0.0000	1.0000	56.38
81.5	446,914		0.0000	1.0000	56.38
82.5	430,725		0.0000	1.0000	56.38
83.5	430,725		0.0000	1.0000	56.38
84.5	430,725		0.0000	1.0000	56.38
85.5	430,725		0.0000	1.0000	56.38
86.5	430,725		0.0000	1.0000	56.38
87.5	430,725		0.0000	1.0000	56.38
88.5	430,725		0.0000	1.0000	56.38
89.5	430,725		0.0000	1.0000	56.38
90.5	430,725		0.0000	1.0000	56.38
91.5	27,541		0.0000	1.0000	56.38
92.5	27,541		0.0000	1.0000	56.38
93.5					56.38

PEOPLES GAS COMPANY LLC
ACCOUNT 399 MINOR STRUCTURES IN ACCOUNTS 351, 366.1 375 AND 390
ORIGINAL AND SMOOTH SURVIVOR CURVES



PEOPLES GAS COMPANY LLC

ACCOUNT 399 MINOR STRUCTURES IN ACCOUNTS 351, 366.1 375 AND 390

ORIGINAL LIFE TABLE

PLACEMENT BAND 1905-2016 EXPERIENCE BAND 1948-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	3,298,943		0.0000	1.0000	100.00
0.5	3,298,971	1,832	0.0006	0.9994	100.00
1.5	3,313,375	3,575	0.0011	0.9989	99.94
2.5	3,309,800	2,818	0.0009	0.9991	99.84
3.5	3,302,773	1,323	0.0004	0.9996	99.75
4.5	1,800,838		0.0000	1.0000	99.71
5.5	1,793,956	2,691	0.0015	0.9985	99.71
6.5	1,644,662	3,543	0.0022	0.9978	99.56
7.5	1,500,509	148	0.0001	0.9999	99.35
8.5	1,448,869	4,038	0.0028	0.9972	99.34
9.5	1,379,122	19,607	0.0142	0.9858	99.06
10.5	1,327,716	6,017	0.0045	0.9955	97.65
11.5	1,279,752	3,694	0.0029	0.9971	97.21
12.5	1,234,734	3,123	0.0025	0.9975	96.93
13.5	1,192,419	6,984	0.0059	0.9941	96.68
14.5	1,135,640	801	0.0007	0.9993	96.12
15.5	1,084,404	8,725	0.0080	0.9920	96.05
16.5	936,608	4,433	0.0047	0.9953	95.28
17.5	886,625	2,899	0.0033	0.9967	94.83
18.5	835,901	5,775	0.0069	0.9931	94.52
19.5	724,062	5,864	0.0081	0.9919	93.86
20.5	700,185	891	0.0013	0.9987	93.10
21.5	689,890	5,537	0.0080	0.9920	92.98
22.5	637,284	3,362	0.0053	0.9947	92.24
23.5	582,744	10,280	0.0176	0.9824	91.75
24.5	533,829	3,380	0.0063	0.9937	90.13
25.5	520,959	6,451	0.0124	0.9876	89.56
26.5	490,046	4,142	0.0085	0.9915	88.45
27.5	493,256	6,267	0.0127	0.9873	87.71
28.5	443,981	2,355	0.0053	0.9947	86.59
29.5	432,201	5,071	0.0117	0.9883	86.13
30.5	398,930	2,493	0.0062	0.9938	85.12
31.5	374,887	5,243	0.0140	0.9860	84.59
32.5	352,963	12,239	0.0347	0.9653	83.41
33.5	327,887	2,985	0.0091	0.9909	80.51
34.5	317,949	2,580	0.0081	0.9919	79.78
35.5	293,021	4,376	0.0149	0.9851	79.13
36.5	239,459	1,949	0.0081	0.9919	77.95
37.5	226,070	7,755	0.0343	0.9657	77.32
38.5	216,596	3,093	0.0143	0.9857	74.67

PEOPLES GAS COMPANY LLC

ACCOUNT 399 MINOR STRUCTURES IN ACCOUNTS 351, 366.1 375 AND 390

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1905-2016 EXPERIENCE BAND 1948-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	212,046	10,338	0.0488	0.9512	73.60
40.5	182,522	3,602	0.0197	0.9803	70.01
41.5	151,403	2,198	0.0145	0.9855	68.63
42.5	147,147	1,961	0.0133	0.9867	67.63
43.5	140,534	1,833	0.0130	0.9870	66.73
44.5	138,701	898	0.0065	0.9935	65.86
45.5	130,799	1,708	0.0131	0.9869	65.44
46.5	124,994	365	0.0029	0.9971	64.58
47.5	120,635	452	0.0038	0.9962	64.39
48.5	117,050	53	0.0005	0.9995	64.15
49.5	114,154	2,167	0.0190	0.9810	64.12
50.5	109,882	1,712	0.0156	0.9844	62.90
51.5	106,104	139	0.0013	0.9987	61.92
52.5	104,538	621	0.0059	0.9941	61.84
53.5	101,940	511	0.0050	0.9950	61.48
54.5	97,755	199	0.0020	0.9980	61.17
55.5	88,259	488	0.0055	0.9945	61.04
56.5	86,086	2,158	0.0251	0.9749	60.71
57.5	82,382	537	0.0065	0.9935	59.18
58.5	81,189		0.0000	1.0000	58.80
59.5	80,898	323	0.0040	0.9960	58.80
60.5	79,583	1,138	0.0143	0.9857	58.56
61.5	73,368	514	0.0070	0.9930	57.73
62.5	61,728		0.0000	1.0000	57.32
63.5	56,773	106	0.0019	0.9981	57.32
64.5	31,221	607	0.0194	0.9806	57.21
65.5	26,087	13,904	0.5330	0.4670	56.10
66.5	11,073	584	0.0528	0.9472	26.20
67.5	9,961		0.0000	1.0000	24.82
68.5	8,534		0.0000	1.0000	24.82
69.5	8,061	171	0.0212	0.9788	24.82
70.5	7,891		0.0000	1.0000	24.29
71.5	7,771	41	0.0053	0.9947	24.29
72.5	6,655	2,113	0.3175	0.6825	24.16
73.5	4,542		0.0000	1.0000	16.49
74.5	4,542	141	0.0310	0.9690	16.49
75.5	4,401		0.0000	1.0000	15.98
76.5	4,401	62	0.0141	0.9859	15.98
77.5	4,339		0.0000	1.0000	15.75
78.5	4,339		0.0000	1.0000	15.75

PEOPLES GAS COMPANY LLC

ACCOUNT 399 MINOR STRUCTURES IN ACCOUNTS 351, 366.1 375 AND 390

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1905-2016 EXPERIENCE BAND 1948-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	4,237		0.0000	1.0000	15.75
80.5	4,184		0.0000	1.0000	15.75
81.5	4,027		0.0000	1.0000	15.75
82.5	4,027	97	0.0240	0.9760	15.75
83.5	3,930	53	0.0134	0.9866	15.38
84.5	3,878		0.0000	1.0000	15.17
85.5	3,878		0.0000	1.0000	15.17
86.5	3,867	54	0.0139	0.9861	15.17
87.5	3,813	47	0.0124	0.9876	14.96
88.5	3,766		0.0000	1.0000	14.77
89.5	3,736		0.0000	1.0000	14.77
90.5	3,720	15	0.0040	0.9960	14.77
91.5	3,706		0.0000	1.0000	14.72
92.5	3,669	32	0.0088	0.9912	14.72
93.5	3,637		0.0000	1.0000	14.59
94.5	3,595		0.0000	1.0000	14.59
95.5	3,595		0.0000	1.0000	14.59
96.5	3,595	132	0.0367	0.9633	14.59
97.5	599		0.0000	1.0000	14.05
98.5	599	10	0.0160	0.9840	14.05
99.5	385		0.0000	1.0000	13.83
100.5	385		0.0000	1.0000	13.83
101.5	346		0.0000	1.0000	13.83
102.5	334		0.0000	1.0000	13.83
103.5	334		0.0000	1.0000	13.83
104.5	256		0.0000	1.0000	13.83
105.5	242		0.0000	1.0000	13.83
106.5	139		0.0000	1.0000	13.83
107.5	129		0.0000	1.0000	13.83
108.5	93		0.0000	1.0000	13.83
109.5	87		0.0000	1.0000	13.83
110.5	71		0.0000	1.0000	13.83
111.5	71		0.0000	1.0000	13.83
112.5	29		0.0000	1.0000	13.83
113.5	19		0.0000	1.0000	13.83
114.5					13.83

PEOPLES GAS COMPANY LLC

ACCOUNT 399 MINOR STRUCTURES IN ACCOUNTS 351, 366.1 375 AND 390

ORIGINAL LIFE TABLE

PLACEMENT BAND 1905-2016 EXPERIENCE BAND 2005-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	2,140,706		0.0000	1.0000	100.00
0.5	2,191,140	634	0.0003	0.9997	100.00
1.5	2,329,588		0.0000	1.0000	99.97
2.5	2,376,740		0.0000	1.0000	99.97
3.5	2,419,793		0.0000	1.0000	99.97
4.5	1,022,739		0.0000	1.0000	99.97
5.5	1,032,040		0.0000	1.0000	99.97
6.5	894,853		0.0000	1.0000	99.97
7.5	786,456		0.0000	1.0000	99.97
8.5	796,642		0.0000	1.0000	99.97
9.5	777,134	16,070	0.0207	0.9793	99.97
10.5	743,513	550	0.0007	0.9993	97.90
11.5	748,443	1,163	0.0016	0.9984	97.83
12.5	739,498		0.0000	1.0000	97.68
13.5	730,299	2,254	0.0031	0.9969	97.68
14.5	688,320		0.0000	1.0000	97.38
15.5	670,915	2,183	0.0033	0.9967	97.38
16.5	552,156	1,064	0.0019	0.9981	97.06
17.5	525,115	955	0.0018	0.9982	96.87
18.5	489,652		0.0000	1.0000	96.70
19.5	394,479	1,611	0.0041	0.9959	96.70
20.5	401,439		0.0000	1.0000	96.30
21.5	395,501	3,166	0.0080	0.9920	96.30
22.5	375,326	2,186	0.0058	0.9942	95.53
23.5	323,857	6,343	0.0196	0.9804	94.98
24.5	281,006	2,794	0.0099	0.9901	93.12
25.5	283,836	2,148	0.0076	0.9924	92.19
26.5	244,560	1,245	0.0051	0.9949	91.49
27.5	212,674	2,193	0.0103	0.9897	91.03
28.5	185,838	806	0.0043	0.9957	90.09
29.5	175,340	2,654	0.0151	0.9849	89.70
30.5	152,184	534	0.0035	0.9965	88.34
31.5	137,463	1,575	0.0115	0.9885	88.03
32.5	128,485	1,532	0.0119	0.9881	87.02
33.5	117,813	439	0.0037	0.9963	85.98
34.5	116,764	2,292	0.0196	0.9804	85.66
35.5	134,785	1,405	0.0104	0.9896	83.98
36.5	87,781	512	0.0058	0.9942	83.11
37.5	78,087	4,300	0.0551	0.9449	82.62
38.5	74,028	1,714	0.0232	0.9768	78.07

PEOPLES GAS COMPANY LLC

ACCOUNT 399 MINOR STRUCTURES IN ACCOUNTS 351, 366.1 375 AND 390

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1905-2016 EXPERIENCE BAND 2005-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	74,889	2,024	0.0270	0.9730	76.26
40.5	63,583	1,440	0.0227	0.9773	74.20
41.5	56,736	654	0.0115	0.9885	72.52
42.5	55,904	1,381	0.0247	0.9753	71.69
43.5	50,969	1,536	0.0301	0.9699	69.92
44.5	50,150	770	0.0154	0.9846	67.81
45.5	44,050	875	0.0199	0.9801	66.77
46.5	42,952	136	0.0032	0.9968	65.44
47.5	50,691	9	0.0002	0.9998	65.23
48.5	52,931		0.0000	1.0000	65.22
49.5	74,606	530	0.0071	0.9929	65.22
50.5	76,604	729	0.0095	0.9905	64.76
51.5	75,574		0.0000	1.0000	64.14
52.5	75,134	549	0.0073	0.9927	64.14
53.5	74,146	480	0.0065	0.9935	63.67
54.5	70,466	199	0.0028	0.9972	63.26
55.5	61,164	189	0.0031	0.9969	63.08
56.5	59,409	7	0.0001	0.9999	62.89
57.5	58,932	501	0.0085	0.9915	62.88
58.5	57,776		0.0000	1.0000	62.35
59.5	57,484	323	0.0056	0.9944	62.35
60.5	56,170	111	0.0020	0.9980	62.00
61.5	50,982	195	0.0038	0.9962	61.87
62.5	39,660		0.0000	1.0000	61.64
63.5	48,623		0.0000	1.0000	61.64
64.5	23,279		0.0000	1.0000	61.64
65.5	18,877	13,889	0.7358	0.2642	61.64
66.5	4,035		0.0000	1.0000	16.29
67.5	3,648		0.0000	1.0000	16.29
68.5	2,221		0.0000	1.0000	16.29
69.5	1,759		0.0000	1.0000	16.29
70.5	1,759		0.0000	1.0000	16.29
71.5	1,651	28	0.0171	0.9829	16.29
72.5	547	22	0.0397	0.9603	16.01
73.5	525		0.0000	1.0000	15.37
74.5	555	141	0.2536	0.7464	15.37
75.5	527		0.0000	1.0000	11.47
76.5	580	62	0.1074	0.8926	11.47
77.5	554		0.0000	1.0000	10.24
78.5	554		0.0000	1.0000	10.24

PEOPLES GAS COMPANY LLC

ACCOUNT 399 MINOR STRUCTURES IN ACCOUNTS 351, 366.1 375 AND 390

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1905-2016 EXPERIENCE BAND 2005-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	526		0.0000	1.0000	10.24
80.5	520		0.0000	1.0000	10.24
81.5	363		0.0000	1.0000	10.24
82.5	3,228	97	0.0300	0.9700	10.24
83.5	3,145	53	0.0167	0.9833	9.94
84.5	3,298		0.0000	1.0000	9.77
85.5	3,319		0.0000	1.0000	9.77
86.5	3,380	54	0.0159	0.9841	9.77
87.5	3,338	47	0.0141	0.9859	9.61
88.5	3,291		0.0000	1.0000	9.48
89.5	3,465		0.0000	1.0000	9.48
90.5	3,464	15	0.0043	0.9957	9.48
91.5	3,552		0.0000	1.0000	9.44
92.5	3,526	32	0.0092	0.9908	9.44
93.5	3,539		0.0000	1.0000	9.35
94.5	3,503		0.0000	1.0000	9.35
95.5	3,519		0.0000	1.0000	9.35
96.5	3,519	127	0.0360	0.9640	9.35
97.5	570		0.0000	1.0000	9.01
98.5	580	10	0.0165	0.9835	9.01
99.5	385		0.0000	1.0000	8.86
100.5	385		0.0000	1.0000	8.86
101.5	346		0.0000	1.0000	8.86
102.5	334		0.0000	1.0000	8.86
103.5	334		0.0000	1.0000	8.86
104.5	256		0.0000	1.0000	8.86
105.5	242		0.0000	1.0000	8.86
106.5	139		0.0000	1.0000	8.86
107.5	129		0.0000	1.0000	8.86
108.5	93		0.0000	1.0000	8.86
109.5	87		0.0000	1.0000	8.86
110.5	71		0.0000	1.0000	8.86
111.5	71		0.0000	1.0000	8.86
112.5	29		0.0000	1.0000	8.86
113.5	19		0.0000	1.0000	8.86
114.5					8.86

PART VII. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

PEOPLES GAS COMPANY LLC

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1891	34	34			0.0
1892	34	34			0.0
1894	261	261			0.0
1896	7,975	7,975			0.0
1897	186	186			0.0
1899	1,757	1,757			0.0
1900	3,187	3,188	1-	1-	0.0
1901	3,547	3,547		1-	0.0
1902	10,029	10,030	1-	2-	0.0
1903	9,377	9,377		2-	0.0
1904	11,803	11,803		2-	0.0
1905	38,666	38,665	1	1-	0.0
1906	30,138	30,138		1-	0.0
1907	7,461	7,461		1-	0.0
1908	21,160	21,160		1-	0.0
1909	32,895	32,895		1-	0.0
1910	2,491	2,492	1-	2-	0.0
1911	23,227	23,227		2-	0.0
1912	32,537	32,537		2-	0.0
1913	24,206	24,206		2-	0.0
1914	48,888	48,888		2-	0.0
1915	39,021	39,022	1-	3-	0.0
1916	24,761	24,762	1-	4-	0.0
1917	35,453	35,453		4-	0.0
1918	8,477	8,478	1-	5-	0.0
1919	14,054	14,055	1-	6-	0.0
1920	821	821		6-	0.0
1921	686	686		6-	0.0
1922	9,558	9,557	1	5-	0.0
1923	5,533	5,532	1	4-	0.0
1924	53,276	53,267	9	5	0.0
1925	99,373	99,365	8	13	0.0
1926	169,730	169,654	76	89	0.0
1927	35,012	34,994	18	107	0.0
1928	385,597	373,752	11,845	11,952	0.0
1929	29,661	29,547	114	12,066	0.0
1930	3,188	3,154	34	12,100	0.0
1931	785	780	5	12,105	0.0
1932	5,585	5,495	90	12,195	0.0
1933	2,206	2,164	42	12,237	0.0
1934	964	917	47	12,284	0.0
1935	53,497	51,975	1,522	13,806	0.0
1936	28,672	27,730	942	14,748	0.0
1937	119,825	111,511	8,314	23,062	0.0
1938	39,607	37,816	1,791	24,853	0.0
1939	65,244	62,147	3,097	27,950	0.0

PEOPLES GAS COMPANY LLC

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1940	92,374	84,077	8,297	36,247	0.0
1941	27,555	25,990	1,565	37,812	0.0
1942	27,321	25,517	1,804	39,616	0.0
1943	15,485	14,408	1,077	40,693	0.0
1944	11,915	10,991	924	41,617	0.0
1945	4,333	3,964	369	41,986	0.0
1946	10,696	9,073	1,623	43,609	0.0
1947	11,720	10,200	1,520	45,129	0.0
1948	27,887	23,452	4,435	49,564	0.0
1949	65,955	57,806	8,149	57,713	0.0
1950	87,589	77,744	9,845	67,558	0.0
1951	97,181	85,826	11,355	78,913	0.0
1952	69,279	61,212	8,067	86,980	0.0
1953	113,966	94,647	19,319	106,299	0.0
1954	167,375	145,062	22,313	128,612	0.0
1955	418,619	356,349	62,270	190,882	0.1
1956	192,813	160,664	32,149	223,031	0.1
1957	310,453	258,092	52,361	275,392	0.1
1958	227,612	188,187	39,425	314,817	0.1
1959	358,119	290,825	67,294	382,111	0.1
1960	222,236	191,063	31,173	413,284	0.1
1961	551,757	439,277	112,480	525,764	0.2
1962	337,618	267,244	70,374	596,138	0.2
1963	1,354,942	1,053,838	301,104	897,242	0.3
1964	700,203	547,838	152,365	1,049,607	0.3
1965	598,541	465,739	132,802	1,182,409	0.3
1966	1,319,134	1,033,665	285,469	1,467,878	0.4
1967	773,398	581,711	191,687	1,659,565	0.5
1968	678,870	506,324	172,546	1,832,111	0.5
1969	1,360,032	993,451	366,581	2,198,692	0.6
1970	1,217,013	915,294	301,719	2,500,411	0.7
1971	868,597	620,996	247,601	2,748,012	0.8
1972	959,564	670,192	289,372	3,037,384	0.9
1973	990,441	695,931	294,510	3,331,894	1.0
1974	1,587,793	1,098,236	489,557	3,821,451	1.1
1975	824,809	593,507	231,302	4,052,753	1.2
1976	1,157,739	868,419	289,320	4,342,073	1.3
1977	1,223,172	895,707	327,465	4,669,538	1.4
1978	1,593,035	1,161,873	431,162	5,100,700	1.5
1979	2,156,543	1,578,969	577,574	5,678,274	1.7
1980	1,509,064	1,131,066	377,998	6,056,272	1.8
1981	1,937,834	1,380,667	557,167	6,613,439	2.0
1982	2,061,596	1,424,642	636,954	7,250,393	2.1
1983	2,241,159	1,529,341	711,818	7,962,211	2.4
1984	4,823,638	3,133,754	1,689,884	9,652,095	2.9
1985	2,804,062	1,834,871	969,191	10,621,286	3.1

PEOPLES GAS COMPANY LLC

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1986	3,495,018	2,262,054	1,232,964	11,854,250	3.5
1987	7,136,698	4,478,204	2,658,494	14,512,744	4.3
1988	2,572,219	1,622,304	949,915	15,462,659	4.6
1989	5,561,188	3,405,311	2,155,877	17,618,536	5.2
1990	8,056,184	4,681,658	3,374,526	20,993,062	6.2
1991	4,621,042	2,731,052	1,889,990	22,883,052	6.8
1992	6,041,997	3,570,435	2,471,562	25,354,614	7.5
1993	6,570,288	3,807,848	2,762,440	28,117,054	8.3
1994	4,976,258	2,825,238	2,151,020	30,268,074	8.9
1995	4,288,717	2,397,585	1,891,132	32,159,206	9.5
1996	4,907,167	2,666,639	2,240,528	34,399,734	10.2
1997	7,060,892	3,765,647	3,295,245	37,694,979	11.1
1998	7,036,501	3,788,864	3,247,637	40,942,616	12.1
1999	7,333,666	3,413,022	3,920,644	44,863,260	13.3
2000	7,836,370	3,712,861	4,123,509	48,986,769	14.5
2001	5,929,506	2,724,223	3,205,283	52,192,052	15.4
2002	7,081,873	3,120,145	3,961,728	56,153,780	16.6
2003	7,157,598	3,031,250	4,126,348	60,280,128	17.8
2004	8,322,294	3,705,381	4,616,913	64,897,041	19.2
2005	8,710,823	3,353,835	5,356,988	70,254,029	20.8
2006	8,459,779	3,253,597	5,206,182	75,460,211	22.3
2007	9,052,901	3,408,598	5,644,303	81,104,514	24.0
2008	11,056,905	4,003,004	7,053,901	88,158,415	26.1
2009	6,099,412	2,151,121	3,948,291	92,106,706	27.2
2010	6,974,006	2,340,556	4,633,450	96,740,156	28.6
2011	8,180,485	2,566,853	5,613,632	102,353,788	30.3
2012	9,898,469	2,811,467	7,087,002	109,440,790	32.4
2013	16,972,814	4,555,094	12,417,720	121,858,510	36.0
2014	25,259,190	9,968,504	15,290,686	137,149,196	40.5
2015	12,082,450	3,642,737	8,439,713	145,588,909	43.0
2016	18,415,323	3,673,721	14,741,602	160,330,511	47.4
2017	20,722,004	3,742,707	16,979,297	177,309,808	52.4
2018	21,133,012	3,844,102	17,288,910	194,598,718	57.5
2019	22,154,505	3,882,222	18,272,283	212,871,001	62.9
2020	22,494,353	3,806,909	18,687,444	231,558,445	68.5
2021	26,104,740	3,098,434	23,006,306	254,564,751	75.3
2022	29,333,938	1,640,691	27,693,247	282,257,998	83.4
2023	18,821,989	1,498,809	17,323,180	299,581,178	88.6
2024	39,241,209	558,884	38,682,325	338,263,503	100.0
TOTAL	496,885,265	158,621,762	338,263,503		

UTILITY PLANT IN SERVICE

PEOPLES GAS COMPANY LLC

ACCOUNT 303.00 MISCELLANEOUS INTANGIBLE PLANT - CIAC

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 40-SQUARE						
NET SALVAGE PERCENT.. 0						
2014	1,427,278.43	362,771	392,821	1,034,457	29.83	34,678
2023	50,978.29	1,699	1,840	49,138	38.67	1,271
2024	101,956.59	849	919	101,038	39.67	2,547
	1,580,213.31	365,319	395,580	1,184,633		38,496

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 30.8 2.44

PEOPLES GAS COMPANY LLC

ACCOUNT 303.01 MISCELLANEOUS INTANGIBLE PLANT - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2018	469,642.31	469,642	469,642			
2019	298,573.35	298,573	298,573			
2020	1,035,670.52	863,055	907,520	128,151	0.83	128,151
2021	787,680.38	498,862	524,564	263,116	1.83	143,779
2023	2,250,045.28	600,020	630,933	1,619,112	3.67	441,175
2024	333,929.97	22,263	23,410	310,520	4.67	66,493
	5,175,541.81	2,752,415	2,854,642	2,320,900		779,598

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.0 15.06

PEOPLES GAS COMPANY LLC

ACCOUNT 303.02 MISCELLANEOUS INTANGIBLE PLANT - MAJOR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2015	2,056,541.65	1,256,773	1,362,135	694,407	5.83	119,109
2016	315,993.54	172,040	186,463	129,531	6.83	18,965
2020	1,710,548.17	475,156	514,990	1,195,558	10.83	110,393
2021	77,229.59	16,304	17,671	59,559	11.83	5,035
2023	862,946.69	76,707	83,138	779,809	13.67	57,045
	5,023,259.64	1,996,980	2,164,397	2,858,863		310,547

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.2 6.18

PEOPLES GAS COMPANY LLC

ACCOUTN 303.03 MISCELLANEOUS INTANGIBLE PLANT - SAP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2014	5,174,185.88	5,174,186	5,174,186			
2015	76,911.58	70,503	76,912			
2016	9,946.99	8,123	9,947			
2017	50,958.64	36,521	50,959			
2019	899,766.02	464,882	662,478	237,288	4.83	49,128
2020	32,546.42	13,561	19,325	13,221	5.83	2,268
2021	48,329.71	15,305	21,810	26,520	6.83	3,883
2022	663.57	144	205	459	7.83	59
2023	662,500.83	88,331	125,876	536,625	8.67	61,894
2024	479,747.95	15,990	22,787	456,961	9.67	47,256
	7,435,557.59	5,887,546	6,164,485	1,271,073		164,488

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.7 2.21

PEOPLES GAS COMPANY LLC

ACCOUNT 350.20 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1947	11.20	10	11			
1948	1,215.76	1,081	1,216			
1949	109.20	97	109			
1953	162.40	140	162			
1954	2,117.36	1,810	2,117			
1955	437.08	371	437			
1967	100.00	74	92	8	17.93	
1969	1,120.00	811	1,005	115	19.34	6
1970	644.80	460	570	75	20.06	4
1972	392.00	271	336	56	21.53	3
1973	1,064.00	725	899	165	22.28	7
1974	448.00	301	373	75	23.04	3
1977	280.00	188	233	47	23.25	2
1980	112.00	71	88	24	25.76	1
1983	1,456.00	869	1,077	379	27.80	14
1985	1,400.00	795	985	415	29.80	14
1986	409.02	228	283	126	30.33	4
1987	441.00	239	296	145	31.33	5
1993	875.00	404	501	374	36.40	10
2000	2,875.00	1,042	1,291	1,584	42.50	37
	15,669.82	9,987	12,081	3,589		110

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 32.6 0.70

PEOPLES GAS COMPANY LLC

ACCOUNT 351.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
FENCING						
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1986	2,159.71	1,377	1,443	716	21.71	33
1987	3,015.84	1,883	1,974	1,042	22.36	47
2000	87,678.55	39,622	41,534	46,145	29.31	1,574
2002	15,519.54	6,537	6,852	8,667	30.46	285
2004	4,097.17	1,595	1,672	2,425	31.65	77
2007	7,536.43	2,574	2,698	4,838	33.09	146
2008	3,484.86	1,127	1,181	2,303	33.84	68
2010	6,944.58	2,007	2,104	4,841	34.85	139
2015	25,255.03	4,978	5,218	20,037	37.34	537
	155,691.71	61,700	64,677	91,015		2,906
SPRANKLE COMPRESSOR STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2026						
NET SALVAGE PERCENT.. 0						
1926	27,541.11	26,865	27,541			
1957	6,109.86	5,923	6,110			
1966	509.61	492	510			
1969	1,945.00	1,876	1,945			
1975	218.60	210	219			
1977	909.38	875	909			
1992	1,768.44	1,672	1,768			
1997	1,608.21	1,507	1,608			
	40,610.21	39,420	40,610			
VARDY COMPRESSOR STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2029						
NET SALVAGE PERCENT.. 0						
1974	28,324.75	25,611	26,951	1,374	4.72	291
1992	1,047.69	913	961	87	4.73	18
1997	20,000.00	17,006	17,896	2,104	4.78	440
2000	3,660.53	3,061	3,221	439	4.73	93
	53,032.97	46,591	49,028	4,005		842

PEOPLES GAS COMPANY LLC

ACCOUNT 351.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
KINTER COMPRESSOR STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2040						
NET SALVAGE PERCENT.. 0						
1937	16,189.19	13,523	14,230	1,959	11.91	164
1938	95.25	79	83	12	12.01	1
1952	204.04	164	173	31	13.19	2
1972	13,022.94	9,799	10,312	2,711	14.38	189
1973	180.36	135	142	38	14.42	3
1989	10,852.97	7,633	8,032	2,821	14.84	190
1996	12,117.50	7,919	8,333	3,784	14.94	253
1997	885.10	572	602	283	14.85	19
2006	6,265.06	3,426	3,605	2,660	15.06	177
2020	216,199.52	47,110	49,574	166,626	14.95	11,146
	276,011.93	90,360	95,086	180,926		12,144
OTHER						
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1922	2,788.90	2,785	2,789			
1947	1,038.24	906	957	81	6.98	12
1955	19,251.51	15,926	16,823	2,429	9.50	256
1956	3,600.73	2,957	3,124	477	9.84	48
1973	752.53	518	547	205	17.12	12
1989	8,583.03	5,162	5,453	3,130	23.31	134
1997	4,341.57	2,159	2,281	2,061	27.48	75
1998	1,699.65	818	864	836	28.18	30
2001	15,198.62	6,654	7,029	8,170	29.75	275
2003	984.46	400	423	562	30.92	18
	58,239.24	38,285	40,288	17,951		860
	583,586.06	276,356	289,689	293,897		16,752

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.5 2.87

PEOPLES GAS COMPANY LLC

ACCOUNT 352.01 WELLS - CONSTRUCTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1924	2,265.25	2,221	2,265			
1925	1,493.37	1,460	1,493			
1928	2,860.36	2,768	2,860			
1929	3,549.20	3,423	3,549			
1946	2,221.95	1,997	2,222			
1947	1,621.84	1,450	1,622			
1948	666.70	593	667			
1972	37,441.33	25,926	37,441			
1973	19,289.02	13,150	19,289			
1984	67,428.84	39,271	67,429			
1989	81,028.80	41,892	81,029			
1990	27,243.36	13,682	27,243			
1998	306,839.07	119,637	306,839			
1999	3,350.24	1,265	3,350			
2000	36,834.77	13,353	36,835			
2017	18,139.35	1,975	7,391	10,748	58.62	183
2024	1,499,161.78	7,646	28,615	1,470,547	65.45	22,468
	2,111,435.23	291,709	630,139	1,481,296		22,651

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 65.4 1.07

PEOPLES GAS COMPANY LLC

ACCOUNT 352.02 WELLS - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R3						
NET SALVAGE PERCENT.. 0						
1946	881.96	772	136-	1,018	8.11	126
1947	559.26	487	86-	645	8.42	77
1948	502.45	435	77-	579	8.73	66
1971	5,274.61	3,678	647-	5,922	19.67	301
1972	20,746.82	14,264	2,510-	23,257	20.31	1,145
1973	7,138.58	4,836	851-	7,990	20.97	381
1977	14,606.68	10,058	1,770-	16,377	21.33	768
1981	16,022.93	10,306	1,814-	17,837	23.95	745
1984	26,696.09	16,191	2,849-	29,545	26.06	1,134
1986	16,432.04	9,596	1,689-	18,121	27.19	666
1989	24,419.81	13,311	2,343-	26,763	29.35	912
1991	10,780.07	5,613	988-	11,768	30.53	385
1999	281,379.79	114,719	20,190-	301,570	36.56	8,249
2000	47,914.19	18,873	3,321-	51,235	37.18	1,378
2015	1,799.16	284	50-	1,849	48.97	38
	475,154.44	223,423	39,321-	514,475		16,371

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.4 3.45

PEOPLES GAS COMPANY LLC

ACCOUNT 352.12 STORAGE RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R4						
NET SALVAGE PERCENT.. 0						
1982	39,789.08	25,839	32,735	7,054	22.77	310
1998	306,574.89	128,363	162,621	143,954	36.33	3,962
1999	45,758.17	18,541	23,489	22,269	36.94	603
	392,122.14	172,743	218,845	173,277		4,875

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 35.5 1.24

PEOPLES GAS COMPANY LLC

ACCOUNT 353.00 LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-S0						
NET SALVAGE PERCENT.. 0						
1955	58.73	53	58	1	4.02	
1967	1,403.94	1,100	1,203	201	8.67	23
1969	8,892.83	6,785	7,422	1,471	9.48	155
1973	20,031.42	14,468	15,826	4,205	11.11	378
1974	7,476.43	5,321	5,820	1,656	11.53	144
1975	1,316.22	923	1,010	306	11.94	26
1977	4,742.13	3,802	4,159	583	11.66	50
1978	92.62	74	81	12	11.97	1
1981	3,732.22	2,868	3,137	595	13.01	46
1983	53,386.53	39,997	43,752	9,635	13.78	699
1984	8,032.39	5,937	6,494	1,538	14.18	108
1986	1,977.64	1,427	1,561	417	14.74	28
1988	36,986.49	25,950	28,386	8,600	15.38	559
1990	7,456.23	5,069	5,545	1,911	16.09	119
1993	14,329.66	9,290	10,162	4,168	16.91	246
1998	350.13	204	223	127	18.68	7
1999	35,833.87	20,472	22,394	13,440	18.89	711
2000	69,646.75	38,710	42,344	27,303	19.31	1,414
2001	20,619.54	11,178	12,227	8,393	19.57	429
2002	1,768.18	933	1,021	747	19.85	38
2003	3,994.92	2,046	2,238	1,757	20.16	87
2004	109,547.14	54,346	59,447	50,100	20.48	2,446
2005	15,362.23	7,391	8,085	7,277	20.67	352
2006	271,006.84	125,530	137,313	133,694	21.05	6,351
2007	203,116.92	90,651	99,161	103,956	21.30	4,881
2008	443,406.29	189,955	207,786	235,620	21.57	10,924
2009	6,863.63	2,811	3,075	3,789	21.87	173
2010	203.97	79	86	118	22.20	5
2011	18,910.41	6,997	7,654	11,256	22.42	502
2012	12,614.29	4,405	4,818	7,796	22.68	344
2013	89,104.35	29,155	31,892	57,212	22.96	2,492
2015	20,650.50	5,811	6,357	14,294	23.41	611
2023	15,650.74	808	884	14,767	24.51	602
2024	236,262.69	3,190	3,489	232,774	24.36	9,556
	1,744,828.87	717,736	785,110	959,719		44,507

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 21.6 2.55

PEOPLES GAS COMPANY LLC

ACCOUNT 354.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2.5						
NET SALVAGE PERCENT.. 0						
1926	653.42	641	605	48	1.02	47
1934	391.52	369	348	44	3.17	14
1935	128.05	120	113	15	3.43	4
1937	22,511.68	20,915	19,741	2,771	3.90	711
1938	145.79	135	127	19	4.13	5
1940	427.87	392	370	58	4.57	13
1941	32.37	30	28	4	4.78	1
1942	572.30	520	491	81	5.00	16
1948	20,508.86	18,137	17,119	3,390	6.36	533
1949	25,655.00	22,581	21,314	4,341	6.59	659
1950	73.85	65	61	13	6.83	2
1952	12,244.29	10,615	10,019	2,225	7.32	304
1953	83,449.39	71,948	67,910	15,539	7.58	2,050
1954	18,684.13	16,021	15,122	3,562	7.84	454
1956	35,797.62	30,343	28,640	7,158	8.38	854
1959	8,431.19	7,012	6,618	1,813	9.26	196
1960	1,412.70	1,167	1,102	311	9.58	32
1962	792.58	645	609	184	10.25	18
1967	496.53	387	365	132	12.18	11
1970	40,341.91	30,418	28,711	11,631	13.53	860
1971	166.76	124	117	50	14.01	4
1972	6,122.50	4,507	4,254	1,868	14.51	129
1974	77,931.99	55,912	52,774	25,158	15.54	1,619
1975	875.46	619	584	291	16.09	18
1977	2,026.45	1,529	1,443	583	15.33	38
1979	160.41	117	110	50	16.56	3
1981	4,022.92	2,865	2,704	1,319	17.44	76
1982	43,067.23	30,147	28,455	14,612	18.07	809
1983	42,407.28	29,155	27,519	14,888	18.71	796
1984	5,284.91	3,566	3,366	1,919	19.36	99
1985	27,434.30	18,266	17,241	10,193	19.66	518
1986	15,814.31	10,320	9,741	6,073	20.32	299
1987	8,037.69	5,138	4,850	3,188	20.97	152
1988	2,100.43	1,314	1,240	860	21.64	40
1989	49,368.92	30,382	28,677	20,692	21.98	941
1990	36,627.90	22,024	20,788	15,840	22.65	699
1991	31,960.30	18,761	17,708	14,252	23.33	611
1992	75,494.17	43,228	40,802	34,692	24.01	1,445
1993	52,246.53	29,148	27,512	24,735	24.70	1,001
1994	61,709.98	33,694	31,803	29,907	25.08	1,192
1995	41,456.22	22,005	20,770	20,686	25.78	802
1996	15,565.75	8,023	7,573	7,993	26.48	302
1997	45,828.13	22,909	21,623	24,205	27.18	891

PEOPLES GAS COMPANY LLC

ACCOUNT 354.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2.5						
NET SALVAGE PERCENT.. 0						
1998	105,667.70	51,428	48,542	57,126	27.60	2,070
1999	278,086.71	130,868	123,523	154,564	28.31	5,460
2000	598,992.42	272,122	256,850	342,142	29.03	11,786
2001	5,364.07	2,348	2,216	3,148	29.75	106
2002	359,928.06	152,394	143,841	216,087	30.19	7,158
2004	40,349.59	15,704	14,823	25,527	31.65	807
2005	57,361.37	21,442	20,239	37,122	32.11	1,156
2008	4,056.99	1,299	1,226	2,831	34.34	82
2009	6,650.66	2,017	1,904	4,747	34.84	136
2010	500,623.36	142,578	134,576	366,047	35.58	10,288
2011	21,564.37	5,764	5,441	16,123	36.09	447
2013	67,515.83	15,529	14,657	52,859	37.38	1,414
2014	46,178.98	9,716	9,171	37,008	38.14	970
2015	33,682.52	6,454	6,092	27,591	38.68	713
2016	3,478.80	599	565	2,914	39.23	74
2017	43,929.26	6,704	6,328	37,601	39.78	945
2018	23,260.96	3,084	2,911	20,350	40.34	504
2019	4,053,777.39	454,428	428,925	3,624,852	40.92	88,584
2020	510,998.92	46,859	44,229	466,770	41.29	11,305
2021	44,843.19	3,166	2,988	41,855	41.68	1,004
2023	37,850.30	1,177	1,111	36,739	41.58	884
	7,762,623.04	1,971,894	1,861,225	5,901,398		165,161

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 35.7 2.13

PEOPLES GAS COMPANY LLC

ACCOUNT 355.00 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R2.5						
NET SALVAGE PERCENT.. 0						
1957	241.45	219	241			
1962	90.74	80	91			
1967	449.41	385	449			
1970	578.21	484	578			
1972	387.64	319	384	4	7.95	1
1974	1,708.01	1,380	1,663	45	8.64	5
1975	63,725.61	50,966	61,416	2,310	9.01	256
1980	9,069.46	7,371	8,882	187	10.18	18
1984	2,302.36	1,776	2,140	162	11.92	14
1985	11,019.54	8,373	10,090	930	12.38	75
1986	68,951.24	51,582	62,159	6,792	12.85	529
1987	75,197.66	55,338	66,685	8,513	13.34	638
1988	3,259.81	2,358	2,841	419	13.84	30
1990	8,274.81	5,739	6,916	1,359	15.09	90
1994	9,408.14	5,988	7,216	2,192	17.23	127
1997	26,200.96	15,375	18,527	7,674	19.13	401
1998	18,383.40	10,486	12,636	5,747	19.71	292
1999	29,247.16	16,194	19,514	9,733	20.29	480
2000	130,655.48	70,097	84,470	46,185	20.88	2,212
2004	8,475.13	3,914	4,717	3,758	23.50	160
2006	5,100.56	2,159	2,602	2,499	24.75	101
2007	36,267.51	14,630	17,630	18,638	25.39	734
2008	19,856.93	7,609	9,169	10,688	26.03	411
2011	236,514.78	75,685	91,203	145,312	27.98	5,193
2015	9,608.12	2,211	2,664	6,944	30.67	226
2021	43,398.37	3,711	4,472	38,926	33.87	1,149
2022	37,188.38	2,216	2,671	34,517	34.20	1,009
2024	32,439.75	324	390	32,050	33.11	968
	888,000.62	416,969	502,416	385,585		15,119

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 25.5 1.70

PEOPLES GAS COMPANY LLC

ACCOUNT 365.20 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1896	1,491.56	1,492	1,492			
1897	186.44	186	186			
1899	279.66	280	280			
1900	1,118.66	1,119	1,119			
1901	2,423.76	2,424	2,424			
1902	3,262.76	3,263	3,263			
1903	652.55	653	653			
1904	1,957.65	1,958	1,958			
1905	10,813.71	10,814	10,814			
1906	8,762.83	8,763	8,763			
1907	1,025.44	1,025	1,025			
1908	3,822.09	3,822	3,822			
1909	9,228.94	9,229	9,229			
1910	2,050.88	2,051	2,051			
1911	2,050.88	2,051	2,051			
1912	8,110.28	8,110	8,110			
1913	7,727.12	7,727	7,727			
1914	9,272.66	9,273	9,273			
1915	13,452.13	13,452	13,452			
1916	2,027.54	2,028	2,028			
1917	2,983.09	2,983	2,983			
1918	1,118.66	1,116	1,119			
1919	932.22	927	932			
1920	372.89	370	373			
1921	466.11	461	466			
1922	6,570.33	6,479	6,570			
1923	4,505.92	4,432	4,506			
1924	10,189.22	9,990	10,189			
1925	9,051.28	8,847	9,051			
1926	10,325.40	10,060	10,325			
1927	559.33	543	559			
1928	93.22	90	93			
1929	2,050.88	1,978	2,051			
1930	488.65	470	489			
1931	93.22	89	93			
1933	53.13	50	53			
1934	52.63	50	53			
1935	3,822.09	3,605	3,822			
1936	1,305.10	1,226	1,305			
1937	3,076.31	2,878	3,076			
1938	1,272.58	1,186	1,273			
1939	5,331.41	4,947	5,331			
1940	105.22	97	105			

PEOPLES GAS COMPANY LLC

ACCOUNT 365.20 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1941	2,620.80	2,411	2,605	16	5.60	3
1942	1,137.28	1,042	1,126	11	5.88	2
1943	853.78	779	842	12	6.17	2
1944	489.44	444	480	9	6.47	1
1945	79.23	72	78	1	6.78	
1946	1,182.16	1,062	1,147	35	7.09	5
1947	684.32	612	661	23	7.42	3
1948	90.72	81	88	3	7.76	
1949	1,862.56	1,647	1,779	84	8.12	10
1950	5,539.76	4,868	5,260	280	8.49	33
1951	5,307.52	4,634	5,007	301	8.88	34
1952	572.32	496	536	36	9.29	4
1953	313.96	270	292	22	9.72	2
1954	1,875.50	1,603	1,732	144	10.17	14
1955	2,017.97	1,711	1,849	169	10.64	16
1956	3,933.97	3,308	3,574	360	11.14	32
1957	3,389.26	2,825	3,052	337	11.66	29
1959	3,399.11	2,779	3,003	396	12.77	31
1960	808.64	654	707	102	13.35	8
1961	9,275.02	7,425	8,022	1,253	13.96	90
1962	4,755.09	3,764	4,067	688	14.59	47
1963	26,678.10	20,874	22,553	4,125	15.23	271
1964	15,046.30	11,631	12,566	2,480	15.89	156
1965	70,676.22	53,956	58,296	12,380	16.56	748
1966	28,093.08	21,174	22,877	5,216	17.24	303
1967	7,076.96	5,264	5,687	1,390	17.93	78
1968	8,527.45	6,258	6,761	1,766	18.63	95
1969	19,661.40	14,229	15,373	4,288	19.34	222
1970	6,915.20	4,934	5,331	1,584	20.06	79
1971	2,472.96	1,738	1,878	595	20.79	29
1972	4,981.44	3,449	3,726	1,255	21.53	58
1973	1,575.40	1,074	1,160	415	22.28	19
1974	4,088.00	2,742	2,963	1,125	23.04	49
1975	1,428.00	942	1,018	410	23.81	17
1976	960.20	652	704	256	22.75	11
1977	280.00	188	203	77	23.25	3
1978	1,344.00	881	952	392	24.25	16
1979	12,868.80	8,312	8,981	3,888	24.76	157
1980	39,489.72	24,942	26,948	12,542	25.76	487
1981	3,724.00	2,315	2,501	1,223	26.28	47
1982	17,016.00	10,332	11,163	5,853	27.28	215
1983	8,078.19	4,822	5,210	2,868	27.80	103
1984	55,490.60	32,318	34,917	20,574	28.80	714

PEOPLES GAS COMPANY LLC

ACCOUNT 365.20 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1985	14,290.20	8,115	8,768	5,522	29.80	185
1986	62,305.05	34,716	37,508	24,797	30.33	818
1987	194,908.23	105,757	114,263	80,645	31.33	2,574
1988	115,525.78	61,414	66,354	49,172	31.86	1,543
1989	123,238.75	63,714	68,839	54,400	32.86	1,656
1990	185,551.25	93,184	100,679	84,872	33.86	2,507
1991	32,183.75	15,799	17,070	15,114	34.40	439
1992	3,906.25	1,860	2,010	1,896	35.40	54
1993	44,606.25	20,577	22,232	22,374	36.40	615
1994	37,950.00	17,059	18,431	19,519	36.95	528
1995	63,750.00	27,706	29,934	33,816	37.95	891
1996	27,606.25	11,586	12,518	15,088	38.95	387
1997	31,875.00	12,903	13,941	17,934	39.95	449
1999	23,468.75	8,859	9,572	13,897	41.50	335
2000	48,556.25	17,602	19,018	29,538	42.50	695
2001	13,687.50	4,756	5,139	8,548	43.50	197
2002	15,664.48	5,208	5,627	10,037	44.50	226
2003	33,083.71	10,504	11,349	21,735	45.50	478
2004	52,145.60	15,774	17,043	35,103	46.50	755
2005	15,277.70	4,421	4,777	10,501	47.06	223
2006	24,609.40	6,750	7,293	17,316	48.06	360
2007	51,227.20	13,278	14,346	36,881	49.06	752
2008	133,150.55	32,502	35,115	98,036	50.06	1,958
2009	24,419.44	5,592	6,042	18,377	51.06	360
2010	43,311.35	9,264	10,009	33,302	52.06	640
2011	71,040.95	14,123	15,258	55,783	53.06	1,051
2012	12,523.32	2,301	2,486	10,037	54.06	186
2014	7,764.10	1,192	1,288	6,476	56.06	116
2018	42,779.04	4,008	4,330	38,449	59.62	645
	2,091,602.96	1,058,632	1,133,451	958,152		25,866

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 37.0 1.24

PEOPLES GAS COMPANY LLC

ACCOUNT 366.10 COMPRESSOR STATION STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
RUBRIGHT						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2049						
NET SALVAGE PERCENT.. 0						
2008	596,565.77	248,828	254,632	341,934	22.59	15,137
2011	3,201.69	1,176	1,203	1,998	22.67	88
	599,767.46	250,004	255,835	343,932		15,225
OTHER						
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1920	182.35	182	182			
1954	2,718.88	2,266	2,319	400	9.17	44
1955	5,528.42	4,573	4,680	848	9.50	89
1964	8,289.98	6,346	6,494	1,796	12.90	139
1991	6,596.96	3,807	3,896	2,701	24.30	111
1995	13,450.00	7,061	7,226	6,224	26.39	236
1996	34,710.81	17,696	18,110	16,601	27.08	613
1997	18,500.00	9,198	9,413	9,087	27.48	331
1999	1,169.44	547	560	610	28.60	21
2001	7,210.91	3,157	3,231	3,980	29.75	134
2007	2,209.21	755	773	1,437	33.09	43
	100,566.96	55,588	56,884	43,683		1,761
	700,334.42	305,592	312,719	387,615		16,986

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 22.8 2.43

PEOPLES GAS COMPANY LLC

ACCOUNT 366.20 MEASURING AND REGULATING STATION STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
FENCING						
SURVIVOR CURVE.. 35-SQUARE						
NET SALVAGE PERCENT.. 0						
1973	12,047.99	12,048	12,048			
1985	957.93	958	958			
1986	494.00	494	494			
1987	4,188.49	4,188	4,188			
1995	1,205.33	1,004	1,139	66	5.83	11
2002	3,077.66	1,949	2,211	867	12.83	68
2003	3,462.31	2,094	2,375	1,087	13.83	79
2006	4,144.29	2,151	2,440	1,704	16.83	101
2007	223.16	109	124	100	17.83	6
2011	11,451.64	4,308	4,887	6,565	21.83	301
	41,252.80	29,303	30,864	10,389		566
OTHER						
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
1936	175.78	172	176			
1950	286.99	263	277	10	4.66	2
1954	485.31	435	458	27	5.71	5
1957	342.18	301	317	25	6.56	4
1963	140.44	119	125	15	8.52	2
1964	366.21	307	324	43	8.90	5
1965	9.51	8	8	1	9.29	
1966	4,177.04	3,440	3,625	552	9.70	57
1967	101.27	83	87	14	10.12	1
1968	110.94	90	95	16	10.56	2
1971	989.90	774	816	174	11.99	15
1984	607.62	420	443	165	17.97	9
1993	4,489.56	2,546	2,683	1,807	23.78	76
1997	1,114.92	563	593	522	26.60	20
	13,397.67	9,521	10,028	3,370		198

PEOPLES GAS COMPANY LLC

ACCOUNT 366.20 MEASURING AND REGULATING STATION STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
I.U.P. METERING SITE						
INTERIM SURVIVOR CURVE.. SQUARE						
PROBABLE RETIREMENT YEAR.. 6-2032						
NET SALVAGE PERCENT.. 0						
1963	5,315.62	4,712	4,963	352	7.83	45
1987	14,694.98	12,137	12,784	1,911	7.83	244
	20,010.60	16,849	17,747	2,264		289
	74,661.07	55,673	58,639	16,023		1,053

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.2 1.41

PEOPLES GAS COMPANY LLC

ACCOUNT 366.30 OTHER STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-R2.5						
NET SALVAGE PERCENT.. 0						
1964	948.40	864	904	44	3.55	12
1989	6,269.91	4,785	5,008	1,262	10.92	116
1990	3,452.63	2,595	2,716	737	11.29	65
1991	4,259.48	3,136	3,282	977	11.88	82
1992	6,560.01	4,748	4,969	1,591	12.28	130
1993	1,344.70	951	995	350	12.89	27
1996	4,261.43	2,809	2,940	1,321	14.57	91
1998	1,713.94	1,072	1,122	592	15.67	38
2003	3,060.34	1,620	1,695	1,365	18.83	72
2010	5,254.57	1,987	2,080	3,175	23.29	136
2011	7,667.97	2,716	2,842	4,826	24.01	201
	44,793.38	27,283	28,553	16,240		970

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.7 2.17

PEOPLES GAS COMPANY LLC

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
NET SALVAGE PERCENT.. 0						
1905	21,399.34	19,901	21,399			
1906	17,667.82	16,377	17,668			
1907	6,103.07	5,639	6,103			
1908	14,408.39	13,271	14,408			
1909	19,926.67	18,295	19,927			
1910	347.77	318	348			
1911	16,849.18	15,371	16,849			
1912	17,638.52	16,042	17,639			
1913	1,817.14	1,647	1,817			
1914	36,258.69	32,763	36,259			
1915	24,808.55	22,344	24,809			
1916	21,226.97	19,053	21,227			
1917	28,425.83	25,428	28,426			
1918	82.57	74	83			
1919	5,684.07	5,050	5,684			
1920	34.69	31	35			
1921	152.71	135	153			
1923	991.01	868	991			
1924	37,770.00	32,961	37,770			
1925	87,497.36	76,064	87,497			
1926	128,066.71	110,906	128,067			
1927	33,061.01	28,521	33,061			
1928	1,889.53	1,623	1,888	2	10.56	
1929	23,513.03	20,118	23,398	115	10.83	11
1930	1,579.62	1,346	1,565	15	11.09	1
1931	252.60	214	249	4	11.37	
1932	5,153.09	4,353	5,063	90	11.65	8
1933	1,885.23	1,585	1,843	42	11.94	4
1934	127.40	107	124	3	12.24	
1935	47,931.14	39,917	46,424	1,507	12.54	120
1936	25,994.15	21,541	25,053	941	12.85	73
1937	35,834.77	29,542	34,358	1,477	13.17	112
1938	33,386.12	27,372	31,834	1,552	13.51	115
1939	56,945.04	46,429	53,998	2,947	13.85	213
1940	3,880.40	3,146	3,659	221	14.20	16
1941	24,555.85	19,789	23,015	1,541	14.56	106
1942	23,243.85	18,617	21,652	1,592	14.93	107
1943	13,634.96	10,852	12,621	1,014	15.31	66
1944	11,001.21	8,698	10,116	885	15.70	56
1945	3,895.54	3,059	3,558	338	16.11	21
1946	2,621.11	2,043	2,376	245	16.53	15
1947	5,639.72	4,365	5,077	563	16.95	33
1948	461.52	355	413	49	17.39	3

PEOPLES GAS COMPANY LLC

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
NET SALVAGE PERCENT.. 0						
1949	19,926.47	15,187	17,663	2,263	17.84	127
1950	66,133.18	49,988	58,137	7,996	18.31	437
1951	69,312.22	51,956	60,426	8,886	18.78	473
1952	8,065.81	5,993	6,970	1,096	19.27	57
1953	9,468.21	6,972	8,109	1,359	19.77	69
1954	95,576.32	69,732	81,099	14,477	20.28	714
1955	322,766.15	233,253	271,277	51,489	20.80	2,475
1956	132,890.06	95,096	110,598	22,292	21.33	1,045
1957	277,646.77	196,685	228,748	48,899	21.87	2,236
1958	163,612.10	114,704	133,403	30,209	22.42	1,347
1959	295,287.21	204,773	238,154	57,133	22.99	2,485
1960	75,206.86	51,582	59,991	15,216	23.56	646
1961	441,889.02	299,601	348,441	93,448	24.15	3,869
1962	223,126.07	149,523	173,898	49,228	24.74	1,990
1963	1,094,435.22	724,516	842,624	251,811	25.35	9,933
1964	312,368.84	204,249	237,545	74,824	25.96	2,882
1965	187,515.09	121,060	140,795	46,720	26.58	1,758
1966	746,991.05	475,886	553,463	193,528	27.22	7,110
1967	345,321.80	217,045	252,427	92,895	27.86	3,334
1968	213,806.57	132,532	154,137	59,670	28.51	2,093
1969	690,164.11	421,739	490,489	199,675	29.17	6,845
1970	387,673.56	233,484	271,546	116,128	29.83	3,893
1971	195,665.94	116,069	134,990	60,676	30.51	1,989
1972	396,471.73	231,591	269,344	127,128	31.19	4,076
1973	494,658.36	284,394	330,755	163,903	31.88	5,141
1974	619,511.11	350,395	407,515	211,996	32.58	6,507
1975	304,038.03	169,085	196,649	107,389	33.29	3,226
1976	441,292.74	272,057	316,407	124,886	29.96	4,168
1977	464,643.53	282,689	328,772	135,872	30.36	4,475
1978	591,770.22	352,458	409,914	181,856	31.35	5,801
1979	767,237.62	450,522	523,964	243,274	31.75	7,662
1980	388,850.13	224,989	261,666	127,184	32.17	3,953
1981	613,630.79	347,008	403,576	210,055	33.17	6,333
1982	788,425.85	438,838	510,376	278,050	33.59	8,278
1983	690,386.93	377,987	439,605	250,782	34.02	7,372
1984	2,729,371.03	1,458,030	1,695,712	1,033,659	35.02	29,516
1985	1,237,918.07	649,659	755,564	482,354	35.46	13,603
1986	1,285,278.81	657,292	764,441	520,838	36.46	14,285
1987	2,535,084.72	1,272,106	1,479,479	1,055,606	36.90	28,607
1988	427,153.19	210,117	244,369	182,784	37.36	4,893
1989	1,433,268.59	685,532	797,285	635,984	38.36	16,579
1990	4,741,140.29	2,219,328	2,581,114	2,160,026	38.82	55,642
1991	1,172,016.62	536,432	623,879	548,138	39.30	13,948

PEOPLES GAS COMPANY LLC

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
NET SALVAGE PERCENT.. 0						
1992	700,524.54	313,205	364,262	336,263	39.78	8,453
1993	1,374,605.17	595,479	692,551	682,054	40.78	16,725
1994	1,004,540.87	424,218	493,372	511,169	41.26	12,389
1995	953,413.52	392,044	455,953	497,461	41.76	11,912
1996	1,031,866.37	409,857	476,670	555,196	42.75	12,987
1997	1,612,808.48	622,222	723,654	889,154	43.25	20,558
1998	1,210,381.16	452,925	526,759	683,622	43.76	15,622
1999	1,639,050.44	589,894	686,056	952,994	44.76	21,291
2000	1,488,152.73	517,877	602,299	885,854	45.28	19,564
2001	1,464,341.71	491,872	572,055	892,287	45.80	19,482
2002	1,086,619.57	349,240	406,172	680,448	46.80	14,539
2003	1,934,808.41	597,856	695,316	1,239,492	47.33	26,188
2004	1,882,573.95	557,995	648,957	1,233,617	47.86	25,776
2005	2,666,467.61	756,477	879,795	1,786,673	48.40	36,915
2006	2,842,310.80	764,297	888,890	1,953,421	49.40	39,543
2007	2,543,924.33	650,736	756,816	1,787,108	49.95	35,778
2008	1,868,892.85	453,207	527,087	1,341,806	50.50	26,570
2009	1,031,196.10	236,144	274,639	756,557	51.06	14,817
2010	1,935,160.45	416,640	484,559	1,450,601	51.62	28,102
2011	2,611,591.74	525,975	611,717	1,999,875	52.20	38,312
2012	2,553,167.91	478,464	556,461	1,996,707	52.77	37,838
2013	3,237,377.38	556,829	647,601	2,589,776	53.77	48,164
2014	4,987,053.82	785,960	914,084	4,072,970	54.35	74,940
2015	1,664,901.49	239,579	278,634	1,386,267	54.53	25,422
2016	1,022,475.61	131,899	153,401	869,075	55.13	15,764
2017	3,488,684.01	397,710	462,543	3,026,141	55.72	54,310
2018	229,017.42	22,604	26,289	202,728	56.33	3,599
2019	3,330,954.82	278,801	324,250	3,006,705	56.56	53,160
2020	1,349,288.87	92,156	107,179	1,242,110	56.81	21,864
2021	659,998.51	34,716	40,375	619,624	57.07	10,857
2022	5,709,376.72	208,963	243,027	5,466,350	57.01	95,884
2023	79,182.42	1,829	2,127	77,055	56.47	1,365
2024	3,297,817.21	20,117	23,397	3,274,420	54.31	60,291
	93,833,167.93	29,756,051	34,590,767	59,242,401		1,251,933

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 47.3 1.33

PEOPLES GAS COMPANY LLC

ACCOUNT 368.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 48-S0.5						
NET SALVAGE PERCENT.. 0						
1936	115.49	109	115			
1938	645.68	600	646			
1942	85.33	77	85			
1950	1,347.44	1,138	1,266	81	7.45	11
1952	24,180.19	20,085	22,336	1,844	8.13	227
1954	13,036.61	10,641	11,834	1,203	8.82	136
1955	45,716.15	36,983	41,128	4,588	9.17	500
1956	763.69	612	681	83	9.52	9
1957	55.47	44	49	6	9.88	1
1959	1,643.56	1,281	1,425	219	10.59	21
1963	3,439.75	2,576	2,865	575	12.05	48
1964	40,983.16	30,379	33,783	7,200	12.42	580
1965	745.52	547	608	138	12.79	11
1974	100.72	66	73	28	16.34	2
1975	894.41	582	647	247	16.76	15
1981	21,675.02	15,532	17,273	4,402	17.07	258
1983	16,372.13	11,457	12,741	3,631	17.66	206
1986	4,822.17	3,239	3,602	1,220	18.65	65
1987	9,141.03	6,048	6,726	2,415	19.01	127
1989	3,965.37	2,552	2,838	1,127	19.48	58
1990	32,570.00	20,587	22,894	9,676	19.89	486
1991	15,561.67	9,651	10,733	4,829	20.31	238
1992	1,853.80	1,127	1,253	601	20.74	29
1993	35,430.20	21,201	23,577	11,853	20.92	567
1994	10,094.08	5,907	6,569	3,525	21.38	165
1996	18,165.37	10,182	11,323	6,842	22.09	310
1997	9,526.09	5,201	5,784	3,742	22.59	166
1998	31,383.06	16,752	18,629	12,754	22.85	558
1999	8,674.43	4,519	5,025	3,649	23.14	158
2000	2,369.32	1,197	1,331	1,038	23.68	44
2002	48,950.94	23,330	25,945	23,006	24.34	945
2003	3,461.16	1,597	1,776	1,685	24.71	68
2005	5,267.33	2,261	2,514	2,753	25.48	108
2008	1,304,118.27	491,261	546,315	757,803	26.75	28,329
2009	1,414,984.23	508,545	565,536	849,448	27.03	31,426
2013	40,953.43	11,479	12,765	28,188	28.67	983
2014	1,619,339.69	419,733	466,771	1,152,569	29.05	39,675
2017	23,705.70	4,537	5,045	18,661	30.28	616

PEOPLES GAS COMPANY LLC

ACCOUNT 368.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 48-S0.5						
NET SALVAGE PERCENT.. 0						
2019	35,625.34	5,062	5,629	29,996	31.20	961
2020	4,032.72	471	524	3,509	31.55	111
2024	1,030,922.67	10,412	11,579	1,019,344	32.78	31,097
	5,886,718.39	1,719,560	1,912,238	3,974,480		139,315
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					28.5	2.37

PEOPLES GAS COMPANY LLC

ACCOUNT 369.00 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 38-R1.5						
NET SALVAGE PERCENT.. 0						
1905	126.35	126	126			
1916	12.60	13	13			
1917	15.87	16	16			
1918	7.93	8	8			
1919	26.60	27	27			
1920	118.61	119	119			
1925	7.93	8	8			
1926	134.52	135	135			
1927	24.28	24	24			
1928	18.23	18	18			
1929	364.58	365	365			
1930	196.67	197	197			
1931	253.19	253	253			
1934	42.80	43	43			
1935	1,537.72	1,538	1,538			
1936	968.25	968	968			
1937	1,260.24	1,260	1,260			
1940	1,348.46	1,348	1,348			
1941	94.00	94	94			
1942	656.75	657	657			
1943	318.35	318	318			
1945	9.15	9	9			
1946	135.63	136	136			
1949	4,166.93	4,122	4,167			
1950	99.75	98	100			
1952	211.25	203	211			
1954	10,839.26	10,249	10,839			
1955	90.83	85	91			
1957	337.27	312	337			
1958	1,847.59	1,697	1,848			
1959	38.21	35	38			
1960	884.83	802	885			
1961	373.16	336	373			
1962	560.55	501	561			
1964	231.77	204	232			
1965	945.68	826	946			
1966	8,900.74	7,713	8,901			
1967	3,415.48	2,935	3,415			
1968	4,168.50	3,551	4,168			
1969	868.00	733	868			
1970	5,699.46	4,768	5,687	12	6.21	2
1971	2,117.76	1,755	2,093	25	6.51	4
1972	6,966.24	5,716	6,818	148	6.82	22

PEOPLES GAS COMPANY LLC

ACCOUNT 369.00 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 38-R1.5						
NET SALVAGE PERCENT.. 0						
1973	8,334.26	6,771	8,076	258	7.13	36
1974	12,042.38	9,681	11,547	495	7.45	66
1975	4,881.53	3,882	4,630	252	7.78	32
1976	7,081.83	6,140	7,082			
1977	6,123.52	5,256	6,124			
1978	20,134.35	17,104	20,134			
1979	74,339.02	62,787	74,339			
1980	194,335.36	162,231	193,553	782	8.74	89
1981	69,022.30	56,909	67,896	1,126	9.19	123
1982	42,048.53	34,396	41,037	1,012	9.38	108
1983	27,424.78	22,129	26,401	1,024	9.85	104
1984	67,634.84	54,061	64,498	3,137	10.09	311
1985	93,834.27	73,866	88,127	5,707	10.59	539
1986	31,882.80	24,824	29,617	2,266	10.85	209
1987	64,465.67	49,355	58,884	5,582	11.38	491
1988	16,296.76	12,319	14,697	1,600	11.68	137
1989	238.56	178	212	27	12.00	2
1990	39,196.58	28,661	34,195	5,002	12.56	398
1991	36,258.65	26,095	31,133	5,126	12.92	397
1992	38,349.98	27,140	32,380	5,970	13.29	449
1993	106,920.74	73,978	88,261	18,660	13.88	1,344
1994	129,071.80	87,614	104,529	24,543	14.28	1,719
1995	85,779.26	57,043	68,056	17,723	14.69	1,206
1996	58,774.50	38,239	45,622	13,152	15.13	869
1997	462,788.19	294,194	350,994	111,794	15.57	7,180
1998	395,944.17	244,496	291,700	104,244	16.21	6,431
1999	132,505.09	79,702	95,090	37,415	16.67	2,244
2000	134,722.55	78,786	93,997	40,726	17.16	2,373
2001	64,325.28	36,511	43,560	20,765	17.65	1,176
2002	191,744.07	105,843	126,278	65,466	17.99	3,639
2003	141,856.82	75,666	90,275	51,582	18.52	2,785
2004	258,883.44	133,118	158,819	100,064	19.05	5,253
2005	129,863.58	64,218	76,616	53,248	19.59	2,718
2006	247,923.83	118,012	140,796	107,128	20.00	5,356
2007	389,383.89	177,793	212,119	177,265	20.43	8,677
2008	493,310.06	214,541	255,962	237,348	21.01	11,297
2009	412,363.32	170,718	203,678	208,685	21.47	9,720
2010	686,279.00	269,296	321,289	364,990	21.94	16,636
2011	416,687.25	154,716	184,587	232,100	22.29	10,413
2012	286,214.21	99,603	118,833	167,381	22.80	7,341
2013	400,936.82	130,304	155,462	245,475	23.20	10,581
2014	124,307.75	37,404	44,626	79,682	23.62	3,373
2015	525,167.28	145,366	173,431	351,736	23.95	14,686

PEOPLES GAS COMPANY LLC

ACCOUNT 369.00 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 38-R1.5						
NET SALVAGE PERCENT.. 0						
2016	318,734.49	80,162	95,639	223,095	24.30	9,181
2017	155,947.50	35,213	42,011	113,936	24.58	4,635
2019	15,551.67	2,667	3,182	12,370	24.95	496
2020	37,949.38	5,423	6,470	31,479	24.99	1,260
2021	33,417.38	3,776	4,505	28,912	24.85	1,163
2023	27,221.16	1,448	1,728	25,493	23.73	1,074
2024	412,767.52	6,357	7,584	405,184	21.27	19,050
	8,191,709.94	3,760,313	4,480,519	3,711,191		177,395
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					20.9	2.17

PEOPLES GAS COMPANY LLC

ACCOUNT 374.20 LAND AND LAND RIGHTS - LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1892	33.70	34	34			
1899	33.70	34	34			
1901	67.41	67	67			
1902	33.70	34	34			
1903	67.41	67	67			
1904	67.41	67	67			
1905	67.41	67	67			
1906	67.41	67	67			
1910	67.41	67	67			
1912	67.41	67	67			
1913	33.70	34	34			
1915	134.82	135	135			
1916	101.11	101	101			
1917	67.41	67	67			
1918	101.11	101	101			
1919	134.82	134	135			
1920	67.41	67	67			
1921	67.41	67	67			
1924	67.41	66	67			
1925	134.82	132	135			
1926	134.82	131	135			
1929	168.53	163	169			
1930	101.11	97	101			
1931	67.41	65	67			
1932	134.83	129	135			
1933	33.70	32	34			
1934	134.82	128	135			
1935	67.41	64	67			
1936	33.70	32	34			
1937	269.65	252	270			
1938	37.50	35	38			
1939	2.25	2	2			
1940	58.24	54	58			
1941	141.68	130	142			
1943	18.00	16	18			
1944	7.28	7	7			
1946	117.71	106	118			
1947	3.92	4	4			
1948	88.48	79	88			
1949	119.90	106	120			
1950	26.88	24	27			
1951	467.20	408	467			
1952	53.08	46	53			

PEOPLES GAS COMPANY LLC

ACCOUNT 374.20 LAND AND LAND RIGHTS - LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1953	199.36	172	199			
1954	392.00	335	392			
1955	72.80	62	73			
1956	375.20	315	375			
1957	448.00	373	445	3	11.66	
1958	4,158.55	3,434	4,099	60	12.20	5
1959	257.60	211	252	6	12.77	
1960	112.00	91	109	3	13.35	
1961	604.80	484	578	27	13.96	2
1962	644.00	510	609	35	14.59	2
1963	840.00	657	784	56	15.23	4
1964	4,266.88	3,298	3,937	330	15.89	21
1965	2,598.40	1,984	2,368	230	16.56	14
1966	3,109.60	2,344	2,798	312	17.24	18
1967	6,719.55	4,998	5,966	754	17.93	42
1968	5,420.80	3,978	4,748	673	18.63	36
1969	4,416.01	3,196	3,815	601	19.34	31
1970	5,693.00	4,062	4,849	844	20.06	42
1971	9,401.80	6,609	7,889	1,513	20.79	73
1972	2,688.00	1,861	2,221	467	21.53	22
1973	6,438.52	4,389	5,239	1,200	22.28	54
1974	1,699.60	1,140	1,361	339	23.04	15
1975	448.00	296	353	95	23.81	4
1976	5,672.80	3,853	4,599	1,074	22.75	47
1977	2,292.64	1,536	1,833	460	23.25	20
1978	1,120.00	734	876	244	24.25	10
1979	1,297.20	838	1,000	297	24.76	12
1980	1,820.00	1,150	1,373	447	25.76	17
1981	2,469.60	1,535	1,832	638	26.28	24
1982	2,902.20	1,762	2,103	799	27.28	29
1983	6,537.44	3,902	4,658	1,879	27.80	68
1984	2,226.00	1,296	1,547	679	28.80	24
1985	4,077.60	2,316	2,765	1,313	29.80	44
1986	4,854.23	2,705	3,229	1,625	30.33	54
1987	33,826.34	18,354	21,909	11,917	31.33	380
1988	21,831.50	11,606	13,854	7,978	31.86	250
1989	33,538.13	17,339	20,697	12,841	32.86	391
1990	15,258.75	7,663	9,147	6,112	33.86	181
1991	16,245.00	7,975	9,520	6,725	34.40	195
1992	51,887.50	24,704	29,488	22,400	35.40	633
1993	54,150.00	24,979	29,817	24,333	36.40	668
1994	14,887.50	6,692	7,988	6,900	36.95	187
1995	31,322.50	13,613	16,249	15,074	37.95	397

PEOPLES GAS COMPANY LLC

ACCOUNT 374.20 LAND AND LAND RIGHTS - LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1996	11,575.00	4,858	5,799	5,776	38.95	148
1997	21,418.75	8,670	10,349	11,070	39.95	277
1998	37,106.25	14,468	17,270	19,836	40.95	484
1999	49,683.75	18,756	22,389	27,295	41.50	658
2000	19,871.25	7,203	8,598	11,273	42.50	265
2001	27,041.25	9,397	11,217	15,824	43.50	364
2002	31,151.64	10,358	12,364	18,788	44.50	422
2003	55,747.77	17,700	21,128	34,620	45.50	761
2004	45,724.62	13,832	16,511	29,214	46.50	628
2005	80,066.42	23,171	27,659	52,407	47.06	1,114
2006	137,562.35	37,733	45,041	92,521	48.06	1,925
2007	134,486.10	34,859	41,610	92,876	49.06	1,893
2008	39,166.78	9,561	11,413	27,754	50.06	554
2009	15,501.94	3,550	4,237	11,265	51.06	221
2010	43,716.72	9,351	11,162	32,555	52.06	625
2011	34,165.65	6,792	8,107	26,059	53.06	491
2012	64,213.52	11,796	14,080	50,134	54.06	927
2014	1,150.00	177	211	939	56.06	17
2017	41,405.55	4,509	5,383	36,023	58.62	615
	1,263,747.80	449,677	536,240	727,508		16,405

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 44.3 1.30

PEOPLES GAS COMPANY LLC

ACCOUNT 375.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BUTLER METER SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2021						
NET SALVAGE PERCENT.. 0						
1966	62,627.19	62,627	62,627			
1969	216.05	216	216			
1972	1,191.68	1,192	1,192			
	64,034.92	64,035	64,035			
OTHER						
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1905	16.45	16	16			
1906	9.06	9	9			
1907	37.98	38	38			
1909	15.21	15	15			
1910	4.72	5	5			
1911	33.12	33	33			
1912	9.35	9	9			
1913	95.24	95	95			
1914	12.62	13	13			
1915	6.69	7	7			
1917	11.15	11	11			
1922	14.36	14	14			
1925	24.94	25	25			
1927	25.26	25	25			
1929	14.76	14	15			
1930	28.91	28	29			
1933	10.25	10	10			
1938	150.88	139	151			
1939	51.18	47	51			
1940	98.28	89	98			
1947	28.12	25	28			
1948	116.20	101	116			
1950	461.47	395	461			
1951	1,392.53	1,185	1,383	9	8.20	1
1952	516.23	436	509	7	8.52	1
1953	929.97	780	910	20	8.84	2
1954	1,769.94	1,475	1,722	48	9.17	5
1955	521.75	432	504	18	9.50	2
1956	1,303.08	1,070	1,249	54	9.84	5
1958	541.44	438	511	30	10.55	3

PEOPLES GAS COMPANY LLC

ACCOUNT 375.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER						
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1959	973.42	780	910	63	10.92	6
1960	286.15	227	265	21	11.30	2
1961	644.36	508	593	51	11.68	4
1962	1,520.68	1,187	1,385	135	12.08	11
1963	1,452.79	1,123	1,311	142	12.48	11
1964	991.43	759	886	106	12.90	8
1965	3,619.01	2,742	3,200	419	13.33	31
1966	1,948.63	1,461	1,705	243	13.76	18
1967	1,407.58	1,044	1,219	189	14.21	13
1968	2,037.03	1,494	1,744	293	14.67	20
1969	2,077.44	1,506	1,758	320	15.14	21
1970	3,571.69	2,557	2,985	587	15.62	38
1971	3,094.39	2,188	2,554	541	16.11	34
1972	3,946.90	2,755	3,216	731	16.61	44
1973	4,743.32	3,267	3,813	930	17.12	54
1974	1,194.53	811	947	248	17.64	14
1976	4,604.62	3,416	3,987	617	16.77	37
1977	2,055.15	1,503	1,754	301	17.35	17
1978	1,569.53	1,138	1,328	241	17.53	14
1979	1,874.93	1,338	1,562	313	18.13	17
1980	1,468.22	1,031	1,203	265	18.73	14
1981	1,720.14	1,188	1,387	334	19.33	17
1982	4,441.79	3,034	3,541	901	19.56	46
1983	9,477.52	6,359	7,422	2,055	20.18	102
1984	10,461.18	6,891	8,043	2,418	20.81	116
1985	7,785.19	5,062	5,908	1,877	21.07	89
1986	10,611.93	6,764	7,895	2,717	21.71	125
1987	14,324.57	8,944	10,439	3,885	22.36	174
1988	21,400.43	13,157	15,357	6,044	22.66	267
1989	19,922.57	11,981	13,984	5,938	23.31	255
1990	10,015.02	5,920	6,910	3,105	23.64	131
1991	24,231.26	13,984	16,322	7,909	24.30	325
1992	32,516.56	18,304	21,364	11,152	24.98	446
1993	43,283.63	23,875	27,867	15,417	25.33	609
1994	13,280.34	7,132	8,324	4,956	26.01	191
1995	25,362.69	13,315	15,541	9,822	26.39	372
1996	17,269.28	8,804	10,276	6,993	27.08	258
1997	8,184.62	4,069	4,749	3,435	27.48	125
1998	19,649.72	9,461	11,043	8,607	28.18	305
1999	16,970.92	7,944	9,272	7,699	28.60	269
2000	17,142.11	7,747	9,042	8,100	29.31	276
2001	25,376.64	11,110	12,967	12,409	29.75	417

PEOPLES GAS COMPANY LLC

ACCOUNT 375.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER						
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
2002	29,931.02	12,607	14,715	15,216	30.46	500
2003	42,981.97	17,468	20,388	22,593	30.92	731
2004	46,149.77	17,961	20,964	25,186	31.65	796
2005	49,610.68	18,544	21,644	27,966	32.11	871
2006	39,081.42	13,987	16,325	22,756	32.59	698
2007	26,073.46	8,907	10,396	15,677	33.09	474
2008	38,340.96	12,396	14,468	23,872	33.84	705
2009	31,185.28	9,555	11,153	20,033	34.34	583
2010	56,250.92	16,257	18,975	37,276	34.85	1,070
2011	49,627.42	13,459	15,709	33,918	35.38	959
2012	89,461.04	22,643	26,429	63,032	35.91	1,755
2013	67,446.85	15,890	18,547	48,900	36.23	1,350
2014	7,695.72	1,667	1,946	5,750	36.78	156
2015	2,004.03	395	461	1,543	37.34	41
2016	4,871.13	867	1,012	3,859	37.71	102
	987,472.72	417,462	487,176	500,297		16,153
	1,051,507.64	481,497	551,211	500,297		16,153

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.0 1.54

PEOPLES GAS COMPANY LLC

ACCOUNT 376.10 LOW PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. 0						
1894	261.38	261	261			
1896	6,483.38	6,483	6,483			
1899	1,443.31	1,443	1,443			
1900	2,068.66	2,069	2,069			
1901	1,055.61	1,056	1,056			
1902	6,732.80	6,733	6,733			
1903	8,656.66	8,657	8,657			
1904	9,524.62	9,500	9,525			
1905	6,242.71	6,203	6,243			
1906	3,604.90	3,568	3,605			
1907	141.99	140	142			
1908	2,874.07	2,822	2,874			
1909	3,644.23	3,564	3,644			
1910	0.91	1	1			
1911	4,294.19	4,165	4,294			
1912	6,711.69	6,482	6,712			
1913	14,436.68	13,881	14,437			
1914	3,322.40	3,181	3,322			
1915	529.21	504	529			
1916	1,371.31	1,301	1,371			
1917	3,949.90	3,732	3,950			
1918	7,038.72	6,622	7,039			
1919	7,276.56	6,818	7,277			
1922	141.02	131	141			
1923	5.81	5	5	1	5.02	
1924	2,984.06	2,743	2,976	8	5.25	2
1925	1,163.73	1,066	1,156	8	5.46	1
1926	2,874.23	2,623	2,846	28	5.68	5
1927	1,319.84	1,200	1,302	18	5.90	3
1928	47.29	43	47			
1930	792.54	713	773	20	6.56	3
1931	14.14	13	14			
1936	21.93	19	21	1	7.95	
1937	40,653.87	35,531	38,546	2,108	8.19	257
1938	3,722.73	3,239	3,514	209	8.44	25
1939	2,468.77	2,139	2,320	149	8.69	17
1940	892.02	769	834	58	8.94	6
1941	44.80	38	41	4	9.20	
1942	1,625.27	1,388	1,506	119	9.47	13
1943	659.99	561	609	51	9.74	5
1944	326.48	276	299	27	10.02	3
1945	349.24	294	319	30	10.30	3
1946	3,535.47	2,959	3,210	325	10.60	31

PEOPLES GAS COMPANY LLC

ACCOUNT 376.10 LOW PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. 0						
1947	2,133.03	1,775	1,926	207	10.90	19
1948	3,951.68	3,270	3,547	405	11.22	36
1949	13,241.91	10,891	11,815	1,427	11.54	124
1950	10,818.10	8,841	9,591	1,227	11.88	103
1951	16,132.65	13,100	14,211	1,922	12.22	157
1952	22,030.32	17,767	19,274	2,756	12.58	219
1953	16,822.65	13,471	14,614	2,209	12.95	171
1954	15,554.36	12,362	13,411	2,143	13.34	161
1955	15,480.83	12,208	13,244	2,237	13.74	163
1956	7,877.22	6,162	6,685	1,192	14.15	84
1957	15,800.10	12,259	13,299	2,501	14.57	172
1958	51,556.36	39,651	43,015	8,541	15.01	569
1959	38,086.98	29,028	31,491	6,596	15.46	427
1960	78,678.43	59,409	64,449	14,229	15.92	894
1961	86,522.87	64,692	70,181	16,342	16.40	996
1962	94,703.75	70,095	76,042	18,662	16.89	1,105
1963	197,255.89	144,482	156,740	40,516	17.39	2,330
1964	302,739.91	219,323	237,931	64,809	17.91	3,619
1965	314,788.36	225,486	244,617	70,171	18.44	3,805
1966	361,422.69	255,887	277,597	83,826	18.98	4,417
1967	386,484.76	270,362	293,300	93,185	19.53	4,771
1968	426,594.98	294,679	319,680	106,915	20.10	5,319
1969	601,764.03	410,313	445,125	156,639	20.68	7,574
1970	541,078.82	364,022	394,907	146,172	21.27	6,872
1971	615,773.55	408,590	443,256	172,518	21.87	7,888
1972	435,115.56	284,631	308,780	126,336	22.48	5,620
1973	345,863.35	222,895	241,806	104,057	23.11	4,503
1974	733,042.06	465,313	504,791	228,251	23.74	9,615
1975	283,770.32	177,291	192,333	91,437	24.39	3,749
1976	549,434.19	375,813	407,698	141,736	22.25	6,370
1977	549,807.96	370,845	402,309	147,499	22.76	6,481
1978	781,265.79	519,385	563,451	217,815	23.28	9,356
1979	985,918.47	645,678	700,459	285,459	23.80	11,994
1980	633,383.85	405,619	440,033	193,351	24.80	7,796
1981	773,822.79	487,663	529,038	244,785	25.33	9,664
1982	805,635.20	499,333	541,698	263,937	25.86	10,206
1983	975,206.55	594,193	644,606	330,601	26.40	12,523
1984	1,405,934.94	841,452	912,843	493,092	26.95	18,297
1985	1,010,698.75	593,786	644,164	366,535	27.50	13,329
1986	1,342,126.27	773,467	839,090	503,036	28.06	17,927
1987	3,221,955.96	1,820,083	1,974,504	1,247,452	28.62	43,587
1988	1,353,807.09	744,188	807,327	546,480	29.62	18,450
1989	2,347,730.12	1,263,079	1,370,242	977,488	30.20	32,367

PEOPLES GAS COMPANY LLC

ACCOUNT 376.10 LOW PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. 0						
1990	1,555,483.59	818,495	887,938	667,546	30.77	21,695
1991	1,886,889.55	970,050	1,052,352	834,538	31.35	26,620
1992	3,117,995.38	1,564,610	1,697,356	1,420,639	31.94	44,478
1993	2,624,756.02	1,284,293	1,393,256	1,231,500	32.53	37,857
1994	2,078,938.94	990,822	1,074,886	1,004,053	33.13	30,306
1995	1,399,044.51	648,877	703,930	695,115	33.72	20,614
1996	1,937,443.20	873,206	947,291	990,152	34.33	28,842
1997	2,782,056.29	1,209,360	1,311,965	1,470,091	35.33	41,610
1998	2,688,164.03	1,132,524	1,228,611	1,459,553	35.94	40,611
1999	2,851,327.58	1,162,486	1,261,115	1,590,213	36.56	43,496
2000	3,071,906.22	1,210,024	1,312,686	1,759,220	37.18	47,316
2001	2,370,346.32	900,495	976,895	1,393,451	37.81	36,854
2002	3,443,410.53	1,259,600	1,366,468	2,076,943	38.44	54,031
2003	2,823,208.20	992,075	1,076,245	1,746,963	39.07	44,714
2004	3,070,201.69	1,034,044	1,121,775	1,948,427	39.71	49,066
2005	3,660,575.25	1,178,705	1,278,710	2,381,865	40.36	59,015
2006	2,734,947.05	839,629	910,865	1,824,082	41.01	44,479
2007	3,114,680.88	908,864	985,975	2,128,706	41.66	51,097
2008	4,043,901.43	1,117,734	1,212,566	2,831,335	42.32	66,903
2009	1,772,465.55	462,436	501,670	1,270,796	42.97	29,574
2010	2,092,866.17	512,961	556,482	1,536,384	43.64	35,206
2011	2,640,745.12	604,995	656,324	1,984,421	44.30	44,795
2012	4,593,957.41	978,054	1,061,035	3,532,922	44.98	78,544
2013	4,790,105.49	941,256	1,021,115	3,768,990	45.65	82,563
2014	4,053,886.38	733,753	796,007	3,257,879	46.01	70,808
2015	2,030,648.69	333,229	361,501	1,669,148	46.70	35,742
2016	2,664,829.10	391,730	424,965	2,239,864	47.39	47,264
2017	4,261,090.14	555,646	602,789	3,658,301	47.78	76,566
2018	2,174,484.24	246,804	267,744	1,906,740	48.18	39,575
2019	2,457,001.96	234,889	254,818	2,202,184	48.89	45,044
2020	4,087,344.60	320,039	347,192	3,740,153	49.03	76,283
2021	8,911,727.94	536,486	582,003	8,329,725	49.46	168,413
2022	8,836,807.53	371,146	402,634	8,434,174	49.38	170,801
2023	3,924,038.28	103,987	112,810	3,811,228	48.92	77,907
2024	8,798,158.88	61,587	66,812	8,731,347	47.29	184,634
	142,282,556.71	41,692,666	45,224,052	97,058,505		2,347,526

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 41.3 1.65

PEOPLES GAS COMPANY LLC

ACCOUNT 376.20 REGULAR PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. 0						
2013	3,324,759.39	653,315	765,483	2,559,276	45.65	56,063
2014	3,560,016.19	644,363	754,994	2,805,022	46.01	60,965
2015	2,324,822.76	381,503	447,003	1,877,820	46.70	40,210
2016	10,307,413.62	1,515,190	1,775,333	8,532,081	47.39	180,040
2017	7,259,555.42	946,646	1,109,175	6,150,380	47.78	128,723
2018	11,096,299.80	1,259,430	1,475,661	9,620,639	48.18	199,681
2019	5,423,614.23	518,498	607,519	4,816,095	48.89	98,509
2020	7,906,033.03	619,042	725,325	7,180,708	49.03	146,455
2021	7,894,163.89	475,229	556,821	7,337,343	49.46	148,349
2022	9,076,482.66	381,212	446,663	8,629,820	49.38	174,763
2023	6,579,646.42	174,361	204,297	6,375,349	48.92	130,322
2024	4,431,655.23	31,022	36,348	4,395,307	47.29	92,944
	79,184,462.64	7,599,811	8,904,622	70,279,841		1,457,024
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					48.2	1.84

PEOPLES GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1891	33.73	34	34			
1904	253.05	253	253			
1906	25.53	26	26			
1907	152.63	153	153			
1908	55.65	56	56			
1909	80.40	80	80			
1910	19.55	20	20			
1913	96.06	96	96			
1914	21.22	21	21			
1915	89.54	90	90			
1916	21.52	22	22			
1918	127.99	128	128			
1920	44.62	45	45			
1922	43.13	43	43			
1923	29.83	30	30			
1927	22.71	22	23			
1931	104.19	100	104			
1932	297.26	283	297			
1933	224.14	212	224			
1934	214.50	202	214			
1935	10.63	10	11			
1936	57.95	54	58			
1937	29.65	27	30			
1938	150.39	138	150			
1939	445.24	408	445			
1940	92.63	84	93			
1941	65.32	59	65			
1944	90.17	80	89	1	6.09	
1948	284.55	247	275	10	7.28	1
1949	873.07	753	839	34	7.58	4
1950	912.90	782	872	41	7.89	5
1951	4,568.50	3,887	4,332	236	8.20	29
1952	1,201.71	1,016	1,132	70	8.52	8
1953	2,619.87	2,199	2,451	169	8.84	19
1954	4,325.39	3,604	4,017	308	9.17	34
1955	5,881.53	4,866	5,424	458	9.50	48
1956	6,271.38	5,149	5,739	532	9.84	54
1957	4,592.65	3,741	4,170	423	10.20	41
1958	5,895.96	4,765	5,311	585	10.55	55
1959	10,001.65	8,016	8,934	1,068	10.92	98
1960	10,169.63	8,080	9,006	1,164	11.30	103
1961	10,753.46	8,470	9,441	1,312	11.68	112
1962	11,080.34	8,647	9,638	1,442	12.08	119

PEOPLES GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1963	25,384.05	19,624	21,873	3,511	12.48	281
1964	5,003.11	3,830	4,269	734	12.90	57
1965	17,643.62	13,368	14,900	2,744	13.33	206
1966	10,391.43	7,792	8,685	1,706	13.76	124
1967	15,475.32	11,477	12,792	2,683	14.21	189
1968	17,243.72	12,644	14,093	3,151	14.67	215
1969	12,100.01	8,769	9,774	2,326	15.14	154
1970	30,100.81	21,552	24,021	6,080	15.62	389
1971	17,032.78	12,044	13,424	3,609	16.11	224
1972	22,515.59	15,716	17,517	4,999	16.61	301
1973	14,112.93	9,720	10,834	3,279	17.12	192
1974	12,577.87	8,544	9,523	3,055	17.64	173
1975	15,549.25	10,412	11,605	3,944	18.17	217
1976	26,140.50	19,391	21,613	4,528	16.77	270
1977	12,983.01	9,492	10,580	2,403	17.35	139
1978	6,369.92	4,617	5,146	1,224	17.53	70
1979	13,933.65	9,943	11,082	2,852	18.13	157
1980	16,292.92	11,441	12,752	3,541	18.73	189
1981	144,228.60	99,619	111,033	33,196	19.33	1,717
1982	71,211.90	48,645	54,219	16,993	19.56	869
1983	181,898.76	122,054	136,039	45,860	20.18	2,273
1984	136,905.40	90,180	100,513	36,392	20.81	1,749
1985	73,420.24	47,738	53,208	20,212	21.07	959
1986	139,552.48	88,951	99,143	40,409	21.71	1,861
1987	136,229.76	85,062	94,809	41,421	22.36	1,852
1988	93,923.15	57,744	64,360	29,563	22.66	1,305
1989	244,381.85	146,971	163,811	80,571	23.31	3,456
1990	229,111.81	135,428	150,946	78,166	23.64	3,307
1991	225,677.50	130,238	145,161	80,516	24.30	3,313
1992	271,931.72	153,070	170,609	101,323	24.98	4,056
1993	230,075.75	126,910	141,452	88,624	25.33	3,499
1994	98,089.63	52,674	58,709	39,381	26.01	1,514
1995	259,475.16	136,224	151,833	107,642	26.39	4,079
1996	38,301.75	19,526	21,763	16,539	27.08	611
1997	59,962.65	29,813	33,229	26,734	27.48	973
1998	33,394.22	16,079	17,921	15,473	28.18	549
1999	93,440.24	43,739	48,751	44,689	28.60	1,563
2000	138,362.11	62,526	69,690	68,672	29.31	2,343
2001	161,590.89	70,744	78,850	82,741	29.75	2,781
2002	251,620.38	105,983	118,127	133,493	30.46	4,383
2003	227,359.70	92,399	102,986	124,374	30.92	4,022
2004	204,136.71	79,450	88,554	115,583	31.65	3,652
2005	163,287.57	61,037	68,031	95,257	32.11	2,967

PEOPLES GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
2006	193,803.70	69,362	77,310	116,494	32.59	3,575
2007	152,272.31	52,016	57,976	94,296	33.09	2,850
2008	55,222.98	17,854	19,900	35,323	33.84	1,044
2009	75,266.36	23,062	25,704	49,562	34.34	1,443
2010	209,071.47	60,422	67,345	141,726	34.85	4,067
2011	206,268.84	55,940	62,350	143,919	35.38	4,068
2012	70,993.06	17,968	20,027	50,966	35.91	1,419
2013	105,207.64	24,787	27,627	77,581	36.23	2,141
2014	191,786.01	41,541	46,301	145,485	36.78	3,956
2015	129,079.48	25,442	28,357	100,722	37.34	2,697
2016	101,732.50	18,108	20,183	81,550	37.71	2,163
2017	372,838.89	59,058	65,825	307,014	38.08	8,062
2018	501,374.15	69,240	77,173	424,201	38.48	11,024
2019	189,914.00	22,372	24,935	164,979	38.69	4,264
2020	263,756.13	25,505	28,427	235,329	38.94	6,043
2021	1,103,961.29	83,239	92,777	1,011,184	38.85	26,028
2022	1,293,186.63	68,668	76,536	1,216,651	38.65	31,479
2023	1,033,659.93	35,041	39,056	994,604	38.04	26,146
2024	2,515,935.74	23,398	26,079	2,489,857	35.64	69,861
	13,046,083.35	3,173,201	3,536,599	9,509,484		276,260

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 34.4 2.12

PEOPLES GAS COMPANY LLC

ACCOUNT 380.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. 0						
1973	43,205.51	33,337	35,766	7,440	11.42	651
1974	85,046.70	64,857	69,583	15,464	11.87	1,303
1975	109,204.15	82,253	88,247	20,957	12.34	1,698
1976	116,480.36	93,697	100,525	15,955	11.71	1,363
1977	158,804.68	126,583	135,808	22,997	12.01	1,915
1978	176,348.82	138,399	148,485	27,864	12.66	2,201
1979	237,769.50	184,723	198,185	39,584	12.97	3,052
1980	214,049.44	163,555	175,474	38,575	13.64	2,828
1981	213,653.13	161,394	173,156	40,497	13.98	2,897
1982	235,858.24	176,045	188,874	46,984	14.33	3,279
1983	221,752.95	162,501	174,343	47,410	15.01	3,159
1984	283,249.79	204,790	219,714	63,536	15.39	4,128
1985	281,444.35	199,516	214,056	67,388	16.08	4,191
1986	365,619.48	255,349	273,958	91,661	16.48	5,562
1987	575,933.28	393,881	422,585	153,348	17.18	8,926
1988	323,624.50	217,702	233,567	90,058	17.60	5,117
1989	963,174.70	633,384	679,542	283,633	18.31	15,491
1990	987,359.55	637,637	684,105	303,255	18.74	16,182
1991	1,004,059.14	632,758	678,870	325,189	19.46	16,711
1992	1,298,716.53	802,087	860,539	438,178	19.92	21,997
1993	1,419,729.37	853,967	916,200	503,529	20.65	24,384
1994	1,082,215.96	636,559	682,949	399,267	21.12	18,905
1995	1,004,030.24	574,004	615,835	388,195	21.85	17,766
1996	1,114,786.80	621,717	667,025	447,762	22.34	20,043
1997	1,178,152.36	636,909	683,324	494,828	23.09	21,430
1998	1,242,347.00	653,475	701,097	541,250	23.58	22,954
1999	1,147,905.76	583,595	626,125	521,781	24.34	21,437
2000	1,204,591.00	593,863	637,141	567,450	24.85	22,835
2001	1,006,629.25	478,048	512,886	493,743	25.61	19,279
2002	927,862.98	425,704	456,727	471,136	26.14	18,024
2003	1,096,083.31	482,605	517,775	578,308	26.91	21,490
2004	1,164,279.38	493,072	529,005	635,274	27.45	23,143
2005	875,559.05	354,076	379,879	495,680	28.23	17,559
2006	766,249.88	296,539	318,149	448,101	28.78	15,570
2007	901,120.99	331,072	355,199	545,922	29.56	18,468
2008	947,563.28	330,889	355,003	592,560	30.13	19,667
2009	637,834.91	210,868	226,235	411,600	30.71	13,403
2010	570,701.39	177,032	189,933	380,768	31.50	12,088
2011	735,461.05	214,019	229,616	505,845	32.08	15,768
2012	902,341.45	244,805	262,645	639,696	32.68	19,575
2013	2,723,777.46	681,217	730,861	1,992,916	33.48	59,526
2014	2,453,679.25	563,855	604,946	1,848,733	34.08	54,247
2015	1,992,051.82	416,339	446,680	1,545,372	34.69	44,548

PEOPLES GAS COMPANY LLC

ACCOUNT 380.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. 0						
2016	1,715,963.92	322,258	345,743	1,370,221	35.31	38,805
2017	2,139,436.20	355,788	381,716	1,757,720	35.94	48,907
2018	2,932,961.44	424,986	455,957	2,477,004	36.39	68,068
2019	1,836,400.22	224,775	241,156	1,595,244	37.03	43,080
2020	2,288,168.89	228,817	245,492	2,042,677	37.50	54,471
2021	2,981,319.21	230,456	247,251	2,734,068	37.82	72,292
2022	2,097,419.60	113,261	121,515	1,975,905	37.99	52,011
2023	1,259,646.24	42,828	45,949	1,213,697	37.88	32,041
2024	9,650,999.10	86,859	93,189	9,557,810	36.57	261,357
	61,892,623.56	18,248,705	19,578,585	42,314,039		1,335,792

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.7 2.16

PEOPLES GAS COMPANY LLC

ACCOUNT 381.00 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 28-R1.5						
NET SALVAGE PERCENT.. 0						
1957	22.89	23	23			
1964	8,967.47	8,967	8,967			
1966	14.98	15	15			
1968	242.32	242	242			
1969	16,807.13	16,585	15,661	1,146	0.37	1,146
1970	74.19	72	68	6	0.70	6
1971	533.82	514	485	49	1.03	48
1972	695.98	662	625	71	1.37	52
1973	829.60	780	737	93	1.69	55
1974	57.31	53	50	7	1.96	4
1975	27,156.66	25,033	23,638	3,519	2.19	1,607
1976	554.09	528	499	55	2.34	24
1977	814.81	772	729	86	2.59	33
1978	1,164.30	1,097	1,036	128	2.85	45
1979	10,321.20	9,697	9,157	1,164	2.91	400
1980	5,061.81	4,717	4,454	608	3.23	188
1981	2,193.41	2,026	1,913	280	3.56	79
1982	282.11	259	245	37	3.71	10
1983	1,743.23	1,593	1,504	239	3.88	62
1984	356.02	322	304	52	4.28	12
1985	111.61	100	94	18	4.50	4
1988	16,120.18	14,050	13,267	2,853	5.33	535
1989	8,855.21	7,630	7,205	1,650	5.65	292
1990	75,645.52	64,359	60,773	14,873	5.99	2,483
1991	73,880.63	62,237	58,769	15,112	6.20	2,437
1992	197,283.36	163,725	154,602	42,681	6.59	6,477
1993	315,462.49	258,585	244,176	71,286	6.86	10,392
1994	284,590.63	229,209	216,437	68,154	7.29	9,349
1995	307,561.16	243,988	230,392	77,169	7.60	10,154
1996	451,701.77	351,153	331,586	120,116	8.07	14,884
1997	708,989.88	541,243	511,084	197,906	8.42	23,504
1998	504,354.28	377,459	356,426	147,928	8.80	16,810
1999	624,436.57	457,337	431,853	192,584	9.20	20,933
2000	496,105.17	354,864	335,090	161,015	9.62	16,738
2001	543,780.35	379,178	358,049	185,731	10.06	18,462
2002	530,666.99	359,951	339,894	190,773	10.51	18,152
2003	619,364.70	407,728	385,008	234,357	10.99	21,325
2004	914,625.26	582,891	550,411	364,214	11.48	31,726
2005	773,760.88	476,018	449,493	324,268	11.99	27,045
2006	957,078.76	568,505	536,827	420,252	12.42	33,837
2007	1,196,722.84	684,047	645,930	550,793	12.86	42,830
2008	932,411.72	509,470	481,081	451,331	13.42	33,631
2009	548,853.31	286,337	270,382	278,471	13.90	20,034

PEOPLES GAS COMPANY LLC

ACCOUNT 381.00 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 28-R1.5						
NET SALVAGE PERCENT.. 0						
2010	396,584.64	197,182	186,195	210,390	14.32	14,692
2011	590,810.47	277,681	262,208	328,602	14.85	22,128
2012	607,031.41	268,854	253,873	353,158	15.30	23,082
2013	257,493.52	106,680	100,735	156,759	15.79	9,928
2014	671,146.11	258,593	244,184	426,962	16.22	26,323
2015	735,192.56	260,846	246,311	488,882	16.67	29,327
2016	1,087,937.39	351,839	332,234	755,703	17.09	44,219
2017	1,389,611.31	404,377	381,844	1,007,767	17.46	57,719
2018	1,893,502.80	487,009	459,871	1,433,632	17.81	80,496
2019	1,666,317.62	369,256	348,680	1,317,638	18.14	72,637
2020	411,686.42	76,327	72,074	339,612	18.31	18,548
2021	363,968.97	53,467	50,488	313,481	18.39	17,046
2022	554,896.48	58,819	55,541	499,355	18.28	27,317
2023	351,018.76	24,466	23,103	327,916	17.79	18,433
2024	1,186,059.90	24,077	22,735	1,163,325	16.09	72,301
	23,323,514.96	10,673,494	10,079,257	13,244,258		920,001
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					14.4	3.94

PEOPLES GAS COMPANY LLC

ACCOUNT 382.10 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1.5						
NET SALVAGE PERCENT.. 0						
1967	403.44	299	373	30	12.97	2
1968	717.30	525	656	61	13.37	5
1970	1,281.49	917	1,145	136	14.21	10
1971	3,024.53	2,139	2,671	354	14.64	24
1972	1,667.94	1,165	1,455	213	15.08	14
1973	2,376.15	1,638	2,045	331	15.53	21
1974	1,502.55	1,022	1,276	227	16.00	14
1975	680.86	457	571	110	16.47	7
1976	1,577.60	1,201	1,500	78	15.13	5
1977	2,740.69	2,056	2,567	174	15.72	11
1978	419.36	312	390	29	15.94	2
1979	2,997.83	2,194	2,740	258	16.56	16
1980	5,131.02	3,716	4,640	491	16.81	29
1981	8,377.83	6,004	7,497	881	17.07	52
1982	5,483.17	3,861	4,821	662	17.71	37
1983	3,631.70	2,527	3,155	477	18.01	26
1984	17,175.69	11,728	14,644	2,532	18.66	136
1985	13,253.20	8,929	11,149	2,104	18.97	111
1986	51,842.15	34,231	42,742	9,100	19.64	463
1987	153,474.44	99,820	124,640	28,834	19.98	1,443
1988	98,837.58	63,276	79,009	19,829	20.33	975
1989	90,534.29	56,674	70,766	19,768	21.01	941
1990	63,852.21	39,269	49,033	14,819	21.39	693
1991	60,908.10	36,764	45,905	15,003	21.78	689
1992	110,947.57	65,670	81,999	28,949	22.18	1,305
1993	148,372.95	85,552	106,824	41,549	22.89	1,815
1994	60,332.15	34,033	42,495	17,837	23.31	765
1995	44,609.82	24,589	30,703	13,907	23.75	586
1996	61,974.86	33,342	41,632	20,343	24.19	841
1997	63,357.25	33,218	41,478	21,879	24.65	888
1998	116,355.16	59,364	74,125	42,230	25.12	1,681
1999	67,939.13	33,684	42,059	25,880	25.59	1,011
2000	128,424.71	61,759	77,115	51,310	26.09	1,967
2001	129,461.47	60,277	75,265	54,196	26.59	2,038
2002	102,321.16	46,045	57,494	44,827	27.09	1,655
2003	88,505.96	38,403	47,952	40,554	27.61	1,469
2004	94,990.63	39,649	49,507	45,484	28.14	1,616
2005	158,890.79	63,652	79,479	79,412	28.68	2,769
2006	118,345.55	45,575	56,907	61,439	29.00	2,119
2007	107,572.33	39,522	49,349	58,223	29.56	1,970
2008	81,964.20	28,753	35,902	46,062	29.92	1,540
2009	109,691.34	36,604	45,705	63,986	30.29	2,112
2010	63,902.35	20,187	25,206	38,696	30.68	1,261

PEOPLES GAS COMPANY LLC

ACCOUNT 382.10 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1.5						
NET SALVAGE PERCENT.. 0						
2011	59,251.60	17,633	22,017	37,235	31.08	1,198
2012	91,316.12	25,441	31,767	59,549	31.50	1,890
2013	472,613.95	122,974	153,551	319,063	31.75	10,049
2014	130,587.14	31,472	39,297	91,290	32.03	2,850
2015	142,034.61	31,375	39,176	102,859	32.33	3,182
2016	179,031.42	35,824	44,732	134,299	32.65	4,113
2017	184,299.77	33,027	41,239	143,061	32.83	4,358
2018	222,181.97	35,083	43,806	178,376	32.89	5,423
2019	210,492.05	28,606	35,719	174,773	32.86	5,319
2020	224,975.72	25,400	31,716	193,260	32.73	5,905
2021	285,445.95	25,405	31,722	253,724	32.42	7,826
	4,652,080.80	1,642,842	2,051,328	2,600,753		87,247

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 29.8 1.88

PEOPLES GAS COMPANY LLC

ACCOUNT 387.00 OTHER EQUIPMENT - DISTRIBUTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 25-R2						
NET SALVAGE PERCENT.. 0						
2024	103,512.86	2,008	1,123	102,390	16.85	6,077
	103,512.86	2,008	1,123	102,390		6,077

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.8 5.87

PEOPLES GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BUTLER GENERAL OFFICE						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2028						
NET SALVAGE PERCENT.. 0						
1928	380,688.45	361,936	368,846	11,842	3.53	3,355
1955	795.16	747	761	34	3.70	9
1966	1,682.43	1,566	1,596	87	3.74	23
1967	3,961.79	3,685	3,755	206	3.74	55
1971	2,385.40	2,209	2,251	134	3.75	36
1978	2,927.05	2,703	2,755	172	3.84	45
1979	7,118.26	6,559	6,684	434	3.85	113
1983	1,399.03	1,284	1,309	91	3.68	25
1986	23,988.33	21,791	22,207	1,781	3.85	463
1988	1,646.96	1,489	1,517	130	3.83	34
1989	8,096.53	7,318	7,458	639	3.74	171
1990	1,588.13	1,427	1,454	134	3.86	35
1994	10,716.66	9,505	9,686	1,030	3.85	268
1996	1,857.29	1,637	1,668	189	3.78	50
2000	36,282.39	31,392	31,991	4,291	3.77	1,138
2003	2,221.01	1,885	1,921	300	3.77	80
2004	14,529.61	12,219	12,452	2,077	3.81	545
2005	4,397.58	3,667	3,737	661	3.82	173
2006	11,217.14	9,272	9,449	1,768	3.81	464
2007	60,968.05	49,921	50,874	10,094	3.80	2,656
2008	5,762.93	4,668	4,757	1,006	3.79	265
2009	3,209.74	2,566	2,615	595	3.81	156
2011	152,081.93	117,940	120,192	31,890	3.81	8,370
2012	236,084.92	179,802	183,235	52,850	3.81	13,871
2013	37,798.95	28,194	28,732	9,067	3.80	2,386
2017	4,925.80	3,216	3,277	1,648	3.81	433
2019	11,835.76	6,819	6,949	4,887	3.80	1,286
2020	15,836.94	8,281	8,439	7,398	3.80	1,947
2021	178,901.38	81,293	82,845	96,056	3.80	25,278
2023	434,457.20	113,089	115,248	319,209	3.79	84,224
2024	764,380.62	62,144	63,330	701,050	3.77	185,955
	2,423,743.42	1,140,224	1,161,994	1,261,749		333,909

PEOPLES GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BUTLER WAREHOUSE AND AUTOMOTIVE SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2033						
NET SALVAGE PERCENT.. 0						
1940	85,470.71	76,060	77,512	7,959	7.68	1,036
1950	1,888.42	1,660	1,692	197	7.97	25
1957	1,467.16	1,277	1,301	166	8.14	20
1960	1,094.63	948	966	129	8.20	16
1961	384.66	332	338	46	8.22	6
1971	7,527.00	6,362	6,483	1,044	8.39	124
1974	100.80	85	87	14	8.43	2
1976	1,027.37	876	893	135	8.33	16
1977	61.74	52	53	9	8.39	1
1978	8,509.01	7,188	7,325	1,184	8.48	140
1985	4,367.87	3,593	3,662	706	8.45	84
1987	46,695.26	38,010	38,736	7,960	8.49	938
1988	8,962.35	7,260	7,399	1,564	8.48	184
1989	1,660.57	1,337	1,363	298	8.50	35
1990	19,730.45	15,774	16,075	3,655	8.57	426
1993	48,822.88	38,345	39,077	9,746	8.52	1,144
1995	15,769.73	12,188	12,421	3,349	8.57	391
1996	18,223.21	13,961	14,228	3,996	8.60	465
1997	3,293.66	2,505	2,553	741	8.55	87
1998	16,193.02	12,203	12,436	3,757	8.56	439
2002	3,800.81	2,738	2,790	1,011	8.60	118
2005	2,841.13	1,960	1,997	844	8.61	98
2010	5,465.82	3,392	3,457	2,009	8.66	232
2013	236,553.73	133,393	135,940	100,614	8.64	11,645
2014	56,352.00	30,481	31,063	25,289	8.63	2,930
2017	431,012.73	195,507	199,240	231,773	8.63	26,857
2019	609,584.14	228,350	232,710	376,874	8.63	43,670
2021	34,747.85	9,354	9,533	25,215	8.60	2,932
2022	13,963.99	2,817	2,871	11,093	8.57	1,294
2024	764,007.79	29,261	29,820	734,188	8.37	87,717
	2,449,580.49	877,269	894,018	1,555,562		183,072
BUTLER WELDING, STORAGE AND RADIO SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2030						
NET SALVAGE PERCENT.. 0						
1970	76,065.13	67,947	69,244	6,821	5.64	1,209
1972	1,375.00	1,224	1,247	128	5.65	23

PEOPLES GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BUTLER WELDING, STORAGE AND RADIO SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2030						
NET SALVAGE PERCENT.. 0						
1986	11,191.91	9,739	9,925	1,267	5.69	223
1988	14,573.97	12,598	12,839	1,735	5.67	306
1990	7,718.75	6,620	6,746	972	5.67	171
1991	14,753.75	12,576	12,816	1,938	5.74	338
1992	29,439.75	25,000	25,477	3,962	5.71	694
1996	13,215.13	10,980	11,190	2,025	5.73	353
2000	3,181.25	2,568	2,617	564	5.77	98
2002	3,275.40	2,599	2,649	627	5.77	109
2004	1,119.19	871	888	232	5.74	40
2007	1,277.84	956	974	304	5.77	53
2012	34,948.75	23,727	24,180	10,769	5.75	1,873
2017	24,400.00	13,535	13,793	10,607	5.75	1,845
2021	4,260.35	1,514	1,543	2,717	5.75	473
	240,796.17	192,454	196,129	44,667		7,808

PEOPLES GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
TARENTUM GARAGE AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2024						
NET SALVAGE PERCENT.. 0						
1966	63,790.24	63,790	63,790			
1972	3,834.59	3,835	3,835			
1974	940.00	940	940			
1975	4,390.52	4,391	4,391			
1979	14,518.41	14,518	14,518			
1985	2,084.86	2,085	2,085			
1986	30,754.00	30,754	30,754			
1992	3,544.98	3,545	3,545			
1993	5,540.63	5,541	5,541			
1994	1,728.79	1,729	1,729			
1995	9,736.43	9,736	9,736			
2002	22,444.54	22,445	22,445			
2004	403,589.41	403,589	403,589			
2005	24,609.69	24,610	24,610			
2006	36,164.06	36,164	36,164			
2007	5,235.62	5,236	5,236			
2012	34,744.46	34,744	34,744			
	667,651.23	667,652	667,651			
ALABRAN GARAGE AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1970	62,569.44	61,515	62,569			
1971	1,283.57	1,262	1,284			
1975	6,034.09	5,924	6,034			
1981	16,499.35	16,168	16,499			
1985	4,072.63	3,988	4,073			
1986	15,847.00	15,484	15,847			
1988	14,972.72	14,621	14,973			
1992	1,226.29	1,195	1,226			
1995	17,159.18	16,665	17,159			
1996	7,878.80	7,657	7,879			
2003	1,868.53	1,800	1,869			
2005	5,658.55	5,423	5,659			
2006	1,158.55	1,107	1,159			

PEOPLES GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ALABRAN GARAGE AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
2007	6,818.72	6,508	6,819			
2010	1,578.25	1,491	1,578			
2011	31,794.42	29,890	31,794			
	196,420.09	190,698	196,420			
HOME GARAGE AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2040						
NET SALVAGE PERCENT.. 0						
1970	54,725.21	41,535	43,082	11,643	14.29	815
1971	1,851.86	1,400	1,452	400	14.33	28
1985	4,072.62	2,967	3,078	995	14.60	68
1987	14,396.71	10,327	10,712	3,685	14.65	252
1989	89,302.73	62,807	65,147	24,156	14.84	1,628
1990	8,907.58	6,209	6,440	2,467	14.85	166
1992	5,149.94	3,529	3,660	1,489	14.78	101
1993	5,663.25	3,830	3,973	1,691	14.92	113
1995	15,591.50	10,323	10,708	4,884	14.89	328
1996	20,668.06	13,507	14,010	6,658	14.94	446
2003	1,868.54	1,092	1,133	736	15.07	49
2004	1,119.19	641	665	454	15.05	30
2007	1,267.19	674	699	568	15.09	38
2019	93,732.62	24,024	24,919	68,814	14.99	4,591
2020	140,160.49	30,541	31,679	108,482	14.95	7,256
2021	2,107.48	369	383	1,725	14.92	116
2023	28,110.02	2,347	2,434	25,676	14.64	1,754
	488,694.99	216,122	224,174	264,521		17,779
WALKCHALK GARAGE AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1960	53,582.50	52,791	53,583			
1961	410.75	405	411			
1973	7,800.00	7,662	7,800			
1976	2,912.28	2,862	2,912			

PEOPLES GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WALKCHALK GARAGE AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1979	11,350.08	11,124	11,350			
1984	2,931.27	2,873	2,931			
1987	11,978.91	11,709	11,979			
1991	4,070.94	3,970	4,071			
1992	1,987.83	1,937	1,988			
1996	9,203.44	8,944	9,203			
1999	2,122.54	2,057	2,123			
2004	1,119.19	1,074	1,119			
2006	44,003.82	42,050	44,004			
2007	2,740.61	2,616	2,741			
2009	4,035.25	3,825	4,035			
2011	3,788.80	3,562	3,789			
	164,038.21	159,461	164,038			
ANDERSON GARAGE AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2026						
NET SALVAGE PERCENT.. 0						
1966	25,475.19	24,603	25,475			
1967	580.41	560	580			
1979	14,837.92	14,274	14,838			
1981	43,038.75	41,244	43,039			
1982	5,226.44	5,003	5,226			
1986	8,103.37	7,732	8,103			
1987	14,133.57	13,448	14,106	28	1.89	15
1992	1,901.06	1,798	1,886	15	1.85	8
1993	3,125.00	2,951	3,095	30	1.83	16
2004	4,637.50	4,255	4,463	174	1.81	96
2007	15,716.32	14,219	14,915	802	1.81	443
2009	3,641.80	3,248	3,407	235	1.84	128
2012	6,422.35	5,587	5,860	562	1.82	309
	146,839.68	138,922	144,994	1,846		1,015

PEOPLES GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER						
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1982	208.10	142	148	60	19.56	3
1984	1,548.70	1,020	1,065	484	20.81	23
1985	4,938.30	3,211	3,351	1,587	21.07	75
2003	4,518.29	1,836	1,916	2,602	30.92	84
2007	4,747.17	1,622	1,693	3,054	33.09	92
2012	49,579.91	12,549	13,097	36,483	35.91	1,016
2013	88,766.55	20,913	21,827	66,940	36.23	1,848
2014	1,176.69	255	266	911	36.78	25
2020	10,366.50	1,002	1,046	9,321	38.94	239
2021	70,602.23	5,323	5,556	65,047	38.85	1,674
2022	8,397.51	446	465	7,932	38.65	205
2023	510,384.88	17,302	18,058	492,327	38.04	12,942
2024	763,669.92	7,102	7,412	756,258	35.64	21,219
	1,518,904.75	72,723	75,901	1,443,004		39,445
	8,296,669.03	3,655,525	3,725,319	4,571,349		583,028

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.8 7.03

PEOPLES GAS COMPANY LLC

ACCOUNT 391.10 OFFICE FURNITURE AND EQUIPMENT - FURNITURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2005	18,544.44	17,772	18,544			
2006	17,798.10	16,167	17,798			
2007	49,898.90	42,830	49,899			
2008	1,672.84	1,352	1,576	97	3.83	25
2009	1,248.83	947	1,104	145	4.83	30
2010	3,965.54	2,809	3,275	691	5.83	119
2011	6,120.39	4,029	4,698	1,422	6.83	208
2012	11,373.26	6,919	8,068	3,305	7.83	422
2013	85,436.40	47,702	55,622	29,814	8.83	3,376
	196,058.70	140,527	160,584	35,475		4,180

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.5 2.13

PEOPLES GAS COMPANY LLC

ACCOUNT 391.20 OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2019	6,450.00	3,333	6,450			
2020	6,996.39	2,915	25,198	18,202-		
	13,446.39	6,248	31,648	18,202-		
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					0.0	0.00

PEOPLES GAS COMPANY LLC

ACCOUNT 392.20 TRANSPORTATION EQUIPMENT - LIGHT TRUCKS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 9-L3						
NET SALVAGE PERCENT.. 0						
2007	9,264.62	8,890	7,995	1,270	0.72	1,270
2014	96,008.82	79,159	71,186	24,823	2.16	11,492
2015	19,817.24	15,878	14,279	5,538	2.27	2,440
2016	68,763.79	53,182	47,826	20,938	2.39	8,761
2017	402,448.43	295,075	265,355	137,093	2.61	52,526
2018	575,294.88	388,094	349,005	226,290	2.97	76,192
2019	495,244.75	294,770	265,081	230,164	3.51	65,574
2020	923,854.00	459,987	413,658	510,196	4.20	121,475
2021	2,086,618.40	810,860	729,191	1,357,427	4.98	272,576
2022	607,576.72	164,289	147,742	459,835	5.85	78,604
2023	531,822.41	89,133	80,155	451,667	6.62	68,228
2024	1,955,210.94	82,119	73,848	1,881,363	7.60	247,548
	7,771,925.00	2,741,436	2,465,321	5,306,604		1,006,686

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.3 12.95

PEOPLES GAS COMPANY LLC

ACCOUNT 392.30 TRANSPORTATION EQUIPMENT - HEAVY TRUCKS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 14-S1						
NET SALVAGE PERCENT.. 0						
2016	260,401.37	148,637	59,712	200,689	6.14	32,686
2017	376,786.56	196,570	78,969	297,818	6.57	45,330
2018	789,353.48	368,944	148,217	641,136	7.03	91,200
2019	353,390.06	144,042	57,866	295,524	7.51	39,351
2020	861,744.96	294,458	118,294	743,451	8.03	92,584
2021	23,711.09	6,374	2,561	21,150	8.61	2,456
2023	137,116.92	16,344	6,565	130,552	9.85	13,254
2024	41,701.65	1,264	508	41,194	10.67	3,861
	2,844,206.09	1,176,633	472,692	2,371,514		320,722

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.4 11.28

PEOPLES GAS COMPANY LLC

ACCOUNT 393.00 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2002	853.30	757	683	170	2.83	60
2003	60.31	51	46	14	3.83	4
2005	3,420.75	2,623	2,367	1,054	5.83	181
2006	1,008.00	732	660	348	6.83	51
2007	54.28	37	33	21	7.83	3
2010	41.71	24	22	20	10.83	2
2011	456.77	241	218	239	11.83	20
	5,895.12	4,465	4,029	1,866		321
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					5.8	5.45

PEOPLES GAS COMPANY LLC

ACCOUNT 394.20 TOOLS, SHOP AND GARAGE EQUIPMENT - TOOLS AND WORK EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2010	287,460.88	271,490	265,333	22,128	0.83	22,128
2011	223,895.39	196,531	192,074	31,821	1.83	17,389
2012	234,880.05	190,514	186,194	48,686	2.83	17,204
2013	191,038.12	142,216	138,991	52,047	3.83	13,589
2014	54,908.82	37,216	36,372	18,537	4.83	3,838
2015	27,411.96	16,752	16,372	11,040	5.83	1,894
2016	162,142.32	88,277	86,275	75,867	6.83	11,108
2017	1,119.95	535	523	597	7.83	76
2018	30,205.91	12,418	12,136	18,070	8.83	2,046
2019	27,535.56	9,484	9,269	18,267	9.83	1,858
2020	54,112.57	15,031	14,690	39,423	10.83	3,640
2021	186,955.14	39,468	38,573	148,382	11.83	12,543
2022	391,734.22	56,582	55,300	336,434	12.83	26,222
2023	6,209.77	552	539	5,671	13.67	415
	1,879,610.66	1,077,066	1,052,641	826,970		133,950

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.2 7.13

PEOPLES GAS COMPANY LLC

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 18-L2.5						
NET SALVAGE PERCENT.. 0						
1961	899.12	899	899			
1962	344.18	344	344			
1975	197.69	193	163	35	0.44	35
1985	6,880.94	6,549	5,546	1,335	1.98	674
1987	4,573.62	4,317	3,656	918	2.20	417
1988	1,196.31	1,121	949	247	2.44	101
1989	12,756.85	11,888	10,067	2,690	2.57	1,047
1991	708.24	653	553	155	2.81	55
1992	87,963.71	80,645	68,290	19,674	2.92	6,738
1993	36,458.03	33,180	28,097	8,361	3.08	2,715
1994	78,702.89	70,990	60,114	18,589	3.28	5,667
1999	1,315.33	1,126	953	362	4.24	85
2000	68,445.08	57,891	49,022	19,423	4.41	4,404
2001	74,531.87	62,160	52,637	21,895	4.61	4,749
2002	11,262.22	9,262	7,843	3,419	4.79	714
2003	69,097.77	56,018	47,436	21,662	4.94	4,385
2007	16,593.21	12,647	10,710	5,883	5.36	1,098
2008	44,054.89	32,905	27,864	16,191	5.48	2,955
2013	183,559.11	113,972	96,512	87,047	6.82	12,763
2014	266,756.11	155,412	131,603	135,153	7.28	18,565
2015	173,798.73	93,678	79,327	94,472	7.84	12,050
2016	82,749.22	40,680	34,448	48,301	8.45	5,716
2017	51,708.84	22,793	19,301	32,408	9.09	3,565
2018	126,682.60	48,899	41,408	85,275	9.81	8,693
2019	33,432.96	10,986	9,303	24,130	10.56	2,285
2020	327,118.21	87,929	74,458	252,660	11.34	22,280
2021	210,562.95	43,544	36,873	173,690	12.15	14,295
2022	706,244.46	100,993	85,521	620,723	12.98	47,821
2023	39,502.89	3,492	2,957	36,546	13.75	2,658
2024	380,461.01	8,446	7,152	373,309	14.68	25,430
	3,098,559.04	1,173,612	994,006	2,104,553		211,960

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.9 6.84

PEOPLES GAS COMPANY LLC

ACCOUNT 397.00 GENERATION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2024	161,152.05	3,581	5,372	155,780	14.67	10,619
	161,152.05	3,581	5,372	155,780		10,619
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					14.7	6.59

PEOPLES GAS COMPANY LLC

ACCOUNT 397.10 COMMUNICATION EQUIPMENT - STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2007	11,500.91	7,897	5,909	5,592	7.83	714
2011	13,689.76	7,210	5,394	8,296	11.83	701
2012	3,464.31	1,686	1,262	2,202	12.83	172
2024	299,297.11	3,990	2,985	296,312	24.67	12,011
	327,952.09	20,783	15,550	312,402		13,598

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.0 4.15

PEOPLES GAS COMPANY LLC

ACCOUNT 397.20 COMMUNICATION EQUIPMENT - RADIO

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF AUGUST 31, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2010	64,622.48	61,032	56,890	7,732	0.83	7,732
2011	33,696.54	29,578	27,571	6,126	1.83	3,348
2012	3,137.18	2,545	2,372	765	2.83	270
2013	572,369.14	426,094	397,174	175,195	3.83	45,743
2014	327,931.95	222,266	207,181	120,751	4.83	25,000
2015	91,070.54	55,654	51,877	39,194	5.83	6,723
2016	108,857.64	59,266	55,243	53,615	6.83	7,850
2018	25,970.74	10,677	9,952	16,019	8.83	1,814
2019	105,310.54	36,273	33,811	71,500	9.83	7,274
2020	74,963.75	20,823	19,410	55,554	10.83	5,130
2021	70,789.04	14,944	13,930	56,859	11.83	4,806
	1,478,719.54	939,152	875,411	603,309		115,690

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.2 7.82

PART VIII. EXPERIENCED AND ESTIMATED NET SALVAGE

PEOPLES GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2019 TRANSACTION YEAR				
303.00	706,507.19			
352.00	5,127.00	216,163.00		216,163.00-
353.00	4,175.49	3,444.00		3,444.00-
354.00	3,051.20		464.00	464.00
365.20	12,922.71			
366.01	2,598.75			
366.03	1,125.00			
367.00	14,289.08	104,641.00		104,641.00-
368.00	83,169.32	27,275.00		27,275.00-
375.02	4,244.02			
376.00	224,469.74	227,525.00	2,643.00	224,882.00-
378.00	16,212.01			
380.00	38,621.82	335,890.00		335,890.00-
381.00	738,574.24			
382.10	3,852.68	8,747.00		8,747.00-
390.00	27,583.67			
391.01	60,102.55			
391.02	120,825.79			
391.03	2,154.29			
392.00	1,113,880.79		146,103.00	146,103.00
396.00	38,744.45		500.00	500.00
397.20	30,568.40			
398.00	30,182.42			
399.00	4,244.02			
	3,287,226.63	923,685.00	149,710.00	773,975.00-

PEOPLES GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2020 TRANSACTION YEAR				
303.00	776,851.10			
351.00	798.05			
353.00	2,549.00			
355.00	12,378.93			
367.00	37,945.19	99,744.00		99,744.00-
368.00		31,881.00		31,881.00-
369.00	3,021.94			
375.02	3,080.25			
376.00	415,086.13	342,321.00	8,316.00	334,005.00-
378.00	11,443.00	4,249.00		4,249.00-
380.00	58,211.24	424,224.00		424,224.00-
382.10	5,055.86	9,887.00		9,887.00-
390.00	26,280.74			
391.01	9,316.58			
391.02	313,487.14			
391.03	14,189.00			
392.00	961,032.06		139,251.00	139,251.00
394.20	501,795.32			
396.00	43,163.20			
397.20	20,196.94			
	3,215,881.67	912,306.00	147,567.00	764,739.00-

PEOPLES GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2021 TRANSACTION YEAR				
303.00	379,965.27			
352.00		1,982.00		1,982.00-
354.00	1,857.17			
367.00	14,445.28	215,555.00		215,555.00-
369.00	33,570.20			
375.02	7,739.40			
376.00	1,030,456.79	241,723.00	5,566.00	236,157.00-
378.00	54,750.28	56,011.00		56,011.00-
380.00		189,733.00		189,733.00-
381.00	414,953.07			
382.10	3,974.15	11,196.00		11,196.00-
390.00	169,838.92			
391.01	9,927.25			
391.02	14,270.00			
391.03	450.32			
392.00	354,682.91		103,133.00	103,133.00
393.00	14,500.38			
394.20	282,035.93			
396.00	108,773.95			
397.20	369,560.42			
	3,265,751.69	716,200.00	108,699.00	607,501.00-
2022 TRANSACTION YEAR				
303.00	1,528,279.18			
352.00	93,477.72			
367.00	22,240.16		6,938.75	6,938.75
369.00	365.05			
375.02	2,349.51			
376.00	429,518.47	46,553.14	10,878.77	35,674.37-
378.00	173,173.04			
380.00	76,596.80			
381.00	342,674.32			
382.10	4,291.40	1,495.00		1,495.00-
391.01	8,457.12			
391.02	9,207.66			
392.00	1,735,740.32		5,643.60	5,643.60
393.00	10,559.15			
394.20	193,490.71			
396.00	260,936.19			
397.20	604,496.46			
	5,495,853.26	48,048.14	23,461.12	24,587.02-

PEOPLES GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2023 TRANSACTION YEAR				
303.00	5,857,983.70			
351.00	97.31			
352.00	691.43	2,123.00		2,123.00-
353.00	747.57	897.00		897.00-
354.00	515.09		464.00	464.00
355.00	1,453.38			
366.20	37.39			
367.00	16,970.96	48,640.00	690.00	47,950.00-
368.00	9,278.76	6,588.00		6,588.00-
369.00	5,993.04			
375.00	1,831.85			
376.00	303,075.50	391,641.86	2,093.00	389,548.86-
378.00	42,789.20	2,519.00		2,519.00-
380.00	166,560.83	58,627.62		58,627.62-
381.00	127,465.64			
382.10	1,552.25	3,583.84		3,583.84-
390.00	69,447.34			
392.00	1,265,221.41		35,512.00	35,512.00
396.00	504,626.04	663.00		663.00-
397.20	41,665.95			
	8,418,004.64	515,283.32	38,759.00	476,524.32-
TOTAL	23,682,717.89	3,115,522.46	468,196.12	2,647,326.34-

PEOPLES NATURAL GAS COMPANY LLC

PITTSBURGH, PENNSYLVANIA

PEOPLES GAS DIVISION

2025 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION
ACCRUALS RELATED TO GAS PLANT
AS OF SEPTEMBER 30, 2025

Prepared by:

GANNETT FLEMING

Excellence Delivered As Promised

PEOPLES NATURAL GAS COMPANY LLC

Pittsburgh, Pennsylvania

PEOPLES GAS DIVISION

2025 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO GAS PLANT
AS OF SEPTEMBER 30, 2025

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | **F** 717.763.8150

gannettfleming.com

December 14, 2023

Peoples Natural Gas Company, LLC
375 North Shore Drive, Suite 600
Pittsburgh, PA 15212-5322

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to gas plant as of September 30, 2025. The results of our study as of August 31, 2024 are presented in our report titled "2024 Depreciation Study - Calculated Annual Depreciation Accruals Related to Gas Plant as of August 31, 2024". The same methods, procedures and estimates are used in both studies.

The attached report sets forth a description of the methods and procedures upon which the studies were based, the estimates of survivor curves and the calculated annual depreciation rates as of September 30, 2025.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS
President

JJS:mle

075181.000

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PART I. RESULTS OF STUDY

PEOPLES NATURAL GAS COMPANY LLC
PEOPLES GAS DIVISION
DEPRECIATION STUDY

PART I. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

Tables 1 through 4 presented on pages I-3 through I-9 summarize the results of the depreciation study as of September 30, 2025. Table 1 sets forth, by depreciable group, the estimated survivor curve, original cost, book depreciation reserve as of September 30, 2025, future book accruals, calculated annual accrual amount and rate, and composite remaining life for plant in service. Table 2 presents the bringforward of the book reserve to September 30, 2025. Table 3 sets forth the calculations of the depreciation accruals for the thirteen months ended September 30, 2025. Table 4 presents the annual amortization of experienced and estimated net salvage based on the period 2020 through 2024.

DESCRIPTION OF DETAILED TABULATIONS

The supporting data for the depreciation calculations are presented in account sequence in the section beginning on page II-6. The original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual are shown for each vintage of each account or subaccount. The amounts of regular retirements, gross salvage and cost of removal are set forth by account for the years 2020 through 2024, beginning on page III-2.

PEOPLES GAS COMPANY LLC

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF SEPTEMBER 30, 2025

	DEPRECIABLE GROUP	SURVIVOR CURVE		ORIGINAL COST AS OF SEPTEMBER 30, 2025	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)
	INTANGIBLE PLANT								
303.00	MISCELLANEOUS INTANGIBLE PLANT								
	CIAC	40-SQ		1,791,247.92	409,967	1,381,281	44,545	2.49	31.0
	OTHER	5-SQ		5,866,725.96	3,656,620	2,210,106	788,737	13.44	2.8
	MAJOR	15-SQ		5,694,106.78	2,427,255	3,266,852	362,311	6.36	9.0
	SAP	10-SQ		8,428,562.72	6,212,418	2,216,145	294,458	3.49	7.5
	TOTAL MISCELLANEOUS INTANGIBLE PLANT			**21,780,643.38**	**12,706,260**	**9,074,384**	**1,490,051**	**6.84**	
	UNDERGROUND STORAGE PLANT								
350.20	RIGHTS OF WAY	70-R4		15,669.82	12,200	3,470	110	0.70	31.5
351.00	STRUCTURES AND IMPROVEMENTS								
	MAJOR	75-R1.5	*	369,655.11	199,631	170,024	12,649	3.42	13.4
	FENCING	55-R2		155,691.71	67,194	88,498	2,875	1.85	30.8
	OTHER	55-R2		57,923.13	40,688	17,235	844	1.46	20.4
	TOTAL STRUCTURES AND IMPROVEMENTS			583,269.95	307,513	275,757	16,368	2.81	16.8
352.01	WELLS - CONSTRUCTION	70-R4		2,330,436.13	653,305	1,677,131	26,214	1.12	64.0
352.02	WELLS - EQUIPMENT	65-R3		474,433.88	(22,148)	496,582	16,239	3.42	30.6
352.12	STORAGE RIGHTS	65-R4		391,527.48	223,637	167,890	4,861	1.24	34.5
353.00	LINES	40-S0		2,468,964.76	837,681	1,631,284	72,286	2.93	22.6
354.00	COMPRESSOR STATION EQUIPMENT	55-R2.5		7,760,949.36	2,039,790	5,721,159	162,546	2.09	35.2
355.00	MEASURING AND REGULATING STATION EQUIPMENT	45-R2.5		883,117.84	513,842	369,276	14,814	1.68	24.9
	TOTAL UNDERGROUND STORAGE PLANT			**14,908,369.22**	**4,565,820**	**10,342,549**	**313,438**	**2.10**	
	TRANSMISSION PLANT								
365.20	RIGHTS OF WAY	70-R4		2,091,602.96	1,161,548	930,055	25,765	1.23	36.1
366.10	COMPRESSOR STATION STRUCTURES								
	MAJOR	75-R1.5	*	599,767.46	272,585	327,182	15,002	2.50	21.8
	OTHER	55-R2		100,566.96	58,570	41,997	1,723	1.71	24.4
	TOTAL COMPRESSOR STATION STRUCTURES			700,334.42	331,155	369,179	16,725	2.39	22.1
366.20	MEASURING AND REGULATING STATION STRUCTURES								
	MAJOR	SQUARE	*	20,010.60	18,125	1,886	280	1.40	6.7
	FENCING	35-SQ		41,252.80	31,488	9,765	562	1.36	17.4
	OTHER	55-R3		13,276.37	10,045	3,231	194	1.46	16.7
	TOTAL MEASURING AND REGULATING STATION STRUCTURES			74,539.77	59,658	14,882	1,036	1.39	14.4
366.30	OTHER STRUCTURES								
	OTHER	40-R2.5		44,793.38	29,606	15,187	937	2.09	16.2
367.00	MAINS	75-R2.5		97,400,140.98	35,886,536	61,513,605	1,302,756	1.34	47.2
368.00	COMPRESSOR STATION EQUIPMENT	48-S0.5		7,040,779.64	2,029,289	5,011,491	172,436	2.45	29.1
369.00	MEASURING AND REGULATING STATION EQUIPMENT	38-R1.5		8,727,432.72	4,665,203	4,062,230	194,573	2.23	20.9
	TOTAL TRANSMISSION PLANT			**116,079,623.87**	**44,162,995**	**71,916,629**	**1,714,228**	**1.48**	

PEOPLES GAS COMPANY LLC

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF SEPTEMBER 30, 2025

	DEPRECIABLE GROUP	SURVIVOR CURVE		ORIGINAL COST AS OF SEPTEMBER 30, 2025	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)
	DISTRIBUTION PLANT								
374.20	LAND AND LAND RIGHTS - LAND RIGHTS	70-R4		1,263,747.80	554,038	709,710	16,377	1.30	43.3
375.00	STRUCTURES AND IMPROVEMENTS								
	MAJOR	75-R1.5	*	64,034.92	64,035	0	0	-	-
	OTHER	55-R2		982,120.73	499,322	482,799	15,879	1.62	30.4
	TOTAL STRUCTURES AND IMPROVEMENTS			1,046,155.65	563,357	482,799	15,879	1.52	30.4
376.00	MAINS								
	LOW PRESSURE	65-R2.5		150,481,156.94	47,329,541	103,151,616	2,489,927	1.65	41.4
	REGULAR PRESSURE	65-R2.5		83,314,585.47	10,266,787	73,047,798	1,521,466	1.83	48.0
	TOTAL MAINS			233,795,742.41	57,596,328	176,199,414	4,011,393	1.72	43.9
378.00	MEASURING AND REGULATING STATION EQUIPMENT - GENERAL	55-R2		16,127,445.64	3,831,099	12,296,347	350,152	2.17	35.1
380.00	SERVICES	50-R2.5		69,135,566.18	21,056,095	48,079,471	1,498,435	2.17	32.1
381.00	METERS	28-R1.5		24,983,087.57	10,678,799	14,304,289	987,595	3.95	14.5
382.10	METER INSTALLATIONS	50-R1.5		4,647,041.44	2,140,586	2,506,455	84,844	1.83	29.5
387.00	OTHER EQUIPMENT - DISTRIBUTION	25-R2		260,592.45	(56,554)	317,146	18,293	7.02	17.3
	TOTAL DISTRIBUTION PLANT			**351,259,379.14**	**96,363,748**	**254,895,631**	**6,982,968**	**1.99**	
	GENERAL PLANT								
390.00	STRUCTURES AND IMPROVEMENTS								
	MAJOR	75-R1.5	*	6,705,313.60	4,120,431	2,584,882	546,665	8.15	4.7
	OTHER	55-R2		1,482,679.41	100,621	1,382,058	36,273	2.45	38.1
	TOTAL STRUCTURES AND IMPROVEMENTS			8,187,993.01	4,221,052	3,966,940	582,938	7.12	6.8
	OFFICE FURNITURE AND EQUIPMENT								
391.10	FURNITURE	20-SQ		177,514.26	146,366	31,148	4,197	2.36	7.4
391.20	EQUIPMENT	10-SQ		13,446.39	31,648	(18,202)	0	-	-
	TOTAL OFFICE FURNITURE AND EQUIPMENT			190,960.65	178,014	12,946	4,197	2.20	3.1
	TRANSPORTATION EQUIPMENT								
392.20	LIGHT TRUCKS	9-L3		7,734,627.51	2,857,505	4,877,123	989,811	12.80	4.9
392.30	HEAVY TRUCKS	14-S1		2,513,395.34	463,216	2,050,179	294,891	11.73	7.0
	TOTAL TRANSPORTATION EQUIPMENT			10,248,022.85	3,320,721	6,927,302	1,284,702	12.54	5.4
393.00	STORES EQUIPMENT	25-SQ		5,895.12	4,377	1,518	325	5.51	4.7
	TOOLS, SHOP AND GARAGE EQUIPMENT								
394.20	TOOLS AND WORK EQUIPMENT	15-SQ		1,592,149.78	900,233	691,917	112,082	7.04	6.2

PEOPLES GAS COMPANY LLC

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF SEPTEMBER 30, 2025

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF SEPTEMBER 30, 2025	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
396.00	POWER OPERATED EQUIPMENT	18-L2.5	3,199,078.98	1,145,209	2,053,870	208,737	6.52	9.8
	COMMUNICATION EQUIPMENT							
397.00	GENERATION	15-SQ	393,910.14	25,139	368,771	26,179	6.65	14.1
397.10	STRUCTURES	25-SQ	719,746.05	39,135	680,611	29,141	4.05	23.4
397.20	RADIO	15-SQ	1,414,097.06	933,534	480,563	108,256	7.66	4.4
	TOTAL COMMUNICATION EQUIPMENT		2,527,753.25	997,808	1,529,945	163,576	6.47	9.4
	TOTAL GENERAL PLANT		**25,951,853.64**	**10,767,414**	**15,184,438**	**2,356,557**	**9.08**	
	AMORTIZATION OF NET SALVAGE					**503,089**		
	TOTAL DEPRECIABLE GAS PLANT		**529,979,869.25**	**168,566,237**	**361,413,631**	**13,360,331**	**2.52**	
	NONDEPRECIABLE GAS PLANT							
301.00	ORGANIZATION		128,115.45					
302.00	FRANCHISES AND CONSENTS		71,371.20					
350.10	LAND AND LAND RIGHTS - LAND		46,820.26					
365.10	LAND AND LAND RIGHTS - LAND		119,953.61					
374.10	LAND AND LAND RIGHTS - LAND		13,101.61					
389.00	LAND AND LAND RIGHTS		164,935.92					
	TOTAL NONDEPRECIABLE GAS PLANT		544,298.05					
	TOTAL GAS PLANT IN SERVICE		**530,524,167.30**					

* LIFESPAN PROCEDURE IS USED. SURVIVOR CURVE SHOWN IS INTERIM CURVE.

PEOPLES GAS COMPANY LLC

TABLE 2. BRINGFORWARD TO SEPTEMBER 30, 2025, OF THE BOOK RESERVE AS OF AUGUST 31, 2024

ACCOUNT	BOOK RESERVE AS OF AUGUST 31, 2024		DEPRECIATION ACCRUALS		AMORTIZATION OF NET SALVAGE		PROJECTED RETIREMENTS		PROJECTED GROSS SALVAGE		PROJECTED COST OF REMOVAL		ACQUISITIONS AND ADJUSTMENTS		PROJECTED BOOK RESERVE AS OF 09/30/2025
(1)	(2)	+	(3)	+	(4)	-	(5)	+	(6)	-	(7)	+	(8)	=	(9)
DEPRECIABLE PLANT															
303.00	395,580		44,561				30,174								409,967
303.01	2,854,642		900,804				98,826								3,656,620
303.02	2,164,397		358,776				95,918								2,427,255
303.03	6,164,485		189,913				141,980								6,212,418
350.20	12,081		119												12,200
351.00	289,689		18,140				316								307,513
352.01	630,139		25,724		10,552		3,221				9,889				653,305
352.02	(39,321)		17,745		2,361		721				2,212				(22,148)
352.12	218,845		5,264		1,948		595				1,826				223,637
353.00	785,110		57,933		939		2,864				3,437				837,681
354.00	1,861,225		179,103		(371)		1,674		1,506						2,039,790
355.00	502,416		16,309				4,883								513,842
365.20	1,133,451		28,097												1,161,548
366.10	312,719		18,436												331,155
366.20	58,639		1,140				121								59,658
366.30	28,553		1,053												29,606
367.00	34,590,767		1,377,999		109,239		29,187		2,335		164,617				35,886,536
368.00	1,912,238		166,142		14,075		36,939				26,226				2,029,289
369.00	4,480,519		198,961				14,277								4,665,203
374.20	536,240		17,798												554,038
375.00	551,211		17,498				5,352								563,357
376.10	45,224,052		2,617,528		186,187		484,880		4,849		218,196				47,329,541
376.20	8,904,622		1,620,109		93,794		244,263		2,443		109,918				10,266,787
378.00	3,536,599		335,350		15,309		45,658				10,501				3,831,099
380.00	19,578,585		1,534,733		197,847		46,292				208,778				21,056,095
381.00	10,079,257		1,034,359				434,817								10,678,799
382.10	2,051,328		94,696		7,412		5,039				7,811				2,140,586
387.00	1,123		11,670		(69,347)										(56,554)
390.00	3,725,319		627,742				132,009								4,221,052
391.10	160,584		4,327				18,544								146,367
391.20	31,648		0												31,648
392.20	2,465,321		1,087,329		(12,328)		758,685		75,869						2,857,505
392.30	472,692		326,910		(5,966)		367,134		36,713						463,216
393.00	4,029		348												4,377
394.20	1,052,641		134,936		117		287,461								900,233
396.00	994,006		233,218		390		80,005				2,400				1,145,209
397.00	5,372		19,767												25,139
397.10	15,550		23,585												39,135
397.20	875,411		122,745				64,623								933,533
TOTAL DEPRECIABLE GAS PLANT	**158,621,764**		**13,470,867**		**552,157**		**3,436,458**		**123,715**		**765,811**		**0**		**168,566,237**

PEOPLES GAS COMPANY LLC

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE THIRTEEN MONTHS ENDED SEPTEMBER 30, 2025

	DEPRECIABLE GROUP	ORIGINAL COST AS OF AUGUST 31, 2024	ORIGINAL COST AS OF SEPTEMBER 30, 2025	COMPOSITE ACCRUAL RATE	13-MONTH ACCRUAL AMOUNT *
	(1)	(2)	(3)	(4)	(5)
303.00	MISCELLANEOUS INTANGIBLE PLANT				
	CIAC	1,580,213.31	1,791,247.92	2.44	44,561
	OTHER	5,175,541.81	5,866,725.96	15.06	900,804
	MAJOR	5,023,259.64	5,694,106.78	6.18	358,776
	SAP	7,435,557.59	8,428,562.72	2.21	189,913
	TOTAL MISCELLANEOUS INTANGIBLE PLANT	19,214,572.35	21,780,643.38		1,494,054
350.20	RIGHTS OF WAY	15,669.82	15,669.82	0.70	119
351.00	STRUCTURES AND IMPROVEMENTS				
	MAJOR	369,655.11	369,655.11	3.51	14,055
	FENCING	155,691.71	155,691.71	1.87	3,154
	OTHER	58,239.24	57,923.14	1.48	931
	TOTAL STRUCTURES AND IMPROVEMENTS	583,586.06	583,269.96		18,140
352.01	WELLS - CONSTRUCTION	2,111,435.23	2,330,436.13	1.07	25,724
352.02	WELLS - EQUIPMENT	475,154.44	474,433.88	3.45	17,745
352.12	STORAGE RIGHTS	392,122.14	391,527.48	1.24	5,264
353.00	LINES	1,744,828.87	2,468,964.76	2.55	57,933
354.00	COMPRESSOR STATION EQUIPMENT	7,762,623.04	7,760,949.36	2.13	179,103
355.00	MEASURING AND REGULATING STATION EQUIPMENT	888,000.62	883,117.84	1.70	16,309
365.20	RIGHTS OF WAY	2,091,602.96	2,091,602.96	1.24	28,097
366.10	COMPRESSOR STATION STRUCTURES				
	MAJOR	599,767.46	599,767.46	2.54	16,526
	OTHER	100,566.96	100,566.96	1.75	1,910
	TOTAL COMPRESSOR STATION STRUCTURES	700,334.42	700,334.42		18,436
366.20	MEASURING AND REGULATING STATION STRUCTURES				
	MAJOR	20,010.60	20,010.60	1.44	313
	FENCING	41,252.80	41,252.80	1.37	613
	OTHER	13,397.67	13,276.36	1.48	214
	TOTAL MEASURING AND REGULATION STATION STRUCTURES	74,661.07	74,539.76		1,140
366.30	OTHER STRUCTURES				
	OTHER	44,793.38	44,793.38	2.17	1,053
367.00	MAINS	93,833,167.93	97,400,140.98	1.33	1,377,999
368.00	COMPRESSOR STATION EQUIPMENT	5,886,718.39	7,040,779.64	2.37	166,142
369.00	MEASURING AND REGULATING STATION EQUIPMENT	8,191,709.94	8,727,432.72	2.17	198,961
374.20	LAND AND LAND RIGHTS - LAND RIGHTS	1,263,747.80	1,263,747.80	1.30	17,798
375.00	STRUCTURES AND IMPROVEMENTS				
	MAJOR	64,034.92	64,034.92	-	-
	OTHER	987,472.72	982,120.73	1.64	17,498
	TOTAL STRUCTURES AND IMPROVEMENTS	1,051,507.64	1,046,155.65		17,498
	MAINS				
376.10	LOW PRESSURE	142,282,556.71	150,481,156.94	1.65	2,617,528
376.20	REGULAR PRESSURE	79,184,462.64	83,314,585.47	1.84	1,620,109
	TOTAL MAINS	221,467,019.35	233,795,742.41		4,237,637
378.00	MEASURING AND REGULATING STATION EQUIPMENT - GENERAL	13,046,083.35	16,127,445.64	2.12	335,350
380.00	SERVICES	61,892,623.56	69,135,566.18	2.16	1,534,733
381.00	METERS	23,323,514.96	24,983,087.57	3.94	1,034,359
382.10	METER INSTALLATIONS	4,652,080.80	4,647,041.44	1.88	94,696
387.00	OTHER EQUIPMENT - DISTRIBUTION	103,512.86	260,592.45	5.87	11,670
390.00	STRUCTURES AND IMPROVEMENTS				
	MAJOR	6,777,764.28	6,705,313.60	8.02	585,487
	OTHER	1,518,904.75	1,482,679.41	2.60	42,255
	TOTAL STRUCTURES AND IMPROVEMENTS	8,296,669.03	8,187,993.01		627,742
	OFFICE FURNITURE AND EQUIPMENT				
391.10	FURNITURE	196,058.70	177,514.26	2.13	4,327
391.20	EQUIPMENT	13,446.39	13,446.39	-	-
	TOTAL OFFICE FURNITURE AND EQUIPMENT	209,505.09	190,960.65		4,327
	TRANSPORTATION EQUIPMENT				
392.20	LIGHT TRUCKS	7,771,925.00	7,734,627.51	12.95	1,087,329
392.30	HEAVY TRUCKS	2,844,206.09	2,513,395.34	11.28	326,910
	TOTAL TRANSPORTATION EQUIPMENT	10,616,131.09	10,248,022.85		1,414,239
393.00	STORES EQUIPMENT	5,895.12	5,895.12	5.45	348
	TOOLS, SHOP AND GARAGE EQUIPMENT				
394.20	TOOLS AND WORK EQUIPMENT	1,879,610.66	1,592,149.78	7.13	134,936

PEOPLES GAS COMPANY LLC

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE THIRTEEN MONTHS ENDED SEPTEMBER 30, 2025

	DEPRECIABLE GROUP	ORIGINAL COST AS OF AUGUST 31, 2024	ORIGINAL COST AS OF SEPTEMBER 30, 2025	COMPOSITE ACCRUAL RATE	13-MONTH ACCRUAL AMOUNT *
	(1)	(2)	(3)	(4)	(5)
396.00	POWER OPERATED EQUIPMENT	3,098,559.04	3,199,078.98	6.84	233,218
	COMMUNICATION EQUIPMENT				
397.00	GENERATION	161,152.05	393,910.14	6.59	19,767
397.10	STRUCTURES	327,952.09	719,746.05	4.15	23,585
397.20	RADIO	1,478,719.54	1,414,097.06	7.82	122,745
	TOTAL COMMUNICATION EQUIPMENT	1,967,823.68	2,527,753.25		166,097
	TOTAL DEPRECIABLE GAS PLANT	**496,885,264.69**	**529,979,869.25**		**13,470,867**

* ANNUAL ACCRUAL DEVELOPED BASED ON MONTHLY AVERAGES.

PEOPLES GAS COMPANY LLC

TABLE 4. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

	2020		2021		2022		2023		2024			
ACCOUNT	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE	SALVAGE ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)=(12)/5
352.00			1,982				2,123		13,927		(18,032)	(3,606)
353.00							897		3,437		(4,334)	(867)
354.00								464		1,506	1,970	394
367.00	99,744		215,555			6,939	48,640	690	164,617	2,335	(518,592)	(103,718)
368.00	31,881						6,588		26,227		(64,696)	(12,939)
376.00	342,321	8,316	241,723	5,566	46,553	10,879	391,642	2,093	328,114	7,292	(1,316,207)	(263,241)
378.00	4,249		56,011				2,519		10,501		(73,280)	(14,656)
380.00	424,224		189,733				58,628		208,777		(881,362)	(176,272)
382.10	9,887		11,196		1,495		3,584		7,811		(33,973)	(6,795)
392.00		139,251		103,133		5,644		35,512		112,582	396,122	79,224
394.20							663				(663)	(133)
396.00									2,400		(2,400)	(480)
TOTAL	**912,306**	**147,567**	**716,200**	**108,699**	**48,048**	**23,461**	**515,283**	**38,759**	**765,811**	**123,715**	**(2,515,447)**	**(503,089)**

PART II. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

PEOPLES GAS COMPANY LLC

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1891	26	26			0.0
1892	34	34			0.0
1894	116	116			0.0
1896	7,002	7,003	1-	1-	0.0
1897	186	186		1-	0.0
1899	1,559	1,559		1-	0.0
1900	2,912	2,912		1-	0.0
1901	3,409	3,409		1-	0.0
1902	9,180	9,180		1-	0.0
1903	8,317	8,317		1-	0.0
1904	10,653	10,653		1-	0.0
1905	28,956	28,956		1-	0.0
1906	29,718	29,718		1-	0.0
1907	7,427	7,426	1		0.0
1908	20,843	20,843			0.0
1909	32,500	32,501	1-	1-	0.0
1910	2,489	2,489		1-	0.0
1911	22,794	22,795	1-	2-	0.0
1912	31,888	31,886	2		0.0
1913	22,856	22,856			0.0
1914	48,565	48,566	1-	1-	0.0
1915	38,955	38,955		1-	0.0
1916	24,631	24,631		1-	0.0
1917	35,109	35,109		1-	0.0
1918	7,900	7,901	1-	2-	0.0
1919	13,477	13,477		2-	0.0
1920	818	817	1	1-	0.0
1921	686	686		1-	0.0
1922	9,500	9,499	1		0.0
1923	5,530	5,530			0.0
1924	52,614	52,600	14	14	0.0
1925	98,978	98,968	10	24	0.0
1926	168,830	168,797	33	57	0.0
1927	34,912	34,893	19	76	0.0
1928	352,088	340,773	11,315	11,391	0.0
1929	29,113	28,960	153	11,544	0.0
1930	3,140	3,104	36	11,580	0.0
1931	779	774	5	11,585	0.0
1932	5,573	5,475	98	11,683	0.0
1933	2,198	2,154	44	11,727	0.0
1934	565	563	2	11,729	0.0
1935	53,343	51,797	1,546	13,275	0.0
1936	28,633	27,669	964	14,239	0.0
1937	117,521	109,869	7,652	21,891	0.0
1938	39,386	37,597	1,789	23,680	0.0
1939	65,105	62,010	3,095	26,775	0.0

PEOPLES GAS COMPANY LLC

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1940	70,894	64,502	6,392	33,167	0.0
1941	27,541	25,991	1,550	34,717	0.0
1942	27,246	25,469	1,777	36,494	0.0
1943	15,456	14,391	1,065	37,559	0.0
1944	11,897	10,985	912	38,471	0.0
1945	4,320	3,955	365	38,836	0.0
1946	10,455	8,919	1,536	40,372	0.0
1947	11,556	10,105	1,451	41,823	0.0
1948	27,729	23,732	3,997	45,820	0.0
1949	65,558	57,978	7,580	53,400	0.0
1950	86,882	77,282	9,600	63,000	0.0
1951	96,626	85,531	11,095	74,095	0.0
1952	67,666	59,880	7,786	81,881	0.0
1953	113,505	95,870	17,635	99,516	0.0
1954	166,302	144,769	21,533	121,049	0.0
1955	416,048	355,217	60,831	181,880	0.1
1956	192,418	161,569	30,849	212,729	0.1
1957	309,760	258,684	51,076	263,805	0.1
1958	226,485	188,086	38,399	302,204	0.1
1959	357,108	291,599	65,509	367,713	0.1
1960	220,585	190,343	30,242	397,955	0.1
1961	549,502	439,976	109,526	507,481	0.1
1962	335,695	267,231	68,464	575,945	0.2
1963	1,351,111	1,057,912	293,199	869,144	0.2
1964	692,313	544,432	147,881	1,017,025	0.3
1965	593,743	465,284	128,459	1,145,484	0.3
1966	1,313,748	1,036,242	277,506	1,422,990	0.4
1967	767,554	581,592	185,962	1,608,952	0.4
1968	672,494	505,322	167,172	1,776,124	0.5
1969	1,349,808	994,289	355,519	2,131,643	0.6
1970	1,209,828	917,116	292,712	2,424,355	0.7
1971	860,862	621,165	239,697	2,664,052	0.7
1972	954,009	673,628	280,381	2,944,433	0.8
1973	986,108	700,002	286,106	3,230,539	0.9
1974	1,580,055	1,106,031	474,024	3,704,563	1.0
1975	817,570	593,862	223,708	3,928,271	1.1
1976	1,152,060	871,550	280,510	4,208,781	1.2
1977	1,217,739	900,778	316,961	4,525,742	1.3
1978	1,585,402	1,168,250	417,152	4,942,894	1.4
1979	2,146,711	1,586,776	559,935	5,502,829	1.5
1980	1,502,671	1,137,981	364,690	5,867,519	1.6
1981	1,929,692	1,389,974	539,718	6,407,237	1.8
1982	2,054,234	1,436,496	617,738	7,024,975	1.9
1983	2,231,933	1,542,617	689,316	7,714,291	2.1
1984	4,810,267	3,166,665	1,643,602	9,357,893	2.6
1985	2,789,749	1,851,797	937,952	10,295,845	2.8

PEOPLES GAS COMPANY LLC

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1986	3,483,916	2,293,809	1,190,107	11,485,952	3.2
1987	7,112,279	4,534,704	2,577,575	14,063,527	3.9
1988	2,561,808	1,646,832	914,976	14,978,503	4.1
1989	5,542,424	3,463,362	2,079,062	17,057,565	4.7
1990	8,039,580	4,755,222	3,284,358	20,341,923	5.6
1991	4,605,056	2,777,149	1,827,907	22,169,830	6.1
1992	6,001,527	3,619,753	2,381,774	24,551,604	6.8
1993	6,534,651	3,871,053	2,663,598	27,215,202	7.5
1994	4,942,132	2,869,240	2,072,892	29,288,094	8.1
1995	4,268,536	2,444,996	1,823,540	31,111,634	8.6
1996	4,881,530	2,718,831	2,162,699	33,274,333	9.2
1997	7,024,266	3,846,298	3,177,968	36,452,301	10.1
1998	7,007,397	3,853,669	3,153,728	39,606,029	11.0
1999	7,302,628	3,516,694	3,785,934	43,391,963	12.0
2000	7,800,692	3,812,317	3,988,375	47,380,338	13.1
2001	5,897,136	2,801,472	3,095,664	50,476,002	14.0
2002	7,054,015	3,220,826	3,833,189	54,309,191	15.0
2003	7,123,035	3,132,003	3,991,032	58,300,223	16.1
2004	8,290,501	3,824,825	4,465,676	62,765,899	17.4
2005	8,663,868	3,470,042	5,193,826	67,959,725	18.8
2006	8,430,901	3,391,548	5,039,353	72,999,078	20.2
2007	9,007,816	3,553,200	5,454,616	78,453,694	21.7
2008	11,015,832	4,191,993	6,823,839	85,277,533	23.6
2009	6,074,725	2,253,019	3,821,706	89,099,239	24.7
2010	6,608,213	2,141,320	4,466,893	93,566,132	25.9
2011	8,161,834	2,736,563	5,425,271	98,991,403	27.4
2012	9,870,710	3,012,930	6,857,780	105,849,183	29.3
2013	16,924,484	4,909,034	12,015,450	117,864,633	32.6
2014	24,990,355	10,153,759	14,836,596	132,701,229	36.7
2015	11,949,690	3,878,827	8,070,863	140,772,092	39.0
2016	18,268,241	3,985,976	14,282,265	155,054,357	42.9
2017	20,439,486	4,029,307	16,410,179	171,464,536	47.4
2018	20,674,749	4,039,923	16,634,826	188,099,362	52.0
2019	21,966,792	4,329,014	17,637,778	205,737,140	56.9
2020	22,280,681	4,493,263	17,787,418	223,524,558	61.8
2021	25,956,350	3,984,096	21,972,254	245,496,812	67.9
2022	29,278,307	2,384,755	26,893,552	272,390,364	75.4
2023	18,781,542	2,566,868	16,214,674	288,605,038	79.9
2024	50,819,806	2,659,645	48,160,161	336,765,199	93.2
2025	24,880,668	232,239	24,648,429	361,413,628	100.0
TOTAL	529,979,868	168,566,240	361,413,628		

UTILITY PLANT IN SERVICE

PEOPLES GAS COMPANY LLC

ACCOUNT 303.00 MISCELLANEOUS INTAGIBLE PLANT - CIAC

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 40-SQUARE						
NET SALVAGE PERCENT.. 0						
2014	1,397,104.60	392,936	399,612	997,493	28.75	34,695
2023	50,978.29	3,080	3,132	47,846	37.58	1,273
2024	176,244.23	6,059	6,162	170,082	38.62	4,404
2025	166,920.80	1,043	1,061	165,860	39.75	4,173
	1,791,247.92	403,118	409,967	1,381,281		44,545

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.0 2.49

PEOPLES GAS COMPANY LLC

ACCOUNT 303.01 MISCELLANEOUS INTAGIBLE PLANT - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2018	370,816.44	370,816	370,816			
2019	298,573.35	298,573	298,573			
2020	1,035,670.52	1,035,671	1,035,671			
2021	787,680.38	669,528	672,437	115,243	0.75	115,243
2023	2,250,045.28	1,087,514	1,092,239	1,157,806	2.58	448,762
2024	577,238.12	158,740	159,430	417,808	3.62	115,417
2025	546,701.87	27,335	27,454	519,248	4.75	109,315
	5,866,725.96	3,648,177	3,656,620	2,210,106		788,737
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					2.8	13.44

PEOPLES GAS COMPANY LLC

ACCOUNT 303.02 MISCELLANEOUS INTAGIBLE PLANT - MAJOR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2015	1,960,623.58	1,339,753	1,398,849	561,775	4.75	118,268
2016	315,993.54	194,864	203,460	112,534	5.75	19,571
2020	1,710,548.17	598,692	625,100	1,085,448	9.75	111,328
2021	77,229.59	21,881	22,846	54,384	10.75	5,059
2023	862,946.69	139,029	145,162	717,785	12.58	57,058
2024	236,149.19	21,648	22,603	213,546	13.62	15,679
2025	530,616.02	8,845	9,235	521,381	14.75	35,348
	5,694,106.78	2,324,712	2,427,255	3,266,852		362,311

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.0 6.36

PEOPLES GAS COMPANY LLC

ACCOUNT 303.03 MISCELLANEOUS INTAGIBLE PLANT - SAP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2014	5,032,205.50	5,032,206	5,032,206			
2015	76,911.58	76,912	76,912			
2016	9,946.99	9,201	9,947			
2017	50,958.64	42,041	49,108	1,851	1.75	1,058
2019	899,766.02	562,354	656,886	242,880	3.75	64,768
2020	32,546.42	17,087	19,959	12,587	4.75	2,650
2021	48,329.71	20,540	23,993	24,337	5.75	4,233
2022	663.57	216	252	412	6.75	61
2023	662,500.83	160,107	187,021	475,480	7.58	62,728
2024	829,302.03	114,029	133,197	696,105	8.62	80,755
2025	785,431.43	19,636	22,937	762,494	9.75	78,205
	8,428,562.72	6,054,329	6,212,418	2,216,145		294,458

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.5 3.49

PEOPLES GAS COMPANY LLC

ACCOUNT 350.20 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1947	11.20	10	11			
1948	1,215.76	1,087	1,216			
1949	109.20	97	109			
1953	162.40	141	162			
1954	2,117.36	1,825	2,117			
1955	437.08	374	437			
1967	100.00	75	92	8	17.18	
1969	1,120.00	823	1,011	109	18.57	6
1970	644.80	467	573	72	19.28	4
1972	392.00	276	339	53	20.72	3
1973	1,064.00	738	906	158	21.46	7
1974	448.00	306	376	72	22.21	3
1977	280.00	190	233	47	22.67	2
1980	112.00	72	88	24	24.68	1
1983	1,456.00	886	1,088	368	27.19	14
1985	1,400.00	817	1,003	397	28.72	14
1986	409.02	233	286	123	29.72	4
1987	441.00	246	302	139	30.25	5
1993	875.00	418	513	362	35.32	10
2000	2,875.00	1,089	1,338	1,537	41.41	37
	15,669.82	10,170	12,200	3,470		110

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.5 0.70

PEOPLES GAS COMPANY LLC

ACCOUNT 351.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
FENCING						
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1986	2,159.71	1,407	1,470	689	20.99	33
1987	3,015.84	1,927	2,014	1,002	21.63	46
2000	87,678.55	40,955	42,801	44,878	28.81	1,558
2002	15,519.54	6,784	7,090	8,430	29.94	282
2004	4,097.17	1,672	1,747	2,350	30.83	76
2007	7,536.43	2,709	2,831	4,705	32.51	145
2008	3,484.86	1,190	1,244	2,241	33.25	67
2010	6,944.58	2,139	2,235	4,709	34.26	137
2015	25,255.03	5,513	5,761	19,494	36.70	531
	155,691.71	64,296	67,194	88,498		2,875
SPRANKLE COMPRESSOR STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2026						
NET SALVAGE PERCENT.. 0						
1926	27,541.11	27,257	27,541			
1957	6,109.86	6,032	6,110			
1966	509.61	502	510			
1969	1,945.00	1,916	1,945			
1975	218.60	215	219			
1977	909.38	895	909			
1992	1,768.44	1,729	1,768			
1997	1,608.21	1,567	1,608			
	40,610.21	40,113	40,610			
VARDY COMPRESSOR STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2029						
NET SALVAGE PERCENT.. 0						
1974	28,324.75	26,209	27,571	754	3.68	205
1992	1,047.69	944	993	55	3.65	15
1997	20,000.00	17,684	18,603	1,397	3.70	378
2000	3,660.53	3,189	3,355	306	3.74	82
	53,032.97	48,026	50,522	2,511		680

PEOPLES GAS COMPANY LLC

ACCOUNT 351.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
KINTER COMPRESSOR STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2040						
NET SALVAGE PERCENT.. 0						
1937	16,189.19	13,673	14,384	1,806	11.24	161
1938	95.25	80	84	11	11.33	1
1952	204.04	167	176	28	12.39	2
1972	13,022.94	10,008	10,528	2,495	13.45	186
1973	180.36	138	145	35	13.49	3
1989	10,852.97	7,868	8,277	2,576	13.75	187
1996	12,117.50	8,188	8,614	3,504	14.04	250
1997	885.10	593	624	261	13.95	19
2006	6,265.06	3,618	3,806	2,459	14.08	175
2020	216,199.52	58,806	61,862	154,337	14.05	10,985
	276,011.93	103,139	108,499	167,513		11,969
OTHER						
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1922	2,743.90	2,744	2,744			
1947	1,028.88	904	955	74	6.66	11
1955	19,107.20	15,932	16,823	2,284	9.14	250
1956	3,574.29	2,959	3,125	450	9.47	48
1973	748.80	523	552	197	16.56	12
1989	8,553.81	5,271	5,566	2,988	22.58	132
1997	4,329.38	2,214	2,338	1,992	27.00	74
1998	1,694.98	841	888	807	27.69	29
2001	15,159.82	6,875	7,260	7,900	29.22	270
2003	982.07	415	438	544	30.38	18
	57,923.13	38,678	40,688	17,235		844
	583,269.95	294,252	307,513	275,757		16,368

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.8 2.81

PEOPLES GAS COMPANY LLC

ACCOUNT 352.01 WELLS - CONSTRUCTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1924	1,825.41	1,796	1,825			
1925	1,219.38	1,196	1,219			
1928	2,406.52	2,337	2,407			
1929	3,014.04	2,918	3,014			
1946	2,099.40	1,897	2,099			
1947	1,538.79	1,383	1,539			
1948	634.94	568	635			
1972	37,093.52	26,114	37,094			
1973	19,122.48	13,260	19,122			
1984	67,196.50	40,190	67,196			
1989	80,854.55	43,087	80,855			
1990	27,190.19	14,090	27,190			
1998	306,585.67	124,474	290,489	16,097	39.87	404
1999	3,347.79	1,309	3,055	293	40.87	7
2000	36,810.82	13,944	32,541	4,270	41.41	103
2017	18,138.19	2,275	5,309	12,829	57.54	223
2024	1,564,929.75	32,707	76,330	1,488,600	64.41	23,111
2025	156,428.19	594	1,386	155,042	65.54	2,366
	2,330,436.13	324,139	653,305	1,677,131		26,214

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 64.0 1.12

PEOPLES GAS COMPANY LLC

ACCOUNT 352.02 WELLS - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R3						
NET SALVAGE PERCENT.. 0						
1946	873.70	769	74-	948	7.79	122
1947	554.28	485	47-	601	8.08	74
1948	498.14	434	42-	540	8.39	64
1971	5,254.98	3,720	357-	5,612	18.99	296
1972	20,672.76	14,433	1,387-	22,060	19.62	1,124
1973	7,114.00	4,897	470-	7,584	20.26	374
1977	14,563.73	10,189	979-	15,543	20.72	750
1981	15,983.28	10,467	1,006-	16,989	23.32	729
1984	26,637.96	16,593	1,594-	28,232	24.97	1,131
1986	16,399.11	9,784	940-	17,339	26.54	653
1989	24,377.03	13,607	1,307-	25,684	28.69	895
1991	10,762.95	5,751	552-	11,315	29.85	379
1999	281,078.23	119,514	11,482-	292,560	35.48	8,246
2000	47,865.35	19,577	1,881-	49,746	36.48	1,364
2015	1,798.38	317	30-	1,828	47.89	38
	474,433.88	230,537	22,148-	496,582		16,239

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 30.6 3.42

PEOPLES GAS COMPANY LLC

ACCOUNT 352.12 STORAGE RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R4						
NET SALVAGE PERCENT.. 0						
1982	39,565.48	26,180	32,726	6,839	22.11	309
1998	306,247.30	133,524	166,910	139,337	35.25	3,953
1999	45,714.70	19,200	24,001	21,714	36.25	599
	391,527.48	178,904	223,637	167,890		4,861

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 34.5 1.24

PEOPLES GAS COMPANY LLC

ACCOUNT 353.00 LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-S0						
NET SALVAGE PERCENT.. 0						
1955	58.29	53	58			
1967	1,398.35	1,110	1,209	189	8.24	23
1969	8,858.21	6,856	7,467	1,391	9.04	154
1973	19,957.58	14,634	15,938	4,020	10.67	377
1974	7,449.26	5,386	5,866	1,583	11.08	143
1975	1,311.50	935	1,018	294	11.49	26
1977	4,725.59	3,831	4,172	554	11.27	49
1978	92.30	74	81	11	11.58	1
1981	3,720.14	2,897	3,155	565	12.57	45
1983	53,219.48	40,473	44,079	9,140	13.31	687
1984	8,007.56	6,012	6,548	1,460	13.69	107
1986	1,971.77	1,447	1,576	396	14.22	28
1988	36,880.34	26,240	28,578	8,302	15.10	550
1990	7,435.79	5,137	5,595	1,841	15.77	117
1993	14,292.61	9,403	10,241	4,052	16.77	242
1998	349.33	209	228	121	18.20	7
1999	35,754.83	20,931	22,796	12,959	18.59	697
2000	69,497.91	39,656	43,189	26,309	19.00	1,385
2001	20,576.60	11,478	12,501	8,076	19.23	420
2002	1,764.61	960	1,046	719	19.49	37
2003	3,987.14	2,112	2,300	1,687	19.76	85
2004	109,340.26	56,223	61,232	48,108	20.07	2,397
2005	15,334.16	7,639	8,320	7,014	20.40	344
2006	270,538.01	130,183	141,781	128,757	20.75	6,205
2007	202,769.67	94,369	102,777	99,993	20.96	4,771
2008	442,703.30	197,800	215,422	227,281	21.36	10,640
2009	6,853.03	2,940	3,202	3,651	21.63	169
2010	203.67	84	91	113	21.79	5
2011	18,884.48	7,401	8,060	10,824	22.11	490
2012	12,597.39	4,690	5,108	7,489	22.34	335
2013	88,995.06	31,291	34,079	54,916	22.59	2,431
2015	20,628.16	6,323	6,886	13,742	23.19	593
2023	15,645.83	1,407	1,532	14,114	24.47	577
2024	445,205.63	23,685	25,796	419,410	24.47	17,140
2025	517,956.92	5,283	5,754	512,203	24.38	21,009
	2,468,964.76	769,152	837,681	1,631,284		72,286

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 22.6 2.93

PEOPLES GAS COMPANY LLC

ACCOUNT 354.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2.5						
NET SALVAGE PERCENT.. 0						
1937	22,010.99	20,550	19,731	2,280	3.65	625
1938	145.79	136	131	15	3.88	4
1940	427.87	394	378	50	4.33	12
1941	32.37	30	29	3	4.55	1
1942	572.30	523	502	70	4.76	15
1948	20,508.86	18,234	17,507	3,002	6.10	492
1949	25,655.00	22,698	21,793	3,862	6.34	609
1950	73.85	65	62	12	6.57	2
1952	12,244.29	10,673	10,247	1,997	7.06	283
1953	83,449.39	72,373	69,488	13,961	7.30	1,912
1954	18,684.13	16,116	15,473	3,211	7.56	425
1956	35,797.62	30,539	29,321	6,477	8.08	802
1959	8,431.19	7,062	6,780	1,651	8.93	185
1960	1,412.70	1,175	1,128	285	9.24	31
1962	792.58	650	624	169	9.88	17
1967	496.53	391	375	122	11.73	10
1970	40,341.91	30,785	29,558	10,784	13.03	828
1971	166.76	126	121	46	13.49	3
1972	6,122.50	4,567	4,385	1,738	13.97	124
1974	77,931.99	56,720	54,459	23,473	14.97	1,568
1975	875.46	629	604	271	15.50	17
1977	2,026.45	1,545	1,483	543	15.04	36
1979	160.41	119	114	46	15.86	3
1981	4,022.92	2,902	2,786	1,237	17.10	72
1982	43,067.23	30,733	29,508	13,559	17.36	781
1983	42,407.28	29,744	28,558	13,849	17.99	770
1984	5,284.91	3,641	3,496	1,789	18.63	96
1985	27,434.30	18,551	17,811	9,623	19.27	499
1986	15,814.31	10,551	10,130	5,684	19.58	290
1987	8,037.69	5,257	5,047	2,991	20.23	148
1988	2,100.43	1,346	1,292	808	20.89	39
1989	49,368.92	30,959	29,725	19,644	21.55	912
1990	36,627.90	22,468	21,572	15,056	22.22	678
1991	31,960.30	19,266	18,498	13,462	22.57	596
1992	75,494.17	44,428	42,657	32,837	23.25	1,412
1993	52,246.53	29,990	28,794	23,453	23.93	980
1994	61,709.98	34,521	33,145	28,565	24.61	1,161
1995	41,456.22	22,697	21,792	19,664	25.00	787
1996	15,565.75	8,287	7,957	7,609	25.69	296
1997	45,828.13	23,693	22,748	23,080	26.39	875
1998	105,667.70	52,982	50,870	54,798	27.10	2,022
1999	278,086.71	135,762	130,349	147,738	27.52	5,368
2000	598,992.42	282,844	271,568	327,424	28.22	11,603

PEOPLES GAS COMPANY LLC

ACCOUNT 354.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2.5						
NET SALVAGE PERCENT.. 0						
2001	5,364.07	2,445	2,348	3,016	28.94	104
2002	359,928.06	158,152	151,847	208,081	29.66	7,016
2004	40,349.59	16,463	15,807	24,543	30.83	796
2005	57,361.37	22,417	21,523	35,838	31.56	1,136
2008	4,056.99	1,379	1,324	2,733	33.51	82
2009	6,650.66	2,140	2,055	4,596	34.25	134
2010	500,623.36	152,690	146,602	354,021	34.75	10,188
2011	21,564.37	6,176	5,930	15,634	35.50	440
2013	67,515.83	16,872	16,199	51,317	36.77	1,396
2014	46,178.98	10,704	10,277	35,902	37.29	963
2015	33,682.52	7,147	6,862	26,821	38.06	705
2016	3,478.80	672	645	2,834	38.60	73
2017	43,929.26	7,648	7,343	36,586	39.14	935
2018	23,260.96	3,575	3,432	19,829	39.92	497
2019	4,053,777.39	544,828	523,107	3,530,670	40.26	87,697
2020	510,998.92	58,203	55,883	455,116	40.83	11,147
2021	44,843.19	4,193	4,026	40,817	41.20	991
2023	37,850.30	2,067	1,984	35,866	41.83	857
	7,760,949.36	2,124,493	2,039,790	5,721,159		162,546

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 35.2 2.09

PEOPLES GAS COMPANY LLC

ACCOUNT 355.00 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R2.5						
NET SALVAGE PERCENT.. 0						
1957	230.93	211	231			
1962	88.09	78	88			
1967	439.13	379	439			
1970	566.72	478	567			
1972	380.64	316	377	4	7.60	1
1974	1,679.98	1,372	1,635	45	8.26	5
1975	62,725.43	50,724	60,439	2,286	8.61	266
1980	8,956.83	7,377	8,790	167	9.69	17
1984	2,278.59	1,786	2,128	151	11.38	13
1985	10,911.19	8,432	10,047	864	11.83	73
1986	68,303.08	52,006	61,966	6,337	12.30	515
1987	74,523.34	55,870	66,570	7,953	12.77	623
1988	3,231.92	2,384	2,841	391	13.25	30
1990	8,210.44	5,817	6,931	1,279	14.50	88
1994	9,347.63	6,105	7,274	2,074	16.60	125
1997	26,055.29	15,753	18,770	7,285	18.48	394
1998	18,285.77	10,763	12,824	5,462	19.05	287
1999	29,099.86	16,651	19,840	9,260	19.62	472
2000	130,027.17	72,230	86,064	43,963	20.20	2,176
2004	8,441.82	4,072	4,852	3,590	22.80	157
2006	5,082.46	2,260	2,693	2,389	24.04	99
2007	36,144.78	15,369	18,313	17,832	24.67	723
2008	19,793.24	8,024	9,561	10,232	25.30	404
2011	235,864.39	80,996	96,509	139,355	27.24	5,116
2015	9,586.70	2,447	2,916	6,671	29.91	223
2021	43,327.60	4,879	5,813	37,515	33.49	1,120
2022	37,131.08	3,245	3,866	33,265	33.93	980
2024	32,403.74	1,257	1,498	30,906	34.09	907
	883,117.84	431,281	513,842	369,276		14,814

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 24.9 1.68

PEOPLES GAS COMPANY LLC

ACCOUNT 365.20 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1896	1,491.56	1,492	1,492			
1897	186.44	186	186			
1899	279.66	280	280			
1900	1,118.66	1,119	1,119			
1901	2,423.76	2,424	2,424			
1902	3,262.76	3,263	3,263			
1903	652.55	653	653			
1904	1,957.65	1,958	1,958			
1905	10,813.71	10,814	10,814			
1906	8,762.83	8,763	8,763			
1907	1,025.44	1,025	1,025			
1908	3,822.09	3,822	3,822			
1909	9,228.94	9,229	9,229			
1910	2,050.88	2,051	2,051			
1911	2,050.88	2,051	2,051			
1912	8,110.28	8,110	8,110			
1913	7,727.12	7,727	7,727			
1914	9,272.66	9,273	9,273			
1915	13,452.13	13,452	13,452			
1916	2,027.54	2,028	2,028			
1917	2,983.09	2,983	2,983			
1918	1,118.66	1,119	1,119			
1919	932.22	930	932			
1920	372.89	371	373			
1921	466.11	462	466			
1922	6,570.33	6,502	6,570			
1923	4,505.92	4,445	4,506			
1924	10,189.22	10,023	10,189			
1925	9,051.28	8,877	9,051			
1926	10,325.40	10,095	10,325			
1927	559.33	545	559			
1928	93.22	91	93			
1929	2,050.88	1,986	2,051			
1930	488.65	471	489			
1931	93.22	90	93			
1933	53.13	51	53			
1934	52.63	50	53			
1935	3,822.09	3,620	3,822			
1936	1,305.10	1,231	1,305			
1937	3,076.31	2,891	3,076			
1938	1,272.58	1,191	1,273			
1939	5,331.41	4,970	5,331			
1940	105.22	98	105			

PEOPLES GAS COMPANY LLC

ACCOUNT 365.20 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1941	2,620.80	2,422	2,610	11	5.30	2
1942	1,137.28	1,047	1,128	9	5.58	2
1943	853.78	782	843	11	5.86	2
1944	489.44	446	481	8	6.15	1
1945	79.23	72	78	1	6.44	
1946	1,182.16	1,068	1,151	31	6.75	5
1947	684.32	615	663	21	7.07	3
1948	90.72	81	87	4	7.39	1
1949	1,862.56	1,657	1,786	77	7.73	10
1950	5,539.76	4,900	5,280	260	8.09	32
1951	5,307.52	4,666	5,028	280	8.46	33
1952	572.32	500	539	33	8.85	4
1953	313.96	272	293	21	9.25	2
1954	1,875.50	1,616	1,741	134	9.68	14
1955	2,017.97	1,726	1,860	158	10.13	16
1956	3,933.97	3,338	3,597	337	10.60	32
1957	3,389.26	2,852	3,073	316	11.10	28
1959	3,399.11	2,809	3,027	372	12.15	31
1960	808.64	662	713	96	12.72	8
1961	9,275.02	7,513	8,096	1,179	13.30	89
1962	4,755.09	3,810	4,105	650	13.91	47
1963	26,678.10	21,137	22,776	3,902	14.54	268
1964	15,046.30	11,783	12,697	2,349	15.18	155
1965	70,676.22	54,693	58,935	11,741	15.83	742
1966	28,093.08	21,471	23,136	4,957	16.50	300
1967	7,076.96	5,340	5,754	1,323	17.18	77
1968	8,527.45	6,350	6,843	1,684	17.87	94
1969	19,661.40	14,445	15,565	4,096	18.57	221
1970	6,915.20	5,011	5,400	1,515	19.28	79
1971	2,472.96	1,766	1,903	570	20.00	28
1972	4,981.44	3,507	3,779	1,202	20.72	58
1973	1,575.40	1,092	1,177	398	21.46	19
1974	4,088.00	2,791	3,007	1,081	22.21	49
1975	1,428.00	959	1,033	395	22.98	17
1976	960.20	662	713	247	22.18	11
1977	280.00	190	205	75	22.67	3
1978	1,344.00	902	972	372	23.17	16
1979	12,868.80	8,452	9,108	3,761	24.17	156
1980	39,489.72	25,554	27,536	11,954	24.68	484
1981	3,724.00	2,357	2,540	1,184	25.68	46
1982	17,016.00	10,598	11,420	5,596	26.19	214
1983	8,078.19	4,915	5,296	2,782	27.19	102
1984	55,490.60	33,189	35,763	19,728	27.72	712

PEOPLES GAS COMPANY LLC

ACCOUNT 365.20 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1985	14,290.20	8,340	8,987	5,303	28.72	185
1986	62,305.05	35,458	38,208	24,097	29.72	811
1987	194,908.23	108,837	117,278	77,630	30.25	2,566
1988	115,525.78	62,823	67,695	47,831	31.25	1,531
1989	123,238.75	65,674	70,768	52,471	31.78	1,651
1990	185,551.25	96,153	103,611	81,940	32.78	2,500
1991	32,183.75	16,205	17,462	14,722	33.78	436
1992	3,906.25	1,922	2,071	1,835	34.32	53
1993	44,606.25	21,291	22,942	21,664	35.32	613
1994	37,950.00	17,552	18,913	19,037	36.32	524
1995	63,750.00	28,732	30,960	32,790	36.87	889
1996	27,606.25	12,031	12,964	14,642	37.87	387
1997	31,875.00	13,416	14,457	17,418	38.87	448
1999	23,468.75	9,179	9,891	13,578	40.87	332
2000	48,556.25	18,393	19,820	28,736	41.41	694
2001	13,687.50	4,980	5,366	8,322	42.41	196
2002	15,664.48	5,464	5,888	9,776	43.41	225
2003	33,083.71	11,043	11,899	21,185	44.41	477
2004	52,145.60	16,624	17,913	34,233	45.41	754
2005	15,277.70	4,641	5,001	10,277	46.41	221
2006	24,609.40	7,154	7,709	16,900	46.97	360
2007	51,227.20	14,118	15,213	36,014	47.97	751
2008	133,150.55	34,686	37,376	95,775	48.97	1,956
2009	24,419.44	5,993	6,458	17,961	49.97	359
2010	43,311.35	9,975	10,749	32,562	50.97	639
2011	71,040.95	15,288	16,474	54,567	51.97	1,050
2012	12,523.32	2,506	2,700	9,823	52.97	185
2014	7,764.10	1,319	1,421	6,343	54.97	115
2018	42,779.04	4,714	5,080	37,699	58.54	644
	2,091,602.96	1,087,341	1,161,548	930,055		25,765

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 36.1 1.23

PEOPLES GAS COMPANY LLC

ACCOUNT 366.10 COMPRESSOR STATION STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
RUBRIGHT						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2049						
NET SALVAGE PERCENT.. 0						
2008	596,565.77	263,443	271,278	325,288	21.81	14,915
2011	3,201.69	1,269	1,307	1,895	21.72	87
	599,767.46	264,712	272,585	327,182		15,002
OTHER						
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1920	182.35	182	182			
1954	2,718.88	2,283	2,351	368	8.81	42
1955	5,528.42	4,610	4,748	781	9.14	85
1964	8,289.98	6,413	6,604	1,686	12.45	135
1991	6,596.96	3,886	4,002	2,595	23.89	109
1995	13,450.00	7,241	7,457	5,993	25.93	231
1996	34,710.81	18,175	18,717	15,994	26.61	601
1997	18,500.00	9,459	9,741	8,759	27.00	324
1999	1,169.44	565	582	588	28.10	21
2001	7,210.91	3,270	3,368	3,843	29.22	132
2007	2,209.21	794	818	1,392	32.51	43
	100,566.96	56,878	58,570	41,997		1,723
	700,334.42	321,590	331,155	369,179		16,725

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 22.1 2.39

PEOPLES GAS COMPANY LLC

ACCOUNT 366.20 MEASURING AND REGULATING STATION STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
FENCING						
SURVIVOR CURVE.. 35-SQUARE						
NET SALVAGE PERCENT.. 0						
1973	12,047.99	12,048	12,048			
1985	957.93	958	958			
1986	494.00	494	494			
1987	4,188.49	4,188	4,188			
1995	1,205.33	1,042	1,165	40	4.75	8
2002	3,077.66	2,044	2,285	793	11.75	67
2003	3,462.31	2,201	2,461	1,002	12.75	79
2006	4,144.29	2,279	2,548	1,597	15.75	101
2007	223.16	116	130	93	16.75	6
2011	11,451.64	4,662	5,212	6,240	20.75	301
	41,252.80	30,032	31,488	9,765		562
OTHER						
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
1936	167.29	165	167			
1950	279.72	257	270	10	4.38	2
1954	475.13	428	449	26	5.42	5
1957	335.93	298	313	23	6.25	4
1963	138.50	118	124	15	8.13	2
1964	361.36	306	321	40	8.49	5
1965	9.39	8	8	1	8.86	
1966	4,126.72	3,433	3,601	525	9.25	57
1967	100.11	83	87	13	9.66	1
1968	109.72	90	94	15	10.08	1
1971	980.43	776	814	166	11.45	14
1984	604.51	426	447	158	17.23	9
1993	4,475.41	2,612	2,740	1,735	23.00	75
1997	1,112.15	581	609	503	25.81	19
	13,276.37	9,581	10,045	3,231		194

PEOPLES GAS COMPANY LLC

ACCOUNT 366.20 MEASURING AND REGULATING STATION STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
I.U.P. METERING SITE						
INTERIM SURVIVOR CURVE.. SQUARE						
PROBABLE RETIREMENT YEAR.. 6-2032						
NET SALVAGE PERCENT.. 0						
1963	5,315.62	4,796	5,028	287	6.75	43
1987	14,694.98	12,491	13,097	1,598	6.75	237
	20,010.60	17,287	18,125	1,886		280
	74,539.77	56,900	59,658	14,882		1,036
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					14.4	1.39

PEOPLES GAS COMPANY LLC

ACCOUNT 366.30 OTHER STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-R2.5						
NET SALVAGE PERCENT.. 0						
1964	948.40	870	916	32	3.31	10
1989	6,269.91	4,887	5,147	1,123	10.26	109
1990	3,452.63	2,641	2,782	671	10.83	62
1991	4,259.48	3,195	3,365	894	11.41	78
1992	6,560.01	4,843	5,101	1,459	11.79	124
1993	1,344.70	971	1,023	322	12.39	26
1996	4,261.43	2,879	3,032	1,229	14.04	88
1998	1,713.94	1,102	1,161	553	15.12	37
2003	3,060.34	1,689	1,779	1,281	18.07	71
2010	5,254.57	2,115	2,227	3,028	22.63	134
2011	7,667.97	2,918	3,073	4,595	23.20	198
	44,793.38	28,110	29,606	15,187		937

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.2 2.09

PEOPLES GAS COMPANY LLC

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
NET SALVAGE PERCENT.. 0						
1905	12,416.29	11,588	12,416			
1906	17,657.22	16,426	17,657			
1907	6,099.46	5,655	6,099			
1908	14,399.88	13,309	14,400			
1909	19,914.95	18,346	19,915			
1910	347.57	319	348			
1911	16,839.60	15,416	16,840			
1912	17,628.50	16,087	17,628			
1913	1,816.13	1,652	1,816			
1914	36,238.84	32,861	36,239			
1915	24,794.97	22,408	24,795			
1916	21,215.39	19,111	21,215			
1917	28,410.85	25,509	28,411			
1918	82.53	74	83			
1919	5,681.08	5,067	5,681			
1920	34.67	31	35			
1921	152.63	135	153			
1923	990.51	871	991			
1924	37,751.56	33,075	37,752			
1925	87,454.67	76,342	87,455			
1926	128,004.26	111,313	128,004			
1927	33,045.23	28,626	33,045			
1928	1,888.64	1,630	1,884	5	10.28	
1929	23,502.00	20,199	23,349	153	10.54	15
1930	1,578.88	1,352	1,563	16	10.80	1
1931	252.49	215	249	3	11.07	
1932	5,150.76	4,371	5,053	98	11.35	9
1933	1,884.38	1,592	1,840	44	11.63	4
1934	127.34	107	124	3	11.92	
1935	47,910.32	40,111	46,365	1,545	12.21	127
1936	25,982.87	21,646	25,021	962	12.52	77
1937	35,819.26	29,692	34,322	1,497	12.83	117
1938	33,372.17	27,521	31,812	1,560	13.15	119
1939	56,921.26	46,691	53,971	2,950	13.48	219
1940	3,878.78	3,164	3,657	222	13.82	16
1941	24,545.82	19,908	23,012	1,534	14.17	108
1942	23,234.52	18,733	21,654	1,581	14.53	109
1943	13,629.49	10,922	12,625	1,004	14.90	67
1944	10,996.81	8,756	10,121	876	15.28	57
1945	3,894.04	3,080	3,560	334	15.67	21
1946	2,620.10	2,058	2,379	241	16.08	15
1947	5,637.54	4,398	5,084	554	16.49	34
1948	461.35	357	413	48	16.92	3

PEOPLES GAS COMPANY LLC

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
NET SALVAGE PERCENT.. 0						
1949	19,919.08	15,308	17,695	2,224	17.36	128
1950	66,108.65	50,410	58,270	7,839	17.81	440
1951	69,286.58	52,408	60,580	8,707	18.27	477
1952	8,062.93	6,048	6,991	1,072	18.74	57
1953	9,464.83	7,038	8,135	1,330	19.23	69
1954	95,542.26	70,421	81,401	14,141	19.72	717
1955	322,653.57	235,624	272,363	50,291	20.23	2,486
1956	132,844.52	96,090	111,073	21,772	20.75	1,049
1957	277,551.66	198,802	229,800	47,752	21.28	2,244
1958	163,556.18	115,973	134,056	29,500	21.82	1,352
1959	295,189.97	207,105	239,398	55,792	22.38	2,493
1960	75,182.10	52,186	60,323	14,859	22.94	648
1961	441,743.60	303,270	350,557	91,187	23.51	3,879
1962	223,054.20	151,380	174,984	48,070	24.10	1,995
1963	1,094,089.01	733,915	848,350	245,739	24.69	9,953
1964	312,270.06	206,973	239,245	73,025	25.29	2,888
1965	187,455.91	122,696	141,827	45,629	25.91	1,761
1966	746,764.05	482,611	557,862	188,902	26.53	7,120
1967	345,216.89	220,203	254,538	90,679	27.16	3,339
1968	213,741.63	134,514	155,488	58,254	27.80	2,095
1969	689,958.96	428,237	495,010	194,949	28.45	6,852
1970	387,560.43	237,137	274,112	113,448	29.11	3,897
1971	195,608.86	117,938	136,327	59,282	29.78	1,991
1972	396,356.28	235,436	272,146	124,210	30.45	4,079
1973	494,519.70	289,195	334,288	160,232	31.14	5,146
1974	619,337.50	356,491	412,077	207,260	31.83	6,511
1975	303,952.85	172,159	199,003	104,950	32.52	3,227
1976	441,171.72	275,953	318,981	122,191	29.49	4,143
1977	464,518.47	286,887	331,620	132,898	29.88	4,448
1978	591,611.00	357,806	413,597	178,014	30.88	5,765
1979	767,031.52	457,611	528,964	238,068	31.27	7,613
1980	388,749.63	228,663	264,317	124,433	31.68	3,928
1981	613,472.25	352,869	407,890	205,582	32.68	6,291
1982	788,222.19	446,607	516,244	271,978	33.08	8,222
1983	690,212.35	384,931	444,951	245,261	33.51	7,319
1984	2,728,693.87	1,485,774	1,717,442	1,011,252	34.51	29,303
1985	1,237,611.02	662,493	765,792	471,819	34.94	13,504
1986	1,284,960.45	675,889	781,276	503,684	35.37	14,240
1987	2,534,480.94	1,299,175	1,501,748	1,032,733	36.37	28,395
1988	427,051.48	214,764	248,251	178,800	36.82	4,856
1989	1,432,927.39	706,433	816,583	616,344	37.28	16,533
1990	4,740,035.24	2,272,373	2,626,691	2,113,344	38.28	55,208
1991	1,171,748.68	549,784	635,509	536,240	38.74	13,842

PEOPLES GAS COMPANY LLC

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
NET SALVAGE PERCENT.. 0						
1992	700,364.43	321,327	371,430	328,934	39.22	8,387
1993	1,374,291.37	611,560	706,917	667,374	40.22	16,593
1994	1,004,320.43	436,277	504,303	500,017	40.69	12,288
1995	953,204.35	403,682	466,626	486,578	41.18	11,816
1996	1,031,640.03	422,457	488,328	543,312	42.18	12,881
1997	1,612,462.12	642,244	742,385	870,077	42.67	20,391
1998	1,210,126.30	468,319	541,341	668,785	43.17	15,492
1999	1,638,705.38	615,170	711,090	927,615	43.68	21,237
2000	1,487,839.76	537,259	621,031	866,809	44.68	19,400
2001	1,464,045.83	511,245	590,960	873,086	45.19	19,320
2002	1,086,400.05	366,225	423,328	663,072	45.72	14,503
2003	1,934,417.63	624,043	721,346	1,213,072	46.72	25,965
2004	1,882,201.58	583,859	674,897	1,207,305	47.25	25,551
2005	2,665,950.65	793,654	917,404	1,748,547	47.78	36,596
2006	2,841,759.85	809,617	935,856	1,905,904	48.32	39,443
2007	2,543,431.57	686,981	794,098	1,749,334	49.32	35,469
2008	1,868,545.12	480,216	555,093	1,313,452	49.87	26,338
2009	1,031,004.27	251,359	290,552	740,452	50.41	14,689
2010	1,934,800.52	445,585	515,062	1,419,739	50.97	27,854
2011	2,611,116.04	565,568	653,754	1,957,362	51.54	37,978
2012	2,552,712.27	517,435	598,115	1,954,597	52.11	37,509
2013	3,236,799.74	606,576	701,156	2,535,644	53.11	47,743
2014	4,986,164.44	863,604	998,261	3,987,903	53.69	74,276
2015	1,664,616.43	264,508	305,751	1,358,865	54.26	25,044
2016	1,022,300.58	147,518	170,520	851,781	54.85	15,529
2017	3,488,086.86	454,847	525,768	2,962,319	55.04	53,821
2018	228,979.03	26,401	30,518	198,461	55.64	3,567
2019	3,330,407.83	333,041	384,970	2,945,438	56.25	52,363
2020	1,349,067.33	114,671	132,551	1,216,516	56.48	21,539
2021	659,890.17	45,994	53,166	606,724	56.73	10,695
2022	5,708,477.42	308,258	356,322	5,352,155	56.99	93,914
2023	79,169.95	3,214	3,715	75,455	57.11	1,321
2024	4,437,209.60	105,606	122,073	4,315,137	56.43	76,469
2025	2,455,875.98	11,297	13,058	2,442,818	54.10	45,154
	97,400,140.98	31,057,921	35,886,536	61,513,605		1,302,756

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 47.2 1.34

PEOPLES GAS COMPANY LLC

ACCOUNT 368.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 48-S0.5						
NET SALVAGE PERCENT.. 0						
1936	101.93	97	102			
1938	606.73	568	607			
1942	80.66	73	80	1	4.39	
1950	1,286.48	1,097	1,200	86	7.08	12
1952	23,135.47	19,395	21,224	1,911	7.76	246
1954	12,498.69	10,298	11,269	1,230	8.45	146
1955	43,873.15	35,839	39,219	4,654	8.79	529
1956	733.60	594	650	84	9.14	9
1957	53.34	43	47	6	9.49	1
1959	1,583.15	1,247	1,365	218	10.20	21
1963	3,324.58	2,518	2,755	570	11.65	49
1964	39,642.85	29,724	32,527	7,116	12.01	593
1965	721.71	535	585	137	12.39	11
1974	98.14	66	72	26	15.90	2
1975	872.11	576	630	242	16.31	15
1981	21,215.45	15,396	16,848	4,367	16.73	261
1983	16,044.18	11,388	12,462	3,582	17.27	207
1986	4,733.93	3,233	3,538	1,196	18.22	66
1987	8,978.73	6,044	6,614	2,365	18.57	127
1989	3,899.39	2,544	2,784	1,115	19.31	58
1990	32,045.37	20,560	22,499	9,546	19.69	485
1991	15,319.55	9,706	10,621	4,699	19.81	237
1992	1,825.91	1,135	1,242	584	20.22	29
1993	34,916.32	21,281	23,288	11,628	20.66	563
1994	9,952.73	5,941	6,501	3,452	21.10	164
1996	17,929.62	10,279	11,248	6,682	21.77	307
1997	9,407.19	5,289	5,788	3,619	22.00	164
1998	31,007.42	16,983	18,585	12,422	22.50	552
1999	8,574.74	4,592	5,025	3,550	22.77	156
2000	2,343.31	1,219	1,334	1,009	23.29	43
2002	48,460.03	23,886	26,139	22,321	23.92	933
2003	3,428.06	1,640	1,795	1,633	24.26	67
2005	5,221.90	2,337	2,557	2,665	25.00	107
2008	1,294,620.45	513,705	562,151	732,469	26.23	27,925
2009	1,405,340.93	532,062	582,239	823,102	26.67	30,862
2013	40,744.28	12,329	13,492	27,252	28.23	965
2014	1,611,788.51	455,169	498,094	1,113,695	28.59	38,954
2017	23,624.17	5,108	5,590	18,034	29.92	603
2019	35,532.21	6,019	6,587	28,945	30.65	944

PEOPLES GAS COMPANY LLC

ACCOUNT 368.00 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 48-S0.5						
NET SALVAGE PERCENT.. 0						
2020	4,023.77	581	636	3,388	31.11	109
2024	1,407,506.35	57,145	62,533	1,344,973	32.52	41,358
2025	813,682.55	6,184	6,767	806,916	32.86	24,556
	7,040,779.64	1,854,425	2,029,289	5,011,491		172,436
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 29.1						2.45

PEOPLES GAS COMPANY LLC

ACCOUNT 369.00 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 38-R1.5						
NET SALVAGE PERCENT.. 0						
1905	125.20	125	125			
1916	12.55	13	13			
1917	15.81	16	16			
1918	7.90	8	8			
1919	26.50	26	26			
1920	118.16	118	118			
1925	7.90	8	8			
1926	134.04	134	134			
1927	24.19	24	24			
1928	18.16	18	18			
1929	363.30	363	363			
1930	195.99	196	196			
1931	252.32	252	252			
1934	42.66	43	43			
1935	1,532.67	1,533	1,533			
1936	965.10	965	965			
1937	1,256.18	1,256	1,256			
1940	1,344.23	1,344	1,344			
1941	93.71	94	94			
1942	654.73	655	655			
1943	317.39	317	317			
1945	9.12	9	9			
1946	135.23	135	135			
1949	4,155.03	4,148	4,155			
1950	99.47	98	99			
1952	210.67	205	211			
1954	10,809.79	10,323	10,810			
1955	90.58	86	91			
1957	336.38	313	336			
1958	1,842.75	1,704	1,843			
1959	38.11	35	38			
1960	882.56	806	883			
1961	372.21	338	372			
1962	559.13	504	559			
1964	231.19	205	231			
1965	943.36	831	943			
1966	8,879.03	7,762	8,879			
1967	3,407.27	2,954	3,407			
1968	4,158.52	3,576	4,159			
1969	865.95	738	866			
1970	5,686.06	4,805	5,686			
1971	2,112.85	1,769	2,095	18	6.19	3
1972	6,950.16	5,763	6,824	126	6.49	19

PEOPLES GAS COMPANY LLC

ACCOUNT 369.00 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 38-R1.5						
NET SALVAGE PERCENT.. 0						
1973	8,315.25	6,829	8,086	229	6.79	34
1974	12,015.14	9,767	11,565	450	7.11	63
1975	4,870.62	3,918	4,639	232	7.43	31
1976	7,066.08	6,160	7,066			
1977	6,110.05	5,277	6,110			
1978	20,090.50	17,278	20,090			
1979	74,178.38	63,126	74,178			
1980	193,918.83	163,202	193,297	622	8.52	73
1981	68,875.84	57,601	68,223	653	8.66	75
1982	41,960.31	34,663	41,055	905	9.10	99
1983	27,367.52	22,430	26,566	802	9.30	86
1984	67,495.25	54,570	64,633	2,862	9.77	293
1985	93,642.20	75,007	88,838	4,804	10.00	480
1986	31,818.36	25,102	29,731	2,087	10.50	199
1987	64,335.71	50,201	59,458	4,878	10.77	453
1988	16,264.40	12,481	14,783	1,481	11.29	131
1989	238.09	180	213	25	11.60	2
1990	39,120.09	29,098	34,464	4,656	12.14	384
1991	36,188.23	26,526	31,417	4,771	12.48	382
1992	38,276.59	27,617	32,710	5,567	12.83	434
1993	106,717.51	75,375	89,274	17,444	13.41	1,301
1994	128,828.45	89,381	105,863	22,965	13.79	1,665
1995	85,619.06	58,272	69,017	16,602	14.20	1,169
1996	58,665.88	39,124	46,338	12,328	14.61	844
1997	461,940.90	300,169	355,520	106,421	15.23	6,988
1998	395,222.96	250,927	297,198	98,025	15.67	6,256
1999	132,267.30	81,940	97,050	35,217	16.12	2,185
2000	134,482.05	81,160	96,126	38,356	16.59	2,312
2001	64,211.86	37,680	44,628	19,584	17.07	1,147
2002	191,407.02	109,025	129,129	62,278	17.57	3,545
2003	141,611.97	78,141	92,550	49,062	18.07	2,715
2004	258,437.91	138,394	163,914	94,524	18.43	5,129
2005	129,642.63	66,947	79,292	50,351	18.96	2,656
2006	247,505.14	122,911	145,576	101,929	19.51	5,224
2007	388,734.74	185,893	220,172	168,563	19.92	8,462
2008	492,492.55	225,118	266,630	225,863	20.49	11,023
2009	411,685.68	179,948	213,131	198,555	20.93	9,487
2010	685,165.81	285,235	337,833	347,333	21.38	16,246
2011	416,016.39	164,202	194,481	221,535	21.85	10,139
2012	285,757.55	106,388	126,006	159,752	22.34	7,151
2013	400,301.72	140,266	166,131	234,171	22.71	10,311
2014	124,113.77	40,635	48,128	75,986	23.11	3,288
2015	524,350.85	159,088	188,424	335,927	23.53	14,277

PEOPLES GAS COMPANY LLC

ACCOUNT 369.00 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 38-R1.5						
NET SALVAGE PERCENT.. 0						
2016	318,244.94	88,918	105,315	212,930	23.86	8,924
2017	155,709.61	39,566	46,862	108,848	24.22	4,494
2019	15,528.36	3,124	3,700	11,828	24.81	477
2020	37,893.22	6,586	7,801	30,092	24.96	1,206
2021	33,368.41	4,852	5,747	27,621	24.99	1,105
2023	27,181.91	2,430	2,878	24,304	24.61	988
2024	587,071.17	32,113	38,034	549,037	23.75	23,117
2025	374,823.85	4,385	5,194	369,630	21.12	17,501
	8,727,432.72	3,943,841	4,665,203	4,062,230		194,573

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 20.9 2.23

PEOPLES GAS COMPANY LLC

ACCOUNT 374.20 LAND AND LAND RIGHTS - LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1892	33.70	34	34			
1899	33.70	34	34			
1901	67.41	67	67			
1902	33.70	34	34			
1903	67.41	67	67			
1904	67.41	67	67			
1905	67.41	67	67			
1906	67.41	67	67			
1910	67.41	67	67			
1912	67.41	67	67			
1913	33.70	34	34			
1915	134.82	135	135			
1916	101.11	101	101			
1917	67.41	67	67			
1918	101.11	101	101			
1919	134.82	135	135			
1920	67.41	67	67			
1921	67.41	67	67			
1924	67.41	66	67			
1925	134.82	132	135			
1926	134.82	132	135			
1929	168.53	163	169			
1930	101.11	98	101			
1931	67.41	65	67			
1932	134.83	129	135			
1933	33.70	32	34			
1934	134.82	128	135			
1935	67.41	64	67			
1936	33.70	32	34			
1937	269.65	253	270			
1938	37.50	35	38			
1939	2.25	2	2			
1940	58.24	54	58			
1941	141.68	131	142			
1943	18.00	16	18			
1944	7.28	7	7			
1946	117.71	106	118			
1947	3.92	4	4			
1948	88.48	79	88			
1949	119.90	107	120			
1950	26.88	24	27			
1951	467.20	411	467			
1952	53.08	46	53			

PEOPLES GAS COMPANY LLC

ACCOUNT 374.20 LAND AND LAND RIGHTS - LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1953	199.36	173	199			
1954	392.00	338	392			
1955	72.80	62	73			
1956	375.20	318	375			
1957	448.00	377	446	2	11.10	
1958	4,158.55	3,469	4,100	59	11.61	5
1959	257.60	213	252	6	12.15	
1960	112.00	92	109	3	12.72	
1961	604.80	490	579	26	13.30	2
1962	644.00	516	610	34	13.91	2
1963	840.00	666	787	53	14.54	4
1964	4,266.88	3,342	3,949	318	15.18	21
1965	2,598.40	2,011	2,377	221	15.83	14
1966	3,109.60	2,377	2,809	301	16.50	18
1967	6,719.55	5,070	5,992	728	17.18	42
1968	5,420.80	4,037	4,771	650	17.87	36
1969	4,416.01	3,244	3,834	582	18.57	31
1970	5,693.00	4,125	4,875	818	19.28	42
1971	9,401.80	6,716	7,937	1,465	20.00	73
1972	2,688.00	1,892	2,236	452	20.72	22
1973	6,438.52	4,465	5,277	1,162	21.46	54
1974	1,699.60	1,160	1,371	329	22.21	15
1975	448.00	301	356	92	22.98	4
1976	5,672.80	3,911	4,622	1,051	22.18	47
1977	2,292.64	1,560	1,844	449	22.67	20
1978	1,120.00	752	889	231	23.17	10
1979	1,297.20	852	1,007	290	24.17	12
1980	1,820.00	1,178	1,392	428	24.68	17
1981	2,469.60	1,563	1,847	623	25.68	24
1982	2,902.20	1,807	2,135	767	26.19	29
1983	6,537.44	3,977	4,700	1,837	27.19	68
1984	2,226.00	1,331	1,573	653	27.72	24
1985	4,077.60	2,380	2,813	1,265	28.72	44
1986	4,854.23	2,763	3,265	1,589	29.72	53
1987	33,826.34	18,889	22,322	11,504	30.25	380
1988	21,831.50	11,872	14,030	7,802	31.25	250
1989	33,538.13	17,872	21,121	12,417	31.78	391
1990	15,258.75	7,907	9,344	5,915	32.78	180
1991	16,245.00	8,179	9,666	6,579	33.78	195
1992	51,887.50	25,534	30,175	21,712	34.32	633
1993	54,150.00	25,846	30,544	23,606	35.32	668
1994	14,887.50	6,885	8,136	6,752	36.32	186
1995	31,322.50	14,117	16,683	14,640	36.87	397

PEOPLES GAS COMPANY LLC

ACCOUNT 374.20 LAND AND LAND RIGHTS - LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1996	11,575.00	5,044	5,961	5,614	37.87	148
1997	21,418.75	9,015	10,654	10,765	38.87	277
1998	37,106.25	15,065	17,803	19,303	39.87	484
1999	49,683.75	19,431	22,963	26,721	40.87	654
2000	19,871.25	7,527	8,895	10,976	41.41	265
2001	27,041.25	9,838	11,626	15,415	42.41	363
2002	31,151.64	10,866	12,841	18,311	43.41	422
2003	55,747.77	18,609	21,991	33,757	44.41	760
2004	45,724.62	14,577	17,227	28,498	45.41	628
2005	80,066.42	24,324	28,745	51,321	46.41	1,106
2006	137,562.35	39,989	47,258	90,304	46.97	1,923
2007	134,486.10	37,064	43,801	90,685	47.97	1,890
2008	39,166.78	10,203	12,058	27,109	48.97	554
2009	15,501.94	3,804	4,495	11,007	49.97	220
2010	43,716.72	10,068	11,898	31,819	50.97	624
2011	34,165.65	7,352	8,688	25,478	51.97	490
2012	64,213.52	12,849	15,185	49,029	52.97	926
2014	1,150.00	195	230	920	54.97	17
2017	41,405.55	5,192	6,136	35,270	57.54	613
	1,263,747.80	469,235	554,038	709,710		16,377

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 43.3 1.30

PEOPLES GAS COMPANY LLC

ACCOUNT 375.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BUTLER METER SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2021						
NET SALVAGE PERCENT.. 0						
1966	62,627.19	62,627	62,627			
1969	216.05	216	216			
1972	1,191.68	1,192	1,192			
	64,034.92	64,035	64,035			
OTHER						
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1905	13.59	14	14			
1906	8.01	8	8			
1907	33.75	34	34			
1909	13.63	14	14			
1910	4.25	4	4			
1911	29.90	30	30			
1912	8.47	8	8			
1913	86.60	87	87			
1914	11.51	12	12			
1915	6.12	6	6			
1917	10.25	10	10			
1922	13.37	13	13			
1925	23.37	23	23			
1927	23.77	23	24			
1929	13.93	14	14			
1930	27.35	26	27			
1933	9.75	9	10			
1938	144.58	134	145			
1939	49.11	45	49			
1940	94.44	87	94			
1947	27.25	24	27			
1948	112.73	98	113			
1950	448.59	387	449			
1951	1,354.95	1,161	1,346	9	7.86	1
1952	502.79	428	496	7	8.17	1
1953	906.57	767	889	17	8.49	2
1954	1,726.88	1,450	1,681	46	8.81	5
1955	509.49	425	493	17	9.14	2
1956	1,273.51	1,054	1,222	52	9.47	5
1958	529.95	432	501	29	10.17	3

PEOPLES GAS COMPANY LLC

ACCOUNT 375.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER						
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1959	953.50	771	894	60	10.52	6
1960	280.49	225	261	20	10.89	2
1961	632.04	503	583	49	11.27	4
1962	1,492.62	1,176	1,363	129	11.65	11
1963	1,426.89	1,114	1,291	136	12.05	11
1964	974.34	754	874	100	12.45	8
1965	3,558.70	2,726	3,160	399	12.87	31
1966	1,917.31	1,454	1,686	232	13.29	17
1967	1,385.70	1,040	1,206	180	13.73	13
1968	2,006.41	1,489	1,726	280	14.17	20
1969	2,047.32	1,503	1,742	305	14.63	21
1970	3,521.62	2,555	2,962	560	15.10	37
1971	3,052.43	2,188	2,536	516	15.57	33
1972	3,895.19	2,758	3,197	698	16.06	43
1973	4,683.33	3,273	3,794	889	16.56	54
1974	1,179.91	814	944	236	17.07	14
1976	4,552.11	3,430	3,976	576	16.11	36
1977	2,032.48	1,510	1,750	282	16.69	17
1978	1,552.77	1,137	1,318	235	17.26	14
1979	1,855.60	1,339	1,552	303	17.85	17
1980	1,453.59	1,039	1,204	249	18.04	14
1981	1,703.55	1,199	1,390	314	18.64	17
1982	4,400.38	3,045	3,530	871	19.25	45
1983	9,392.37	6,428	7,452	1,941	19.48	100
1984	10,370.22	6,973	8,083	2,287	20.10	114
1985	7,719.68	5,096	5,907	1,812	20.73	87
1986	10,525.77	6,859	7,951	2,575	20.99	123
1987	14,212.13	9,079	10,525	3,688	21.63	171
1988	21,237.87	13,291	15,407	5,831	22.27	262
1989	19,776.32	12,186	14,126	5,650	22.58	250
1990	9,944.12	5,994	6,948	2,996	23.23	129
1991	24,065.36	14,177	16,434	7,631	23.89	319
1992	32,301.16	18,689	21,665	10,636	24.22	439
1993	43,007.26	24,273	28,138	14,869	24.89	597
1994	13,198.32	7,300	8,462	4,736	25.25	188
1995	25,211.16	13,574	15,735	9,476	25.93	365
1996	17,169.69	8,990	10,421	6,748	26.61	254
1997	8,139.06	4,162	4,825	3,314	27.00	123
1998	19,544.06	9,694	11,238	8,307	27.69	300
1999	16,882.71	8,154	9,452	7,430	28.10	264
2000	17,056.26	7,967	9,236	7,821	28.81	271
2001	25,253.77	11,453	13,277	11,977	29.22	410

PEOPLES GAS COMPANY LLC

ACCOUNT 375.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER						
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
2002	29,790.91	13,022	15,095	14,695	29.94	491
2003	42,788.04	18,091	20,972	21,816	30.38	718
2004	45,948.78	18,747	21,732	24,217	30.83	786
2005	49,401.99	19,306	22,380	27,022	31.56	856
2006	38,922.89	14,612	16,939	21,984	32.03	686
2007	25,971.59	9,337	10,824	15,148	32.51	466
2008	38,196.25	13,048	15,126	23,071	33.25	694
2009	31,071.60	10,098	11,706	19,366	33.75	574
2010	56,053.62	17,265	20,014	36,040	34.26	1,052
2011	49,459.45	14,378	16,667	32,792	34.77	943
2012	89,168.72	24,343	28,219	60,950	35.29	1,727
2013	67,234.83	17,131	19,859	47,376	35.83	1,322
2014	7,672.44	1,812	2,101	5,572	36.37	153
2015	1,998.18	436	505	1,493	36.70	41
2016	4,857.41	966	1,120	3,738	37.26	100
	982,120.73	430,800	499,322	482,799		15,879
	1,046,155.65	494,835	563,357	482,799		15,879

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 30.4 1.52

PEOPLES GAS COMPANY LLC

ACCOUNT 376.10 MAINS - LOW PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. 0						
1894	115.78	116	116			
1896	5,510.88	5,511	5,511			
1899	1,245.30	1,245	1,245			
1900	1,793.33	1,793	1,793			
1901	918.17	918	918			
1902	5,883.16	5,883	5,883			
1903	7,597.40	7,597	7,597			
1904	8,394.04	8,394	8,394			
1905	5,519.79	5,493	5,520			
1906	3,198.94	3,180	3,199			
1907	126.47	125	126			
1908	2,569.12	2,534	2,569			
1909	3,267.81	3,210	3,268			
1910	0.82	1	1			
1911	3,873.68	3,774	3,874			
1912	6,073.01	5,892	6,073			
1913	13,101.64	12,658	13,102			
1914	3,022.02	2,907	3,022			
1915	482.69	462	483			
1916	1,254.13	1,196	1,254			
1917	3,621.79	3,438	3,622			
1918	6,468.81	6,114	6,469			
1919	6,702.73	6,308	6,703			
1922	130.83	122	131			
1923	5.40	5	5			
1924	2,780.53	2,566	2,767	14	5.01	3
1925	1,086.78	999	1,077	10	5.23	2
1926	2,690.01	2,465	2,658	32	5.44	6
1927	1,237.73	1,130	1,219	19	5.66	3
1928	44.44	40	43	1	5.88	
1930	747.90	675	728	20	6.32	3
1931	13.37	12	13			
1936	20.93	18	19	2	7.69	
1937	38,870.44	34,128	36,801	2,069	7.93	261
1938	3,565.46	3,117	3,361	204	8.17	25
1939	2,368.37	2,062	2,224	144	8.42	17
1940	857.14	743	801	56	8.67	6
1941	43.12	37	40	3	8.92	
1942	1,566.51	1,345	1,450	117	9.18	13
1943	637.06	545	588	49	9.44	5
1944	315.59	268	289	27	9.72	3
1945	338.07	286	308	30	9.99	3
1946	3,426.80	2,885	3,111	316	10.28	31

PEOPLES GAS COMPANY LLC

ACCOUNT 376.10 MAINS - LOW PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. 0						
1947	2,070.06	1,733	1,869	201	10.57	19
1948	3,839.64	3,197	3,447	393	10.88	36
1949	12,882.35	10,665	11,500	1,382	11.19	124
1950	10,536.08	8,670	9,349	1,187	11.51	103
1951	15,729.10	12,862	13,869	1,860	11.85	157
1952	21,501.38	17,466	18,834	2,667	12.20	219
1953	16,435.59	13,262	14,301	2,135	12.55	170
1954	15,211.17	12,188	13,143	2,068	12.92	160
1955	15,152.86	12,050	12,994	2,159	13.31	162
1956	7,716.97	6,090	6,567	1,150	13.70	84
1957	15,491.66	12,129	13,079	2,413	14.11	171
1958	50,592.25	39,283	42,360	8,232	14.53	567
1959	37,403.50	28,789	31,044	6,360	14.97	425
1960	77,322.02	58,979	63,598	13,724	15.42	890
1961	85,089.66	64,301	69,337	15,753	15.88	992
1962	93,201.06	69,743	75,205	17,996	16.36	1,100
1963	194,249.11	143,923	155,195	39,054	16.84	2,319
1964	298,304.13	218,681	235,809	62,495	17.35	3,602
1965	310,354.33	225,078	242,707	67,647	17.86	3,788
1966	356,538.64	255,667	275,692	80,847	18.39	4,396
1967	381,476.37	270,379	291,556	89,920	18.93	4,750
1968	421,278.36	294,958	318,060	103,218	19.49	5,296
1969	594,550.78	411,156	443,359	151,192	20.05	7,541
1970	534,843.47	365,095	393,690	141,153	20.63	6,842
1971	608,970.41	410,166	442,291	166,679	21.22	7,855
1972	430,490.88	285,979	308,378	122,113	21.82	5,596
1973	342,326.79	224,197	241,757	100,570	22.43	4,484
1974	725,836.03	468,331	505,012	220,824	23.06	9,576
1975	281,096.17	178,648	192,640	88,456	23.69	3,734
1976	544,457.35	378,071	407,683	136,774	21.67	6,312
1977	545,016.53	373,445	402,694	142,323	22.17	6,420
1978	774,715.71	523,475	564,475	210,241	22.68	9,270
1979	977,979.32	651,334	702,349	275,630	23.19	11,886
1980	628,489.68	409,524	441,599	186,891	24.19	7,726
1981	768,071.32	492,795	531,392	236,679	24.72	9,574
1982	799,883.40	505,046	544,603	255,280	25.25	10,110
1983	968,512.68	601,543	648,658	319,855	25.78	12,407
1984	1,396,692.71	852,681	919,466	477,227	26.32	18,132
1985	1,004,310.48	602,285	649,458	354,852	26.87	13,206
1986	1,333,970.66	785,442	846,960	487,011	27.41	17,768
1987	3,203,136.37	1,850,132	1,995,040	1,208,096	27.97	43,193
1988	1,346,228.22	762,234	821,935	524,293	28.54	18,370
1989	2,335,122.29	1,286,652	1,387,427	947,695	29.54	32,082

PEOPLES GAS COMPANY LLC

ACCOUNT 376.10 MAINS - LOW PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. 0						
1990	1,547,468.24	834,550	899,915	647,553	30.11	21,506
1991	1,877,548.90	990,219	1,067,776	809,773	30.69	26,386
1992	3,103,187.54	1,599,383	1,724,652	1,378,536	31.26	44,099
1993	2,612,822.80	1,314,511	1,417,468	1,195,355	31.85	37,531
1994	2,069,862.70	1,015,475	1,095,010	974,853	32.45	30,042
1995	1,393,180.56	665,940	718,098	675,083	33.04	20,432
1996	1,929,648.24	897,479	967,772	961,876	33.64	28,593
1997	2,771,366.60	1,244,898	1,342,402	1,428,965	34.64	41,252
1998	2,678,265.63	1,167,724	1,259,184	1,419,082	35.25	40,258
1999	2,841,253.82	1,200,714	1,294,758	1,546,496	35.86	43,126
2000	3,061,495.08	1,252,151	1,350,223	1,711,272	36.48	46,910
2001	2,362,659.71	933,959	1,007,110	1,355,550	37.10	36,538
2002	3,432,724.52	1,308,898	1,411,415	2,021,310	37.73	53,573
2003	2,814,807.10	1,033,316	1,114,248	1,700,559	38.36	44,332
2004	3,061,442.49	1,080,077	1,164,672	1,896,770	38.99	48,648
2005	3,650,586.83	1,234,628	1,331,328	2,319,259	39.63	58,523
2006	2,727,825.40	882,179	951,274	1,776,551	40.27	44,116
2007	3,106,907.60	958,170	1,033,217	2,073,691	40.92	50,677
2008	4,034,230.30	1,182,836	1,275,479	2,758,751	41.58	66,348
2009	1,768,404.10	491,439	529,930	1,238,474	42.23	29,327
2010	2,088,288.94	547,758	590,660	1,497,629	42.89	34,918
2011	2,635,217.56	649,581	700,458	1,934,760	43.55	44,426
2012	4,584,748.66	1,057,243	1,140,050	3,444,699	44.22	77,899
2013	4,780,927.66	1,025,031	1,105,315	3,675,613	44.89	81,880
2014	4,046,462.57	801,200	863,952	3,182,511	45.57	69,838
2015	2,027,097.22	369,743	398,702	1,628,395	45.93	35,454
2016	2,660,366.41	440,557	475,063	2,185,303	46.61	46,885
2017	4,254,257.86	631,757	681,238	3,573,020	47.31	75,524
2018	2,171,147.04	286,591	309,038	1,862,109	47.69	39,046
2019	2,453,407.90	280,670	302,653	2,150,755	48.39	44,446
2020	4,081,626.11	396,326	427,367	3,654,259	48.81	74,867
2021	8,899,810.10	707,535	762,952	8,136,858	49.22	165,316
2022	8,825,495.99	545,416	588,135	8,237,361	49.38	166,816
2023	3,919,245.73	182,637	196,942	3,722,304	49.40	75,350
2024	11,538,905.51	313,858	338,440	11,200,466	49.13	227,976
2025	5,929,897.99	31,428	33,889	5,896,009	47.14	125,074
	150,481,156.94	43,896,398	47,329,541	103,151,616		2,489,927

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 41.4 1.65

PEOPLES GAS COMPANY LLC

ACCOUNT 376.20 MAINS - REGULAR PRESSURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. 0						
2013	3,309,086.49	709,468	798,849	2,510,237	44.89	55,920
2014	3,544,542.67	701,819	790,236	2,754,307	45.57	60,441
2015	2,315,455.32	422,339	475,546	1,839,909	45.93	40,059
2016	10,268,911.80	1,700,532	1,914,770	8,354,142	46.61	179,235
2017	7,234,484.42	1,074,321	1,209,667	6,024,817	47.31	127,348
2018	11,060,783.88	1,460,023	1,643,961	9,416,823	47.69	197,459
2019	5,407,535.72	618,622	696,558	4,710,978	48.39	97,354
2020	7,884,423.30	765,578	862,028	7,022,395	48.81	143,872
2021	7,874,170.81	625,997	704,862	7,169,309	49.22	145,658
2022	9,055,188.50	559,611	630,112	8,425,076	49.38	170,617
2023	6,565,394.07	305,947	344,491	6,220,903	49.40	125,929
2024	5,808,154.05	157,982	177,885	5,630,269	49.13	114,599
2025	2,986,454.44	15,828	17,822	2,968,632	47.14	62,975
	83,314,585.47	9,118,067	10,266,787	73,047,798		1,521,466

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 48.0 1.83

PEOPLES GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1891	26.41	26	26			
1904	233.67	234	234			
1906	23.68	24	24			
1907	141.86	142	142			
1908	51.83	52	52			
1909	75.04	75	75			
1910	18.28	18	18			
1913	90.31	90	90			
1914	19.98	20	20			
1915	84.47	84	84			
1916	20.34	20	20			
1918	121.33	121	121			
1920	42.43	42	42			
1922	41.13	41	41			
1923	28.48	28	28			
1927	21.79	21	22			
1931	100.48	97	100			
1932	286.98	275	287			
1933	216.62	206	217			
1934	207.52	197	208			
1935	10.30	10	10			
1936	56.18	53	56			
1937	28.77	27	29			
1938	146.06	135	146			
1939	432.81	399	433			
1940	90.13	83	90			
1941	63.60	58	64			
1944	88.01	79	87	1	5.78	
1948	278.55	243	268	11	6.95	2
1949	855.22	742	820	35	7.25	5
1950	894.81	772	853	42	7.56	6
1951	4,480.69	3,840	4,241	240	7.86	31
1952	1,179.32	1,004	1,109	70	8.17	9
1953	2,572.62	2,176	2,403	170	8.49	20
1954	4,249.82	3,569	3,942	308	8.81	35
1955	5,781.87	4,821	5,325	457	9.14	50
1956	6,168.30	5,106	5,640	528	9.47	56
1957	4,519.44	3,712	4,100	419	9.82	43
1958	5,804.96	4,732	5,226	579	10.17	57
1959	9,852.21	7,968	8,801	1,051	10.52	100
1960	10,022.23	8,038	8,878	1,144	10.89	105
1961	10,602.27	8,430	9,311	1,291	11.27	115
1962	10,929.24	8,614	9,514	1,415	11.65	121

PEOPLES GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1963	25,048.77	19,561	21,605	3,444	12.05	286
1964	4,939.07	3,821	4,220	719	12.45	58
1965	17,424.79	13,347	14,742	2,683	12.87	208
1966	10,266.39	7,786	8,600	1,666	13.29	125
1967	15,294.82	11,477	12,676	2,619	13.73	191
1968	17,048.74	12,656	13,978	3,071	14.17	217
1969	11,967.27	8,784	9,702	2,265	14.63	155
1970	29,780.93	21,605	23,862	5,919	15.10	392
1971	16,857.27	12,085	13,348	3,509	15.57	225
1972	22,290.86	15,782	17,431	4,860	16.06	303
1973	13,976.25	9,768	10,789	3,187	16.56	192
1974	12,459.66	8,593	9,491	2,969	17.07	174
1975	15,407.44	10,477	11,572	3,835	17.60	218
1976	25,909.85	19,523	21,563	4,347	16.11	270
1977	12,871.99	9,564	10,563	2,309	16.69	138
1978	6,317.06	4,627	5,110	1,207	17.26	70
1979	13,821.44	9,972	11,014	2,807	17.85	157
1980	16,165.59	11,558	12,766	3,400	18.04	188
1981	143,136.95	100,711	111,234	31,903	18.64	1,712
1982	70,690.20	48,918	54,029	16,661	19.25	866
1983	180,605.55	123,606	136,522	44,084	19.48	2,263
1984	135,960.83	91,420	100,972	34,989	20.10	1,741
1985	72,928.98	48,140	53,170	19,759	20.73	953
1986	138,647.84	90,343	99,783	38,865	20.99	1,852
1987	135,373.44	86,477	95,513	39,860	21.63	1,843
1988	93,351.36	58,419	64,523	28,828	22.27	1,294
1989	242,938.26	149,699	165,341	77,597	22.58	3,437
1990	227,800.89	137,318	151,666	76,135	23.23	3,277
1991	224,425.51	132,209	146,024	78,402	23.89	3,282
1992	270,468.14	156,493	172,845	97,623	24.22	4,031
1993	228,875.93	129,178	142,676	86,200	24.89	3,463
1994	97,594.34	53,979	59,619	37,975	25.25	1,504
1995	258,206.97	139,019	153,545	104,662	25.93	4,036
1996	38,120.18	19,960	22,046	16,074	26.61	604
1997	59,686.95	30,518	33,707	25,980	27.00	962
1998	33,245.33	16,490	18,213	15,032	27.69	543
1999	93,037.60	44,937	49,632	43,406	28.10	1,545
2000	137,785.19	64,359	71,084	66,701	28.81	2,315
2001	160,937.63	72,985	80,611	80,327	29.22	2,749
2002	250,634.26	109,552	120,999	129,635	29.94	4,330
2003	226,496.08	95,763	105,769	120,727	30.38	3,974
2004	203,387.20	82,982	91,653	111,734	30.83	3,624
2005	162,707.94	63,586	70,230	92,478	31.56	2,930

PEOPLES GAS COMPANY LLC

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
2006	193,137.35	72,504	80,080	113,057	32.03	3,530
2007	151,765.02	54,560	60,261	91,504	32.51	2,815
2008	55,045.01	18,803	20,768	34,277	33.25	1,031
2009	75,031.77	24,385	26,933	48,099	33.75	1,425
2010	208,440.39	64,200	70,908	137,532	34.26	4,014
2011	205,667.59	59,788	66,035	139,633	34.77	4,016
2012	70,792.68	19,326	21,345	49,448	35.29	1,401
2013	104,920.99	26,734	29,527	75,394	35.83	2,104
2014	191,280.34	45,180	49,901	141,379	36.37	3,887
2015	128,750.08	28,106	31,043	97,707	36.70	2,662
2016	101,481.45	20,185	22,294	79,187	37.26	2,125
2017	371,951.71	66,877	73,865	298,087	37.62	7,924
2018	500,222.56	80,136	88,509	411,714	38.00	10,835
2019	189,492.07	26,529	29,301	160,191	38.39	4,173
2020	263,189.44	31,504	34,796	228,393	38.61	5,915
2021	1,101,667.81	108,624	119,974	981,694	38.85	25,269
2022	1,290,599.91	99,376	109,760	1,180,840	38.95	30,317
2023	1,031,666.52	60,559	66,887	964,780	38.74	24,904
2024	3,494,997.92	121,975	134,721	3,360,277	38.00	88,428
2025	2,141,493.25	14,990	16,556	2,124,937	35.46	59,925
	16,127,445.64	3,468,812	3,831,099	12,296,347		350,152

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 35.1 2.17

PEOPLES GAS COMPANY LLC

ACCOUNT 380.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. 0						
1973	43,138.37	33,682	36,075	7,063	10.96	644
1974	84,920.01	65,575	70,234	14,686	11.39	1,289
1975	109,045.47	83,245	89,159	19,886	11.83	1,681
1976	116,313.58	94,516	101,231	15,083	11.36	1,328
1977	158,583.41	127,787	136,866	21,717	11.63	1,867
1978	176,106.80	140,621	150,612	25,495	11.92	2,139
1979	237,449.88	186,683	199,946	37,504	12.58	2,981
1980	213,769.45	166,377	178,197	35,572	12.89	2,760
1981	213,376.27	163,340	174,945	38,431	13.55	2,836
1982	235,562.38	178,297	190,964	44,598	13.89	3,211
1983	221,479.09	164,692	176,393	45,086	14.57	3,094
1984	282,905.13	207,709	222,466	60,439	14.93	4,048
1985	281,113.20	203,667	218,137	62,976	15.31	4,113
1986	365,193.32	259,433	277,865	87,328	16.00	5,458
1987	575,279.55	402,696	431,306	143,974	16.39	8,784
1988	323,265.16	221,566	237,307	85,958	17.10	5,027
1989	962,121.62	648,662	694,747	267,375	17.52	15,261
1990	986,307.94	650,174	696,366	289,942	18.22	15,913
1991	1,003,007.24	649,247	695,373	307,634	18.66	16,486
1992	1,297,389.63	819,691	877,927	419,463	19.38	21,644
1993	1,418,305.56	878,215	940,608	477,698	19.83	24,090
1994	1,081,154.00	652,044	698,369	382,785	20.56	18,618
1995	1,003,064.91	591,708	633,746	369,319	21.03	17,562
1996	1,113,734.45	638,504	683,867	429,867	21.77	19,746
1997	1,177,072.34	658,454	705,234	471,838	22.25	21,206
1998	1,241,220.19	673,114	720,936	520,284	23.00	22,621
1999	1,146,894.33	605,101	648,091	498,803	23.50	21,226
2000	1,203,550.96	613,811	657,420	546,131	24.26	22,512
2001	1,005,769.12	497,554	532,903	472,866	24.77	19,090
2002	927,100.21	441,856	473,248	453,852	25.53	17,777
2003	1,095,190.77	504,445	540,284	554,907	26.06	21,293
2004	1,163,351.82	514,202	550,734	612,618	26.83	22,833
2005	874,880.55	371,999	398,428	476,453	27.37	17,408
2006	765,661.85	311,012	333,108	432,554	28.14	15,371
2007	900,451.66	350,006	374,872	525,580	28.70	18,313
2008	946,870.86	349,585	374,422	572,449	29.48	19,418
2009	637,377.71	223,720	239,614	397,764	30.05	13,237
2010	570,302.50	188,713	202,120	368,182	30.83	11,942
2011	734,955.11	229,379	245,675	489,280	31.41	15,577
2012	901,736.29	264,028	282,786	618,950	32.00	19,342
2013	2,721,986.87	740,380	792,981	1,929,006	32.79	58,829
2014	2,452,103.08	617,930	661,832	1,790,271	33.39	53,617
2015	1,990,791.93	461,067	493,824	1,496,968	34.00	44,028

PEOPLES GAS COMPANY LLC

ACCOUNT 380.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. 0						
2016	1,714,905.88	361,674	387,370	1,327,536	34.61	38,357
2017	2,138,148.86	405,821	434,653	1,703,496	35.23	48,354
2018	2,931,215.71	493,030	528,058	2,403,158	35.85	67,034
2019	1,835,343.14	269,612	288,767	1,546,576	36.30	42,605
2020	2,286,870.57	284,487	304,699	1,982,172	36.95	53,645
2021	2,979,656.51	303,925	325,517	2,654,140	37.42	70,928
2022	2,096,287.74	166,236	178,046	1,918,242	37.73	50,841
2023	1,258,972.33	75,412	80,770	1,178,202	37.91	31,079
2024	11,997,854.07	421,125	451,044	11,546,810	37.84	305,148
2025	4,936,456.80	33,568	35,953	4,900,504	36.51	134,224
	69,135,566.18	19,659,377	21,056,095	48,079,471		1,498,435

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 32.1 2.17

PEOPLES GAS COMPANY LLC

ACCOUNT 381.00 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 28-R1.5						
NET SALVAGE PERCENT.. 0						
1964	7,038.64	7,039	7,039			
1966	12.23	12	12			
1968	202.67	203	203			
1969	14,201.41	14,196	13,572	629	0.01	629
1970	63.28	63	63			
1971	459.36	448	428	31	0.67	31
1972	603.76	582	556	48	1.01	48
1973	725.07	690	660	65	1.34	49
1974	50.45	47	45	5	1.66	3
1975	24,069.12	22,410	21,425	2,644	1.93	1,370
1976	494.21	475	454	40	2.03	20
1977	731.27	699	668	63	2.25	28
1978	1,051.08	998	954	97	2.50	39
1979	9,369.35	8,840	8,451	918	2.77	331
1980	4,619.72	4,327	4,137	483	3.06	158
1981	2,012.11	1,879	1,796	216	3.14	69
1982	260.05	241	230	30	3.48	9
1983	1,614.48	1,487	1,422	192	3.62	53
1984	331.18	302	289	42	4.00	10
1985	104.26	94	90	14	4.20	3
1988	15,230.09	13,389	12,800	2,430	5.12	475
1989	8,394.69	7,334	7,012	1,383	5.24	264
1990	71,937.74	62,125	59,394	12,544	5.57	2,252
1991	70,468.05	60,095	57,453	13,015	5.91	2,202
1992	188,703.30	158,737	151,758	36,945	6.28	5,883
1993	302,531.51	251,706	240,640	61,892	6.51	9,507
1994	273,595.31	224,020	214,171	59,424	6.92	8,587
1995	296,372.62	239,380	228,856	67,517	7.20	9,377
1996	436,206.27	345,781	330,579	105,627	7.65	13,807
1997	686,043.53	534,908	511,392	174,652	7.98	21,886
1998	488,962.04	374,398	357,938	131,024	8.34	15,710
1999	606,449.15	453,685	433,739	172,710	8.84	19,537
2000	482,606.05	353,364	337,829	144,777	9.23	15,685
2001	529,807.50	379,024	362,361	167,446	9.65	17,352
2002	517,777.97	361,150	345,273	172,505	10.08	17,114
2003	605,125.87	410,638	392,585	212,541	10.54	20,165
2004	894,717.32	589,440	563,526	331,191	11.01	30,081
2005	757,811.81	484,924	463,605	294,207	11.40	25,808
2006	938,366.46	579,817	554,326	384,040	11.90	32,272
2007	1,174,517.53	700,952	670,136	504,382	12.33	40,907
2008	915,991.12	524,588	501,525	414,466	12.87	32,204
2009	539,660.48	296,382	283,352	256,308	13.34	19,213
2010	390,262.52	204,732	195,731	194,532	13.82	14,076

PEOPLES GAS COMPANY LLC

ACCOUNT 381.00 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 28-R1.5						
NET SALVAGE PERCENT.. 0						
2011	581,849.77	290,227	277,468	304,382	14.32	21,256
2012	598,258.65	282,199	269,792	328,467	14.84	22,134
2013	253,945.28	112,929	107,964	145,981	15.30	9,541
2014	662,328.65	275,661	263,542	398,787	15.78	25,272
2015	725,976.64	281,243	268,879	457,098	16.21	28,199
2016	1,074,920.94	383,747	366,876	708,045	16.66	42,500
2017	1,373,755.03	447,707	428,024	945,731	17.07	55,403
2018	1,872,905.86	549,885	525,710	1,347,196	17.44	77,247
2019	1,649,031.65	428,748	409,899	1,239,133	17.79	69,653
2020	407,614.84	91,591	87,564	320,051	18.11	17,673
2021	360,539.86	67,890	64,905	295,635	18.32	16,137
2022	549,913.27	82,597	78,966	470,947	18.39	25,609
2023	348,015.55	40,544	38,762	309,254	18.33	16,871
2024	1,937,413.15	138,525	132,435	1,804,978	17.86	101,063
2025	1,327,065.80	20,437	19,538	1,307,528	15.98	81,823
	24,983,087.57	11,169,531	10,678,799	14,304,289		987,595

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.5 3.95

PEOPLES GAS COMPANY LLC

ACCOUNT 382.10 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1.5						
NET SALVAGE PERCENT.. 0						
1970	850.69	617	765	86	13.75	6
1971	3,021.57	2,165	2,683	339	14.17	24
1972	1,666.32	1,180	1,462	204	14.60	14
1973	2,373.85	1,660	2,057	317	15.04	21
1974	1,501.11	1,036	1,284	217	15.49	14
1975	680.21	463	574	106	15.96	7
1976	1,576.10	1,211	1,501	75	14.85	5
1977	2,738.14	2,088	2,588	150	15.04	10
1978	418.97	315	390	29	15.64	2
1979	2,995.06	2,230	2,764	231	15.86	15
1980	5,126.34	3,758	4,658	468	16.48	28
1981	8,370.20	6,074	7,528	842	16.73	50
1982	5,478.23	3,909	4,845	633	17.36	36
1983	3,628.46	2,560	3,173	455	17.63	26
1984	17,160.36	11,962	14,826	2,334	17.92	130
1985	13,241.57	9,060	11,229	2,013	18.58	108
1986	51,796.77	34,968	43,339	8,458	18.89	448
1987	153,340.71	101,466	125,756	27,585	19.55	1,411
1988	98,752.74	64,377	79,788	18,965	19.89	953
1989	90,456.65	58,037	71,931	18,526	20.25	915
1990	63,798.00	40,027	49,609	14,189	20.93	678
1991	60,856.88	37,518	46,500	14,357	21.31	674
1992	110,854.35	67,089	83,150	27,704	21.69	1,277
1993	148,250.23	87,497	108,443	39,807	22.39	1,778
1994	60,282.45	34,849	43,192	17,090	22.81	749
1995	44,573.19	25,215	31,251	13,322	23.22	574
1996	61,924.81	34,232	42,427	19,498	23.66	824
1997	63,306.13	34,160	42,338	20,968	24.10	870
1998	116,262.09	60,828	75,390	40,872	24.83	1,646
1999	67,885.39	34,567	42,842	25,043	25.30	990
2000	128,323.21	63,507	78,710	49,613	25.77	1,925
2001	129,360.61	62,119	76,990	52,371	26.25	1,995
2002	102,241.89	47,542	58,923	43,319	26.75	1,619
2003	88,437.51	39,947	49,510	38,928	27.01	1,441
2004	94,918.50	41,346	51,244	43,674	27.53	1,586
2005	158,770.23	66,556	82,489	76,281	28.06	2,718
2006	118,256.41	47,575	58,964	59,292	28.60	2,073
2007	107,492.34	41,589	51,545	55,947	28.92	1,935
2008	81,903.30	30,239	37,478	44,425	29.48	1,507
2009	109,610.90	38,649	47,901	61,710	29.83	2,069
2010	63,855.82	21,424	26,553	37,303	30.20	1,235
2011	59,208.49	18,816	23,320	35,888	30.59	1,173
2012	91,250.92	27,321	33,861	57,390	31.00	1,851

PEOPLES GAS COMPANY LLC

ACCOUNT 382.10 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R1.5						
NET SALVAGE PERCENT.. 0						
2013	472,276.98	132,474	164,188	308,089	31.42	9,806
2014	130,494.58	34,059	42,213	88,282	31.85	2,772
2015	141,935.39	34,334	42,553	99,382	32.12	3,094
2016	178,906.44	39,717	49,225	129,681	32.42	4,000
2017	184,172.62	37,221	46,131	138,042	32.57	4,238
2018	222,030.02	40,232	49,863	172,167	32.75	5,257
2019	210,348.19	33,656	41,713	168,635	32.81	5,140
2020	224,824.67	30,936	38,342	186,483	32.92	5,665
2021	285,254.85	32,747	40,587	244,668	32.79	7,462
	4,647,041.44	1,727,124	2,140,586	2,506,455		84,844

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 29.5 1.83

PEOPLES GAS COMPANY LLC

ACCOUNT 387.00 OTHER EQUIPMENT - DISTRIBUTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 25-R2						
NET SALVAGE PERCENT.. 0						
2024	154,028.56	11,136	49,621-	203,650	17.64	11,545
2025	106,563.89	1,556	6,933-	113,497	16.82	6,748
	260,592.45	12,692	56,554-	317,146		18,293

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.3 7.02

PEOPLES GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BUTLER GENERAL OFFICE						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2028						
NET SALVAGE PERCENT.. 0						
1928	347,637.41	335,074	336,328	11,309	2.59	4,366
1955	765.09	731	734	31	2.68	12
1966	1,638.43	1,557	1,563	76	2.70	28
1967	3,861.64	3,667	3,681	181	2.70	67
1971	2,332.68	2,208	2,216	116	2.71	43
1978	2,875.64	2,717	2,727	148	2.75	54
1979	6,997.44	6,602	6,627	371	2.77	134
1983	1,378.13	1,293	1,298	80	2.79	29
1986	23,661.89	22,105	22,188	1,474	2.76	534
1988	1,625.88	1,514	1,520	106	2.75	39
1989	7,996.10	7,449	7,477	519	2.66	195
1990	1,569.02	1,455	1,460	109	2.77	39
1994	10,602.04	9,741	9,777	825	2.76	299
1996	1,838.55	1,683	1,689	149	2.70	55
2000	35,954.88	32,410	32,531	3,424	2.76	1,241
2003	2,202.53	1,960	1,967	235	2.75	85
2004	14,412.02	12,770	12,818	1,594	2.73	584
2005	4,362.88	3,843	3,857	505	2.74	184
2006	11,131.07	9,750	9,786	1,345	2.73	493
2007	60,511.91	52,676	52,873	7,639	2.71	2,819
2008	5,721.02	4,934	4,952	769	2.75	280
2009	3,186.99	2,729	2,739	448	2.72	165
2011	151,060.30	126,785	127,260	23,801	2.73	8,718
2012	234,543.29	194,530	195,258	39,285	2.73	14,390
2013	37,558.34	30,689	30,804	6,754	2.74	2,465
2017	4,897.71	3,677	3,691	1,207	2.74	441
2019	11,771.85	8,188	8,219	3,553	2.73	1,301
2020	15,753.81	10,355	10,394	5,360	2.74	1,956
2021	177,988.21	108,324	108,729	69,259	2.73	25,370
2023	432,361.12	202,907	203,666	228,695	2.73	83,771
2024	764,077.08	255,966	256,924	507,153	2.73	185,770
2025	5,243.13	441	443	4,800	2.72	1,765
	2,387,518.08	1,460,730	1,466,197	921,321		337,692

PEOPLES GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BUTLER WAREHOUSE AND AUTOMOTIVE SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2033						
NET SALVAGE PERCENT.. 0						
1940	64,037.71	57,758	57,974	6,064	6.84	887
1950	1,587.67	1,418	1,423	164	7.07	23
1957	1,293.64	1,145	1,149	144	7.20	20
1960	979.96	864	867	113	7.25	16
1961	345.98	304	305	41	7.27	6
1971	7,034.04	6,074	6,097	937	7.40	127
1974	95.04	82	82	13	7.43	2
1976	973.89	844	847	127	7.57	17
1977	58.68	51	51	7	7.31	1
1978	8,105.94	7,009	7,035	1,071	7.39	145
1985	4,219.33	3,549	3,562	657	7.60	86
1987	45,250.34	37,906	38,048	7,202	7.41	972
1988	8,697.89	7,225	7,252	1,446	7.59	191
1989	1,613.80	1,334	1,339	275	7.61	36
1990	19,199.77	15,836	15,895	3,304	7.49	441
1993	47,679.28	38,596	38,740	8,939	7.59	1,178
1995	15,432.33	12,371	12,417	3,015	7.49	403
1996	17,850.49	14,202	14,255	3,595	7.51	479
1997	3,229.25	2,545	2,555	675	7.59	89
1998	15,889.77	12,427	12,474	3,416	7.59	450
2002	3,740.82	2,818	2,829	912	7.61	120
2005	2,801.46	2,037	2,045	757	7.60	100
2010	5,402.99	3,609	3,623	1,780	7.58	235
2013	234,126.86	144,550	145,091	89,036	7.59	11,731
2014	55,795.38	33,265	33,390	22,406	7.62	2,940
2017	427,217.81	222,410	223,242	203,975	7.60	26,839
2019	604,618.27	272,804	273,825	330,793	7.60	43,525
2021	34,485.86	12,370	12,416	22,070	7.60	2,904
2022	13,862.84	4,159	4,175	9,688	7.58	1,278
2024	762,487.81	117,728	118,169	644,319	7.53	85,567
2025	5,240.25	171	172	5,069	7.40	685
	2,413,355.15	1,037,461	1,041,344	1,372,011		181,493

PEOPLES GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BUTLER WELDING, STORAGE AND RADIO SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2030						
NET SALVAGE PERCENT.. 0						
1970	76,065.13	69,416	69,676	6,389	4.62	1,383
1972	1,375.00	1,252	1,257	118	4.62	26
1986	11,191.91	10,016	10,054	1,138	4.61	247
1988	14,573.97	12,975	13,024	1,550	4.59	338
1990	7,718.75	6,802	6,827	891	4.75	188
1991	14,753.75	12,986	13,035	1,719	4.66	369
1992	29,439.75	25,842	25,939	3,501	4.63	756
1996	13,215.13	11,403	11,446	1,769	4.65	380
2000	3,181.25	2,683	2,693	488	4.69	104
2002	3,275.40	2,726	2,736	539	4.68	115
2004	1,119.19	916	919	200	4.72	42
2007	1,277.84	1,017	1,021	257	4.69	55
2012	34,948.75	25,792	25,889	9,060	4.70	1,928
2017	24,400.00	15,540	15,598	8,802	4.70	1,873
2021	4,260.35	2,022	2,030	2,231	4.70	475
	240,796.17	201,388	202,142	38,654		8,279
TARENTUM GARAGE AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2024						
NET SALVAGE PERCENT.. 0						
1966	63,790.24	63,790	63,790			
1972	3,834.59	3,835	3,835			
1974	940.00	940	940			
1975	4,390.52	4,391	4,391			
1979	14,518.41	14,518	14,518			
1985	2,084.86	2,085	2,085			
1986	30,754.00	30,754	30,754			
1992	3,544.98	3,545	3,545			
1993	5,540.63	5,541	5,541			
1994	1,728.79	1,729	1,729			
1995	9,736.43	9,736	9,736			
2002	22,444.54	22,445	22,445			
2004	403,589.41	403,589	403,589			
2005	24,609.69	24,610	24,610			

PEOPLES GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
TARENTUM GARAGE AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2024						
NET SALVAGE PERCENT.. 0						
2006	36,164.06	36,164	36,164			
2007	5,235.62	5,236	5,236			
2012	34,744.46	34,744	34,744			
	667,651.23	667,652	667,651			
ALABRAN GARAGE AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1970	62,569.44	62,569	62,569			
1971	1,283.57	1,284	1,284			
1975	6,034.09	6,034	6,034			
1981	16,499.35	16,499	16,499			
1985	4,072.63	4,073	4,073			
1986	15,847.00	15,847	15,847			
1988	14,972.72	14,973	14,973			
1992	1,226.29	1,226	1,226			
1995	17,159.18	17,159	17,159			
1996	7,878.80	7,879	7,879			
2003	1,868.53	1,869	1,869			
2005	5,658.55	5,659	5,659			
2006	1,158.55	1,159	1,159			
2007	6,818.72	6,819	6,819			
2010	1,578.25	1,578	1,578			
2011	31,794.42	31,794	31,794			
	196,420.09	196,421	196,420			
HOME GARAGE AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2040						
NET SALVAGE PERCENT.. 0						
1970	54,725.21	42,385	42,757	11,968	13.37	895
1971	1,851.86	1,429	1,442	410	13.41	31
1985	4,072.62	3,032	3,059	1,014	13.81	73
1987	14,396.71	10,573	10,666	3,731	13.83	270
1989	89,302.73	64,744	65,313	23,990	13.75	1,745

PEOPLES GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
HOME GARAGE AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2040						
NET SALVAGE PERCENT.. 0						
1990	8,907.58	6,405	6,461	2,446	13.77	178
1992	5,149.94	3,630	3,662	1,488	13.92	107
1993	5,663.25	3,963	3,998	1,665	13.83	120
1995	15,591.50	10,658	10,752	4,840	14.00	346
1996	20,668.06	13,965	14,088	6,580	14.04	469
2003	1,868.54	1,143	1,153	715	14.11	51
2004	1,119.19	673	679	440	14.08	31
2007	1,267.19	715	721	546	14.11	39
2019	93,732.62	28,823	29,076	64,656	14.08	4,592
2020	140,160.49	38,124	38,459	101,702	14.05	7,239
2021	2,107.48	490	494	1,613	14.03	115
2023	28,110.02	4,163	4,200	23,910	13.90	1,720
	488,694.99	234,915	236,979	251,716		18,021
WALKCHALK GARAGE AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1960	53,582.50	53,582	53,583			
1961	410.75	411	411			
1973	7,800.00	7,800	7,800			
1976	2,912.28	2,912	2,912			
1979	11,350.08	11,350	11,350			
1984	2,931.27	2,931	2,931			
1987	11,978.91	11,979	11,979			
1991	4,070.94	4,071	4,071			
1992	1,987.83	1,988	1,988			
1996	9,203.44	9,203	9,203			
1999	2,122.54	2,123	2,123			
2004	1,119.19	1,119	1,119			
2006	44,003.82	44,004	44,004			
2007	2,740.61	2,741	2,741			
2009	4,035.25	4,035	4,035			
2011	3,788.80	3,789	3,789			
	164,038.21	164,038	164,038			

PEOPLES GAS COMPANY LLC

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ANDERSON GARAGE AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 75-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2026						
NET SALVAGE PERCENT.. 0						
1966	25,475.19	25,114	25,475			
1967	580.41	572	580			
1979	14,837.92	14,617	14,833	5	0.70	5
1981	43,038.75	42,281	42,907	132	0.79	132
1982	5,226.44	5,131	5,207	19	0.80	19
1986	8,103.37	7,951	8,069	35	0.75	35
1987	14,133.57	13,840	14,045	89	0.81	89
1992	1,901.06	1,858	1,885	16	0.76	16
1993	3,125.00	3,054	3,099	26	0.75	26
2004	4,637.50	4,484	4,550	87	0.73	87
2007	15,716.32	15,088	15,311	405	0.76	405
2009	3,641.80	3,480	3,532	110	0.76	110
2012	6,422.35	6,076	6,166	256	0.76	256
	146,839.68	143,546	145,660	1,180		1,180
OTHER						
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
2003	2,176.24	920	934	1,243	30.38	41
2007	3,395.50	1,221	1,239	2,157	32.51	66
2012	43,436.76	11,858	12,033	31,404	35.29	890
2013	79,600.61	20,282	20,581	59,020	35.83	1,647
2014	1,075.59	254	258	818	36.37	22
2020	10,074.94	1,206	1,224	8,851	38.61	229
2021	68,964.77	6,800	6,900	62,065	38.85	1,598
2022	8,237.57	634	643	7,594	38.95	195
2023	502,442.18	29,493	29,927	472,515	38.74	12,197
2024	758,043.81	26,456	26,846	731,198	38.00	19,242
2025	5,231.44	37	38	5,194	35.46	146
	1,482,679.41	99,161	100,621	1,382,058		36,273
	8,187,993.01	4,205,312	4,221,052	3,966,940		582,938
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.8						7.12

PEOPLES GAS COMPANY LLC

ACCOUNT 391.10 OFFICE FURNITURE AND EQUIPMENT - FURNITURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2006	17,798.10	17,131	17,798			
2007	49,898.90	45,533	49,899			
2008	1,672.84	1,443	1,629	44	2.75	16
2009	1,248.83	1,015	1,145	104	3.75	28
2010	3,965.54	3,024	3,413	553	4.75	116
2011	6,120.39	4,361	4,922	1,198	5.75	208
2012	11,373.26	7,535	8,504	2,869	6.75	425
2013	85,436.40	52,330	59,057	26,379	7.75	3,404
	177,514.26	132,372	146,367	31,147		4,197

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.4 2.36

PEOPLES GAS COMPANY LLC

ACCOUNT 391.20 OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2019	6,450.00	4,031	6,450			
2020	6,996.39	3,673	25,198	18,202-		
	13,446.39	7,704	31,648	18,202-		
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					0.0	0.00

PEOPLES GAS COMPANY LLC

ACCOUNT 392.20 TRANSPORTATION EQUIPMENT - LIGHT TRUCKS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 9-L3						
NET SALVAGE PERCENT.. 0						
2014	47,113.43	40,018	36,697	10,416	1.99	5,234
2015	10,307.58	8,516	7,809	2,499	2.16	1,157
2016	38,020.21	30,561	28,025	9,995	2.26	4,423
2017	243,914.35	189,351	173,636	70,278	2.38	29,529
2018	397,084.11	292,770	268,471	128,613	2.58	49,850
2019	393,791.79	268,015	245,771	148,021	2.93	50,519
2020	822,291.63	495,595	454,463	367,829	3.46	106,309
2021	1,982,650.63	1,004,411	921,050	1,061,601	4.14	256,425
2022	595,224.59	236,780	217,128	378,097	4.92	76,849
2023	528,738.79	158,939	145,748	382,991	5.62	68,148
2024	2,171,932.81	375,310	344,161	1,827,772	6.58	277,777
2025	503,557.59	15,862	14,546	489,012	7.69	63,591
	7,734,627.51	3,116,128	2,857,505	4,877,123		989,811

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.9 12.80

PEOPLES GAS COMPANY LLC

ACCOUNT 392.30 TRANSPORTATION EQUIPMENT - HEAVY TRUCKS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 14-S1						
NET SALVAGE PERCENT.. 0						
2016	203,036.42	125,639	49,743	153,293	5.70	26,894
2017	308,033.76	176,873	70,028	238,006	6.12	38,890
2018	671,467.90	353,461	139,943	531,525	6.52	81,522
2019	311,558.64	147,211	58,284	253,275	6.98	36,286
2020	784,743.17	323,785	128,193	656,550	7.47	87,892
2021	22,230.08	7,718	3,056	19,174	7.99	2,400
2023	134,582.03	28,289	11,200	123,382	9.08	13,588
2024	52,144.77	6,409	2,538	49,607	9.81	5,057
2025	25,598.57	584	231	25,368	10.74	2,362
	2,513,395.34	1,169,969	463,216	2,050,179		294,891

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.0 11.73

PEOPLES GAS COMPANY LLC

ACCOUNT 393.00 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2002	853.30	794	736	117	1.75	67
2003	60.31	54	50	10	2.75	4
2005	3,420.75	2,771	2,570	851	4.75	179
2006	1,008.00	776	720	288	5.75	50
2007	54.28	40	37	17	6.75	3
2010	41.71	25	23	19	9.75	2
2011	456.77	260	241	216	10.75	20
	5,895.12	4,720	4,377	1,518		325
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					4.7	5.51

PEOPLES GAS COMPANY LLC

ACCOUNT 394.20 TOOLS, SHOP AND GARAGE EQUIPMENT - TOOLS AND WORK EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2011	223,895.39	212,701	208,003	15,892	0.75	15,892
2012	234,880.05	207,477	202,894	31,986	1.75	18,278
2013	191,038.12	156,015	152,569	38,469	2.75	13,989
2014	54,908.82	41,182	40,272	14,637	3.75	3,903
2015	27,411.96	18,731	18,317	9,095	4.75	1,915
2016	162,142.32	99,988	97,779	64,363	5.75	11,194
2017	1,119.95	616	602	518	6.75	77
2018	30,205.91	14,599	14,277	15,929	7.75	2,055
2019	27,535.56	11,473	11,220	16,316	8.75	1,865
2020	54,112.57	18,939	18,521	35,592	9.75	3,650
2021	186,955.14	52,970	51,800	135,155	10.75	12,573
2022	391,734.22	84,877	83,001	308,733	11.75	26,275
2023	6,209.77	1,000	978	5,232	12.58	416
	1,592,149.78	920,568	900,233	691,917		112,082

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.2 7.04

PEOPLES GAS COMPANY LLC

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 18-L2.5						
NET SALVAGE PERCENT.. 0						
1961	425.47	425	425			
1962	179.20	179	179			
1975	144.38	142	127	17	0.24	17
1985	5,556.99	5,324	4,778	779	1.76	443
1987	3,745.97	3,553	3,189	557	2.07	269
1988	986.22	929	834	152	2.28	67
1989	10,582.75	9,936	8,917	1,666	2.36	706
1991	594.47	552	495	99	2.65	37
1992	74,241.67	68,377	61,363	12,879	2.85	4,519
1993	30,933.85	28,332	25,426	5,508	2.96	1,861
1994	67,117.09	61,036	54,775	12,342	3.11	3,968
1999	1,150.50	1,000	897	254	3.96	64
2000	60,238.38	51,715	46,410	13,828	4.16	3,324
2001	66,049.63	55,898	50,164	15,886	4.40	3,610
2002	10,057.66	8,395	7,534	2,524	4.60	549
2003	62,232.67	51,373	46,104	16,129	4.70	3,432
2007	15,529.82	12,045	10,810	4,720	5.28	894
2008	41,621.67	31,732	28,477	13,145	5.38	2,443
2013	179,619.24	118,154	106,035	73,584	6.37	11,552
2014	262,175.71	163,703	146,911	115,265	6.77	17,026
2015	171,441.98	100,345	90,052	81,390	7.26	11,211
2016	81,869.58	44,455	39,895	41,975	7.79	5,388
2017	51,279.60	25,424	22,816	28,464	8.39	3,393
2018	125,879.35	56,041	50,293	75,586	9.04	8,361
2019	33,278.59	12,999	11,666	21,613	9.75	2,217
2020	326,087.92	108,718	97,566	228,522	10.50	21,764
2021	210,149.92	57,602	51,694	158,456	11.25	14,085
2022	705,490.76	149,705	134,349	571,142	12.06	47,358
2023	39,484.71	6,278	5,634	33,851	12.78	2,649
2024	433,726.00	39,556	35,499	398,227	13.71	29,046
2025	127,207.23	2,112	1,895	125,312	14.77	8,484
	3,199,078.98	1,276,035	1,145,209	2,053,870		208,737

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.8 6.52

PEOPLES GAS COMPANY LLC

ACCOUNT 397.00 GENERATION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2024	231,798.68	21,249	22,303	209,496	13.62	15,381
2025	162,111.46	2,702	2,836	159,275	14.75	10,798
	393,910.14	23,951	25,139	368,771		26,179

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.1 6.65

PEOPLES GAS COMPANY LLC

ACCOUNT 397.10 COMMUNICATION EQUIPMENT - STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2007	11,500.91	8,396	7,486	4,015	6.75	595
2011	13,689.76	7,803	6,958	6,732	10.75	626
2012	3,464.31	1,836	1,637	1,827	11.75	155
2024	420,982.02	23,154	20,646	400,336	23.62	16,949
2025	270,109.05	2,701	2,408	267,701	24.75	10,816
	719,746.05	43,890	39,135	680,611		29,141

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.4 4.05

PEOPLES GAS COMPANY LLC

ACCOUNT 397.20 COMMUNICATION EQUIPMENT - RADIO

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2011	33,696.54	32,012	30,486	3,211	0.75	3,211
2012	3,137.18	2,771	2,639	498	1.75	285
2013	572,369.14	467,437	445,158	127,211	2.75	46,259
2014	327,931.95	245,949	234,226	93,706	3.75	24,988
2015	91,070.54	62,231	59,265	31,806	4.75	6,696
2016	108,857.64	67,129	63,929	44,929	5.75	7,814
2018	25,970.74	12,552	11,954	14,017	7.75	1,809
2019	105,310.54	43,880	41,789	63,522	8.75	7,260
2020	74,963.75	26,237	24,986	49,978	9.75	5,126
2021	70,789.04	20,057	19,101	51,688	10.75	4,808
	1,414,097.06	980,255	933,533	480,564		108,256

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.4 7.66

PART III. EXPERIENCED AND ESTIMATED NET SALVAGE

PEOPLES GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2020 TRANSACTION YEAR				
303.00	776,851.10			
351.00	798.05			
353.00	2,549.00			
355.00	12,378.93			
367.00	37,945.19	99,744.00		99,744.00-
368.00		31,881.00		31,881.00-
369.00	3,021.94			
375.02	3,080.25			
376.00	415,086.13	342,321.00	8,316.00	334,005.00-
378.00	11,443.00	4,249.00		4,249.00-
380.00	58,211.24	424,224.00		424,224.00-
382.10	5,055.86	9,887.00		9,887.00-
390.00	26,280.74			
391.01	9,316.58			
391.02	313,487.14			
391.03	14,189.00			
392.00	961,032.06		139,251.00	139,251.00
394.20	501,795.32			
396.00	43,163.20			
397.20	20,196.94			
	3,215,881.67	912,306.00	147,567.00	764,739.00-
2021 TRANSACTION YEAR				
303.00	379,965.27			
352.00		1,982.00		1,982.00-
354.00	1,857.17			
367.00	14,445.28	215,555.00		215,555.00-
369.00	33,570.20			
375.02	7,739.40			
376.00	1,030,456.79	241,723.00	5,566.00	236,157.00-
378.00	54,750.28	56,011.00		56,011.00-
380.00		189,733.00		189,733.00-
381.00	414,953.07			
382.10	3,974.15	11,196.00		11,196.00-
390.00	169,838.92			
391.01	9,927.25			
391.02	14,270.00			
391.03	450.32			
392.00	354,682.91		103,133.00	103,133.00
393.00	14,500.38			
394.20	282,035.93			
396.00	108,773.95			
397.20	369,560.42			
	3,265,751.69	716,200.00	108,699.00	607,501.00-

PEOPLES GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2022 TRANSACTION YEAR				
303.00	1,528,279.18			
352.00	93,477.72			
367.00	22,240.16		6,938.75	6,938.75
369.00	365.05			
375.02	2,349.51			
376.00	429,518.47	46,553.14	10,878.77	35,674.37-
378.00	173,173.04			
380.00	76,596.80			
381.00	342,674.32			
382.10	4,291.40	1,495.00		1,495.00-
391.01	8,457.12			
391.02	9,207.66			
392.00	1,735,740.32		5,643.60	5,643.60
393.00	10,559.15			
394.20	193,490.71			
396.00	260,936.19			
397.20	604,496.46			
	5,495,853.26	48,048.14	23,461.12	24,587.02-
2023 TRANSACTION YEAR				
303.00	5,857,983.70			
351.00	97.31			
352.00	691.43	2,123.00		2,123.00-
353.00	747.57	897.00		897.00-
354.00	515.09		464.00	464.00
355.00	1,453.38			
366.20	37.39			
367.00	16,970.96	48,640.00	690.00	47,950.00-
368.00	9,278.76	6,588.00		6,588.00-
369.00	5,993.04			
375.00	1,831.85			
376.00	303,075.50	391,641.86	2,093.00	389,548.86-
378.00	42,789.20	2,519.00		2,519.00-
380.00	166,560.83	58,627.62		58,627.62-
381.00	127,465.64			
382.10	1,552.25	3,583.84		3,583.84-
390.00	69,447.34			
392.00	1,265,221.41		35,512.00	35,512.00
396.00	504,626.04	663.00		663.00-
397.20	41,665.95			
	8,418,004.64	515,283.32	38,759.00	476,524.32-

PEOPLES GAS COMPANY LLC

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2024 TRANSACTION YEAR				
303.00	112,689.58			
351.00	291.90			
352.00	2,777.55	13,927.00		13,927.00-
353.00	2,373.28	3,437.00		3,437.00-
354.00	1,545.16		1,506.00	1,506.00
355.00	4,409.27			
366.20	112.09			
367.00	26,223.38	164,617.00	2,335.00	162,282.00-
368.00	29,889.34	26,227.00		26,227.00-
369.00	12,699.13			
375.00	4,957.16			
376.00	642,846.44	328,114.00	7,292.00	320,822.00-
378.00	35,904.20	10,501.00		10,501.00-
380.00	37,912.29	208,777.00		208,777.00-
381.00	388,427.51			
382.10	4,655.08	7,811.00		7,811.00-
390.00	100,310.95			
391.10	7,441.49			
391.20	57,630.94			
392.00	1,061,616.17		112,582.00	112,582.00
394.20	443,344.17			
396.00	68,788.86	2,400.00		2,400.00-
397.20	266,230.92			
	3,313,076.86	765,811.00	123,715.00	642,096.00-
TOTAL	23,708,568.12	2,957,648.46	442,201.12	2,515,447.34-

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Peoples Natural Gas Company LLC

Docket No. R-2023-3044549

Volume 11

Direct Testimony and Exhibits of Ralph Zarumba
Statement No. 15

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY	:	
COMMISSION	:	
	:	
v.	:	Docket No. R-2023-3044549
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED DIRECT TESTIMONY OF

RALPH N. ZARUMBA,

BLACK & VEATCH MANAGEMENT CONSULTING, LLC

DATE SERVED: December 29, 2023

DATE ADMITTED: _____ Peoples Statement No. 15

I. Introduction and Qualifications

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Ralph Zarumba. My business address is 736 Central Street, Evanston, Illinois.

Q. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?

A. I am a subcontractor to Black & Veatch Management Consulting, LLC ("Black & Veatch"). Prior to my retirement, I was a Managing Director at Black & Veatch leading the Natural Gas and Electricity Regulatory Practice.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

A. I received a Bachelor of Science in Economics from Illinois State University in Normal, IL, and a Master of Arts in Economics from DePaul University in Chicago, IL.

Q. PLEASE SUMMARIZE YOUR QUALIFICATIONS.

A. I have over thirty-eight (38) years of experience in the energy industry, primarily focusing on the fields of regulatory and economic consulting for regulated industries. My work experience, presentation of expert testimony, and other industry-related activities are detailed in Appendix A.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PENNSYLVANIA PUBLIC UTILITIES COMMISSION ("PPUC") OR ANY OTHER REGULATORY AUTHORITY?

A. I have not presented testimony before the PPUC. However, I have presented testimony before several other regulatory authorities over the past 35 years. My expert testimony has dealt with various matters involving regulatory industries, including cost-of-service and pricing. A listing of my appearances in proceedings and expert reports is included in Appendix A.

Q. HAVE YOU PREVIOUSLY PREPARED COST-OF SERVICE-STUDIES AND RATE DESIGNS?

A. Over my utility consulting career, I have conducted numerous allocated and marginal cost-of-service studies for gas and electric utilities. I have also prepared or reviewed rate structures and pricing designs for numerous gas and electric utilities operating in North America and abroad.

Q. HAVE YOU TAUGHT AND LECTURED ON REGULATORY TOPICS IN ACADEMIC SETTINGS?

A. Yes. I have taught and lectured on cost-of-service and pricing at Michigan State University and the University of Missouri. I have also taught regulatory principles in various seminars

on behalf of the United States Agency of International Development (USAID) in various developing countries.

Q. ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

A. I am appearing on behalf of Peoples Natural Gas ("Peoples" or "the Company"). Specifically, the Company requested that I conducted a cost-of-service studies to determine the embedded costs of serving its customers and to develop its class revenue and rate design proposals.

I. Overview of Testimony

Q. PLEASE PROVIDE AN OVERVIEW OF YOUR TESTIMONY.

A. My testimony will discuss the cost-of-service and rate design issues in this proceeding. The specific issues which I will address will include:

- Testimony supporting the cost-of-service studies for the Peoples Natural Gas ("PNG") division, Peoples Gas ("PG") division and the combined Peoples entity;
- Testimony supporting the proposed rate designs for the combined Peoples entity;
- Support for several new rate designs proposed by the Company;
- Testimony supporting the estimated number of Heating Degree Days ("HDD") supporting the Company's revenue forecast; and
- Testimony supporting the proposed Weather Normalization Mechanism.

Q. PLEASE LIST THE FILING REQUIREMENTS THAT YOU ARE SPONSORING.

A. Peoples Exhibit RNZ-1 provides a listing of the filing requirements which I am responsible for in this proceeding.

Q. ARE YOU SPONSORING ANY OTHER EXHIBITS IN YOUR TESTIMONY?

A. Yes. I am sponsoring the following exhibits related to the Company's cost-of-service studies, class revenue requirement and rate design proposals:

- Peoples Exhibit RNZ-2: Minimum Customer Cost Analysis;
- Peoples Exhibit RNZ-3: Derivation of the Total Gathering Cost-of-Service;
- Peoples Exhibit RNZ-4: Proposed Class Revenue Apportionment;
- Peoples Exhibit RNZ-5: Proposed Rates; and
- Peoples Exhibit RNZ-6: Residential Monthly Bill Comparison.

A. Peoples Proposed Rate Classes

Q. PLEASE DESCRIBE THE REQUESTED COMBINATION OF TARIFFS THE COMPANY IS REQUESTING IN THIS PROCEEDING.

A. In this proceeding, the Company wishes to combine Peoples Natural Gas LLC and Peoples Natural Gas divisions into a single operating entity with a unified set of rates and tariffs. Currently, the two companies operate under separate tariffs. My exhibits detail the cost-of-service for the two separate entities and a rate design for the combined utility.

II. Theory of Allocated Cost-of-service Studies

Q. PLEASE STATE THE PURPOSE OF A COST-OF-SERVICE STUDY.

A. An allocated (sometimes referred to as embedded) cost-of-service study is an analysis of costs that assigns to each customer or rate class its proportionate share of the Company's total cost-of-service (i.e., the Company's total revenue requirement). The results of these studies can be utilized to determine the relative cost-of-service for each class and to help determine the individual class revenue requirements to be used in developing prospective rates for each class.

Q. ARE THERE CERTAIN GUIDING PRINCIPLES THAT SHOULD BE FOLLOWED WHEN PERFORMING A CLASS COST-OF-SERVICE STUDY?

A. Yes. First, the fundamental and underlying philosophy applicable to all cost studies pertains to the concept of cost causation for purposes of allocating costs to customer groups. Cost causation addresses the question, "Which customer or group of customers causes the utility to incur particular types of costs?" To answer this question, it is necessary to establish a link between a utility's customers and the costs incurred by the utility in serving those customers.

The essential element in selecting and developing a reasonable cost-of-service study allocation methodology is the establishment of relationships between customer requirements, load profiles, and usage characteristics on the one hand and the costs incurred by the Company in serving those requirements on the other hand. For example, providing

a customer with gas service during peak periods can have much different cost implications for the utility than service to a customer who requires off-peak gas service.

A natural gas distribution system is designed to meet three primary objectives:

- Extend distribution services to all customers entitled to be attached to the distribution system;
- Meet the aggregate peak design day capacity requirements of all customers entitled to service on the peak day; and
- Deliver volumes of natural gas to those customers either on a sales or transportation basis. There is generally a direct link between the manner in which costs are defined and their subsequent allocation.

Customer-related costs are incurred to attach a customer to the distribution system, meter any gas usage, and maintain the customer's account. Customer costs are a function of the number of customers served and continue to be incurred whether or not the customer consumes any gas. They may include capital costs associated with minimum size distribution mains, services, meters, regulators and customer service and accounting expenses.

Demand or capacity related costs are associated with plant that is designed, installed, and operated to meet maximum hourly or daily gas flow requirements, such as distribution mains, or more localized distribution facilities which are designed to satisfy individual customer maximum demands. Gas supply-related contracts also have a capacity-related component of cost relative to the Company's requirements for serving daily peak demands and the winter peaking season.

Commodity-related costs are those costs which vary with the throughput sold to or transported for customers. Costs related to gas supply are classified as commodity related to the extent they vary with the amount of gas volumes purchased by the Company for its sales service customers.

III. Peoples Cost-of-Service Studies

Q. PLEASE DESCRIBE THE PEOPLES COST-OF-SERVICE STUDIES.

A. The Peoples cost-of-service study is composed of three (3) separate studies:

- A study for Peoples Natural Gas Division;
- A study for Peoples Gas Division; and

A study of the combined divisions.

It should be noted that that the cost-of-service studies for Peoples Gas and Peoples Natural Gas, the legacy divisions, only captured the revenue deficiencies of those organizations.

Q. WHY WERE MULTIPLE STUDIES PERFORMED?

A. Given that the Company is proposing to combine the tariffs of multiple divisions in this proceeding, I felt that performing cost-of-service studies on the separate divisions and the combined entity would provide valuable information regarding the combination of the rates of the two companies and if changes in the rates were justified.

Q. ARE CHANGES TO THE OVERALL RATE DESIGNS JUSTIFIED BASED UPON THE COST-OF-SERVICE STUDIES?

A. The following changes to the rate designs are proposed:

- Combining the PG and PNG rates into a single rate design;
- The transition rates which were implemented in the previous case are no longer required and are being eliminated; and
- A new rate schedule is proposed splitting LGS into multiple categories based upon use of the transmission and distribution system.

Q. WHAT WAS THE SOURCE OF THE COST DATA ANALYZED IN PEOPLES' COST-OF-SERVICE STUDIES?

A. All cost-of-service data has been extracted from the Company's total cost-of-service (i.e., total revenue requirement) contained in this filing. Where more detailed information was required to perform various subsidiary analyses related to certain plant and expense elements, the data were derived from the historical books and records of the Company.

Q. WHAT CLASSES OF SERVICE WERE INCLUDED IN THE COMPANY'S COST-OF-SERVICE STUDIES?

A. The customer classes reflected in Peoples' cost-of-service studies are Residential Service (RS), Small General Service (SGS), Medium General Service (MGS), and Large General Service (LGS).

Q. DO THESE RATE CLASSES INCLUDE BOTH SALES AND TRANSPORTATION SERVICE CUSTOMERS?

A. Yes. These customer classes are configured as combined classes that include both sales service and transportation service customers. Therefore, the RS class includes residential customers served under Peoples' Rates RS, the SGS class includes small commercial and industrial customers served under Peoples' Rates SGS, GSS and GS-T, the MGS class includes medium-sized commercial and industrial customers served under Peoples' Rates MGS and GSL and GS-T, and the LGS class includes large commercial and industrial customers served under Peoples' Rates LGS, GSL, GST and GS-T. A gas utility's class cost-of-service study should recognize that sales service and transportation service customers both require delivery service to physically move gas on its gas system. For example, it costs a gas utility the same amount to have a service line and meter in place at a customer's premises, irrespective of whether the gas moving through the service line and meter is customer-owned gas transported by the utility, or gas it owns that is sold to the customer. Similarly, the volume of gas used by a customer during a peak period establishes the customer's contribution to the system peak. A gas utility's pipeline system does not need to be larger or smaller if the customer, instead of the utility, owns the gas as it moves through its gas system. Therefore, the allocation of distribution costs for sales service and transportation service for the same customer should be based on allocation factors that include both sales and transportation load characteristics.

Q. PLEASE EXPLAIN WHY THE COST-OF-SERVICE STUDIES YOU PREPARED DO NOT INCLUDE A RATE CLASS FOR GATHERING SERVICE.

A. Peoples' cost-of-service studies do not include a separate rate class for gathering service since Peoples is proposing that its gathering service rates be set on a negotiated basis using value of service considerations rather than cost-of-service as a guide. As such, a cost-of-service study for Peoples which includes a gathering service rate class would provide no value in determining the revenue and rate levels for gathering service to local producers that are reflective of the value-based considerations associated with producers' access to Peoples' gathering system.

Nevertheless, as I explain later in this testimony. I have determined the cost-of-service associated with Peoples' gathering system and compared that to the contributions by producers under present and proposed charges for informational purposes.

Q. WHAT STEPS DID YOU FOLLOW TO PERFORM THE COMPANY'S COST-OF-SERVICE STUDIES?

A. I followed three broad steps to perform the cost-of-service studies generally accepted in natural gas and electricity ratemaking in preparing allocated cost-of-service studies:

- functionalization;
- classification; and
- allocation.

Q. WHAT FUNCTIONS DOES THE COMPANY PROVIDE TO CUSTOMERS?

A. For Peoples, the functional cost categories associated with gas service include:

- Gas Supply;
- Gathering;
- Storage;
- Transmission; and
- Distribution.

I should note that the gas supply function simply reflects Peoples' gas supply costs and revenues presented and reviewed within Peoples' annual 1307(f) process. Since that function is addressed in a separate proceeding, we have excluded it from the cost-of-service study.

Q. WHAT COST CLASSIFICATIONS WERE ADOPTED FOR THE COST-OF-SERVICE STUDY?

A. The three cost classifications used in this study are:

- customer;
- demand or capacity; and
- commodity or energy.

Q. HOW WERE COSTS ALLOCATED?

A. Costs typically are allocated based on customer, demand, commodity, or revenue-related allocation factors.

Q. HOW ARE THE COST AND UTILITY RELATIONSHIPS YOU PREVIOUSLY DISCUSSED ESTABLISHED?

A. To establish these relationships, the cost analyst must analyze the Company's gas system design and operations, accounting records, and system and customer load data (e.g., annual and peak period gas consumption levels). From the results of those analyses, methods of direct assignment and "common" cost allocation methodologies can be chosen for all the utility's plant and expense elements.

Q. AS PART OF YOUR WORK, DID YOU REVIEW AND ANALYZE THE COMPANY'S GAS SYSTEM DESIGN AND OPERATIONS?

A. Yes. Since it is widely recognized that a utility's plant in service components provide the most direct link to a utility's gas service requirements, I initially focused my efforts on better understanding the nature and operation of the Company's gas system. This effort included review of the Company's gathering, storage, transmission, and distribution systems and the types and levels of costs incurred in connecting various sized customers to its distribution system.

Q. PLEASE DESCRIBE THE MOST IMPORTANT CONSIDERATIONS YOU RELIED UPON IN DETERMINING THE COST ALLOCATIONS METHODOLOGIES THAT WERE USED TO PERFORM THE COMPANY'S CLASS COST-OF-SERVICE STUDY?

A. As stated above, it is important to recognize the cost causative characteristics of the cost elements which are allocated within any class cost-of-service study. Additionally, the cost analyst needs to develop data in a form that is compatible with and supportive of rate design proposals. Of further concern is the availability of data for use in developing alternative cost allocation factors. In evaluating any cost allocation methodology, consideration should be given to:

- Recognition of cost causality;
- Results which are representative of the true costs of serving different types of customers;
- A sound rationale or theoretical basis;
- Stability of results over time;
- Logical consistency and completeness; and
- Ease of implementation.

B. Functionalization

Q. PLEASE DESCRIBE THE FUNCTIONALIZATION PROCESS ADOPTED IN YOUR COST-OF-SERVICE ANALYSIS.

A. The Peoples COS model functionalizes costs into five components. These components are:

- Gas Supply;
- Gathering;
- Storage;

- Transmission, and
- Distribution.

Each of the FERC account costs and revenues are either directly assigned to one of these functions or allocated to multiple functions. General Plant and Intangible plant are examples of types of costs that are allocated to multiple functions.

C. Classification

a. Classification of Distribution Mains

Q. WHAT APPROACH DID YOU ADOPT TO CLASSIFY DISTRIBUTION MAINS BETWEEN DEMAND AND CUSTOMER RELATED FACILITIES?

A. I used the Minimum System Approach. The Minimum System approach, which is the method utilized in the Company's previous cost studies, is intended to reflect the engineering considerations associated with installing distribution mains to serve gas customers. That is, the method utilizes actual installed investment units to determine the minimum distribution system rather than a statistical analysis based upon the investment characteristics of the entire distribution system.

Q. DO PROFESSIONAL REFERENCES EXIST WHICH SUPPORT THE USE OF THE MINIMUM SYSTEM APPROACHES?

A. Yes. Two of the more commonly accepted literary references relied upon when preparing embedded cost-of-service studies, (1) Electric Utility Cost Allocation Manual, by John J.

Doran et al, National Association of Regulatory Utility[1] (NARUC), and (2) Gas Rate Fundamentals, American Gas Association[2], both describe minimum system concepts and methods as an appropriate technique for determining the customer component of utility distribution facilities.

Q. WHAT SIZE DISTRIBUTION MAIN WAS ADOPTED IN YOUR MINIMUM SYSTEM APPROACH?

A. I adopted a 2-inch diameter distribution main in my minimum system study.

Q. DID YOU MAKE ANY ADJUSTMENT TO THE RESULTING CUSTOMER COST COMPONENT FOR DISTRIBUTION MAINS BASED ON THE USE OF THE MINIMUM SYSTEM APPROACH?

A. Yes. To recognize that the minimum sized distribution main (a 2-inch diameter main) also has some level of capacity carrying capability, an adjustment was made to the level of the customer cost component to exclude a portion of the costs of distribution mains from the customer cost classification category. Those excluded costs were classified as capacity related and treated in the same manner as other capacity-related costs for cost allocation purposes.

[1] https://pubs.naruc.org/pub/53A3986F-2354-D714-51BD-23412BCFEDFD

[2] https://webstore.ansi.org/preview-pages/AGA/preview_F00502.pdf

D. Allocation

a. Allocation of Demand Related Costs

Q. PLEASE DESCRIBE THE KEY ISSUES RELATED TO THE ALLOCATION DEMAND-RELATED COSTS WITHIN A GAS UTILITY'S COST-OF-SERVICE STUDY?

A. A complex part of the allocation process is the allocation of demand-related costs. Several approaches have been used to develop allocation factors for the demand components of costs. In fact, it is not unusual for more than one demand cost allocation methodology to be used in a cost-of-service study. Despite numerous methods to allocate demand costs, it is fair to say that three basic methodologies form the foundation for the allocation process. These three methodologies are:

- Peak Demand Allocations;
- Average and Excess Demand Allocations; and
- Non-Coincident Demand Allocations.

These demand allocation methodologies are discussed below.

Peak Demand Allocation is premised on the notion that investment in capacity is determined by the Company's peak load or peak loads. Under this methodology, demand-related costs are allocated to each customer class or group in proportion to the demand coincident with the system peak or peaks of that class or group. The Peak Demand Allocation process might focus on a single peak, such as the highest daily demand occurring during the test period. Other variations might include the average of several cold

days, or the expected contribution to the system peak on a design day. In some instances, it may be appropriate to determine the peak demand responsibility on an hourly basis rather than a daily basis where hourly requirements dictate a company's investment in distribution facilities.

The Average and Excess Demand Allocation methodology, also referred to as the "used and unused capacity" method, allocates demand related costs to the classes of service on the basis of system and class load factor characteristics. Specifically, the portion of utility facilities and related expenses required to service the average load is allocated on the basis of each class' average demand. The portion of these facilities is derived by multiplying the total demand related costs by the utility's system load factor. The remaining demand related costs are allocated to the classes based on each class' excess or unused demand (i.e., total class non-coincident demand minus average demand).

A more simplistic version of this methodology is the Peak and Average methodology. This cost methodology gives equivalent weight to peak demands and average demands. As is the case with the Average and Excess method, it has the effect of allocating a portion of the utility's demand-related costs on a commodity-related basis. The Non-Coincident Demand Allocation methodology recognizes that certain facilities, in particular distribution facilities, are designed to serve local peaks which may or may not be coincident with the system peak loads. Using this methodology, demand costs are allocated on the basis of each group's (rate class), maximum demand, irrespective of the time of the system peak.

Q. HOW HAVE DEMAND-RELATED COSTS BEEN ALLOCATED IN THE COMPANY'S COST-OF-SERVICE STUDY?

A. Peoples' cost-of-service studies use either a coincident peak demand or peak and average allocation factor, both derived on a design day basis, for allocating its capacity related costs to the various customer classes. Capacity costs for the Company consist of the capacity costs associated with city-gate facilities and the capacity portion of the Company's distribution system.

Q. WHY DOESN'T AVERAGE DEMAND (I.E., ANNUAL GAS THROUGHPUT VOLUMES DIVIDED BY 365) INFLUENCE THE OCCURRENCE OF DEMAND-RELATED COSTS?

A. By sizing plant investment for peak period demands, the gas utility can satisfy its service obligation throughout the year. If a gas utility's system was sized and installed to accommodate average gas demands, it would be unable to accommodate system peak demands. From a gas engineering perspective, a peak demand design criterion is always utilized when designing a gas distribution system to accommodate the gas demand requirements of the customers served by that system. As such, cost causation with respect to demand related costs is unrelated to average demand characteristics.

Additionally, use of average demand characteristics for the allocation of demand-related costs penalizes customers that exhibit efficient gas consumption characteristics (i.e., customers with high load factors) and encourages the inefficient use of the gas utility's system by customers with low load factors. Clearly, under-utilization of a gas utility's system is a result that it can hardly encourage, recognizing that higher system utilization will result in lower unit costs to all customers.

For the above-stated reasons, it is inappropriate to rely upon only a commodity-based allocation factor, as derived from annual gas throughput volume, for purposes of allocating demand related costs to a gas utility.

Q. WHY DID YOU CHOOSE TO UTILIZE THE COMPANY'S DESIGN DAY DEMAND RATHER THAN ITS ACTUAL PEAK DAY DEMAND AS A DEMAND ALLOCATOR?

A. Use of a gas utility's design day demand is superior to using its actual peak day demand, or a historical average of multiple peak day demands over time, for purposes of deriving demand allocation factors for a number of reasons. These include:

- A gas utility's system is designed, and consequently costs are incurred, to meet design day demand. In contrast, costs are not incurred on the basis of an average of peak demands;
- Design day demand is more consistent with the level of change in customer demands for gas during peak periods and is more closely related to the change in fixed plant investment over time; and
- Design day demand provides more stable cost allocation results over time.

Q. PLEASE EXPLAIN WHY THE COMPANY'S DESIGN DAY DEMAND BEST REFLECTS THE FACTORS THAT ACTUALLY CAUSE COSTS TO BE INCURRED?

A. The Company must consistently rely upon design day demand in the acquisition of its upstream gas supply-related resources and in the design of its own distribution facilities required to service its firm service customers. And perhaps more importantly, design day demand directly measures the gas demand requirements of the Company's firm service customers, which create the need for the Company to acquire resources, build facilities, and incur millions of dollars in fixed costs on an ongoing basis. In my opinion, there is no better way to capture the true cost causative factors of the Company's operations than to utilize its design peak day requirements within its cost-of-service study.

Q. WHAT LEVEL OF FIRM DEMAND REQUIREMENTS MUST THE COMPANY CONSIDER IN DESIGNING ITS GAS DISTRIBUTION SYSTEM TO DELIVER GAS UNDER ALL CIRCUMSTANCES?

A. Peoples designs its system, and has sufficient capacity, to serve the delivery or transportation requirements of all its sales and transportation service customers. Therefore, the demands of all customers will be treated on an equivalent basis for purposes of cost allocation based on peak demands.

Q. WHY IS THE USE OF DESIGN DAY DEMAND CLOSELY RELATED TO THE CHANGE IN THE COMPANY'S FIXED PLANT INVESTMENT OVER TIME?

A. The change in its design day demand serves as the primary input into the Company's ongoing decisions to install distribution system facilities to meet firm customer demands for gas delivery service.

Regarding plant investment for meeting growth, the construction cost estimates associated with connecting a new customer to the Company's gas distribution system are always based upon the capacity level necessary to meet each customer's peak hour demands. An appropriate proxy for the peak hour demands used in distribution cost estimating is the customer's design day demand.

Q. PLEASE EXPLAIN WHY THE USE OF DESIGN DAY DEMAND PROVIDES MORE STABLE COST ALLOCATION RESULTS OVER TIME?

A. By definition, a gas utility's design day peak is as stable a determinant of planned capacity utilization as you can derive. If it was not a stable demand determinant, the design of a gas utility's system and supply portfolio would tend to vary and make the installation of facilities a much more difficult task. Therefore, use of design day demands provides a more stable basis than any of the other demand allocators available based on either actual peak day demand or the averaging of multiple peak days.

Q. HOW WAS THE INVESTMENT IN DISTRIBUTION MAINS CLASSIFIED AND ALLOCATED IN THE COMPANY'S COST-OF-SERVICE STUDY?

A. It is widely accepted that distribution mains (Account No. 376) are installed to meet both system peak period load requirements and to connect customers to the gas utility's system. Therefore, to ensure that the rate classes that cause the incurrence of this plant investment or expense are charged with its cost, distribution mains should be allocated to the rate classes in proportion to their peak period load requirements and numbers of customers.

There are two cost factors that influence the level of distribution mains facilities installed by a gas utility in expanding its gas distribution system. First, the size of the distribution main (i.e., the diameter of the main) is directly influenced by the sum of the peak period gas demands placed on the gas utility's system by its customers. Secondly, the total installed footage of distribution mains is influenced by the need to expand the distribution system grid to connect new customers to the system. Therefore, to recognize that these two cost factors influence the level of investment in distribution mains, it is appropriate to allocate such investment based on both peak period demands, and the number of customers served by the gas utility.

b. Treatment of the Gathering System Costs

Q. HOW WERE THE COSTS OF THE COMPANY'S GATHERING SYSTEM ALLOCATED IN ITS COST-OF-SERVICE STUDY?

A. Peoples' gathering system is used to transport gas supplies delivered to its gas distribution system for its system supply and its end-use customers from local production facilities located within its service area. The plant and associated expenses for Peoples' gathering system were allocated to its classes of service based on the percentage of annual gas volumes in each class supplied by Pennsylvania gas producers that moved through the Company's gathering system. It is important to note that a portion of the costs of Peoples' gathering system allocated to its classes of service was effectively assigned to the local gas producers connected to Peoples' gas system by crediting the revenues proposed to be generated from the gathering services provided by Peoples to the same rate classes that received an allocated portion of Peoples' gathering cost-of-service.

c. Treatment of Storage

Q. HOW WERE THE COSTS OF THE COMPANY'S UNDERGROUND STORAGE FACILITIES ALLOCATED IN ITS COST-OF-SERVICE STUDIES?

A. Peoples currently owns and operates the Dice Storage Field, which has 1,530,000 Mcf of storage capacity and 32,000 Mcf of maximum design day withdrawal capacity. Peoples' underground storage is used to generally support the unplanned daily balancing requirements of its sales and transportation service customers. Based on a five-year historical review of the daily withdrawal activity of this facility, it was determined that gas volumes are primarily withdrawn from this storage facility on most days during the months of November through May. As a result, Peoples' Storage Lines and Storage M&R Equipment were allocated to the rate classes in proportion to the total gas sales and transportation volumes for each class during the six-month period of December through May.

d. Allocation of A&G Costs

Q. HOW WERE ADMINISTRATIVE AND GENERAL EXPENSES ALLOCATED IN THE COMPANY'S COST-OF -SERVICE STUDIES?

A. Peoples' cost-of-service studies allocated these expenses on a specific account-by-account basis rather than on an aggregate basis. Specifically, administrative and general expenses of a utility typically pertain to the following cost categories:

(1) labor;

(2) plant or rate base;

(3) O&M expenses; or

(4) some combination of the above categories.

In the Company's cost-of-service study, each of its administrative and general accounts was related to one or more of these categories. These categories were then used as a basis to establish an appropriate allocation factor for each account. The allocation factors chosen were broad-based to specifically recognize the Company-wide nature of administrative and general expenses.

Specifically, supervision, office supplies, and expenses, administrative expenses transferred (Account Nos. 920, 921 and 922) and employee pensions and benefits (Account No. 926) were allocated using a labor-related allocation factor derived based on all non-A&G labor costs incurred by the Company. Similarly, the plant allocation factors discussed above were derived based on the Company's total plant investment. For example, the total Production. Storage, Transmission, and Distribution plant in service by function were used to allocate property insurance (Account No. 924) and injuries and damages (Account No. 925) to the rate classes.

Outside services (Account No. 923) include support activities provided to Peoples directly by its outside service providers and internal service organizations. These activities relate to various general business functions supporting the Company's gas utility operations. Due to the general nature of these costs and their corporate-wide applicability, the non-gathering costs were allocated to the Company's customer classes using a labor-based

allocation factor reflecting labor-related costs across all of Peoples' non- A&G cost accounts.

Q. HOW WERE TAXES OTHER THAN INCOME TAXES ALLOCATED IN THE COMPANY'S COST-OF-SERVICE STUDY?

A. Peoples' cost-of-service studies allocated these expenses in a manner to reflect the specific cost causative factors associated with the Company's specific tax expense categories. Specifically, these taxes can be cost classified based on the tax assessment method established for each tax category (i.e., property and payroll). As a result, taxes other than income taxes of a utility typically can be grouped into the following categories:

(1) plant;

(2) labor; and

(3) gas supply related.

In the cost-of-service study, each of Peoples' taxes other than income taxes accounts was related to one of the above stated categories with one exception. These categories were then used as a basis to establish an appropriate allocation factor for each tax account. The one exception is for Other General Taxes which consists of emission taxes related to Gathering. These taxes were therefore directly assigned to the Gathering functions.

Q. HOW WERE INCOME TAXES ALLOCATED IN THE COMPANY'S COST-OF-SERVICE STUDIES?

A. Aggregate Income Taxes (income taxes at current rates plus income tax change at proposed rates) were allocated based on rate base.

E. Other Cost-of-Service Study Issues

Q. HOW DID YOU RECOGNIZE THE FACT THAT THE COMPANY OPERATES BOTH LOW AND REGULATED PRESSURE DISTRIBUTION MAINS?

A. This operating condition was recognized in the Company's cost-of-service studies by treating the plant and associated expenses for its low-pressure gas distribution system differently compared to the treatment of the plant and associated expenses for its regulated pressure gas distribution system. The manner in which various sizes of customers rely upon the Company's gas distribution system determined how each portion of Peoples' gas distribution system was allocated to its rate classes. Specifically, the plant and associated expenses for Peoples' regulated pressure distribution mains were assigned to all rate classes, while the plant and associated expenses for its low-pressure distribution mains were assigned only to the Residential Service, Small General Service, and Medium General Service rate classes. This treatment reflects the fact that larger customers (primarily industrial customers) included in the Company's Large General Service rate class do not require Peoples' low pressure distribution mains to receive gas utility service. The nature of their gas loads and higher gas delivery pressure requirements requires that they be served from Peoples' regulated pressure gas distribution system. In fact, because of such gas demand requirements, these customers are not connected to Peoples' low-pressure gas distribution system, nor can they be served indirectly through a back-feeding of gas from such facilities. As a result, the cost causative characteristics of these plant and expense

elements dictate that they should be treated for cost allocation purposes in the manner just described.

Also, as is discussed later in my testimony, the Company has identified a group of customers (i.e., Mainline customers) who do not use the Company's high-pressure distribution network. These customers have been moved into a new tariff class and no high-pressure mains costs have been allocated to this tariff class.

Q. WHY HAVE YOU PERFORMED MULTIPLE STUDIES IN THIS PROCEEDING?

A. By performing cost-of-service studies under various cost allocation methodologies, the boundaries of cost responsibility may be identified. The results can then be used as a tool to guide the Company's revenue allocation and rate design.

Given adequate time and resources, each individual investment and expense could be analyzed to determine how it is used and what created the need for the investments and operating expenses and classified accordingly. Such a detailed cost classification study would, perhaps, be more accurate, but very costly to perform. However, the results of such a detailed and extensive cost-of-service study (assuming that data is available to accomplish it) may not be any more useful for revenue allocation and rate design than the cost-of-service studies filed in this proceeding, particularly when the cost analyst considers: (1) the need to ameliorate customer impacts; (2) the limitations of cost tracking of rates designed for a broad class of customers; and (3) the time and financial constraints in preparing a rate filing. The use of more than one cost allocation methodology attempts

to recognize the level of judgment inherent in performing cost-of-service studies and provides this Commission with a reasonable and useable range of results.

In view of these considerations, and to minimize the potential controversy associated with selecting particular cost allocation methods, I have decided to use two common demand cost allocation methods (the peak method and the peak and average method), with and without a customer component of distribution mains, to determine a range of rate of return values for purposes of evaluating class cost responsibility. I will describe that evaluation later in my testimony.

F. Special Studies

Q. PLEASE DESCRIBE THE SPECIAL STUDIES YOU CONDUCTED FOR PURPOSES OF ALLOCATING OTHER DISTRIBUTION PLANT INVESTMENT.

A. Regarding the Company's major plant accounts, a combination of direct assignments and weighting factors were developed to allocate the following plant accounts:

- Services - Account No. 380;
- Meters - Account No. 381; and
- Industrial Measuring & Regulating Station Equipment - Account No. 385.

The weighting factors reflect any differences in the unit costs that the customer groups cause the Company to incur. For example, the average cost of a meter to serve a Residential Service customer was approximately $198.00, compared to the average cost of a meter to serve a Medium General Service customer of approximately $3,073.00. In addition, the cost of a service line for a residential customer costs less, on a per unit basis, than the cost

of a service line to serve an industrial service customer. The use of weighting factors takes these unit cost differences into account when assigning costs to these two customer classes.

Q. PLEASE DESCRIBE THE METHOD USED TO ALLOCATE RESERVE FOR DEPRECIATION AND DEPRECIATION EXPENSE.

A. These items were allocated on the same basis as their associated plant accounts.

Q. HOW WERE DISTRIBUTION-RELATED OPERATIONS AND MAINTENANCE EXPENSES ALLOCATED IN THE COMPANY'S CLASS COST-OF-SERVICE STUDY?

A. In general, these expenses were allocated on the basis of the cost allocation methods used for the Company's corresponding plant accounts. A utility's operation and maintenance expenses generally are thought to support the utility's corresponding plant-in-service accounts. That is, the existence of the particular plant facilities necessitates the incurrence of cost (i.e., expenses) by the utility to operate and maintain those facilities. As a result, the allocation basis used to allocate a specific plant account will be the same basis as used to allocate the corresponding expense account. For example, Maintenance of Services - Account No. 892, is allocated on the same basis as its investment in Services - Account No. 380. With the Company's detailed analyses supporting its assignment of plant in service components, where feasible, it was deemed appropriate to rely upon those results in allocating related expenses in view of the overall conceptual acceptability of such an approach.

G. Results of the Cost-of-Service Study

Q. PLEASE DISCUSS THE RESULTS OF THE COMPANY'S COST-OF-SERVICE STUDIES.

A. Referring to IV-B-1(E) of Exhibit 11, Schedule 1, the following cost-of-service study results at present rates for the future test year are summarized in the table below:

Method	Total	RES	SGS	MGS	LGS
Return @ Cur. Rates - Demand/Peak and Avg	5.50%	6.20%	3.20%	2.70%	7.10%
Return @ Cur. Rates - Min System/Design Day	5.50%	4.00%	5.10%	10.80%	17.10%

Q. PLEASE DESCRIBE THE CONTENTS OF EXHIBIT RNZ-2.

A. Peoples Exhibit RNZ-2 - Cost Analysis Supporting Customer Charges for All Rate Schedules - presents the components of the customer-classified costs for each of Peoples' customer classes. This information is extracted from the cost-of-service studies which are presented in Exhibit 11, Schedule 1.

Q. HAVE YOU PREPARED A MINIMUM SYSTEM CUSTOMER ANALYSIS THAT RELIES UPON THE COMMISSION'S PAST REGULATORY PREFERENCES AND PRECEDENTS ADDRESSING THIS ISSUE?

A. Yes. While I believe that the Company's customer cost analysis presented in Exhibit 11, Schedule 4 is the most appropriate method to derive a gas utility's customer-related cost-of-service for purposes of setting its monthly customer charges, I do recognize that in the past this Commission has relied, at least in part, on a minimum customer analysis approach

that excludes certain costs that, in my opinion, are also appropriately classified as customer related costs. As a result, I have also prepared a customer cost analysis that was guided by the Commission's decision in the Aqua Pennsylvania Rate Case in Docket R00038805. This cost analysis is presented in Peoples Exhibit RNZ-2. It shows that the level of the monthly customer charge for the Company's Residential Service rate class should be equal to at least $22.15 per month.

Q. HOW CAN THE COST-OF-SERVICE STUDY RESULTS PROVIDE GUIDELINES FOR THE PROPOSED RATE DESIGN?

A. Results of a cost-of-service study provide cost guidelines for use in evaluating class revenue levels and class rate structures. With regard to rate class revenue levels, the rate of return results show that certain rate classes are being charged rates that recover less than their indicated costs of service. Obviously, because this condition exists, rates for other rate classes provide for recovery of more than the indicated costs of serving these other rate classes. By adjusting rates in accordance with the cost study, rate class revenue levels can be brought closer in line with the indicated costs of service, resulting in movement of rate class rates of return toward the system average rate of return and resulting in rates that are more in line with the cost of providing service.

Concerning cost justification of rates within each rate class, the classified costs, as allocated to each class of service in the cost study, provide cost information that can be of assistance in determining the need for changes in the relative levels of demand charges (if they exist), customer and commodity rate block charges.

Q. ARE THE RESULTS OF A UTILITY'S COST-OF-SERVICE STUDY ALWAYS RELEVANT FOR ALL TYPES OF SERVICES?

A. No. This situation applies to Peoples' competitively situated customers, where rates are based on their competitive characteristics. Competitive customers should be established at a price level where they are recovering in excess of out-of-pocket costs and therefore reducing the overall requirement reducing costs for all customers. For these customers, the price the customer is willing to pay for gas delivery service relative to available alternatives has much more influence on the relative profitability (i.e., rate of return on net rate base) than cost causation does, as measured by a gas utility's cost-of-service study. This view is shared by NARUC in its Gas Rate Design Manual, where it states that "[s]etting rates based on value of service bears little relationship to setting them based on cost-of-service. When using value of service principles, we normally look not to the cost of the utility providing the service, but rather to the cost of alternatives available to the customer." Therefore, the guidelines I discussed above are most useful when evaluating the costs to serve customers in the Company's RS, SGS and MGS rate classes, and less useful when evaluating its LGS rate class which includes most of the Company's competitively situated customers who are priced on a negotiated (i.e., value of service) basis. In addition, as I pointed out earlier in my testimony, cost-of-service study results for Peoples' gathering service to local gas producers (other than the derivation of Peoples' total functionalized cost of gathering) do not provide the sole basis for adjustments to the current level of rates for this service.

Q. PLEASE DESCRIBE HOW THE UNIT COST ANALYSIS PRESENTED IN EXHIBIT 11 WAS PREPARED.

A. The cost-of-service compiles the functionalized, classified, and allocated expenses and rate base data for each class of service. The system average rate of return is applied to the allocated rate base to determine the required net income. This is then grossed up to account for the income tax related revenue responsibilities. The sum of the expense related revenue requirement and the rate base related revenue requirement yields the total revenue requirement for each component of cost at the system average rate of return. The computer model makes this calculation for each of the various cost components (i.e., the customer, demand and commodity portions of the supply, gathering, storage, and distribution functional categories). The functionally classified costs are unitized by dividing the total costs by the appropriate number of billing units. Customer-related costs are divided by the number of bills, demand related costs are divided by the contribution to peak demand and commodity-related costs are divided by the number of Mcf delivered. It should be noted that a monthly customer cost is calculated for each customer class, as well as unit commodity and demand costs.

Page 153 of IV-B-1(A) and IV-B-1(B) (Exhibit 11, Schedule 1) presents the unitized cost-of-service study results (at the Company's proposed rate of return on rate base) described above.

Q. CAN THE RESULTS OF THE UNIT COST ANALYSIS BE USED FOR RATE DESIGN?

A. Yes, if three-part rates (i.e., customer, demand, and commodity) were set at the unit cost levels, the Company's operating expenses and rate of return on investment based on its pro-forma test year would be recovered (assuming customer counts, gas deliveries and other billing determinants were as projected). The unit cost analyses also provide valuable unbundled cost information for the design of portions of the tariff.

Q. CAN THE UNIT COST ANALYSIS PROVIDE GUIDANCE ON THE APPROPRIATE LEVEL OF MONTHLY CUSTOMER CHARGES?

A. Yes. For example, Peoples' cost-of-service studies show that a full cost-based customer charge for its Residential Service class is supportable within a range of between $22.15 (Minimum Customer Cost) and $41.85 (Minimum System / Design Day Cost) per month. The unit cost analysis could also be used to establish separately metered contract demand charges where the cost of demand metering can be justified or where a reasonable method of estimating customer demands can be derived.

Q. ARE THE TOTAL FUNCTIONALIZED COST OF THE GATHERING SYSTEM DERIVED IN THE COST-OF-SERVICE STUDY?

A. Yes. The functionalization phase of Peoples' cost-of-service study identifies the specific plant components and expenses that comprise the gathering function and allocates other indirect costs that are necessary to support the gathering function. This process determines Peoples' fully loaded cost of gathering service. Peoples Exhibit RNZ-3 summarizes the rate base, expenses, rate of return on rate base (as proposed) and, federal income taxes that

comprise Peoples' total gathering cost-of-service. These cost components are derived from the cost-of-service study presented in Exhibit 11, Schedule 1, IV-B-1(A), Pages 63 to 72, which provides each of the detailed plant and expense components that comprise Peoples' gathering function. As a point of comparison, Peoples Exhibit RNZ-3 also provides Peoples' gathering service revenues at present .and proposed rates.

IV. PEOPLES' PROPOSED CLASS REVENUES

Q. PLEASE DESCRIBE THE APPROACH FOLLOWED TO ALLOCATE THE $173.7 MILLION BASE RATE REVENUE INCREASE TO VARIOUS CUSTOMER CLASSES.

A. As described earlier, the apportionment of revenues among rate classes consists of deriving a reasonable balance between various criteria or guidelines related to utility rate design. The various criteria that were considered in the process included:

(1) cost-of-service;

(2) class contribution to present revenue levels; and

(3) customer impact considerations.

Complicating the allocation of the revenue increase is the combination of the PNG and PG rates and tariffs. The significant differences in the level of the existing rates introduces challenges to developing tariffs.

These criteria were evaluated for each of the Company's rate classes. Based on this evaluation, adjustments to the present revenue levels in certain rate classes were made so

that the rates proposed by Peoples moved class revenues closer to the costs of serving those rate classes.

Q. PLEASE PROVIDE THE RATE OF RETURNS ("ROR") PRODUCED BY EACH TARIFF CLASS UNDER PRESENT RATES.

A. Peoples Exhibit RNZ-4 provide two reference points based on the cost-of-service studies presented by Peoples.

Q. DO YOU BELIEVE THAT ALLOCATING THE RATE INCREASE USING EITHER COST-OF-SERVICE STUDY IS APPROPRIATE?

A. No. I believe that adopting the results from either cost-of-service study to allocate the rate changes ignores the principle of gradualism which should be considered in any rate design exercise.

Q. WHAT IS THE PROPOSED ALLOCATION OF THE REVENUE REQUIREMENT TO EACH TARIFF CLASS?

A. Based upon input from the Company and the results of the cost-of-service analyses, I prepared the proposed revenues and associated increases as provided in the Peoples Exhibit 11.

Q. DOES THE PROPOSED ALLOCATION OF THE REVENUE REQUIREMENT PROVIDE MOVEMENT FOR EACH CLASS TOWARD COST-OF-SERVICE?

A. This approach resulted in reasonable movement of the class relative rates of return on net rate base towards unity or 1.00. The results are provided in Exhibit 11, Schedule 1, IV-B-1(A), Page 1.

Q. EARLIER IN YOUR TESTIMONY YOU MENTIONED THAT BECAUSE THE COMPANY HAS COMPETITIVELY SITUATED CUSTOMERS INCLUDED IN THE SGS, MGS AND LGS RATE CLASSES, ANY INCREASE IN CLASS REVENUES ASSIGNED TO THOSE RATE CLASSES COULD NOT BE RECOVERED FROM SUCH CUSTOMERS. HOW WILL THE OTHER CUSTOMERS IN THESE RATE CLASSES BE IMPACTED BY THE INCREASES IN REVENUES TO THESE RATE CLASSES UNDER THE COMPANY'S INTERCLASS REVENUE PROPOSAL?

A. The standard rates of the other customers were increased to recover the entirety of the revenue increase assigned to each of these three rate classes. In other words, any discounts which competitive customers were provided were recovered from the other customers in that tariff class. In doing so, the Company was mindful of the unique customer impact considerations in these rate classes recognizing the fewer number of customers and decreased level of gas volumes under which any revenue increase could be recovered through the Company's standard rates. As such, it is important to understand that any

greater level of revenue sought from these rate classes will have a disproportionate impact on the level of the Company's standard rates proposed for these rate classes.

V. Proposed Rate Design

H. Rate Design Principles and Changes in the Structural Peoples Rate Design.

Q. CAN YOU PLEASE DESCRIBE THE KEY OBJECTIVES YOU SOUGHT TO ACHIEVE IN THE DESIGN OF THE PEOPLES' PROPOSED RATES?

A. Yes. In general, I sought to achieve the following objectives when developing the proposed rate design:

- Achieve fair and equitable rate levels (reflective of the cost to serve);
- Avoid undue discrimination between and within rate classes;
- Rates should be stable, understandable, and provide customer choices;
- Create economically efficient pricing for natural gas delivery service;
- Rates should encourage energy conservation and energy efficiency; and
- Rates should allow a utility to recover its revenue requirement in a manner that maintains revenue stability and minimizes year-to-year under or over-collections.

Q. PLEASE DESCRIBE THE CHANGES IN THE PEOPLES GAS STRUCTURAL RATE DESIGN.

A. We are proposing the following structural changes:

- In the previous request, Peoples implemented transition tariffs for certain customers to mitigate rate increases. We are proposing that customers served under transition rates be moved to the standard rate design for those classes;
- A Mainline rate design is proposed for LGS customers who are not served by the company's distribution and/or transmission system; and
- The tariffs of PNG and PG are being combined.

I. Proposed Revenue Targets

Q. WHAT ARE THE PROSPOED REVENUE TARGETS FOR EACH RATE CLASS?

A. The table below provides the target base rate revenue for each rate class based upon the average of the two cost-of-service approaches previously discussed in my testimony.

	Revenues at Current Rates	Minimum System/Design Day	Demand/Peak & Average	Mean	Rate Design Target	Rate Design Proposed Revenues	Percent Increase	Proposed Revenues as a Percent of Target
RES	$347,866,631	$508,820,648	$451,420,813	$480,120,731	$480,120,731	$480,120,731	38%	100%
SGS	$43,991,391	$60,323,814	$67,379,366	$63,851,590	$63,851,590	$63,852,921	45%	100%
MGS	$57,024,004	$60,132,252	$90,788,231	$75,460,242	$75,460,242	$75,459,798	32%	100%
LGS	$55,979,202	$49,322,142	$69,010,446	$59,166,294	$59,166,294	$59,166,294	6%	100%
Total	$504,861,227	$678,598,857	$678,598,857	$678,598,857	$678,598,857	$678,599,743	34%	100%

J. Residential Rate Design

Q. PLEASE DESCRIBE THE PROPOSED RESIDENTIAL RATE DESIGN.

A. As I previously discussed in my testimony, Peoples Natural Gas and Peoples Gas are combining their tariffs in this proceeding. I am proposing the same distribution rates for residential customers of the two entities.

Q. DOES A SIGNIFICANT DIFFERENCE EXIST BETWEEN THE RESIDENTIAL DISTRIBUTION RATES OF PNG AND PG?

A. The overall structure of the distribution rates for both divisions is the same. They include a monthly fixed charge and a volumetric charge. However, the overall levels of these charges differ. PG's rates are higher than the PNG rates.

Q. HOW DO THE PRESENT REVENUES OF THE COMBINED ENTITY COMPARE TO THE RESULTS OF THE ALLOCATED COST-OF-SERVICE STUDY?

A. The residential customers of the combined entities are recovering 72 percent of the allocated cost-of-service.

Q. PLEASE DETAIL YOUR PROPOSED RESIDENTIAL DISTRIBUTION RATE DESIGN.

A. The proposed distribution rate design is detailed in Peoples Exhibit RNZ-5.

Q. ARE THE PROPOSED RATES SUPPORTED BY THE COST-OF-SERVICE STUDY?

A. If the proposed rates are adopted, the Residential class will produce revenues at 100 percent of the targeted cost-of-service level. The proposed monthly fixed charge of $21.50 is below the level detailed in the unit cost analysis of $41.85, and the Minimum Customer Cost of $22.15. The proposed volumetric charge is $5.6304.

Q. HAVE YOU PREPARED A BILL IMPACT ANALYSIS FOR A TYPICAL RESIDENTIAL CUSTOMER?

A. Yes. I have prepared bill impacts for a typical residential customer consuming 80 Mcf per year. Separate bill impacts have been prepared for legacy PNG and PG customers. A legacy typical PNG customer will experience an overall impact of 21.2 percent increase, including the cost of gas and riders. In contrast PG customers will experience an increase of 7.5 percent, including gas costs and riders. The residential typical bill analysis is detailed in Peoples Exhibit RNZ-6.

Q. IN THE COMPANY'S PREVIOUS CASE, CERTAIN RESIDENTIAL CUSTOMERS WERE PLACED ON A TRANSITIONAL RATE DESIGN TO AVOID ADVERSE RATE INCREASES. HOW WERE THESE CUSTOMERS TREATED IN THE PROPOSED RATE DESIGN?

A. It was determined that residential transitional customers would not experience adverse impacts if they were placed on the proposed residential tariffs. I propose to eliminate the residential transitional rate class.

K. Small General Service

Q. PLEASE DESCRIBE THE PROPOSED SMALL GENERAL SERVICE RATE DESIGN.

A. Similar to the Residential rate design, The SGS customers of the combined entities are recovering 69 percent of the allocated cost-of-service.

Q. DOES A DIFFERENCE EXIST BETWEEN THE SMALL GENERAL SERVICE DISTRIBUTION RATES OF PNG AND PG?

A. The overall structure of the distribution rates for both divisions is the same. They include a monthly fixed charge and a volumetric charge. However, the overall levels of these charges differ. PG's rates are higher than the PNG rates.

Q. PLEASE DETAIL YOUR PROPOSED SMALL GENERAL SERVICE DISTRIBUTION RATE DESIGN.

A. The present and proposed distribution rate designs are detailed in Peoples Exhibit RNZ-5.

Q. ARE THE PROPOSED RATES SUPPORTED BY THE COST-OF-SERVICE STUDY?

A. The proposed monthly fixed charges of $25.00 and $50.00 are generally supported by the Company's preferred cost-of-service study of $43.62, and exceeds the Minimum Customer Cost of $23.83. At proposed rates, the SGS class recovers 100 percent of the allocated revenue requirement.

Q. HAVE YOU PREPARED A BILL IMPACT ANALYSIS FOR A TYPICAL SMALL GENERAL SERVICE CUSTOMER?

A. Yes. I have prepared bill impacts for a typical Small General Service customers consuming 250 (Tier 1 customers) and 750 Mcf (Tier 2 customers) per year. Separate bill impacts have been prepared for legacy PNG and PG customers.

- Tier 1 (0-499 Mcf per year) Small General Service Customers: A legacy Tier 1 PNG customer will experience an overall typical bill increase of 22.1 percent, including the cost of gas and riders. In contrast, PG customers will experience an increase of 0.4 percent.
- Tier 2 (500-999 Mcf per year) Small General Service Customers: A legacy Tier 2 PNG customer will experience an overall increase of 22.1 percent, including the cost of gas and riders. In contrast, PG customers will experience an increase of 2.5 percent.

The typical bills are detailed in Exhibit RNZ-6.

L. Medium General Service

Q. PLEASE DESCRIBE THE PROPOSED MEDIUM GENERAL SERVICE RATE DESIGN.

A. Similar to the Small General Service rate design, the Medium General Service rates for PG and PNG are being combined.

Q. DOES A SIGNIFICANT DIFFERENCE EXIST BETWEEN THE MEDIUM GENERAL SERVICE DISTRIBUTION RATES OF PNG AND PG?

A. The overall structure of the distribution rates for both divisions are the same. They include a monthly fixed charge and a volumetric charge. However, the overall levels of these charges differ. The PG's rates are higher than the PNG rates.

Q. HOW DO THE PRESENT MGS REVENUES OF THE COMBINED ENTITY COMPARE TO THE RESULTS OF THE ALLOCATED COST-OF-SERVICE STUDY?

A. The combined entities are currently recovering 76 percent of the allocated cost-of-service revenues.

Q. PLEASE DESCRIBE THE PROPOSED MEDIUM GENERAL SERVICE DISTRIBUTION RATE DESIGN.

A. The proposed distribution rate designs is detailed in the Exhibit RNZ-5.

Q. ARE THE PROPOSED RATES SUPPORTED BY THE COST-OF-SERVICE STUDY?

A. The proposed monthly fixed charges of $105 and $150 are partially within the range supported by the Minimum Customer Cost Study ($90.43) and the Minimum System/Design Day methods ($117.05). The proposed volumetric charges are $3.8268 per Mcf.

Q. HAVE YOU PREPARED A BILL IMPACT ANALYSIS FOR A TYPICAL MGS CUSTOMERS?

A. Yes. I have prepared bill impacts for a typical Medium General Service customers consuming 1,750 and 13,750 Mcf per year. Separate bill impacts have been prepared for legacy PNG and PG customers.

- Tier 1 (1,000-2,499 Mcf per year) Medium General Service Customers: A legacy Tier 1 PNG customer will experience an overall increase of 13.8 percent, including the cost of gas and riders. In contrast, PG customers will experience a decrease of 1.0 percent.
- Tier 2 (2,500-24,999 Mcf per year) Small General Service Customers: A legacy Tier 2 PNG customer will experience an overall increase of 13.4 percent, including the cost of gas and riders. In contrast, PG customers will experience a decrease of 3.9 percent.

The typical bills are detailed in Exhibit RNZ-6.

Q. IN THE COMPANY'S PREVIOUS CASE, CERTAIN MEDIUM GENERAL SERVICE CUSTOMERS WERE PLACED ON A TRANSITIONAL RATE DESIGN TO AVOID ADVERSE RATE INCREASES. HOW WERE THESE CUSTOMERS TREATED IN THE PROPOSED RATE DESIGN?

A. It was determined that Medium General Service transitional customers would not experience adverse impacts if they were placed on the proposed residential tariffs. I propose to eliminate the residential transitional rate class.

M. Large General Service

Q. PLEASE DESCRIBE THE PROPOSED LARGE GENERAL SERVICE RATE DESIGN.

A. Similar to the other rates for PG and PNG, LGS rates for both divisions are being combined. Further, we are proposing an expansion of the LGS tariff to provide a Mainline service rate for customers who do not use the high-pressure distribution system.

Q. DOES A SIGNIFICANT DIFFERENCE EXIST BETWEEN THE LARGE GENERAL SERVICE DISTRIBUTION RATES OF PNG AND PG?

A. The overall structure of the distribution rates is the same for both divisions. They include a monthly fixed charge and a volumetric charge. However, the overall levels of these charges differ. PG's rates are higher than the PNG rates. Exhibit RNZ-6 details the present rates for the two entities.

Q. ARE YOU PROPOSING ANY CHANGES TO THE LGS TARIFF RATE DESIGN?

A. Yes. I am proposing an expansion of the LGS Tariff. The expansion is a pricing option for customers who are:

- Connected directly to the Company's transmission system and not using the distribution system; or
- Connected directly to interstate pipelines through facilities constructed by the Company.

I will refer to the above two groups of customers as "Mainline Customers".

Q. ARE THE MAINLINE CUSTOMERS CURRENTLY SERVED UNDER THE LGS TARIFF RATES?

A. No. The Mainline customers are all served under special contracts but are classified as LGS customers. The Mainline customer Mcf sales and revenues captured in the FPFTY are 22,422,445 Mcf and $7.0 million in present base revenues.

Q. PLEASE DESCRIBE THE COMPANY'S REGULATED DISTRIBUTION SYSTEM – ACCT. 376. AND WHAT RATE CLASSES ARE SERVED BY THAT DISTRIBUTION SYSTEM.

A. The Company operates a high-pressure and low-pressure distribution system. The low-pressure and high-pressure distribution systems are both captured in Account 376 – Mains. For the purposes of the cost-of-service study, Account 376 is separated into the high- and

low-pressure systems. All customers served under the LGS tariff are not interconnected to the low-pressure system and therefore not allocated any cost associated with these investments. However, LGS customers are allocated a portion of the high-pressure distribution system.

Q. DO ALL LGS CUSTOMERS USE THE COMPANY'S DISTRIBUTION ASSETS?

A. No. As I described previously in my testimony, the Mainline customers are served through the Company's transmission system or interconnections to interstate pipelines.

Q. DOES THE DESIGN OF THE EXISTING LGS CORRECTLY REFLECT THE EMBEDDED COST TO SERVE THESE CUSTOMERS?

A. No. In the case of customers served by the Company's transmission system, the existing LGS rate design captures the embedded cost of the High-Pressure distribution system not used by these customers. In the case of customers served through a People's interconnection to an interstate pipeline, those customers also avoid the Company's transmission system.

Q. HOW DID YOU DEVELOP THE PROPOSED RATE DESIGNS?

A. I added two new tariff classes to the cost-of-service study, Mainline LGS Transmission customers and Mainline LGS Non-Transmission customers.

Q. PLEASE DESCRIBE THE DESIGN OF MAINLINE LGS TRANSMISSION SERVICE.

A. Mainline LGS Transmission customers do not use the high-pressure distribution system, Account 376 – Regulated Mains. Account 376 – Regulated Mains. Therefore, Mainline LGS transmission customers are not allocated Account 376 – Regulated Mains costs. All other cost allocations are consistent with the other LGS customers.

Q. PLEASE DESCRIBE THE DESIGN OF MAINLINE LGS NON-TRANSMISSION SERVICE.

A. Mainline LGS Non-Transmission customers do not use the Company's transmission system because they are interconnected to interstate pipelines. Therefore, Mainline LGS transmission customers are not allocated Account 376 – Regulated Mains costs and transmission mains. All other cost allocations are consistent with the other LGS customers.

Q. DOES THE CREATION OF THE MAINLINE LGS TARIFFS REDUCE THE SIZE OF THE CURRENT DEFINITION OF LGS CUSTOMERS?

A. The sum of the three tariffs, LGS, Mainline LGS transmission and Mainline LGS Non-transmission, equals the traditional definition of LGS customers. The Mainline LGS customers constitute 48 percent of the Mcf sales and 13 percent of the revenues of the total LGS tariff class.

Q. DO YOU ANTICIPATE CUSTOMER MOVEMENT FROM THE CURRENT LGS RATE TO THE PROPOSED LGS MAINLINE RATE?

A. I do not anticipate any customers will move from their current special contracts to the proposed LGS Mainline tariff. The special contracts which they are served under captures pricing equal to that of their competitive alternatives which is below the proposed LGS Mainline tariff.

Q. WILL THE CUSTOMERS RECEIVING SERVICE UNDER MAINLINE LGS TARIFFS RECEIVE A "WINDFALL" BY TAKING SERVICE ON THE PROPOSED TARIFF?

A. No. The development of Mainline LGS service reflects the accurate embedded cost to serve these customers which was previously not reflected in the existing LGS tariff. Creating the Mainline LGS tariff eliminates an implicit cross-subsidy in the embedded cost-of-service study. The proposed rates are based upon cost-of-service principles and any reallocation of the revenue requirement is supported by cost-of-service principles. The existing tariffs allocate costs to Mainline customers for facilities which they do not use.

Q. IF MAINLINE CUSTOMERS ARE SERVED AT A PRICE BELOW THE MAINLINE LGS RATE ARE THEY BEING SUBSIDIZED BY THE OTHER CUSTOMERS WHICH THE COMPANY SERVES?

A. If Mainline LGS customers have competitive alternatives below that of the proposed Mainline LGS rate, but above the Company's out-of-pocket costs, they are not being cross-

subsidized by other customers. The fact that the Mainline customers are not paying the embedded cost-of-service is not evidence a subsidy has been created. As I stated above, the Mainline customers have competitive alternatives providing a lower cost alternative to service under the Company's standard rates.

Q. PLEASE DETAIL YOUR PROPOSED LARGE GENERAL SERVICE DISTRIBUTION RATE DESIGN.

A. The proposed distribution rate design is detailed in Exhibit RNZ-5.

Q. ARE THE PROPOSED RATES SUPPORTED BY THE COST-OF-SERVICE STUDY?

A. The proposed monthly fixed charges range from $800.00 to $1,920.00 are in some cases above that which is supported by the Minimum Customer Cust Study of $959.20 and, $1,027.31 in the Minimum System/Design Day cost-of-service study. The proposed volumetric charges range from $1.5319 and $2.4602 per Mcf.

Q. HAVE YOU PREPARED A BILL IMPACT ANALYSIS FOR TYPICAL LGS CUSTOMERS?

A. Yes. I have prepared bill impacts for a typical Large General Service customers which is detailed in Exhibit RNZ-6.

Q. IN THE COMPANY'S PREVIOUS CASE, CERTAIN LARGE GENERAL SERVICE CUSTOMERS WERE PLACED ON A TRANSITIONAL RATE DESIGN TO AVOID ADVERSE RATE INCREASES. HOW WERE THESE CUSTOMERS TREATED IN THE PROPOSED RATE DESIGN?

A. It was determined that Large General Service transitional customers would not experience adverse impacts if they were placed on the proposed LGS tariffs. I propose to eliminate the LGS transitional rate class.

VI. Heating Degree Day Estimation

Q. WHY IS IT NECESSARY TO ESTIMATE THE EXPECTED LEVEL OF HEATING DEGREE DAYS ("HDD") WHEN ESTIMATING THE TEST YEAR REVENUES.

A. The number of HDDs varies from year-to-year based upon normal random variation in weather. Random variation is normal. A significant quantity of Peoples sales is weather-sensitive. In other words, if HDD are above the expected level, sales would be expected to be in excess of the test year estimate. Conversely, if HDD are below the expected below the expected level, sales will be below the test year estimate.

Q. THE TESTIMONY OF COMPANY WITNESS SCANLON PROPOSES USING 5,341 HDD AS AN ESTIMATE FOR NORMAL WEATHER FOR THE TEST YEAR. DO YOU BELIEVE ADOPTING 5,341 HDD IS APPROPRIATE?

A. Yes, I believe that adopting 5,341 HDD is a conservative estimate of weather for the test year.

Q. PLEASE DESCRIBE WHY YOU BELIEVE THAT 5,341 HDD IS AN CONSERVATIVE ESTIMATE.

A. Company Witness Scanlon developed the estimated HDD based an average of two approaches to estimating HDD. The first approach is based upon a 20-year average of HDD for the Company's service area. Using historical data to estimate the test-year level of HDDs has been used in the past. Implicit in using a multi-year average is that the mean number of HDD does not change over time, only variation from year-to-year.

Q. IF HDD ARE CHANGING OVER TIME DOES THE 20-YEAR AVERAGE REFLECT THE TREND IN THE DATA?

A. It is generally agreed that weather is becoming milder (i.e., warmer) over time. Therefore, the average number of HDD for each year are decreasing. In other words, a trend exists in the HDD data and the mean number of HDD experienced over time is decreasing.

The trend of decreasing HDD is inconsistent with the use of a 20-year average which assumes that the mean of the HDD is constant over time. Use of the 20-year HDD average will overstate the expected HDD level in the future because it fails to recognize the trend of declining HDD (i.e., warmer weather). Simply put, the 20-year average introduces a bias in the analysis overstating HDD.

Q. HAS THE COMPANY DEVELOPED AN APPROACH WHICH ESTIMATES THE TREND IN THE ANNUAL NUMBER OF HDD?

A. Yes. A regression analysis was developed which estimated the trend in HDD over time. The regression used 65 years of data and produced a negative coefficient for the time variable. The negative coefficient for the time variable produces estimated HDD which slightly decreases every year.

Therefore, adopting the averaging methodology of the 20-year average will not capture the trend of decreasing HDD. The 65-year regression captures the trend of decreasing HDD. Therefore, averaging the results of the two approaches will provide a conservative (slightly overstated) level of HDD for the test-year.

N. Weather Normalization Mechanism

Q. PLEASE DESCRIBE THE CHALLENGES TRIGGERED BY NON-NORMAL WEATHER FOR A NATURAL GAS DISTRIBUTION UTILITY AND ITS CUSTOMERS.

A. A significant variation occurs in the heating load triggered by non-normal weather. Significant variation in heating load can occur from year-to-year, which burdens the natural gas distribution utility and customers.

Q. WHAT ARE THE IMPACTS OF THE VARIATION IN WEATHER ON CUSTOMERS?

A. The impact on customers triggered by non-normal weather is variation in the level of bills. The variation can be especially problematic when severe weather occurs, and customers' bills increase.

Q. WHAT ARE THE IMPACTS OF THE VARIATION IN WEATHER FOR THE COMPANY?

A. The Company's revenues fluctuate. However, the majority of the Company's cost structure related to delivery base rates is fixed. Therefore, under- and over-earning occurs.

Q. WHAT ARE THE POTENTIAL REMEDIES TO THE CHALLENGES INTRODUCED BY WEATHER VARIATION?

A. Regulatory authorities in the United States have introduced a number of mechanisms addressing revenue variation triggered by weather variation and other factors. The Company proposes a Weather Normalization Mechanism to remedy the weather normalization problem specifically.

Q. WHAT IS THE OBJECTIVE OF THE PROPOSED WEATHER NORMALIZATION MECHANISM?

A. The Weather Normalization Mechanism provides symmetric protection to customers and the Company for revenue variations in usage associated with non-normal weather.

Q. IS THE WEATHER NORMALIZATION MECHANISM A REVENUE DECOUPLING MECHANISM?

A. No. A Revenue Decoupling Mechanism is designed to adjust revenue variation triggered by several variables introducing volatility in the utility revenue stream. The proposed Weather Normalization Mechanism has a narrower focus and only adjusts for the variation in normal Heating Degree Days ("HDD") in a specific time period. The Weather Normalization mechanism only applies to the non-base load consumption. The Weather Normalization Mechanism would not address reductions in usage associated with adopting more efficient end-use equipment, customer defection to other fuels, and other similar variables.

Q. PLEASE DESCRIBE HOW THE COMPANY'S PROPOSED WEATHER NORMALIZATION MECHANISM WILL OPERATE.

A. The proposed Weather Normalization mechanism will adjust the delivery base rate volumetric component of the customer's bill, reflecting the revenues associated with weather-sensitive load. The mechanism will be applied on a customer-by-customer basis.

Q. DOES A WEATHER NORMALIZATION MECHANISM REDUCE THE RISK OF THE UTILITY?

A. I defer questions about risk to the Company's cost of capital witness, Mr. Moul.

Q. IS A DEADBAND INLCUDED IN THE COMPANY'S PROSPOED WEATHER NORMALIZATION MECHANISM?

A. No. I believe that dead bands reduce the effectiveness of the Weather Normalization Mechanism and therefore reduce their values to both the Company and customers. The policy goal of the Weather Normalization Mechanism is reduce the revenues fluctuations associated with non-normal weather conditions. The dead band implicitly states that the policy goal of the Weather Normalization Mechanism is less important for smaller weather variation than significant weather variation.

VII. Conclusions

Q. PLEASE SUMMARIZE YOUR CONCLUSIONS AND RECOMMENDATIONS WITH REGARD TO PEOPLES' COST-OF-SERVICE STUDIES, CLASS REVENUES AND RATE DESIGN.

A. My conclusions and recommendations for the Company's cost-of-service studies, class revenues and rate design are as follows:

- The range of results from the Company's two cost-of-service studies should be accepted by the Commission as a guide to evaluate and set Peoples' class revenues and rate design in this proceeding;
- The Commission should accept the Company's proposed apportionment of non-gas revenues to its rate classes because it reasonably balances the various criteria that were

considered by the Company in the revenue apportionment process which included: (1) cost-of-service; (2) class contribution to present revenue levels; and (3) customer impact considerations; and

- The Commission should approve the rate design proposed by the Company because it reasonably satisfies the key rate design objectives I presented earlier in my testimony, including: (1) achieve fair and equitable rate levels that are reflective of the cost to serve; (2) avoid undue discrimination between and within rate classes; (3) rates should be stable, understandable, and provide customer choices; (4) create economically efficient pricing for natural gas delivery service; (5) rates should encourage energy conservation and energy efficiency; and (6) rates should allow a utility to recover its revenue requirement in a manner that maintains revenue stability, and minimizes year-to-year under or over collections.

Q. DOES THIS COMPLETE YOUR PREPARED TESTIMONY?

A. Yes. I reserve the right to submit supplemental testimony as additional issues arise during the course of this proceeding. Thank you.

WITNESS AREAS OF RESPONSIBILITY
(LIST OF SECTION)

Section	Subject Matter
53.53	
III-A-45	Explanation of any differences between the basis or procedure used in allocations of revenues, expenses, depreciation and taxes in the current rate case and that used in the prior rate case.
III-A-47	Schedule showing rate of return on facilities allocated to serve wholesale customers
IV-B-1	Cost of Service Studies under Present and Proposed Tariffs
IV-B-2	Statement of Testimony Describing the Complete Methodology of the Cost-of-Service Studies
IV-B-3	Complete Description and Back-Up Calculations for All Allocation Factors.
IV-B-7	Graph of present and proposed base rates on hyperbolic cross section paper.
IV-B-9	Cost Analysis Supporting Minimum Charges for All Rate Schedules.
IV-B-10	Cost analysis supporting demand charges for all tariffs which contain demand charges.
IV-B-12	Supply a tabulation of base rate bills for each rate schedule comparing the existing rates to proposed rates. The tabulation should show the dollar difference and the per cent increase or decrease.
Exhibit	
VI.III.COS.2	Detailed explanation describing how contributions in aid of construction and customer advances are reflected in the Company's cost of service study.
VI.III.COS.8	Company's rate design models and cost of service study on an IBM PC-compatible computer disk in Lotus 1-2-3-or Quattro format. If the models consist of more than one file, please include information on all files on the disk and what they contain. If not available in Lotus 1-2-3 or Quattro format, please provide in ASCII format.

VI.III.COS.19 Workpapers showing the development of each allocation factor reflected in the Company's cost of service study. Include a description of each allocation factor, all calculations performed to develop the allocators and all supporting documentation, studies or other information relied upon to determine the allocators.

VI.III.COS.20 All workpapers, calculations and supporting documentation for the functionalization and classification performed for the Company's cost of service study.

Section - 53.53	Exhibit
III.A.45	Ex. 13, Sch. 11 – Methodologies are fundamentally the same
III.A.47	Ex. 11, Sch. 9
IV.B.1	Ex. 11, Sch. 1
IV.B.2	Ex. 11, Sch. 2
IV.B.3	Ex. 11, Sch. 3
IV.B.7	Ex. 11, Sch. 7
IV.B.9	Ex. 11, Sch. 4 –
IV.B.10	Ex. 11, Sch. 5 –
IV.B.12	Ex. 11, Sch. 8 –
IV.B.19	Ex. 17, COS-19 -
IV.B.20	Ex. 17, COS-20 – See Exhibit 11, Schedule 1
Exhibit	
VI.III.COS.2	Ex. 17, COS-2
VI.III.COS.8	Ex. 17, COS-8
VI.III.COS.19	Ex. 17, COS-19
VI.III.COS.20	Ex. 17, COS-20

Peoples Natural Gas Company LLC
Design Day Method for the 12 Months Ending October 31, 2020
Minimum Customer Cost Analysis

Please see Exhibit 11, Sch 1, page 145-152.

Peoples Natural Gas Company LLC
Combined Divisions
Gathering Revenue Requirement Calcualtion
12 Months Ended September 30, 2025
Mains Classification: MINSYSTEM
Mains Allocation: Cust Avg/Design Day

Rate Base	
Plant in Service	
Intangible Plant	$4,063,013
Production Plant	$158,771,264
General Plant	$7,451,519
Total Plant in Service	$170,285,796
Depreciation Reserve	
Intangible Plant	$1,295,280
Production Plant	$59,495,813
General Plant	$2,747,500
Total Depreciation Reserve	$63,538,594
Other Rate Base Items	
Materials and Supplies	$168,496
Prepayments	$174,740
Cash Working Capital	$1,096,798
Deferred Income Taxes	$796,991
Total Other Rate Base Items	$2,237,025
Total Net Rate Base	$108,984,228
Return on Rate Base %	8.40%

Return on Rate Base $	$9,159,702
Expenses	
Natural Gas Production and Gathering	$13,550,312
Administrative & General	$3,089,661
Depreciation Expense	$5,062,606
Taxes Other Than Income Taxes	$2,120,165
Total Expenses	$23,822,744
Income Taxes @ Proposed Rates	$0
Total Gathering Cost of Service	$32,982,446

Gathering Service Revenues

At Present Rates	$6,995,675
At Proposed Rates (FPFTY)	$9,373,519

Peoples Natural Gas Company LLC
Combined Divisions
12 Months Ended September 30, 2025
Cost of Service Study Summary
Mains Classification: MINSYSTEM
Mains Allocation: Cust Avg/Design Day

RETURN AT CURRENT RATES

	Total	RES	SGS	MGS	LGS	LGS-Mainline
Total Oper. Rev. @ Current Rates	$833,215,508	$591,717,562	$81,729,812	$85,861,952	$58,801,838	$15,104,344
Other Income	$0	$0	$0	$0	$0	$0
O&M	$440,673,789	$321,289,428	$48,679,094	$41,088,276	$17,089,668	$12,527,324
Cust. Accts, Services, Sales Expense	$38,351,539	$33,084,340	$2,058,121	$1,496,598	$1,633,164	$79,316
A&G	$62,261,991	$46,142,724	$5,679,286	$5,469,999	$3,317,081	$1,652,901
Depreciation	$134,219,598	$102,574,883	$12,010,308	$11,367,459	$5,565,472	$2,701,476
Taxes Other Than Income	$15,353,167	$10,435,060	$1,440,286	$1,469,046	$1,224,956	$783,819
Income Before Income Taxes	$142,355,425	$78,191,127	$11,862,717	$24,970,574	$29,971,497	($2,640,491)
Income Taxes @ Current Rates	($91,344,434)	($50,172,477)	($7,611,885)	($16,022,733)	($19,231,648)	$1,694,309
Income For Return	$233,699,859	$128,363,604	$19,474,602	$40,993,307	$49,203,146	($4,334,800)
Rate Base @ Current Rates	$4,244,704,201	$3,217,320,670	$384,742,578	$379,906,653	$180,008,164	$82,726,138
Return @ Current Rates	5.51%	3.99%	5.06%	10.79%	27.33%	-5.24%

REVENUE REQUIRMENT AND REVENUES AT PROPOSED EQUALIZED RETURN

	Total	RES	SGS	MGS	LGS	LGS-Mainline
Base Rates Revenues @ Current Rates	$504,861,227	$347,866,631	$43,991,391	$57,024,004	$48,982,267	$6,996,935
Base Rate Revenue Increase	$173,737,629	$160,954,017	$16,332,423	$3,108,248	($16,257,547)	$9,600,488
Total Base Rate Revenue @ Proposed Rates	$678,598,857	$508,820,648	$60,323,814	$60,132,252	$32,724,719	$16,597,423
Rider Revenue @ Proposed Rates	($24,553,786)	($13,140,760)	($1,999,383)	($3,179,570)	($3,287,029)	($2,947,045)
Gas Revenues @ Proposed Rates	$317,688,724	$236,156,094	$37,306,901	$28,525,812	$8,705,460	$6,994,456
Gathering Revenues @ Proposed Rates	$9,373,519	$1,399,493	$485,052	$1,571,947	$3,083,557	$2,833,470
Forfited Discount/Late Fees @ Proposed Rates	$6,365,885	$5,703,590	$312,878	$231,627	$117,789	$0
Other Revenues @ Current/Proposed Rates	$1,768,640	$1,403,276	$245,883	$83,121	$20,333	$16,028
Total Revenues @ Proposed Rates	$989,241,838	$740,342,342	$96,675,145	$87,365,189	$41,364,830	$23,494,331
Total Revenue Requirement						
Production Expense	$10,565,157	($396,925)	$333,981	$2,083,088	$4,448,963	$4,096,050
Storage Expense	$3,690,773	$2,090,104	$381,729	$508,127	$394,662	$316,151
Transmission Expense	$10,183,620	$6,097,223	$1,114,304	$1,450,403	$895,489	$626,202
Distribution Expense	$98,545,624	$77,342,742	$9,542,375	$8,520,912	$2,645,114	$494,481
Customer Accounts, Services and Sales Exp.	$41,763,641	$36,330,538	$2,129,435	$1,567,290	$1,657,063	$79,316
Administrative & General Exp.	$62,261,991	$46,142,724	$5,679,286	$5,469,999	$3,317,081	$1,652,901
Taxes Other Than Income	$15,353,167	$10,435,060	$1,440,286	$1,469,046	$1,224,956	$783,819
Depreciation	$134,219,598	$102,574,883	$12,010,308	$11,367,459	$5,565,472	$2,701,476
Cost of Gas	$317,688,724	$236,156,094	$37,306,901	$28,525,812	$8,705,460	$6,994,456
Total Expenses Excluding Income Taxes	$694,272,295	$516,772,444	$69,938,605	$60,962,135	$28,854,260	$17,744,851
Income Taxes	($59,295,392)	($44,942,487)	($5,374,635)	($5,307,597)	($2,514,901)	($1,155,772)
Rate Base	$4,215,125,164	$3,194,821,726	$382,066,100	$377,300,571	$178,776,493	$82,160,274
Return on Rate Base %	8.405%	8.405%	8.405%	8.405%	8.405%	8.405%
Return on Rate Base	$354,264,935	$268,512,385	$32,111,175	$31,710,651	$15,025,471	$6,905,253
Total Revenue Requirement	**$989,241,838**	**$740,342,342**	**$96,675,145**	**$87,365,189**	**$41,364,830**	**$23,494,331**
Income For Return Reconciliatoin						
Total Income For Return	$354,264,935	$268,512,385	$32,111,175	$31,710,651	$15,025,471	$6,905,253
Return on Rate Base	$354,264,935	$268,512,385	$32,111,175	$31,710,651	$15,025,471	$6,905,253

Peoples Natural Gas Company LLC
Combined Divisions
12 Months Ended September 30, 2025
Cost of Service Study Summary
Mains Classification: DEMAND
Mains Allocation: Peak and Avg

RETURN AT CURRENT RATES

	Total	RES	SGS	MGS	LGS	LGS-Mainline
Total Oper. Rev. @ Current Rates	$833,215,508	$591,717,562	$81,729,812	$85,861,952	$58,801,838	$15,104,344
Other Income	$0	$0	$0	$0	$0	$0
O&M	$440,673,789	$310,408,080	$49,952,676	$46,903,913	$20,881,058	$12,528,063
Cust. Accts, Services, Sales Expense	$38,351,539	$33,084,340	$2,058,121	$1,496,598	$1,633,164	$79,316
A&G	$62,261,991	$41,596,398	$6,235,656	$7,900,983	$4,875,073	$1,653,881
Depreciation	$134,219,598	$90,572,207	$13,503,915	$17,775,780	$9,666,242	$2,701,453
Taxes Other Than Income	$15,353,167	$9,911,661	$1,504,070	$1,748,685	$1,404,884	$783,866
Income Before Income Taxes	$142,355,425	$106,144,876	$8,475,375	$10,035,992	$20,341,416	($2,642,234)
Income Taxes @ Current Rates	($91,344,434)	($68,109,407)	($5,438,348)	($6,439,741)	($13,052,366)	$1,695,428
Income For Return	$233,699,859	$174,254,283	$13,913,723	$16,475,733	$33,393,783	($4,337,663)
Rate Base @ Current Rates	$4,244,704,201	$2,793,718,574	$437,512,364	$606,069,689	$324,676,423	$82,727,151
Return @ Current Rates	5.51%	6.24%	3.18%	2.72%	10.29%	-5.24%

REVENUE REQUIRMENT AND REVENUES AT PROPOSED EQUALIZED RETURN

	Total	RES	SGS	MGS	LGS	LGS-Mainline
Base Rates Revenues @ Current Rates	$504,861,227	$347,866,631	$43,991,391	$57,024,004	$48,982,267	$6,996,935
Base Rate Revenue Increase	$173,737,629	$103,554,182	$23,387,976	$33,764,227	$3,428,942	$9,602,303
Total Base Rate Revenue @ Proposed Rates	$678,598,857	$451,420,813	$67,379,366	$90,788,231	$52,411,209	$16,599,237
Rider Revenue @ Proposed Rates	($24,553,786)	($13,140,760)	($1,999,383)	($3,179,570)	($3,287,029)	($2,947,045)
Gas Revenues @ Proposed Rates	$317,688,724	$236,156,094	$37,306,901	$28,525,812	$8,705,460	$6,994,456
Gathering Revenues @ Proposed Rates	$9,373,519	$1,399,493	$485,052	$1,571,947	$3,083,557	$2,833,470
Forfited Discount/Late Fees @ Proposed Rates	$6,365,885	$5,703,590	$312,878	$231,627	$117,789	$0
Other Revenues @ Current/Proposed Rates	$1,768,640	$1,403,276	$245,883	$83,121	$20,333	$16,028
Total Revenues @ Proposed Rates	$989,241,838	$682,942,507	$103,730,697	$118,021,168	$61,051,320	$23,496,146
Total Revenue Requirement						
Production Expense	$10,565,157	($396,925)	$333,981	$2,083,088	$4,448,963	$4,096,050
Storage Expense	$3,690,773	$2,090,104	$381,729	$508,127	$394,662	$316,151
Transmission Expense	$10,183,620	$6,097,223	$1,114,304	$1,450,403	$895,489	$626,202
Distribution Expense	$98,545,624	$66,461,394	$10,815,956	$14,336,550	$6,436,504	$495,220
Customer Accounts, Services and Sales Exp.	$41,763,641	$36,330,538	$2,129,435	$1,567,290	$1,657,063	$79,316
Administrative & General Exp.	$62,261,991	$41,596,398	$6,235,656	$7,900,983	$4,875,073	$1,653,881
Taxes Other Than Income	$15,353,167	$9,911,661	$1,504,070	$1,748,685	$1,404,884	$783,866
Depreciation	$134,219,598	$90,572,207	$13,503,915	$17,775,780	$9,666,242	$2,701,453
Cost of Gas	$317,688,724	$236,156,094	$37,306,901	$28,525,812	$8,705,460	$6,994,456
Total Expenses Excluding Income Taxes	$694,272,295	$488,818,695	$73,325,947	$75,896,717	$38,484,341	$17,746,595
Income Taxes	($59,295,392)	($39,023,173)	($6,112,026)	($8,467,945)	($4,536,461)	($1,155,787)
Rate Base	$4,215,125,164	$2,774,036,112	$434,484,950	$601,959,890	$322,482,925	$82,161,287
Return on Rate Base %	8.405%	8.405%	8.405%	8.405%	8.405%	8.405%
Return on Rate Base	$354,264,935	$233,146,985	$36,516,776	$50,592,396	$27,103,440	$6,905,338
Total Revenue Requirement	**$989,241,838**	**$682,942,507**	**$103,730,697**	**$118,021,168**	**$61,051,320**	**$23,496,146**
Income For Return Reconciliatoin						
Total Income For Return	$354,264,935	$233,146,985	$36,516,776	$50,592,396	$27,103,440	$6,905,338
Return on Rate Base	$354,264,935	$233,146,985	$36,516,776	$50,592,396	$27,103,440	$6,905,338

Base Rate Revenues

Rate	Revenues @ Current Rates	Cost of Service			Rate Design Target	Rate Design Proposed Revenues
		MinSys/ Design Day	Demand/ Peak&Avg	Mean		
RES-Base Rates	$347,866,631	$508,820,648	$451,420,813	$480,120,731	$480,120,731	$480,120,731
SGS-Base Rates	$43,991,391	$60,323,814	$67,379,366	$63,851,590	$63,851,590	$63,852,921
MGS-Base Rates	$57,024,004	$60,132,252	$90,788,231	$75,460,242	$75,460,242	$75,459,798
LGS-Base Rates	$48,982,267	$32,724,719	$52,411,209	$42,567,964	$52,169,360	$52,169,359
LGS-MAINLINE-Base Rates	$6,996,935	$16,597,423	$16,599,237	$16,598,330	$6,996,935	$6,996,935
Total	$504,861,227	$678,598,857	$678,598,857	$678,598,857	$678,598,857	$678,599,743

Overall Return

	Return @ Current Rates		Cost of Service - Return			Rate Design Target Return	Rate Design Proposed Revenues Return
	MinSystem/ Design Day	Demand/ Peak&Avg	MinSys/ Design Day	Demand/ Peak&Avg	Mean		
RES	4.0%	6.2%	8.405%	8.405%	8.405%	8.405%	8.405%
SGS	5.1%	3.2%	8.405%	8.405%	8.405%	8.405%	8.405%
MGS	10.8%	2.7%	8.405%	8.405%	8.405%	8.405%	8.405%
LGS	27.3%	10.3%	8.405%	8.405%	8.405%	8.405%	8.405%
LGS-MAINLINE	-5.2%	-5.2%	8.405%	8.405%	8.405%	8.405%	8.405%
Total	5.5%	5.5%	8.405%	8.405%	8.405%	8.405%	8.405%

Peoples Natural Gas Company LLC
Present and Proposed Rates

Please see Exhibit 11, Schedule 8 for the typical bill by rate class.

Peoples Natural Gas Company LLC
Residential Monthly Bill Comparison

Peoples Division

Month	Mcf Usage	Present Monthly Fixed Charge	Present Volumetric Charge	Proposed Monthly Fixed Charge	Proposed Volumetric Charge	Total Present Bill	Total Proposed Bill	Increase - $	Increase - 5
Jan	8.93	$ 15.75	$ 10.36	$ 21.50	$ 10.29	$ 108.23	$ 113.38	$ 5.15	4.8%
Feb	12.74	$ 15.75	$ 10.36	$ 21.50	$ 10.29	$ 147.73	$ 152.62	$ 4.90	3.3%
Mar	14.23	$ 15.75	$ 10.36	$ 21.50	$ 10.29	$ 163.14	$ 167.94	$ 4.80	2.9%
Apr	12.19	$ 15.75	$ 10.36	$ 21.50	$ 10.29	$ 141.95	$ 146.88	$ 4.93	3.5%
May	10.14	$ 15.75	$ 10.36	$ 21.50	$ 10.29	$ 120.75	$ 125.82	$ 5.07	4.2%
Jun	5.77	$ 15.75	$ 10.36	$ 21.50	$ 10.29	$ 75.48	$ 80.84	$ 5.36	7.1%
Jul	3.26	$ 15.75	$ 10.36	$ 21.50	$ 10.29	$ 49.47	$ 55.00	$ 5.53	11.2%
Aug	1.77	$ 15.75	$ 10.36	$ 21.50	$ 10.29	$ 34.05	$ 39.68	$ 5.63	16.5%
Sep	1.49	$ 15.75	$ 10.36	$ 21.50	$ 10.29	$ 31.16	$ 36.81	$ 5.65	18.1%
Oct	1.49	$ 15.75	$ 10.36	$ 21.50	$ 10.29	$ 31.16	$ 36.81	$ 5.65	18.1%
Nov	2.23	$ 15.75	$ 10.36	$ 21.50	$ 10.29	$ 38.87	$ 44.47	$ 5.60	14.4%
Dec	5.77	$ 15.75	$ 10.36	$ 21.50	$ 10.29	$ 75.48	$ 80.84	$ 5.36	7.1%
Total	80					$ 1,017.46	$ 1,081.10	$ 63.64	6.3%

	PRESENT RATES	PROPOSED RATES
PEOPLES GAS DIVISION	Rate	Rate
Monthly Service Charge	$ 15.75	$ 21.50
Rider DSIC	$ -	$ -
Rider TCJA	$ (1.2976)	$ (0.3502)
Rider Supplier Choice	$ (0.0012)	$ 0.0037
Base Cost of Gas	$ 3.9521	$ 3.9521
Rider AVC	$ -	$ 0.6835
Delivery Rate	$ 6.7743	$ 5.6304
Rider STAS	$ 0.0043	$ -
Rider MFC	$ 0.0967	$ 0.0869
Rider USR	$ -	$ -
Rider GPC	$ 0.0865	$ 0.0865
Rider DSIC	$ -	$ -
Rider TCJA	$ (0.5581)	$ (0.1506)
Total Rate per Mcf	$ 10.3558	$ 10.2887

Peoples Natural Gas Division

Month	Mcf Usage	Present Monthly Fixed Charge	Present Volumetric Charge	Proposed Monthly Fixed Charge	Proposed Volumetric Charge	Total Present Bill	Total Proposed Bill	Increase - $	Increase - 5
Jan	8.93	$ 14.24	$ 8.79	$ 20.51	$ 10.17	$ 92.71	$ 111.32	$ 18.61	20.1%
Feb	12.74	$ 14.24	$ 8.79	$ 20.51	$ 10.17	$ 126.23	$ 150.10	$ 23.87	18.9%
Mar	14.23	$ 14.24	$ 8.79	$ 20.51	$ 10.17	$ 139.31	$ 165.23	$ 25.93	18.6%
Apr	12.19	$ 14.24	$ 8.79	$ 20.51	$ 10.17	$ 121.32	$ 144.42	$ 23.10	19.0%
May	10.14	$ 14.24	$ 8.79	$ 20.51	$ 10.17	$ 103.34	$ 123.61	$ 20.28	19.6%
Jun	5.77	$ 14.24	$ 8.79	$ 20.51	$ 10.17	$ 64.92	$ 79.16	$ 14.24	21.9%
Jul	3.26	$ 14.24	$ 8.79	$ 20.51	$ 10.17	$ 42.85	$ 53.62	$ 10.77	25.1%
Aug	1.77	$ 14.24	$ 8.79	$ 20.51	$ 10.17	$ 29.77	$ 38.48	$ 8.71	29.3%
Sep	1.49	$ 14.24	$ 8.79	$ 20.51	$ 10.17	$ 27.32	$ 35.65	$ 8.33	30.5%
Oct	1.49	$ 14.24	$ 8.79	$ 20.51	$ 10.17	$ 27.32	$ 35.65	$ 8.33	30.5%
Nov	2.23	$ 14.24	$ 8.79	$ 20.51	$ 10.17	$ 33.86	$ 43.21	$ 9.36	27.6%
Dec	5.77	$ 14.24	$ 8.79	$ 20.51	$ 10.17	$ 64.92	$ 79.16	$ 14.24	21.9%
Total	80					$ 873.86	$ 1,059.61	$ 185.76	21.3%

	PRESENT RATES	PROPOSED RATES
PEOPLES NATURAL GAS DIVISION	Rate	Rate
Monthly Service Charge	$ 14.50	$ 21.50
Rider DSIC	$ 0.7250	$ -
Rider TRS	$ (0.9920)	$ (0.9920)
Rider Supplier Choice	$ 0.0042	$ 0.0037
Base Cost of Gas	$ 3.9521	$ 3.9521
Rider AVC	$ 0.7515	$ 0.6835
Delivery Rate	$ 3.9608	$ 5.6304
Rider STAS	$ 0.0032	$ -
Rider MFC	$ 0.0967	$ 0.0869
Rider USR	$ -	$ -
Rider GPC	$ 0.0865	$ 0.0865
Rider Rate Credit	$ -	$ -
Rider DSIC	$ 0.2078	$ -
Rider TRS	$ (0.2710)	$ (0.2710)
Total Rate per Mcf	$ 8.7876	$ 10.1684

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED REBUTTAL TESTIMONY OF
RALPH ZARUMBA
ON BEHALF OF
PEOPLES NATURAL GAS COMPANY, LLC

DATE SERVED:
DATE ADMITTED: _____

Peoples Statement No. 15-R

PREPARED REBUTTAL TESTIMONY OF
RALPH ZARUMBA

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Ralph Zarumba. My business address is 736 Central Street, Evanston, Illinois.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am a subcontractor to Black & Veatch Management Consulting, LLC ("Black & Veatch"). Prior to my retirement, I was a Managing Director at Black & Veatch, leading the Natural Gas and Electricity Regulatory Practice.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN THIS PROCEEDING?

A. Yes. My direct testimony is outlined in Peoples Statement No. 15.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I am responding to various parties in this proceeding on the following topics:

- The forecasted number of Heating Degree Days (“HDD”) included in the fully projected future test year (“FPFTY” or “test year”).
- The proposed Weather Normalization Adjustment (“WNA”) mechanism.
- The revised allocated cost of service study, and.
- The revised proposed rate design.

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. Yes. I am sponsoring the following additional exhibits.

- Appendix A, my resume, was inadvertently not included in my direct testimony.
- Exhibit RNZ-R-1 which is the revised cost of service summary.
- Exhibit RNZ-R-2 includes the revised cost of service models under the Minimum System and Peak and Average approaches. These models are provided electronically.
- Exhibit RNZ-R-3 is the cost of service external factors models which is provided electronically.
- Exhibit RNZ-R-4 is the revised base rate design based on the revised cost of service studies, which is filed electronically.
- Exhibit RNZ-R-5 is the base rate comparison.

Q. HOW HAVE YOU ARRANGED YOUR REBUTTAL TESTIMONY?

A. My rebuttal testimony is organized as follows:

- A section summarizing my conclusions and recommendations.
- Discussions addressing the regression analyses that resulted in an estimated 5,341 HDD for the test year.
- Other Parties concerns about the Company's proposed Weather Normalization Adjustment.
- Other Parties concerns regarding the Company's cost of service studies.
- A revised rate design based upon the cost of service study changes.

Q. WHAT ARE YOUR RECOMMENDATIONS AND CONCLUSIONS.

A. My recommendations and conclusions are as follows:

- After responding to the other parties in this proceeding, I believe that an estimate of 5,341 HDD for the FPFTY remains accurate.
- The Company has illustrated that its Weather Normalization Adjustment mechanism, as proposed, should be approved in this proceeding. (Also see the rebuttal testimony of Carol Scanlon regarding WNA).
- I recommend the adoption of the cost of service study using the design day, and the minimum system approaches.
- The revenue allocations based upon the average design day and peak and average cost of services approaches provide an appropriate basis for revenue allocation.
- The proposed tariff, Rate MLS, should be approved and opened to all eligible customers.
- The amended rate design detailed in the Exhibit RNZ-R-4 should be approved.

II. PEOPLES APPROACH TO ESTIMATING HEATING DEGREE DAYS IS ACCURATE AND SHOULD BE ADOPTED

Q. PLEASE SUMMARIZE THE COMPANY'S PROPOSAL TO ESTIMATE HDD FOR THE FPFTY.

A. The Company has proposed to estimate the HDD for the Test Year as the arithmetic average of a 20-year average of HDD and a regression analysis using 65 years of data in which the estimated HDD is a function of time. The resulting proposed HDD for the Test Year is 5,341.

Q. PLEASE SUMMARIZE THE CONCERNS OF THE INTERVENING PARTIES REGARDING THE PEOPLES PROPOSAL FOR ESTIMATING HDD.

A. The following parties have filed testimony that addresses the Company's approach to estimating HDDs.

- I&E Witness Cline stated that he does not support using the 65-year regression to estimate HDD. He has further proposed to use 5,443 HDD instead of 5,341 HDD for the test year.
- OCA Witness Johnson stated that the R^2 in the regression is weak.
- OSBA Witness Knecht adopted the regression analysis approach but has produced slightly different results.

Q. PLEASE EXPLAIN THE PURPOSE AND THEORY OF USING A REGRESSION ANALYSIS.

A. The number of HDDs has gradually been diminishing over time. In my direct testimony, I provided a regression analysis that supports that conclusion. Therefore, using traditional approaches to estimate HDD, such as adopting a 20- or 30-year average, will overstate HDD and, therefore, overstate sales in the Company's sales forecast.

Q. WHY WILL A 20 OR 30 YEAR AVERAGE OF HDD OVERSTATE THE EXPECTED LEVEL OF HDD?

A. Using multi-year averages assumes that no trend exists in the time series. In other words, the average (i.e., mean) changes over time. Therefore, any projection of HDD relying on multi-year averages will overstate HDD and the Company's sales forecast.

Q. HOW DOES A REGRESSION ANALYSIS IMPROVE THE LOAD FORECAST?

A. The regression analysis captures the trend in decreasing HDD in the fitted equation.

Q. DOES THE REGRESSION ANALYSIS INCLUDED IN YOUR DIRECT TESTIMONY RESPOND TO THE CRITICISMS OF MR. CLINE, MR. JOHNSON AND MR. KNECHT?

A. Yes. The following discussions address their concerns.

Q. PLEASE DESCRIBE HOW A REGRESSION ANALYSIS IS PERFORMED AND TESTED FOR VALIDITY.

A. A properly constructed regression analysis captures all systematic variation in the data. The residuals of the regression equation (i.e., the difference between the actual and predicted values) are randomly distributed. An independent variable cannot predict the random variation in a data series.

Q. PLEASE DESCRIBE THE STATISTICS COMMONLY USED TO EVALUATE A REGRESSION ANALYSIS.

A. The statistics which are commonly used to evaluate a regression analysis are:

- The Coefficient of Determination, or the R^2 Statistic. It is the proportion of variation that is explained by the independent variable(s).
- The t-Statistic is a ratio of the difference between the mean of the two sample sets and the variation within the sample sets. The t statistic provides evidence that the estimated coefficient is statistically significant.
- The Durbin-Watson Statistic is a test for autocorrelation. Autocorrelation is the degree of correlation of a variable's values over time.

Q. AFTER REVIEWING THE TESTIMONY OF THE INTERVENING PARTIES, ARE YOU CHANGING YOUR PROPOSAL FOR THE REGRESSION ANALYSIS ESTIMATING HDD?

A. No, I can address the concerns expressed by I&E Witness Cline, OSBA Witness Knecht and OCA Witness Johnson. To address their concerns, I ran regression analyses using different lengths of time. The results are provided in Table 1 below.

- 65 years (original regression).
- 60 years.
- 55 years.
- 50 years.
- 40 Years
- 30 years
- 10 years.

Table 1 - Results of the Regression Analyses

Regression	Constant Coefficient	Trend Coefficient	Adjusted R^2	t-Statistic for the Trend Variable	Durbin-Watson Statistic	F-Statistic	F-Statistic Probability
30 Years	5656	(11.46)	0.058	-1.674	1.971	2.802	10.50%
20 Year	5626	(17.39)	0.051	-1.422	1.89	2.021	17.20%
10 Years	5569	(31.51)	-0.043	-0.793	1.704	0.6281	45.10%
65 Years	6187	(14.14)	0.370	-6.214	1.622	38.61	0.00%
60 Years	6113	(14.04)	0.319	-5.35	1.566	28.62	0.00%
55 Years	6068	(14.73)	0.295	-4.862	1.493	23.64	0.00%
50 Years	5971	(14.01)	0.222	-3.875	1.433	15.02	0.00%
40 Years	5710	(9.64)	0.078	-2.072	1.848	4.295	4.51%

Q. PLEASE COMMENT ON THE RESULTS OF THE VARIOUS REGRESSION ANALYSES.

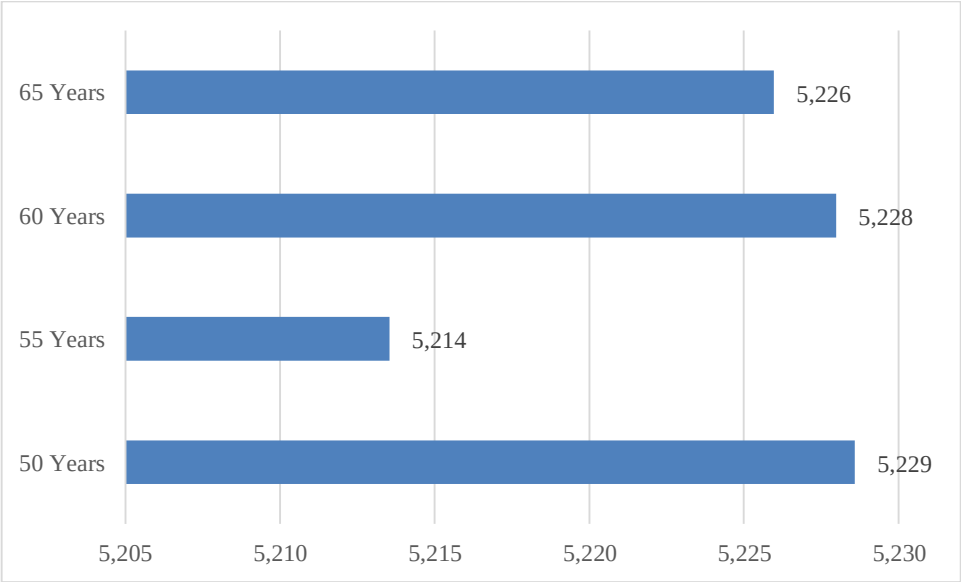
A. I rejected the results of the regression analyses using 30, 20, and 10 years of data due to a very low R^2, poor F Statistic, and, in the case of the 10 year regression, a very low t-statistic for the trend variable. It should be noted that the 10 and 20 year regression results would have provided the lowest level of HDD and generated the weakest sales for the Company. With the exception of the 40 year regression, the other models result in very similar trend coefficient estimates (14.01-14.73), which represents the number of HDDs that can be expected to decrease each year. The consistency of the estimated trend coefficients suggests the models are stable and consistent. The 65 year model, which I advocate adopting, has a Durbin-Watson statistic indicating that the residuals (i.e., the actual less

predicted value) are randomly distributed; in other words, all systematic information in the data has been captured.

Q. HAVE YOU ESTIMATED THE PREDICTED VALUES FOR THE REGRESSION ANALYSES?

A. Yes. The graph below provides the predicted values of the models for the year 2025.

Figure 1 - 2025 Predicted Heating Degree Days



The projected HDD projections of the various models are extremely similar, suggesting that the 65 year model reliably projects future HDDs.

Q. PLEASE COMMENT ON OCA WITNESS JOHNSON'S CONCERNS THAT THE R^2 IS STATICALLY WEAK AND SUGGESTS THAT VARIABLES MAY EXIST THAT WOULD EXPLAIN THE REMAINING VARIATION IN THE DATA.

A. Mr. Johnson's concerns are unfounded. First, the Durbin-Watson statistic suggests no autocorrelation exists in the model, and all systematic variation is captured in the regression equation. In other words, Mr. Johnson's concern about missing explanatory variables has been addressed. Second, HDD data tends to vary randomly from year to year. By definition, random variation cannot be modeled.

Q. OSBA WITNESS KNECHT PROSPOES A DIFFERENT REGRESSION ANALYSIS PREDICTING HDD. PLEASE COMMENT.

A. Mr. Knecht provided a regression analysis similar to what I filed in my direct testimony, except he specified log-linear equations using 65 years of data. The predicted value they produced for 2025 is very similar to what I produced in my 65 year regression and, therefore, supports my original proposal.

Q. I&E WITNESS CLINE STATED THAT HE DOES NOT SUPPORT USING THE 65 YEAR REGRESSION TO ESTIMATE HDD. HE HAS FURTHER PROPOSED TO USE 5,443 HDD INSTEAD OF 5,341 HDD FOR THE TEST YEAR. PLEASE COMMENT.

A. The objective of any forecast is to provide the most accurate estimation of behavior for the test year. I believe a regression analysis approach captures the decreasing trend in HDD, which I described above. In order to further support the proposed HDD, I have compared the results of a projection using only a regression analysis, a 20 year moving average, and the Company's proposed blended regression analysis/20 year moving average approach. I prepared analyses for two time periods: 2003-22 and 1993-22. I summed the net errors and

divided the net errors by the total HDD for the periods. The graphs below illustrate the results.

Figure 2 - Percentage Errors from Various Heating Degree Day Forecasts – 2003-22

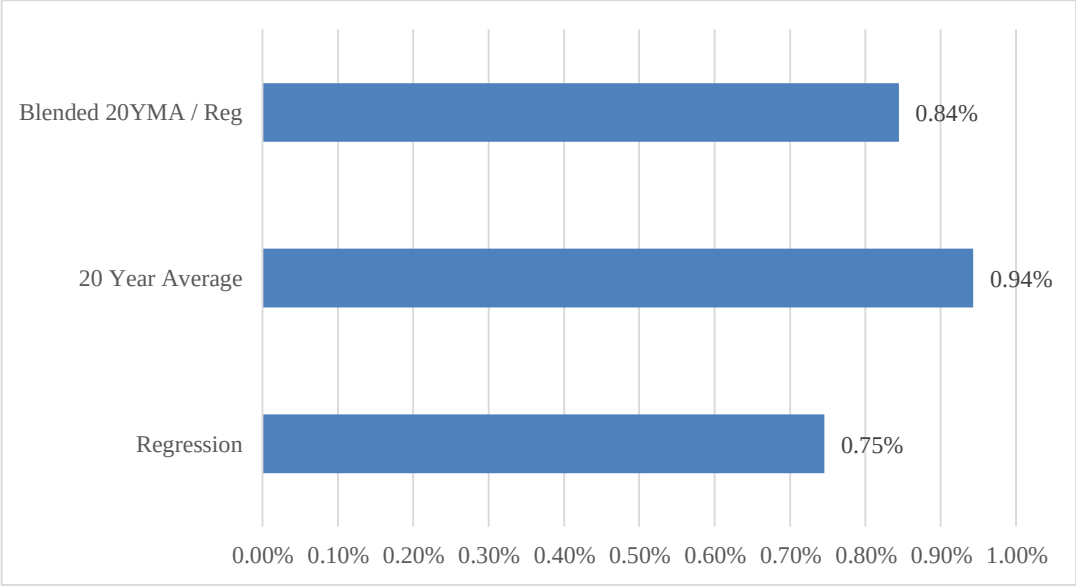
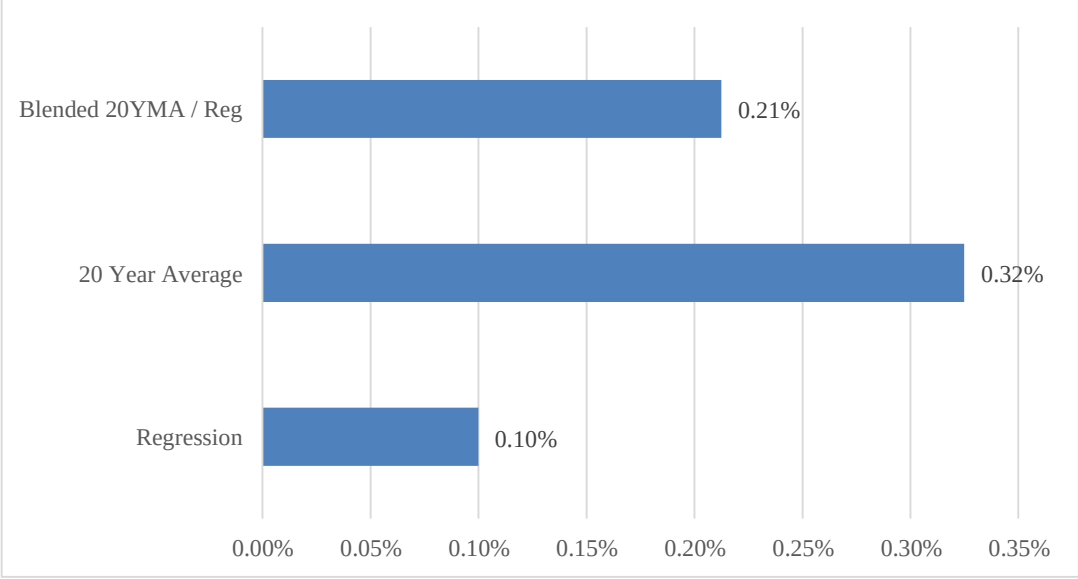


Figure 3- Percentage Errors from Various Heating Degree Day Forecasts - 1993-2022



In both cases, the regression analyses produce the most accurate forecast over the time periods analyses. The blended regression analysis / 20 year moving average produces the

second most reliable results. The 20-year moving average produces the least reliable results.

I therefore conclude that the Company's proposal to use the blended regression analysis / 20-year moving average approach is superior to the 20 year moving average forecast of HDDs.

Q. PLEASE SUMMARIZE YOUR CONCLUSIONS.

A. Given the rigor of the statistics supporting the 65 year model and the consistency of the results of the various time periods modeled, I believe the 65 year regression analysis provides accurate projections of future HDD. This was further verified by OSBA Witness Knecht, who independently arrived at virtually identical results adopting a different specification of the equation.

III. PEOPLES PROPOSED WEATHER NORMALIZATION ADJUSTMENT (WNA)

Q. WHAT PARTIES HAVE FILED TESTIMONY ADDRESSING THE PROPOSED WNA?

A. Parties who have filed testimony addressing the proposed WNA include.

- I&E Witness Cline.
- OCA Witnesses Johnson and Alexander.
- OSBA Witnesses Knecht and Ewen.
- CAUSE-PA Witness Geller

A. PARTY POSITIONS ON THE COMPANY'S WEATHER NORMALIZATION MECHANISM

Q. DO ANY PARTIES IN THIS PROCEEDING REJECT THE IMPLEMENTATION OF THE WNA?

A. OCA Witnesses Johnson and Alexander oppose the implementation of the WNA, as does CAUSE-PA' Witness Geller. The other parties either support the implementation of the WNA as proposed or with modifications to the Company's original proposal.

Q. PLEASE SUMMARIZE OCA'S CONCERNS ABOUT THE PROPOSED WNA, WHICH LEADS THEM TO RECOMMEND REJECTION OF THE MECHANISM.

A. OCA Witness Johnson claims that the WNA weakens traditional regulatory principles and shifts the risk to customers (OCA Statement No. 4 p. 41).

Q. IS IT YOUR OPINION THAT THE PROPOSED WNA MECHANISM SHIFTS RISK TO CUSTOMERS?

A. No. The WNA mechanism is designed to be symmetric and limit risk equally for customers and the Company. The WNA mechanism moves revenues towards those approved in the rate request. The formula for the adjustment to the volumetric charge of the tariff is based on the ratio of normal HDD to actual HDD. The weather behavior is random and not skewed to be warmer or colder than normal for a specific period. Therefore, OCA's claims that the WNA shifts risk to customers are unfounded.

Q. HAVE YOU TESTED YOUR HYPOTHESIS THAT THE IMPACT OF THE WNA IS SYMMETRIC?

A. Yes. The Company has provided residential customer data for each customer for the past 7 years. With that data, I have prepared analyses to measure the impact of the WNA on individual customers and the residential customers as a whole.

Q. WHAT DID YOU USE IN THE SEVEN (7) YEARS OF DATA?

A. I used actual customer usage for 7 years. Any given year will have HDD, which will be above or below normal, thus impacting usage. The sum of HDD for 2016 through 2022 produces an average HDD, which is close to normal but still slightly warmer than average. I feel using multiple years of data provides a more rigorous analysis.

Q. WERE ALL CUSTOMERS USED IN THE ANALYSIS?

A. I excluded customers who did not have a full year of data because of the seasonal aspect of the WNA. Using customers with incomplete data could introduce inaccuracies in the analysis results.

Q. HOW DID YOU TEST THE WNA'S DESIGN TO DETERMINE THE WNA'S IMPACT?

A. I calculated the base distribution portion of each customer's bill with and without the WNA. The base distribution tariff I used for the calculation is the Company's current PNG tariff.

Q. WHAT ARE THE RESULTS OF THE ANALYSIS?

A. The table below provides a summary of the bill comparison. In total, the results of the analysis indicate that the WNA produces slightly more revenue than distribution tariffs without the WNA. However, it should be noted that the result is expected because the sum of the HDD for the 7 years is slightly below normal. It should be noted that the data used in the analysis are not billing determinants. The data is a sample to measure customer impacts, not billing determinants. Therefore, the data is not adjusted to reflect normal weather and would be expected to produce a slightly above or below normal result.

Table 2 – Impacts of the Weather Normalization Mechanism – 2016-22

Year	No. of Bills – Decreased	No. of Bills – Increased	$ Decrease	$ Increase	Net $ Impact
2016	738,322	2,697,543	($1,488,445)	$12,538,443	$11,049,998
2017	1,150,361	2,467,970	($2,489,027)	$15,935,965	$13,446,938
2018	2,421,268	1,196,389	($22,018,240)	$8,158,156	($13,860,084)
2019	1,939,522	1,502,413	($8,551,058)	$4,696,034	($3,855,024)
2020	982,283	2,771,266	($4,217,709)	$11,837,959	$7,620,249
2021	1,934,388	1,819,233	($6,590,751)	$6,481,817	($108,933)
2022	2,357,903	1,615,369	($9,618,625)	$5,243,101	($4,375,524)
Total	11,524,047	14,070,183	($54,973,856)	$64,891,474	$9,917,619

Q. PLEASE DISCUSS THE VARIATION IN THE IMPACTS FROM YEAR TO YEAR.

A. The annual results demonstrate that the WNA can benefit the Company in some years and, in other years, benefit customers based on weather patterns. The net impact over the entire period was an increase of $9,917,619 over the base charges without the WNA of $1.49 billion or 0.66 percent. The slight increase in revenues is consistent with the HDD data for those years, which were 2 percent below normal. **Error! Reference source not found.Error! Reference source not found.** provides the HDD by year.

Table 3 – Heating Degree Days by Year – 2016-22

Year	Actual HDDs	Normal HDDs	Actual vs Normal HDDs
2016	5017	5368	-7%
2017	4892	5341	-8%
2018	5664	5341	6%
2019	5398	5341	1%
2020	5157	5368	-4%
2021	5139	5341	-4%
2022	5648	5341	6%
Avg	5274	5349	-1%

Q. WHAT IMPACT DOES THE WNA HAVE ON YEARS WHEN THE WEATHER IS SEVERE?

A. In years when the weather is severe (i.e., significantly colder than normal), the WNA limits the impact on bills, making them more affordable. Note that the years 2018, 2019 and 2022 were colder than normal. Table 2 above and **Error! Reference source not found.** below illustrates the distribution of bill's impacts with the WNA. Overall, these tables show that 45% of customer bills benefited from the WNA and experienced lower bills than if the WNA did not exist.

Table 4 - Distribution of Bills with Increases and Decreases Triggered by the WNA

Bill Impact (% Change) Bins	2016	2017	2018	2019	2020	2021	2022	Total
-100 to -75%	0	0	0	0	0	0	0	**0**
-75 to -50%	0	0	0	0	0	0	0	**0**
-50 to -15%	6	16	897,192	24,406	257,969	61,028	133,631	**1,374,248**
-15 to -10%	56	10,787	664,959	316,094	166,185	207,653	503,147	**1,868,881**
-10 to -5%	65,523	206,504	435,757	723,309	148,358	636,468	617,323	**2,833,242**
-5 to 0%	672,938	933,153	423,466	875,942	409,850	1,029,523	1,103,838	**5,448,710**
0 to 5%	1,163,826	586,204	384,070	704,272	1,099,257	862,626	969,230	**5,769,485**
5 to 10%	652,214	538,517	203,289	446,829	1,258,946	348,631	419,449	**3,867,875**
10 to 15%	318,243	463,371	282,328	193,699	299,915	311,830	139,875	**2,009,261**
15 to 50%	557,638	870,953	294,734	147,551	113,069	291,264	86,777	**2,361,986**
50 to 100%	4,703	8,249	19,023	5,811	0	4,522	1	**42,309**
100 to 200%	628	575	6,297	2,821	0	76	1	**10,398**
200 to 300%	86	2	2,940	741	0	0	0	**3,769**
300 to 7000%	4	0	3,602	460	0	0	0	**4,066**
Total	**3,435,865**	**3,618,331**	**3,617,657**	**3,441,935**	**3,753,549**	**3,753,621**	**3,973,272**	**25,594,230**

Q. OCA WITNESS JOHNSON STATES THAT THE UTILITY SHOULD DEMONSTRATE THAT THE WNA MECHANISM IS REQUIRED TO AVOID SIGNIFICANT DAMAGE TO CUSTOMERS (OCA STATEMENT NO. 4 P. 41).

A. The WNA assists in avoiding significant damage to customers by limiting the bill's impact on them. However, I disagree with Mr. Johnson that the only criteria that should be applied to any regulatory mechanism is that it avoids significant customer damage. First, the analysis I included above demonstrates that during years with especially severe weather, the WNA shields customers from high bills. Second, regulatory mechanisms are implemented to support the balanced goals of serving the customers and providing the

utility with a reasonable opportunity to earn their return. The WNA is a mechanism that protects customers from unhedged weather risks. Warmer-than-normal weather does not adversely impact customers because bills are lower than normal. However, when extreme cold weather occurs, which is greater than what was assumed to develop rates, customers are exposed to the risk of higher bills than normal. Further, the WNA provides a mechanism which reduces under- and over-recovery of the authorized level of revenues by the utility. Both features of the WNA support the goal of proper regulatory policy.

Q. HAVE YOU PREPARED AN ANALYSIS TESTING YOUR CLAIM THAT WEATHER RISKS ARE UNHEDGED?

A. Yes. I have prepared an analysis of the seven historical years comparing actual and normal weather patterns. The past 7 years have provided something relatively close to normal weather. However, in 2018, HDDs were 6 percent higher than normal in a specific year, which would reduce customers' bills. As shown in Table 4, 67% of customer bills in 2018 received a bill decrease. Conversely, in 2017, the weather was 8% percent below normal, which increased 68% of customer bills.

Q. OCA WITNESS JOHNSON STATES THAT THE WNA MECHANISM WILL NOT REDUCE THE FREQUENCY OF RATE CASES AND WEAKENS THE INCENTIVES TO CONTROL COSTS. SUPPORTING HIS CLAIM, HE REFERENCES AN NRRI REPORT BY MR. KENNETH COSTELLO (OCA STATEMENT NO. 4 P. 41). PLEASE COMMENT.

A. Mr. Johnson misunderstands the rationale of the WNA. The WNA is designed to provide a revenue level closer to that which the Commission approves in this rate request. The WNA does not impact the cost structure of the utility. Mr. Johnson's reference to controlling costs is more appropriately focused on Performance-Based Ratemaking mechanisms. No Performance-Based Ratemaking mechanisms are proposed in this proceeding.

Further, I have reviewed the NRRI Report by Mr. Costello, and I believe Mr. Johnson mischaracterizes the content.

- The NRRI Report does not address WNA mechanisms.
- Mr. Costello avoids commenting on specific alternative rate mechanisms in his paper. Mr. Costello states:

This paper excludes endorsing specific rate mechanisms since it argues that their efficacy is case-specific and depends essentially on the weights commissioners place on the different objectives ascribed to ratemaking. The challenge for commissions, then, is to weigh these objectives and measure (if possible) the effect of a rate mechanism on each one and the overall public interest. Assigning weights requires judgment by commissions, while examining the effect demands data and other unbiased information derived from sound analytical methods. This paper addresses the latter task. If a commission assigns a top priority to economic efficiency, for example, it would tend to favor mechanisms that set prices compatible with marginal-cost principles and provide utilities with strong incentives for technological advances and productivity.

The NRRI Report discusses revenue decoupling mechanisms, which some parties have characterized as being similar to the proposed WNA. Mr. Costello lists the following rationales for revenue decoupling mechanisms.

- It eliminates the disincentive for utilities to promote energy efficiency.
- Standard rate design places the utility at risk for recovering its fixed costs, with the risk increasing in recent years because of declining usage per customer.
- RD is superior to alternative rate designs in achieving revenue stability and promoting energy efficiency.
- It would result in small annual rate adjustments, either upward or downward.

Q. OCA WITNESS JOHNSON STATES THE WNA WILL PROVIDE A DISINCENTIVE TO ENERGY EFFICIENCY. DO YOU AGREE?

A. No, I disagree that the WNA will provide a disincentive to energy efficiency. I believe that the WNA mechanism removes the barriers to implementing energy efficiency because it lessens the impact on the relationship between consumption and revenues. For example, see the paper published by the National Renewable Energy Laboratory, "Decoupling Policies: Options to Encourage Energy Efficiency Policies for Utilities."[1]

Q. PARTIES IN THE PROCEEDING HAVE EXPRESSED CONCERNS ABOUT THE PHILADELHIA GAS WORKS ("PGW") WNA. WHAT IS YOUR INTERPRETATION OF THE ISSUES THAT PGW ENCOUNTERED WITH THEIR WNA?

[1] www.nrel.gov/docs/fy10osti/46606.pdf

A. PGW encountered unexpected bill impacts, primarily during the transition month of May.

Q. HAS PEOPLES ANALYZED ITS PROPOSED WNA AND DETERMINED IF SIMILAR ISSUES COULD OCCUR?

A. First, I note that Peoples cannot be compared to PGW as though it is an apples to apples comparison. I note that Peoples and PGW do not have the same customer profiles, weather, billing and more. As I stated previously, Peoples has analyzed individual customer data for the years 2016 through 2022 to analyze the behavior of the WNA. The analysis does identify the infrequent times that certain customers experienced distribution bill impacts that were out of the ordinary. The takeaway is that the mechanism worked as intended and without unusual results, 99.93% of the time.

Q. PLEASE EXPLAIN WHAT HAPPENED IN THE ANALYSIS THAT PRODUCED UNUSUAL RESULTS 0.07% OF TIME.

A. Certain customers exhibited behavior inconsistent with weather trends. Specifically, a small subset of customers increased usage when HDD was below normal. The result was an unusual increase in the distribution charge to those customers.

Q. WHEN DID THIS BEHAVIOR OCCUR?

A. First, for purposes of this analysis, I assume an unusual increase to be when the base bill increase is above 100% due to the WNA. Almost all instances of this behavior occurred in May and October, primarily in the years 2018 and 2019, with 70% of the instances being

in May 2018. The total increase for the 18,233 (0.07%) bills that experienced an increase above 100% was $1.5 million.

Q. WHAT IS THE COMPANY'S POSITION WITH RESPECT TO PGW CONCERNS?

A. The analysis I've performed, analyzing over 40 million bills, 25 million bills impacted in WNA months, over a seven year period for the Company, illustrates that its WNA mechanism, as proposed, yields intended results 99.93% of the time. As such, the Company is confident that its WNA mechanism will be implemented accurately and it is extremely likely that it will produce the intended impact of normal weather.

IV. ALLOCATED COST-OF-SERVICE ISSUES

Q. WHAT PARTIES HAVE FILED TESTIMONY ADDRESSING PEOPLES COST-OF-SERVICE STUDY?

A. The following parties have filed testimony addressing the Peoples Cost-of-Service Study

- I&E Witness Cline.
- OCA Witness Johnson.
- OSBA Witness Knecht.
- PII Witness Baudino

I will address each issue individually and address the arguments made by each witness.

A. MAINS CLASSIFICATION/ALLOCATION AND SEGREGATION

1. Summary of Positions

Q. WHAT APPROACH DO YOU BELIEVE IS APPROPRIATE FOR THE CLASSIFICATION AND ALLOCATION OF DISTRIBUTION MAINS?

A. I believe distribution mains should be functionalized as demand and customer based on a minimum cost study for cost-of-service classification purposes. For allocation purposes, the demand component of mains is allocated to the classes using a design day allocator.

Q. DID YOUR REVENUE ALLOCATION ADOPT YOUR PROSPOED COST-OF-SERVICE APPROACH?

A. No. For revenue allocation purposes I averaged the minimum system/design day approach with a Peak and Average methods. The midpoint of the results of the two studies is the basis of revenue allocation.

Q. WHICH MAINS CLASSIFICATION AND ALLOCATION APPROACHES WERE PROPOSED FOR COST-OF-SERVICE IN THIS PROCEEDING?

A. The following table includes the Company's position and my understanding of the positions of the other witnesses in their direct testimony. Depending on one's perspective, the Peak and Average methods could be portrayed differently. Therefore, in the table below, I show two perspectives for the I&E and OCA Peak and Average methods, although they are both mathematically equivalent.

Table 5 - Summary of Parties Positions - Classification and Allocation of Mains

Party/Witness	Mains Cost-of-Service	
	Classification	**Allocation**
Peoples, Zarumba	MinSystem 48% Customer 52% Demand	Number of Customers Design Day
I&E (Cline) and OCA (Johnson)	Demand 100%	Peak and Avg 50% Design Day 50% Throughput
	Peak and Avg 50% Commodity 50% Demand	Peak and Avg Throughput Design Day
PII, Baudino	MinSystem 48% Customer 52% Demand	Number of Customers Design Day
OSBA, Ewen/Knecht	Zero Intercept 29% Customer 71% Demand	Number of Customers Design Day (Modified)

Q. AFTER REVIEWING THE TESTIMONY OF THE PARTIES IN THIS PROCEEDING, HAVE YOU CHANGED YOUR PROPOSAL FOR YOUR PREFERRED COST-OF-SERVICE METHODOLOGY OR ULTIMATE REVENUE ALLOCATION METHODOLOGY?

A. No. It should be noted that the other parties in this proceeding are divided in their proposals for the cost-of-service study and revenue allocation approach.

Q. WHERE DOES YOU POSITION OF COST OF SERVICE RELATIVE TO THE OTHER PARTIES IN THIS PROCEEDING?

A. From a policy standpoint the cost of service study I sponsored is aligned with PII Witness Baudino and OSBA Witness Knecht in terms of a portion of Mains being classified as customer related. However, the approach I proposed for revenue allocation finds a midpoint between those parties and I&E Witness Cline and OCA Witness Johnson.

2. Customer Component of Mains Classification/Allocation

Q. PLEASE DESCRIBE YOUR APPROACH TO THE CLASSIFICATION OF MAINS.

A. In my direct testimony, I described the approach I adopted, classifying a portion of mains as customer-related and the balance as demand-related using the minimum system approach. See page 14 if Peoples Statement No. 15. The result of the analysis classified mains as 48 percent customer and 52 percent demand.

Q. DO YOU BELIEVE IT IS APPROPRIATE TO EXCLUDE ANY CUSTOMER COMPONENT FROM MAINS CLASSIFICATION AS OCA AND I&E HAVE PROPOSED?

A. No. I am not aware of any precedent specific to Peoples Gas where the Commission ruled on the customer component of Mains. Second, the Commission's policy regarding natural gas and electric distribution-related facilities has varied between cases. OSBA Witness Knecht states:

> We note that even in cases in which the revenue allocation methodology is litigated, a determination regarding which ACCOSS should be used should be determined on a case-by-case basis. We have observed that 'the inherent distinctions between utilities and rate cases may result in different methodologies to be reasonable for different reasons. In other words, the best-suited ACCOSS may

depend on the circumstances of the situation on a case-by-case basis.[2]

Given the lack of specific precedent for Peoples Gas and the Commission's statement on determining the appropriate COS on a case-by-case basis, I agree with Mr. Knecht that "Commission precedent has only limited applicability to this case.[3]"

Q. ASIDE FROM PAST COMMISSION PRECEDENT, WHY SHOULD MAINS CLASSIFICATION INCLUDE A CUSTOMER COMPONENT?

A. While methodologies for classifying mains can vary across utilities and regulators, using a customer component is within industry norms. Both the American Gas Association ("AGA") text Gas Rate Fundamentals[4] and NARUC's "Gas Distribution Rate Design Manual"[5] recognize the segregation of Mains into a customer and distribution component. Second, using a commodity-based allocation factor (such as the peak and average method) provides little insight, if any, into how the utility incurs costs to provide service. The rationale for using a commodity-based allocation factor is usually discussed by cost analysts supporting such a method by arguing that the gas distribution system would not be built if it were not for customers' commodity consumption. Their argument relies upon the concept I characterize as the "commodity delivery function." A "commodity delivery

[2] PUC v. Columbia Gas of Pennsylvania, Inc. Docket No. R-2022-3031211 (Order entered December 8, 2022) at 107, footnote 30.

[3] Ewen/Knecht Direct testimony, page 32 lines 3-4

[4] Gas Rate Fundamentals, Fourth Edition. American Gas Association, 1987. See Table 7-4 at page 142 and the example cost allocation study at page A-17. The implied demand/customer classification split for joint-use distribution mains in the AGA sample study is 68 percent demand, 32 percent customer

[5] National Association of Regulatory Utility Commissioners, “Gas Distribution Rate Design Manual,” 1989, page 46

function" relates to the notion that a gas distribution utility delivers a commodity through its distribution system. In other words, these cost analysts view the "commodity delivery function" as the reason for the existence of gas distribution utilities, which is why those facilities were originally installed. It is obvious that all customers utilize the utility's gas distribution system to receive delivery service throughout the year, that fact provides little, if any, insight into the manner in which the utility incurs costs to provide such service.

In reality, customers value the availability of the design day capacity when it is needed and are willing to pay for that capacity because of the importance of service reliability under design day conditions. Once capacity is available to serve the design day, commodity use during all other days of the year has no impact at all on a utility's delivery system costs. Simply stated, annual usage does not cause any delivery system costs to be incurred by the utility. The installation of additional distribution mains (i.e., main extensions) to move gas from the existing system to new customers is more correctly thought of as being customer-related. For larger customers, the unit cost is lower than for smaller customers simply because they require either larger diameter or higher pressure mains to serve their higher design day demands – and those mains have lower unit costs due to the economies of scale inherent in a utility's gas distribution system.

Any commodity-based allocation method will assign higher total costs to larger customers based on the use of commodity when system unit costs are either the same or less for these higher commodity users. This allocation violates the fundamental principle of cost causation because these larger customers cause the same or less unit cost to be incurred by the utility.

Q. WHAT ARE THE RESULTS OF USING A COMMODITY-BASED METHODOLOGY FOR ALLOCATING MAINS?

A. As the cost analyst relies more heavily on the concept of a "commodity delivery function" to establish a cost allocation method for distribution mains, the resulting cost allocation factor based on a greater weighting of commodity volumes would quickly cause a result where the unit cost to serve each customer class would be identical. This would occur because the customers' use of the utility's gas distribution system, as measured by annual volume, would create a cost allocation factor that simply assigns costs to the utility's classes of service on a pro-rata basis without regard for either economies of scale or customers' annual load factors.

Q. WHAT PARTIES DISAGREE WITH THE ADOPTION OF THE MINIMUM SYSTEM APPROACH?

A. OCA Witness Johnson disagrees with the adoption of the Minimum System Approach. Mr. Johnson claims the Minimum System Approach is flawed because it is an abstraction. He quoted Bonbright, who stated these costs were unallocable. Further, he stated the Company did not perform a Zero-Intercept Study.

Q. IN HIS TESTIMONY, MR. JOHNSON STATES THAT BONBRIGHT REJECTS THE ADOPTION OF THE MINIMUM SYSTEM APPROACH. PLEASE COMMENT.

A. I have performed cost studies, both embedded and marginal cost of service, and the analyses used to prepare these studies rely upon analyses that Mr. Johnson refers to as "abstractions."

Mr. Johnson's quote refers to the 1961 edition of that publication. Curiously, the more recent 1988 edition of "Principles of Public Utility Rates" omits that language. I suggest that relying on the more recent edition of the publication provides a more reliable source of information.

I further believe the concept of "unallocable" is questionable from a policy perspective. If we accept the concept of unallocable, does that mean those costs should be ignored? Mr. Johnson suggests that these costs should not be ignored, they should all be allocated based upon demand, which he advocates in this proceeding. I believe that Mr. Johnson's proposal is arbitrary.

The minimum system approach is widely adopted in the industry and referenced in cost allocation manuals published by NARUC. The minimum system concept recognizes that a large portion of a gas utility's total cost of distribution mains must be borne regardless of customers' peak day or annual use. To illustrate this point, it is useful to summarize a gas utility's process for physically connecting new customers. To extend gas service to a typical residential subdivision, the utility must first design the gas system. Based on this design, the utility determines the length and size of pipe needed to serve the area and procures the necessary material. A field crew is then dispatched to the site, together with the facilities and equipment required to install the natural gas facilities. The activities necessary to install gas mains include digging a trench, installing the main into the trench, and backfilling the trench. Pipeline boring (i.e., a trenchless installation method) may be necessary to install

some main segments if the utility is unable to open a trench for a portion of the line due to existing surface conditions along the route of the main. After the main is installed, it will be pressure tested, tied into the existing gas system, and purged and filled with natural gas. The main is then ready to provide utility service to the new customers. These steps are necessary regardless of how much gas the new customers are projected to use during the year or during a peak day. The design work must still be completed, the crews, materials, and equipment dispatched to the site, the trench dug, the main installed in the trench, the trench backfilled, testing performed, and the other activities performed.

The additional costs associated with any larger mains required are mostly the incremental material costs of the larger mains themselves, the additional labor involved with digging a wider trench for very large mains, and possibly the need for additional equipment to handle larger diameter mains. As a result, a large percentage of the costs of providing gas delivery service to a gas utility's customers are incurred before they ever use one unit of gas. These are the costs the gas utility must incur simply to extend its gas distribution system to customers, irrespective of whether they will demand a small or large volume of gas on a peak day. As a result, the costs of such a minimum system are fundamentally customer-related in nature.

Q. ON PAGE 26 OF HIS TESTIMONY, OSBA WITNESS KNECHT DISCUSS THE APPLICATION OF THE ZERO-INTERCEPT METHOD. IS THE ADOPTION OF THE ZERO INTERCEPT METHOD A VALID APPROACH TO CLASSIFY MAINS?

A. Yes, the Zero Intercept method is a recognized method for classifying mains as customer- and demand-related[6]. Conceptually, the Zero Intercept and minimum systems are similar because they both recognize that some portion of the distribution system is required to serve customers regardless of the usage level.

Q. MR. JOHNSON'S TESTIMONY PROVIDES AN EXAMPLE OF A HOME BEING SPLIT FROM A SINGLE DWELLING INTO TWO DWELLINGS AS AN EXAMPLE OF WHERE A SMALL INCREMENTAL INVESTMENT IS REQUIRED. PLEASE COMMENT.

A. Mr. Johnson's hypothetical example identifies a highly unusual situation. The splitting of single residences into multiple residences is unusual and not a firm foundation for policymaking.

Q. MR. JOHNSON STATES THAT THE ADJUSTMENT TO REMOVE THE CAPACITY OF A 2" MAIN IS LIKELY INSUFFICIENT. PLEASE COMMENT.

A. I discount Mr. Johnson's statement because he provides no credible evidence to support his statement. In contrast, my direct testimony contains a discussion of the analysis we followed to support the estimate of 5.6%.

Mr. Johnson states that other methodologies exist to estimate the cost of mains with no load capacity. He relies upon an installation that includes labor and no materials and deduces that the cost of labor is 3.8% to 30% of the total cost. However, I see no

[6] National Association of Regulatory Utility Commissioners, "Electric Utility Cost Allocation Manual," 1992, page 92

relationship in the labor component of installing a 2" main and the capacity of that main. All else held equal, a 2" main has a specific capacity regardless of the labor cost installed during the installation of that main. A simple example is to assume the installation of a 2" main in loose soil compared to the same installation in rock. The labor cost of trenching is significantly greater if rock needs to be excavated rather than soil. However, Mr. Johnson appears to believe that the cost differential for the two identical pipelines would have different capacities.

Q. MR. JOHNSON STATES THAT THE CLASSIFICATION OF MAINS IS NOT SYMMETRIC WITH THE TREATMENT OF SERVICE LINES. PLEASE COMMENT.

A. First, adopting the minimum system approach for mains is not contingent on adopting the minimum system approach for services. Further, The Company installs mains based on customer type (i.e., various customer types would receive a specific sized main). Therefore, the application of a minimum system approach under these circumstances would result in services being 100% customer-classified, which is the identical result proposed in my study.

B. DESIGN DAY ALLOCATOR

Q. WHAT DOES OSBA PROPOSE WITH REGARDS TO THE DESIGN DAY ALLOCATOR?

A. OSBA proposes to essentially replace the LGS design day value with recent peak demand values which are higher than the design day value. The design day values for the remaining classes are essentially re-scaled so the that the total company design day value does not

change. Peoples witness Ms. Folks addresses this issue in her rebuttal testimony and has stated there should not be an adjustment to the design day allocator. Therefore, for cost-of-service purposes I continue to use the same allocator used in my direct testimony.

C. COST-OF-SERVICE CORRECTIONS AND REFINEMENTS

Q. PLEASE SUMMARIZE THE COST-OF-SERVICE CORRECTIONS AND REFINEMENTS YOU ARE ACCEPTING FROM THE OTHER PARTIES

A. **Error! Reference source not found.** below lists the various corrections and refinements accepted by the company.

Table 6 - Other Cost-of-Service Corrections and Refinements

Issue#	Correction/Refinement Summary	Witness	Company Rebuttal Position
1	CUST-902 allocator corrections	OSBA Knecht)	Accepted in concept but with a revision to the OSBA calculation
2	CUST-908 allocator corrections	OSBA (Knecht)	Agreed in concept but with a revision to the OSBA calculation
3	**Collections allocator:** Receivables used in the allocator should be weighted.	OSBA (Knecht)	Agreed in concept but with a revision to the OSBA calculation
4	**Large industrial customer support costs:** Reallocation of $1.3 million of labor costs to MGS and LGS only.	OCA (Johnson)	Agreed in concept but with a revision to the OCA calculation

Q. PLEASE EXPLAIN YOUR REVISIONS TO OSBA'S ADJUSTMENTS FOR THE CUST-902, CUST-908 AND COLLECTIONS ALLOCATORS.

A. For CUST-902 (meter reading expenses) I agree conceptually with the formula correction proposed by Mr. Knecht. However, Mr. Knecht's calculations assign a higher weight to GM&R (large commercial and small and large industrial) customers. According to the

Company, there is no difference in meter reading costs within the GM&R customers. Therefore I have not added a weighting factor to those customers.

For the "Cust-908" (Customer Service/Information) allocator I agree conceptually that there needs to be a formula correction. However, Mr. Knecht's revisions were only applied to the PNG component and not to the PG component. I have made the correction to both components which flow through to the combined entity allocator.

The "Collections" allocator is used to allocate forfeited discounts (including late fee revenue) to the classes. Mr. Knecht proposes to weight the receivables used to develop the allocator. His adjustment assigns receivables with greater arrearage periods with more weight, presumably to recognize a higher likelihood and or magnitude of late fees associated with those receivables. The adjustment was only made to the PNG component. The overall adjustment has a relatively small impact and I have accepted the adjustment conceptually but also added the weighting factor to the PG component. In future rate cases the company may look into a more precise weighting calculation than that used by Mr. Knecht.

Q. WHAT OTHER COST-OF-SERVICE ISSUES WERE PRESENTED BY THE PARTIES?

A. Mr. Knecht's testimony provided comments related to storage costs, Mains accumulated depreciation, cash-working capital, and A&G costs. However, no specific adjustment calculations were provided. I have not made any adjustments for these items.

Q. WHAT IS YOUR RESPONSE TO OCA WITNESS JOHNSON'S ADJUSTMENT FOR LARGE CUSTOMER SUPPORT COSTS?

A. Based on a data request response from the Company, Mr. Johnson proposes to reallocate $1,338,516 of labor costs related to support of large industrial customers to just the MGS, LGS, and LGS-Mainline classes. He proposes the reallocation should be based on revenues at current rates for those classes. I agree conceptually that these costs should be allocated to just the MGS and LGS classes. However, after a further detailed review by the Company, is was determined that $284,718 is related to FERC account 417.1 which is not an expense included in revenue requirement. It was also determined that $325,750 were booked as capital costs. Given the low dollar impact and complications of tracing dollars into capital I have not made an adjustment for the $325,750. Only $728,048 of the $1,338,516 is included in revenue requirement and cost-of-service expenses for FERC accounts 912, 920, 926 and 408.1. I have created line items in the cost-of-service model to reverse these amounts out from the applicable FERC accounts and then reallocate those costs to just the MGS, LGS, and LGS-Mainline classes. In order to be consistent with the allocators already being used for the specific FERC accounts involved, my reallocation uses the same factors assigned to those accounts but with the residential and SGS portions removed.

Q. WHAT IS THE NET IMPACT OF THE ADJUSTMENTS YOU HAVE ACCEPTED OR MODIFIED, AS SHOWN IN ERROR! REFERENCE SOURCE NOT FOUND.**?**

A. The net impact of these adjustments relative to the Company's filed position in direct testimony is shown below.

Table 7 - Rebuttal Cost-of-Service Adjustments

Class	Revenues @ Current Rates	Cost of Service			Rate Design Target	
		MinSys/ Design Day	Demand/ Peak&Avg	Mean	Revenues	% Change From Direct
As Filed-Direct						
RES	$347,866,631	$508,820,648	$451,420,813	$480,120,731	$480,120,731	
SGS	$43,991,391	$60,323,814	$67,379,366	$63,851,590	$63,851,590	
MGS	$57,024,004	$60,132,252	$90,788,231	$75,460,242	$75,460,242	
LGS	$48,982,267	$32,724,719	$52,411,209	$42,567,964	$52,169,360	
LGS-Mainline	$6,996,935	$16,597,423	$16,599,237	$16,598,330	$6,996,935	
Total	**$504,861,227**	**$678,598,857**	**$678,598,857**	**$678,598,857**	**$678,598,857**	
Rebuttal						
RES	$347,866,631	$511,080,159	$453,702,442	$482,391,301	$482,391,301	0.47%
SGS	$43,991,391	$60,175,651	$67,228,687	$63,702,169	$63,702,169	-0.23%
MGS	$57,024,004	$59,289,827	$89,916,725	$74,603,276	$74,603,276	-1.14%
LGS	$48,982,267	$31,509,466	$51,206,887	$41,358,177	$50,905,176	-2.42%
LGS-Mainline	$6,996,935	$16,543,753	$16,544,115	$16,543,934	$6,996,935	0.00%
Total	**$504,861,227**	**$678,598,857**	**$678,598,857**	**$678,598,857**	**$678,598,857**	0.00%

Q. HAVE YOU INCORPRATED THESE ADJUSTMENTS INTO A REVISED SET OF BASE RATES?

A. Yes. I have proportionately adjusted all base rates within each class by the percentage change noted in **Error! Reference source not found.**[7]. For example, the residential rates (customer and consumption) were increased by the 0.47% shown in **Error! Reference source not found.**. A summary of the revised rates is shown in Exhibit RNZ-R-4 and RNZ-R-5. RNZ-R-4 includes the calculation of the revised rates.

[7] Since the revenues shown in **Error! Reference source not found.** include negotiated customer revenues, the actual change applied to non-negotiated customers for non-residential classes is slightly different than what is shown in **Error! Reference source not found.**. The actual % changes are -0.24% (SGS), -1.14% (MGS), and -2.48% (LGS).

D. COST-OF-SERVICE TREATMENT FOR DISCOUNT CUSTOMERS

Q. ON P. 10 OF HIS TESTIMONY I&E WITNESS CLINE STATES "…I RECOMMEND THAT THE DISCOUNT RATE CUSTOMERS BE SEPARATED INTO THEIR OWN, SEPARATE CUSTOMER CLASS WITH AN APPROPRIATE ALLOCATION AND/OR ASSIGNMENT OF THE COSTS TO SERVE THE DISCOUNT CUSTOMERS." DO YOU AGREE WITH MR. CLINE'S PROPOSAL?

A. No, I disagree with Mr. Cline's proposal that in the next rate case discount customers should be separated into their own class of service.

Q. PLEASE EXPLAIN YOUR CONCERNS WITH MR. CLINE'S PROSPOAL.

A. The customers receiving discounts are customers with a competitive alternative to services from Peoples. However, retaining these customers on the Peoples system provides a contribution to fixed costs benefiting all customers. The allocated cost of service associated with these customers is relevant to determine the costs of serving the customer class irrespective of the discount.

V. <u>OVERALL REVENUE ALLOCATION</u>

Q. PLEASE SUMMARIZE THE PARTY'S POSITIONS REGARDING THE ALLOCATION OF THE REVENUE INCREASE.

A. The positions of the parties regarding the allocation of the revenue increase are.

- I&E Witness Cline recommends allocating revenue based on P&A but adopting a 1.5 times system average limit (except for MLS).

- OCA Witness Johnson proposed an alternative revenue allocation and proposed an alternative scale back of rates if the full increase is not granted.
- OSBA Witness Knecht recommends that a 1.5 times system average rate increase be the support boundary.
    - Revenue allocation should be based upon the average of the Company results and their cost-of-service study.
    - The rates of PG and PNG should not be harmonized in this case.
- PII Witness Baudino recommends that Rate LGS customers not receive a rate increase. Further, he recommends that the shortfall from Rate LGS customers who are on competitive rates should not be entirely recovered from non-competitive rate LGS customers.
    - Proposed a proportional scale-back approach.

Q. WHAT IS YOUR RESPONSE TO THE INTERVENING PARTIES RECOMMENDATIONS?

A. First, intervening parties representing specific customer groups have an incentive to recommend cost-of-service studies which serve their constituencies as the baseline. My direct testimony recommends a revenue allocation baseline using two accepted cost-of-service approaches.

Second, adopting a standard of a maximum increase of 1.5 times the average increase is reasonable and achieves the goal of gradualism.

Third, I disagree with PII Witness Baudino's recommendation that LGS customers should receive a decrease. I have previously agreed with several parties that a cap on the increase

of 1.5 times the average increase should exist in the final rate design. Consistent with the policy of a cap on increases, a floor to the minimum increase should also exist.

VI. RATE DESIGN

A. RESIDENTIAL RATE DESIGN

Q. PLEASE DESCRIBE PARTIES RECOMMENDATIONS FOR THE RESIDENTIAL RATES DESIGN.

A. The recommendations for the changes to the proposed residential rate design are as follows:

- I&E Witness Cline recommends that the residential customer charge (at the full increase) be reduced from $21.50 to $20.00. The customer charge should also be scaled back based upon the ordered revenue increase compared to the Company's requested increase.

- OCA Witness Johnson argues that the residential customer charge should only recover costs that directly vary with the number of customers and proposes a $9.00/month customer charge. OCA Witness Colton also supports the $9.00/month residential customer charge.

Q. PLEASE COMMENT ON THE RECOMMENDED CHANGES TO THE COMPANY'S PROPOSED RATE DESIGN.

A. I believe that the proposed residential customer charge is appropriate and cost-based. However, I also acknowledge that other factors influence rate design. The proposed residential customer charge proposed by Mr. Cline is similar to the Company's proposal. I reject the OCA proposal and Mr. Johnson's supporting methodology.

Q. WHAT CONCERNS DO YOU HAVE WITH MR. JOHNSON'S METHODOLOGY?

A. Mr. Johnson's approach is predicated upon the assumption that the customer charge should only recover cost that vary with the number of customers. That assumption is contrary to the theory behind an allocated cost of service study which allocates costs to each customer class or rate element based upon the average embedded cost of the utility. Mr. Johnson appears to be embracing the concept associated with a marginal cost analysis.

Q. WHY IS MR. JOHNSON'S APPROACH MORE CONSISTENT WITH THE MARGINAL COST ANALYSIS?

A. A marginal cost analysis measures the change in costs associated with adding another unit of output to the utility. In the case of a natural gas distribution company, the costs are the marginal customer cost (i.e., monthly fixed charge) which is and the marginal distribution cost (i.e., the volumetric charge).

Q. IF THE COMPANY WAS PREPARING A MARGINAL COST STUDY, WOULD MR. JOHNSON'S ESTIMATES BE APPROPRIATE REPRESENTATIONS OF THESE COSTS.

A. No. Estimates of marginal customer costs would include the cost of the meter, regulating station, service, associated O&M expenses as well as customer support.

Q. PLEASE SUMMARIZE YOUR CONCLUSIONS.

A. I reject Mr. Johnson's analysis because it more closely resembles that which is used in a marginal cost analysis. I therefore reject Mr. Johnson's proposal.

B. RATE MLS

Q. PLEASE SUMMARIZE PARTIES POSITION ON THE PROPOSED RATE MLS

A. Parties in this proceeding have adopted the following positions regarding Rate MLS:

- I&E Witness Cline proposes to exempt Rate MLS from the 1.5 times system average revenue increase cap (check).
- OSBA Witness Knecht supports the establishment of rate MLS.
- PII Witness Baudino supports the establishment of rate MLS, but recommends that Rate MLS be separated from the customer classes in future cost-of-service studies.

Q. PLEASE RESPOND TO THE PARTIES RECOMMENDATIONS.

A. My response are:

- Rate MLS is new tariff and currently all potential customers who would take service under this tariff are currently served under special contracts. Therefore, the 1.5 times system average rate cap would not apply to those customers because it would be a voluntary tariff change for a customer to move to Rate MLS.
- I agree with Mr. Baudino that it would be appropriate to separate Rate MLS customers from Rate LGS customers in the cost-of-service study in the Company's next rate request.

C. GATHERING SYSTEM COSTS

Q. WHAT PARTIES IN THIS PROCEEDING TAKE ISSUE WITH THE COMPANY'S PROPOSED TREATMENT OF GATHERING SYSTEM COSTS?

A. OSBA Witness Knecht proposed an alternative treatment of Gathering System Costs.

Q. PLEASE SUMMARIZE OSBA'S PROPOSALS.

A. Mr. Knecht state in testimony:

> A conceptually superior method would be to recover gathering system costs from the PGC customers, NGSs and gas producers who use the system. This approach would result in a more accurate assignment of costs in two ways, first through a more accurate allocation of the costs among rate classes based on actual usage, and second through a more accurate recovery of costs within each rate class from the customers who actually benefit from the gathering system. (OSBA Statement No. 1 p. 16)

Mr. Knecht further states that it is unlikely that these changes can be implemented in the timeframe of this proceeding.

Q. WHAT IS YOUR RESPONSE TO THE OSBA'S RECOMMENDATIONS REGARDING THE COST ALLOCATION OF GATHERING SYSTEM COSTS?

A. I will address each of his three main points separately:

- I do not agree with either of Mr. Knecht's assertions that there is a conceptually superior method to the method utilized by the Company. The Company utilized an appropriate method of allocating these costs by first identifying the gathering volumes by the PG and PNG entities by system supply and transport. These volumes were then allocated to the classes based on through-put for each class. The sum of the PNG and PG allocated volumes for each class is the allocator used to allocate gathering costs and revenues. This is consistent with my understanding

based upon discussions with Company personnel that all customers benefit from use of the gathering system. Specifically, sales customers (primarily residential) receive the benefit of the lower cost gas in the Purchased Gas Cost rates and transportation customers receive the benefit of the lower cost gas based upon the local gas procured on their behalf by third-party marketers procuring local gas.

- I do not agree this needs to be addressed in a future rate case based upon my description above.
- I do agree that it is unlikely that Mr. Knecht's changes could be implemented at this point of the proceeding.

Refer to page 59 of the rebuttal testimony of witness Andrew Wachter at Peoples Statement No. 2-R for additional discussion of this matter.

VII. CONCLUSIONS

Q. Please summarize your conclusions.

A. My conclusions are:

- I accept, with some modification, the corrections proposed by Mr. Knecht for the "Cust-902", "Cust-908" and "Collections" allocators and the reallocation of costs related to Larger Customer support cost proposed by Mr. Johnson.
- The analyses included in my testimony supports the adoption of 5,341 HDD for the test year. The regression analysis which I included in my direct and rebuttal testimony is rigorous and provides an accurate estimate of future HDD.

- The WNA, as proposed, should be approved. The analyses I previously discussed in this rebuttal testimony rigorously tests the proposed WNA.

- The cost of service studies which I prepared, after capturing small corrections, provides a reasonable basis for allocating the costs to the Company's tariff classes. I reject proposals for adopting the Peak and Average approach and ignoring evidence supporting that a significant portion of the cost of distribution mains is customer-related. My recommendation regarding cost of service are generally shared by OSBA Witness Knecht and PII Witness Baudino.

- Inasmuch as I support the adoption of a cost of service study adopting the concept of a design day and a minimum system, I have proposed a revenue allocation based upon the average of that study and a study adopting the Peak and Average Approach. Adoption of the averaging approach for revenue allocation recognizes the diversity of opinions that exist for cost of service analysis and provides a measure of gradualism for rate increases.

- The Company should proceed with the integration of the legacy Peoples Natural Gas and Peoples Gas Tariffs.

- The proposed Rate MLS provides a tariff option which is more accurately aligned with the cost of service of those customers. The proposed rate offering recognizes that these customers generally do not rely upon the Company's distribution mains and therefore should not allocated the costs of these assets.

- The revised Cost of service evidence supports a proposed residential monthly charge of $21.60. I&E Witness Cline supports a monthly fixed charge which is slightly lower, $20.00

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

Appendix A

Ralph Zarumba

rzarumba@nexus-economics.com
+1-312-342-4387

Ralph Zarumba is a regulatory economist with thirty-nine years of experience. He has worked in fifteen countries, assisting utilities, regulators, customer groups, developers, and other industry participants. He has appeared as an expert witness in regulatory and legal proceedings in twenty-four jurisdictions in North America.

REPRESENTATIVE PROJECT EXPERIENCE

Embedded Cost of Service Analysis

- Sponsored an embedded cost of service study and pricing design for CenterPoint Minnesota Natural Gas.
- Sponsored an embedded cost of service study and pricing design for Liberty Utilities New Brunswick natural gas.
- On behalf of Heritage Gas (Nova Scotia), prepared a cost allocation for a natural gas storage field presented before the Nova Scotia Utility and Review Board.
- Mr. Zarumba provided testimony in the proceedings reviewing the 2014 Nova Scotia Power Cost-of-Service study.
- Mr. Zarumba prepared and sponsored a cost-of-service filing supporting a Reliability Must-Run filing on the Cayuga Operating Company before the FERC and the NYPSC.
- Mr. Zarumba provided testimony in the proceedings reviewing the 2014 Nova Scotia Power Cost-of-Service study.

Pricing and Marginal Cost Studies

- On behalf of Enbridge Gas, New Brunswick appeared as an expert witness on marginal cost analysis and its application to pricing in the New Brunswick Power rate request.
- Mr. Zarumba is the principal author and expert witness of an Electric Marginal Cost of Service Study for Montana-Dakota Utilities for their Montana service area.
- On behalf of Bermuda Electric Power Company, prepared a marginal cost of service study, an allocated cost of service study, and a pricing design proposal implementing movement to access charges.
- On behalf of Puerto Rico Electric Power Authority, managed that company's first regulated rate request. It was the witness supporting pricing design, the marginal cost of service, an embedded cost

of service study, an electric rating period study, proposals for unbundling tariffs into functional components, and detailed testimony addressing compensation for Distributed Energy Resources.

- As an advisor to the Ontario Energy Board assisted in developing a proposal to change electric distribution pricing into a fully fixed tariff design and eliminate the volumetric (i.e., KWH. charge) component.
- Prepared a Pricing Strategy for the South Carolina Public Service Company (Santee Cooper).
- Prepared testimony proposing Retail Conjunctive Billing Pricing filed in Illinois and Wisconsin, filed before the Illinois Commerce Commission and the Wisconsin Public Service Commission.
- Negotiated complex service contracts with thermal energy customers, leading to a major Wisconsin Electric Steam System expansion.
- Prepared ancillary service pricing proposals based on market-based mechanisms for San Diego Gas and Electric Company.
- Prepared an analysis of pricing mechanisms for optional renewable energy products for a Midwestern public power association.

Regulatory Policy

- Prepared a white paper on rate mitigation mechanisms for the Ontario Energy Board.
- On behalf of the Ontario Energy Board, Mr. Zarumba co-authored a study that identified factors that could impede the combination of regulated distributors in that Province.
- On behalf of the Ontario Energy Board, prepared a white paper addressing the apportionment of regulatory commission costs to stakeholders.
- Developed electric regulatory rules for several Southeastern European countries.
- Mr. Zarumba led an effort for the Province of Alberta, which compared the cost of providing distribution services for Rural Electric Associations versus Investor-Owned Utilities.

Generation Market Analysis

- For a major public power generation, the owner prepared a strategy of internal coal versus natural gas generation dispatch protocols, including the treatment of liquidated damages.
- On behalf of Nalcor, I co-authored a report on the feasibility and economics of the proposed development of the Lower Churchill Hydroelectric project.
- Prepared several electric market price forecasts for many regions of the United States and Central America.
- Supported the electric pricing and infrastructure analysis for a Least-Cost Resource Plan for San Diego County.
- Prepared an analysis of coal-fired electric generation technology saturation in the Western Electric Coordinating Council.

- Developed a long-run electric generation expansion plan for the Railbelt System in Alaska used in a Department of Energy Study investigating the feasibility of a natural gas pipeline in Alaska.
- Managed a team that prepared a long-term capacity and energy forecast for a medium-sized municipal utility.
- On behalf of Manitowoc Public Utilities, prepared a resource plan evaluating various generation expansion options.

Large Power Procurement

- During the time period 2004 through 2008, Mr. Zarumba, on behalf of the Metropolitan Transit Authority and the Port Authority of New York and New Jersey, assisted the New York Power Authority (NYPA) in procuring electric generation capacity and energy in RFP 3, RFP 4 and RFP 5. Mr. Zarumba worked with representatives of the City of New York and NYPA, including Mr. Gil Quiniones, who was initially the President of the New York Economic Development Corporation and later the Chief Operating Officer of NYPA. These procurements resulted in contracting for a utility-scale combined-cycle combustion turbine in Queens, a High Voltage Direct Current (HVDC) transmission line between Manhattan and North New Jersey, and various renewables.
- From 1997 through 1999 Mr. Zarumba advised the Build Owners and Managers of Chicago (BOMA/Chicago) on procuring a preferred energy supplier to their membership. BOMA/Chicago estimated their building load (i.e., load excluding tenants) of approximately 700MW. Mr. Zarumba and the BOMA/Chicago team interviewed over one dozen bidders. As a result of the solicitation, a preferred supplier who served BOMA/Chicago for approximately ten years was chosen.
- The Metropolitan Transit Authority operates commuter rail lines that extend into Connecticut, requiring approximately 45MW of load. From 2004 through 2008, he developed a procurement process that provided significant savings for generation services.
- In 2006, Mr. Zarumba was jointly retained by the Chicago Transit Authority and Metra for their first retail power procurement. Mr. Zarumba developed Request for Proposal documents, reviewed legal agreements, and designed the proposal evaluation processes.

Electric Transmission

- Presented testimony before the Alberta Energy Regulator applying marginal cost theory developing a proposed electric transmission tariff.
- Assisted the Long Island Power Authority in purchasing distribution, transmission, and regulatory assets and prepared that utility's non-jurisdictional open-access transmission tariff.
- Prepared the pricing portion of a FERC open access tariff (Docket No. ER96-96-43.000) for San Diego Gas and Electric Company; testified on revenue requirements and pricing, including opportunity costs.
- Prepared a Reliability Must-Run for the Cuyahoga Generating Station, filed with the Federal Energy Regulatory Commission and the New York Public Service Commission.

Revenue Requirements

- On behalf of FirstEnergy, I prepared a Time Study that quantified the capitalization of Administrative and General Expenses. The study was prepared in response to a request from the Federal Energy Regulatory Commission.
- Prepared several Cash Working Capital studies for various distributors and transmitters in the Province of Ontario filed before the Ontario Energy Board.
- For a confidential client, prepared a benchmarking analysis of the costs of regulatory proceedings associated with introducing new electric generation.
- Managed a project for Commonwealth Edison Company in their Electric Rate Request (Illinois Commerce Commission Docket No. 10-467) in which a Cash Working Capital study was provided.
- Assisted Indianapolis Power & Light in preparing a cost recovery plan for Energy Efficiency and Demand Side Management Expenditures.
- On behalf of the Missouri River Electric Cooperative, I managed a project team that completed a Remaining Life Study for the Western Minnesota Municipal Power Agency.
- For Heritage Gas (Nova Scotia) prepared a cost allocation for a natural gas storage field presented before the Nova Scotia Utility and Review Board.
- On behalf of the Ontario Energy Board, prepared a white paper addressing the apportionment of regulatory commission costs to stakeholders.
- Prepared ancillary service pricing proposals based on market-based mechanisms for San Diego Gas and Electric Company.

Valuations and Estimation of Damages

- On behalf of the Government of the Province of Newfoundland, prepared a valuation of certain hydroelectric generating units expropriated by the Province after the closure of the Abitibi Pulp and Paper Mill.
- Mr. Zarumba has prepared several studies preparing valuations of specific generating assets facing market-based pricing in North America.
- As a contractor to NERA Economics assisted in preparing a study quantifying the damages associated with an accident at the Hawthorne Generating Station.

Management Audit and Affiliate Code of Conduct

- Led the regulatory and financial review for a management audit of Jersey Central Power & Light on behalf of the New Jersey Board of Public Utilities.
- On behalf of a coalition of marketers and energy service companies, Mr. Zarumba presented testimony before the Illinois Commerce Commission addressing affiliate rules and code of conduct.

- Mr. Zarumba presented testimony before the Wisconsin Public Service Commission addressing affiliate rules and code of conduct on behalf of a coalition of marketers and energy service companies.

Demand Response

- Assisted the Building Owners and Managers of Chicago (BOMA/Chicago) in developing a program where they can bid demand response based ancillary services into the PJM market.
- Prepared a presentation for the Public Utilities Commission of Ohio on Commercial and Industrial Dynamic Pricing and Demand Response in an unregulated regulatory environment.

Merger, Acquisition, and Divestiture

- On behalf of the Minnesota Public Service Commission. Mr. Zarumba co-authored an analysis of the merger savings associated with the proposed Primergy Merger (the proposed combination of Northern States Power and Wisconsin Energy). The analysis included a detailed review of cost savings emanating from the merger and regulatory commitments made by the companies to regulatory authorities in Minnesota.
- For Manitowoc Public Utilities, an analysis evaluating the divestiture of its transmission assets to the American Transmission Company.

International

- Assisted the Israel Public Utility Authority with electric tariff reviews for the Israel Electric Company and the Jerusalem District Electric Company.
- During the time period 2007 through 2017, assisted the Albanian Electric Regulator in several rate requests, trained staff, and conducted negotiations involving the privatization of the electric distribution system.
- Mr. Zarumba assisted the electric regulator in the Republic of Macedonia with various regulatory issues, including pricing design, revenue requirements, and privatization issues. Included in the assistance was the development of market designs for the electricity sector.
- I completed a tariff implementation plan proposal for privatizing the Bulgarian Electric Utility's distribution companies.
- Led a team to implement regulatory procedures and methodology for the electric power industry in Bosnia and Herzegovina.
- Conducted a of the electric power market in El Salvador, including a quantification of the level of generation market power using the Lerner Index.

Expert Witness Testimony

SPONSOR	DATE	CASE/APPLICANT	DOCKET/CASE NO.	SUBJECT
Alberta Utilities Commission				
ATCO Electric Ltd.	3/2022	ATCO Electric Ltd.	26911	Transmission Pricing
Federal Energy Regulatory Commission				
Cayuga Generating Company	11/2012	Cayuga Generating Company	ER-13-405-000	Reliability Must-Run Tariff Cost of Service Support
San Diego Gas and Electric Company	09/1995	San Diego Gas and Electric Company	ER96-43	Open-Access Transmission Tariff Filing – Calculation of Transmission Charges
Bermuda Regulatory Authority				
Bermuda Electric Light Company	4/2019	Bermuda Electric Light Company	Not Applicable	Request for a rate increase and multi-year rate plan
Bermuda Electric Light Company	8/2019	Bermuda Electric Light Company	Not Applicable	Marginal Cost of Service Study

Illinois Commerce Commission				
Commonwealth Edison Company	5/2022	Commonwealth Edison Company	22-0067	Cost Benefit Analysis
The Building Owners and Managers Association of Chicago	2/2008	Commonwealth Edison Company	07-0566	Commonwealth Edison Company General Rate Case
The Building Owners and Managers Association of Chicago	11/2007	Commonwealth Edison Company	07-0540	Evaluation of an Energy Efficiency Plan for Commonwealth Edison Company
The National Association of Energy Service Companies and Blackhawk Energy Services	02/1999	Commonwealth Edison Company, et al.	98-0147 & 98-0148	Functional Separation of Electric Utility Functions
The Building Owners and Managers Association of Chicago	11/1998	Commonwealth Edison Company, et al.	98-0650	Customer Selection Proceeding – Lottery Rules
The Building Owners and Managers of Chicago, Johnson Controls, Inc., and Blackhawk Energy Services	07/1998	Commonwealth Edison Company	98-0362	Application of Commonwealth Edison to Approve Rate HEP – a Real Time Pricing Tariff
The Building Owners and Managers Association of Chicago	02/1997	Commonwealth Edison Company	96-0485	Complaint against Commonwealth Edison Company's Conjunctive Billing Tariff
Indiana Utility Regulatory Commission				
CenterPoint Indiana	5/2022	CenterPoint Indiana	45722	Securitization

AES Indiana	10/2022	A.E.S. Indiana	38703	Prudency
Kansas Corporation Commission				
Tysons Fresh Meats	04/2014	Tysons Fresh Meats	14-WHLW-218-RTS	Abrogation of a Long-term Service Agreement by a Utility
McHenry County, IL				
Indeck Pleasant Valley, LLC.	09/2002	Indeck Pleasant Valley, LLC		Deposition
Lake County, IL				
Indeck Pleasant Valley, LLC.	09/2002	Indeck Pleasant Valley, LLC.		Deposition
Libertyville, IL Zoning Board				
Indeck Libertyville, LLC	01/2000	Indeck Libertyville, LLC		Need for a combustion turbine facility.
Louisiana Pilotage Fee Commission				
Crescent River Port Pilots' Association	7/2020	Crescent River Port Pilots' Association	P20-001	Benchmarking analysis of pilotage fees

Massachusetts Department of Public Utilities				
Eastern Edison Company	04/1990	Eastern Edison Company		Purchased Power Cost Adjustment Calculation
Eastern Edison Company	02/1990	Eastern Edison Company	90-9A	Oil Conservation Adjustment Calculation
Eastern Edison Company	02/1990	Eastern Edison Company	90-4A	Fuel Cost Adjustment Calculation
Eastern Edison Company	12/1989	Eastern Edison Company	89-240	Purchased Power Cost Adjustment Calculation
Eastern Edison Company	11/1989	Eastern Edison Company	89-4D	Fuel Cost Adjustment Calculation
Eastern Edison Company	05/1989	Eastern Edison Company	89-9D	Oil Conservation Adjustment Calculation
Eastern Edison Company	08/1989	Eastern Edison Company	89-9B	Fuel Cost Adjustment Calculation
Eastern Edison Company	08/1989	Eastern Edison Company	89-9C	Oil Conservation Adjustment Calculation
Eastern Edison Company	05/1989	Eastern Edison Company	89-4B	Fuel Cost Adjustment Calculation
Eastern Edison Company	11/1989	Eastern Edison Company	89-9B	Oil Conservation Adjustment Calculation
Eastern Edison Company	05/1989	Eastern Edison Company		Conservation Surcharge Adjustment
Eastern Edison Company	02/1989	Eastern Edison Company	89-4A	Fuel Cost Adjustment Calculation
Eastern Edison Company	02/1989	Eastern Edison Company	89-9A	Oil Conservation Adjustment Calculation
Eastern Edison Company	11/1988	Eastern Edison Company	88-4D	Fuel Cost Adjustment Calculation

Eastern Edison Company	11/1988	Eastern Edison Company	89-4D	Oil Conservation Adjustment Calculation
Eastern Edison Company	05/1988	Eastern Edison Company		Conservation Service Charge
McHenry Country, IL Zoning Board of Appeals				
Indeck Pleasant Valley, LLC	03/1999	Indeck Pleasant Valley, LLC	99-04	Need for a combustion turbine facility
Minnesota Public Utilities Commission				
CenterPoint Energy Minnesota Gas	11/2021	CenterPoint Energy Minnesota Gas	G-008/GR-21-436	Class Cost of Service and Rate Design
Montana Public Service Commission				
Montana Dakota Utilities	9/28/2018	Montana Dakota Utilities	D2018.9.60	Marginal Cost of Service Study

New Brunswick Energy and Utility Board				
Enbridge Gas New Brunswick	12/2016	NB Power Company	Matter 357	Marginal Cost Pricing
Liberty Utility New Brunswick	12/2019	NB Power	Matter 458	Marginal Cost Pricing
Liberty Utilities New Brunswick	11/2021	Liberty Utilities New Brunswick	Matter 494	Natural Gas Allocated Cost of Service and Pricing Design

New Jersey Board of Public Utilities				
Public Service Electric & Gas Company	11/2021	Public Service Electric & Gas	EO21111211 / GO21111212	Cost-Benefit Analysis for Infrastructure Investments
New Mexico Public Regulation Commission				
El Paso Electric Company	07/2015	El Paso Electric Company	15-000127-UT	Cash Working Capital Study
New York Public Service Commission				
Cayuga Generating Company	11/2012	Cayuga Generating Company	12-E-0400	Reliability Must-Run Tariff Cost of Service Support
Nova Scotia Utility and Review Board				
Heritage Gas	12/2014	Heritage Gas	M06582	Allocated Cost of Service Analysis
Port Hawkesbury Paper	10/2013	Port Hawkesbury Paper	P-892/M05473	Allocated Cost-of-Service

Ontario Energy Board				
Hydro One Networks Inc. (transmission)	05/2016	Hydro One Networks Inc. (transmission)	EB-2016-0160	Cash Working Capital Studies
Entegrus Powerlines Inc.	12/2015	Entegrus Powerlines Inc.	EB-2015-0061	Cash Working Capital Study
Hydro Ottawa	10/2015	Hydro Ottawa	EB-2015-0004	Cash Working Capital Study
Kingston Hydro	09/2015	Kingston Hydro	EB-2015-0083	Cash Working Capital Study
North Bay Hydro	07/2015	North Bay Hydro	EB-2014-0099	Cash Working Capital Study
Toronto Hydroelectric System Limited	06/2014	Toronto Hydroelectric System Limited	EB-2014-0116	Cash Working Capital Study
Horizon Utilities	03/2014	Horizon Utilities	EB-2014-0002	Cash Working Capital Study
APPrO	02/2013	APPrO	EB-2012-0337	Recovery of Energy Efficiency Costs from Electric Generators
Great Lakes Power Transmission	07/2012	Great Lakes Power Transmission	EB-2012-0300	Corporate Shared Services Study
London Hydro	07/2012	London Hydro	EB-2012-146	Determination of Working Capital Requirements
London Hydro	07/2012	London Hydro	EB-2012-146	Cost Allocation of Revenue Cycle Services
Hydro One	08/2012	Hydro One	EB-2012-0031	Cash Working Capital Studies
Hydro One Networks Inc. (distribution)	12/2013	Hydro One Networks Inc. (distribution)	EB-2013-0416	Cash Working Capital Study
Ontario Energy Board	01/2012	Ontario Energy Board	EB-2012-0018	Review of the Ontario Energy Board

				Cost Assessment Model
Ontario Energy Board	11/2011	Ontario Energy Board	EB-2010-0378	Principal Author of Rate Mitigation White Paper
Public Hearings Held on Long Island				
Long Island Power Authority	05/1998	Long Island Power Authority		Non-Jurisdictional Open-Access Transmission Tariff
Puerto Rico Energy Commission				
Puerto Rico Electric Power Authority	05/16	Puerto Rico Electric Power Authority	CEPR-AP-2015-0001	PREPA General Rate Case: Pricing Design; Embedded Cost of Service; Marginal Cost of Service; and Provisional (Temporary) Rate
Puerto Rico Electric Power Authority	04/16	Puerto Rico Electric Power Authority	CEPR-AP-2016-0001	Pricing Design and Cost Recovery Mechanism for Transition Charges

Rhode Island Public Utilities Commission				
Blackstone Valley Electric Company	02/1989 06/1989 02/1990	Blackstone Valley Electric Company	1541	Fuel Adjustment Clause Calculation
Blackstone Valley Electric Company	02/1989 06/1989 02/1990	Blackstone Valley Electric Company	1856	Purchased Power Cost Adjustment Calculation
Blackstone Valley Electric Company	02/1989 06/1989 02/1990	Blackstone Valley Electric Company	1694	Oil Conservation Adjustment Calculation
Texas Public Utilities Commission				
El Paso Electric Company	08/2015	El Paso Electric Company	15-00127-UT	Cash Working Capital Study
Wisconsin Public Service Commission				
Johnson Controls, Inc., Harley-Davidson, and WICOR Energy	01/1998	Johnson Controls, Inc., Harley-Davidson, and WICOR Energy	6630-UR-110	Application of Wisconsin Electric Power Company for a Rate Increase for Electric, Gas, and Steam Service
National Association of Energy Service Companies	1/1999	Wisconsin Public Service Commission	05-BU-101	Affiliates Relations Rules

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED SURREBUTTAL TESTIMONY OF RALPH ZARUMBA ON BEHALF OF PEOPLES NATURAL GAS COMPANY, LLC

DATE SERVED:
DATE ADMITTED: May 3, 2024

Peoples Statement No. 15-SR

PREPARED SURREBUTTAL TESTIMONY OF
RALPH ZARUMBA

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Ralph Zarumba. My business address is 736 Central Street, Evanston, Illinois.

Q. BY WHOM ARE YOU EMPLOYED, AND IN WHAT CAPACITY?

A. I am a subcontractor to Black & Veatch Management Consulting, LLC ("Black & Veatch"). Prior to my retirement, I was a Managing Director at Black & Veatch, leading the Natural Gas and Electricity Regulatory Practice.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 15, and my rebuttal testimony is set forth in Peoples Statement No. 15-R.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. My surrebuttal testimony responds to the rebuttal testimony of the following parties.

- Office of Consumer Advocate (“OCA”) Rebuttal Testimony of Clarence Johnson.
- Office of Small Business Advocate (“OSBA”) Rebuttal Testimony of Robert Knecht.
- Peoples Industrial Intervenors (“PII”) Rebuttal Testimony of Richard Baudino.

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. Yes. My surrebuttal testimony includes the following exhibits.

- Exhibit RNZ-SR-1 – Base Rate Comparison
- Exhibit RNZ-SR-2 – Rate Design Workpaper

Q. HOW HAVE YOU ARRANGED YOUR SURREBUTTAL TESTIMONY?

A. My surrebuttal testimony is arranged as follows:

- I address rebuttal testimony relating to the Weather Normalization Adjustment ("WNA").
- I address rebuttal testimony concerning the Cost of Service Study.
- I address rebuttal testimony concerning the Revenue Allocation and the Rate Design.

I. <u>WEATHER NORMALIZATION MECHANISM</u>

Q. WHAT PARTIES HAVE ADDRESSED THE WNA IN THEIR REBUTTAL TESTIMONY?

A. OCA Witness Clarence Johnson addresses the WNA in his rebuttal testimony. His testimony is in response to the testimony of the Bureau of Investigation and Enforcement ("I&E") Witness Mr. Cline and OSBA Witness Mr. Knecht.

Q. PLEASE SUMMARIZE MR. JOHNSON'S POSITION ON THE PROPOSED WNA.

A. Mr. Johnson continues to oppose the WNA based on policy reasons.

Q. PLEASE STATE YOUR UNDERSTANDING OF MR. JOHSON'S CRITICISM OF MR. CLINE'S POSITION REGARDING THE WNA.

A. Mr. Johnson believes I&E Witness Cline's direct testimony supporting the adoption of the proposed Peoples WNA based upon the Pennsylvania Public Utility Commission's ("Commission") support of similar mechanisms provides insufficient evidence (OCA Statement 4R[1]) to support the adoption of the Peoples WNA.

Q. MR. JOHNSON'S STATES[2] THAT IT IS NECESSARY FOR PEOPLES TO DEMONSTRATE EXTRAORDINARY CIRCUMSTANCES TO JUSTIFY A WNA. DO YOU AGREE WITH MR. JOHNSON'S RECOMMENDATION?

A. No, I do not. For example, Mr. Johnson uses the term "extraordinary circumstances" but is unclear about the definition of the term. Given that the WNA is designed to address variation in HDD, I have also been advised by counsel that there is no regulation or statute in Pennsylvania supporting Mr. Johnson's claim. The Company will address this issue further in Briefs if necessary.

Q. WHAT ARE MR. JOHNSON'S CONCERNS ABOUT HOW THE WNA IMPACTS RISK?

A. Mr. Johnson states that the "…WNA largely attenuates the normal business risk arising from normal weather…"[3] Mr. Moul, the Peoples Witness addressing cost of capital issues

[1] Exhibit OCA Statement 4R, page 23.
[2] Exhibit OCA Statement 4R, page 25.
[3] Ibid.

will address the risk impacts of the WNA and does so in his direct, rebuttal and surrebuttal testimonies in this proceeding.

Q. DOES THE WNA ADDRESS THE HDD VARIATION RISK TO WHICH CUSTOMERS ARE EXPOSED?

A. Yes. Mr. Johnson ignores the WNA's benefits to customers through the levelization of distribution charges, which avoids significant bill increases during very cold weather events. The WNA is effectively a "collar" that provides risk reduction value to customers. If HDD are above normal, the collar reduces the amount a customer is required to pay. Conversely, if HDD are below normal, the bill is increased to reflect normal weather patterns. OCA focuses almost exclusively on the impacts of warmer than normal weather. The WNA protects customers from the impacts of colder than normal weather by reducing their bills in these months. Contrary to OCA's suggestions, even though average temperatures have warmed in recent years, we still experience colder than normal weather and certain months can be significantly colder than normal. Without the mitigating effects of the WNA, customers can experience much higher bills in these months.

Q. PLEASE PROVIDE EXAMPLES OF HOW THE WNA PROVIDES SYMMETRIC PROTECTION TO CUSTOMERS AND THE COMPANY.

A. In my rebuttal testimony, I provided a multiyear analysis of residential customer bills and the impact of the WNA. In that analysis, 2018 was the most severe (i.e., had the greatest number of HDD). Given that the weather was colder than normal, the WNA would have produced lower bills for customers and reduced the level of Peoples base rate revenues.

Conversely, 2017 was a mild year. (i.e., had less than normal HDD). In this case, the WNA would have produced higher bills for customers. Table 1 below provides a comparative monthly bill impact[4] of the WNA for these two extreme years.

Table 1 Distribution of Bill Impacts from WNA for 2017 and 2018

WNA Months	**2017**	**2018**
Jan	$855,689	($8,005,752)
Feb	$5,353,579	$1,756,641
Mar	$2,869,267	$1,975,812
Apr	$1,843,785	($5,307,937)
May	$1,856,844	$1,828,259
Oct	$1,493,093	$200,534
Nov	($402,686)	($2,907,870)
Dec	($422,634)	($3,399,771)
Total	**$13,446,938**	**($13,860,084)**

The above example provides evidence supporting the following:

- The WNA provides a collar that protects customers from extreme weather variation.
- In the case of extreme weather events, the WNA provides bills to customers that are closer to that which they would have received during normal weather.

Q. MR. JOHNSON REPEATS OSBA WITNESS KNECHT'S CONCERNS THAT THE WNA PROVIDES LARGE BILL ADJUSTMENTS IN CIRCUMSTANCES OF

[4] Bill impacts are based on using the PNG distribution rate of $3.9608.

LOW ACTUAL HDD OR WHEN THE NON-HEATING USAGE MAY NOT BE ACCURATELY REPRESENTED[5]. PLEASE COMMENT.

A. One of the solutions proposed by Mr. Knecht to address this issue was to not charge the WNA for months with less than 100 HDD. In surrebuttal, Mr. Johnson disagrees that this will effectively address the issue. However, I believe that Mr. Knecht's proposal is problematic. The WNA is calculated on a customer basis based upon the meter read dates of each customer. The following challenges are associated with Mr. Knecht's 100 HDD proposal.

- It is possible that during some billing months some customers would be subject to the WNA and others would not be based upon their meter read dates and the associated weather patterns of a customer's billing cycle. Implementing a WNA mechanism with a trigger where some customers are subjected to the WNA and others are not on a specific month is confusing and potentially introduces equity issues when some customers are subjected to the WNA and others are not during the same revenue month.

- Inasmuch as most customers have billing cycles capturing a similar number of days, variation occurs where billing cycles have more or less days than an average billing cycle. As a result, application of the 100 HDD introduces practical challenges which make implementation of the proposal problematic.

In summary, the analysis included in my rebuttal testimony demonstrates that the increase to the base rate portion of a customer's bill was less than 100% for 99.03% of the bills rendered for a multiyear period. The high confidence level produced by our analyses

[5] Exhibit OCA Statement 4R, page 26.

suggests the WNA operates properly. Frankly, very few regulatory mechanisms perform as designed with a similarly high level of certainty.

II. PEOPLES COST OF SERVICE STUDY

A. RESPONSE TO PII WITNESS BAUDINO

Q. PLEASE RESPOND TO MR. BAUDINO'S REBUTTAL TESTIMONY REGARDING THE COST OF SERVICE STUDY.

A. Mr. Baudino and I are aligned on the cost-of-service study methodology.

B. RESPONSE TO OCA WITNESS JOHNSON

Q. AFTER REVIEWING THE REBUTTAL TESTIMONY OF OCA WITNESS JOHNSON, HAVE YOU CHANGED YOUR POSITION ON THE COST OF SERVICE STUDY?

A. No. I believe that the cost of service study based upon classification of a portion of mains classified as customer related and the adoption of the demand day to allocate costs is the most appropriate approach to performing a cost of service study.

Q. IN HIS REBUTTAL TESTIMONY, MR. JOHNSON SUGGESTS THAT A "DOUBLE-COUNTING" MAY EXIST IF THE MINIMUM SYSTEM APPROACH IS ADOPTED. DO YOU AGREE WITH MR. JOHNSON?

A. No, I do not. Mr. Johnson references a Public Utilities Fortnightly article published in 1981 by Mr. George Sterzinger. I have reviewed the article and concluded the following:

- The referenced article is over 40 years old. The relevance of a publication of that age is questionable since it relied upon survey results. Given the publication date of Mr. Sterzinger's article, it is not unreasonable to conclude that the survey occurred in the 1970s.

- Mr. Sterzinger alternatively discusses marginal cost and allocated cost analyses. The studies which I sponsored and those submitted by the other cost of service witnesses in this proceeding are embedded cost of service studies – which are separate and distinct from Mr. Sterzinger's analyses.

- The article addresses electric cost of service analysis, not natural gas distribution systems.

- The double-counting issue allegedly occurring is associated with the capacity of the minimum system. Mr. Sterzinger proposes:

> One way to solve the double allocation problem would be to determine, for each piece of minimum equipment, the demand level it would be capable of serving, and then adjusting the demand allocation factors used to allocate the costs of all equipment of that type in order to assure that minimum use customers and the residential class were not charged twice.[6]

Q. HAS THE "DOUBLE-COUNTING" PROBLEM BEEN ADDRESSED IN YOUR STUDY?

A. Yes. In the study I included in my direct testimony[7] I included a detailed estimate of the capacity associated with the Minimum Distribution System. In that analysis I concluded

[6] Sterzinger, George J. "The Customer Charge and Problems of Double Allocation of Costs, Public Utilities Fortnightly, July 2, 1981.

[7] Workpapers for the minimum cost study are shown in Peoples response to OCA data request 5-1 as Attachment OCA 5-1(h).

that the Minimum Distribution System captured 5.6% percent of the capacity which was deducted from the calculation thus addressing the concerns raised in Mr. Sterzinger's article. It should be noted that the calculation of the capacity of the Minimum Distribution System was previously raised by Mr. Johnson in his direct testimony to which I responded in my rebuttal testimony.

Q. IN YOUR REBUTTAL TESTIMONY[8] YOU ADDRESSED MR. JOHNSON'S CONCERNS RELATED TO THE ALLOCATION OF LARGE CUSTOMER SUPPORT COSTS. DO YOU HAVE ANY FURTHER ADJUSTMENTS TO THE REALLOCATION OF THESE COSTS YOU PROPOSED IN YOUR REBUTTAL TESTIMONY?

A. No.

C. RESPONSE TO OSBA WITNESS KNECHT

Q. DO YOU AGREE WITH OSBA WITNESS KNECHT THAT "TO FULLY CHARGE ALL CUSTOMERS FOR THE ENTIRE REGULATED-PRESSURE SYSTEM, AND TO EXEMPT LGS CUSTOMERS FROM CONTRIBUTING TO ALL LOW-PRESSURE SYSTEM COSTS IS NOT JUSTIFIED BY THE EVIDENCE AND IS INCONSISTENT WITH THE PRACTICES OF OTHER PENNSYLVANIA NATURAL GAS DISTRIBUTION COMPANIES?

[8] Peoples Statement 15-R, page 34.

A. No. In my discussions with the Company it has been confirmed that LGS customers do not take service from low pressure mains. In response to Mr. Knecht's suggestion that not all customer classes should be allocated the regulated mains (i.e., some distribution mains may not use the regulated distribution system), the Company states that given the complex nature of the Company's system of mains it is impossible to conclude with absolute certainty that the situation does not exist. However, the Company believes that it is reasonable to conclude that customers using the low pressure systems are almost always connected to the regulated pressure system.

Q. DO YOU AGREE WITH OSBA WITNESS KNECHT THAT THE LGS DESIGN DAY ALLOCATOR VALUE SHOULD BE ADJUSTED?

A. No. As stated in my rebuttal testimony, this issue is addressed by Peoples Witness Dawn Folks in her rebuttal testimony.

Q. DO YOU HAVE ANY FURTHER UPDATES TO THE FERC 902, FERC 908 AND COLLECTIONS ALLOCATOR CORRECTIONS AND REFINEMENTS MENTIONED IN YOUR REBUTTAL TESTIMONY?

A. No.

III. <u>REVENUE ALLOCATION AND RATE DESIGN</u>

A. RESPONSE TO PII WITNESS BAUDINO

Q. PLEASE STATE MR. BAUDINO'S POSITION ON THE ALLOCATION OF THE REVENUE REQUIREMENT.

A. Mr. Baudino and I are aligned on the adoption of using the mean value results of the Peak and Average and the Design Day Approach when determining the revenue allocation. However, Mr. Baudino's approach includes an additional adjustment to re-allocate the LGS-Mainline short fall of $9.6 million to all of the classes based on each class's mean COS revenue requirement[9]. The effective result of this adjustment is proposed LGS revenues that are $5.8 million lower than revenues at current rates. As stated in my rebuttal testimony, I have previously agreed with several parties that a cap on the increase of 1.5 times the average increase should exist in the final rate design. Consistent with the policy of a cap on increases, a floor to the minimum increase should also exist.[10]

Q. MR. BAUDINO STATES "THERE IS NO EVIDENCE THAT GAS DISTRIBUTION UTILITIES SIZE AND BUILD THEIR SYSTEMS TO MEET AVERAGE DEMAND…"[11]. PLEASE COMMENT.

A. I have proposed adopting the mean of the Peak and Average and the Demand Day Approach which recognizes that divergent opinions exist on the proper cost allocation approach. Further, I believe the adoption of the mean of the two approaches as a vehicle for revenue allocation provides gradualism and moves all customer classes closer to cost of service. However, as I previously stated in this testimony, I believe that the Minimum

[9] PII Statement No. 1, Exhibit RAB-2. See also the associated supporting workpaper "Direct Tables and RAB-2.xlsx."
[10] Peoples Statement No. 15-R, page 37.
[11] PII Statement No.1-R page 5.

System/Design Day approach, recognizing that a portion of distribution mains are properly classified as customer-related, is the proper approach to performing a cost of service study given the characteristics of the Peoples system.

B. RESPONSE TO OCA WITNESS JOHNSON

Q. IN OCA STATEMENT 4R[12] MR. JOHNSON SUGGESTS THAT THE RISKS OF REVENUE SHORTFALLS SHOULD BE ASSIGNED TO THAT TARIFF CLASS. PLEASE COMMENT.

A. Mr. Johnson suggests that LGS customers introduce more risk to serve than other customer classes. Mr. Johnson goes on to state that "… an appropriate allowance for the risk factor…"[13] should be incorporated into the cost of service and rate design. In response, I believe competitive customers are not introducing additional risk to the Company and the other customers, rather, they are making a contribution to the fixed costs of the system which reduces the overall revenue requirement. The negotiated prices which competitive customers are paying is in excess of incremental costs and are subject to change if the alternative service opportunities available to the customer should no longer be available.

Q. DID OCA WITNESS JOHNSON OPINE ON THE RESIDENTIAL MONTHLY FIXED CHARGE IN HIS REBUTTAL TESTIMONY?

[12] OCA Statement 4R page 20.
[13] OCA Statement 4R pages 20-21.

A. Yes. Mr. Johnson disagreed[14] with I&E Witness Cline's proposal for a residential monthly fixed charge of $20.00. As a reference, the Company's proposed residential monthly fixed charge in rebuttal testimony is $21.60 which is relatively close to Mr. Cline's proposal.

No new evidence has been introduced in Mr. Johnson's rebuttal testimony to support his proposal. Therefore, my position on the residential monthly fixed charge remains unchanged, and I believe my rebuttal proposal for $21.60 is accurate and cost justified.

C. RESPONSE TO OSBA WITNESS KNECHT

Q. OSBA WITNESS KNECHT RECOMMENDS THAT THE LEGACY PG AND PNG RATES NOT BE COMBINED AT THIS TIME. PLEASE COMMENT.

A. OSBA Witness Knecht expresses concern that the rate cap of 1.5 times the system average is violated in some cases for the rate design proposals when the class rate impacts are measured on a legacy company basis.

Q. DO YOU BELIEVE THE CLASS REVENUE INCREASES MUST BE NO MORE THAN 1.5 TIMES THE SYSTEM AVERAGE?

A. From a combined entity perspective adopting a standard of a maximum increase of 1.5 times the average increase is reasonable and achieves the goal of gradualism. From a

[14] OCA Statement 4R page 18.

legacy company perspective, I do not believe the increases must be no more than 1.5 times the system average.

Q. IF THE COMMISSION ACCEPTS THAT IN ORDER TO ACHIEVE A GOAL OF GRADUALISM, MR. KNECHT'S STANDARD OF 1.5 TIMES THE SYSTEM AVERAGE FOR THE LEGACY COMPANIES IS A STANDARD THAT MUST BE ACHIEVED, WOULD A SIGNIFICANT CHANGE TO YOUR REBUTTAL REVENUE ALLOCATION AND RATE DESIGN BE REQUIRED?

A. No. I have prepared an alternative rate design which achieves Mr. Knecht's goal of capping the PG and PNG entity class increases to 1.5 times the system average. The complete rate design is detailed in Exhibit RNZ-SR-2 and summarized in Table 3 below. A summary of revised base rates resulting from this methodology is shown in Exhibit RNZ-SR-1. I adopted the following process in developing the proposed rate design.

- I calculated the revenue reduction to Rate SGS to achieve a 51.6% increase for the PNG division which is 1.5 times the system average increase of 34.4%. The reduction in total SGS revenues from my rebuttal position is $1,180,448. The alternative rate design reduced the SGS volumetric charge from my rebuttal position of $4.5378 to $4.4251, a 2.48% decrease. I maintained my rebuttal proposed monthly fixed charge at $24.94 (0-499 Mcf/yr) and $49.88 (500-999 Mcf/yr).

- I redistributed the SGS rate reduction to the other customer classes on an equal percentage of revenue basis. The revenues were allocated as shown in Table 3 below.

Table 2 – SGS Revenue Re-allocation

	Rebuttal Revenues	Rebuttal Revenues Excluding SGS		SGS Revenue Reallocated to Non SGS	Surrebuttal Rev. Target
Res	$482,391,301	$482,391,301	78.5%	$926,071	$483,317,372
SGS	$63,702,169			($1,180,448)	$62,521,721
MGS	$74,603,276	$74,603,276	12.1%	$143,220	$74,746,496
LGS	$57,902,111	$57,902,111	9.4%	$111,158	$58,013,269
Total	$678,598,857	$614,896,688	100.0%	$0	$678,598,857

- The increase in the other classes to achieve the revenue requirement was applied to the volumetric charges. The percent change from my rebuttal position for the other classes consumption charge is 0.3% increase (Residential), 0.22% increase (MGS) and a 0.24% increase for LGS.

- After completing the rate design, I tested the results to ensure that the revenue movement had not triggered a violation of the 1.5 of the average system increase for another tariff class. The updated revenue percent increases from current rates is shown in Table 4 below.

Table 3- Percent Increase by Entity and Class

Class	PNG	PG	Combined
Residential	45.20%	-2.93%	38.94%
SGS	51.62%	-17.57%	42.12%
MGS	39.17%	-19.88%	31.08%
LGS	2.84%	8.72%	3.63%
Total	40.40%	-4.92%	34.41%
			1.5
System Avg x 1.5			51.62%

It should be noted that the rate impact problems are relatively small when my rebuttal revenue allocation proposal is adopted. However, as Mr. Knecht details in his Table IEc-

R4, the rate impact problem is more severe in some of the alternative revenue allocations (e.g., OCA I and OCA II).

Q. DOES THIS REALLOCATION IMPACT THE LGS MAINLINE RATES?

A. Yes. However, it should first be noted that both LGS Mainline rates are virtually identical under either the MinSystem/Design Day method or the Peak and Average method. As such, I propose to adjust the volumetric LGS Mainline rates by the same increase (0.24%) that was applied to the LGS class due to the SGS class reallocation described above. A comparison of the LGS Mainline rates is shown below in Table 5.

Table 4 – LGS Mainline Rates

	Direct MinSystem/Design Day	Rebuttal MinSystem/Design Day	Surrebuttal
LGS Mainline - No Transmission			
LGS No Trans. Customer Charge	$1,920.00	$1,872.44	$1,872.44
LGS No Trans. Consumption Charge	$0.4422	$0.4365	$0.4376
LGS Mainline - Incl Transmission			
LGS Incl. Trans. Customer Charge	$1,920.00	$1,872.44	$1,872.44
LGS Incl. Trans. Consumption Charge	$0.7430	$0.7411	$0.7429

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

BASE RATE COMPARISON

		Current Rates				Proposed Base Rates			Surrebuttal % Change From Rebuttal
		PNG		PG		As Filed			
		Retail	Transport	Retail	Transport	Direct	Rebuttal	Surrebuttal	
Residential									
Res	Customer Charge	$14.50	$14.50	$15.75	$15.75	$21.50	$21.60	$21.60	0.00%
Res	Consumption Charge	$3.9608	$3.9608	$6.7743	$6.7743	$5.6304	$5.6570	$5.6737	0.30%
Res	CAP Customer Charge	$14.50	$0.00	$15.75	$0.00	$21.50	$21.60	$21.60	0.00%
Res	CAP Consumption Charge	$3.9608	$0.0000	$6.7743	$0.0000	$5.6304	$5.6570	$5.6737	0.30%
Commercial SGS									
SGS	Customer Charge 0-499 Mcf/Yr	$20.00	$20.00	$35.00	$35.00	$25.00	$24.94	$24.94	0.00%
SGS	Customer Charge 500-999.9 Mcf/Yr	$40.00	$40.00	$65.00	$65.00	$50.00	$49.88	$49.88	0.00%
SGS	Consumption Charges	$2.7000	$2.7000	$5.1008	$5.1008	$4.5485	$4.5378	$4.4251	-2.48%
Commercial MGS									
MGS	Customer Charge 1,000 - 2,499 Mcf/Yr	$85.00	$85.00	$75.00	$75.00	$105.00	$103.81	$103.81	0.00%
MGS	Customer Charge 2,500 - 24,999 Mcf/Yr	$130.00	$130.00	$175.00	$175.00	$150.00	$148.30	$148.30	0.00%
MGS	Consumption Charges	$2.6914	$2.6914	$4.8604	$4.8604	$3.8268	$3.7833	$3.7915	0.22%
Commercial LGS									
LGS	Customer Charge 25,000 - 49,999 Mcf/Yr	$575.00	$575.00	$800.00	$800.00	$800.00	$780.18	$780.18	0.00%
LGS	Customer Charge 50,000 - 99,999 Mcf/Yr	$750.00	$750.00	$1,500.00	$1,500.00	$900.00	$877.70	$877.70	0.00%
LGS	Customer Charge 100,000 - 199,999 Mcf/Yr	$1,400.00	$1,400.00	$5,000.00	$5,000.00	$1,680.00	$1,638.38	$1,638.38	0.00%
LGS	Customer Charge > 200,000 Mcf/Yr	$1,600.00	$1,600.00	$7,500.00	$7,500.00	$1,920.00	$1,872.44	$1,872.44	0.00%
LGS	Consumption Charges 25,000 - 49,999 Mcf/Yr	$2.6411	$2.5882	$3.7500	$3.4390	$2.4602	$2.3993	$2.4050	0.24%
LGS	Consumption Charges 50,000 - 99,999 Mcf/Yr	$2.5773	$2.5882	$3.7500	$3.4390	$2.4008	$2.3413	$2.3470	0.24%
LGS	Consumption Charges 100,000 - 199,999 Mcf/Yr	$2.5694	$2.5882	$0.9988	$3.4390	$2.3934	$2.3341	$2.3397	0.24%
LGS	Consumption Charges 200,000 - 749,999 Mcf/Yr	$2.4999	$2.5882	$0.9988	$3.4390	$2.3287	$2.2710	$2.2765	0.24%
LGS	Consumption Charges 750,000 - 1,999,999 Mcf/Yr	$2.1327	$2.5882	$0.9988	$3.4390	$1.9866	$1.9374	$1.9420	0.24%
LGS	Consumption Charges > 2,000,000 Mcf/Yr	$1.6445	$2.5882	$0.9988	$3.4390	$1.5319	$1.4940	$1.4975	0.24%
Industrial SGS									
SGS	Customer Charge 0-499 Mcf/Yr	$20.00	$20.00	$35.00	$35.00	$25.00	$24.94	$24.94	0.00%
SGS	Customer Charge 500-999.9 Mcf/Yr	$40.00	$40.00	$65.00	$65.00	$50.00	$49.88	$49.88	0.00%
SGS	Consumption Charges	$2.6390	$2.5601	$5.1008	$5.1008	$4.5485	$4.5378	$4.4251	-2.48%
Industrial MGS									
MGS	Customer Charge 1,000 - 2,499 Mcf/Yr	$85.00	$85.00	$75.00	$75.00	$105.00	$103.81	$103.81	0.00%
MGS	Customer Charge 2,500 - 24,999 Mcf/Yr	$130.00	$130.00	$175.00	$175.00	$150.00	$148.30	$148.30	0.00%
MGS	Consumption Charges	$2.4773	$2.3636	$4.8604	$4.8604	$3.8268	$3.7833	$3.7915	0.22%
Industrial LGS									
LGS	Customer Charge 25,000 - 49,999 Mcf/Yr	$575.00	$575.00	$800.00	$800.00	$800.00	$780.18	$780.18	0.00%
LGS	Customer Charge 50,000 - 99,999 Mcf/Yr	$750.00	$750.00	$1,500.00	$1,500.00	$900.00	$877.70	$877.70	0.00%
LGS	Customer Charge 100,000 - 199,999 Mcf/Yr	$1,400.00	$1,400.00	$5,000.00	$5,000.00	$1,680.00	$1,638.38	$1,638.38	0.00%
LGS	Customer Charge > 200,000 Mcf/Yr	$1,600.00	$1,600.00	$7,500.00	$7,500.00	$1,920.00	$1,872.44	$1,872.44	0.00%
LGS	Consumption Charges 25,000 - 49,999 Mcf/Yr	$2.1940	$2.1766	$3.7500	$1.3004	$2.4602	$2.3993	$2.4050	0.24%
LGS	Consumption Charges 50,000 - 99,999 Mcf/Yr	$2.5773	$2.1766	$3.7500	$1.3004	$2.4008	$2.3413	$2.3470	0.24%
LGS	Consumption Charges 100,000 - 199,999 Mcf/Yr	$2.5694	$2.1766	$0.9988	$1.3004	$2.3934	$2.3341	$2.3397	0.24%
LGS	Consumption Charges 200,000 - 749,999 Mcf/Yr	$2.4999	$2.1766	$0.9988	$1.3004	$2.3287	$2.2710	$2.2765	0.24%
LGS	Consumption Charges 750,000 - 1,999,999 Mcf/Yr	$2.1327	$2.1766	$0.9988	$1.3004	$1.9866	$1.9374	$1.9420	0.24%
LGS	Consumption Charges > 2,000,000 Mcf/Yr	$1.6445	$2.1766	$0.9988	$1.3004	$1.5319	$1.4940	$1.4975	0.24%

LGS Mainline

See the "Mainline_No Transmission " tab in RNZ-R-2A for the derivation of LGS Mainline rates for Rebuttal

Surrebuttal consumption rates = Rebuttal Rates x (1+LGS Surrebuttal increase %)

		Direct MinSystem/ Design Day	Rebuttal MinSystem/ Design Day	Surrebuttal
LGS Mainline - No Transmission				
LGS	LGS Mainline - No Trans. Customer Charge	$1,920.00	$1,872.44	$1,872.44
LGS	LGS Mainline - No Trans. Consumption Charge	$0.4422	$0.4365	$0.4376
LGS Mainline - Incl Transmission				
LGS	LGS Mainline - Incl. Trans. Customer Charge	$1,920.00	$1,872.44	$1,872.44
LGS	LGS Mainline - Incl. Trans. Consumption Charge	$0.7430	$0.7411	$0.7429

Peoples Exhibit RNZ-SR-2

Revised Rate Design Model – Base Rates

The rate design model will be provided electronically.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED REJOINDER TESTIMONY OF
RALPH ZARUMBA
ON BEHALF OF
PEOPLES NATURAL GAS COMPANY, LLC

DATE SERVED: May 8, 2024
DATE ADMITTED: _____

Peoples Statement No. 15-RJ

PREPARED REJOINDER TESTIMONY OF
RALPH ZARUMBA

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Ralph Zarumba. My business address is 736 Central Street, Evanston, Illinois.

Q. BY WHOM ARE YOU EMPLOYED, AND IN WHAT CAPACITY?

A. I am a subcontractor to Black & Veatch Management Consulting, LLC ("Black & Veatch"). Prior to my retirement, I was a Managing Director at Black & Veatch, leading the Natural Gas and Electricity Regulatory Practice.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN THIS PROCEEDING?

A. Yes. My direct testimony is outlined in Peoples Statement No. 15, my rebuttal testimony is set forth in Peoples Statement No. 15-R, and my surrebuttal testimony is set forth in Peoples Statement No. 15-SR.

Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?

A. My rejoinder testimony aims to respond to the following parties.

- The Commission's Bureau of Investigation and Enforcement ("I&E").
- The Pennsylvania Office of Consumer Advocate ("OCA").
- The Pennsylvania Office of Small Business Advocate ("OSBA").
- The Peoples Industrial Intervenors ("PII").

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. No, I am not sponsoring any additional exhibits.

Q. HOW HAVE YOU ARRANGED YOUR REJOINDER TESTIMONY?

A. My rejoinder testimony addresses the following topics.

- Separating Discount Customers into their own tariff class.
- The Weather Normalization Adjustment ("WNA") Mechanism.
- The Heating Degree Day ("HDD") Estimate Used in the Test Year.
- The Cost of Service Study.
- The Revenue Allocation.
- Treatment of the Gathering System.
- The Pricing Design.

II. <u>WEATHER NORMALIZATION ADJUSTMENT MECHANISM</u>

Q. WHAT PARTIES ADDRESSED THE WNA IN THEIR SURREBUTTAL TESTIMONY?

A. The following parties addressed the WNA in their surrebuttal testimony.

- I&E Witness Cline.
- OCA Witness Johnson.
- OSBA Witness Knecht.

Q. WHAT ARE MR. CLINE'S RECOMMENDATIONS REGARDING THE WNA?

A. Mr. Cline supports the adoption of the WNA. However, contrary to my testimony, he recommends a 3 percent deadband.[1] This issue is addressed by Peoples Witness Scanlon.

Q. WHAT IS MR. KNECHT'S POSITION REGARDING THE WNA?

A. Mr. Knecht has expressed concerns about specific high bill impacts, which occur in a tiny percentage of monthly bills and, therefore, do not support the adoption of the WNA.[2] Mr. Knecht's concerns are addressed by Peoples Witness Scanlon.

Q. DOES OCA WITNESS JOHNSON CONTINUE TO RECOMMEND REJECTION OF THE WNA?

A. Yes. His objections and my responses are listed below.

- Reference to Costello Article. Mr. Johnson quotes Mr. Costello, stating that it is a well-known regulatory principle that regulatory lag is an important tool for incentivizing utility behavior[3]. However, utility management can do nothing to influence the weather. I continue to believe that Mr. Johnson's reference to Mr. Costello's article is being made out of context and, therefore, should be ignored.

[1] Exhibit I&E Statement No. 3-S, page 10.
[2] Exhibit OSBA Statement No. 1S, page 13.
[3] Exhibit OCA Statement 4SR, page 22-3.

- Mr. Johnson's reference to my rebuttal testimony where he states that "The bottom line of his analysis is that the cumulative impact of the WNA during the seven-year time period he analyzed, extending from 2016 through 2022, would have been $9.9M in higher revenue charges"[4] Mr. Johnson ignored that the $9.9M over seven years constitutes 0.66% of total base rate revenues over seven years, which is explained as slightly warmer than normal weather in that time period.

Q. IN HIS SURREBUTTAL, MR. JOHNSON STATES THAT YOU DID NOT ADDRESS HIS ARGUMENTS THAT THE WNA PROVIDES DISINCENTIVES TO ENERGY EFFICIENCY[5].

A. I reject Mr. Johnson's statement because customer investment in energy efficiency responds to long-term energy consumption and cost trends, not the volatility in distribution system consumption charges that the WNA avoids.

III. FORECAST HEATING DEGREE DAYS USED IN THE TEST-YEAR

Q. WHAT PARTIES HAVE FILED SURREBUTTAL TESTIMONY ADDRESSING THE HDD FORECAST?

A. The following parties provided evidence addressing the projected number of HDDs to develop the test year.

- I&E witness Cline stated "Mr. Zarumba's statistical analysis does not explain why a rolling, historic average calculation of HDD was historically acceptable to the Company,

[4] Ibid.
[5] Exhibit OCA Statement 4SR, page 25.

the Commission, and the other NGDCs as detailed in the chart below, however, is not in the present base rate case."[6] I respond to Mr. Cline's concern that the use of regression analysis improves the approach and provides a more accurate forecast and the resulting test year estimate of revenues.

- OCA Witness Johnson reiterated his concern that the model only explains 37% of the variation in the data.[7] My rebuttal and surrebuttal testimony addresses Mr. Johnson's concerns. In them, I explain the proper interpretation of a regression analysis. My surrebuttal testimony addresses the question of whether the modeled regression equation explains all systematic behavior in the data. The remaining movement in the data is random and cannot be modeled.

Q. **COST OF SERVICE ANALYSIS**

Q. WHAT PARTIES FILED SURREBUTTAL TESTIMONY ON THE COST OF SERVICE STUDY?

A. I&E Witness Cline, OCA Witness Johnson, OSBA Witness Knecht, and PII Witness Baudino filed surrebuttal testimony.

1. Customer Component of Distribution Mains

Q. WHAT PARTIES OBJECT TO CLASSIFYING A PORTION OF DISTRIBUTION MAINS AS CUSTOMER-RELATED?

A. I&E Witness Cline rejects classifying a portion of mains as customer-related and responds to OSBA Witness Knecht's testimony the Commission has rejected this approach in the

[6] Exhibit I&E Statement No. 3-S, page 6.
[7] Exhibit OCA Statement 4SR, page 26.

past[8]. OCA Witness Johnson stands by his quote from Bonbright[9] stating that the minimum system costs as "unallocable" and an analysis stating, "The existence of engineering overhead and construction labor expense does not create a customer-related cost.17 The design, engineering, and trenching activities are required regardless of the number of customers."[10].

I reject the argument of I&E Witness Cline. I agree with OSBA Witness Knecht that the policy history of cost of service analysis in Pennsylvania is unclear. Still, more importantly the two commonly used approaches to performing analyses classifying main as demand or customer, the Minimum System and the Zero Intercept approach, have been performed in this proceeding which provided reliable results supporting a customer functionalization of mains.

Q. MR. JOHNSON REITERATES HIS CLAIM THAT THE 1961 EDITION OF BONBRIGHT IS THE AUTHORITATIVE EDITION OF THAT BOOK AND CITES 25 REFERENCES WHICH ALFRED. E. KAHN USED IN HIS 1988 EDITION OF THE *ECONOMICS OF REGULATION*.[11] PLEASE COMMENT.

A. Mr. Johnson's statement is questionable. The second edition of Kahn was published in June 1988[12], and the second edition of Bonbright, which was published in March 1988. Given the lag between the writing of a book and its publication, it is reasonable to assume that

[8] Exhibit I&E Statement No. 3-S, page 22.
[9] Exhibit OCA Statement 4SR, page 7.
[10] Exhibit OCA Statement 4SR 8.
[11] Exhibit OCA Statement 4SR page 7, footnote 13.
[12] https://mitpress.mit.edu/9780262610520/the-economics-of-regulation/

Kahn did not have access to the more recent edition of Bonbright when his second edition was published.

2. Allocation of the Revenue Requirement

IV. REVENUE ALLOCATION

Q. PLEASE DESCRIBE THE REVENUE ALLOCATION PROPOSALS IN PARTIES SURREBUTTAL TESTIMONY.

A. I&E witness Cline and OCA witness Johnson propose using the peak and average cost-of-service method for revenue allocation[13]. Mr. Knecht proposes an average of his zero-intercept cost-of-service method and the Company's revenue allocation in its direct testimony[14]. Mr. Knecht also offers an alternative method that includes the reallocation of the LGS-ML shortfall to all of the classes[15]. PII witness Baudino uses the Company's revenue allocation method with one adjustment to reallocate the LGS-ML shortfall to all of the classes instead of just the LGS class.

Q. HOW DO YOU RESPOND TO I&E AND OCA'S REVENUE ALLOCATION POSITIONS.

A. I continue to believe that a customer component should be recognized in the cost-of-service. I believe that averaging the minimum system/design day method and the peak and average cost-of-service methods is a reasonable compromise for revenue allocation purposes.

[13] I&E Statement 3-25, page 18 and pages 27-28.
[14] "IEc WP2S Revenue Allocation Rate Design Surrebuttal" workpaper, tab "RecAlloc Surrebuttal", line 22.
[15] Exhibit OSBA Statement 1S, page 10.

Q. MR KNECHT'S SURREBUTTAL TESTIMONY[16] REITERATES HIS POSITION THAT IN ORDER TO KEEP THE PNG DIVISION SGS INCREASE TO 1.5 TIMES THE SYSTEM AVERAGE, EITHER 1) REVENUE COULD BE REALLOCATED TO OTHER CLASSES OR 2) FULL RATE HARMONIZATION SHOULD BE DEFERRED UNTIL THE NEXT BASE RATE CASE. WHAT IS YOU OPINION ON THIS MATTER?

A. First, I do not believe rate harmonization should be deferred until the next base rate case. As stated in my surrebuttal testimony[17], if the Commission decides that the maximum revenue increase of 1.5 times the system average should be applied to the divisional level, it would not require a significant reallocation of revenues to the other classes. Nevertheless, my surrebuttal testimony describes how this reallocation could be performed[18].

Q. HOW DO YOU RESPOND TO MR. BAUDINO'S CONTENTION THAT THE LGS-ML SHORTFALL SHOULD BE ALLOCATED TO ALL OF THE CLASSES?

A. As stated in my surrebuttal testimony[19], if the Company were to accept this PII position, the effective result of this adjustment is proposed LGS revenues that are $5.8 million lower than revenues at current rates.

V. RESIDENTIAL MONTHLY FIXED CHARGE

Q. WHAT PARTIES FIELD SURREBUTTAL TESTIMONY ADDRESSING THE RESIDENTIAL MONTHLY FIXED CHARGE?

[16] Exhibit OSBA Statement 1S, pages 11-12.
[17] Exhibit Peoples Statement No. 15-SR, pages 14-16.
[18] Ibid.
[19] Exhibit Peoples Statement N0 15-SR, page 11.

A. I&E Witness Cline filed surrebuttal testimony reiterating his proposal for the monthly residential fixed charge at $20.00 per month. He further stated that the proposed $20.00 customer charge be scaled back if the Company is not granted less than the full increase.[20] Mr. Cline and I come to slightly different results based upon the cost of service analysis supporting our calculations. Mr. Cline's proposed monthly fixed charge is "consistent with the results of the Peak and Average customer cost analysis."[21] The different cost of service studies used in this explains the difference in our results.

Q. DO YOU AGREE WITH MR. CLINE'S PROPOSAL?

A. I continue to disagree with the methodology which Mr. Cline used to prepare his proposal but recognize that the results of the two analyses are not significantly different.

Q. WHAT IS MR. JOHNSON'S OPINION REGARDING THE RESIDENTIAL MONTHLY FIXED CHARGE?

A. Mr. Johnson proposed that the residential monthly fixed charge should be maintained at the current PNGD level of $14.50. He states, "…residential rates should convey usable pricing information to the end user so that they can respond by controlling their usage of utility service. In a two-part tariff (fixed charge and usage charge), the monthly fixed customer charge conveys no useful pricing information to customers other than rationing access to the utility system."[22]

[20] Exhibit I&E Statement No. 3-S, page, page 27.
[21] Exhibit I&E Statement No. 3-S, page, 27.
[22] Exhibit OCA Statement 4SR page 21.

Q. DO YOU FIND MR. JOHNSON'S TESTIMONY PERSUASIVE?

A. No. I reiterate my earlier testimony that his analysis appears to be drawing on marginal cost principles when adopting the basic customer charge. He claims "…my evaluation considered marginal cost principles because the concept is fundamental to efficient pricing."[23] I reject these statements because:

- No party filed a marginal cost study in this proceeding.
- Mr. Johnson presumes that collecting the balance of the revenue requirement from the volumetric charge is efficient. The conclusion is not supported by any evidence in this proceeding.

Further, this statement concisely illustrates our disagreement. I believe that in a two-part tariff, both the monthly fixed charge and the volumetric charge provide valuable information to a customer. Establishing the monthly fixed charge at too low of a price provides an incentive to customers to inefficiently establish services. For example, if a customer desires to use natural gas to heat a garage or tool shed, a low monthly fixed charge provides the incentive to request a service from the Company instead of investing in a pipeline from their home to the garage or tool shed. The low usage used by the garage or the tool shed would not provide the margins necessary to support the investment by the Company, thus triggering cost-shifting from other customers. The result is clearly inefficient and not sending a proper price signal to customers.

[23] Ibid.

VI. ALLOCATION OF GATHERING SYSTEM COSTS

Q. PLEASE STATE OSBA WITNESS KNECHT'S CONCERNS REGARDING THE COMPANY'S PROPOSED TREATMENT OF GATHERING SYSTEM COSTS.

A. Mr. Knecht expresses concern that the Company's proposed allocation of gathering system costs recovers those costs from both sales and transportation customers, but he claims that transportation customers benefit from the gathering system. Further, he states that the benefits of the gathering system are limited to legacy PGC customers. He concludes that the Company should, in its next rate request, prepare and file an evaluation as to how the Company can more accurately recover gathering system costs[24].

Q. PLEASE RESPOND TO MR. KNECHT'S RECOMMENDATION.

A. First, I do not support different treatment of the recovery of gathering system costs from PGC and PNG customers. The merger of the legacy companies was approved by the Commission, and the continued treatment of the combined entity as two separate entities prolongs the transition process. Second, both transportation and sales customers benefit from the gathering system as providing *potential* access to natural gas supplies for both transportation and sales customers. Therefore, I believe that my proposed allocation of gather system costs is reasonable.

Q. DOES THIS CONCLUDE YOUR REJOINDER TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

[24] Exhibit OSBA Statement 1S, page 3-4.

EXHIBIT NO. 1

Schedule 6

Peoples Natural Gas Company LLC
§ 53.53 II.C

1. Provide test year monthly balances for ‘‘Current Gas Storage’’ and notes financing such storage.

* * * * * * * * * * * * * * *

Please see the attached schedule for Current Gas Storage. Gas storage is financed utilizing the Intercompany Demand Note Agreement with PNG Companies as discussed at Exhibit 16, Schedule 15 - 53.53.II.A.17.

Peoples Natural Gas Company LLC
Exhibit 1, Schedule 6: 53.53 II.C.1 - Gas Stored - Current
12 Months Ended August 31, 2023

		Inventory of Gas Stored Underground - Current		
Month	**Year**	Peoples Natural Gas	Peoples Gas	**Combined**
September	2022	$ 138,544,068	$ 27,258,423	$ 165,802,491
October	2022	$ 150,044,386	$ 29,842,554	$ 179,886,940
November	2022	$ 139,994,064	$ 25,674,243	$ 165,668,308
December	2022	$ 121,180,022	$ 18,434,970	$ 139,614,992
January	2023	$ 88,929,591	$ 13,392,356	$ 102,321,946
February	2023	$ 66,662,101	$ 8,451,996	$ 75,114,097
March	2023	$ 40,952,076	$ 3,924,122	$ 44,876,198
April	2023	$ 42,774,859	$ 3,963,310	$ 46,738,170
May	2023	$ 47,322,842	$ 4,770,265	$ 52,093,107
June	2023	$ 52,087,458	$ 5,869,638	$ 57,957,096
July	2023	$ 56,783,008	$ 7,578,281	$ 64,361,289
August	2023	$ 58,570,104	$ 9,073,667	$ 67,643,771
Total		$ 1,003,844,580	$ 158,233,825	$ 1,162,078,404
12 Month Average		**$ 83,653,715**	**$ 13,186,152**	**$ 96,839,867**

EXHIBIT NO. 4
Sch. 22, Pages 1-4
(Revised)

Peoples Natural Gas Company LLC
§ 53.53 III.E

34. Prepare a 3-column schedule of expenses, as described below for the following periods (supply sub-accounts, if significant, to clarify basic accounts):

    a. Column 1—Test Year

    b. Column 2 and 3—The two previous years

    Provide the annual recorded expense by accounts. (Identify all accounts used but not specifically listed below.)

* * * * * * * * * * * * * * * * * *

Refer to Attachment A for Combined
Refer to Attachment B for PNG
Refer to Attachment C for PGC

Peoples Natural Gas Company LLC
Combined
Attachment A

Cost Element Description	Twelve Months Ended August 31, 2023 (1)	August 31, 2022 (2)	August 31, 2021 (3)
Labor	$ 55,181,109	$ 59,716,376	$ 62,215,680
APIP/Incentive Compensation	6,823,130	6,246,352	8,674,441
Pension	4,497,434	6,640,392	2,516,547
Post Retirement Benefits Other Than Pensions	1,229,997	1,390,793	2,431,486
Other Employee Benefits	16,406,605	16,923,896	19,091,664
Outside Services - Contracted	24,124,704	21,607,671	21,437,907
Outside Services - IT	8,596,499	8,688,036	8,587,260
Outside Services - A&G	4,407,530	5,316,396	4,787,184
Building Leases	3,902,706	4,118,802	3,415,734
Corporate Insurance	5,213,687	4,710,028	5,035,015
Injuries and Damages	1,173,800	2,841,375	2,361,748
Travel	931,017	697,498	481,494
Licenses & Permits	677,424	(553,209)	3,066,056
Utilities & Fuel Used in Company Operations	2,938,901	2,923,474	3,029,402
Public Relations	1,516,137	2,185,568	2,264,248
Fleet	1,099,110	461,400	1,833,132
Materials & Supplies	10,459,149	10,183,753	10,651,564
Other O&M	15,762,631	8,571,642	4,333,655
Uncollectible Accounts	14,518,575	14,711,145	21,022,912
Subtotal	**179,460,145**	**177,381,391**	**187,237,128**
Total USP Rider	12,891,002	14,597,937	2,330,064
Total Operation and Maintenance Expense	**$ 192,351,147**	**$ 191,979,328**	**$ 189,567,192**

Peoples Natural Gas Company LLC
Peoples Natural Gas Division
Attachment B

Cost Element Description	Twelve Months Ended August 31, 2023 (1)	August 31, 2022 (2)	August 31, 2021 (3)
Labor	$ 45,572,427	$ 50,798,655	$ 50,767,035
APIP/Incentive Compensation	6,471,016	5,917,791	8,230,000
Pension	4,497,434	6,640,392	2,694,110
Post Retirement Benefits Other Than Pensions	1,229,997	1,390,793	2,353,424
Other Employee Benefits	15,791,330	16,337,366	18,620,678
Outside Services - Contracted	21,567,899	19,573,007	18,825,788
Outside Services - IT	7,646,196	7,856,242	8,019,995
Outside Services - A&G	3,735,604	4,620,118	4,462,039
Building Leases	3,433,344	3,715,685	3,173,115
Corporate Insurance	4,418,865	4,047,987	4,410,555
Injuries and Damages	1,064,530	2,502,944	2,021,529
Travel	852,692	624,235	430,015
Licenses & Permits	649,395	(440,017)	2,698,501
Utilities & Fuel Used in Company Operations	2,424,797	2,429,613	2,649,273
Public Relations	1,413,159	2,065,011	2,232,151
Fleet	864,407	540,664	1,531,917
Materials & Supplies	9,113,593	8,930,560	9,635,885
Other O&M	14,175,508	7,310,404	4,399,956
Uncollectible Accounts	13,030,674	12,219,811	19,414,613
Subtotal	**157,952,865**	**157,081,261**	**166,570,578**
Total USP Rider	11,560,342	12,872,050	2,695,750
Total Operation and Maintenance Expense	**$ 169,513,207**	**$ 169,953,312**	**$ 169,266,329**

Peoples Natural Gas Company LLC
Peoples Gas Division

Cost Element Description	Twelve Months Ended August 31, 2023 (1)	August 31, 2022 (2)	August 31, 2021 (3)
Labor	$ 9,608,682	$ 8,917,720	$ 11,448,645
APIP/Incentive Compensation	352,114	328,561	444,441
Pension	0	0	(177,563)
Post Retirement Benefits Other Than Pensions	(0)	(0)	78,062
Other Employee Benefits	615,275	586,531	470,986
Outside Services - Contracted	2,556,804	2,034,664	2,612,119
Outside Services - IT	950,303	831,795	567,265
Outside Services - A&G	671,926	696,278	325,145
Building Leases	469,361	403,117	242,619
Corporate Insurance	794,823	662,042	624,460
Injuries and Damages	109,270	338,431	340,219
Travel	78,325	73,263	51,479
Licenses & Permits	28,029	(113,192)	367,555
Utilities & Fuel Used in Company Operations	514,104	493,861	380,128
Public Relations	102,979	120,557	32,097
Fleet	234,703	(79,264)	301,216
Materials & Supplies	1,345,557	1,253,194	1,015,679
Other O&M	1,587,123	1,261,238	(66,302)
Uncollectible Accounts	1,487,901	2,491,334	1,608,299
Subtotal	**21,507,280**	**20,300,129**	**20,666,550**
Total USP Rider	1,330,660	1,725,886	(365,687)
Total Operation and Maintenance Expense	**$ 22,837,940**	**$ 22,026,016**	**$ 20,300,863**

Attachment C

EXHIBIT NO. 4
Sch. 22, Pages 1-4
(Redline)

Peoples Natural Gas Company LLC
§ 53.53 III.E

34. Prepare a 3-column schedule of expenses, as described below for the following periods (supply sub-accounts, if significant, to clarify basic accounts):

    a. Column 1—Test Year

    b. Column 2 and 3—The two previous years

    Provide the annual recorded expense by accounts. (Identify all accounts used but not specifically listed below.)

* * * * * * * * * * * * * * * * * *

Refer to Attachment A for Combined
Refer to Attachment B for PNG
Refer to Attachment C for PGC

Peoples Natural Gas Company LLC
Combined
Attachment A

Cost Element Description	Twelve Months Ended August 31, 2023 (1)		Twelve Months Ended August 31, 2022 (2)		Twelve Months Ended August 31, 2021 (3)	
Labor	$ ~~60,920,126~~	55,181,109	~~49,114,526~~	59,716,376	$ 62,215,680	
APIP/Incentive Compensation	6,823,130		~~7,036,861~~	6,246,352	8,674,441	
Pension	4,497,434		~~6,730,305~~	6,640,392	2,516,547	
Post Retirement Benefits Other Than Pensions	1,229,997		~~920,924~~	1,390,793	2,431,486	
Other Employee Benefits	16,406,605		~~22,747,650~~	16,923,896	19,091,664	
Outside Services - Contracted	24,124,704		~~28,597,523~~	21,607,671	21,437,907	
Outside Services - IT	8,596,499		~~7,272,132~~	8,688,036	8,587,260	
Outside Services - A&G	4,407,530		~~4,194,530~~	5,316,396	4,787,184	
Building Leases	3,902,706		~~3,460,219~~	4,118,802	3,415,734	
Corporate Insurance	5,213,687		~~3,506,146~~	4,710,028	5,035,015	
Injuries and Damages	1,173,800		~~2,178,449~~	2,841,375	2,361,748	
Travel	931,017		~~353,905~~	697,498	481,494	
Licenses & Permits	677,424		~~20,583~~	(553,209)	3,066,056	
Utilities & Fuel Used in Company Operations	2,938,901		~~2,179,703~~	2,923,474	3,029,402	
Public Relations	1,516,137		~~1,632,445~~	2,185,568	2,264,248	
Fleet	1,099,110		~~2,672,276~~	461,400	1,833,132	
Materials & Supplies	10,459,149		~~11,414,685~~	10,183,753	10,651,564	
Other O&M	~~14,841,451~~	15,762,631	~~17,052,899~~	8,571,642	~~10,825,189~~	4,333,655
Uncollectible Accounts	~~9,700,738~~	14,518,575	~~6,295,629~~	14,711,145	~~14,531,377~~	21,022,912
Subtotal	**179,460,145**		**177,381,391**		**187,237,128**	
Total USP Rider	12,891,002		14,597,937		2,330,064	
Total Operation and Maintenance Expense	**$ 192,351,147**		**$ 191,979,328**		**$ 189,567,192**	

Peoples Natural Gas Company LLC
Peoples Natural Gas Division
Attachment B

Cost Element Description	Twelve Months Ended August 31, 2023 (1)		Twelve Months Ended August 31, 2022 (2)		Twelve Months Ended August 31, 2021 (3)	
Labor	$ ~~50,922,716~~	45,5~~2~~,427	~~41,385,542~~	50,7~~8~~,655	$ 50,767,035	
APIP/Incentive Compensation	6,471,016		~~6,753,162~~	5,917,791	8,230,000	
Pension	4,497,434		~~6,730,305~~	6,640,392	2,694,110	
Post Retirement Benefits Other Than Pensions	1,229,997		~~920,924~~	1,390,793	2,353,424	
Other Employee Benefits	15,791,330		~~22,234,494~~	16,337,366	18,620,678	
Outside Services - Contracted	21,567,899		~~24,662,169~~	19,573,007	18,825,788	
Outside Services - IT	7,646,196		~~6,556,057~~	7,856,242	8,019,995	
Outside Services - A&G	3,735,604		~~3,622,409~~	4,620,118	4,462,039	
Building Leases	3,433,344		~~3,129,013~~	3,715,685	3,173,115	
Corporate Insurance	4,418,865		~~2,962,206~~	4,047,987	4,410,555	
Injuries and Damages	1,064,530		~~1,903,319~~	2,502,944	2,021,529	
Travel	852,692		~~290,075~~	624,235	430,015	
Licenses & Permits	649,395		~~88,664~~	(440,417)	2,698,501	
Utilities & Fuel Used in Company Operations	2,424,797		~~1,773,915~~	2,429,613	2,649,273	
Public Relations	1,413,159		~~1,533,130~~	2,065,011	2,232,151	
Fleet	864,407		~~2,664,649~~	540,664	1,531,917	
Materials & Supplies	9,113,593		~~9,991,543~~	8,930,560	9,635,885	
Other O&M	~~13,154,977~~	14,175,508	~~14,984,986~~	7,310,404	~~9,668,529~~	4,399,956
Uncollectible Accounts	~~8,700,915~~	13,030,674	~~4,894,699~~	12,219,811	~~14,146,041~~	19,414,613
Subtotal	**157,952,865**		**157,081,261**		**166,570,578**	
Total USP Rider	11,560,342		12,872,050		2,695,750	
Total Operation and Maintenance Expense	**$ 169,513,207**		**$ 169,953,312**		**$ 169,266,329**	

Peoples Natural Gas Company LLC
Peoples Gas Division
Attachment C

Cost Element Description	Twelve Months Ended August 31, 2023 (1)	Twelve Months Ended August 31, 2022 (2)	Twelve Months Ended August 31, 2021 (3)
Labor	$ ~~9,997,410~~ 9,608,682	$ ~~7,728,984~~ 8,917,720	$ 11,448,645
APIP/Incentive Compensation	352,114	~~283,698~~ 328,561	444,441
Pension	0	0	(177,563)
Post Retirement Benefits Other Than Pensions	(0)	(0)	78,062
Other Employee Benefits	615,275	~~513,156~~ 586,531	470,986
Outside Services - Contracted	2,556,804	~~3,935,354~~ 2,034,664	2,612,119
Outside Services - IT	950,303	~~716,075~~ 831,795	567,265
Outside Services - A&G	671,926	~~572,121~~ 696,278	325,145
Building Leases	469,361	~~331,205~~ 403,117	242,619
Corporate Insurance	794,823	~~543,940~~ 662,042	624,460
Injuries and Damages	109,270	~~275,130~~ 338,431	340,219
Travel	78,325	~~63,830~~ 73,263	51,479
Licenses & Permits	28,029	~~(68,081)~~ (113,192)	367,555
Utilities & Fuel Used in Company Operations	514,104	~~405,787~~ 493,861	380,128
Public Relations	102,979	~~99,315~~ 120,557	32,097
Fleet	234,703	~~7,627~~ (79,264)	301,216
Materials & Supplies	1,345,557	~~1,423,142~~ 1,253,194	1,015,679
Other O&M	~~1,686,474~~ 1,587,123	~~2,067,913~~ 1,261,238	~~1,156,661~~ (66,302)
Uncollectible Accounts	~~999,823~~ 1,487,901	~~1,400,931~~ 2,491,334	~~385,337~~ 1,608,299
Subtotal	**21,507,280**	**20,300,129**	**20,666,550**
Total USP Rider	1,330,660	1,725,886	87)
Total Operation and Maintenance Expense	**$ 22,837,940**	**$ 22,026,016**	**$ 20,300,863**

EXHIBIT NO. 4

Schedule 1

(Revised)

Peoples Natural Gas Company LLC
Post Retirement Benefits Other Than Pensions

Line No.	Description	PNG (1)	PGC (2)	Combined (3)
1	HTY Net Post Retirement Benefits Other Than Pensions	$ 1,229,997	$ (0)	$ 1,229,997
2	Prior PBOPS Expense Amortization	$ (1,016,131)	$ 2,650,250	$ 1,634,119
3	HTY Adjusted PBOPS Net Expense (Ln 1 + Ln 2)	$ 213,866	$ 2,650,250	$ 2,864,116
4	FTY Net Expense	$ 1,256,374	$ -	$ 1,256,374
5	FTY Adjustment (Ln 4 - Ln 1)	$ 26,377	$ 0	$ 26,377
6	FTY Adjusted PBOPS Net Expense (Ln 3 + Ln 5)	$ 240,243	$ 2,650,250	$ 2,890,493
7	FPFTY Net Expense	$ 1,256,374	$ -	$ 1,256,374
8	FPFTY Adjustment (Ln 7 - Ln 4)	$ -	$ -	$ -
9	FPFTY Adjusted PBOPS Net Expense (Ln 6 + Ln 8)	$ 240,243	$ 2,650,250	$ 2,890,493
10	Amount To Be Tracked (Ln 9 - Ln 2)			$ 1,256,374

EXHIBIT NO. 4
Sch. 1, Page 11
(Redline)

Peoples Natural Gas Company LLC
Post Retirement Benefits Other Than Pensions

Line No.	Description		PNG (1)	PGC (2)	Combined (3)	
1	HTY Net Post Retirement Benefits Other Than Pensions		$ 1,229,997	$ (0)	$ 1,229,997	
2	Prior PBOPS Expense Amortization		$ (1,016,131)	$ 2,650,250	$ 1,634,119	
3	HTY Adjusted PBOPS Net Expense (Ln 1 + Ln 2)		$ 213,866	$ 2,650,250	$ 2,864,116	
4	FTY Net Expense	1,256,374	$ ~~779,921~~	$ -	$ ~~779,921~~	1,256,374
5	FTY Adjustment (Ln 4 - Ln 1)	26,377	$ ~~(450,075)~~	$ 0	$ ~~(450,075)~~	26,377
6	FTY Adjusted PBOPS Net Expense (Ln 3 + Ln 5)	240,243	$ ~~(236,209)~~	$ 2,650,250	$ ~~2,414,041~~	2,890,493
7	FPFTY Net Expense	1,256,374	$ ~~779,921~~	$ -	$ ~~779,921~~	1,256,374
8	FPFTY Adjustment (Ln 7 - Ln 4)		$ -	$ -	$ -	
9	FPFTY Adjusted PBOPS Net Expense (Ln 6 + Ln 8)	240,243	$ ~~(236,209)~~	$ 2,650,250	$ ~~2,414,041~~	2,890,493
10	Amount To Be Tracked (Ln 9 - Ln 2)				$ ~~779,921~~	1,256,374

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED REBUTTAL TESTIMONY OF
MICHAEL HUWAR, PRESIDENT
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: 4-18-2024 Peoples Statement No. 1-R
DATE ADMITTED: _____

PREPARED REBUTTAL TESTIMONY OF
MICHAEL HUWAR

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Michael Huwar. My business address is Peoples Natural Gas Company LLC, 375 North Shore Drive, Suite 600, Pittsburgh, Pennsylvania 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Peoples Natural Gas Company LLC ("Peoples Natural Gas," "Peoples," or the "Company") as President. I am also the President of Peoples Natural Gas' direct parent, PNG Companies LLC ("PNG"). On January 1, 2023, Peoples Natural Gas was merged with Peoples Gas Company LLC and two divisions were formed.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth as Peoples Statement No. 1.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I will respond to the testimony of the witnesses who raised concerns with the management efficiency adjustment component of the Company's proposed return on equity in this proceeding. Specifically, I will respond to certain issues identified by the Office of Consumer Advocate ("OCA") witness Alexander and the Bureau of Investigation and Enforcement ("I&E") witness Spadaccio.

Management Effectiveness Adjustment

Q. WHAT IS THE COMPANY PROPOSING WITH RESPECT TO MANAGEMENT EFFECTIVENESS IN THIS PROCEEDING?

A. As outlined in my direct testimony as well as the direct testimony of witness Moul, the Company proposed to include an adjustment of 25 basis points to its proposed return on equity for its exemplary management performance. I note that I have been advised by counsel that, under Pennsylvania law, the Pennsylvania Public Utility Commission ("Commission") shall consider the efficiency, effectiveness and adequacy of service of each utility when determining just and reasonable rates. Specifically, the Commission can make "adjustments to specific components of the utility's claimed cost of service as it may determine to be proper and appropriate." See 66 Pa. C.S. § 523(a).

In my direct testimony, as well as in the testimony of other Company witnesses, we have offered support for and evidence of above average performance, efficiency, effectiveness and adequacy of service such that the Commission should consider an appropriate upwards adjustment to the Company's rate of return.

Q. WHAT IS OCA'S POSITION WITH RESPECT TO THE COMPANY'S REQUEST FOR A MANAGEMENT EFFICIENCY ADJUSTMENT?

A. Overall, OCA claims that the Company has not offered evidence to support a management efficiency adjustment. OCA's witness Alexander claims that "there is no basis to support any reward in the form of higher profits due to 'management efficiency' as requested by Peoples.[1]" Specifically, witness Alexander points to specific areas she deems as requiring

[1] Alexander Direct, at page 9.

significant improvement, citing the need for improvement as a reason the Company should not be awarded additional profits for management performance[2].

OCA witness Colton attempts to link the Company's management performance to its credit and collections processes, arguing that the Company does not have strong management performance due to the number of residential customers in debt[3].

Company Witness Doyle-Conley will address both Ms. Alexander's proposed areas of improvement[4] as well as Mr. Colton's specific concerns regarding the Company's credit and collection procedures[5].

Q. WHAT IS YOUR RESPONSE TO OCA'S CLAIMS CONCERNING MANAGEMENT PERFORMANCE?

A. I disagree with OCA's contention that we have not provided any evidence of above average performance. In my direct testimony pages 16-18, I provide examples of certain customer service metrics reflecting the Company's above average performance benchmarked with other Pennsylvania utilities. In many categories the Company is exceeding the Commission's goals and even leading its peers with the highest scores and percentages in various categories. On page 19 of my direct testimony, I include the Company's outstanding leaks metrics on its system. The Company has reduced its outstanding leaks by 83% since 2019[6]. Additionally, Company witnesses, Palombo and Becker, in their direct testimonies, provide evidence of the Company's exemplary performance with

[2] *Id.* at 1.
[3] Colton Direct, at page 68.
[4] Doyle-Conley Rebuttal, page pages 7-8, 10-2.
[5] *Id*. at 5-7.
[6] Represents the year end leaks outstanding as reported in the annual DOT distribution report.

metrics concerning safety and compliance, as well as infrastructure investment progress. The Company has provided evidence that it does show above average performance.

Q. WHAT IS I&E'S POSITION WITH RESPECT TO THE COMPANY'S REQUEST FOR A MANAGEMENT PERFORMANCE ADJUSTMENT?

A. I&E witness Spadaccio asserts that the topics used to support the Company's claim for a management effectiveness adjustment fall within the categories of reliability, customer satisfaction, and safety that are required of every public utility company under 66 Pa C.S.A. Section 1501. Further, Mr. Spadaccio claims that additional basis points for management performance defeats the purpose of cost cutting measures that would benefit ratepayers[7].

Q. WHAT IS YOUR RESPONSE TO I&E'S ASSERTIONS REGARDING MANAGEMENT PERFORMANCE?

A. The Company agrees with Mr. Spadaccio in his assertion that it has used its above average performance in areas which fall under its responsibilities under 66 Pa C.S.A. Section 1501 to justify its claim for a management performance adjustment. Moreover, Mr. Spadaccio does not deny that the Company's performance is above average. Rather, Mr. Spadaccio disregards the above average performance altogether and this has the effect of treating the Company's exemplary, above average performance in the same way as a company with just average performance. Mr. Spadaccio's assertions effectively disregard the provisions of Section 523 of the Public Utility Code.

Q. PLEASE FURTHER EXPLAIN THE COMPANY'S EXEMPLARY PERFORMANCE.

[7] Spadaccio Direct, at pages 61-65.

A. Peoples consistently provides safe and reliable natural gas service to its customers at reasonable rates. This is the product of a dedicated and knowledgeable workforce that is constantly seeking to improve its quality of service and control costs. As part of its commitment to providing low-cost natural gas delivery service to its customers, the Company has committed significant resources to improving its infrastructure. In his direct testimony in this proceeding, on pages 4-6, Company witness Becker provides metrics which illustrate the robust capital investments the Company has made to its system, outlining its four major capital pipeline work programs. The Company is continuing to invest in bettering its system and improving its facilities for the benefit of its customers. Notably, the Company's ability to control costs is evidenced by its reasonable installation costs per mile, despite its vast urban footprint with complex projects. As Company witness Becker illustrates in his testimony, pages 3-4, Peoples' LTIIP pipeline replacement cost per mile compares favorably with other Pennsylvania LDCs.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**Docket No. R-2024-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED REBUTTAL TESTIMONY OF
ANDREW P. WACHTER
DIRECTOR OF FINANCE AND REGULATION
PNG COMPANIES LLC

PUBLIC VERSION

DATE SERVED: April 18, 2024
DATE ADMITTED: _____

Peoples Statement No. 2-R

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I. INTRODUCTION AND SUMMARY

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Andrew P. Wachter, and my business address is 375 North Shore Drive, Suite 600, Pittsburgh, PA 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed as Director, Finance and Regulation for PNG Companies LLC ("PNG"). I provide services to Peoples Natural Gas Company LLC ("Peoples" or the "Company") and its two divisions: the Peoples Natural Gas Division ("PNGD") and the Peoples Gas Company Division ("PGD"). As Director, Finance and Regulation, I oversee the Rates and Regulatory department and the Financial, Planning and Analysis department at Peoples and its affiliates.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 2.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I am presenting updates to the Company's original filing. In addition, I am presenting testimony in rebuttal of certain expense positions and recommendations of the Bureau of Investigation and Enforcement ("I&E") witnesses Ethan H. Cline and Christopher Keller, the Office of Consumer Advocate ("OCA") witnesses David Evrard, Dante Mugrace and Barbara Alexander, and the Office of Small Business Advocate ("OSBA") witness Robert D. Knecht. I will also address certain comments made at the Public Input Hearings.

Q. ARE YOU SPONSORING ANY EXHIBITS?

A. Yes. I am also sponsoring fourteen (14) additional exhibits **(Exhibit Nos. APW-R-1 through APW-R-14**).

Q. HOW HAVE YOU ARRANGED YOUR REBUTTAL TESTIMONY?

A. I have arranged my rebuttal testimony by subject matter. Where more than one witness has addressed the same subject matter with testimony that I wish to rebut, I address all of that testimony in the same section. I will address the following issues in the order listed.

- Updates to Original Filing
- 5-Year Average Annual Increases
- Inflation Adjustments
- Labor/Vacancy Adjustments
- Incentive Compensation

- Corporate Insurance
- Employee Expenses
- Travel and Entertainment Expenses
- Company Memberships
- Advertising Expenses
- Materials and Supplies
- Rate Case Expense
- Pension Expense
- PBOP Expense
- Outside Services – Contracted
- Outside Services – IT
- Outside Services – A&G
- Payment Processing Expenses
- Uncollectible Accounts Expense
- Non-Basic Service From Third Party Programs
- Gathering System Charges
- Synergy Savings
- Cost of Other Proposals
- Public Input Hearing Comments

II. UPDATES TO THE COMPANY'S ORIGINAL FILING

Q. HAS THE COMPANY UPDATED OR ADJUSTED THE COST OF SERVICE AS FILED?

A. The Company identified three adjustments during the discovery process. However, we are not updating the as filed revenue requirement claim as we are not proposing an increase greater than the amount filed. However, to the extent that the Commission disallows other expenses or reduces the Company's proposed rate of return, the Company requests that the full adjustments described below be adopted.

Q. CAN YOU SUMMARIZE THE ADJUSTMENTS IDENTIFIED ON THE AMOUNT OF RATE INCREASE REQUESTED?

A. Yes. Below are the adjustments:

1. increase in labor expense of $538,590 as referenced in the response to I&E-RE-6;
2. increase in PBOP expense of $476,452 to update the original estimate in the filing as referenced in the response to I&E-RE-18; and
3. reduction in licenses and permits expense of $18,697 as referenced in the response to I&E-RE-30.

The referenced interrogatory responses and revised Exhibit No. 4 are included in the Highly Confidential **Exhibit No. APW-R-1**.

Please note that there is an increase in Cash Working Capital associated with these adjustments.

Q. PLEASE EXPLAIN THE IMPACT THESE ADJUSTMENTS HAVE ON THE COST OF SERVICE AS FILED?

A. The impact of these changes would have increased the overall claimed increase in revenues by approximately $996,345, excluding the cash working capital amount.

III. RESPONSE TO OTHER PARTIES ADJUSTMENTS

A. GAS SUPPLY EXPENSE

Q. DO ANY OF THE PARTIES MAKE AN ADJUSTMENT TO GAS SUPPLY EXPENSE?

A. No. However, I&E Witness Cline proposes an adjustment to gross present rate revenue including gas supply expense revenue without a corresponding proposed adjustment to gas supply expense.

Q. PLEASE EXPLAIN FURTHER.

A. As described in Peoples Statement No. 3-R – the Rebuttal Testimony of Carol Scanlon, I&E Witness Cline proposes to change the Heating Degree Days (HDDs) the Company utilizes to developing its existing revenue at present rates. In calculating his proposed revenue adjustment of $9,311,915 (see I&E Statement No. 3 – Direct Testimony of Ethan H. Cline, starting on Page 20, Row 13), Cline utilized gross revenue including gas cost revenue. I&E Witness Cline's error in excluding an offsetting increase in gas supply expense that is also impacted by his proposed change in HDDs. Please note that we do not

agree with the HDD adjustment. This is discussed further in Peoples Natural Gas Statement No. 3-R – the Rebuttal Testimony of Carol Scanlon.

Q. HOW DOES MR. CLINE'S FAILURE TO ADJUST GAS SUPPLY EXPENSES AFFECT HIS BASE RATE PROPOSAL?

A. Mr. Cline's failure to adjust gas supply expenses affects the base rate increase because his derivation of the base rate increase is based upon total revenues, including gas cost revenues, and not based on distribution revenues alone. His $9,311,915 adjustment to revenues includes $4,763,786 related to distribution revenues and $4,548,129 related to gas cost revenues. He is decreasing the Company's proposed revenue increase by both distribution and gas cost revenue. If his adjustment is accepted, which I disagree with, it should only reduce the Company's base rate request by the distribution revenue portion of $4,763,786.

Q. WHAT IS THE RESULT OF THIS CORRECTION TO THIS PROPOSED ADJUSTMENT?

A. If I&E Witness Cline's proposed adjustment is accepted then an additional gas supply expense of $4,548,129 must be included in the case. This increases the proposed rate increase of I&E from $83,525,000 to $88,073,129.

The chart below compares the gross revenue at existing rates as filed to the response to I&E-RS-3 as utilized by Mr. Cline in his adjustment. The additional gas cost revenue of $4,5458,129 is highlighted.

	Ex 3 as Filed	Response to I&E-RS-3	Change in Revenues
	Total	Total	Total
Sales			
Base Rate Revenue	$ 351,764,838	$ 355,395,361	$ 3,630,523
STAS	$ 185,762	$ 188,586	$ 2,824
Supplier Choice Rider	$ 25,201	$ 25,201	$ -
Universal Services Program	$ -	$ -	$ -
Merchant Function Charge	$ 4,767,172	$ 4,840,259	$ 73,086
Gas Procurement Charge	$ 5,155,561	$ 5,233,575	$ 78,014
DSIC	$ 15,397,912	$ 15,555,773	$ 157,861
TRS/TCJA	$ (24,809,492)	$ (25,066,489)	$ (256,997)
Gas Cost	$ 274,379,163	$ 278,533,749	$ 4,154,586
Total Sales	**$ 626,866,118**	**$ 634,706,015**	**$ 7,839,897**
Transport			
Base Rate Revenue	$ 153,096,389	$ 154,132,651	$ 1,036,262
STAS	$ 168,760	$ 169,596	$ 836
Supplier Choice Rider	$ 4,551	$ 4,551	$ -
Rider USP	$ -	$ -	$ -
Merchant Function Charge	$ 178,965	$ 181,711	$ 2,746
DSIC	$ 9,155,179	$ 9,204,211	$ 49,032
TRS/TCJA	$ (13,763,532)	$ (13,835,261)	$ (71,729)
Gas Cost	$ 43,309,452	$ 43,702,995	$ 393,543
Total Transport	**$ 192,149,764**	**$ 193,560,454**	**$ 1,410,690**
Total			
Base Rate Revenue	$ 504,861,227	$ 509,528,012	$ 4,666,785
STAS	$ 354,522	$ 358,182	$ 3,660
Supplier Choice Rider	$ 29,752	$ 29,752	$ -
Universal Services Program	$ -	$ -	$ -
Merchant Function Charge	$ 4,946,137	$ 5,021,969	$ 75,832
Gas Procurement Charge	$ 5,155,561	$ 5,233,575	$ 78,014
DSIC	$ 24,553,091	$ 24,759,985	$ 206,893
TRS/TCJA	$ (38,573,023)	$ (38,901,749)	$ (328,726)
Gas Cost	$ 317,688,615	$ 322,236,744	$ 4,548,129
Total Combined	**$ 819,015,882**	**$ 828,266,470**	**$ 9,250,587**
Other Operating Revenue			
483 - Sales for Resale	18,054	18,054	-
487 - Forfeited Discounts	5,435,311	5,496,639	61,328
488 - Miscellaneous Service Revenues	1,040,665	1,040,665	-
489.1 - Revs from Transp of Gas of Others thru Gath Fac.	6,995,675	6,995,675	-
493 - Rent from Gas Property	-	-	-
495 - Other Gas Revenues	709,921	709,921	-
496 - Provision for Rate Refunds	-	-	-
Total Other Operating Revenue	14,199,626	14,260,954	61,328
Overall Total	**833,215,508**	**842,527,424**	**9,311,915**

Q. PLEASE CONTINUE.

A. As shown above, present rates were increased by $4,548,129 but gas cost expense was not adjusted. As shown on the table below from page 4 of I&E Statement No. 1 – the Direct Testimony of Christopher Keller, he proposes a $9,500 thousand adjustments to O&M expense and a $216 thousand adjustments to taxes other than income.

Peoples Natural Gas Company LLC		TABLE I			
R-2023-3044549		INCOME SUMMARY			
Dollar Amounts in Thousands					
	9/30/25	INVESTIGATION & ENFORCEMENT			
	Proforma	[----------			]
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	$	$	$	$	$
Operating Revenue	833,216	9,312	842,528	83,525	926,053
Deductions:					
O&M Expenses	541,288	-9,500	531,788	1,838	533,626
Depreciation	134,220	0	134,220		134,220
Taxes, Other	15,353	-216	15,137	0	15,137
Income Taxes:					
Current State	0	0	0	0	0
Current Federal	0	4,129	4,129	17,154	21,283
Deferred Taxes	-91,345	0	-91,345		-91,345
ITC	0	0	0		0
Total Deductions	599,516	-5,587	593,929	18,992	612,921
Income Available	233,700	14,899	248,599	64,533	313,132
Rate Base	4,215,125	-692	4,214,433	0	4,214,433
Rate of Return	5.54%		5.90%		7.43%

The below from page 2 of I&E Statement No. 1 – the Direct Testimony of Christopher Keller, detail the $9,500 thousand adjustments to O&M expense and a $216 thousand adjustments to taxes other than income and clearly shows that gas costs are not included.

	Company Claim	I&E Adjustment	I&E Recommended Allowance
O&M Expenses:			
Labor Expense	$69,463,580	($2,275,920)	$67,187,660
Payroll Taxes	$6,571,623	($216,212)	$6,355,411
Pension Expense	$5,670,000	($1,286,880)	$4,383,120
Post Retirement Benefits Other Pensions	$2,414,041	($417,689)	$1,996,352
Other Employee Benefits	$20,982,496	($687,504)	$20,294,992
Outside Services - Contracted	$28,657,932	($810,857)	$27,847,075
Corporate Insurance	$9,080,331	($2,085,969)	$6,994,362
Advertising Expense	$1,423,934	($1,370,197)	$53,737
Rate Case Expense	$1,031,000	($564,132)	$466,868
Total O&M Expense Adjustments		($9,715,360)	
Rate Base Adjustments:			
Cash Working Capital	$36,256,917	($692,386)	$35,564,531
Total Rate Base Adjustments		($692,386)	

Q. WHAT ARE THE CONSEQUENCES OF INCLUDING GAS COST REVENUE BUT EXCLUDING THE OFFSETTING GAS COST EXPENSE ADJUSTMENT.

A. This mistake overstates base rate revenue at existing rates thus understating the overall rate increase proposed by I&E. As such, the proposed rate increase of I&E should be adjusted from $83,525,000 to $88,073,129.

B. <u>5-YEAR AVERAGE ANNUAL INCREASES</u>

Q. PLEASE SUMMARIZE HOW THE COMPANY USED 5-YEAR AVERAGE ANNUAL INCREASES TO MAKE ADJUSTMENTS TO CERTAIN HTY EXPENSES.

A. In order to appropriately project how certain expenses are expected to change during the FTY and FPFTY, the Company used a 5-year historical percentage experience change for each expense type individually and applied it to the HTY balances to determine the amount of change in balance to expect.

Q. HOW IS APPLYING THE 5-YEAR AVERAGE INCREASE DIFFERENT THAN APPLYING A STANDARD INFLATION ADJUSTMENT?

A. Utilizing a 5-year average increase methodology, as described above, utilizes known and recently incurred activity for each specific expense account. Whereas a standard inflation adjustment often is based upon broad inflation indicators or even one over-riding inflation

metric applied to different expense categories. An inflation adjustment is an approach that weights various categories into one such as CPI – the Consumer Price Index.

Q. WHAT IS OCA WITNESS MUGRACE RECOMMENDING WITH RESPECT TO APPLYING A 5-YEAR AVERAGE INCREASE?

A. OCA Witness Mugrace is proposing to disallow any sort of percentage increases as he refers to them as inflationary adjustments that are not actually known or measurable as they do not reflect the true cost of expenses. In various places he claims that "Costs should be based upon evidence or documentation that supports Peoples' adjustments. More definitive types of increases or adjustments are contractually related increases or escalation adjustments that are predetermined in contracts or service agreements entered into by Peoples and third-party vendors".

The table below summarizes all adjustments that OCA Witness Mugrace's deems to be inflationary:

	FTY	FPFTY	Total
Outside Services - Contracted	$ (904,595)	$(1,035,740)	$(1,940,335)
Outside Services - IT	$ (205,356)	$ (236,958)	$ (442,314)
Outside Services - A&G	$ (206,890)	$ (221,372)	$ (428,262)
Corporate Insurance	$ (773,601)	$ (874,943)	$(1,648,544)
Injuries & Damages	$ (73,935)	$ (76,301)	$ (150,236)
Travel	$ (40,947)	$ (42,748)	$ (83,695)
Company Memberships	$ (17,345)	$ (17,722)	$ (35,067)
Licenses & Permits	$ (33,712)	$ (34,931)	$ (68,643)
Utilities & Fuels	$ (84,825)	$ (87,415)	$ (172,240)
Advertising	$ (42,784)	$ (44,153)	$ (86,937)
Fleet	$ (35,128)	$ (36,250)	$ (71,378)
Materials & Supplies	$ (307,733)	$ (338,640)	$ (646,373)
Other O&M	$ (440,321)	$ (449,212)	$ (889,533)
Payment Processing	$ -	$ (91,628)	$ (91,628)
Total	$(3,167,171)	$(3,588,014)	$(6,755,185)

Please note $6,518,012 of the above adjustments relate to categories whereby the Company used the multi-year average methodology. Such methodology was not used for either the Injuries & Damages or the Advertising categories both of which will be discussed in the next section of my testimony.

Q. DO YOU AGREE WITH MR. MUGRACE'S RECOMMENDATION TO DISALLOW THE APPLICATION OF A 5-YEAR AVERAGE ANNUAL INCREASE FOR THESE EXPENSES?

A. No. He first claims that "Costs should be based upon evidence or documentation that supports Peoples' adjustments." I would argue that utilizing historic trends (i.e., a 5-year average increase) is sufficient evidence of the proposed expense. It is unreasonable to believe that these costs are not going to increase over the 25-month projected period (FTY and FPFTY) in this proceeding especially considering the wide-spread inflation being experienced across the world.

He further explains that "More definitive types of increases or adjustments are contractually related increases or escalation adjustments that are predetermined in contracts or service agreements entered into by Peoples and third-party vendors." When available the Company did utilize this information. However, this should not be a binary test for recoverability as many of these expenses are not incurred as part of contracts or service agreements entered into by Peoples.

I further note that no other party took exception to our approach to our projection methodology.

Q. IS THERE PRECEDENT FOR THE APPROACH THAT THE COMPANY TOOK?

A. Yes. In Aqua Pennsylvania's most recent base rate proceeding at Docket No. R-2021-3027385, the Commission adopted a three-year average increase to adjust the company's general liability insurance claim. The three-year average increase was I&E's proposal, and the Commission adopted it over Aqua Pennsylvania's five-year average increase proposal. However, I note that no party has proposed a different period for determining the average annual increase in this proceeding.

Q. DOES MUGRACE'S APPROACH TO PERCENTAGE ADJUSTMENTS EFFECTIVELY UTILIZE A HISTORIC TEST YEAR ("HTY") METHODOLOGY RATHER THAN A FULLY PROJECTED FUTURE TEST YEAR ("FPFTY") METHODOLOGY?

A. Yes. By not allowing a reasonable methodology to project increases, such as recent average Company-experienced increases by specific expense categories, he effectively reverts to utilization of historic test year balances. This approach is contrary to methodology widely accepted in Pennsylvania base rate cases. Further, this could have broader implications if a HTY approach was utilized.

C. <u>INFLATION ADJUSTMENT ITEMS</u>

Q. DID THE COMPANY APPLY A STANDARD INFLATION ADJUSTMENT TO ANY EXPENSE ITEMS?

A. Yes, the Company applied a standard inflation adjustment to both the Injuries & Damages ($150,236 adjustment) and the Advertising ($86,937 adjustment) categories of expenses.

Q. HOW DID THE COMPANY DETERMINE THE INFLATION AMOUNT?

A. The Company utilized the CPI – Consumer Price Index for both of these categories.

Q. WHY DIDN'T THE COMPANY PROPOSE A 5-YEAR AVERAGE ANNUAL INCREASE FOR THESE ITEMS INSTEAD OF AN INFLATION ADJUSTMENT?

A. Due to the fluctuating nature of these categories and types of expenses it was more reasonable to use an index-based approach.

Q. WHAT DOES MR. MUGRACE PROPOSE WITH RESPECT TO THE INFLATION ADJUSTMENT FOR THESE EXPENSES.

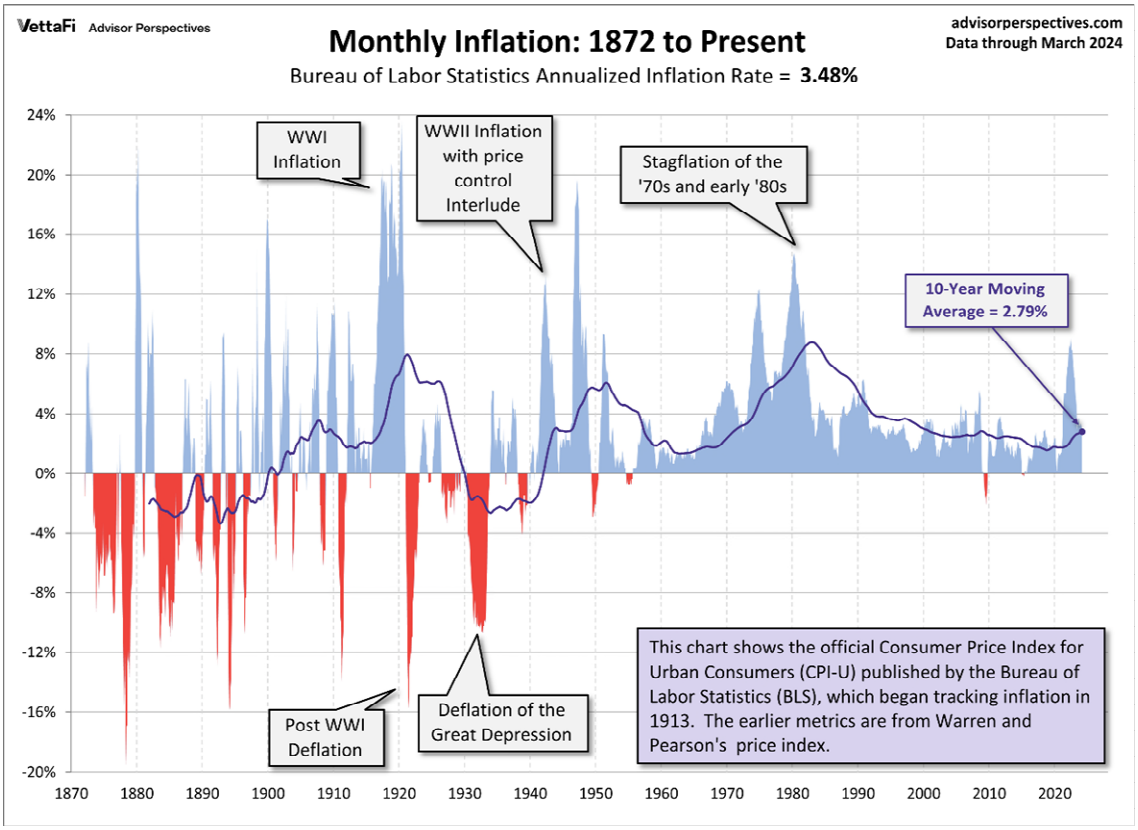
A. Mr. Mugrace proposes to disallow the Company's $150,236 increase in Injuries & Damages expense and the Company's $86,937 increase in Advertising expense.

Q. DO YOU AGREE WITH MR, MUGRACE'S ADJUSTMENTS?

A. No.

Q. WHY IS IT REASONABLE TO INCLUDE AN INFLATION FACTOR FOR THESE ITEMS?

A. As stated above, inflation is a real thing and is expected in all expense categories over time. Utilizing an actual experienced inflation factor to project these costs is a reasonable approach. The table below from VettaFi Advisor Perspectives shows the history of inflation based upon data from Bureau of Labor Statistics data which shows that inflation has occurred in most months for the last six decades.



During 2022 and 2023 monthly inflation was averaged 5.49%.

Q. HAS THE COMMISSION APPROVED AN INFLATION ADJUSTMENT FOR ANY UTILITIES IN RECENT CASES?

A. Yes, the Commission has recently approved an inflation adjustment for PECO Gas for several expenses in its 2020 base rate proceeding at Docket No. R-2020-3018929. Like

the PECO case, herein the Company has limited the general inflation adjustment to only a few categories of expenses.

Q. DID MR. MUGRACE PROPOSE ANY ADDITIONAL INFLATION ADJUSTMENTS TO PEOPLES' CLAIM?

A. Yes. Mr. Mugrace proposed similar adjustments to capital expenditures. Please note that Company witness Paul Becker will address OCA Witnesses Inflation adjustment related to capital expenditures in his rebuttal testimony Peoples Natural Gas Statement No. 5-R.

D. <u>LABOR/VACANCY ADJUSTMENTS</u>

Q. PLEASE EXPLAIN THE LABOR/VACANCY ADJUSTMENTS PROPOSED BY I&E AND OCA REGARDING LABOR AND LABOR RELATED EXPENSES.

A. Both the OCA and I&E make proposed adjustments related to increasing the level of vacant positions to be included in the FPFTY labor claim. OCA Witness Mugrace proposed a vacancy rate of 2.7% and I&E witness Keller suggests that 56 open positions be used rather than the Company's proposed 8 positions.

Q. DO YOU AGREE WITH THESE ADJUSTMENTS?

A. I do not.

Q. WHY SHOULD THE COMPANY'S CLAIM REGARDING EMPLOYEE HEADCOUNT BE ACCEPTED?

A. Our proposed vacancy level represents more normalized and expected vacancy levels going forward. In recent years the Company has seen increased levels of vacancy. However, it is expected that levels will revert to pre-COVID vacancies. As shown in the article entitled "The Great Resignation Is Over: Quitting has fallen to a three-year low" as published by the SHRM (Society for Human Resources Management) attached as **Exhibit No. APW-R-2** there is an expectation that the recent spike in turnover as part of the post-COVID "Great Resignation" was an anomaly and does not represent the future. As such, it is more appropriate to use the Company's proposal.

Mr. Mugrace made a statement that "It is uncertain whether or not Peoples will actually hire the number of employees it has proposed." (OCA Statement No. 2, Page 26 lines 15-16) The Company continues to hire vacant positions. For example, as shown in the CONFIDENTIAL response to I&E-RE-6 attached as **Exhibit No. APW-R-3**, 52 of the open positions as of August 31, 2023 have been filled as of the time of the response.

Further, pre-COVID the average vacancy level for all of PNG Companies (including entities other than PNGD and PGD) averaged 13 vacancies in 2018 prior to COVID.

Q. DOES I&E'S REDUCTION TO THE COMPANY'S EMPLOYEE HEADCOUNT AFFECT OTHER EXPENSES?

A. Yes. I&E proposed related adjustment to benefits of $527,144 and payroll taxes (to be addressed in Statement No. 10-R – the Rebuttal Testimony of Rudolph Hanechak). These adjustments should also be rejected for the reasons stated above.

Further, it is inappropriate to apply the vacancy ratio to PBOP expense. This expense is a future liability for retirement expenses that is a result of having the employee and it is not an expense that should be normalized.

Q. DOES OCA'S REDUCTION TO THE COMPANY'S EMPLOYEE HEADCOUNT AFFECT OTHER EXPENSES?

A. Yes. OCA also adjusted benefits by $687,504 and payroll taxes (to be addressed in Statement No. 10-R – the Rebuttal Testimony of Rudolph Hanechak). These adjustments should be rejected for the reasons stated above.

Q. IF I&E'S AND OCA'S EMPLOYEE HEADCOUNT ADJUSTMENTS ARE DENIED, SHOULD THESE RELATED ADJUSTMENTS ALSO BE DENIED?

A. Yes.

Q. IF MR. MUGRACE'S VACANCY RATIO ADJUSTMENT IS ACCEPTED IS THE AMOUNT CORRECT?

A. It is not. His methodology double counts the original eight FTE vacancies that were included in the Company's filing as he did not remove our as filed vacancy adjustment prior to calculating his adjustment. This amount is $247,205. Thus, his adjustment, if accepted should be reduced by this amount.

E. INCENTIVE COMPENSATION

Q. OCA PROPOSES TO REDUCE THE COMPANY'S CLAIM FOR INCENTIVE COMPENSATION BY $2,562,451 (OCA St. No. 2, pp. 27-29). PLEASE SUMMARIZE THE BASIS FOR OCA'S PROPOSED ADJUSTMENT TO INCENTIVE COMPENSATION.

A. He recommends this adjustment as this amount relates to the financial performance of the Company as it promotes shareholder interest and does not benefit customers.

Please note that Mr. Mugrace makes an adjustment in other O&M of $885,507 for similar reasons. This will be discussed in the Other O&M section below.

Q. DOES MR. MUGRACE PROVIDE ANY SUPPORT FOR HIS POSITION ON INCENTIVE COMPENSATION?

A. He does not other than stating that "minimal or none being attributable to the benefit of customers, nor related to customer service performances and measures, safety and environmental issues, and other customer related issues." (OCA St. No. 1, p. 28 and 29)

Q. PLEASE EXPLAIN WHY YOU DISAGREE WITH OCA'S PROPOSED ADJUSTMENT TO INCENTIVE COMPENSATION.

A. OCA's proposal on incentive compensation should be rejected for three main reasons: 1) the overall level of incentive compensation claimed is part of a fair, market-based level of total compensation; 2) there are no regulations that prohibit utilities from recovery of

incentive compensation that is tied to financial metrics and a recent UGI Utilities, Inc. – Electric Division ("UGI") Commission order (Docket No. R-2017-2640058) supports this position; and 3) financial metrics provide customers a direct benefit by incentivizing employees to be good financial stewards of company and ultimately customer funds.

Q. PLEASE EXPLAIN HOW PEOPLES INCENTIVE COMPENSATION IS PART OF A FAIR, MARKET-BASED LEVEL OF TOTAL COMPENSATION.

A. As discussed in my Direct Testimony, Peoples Statement No. 2, to retain talent, Peoples must offer benefits comparable to other companies. Offering Incentive Compensation is one way for Peoples to retain talent by offering market-based incentives to Company employees. The Company has undertaken research to ensure that it offers market-based compensation and incentive programs. Eliminating or reducing these programs would have a significant impact on the Company's ability to attract and retain competent employees. Based upon feedback from our Human Resources department it is their understand that most utilities offer incentive compensation.

Further, as explained in the Highly Confidential response to Interrogatory No. OCA-VII-26 (attached in **Exhibit No. APW-R-4**) Compensation programs are regularly reviewed to ensure market competitiveness to attract, retain, and reward talented employees necessary to provide safe and reliable service. The Company utilizes several compensation surveys to compare itself against market data and trends. Further, benchmarking against the market is done internally by human resources utilizing various third-party sources based upon third-party survey information. In 2023, the survey sources

utilized included: Salary.com, Willis Towers Watson, and American Water Works Association. Compensation programs are regularly reviewed to ensure market competitiveness to attract, retain, and reward talented employees necessary to provide safe and reliable service.

In addition, the Company has an Executive Compensation Committee that has retained an independent compensation consultant, Pay Governance LLC, to assist in designing our executive compensation program and assessing its competitiveness through benchmarking peer analysis and other methodologies. **(BEGIN HIGHLY CONFIDENTIAL)** [redacted] **(END HIGHLY CONFIDENTIAL)**

Q. DOES MR. MUGRACE OBJECT TO THE OVERALL LEVEL OF INCENTIVE COMPENSATION OR THE PROGRAMS THEMSELVES?

A. No. He does not. Specifically, he states "While I am not opposing the Company's STI plan what I am opposing are the costs related to the Company's recovery of its STI related to financial performance through ratepayers" (OCA St. No. 1, p. 29).

Q. PLEASE EXPLAIN YOUR SECOND REASON WHY THE OCA'S POSITION ON INCENTIVE COMPENSATION SHOULD BE REJECTED.

A. I am not aware of, and I have been advised by counsel that there are no regulations that prohibit utilities from recovery of incentive compensation that is tied to financial metrics. Further, as part of the UGI's recent base rate case proceeding (Docket No. R-2017-2640058) an argument was made to disallow recovery of certain employee compensation costs because they contained certain financial metrics beyond metrics related to duties directly related to the provision of service. The Order in that proceeding rejected that argument. In particular, the order specifically stated that "the fact that the program includes a financial metric does not disqualify it from allowance as an expense for inclusion in the rate base". (*See e.g., UGI 2016 Order* at 74)

Q. REGARDING YOUR THIRD REASON TO REJECT OCA'S POSITION, PLEASE EXPLAIN WHY THESE COSTS PROVIDE A DIRECT BENEFIT TO THE CUSTOMERS.

A. Financial metrics incentivize employees to be good financial stewards of company and ultimately customer resources thus they provide customers a direct benefit. I point out that the impact most employees have on financial targets is to achieve their O&M budgets. As such, this drives employees to be efficient with the costs they incur while still achieving our mission to "Make Customers Lives Better". Such savings ultimately delay the need for future rate cases. Further, this compensation is also tied to and aimed at improving operational effectiveness.

Q. MR. MUGRACE ALSO RECOMMENDS THAT THE COMPANY'S DIVERSITY, EQUITY AND INCLUSION ("DEI") INCENTIVE COMPENSATION COSTS BE DENIED IN THE AMOUNT OF $512,615. (OCA ST. NO. 2, p. 29) DOES THE COMPANY AGREE WITH THIS ADJUSTMENT?

A. No. it does not. Mr. Mugrace makes two contradictory arguments in this testimony on this topic. First, he argues that this type of compensation does not provide ratepayers benefits. He argues that these are organization frameworks of fair treatment and that "I do not see a nexus between DEI and ratepayer benefits in the areas of customer service, customer engagement or customer participation" (OCA St. No. 1, p. 29). Second, he states that "If Peoples believes these incentive costs do provide customer benefits then Peoples should be burdened with providing the dollars and not the ratepayers." (OCA St. No. 1, p. 29).

These two arguments seem to contradict each other. On one hand he seems to use lack of customer benefit as the basis for disallowance but then goes and says even if it benefits customers it should still be disallowed.

Q. PLEASE FURTHER EXPLAIN THE COMPANY'S POSITION ON THIS MATTER.

A. As it is hard to rebut Mr. Mugrace's circular arguments, I will provide support for why these costs are appropriate. Although I could cite various third-party articles, etc. such as the Harver research entitled "7 Benefits Of Diversity In Customer Service At Your Company" attached as **Exhibit No. APW-R-5**, I will share three statements made by the OCA in the Amended Policy Statement on Diversity at Major Jurisdictional Utilities

proceeding at Docket No. M-2023-3038267 attached as **Exhibit No. APW-R-6**. Further, I am not aware that an argument was made that any costs associated with the Amended Policy Statement on Diversity would not be recoverable. Below are the three statements:

1. "The OCA supports the Commission's adoption of the proposed Diversity Policy Statement as being beneficial to consumer interests. The Commission proposes to encourage major jurisdictional utilities and major telecommunications utilities to incorporate diversity into their employment and procurement practices. Public utilities operate in national, state, and local economies that encompass a diverse citizenry that comprise utility workforces and contractors. It is good business practice for utilities to incorporate diversity in their employment and procurement practices because it helps to ensure that utilities will employ a qualified workforce and procure quality goods and services at reasonable costs." (page 4)
2. "Additionally, public utilities provide service to diverse consumers of the Commonwealth. Thus, fostering diversity in their employment and procurement practices can aid utilities in creating value for their customers and the communities they serve." (page 4)
3. "…the OCA supports the Commission's proposal in its Diversity Policy Statement to encourage major telecommunication utilities to report on their diversity programs, as such policy may improve transparency, which benefits consumers." (page 4)

Each of these statements clearly demonstrates that the OCA has proclaimed that encouraging diversity benefits customers. Therefore, it is a reasonable conclusion that

incentives to employees to support diversity efforts would be reasonable costs to recover in base rates.

Additionally, I provide the Statement from Commissioner Kathryn L. Zerfuss attached as **Exhibit No. APW-R-7** whereby the Commissioner made the following statements regarding the benefits of diversity:

- "The utilities' diversity programs impact and strengthen the relationship between utilities and the customers that live and work in their communities and, ultimately, the way customers are served." (page 2)

This statement by Commissioner Zerfuss supports diversity programs as key parts of a company's strategy and as beneficial to customer relationships both of which support that a goal that incentives diversity at Peoples is reasonable.

F. CORPORATE INSURANCE

Q. PLEASE EXPLAIN OCA'S PROPOSED ADJUSTMENT TO THE COMPANY'S CLAIM FOR CORPORATE INSURANCE.

A. OCA proposes to deny the Company an increase in insurance expense during both the FTY and FPFTY. Mr. Mugrace claims they are speculative and cyclical in nature.

Q. ARE THE COMPANY'S PROPOSED PREMIUM INCREASES REASONABLE?

A. Yes. For the FPFTY, I increased the insurance expense by 13.1%[1] which represents the average total premium increase experienced from the 2023 invoice as compared to the 2022 premiums and the premium increase experienced from the 2022 invoice as compared to the 2021 premiums. The Company further affirmed the reasonableness of this increase with our third-party insurance brokers. The third-party brokers shared with us the following feedback about upcoming rates:

Industry data for forecasts beyond this horizon is scarce, as market dynamics can shift dramatically. This is illustrated in various lines of coverage:

- *Excess Liability:*
  - *Historically stable, with occasional modest increases.*
  - *However, from 2018 to 2020, the market experienced a seismic shift due to nuclear verdicts, resulting in carriers reducing their capacity. They transitioned from providing $25 million layers to $10 million or $15 million while maintaining similar pricing to the prior $25 million, causing significant cost increases for policyholders.*

- *D&O:*
  - *Leading up to the COVID-19 pandemic, the public D&O market witnessed a surge in securities litigation and claim payouts. This trend was further amplified by the increasing number of SPACs, contributing to higher premiums.*
  - *Similar to the Excess Liability market, D&O coverage experienced a substantial decrease in available capacity, with $25 million chunks becoming scarce.*

- *Cyber:*
  - *The cyber insurance market underwent a radical transformation due to the rising incidence of ransomware attacks and inadequate protection by businesses. This led to triple-digit rate increases, reduced capacity, and, in extreme cases, some insureds being left without coverage.*
  - *While the rate increases were not as dramatic, the cyber market evolved due to the heightened requirements set by insurance companies. Businesses invested significant time and resources in enhancing their cybersecurity, resulting in a notable decline in claims activity and a stabilization of this previously volatile market.*

[1] Please note this percentage was slightly revised to 12.91% in the response to I&E-RE-27.

- *Property:*
    - *Currently, the property insurance market is facing a challenging phase, often referred to as a "hard market." The industry collectively hopes for this to be a cyclical pattern but currently sees no end to issues, particularly those related to weather, which are driving claims.*

The examples provided emphasize how rapidly insurance markets can change. Predicting market conditions 3-5 years ahead remains a challenging task, as evidenced by the persistence of nuclear verdicts and extreme weather-related claims. The volatility in the insurance market is likely to continue as long as these trends persist.

Q. PLEASE EXPLAIN I&E'S PROPOSED ADJUSTMENT TO THE COMPANY'S CORPORATE INSURANCE CLAIM.

A. I&E Witness Keller proposes three adjustments to the Company's claim for insurance: 1) utilizing an 8.77% increase rather than the 13.1% proposed by the Company (represents the increase experienced by the Company from 2022 to 2023); 2) changing which number the increase is multiplied by; and 3) utilizing a three-year average of capitalization.

Q. DO YOU AGREE WITH I&E'S ADJUSTMENT?

A. No. I do not. For the reasons explained above our percentage increase is reasonable and I&E's recommended increase of 8.775 should be denied.

I&E's second adjustment is not unreasonable. I&E's third adjustment to utilize a three-year average of capitalization is not unreasonable. However, the Company's methodology is reasonable as well.

G. EMPLOYEE EXPENSES

Q. THE OCA PROPOSED TO REMOVE $221,500 OF EXPENSE FOR EMPLOYEE SERVICE AND SAFETY AWARDS. (OCA St. No. 2, p. 33). OCA ALSO PROPOSES TO DECREASE THE COMPANY'S EXPENSES FOR EMPLOYEE EVENTS OF $32,937. (OCA St. No. 1, p. 33). WHAT IS THE REASONING?

A. He claims that the Company did not fully justify these costs and did not provide the ratepayer benefits.

Q. WHY DOES THE COMPANY INCUR THESE EXPENSES AND WHAT ARE THE BENEFITS TO CUSTOMERS?

A. Service Awards are another important component of the Company's recognition programs. As part of the workplace culture survey completed in mid-2018 the results revealed that employees felt the Company could improve both recognition and reward program objectives and frequency. In particular, non-union employees specifically noted that the discontinuation of the service anniversary awards was one component of their dissatisfaction with recognition at the Company. With a seasoned, experienced workforce capable of effectively and efficiently addressing customer needs, the Company approved the reinstatement of service awards to reward employees' on-going commitment of their careers to Peoples. This is intended to encourage a more frequent and broader recognition of the behaviors and achievements that reflect excellent performance and contributions to Peoples' values, mission, and vision. They report being very pleased and appreciative that Peoples is recognizing that they have committed their careers to the company.

Peoples has a comprehensive Safety Program. One component of this program is providing employees the opportunity to earn Safety Awards. Employees can earn these awards in one of two ways. The first way is if a shop works the entire month without incurring an OSHA Recordable Injury or Responsible Motor Vehicle Accident, each employee in that shop is eligible for a $25 Gift Card. The second is associated with the President's Award for Excellence in Safety. The President's Award for Safety is an individual large and small shop award / honor earned for not incurring any OSHA Recordable Injuries or Responsible Motor Vehicle Accidents during the entire calendar year. In appreciation for their efforts, the prize for the first-place winners in each category is a $75 gift card, steak lunch, and ½ day off.

The Occupational Safety and Health Administration ("OSHA") issued a Memorandum on October 11, 2018 (attached is **Exhibit No. APW-R-8**) which explains the value of these types of incentives/award programs.

Q IS THERE ANYTHING ELSE YOU WOULD LIKE TO ADD?

A. Yes. OCA's proposal to decrease the Company expenses by $32,937 for employee events should also be rejected.

Q. WHY SHOULD THE COMMISSION NOT ACCEPT OCA'S ADJUSTMENTS?

A. The Company has demonstrated that these programs are prudent costs that reflect reasonable and important costs aimed at retaining and attracting employees. These costs mainly relate to the costs associated with an employee gatherings such as the Lernerville

Raceway event, the Special Olympics Polar Plunge event, team lunches and other similar costs.

These costs are an integral part of the Company's employee recognition and engagement program. As discussed above, an engaged workforce provides significant benefits which directly benefit customers. Below is an excerpt from an article by Gallup entitled "The Benefits of Employee Engagement" (attached as **Exhibit No. APW-R-14**) which shows the benefits of employee engagement:

> *"When comparing employee engagement levels, Gallup found that top- and bottom-quartile business units and teams had the following differences in business outcomes*:*
> - *81% in absenteeism*
> - *58% in patient safety incidents (mortality and falls)*
> - *18% in turnover for high-turnover organizations*
> - *43% in turnover for low-turnover organizations*
> - *28% in shrinkage (theft)*
> - *64% in safety incidents (accidents)*
> - *41% in quality (defects)*
> - *10% in customer loyalty/engagement*
> - *18% in productivity (sales)*
> - *23% in profitability*

Q. ARE THERE ANY COMMISSION ORDERS THAT RELATE TO RECOGNITION EVENTS SUCH AS THESE?

A. Yes. I have been advised by counsel that the Commission in the most recent UGI Utilities, Inc. – Electric Division ("UGI") proceeding at Docket No. R-2017-2640058 approved similar employee recognition costs.

Q. I&E PROPOSES A SIMILAR ADJUSTMENT. PLEASE EXPLAIN.

I&E proposes an adjustment of $687,504 to employee expenses related to the vacancy adjustment discussed above.

Q. SHOULD THE COMMISSION ACCEPT EITHER OF I&E'S PROPOSED ADJUSTMENTS?

A. No, for the reasons stated above.

H. TRAVEL AND ENTERTAINMENT EXPENSES

Q. OCA ALSO PROPOSES TO REMOVE CERTAIN TRAVEL AND ENTERTAINMENT EMPLOYEE EXPENSES. (OCA St. No. 2, p. 40). WHAT IS THE BASIS FOR THIS ADJUSTMENT?

A. OCA proposes to remove $829,093 of travel and entertainment expense as Mr. Mugrace claims that the Company did not provide useful information to evaluate the reasonableness of such costs.

Q. PLEASE EXPLAIN THESE EXPENSES AND HOW THESE PROGRAMS BENEFIT CUSTOMERS?

A. Below is a detail of these types of expenses and the reasoning for their appropriate inclusion.

Description	Amount	Reason for Inclusion
Travel expense	$184,117	These costs represent valid travel costs such as mileage reimbursement, airfare, lodging, tolls, meals while traveling, etc.
Employee Events	$219,298	These costs mainly relate to the costs associated with an employee picnic, an annual baseball

Description	Amount	Reason for Inclusion
		game and tailgate, an employee leadership training event and other similar costs.
Sports Sponsorship Related expense	$323,690	Costs represent costs related to corporate functions at sporting venues and other company events. These costs include the value of the tickets received in conjunction with the advertising partnerships the Company has with the various sports teams among other costs. These tickets are used for employee recognition and other such business purposes.
Other	$101,988	Represents other employee related costs such as other reimbursable meals incurred during approved overtime, business related meals and working meals
Total	**$829,093**	

I. COMPANY MEMBERSHIPS

Q. OCA PROPOSES TO DISALLOW CERTAIN EXPENSES RELATED TO THE COMPANY'S CORPORATE MEMBERSHIPS. (OCA St. No. 2, pp. 41-43). OCA ARGUES THAT THESE EXPENSES SHOULD BE DISALLOWED BECAUSE THESE MEMBERSHIPS DO NOT BENEFIT RATEPAYERS. DO YOU AGREE?

A. I do not. In addition to the adjustment for the Company's 5-year trend (rebutted above), Mr. Mugrace proposes an adjustment of $212,202 as he does not believe the Company should recover membership costs related to the following organization as he claims they do not benefit customers: Curate Solutions ($11,928), Energy Association of PA ($168,522), Pittsburgh Area Chamber of Commerce ($1,402), Chamber of Commerce for Greater Philadelphia ($16,850) and the Women's Business Enterprise National Council, Inc ($8,500). As described below, these organizations do benefits customers:

- Curate Solutions - Curate is a civic intelligence company that empowers organizations to monitor risk in local government discussions. It helps companies to stay ahead of policy changes within cities, counties, and school districts with AI-powered local legislative tracking software. Curate scans meeting minutes, agendas, planning, and other documents from more than 12,000 local government entities, helping companies to mitigate risks and spot opportunities. This is a tool that helps the sales team identify upcoming projects. This clearly benefits customers by the fact that expansion of our service creates added revenue opportunities to cover shared costs.
- Energy Association of PA - The Energy Association of Pennsylvania facilitates the collaboration on issues before the PUC thus improving the regulatory process by providing a common response to policy issues such as new regulations.
- Pittsburgh Area Chamber of Commerce - PAACC is a leader in providing and optimizing business growth strategies for professionals in 34 communities, including Moon, Robinson, Findlay, and North Fayette Townships. Its mission is to provide resources and information to advance and maximize economic vitality through advocacy, education and networking to its members and its regional business community. This organization helps foster economic development in the region. A strong economy in the region provides a clear benefit to customers.
- Chamber of Commerce for Greater Philadelphia - The Chamber serves businesses in 11-county Greater Philadelphia regions, encompassing Southeastern Pennsylvania, Northern Delaware, and Southern New Jersey. It is a leading voice

for businesses of all sizes and industries in the Greater Philadelphia area. They advocate for their members and seek opportunities to drive a pro-growth policy that advances economic development and job creation in the region. This organization helps foster economic development in the state. A strong economy in the state provides a clear benefit to customers.

- Women's Business Enterprise National Council, Inc - The Women's Business Enterprise National Council (WBENC) is a leading non-profit organization dedicated to helping women-owned businesses thrive. WBENC was founded in 1997 to develop a nationwide standard for women-owned business certification. Since then, the organization has grown to become the largest third-party certifier of businesses owned, controlled, and operated by women in the United States and a leading advocate for women-owned businesses in corporate and government supply chains. A 501c (3) non-profit, WBNEC partners with fourteen regional partner organizations (see Women's Business Enterprise Center East above) to provide its world-class standard of certification to women-owned businesses throughout the country and offers programming and resources to help women-owned businesses thrive. Supported by corporate and government members dedicated to supplier diversity and investing in the development of women-owned businesses as suppliers. This is a Supplier Diversity Council for Women-owned Companies. We attend several events and utilize their databases to identify and engage women-owned businesses. This supports our supply chain diversity efforts which benefits customers as described in the Incentive Compensation section above.

Based upon the above description it is clear these memberships provide a clear benefit to customers and thus OCA's recommendation should be denied.

J. ADVERTISING EXPENSES

Q. PLEASE EXPLAIN I&E'S PROPOSAL TO EXCLUDE $1,370,197 OF ADVERTISING EXPENSE (I&E St. No. 1, pp. 24-27.)

A. I&E recommend removal of 100% of $1,370,197 of Other Advertising program costs related to Sports Partnerships and Advertising based upon the assertion that these costs may be more representative of goodwill advertising or promotional advertising, that non-customers may benefit from these costs and that there could be a more effective and potentially less costly way to reach customers.

Below is a detail of the costs Mr. Keller proposes to disallow with our explanation of such costs and the basis for their recoverability.

Listing	Cost	Explanation
Project Hyde Park Safety Improvement	$5,000	Peoples contributed to the Hyde Park Volunteer Fire Department located in Hyde Park, Pa. The donation was used to facilitate the improvement of the dock facility that Hyde Park VFD and other emergency service providers use to deploy personnel and equipment for river rescue efforts.
Marcellus Shale Coalition	$15,000	Peoples collaborated with other Marcellus Shale Coalition members on the development of the web site Natural Gas for the Next Generation (www.natgasnextgen.com).
Mark-IM.com	$318	Mark-IM is the vendor that operates our online company store for employees to purchase clothing with the Peoples logo.
Pennsylvania One Call System Inc	$3,000	As a longtime partner with the Pennsylvania One Call System, Peoples was a sponsor of a local Safety Days event held for contractors in Western Pennsylvania, as well as the organization's annual golf outing. This support helps PA One Call in their mission to protect Pennsylvania residents from the dangers stemming from damage to underground utility lines,

Listing	Cost	Explanation
		both in loss of utility service as well as risk of harm to persons or property.
Pittsburgh Downtown Partnership	$125,000	Peoples serves as the presenting sponsor of the annual Holiday Market organized by the Pittsburgh Downtown Partnership. This widely acclaimed community event is a major economic driver during the holiday season, supporting businesses of all sizes. Peoples utilizes the advertising elements that come with the sponsorship to drive awareness toward its Gift of Warmth program to help customers who are struggling to pay their bills, as well as other Customer Assistance Programs.
Tall Timber Group	$2,490	Advertising in regional business trade publication Breaking Ground
Allegheny Conference on Community	$2,000	Sponsorship of Conference's Clean Energy Action Forum.
Carnegie Mellon University	$1,500	Sponsorship of CMU Energy Week held by Wilton E. Scott Institute for Energy Innovation at Carnegie Mellon University
Lozinak Professional Baseball LLC	$205,521	Peoples is the naming rights sponsor of the Altoona Curve minor league baseball team. This includes numerous avenues for advertising, including through the team's website, printed programs, and various signage and awareness opportunities at the ballpark. Peoples utilized this for important safety messages including Damage Prevention (Call 811 Before You Dig) and How to Detect a Natural Gas Leak.
Pittsburgh Penguins LP	$69,979	During the 2022 and 2023 National Hockey League Seasons, Peoples was an in-game sponsor of the Pittsburgh Penguins. Through this partnership, Peoples communicated important natural gas safety messages to attendees of Penguins games, primarily around Carbon Monoxide safety and awareness.
Pittsburgh Pirates	$37,370	Peoples was an in-game sponsor of the Pittsburgh Pirates. Through this partnership, Peoples communicated important natural gas safety messages to attendees of Pirates games, primarily around Damage Prevention (Call 811 Before You Dig), as that is a prominent safety campaign during the baseball season.

Listing	Cost	Explanation
Pittsburgh Steelers LLC	$852,193	During the 2022 and 2023 National Football League Seasons, Peoples was an in-game sponsor of the Pittsburgh Steelers. Through this partnership, Peoples communicated important natural gas safety messages to attendees of Steelers games, primarily around overall Natural Gas Safety (How to Detect a Natural Gas Leak through Sight, Smell and Sound).
Brand Makers LLC	$14,020	Promotional products used as giveaways at a variety of public, industry and internal events to increase engagement.
Capital Analytics Associates	$5,500	Sponsorship of Invest Pittsburgh 2023 Conference
First Choice Telephone Answering Service	$225	First Choice is the operator of our media hotline, answering calls 24/7/365 that may come in from members of the media and contacting the company's on-call Media Relations representative, who then gathers information and responds to the media inquiry.
J Mac Cycling LLC	$500	Peoples employee is part of a small cycling team, J Mac Cycling. We sponsored his team and in exchange, the Peoples logo is placed on the cycling team's uniforms.
Lakemont Park	$1,000	Peoples served as a sponsor for Lakemont's Holiday Lights on the Lake event in both 2022 and 2023. Our logo was included in promotional materials for the event both online and on-site.
Local Government Academy	$1,200	Peoples sponsored The Annual Promoting Excellence in Local Government Golf Outing, held by Local Government Academy. The organization provides municipal governments with education resources, and the outing specifically supports the Michael Lynch Scholarship Foundation.
Mark-IM.com	$24,838	For the purchase of clothing with the company logo on it, worn by staff while working in the field as well as during company volunteer events. Branded clothing, when paired with ID badges, helps ensure customers that our employees are who they claim to be, providing important peace of mind. Having employees wear apparel with the Peoples logo also brings visibility to the company, which is valuable whether in community service or professional functions.
PA Mobile AG Lab	$2,000	Peoples sponsored the Pennsylvania Mobile Agriculture Lab at the Butler County Farm Show. Peoples logo featured on Lab signage and transportation at the show.

Listing	Cost	Explanation
Rapps Packaging	$1,543	Labels for Peoples' Eat Drink Help (EDH) community program. Through EDH, Peoples partners with a small business and a local charity. Peoples provides 1,000 labels to create awareness for all 3 entities, which are placed on the business' products. Once the supply of labels is exhausted, Peoples makes a $1,000 donation to the charity on behalf of the company and participating small business. In 2024, EDH will reach and exceed the milestone of $200,000 donated to local community causes since the program's start in 2016.
Total	**$1,370,197**	

Q. WHAT WAS THE BASIS FOR INCLUDING THE ABOVE REFERENCED ADVERTISING COSTS IN THE CLAIM?

A. There are three main reasons. First, Peoples claim for advertising expenses reflects only expenses which satisfy at least one of the criteria set forth in Section 1316(a) of the Public Utility Code which are as follows:

1. Advertising that is required by law or regulation is addressed, for example, by costs projected for notices to ratepayers of proposed changes in our rates, pamphlets that advise them of their rights as consumers, and information on means of using their energy services more effectively and efficiently.
2. Advertising that is in support of financing.
3. Advertising that encourages energy independence is addressed, for example, by costs projected for publications that educate consumers on the use of domestic natural gas as a heating fuel instead of oil, or as a motor vehicle fuel instead of gasoline.
4. Advertising that provides important information to the public regarding the pipelines being replaced as part of our infrastructure replacement program

and safety messages such as “Call before you dig” and explanations of gas odorization. Rate changes, means of reducing usage or bills, and energy conservation are addressed, for example, by costs projected for notices of changes in rates, for publications that provide maintenance tips and information on home winterization, budget payment programs, for billing and payment options as well as for the availability of public funds for payment of utility bills, and for bill inserts.

5. Advertising that provided a direct benefit to ratepayers is represented by most if not all of our projected advertising costs, in that those costs are designed to keep all of our ratepayers or targeted groups of our ratepayers well informed of issues of interest to them, including information related to our infrastructure replacement program.

6. Advertising that is for the promotion of community service or economic development.

Second, these costs are integral components of the Company’s advertising and outreach program and directly benefit our customers.

Through these relationships, Peoples is able to share information about key customer services and vital safety messages with large, concentrated groups of customers and with the public. These opportunities include print ads in sports programs, radio spots during games, digital and video ads on scoreboards and stadium televisions, on-site promotion such as banners, wraps and decals, and digital advertising on widely-visited

team websites. These advertising and outreach programs focus on safety, e-billing, e-account and other key messages.

In recent years Peoples introduced an e-billing solution. One aspect of these partnerships is focused on increasing customer awareness of the e-Billing solution. Every day, more people turn to digital solutions in all facets of their lives, and Peoples has met that customer expectation by launching a free, e-Billing solution through the Peoples e-Account customer portal. By choosing e-Billing, customers' bills, usage, and account information, as well as required Commission messages, are presented and stored in one secure location.

Many of Peoples' e-Billing ads provide customers with a link to enroll directly from their stadium seats. In the time it takes for a racing pierogi to "round first" in PNC Park, a Peoples customer can reduce their carbon footprint, make a payment, and never have to worry about misplacing a gas bill again. Further, it strengthens the Company's relationship with customers thus making them more likely to pay.

In addition to cutting down on clutter and adding convenience for customers, e-billing is an essential initiative in Peoples' commitment to protecting the environment. Every year, Peoples sends over 8.4 million paper bills. If all Peoples customers switched to e-Billing, we would annually save 33.5 tons of paper, or approximately 6,700 trees. Additionally, this would reduce billing costs.

Another important aspect of these partnerships is focused on increasing customer and public awareness of critical safety information in the seasons which most closely correspond to the potential dangers.

Peoples leverages its partnerships with the Pittsburgh Pirates and Altoona Curve to promote "Call 811" safe digging practices, using print and video advertising at the two respective ballparks.

The Company is also working with other partners to focus campaigns on other key safety initiatives. The Peoples' communications assets for the Pittsburgh Steelers partnership will focus on regulatory messaging surrounding the "3 S's: Sight, Sound, Smell," informing the public about recognizing natural gas leaks. The Pittsburgh Penguins messaging focuses on educating the public about the dangers and prevention of carbon monoxide poisoning.

Sharing these vital safety messages serves to directly protect Peoples customers and the public, including the customers of all other utility companies in the region.

Peoples' sports partnerships deliver significant value to customers by increasing awareness of high-demand services and important safety messages in a timely manner, while also contributing to significant, holistic economic growth within Peoples' service territory. Sports partnerships allow Peoples to inform customers about valuable services, highlight crucial safety messages, and empower regional economic growth. The ongoing health of the company is directly connected to this growth. By supporting popular sporting events and thoughtfully leveraging corresponding message opportunities, Peoples upholds its commitment to the customers and communities it serves and provides them a direct benefit.

Third, they provide a direct benefit to our community and thus our customers. Although these partnerships are integral aspects of our advertising campaigns related to

billing practices, safety, environmental and other messaging these partnerships have further benefits.

Section 1316(a) of the Public Utility code sets forth criteria regarding the recoverability of advertising expenses incurred by a utility. The last item listed, (6), states that advertising that "is for the promotion of community service or economic development" is recoverable.

Peoples' partnerships with the Pittsburgh Pirates, Penguins, Steelers and other teams also fits under item (6) as these major league sports franchises are catalysts for economic development in the City of Pittsburgh and the Western Pennsylvania region, as well as are regional leaders in community service.

A 2018 study by PricewaterhouseCoopers LLC estimated that the Pittsburgh major league sports franchises generated approximately $88 million in revenue to the City of Pittsburgh and helped create over 10,000 jobs between 2012-2016. In addition, these franchises are engaged in many community service projects throughout the region, promoting healthy lifestyles and civic pride among local residents. This study showed that Pittsburgh sports teams have:

- Created 10,100 annual jobs.
- Induced $6 billion in direct and indirect spend in the region over five years.
- Attracted and retained major companies and employers.
- Attracted almost 4 million people to the city each year.
- Generated nearly $41.5 million in advertising value each year to raise the profile of Pittsburgh regionally, nationally, and globally.

By sponsoring the major league sports franchises, Peoples helps spur economic development in the region and creates a positive community brand for Western Pennsylvania, which makes the region a more attractive place for businesses to locate and create jobs and has a direct benefit for our customers. Attached as **Exhibit No. APW-R-9** are letters received in 2019 from the Pittsburgh Penguins, Pittsburgh Steelers and Pittsburgh Pirates affirming the impact of our partnerships.

K. MATERIALS AND SUPPLIES

Q. PLEASE EXPLAIN OCA'S PROPOSED ADJUSTMENTS TO MATERIALS AND SUPPLIES EXPENSES.

A. OCA proposed to remove Materials and Supplies expense related to inflationary adjustments as fully described in Section III. B. of my testimony above. In addition, OCA is proposing to remove $49,932 associated with additionally expected increases resulting from increased costs per fault.

Q. DO YOU AGREE WITH THESE ADJUSTMENTS?

A. No, I do not agree. I explained why OCA's proposed elimination of the 5-year average increase (or inflation) should be denied above.

I also disagree with OCA's adjustment to remove the additional cost related to the planned increase within the Damage Prevention and Leak Survey Departments. This incremental adjustment was added for the expected increase in average cost per fault, higher number of faults expected and the higher cost of anodes recently experienced.

L. RATE CASE EXPENSE

Q. BOTH OCA AND I&E PROPOSE ADJUSTMENTS TO THE COMPANY'S RATE CASE EXPENSE CLAIM. PLEASE SUMMARIZE THESE ADJUSTMENTS.

A. OCA Witness Mugrace proposes a 3-year amortization of rate case expense and I&E Witness Keller proposes a 53-month amortization of rate case expense rather than the Company's two-year amortization. I note that no party objected the underlying claim for rate case expense.

Q. DO YOU AGREE WITH EITHER OCA OR I&E'S RECOMMENDATION REGARDING THE AMORTIZATION PERIOD?

A. No. I do not.

Q. PLEASE EXPLAIN PEOPLES' BASIS FOR A TWO-YEAR AMORTIZATION PERIOD AS ORIGINALLY PROPOSED.

A. Peoples filed rate cases in 2010, 2012 and 2019. The reason seven years elapsed between the 2012 case and the 2019 case was a result of the stay out period committed to in the Company acquisition of the Equitable Gas Company. Further, the main reason for the time that has elapsed between the 2019 case and this case was the result of the Company receiving Accounting and Regulatory approval regarding its treatment of the tax repair election in Docket No. P-2020-3021191. Specifically, the Company changed its tax accounting method to define its unit of property under the IRS's tangible property

regulations, which allowed the Company to prospectively deduct, as an operating expense on its income tax returns, the costs of certain asset improvements that otherwise would be capitalized and depreciated for tax purposes. Peoples projects two years to be the approximate length of time between the filing of this proceeding and the filing of Peoples' next base rate proceeding given the Company's LTIIP commitments for infrastructure replacement. For example, the Company is projected to have capital expenditures of over $1 billion for the combined FTY and FPFTY and expects this to continue beyond the FPFTY.

Q. WHAT IS THE COMPANY'S PROJECTED LTIIP SPEND FOR THE TWO CALENDAR YEARS SUBSEQUENT TO THE FPFTY?

A. We anticipate spending over $475 million and $550 million on LTIIP alone in calendar years 2026 and 2027, respectively.

Q. DID YOU PREPARE AN ANALYSIS REGARDING LTIIP COMMITMENTS AND SUFFICIENCY OF DSIC RECOVERY?

A. Yes. I have prepared **Exhibit No. APW-R-10**. This schedule illustrates that under both the OCA and I&E's proposed rate increases that DSIC revenue is insufficient to provide an adequate return on two years of LTIIP capital expenditures for infrastructure replacement beyond the FPFTY. I note that even if the entire rate increase proposed by the Company is approved that DSIC revenue would be insufficient to provide adequate revenue requirement on LTIIP capital expenditures during 2026 and 2027. Further, this

analysis does not take into account the Company's anticipated cost increases expected during 2026 and 2027 as well as further capital expenditures related to non-LTIIP needs.

As such, this schedule more than supports a two-year amortization of rate case expenses.

Q. WHY ARE BOTH OCA AND I&E'S AMORTIZATION PERIOD FLAWED?

A. Both ignore significant factors why history is not an appropriate indicator of future circumstance in this instance. First, both I&E and OCA ignore the undisputed fact that the reason seven years elapsed between the 2012 case and the 2019 case was a result of the stay out period committed to in the Company acquisition of the Equitable Gas Company. Second, both I&E and OCA ignore the undisputed fact that the main reason for the time that has elapsed between the 2019 case and this case was the result of the Company receiving Accounting and Regulatory approval regarding its treatment of the tax repair election. This election alone reduced the Company's revenue requirement by over $100 million dollars.

Q. WHAT IS THE APPROPRIATE CALCULATION TO DETERMINE THE COMPANY'S RECENT RATE CASE FILING HISTORY?

A. The Company's two-year amortization is more appropriate to use and is quite frankly conservative.

Q. I&E CITES OTHER COMPANIES AS EXAMPLES TO SUPPORT ITS POSITION. ARE THESE REFERENCES RELEVANT?

A. No. They are not. The unique facts and circumstance of Peoples should be considered rather than the unknown facts and circumstance of the other companies. The information provided above regarding the circumstances unique to Peoples supports the argument that a two-year amortization is appropriate.

Q. DO YOU AGREE WITH THESE PROPOSED ADJUSTMENTS?

A. For the reasons stated above, I do not. The Company's original proposal of a two-year normalization should be accepted.

M. PENSION EXPENSE

Q. PLEASE EXPLAIN I&E'S AND OCA'S PROPOSED ADJUSTMENTS TO THE COMPANY'S PENSION EXPENSE.

A. I&E Witness Keller proposes utilizing a 3-year average of pension contributions for pension expense and OCA Witness Mugrace proposes utilizing a 5-year average of pension contributions for pension expense.

Q. DO YOU AGREE WITH I&E'S OR OCA'S PROPOSED ADJUSTMENTS?

A. I do not. The pension funding approach has changed since the acquisition of the Company by Essential Utilities ("Essential") on March 16, 2020, and thus recent history is a better indicator of future costs than past practice especially prior to the Essential acquisition. The

most recent two years are the best indicator. However, a 3-year average such as that proposed by I&E Witness Keller is not unreasonable as that represents the first three calendar years after the Essential acquisition of Peoples.

Q. DO YOU BELIEVE THAT THE COMPANY'S PROPOSAL IN THIS CASE IS FAIR TO RATEPAYERS?

A. Yes. Ratepayers have received the benefit of the Company contributing more to pensions than the accrual amount over the past _ years. It is fair for ratepayers to include the Company's projected contribution in rates in this proceeding.

N. PBOP EXPENSE

Q. PLEASE EXPLAIN I&E'S AND OCA'S PROPOSED ADJUSTMENTS TO THE COMPANY'S PBOP EXPENSE

A. I&E Witness Keller proposes a 53-month amortization of PBOP Expense to be consistent with his rate case expense recommendation and OCA Witness Mugrace proposes a 5-year amortization of PBOP expense. Further, OCA Witness Mugrace proposes an adjustment related to his vacancy credit adjustment which is addressed above.

Q. DO YOU AGREE WITH I&E'S OR OCA'S PROPOSED ADJUSTMENTS?

A. I do not for the same reasons as discussed above in Section L – Rate Case Expense.

Q. ARE THERE ANY OTHER CHANGES NECESSARY IF THE COMPANY'S PBOP CLAIM IS ADJUSTED?

A. Yes. In my direct testimony, Peoples Statement No. 1, consistent with prior cases, I proposed to track actual PBOP costs and amortize the cumulative difference between actual and projected costs in the Company's next base rate proceeding. The amount to be tracked was $779,921 as calculated on Line 10 on page 11 of **Ex. 4, Sch. 1**. The tracking excluded the amortization of prior period amounts. This treatment is consistent with the past ratemaking treatment of these costs by both divisions. The Company anticipates that differences between the rate allowance and actual accruals be tracked and amortized over a period to be determined in the Company's next base rate proceeding.

If PBOP expense is changed then the amount to be tracked must also change.

O. <u>OUTSIDE SERVICES - CONTRACTED</u>

Q. I&E PROPOSES A REDUCTION IN OUTSIDE SERVICES – CONTRACTED OF $810,857. BASED UPON USING THE COMPANY CAPITALIZATION PERCENTAGE FROM THE HTY. IS THIS ADJUSTMENT REASONABLE?

A. No. I&E's calculation incorrectly assumes that the costs added in the FTY and FPFTY would have a similar capitalization rate as those costs incurred in the HTY. That is not the case. The costs added in the FTY and FPFTY are 100% expenses thus causing the reduction in the capitalization rate in those years. The chart below illustrates this.

	Expense	Capital	Total	Ratio
HTY	$ 34,406,069	$ (10,281,365)	$ 24,124,704	-29.9%
5-Year Avg Increase	1,290,228	(385,551)	904,676	-29.9%
Specific Adjustments	2,592,893	-	2,592,893	0.0%
Total	$ 38,289,190	$ (10,666,917)	$ 27,622,273	-27.9%

Q. PLEASE EXPLAIN OCA'S PROPOSED ADJUSTMENT TO OUTSIDE SERVICES – CONTRACTED.

A. Overall, OCA proposed a total adjustment of $3,668,930. Of this amount, $1,940,335 relates to the elimination of the 5-year average increase discussed above in Section III. B. of my testimony and should be rejected. The remaining adjustment of $1,728,595 relates to an incorrect proposal to normalize expenses for Pig Runs, Pipeline Maintenance and Corrosion costs and Right of Way costs.

As the table below provides these costs represent appropriate incremental costs in the claim.

	PNG	PG	DESCRIPTION
BRIDGE WORK	$675,000	$75,000	Required atmospheric remediation for exposed pipe on bridges. This work is required for compliance and integrity of the bridge lines. The work will include inspection of the lines on the bridges and subsequent remediation. Remediation will include replacing hangers and pipe supports, wrapping and/or painting the pipe, and general maintenance.
PRESSURE TESTS	810,000	90,000	These are part of the prescriptive pipeline integrity management program. Pressure testing of sections is required on three lines.
ADDITIONAL PIG RUNS	450,000	50,000	Internal line inspection "ILI" of Transmission Pipelines as mandated by Federal Code; PHMSA, Subpart O of 49 CFR part 192, which prescribes

	PNG	PG	DESCRIPTION
			requirements for managing pipeline integrity in HCAs and requires that operators perform pipeline assessments.
ADDITIONAL PIPELINE MAINTENANCE/ CORROSION	285,371	31,708	Ground Bed and Rectifier needs due to age and condition. These units typically have a 25-30 year working lifespan. We typically have 320 at any given time, due to differing decades of installation, depleting, etc. They get replaced and updated to maintain the requirements of CFR 192.465 (A) (B) 1 & 2.
ADDITIONAL RIGHT OF WAY MAINTENANCE	110,206	15,608	Process of cutting or trimming vegetation within the right of way of gas lines. The ROW must be clear for the overall operation and maintenance of our gas lines to allow for any ongoing maintenance/inspection activities
TOTAL	$2,330,577	$262,316	

P. OUTSIDE SERVICES – IT

Q. PLEASE EXPLAIN OCA'S PROPOSED ADJUSTMENT TO OUTSIDE SERVICES – IT.

A. In addition to the adjustment to eliminate the Company's 5-year average increase adjustments addressed in Section III. B. above, Mr. Mugrace proposes a normalization adjustment of $745,033 based upon his claim that Peoples has not identified whether these costs are annual or one-times costs. This adjustment was derived by taking the Company's proposed adjustment of $1,117,550 and dividing it by three and then subtracting that from the original claim amount of $1,117,550.

Q. WHAT IS YOUR RESPONSE TO THE OCA'S ADJUSTMENT?

A. The OCA adjustment of $372,517 should be rejected. Below is a table of the claimed expenses with support (as provided in discovery) that these costs are recurring, annual costs that should be included in the revenue requirement.

Provider	Description	Amount	Frequency	Reference to Support[2]
ASI	Tax Provision Software Maintenance	$22,000	Annual/ Recurring	Page 15 in contract states billing frequency is annually
Blackline	Financial Process management Software Maintenance	$52,500	Annual/ Recurring	Page 2 in contract states that subscription can be renewed 60 days prior to end of current Subscription, which is currently 9/30/24
Box Services	Document Storage and sharing application	$16,000	Annual/ Recurring	Page 1 in contract states billing frequency is annually
Cority	Safety Incident Management	$73,500	Annual/ Recurring	Page 1 of contract states term of agreement is through May 31, 2025
Reliaquest (Splunk)	SIEM Application (Security Information and Event Management system.)	$228,550	Annual/ Recurring	The contract attached as **Exhibit No. APW-R-11** shows that this is an annual expense.
Workday	HRIS – HR Information System for employee management	$725,000	Annual/ Recurring	Page 1 of contract states term is through June 2026, with an annual fee of $1,299,930
Total		**$1,117,500**		

[22] Support provided in response to Interrogatory No. I&E-RE-24, Part E attached as **Exhibit No. APW-R-13**

This table illustrates these are clearly appropriate annual costs to be recovered in full in the revenue requirement. Mr. Mugrace's normalization adjustment is flawed and should be rejected.

Q. <u>OUTSIDE SERVICES – A&G</u>

Q. DID ANY PARTY MAKE AN ADJUSTMENT TO OUTSIDE SERVICES – A&G BEYOND WHAT WAS DISCUSSED IN SECTION III. B. ABOVE?

A. No.

R. <u>PAYMENT PROCESSING EXPENSES</u>

Q. PLEASE EXPLAIN OCA'S PROPOSED ADJUSTMENT TO THE COMPANY'S PAYMENT PROCESSING EXPENSE?

A. Overall, OCA is comfortable with the recovery of these costs including the recovery of such costs related to the Peoples Gas Division customers. However, OCA is only proposing recovery of 50% of the two adjustments the company proposes.

Q. PLEASE DESCRIBE THE COMPANY'S PROPOSED ADJUSTMENTS TO PAYMENT PROCESSING EXPENSES.

A. There were three types of adjustments made to payment processing expenses. The first adjustment of $124,419 was made to reflect the cost of extending such payments to the Peoples Gas Division customers. It was calculated as follows:

PGC Adoption Estimate	
PNG HTY Average Monthly Payments	88,896
PNG HTY Average Number of Customers (Res. & Comm)	636,247
Percentage Adoption	14.0%
x PGC HTY Average Number of Customers (Res. & Comm)	63,317
PGC Projected # of Payments - Monthly	8,847
Net fee per Payment	$ 1.17
PGC Adoption Adjustment-Monthly	$ 10,368
PGC Adoption Adjustment-Annual	$ 124,419

The second adjustment was to reflect the cost of additional adoption of this payment channel based upon the percentage increase for the twelve-months ended (TME) August 31, 2023, as compared to the TME August 31, 2022 (7.82%). Both the FTY and FPFTY were adjusted for a total of $256,185. The third adjustment of $183,256 was made to reflect a 10% increase in these costs the Company expects to incur upon the expiration of the existing contract in February of 2025.

Q. WHAT IS THE BASIS FOR OCA'S ADJUSTMENT?

A. First, he recommends only 50% recovery of the Company's increase in adoption adjustment of $256,185 thus disallowing $128,094 of the Company's claim. Second, he recommends only 50% recovery of the Company's increase associated with the upcoming contract expiration of $183,256, thus allowing only $91,628 of the Company's claim.

I do find it noteworthy that Mr. Mugrace is comfortable with a portion of our proposed increase based upon history in Payment Processing expense but is unwilling to admit there is any increase necessary in the various categories discussed in Section III. B. of my testimony above.

Q. SHOULD THE COMPANY'S CLAIM BE ACCEPTED?

A. Yes, it should be accepted for various reasons. The Company's increase in adoption rate is reasonable and conservative. Below is a chart of number of payments experienced by PNGD during the first three full calendar years after adoption and the related percentage increase year over year:

	# of Payments	% Change
8/31/2021	801,488	
8/31/2022	956,712	19.37%
8/31/2023	1,031,485	7.82%
Total	2,789,685	

As you can see, the average increase over the last two years was 13.6% and would have been reasonable to use. However, the Company utilized the change from 8/31/22 to 8/31/23 to be conservative.

OCA's challenge to the expected increase in costs upon the expiration of the in February of 2025 of 10% is inappropriate. The contract is over 5 years old and thus the Company proposal is an increase of about 2% per year rather than OCA's proposed increase of about 1% per year. Further, the articles included in **Exhibit No. APW-R-12** indicate that the 10% increase proposed by the Company may be low.

S. UNCOLLECTIBLE ACCOUNTS EXPENSE

Q. DOES OCA ACCEPT THE COMPANY'S METHODOLOGY FOR CALCULATING UNCOLLECTIBLE ACCOUNT EXPENSE?

A. Yes, OCA accepts the Company's methodology for determining the percentage of uncollectible accounts expense. OCA St. No. 2, p. 54. However, the OCA adjusts the overall level of uncollectible expense to reflect its proposed revenue increase.

Q. WHAT IS YOUR RESPONSE TO THE OCA'S ADJUSTMENT?

A. For the reasons noted in the Company' rebuttal testimony, the OCA's revenue adjustments are unreasonable and, in many circumstances, contrary to Commission precedent. Therefore, the OCA's adjustment to uncollectible accounts expense also should not be accepted. The ultimate recovery of uncollectible accounts expense should be calculated based on the rate increase approved in this proceeding.

Q. DOES ANY OTHER PARTY MAKE AN ADJUSTMENT TO UNCOLLECTIBLE ACCOUNTS EXPENSE?

A. Although no other party provided testimony on uncollectible accounts expense it appears that I&E Witness Keller makes an adjustment to uncollectible accounts expense in Table 1 on page 4 of his direct testimony (OCA Statement No. 1). Upon reviewing the Excel workpapers provided, it appears that Mr. Keller adjusts the overall level of uncollectible expense to reflect I&E's proposed revenue increase.

Q. WHAT IS YOUR RESPONSE TO THE I&E'S APPARENT AND UNSUPPORTED ADJUSTMENT?

A. For the reasons noted in the Company' rebuttal testimony, the I&E's revenue adjustments are unreasonable and, in many circumstances, contrary to Commission precedent. Therefore, the I&E's adjustment to uncollectible accounts expense also should not be accepted. The ultimate recovery of uncollectible accounts expense should be calculated based on the rate increase approved in this proceeding.

T. NON BASIC SERVICES FROM THIRD-PARTY PROVIDERS

Q. WHAT DOES OCA WITNESS ALEXANDER PROPOSE WITH RESPECT TO THE COMPANY ALLOWING THIRD PARTIES TO OFFER NON-BASIC SERVICES?

A. OCA Witness Alexander proposes that the Commission investigate whether regulated ratepayers are subsidizing any costs associated with marketing, billing, and collection of unregulated non-basic provided by Peoples' unregulated affiliate.

Regarding OCA's claim that they did not receive a reply to the discovery[3] at the time of filing their Direct Testimony is misleading. I wanted to clarify that the Company responded to this discovery on time. Rather, OCA did not have the discovery in time as it did not serve the discovery in time to receive it back prior to filing of their Direct Testimony. OCA Set XX was served on March 11, 2024, 10 days prior to the due date for their Direct Testimony. The Company timeline filed responses on March 21, 2024.

[3] The Company assumes this is in reference to OCA Set XX served on March 11, 2024.

Q. PLEASE RESPOND TO MS. ALEXANDER'S RECOMMENDATIONS.

A. The Company is confident that it is appropriately handling this billing and relationship with its affiliate. Peoples most recent management audit issued April 2021 at Docket Nos. D-2020-3018771, D-2020-3018773, D-2020-3018774 included a comprehensive review of affiliate transactions and there were no findings related to non-basic chargers. As such, a special investigation is unnecessary as there are already avenues for review of such charges in place.

However, if further review is deemed necessary the Company will fully cooperate with any such review as it does with all reviews and audits performed by the PUC.

U. GATHERING SYSTEM CHARGES

Q. OSBA WITNESS KNECHT ARGUES THAT THE COMPANY SHOULD RECOVER GATHERING SYSTEM COSTS IN THE COMPANY'S PURCHASED GAS COST ("PGC") PROCEEDINGS. (OSBA ST. NO. 1, P. 13-17) IS THIS A REASONABLE REQUEST?

A. No, it is both unreasonable and unlawful. Peoples owns the gathering system assets, and they are used to provide utility service to customers. Therefore, Peoples is allowed to earn a return on and of the gathering system assets. It is my understanding that NGDCs cannot legally recover costs for owning utility infrastructure in PGC rates. Costs for owning utility infrastructure are recovered in base rates, and Peoples has recovered its gathering system costs in its prior rate cases. Therefore, OSBA's proposal cannot be accepted.

Q. DO YOU AGREE WITH HIS RECOMMENDATION?

A. I do agree that is too late in this proceeding to implement changes. However, I do not agree with his proposed change to the allocation of costs.

V. SYNERGY SAVINGS

Q. OCA WITNESS EVRARD ARGUES THAT THE COMPANY DID NOT CLEARLY SET FORTH ANY COST SAVINGS OR OPERATIONAL EFFICIENCIES RESULTING FROM THE ACQUISITION BY ESSENTIAL. (OCA Statement No. Pages 10 to 13) PLEASE RESPOND TO MR. EVRARD'S ASSERTIONS.

A. Mr. Evrard mainly makes two claims. First, he claims that it is unclear whether cost savings and operational efficiencies anticipated in the Aqua-Peoples acquisition are captured or reflected in the revenue requirement; Second, Mr. Evrard further tries to tie the request for capital structure and Return on Equity to the ownership of Essential Utilities.

Regarding cost savings, any benefits achieved over the last four years have been reflected in O&M as the Company utilized a HTY plus approach to developing the revenue requirement in this case. In other words, adjustments were made to the HTY costs which would include the benefits of the Essential acquisition. Further, no requirement was established in the Essential Acquisition proceeding which required the Company to report or demonstrate cost savings.

One of the biggest savings/benefits passed onto customers since the Essential Acquisition was the adoption of the IRS Unit of Property rules ("Tax Repairs"). Peoples

voluntarily filed a petition at Docket No. P-2020-3021191 whereby it made the following commitments which benefited customers:

- Refund 100% of the Tax Repairs Catch-Up deduction to customers via a special surcredit (Rider Tax Repairs Surcredit) that began on August 1, 2021. This surcredit has provided an annual refund to customers in excess of $29 million since inception. This credit was provided to customers in advance of such tax benefit being monetized by the Company.
- File a base rate case no later than December 31, 2023 to ensure the prospective impact of Tax Repairs was reflected in base rates.;
- Provided $5.0 million of rate credits which were used to offset the impact the COVID-19 pandemic had on customers.; and
- Provided a $500,000 non-recoverable donation to the Dollar Energy Fund for low-income customer grants.

I note that Mr. Huwar's Statement No 1-R in this proceeding explains the many efficiencies and improvements in service that the combined Peoples is providing to its customers.

Regarding Mr. Evrard's second claim that capital structure and Return on Equity are tied to the ownership of Essential Utilities is baseless. Company Witness Paul Moul prepared an evaluation of both capital structure and ROE that drove the claim for such items in the case, and this was unrelated to the Essential acquisition or ownership.

W. COST OF OTHER PROPOSALS

Q. DID PARTIES MAKE RECOMMENDATIONS THAT COULD RESULT IN INCURRING ADDITIONAL COSTS?

A. Yes. OCA Witness Alexander made the following recommendations that would potentially impact costs. The Company sent discovery to obtain any cost assessment completed by the witness on her recommendations and no assessments were completed.

- evaluate the potential for extending the hours at a reasonable cost;
- professionally conduct a complaint root cause analysis and report on findings, including identification of trends, evaluation, steps to reform or avoid repeated trends, and internal steps taken to take proper internal enforcement action where needed within months and quarterly updates to stakeholders;
- conduct consumer education to alert them when they are paying more for service than default service from an NGS; and
- Present on the bill whether the NGS charges are higher/lower than default service.

In addition, OCA Witness Colton made various recommendations that could have cost implications such as the following listed below. In the response to discovery, Mr. Colton admitted that he did not complete a specific "assessment of the costs" for his recommendation but did provide his assumptions about the implications. The Company appreciates Mr. Colton's further feedback and continues to assess the implications.

- Provide a notice about CAP to customers they are entering into a payment arrangement with;
- Provide a notice about CAP to customers in the cold weather survey; and

- Notify low income customers about CAP when there balance reaches more than $300.

Q. WERE THESE COSTS INCLUDED IN THE REVENUE REQUIREMENTS PROPOSED BY THESE PARTIES?

A. No. As such, the Company is proposing that certain accommodations be made for future recovery of incremental costs incurred as a result of recommendations made by the other parties in this proceeding.

IV. PUBLIC INPUT HEARING COMMENTS

Q. Please address the concerns raised at the Public Input Hearings regarding the Company's accounting methods.

A. While Company Witness Mitole in her Direct Testimony at Peoples Statement No. 8 addresses the Company's accounting methods and the systems in place for Peoples, I'll briefly address the concerns raised by Mr. Culbertson at the March 5, 2024 Public Input Hearing here.[4] First, Mr. Culbertson contends that Peoples "systems of accounts" is not public information and that Peoples must follow generally accepted accounting principles ("GAAP"). The Company's financial results are publicly available as the Company files annually files the Gas Annual Report each April with the PUC. This report provides an extensive level of detail of the Company's books and records. Further, I add that the

[4] Public Input Hearing Tr. 126-129.

Company compliance with GAAP is audited annually by a Big Four Accounting Firm.

Second, Mr. Culbertson suggests that Peoples' capitalized costs are unaudited and that "imprudent and unreasonable" costs must be removed from the rate base. I agree that Peoples should not recover "imprudent and unreasonable" costs; in that vein, Peoples is not seeking to recover "imprudent and unreasonable" costs in this proceeding, as no such costs from Peoples exist. Moreover, as to Mr. Culbertson's contentions that the Company's costs are "unaudited," such position is meritless. Indeed, this proceeding – with the participation of many parties, including the Office of Consumer Advocate, the Commission's Bureau of Investigation and Enforcement ("I&E"), the Office of Small Business Advocate ("OSBA"), and the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania ("CAUSE-PA"), among others – serves as a fulsome audit of the Company's claimed costs sought to be recovered. Additionally, I note that Mr. Cuthbertson mistakenly contends that the acquisition of Peoples by Essential Utilities, Inc. was not approved by the Commission. In fact, it was at Docket Nos. A-2018-3006061, *et al.*, on January 24, 2020. As mentioned above, the Company compliance with GAAP is audited annually by a Big Four Accounting Firm.

V. CONCLUSION

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED REBUTTAL TESTIMONY OF
EDWARD A. PALOMBO,
VICE PRESIDENT, RELIABILITY
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: April 18, 2024 Peoples Statement No. 4-R
DATE ADMITTED: _____

PREPARED REBUTTAL TESTIMONY OF
EDWARD A. PALOMBO

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Edward A. Palombo. My business address is 375 North Shore Drive, Pittsburgh, Pennsylvania 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Peoples Natural Gas Company LLC ("Peoples" or "Company") as Vice President, Reliability.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 4.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I will be addressing comments from PIOGA witnesses Weaver, Jacobs, and Brant, regarding topics of gas quality, gathering fees, and operating conditions. I will also touch on the overall long-term relationship between Peoples and PIOGA, and a continued commitment to maintain and enhance the relationship and address OCA Witness Alexander's testimony on Termination Procedures and certain Supplier Matters.

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. No.

Q. HOW HAVE YOU ARRANGED YOUR REBUTTAL TESTIMONY?

A. I will be addressing the testimony by the major topics as opposed to by witness.

Q. BRIEFLY DESCRIBE THE RELATIONSHIP BETWEEN PEOPLES AND PIOGA, AND ITS' MEMBER COMPANIES.

A. As stated by PIOGA witness Weaver, Peoples and PIOGA have developed a good business relationship dating back to the 1990s. We both recognize and understand how local production can benefit producers, Peoples and its' customers. We have a history of collaboration and cooperation to identify opportunities where both organizations can improve their core businesses: allow producers to deliver locally produced natural gas, and Peoples to provide safe, reliable gas service to customers at an affordable price.

A prime example of this is included in witness Brant's testimony where his company (Kriebel) experienced a shut-in of a production meter to the Peoples' system due to different regulator set pressures at various delivery points, both production and interstate, in the near vicinity. Mr. Brant directly reached out to Peoples' operating personnel and discussed how adjusting the set pressures at delivery points may allow his production to flow again. Peoples' operations team made pressure adjustments at some of the delivery points, and in fact the production meter in question did resume flowing gas. Without a strong business relationship where both sides respect and understand each other's viewpoints, this direct communication and resolution would not have been reached. This is just one of many instances where Peoples and PIOGA collaborate to mutually benefit each other and system operations.

GAS QUALITY STANDARDS

Q. WHAT COMMENTS RELATED TO GAS QUALITY WILL YOU BE ADDRESSING?

A. Witnesses Weaver and Jacobs both offer testimony regarding gas quality, specifically water vapor content, and generally support standardization across the system. One consistent standard is the most efficient and effective way to ensure gas quality, and reduce or prevent customer outages associated with fluids, help mitigate corrosion of pipelines and facilities, and maintain safe and reliable service to customers. However, Mr. Weaver and Mr. Jacobs propose that the standard water vapor standards should revert to the original water vapor standards and moisture curve of the legacy Peoples Natural Gas Company.

Q. ARE THE WATER VAPOR STANDARDS REQUESTED BY PIOGA CURRENTLY IN EFFECT ON PEOPLES SYSTEM?

A. No, they are not. The current PNGD water vapor standards are a combination of the legacy Peoples Natural Gas Division ("PNGD") and legacy Equitable Gas Company (EGC") water vapor standards as listed in the current Master Interconnect Measurement Agreement (MIMA) and include use of the water vapor curve. This was accomplished when the Peoples and Equitable divisions were merged in the prior base rate case, and a consolidated MIMA was implemented for the current PNGD system. These combined PNGD/EGC standards are what currently apply.

Q. IS THE COMPANY PROPOSING TO APPLY THE COMBINED PNGD/EGC STANDARDS TO PRODUCERS ON THE PEOPLES GAS DIVISION (PGD) SYSTEM?

A. Yes. The Company is proposing to have these standards that are currently in the MIMA also apply to producers on the PGD system so that all producers across the entire Peoples system have the same standards.

Q. WHAT IS PIOGA PROPOSING?

A. PIOGA is proposing that the Company relax its current standards and revert back to legacy PNGD standards that no longer apply.

Q. DO YOU AGREE WITH PIOGA'S PROPOSAL?

A. No. The Company agrees to use of a water vapor or moisture curve to determine the allowed level of water vapor in production gas delivered to the Company facilities. The moisture curve referenced by witness Jacobs is included in the water vapor requirements in the MIMA. However, the other standards that are in the current MIMA and tariff must also apply. The gas quality requirements in the PNGD tariff are listed below.

PEOPLES NATURAL GAS COMPANY LLC

GAS—PA PUC NO. 47
ORIGINAL PAGE NO. 35

RULES AND REGULATIONS

31. GAS QUALITY

Unless otherwise agreed to by the Company through separate agreement, gas delivered by a supplier or producer shall not contain more than:

(a) Seven (7) pounds of water per million cubic feet on an approved dew point apparatus.
(b) Two (2) percent by volume of carbon dioxide.
(c) Four (4) percent by volume total inerts including carbon dioxide, nitrogen, argon, and helium provided that total carbon dioxide content shall not exceed two (2) percent by volume.
(d) Twenty-five hundredths (0.25) grains of hydrogen sulfide per 100 cubic feet.
(e) Ten (10) grains of total sulfur per 100 cubic feet.
(f) Two tenths (0.2) percent by volume oxygen.

Gas delivered into the Company's system should be free from oil, water, salt, gum, dust, and other foreign substances that might interfere with the marketability of the gas. Unless otherwise agreed to by the Company, the gas delivered shall contain not less than 967 Btu per cubic foot and shall not exceed 1,100 Btu per cubic foot (as determined by calorimeter test @ 60 degrees Fahrenheit and saturated with water vapor). Gas accepted by the Company that contains less than 967 Btu per cubic foot will be enhanced to ensure that gas delivered by the Company to customers shall meet Commission heating value requirements and the Company may charge for this.

Q. WHY IS IT IMPORTANT THAT THE CURRENT MIMA STANDARDS NOT BE REDUCED?

A. As previously stated, the water content in the gas stream can have negative effects on pipeline operations, both from a material integrity perspective as well as reliable gas service. The current standards have evolved over the years based upon operational issues Peoples has experienced. High water content does not just potentially have negative impact immediately on the system, it can also build up over time (months, or even years), and result in costly remediations to resolve. In efforts to reduce and minimize these negative effects, Peoples can use past issues to evaluate the water vapor standards to best determine the optimal requirements that prevent similar future operational issues.

Q. HOW DO THE CURRENT MIMA STANDARDS COMPARE TO STANDARDS IMPOSED BY INTERSTATE PIPELINES?

A. Peoples current water vapor standards are lower than the water vapor requirements for producer deliveries to other pipelines, such as interstate transmission lines, and midstream pipelines. For example, Peoples has interconnects with Equitrans where off-system deliveries of local production to the interstate system can be supplied. Equitrans has a strict 7#/MMcf water vapor content that must be met to deliver the volumes, with no exceptions. Interstate pipelines have strict guidelines for gas quality, and zero tolerance if those requirements are not met. If the moisture limit even slightly exceeds the acceptable level, and for a very short period of time, Equitrans has an automated valve at the point of demarcation they will close immediately without notice to Peoples. Over the years, Peoples experienced many unexpected shut-ins at the Equitrans interconnects, and ultimately invested capital to install additional gas conditioning and glycol units to maintain moisture content below the requirement.

RATE AGS

Q. WHAT COMMENTS REGARDING GATHERING FEES AND RATE AGS WILL YOU BE ADDRESSING?

A. I will be addressing the over-arching concept of offering a gathering service, whether or not it is appropriate to charge a gathering fee on the PGD system, and the value of the service and fees.

Witnesses Weaver and Jacobs offer testimony that tariff AGS and a gathering fee should not be applied to PGD since there never was a gathering fee, primarily on the premise that there are no gathering assets as classified by DOT on the PGD system. They

do however propose an alternative of $0.18 per Mcf fee as compared to the $0.26 currently charged on the PNGD system and proposed for the PGD system.

Q. DO YOU AGREE WITH THEIR ASSESSMENT?

A. I do not agree for several reasons. First and foremost, PNGD does not collect a gathering fee based upon the DOT classification of pipe or the Federal Energy Regulatory Commission ("FERC") natural chart of accounts classification. The gathering fee is collected regardless if the pipeline is classified under DOT or FERC as distribution, transmission, or gathering. The AGS service and associated gathering fees are applied at any delivery point to help recover some of the costs to operate and maintain pipelines and facilities that receive and transport local production gas. Secondly, PGD (legacy TW Phillips) did in fact have DOT classified gathering and production pipelines but reclassified them to distribution as part of segmenting business functions prior to their acquisition by Peoples. These assets have been discussed in testimony and identified as the pipelines that "function more like gathering than distribution" in receiving and transporting local production gas.

With respect to the gathering fee, the current $0.26 per Mcf charged to producers represents about a third of the overall cost of gathering service, with the balance absorbed by customers. Peoples believes this is a fair and equitable sharing between customers and producers for recovery of total gathering cost of service. In addition, Peoples has not proposed an increase to the fee in this filing, it has proposed to apply the existing PNGD fee to production that is delivered to PGD, which is not currently subject to any fee beyond producer retainage. PIOGA's proposed fee of $0.18/Mcf would result in recovery of

approximately the same level of revenues that is currently being recovered from producers on the PNGD system even though the fee is expanded to production delivered to PGD. Under PIOGA's alternative proposal, producers would not bear any of the rate increase proposed in this case, and producers that currently deliver gas to PNGD would see a rate decrease. Peoples believes that producers should pay some portion of rising costs that drive this proceeding.

OPERATIONAL ISSUES

Q. WHAT OPERATIONAL ITEMS WILL YOU BE ADDRESSING?

A. I will address operational items that can impact the potential to flow gas into the Peoples system, such as regulator set points, pipeline operating pressures, system maintenance and construction. I will also discuss why it is important for Peoples to establish operating and gas quality requirements and monitor producer delivery points for compliance with these guidelines. Witnesses Jacobs and Brant provided comments regarding Peoples' operating practices that they state reduces the level of gathering service, and their ability to produce gas. Specifically, they question regulator set pressures, the provisions for restricting flow or shutting in meters.

Q. PLEASE GIVE AN OVERVIEW OF HOW PEOPLES OPERATES THE GATHERING SYSTEMS.

A. Peoples has approximately 5,700 producer meters that interconnect to the Peoples systems. These meters serve as points of demarcation between producer and Peoples facilities, much like city gate stations with interstate pipelines. Peoples is required by PHMSA to establish

a Maximum Allowable Operating Pressure (MAOP) on every pipeline it owns and operates. The MAOP is the highest pressure the pipelines can operate safely to prevent failures or ruptures that could lead to catastrophic incidents. Peoples has sole responsibility to ensure their pipeline pressures do not exceed the MAOP and create an over pressurization event. If this occurs, a catastrophic incident could occur. In addition, Peoples could receive a notice of violation of federal codes and face a potential penalty for non-compliance with the regulations.

Q. HOW DOES PEOPLES COMPLY WITH REGULATIONS TO PREVENT AN OVER PRESSURIZATION EVENT ON THE GATHERING SYSTEMS?

A. The regulator set pressure at each producer meter determines the delivery pressure to the pipeline system. Peoples establishes the regulator set pressure at the producer meters to ensure operations are below the MAOP of the system. All 5,700 producer meters represent an opportunity to exceed MAOP and over pressurize the system. Peoples conducts random audits at producer meters to verify the pressure is set at the appropriate set point. If the set pressure is too high, Peoples communicates with the producer to adjust the pressure back to the acceptable level to stay within the MAOP. If the producer does not comply, Peoples will shut-in the meter to avoid an MAOP violation.

Q. ARE ALL REGULATORS SET AT THE SAME PRESSURE IN A GATHERING SYSTEM?

A. Not in every case. Peoples attempts to maintain consistent set pressures within a system, but that is not always practical. Peoples uses pressure/flow modeling to determine the set

pressures to optimize the system to operate within MAOP; and to transport production gas; and to maintain gas service to customers. The Peoples' systems have a variety of pipelines with different diameters, materials, and age, as well as different customer load demands, all of which contribute to the pressure loss across the system.

The physical location of a production meter can influence the regulator set point. If the meter is located in an area of the system with minimal customer demand, less volume may be required to maintain gas service, and a lower set pressure may be more optimal to prevent pressure build-up in the pipeline. The opposite can be true: if the area has large customer demand, a higher set pressure may be requested to flow more gas. Pipe diameters can also be a contributing factor in determining set pressures. If the meter is delivering into a smaller diameter pipeline, a higher set pressure may be required to maintain sufficient line pressure to transport the production gas to customer demand. If the meter is delivering into a large diameter pipe, a lower set pressure may be adequate. The vintage and material of a pipeline can also determine what pressure the regulator should be set. Older bare steel pipes can be more susceptible to significant leaks or failures at higher pressures. Therefore, producer meters near these older pipelines may have a regulator set pressure lower than other meters in the same system to mitigate potential leaks or failures.

Q. ARE REGULATOR SET POINTS STATIC OR CAN THEY BE ADJUSTED?

A. Depending on operating conditions, regulator set points may need to be adjusted. Peoples may need to reduce the operating pressure of a pipeline due to many various reasons: maintenance and construction activities downstream of the producer meter, significant leak repairs or line pulls, decreased customer demand during non-heating season, etc. In these

instances, Peoples asks producers to lower their regulator set pressures to meet the lower operating pressure requirements, recognizing this could restrict the volume of gas the producer may deliver. Peoples primary concern is to operate the pipeline safely while maintaining gas service to customers, therefore this decision to lower set pressures comes after evaluation and modeling to ensure safe and reliable service. The duration of the restriction varies depending on the operational issue that created the lower operating pressure. Peoples cannot predict the extent or duration of the restriction, nor can they always estimate how long it will take to complete the necessary repairs and remediations. Witness Jacobs suggests that the Commission limit the duration Peoples can restrict pressures and flows to nine months, primarily so that producers can avoid the jeopardy of Active Status of the well as defined by the Pa. Department of Environmental Protection ("DEP") for low-producing wells, and so that producers can avoid potential plugging and abandoning costs.

Q. IS PIOGA'S SUGGESTION REASONABLE?

A. No. It is not practical to place a limit on the duration of the restriction since it is unknown how long it may take to resolve the operating issue. Additionally, plugging and abandonment of wells is a typical activity of the exploration and production business. The day a well is drilled, there immediately is a future liability for plugging and abandoning it. Peoples cannot be expected to be the backstop to avoid these costs by just allowing a producer to deliver low volumes or low-quality gas to maintain Active Status on a well.

Regulator set points may also be adjusted seasonally. During non-heating months, Peoples' total volumes delivered to customers decreases, subsequently less total supplies

into the system are required to serve the customers, systems can operate at lower pressures, and regulator set points can be lowered. If regulator set points remain at higher pressures during low customer demand, pressure build-up can occur in the pipelines that could result in over pressurization, additional leakage, or worst-case pipeline failures.

The goal for Peoples is to operate the gathering systems prudently and safely, within prescribed federal guidelines; receive and transport as much local production the system will allow; and maintain gas service to all customers. As previously discussed, Peoples collaboratively works with producers to adjust regulator set points where possible to allow local production to flow into the system, while not compromising pipeline safety and reliable service to customers.

Q. WHAT IMPACT DOES ADJUSTING REGULATOR SET POINTS OR SHUTTING-IN METERS HAVE ON PRODUCERS?

A. Peoples recognizes the regulator set pressures can directly impact the volume of gas delivered by producers. The challenge is to determine the optimal regulator set pressure that can maximize the local production AND maintain system operations at safe and reliable levels. Adjusting regulator set pressures for operational reasons, or seasonally is unavoidable. However, this does not diminish the value of the gathering service as suggested by witness Weaver. The gathering service is still provided to all other producer meters that are operating within the appropriate guidelines to transport local production.

The intent of the random producer meter audits is to ensure all producers are complying with the pressure requirements, and to avoid any assertion of partiality of one producer over another. Any producer meter that is found in violation of set pressures faces

potential shut-in, not as a punitive measure but to ensure the safe operation of the pipelines. To reiterate, shutting-in a meter for violating set pressures does not diminish the value of the gathering service. It is a means to maintain a fair and level playing field for all producers and protect the Peoples system.

Q. DO YOU AGREE WITH THE REVISIONS TO THE "CHARACTER OF SERVICE" LANGUAGE IN RATE AGS AS PROPOSED BY PIOGA?

A. I do not agree. The current langue in the "Character of Service" is adequate as stated. Peoples primary business function is that of a regulated local distribution company that provides safe and reliable service to customers. Rate AGS has been developed and established so that Peoples can also provide a level of service to Appalachian producers to foster a business relationship that takes advantage of the benefits of local production gas. Gas that is produced locally presents value for producers to sustain a profitable business, while assisting Peoples in procuring natural gas for customers in a most cost-effective environment. The balance for Peoples is to accomplish this without sacrificing safe operations and reliable service. The language proposed by PIOGA aims to remove the flexibility for Peoples to make the most prudent daily operational decisions that meets this balance. To revise the language to lift the restrictions and operate the system that meets producers' expectations to freely flow conventional gas at all times, or not have the ability to adjust pressures that ensure safe operations, or shut-in meters that deliver low quality gas, is not consistent with being a prudent operator or providing reliable service.

TERMINATION PROCEDURES

Q. PLEASE EXPLAIN OCA WITNESS ALEXANDER'S RECOMMENDATION REGARDING TERMINATION PROCEDURES.

A. OCA Witness Alexander makes the following recommendation:

> *Peoples should be required to develop and implement detailed training programs to ensure compliance with the Commission's specific regulations relating to personal contact, particularly with respect to the obligation to attempt personal contact "immediately" prior to actual termination of service. This compliance filing and detailed implementation plan should be filed within 3 months of a final order in this proceeding after consultation and review by stakeholders.*

Q. DO YOU AGREE WITH THIS RECOMMENDATION?

A. Peoples currently employs a training program that promotes compliance to Pennsylvania State Code §56.97. Although the Peoples training materials do not specifically illustrate the requirement of "attempting personal contact immediately prior to actual termination", this process is communicated verbally to employees during their Operator Qualification training. The Peoples training materials contain high level bullet points to guide the classroom discussion; therefore, they do not spell out every word that is shared with the employees being trained. Peoples is willing to further evaluate its training program to determine if it can enhance the documentation of compliance to this section of the Code.

CERTAIN SUPPLIER MATTERS

Q. PLEASE EXPLAIN THE TWO RECOMMENDATIONS THAT OCA WITNESS ALEXANDER MAKES REGARDING SUPPLIER MATTERS.

A. OCA Witness Alexander makes two recommendations. First, she recommends that Peoples undertake customer education to alert customers who are purchasing their commodity from a third party supplier if they are paying higher than default service. Second, she recommends that the Peoples bill clearly states whether the charges from a third party supplier are higher than default service.

Q. DO YOU AGREE WITH THESE RECOMMENDATIONS?

A. Additional education regarding Energy Choice can benefit all customers in making the best decision in selecting a natural gas supplier, especially customers who may be paying higher prices than the default service gas price from the utility. Currently, PNG includes the utility gas price, referred to as the Price To Compare (PTC), on the customer bill. This is intended to give the customers a comparison of the default utility gas price against their current supplier price. Peoples is open to discussion of providing additional details to customers in deciding whether or not to renegotiate with their current supplier, to shop and choose another supplier, or return to default service. However, I am advised by counsel that the Commission's policy on advising shopping customers is for the utility to post the price to compare. Peoples respectfully submits that any change to that policy should be considered in a generic proceeding where all interested parties views and positions can be evaluated.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	
	:	

PREPARED REBUTTAL TESTIMONY OF
PAUL BECKER
VICE PRESIDENT, CONSTRUCTION & ENGINEERING
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: April 18, 2024 Peoples Statement No. 5-R
DATE ADMITTED: _____

PREPARED REBUTTAL TESTIMONY OF
PAUL BECKER

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Paul Becker. My business address is 375 North Shore Drive, Pittsburgh, PA 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Peoples Natural Gas Company LLC ("Peoples" or the "Company") as the Vice President, Construction and Engineering.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 5.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. To respond to the recommendations outlined in the testimony of the Bureau of Investigation and Enforcement's ("I&E") witness, Mr. Harvey, the quality-of-service concerns stated in the testimony of the Officer of Consumer Advocate's ("OCA") witness Mr. Evrard and to address the concerns of OCA witness Mugrace.

Q. HOW HAVE YOU ARRANGED YOUR REBUTTAL TESTIMONY?

A. I have arranged my testimony into three separate sections based on my responses to each of the identified witnesses.

Response to I&E witness Harvey re: LTIIP

Q. PLEASE COMMENT ON MR. HARVEY'S RECOMMENDATION (PAGE 18, LINES 4-6) THAT "PEOPLES CONTINUES TO FOCUS ON INCREASING ITS EFFORTS TO MAINTAIN ITS REPLACEMENT RATE TO ENSURE THAT IT MEETS THE ORIGINAL COMMITMENT SET IN THE LTIIP."

A. Peoples agrees to this recommendation and moreover suggests it has demonstrated a keen focus on doing just that. Since 2016, Peoples has met or exceeded the replacement mileage in each year of its then applicable LTIIPs. That is eight years in a row. This achievement has been accomplished while the mileage targets increased from 80 in 2016 to 181 in 2023 or by almost 125%. Mr. Harvey is correct that focus is the key. The organizational structure at Peoples is designed to provide that focus and has proven the ability to execute. Moving forward, assuming fair and reasonable rate case treatments/outcomes, Peoples plans to file an LTIIP covering the calendar years 2026-2030 which will reflect increases in LTIIP mileages (from 184 in 2026 to 221 in 2030).

Q. PLEASE COMMENT ON MR. HARVEY'S RECOMMENDATION (PAGE 18, LINES 10-11) TO MONITOR AND CAPTURE DATA ON LEAKS FOR FIRST GENERATION PLASTIC IN THEIR RISK REDUCTION DATA COLLECTION AND INCLUDE THE INSTALLATION YEAR.

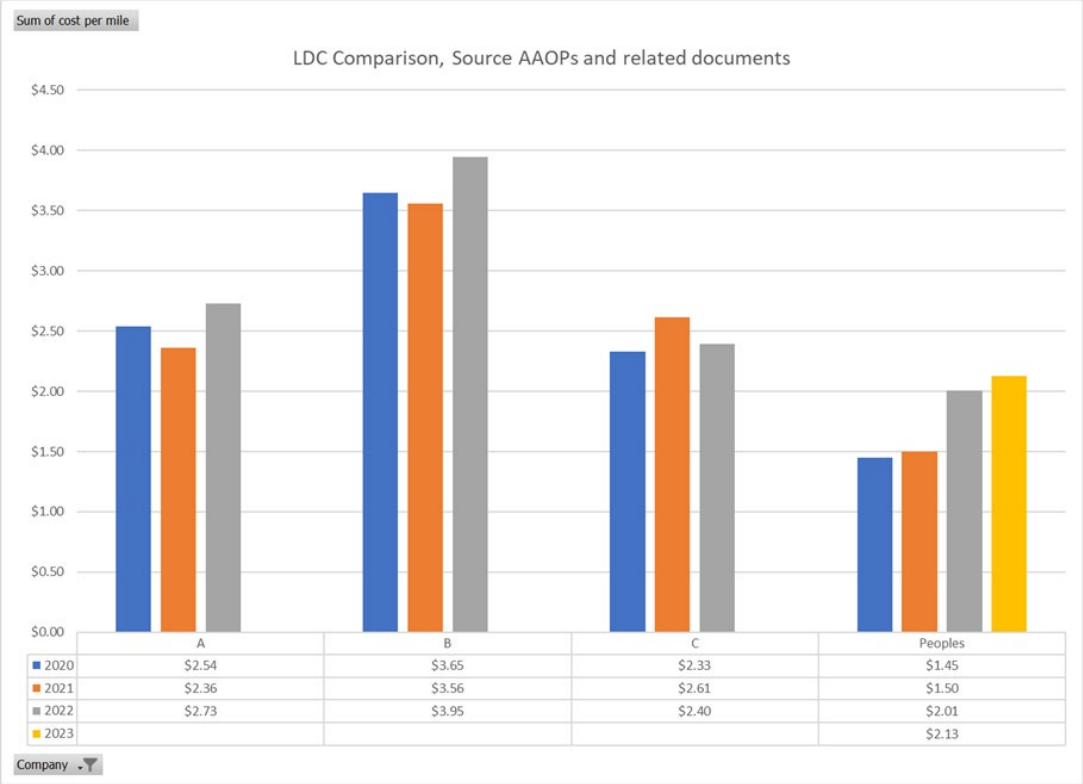
A. Peoples agrees with the recommendation. Gathering such data is reasonable and Peoples will do so. If such data would support risk ranking first generation plastic over bare steel Peoples would adjust its replacement asset type targets accordingly.

Q. PLEASE COMMENT ON THE RECOMMENDATION (PAGE 18, LINES 18-21) TO CONTINUE ITS BARE STEEL REPLACEMENT EFFORTS.

A. As stated above, moving forward, assuming fair and reasonable rate case treatments/outcomes, Peoples plans to file an LTIIP covering the calendar years of 2026-2030 which will reflect increases in LTIIP mileages (from 184 in 2026 to 221 in 2030).

Q. PLEASE COMMENT ON MR. HARVEY'S RECOMMENDATION (PAGE 19, LINES 11-13) TO CONSIDER BREAKING THE COST PER MILE INTO AT LEAST THE FOLLOWING CATEGORIES: DESIGN/INSPECTION, MATERIALS, CONSTRUCTION/LABOR, RESTORATION AND PERMITS.

A. Peoples agrees to pursue a further break down of its costs into categories, which Peoples expects to result in the recommended breakdown. I also want to point out that Peoples' LTIIP pipeline replacement cost per mile compares favorably with other Pennsylvania LDCs. Please see the chart below. The data used for this comparison was obtained from the Annual Asset Optimization Plans of the respective companies with a focus on the cost of mains and services. (Specific company data removed). The cost per mile was calculated by dividing the cost of mains and services (when available) by the total actual LTIIP eligible miles reported.



Response to OCA Witness Evrard re: Quality of Service

Q. IN HIS TESTIMONY ON PAGE 11, AS WELL AS VIA SUMMARY IN EXHIBIT DE-2, PAGE 1., OCA WITNESS EVRARD ASSERTS THE FOLLOWING: "ONE CUSTOMER STATED THAT HE HAD A METER INSTALLED IN FRONT OF A WINDOW, WHICH IS A VIOLATION OF THE COMMISSION'S REGULATIONS AND POSES A SAFETY CONCERN." PLEASE COMMENT ON THIS PARTICULAR CONCERN RAISED BY MR. EVRARD.

A. Peoples has reviewed the customer account records and customer meter location. The Company disagrees with the assertion that there is a violation of the Commission's regulations with respect to the meter's location. Further, the Company disagrees that the location of the meter poses a safety concern.

Q. PLEASE EXPLAIN WHY THE METER PLACEMENT AND LOCATION AT THIS PARTICULAR PREMISES DOES NOT VIOLATE COMMISSION REGULATIONS.

A. The customer contends that since his meter is below a window, it violates Commission regulations governing meter locations. However, I note that the customer fails to take the full text of the regulation into consideration. The full text of the applicable regulation states the following: "Meters and service regulators may not be installed in the following locations: (i) Beneath or in front of windows or other building openings that may directly obstruct emergency fire exits." 52 Pa. Code § 59.18.

Section 59.18 permits the location of a meter below a window if the meter does not directly obstruct an emergency fire exit. It does not prohibit the location of a meter below any window.[1] The meter at issue here does not block an emergency fire exit. Specifically, the meter itself sits near and in front of a glass block window which is not considered an emergency fire exit. Therefore, there is no violation of Section 59.18.

Q. PLEASE EXPLAIN WHY THE METER LOCATION AT THIS PARTICULAR PREMISES DOES NOT POSE A SAFETY CONCERN.

A. The meter at issue does not pose a safety concern as it is not blocking an emergency fire exit. If the customer would need to exit the premises for any reason, emergency or not, the meter is not in the way of any exit and is several feet away from any conceivable evacuation path.

[1] *Culbertson v. Columbia Gas of Pa., Inc.,* 2021 PA. PUC LEXIS 587, *20, Docket No. F-2017-2605797 (Opinion and Order entered Dec. 16, 2021) *Petition for Reconsideration Denied (Opinion and Order entered Aug. 25, 2022).*

Q. IN HIS TESTIMONY ON PAGE 9, AS WELL AS VIA SUMMARY IN EXHIBIT DE-2, PAGE 1., OCA WITNESS EVRARD NOTES THAT THE "OTHER CUSTOMER TESTIFIED THAT HE HAD BEEN WAITING FOR THE COMPANY TO TEST HIS METER FOR FOUR WEEKS, HAD REPEATED ISSUES RECEIVING SERVICE FROM THE COMPANY'S FIELD TECHNICIANS BECAUSE THEY DID NOT KEEP THEIR APPOINTMENTS, AND THAT THE COMPANY'S CALL CENTER HOURS MADE IT DIFFICULT TO GET HELP." PLEASE COMMENT ON THIS PARTICULAR SERVICE CONCERN RAISED BY MR. EVRARD.

A. The Company has reviewed this particular customer account and situation. The Company has no record of any missed appointments. The Company does have records of telephone conversations with the customer explaining the process for reconnecting his natural gas service. At the particular premises in question, natural gas service was disconnected in 2019. This means that before restoring service, the Company requires the customer to provide it with a Service Installation Record ("SIR") from an OQ plumber which signifies that the customer's service line is ready to be hooked up to the Company's facilities.

According to the Company's records, the customer contacted the Company to restore service at the premises at the end of 2023. Since that time, the Company has had several points of contact with the customer, including at and after the Public Input Hearings in the instant proceeding. The Company has explained the process to the customer and is waiting for the SIR paperwork for this premises. When the Company receives the required paperwork, it will schedule the connection work to be performed.

Response to OCA witness Mugrace re: Inflation Rate

Q. PLEASE COMMENT ON MR. MUGRACE'S RECOMMENDATION TO OMIT INFLATION FROM RATE CONSIDERATION RELATED TO CAPITAL EXPENDITURES.

A. As noted on the Chart on page 8 of my direct testimony, actual costs of pipeline construction have increased over time. This is fact. The pattern is well established, and the trend is clearly increasing. Increasing costs for labor and services is well documented in macroeconomic Employment Cost Index ("ECI"). The most recent report (Dec 2023) showing a 12 month increase of 4% or more.

NEWS RELEASE
BUREAU OF LABOR STATISTICS
U. S. DEPARTMENT OF LABOR

Transmission of material in this release is embargoed until 8:30 a.m. (ET) Wednesday, January 31, 2024

USDL-24-0146

Technical information: (202) 691-6199 • ncsinfo@bls.gov • www.bls.gov/eci
Media contact: (202) 691-5902 • pressoffice@bls.gov

EMPLOYMENT COST INDEX – DECEMBER 2023

Compensation costs for civilian workers increased 0.9 percent, seasonally adjusted, for the 3-month period ending in December 2023, the U.S. Bureau of Labor Statistics reported today. **Wages and salaries** increased 0.9 percent and **benefit costs** increased 0.7 percent from September 2023. (See chart 1 and tables A, 1, 2, and 3.)

Chart 1. Three-month percent change, seasonally adjusted, civilian workers, total compensation

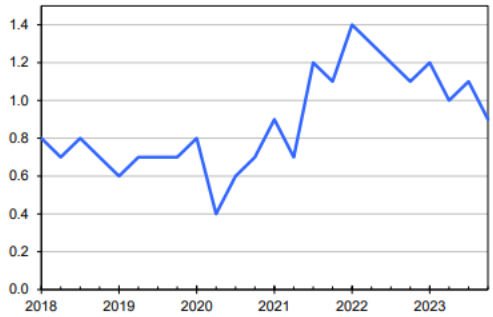
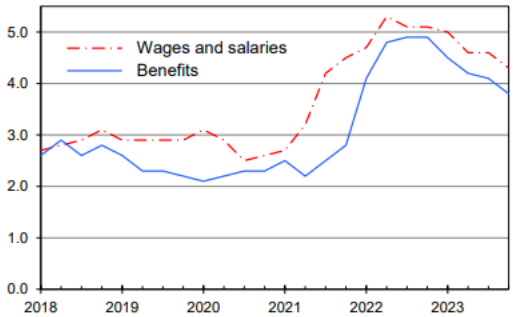


Chart 2. Twelve-month percent change, not seasonally adjusted, civilian workers



Post Covid Inflation is absolutely real and spiked to 9.1% in June 2022[2]. The Company's capital work programs are primarily completed by contract workforce. In addition to the evidence mentioned above, I offer the following table of the Company's contract labor price increases which clearly indicate rising costs:

Annual unit price increases	2020	2021	2022	2023	2024
A	2%	2%	3%	5%	2%
B	3%	3%	9%	5%	3%
C	2%	2%	6.25%	4.25%	4.25%

Thus, to omit inflation in its entirety on future investments/expenses seems to ignore the real world and what Pennsylvanians and a company doing business in Pennsylvania, know to be true. Rather than the extreme view of ignoring inflation in its entirety, the debate in this proposed rate case should be about the reasonableness of the inflation factor. The inflation factors used by Peoples and noted by Mr. Mugrace (2.3%-4.0%) clearly fall in line within the ranges of both the ECI and the known Contractor increases and thus should be considered reasonable. Nevertheless, if the projected costs of planned projects do not increase as projected, the Company will use those available funds for additional projects.

Q. DO YOU AGREE WITH MR. MUGRACE'S RECOMMENDATION TO EXCLUDE THE COST OF REPLACING THE BARE STEEL PIPE IN THE ROBINSON INCIDENT? IF NOT, PLEASE EXPLAIN WHY.

[2] Moul Direct, at page 5.

A. No. The bare steel pipelines in Robinson were not damaged as a result of the incident. The pipelines did not rupture and they remained in service, despite the incident. They could have safely remained in service at the time and not been replaced. These facilities would have been replaced in the future under the Company's LTIIP. However, the replacement of the bare steel pipelines was accelerated after the incident primarily because the PUC Gas Safety Division directed Peoples to accelerate the replacement. These costs should not be disallowed simply because the replacement of the facilities was accelerated. All of the $1,462,407 that OCA Mugrace proposes to exclude from rate base was to replace bare steel pipe that is considered at risk pipe. Peoples did exclude the costs of the damaged customer equipment from rate base.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED REBUTTAL TESTIMONY OF
CHRISTINE SABALL
VICE PRESIDENT, TAX
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: April 18, 2024 Peoples Statement No. 6-R
DATE ADMITTED: _____

PREPARED REBUTTAL TESTIMONY OF
CHRISTINE SABALL

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Christine Saball, and my business address is 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed as Vice President, Tax for Essential Utilities, Inc. ("Essential"), the parent company of Peoples Natural Gas Company LLC ("Peoples" or the "Company").

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 6.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. My testimony responds to certain portions of the Direct Testimony submitted by the Office of Consumer Advocate ("OCA"). Specifically, I will be responding to the following pieces of testimony and the identified issues raised therein: OCA Statement No. 2, the Direct Testimony of Dante Mugrace on behalf of the OCA, regarding adjustments to accumulated deferred income taxes, total income tax expense and the consolidated tax adjustment.

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. Yes. I am sponsoring the **Exhibit CLS-1 through Exhibit CLS-3**.

CALCULATION OF FEDERAL AND STATE INCOME TAX EXPENSE AND ADIT

Q. PLEASE DESCRIBE THE ADJUSTMENT MR. MUGRACE IS PROPOSING TO ACCUMULATED DEFERRED INCOME TAXES?

A. Mr. Mugrace recommends an adjustment to the Deferred Tax balance (or "ADIT") related to the proposed disallowance of the Inflation adjustments included in the calculation of Peoples FPFTY plant balances of $27,819,503 (OCA Statement 2, page 9 Table I). In Exhibit DM-6, he calculates the associated impact of the decrease in book depreciation resulting in his adjustment to Accumulated Depreciation of $727,743. Mr. Mugrace then recommends an adjustment to the Deferred Tax balance of $152,826 to reflect the 21% deferred Federal income tax impact of the Accumulated Depreciation adjustment. I note that the depreciation adjustment itself is addressed in the Peoples Statement No. 14-R – the Rebuttal Testimony of John Spanos.

Q. DO YOU AGREE WITH THE CALCULATION OF THE ADJUSTMENT TO ACCUMULATED DEFERRED INCOME TAXES FOR THE PROPOSED ADJUSTMENT TO PLANT?

A. No, I do not. When Mr. Mugrace adjusted Peoples FPFTY plant balances and accumulated depreciation he did not account for the impact on tax depreciation expense. To calculate the impact on accumulated deferred taxes, the disallowance of the Inflation adjustments included in the calculation of Peoples FPFTY plant balances, all the components of the taxpayer's tax expense, depreciation expense or reserve for deferred taxes would need to

be adjusted under the IRS normalization rules. Section 168(i)(9)(B)(i) of the Internal Revenue Code provides that one way the requirements of the normalization method of accounting (§ 168(i)(9)(A)) will not be satisfied is if the taxpayer, for ratemaking purposes, uses a procedure or adjustment which is inconsistent with such requirements. Internal Revenue Code Section 168(i)(9)(B)(ii) states "such inconsistent procedures and adjustments include the use of an estimate or projection of the taxpayer's tax expense, depreciation expense, or reserve for deferred taxes under §168(i)(9)(A)(ii), unless such estimate or projection is also used, for ratemaking purposes, with respect to all three of these items and with respect to the rate base". I have calculated the impact that Mr. Mugrace's proposed adjustment to the deferred tax balance under the normalization requirements by including the tax impact of reduced tax depreciation. The net resulting adjustment to ADIT is a decrease of the deferred tax liability in the amount of $85,995. In addition, since the Company continues to be in a taxable loss position in the FPFTY, in accordance with normalization requirements, the method life tax depreciation difference is also reflected in the change to the Federal net operating loss resulting in no net change to the ADIT balance due to the proposed adjustment to plant (see **Exhibit CLS-1**).

Q. DOES MR. MUGRACE PROPOSE ANY OTHER ADJUSTMENTS TO THE TAX CALCULATIONS?

A. Yes. In Exhibit DM-37, Mr. Mugrace makes an adjustment to pre-tax operating income in the amount of ($139,454,930) and a corresponding adjustment to total tax expense of ($32,049,040).

Q. DO YOU AGREE WITH THE CALCULATION OF THE ADJUSTMENT TO TOTAL TAX EXPENSE?

A. No, I do not. In Exhibit DM-37, the calculation of Federal Taxable Income Before NOL on line 16, does not account for the Current Year PA NOL Adjustment in adjusted Present Rates calculated by the OCA. As described in my Direct Testimony, page 15, lines 9-16, the tax impact of the PA NOL either increases or decreases current state income tax expense. The calculation must include the impact of the change on the PA NOL Adjustment, so the Federal taxable income does not include a current state tax benefit that is not part of Federal taxable income. The resulting adjustment to tax expense is ($29,285,535) for total income tax expense of ($88,776,727). See **Exhibit CLS-2**.

Q. SHOULD ANY OTHER ADJUSTMENTS BE CONTEMPLATED AS A RESULT OF THE PROPOSED ADJUSTMENT TO TOTAL INCOME TAX EXEPNSE?

A. Yes. A change to the deferred tax expense in total income tax expense must be carried through to adjust accumulated deferred income taxes. The ($29,285,535) decrease to total income tax expense results in a $16,485,401 decrease to ADIT/increase to rate base after applying the pro rata normalization adjustment required for the FPFTY. See **Exhibit CLS-3**.

CONSOLIDATED INCOME TAX ADJUSTMENT

Q. PLEASE SUMMARIZE MR. MUGRACE'S POSITION REARDING THE COMPANY'S SATISFACTION OF THE REQUIREMENTS UNDER ACT 40.

Mr. Mugrace does not challenge that the Company is required to spend $36.7 million on infrastructure replacement under Section 1301.1(b), and that projected spend under the LTIIP program of $508 million for the FPFTY is fourteen times this amount. Mr. Mugrace states that it appears the Company has satisfied the first requirement under ACT 40. Mr. Musgrace then states that the Company does not specify how the 50% of the differential that is required to be used for "general corporate purposes" will benefit Pennsylvania ratepayers and therefore the Company, by default does not satisfy the second requirement under Act 40. Mr. Mugrace recommends an adjustment of $27,460 for non-investor-supplied funding for utility working capital.

Q. DID THE COMPANY SPECIFY HOW THE REQUIREMENTS OF ACT 40 WERE SATISFIED?

Yes. In Statement 6, page 24 the Company addresses how the requirements of Act 40 are satisfied. The Company's position is that because far more than 100% of the funds will be used on infrastructure replacement, no adjustment to non-investor supplied funding for utility working capital is appropriate and therefore there should be no Consolidated Tax adjustment applied in this case.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY AT THIS TIME?

A. Yes, it does. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

Peoples Natural Gas Company, LLC **Exhibit CLS-1**
Test Year Period September 30, 2025

MACRS Life		Proposed OCA Inflation Adjustment	1st Year Tax Depreciation Rate	Tax Depreciation Adjustment	Proposed OCA Book Depreciation Adjustment	Change in Gross Timing Difference	
7	Production Plant	254,301	14.290%	36,340	(5,679)	30,661	
15	Transmission Plant	5,376,933	5.000%	268,847	(83,104)	185,743	
20	Distribution Plant	18,892,437	3.750%	708,466	(389,630)	318,836	
20	General Plant	3,295,831	3.750%	123,594	(249,331)	(125,737)	
		27,819,502		1,137,246	(727,744)	409,502	net addback

Federal Tax Rate	21%
Reduction in Deferred Tax Liability	85,995
Reduction in Deferred Tax Asset for NOL Generation	(85,995)
Rate Base Impact	-

Peoples Natural Gas Company, LLC **Exhibit CLS-2**
Test Year Period September 30, 2025

		Company Proposed	OCA Proposed Adjustments	Recalculated Present Rates OCA
1	**Operating Income Before Taxes/Interest**	**294,969,444**	**(131,607,895)**	**163,361,549**
2	Less Interest Expense	(84,085,080)	(7,847,035)	(91,932,115)
3	**Pre-Tax Operating Income (Loss)**	**210,884,364**	**(139,454,930)**	**71,429,434**
	Scheule M Items			
4	Permanent - Meals and Entertainment	839,000		839,000
	Tax Repairs - Gross Deduction	(430,000,000)		(430,000,000)
	Tax Repairs - Book Depr & AFUDC	40,000,000		40,000,000
	Total Flow Through	**(389,161,000)**	**-**	**(389,161,000)**
	Deferred Adjustments			
5	Depreciation	(46,359,020)		(46,359,020)
6	Sec 163 Interest	1,873,750		1,873,750
7	Contributions In Aid of Construction	(376,420)		(376,420)
8	Cost of Removal	4,175,589		4,175,589
	Property Basis Difference	(1,378,342)		(1,378,342)
	Unicap 263A Inventory	234,219		234,219
9	Other	-		-
10	**Total Deferred Adjustments**	**(41,830,224)**	**-**	**(41,830,224)**
	Total Flow Through and Deferred Adjustments	**(430,991,224)**	**-**	**(430,991,224)**
11	PA Depreciation Adjustment	(2,007,814)		(2,007,814)
12	**Taxable Income Before NOL**	**(222,114,674)**	**(139,454,930)**	**(361,569,604)**
13	Prior Year PA NOL Utilization	-	-	-
14	**PA Taxable Income**	**(222,114,674)**	**(139,454,930)**	**(361,569,604)**
15	PA Income Tax (3mos @ 8.49%, 9mos @ 7.99%)	(18,024,606)	(11,316,768)	(29,341,373)
	Current Year PA NOL Adjustment	18,024,606	11,316,768	29,341,373
	Other	-	-	-
	PA Deferred Tax on Inv. Adj/Line Pack Gas	(18,714)	-	(18,714)
	PA Income Tax Expense	(18,714)	-	(18,714)
16	Federal Taxable Income Before NOL	(220,106,860)	(139,454,930)	(359,561,790)
	Prior Year Federal NOL	-	-	-
	Federal Taxable Income	(220,106,860)	(139,454,930)	(359,561,790)
17	**Federal Income Tax Expense (21%) Current**	**(46,218,510)**	**(29,285,535)**	**(75,504,045)**
	Current NOL Adjustment	46,218,510	29,285,535	75,504,045
	Other	-	-	-
	Federal Current Income Tax Expense	-	-	-
18	Federal Income Tax Expense (21%) Deferred	8,544,081	-	8,544,081
19	Amortization of EDIT	(831,898)		(831,898)
	Current Year Federal NOL	(46,218,510)	(29,285,535)	(75,504,045)
	Amortization of 481(a) Tax Repairs	(20,947,437)		(20,947,437)
	Other	-	-	-
20	**Federal Deferred Income Tax Expense**	**(59,453,764)**	**(29,285,535)**	**(88,739,299)**
21	Total Current and Deferred FIT	(59,453,764)	(29,285,535)	(88,758,013)
22	**Total Income Tax Expense**	**(59,472,478)**	**(29,285,535)**	**(88,776,727)**

Peoples Natural Gas Company, LLC **Exhibit CLS-3**
Test Year Period September 30, 2025

Fully Projected Future Test Period Normalization of Deferred Income Taxes

		Amortization of EDIT	Deferred Tax Expense	NOL	Rate Base			
1	**9/30/2024 Rate Base ADIT, at Present Rates (Attachment 2)**				47,479,738			
2	9/30/2024	(96,255)	803,974	(6,631,412)				
3	09/30/2024 Rate Base ADIT, at Present Rates				41,556,045	Days	Factor	Weighting
4	9/30/2024				41,556,045			
5	10/31/2024	(96,255)	803,974	(6,615,833)	35,647,931	31	0.084932	3,027,632
6	11/30/2024	(96,255)	803,974	(6,615,833)	29,739,817	30	0.082192	2,444,368
7	12/31/2024	(96,255)	803,974	(6,615,833)	23,831,703	31	0.084932	2,024,062
8	1/31/2025	(69,325)	712,007	(6,292,004)	18,182,381	31	0.084932	1,544,257
9	2/28/2025	(69,325)	712,007	(6,292,004)	12,533,059	28	0.076712	961,440
10	3/31/2025	(69,325)	712,007	(6,292,004)	6,883,737	31	0.084932	584,646
11	4/30/2025	(69,325)	712,007	(6,292,004)	1,234,416	30	0.082192	101,459
12	5/31/2025	(69,325)	712,007	(6,292,004)	(4,414,906)	31	0.084932	(374,965)
13	6/30/2025	(69,325)	712,007	(6,292,004)	(10,064,228)	30	0.082192	(827,197)
14	7/31/2025	(69,325)	712,007	(6,292,004)	(15,713,550)	31	0.084932	(1,334,575)
15	8/31/2025	(69,325)	712,007	(6,292,004)	(21,362,871)	31	0.084932	(1,814,381)
16	9/30/2025	(69,325)	712,007	(6,292,004)	(27,012,193)	30	0.082192	(2,220,180)
17		(912,690)	8,819,985	(76,475,533)		365	1	
		Att. 1	*Att. 1*	*Att. 1*				
18	**9/30/2025 Rate Base ADIT, at Present Rates**							4,116,568
19					Projected Ending Balance, 9/30/2025			(27,012,193)
20					**Recalculated Projected Test Period Normalization Adjustment**			31,128,761
21					**Original Projected Test Period Normalization Adjustment**			18,328,626
22					**Adjustment (decrease to Rate Base)**			12,800,135
23					**NOL ADIT Adjustment (per Exhibit CLS-2)**			(29,285,535)
24					**Net decrease to ADIT/Increase to Rate Base**			(16,485,401)

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	
	:	

PREPARED REBUTTAL TESTIMONY OF LUKE RAVENSTAHL VICE PRESIDENT OF SALES AND MARKETING PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED:4-18-2024
DATE ADMITTED: _____

Peoples Statement No. 7-R

PREPARED REBUTTAL TESTIMONY OF
LUKE RAVENSTAHL

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Luke Ravenstahl. My business address is 375 North Shore Drive, Pittsburgh, PA 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Peoples Natural Gas Company LLC ("Peoples" or the "Company") as the Vice President of Sales and Marketing.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 7.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. My rebuttal testimony is in response to the Bureau of Investigation and Enforcement ("I&E") witness Cline's direct testimony, as well as the direct testimony of the Office of Consumer Advocate ("OCA") witness Johnson.

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. Yes. See Exhibit LR-R1 attached hereto.

Q. WHAT ARE THE TOPICS YOU INTEND TO ADDRESS IN THIS TESTMONY?

A. The two topics I will focus on include testimony regarding discounted rate customers, and secondly, the ability to discount for electricity as competitive alternative to natural gas service.

DISCOUNTED RATE CUSTOMERS

Q. WHAT DOES I&E WITNESS CLINE ASSERT WITH RESPECT TO THE COMPANY'S DISCOUNTED CUSTOMERS?

A. Mr. Cline asserts that the Company should not provide excessive discounts[1] and that the Company should re-evaluate discount rates for customers that have not had their rates verified in longer than 10 years[2].

Q. PLEASE DESCRIBE YOUR POSITION AS IT PERTAINS TO MR. CLINE'S TESTIMONY REGARDING DISCOUNTED RATE CUSTOMERS.

A. We agree with Mr. Cline that "providing excessive discounts to customers would be harmful to both the company and its customers as the Company's other customers make up for the lost revenue that results when discount rate customers pay less than tariff rates"[3]. However, to be clear, discounted rates are necessary in order to retain customers on our system in order to provide a net benefit to all customers. Without such discounts, a customer would be lost and thus all revenue that is covering a portion of the Company's revenue requirement would be lost. Our objective in negotiations with competitive customers is to maximize the revenue received without losing the customers to the competitive alternative.

[1] See Cline Direct, page 8.
[2] See Cline Direct, page 6.
[3] See Cline Direct, page 8.

As I noted in my direct testimony, Peoples agreed to new parameters with respect to competitive rate discounts in our last base rate case and has complied with those provisions.[4] Further, and in the spirit of that approach, we have reduced our number of negotiated contracts from 42 to 17. Several discounted delivery rate customers also had their competitive options and associated discounts reviewed and approved or were unopposed in prior 1307(f) settlements. We are in support of ensuring discounts offered are appropriate and in the interests of all ratepayers.

Q. MR. CLINE SUGGESTS THE COMPANY SHOULD RE-EVALUATE DISCOUNT RATES FOR CUSTOMERS UNDER CONTRACT THAT HAVE NOT HAD THEIR RATES VERIFIED FOR LONGER THAN 10 YEARS. DO YOU AGREE?

A. No. Given that existing negotiated customers have already agreed to terms and entered into legally binding agreements, we think a more appropriate solution would be to consider this issue prospectively. We agree with Mr. Cline that an evaluation every 10-years is reasonable and that future contract terms should reflect that accordingly. We believe a more appropriate solution would be to limit any new contract terms to 10 years. Prior to entering into a contract, we would verify the competitive alternative by following our process described in the Company's response to OCA 1-011, attached hereto as Ex. LR-R1.

If, for any reason, the Company determined a need to offer a contract term greater than 10 years, the Company could commit to completing a re-evaluation and verification of the competition every 10 years.

[4] See the Joint Settlement in Docket No. R-2018-3006818.

Q. ON PAGE 10 OF HIS TESTIMONY, MR. CLINE STATES THAT IN THE NEXT RATE CASE THE COMPANY SHOULD SEPARATE DISCOUNT CUSTOMERS INTO THEIR OWN CLASS. DO YOU AGREE?

A. No. As I understand Cost of Service and Rate Classes, they are usually determined by cost causation. As such, it is unlikely that all discounted customers would have similar cost causation and thus it may be difficult to group them into one customer class. Please refer to Rebuttal Statement No. 15-R for further discussion.

ELECTRICITY AS A COMPETITIVE ALTERNATIVE

Q. WHAT DOES I&E WITNESS CLINE ASSERT WITH RESPECT TO THE COMPANY'S PROPOSAL TO INCLUDE ELECTRICITY AS A COMPETITIVE ALTERNATIVE?

A. Mr. Cline recommends the Commission reject the Company's proposal to include electric service as a viable competitive alternative. Mr. Cline asserts that doing so would result in inequitable eligibility of discounted rates[5].

Q. PLEASE DESCRIBE YOUR POSITION AS IT PERTAINS TO MR. CLINE'S TESTIMONY REGARDING ALLOWING ELECTRICITY AS A COMPETITIVE OPTION.

A. We disagree with Mr. Cline and believe that electricity should be deemed a competitive alternative along with all other energy sources. It is clear that electricity is competitive

[5] See Cline Direct, pages 11-12.

with natural gas insofar as many equipment and appliance applications offer both natural gas and electric options. Customers consistently compare the costs and benefits of electricity to natural gas when making decisions. To further illustrate, the Company has a current customer who has a pending project to displace certain gas-fired equipment with electric equipment. This particular customer is one of the top volumetric consumers on our system, consistently ranking in the top 5 in annual consumption. If the project is funded, an electric alternative would displace a significant amount of natural gas consumption. We anticipate additional similar potential conversions will be contemplated by other large Peoples customers. Without the revenue contributions of discounted customers who ultimately reduce the overall system costs, other non-discounted customers will ultimately remit higher distribution costs.

Q. MR. CLINE ARGUES THAT ALLOWING ELECTRICITY AS A COMPETITIVE ALTERNATIVE WOULD NOT BE FAIR TO LOW-INCOME CUSTOMERS. DO YOU AGREE?

A. No. Peoples does not anticipate nor intend to provide discounted rate options for residential customers – and thus, there is no inequitable application of a discount for low-income customers. Rather, the ability to consider electricity as a competitive alternative would apply to commercial and industrial customers, and not residential customers. Currently, tariff flex rate provisions only apply to commercial and industrial customers. As a result, we disagree that low-income customers would be impacted by this change.

Q. HAS PEOPLES EVER HAD THE ABILITY TO DISCOUNT FOR ELECTRICITY AS A COMPETITVE ALTERNATIVE?

A. Yes. For decades, prior to our last rate case, Peoples' tariff included provisions to allow for considering electricity as competitive alternative. In the Company's last base rate case, settlement terms included the removal of that ability, and we compromised and conceded that issue. Our request in this case is to reinstate the ability to discount for electricity, the same as many other PA gas utilities. I further note that during the last rate case there were no customers that received a discount as a result of electricity being the sole competitive alternative.

Q. ARE YOU AWARE OF OTHER PENNSYLVANIA GAS UTILTITIES THAT USE ELECTRICITY AS A COMPETITIVE ALTERNATIVE AND PROVIDE DISCOUNTS? IS THERE PRECEDENT IN PENNSYLVANIA?

A. Yes. Columbia Gas of PA, National Fuel, UGI, PGW, and Pike County Light and Power all reference electricity as a competitive alternative on their company websites. Many include cost savings calculators comparing the cost of natural gas to propane, fuel oil and electricity. Peoples is requesting to be treated the same as our peer companies across Pennsylvania.

Q. WHAT DOES OCA WITNESS JOHNSON ASSERT WITH RESPECT TO USING ELECTRICITY AS A COMPETITIVE ALTERNATIVE.

A. Mr. Johnson recommends that the Company's proposed tariff revision which includes electricity as a competitive alternative be rejected[6].

Q. PLEASE DESCRIBE YOUR POSITION AS IT PERTAINS TO MR. JOHNSON'S TESTIMONY REGARDING ALLOWING ELECTRICITY AS A COMPETITIVE OPTION.

A. We disagree with Mr. Johnson and believe that electricity should be deemed a competitive alternative along with all other energy sources. It is clear that electricity is competitive with natural gas insofar as many equipment and appliance applications offer both natural gas and electric options. Customers consistently compare the costs and benefits of electricity to natural gas when making decisions. As the Company previously referenced, a top five consumer on its system is going to potentially move some of its equipment from natural gas powered to electric powered. While it is ultimately the consumer's choice with respect to the equipment they use, customers do compare natural gas and electric and we should, as well. We anticipate additional similar potential conversions will be contemplated by other large Peoples customers. Therefore, the Company should be able to use electricity as a competitive alternative.

Q. MR. JOHNSON ARGUES THAT ALLOWING ELECTRICITY AS A COMPETITIVE ALTERNATIVE WOULD RESULT IN A DISCOUNTED PRICE WAR AND THAT ALL CUSTOMERS COULD CONVERT TO ELECTRICITY. DO YOU AGREE?

[6] See Johnson Direct, at 49.

A. No. Peoples does not anticipate nor intend to provide discounted rate options for residential customers. Rather, the ability to consider electricity as a competitive alternative would apply to commercial and industrial customers, rather than residential customers. As a result, we disagree that this would result in price wars because residential customers would not be offered discounts. As mentioned above, Peoples had this provision in its tariff prior to the last base rate case and a "price war" did not occur.

Q. ON PAGE 48 OF HIS TESTIMONY, MR. JOHNSON STATES THAT "PEOPLES CLAIMS THAT NATURAL GAS IS CHEAPER THAN ELECTRICITY FOR MANY END USES, AND IF THAT IS TRUE, PEOPLES SHOULD PREVAIL IN ITS COMPETITION WITH THE ELECTRIC DISTRIBUTION COMPANY WITHOUT THE NEED TO OFFER A FLEXED RATE." PLEASE RESPOND.

A. First, the Company's claim that natural gas is cheaper than electric is supported. Please see the Direct Testimony of Michael Huwar in this case, specifically page 23. According to the American Gas Association, natural gas costs are and will cost significantly less than other fuels for many years to come.

However, Mr. Johnson fails to acknowledge the current political and environmental landscapes in our country which are pushing consumers towards electrification. In doing so, legislation like the Inflation Reduction Act, offers rebates and/or grants for consumers to move from one energy source to another, such as from natural gas to electric. Current or future customers should not be penalized for choosing to stay with natural gas. Allowing electricity to be deemed as a competitive alternative gives current and potential consumers a more level playing field and the ability to maintain energy choice. Ultimately, if the

natural gas utility loses customers to the electric sector, the existing natural gas customers, some of which may choose to stick with natural gas, will bear the increased costs of choosing their preferred energy source.

Q. DO YOU HAVE ANY FURTHER COMMENTS FOR MR. JOHNSON?

A. Yes. I want to reiterate that other gas utilities in Pennsylvania currently have the ability to use electricity as a competitive alternative, so clearly others Pennsylvania utility stakeholders deem electricity as a valid potential source of competition for natural gas.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-I-011

Witness: Ravenstahl, Luke **Title:** Vice President Sales & Marketing

Witness: Scanlon, Carol **Title**: Rates Manager

Question: Reference Peoples' Statement No. 7, the Direct Testimony of Luke Ravenstahl, p. 2 whereby Mr. Ravenstahl testifies that when contracts are newly negotiated or renewed, the Company performs its normal assessment, which includes verification of the competitive alternative and a fixed cost analysis. Provide the following information:

a. Identify the step-by-step process that the Company uses to verify the existence of a competitive alternative; and

b. Identify the step-by-step process that the Company uses to perform the fixed cost analysis Mr. Ravenstahl referenced.

Answer: a. Peoples requires the customer to provide us, via a confidential affidavit, a viable competitive alternative. The customer conducts an analysis of the economic and operational viability of the alternative and shares the analysis and any supporting information with us. We then validate and confirm the viability of a competitive alternative before proceeding with or considering a negotiated rate. It should also be noted that if an alternative energy rate is negotiated, it's only valid through the term of the contract. At that point, the process starts over, and we re-evaluate to determine if the customer's competitive alternative is still viable before we consider continuing with a negotiated rate.

b. The first step of the fixed cost analysis is to project the amount of annual revenue that will be received from the customer. The next step is to determine the annual incremental costs of service for the customer. The annual incremental costs of service consist of the following components:

- Return on Rate Base
- Annual Depreciation
- Associated Income Taxes

In order to determine the return on rate base, Peoples first identifies any dedicated facilitates used to serve the customer. The net book value of the facilities is calculated as the original cost of the facilities less accumulated depreciation. The net book value is then multiplied by the current return rate to arrive at the return on rate base. The current return rate is based upon the capital structure and cost of capital filed in the Company's most recent PUC earnings report at the time the analysis is prepared. The annual depreciation expense is calculated as the original cost of the dedicated facilities times the current annual depreciation rate based upon the FERC coding for the type of asset being valued. The associated income taxes are calculated as the amount of federal and state income taxes that will be assessed on the return on rate base amount less interest expense. Once the annual incremental costs of service components are calculated, the final step of the analysis, is to take the projected annual revenue less the sum of the annual incremental costs of service components. If the result is a positive number, it indicates the projected annual revenues exceed the annual incremental costs to serve the customer. Therefore, the customer is contributing to the overall fixed costs, which benefits the other ratepayers. In short, the other ratepayers benefit by having the customer with a negotiated rate on Peoples' system versus Peoples' not serving that customer.

Submit Date: 2/2/2024

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	
	:	

PREPARED REBUTTAL TESTIMONY OF
RITA F. BLACK
DIRECTOR, COMMUNITY ASSISTANCE PROGRAMS
ESSENTIAL UTILITIES

DATE SERVED: April 18, 2024 Peoples Statement No. 9-R
DATE ADMITTED: _____

PREPARED REBUTTAL TESTIMONY OF
RITA F. BLACK

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Rita F. Black and my business address is located at 375 North Shore Drive, Pittsburgh, Pennsylvania 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Essential Utilities, Inc. as the Director of Community Assistance Programs. In this role, I lead assistance programs for Peoples Natural Gas Company LLC[1] ("Peoples", "Peoples Natural Gas" or "the Company"), Aqua Pennsylvania Inc. and Aqua Pennsylvania Wastewater, Inc. (collectively "Aqua PA"), as well as these companies' affiliated regulated utilities operating in other states.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 9.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I will respond to aspects of the direct testimony submitted by Ms. Barbara Alexander on behalf of the Office of Consumer Advocate ("OCA"), Mr. Roger Colton on behalf of OCA, Ms. Jennifer Warabak on behalf of Pennsylvania Weatherization Providers Task Force and

[1] Peoples Natural Gas Company LLC currently has two tariffed divisions under the PUC, "Peoples Natural Gas Division" and "Peoples Gas Division".

Mr. Harry Geller, on behalf of The Coalition for Affordability Utility Services and Energy Efficiency in Pennsylvania ("CAUSE-PA"). In particular, my rebuttal testimony will focus on issues related to low income customers addressed by the above mentioned witnesses as well as topics raised by Ms. Alexander with regards to Bureau of Consumer Services ("BCS") interactions which are within my area of responsibility.

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. Yes. I am sponsoring Exhibits RFB-R1, RFB-R2, RFB-R3, RFB-R4 and RFB-R5.

Q. HOW HAVE YOU ARRANGED YOUR REBUTTAL TESTIMONY?

A. I will first review and respond to the testimony of parties as they relate to low income issues and universal service programs as these issues were addressed by a number of witnesses. These issues include:

- Peoples' reporting definition of 'confirmed low income';
- CAP enrollment;
- Proposed increase to Peoples hardship fund;
- Proposed increase to Peoples Low Income Usage Reduction Program ("LIURP") budget; and
- Impact of proposed rates on low income affordability.

I will then address the concerns raised by Ms. Alexander regarding Peoples' root cause analysis of informal complaint cases filed by consumers with BCS.

CONFIRMED LOW INCOME DEFINITION

Q. PLEASE DESCRIBE THE CONCERN RAISED BY WITNESSES IN THIS CASE REGARDING PEOPLES DEFINITION OF CONFIRMED LOW INCOME.

A. Mr. Geller for CAUSE-PA and Mr. Colton for OCA provided testimony regarding the definition that Peoples uses for the reporting of 'confirmed low income' consumers. As noted in discovery, and reiterated in the testimony of these two witnesses, for reporting purposes, Peoples considers low income status to be confirmed if the customer has received a Low Income Home Energy Assistance Program ("LIHEAP") grant within the past two years, or if the customer is participating in CAP. Peoples used these two parameters as they are two methods of income validation. To receive a LIHEAP grant, a customer must provide income documentation to the state. To participate in CAP, the customer must provide income documentation to the Company, although the Company also accepts participation in LIHEAP as verification of income eligibility for the purposes of CAP participation. As these two methods ensure income was verified, it is therefore confirmed. By contrast, customers contacting the Company to begin service or to discuss payment arrangements provide verbal income information, which is not only unverified, but often outdated. For example, if a customer moved into a home within the Company's service territory ten years ago and noted their household income at that time was less than 150% of the Federal Poverty Limit ("FPL"), and the customer has not updated this information within those ten years, a query of the Company's system to identify low income customers would include this consumer, even though their current income may not be within the low income threshold. For this reason, the Company used validated income as a proxy for confirmed low income customer counts in annual PA PUC reporting.

Q. WITNESS COLTON INCLUDED THE PENNSYLVANIA PUBLIC UTILITY CODE DEFINITION OF CONFIRMED LOW INCOME IN HIS TESTIMONY (PAGE 25, LINES 7 THROUGH 12). PLEASE RESPOND TO HIS STATEMENT THAT PEOPLES IS NOT COMPLYING WITH THIS DEFINITION.

A. As noted in the definition, confirmed low income refers to 'Accounts where the NGDC has obtained information that would reasonably place the customer in a low-income designation.' It goes on to mention receipt of LIHEAP as well as self-certification by the customer obtained in response to interactions as described in §56.97(b) which relates to contact prior to termination. Peoples obtains self-attestation of income at a number of points within the life cycle of a customer, not only when facing termination. At the start of service, the Company asks for income information in order to determine if a security deposit and connection fee should be waived and as an opportunity to refer income eligible customers into universal service programs.

It is important to clarify that the Company uses self-attestation for all manner of eligibility consideration including, but not limited to, waiver of fees, waiver of deposits, establishing payment arrangements and restoration requirements. Customers are only required to provide proof of program eligibility for the Company's universal service programs and hardship fund, the former being funded by residential ratepayers. The limited use of the Confirmed Low Income definition by the Company for reporting purposes has not been the standard by which consumers are able to access protections and benefits.

Q. WITNESS GELLER STATED, WHEN REFERRING TO THE REPORTED CONFIRMED LOW INCOME DEFINITION, "THIS INCONSISTENCY AND UNDERCOUNTING DETRIMENTALLY IMPACTS THE ABILITY OF CUSTOMERS TO ACCESS CERTAIN PROTECTIONS…"[2]. WOULD YOU LIKE TO RESPOND TO THIS STATEMENT?

A. Yes. I want to assure the parties to this case that while there has been disagreement about the definition under which the Company has reported its confirmed low income customer counts, there is no variance between the parties and the Company with regards to access to protections and programs intended to support low income customers. As I described in the prior answer, verbal attestation is used across the board to allow for waiver of fees and deposits and protections related to collections and termination. It also is used in outreach efforts as well. The only services or provisions that require proof of low income status are the universal service programs described in the Company's Universal Service and Energy Conservation Plan ("USECP").

Q. DO YOU HAVE A PROPOSED RESOLUTION REGARDING THE REPORTING OF CONFIRMED LOW INCOME CUSTOMER COUNTS?

A. Yes. While the Company has used the working definition of LIHEAP within the past 2 years and/or CAP participation as indicators of confirmed low income in its reports to the PUC, I understand the concerns raised by the witnesses to this case about the exclusion of self-attested low income status. As noted earlier in my testimony, verbal income can become very stale, particularly if a customer is not payment troubled and has little, if any,

[2] Geller, page 7, lines 17 and 18.

interaction with the Company. Our intention in using the more limited definition was to provide a more timely picture of low income consumers by using validated income. We will modify our reporting for confirmed low income for 2024 activity to include self-attestation data in the annual Universal Service Report.

I do wish to further clarify that our reported confirmed low income counts in the Universal Service Report is unrelated to the needs assessment that the Company completes as part of its USECP. The needs assessment, using census data shared by BCS, is used to develop our programs as suggested by Mr. Geller in his testimony[3].

CAP ENROLLMENT

Q. PLEASE PROVIDE A GENERAL DESCRIPTION OF WITNESS TESTIMONY WITH REGARDS TO CAP ENROLLMENT.

A. Witnesses Geller and Colton provided extensive testimony regarding CAP enrollment levels for Peoples and described their concerns regarding current enrollment levels. Simply stated, their testimony notes CAP enrollment is lower than desired.

Q. DO YOU SHARE THIS CONCERN REGARDING DECREASED CAP ENROLLMENT LEVELS?

A. Yes. The Company provides quarterly CAP participation levels to both BCS and its Universal Service Advisory Group ("USAG"). In fact, the Company raised this issue at its USAG meeting in January as shown in the deck attached as Exhibit RFB-R1. It will also be a primary focus of the April meeting as well. And, CAP participation is the focus of the

[3] Geller, Page 10, lines 3 through 9.

Company's Consumer Education and Outreach Plan ("CEOP"), the most recent version of which was filed at the beginning of March and is attached as Exhibit RFB-R2. Further, we have replaced a retiring member of our staff with a new hire whose prior work experience was obtained at a social service agency where she had direct contact on a daily basis with our customers. Her experience and educational background are key to the ongoing development of our CEOP and have increased our visibility in the community, all in an effort to improve participation, not only in CAP, but in other universal service programs and LIHEAP.

Q. ACCORDING TO HIS TESTIMONY, MR. GELLER IS CONCERNED ABOUT THE TARIFF CHANGE, SUPPORTED IN YOUR DIRECT TESTIMONY, TO REMOVE REFERENCE TO AUTOMATIC ENROLLMENT OF CUSTOMERS INTO CAP. WOULD YOU LIKE TO RESPOND TO HIS COMMENTS ON THIS ISSUE?

A. Yes. As Mr. Geller noted in his testimony, the particular tariff provision that would allow for automatic enrollment into CAP pre-dates April 3, 2000. The Company has been unable to determine exactly when and under what pretenses this provision was added to the tariff. The decision to remove the provision was simply to bring the tariff into compliance with the Company's currently approved USECP, which does not include a provision for automatic enrollment. It in no way reflects "eliminating pathways to enrollment"[4] as it was not an approved method of enrollment. The USECP process includes important stakeholder input, including from some of the same parties to this proceeding, to ensure

[4] Geller Page 24, Line 20.

that a utility's programs are appropriately operated and funded. It is the suitable forum for discussion and approval of program enrollment methods.

Q. MR. GELLER RECOMMENDS THAT PEOPLES FILE A PETITION TO AMEND ITS USECP TO PERMIT AUTO-ENROLLMENT AND AUTO-RECERTIFICATION.[5] PLEASE RESPOND TO HIS RECOMMENDATION.

A. In that section of his testimony, Mr. Geller notes that the Company should work with its USAG to develop the details of an automated enrollment/recertification program such as he describes. I do agree that any considerations that would significantly change enrollment should be a topic of discussion with the USAG. Its members, not only those who represent parties, but those who represent individual non-profits and social service agencies, are a valuable sounding board and provide critical input into our programs. I am also looking ahead to the benefit of data sharing that we are expecting to receive from a data sharing agreement with the Department of Human Services for LIHEAP recipients, hopefully in the fall of 2024. That data sharing could open a door to ease of enrollment for more consumers which would be most beneficial. Further, BCS has just submitted its Universal Service Working Group ("USWG") Report[6] to the Commission. The USWG working sessions delved into issues such as auto-enrollment from data sharing. I believe that initiating a petition to provide auto-enrollment is premature, given the activity currently underway at the Commission on issues such as common applications, common administrator, and common website, in addition to the DHS data sharing provision.

[5] Geller, Page 27, Lines 12 through 17.
[6] M-2023-3038944

Q. HOW DOES PEOPLES ENCOURAGE ENROLLMENT INTO CAP?

A. Outreach and education are critical activities to drive low income customers to participate in programs that can improve their affordability. We have strong educational pieces in place at critical points in the collection process, for example. We provide a plain language CAP notice to customers who have indicated their low income status historically, but are not enrolled in CAP, prior to the issuance of a termination notice. This notice is provided at Exhibit RFB-R3. This document was developed with input from the USAG.

Additionally, all termination notices include information on currently available energy assistance programs, such as LIHEAP and the Company's hardship fund. Above all, we encourage customers to call Peoples and talk to our call center team. Our call center does an exceptional job of identifying CAP eligible customers and explaining the program.

We also use broad promotional methods to increase awareness of our programs. Such broad methods include providing program information in our bill inserts, regular email campaigns, transit advertising, social media advertising and participation in local community events. Local community events serve a dual purpose for Peoples. We seek events that are in the neighborhoods that are most vulnerable to limited income to connect with individual customers. These events also allow our programs to become more visible to the larger audience, which typically includes community members that may not be individually eligible, but may have a family member, friend, coworker or other social connection that could benefit. The community events are always evolving. For example, in the month of March, we began setting up a table to meet with our customers who are utilizing the Giant Eagle Mobile Market in Homewood, a disadvantaged community in Pittsburgh. The Mobile Market brings a scheduled grocery store opportunity to

neighborhoods that are food deserts and we expect this touchpoint to be a helpful gateway to CAP enrollment.

Q. YOU MENTIONED THE STAND-ALONE PLAIN LANGUAGE NOTICE PROVIDED PRIOR TO TERMINATION TO ENCOURAGE CAP ENROLLMENT. MR. COLTON RAISED CONCERNS IN HIS TESTIMONY REGARDING THE EFFECTIVENESS OF THIS NOTICE. WOULD YOU LIKE TO RESPOND?

A. Yes. Mr. Colton provides statistics regarding the number of confirmed low income customers who were disconnected and not reconnected as evidence that this particular notice is not working as intended to prevent utility shut-off. Further, he states "To assume that Peoples has effectively communicated the possibility of enrolling in CAP, and making pre-program arrears subject to forgiveness…one would need to assume that nearly 4,200 Confirmed Low-Income customers…would choose to have their service disconnected rather than to enroll in the Company's CAP."[7] Mr. Colton is attempting to draw a simple throughline between the Company informing customers about CAP and disconnection, reaching the conclusion that our efforts are not sufficient. All of us operating in the utility space, from utility employees to regulators to low income advocates and social service agencies understand that while CAP and LIHEAP are incredible resources for household stabilization and affordability, far too many eligible customers do not participate. There are many reasons why eligible households do not take advantage of resources that would be beneficial, and this challenge is not limited to utility assistance programs broadly, or

[7] Colton, Page 29, Lines 1 through 7.

Peoples in particular. It is my belief that the Commission initiated the CEOP requirement in order to take steps to address this long-standing problem across all utility CAPs.

Mr. Colton further suggests that an additional personal contact requirement be made prior to termination to offer CAP. He notes that if the customer chooses to begin the CAP application process, the Company should postpone disconnection[8]. The Company already provides personal contact prior to termination, and this is the third step in the process for known low income customers, as they would have received the stand-alone plain language CAP notice, followed by the termination notice, before receiving the personal contact. Further, if at any point in the collections process the customer shows interest in applying for CAP and begins the application, a hold is placed on termination to allow time for the customer to complete the enrollment process.

Q. DOES MR. COLTON MAKE A FURTHER RECOMMENDATION REGARDING ADDITIONAL NOTICES FOR CAP ENROLLMENT?

A. Yes. Mr. Colton also recommends the development of a stand-alone notice to be provided to a customer choosing to establish a deferred payment plan and for customers who are included in the cold weather survey.[9] He suggests this notice be developed with input from the USAG.

Q. WHAT IS YOUR RESPONSE TO THIS RECOMMENDATION?

[8] Colton, Page 30, lines 14 through 23.
[9] Colton, Pages 35 and 36.

A. All customers presenting with income at or below 150% FPL are offered CAP when payment arrangements are discussed. Peoples' call center staff are well versed in the benefits of CAP and encourage customers to enroll in CAP rather than establishing a deferred payment plan. For some customers facing arrearages, the prospect of making a verbal payment arrangement in a few moments to stop termination is seen as easier than applying for CAP as CAP requires proof of income. I do not share Mr. Colton's opinion that another notice, mailed to the customer following the creation of their deferred payment arrangement, will increase motivation to apply for CAP. I do, however, see value in incorporating a plain language CAP notice into the cold weather survey packet and will include this topic in the April USAG in order to ensure that any changes necessary to the cold weather survey packet, prior to the 2024 fall heating season, can be completed in a timely manner.

Q. MR. COLTON ALSO RECOMMENDS A STAND-ALONE NOTICE REGARDING CAP FOR CUSTOMERS WITH LOW INCOMES AND ARREARAGES.[10] PLEASE RESPOND TO THIS RECOMMENDATION.

A. I believe this would be redundant. A customer with arrears of $300, the threshold of which Mr. Colton recommends should be eligible for such a notice[11], would be eligible for a disconnection notice and therefore would first receive the current stand-alone notice to enroll in CAP to prevent termination. A second stand-alone notice, as recommended by Mr. Colton, would not be of value as the Company already sends a stand-alone notice.

[10] Colton, Page 38, Lines 17 through 19.
[11] Colton, Page 39, Line 4.

Q. WOULD YOU LIKE TO ADDRESS ANY OTHER CONCERNS RAISED BY WITNESSES TO THIS CASE WITH REGARDS TO CAP ENROLLMENT?

A. Yes. Mr. Geller recommends that Peoples "screen all new and moving customer for income level at the time their service is established."[12] I want to assure Mr. Geller and other parties to this case that this is the standard operating procedure at Peoples. Customers starting or transferring service are asked about household income in order to determine if certain fees, such as connection fees or security deposits are to be waived. Verbal income information is used to not only waive those items, but also to screen for CAP eligibility. Customers meeting the income guideline for CAP are advised of the program and offered application information, including a soft transfer to Dollar Energy Fund to start the process immediately, if they so choose.

Further, the Company has strong relationships with local resettlement organizations that support immigrant populations. As part of its ongoing effort to reach households with incomes below 50% FPL, Peoples developed these relationships and a working process by which the resettlement agency can work directly with a member of the Community Assistance Programs team to not only establish service for an immigrant family, but to, at the same time, enroll that customer into CAP. For most of these families, there is not yet an income source at the time of their resettlement. Through our initiative, they are enrolled in CAP using the zero income form, providing them with the CAP minimum payment of $25 per month, until they reach their recertification date at six months.

[12] Geller, Page 28, lines 5 through 7.

COMPANY'S HARDSHIP FUND

Q. PLEASE DESCRIBE RECOMMONDATIONS MADE BY WITNESSES IN THIS PROCEEDING WITH REGARDS TO THE COMPANY'S HARDSHIP FUND?

A. Witness Warabak, on behalf of Pennsylvania Weatherization Providers Task Force, provided two recommendations regarding the hardship fund. First, she suggested the Company's contribution should be increased commensurate with the increase in rates approved in this proceeding and secondly, that the hardship funds be distributed according to the level of low income consumers residing in the counties of the Company's service territory.[13] Mr. Geller also provided two recommendations regarding the hardship fund. Similar to Ms. Warabak, he recommended an increase commensurate with the increase approved in this proceeding and he also recommended an increase to the maximum grant amount from the current $500 to $600.[14]

Q. PLEASE RESPOND TO THE RECOMMENDATION THAT THE HARDSHIP FUND BE INCREASED COMMENSURATE WITH THE RATE INCREASE APPROVED IN THIS PROCEEDING.

A. In his testimony, Mr. Geller recommended such an increase "to address unaffordability felt by low income customers at both present and proposed rates."[15] Hardship programs are funds of last resort. They were developed with the intention of providing a resource to prevent termination or restore service for customers who had fallen behind on utility bills and have no other resources with which to pay for their utility service. Because Peoples

[13] Warabak, Page 8, Numbers 4 and 5.
[14] Geller, Pages 35 and 36.
[15] Geller, Page 36, Lines 5 and 6.

provides CAP participation eligibility up to 200% FPL, the same threshold as the Company's hardship fund, it is my opinion that the Company's suite of universal service programs are designed appropriately to manage customers who face financial difficulty due to any number of factors, from external economical challenges to changes in Peoples' rates. Therefore, I do not believe an increase to the hardship fund is necessary.

Q. WITNESS WARABAK RECOMMENDED THAT HARDSHIP FUNDING BE DISTRIBUTED BASED ON LOW INCOME POPULATIONS WITHIN THE COUNTIES OF THE COMPANY'S SERVICE TERRITORY. PLEASE REPOND TO THIS RECOMMENDATION.

A. Ms. Warabak's testimony included the statement that "hardship funding be distributed in accordance with the percentage of low-income customers in the counties served by the Company."[16], however, she did not provide a basis for this recommendation. The Company's hardship fund is available to all income qualified residential customers of the Company, regardless of physical location within the Company's service territory. This is an important aspect of the Company's program that should remain intact as adding a geographical limitation on available dollars could prevent otherwise eligible customers from receiving needed assistance.

Q. PLEASE RESPOND TO MR. GELLER'S RECOMMENDATION REGARDING INCREASING THE MAXIMUM GRANT FROM $500 TO $600.

[16] Warabak, Page 7, lines 16 and 17.

A. I disagree with this recommendation. Peoples has offered an expanded CAP enrollment pilot for several years. Under this expansion of CAP eligibility, customers with incomes between 151 and 200% FPL that have accrued arrearages are eligible to participate in CAP. When the hardship grant is available, customers receive the maximum hardship grant of $500 first, then the remaining balance is established as pre-CAP and becomes eligible for Arrearage Forgiveness while the customer participates in CAP. An increase of $100 to those receiving the maximum will only accelerate the depletion of the hardship fund without providing additional support to maintain utility service as CAP is already providing that important safety net.

LIURP BUDGET

Q. PLEASE DESCRIBE RECOMMENDATIONS PROVIDED BY WITNESSES TO THIS CASE WITH REGARDS TO LIURP.

A. Similar to the hardship fund increase proposal, both Mr. Geller and Ms. Warabak proposed increases to the Company's LIURP budget. Specifically, Ms. Warabak recommended an increase of $400,000 and Mr. Geller recommended an increase equal to the 2023 spend, which included carryover from the prior year, along with a further increase commensurate with the increase in approved rates in this proceeding.

Q. WHAT IS THE BASIS FOR THE $400,000 INCREASE PROPOSED BY MS. WARABAK?

A. Ms. Warabak recommended that funding be increased to support completion of an additional 50 jobs per year. Using the average LIURP job cost of $8,000, she calculated

an increase to LIURP funding of $400,000.[17] She did not provide details on her recommended increase of 50 jobs beyond a desire to provide services to more eligible consumers as a way to increase the ability of a household to conserve.

Q. PLEASE DESCRIBE MR. GELLER'S LIURP BUDGET INCREASE PROPOSAL.

A. Mr. Geller based his suggested budget on 2023 actual spending for each division and further suggested a percentage increase equal to the approved residential rate increase from this proceeding.[18] He states these increases are necessary to address current need as well as increased needs resulting from approved rates in this proceeding.

Q. DO YOU AGREE WITH EITHER OF THESE PROPOSED LIURP INCREASES?

A. I do not. I appreciate the concerns raised by these witnesses that LIURP budgets should be appropriate to the need of the eligible customer base. However, I believe a realistic budget that can be fully utilized in a given year is the most appropriate use of ratepayer dollars dedicated to these programs. I think it's helpful to recall the purpose of LIUPR as noted in regulation:

§ 58.1. Purpose.
This chapter requires covered utilities to establish fair, effective and efficient energy usage reduction programs for their low income customers. The programs are intended to assist low income customers conserve energy and reduce residential energy bills. The reduction in energy bills should decrease the incidence and risk of customer payment delinquencies and the attendant utility costs associated with uncollectible accounts expense, collection costs and arrearage carrying costs. The programs are also intended to reduce the residential demand for electricity and gas and the peak demand for electricity so as to reduce costs related to the purchase of fuel or of power and concomitantly reduce demand which could lead to the need to construct new generating capacity. The programs should also result in improved health, safety and comfort levels for program recipients.

[17] Warabak, Page 7, Lines 4 through 8.
[18] Geller, Page 33, lines 6 through 13.

The purpose of LIURP is broad. It was designed to improve health and safety, conserve energy and also support affordability by reducing household bills. To qualify for LIURP, participants must be both low income and significantly high energy users. In this case, I proposed to reduce the limit for LIURP participation of Peoples Natural Gas Division consumers to 120 MCF annually to align Peoples Natural Gas Division customers with Peoples Gas Division customers' current threshold. Mr. Geller noted his support of this proposal in his direct testimony. It is my hope that by lowering the threshold to 120 and thereby broadening the number of eligible households across the Company's service territory, we will see an increase in the number of LIURP jobs completed and will begin to fully spend the LIURP budget in the year it is intended, eliminating carryover. If we find that more annual dollars are needed to support the eligible customer base, the increase to the LIURP budget should occur through the USECP petition process. To increase budgets at this time, without having fully spent program budgets for the past few years, is inconsiderate of the cost to residential ratepayers who fund this program.

Q. CAN YOU PLEASE FURTHER EXPLAIN YOUR CONCERN REGARDING RESIDENTIAL RATEPAYERS WHO FUND LIURP AND OTHER UNIVERSAL SERVICE PROGRAMS?

A. Yes. The costs of the Company's universal service programs are funded through riders which apply to residential, non-CAP customers. On an annual basis, we project the expected costs of LIURP, CAP and Emergency Furnace and Service Line Repair ("EFSLR"). We also adjust for actual costs in this rate setting process. In the case of CAP and EFSLR, if actual costs are different than projected costs, the rider is adjusted

accordingly. However, all dollars allocated to LIURP, whether spent in the year or not, continue to be attributed to LIURP as they are carried over from year to year. For this reason, it is important that the LIURP budget balance the needs of the potential eligible population and the residential ratepayers who fund them. In my opinion, the decision to change LIURP budgets should be made through the USECP process, by which stakeholders and BCS are able to contribute their experience with other utility programs, along with evaluating the needs assessment of the Company's service territory, to set an annual budget that meets the goals noted in §58.1.

IMPACT OF PROPOSED RATES ON AFFORDABILITY

Q. BRIEFLY DESCRIBE CONCERNS RAISED BY WITNESSES IN THIS PROCEEDING REGARDING THE IMPACT OF THE PROPOSED INCREASE ON LOW INCOME HOUSEHOLDS.

A. Witnesses Warabak, Geller and Colton each mentioned their concern about the impact of the proposed increases on low income households. Some of the concerns raised were specific to the proposed customer charge and the Weather Normalization Adjustment. While these two issues will be addressed by other witnesses on behalf of Peoples, I would like to respond to the general concern of affordability for low income households.

Q. PLEASE CONTINUE.

A. As the leader of the Community Assistance Programs department at Peoples, affordability and availability of resources are always top of mind. We know that if we can identify low income households early on in the lifecycle of their service with Peoples, we can improve

overall affordability by waiving fees and deposits, supporting their participation in LIHEAP, CAP and the Company's hardship fund and providing support to their household in the form of EFSLRP and LIURP. We advocate for LIHEAP funding, participate in all available programs, such as Pennsylvania Homeowners Assistance Program, and spend time in our communities promoting universal service programs.

I also recognize the cost of providing service to all of our consumers. The investment in our distribution system is significant and ensures improved safety and reliability for many years to come. These investments and the cost of providing services ultimately increase the cost to utility consumers through rates. For those with incomes at or below 150% FPL, CAP is an affordable option. Peoples was one of the first utilities to file a request to update its USECP to reflect the new affordability guidelines set forth by the Commission in 2019. In addition to reducing our percentage of income payments amounts from 8, 9 and 10% of income to 4, 5 and 6% of income, we also eliminated other fees that CAP customers paid, including CAP Plus (formerly $5) and the $5 pre-CAP copayment amount. Customers participating in CAP are not charged late payment fees, even if they miss a payment, which is an important benefit for low income households as noted by Mr. Colton in his testimony[19]. Further, if a customer enrolls in CAP with a balance, not only is that balance eligible for Arrearage Forgiveness benefits equal to 1/36th of the pre-CAP balance per month for each payment made, if they miss a payment and make up that payment at a later date, they are able to obtain the associated Arrearage Forgiveness benefit.

[19] Colton, Page 59, Lines 5 through 10.

I understand that for low income households, any increase in rates can be daunting. However, I am confident that the CAP offered by Peoples provides an affordable option to mitigate the impact of increased rates on those most vulnerable to changes in their monthly expenses.

Q. PLEASE ADDRESS THE CONCERNS RAISED AT THE PUBLIC INPUT HEARINGS REGARDING AFFORDABILITY OF RATES.

A. I personally attended all of the public input hearings and fully appreciate the concerns raised by the customers that testified about the requested increase in rates. Peoples understands that customers are concerned with the affordability of gas utility service as well as rising costs in other utilities or basic living expenses. Peoples works to mitigate costs where it is reasonably able to do so. For instance, many of Peoples' goods and services are procured through competitive bidding processes, and employee salaries and compensation are targeted to be competitive in the market in order to ensure that the Company continues to offer high quality service at appropriate cost levels. As described in the Direct Testimony of Paul Becker, Peoples must undertake significant infrastructure improvement projects in order to continue providing safe and reliable service to our customers. As shown in Witness Becker's rebuttal, Peoples maintains very reasonable costs for its infrastructure project work. This important work is a primary driver for the proposed rate increase.

Additionally, I would note that Peoples has reached out directly to several of the customers who testified at the Public Input Hearings. We sought to resolve specific concerns those witnesses mentioned in their testimonies and provided information about

our assistance programs as appropriate. One such example is our direct contact with Mr. Hoffman, a customer who testified at the March 5, 2024, 1 p.m. Public Input Hearing held at the Community College of Allegheny County, Boyce Auditorium, regarding his concerns about the calculation of the Distribution System Improvement Charge ("DSIC"). I spoke with Mr. Hoffman right after the hearing and we agreed that following up with members of our billing and rates team to provide a more in-depth description of how this particular charge was calculated would be helpful to him. Our internal team members followed up with him to provide the information needed to explain the calculation of the charge and resolve his concerns. For more information about this particular customer contact, please see the rebuttal testimony of Company witness, Carol Scanlon.

Lastly, regarding affordability, I would like to point out that natural gas costs are and will continue to bet significantly less than other fuels for many years to come[20]. Therefore, the Company will work hard to keep costs as low as possible while maintaining its commitment to providing safe and reliable service to its customers.

ROOT CAUSE ANALYSIS

Q. IN HER DIRECT TESTIMONY, WITNESS ALEXANDER, ON BEHALF OF OCA, PROVIDED STATISTICS REGARDING PEOPLES PERFORMANCE IN A NUMBER OF CATEGORIES MEASURED BY BCS. [21] WOULD YOU LIKE TO EXPOUND ON THOSE STATISTICS?

[20] See Huwar Direct, at page 23. https://playbook.aga.org/share/residential-prices
[21] Alexander, Page 15.

A. Yes. I believe context is always important in evaluating performance. In this particular case, while Ms. Alexander provided a comparison between 2022 and 2023 performance for Peoples in each of the categories, she did not benchmark that performance against Peoples' peers.

For example, on line one of her chart on page 15, she notes that Residential Customer Complaints rose by 1%. This is the lowest increase in complaints across the Major Natural Gas Distribution Companies ("NGDC") group. In fact, overall, Residential Customer Complaints for NGDCs increased by 9% from 2022 to 2023, with some NGDCs seeing increases exceeding 20%. In my experience, this shows exceptional performance by Peoples in satisfying customer concerns.

In the second category, Residential Payment Arrangement Requests ("PARs"), she notes that Peoples' rate increased by 12%. The overall increase in PARs for the NGDC group is 31%, showing that Peoples is far below the average for its group, and significantly below some of its peers who are experiencing increases of 30 and 41%. In the category of Inquiries, Peoples increase is 9% while the overall NGDC average is 13%.

Moving on to Justified Residential Complaints, while Ms. Alexander notes Peoples' rate is slightly down from 3.8% to 3%, it should also be recognized that the average for the NGDC grouping is 10%, more than three times the rate experienced by Peoples. Justified PARs average 4% for the NGDC group, while Peoples' 2023 rate was 3%. In fact, Peoples is second in the grouping behind UGI with a Justified PARs average of 2%, with all other NGDCs in the group exceeding 3%. The currently available 2023 Quarterly Update to UCARE Report for January to December 2023 containing these statistics is provided as Exhibit RFB-R4.

Q. WHY ARE THESE STATISTICS IMPORTANT?

A. The number of informal complaints received by BCS is an important indicator of a utility's performance. If customers are able to resolve concerns with their utility, it is not necessary for the customer to contact BCS for assistance. The number of PARs cases and associated rate of PARs can typically be correlated to collections activities. When customers have exhausted their opportunities for payment arrangements with their utilities, they have the right to contact BCS to request a further payment arrangement. The Justified Residential Complaint and Justified PARs ratings are particularly instructive as they are defined as "A complaint is considered "justified" if it is found that the utility did not comply with Commission Orders, policies, regulations, reports, Secretarial Letters or tariffs.". Further, according to BCS "The justified consumer complaint rate is a normalized ratio useful for comparing utility performance over time among the various utility companies." (Refer to Exhibit RFB-R5, Utility Consumer Activities Report and Evaluation 2022, Page 20). As reflected in the statistics I mentioned above, Peoples is performing exceptionally well with regard to Justified Residential Complaints in comparison with its peers and its Justified PARs are also below the average of the NGDC group.

Q. MS. ALEXANDER RAISES CONCERNS ABOUT HOW PEOPLES EVALUATES COMPLAINT TRENDS AND BCS FINDINGS. WOULD YOU LIKE TO RESPOND?

A. Yes. Ms. Alexander claims "There is no evidence of management's investigation of root causes and identification of reforms and internal actions to respond to routine root cause

analysis."[22] I strongly disagree with this characterization. As noted in the Company's responses to discovery, Peoples does evaluate every case received to determine the root cause of the complaint. Our team of specialists evaluate every aspect of the customer's concern to determine if anything is amiss. If we find something was not handled properly, the next step is to determine whether this was due to human error, system error or process error. If we find the case is due to human error, the specialist documents the incident in a spreadsheet that is shared with the employee's supervisor on a weekly basis so individual coaching can occur to prevent future similar mistakes. If the issue was caused by the billing system, for example, it is immediately escalated to IT and leadership in the Customer organization for resolution. If a process issue is found, our Compliance Supervisor works directly with Customer organization leadership and training to revise the process and ensure proper training and documentation occurs. It is the expectation for every member of the Compliance team that they determine the root cause of the customer's complaint as part of their process in responding to BCS.

Ms. Alexander states, "Peoples response is not a root cause analysis because there is no attempt to find similar instances that did not result in a customer complaint or BCS finding."[23] This is patently untrue. As I described, we look for system and process change that require modification and in the case of system issues, all affected accounts are identified for correction. Further, the coaching spreadsheet we use is cumulative. It allows our team members to identify trends in employee errors, leading to increased training for

[22] Alexander, Page 16, Lines 21 and 22.
[23] Alexander, Page 17, Lines 6 and 7.

agents and important notices sent to all Customer organization team members to highlight an issue that has arisen.

Q. MS. ALEXANDER NOTED AN INCREASE IN VERIFIED INFRACTIONS FROM 13 IN 2022 TO 33 IN 2023. SHE NOTES THIS IS A SIGNIFICANT INCREASE.[24] PLEASE RESPOND TO THIS INCREASE IN INFRACTIONS.

A. Sixty percent of the citations received in 2023 surrounded restoration terms quoted to customers following termination of service and denial letters issued. In all cases, coaching was provided to the individual employees who made these errors and enhancements to the system and training opportunities were also identified to improve performance in this area. Peoples' commitment to improving compliance does not end with the review of the citation. Because denial letters and restoration terms were an area of needed improvement, training held in March of this year, to prepare customer service representatives for the end of winter moratorium, reinforced these items.

Q. DO YOU HAVE ANY CLOSING REMARKS IN RELATION TO THE ROOT CAUSE ANALYSIS ISSUE?

A. Yes. I believe the results we have consistently achieved, from the number of informal cases to the justified complaint rates, reflect that Peoples has imbedded root cause analysis into its daily handling of customer complaints. If we were not identifying and resolving problems, our results would find us at the bottom of our peer group, rather than the top. I disagree with Ms. Alexander's recommendation that a "professionally conducted root

[24] Alexander, Page 15, Table found on line 3.

cause analysis and report on findings…where needed within 3 months and quarterly updates to stakeholders[25]" is necessary.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

[25] Alexander, Page 20, Lines 2 through 5.

PEOPLES USAG

JANUARY 24, 2024

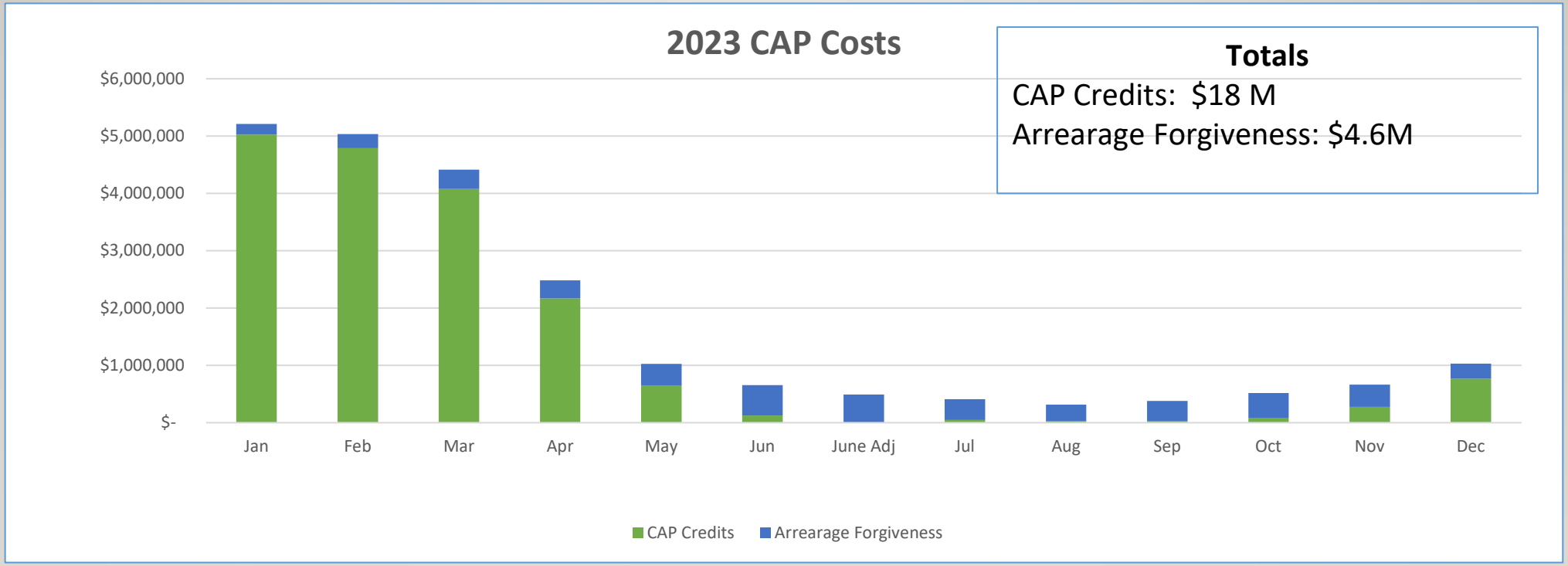
AGENDA

- Program Statistics
- Base Rate Case Filed
- CAP Enrollment
- 2024 Advisory Group Planning

CURRENT CAP PARTICIPATION

	October USAG	December
Peoples Division	30,126	28,159
Peoples Gas LLC	2,542	2,338
Total	**32,668**	**30,497**

CAP BENEFITS COST TRACKING



2022 costs were $21.9 million

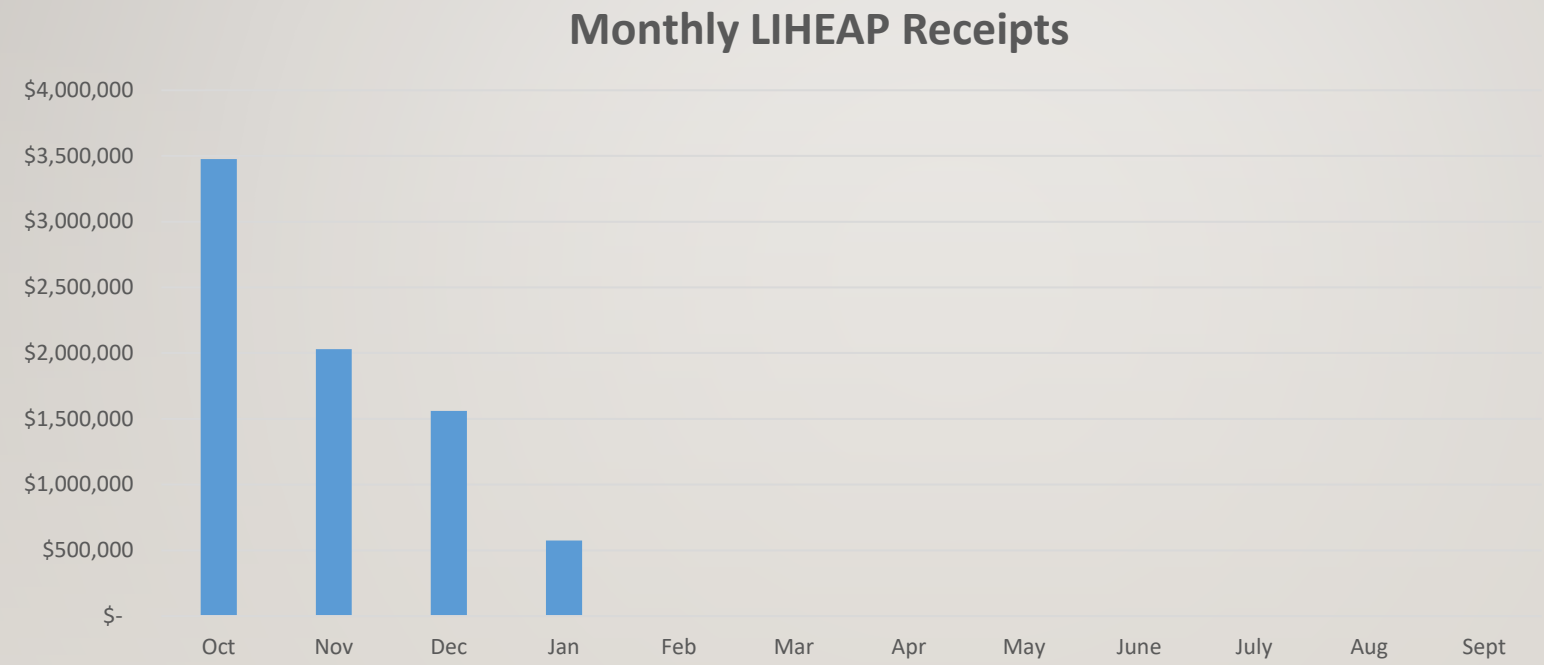
DOLLAR ENERGY FUND

Dollar Energy	Grant program opened 10/1/23
Grants provided through 1/19/24 Funds currently available	$174,090 to 410 households $781,579 current balance*

*Benefit of Dollar Energy Fund winter fundraising efforts will be added to the Fund.

Reminder: Peoples Natural Gas and Peoples Gas were combined into one Fund last year.

LIHEAP UPDATE



$19.5 million rec'd in 2022/2023 year.

$7.6 million program year-to-date receipts

LIHEAP Cash minimum $300/ LIHEAP Crisis maximum $1,000

Program scheduled to close April 5th.

LIURP UPDATE

	Peoples Natural Gas	Peoples Gas
2023 Spend	$3,469,514	$301,075
Completed Jobs	290	27
Former Peoples Division	176	
Former Equitable Division	*114*	
2024 Budget	*$2,753,076*	$511,410

**Please note: Figures above are preliminary as year-end closing processes are still underway.*

The former Equitable Gas has been fully integrated into Peoples Natural Gas and all jobs and dollars are reported to the PUC under Peoples Natural Gas.

BASE RATE CASE FILING

- Peoples filed a request with the PA Public Utility Commission in late December.
- The filing brings Peoples Natural Gas and Peoples Gas together in one tariff and one rider for the recovery of Universal Service program costs.
- Generally programs at both companies have the same eligibility requirements, with the exception of LIURP
  - Peoples Natural Gas requires 140 MCF annually for participation
  - Peoples Gas requires 120 MCF annually for participation
  - We proposed the combined LIURP program should use the lower threshold (120 MCF)

CAP PARTICIPATION

January 2023 USAG Meeting

Current CAP Participation

	October USAG	Current
Peoples Division	30,161	30,111
Peoples Gas LLC	2,539	2,548
Total	32,700	32,659

Today

CURRENT CAP PARTICIPATION

	October USAG	December
Peoples Division	30,126	28,159
Peoples Gas LLC	2,542	2,338
Total	**32,668**	**30,497**

Enrollment levels have been flat all year and are now dipping lower

LOW CAP PARTICIPATION

- During the pandemic, dismissal for failure to recertify was paused.
- Customers could enroll with verbal income if income documentation was not easily attainable during the pandemic.
- Gas rates in 2023 decreased, lowering residential bills
- Participation in LIHEAP is generally flat as well, despite outreach efforts
- Other natural gas utilities are also reporting flat and/or lower than desired participation

2024 FOCUS AREAS

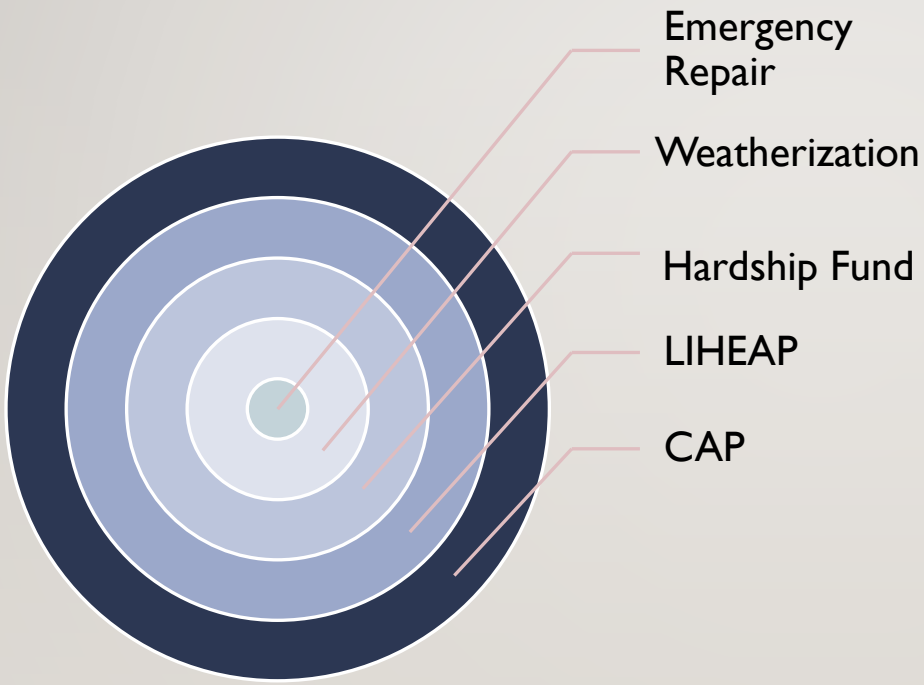
- Increased efforts at Dollar Energy Fund to ensure all grant recipients are also enrolled in CAP.
- Direct calls underway to LIHEAP recipients not on CAP to gain verbal income and permission to enroll in CAP.
- Enroll Emergency Repair Program participants in CAP if they are not yet participating (with customer permission).
- Working with Dollar Energy Fund on IVR improvements to improve experience & keep customers engaged.

Other utility best practices we should consider?

DISCUSSION: WHAT KEEPS ELIGIBLE CUSTOMERS FROM ENROLLING/REMAINING IN CAP?

- Awareness?
- Difficulty in applying?
- Confusion with LIHEAP?
- Problems with outreach messaging?
- What else?

REMEMBER: ASSISTANCE IS AVAILABLE

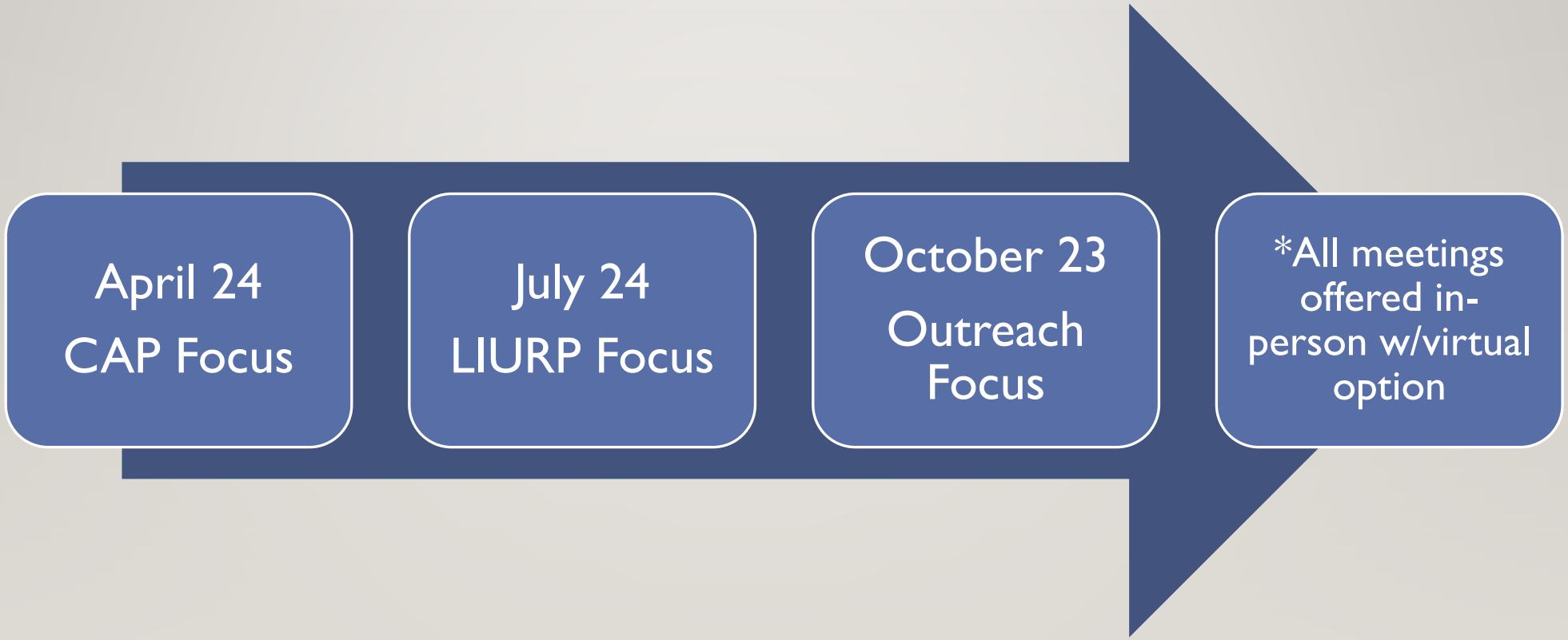


Email: PeoplesHelps@peoples-gas.com

Phone: 1-800-400-WARM (9276)

Website: https://www.peoples-gas.com/assistance

LOOKING AHEAD



PEOPLES™

An Essential Utilities Company

VIA ELECTRONIC MAIL

March 7, 2024

Rosemary Chiavetta, Executive Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
P.O. Box 3265
Harrisburg, PA 17105-3265

Re: M-2018-3003177 - Peoples Natural Gas Company 2019-2024 USECP
M-2020-3021343 - Peoples Gas Company 2019-2024 USECP
P-2020-3017641 - Amendment to Peoples Natural Gas Company 2015-2018 USECP
M-2014-2432515 - Peoples Natural Gas

Dear Secretary Chiavetta:

Please accept this Corrected Status Update that corrects the March 1, 2024 filing at Docket M-2020-3021343.

On behalf of the Peoples Natural Gas Company LLC ("Peoples"), Peoples is providing its Customer Education and Outreach Plan (the "CEOP"), along with a report on outreach activities during 2023 and various sample outreach materials.

Peoples continues to work closely with the Peoples Universal Service Advisory Group (the "USAG") on the development and refinement of its CEOP. The 2024 focus areas include the scheduling of events in partnership with groups in the North and South hills of Pittsburgh, evaluating the benefit of events that Peoples attends, identifying new events to participate in, and a general promotion of programs through various community groups. With regard to collaborative efforts with other utilities, the 2024 plan also focuses on working with other utilities to develop multi-utility outreach programs.

Please contact the undersigned at (724) 944-8114 or Rita Black, Director, Community Assistance Programs, at (412) 208-6530, should you have any questions or concerns regarding this matter.

Sincerely,

Stephen R. Perrott
Associate Counsel

375 North Shore Drive, Pittsburgh, PA 15212 • peoples-gas.com srperrott@peoples-gas.com

Peoples Natural Gas and Peoples Gas Consumer Education and Outreach Plan

Purpose: To provide a multi-pronged approach to consumer education with the goal of connecting eligible populations, for whom CAP is the most beneficial plan, to enrollment. In addition to CAP, promotion of other universal service programs, such as LIURP and Hardship Fund, along with external resources, such as LIHEAP, will be emphasized in appropriate activities. A detailed map of advertising and outreach efforts for CAP and LIHEAP, including the number of expected impressions, is provided as an attachment.

General Audience Education & Outreach Activities

Activity	Frequency
Annual focused bill inserts	Singular section of fall insert; expanded sections in November and December inserts
Website self-screening tool	Available 24/7
Website program information	Available 24/7
Social Media Advertisements	Multi-season messaging; aligning with colder weather; opening of energy assistance programs, etc.
Community education	Posters/handouts provided to schools, churches, agencies regarding LIHEAP and CAP. Transit and other paid media advertising promoting LIHEAP occurs throughout the heating season. LIURP outreach is also conducted, particularly in target areas.

Target Audience Education & Outreach Activities

Activity	Details
Incoming callers screened for eligibility	Application for service; bill payment discussions; termination/restoration calls; PFA calls; emergency repair & LIURP screening calls and PUC cases.
Help at Peoples Now (HAPN Program)	Field employees utilize dedicated phone line to refer customers for assistance with CAP and energy assistance to avoid termination.
Plain English Notice (prior to Termination)	Mailed via US mail to accounts identified as low income (FPL <=150% FPL) prior to termination notice mailing.
Termination Notices	Contain eligibility information regarding CAP and energy assistance.
Hardship Grant applications at Dollar Energy Fund agencies	Benefits of CAP described; customers enroll remaining balances after grant into CAP.
LIHEAP recipient identification	List generated weekly of LIHEAP grants received that week on accounts that are not currently enrolled in CAP to be used for outreach.
Community Events	Provide representatives and materials to local events: senior fairs, resource fairs, etc.
Western PA Utility Partnership Activities	Joint promotion of programs through coordinated outreach. Peoples and other

	western PA utilities have joined with the Greater Pittsburgh Food Bank to develop and distribute a utility support flyer. Work currently underway with other utilities and Pennsylvania Utility Law Project to develop a universal CAP application.
Supporting At-Risk Populations	Coordination with resettlement agencies to support enrollment in CAP at the time of initiation of service for refugees and immigrants. Peoples plans to continue to develop this model to include organizations helping those transitioning from homeless to housed.
Employee Outreach	Provide materials for employees to distribute in their communities (schools, libraries, etc.) Information shared each heating season on Peoples' intranet and electronic bulletin boards in all Peoples' locations to encourage employees to share information with their communities.
LIURP Outreach	LIURP outreach is conducted through community events such as food bank distributions or resource fairs. All LIURP participants are additionally screened for CAP & LIHEAP. LIHEAP applications are mailed annually to LIURP participants. Post-inspectors provide CAP & LIHEAP flyer as part of their inspection and visit to further educate participants.

Annual Training/Community Education Opportunities

Association	Training/Support
Project Destiny (Pittsburgh's north side)	Multi-pronged support including regular training for field workers who visit customer homes; case management assistance to enroll customers in CAP, resolve terminations, etc.; participation in bi-monthly resource meetings.
BeUtilityWise (Allegheny County & Johnstown)	Annual participation in planning, program development and presentations to attendees regarding CAP.
Allegheny County Area Agency on Aging Community Partner Meetings (PA Link)	Quarterly meetings with Area Agency on Aging Staff and other community partners to share resources
Greater Pittsburgh Food Bank Partnership	Distribution of CAP/LIHEAP information in food boxes; LIURP and CAP/LIHEAP outreach at food distribution sites.
Beaver Human Services Forum	Participate in monthly resource meetings and promote programs within network.
State Legislator Events	Provide presentations and one-on-one assistance, distribute materials, etc.

Resource Fairs	Held throughout the service territory, Peoples staff answer questions/distribute information
Train the Trainer events	Offer training to additional local agencies, community partners.
Outreach mailings	Targeting school districts with a high percentage of low income students; local churches; family support centers, social service organizations.

Special Needs/Limited English Proficiency/Protection From Abuse

- Outreach materials (posters/handouts) are currently prepared in both English and Spanish translations. As other languages from resettled community members increase the need for materials in other languages, Peoples will work with its partners to provide translated materials.
- Language Line used for LEP customers.
- All PFA customers screened for CAP and LIHEAP.
- All customers receiving other Universal Service programs (LIURP, Emergency Repair Program, CARES) are screened for CAP and LIHEAP.
- Support to vulnerable customers provided by CARES representatives when customers are having difficulty understanding and/or completing steps to enroll in CAP and apply for LIHEAP.
- Help at Peoples Now – Field employees provided with education and dedicated phone line to reach customer program staff to help customers that need CAP or other income eligible programs. Field employees also carry business cards to be given to customers to encourage them to call for assisstance.

CAP Enrollment Methods

Method	Availability
Via telephone (most commonly used method)	Monday through Friday from 8 a.m. to 4:30 p.m.; customers that must provide income documentation can submit those via email, fax, or US mail.
Dollar Energy Fund Screening Agency	Applications by appointment with local agency.
Self-service online application	Applications available at https://www.hardshiptools.org/MyApp/
Paper Application	Available through Peoples' CARES team.

Ease of Enrollment Efforts

- No income documentation required if customer has received LIHEAP.
- Customers who receive Hardship Grants that do not cover their entire balance are enrolled into CAP for remaining balance.
- Income submitted to other utility programs managed by CAP administrator (Dollar Energy Fund) can be used, with customer's authorization, to avoid multiple submissions.

- Applicants to Duquesne Light's CAP can provide their permission for DLC to share their data with Peoples to enroll in CAP.

2023 Lessons Learned

Activity	
Facebook Live Event	Very little engagement; 11 viewers during event. No participation from audience.
Mission of Mercy	The format and flow of the event has changed since Peoples first began participating. The community tabling is now limited and has very little interaction with patients. Going forward, Peoples will provide its program information to be included in the resource bags given to all incoming attendees.
Community Baby Showers/Family Fun Events	A number of these events were attended in 2023, however there is very little engagement in these types of settings. Peoples will prioritize 2024 events that are more resource focused.

2024 Outreach Focus Areas

Activity	
Agency 'Office Hours'	Schedule events in partnership with North Hills Community Outreach and South Hills Interfaith Movement. Events will offer customers opportunities to ask questions about their accounts, provide documents for CAP recertification, etc. Potentially expand to other agencies in different geographical areas.
Community Relationship Building	Continue to identify and connect with social workers, agency members, church leaders, school resource officers and others to promote programs.
Income below 50% FPL emphasis	Maintain partnerships with transitional/resettlement organizations (Jewish Family & Community Services; Hello Neighbor; Bethany Christian Services, etc.)
Partnering with western PA utilities	Working with electric, gas and water utilities in the western PA area to identify and develop multi-utility outreach opportunities.
Monthly CEOP internal meetings	Evaluate events attended for benefit; identify new events/contacts; continuous improvement of CEOP.

Date	Organization	Type (In person, Web, Radio, Telephone)	Program (CAP, LIHEAP, LIURP, Weatherization)	Outreach Material Taken	Audience (i.e. customers, social service providers)	Number of Participants	Area (Where is event located?)	Notes
Ongoing	Project Destiny	Web			Social service providers	40-50	North Side	Monthly resource meeting for providers to share updates
Ongoing	Jewish Family & Community Services, Hello Neighbor, & Bethany Christian Services	Web/phone			Refugee customers			Start services for refugee customers in conjunction with agencies
Sept-June	Beaver County Human Services Forum	In person			Social service providers	10-20	Beaver County	Monthly resource meeting for providers to share updates
1/23/23 - 3/3/23	Iheart Commercial Announcements	Radio	All		Radio Listeners			
01/27/23	Hello Neighbor	Webex						Met to discuss services offered and potential for collaborating
02/02/23	Ursuline Support Services	Webex						Met to discuss services offered and potential for collaborating
02/14/23	Rebuilding Together Pittsburgh	Webex						Met to discuss referrals back and forth
2/28/2023	Pittsburgh food Bank	In Person	Liheap	Flyers	Customers	140	Lernerville Speedway (Butler County)	
3/17/2023	Latino Commuity Center Family Fair	In person	CAP, LIURP, CARES, DEF	US programs awareness - Spanish version document	Hispanic community	13 families	1555 Broadway Ave. PGH 15216	
3/18/2023	Catholic Charities - Community Wellness Fair (Duquesne)	In Person	All	Flyers, postcards, LIHEAP apps	Customers	50	Duquesne	
3.20 to 3.27.2023	Lernerville Speedway	Social Media	LIHEAP and CAP	Lernerville's Social Media	Customers and social media followers of the speedway		Lernerville Speedway Social Media	Lernerville Facebook has 46,000 followers
4/1/2023	Spring Spectacular Community Festival (Ray of Hope & Westmoreland County BH/DS Office)	In Person	All	Flyers, postcards	Customers	300	Westmore and County	
4/1/2023	Catholic Charities - Community Wellness Fair (Butler)	In Person	All	Flyers, postcards, LIHEAP apps, LIURP	Customers	30	Butler	Low customer participation
4/3/23-4/10/23	Lernerville Speedway	Social Media	All	Stay Warm/Save Money cards	Customers and social media followers of the speedway		Lernerville Speedway Social Media	
4/11/2023	Bethlehem Haven	In person						Met to discuss services offered and potential for collaborating
4/18/2023	Refuge for Women	In person						Met to discuss services offered and potential for collaborating
4/21/2023	LIFE Pittsburgh	Webex						Met to discuss services offered and potential for collaborating
4/29/2023	UPMC/Magee-Womens in collaboration with Casa San Jose	In person Health and	All	Flyers, programs postcards, LIURP, Spanish LIHEAP application	Hispanic population	50	UPMC Neighbohood Center - 6401 Penn Avenue PGH, 15206	
5/9/2023	Beverly's Birthdays Community Baby Shower	In person	All	Postcards, LIURP flyers	Pregnant women/mothers of newborns	35	Hazelwood - Spartan Community Center	
5/13/2023	UPMC Health Plan Mommy & Me Baby Expo	In person	CAP/LIURP	Postcards, LIURP brochures	Pregnant women/families	10	UPMC Neighbohood Center - 6401 Penn Avenue PGH, 15206	
5/30/2023	Dukes Showcase	In person	US Programs	Postcards, 211, LIURP, CAP	Duquesne Community	20	Duquesne School	1st year event. Street event.
6/22/2023	Roots of Faith Neighborhood Table Dinner	In person	CAP/LIURP	CAP postcards, LIURP flyers	Customers	75	Sharpsburg	Duq Lt also attended
7/25/2023	Where to Turn Resource Fair	In person	All	CAP postcards, LIURP flyers	Social service providers		David L. Lawrence Convention Center	
7/26/2023	Beverly's Birthdays Community Baby Shower	In person	All	CAP postcards, LIURP flyers	Pregnant women/mothers of newborns		Pleasant Hills	
7/27/2023	Duquesne Light Utility Awareness Event	In person	All	CAP flyers, postcards	Penn Hills area seniors		Penn Hills Senior Center	
8/8/2023	Beverly's Birthdays Community Baby Shower	In person	CAP/LIURP	CAP postcards, LIURP flyers	Pregnant women/mothers of newborns	60	Hill District/Pittsburgh Marriott City Center	

Date	Organization	Type (In person WEB Radio Telephone)	Program (i.e. CAP/LIHEAP/LIURP/Weatherization)	Outreach Material Taken	Audience (i.e. customers, social service agencies)	Number of Participants	Area (Where is event located?)	Notes
8/16/2023	Breakthru Butler County	In Person	CAP/LIURP	CAP postcards, LIURP flyers, Smart Comfort Booklets	Elementary school-aged children and their families	45	Butler Montessori School at Convenant Presbyterian Church, Butler	Stuffed backpacks with school supplies and our program information
8/17/2023	Back to School Family Funfest (Westmoreland County Juvenile Probation)	In person	CAP/LIURP	CAP postcards, LIURP flyers	Families with school-aged children	300	Twin Lakes Park (Greensburg)	
8/26/2023	Rebuilding Together PGH/Lincoln-Lemington Collaborative Resource Fair	In person	CAP/LIURP	CAP postcards, LIURP flyers	Lincoln-Lemington community	50	Lincoln-Lemington/East Liberty	
8/30/2023	Beverly's Birthdays Community Baby Shower	In person	CAP/LIURP	CAP postcards, LIURP flyers	Pregnant women/mothers of newborns	25	Irwin	
8/30/2023	Latino Community Center	In person	All	US Spanish version information	Hispanic families	10	5750 Baum Blvd. PGH. 15206	
9/1/2023	Senior Care Authority	Telephone	CAP LIHEAP, ERP	Smart Comfort Booklet	Home Bound Seniors and Home Bound Disabled Adults along with Care givers and visiting health agents.		Allegheny Butler Lawrence and Armstrong	
9/2/2023	Pennsylvania Motor Speedway	In person	Furnace Repair, DEF, CAP and LIHEAP	Intermission interview	Spectators and media at the event	2000	Imperial, Pa Allegheny County near Star lake ampitheater	
9/12/2023	Beverly's Birthdays Community Baby Shower	In person	All	CAP flyers, postcards	Pregnant women/mothers of newborns/family members	100	Braddock	
9/13/2023	City in the Streets Event - W. Oakland	In person	CAP, LIURP	CAP postcards, LIURP flyers	Oakland area residents	200	Oakland/Oak Hill	
9/26/2023	Beverly's Birthdays Community Baby Shower	In person			Pregnant women/mothers of newborns		West Mifflin	
9/28/2023	Munhall Cares Main St Market Night	In person	CAP, LIURP, DEF	CAP postcards, LIURP flyers, DEF flyers	Munhall area residents	300	Main St. - Munhall	
9/29/2023	Allegheny County Area Agency on Aging newsletter	Phone			AAA staff		Allegheny County	Interview for monthly newsletter - sent out to all internal AAA staff
9/30/2023	Whitaker Community Cares Fall Community Day	In person	CAP/LIURP	CAP postcards/LIURP flyers	Whitaker and surrounding area		Whitaker/West Mifflin	
10/12/2023	Senator McAndrew & Senator Costa Senior Fair	In person			Senior customers		Greek Orthodox Social Hall - Oakmont	
10/14/2023	Veterans Leadership Program -Stand Down Pittsburgh	In person	All		Veterans	150	2934 Smallman Street, PGH. 15201	
10.13.2023	Lernerville Speedway	In pserson	LIHEAP CAP DEF	Jumbo Tron Ad	Spectators at the event and	15,000	Butler County	Jumbo Tron ads for LIHEAP, DEF and CAP
	Event			Bryan Colbert	social media postings			Track announcer script and interview with Bryan Colbert
				Eric Westendorf				during the event
10/18/2023	Rainbow Kitchen Resource Event	In person	LIHEAP/CAP/DEF/ LIURP	CAP postcards/LIURP flyers/LIHEAP flyers	Customers	80	Carnegie Library of Homestead	
10/20/2023	Beverly's Birthdays Community Baby Shower AK Valley Park Event Center New Kensington	In person	All	CAP postcards/LIURP flyers/LIHEAP flyers	Pregnant women/mothers of newborns/family members	50	New Kensington Event Center	
10/26/2023	Ross Fall Senior Resource Fair	In person	All	CAP postcards/LIURP flyers/LIHEAP flyers	Senior customers	Unknown	Ross Municipal Building	
10/26/2023	PULP Utility Consumer Event	In Person	LIHEAP/CAP/DEF/ LIURP	CAP postcards/LIURP flyers/LIHEAP flyers	Westmoreland County customers	1	Westmoreland County Community College	
10/27/2023, 10/28/2023	Mission of Mercy	In Person	All	CAP postcards/LIURP flyers/LIHEAP flyers	Customers	Unknown	David L Lawrence Convention Center	
11/15/2023	Rainbow Kitchen Resource Event	In Person	LIHEAP/CAP/DEF/ LIURP	CAP postcards/LIURP flyers/LIHEAP flyers & apps	Customers	35	Carnegie Library of Homestead	

Date	Organization	Type (in person, Web, Radio, Telephone)	Program (i.e. CAP, LIHEAP, LIURP, Weatherization)	Outreach Material Used	Audience (i.e. customers, social service agencies)	Number of Participants	Area (Where is event located?)	Notes
11/18/2023	Westmoreland County BH/DS Holiday Festival	In Person	All	LIHEAP/CAP flyers, LIURP flyers, CAP postcards	Customers - family oriented	40	AK Valley Park Event Center - New Kensington/Alle-Kiski Valley area	
12/9/2023	Isiah 117 Project	In Person	All	LIHEAP APPS and smart comfort booklets	Butler City Clergy and CYS. Butler Social service agencies	20	Butler City and County	

DON'T FORGET TO CHECK THESE BOXES OFF...

Your Save Money, Keep Warm Checklist:

- ☑ **PROGRAMFINDER**
  - — Our anonymous and confidential tool to find out if you're eligible for Peoples customer support programs.
  - — www.peoples-gas.com/help
- ☑ **DIAL: 800-400-WARM (9276)**
- ☑ **APPLY FOR CAP**
  - — An affordable bill based on household income.
  - — Earn monthly credits to reduce your balance faster.
- ☑ **APPLY FOR DOLLAR ENERGY FUND**
  - — A grant that helps you pay your gas bill.
- ☑ **LEARN ABOUT LIHEAP**
  - — A federally funded grant program that provides a grant directly to your gas bill account.

IT'S EASY!

WE'RE HERE TO HELP

PEOPLES

An Exelon Utilities Company

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MAKING GAS BILLS MORE AFFORDABLE

If your household income is at or below the limits provided below, you may be eligible. Please try our confidential online eligibility tool ProgramFinder, located at peoples-gas.com/help or call 1-800-400-WARM (9276) to learn more.

LOW INCOME HOME ENERGY ASSISTANCE PROGRAM (LIHEAP)

Provides grants for customers with limited incomes. LIHEAP is not a loan. It is a government grant applied directly to help pay your Peoples heating bill.

PEOPLES CUSTOMER ASSISTANCE PROGRAM (CAP)

Is an affordable monthly payment plan, based on income, for customers who meet income guidelines. Participants make reasonable payments to maintain gas service and can earn credits to reduce their balance each month.

2023 – 2024 INCOME GUIDELINES

150% Federal Poverty Level

Homeowners and Renters May Qualify When:

HOUSEHOLD SIZE*	GROSS MONTHLY INCOME	GROSS ANNUAL INCOME
1	$1,823	$21,870
2	$2,465	$29,580
3	$3,108	$37,290
4	$3,750	$45,000
5	$4,393	$52,710
6	$5,035	$60,420
7	$5,678	$68,130
8	$6,320	$75,840

For each additional person, add $642 to gross monthly income and $7,710 to gross annual income.

*All members of household regardless of age.

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HELP WHEN YOU NEED IT MOST

Your Pennsylvania utilities want to help you find the assistance you need. Funds are available now. Don't miss out!

There are also other types of customer assistance programs available that can help lower your monthly utility bills.

Most assistance programs are available to people that are at or below 150% of the federal poverty level (please see chart below). However, some programs provide help to those with higher incomes. Please contact your utility companies today to find out if you qualify!

2022-2023 Annual Household Federal Income Guidelines 150% Federal Poverty Level

HOUSEHOLD SIZE	MONTHLY INCOME
1	$1,699
2	$2,289
3	$2,879
4	$3,469
5	$4,059
6	$4,649
7	$5,239
8	$5,829
	More than 8 members, add $590

Columbia Gas
A NiSource Company

COLUMBIA GAS
ColumbiaGasPA.com/Assistance
1-888-460-4332

DLC
DUQUESNE LIGHT CO.

DUQUESNE LIGHT
DuquesneLight.com/Assistance
1-888-393-7600

PENNSYLVANIA AMERICAN WATER

PENNSYLVANIA AMERICAN WATER
pennsylvaniaamwater.com
1-800-565-7292

PEOPLES
An Essential Utilities Company

PEOPLES
Peoples-Gas.com/Assistance
1-800-400-WARM (9276)

PGH2O Pittsburgh Water & Sewer Authority

PITTSBURGH WATER & SEWER AUTHORITY
pgh2o.com/CAP
1-412-255-2457

rainbow kitchen
COMMUNITY SERVICES

Monthly Resource EVENT!

Wednesday November 15th

10:00am – Noon

Where: Carnegie of Homestead Library 510 E 10th Avenue, 15120

Everyone is Welcome & All Services/Information are FREE!

Who Will Be Here:

Rainbow Kitchen Community Services: providing information about programs and services offered; other available programs and resources in the community
Allies for Health+Wellness: providing information about programs & services; free testing for HIV, Hepatitis C, Syphilis
Animal Friends: program information and free pet food
Community Life: providing program information about helping older adults to live independently at home
CSL Plasma: providing information about the importance of donating plasma
Deb's Clothing Closet: providing free clothing for men & children
Dress for Success: providing clothing, accessories & employment assistance to women
Duquesne Light Duquesne Light Universal Services/Holy Family Institute: completing applications for Customer Assistance Program (CAP) and Dollar Energy and providing 2023/24 LILHEAP information
First Class Marketing: Affordable Connectivity Program. Free cellphone or table to qualified individuals
Goodwill: providing program information for youth and adults, including free job trainings and GED
PA Women Work: helping women find financial stability through empowerment, employment & economic independence
Peoples Gas Company: providing information about utility assistance and programs
Steel Valley Family Center: providing information about programs and services offered
Unity Recovery: non-clinical, peer-based recovery support services to individuals, family members, and loved ones. Increasing recovery capital through achieving goals related to things such as employment, education, financial health, personal safety, relationships, and more.

And More!!

Hope to see you there!

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LINCOLN LEMINGTON
COLLABORATIVE

LINCOLN-LEMINGTON-BELMAR RESIDENTS
JOIN US FOR A

COMMUNITY & HOUSING RESOURCE FAIR

MEET COMMUNITY ORGANIZATIONS + FREE ENTERTAINMENT, FOOD & DRINK

AUGUST 26TH
12 pm - 6 pm
Rain or shine!

CATALYST ACADEMY
7061 Lemington Avenue

Help us build a better community! Learn more about the Community Vision Plan for Lincoln Lemington and get to know organizations providing resources for our residents.

Rebuilding Together. Pittsburgh

RISE HIGH

Catalyst Academy Charter School

OMICELO CONSTRUCTION GROUP

Questions? Contact Wave at 412.573.9217 or events@waveoflife.org.

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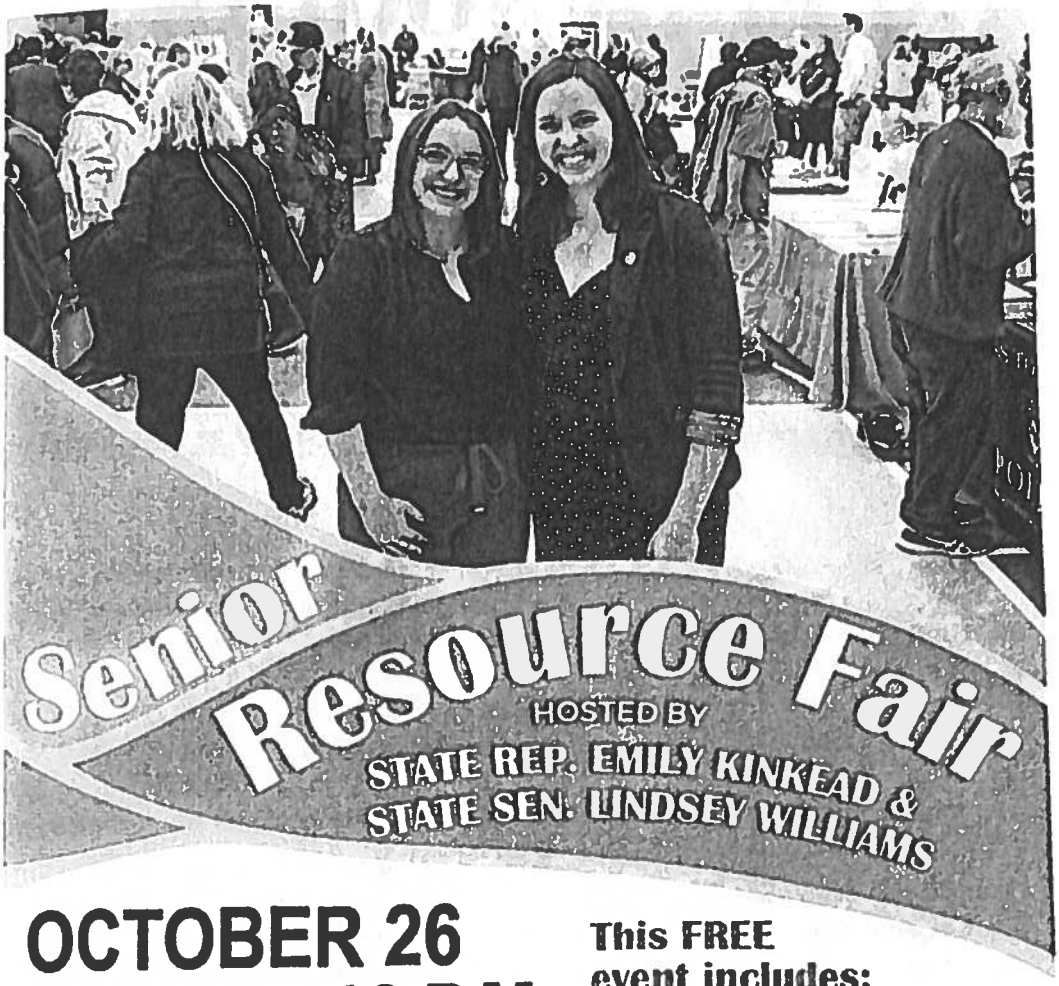

OCTOBER 26
10 A.M. – 12 P.M.

ROSS MUNICIPAL BUILDING
1000 ROSS MUNICIPAL DR.
PITTSBURGH, PA 15237

This FREE event includes:

- ☑ Vaccination Clinic
- ☑ Disposal of Unused or Expired Medication
- ☑ And much more!

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PEOPLES™ | An Essential Utilities Company

[redacted]

[redacted]

RE: ACCOUNT NO:
[redacted]
SERVICE ADDRESS:
[redacted]
Meter NO:

Enrolling in the Customer Assistance Program (CAP) Will Stop Termination

When you sign up, any balance you owe is frozen. You will receive a credit towards that balance every month when you make your CAP payment.

CAP has several benefits:

- **Lower monthly payment.**
- **No late fees.**
- **Pay off your frozen balance faster.**

To learn more and apply:

Call Peoples today at 1-800-400-9276 Monday through Friday from 7 a.m. to 5 p.m. to learn more and apply over the phone. You can also apply online at https://www.hardshiptools.org/MyApp/.

You may be eligible if the gross income (income before taxes) for adults in the household is at or below:

Number of people in your household	Total Monthly Income (before taxes)
1	$1,823
2	$2,465
3	$3,108
4	$3,750
5	$4,393
6	$5,035
7	$5,678
8	$6,320
For each extra person, add:	$642

PEOPLES NATURAL GAS

To learn more, call Peoples at 1-800-400-9276. We can help you enroll today.

Para obtener más información, llame a Peoples al 1.800.400.9276. Le ayudaremos a inscribirse.

Quarterly Update to UCARE Report

January – December 2023

Introduction

The quarterly update to the annual UCARE presents data on customer service performance for jurisdictional utilities in the electric, gas, water and telecommunications industries. The update provides a snapshot of overall BCS activity including the volume of Consumer Complaints, Payment Arrangement Requests (PARs) and Inquiries. Industry specific tables show the volume of activity for the major utilities within the electric, gas, water, municipal water, municipal sewer and telecommunications industries. The quarterly update contains current information that can be reviewed by utility management, consumers, Commission staff and other interested parties. The Commission will continue to produce the annual UCARE report which will present more detailed findings regarding utility performance.

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BCS Activity

Total Volume of Consumer Complaints, Payment Arrangement Requests (PARs) and Inquiries by Industry

January through December 2023

Industry	Consumer Complaints		PARs		Inquiries
	Residential	Commercial*	Residential	Commercial*	All Classes
Electric	11,970	638	26,976	226	8,930
Gas	2,568	141	12,382	270	3,280
Water	1,479	95	2,556	18	1,817
Telecommunications	1,099	153	15	0	765
Other**	57	5	35	2	1,941
Total	**17,173**	**1,032**	**41,964**	**516**	**16,733**

*Please note, commercial customer contacts are excluded from the analyses that appear later in this report, as BCS' regulatory authority has largely been confined to residential accounts.

**Sewer and steam heat complaints are designated as "other" in this table.

Major Electric Distribution Companies

Consumer Complaint, Payment Arrangement Requests (PARs) and Inquiry Statistics for Major Companies

January through December 2022/2023

Company	Residential Consumer Complaints			Residential PARs			Inquiries (Residential & Commercial)		
	2022	2023	Percent Change	2022	2023	Percent Change	2022	2023	Percent Change
Duquesne	639	626	-2%	2,334	2,743	18%	673	961	43%
Met-Ed	634	791	25%	2,494	3,128	25%	849	1,010	19%
PECO	1,614	1,532	-5%	6,071	6,777	12%	1,807	1,647	-9%
Penelec	618	682	10%	2,769	3,284	19%	970	1,098	13%
Penn Power	170	206	21%	871	984	13%	288	264	-8%
PPL	807	5,917	633%	4,954	5,897	19%	1,587	2,026	28%
West Penn	752	862	15%	2,981	3,365	13%	1,023	1,139	11%
Total	**5,234**	**10,616**	**103%**	**22,474**	**26,178**	**16%**	**7,197**	**8,145**	**13%**

Major Electric Distribution Companies

Percent of Justified Residential Consumer Complaints/Payment Arrangement Requests (PARs)

January through December 2023

Company	Consumer Complaints		PARs	
	Number Received	Percent Justified (Closed & Evaluated)*	Number Received	Percent Justified (Closed & Evaluated)*
Duquesne	626	5%	2,743	4%
Met-Ed	791	5%	3,128	3%
PECO	1,532	8%	6,777	2%
Penelec	682	6%	3,284	5%
Penn Power	206	1%	984	4%
PPL	5,917	36%	5,897	3%
West Penn	862	4%	3,365	2%
Total	**10,616**		**26,178**	
Average		**11%**		**3%**

*The ratio of consumer complaints or payment agreement requests found justified to the number of consumer complaints or payment agreement requests that BCS evaluated as of 12/30/2023.

Major Electric Distribution Companies

Response Time to Residential
Consumer Complaints/Payment Arrangement Requests (PARs)

January through December 2022/2023

Company	Average Time in Days			
	Consumer Complaints		PARs	
	2022	2023*	2022	2023*
Duquesne	16.5	15.3	6.1	5.5
Met-Ed	18.4	14.8	7.8	5.7
PECO	16.0	16.1	4.8	4.9
Penelec	18.9	14.7	8.8	5.8
Penn Power	18.7	14.6	9.1	5.9
PPL	24.1	17.0	11.8	12.8
West Penn	18.7	15.5	8.3	5.8
Major Electric	**18.4**	**16.3**	**8.0**	**7.1**

*The 2023 statistics are based on preliminary data on response time from the Consumer Services Information System as of 12/30/2023.

Major Natural Gas Distribution Companies

Consumer Complaint, Payment Arrangement Request (PAR) and Inquiry Statistics for Major Companies

January through December 2022/2023

Company	Residential Consumer Complaints			Residential PARs			Inquiries (Residential & Commercial)		
	2022	2023	Percent Change	2022	2023	Percent Change	2022	2023	Percent Change
Columbia	168	204	21%	552	604	9%	284	263	-7%
National Fuel	66	84	27%	353	437	24%	103	118	15%
Peoples	344	348	1%	1,018	1,145	12%	272	297	9%
Philadelphia Gas Works	1,095	1,124	3%	4,002	5,645	41%	1,313	1,407	7%
UGI Gas	453	551	22%	3,396	4,407	30%	693	936	35%
Total	**2,126**	**2,311**	**9%**	**9,321**	**12,238**	**31%**	**2,665**	**3,021**	**13%**

Major Natural Gas Distribution Companies

Percent of Justified Residential Consumer Complaints/Payment Arrangement Requests (PARs)

January through December 2023

Company	Consumer Complaints		PARs	
	Number Received	Percent Justified (Closed & Evaluated)*	Number Received	Percent Justified (Closed & Evaluated)*
Columbia	204	4%	604	4%
National Fuel	84	16%	437	6%
Peoples	348	3%	1,145	3%
Philadelphia Gas Works	1,124	17%	5,645	5%
UGI Gas	551	8%	4,407	2%
Total	**2,311**		**12,238**	
Average		**10%**		**4%**

*The ratio of consumer complaints or payment agreement requests found justified to the number of consumer complaints or payment agreement requests that BCS evaluated as of 12/30/2023.

Major Natural Gas Distribution Companies

Response Time to Residential
Consumer Complaints/Payment Arrangement Requests (PARs)

January through December 2022/2023

Company	Average Time in Days			
	Consumer Complaints		PARs	
	2022	2023*	2022	2023*
Columbia	8.1	6.2	1.6	1.5
National Fuel	16.7	16.1	7.0	5.0
Peoples	4.7	5.6	1.9	1.8
Philadelphia Gas Works	19.6	18.2	13.1	10.5
UGI Gas	10.6	15.2	4.0	6.5
Major Gas	**14.2**	**14.6**	**7.7**	**7.6**

*The 2023 statistics are based on preliminary data on response time from the Consumer Services Information System as of 12/30/2023.

Major Water Utilities

Consumer Complaint, Payment Arrangement Request (PAR) and Inquiry Statistics for Major Companies

January through December 2022/2023

Company	Residential Consumer Complaints			Residential PARs			Inquiries (Residential & Commercial)		
	2022	2023	Percent Change	2022	2023	Percent Change	2022	2023	Percent Change
Aqua PA	300	258	-14%	360	508	41%	285	166	-42%
PA American	681	888	30%	1,499	1,770	18%	531	765	44%
Other Class A	66	65	-2%	77	128	66%	84	73	-13%
Total	**1,047**	**1,211**	**16%**	**1,936**	**2,406**	**24%**	**900**	**1,004**	**12%**

Major Water Utilities

Percent of Justified Residential Consumer Complaints/Payment Arrangement Requests (PARs)

January through December 2023

Company	Consumer Complaints		PARs	
	Number Received	Percent Justified (Closed & Evaluated)*	Number Received	Percent Justified (Closed & Evaluated)*
Aqua PA	258	30%	508	30%
PA American	888	19%	1,770	17%
Other Class A	65	13%	128	13%
Total	**1,211**		**2,406**	
Average		**21%**		**22%**

*The ratio of consumer complaints or payment agreement requests found justified to the number of consumer complaints or payment agreement requests that BCS evaluated as of 12/30/2023.

Major Water Utilities

Response Time to Residential
Consumer Complaints/Payment Arrangement Requests (PARs)

January through December 2022/2023

Company	Average Time in Days			
	Consumer Complaints		PARs	
	2022	2023*	2022	2023*
Aqua PA	3.1	1.6	1.3	0.9
PA American	14.9	14.2	5.1	6.3
Other Class A	14.4	16.0	13.6	11.9
Major Water	**11.5**	**11.5**	**4.8**	**5.4**

*The 2023 statistics are based on preliminary data on response time from the Consumer Services Information System as of 12/30/2023.

Municipal Water & Sewer Utilities

Consumer Complaint, Payment Arrangement Request (PAR) and Inquiry Statistics for Major Companies

January through December 2022/2023

Company	Residential Consumer Complaints			Residential PARs			Inquiries (Residential & Commercial)		
	2022	2023	Percent Change	2022	2023	Percent Change	2022	2023	Percent Change
PWSA-Water*	174	226	30%	34	91	168%	63	53	-16%
PWSA-Sewer*	26	28	8%	8	32	300%	13	16	23%
Total	**200**	**254**	**27%**	**42**	**123**	**193%**	**76**	**69**	**-9%**

*PWSA informal complaint data is designated as PWSA-Water or PWSA-Sewer based upon the nature of the complaint.

Municipal Water & Sewer Utilities

Response Time to Residential
Consumer Complaints/Payment Arrangement Requests (PARs)

January through December 2022/2023

Company	Average Time in Days			
	Consumer Complaints		PARs	
	2022	2023*	2022	2023*
PWSA-Water**	13.0	24.2	11.4	25.5
PWSA-Sewer**	14.8	25.1	8.9	26.3
Municipal Water & Sewer	**13.2**	**24.3**	**10.9**	**25.7**

*The 2023 statistics are based on preliminary data on response time from the Consumer Services Information System as of 12/30/2023.
**PWSA informal complaint data is designated as PWSA-Water or PWSA-Sewer based upon the nature of the complaint.

Major Local Telecommunications Companies

Consumer Complaint, Payment Arrangement Request (PAR) and Inquiry Statistics for Major Companies

January through December 2022/2023

Company	Residential Consumer Complaints			Residential PARs			Inquiries (Residential & Commercial)		
	2022	2023	Percent Change	2022	2023	Percent Change	2022	2023	Percent Change
Brightspeed (fka CenturyLink)	132	87	-34%	0	1	n/a	45	27	-40%
Frontier Commonwealth	226	249	10%	2	0	-100%	63	54	-14%
Verizon North	29	35	21%	0	0	0%	11	17	55%
Verizon PA	586	522	-11%	7	9	29%	246	288	17%
Windstream	89	92	3%	2	1	-50%	21	30	43%
Total	**1,062**	**985**	**-7%**	**11**	**11**	**0%**	**386**	**416**	**8%**

Major Local Telecommunications Companies

Percent of Justified Residential Consumer Complaints/Payment Arrangement Requests (PARs)

January through December 2023

Company	Consumer Complaints		PARs	
	Number Received	Percent Justified (Closed & Evaluated)*	Number Received	Percent Justified (Closed & Evaluated)*
Brightspeed (fka CenturyLink)	87	47%	1	0%
Frontier Commonwealth	249	67%	0	0%
Verizon North	35	44%	0	0%
Verizon PA	522	43%	9	0%
Windstream	92	28%	1	0%
Total	**985**		**11**	
Average		**49%**		**0%**

*The ratio of consumer complaints or payment agreement requests found justified to the number of consumer complaints or payment agreement requests that BCS evaluated as of 12/30/2023.

Major Local Telecommunications Companies

Response Time to Residential
Consumer Complaints/Payment Arrangement Requests (PARs)

January through December 2022/2023

Company	Average Time in Days			
	Consumer Complaints		PARs	
	2022	2023*	2022	2023*
Brightspeed (fka CenturyLink)	25.5	25.7	0.0	28.0
Frontier Commonwealth	19.7	15.8	8.0	0.0
Verizon North	17.1	15.7	0.0	0.0
Verizon PA	14.2	14.9	11.3	10.3
Windstream	16.0	14.2	18.5	20.0
Major Telecommunications	**17.0**	**16.1**	**12.0**	**13.0**

*The 2023 statistics are based on preliminary data on response time from the Consumer Services Information System as of 12/30/2023.

Compliance

Snapshot of Residential Verified Infraction Statistics by Industry*
Informal Complaints Opened January through December 2023

ELECTRIC	Duquesne	Met-Ed	PECO	Penelec	Penn Power	PPL	West Penn
Chapter 56	68	74	155	99	21	1,138	66
Title 66 and Other	0	0	8	2	1	38	2
Total	**68**	**74**	**163**	**101**	**22**	**1,176**	**68**

GAS	Columbia	National Fuel	Peoples	Philadelphia Gas Works	UGI Gas
Chapter 56	16	21	33	341	174
Title 66 and Other	0	0	0	14	2
Total	**16**	**21**	**33**	**355**	**176**

WATER	Aqua PA	PA American	Other Class A
Chapter 56	167	266	14
Title 66 and Other	7	10	3
Total	**174**	**276**	**17**

TELECOMMUNICATIONS	Brightspeed (fka CenturyLink)	Frontier Commonwealth	Verizon North	Verizon PA	Windstream
Chapter 30	0	21	2	7	1
Chapter 63	32	159	7	267	21
Chapter 64	7	4	2	35	8
Title 66 and Other	13	30	3	40	5
Total	**52**	**214**	**14**	**349**	**35**

*Infraction data on this page is subject to change if the utility disputes infraction(s) or BCS staff discovers additional infraction(s). Final infraction statistics will appear in the annual UCARE report.

Glossary of Terms

Consumer Complaint – Complaint to BCS involving billing, service, rates and other issues not related to requests for payment terms.

Infraction – A misapplication or infringement of a Commission regulation, particularly the standards and billing practices for residential utility service.

Inquiry – Consumer contact to BCS that require no follow-up investigation beyond the initial contact.

Major Electric Distribution Companies – Electric distribution companies with more than 100,000 residential customers.

Major Local Telecommunications Companies – Local telecommunications companies with more than 50,000 residential customers.

Major Natural Gas Distribution Companies – Natural gas distribution companies with more than 100,000 residential customers.

Major Water Utilities – Non-municipal water utilities with annual revenues of $1,000,000 or more for three years in a row are classified as "Class A." The tables in this report present individual statistics for the two largest Class A water companies, PAWC and Aqua, and for the "Other Class A" companies as a whole. The "Other Class A" water companies are Audubon Water, Columbia Water, Community Utilities, Newtown Artesian Water, Veolia Bethel, Veolia PA, and York Water.

Municipal Water and Sewer Utilities – Pittsburgh Water & Sewer (PWSA), a municipal utility, came under the Commission's regulatory authority effective 04/01/18. PWSA informal complaint data is designated as PWSA-Water or PWSA-Sewer based upon the nature of the complaint. Since PWSA's transition to PUC regulation is ongoing, as described in the annual UCARE report, it is premature for BCS to report data regarding justified consumer complaints/PARs or infractions.

Payment Arrangement Request (PAR) – Consumer request for payment plans in the following situations: suspension/termination of service is pending, service is suspended/terminated and in need of restoration, or the customer wants to retire an arrearage.

Justified Consumer Complaint – A consumer complaint where, prior to BCS intervention, the company did not comply with Commission Orders, policies, regulations, reports, Secretarial Letters, tariffs or guidelines when the consumer brought the complaint to the company's attention. The justified consumer complaint rate equals the number of justified consumer complaints for each 1,000 residential customers.

Justified PAR – A Payment Arrangement Request where, prior to BCS intervention, the company did not comply with Commission regulations, reports, Secretarial Letters, tariffs or guidelines. The justified payment arrangement request rate equals the number of justified payment arrangement requests for each 1,000 residential customers.

Response Time – The time span in days from the date BCS first contacts the utility regarding a consumer complaint or PAR, to the date on which the utility provides BCS with its report.

Utility Consumer Activities Report and Evaluation

2022

PENNSYLVANIA PUBLIC UTILITY COMMISSION

PAPUC

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Bureau of Consumer Services

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Consumer Access to the PUC ..... Inside Back Cover

Executive Summary

The Bureau of Consumer Services presents its annual assessment of the major utilities in the 2022 Utility Consumer Activities Report and Evaluation (UCARE). Assembled in one comprehensive report, the UCARE focuses on case handling activity relative to the major electric, gas, water, and telecommunications utilities. The annual UCARE reports and the quarterly UCARE snapshots posted on the PUC website have been prepared to meet the statutory reporting requirement of 66 Pa.C.S. § 308(d) and to communicate to the public and the utility industry how jurisdictional utilities performed relative to informal complaint activity in 2022.

As reflected in the data presented in the report, the number of complaints received was impacted starting in 2020 due to the direct and indirect effects of the COVID-19 pandemic and efforts to address the public health crisis. The COVID-19 pandemic impacted other data as well, such as EDCs and NGDCs conducting fewer terminations and reconnections in 2020, compared to previous years. In 2022, terminations and reconnections were much closer to pre-pandemic levels.

Due to the low volume of complaints about the non-major companies in 2022, BCS presents a summary table listing the non-major companies with five or more residential informal complaints in Appendix C. The informal complaints in Appendix C include both Consumer Complaints and payment arrangement requests (PARs).

Assistance programs for the electric and gas industries are presented in the Universal Service Programs and Collections Performance reports, while assistance programs for the water and telecommunications industries are highlighted in Chapters 9 and 10 of the annual UCARE report.

In 2022, BCS received a total of 115,609 contacts by consumers. Of those contacts, 47,727 needed further investigation (NFIs), which was up from the previous year but still less than the pre-COVID year 2019. BCS also received 16,953 contacts that were addressed on the initial contact. These First Contact Resolutions (FCRs) may also represent some non-jurisdictional dismissals. The top reasons for contact were calls regarding termination or suspension of service and non-jurisdictional complaints.

Billing disputes were the number one reason for Consumer Complaints in the electric, gas, and water industries in 2022. The number one reason for residential telecommunications Consumer Complaints is unsatisfactory service.

Prior to 2022, BCS used a third party to conduct the BCS Feedback Survey, sampling complainants who have contacted BCS. In 2022, BCS took the function in-house and found opportunities to recalibrate the survey process by changing the delivery of the surveys from USPS hard copy to electronic methods, taking advantage of new technology. This change allowed BCS to separate the Intake function, those staff who open the complaints, from the Investigative function. The survey sampling percentage and number of surveys sent were significantly increased from an annual average of approximately 5,000 surveys to over 31,000 Intake surveys and over 28,000 Investigative surveys in 2022.

1. Introduction

This Utility Consumer Activities Report and Evaluation (UCARE) is prepared annually by the Public Utility Commission's (PUC's) Bureau of Consumer Services (BCS) in accordance with the requirements found at 66 Pa.C.S. § 308.1(a). The report details utility compliance with statutes and regulations concerning residential customer service and billing matters as reflected in:

- Title 66 (Public Utility Code):
  - Chapter 14 Responsible Utility Customer Protection Act
  - Chapter 15 Service and Facilities
  - Chapter 22 Natural Gas Choice and Competition Act
  - Chapter 28 Electricity Generation Customer Choice and Competition Act
  - Chapter 30 Alternate Form of Regulation of Telecommunications Services
- 52 Pa. Code:
  - Chapter 53 Tariffs for Noncommon Carriers
  - Chapter 54 Electricity Generation Customer Choice
  - Chapter 55 Noncarrier Rates and Practices
  - Chapter 56 Standards and Billing Practices for Residential Utility Service
  - Chapter 57 Electric Service
  - Chapter 59 Gas Service
  - Chapter 62 Natural Gas Supply Customer Choice
  - Chapter 63 Telephone Service
  - Chapter 64 Standards and Billing Practices for Residential Telephone Service
  - Chapter 65 Water Service
  - Chapter 111 Marketing and Sales Practices for the Retail Residential Energy Market
- Utility Tariffs approved by the PUC:
  - Electric Tariffs
  - Natural Gas Tariffs
  - Water/Wastewater Tariffs
  - Telecommunications Tariffs

The data presented in this report is obtained from informal complaints received by the BCS in 2022 concerning the electric, natural gas, water and telecommunications industries under the PUC's jurisdiction. For comparative purposes, the 2022 data in this report is presented alongside data from prior years. Where appropriate, some of the data presented in this report is based on a statistically valid sampling of informal complaints and is noted as such throughout the report.

Impact of COVID-19 Pandemic

The information in this report cannot be adequately analyzed without first acknowledging the impact of the COVID-19 pandemic. The unprecedented challenges significantly impacted the global economy. Federal and state governments and utilities implemented emergency policy measures and operational adjustments. The PUC office buildings were closed to the public from March 16, 2020, until Aug. 2, 2021, with limited BCS staff working remotely for the first few weeks. The PUC Hotline was initially open to take emergency calls only. BCS was fully operational by July 1, 2020.

To address public health and safety concerns, on March 6, 2020, former Governor Tom Wolf issued a Proclamation of Disaster Emergency in response to the COVID-19 pandemic (*Emergency Proclamation*).[1] On March 13, 2020, former Chairman Gladys Brown Dutrieuille issued an *Emergency Order* which prohibited jurisdictional public utilities from terminating service during the duration of the *Emergency Proclamation* unless termination of service was necessary to ameliorate a safety emergency or unless otherwise determined by the Commission. The *Emergency Order* also encouraged utilities to reconnect previously terminated service if such action could be done safely.[2]

On Oct. 13, 2020, the Commission entered an Order modifying the *Emergency Order* (October 2020 Order).[3] The October 2020 Order lifted the termination moratorium for certain customers effective Nov. 9, 2020, but continued the termination moratorium for "protected customers" at or below 300% of the Federal Poverty Income Guidelines (FPIG), under certain conditions, and established protections for certain residential and small business customers. The termination moratorium and protections established by the October 2020 Order expired on March 31, 2021.

As shown throughout this report, the pandemic impacted the number of complaints received in 2020 and 2021 compared to previous years. Although complaint levels in 2022 started to rise more closely to pre-pandemic levels, BCS expects anomalous caseload activity to continue for the next several years and will monitor trends to assess related impacts and recovery efforts.

[1] https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/2020-03/Pennsylvania%2020200306-COVID19-Digital-Proclamation.pdf
[2] See Public Utility Service Termination Moratorium Proclamation of Disaster Emergency-COVID-19, Docket No. M-2020-3019244 (Emergency Order ratified on March 26, 2020). https://www.puc.pa.gov/pcdocs/1658422.pdf
[3] See Public Utility Service Termination Moratorium - Modification of March 13th Emergency Order, Docket No. M-2020-3019244. https://www.puc.pa.gov/pcdocs/1682379.doc

2. The Bureau of Consumer Services (BCS)

The Pennsylvania PUC's BCS was established by 66 Pa.C.S. § 308. BCS is charged with investigating and issuing final determinations on all informal complaints. BCS began investigating and writing decisions on informal complaints in April 1977. Since that time, BCS has resolved over 4.1 million informal complaints.

Informal Complaints Received by BCS

Informal complaints provide an avenue for consumers to voice concerns and seek assistance from a neutral party. These are the foundation for BCS's compliance monitoring of utility performance. Complainants are required by statute and Commission regulations to attempt to resolve problems directly with utilities prior to filing a complaint or requesting a payment arrangement with the PUC. Although exceptions are permitted for extenuating circumstances, BCS generally handles complaints where the utility and its customers could not find mutually satisfactory resolutions to problems.

Contacts to BCS generally fall into three basic categories, including:

- FCRs (First Contact Resolution complaints),
- NFIs (complaints that Need Further Investigation), primarily consisting of Consumer Complaints and Payment Arrangement Requests (PARs), and
- GIs (General Inquiries do not require detailed customer information or investigation).

BCS collectively refers to the FCR and NFI categories as "informal complaints." FCRs in previous reports were formerly referred to as "inquiries." These complaints are informal complaints resolved during the first contact or call-back. FCRs include informal complaints that do not require further investigation on the part of BCS.

BCS reclassified some contacts that originated as NFIs into the General Inquiry (GI) category because it is not appropriate to count these contacts as informal complaints. Examples include complaints that were found to be duplicates, complaints filed against the wrong utility, and complaints where customers had not previously contacted their utilities. GIs may be included within the FCRs. FCRs are excluded from the analysis in this report.

When a consumer contacts the PUC with an informal complaint against a utility, BCS notifies the utility that a complaint or PAR has been filed. The utility sends all records concerning the complaint to BCS, including records of its contacts with the complainant. A BCS investigator reviews the records, interacts with both the complainant and utility as necessary, renders a decision, and closes the complaint.

In 2022, BCS received 115,609 contacts from consumers including 47,727 contacts that required further investigation (NFIs) and 16,953 FCRs. BCS determined 88% of the 2022 complaints investigated and reviewed were appropriately handled by the subject utilities prior to BCS intervention.

BCS introduced its bilingual Artificially Intelligent Virtual Agent (Aiva) to the PUC website's complaint page in June 2022 and to the BCS Hotline in late July 2022. Aiva facilitates call handling and case intake. Aiva also provides a new option to assist Spanish speaking complainants. Performance statistics for Aiva will be presented in the 2023 UCARE report.

The primary focus of this report is NFI complaints. NFI complaints are categorized as Consumer Complaints and PARs. Consumer Complaints and PARs are taken in by BCS for further investigation. BCS

classifies Consumer Complaints as **disputes** related to utility billing, service delivery and repairs, etc. PARs are classified as contacts where the primary request is to establish payment terms.

BCS Management of Informal Complaint Data

To manage and use its complaint data effectively, BCS maintains both an internal complaint database and the Consumer Services Information System (CSIS), maintained by the Pennsylvania State University. These systems enable BCS to aggregate and analyze the thousands of informal complaints it receives annually to identify trends and issues. The analysis is used by BCS to generate reports to the Commission, utilities, Legislators, and the public, presenting information regarding utility performance, industry trends, investigations, new policy issues, and the impact of utility or Commission policy.

Most of the data presented in this report is derived from the CSIS database; however, some statistics may be derived from BCS's complaint database, the Collections Reporting System (CRS), the Local Exchange Carrier Reporting System (LECRS), and the Compliance Tracking System (CTS). The CRS (for electric and gas) and the LECRS (for telecommunications) provide valuable resources for measuring changes in utility collection performance, including the number of residential service terminations. The CTS maintains data about the number and type of apparent infractions attributable to the major utilities.

BCS Complaints Appealed

The Public Utility Code provides an appeal process for informal complaint decisions when a complainant does not agree with the outcome or result of a BCS determination. Complainants can file a formal appeal and seek a decision from a presiding officer in the PUC's Office of Administrative Law Judge (OALJ). The following table shows the rate of NFI informal complaints appealed to OALJ and the percentage of BCS informal complaints overturned. The appeal rate is typically below 1% and the percentage of BCS NFI complaints overturned is less than 1%.

Informal Complaint Appeal Rate

Year	Informal BCS NFI Complaints	BCS NFI Complaints Appealed	Percent of BCS NFI Complaints Appealed	BCS NFI Decisions Overturned by OALJ	Percent Overturned
2018	64,668	597	0.92%	2	0.00%
2019	59,111	511	0.86%	3	0.01%
2020	13,297	401	3.02%	3	0.02%
2021	28,474	244	0.86%	0	0.00%
2022	47,727	403	0.84%	0	0.00%

BCS Feedback Survey

Through 2021, BCS used a third party to survey a sampling of complainants who have contacted BCS. In a recent internal review of this program, BCS found opportunities to recalibrate the survey process to take advantage of new technology and BCS took the function in-house beginning in 2022. BCS changed the delivery of the surveys from USPS hard copy to electronic methods. This change allowed BCS to separate the Intake function, those staff who open the complaints, from the Investigative function. BCS can more timely survey and monitor each separate role.

The new survey sampling has been significantly increased. In 2021 and prior, there were an average of approximately 5,000 surveys distributed annually. Starting in 2022, BCS has distributed over 31,000 Intake surveys and over 28,000 Investigative surveys. These changes ensure that the surveys represent statistically valid sample size, accurately reflect the performance of all related staff, and align practices with more current and timely survey methods.

The following table presents additional information about how complainants rated the service they received from BCS intake staff in 2022. According to the survey results for the intake staff on the table that follows, 97.8% of complainants who contacted BCS in 2022 rated the person they spoke with on the phone as "very polite" or "fairly polite."

Ratings of BCS Service – Intake

How easy was it to reach the PUC's Bureau of Consumer Services (BCS)?	
	2022
Very easy	59.6%
Fairly easy	29.2%
Somewhat Difficult	7.3%
Difficult	3.5%
Don't recall	0.2%
Was this the first time you contacted BCS about this problem?	
	2022
Yes	71.9%
No	25.2%
Don't recall	2.7%
If you contacted BCS by phone, how polite was the first person who helped you?	
	2022
Very polite	93.4%
Fairly polite	4.4%
Not very polite	0.7%
Not at all polite	0.5%
Don't recall	0.2%
Did not speak to a person	0.0%
Did the person seem interested in helping you with your problem?	
	2022
Very interested	86.6%
Fairly interested	10.2%
Not very interested	1.6%
Not at all interested	0.7%
Don't recall	0.3%
Did not speak to a person	0.3%
Do you feel like the person you spoke with at the PUC understood your problem?	
	2022
Yes	96.3%
No	2.6%
Don't recall	0.6%
Did not speak to a person	0.3%

The following table presents additional information about how complainants rated the service they received from BCS investigators in 2019, 2020, 2021 and 2022. According to the survey results for the investigators on the table that follows, 62.9% of complainants who contacted BCS in 2022 rated the BCS's service as "excellent" or "good." When asked if they would contact the PUC again for help, 69.0% of complainants said "yes." BCS found many factors influence the survey results. As an example, oftentimes those who respond to the surveys are individuals who did not receive a favorable informal decision and they are not pleased with the outcome. BCS takes those factors into consideration when looking at the percentages in the tables below.

Ratings of BCS Service – Investigators

How would you rate the service you received from the PUC (BCS)?				
	2019	2020	2021	2022*
Excellent	48.9%	55.0%	58.4%	51.1%
Good	22.7%	17.5%	24.6%	11.8%
Fair	13.4%	12.8%	8.6%	10.0%
Poor	15.0%	14.8%	8.4%	26.1%
How quickly did the PUC handle your request?				
	2019	2020	2021	2022*
Very quickly	38.6%	43.5%	45.0%	44.3%
Fairly quickly	24.7%	25.4%	35.5%	28.6%
Not very quickly	15.7%	12.7%	7.5%	9.2%
Not at all quickly	15.9%	13.9%	5.4%	9.6%
Don't recall	2.3%	2.0%	0.6%	1.4%
Have not heard from PUC	2.9%	2.5%	6.2%	6.0%
How easy to understand was the information the PUC gave you in writing?				
	2019	2020	2021	2022*
Very easy	44.9%	41.9%	59.4%	38.4%
Fairly easy	19.1%	20.7%	19.6%	14.4%
Not very easy	3.5%	3.0%	3.6%	3.3%
Not at all easy	2.5%	2.0%	2.1%	4.8%
Don't recall	3.2%	7.7%	1.6%	2.5%
Did not receive anything in writing	26.9%	24.7%	13.7%	35.2%
If you had another problem with a utility, would you contact the PUC again?				
	2019	2020	2021	2022*
Yes	81.0%	77.8%	85.0%	69.0%
No	7.2%	10.2%	5.7%	14.0%
Not sure	11.8%	12.0%	9.3%	16.1%

*The survey process was brought in-house in 2022 where the delivery methods were changed from hard copy to electronic and survey sampling was drastically increased.

Complaints Excluded from Analysis by BCS

The majority of contacts and complaints taken in by BCS fall into the categories described earlier in this chapter. However, certain contacts to BCS fall into categories that were excluded from the analyses later in this report. Examples of contacts and complaints that were excluded include:

- non-jurisdictional complaints,
- information requests that did not require investigation, and
- complainants who did not contact the utility prior to contacting the Commission.

Commercial complaints were also excluded from the data used in the analyses. Although BCS's regulatory authority has largely been confined to residential accounts, the Bureau handled 1,399 complaints from commercial complainants in 2022, including 384 complaints related to loss of utility service.

Mediated Complaints Sent to OALJ from BCS

Residential complaints always outnumber commercial complaints to BCS and BCS typically has limited jurisdiction in commercial complaint matters. BCS investigators may attempt to mediate a mutually acceptable agreement between the commercial complainant and the utility. Many commercial complaints are referred to the Office of Administrative Law Judge's Mediation Unit for Alternative Dispute Resolution or they may choose to file a formal complaint by contacting the Secretary's Bureau.

Mediated Complaints Sent to OALJ from BCS

ELECTRIC				
	2019	2020	2021	2022
Duquesne	13	12	7	12
Met-Ed	13	10	8	18
PECO+	13	6	3	27
Penelec	7	3	7	14
Penn Power	5	7	5	12
PPL	21	4	3	12
UGI-Electric	3	0	3	2
West Penn	6	5	11	18
GAS				
	2019	2020	2021	2022
Columbia	2	1	0	2
NFG	1	0	1	1
Peoples	0	2	4	3
Peoples-Equitable*	3	n/a	n/a	n/a
PGW	3	6	18	25
UGI Gas	12	12	4	23
UGI North**	2	n/a	n/a	n/a
WATER				
	2019	2020	2021	2022
Aqua	5	0	6	3
PAWC	7	14	13	8
Audubon	0	0	0	0
Columbia	0	0	0	0
Community Utilities	0	0	0	0
Newtown Artesian	0	0	0	0
Veolia Bethel	0	0	0	0
Veolia PA	0	2	1	0
York	0	0	0	0
MUNICIPAL				
	2019	2020	2021	2022
PWSA-Water	7	5	4	1
PWSA-Sewer	3	0	0	4
TELECOMMUNICATIONS				
	2019	2020	2021	2022
Brightspeed f/k/a CenturyLink	1	1	0	0
Frontier Commonwealth	0	0	1	0
Verizon North	1	0	0	0
Verizon PA	19	3	5	3
Windstream	0	1	1	0

+ PECO statistics include electric and gas.

* Due to the Peoples Natural Gas merger, effective Jan. 1, 2020, the Peoples data includes Peoples-Equitable.

** Due to the UGI Gas merger, effective Jan. 1, 2020, the UGI Gas data includes UGI Central and UGI North.

3. Categories of Residential Consumer Complaints

Total Volume

The following table compares the volume of all residential NFI complaints to the volume of all commercial NFI complaints handled by BCS in 2022.

Total Volume of NFIs
Consumer Complaints and Payment Arrangement Requests (PARs) to BCS in 2022*

Industry	Consumer Complaints		Payment Arrangement Requests	
	Residential	Commercial**	Residential	Commercial**
Electric	6,868	587	23,058	201
Gas	2,423	168	9,408	167
Water	1,234	102	1,991	15
Telecommunications	1,201	148	13	0
Other***	117	10	15	1
Total	**11,843**	**1,015**	**34,485**	**384**

* This table represents "investigated complaints" only, and not those complaints handled on the first call.
** All complaints that involved commercial accounts were deleted from the analyses in the subsequent chapters.
*** Wastewater and steam heat complaints are designated as "other" in this table and the tables that follow.

Consumer Complaints Analyzed by BCS

Most Consumer Complaints regarding the electric, gas, water, wastewater and steam heat industries deal with matters covered in Chapter 14 the Responsible Utility Customer Protection Act, and Chapter 56 Standards and Billing Practices for Residential Utility Service.

For the telecommunications industry, most of the complaints found in the Consumer Complaint category deal with matters covered by Chapter 30, Alternative Form of Regulation of Telecommunications Services, Chapters 63 and/or 64, Telephone Service and Standards and Billing Practices for Residential Telephone Service. Most Consumer Complaints represent complainants who contacted the Commission when they were unable to reach a mutually satisfactory resolution with the utility.

Consumer Complaints by Industry*
2019-22

Industry	2019	2020	2021	2022
Electric	8,007	4,568	5,421	7,455
Gas	2,579	1,355	1,836	2,591
Water	1,194	1,055	1,370	1,336
Telecommunications	1,445	1,337	1,708	1,349
Other	75	53	42	127
Total	**13,300**	**8,368**	**10,377**	**12,858**

* Table includes both residential and commercial Consumer Complaints.

As shown in the table above, electric and gas utilities accounted for 78% of all Consumer Complaints investigated by BCS in 2022.

In 2022, 58% of these complaints were electric (7,455 complaints) and 20% of these complaints were natural gas (2,591 complaints), while telecommunications utilities totaled approximately 10% (1,349 complaints), and water utilities accounted for 10% (1,336 complaints).

The following table presents a comparison of the number of residential and commercial Consumer Complaints for 2019, 2020, 2021 and 2022.

Consumer Complaints to BCS in 2019-22

Industry	Consumer Complaints							
	Residential				Commercial			
	2019	2020	2021	2022	2019	2020	2021	2022
Electric	7,680	4,280	5,056	6,868	327	288	365	587
Gas	2,455	1,299	1,722	2,423	124	56	114	168
Water	1,106	979	1,272	1,234	88	76	98	102
Telecommunications	1,279	1,238	1,566	1,201	166	99	142	148
Other	70	48	41	117	5	5	1	10
Total	**12,590**	**7,844**	**9,657**	**11,843**	**710**	**524**	**720**	**1,015**

Classification of Consumer Complaints

BCS categorizes residential complaints into 14 categories for each of the electric, gas, and water utilities and 11 categories for each of the telecommunications utilities. Tables showing the percent of complaints in each category appear in the following industry chapters. The tables represent all of the complaints that were evaluated by BCS staff. BCS analyzes the categories that generate the most complaints

or problems and often discusses its findings with individual utilities and works with them to make necessary revisions to their complaint handling procedures.

Payment Arrangement Requests

PARs are requests for payment arrangement terms that fall into one of the following situations:

- Suspension/termination of service is pending,
- Service has been terminated and the complainant needs payment terms to have service restored, or
- The complainant wants to eliminate a debt or a past-due balance.

Act 201 of 2004[4] changed the rules that apply to cash deposits, reconnection of service, termination of service, payment arrangements, and the filing of termination complaints by consumers for electric, gas and water. The goal was to increase timely collections while ensuring that service is available to all customers based on equitable terms and conditions.[5] The law is applicable to Electric Distribution Companies (EDCs), water distribution utilities, and Natural Gas Distribution Companies (NGDCs) with an annual operating income in excess of $6 million.[6] On Oct. 22, 2014, Chapter 14 was revised and renewed for a period of 10 years. On Feb. 28, 2019, the Commission amended Chapter 56 to make the regulations consistent with the Chapter 14 updates.[7] BCS is required to provide a report detailing the impact of Chapter 14 every five years. The recent quinquennial report, *The Sixth Report to The General Assembly and The Governor Pursuant to Section 1415 – Implementation of Chapter 14*, was provided to the General Assembly and the Governor on Jan. 31, 2020.[8] The next report is due in December 2024, the same year the general assembly must renew Chapter 14 before it expires.

Telecommunications utilities are not covered by Chapter 14. For the telecommunications industry, most of the complaints found in the PAR category deal with matters covered by Chapter 30, Alternative Form of Regulation of Telecommunications Services, Chapters 63 and/or 64, Telephone Service and Standards and Billing Practices for Residential Telephone Service. For the telecommunications industry, PARs are principally contacts to BCS or to utilities involving a request for payment terms for arrearages associated with basic service. Although Chapter 64 uses the term “payment agreement,” “payment arrangement” has been used throughout this report for consistency.

All of the measures in this report pertaining to PARs are based on assessments of contacts to BCS from individual complainants. As with Consumer Complaints, almost all complainants contacted their utility prior to contacting BCS. During 2022, BCS handled 34,869 PARs from customers of the utilities under the Commission’s jurisdiction.

[4] 66 Pa. C.S. § 1401-1418
[5] 66 Pa. C.S. § 1402
[6] Small natural gas distribution utilities may voluntarily “opt in” to Chapter 14. 66 Pa. C.S. § 1403.
[7] Docket No. L-2015-2508421, published in Pennsylvania Bulletin June 1, 2019.
[8] http://www.puc.pa.gov/general/publications_reports/pdf/Chapter14-Biennial013020.pdf

Payment Arrangement Requests (PARs) by Industry*
2019-22

Industry	2019	2020	2021	2022
Electric	30,055	2,768	11,244	23,259
Gas	12,054	1,449	5,237	9,575
Water	3,628	674	1,592	2,006
Telecommunications	23	13	13	13
Other	51	25	11	16
Total	**45,811**	**4,929**	**18,097**	**34,869**

* Table includes both residential and commercial PARs.

As in past years, most requests for payment arrangements in 2022 involved electric or gas utilities. As shown in the table above, 67% (23,259 complaints) of PARs in 2022 were from electric customers and 27% (9,575 complaints) were from gas customers. Also, 6% (2,006 complaints) of PARs in 2022 came from customers of various water utilities and 1% (16 complaints) of PARs in 2022 came from telecommunications customers. The following table presents a comparison of the number of residential and commercial PARs for 2019, 2020, 2021 and 2022.

Payment Arrangement Requests (PARs) to BCS in 2019-22

Industry	Payment Arrangement Requests							
	Residential				Commercial			
	2019	2020	2021	2022	2019	2020	2021	2022
Electric	29,907	2,731	11,028	23,058	148	37	216	201
Gas	11,931	1,421	5,095	9,408	123	28	142	167
Water	3,604	668	1,578	1,991	24	6	14	15
Telecommunications	23	12	13	13	0	1	0	0
Other	49	25	10	15	2	0	1	1
Total	**45,514**	**4,857**	**17,724**	**34,485**	**297**	**72**	**373**	**384**

With respect to the commercial cases, BCS cannot make payment arrangements for those accounts. Due to its limited jurisdiction over commercial cases, BCS does not issue decisions regarding commercial disputes with no residential end use. Instead, BCS investigators give commercial customers information regarding the utility position or attempt to mediate a mutually acceptable agreement regarding the disputed matter. Many such cases are referred to the Office of Administrative Law Judge's Mediation Unit for Alternative Dispute Resolution where an attempt is made to mediate a resolution between the utility and its customer.

First Contact Resolution (FCR) Complaints

Formerly labeled as "Inquiries," the total number of FCRs BCS received in 2022 was 16,953. FCRs are contacts that did not require follow-up investigation beyond the initial contact or call-back. The FCRs for 2022 include contacts to the BCS via the Consumer Complaint Hotline, mail, website, fax and email.

BCS classifies certain PARs as FCRs; therefore, they are not represented in the number of PARs in the tables in this report. For example, BCS does not issue payment decisions for complainants that are actively enrolled in utility Customer Assistance Programs (CAPs) or requests to restore or avoid suspension / termination of toll or non-basic telecommunications service. Similarly, if a complainant has recently been through the BCS payment arrangement process and calls again with a new request, without a change in income or significant change in circumstances[9], BCS does not open a new PAR complaint for investigation (NFI/PAR). In these instances, BCS dismisses the complaint at the initial contact and classifies the contact as an FCR.

As previously mentioned, BCS reclassified some contacts that originated as NFIs into the General Inquiry (GI) category. The GIs are excluded from analysis within this report. They are not counted as informal complaints. Reclassified GIs (1,231 complaints in 2022) accounted for 7% of FCRs in 2022 and are included in the tables below.

[9] 66 Pa.C.S. § 1402 Definitions of "Change in Income" and "Significant Change in Circumstance" in conjunction with 66 Pa.C.S. § 1405 Payment Arrangements.

FCR Reason for Contact Categories in 2022

Reason for Contact	Number	Percent*
Termination or suspension of service	3,532	20.8%
PUC has no jurisdiction	2,517	14.9%
Unable to open new PAR – service on	2,125	12.5%
Request for general information	1,465	8.6%
CAP inquiry/contact	1,344	7.9%
Billing dispute	1,081	6.4%
Competition issues and requests for information	671	4.0%
Rate protest	468	2.8%
Service (utility facilities)	419	2.5%
Applicant/deposit issue	400	2.4%
People-delivered utility service**	282	1.7%
Unable to open new PAR – service off	128	0.8%
Weather outage	17	0.1%
Rate complaint	0	0.0%
Cramming**	0	0.0%
Slamming**	0	0.0%
Other miscellaneous reasons***	1,445	8.5%
Reason for contact is not available	1,059	6.3%
Total	**16,953**	**100.2%**

* Total percent may be more or less than 100% due to rounding.
** Please refer to the Glossary of Terms.
*** Some of the Other category includes contacts related to Sales Issues, Lifeline/Link-up, Healthcare facilities, etc.

4. Commodity Supplier Activity

Electric and Natural Gas Supplier Activity

Deregulation of the electric and natural gas supply industries occurred in Pennsylvania through the passage of the Electricity Generation Customer Choice and Competition Act in 1996 and the Natural Gas Choice and Competition Act in 1999. Prior to the enactment of these laws, customers in Pennsylvania procured their electricity and/or natural gas from utility companies that generated, transmitted and distributed the energy to the customer. Under energy competition, consumers in Pennsylvania have the choice to purchase electricity and/or natural gas from a supplier that is a different company than the utility; thereby allowing the consumer to choose their energy supply based on several factors, including price, or in the case of electricity, by the source of the power supplied to the customer. Currently, Pennsylvania has a robust competitive energy supply market, with over 450 electric generation suppliers and over 335 natural gas suppliers licensed with the Commission. In 2022, on average, over 1.2 million residential electric customers and over 330,000 natural gas customers were served by competitive suppliers.

As indicated in the following table, in 2022 BCS received 2,845 contacts related to competitive supplier issues in the energy industries.

All Competition-Related Contacts by Industry 2019-22

Industry	2019	2020	2021	2022
Electric	3,490	2,353	1,954	2,465
Gas	454	307	294	380
Total	**3,944**	**2,660**	**2,248**	**2,845**

Of the 2,845 total contacts received about competitive supplier issues in 2022, 955 or 34% pertained to slamming. Slamming is the illegal practice of switching a customer's supplier or provider without permission. The following table presents the number of slamming NFI complaints received by BCS.

Slamming NFIs (Consumer Complaints and PARs) by Industry 2019-22

Industry	2019		2020		2021		2022	
	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Commercial
Electric	912	50	562	44	533	60	654	93
Gas	102	1	76	3	87	7	106	13
Total	**1,014**	**51**	**638**	**47**	**620**	**67**	**760**	**106**

There were 866 NFI complaints about slamming in 2022. Residential consumers filed 760 NFI complaints or 88%, commercial consumers filed the remaining 106 or 12% of slamming NFIs. Of the residential slamming NFIs, 654 were from the electric industry and 106 were from the natural gas industry.

The Commission views slamming as a very serious violation of consumer regulations and has articulated a "zero tolerance" policy against slamming.[10]

Appendix D-1 identifies the types of competition complaints tracked by BCS. In addition to slamming, bill disputes are prevalent among competition complaints to BCS.

[10] L-00970121, Public Meeting of May 21, 1998.

5. Residential Consumer Complaints from Non-Major Utilities

Residential Consumer Complaints for Non-Major Utilities

Historically, the primary focus of BCS's review of utilities' complaint handling has been on the performance of the major electric, gas, water and telecommunications utilities. For the past several years a limited amount of complaint information for the non-major utilities and the other service providers was included in the UCARE report.

Utilities are considered a non-major utility in the following circumstances. A non-major electric utility is an EDC with less than 100,000 residential customers or an electric generation supplier (EGS). A non-major gas utility is an NGDC with less than 100,000 residential customers or a natural gas supplier (NGS). A non-major water utility is a municipal water utility or a non-municipal water utility with revenues of either less than $1 million annually or greater than $1 million annually for no more than two consecutive years. A non-major telecommunications utility is an Incumbent Local Exchange Carrier (ILEC) that served less than 50,000 residential customers, a competitive local exchange carrier, a long-distance company, an IXC, a reseller, or an eligible telecommunications carrier.

In 2022, BCS observed a decrease in the overall number of residential Consumer Complaints for the non-major utilities when compared with the pre-pandemic year of 2019, with the exception of the non-major telecommunication utilities.

Residential Consumer Complaints by Industry for Non-Major Utilities*
2019-22

Industry	2019	2020	2021	2022
Electric	1,690	1,188	1,028	1,522
Gas	381	210	228	297
Water	31	27	22	13
Telecommunications	87	134	145	139
Total	**2,189**	**1,559**	**1,423**	**1,971**

* See Appendix C.

BCS staff investigated the total number of Consumer Complaints with the non-major utilities, including suppliers, under the Commission's jurisdiction. The majority of complaints against non-major utilities involved slamming and billing disputes. These two complaint categories accounted for:

- 69% of non-major electric utility complaints
- 63% of non-major gas utility complaints
- 38% of non-major water utility complaints
- 15% of non-major telecommunications utility complaints

Appendix C presents a summary of the residential informal complaints (Consumer Complaints and PARs) that are not included in the analysis within the electric, gas, water and telecommunications chapters. The table lists the non-major utilities for these industries, the electric generation and natural gas suppliers and providers of telecommunications services that had five or more residential Consumer Complaints in 2022.

6. Performance Measures

Informal complaints are an indicator of utility complaint-handling performance. Utility customers are required to contact their utility about a problem prior to contacting BCS. BCS reviews utility records to evaluate the handling of each complaint. The informal compliance evaluation process includes several assessments that form the basis of the performance measures presented in the industry chapters of this report[11], with the exception of the number of terminations and termination rate. Many of the performance measures are shown as rates, calculated per 1,000 residential customers. Appendix A provides the number of residential customers for the major companies in each of the industries in 2019, 2020, 2021 and 2022.

Informal Compliance Process and Infractions

The BCS informal compliance evaluation process includes notifying a utility of an alleged infraction or violation of a statute or regulation and provides written clarifications of Chapters 14, 30, 56, 63 or 64 and the policies of the Commission and BCS.

The utility has an opportunity to respond and may dispute the infraction by providing details and supporting documentation to disprove the infraction. BCS provides a final determination to the utility regarding the infraction. If the information about the infraction is accurate, BCS expects the utility to take corrective action to address the problem or any deficiencies that led to the infraction. Examples of corrective action may include modification of a system or correction of a systems issue; revision of utility procedures/practices, the text of a notice, bill or letter; and/or additional staff training.

The informal compliance process is designed to help BCS identify systemic errors and to ensure compliance by the utilities. One example of a systemic error is a termination notice that does not comply with the requirements of Chapter 56. Each recipient of the notice is affected by that error. When an error is discovered, BCS requires utilities to investigate the scope of the problem and take corrective action.

Total Complaint Rate

The Total Complaint Rate is the number of all complaints (FCRs and NFIs combined) for each 1,000 residential customers. This calculation allows the reader to make comparisons among utilities of various sizes of the overall BCS activity.

Consumer Complaint Rate

The calculation of the Consumer Complaint rate (Consumer Complaints per 1,000 residential customers) permits the reader to make comparisons among utilities of various sizes. Consumer Complaint rates and statistically significant changes in Consumer Complaint rates from one year to the next are often indicative of patterns and trends that it should investigate. BCS considers the “justified Consumer Complaint

[11] It is important to note that this is not the only report BCS produces to assess utility performance. For example, residential termination and reconnection statistics for electric, gas, and water utilities are reported by the utilities as required by Chapter 56 at § 56.231 and posted on the PUC website at https://www.puc.pa.gov/filing-resources/reports/terminations-for-electric-gas-water-companies/.

rate" (justified Consumer Complaints per 1,000 residential customers) a better indicator of a utility's complaint handling performance.

Justified Consumer Complaint Rate

BCS policy analysts review a statistically valid sampling of complaints and utility records to determine if the utility took appropriate action when handling its consumer contacts. BCS uses the complaint evaluation process to identify whether the utility followed the correct procedures prior to the intervention of BCS. This approach focuses strictly on the utility's compliance with applicable statutes and regulations.

A complaint is considered "justified" if it is found that the utility did not comply with Commission Orders, policies, regulations, reports, Secretarial Letters or tariffs. The "justified Consumer Complaint rate" reflects both volume and percent of complaints found justified. It is the number of justified consumer complaints per 1,000 residential customers. The justified consumer complaint rate is a normalized ratio useful for comparing utility performance over time among the various utility companies.

BCS monitors the complaint rates and justified rates of the major utilities. When BCS finds below-average performance, it may indicate improper dispute handling. In the industry chapters that follow, BCS compares the Consumer Complaint rates, the justified Consumer Complaint rates, and the overall percent of justified Consumer Complaints of the major utilities.

Percent of Justified Consumer Complaints

The percent of justified Consumer Complaints is the estimated number of justified complaints divided by the total number of complaints received. This measures all of the complaints, rather than the statistically valid sample of complaints evaluated.

Response Time to Consumer Complaints

When a consumer contacts BCS with a complaint about a utility, the utility is notified. The utility sends BCS the record of its contacts with the complainant about that specific complaint. The utility has up to 30 days to send BCS its initial informal complaint report or up to five days if the complainant is without service.

"Response time" is the number of days from the date BCS first contacts the utility regarding a complaint to the date on which the utility provides BCS with its initial informal complaint report. Response time quantifies the speed of a utility's response to BCS Consumer Complaints.

Average response time includes all residential EDC Consumer Complaints except complaints processed through CURE (Customer & Utility Resolution Effort). CURE is a voluntary program designed to better manage workload, improve customer satisfaction, and reduce costs. The utility contacts the complainant and attempts to achieve a resolution. If mutual satisfaction is reached, the utility and complainant notify BCS the informal complaint can be closed without further investigation, and the utility isn't required to submit a full utility report.

In the following industry chapters, response time is presented as the average of a utility's responses in the tables titled Average Response Time to BCS.

Payment Arrangement Request (PAR) Rate

BCS may offer a payment arrangement to a complainant in accordance with Chapter 14. The volume of PARs may fluctuate from year to year, or even from month to month, depending upon utility collection strategies and economic factors. The calculation of the PAR rate (PARs per 1,000 residential customers) permits the reader to make comparisons among utilities. Unusually high or low rates and significant changes in rates from one year to the next may indicate areas that need further investigation or Commission action.

Justified Payment Arrangement Request (PAR) Rate

The justified payment arrangement request (PAR) rate is a normalized ratio useful for comparing utility performance among the various utility companies.

Many PARs to BCS are undisputed, with no other problem associated with the request. There is an automated process for the majority of these complaints that BCS refers to as AutoPAR. *AutoPARs are not evaluated, therefore, they are not included in the estimated number of justified complaints. AutoPARs are included in the total number of PAR complaints received by BCS.*

In complaints where the utility claims there are disputed factors in addition to the PAR or a complainant is ineligible for a PUC payment plan, a BCS investigator reviews the record manually and issues a decision or determination.

In an evaluation of a statistically valid sampling of disputed PAR complaints, BCS policy analysts determine if the utility complied with regulations and statutes. BCS monitors the justified PAR rates for below-average performance and improper dispute handling. These are the complaints that appear in the justified PAR tables within this report. The justified PAR rate is the ratio of the estimated number of justified PARs per 1,000 residential customers. In the chapters that follow, BCS compares the justified PAR rates of the major utilities.

Percent of Justified Payment Arrangement Requests (PARs)

The percent of justified PARs is the estimated number of justified complaints divided by the total number of PAR complaints received. The measure takes into account all of the complaints, including AutoPARs, rather than the statistically valid sample of PAR complaints evaluated in the informal compliance process.

Response Time to Payment Arrangement Requests

When a complainant contacts BCS for a PAR, BCS notifies the utility. The utility sends BCS the record of its contacts with the complainant about that specific concern, including the results of the most recent payment negotiation, if any. The utility has up to 30 days to send BCS its initial informal complaint report or up to five days if the complainant is without service.

“Response time” is the number of days from the date BCS first contacts the utility regarding a complaint to the date the utility provides BCS with its initial informal complaint report. Response time quantifies the speed of a utility’s response to BCS PAR complaints.

The calculation for average response excludes undisputed PARs and CURE complaints. CURE is a voluntary program designed to better manage workload, improve customer satisfaction, and reduce costs. The utility contacts the complainant and attempts to achieve a resolution. If mutual satisfaction is reached, the

utility and complainant notify BCS the informal complaint can be closed without further investigation, and the utility isn't required to submit a full utility report.

In the following industry chapters, response time is presented as the average of a utility's responses in the tables titled Average Response Time to BCS.

Termination Rate

The termination statistics and the number of residential customers for the electric, gas and water utilities are drawn from reports required by Chapter 56 at § 56.231. Telecommunications termination statistics and number of residential customers are drawn from reports required by Chapter 64 at § 64.201.

BCS views termination of utility service as a utility's last resort when customers fail to meet their payment obligations. The "termination rate" allows the reader to compare termination activity between utilities.

Previously the termination rate for the telecommunications industry was calculated in the UCARE reports as the number of terminations for each 1,000 residential customers; however, the termination rate for the telecommunications industry is now being calculated consistent with the other industries as defined below.

The termination rate for all industries is the number of service terminations divided by the number of residential customers.

Infraction Rate

BCS compares utilities of various sizes within an industry by using a measure called the infraction rate. The infraction rate is the number of verified infractions for each 1,000 residential customers.

The infraction rate tables in the chapters that follow do not show the causes of the individual infractions, repetitive occurrences due to systemic issues or indicate the level of seriousness of infractions related to health and safety.

This compliance measure shows industry trends over time. Generally, trends may change as complaints for that year continue to be evaluated into the new year, and utilities may subsequently challenge a BCS determination. For example, complaints closed in November and December may not be evaluated by BCS until the new year, and utilities may subsequently challenge BCS infractions. Thus, the total number of infractions for the year may change from the number cited in the current report. BCS will update the 2022 infraction rates in the 2023 report.

Infraction rates are shown for 2019, 2020, 2021 and 2022 in the upcoming industry chapters. The electric, gas, and water industry chapters show the 2022 infractions of Chapter 56, Chapter 14 and other regulations, and the telecommunications industry chapter shows the infractions of Chapters 30, 63, 64 and other regulations.

BCS Performance Measures and Industry Chapters

The tables in the following industry chapters present the data alphabetically by utility name for major utilities, as defined within the sections.

Universal Service and Energy Conservation Programs / Other Low-Income Programs

Universal service and energy conservation programs help utility customers maintain service and conserve energy. While not a performance measure that is reviewed during the compliance evaluation process, BCS monitors and evaluates these programs to help the Commission fulfill its oversight responsibilities, increasing the effectiveness of utility collections while protecting the public's health and safety.

Electric and gas universal service programs include: Customer Assistance Programs (CAP); Low-Income Usage Reduction Programs (LIURP); Hardship Fund Programs; and Customer Assistance and Referral Evaluation Services (CARES) programs. An explanation of each of these programs is included in the Glossary of Terms.

In September 2023, the Commission released the 23rd annual report on Universal Service Programs and Collections Performance, which presents 2022 universal service and collections data for the major electric and natural gas distribution companies. The Universal Service Programs and Collections Performance reports are available on the Commission's website at: https://www.puc.pa.gov/filing-resources/reports/universal-service-reports/

Water and telecommunications utilities also offer programs to assist low-income customers. At the end of the water and telecommunications chapters that follow, readers will find highlights of these programs.

7. Electric Industry

In 2022, the Commission had jurisdiction over 15 electric distribution companies (EDCs). The majority of Consumer Complaints and PARs are about the seven major EDCs: Duquesne Light Co. (**Duquesne**), PECO Energy Co. (**PECO**), PPL Electric Utilities Inc. (**PPL**), and the four FirstEnergy companies – Metropolitan Edison Co. (**Met-Ed**), Pennsylvania Electric Co. (**Penelec**), Pennsylvania Power Co. (**Penn Power**), and West Penn Power Co. (**West Penn**). This chapter will focus exclusively on those seven utilities.

The statistics in the tables on the pages that follow depict the performance of each of the seven major electric utilities in 2022. The major electric utilities are those that have more than 100,000 residential customers. The tables in this chapter also include UGI-Electric, a large non-major EDC with fewer than 100,000 residential customers. In some circumstances, statistics for the non-major utilities can skew the industry averages in ways that do not fairly represent industry performance. For this reason, BCS excluded the statistics involving UGI-Electric when it calculated the electric industry averages. PECO's statistics include data for both electric and gas service. BCS also removed supplier complaints from the data it used to prepare the tables on Consumer Complaints and PARs and addresses these complaints in a separate section of the report.

Total Complaint Rate

The following table shows the Total Complaint Rate, which is the number of all complaints (FCRs and NFIs combined) for each 1,000 residential customers.

2019-22 Residential Total Complaint Numbers/Rates
Major Electric Distribution Companies

Utility	2019		2020		2021		2022	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Duquesne	3,166	5.88	843	1.56	2,612	4.81	3,646	6.68
Met-Ed	6,156	12.20	1,210	2.38	2,132	4.16	3,977	7.72
PECO+	11,000	7.31	2,309	1.52	4,338	2.83	9,492	6.17
Penelec	6,642	13.26	1,107	2.21	2,242	4.47	4,357	8.70
Penn Power	1,918	13.14	284	1.93	594	4.01	1,329	8.92
PPL	10,906	8.84	1,807	1.45	4,464	3.57	7,348	5.85
UGI-Electric	825	14.96	191	3.47	278	5.05	708	12.84
West Penn	7,414	11.82	1,223	1.94	2,433	3.85	4,756	7.53
Total	**48,027**		**8,974**		**19,093**		**34,905**	
Average of Rates*		**9.33**		**1.86**		**3.68**		**6.79**

* Does not include UGI-Electric.
+ PECO statistics include electric and gas.

Consumer Complaints

During 2022, BCS handled 6,868 Consumer Complaints from residential electric consumers of the various EDCs (5,353) and EGSs (1,515). The seven major EDCs represented 76% (5,234) of the total Consumer Complaints.

Consumer Complaint Categories

The following table shows the number and percentage of 2022 complaints in each of the 14 categories used by BCS policy analysts for compliance evaluation. These categories are for all evaluated residential complaints filed with BCS.

Of the 2,956 Consumer Complaints evaluated, the top three categories of EDC complaints for 2022 account for 41% of the total: 21% billing disputes, 10% service interruptions, and 10% termination or PAR procedures. See Appendix D-1 for an explanation of complaint categories.

Number and Percent of Consumer Complaints by Dispute Category
2022 Complaints Evaluated*
Major Electric Distribution Companies

Category**	Duquesne	Met-Ed ***	PECO+ ***	Penelec ***	Penn Power	PPL***	UGI-Electric	West Penn ***	Electric Industry ****
Billing Disputes	114	83	105	103	27	118	38	72	**622**
	24%	19%	23%	21%	19%	25%	38%	15%	**21%**
Service Interruptions	43	52	22	50	6	43	3	92	**308**
	9%	12%	5%	10%	4%	9%	3%	19%	**10%**
Termination or PAR Procedures	73	42	43	49	11	44	8	27	**289**
	15%	9%	9%	10%	8%	9%	8%	6%	**10%**
Service Quality	29	39	42	48	18	32	5	52	**260**
	6%	9%	9%	10%	13%	7%	5%	11%	**9%**
Personnel Problems	42	29	57	42	9	40	3	29	**248**
	9%	7%	12%	9%	6%	9%	3%	6%	**8%**
Credit and Deposits	14	53	20	35	17	7	8	46	**192**
	3%	12%	4%	7%	12%	2%	8%	10%	**7%**
Discontinuance/ Transfer	27	25	30	26	7	25	10	21	**161**
	6%	6%	7%	5%	5%	5%	10%	4%	**5%**
Other Payment Issues	28	16	13	25	7	36	4	22	**147**
	6%	4%	3%	5%	5%	8%	4%	5%	**5%**
Scheduling Delays	20	17	11	10	9	16	0	17	**100**
	4%	4%	2%	2%	6%	3%	0%	4%	**3%**
Metering	17	12	16	21	2	13	6	11	**92**
	4%	3%	4%	4%	1%	3%	6%	2%	**3%**
Damages	5	20	15	14	3	14	1	18	**89**
	1%	4%	3%	3%	2%	3%	1%	4%	**3%**
Service Extensions	2	1	2	1	0	4	0	4	**14**
	<1%	<1%	<1%	<1%	0%	1%	0%	1%	**<1%**
Rates	0	0	3	2	1	1	1	3	**10**
	0%	0%	1%	<1%	1%	<1%	1%	1%	**<1%**
All Other Problems	65	57	78	58	22	75	12	69	**424**
	14%	13%	17%	12%	16%	16%	12%	14%	**14%**
Total*	**479**	**446**	**457**	**484**	**139**	**468**	**99**	**483**	**2,956**

* Based on residential complaints opened in 2022 and evaluated by BCS as of May 5, 2023.

** Categories are for all evaluated residential complaints filed with BCS. See Appendix D-1 for an explanation of complaint categories.

*** Based on a probability sample of complaints.

**** Electric Industry column does not include UGI-Electric.

\+ PECO statistics include electric and gas.

Consumer Complaint Rate, Justified Consumer Complaint Rate, and Percent of Justified Consumer Complaints

The following tables show the Consumer Complaint Rate, the Justified Consumer Complaint Rate, and the Percent of Justified Consumer Complaints for each major EDC in 2019, 2020, 2021 and 2022. A complaint is considered "justified" if it is found that the utility did not comply with Commission Orders, policies, regulations, reports, Secretarial Letters, or tariffs. BCS evaluates a statistically valid sampling of complaints for each utility.

The Consumer Complaint rate is the number of Consumer Complaints for each 1,000 residential customers.

The justified Consumer Complaint rate is the estimated number of justified Consumer Complaints for each 1,000 residential customers based on a statistically valid sampling of complaints. The justified Consumer Complaint rate is a normalized ratio useful for comparing utility performance among the various companies. It is not a percentage.

From 2019 to 2022, the justified Consumer Complaint rates for PECO, Penelec and West Penn increased, the rates for Duquesne and Met-Ed remained stable, and the rates decreased for Penn Power, PPL and UGI-Electric. The 2022 justified Consumer Complaint rates for Duquesne, Met-Ed, PECO, Penelec and West Penn were greater than the 2022 industry average.

The percent of justified Consumer Complaints is the estimated number of justified complaints divided by the total number of complaints received (multiplied by 100). The percent of justified Consumer Complaints represents a utility's individual performance.

2022 Residential Consumer Complaint Rate, Justified Consumer Complaint Rates, and Percent of Justified Consumer Complaints Major Electric Distribution Companies

Utility	Consumer Complaint Rate	Justified Consumer Complaint Rate	Percent of Justified Consumer Complaints
Duquesne	1.17	0.12*	10.5%*
Met-Ed	1.23	0.11*	9.1%*
PECO+	1.05	0.12*	11.6%*
Penelec	1.24	0.11*	8.9%*
Penn Power	1.14	0.07	6.5%
PPL	0.64	0.04*	6.0%*
UGI-Electric	2.03	0.09	4.5%
West Penn	1.19	0.12*	9.7%*
Average**	**1.09**	**0.10**	**9.5%**

* Based on a probability sample of complaints.
** Does not include UGI-Electric.
\+ PECO statistics include electric and gas.

2019-22 Residential Consumer Complaint Numbers/Rates
Major Electric Distribution Companies

Utility	2019		2020		2021		2022	
	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
Duquesne	559	1.04	342	0.63	565	1.04	639	1.17
Met-Ed	798	1.58	436	0.86	499	0.97	635	1.23
PECO+	1,753	1.16	894	0.59	1,147	0.75	1,613	1.05
Penelec	715	1.43	392	0.78	522	1.04	619	1.24
Penn Power	187	1.28	94	0.64	118	0.80	170	1.14
PPL	915	0.74	409	0.33	566	0.45	806	0.64
UGI-Electric	105	1.90	33	0.60	44	0.80	112	2.03
West Penn	958	1.53	492	0.78	567	0.90	752	1.19
Total	**5,990**		**3,092**		**4,028**		**5,346**	
Average of Rates**		**1.25**		**0.66**		**0.85**		**1.09**

* The Consumer Complaint rate is the number of Consumer Complaints for each 1,000 residential customers.
** Does not include UGI-Electric.
\+ PECO statistics include electric and gas.

2019-22 Justified Residential Consumer Complaint Numbers/Rates
Major Electric Distribution Companies

Utility	2019		2020		2021		2022	
	Number**	Rate***	Number**	Rate***	Number**	Rate***	Number**	Rate***
Duquesne	66	0.12	36	0.07	63*	0.12*	67*	0.12*
Met-Ed	54*	0.11*	28	0.06	53	0.10	58*	0.11*
PECO+	77*	0.05*	39*	0.03*	88*	0.06*	187*	0.12*
Penelec	43*	0.09*	31	0.06	49*	0.10*	55*	0.11*
Penn Power	11	0.08	6	0.04	6	0.04	11	0.07
PPL	74*	0.06*	30	0.02	37	0.03	48*	0.04*
UGI-Electric	15	0.27	2	0.04	7	0.13	5	0.09
West Penn	57*	0.09*	27	0.04	25*	0.04*	73*	0.12*
Total	**397**		**199**		**328**		**504**	
Average of Rates****		**0.08**		**0.05**		**0.07**		**0.10**

* Based on a probability sample of complaints.
** Estimated based on the number of Consumer Complaints in CSIS: 2020 as of June 4, 2021; 2021 as of Sept. 10, 2022; and 2022 as of May 5, 2023.
*** The justified Consumer Complaint rate is the estimated number of justified Consumer Complaints for each 1,000 residential customers based on a statistically valid sampling of complaints. The justified Consumer Complaint rate is a normalized ratio useful for comparing utility performance among the various companies. It is not a percentage.
**** Does not include UGI-Electric.
\+ PECO statistics include electric and gas.

2019-22 Number/Percent of Justified Residential Consumer Complaints
Major Electric Distribution Companies

Utility	2019		2020		2021		2022	
	Number**	Percent***	Number**	Percent***	Number**	Percent***	Number**	Percent***
Duquesne	66	11.8%	36	10.5%	63*	11.2%*	67*	10.5%*
Met-Ed	54*	6.8%*	28	6.4%	53	10.6%	58*	9.1%*
PECO+	77*	4.4%*	39*	4.4%*	88*	7.7%*	187*	11.6%*
Penelec	43*	6.0%*	31	7.9%	49*	9.4%*	55*	8.9%*
Penn Power	11	5.9%	6	6.4%	6	5.1%	11	6.5%
PPL	74*	8.1%*	30	7.3%	37	6.5%	48*	6.0%*
UGI-Electric	15	14.3%	2	6.1%	7	15.9%	5	4.5%
West Penn	57*	5.9%*	27	5.5%	25*	4.4%*	73*	9.7%*
Total	**397**		**199**		**328**		**504**	
Average****		**6.5%**		**6.4%**		**8.1%**		**9.5%**

* Based on a probability sample of complaints.

** Estimated based on the number of Consumer Complaints in CSIS: 2020 as of June 4, 2021; 2021 as of Sept. 10, 2022; and 2022 as of May 5, 2023.

*** The percent of justified Consumer Complaints is the estimated number of justified complaints divided by the total number of complaints received (multiplied by 100). The percent of justified Consumer Complaints represents a utility's individual performance.

**** Does not include UGI-Electric.

\+ PECO statistics include electric and gas.

Consumer Complaint Response Time

Response time is the number of days from the date BCS first contacts the utility regarding a complaint to the date the utility provides BCS with its initial informal complaint report. Response time quantifies the speed of a utility's response to BCS Consumer Complaints. Average response time includes all residential EDC Consumer Complaints except complaints processed through CURE.

Duquesne, PECO and UGI-Electric had the shortest Consumer Complaint response times in 2022, while Penelec and PPL took the most time to respond.

2019-22 Average Response Time to BCS
Residential Consumer Complaints
Major Electric Distribution Companies

Utility	Number of Days			
	2019	2020	2021	2022
Duquesne	12.0	12.4	14.3	16.6
Met-Ed	15.8	11.8	15.4	18.6
PECO+	18.6	17.7	16.6	16.6
Penelec	16.6	12.1	14.3	19.0
Penn Power	16.2	12.4	14.7	18.8
PPL	18.9	17.3	19.0	24.6
UGI-Electric	14.3	9.0	8.2	12.1
West Penn	15.6	11.2	14.8	18.8
Average*	**16.6**	**13.8**	**15.7**	**18.4**

* Does not include UGI-Electric
+ PECO statistics include electric and gas.

Payment Arrangement Requests

During 2022, BCS handled 23,058 PARs from residential electric customers of the various EDCs (22,954) and EGSs (104). The seven major EDCs represented 97% (22,472) of the total PARs.

PAR Rate, Justified PAR Rate, and Percent of Justified PARs

The following tables show the PAR Rate, the Justified PAR Rate, and the Percent of Justified PARs for each major EDC in 2019, 2020, 2021 and 2022. A complaint is considered "justified" if it is found that the utility did not comply with Commission Orders, policies, regulations, reports, Secretarial Letters, or tariffs. BCS evaluates a statistically valid sampling of complaints for each utility.

The PAR rate is the number of PARs for each 1,000 residential customers.

The justified PAR rate is the estimated number of justified PARs for each 1,000 residential customers based on a statistically valid sampling of complaints. It is not a percentage. The justified rate is a normalized ratio useful for comparing utility performance among the various companies.

From 2019 to 2022, the justified PAR rates for all of the EDCs decreased. The 2022 justified PAR rates for Penelec, Penn Power and UGI-Electric were greater than the 2022 industry average.

The percent of justified PARs is the estimated number of justified complaints divided by the total number of complaints received (multiplied by 100). The percent of justified PARs represents a utility's individual performance.

2022 Residential Payment Arrangement Request (PAR) Rates, Justified PAR Rates, and Percent of Justified PARs Major Electric Distribution Companies

Utility	PAR Rate	Justified PAR Rate	Percent of Justified PARs
Duquesne	4.28	0.06*	1.4%*
Met-Ed	4.84	0.07*	1.5%*
PECO+	3.95	0.05*	1.2%*
Penelec	5.52	0.12*	2.2%*
Penn Power	5.85	0.14	2.4%
PPL	3.94	0.03*	0.9%*
UGI-Electric	8.62	0.40	4.6%
West Penn	4.72	0.05*	1.0%*
Average**	**4.73**	**0.08**	**1.3%**

+ PECO statistics include electric and gas.
* Based on a probability sample of complaints.
** Does not include UGI-Electric

2019-22 Residential Payment Arrangement Request (PAR) Numbers/Rates
Major Electric Distribution Companies

Utility	2019		2020		2021		2022	
	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
Duquesne	1,755	3.26	169	0.31	1,523	2.80	2,334	4.28
Met-Ed	3,711	7.35	312	0.61	1,186	2.32	2,493	4.84
PECO+	6,696	4.45	610	0.40	2,126	1.39	6,072	3.95
Penelec	4,048	8.08	332	0.66	1,304	2.60	2,768	5.52
Penn Power	1,212	8.30	99	0.67	370	2.50	871	5.85
PPL	7,413	6.01	707	0.57	2,893	2.31	4,953	3.94
UGI-Electric	549	9.96	112	2.04	175	3.18	475	8.62
West Penn	4,286	6.83	289	0.46	1,382	2.19	2,981	4.72
Total	**29,670**		**2,630**		**10,959**		**22,947**	
Average of Rates**		**6.33**		**0.53**		**2.30**		**4.73**

* The PAR rate is the number of PARs for each 1,000 residential customers.

** Does not include UGI-Electric.

\+ PECO statistics include electric and gas.

2019-22 Justified Residential Payment Arrangement Request (PAR) Numbers/Rates
Major Electric Distribution Companies

Utility	2019		2020		2021		2022	
	Number**	Rate***	Number**	Rate***	Number**	Rate***	Number**	Rate***
Duquesne	208*	0.39*	7	0.01	328*	0.60*	33*	0.06*
Met-Ed	507*	1.00*	37	0.07	175*	0.34*	38*	0.07*
PECO+	1,142*	0.76*	24	0.02	338*	0.22*	75*	0.05*
Penelec	521*	1.04*	29	0.06	153*	0.30*	61*	0.12*
Penn Power	150*	1.03*	7	0.05	50	0.34	21	0.14
PPL	749*	0.61*	43	0.03	335*	0.27*	43*	0.03*
UGI-Electric	74	1.34	8	0.15	19	0.34	22	0.40
West Penn	523*	0.83*	42	0.07	163*	0.26*	31*	0.05*
Average of Rates**	**3,874**		**197**		**1,561**		**324**	
Total		**0.81**		**0.04**		**0.33**		**0.08**

* Based on a probability sample of complaints.

** Estimated based on the number of PAR complaints in CSIS: 2020 as of June 4, 2021; 2021 as of Sept. 10, 2022; and 2022 as of May 5, 2023.

*** The justified PAR rate is the estimated number of justified PARs for each 1,000 residential customers based on a statistically valid sampling of complaints. The justified PAR rate is a normalized ratio useful for comparing utility performance among the various companies. It is not a percentage

**** Does not include UGI-Electric.

\+ PECO statistics include electric and gas.

2019-22 Number/Percent of Justified Residential Payment Arrangement Requests (PARs) Major Electric Distribution Companies

Utility	2019		2020		2021		2022	
	Number**	Percent***	Number**	Percent***	Number**	Percent***	Number**	Percent***
Duquesne	208*	11.9%*	7	4.1%	328*	21.5%*	33*	1.4%*
Met-Ed	507*	13.7%*	37	11.9%	175*	14.8%*	38*	1.5%*
PECO+	1,142*	17.1%*	24	3.9%	338*	15.9%*	75*	1.2%*
Penelec	521*	12.9%*	29	8.7%	153*	11.7%*	61*	2.2%*
Penn Power	150*	12.4%*	7	7.1%	50	13.5%	21	2.4%
PPL	749*	10.1%*	43	6.1%	335*	11.6%*	43*	0.9%*
UGI-Electric	74	13.5%	8	7.1%	19	10.9%	22	4.6%
West Penn	523*	12.2%*	42	14.5%	163*	11.8%*	31*	1.0%*
Average**	**3,874**		**197**		**1,561**		**324**	
Total		**13.0%**		**7.5%**		**14.3%**		**1.3%**

* Based on a probability sample of complaints.

** Estimated based on the number of PAR complaints in CSIS: 2020 as of June 4, 2021; 2021 as of Sept. 10, 2022; and 2022 as of May 5, 2023.

*** The percent of justified PARs is the estimated number of justified complaints divided by the total number of PARs received (multiplied by 100). The percent of justified PARs represents a utility's individual performance

**** Does not include UGI-Electric.

\+ PECO statistics include electric and gas.

PAR Response Time

Response time is the number of days from the date BCS first contacts the utility regarding a complaint to the date on which the utility provides BCS with its initial informal complaint report. Response time quantifies the speed of a utility's response to BCS PAR complaints. The calculation for average response excludes undisputed PARs and CURE complaints.

There was a wide range of PAR response times among the major EDCs in 2022, from a low of 6.4 days for PECO to a high of 15.1 days for Penn Power.

2019-22 Average Response Time to BCS
Residential Payment Arrangement Requests (PARs)
Major Electric Distribution Companies

Utility	Number of Days			
	2019	2020	2021	2022
Duquesne	5.1	10.0	8.5	8.6
Met-Ed	11.7	8.4	7.3	12.3
PECO+	7.9	10.9	8.2	6.4
Penelec	11.6	7.3	7.9	13.7
Penn Power	12.8	6.8	9.0	15.1
PPL	6.4	7.0	5.6	11.6
UGI-Electric	8.8	6.2	2.8	8.2
West Penn	12.1	7.0	7.8	13.0
Average*	**7.0**	**6.0**	**7.2**	**8.0**

* Does not include UGI-Electric.
+ PECO statistics include electric and gas.

Termination and Reconnection of Service

Each month, the electric utilities report to the Commission the number of residential accounts that they terminated for non-payment during the previous month. They also report the number of previously terminated residential accounts that they reconnected during the month. Some EDCs maintain a fairly consistent pattern of termination behavior, while others fluctuate from year to year. The number of reconnections varies from year to year and from utility to utility, depending on a variety of factors. The EDC reconnects a customer's terminated service when a customer either pays their debt in full or makes a significant payment on the debt and agrees to a payment arrangement for the balance owed to the utility or presents a medical certificate.

The following tables indicate the annual number of residential accounts each of the seven largest EDCs terminated and reconnected in 2019, 2020, 2021 and 2022. The first table also presents the termination rates for each of these utilities. The termination rate is the number of service terminations divided by the number of residential customers, expressed as a percent. Due to the Covid 19 pandemic, residential terminations were

suspended from March 13, 2020, to March 31, 2021. Utilities were encouraged to reconnect residential customers for health and safety reasons. This significantly impacted 2020 utility terminations and reconnections.

Residential Service Terminations/Termination Rates
Major Electric Distribution Companies

Utility	Residential Service Terminations				Termination Rates*			
	2019	2020**	2021	2022	2019	2020**	2021	2022
Duquesne	27,688	0	30,945	30,467	5.14	0.00	5.70	5.58
Met-Ed	26,076	754	26,941	28,816	5.17	0.15	5.26	5.59
PECO+	92,977	81	76,487	75,689	6.18	0.01	5.00	4.92
Penelec	21,065	760	20,354	20,488	4.21	0.15	4.06	4.09
Penn Power	4,293	150	2,416	3,244	2.94	0.10	1.63	2.18
PPL	53,340	1,502	30,843	35,241	4.32	0.12	2.47	2.81
UGI-Electric	913	36	1,493	1,607	1.66	0.07	2.71	2.92
West Penn	19,743	796	16,147	21,021	3.15	0.13	2.55	3.33
Total	**246,095**	**4,079**	**205,626**	**216,573**				
Average* **					**4.85**	**0.08**	**3.99**	**4.18**

* The termination rate is the number of service terminations divided by the number of residential customers, expressed as a percent.

** Due to the Covid 19 pandemic, residential terminations were suspended from March 13, 2020, to March 31, 2021. This significantly impacted 2020 utility terminations and reconnections.

*** Does not include UGI-Electric

\+ PECO statistics include electric and gas.

Residential Service Reconnections
Major Electric Distribution Companies

Utility	2019	2020*	2021	2022
Duquesne	21,468	0	24,848	23,976
Met-Ed	22,325	485	23,842	25,389
PECO+	78,866	1,181	66,909	62,113
Penelec	16,095	480	16,094	16,268
Penn Power	3,449	85	1,844	2,473
PPL	39,001	840	22,309	24,378
UGI-Electric	660	27	1,143	1,218
West Penn	15,308	536	12,882	17,148
Total	**197,172**	**3,634**	**169,871**	**172,963**

* Due to the Covid 19 pandemic, residential terminations were suspended from March 13, 2020, to March 31, 2021. Utilities were encouraged to reconnect residential customers for health and safety reasons. This significantly impacted 2020 utility terminations and reconnections.

+ PECO statistics include electric and gas.

Compliance

BCS provides utilities with written notice of alleged violations or infractions of the statutes and regulations found during BCS complaint handling. Utilities are provided opportunity to review and respond or appeal. The use of "infraction rate" is intended to help the Commission monitor and maintain customer services at the same level of quality for all distribution customers, regardless of who supplies their electricity under retail competition (66 Pa.C.S. § 2807(d)).

The infraction rates in the table that follows are based on informal complaints that residential consumers filed with BCS from 2019 through 2022. Infractions identified on complaints involving competition issues are included in the infraction statistics. The Infraction Category tables present detailed information about the infractions identified in 2022 complaints to the BCS.

The infraction rate is the number of informally verified infractions per 1,000 residential customers. Dividing per 1,000 customers normalizes the data for comparison purposes. The infraction rate is not a percentage. The categories with dispute-handling and credit standards and deposits are high percentage infraction areas. Appendix B-1 provides a list of the infractions included in each infraction category.

Commission Infraction Rates*
Major Electric Distribution Companies

Utility	2019	2020	2021	2022
Duquesne	0.16	0.10	0.23	0.24
Met-Ed	0.13	0.05	0.18	0.14
PECO+	0.03	0.02	0.08	0.10
Penelec	0.11	0.06	0.13	0.18
Penn Power	0.15	0.05	0.18	0.17
PPL	0.06	0.03	0.04	0.04
UGI-Electric	0.51	0.05	0.27	0.31
West Penn	0.09	0.07	0.09	0.14

* The infraction rate is the number of informally verified infractions per 1,000 residential customers. Dividing per 1,000 customers normalizes the data for comparison purposes. The infraction rate is not a percentage.
+ PECO statistics include electric and gas.

2022 Number and Percent of Major Electric Distribution Company Infractions*

Category**	Duquesne	Met-Ed	PECO+	Penelec	Penn Power	PPL	UGI-Electric	West Penn	Electric Industry ***
Billing and Payment	7	13	8	12	1	3	2	9	**55**
	5%	18%	5%	13%	4%	7%	12%	10%	**9%**
Meter Reading	0	0	8	1	1	0	0	1	**11**
	0%	0%	5%	1%	4%	0%	0%	1%	**1%**
Make-Up Bills	4	3	3	2	0	0	0	5	**17**
	3%	4%	2%	2%	0%	0%	0%	6%	**2%**
Transfer of Accounts	0	2	1	1	1	0	0	1	**6**
	0%	3%	1%	1%	4%	0%	0%	1%	**1%**
Credit Standards and Deposits	23	6	25	9	5	1	3	4	**76**
	18%	8%	16%	10%	19%	2%	18%	5%	**12%**
Termination Grounds	8	3	5	0	1	3	1	5	**26**
	6%	4%	3%	0%	4%	7%	6%	6%	**5%**
Termination Procedures	10	3	17	3	3	2	3	5	**46**
	8%	4%	11%	3%	12%	5%	18%	6%	**8%**
Reconnection of Service	19	3	13	9	4	4	0	7	**59**
	15%	4%	8%	10%	15%	9%	0%	8%	**9%**
Liability – Responsibility for Bills	0	0	2	1	1	0	0	0	**4**
	0%	0%	1%	1%	4%	0%	0%	0%	**1%**
Landlord/Ratepayer	0	0	2	2	0	0	0	0	**4**
	0%	0%	1%	2%	0%	0%	0%	0%	**<1%**
Dispute Handling	32	26	50	25	2	18	4	21	**178**
	25%	37%	32%	28%	8%	41%	24%	24%	**27%**
Other	26	12	20	25	7	13	4	30	**137**
	20%	17%	13%	28%	27%	30%	24%	34%	**24%**
Total	**129**	**71**	**154**	**90**	**26**	**44**	**17**	**88**	**619**

* The number of verified infractions identified by BCS as of May 4, 2023.
** Appendix B-1 provides a list of the infractions included in each infraction category.
*** Electric Average does not include UGI-Electric.
\+ PECO statistics include electric and gas.

8. Natural Gas Industry

In 2022, the Commission had jurisdiction over 21 natural gas distribution companies (NGDCs). The majority of Consumer Complaints and PARs are about the five major NGDCs: Columbia Gas of Pennsylvania Inc. (**Columbia**), National Fuel Gas Distribution Corp. (**NFG**), Peoples Natural Gas Co. (**Peoples**), Philadelphia Gas Works (**PGW**), and UGI Gas f/k/a UGI South (**UGI Gas**). This chapter will focus exclusively on those five utilities.

On Oct 3, 2019, at Docket No. R-2018-3006818, et al., the Commission approved the merger of People Natural Gas' separate Peoples and Equitable rate districts into a single rate district known as Peoples Natural Gas LLC. Although this change took effect when Peoples Natural Gas LLC's amended tariff became effective on Oct. 29, 2019, the 2019 data was based on the separate rate districts. Effective Jan. 1, 2020, the Peoples data includes Peoples-Equitable.

On Oct. 4, 2019, at Docket No. R-2018-3006814, et al., the Commission approved the merger of the UGI Utilities, Inc. separate rate districts – UGI Central, UGI North and UGI South – into one rate district existing as UGI Utilities, Inc. – Gas Division. Although this change took effect when UGI's amended tariff became effective on Oct. 11, 2019, UGI Utilities' 2019 data was based on the separate rate districts. Effective Jan. 1, 2020, the UGI Gas data includes UGI Central f/k/a UGI Central Penn and UGI North f/k/a UGI Penn Natural Gas.

The statistics in the tables on the pages that follow depict the performance of each of the five major gas utilities in 2022. The major gas utilities are those that have more than 100,000 residential customers.

Total Complaint Rate

The following table shows the Total Complaint Rate, which is the number of all complaints (FCRs and NFIs combined) for each 1,000 residential customers.

2019-22 Residential Total Complaint Numbers/Rates
Major Natural Gas Distribution Companies

Utility	2019		2020		2021		2022	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Columbia	852	2.13	257	0.63	639	1.57	1,004	2.45
NFG	895	4.55	150	0.76	355	1.79	522	2.65
Peoples+	1,584	4.72	477	0.81	1,344	2.27	1,634	2.75
Peoples-Equitable+	1,071	4.32	n/a	n/a	n/a	n/a	n/a	n/a
PGW	7,568	15.76	1,417	2.91	3,951	8.08	6,410	13.15
UGI Gas++	3,305	9.00	1,199	1.98	1,645	2.69	4,542	7.34
UGI North++	2,041	13.00	n/a	n/a	n/a	n/a	n/a	n/a
Total	**17,316**		**3,500**		**7,934**		**14,112**	
Average of Rates		**7.93**		**1.53**		**3.45**		**6.12**

+ Due to the Peoples Natural Gas merger, effective Jan. 1, 2020, the Peoples data includes Peoples-Equitable.
++ Due to the UGI Gas merger, effective Jan. 1, 2020, the UGI Gas data includes UGI Central and UGI North.

Consumer Complaints

During 2022, BCS handled 2,423 Consumer Complaints from residential natural gas customers of the various NGDCs (2,164) and natural gas suppliers (NGSs) (259). The five major NGDCs represented 88% (2,126) of the total Consumer Complaints.

Consumer Complaint Categories

The following table shows the number and percentage of 2022 complaints in each of the 14 categories used by BCS policy analysts for compliance evaluation. These categories are for all evaluated residential complaints filed with BCS.

Of the 1,254 Consumer Complaints evaluated, the top three categories of NGDC complaints account for almost half (45%) of the total: 23% billing disputes, 14% termination or PAR procedures, and 8% discontinuance/transfer. See Appendix D-1 for an explanation of complaint categories.

Number and Percent of Consumer Complaints by Dispute Category
2022 Complaints Evaluated*
Major Natural Gas Distribution Companies

Category**	Columbia	NFG	Peoples	PGW	UGI Gas	Gas Industry
Billing Disputes	34	12	52	112	77	**287**
	29%	23%	19%	26%	20%	**23%**
Termination or PAR Procedures	11	2	36	76	56	**181**
	9%	4%	13%	18%	15%	**14%**
Discontinuance/ Transfer	4	3	9	52	31	**99**
	3%	6%	3%	12%	8%	**8%**
Service Quality	12	9	42	7	22	**92**
	10%	17%	16%	2%	6%	**7%**
Personnel Problems	7	3	24	36	18	**88**
	6%	6%	9%	8%	5%	**7%**
Damages	7	5	31	17	24	**84**
	6%	10%	11%	4%	6%	**7%**
Other Payment Issues	7	3	20	27	24	**81**
	6%	6%	7%	6%	6%	**6%**
Credit and Deposits	3	0	7	29	39	**78**
	3%	0%	3%	7%	10%	**6%**
Metering	4	5	5	15	11	**40**
	3%	10%	2%	3%	3%	**3%**
Scheduling Delays	3	2	13	6	11	**35**
	3%	4%	5%	1%	3%	**3%**
Service Extensions	4	0	4	0	4	**12**
	3%	0%	1%	0%	1%	**1%**
Rates	4	0	0	3	2	**9**
	3%	0%	0%	1%	1%	**1%**
Service Interruptions	2	0	4	0	2	**8**
	2%	0%	1%	0%	1%	**1%**
All Other Problems	14	8	24	54	60	**160**
	12%	15%	9%	12%	16%	**13%**
Total*	**116**	**52**	**271**	**434**	**381**	**1,254**

* Based on residential complaints opened in 2022 and evaluated by BCS as of May 5, 2023.

** Categories are for all evaluated residential complaints filed with BCS. See Appendix D-1 for an explanation of complaint categories.

Consumer Complaint Rate, Justified Consumer Complaint Rate, and Percent of Justified Consumer Complaints

The following tables show the Consumer Complaint Rate, the Justified Consumer Complaint Rate, and the Percent of Justified Consumer Complaints for each major NGDC in 2019, 2020, 2021 and 2022. A complaint is considered "justified" if it is found that the utility did not comply with Commission Orders, policies, regulations, reports, Secretarial Letters, or tariffs. BCS evaluates a statistically valid sampling of complaints for each utility.

The Consumer Complaint rate is the number of Consumer Complaints for each 1,000 residential customers.

The justified Consumer Complaint rate is the estimated number of justified Consumer Complaints for each 1,000 residential customers based on a statistically valid sampling of complaints. The justified Consumer Complaint rate is a normalized ratio useful for comparing utility performance among the various utility companies. It is not a percentage.

From 2019 to 2022, the justified Consumer Complaint rates for Peoples and PGW increased, while the rates for Columbia, NFG and UGI Gas decreased. The 2022 justified Consumer Complaint rate for PGW was greater than the 2022 industry average.

The percent of justified Consumer Complaints is the estimated number of justified complaints divided by the total number of complaints received (multiplied by 100). The percent of justified Consumer Complaints represents a utility's individual performance.

2022 Residential Consumer Complaint Rates, Justified Consumer Complaint Rates, and Percent of Justified Consumer Complaints Major Natural Gas Distribution Companies

Utility	Consumer Complaint Rate	Justified Consumer Complaint Rate	Percent of Justified Consumer Complaints
Columbia	0.41	0.00	0.6%
NFG	0.34	0.04	12.1%
Peoples	0.58	0.02	3.8%
PGW	2.25	0.47*	20.7%*
UGI Gas	0.73	0.07	9.3%
Average	**0.86**	**0.12**	**13.7%**

* Based on a probability sample of complaints.

2019-22 Residential Consumer Complaint Numbers/Rates
Major Natural Gas Distribution Companies

Utility	2019		2020		2021		2022	
	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
Columbia	137	0.34	76	0.19	122	0.30	168	0.41
NFG	96	0.49	51	0.26	74	0.37	66	0.34
Peoples+	227	0.68	239	0.40	374	0.63	344	0.58
Peoples-Equitable+	163	0.66	n/a	n/a	n/a	n/a	n/a	n/a
PGW	920	1.92	501	1.03	628	1.28	1,095	2.25
UGI Gas++	296	0.81	222	0.37	296	0.48	453	0.73
UGI North++	235	1.50	n/a	n/a	n/a	n/a	n/a	n/a
Total	**2,074**		**1,089**		**1,494**		**2,126**	
Average of Rates		**0.91**		**0.45**		**0.61**		**0.86**

* The Consumer Complaint rate is the number of Consumer Complaints for each 1,000 residential customers.
\+ Due to the Peoples Natural Gas merger, effective Jan. 1, 2020, the Peoples data includes Peoples-Equitable.
++ Due to the UGI Gas merger, effective Jan. 1, 2020, the 2020 UGI Gas data includes UGI Central and UGI North.

2019-22 Justified Residential Consumer Complaint Numbers/Rates
Major Natural Gas Distribution Companies

Utility	2019		2020		2021		2022	
	Number**	Rate***	Number**	Rate***	Number**	Rate***	Number**	Rate***
Columbia	4	0.01	3	0.01	7	0.02	1	0.00
NFG	10	0.05	6	0.03	5	0.03	8	0.04
Peoples+	3	0.01	5	0.01	12	0.02	13	0.02
Peoples-Equitable+	9	0.04	n/a	n/a	n/a	n/a	n/a	n/a
PGW	77*	0.16*	70	0.14	150*	0.31*	227*	0.47*
UGI Gas++	33	0.09	18	0.03	40	0.07	42	0.07
UGI North++	25	0.16	n/a	n/a	n/a	n/a	n/a	n/a
Total	**161**		**102**		**214**		**291**	
Average of Rates		**0.07**		**0.04**		**0.09**		**0.12**

* Based on a probability sample of complaints.
** Estimated based on the number of Consumer Complaints in CSIS: 2020 as of June 4, 2021; 2021 as of Sept. 10, 2022; and 2022 as of May 5, 2023.
*** The justified Consumer Complaint rate is the estimated number of justified Consumer Complaints for each 1,000 residential customers based on a statistically valid sampling of complaints. The justified Consumer Complaint rate is a normalized ratio useful for comparing utility performance among the various companies. It is not a percentage.
\+ Due to the Peoples Natural Gas merger, effective Jan. 1, 2020, the 2020 Peoples data includes Peoples-Equitable.
++ Due to the UGI Gas merger, effective Jan. 1, 2020, the 2020 UGI Gas data includes UGI Central and UGI North.

2019-22 Number/Percent of Justified Residential Consumer Complaints
Major Natural Gas Distribution Companies

Utility	2019		2020		2021		2022	
	Number**	Percent***	Number**	Percent***	Number**	Percent***	Number**	Percent***
Columbia	4	2.9%	3	3.9%	7	5.7%	1	0.6%
NFG	10	10.4%	6	11.8%	5	6.8%	8	12.1%
Peoples+	3	1.3%	5	2.1%	12	3.2%	13	3.8%
Peoples-Equitable+	9	5.5%	n/a	n/a	n/a	n/a	n/a	n/a
PGW	77*	8.4%*	70	14.0%	150*	23.9%*	227*	20.7%*
UGI Gas++	33	11.1%	18	8.1%	40	13.5%	42	9.3%
UGI North++	25	10.6%	n/a	n/a	n/a	n/a	n/a	n/a
Total	**161**		**102**		**214**		**291**	
Average		**7.8%**		**9.4%**		**14.3%**		**13.7%**

* Based on a probability sample of complaints.

** Estimated based on the number of Consumer Complaints in CSIS: 2020 as of June 4, 2021; 2021 as of Sept. 10, 2022; and 2022 as of May 5, 2023.

*** The percent of justified Consumer Complaints is the estimated number of justified complaints divided by the total number of complaints received (multiplied by 100). The percent of justified Consumer Complaints represents a utility's individual performance.

\+ Due to the Peoples Natural Gas merger, effective Jan. 1, 2020, the Peoples data includes Peoples-Equitable.

++ Due to the UGI Gas merger, effective Jan. 1, 2020, the UGI Gas data includes UGI Central and UGI North.

Consumer Complaint Response Time

Response time is the number of days from the date BCS first contacts the utility regarding a complaint to the date the utility provides BCS with its initial informal complaint report. Response time quantifies the speed of a utility's response to BCS Consumer Complaints. Average response time includes all residential NGDC Consumer Complaints except complaints processed through CURE.

Peoples had the shortest Consumer Complaint response times in 2022, while PGW took the most time to respond.

2019-22 Average Response Time to BCS
Residential Consumer Complaints
Major Natural Gas Distribution Companies

Utility	Number of Days			
	2019	2020	2021	2022
Columbia	6.9	9.6	10.3	8.2
NFG	12.9	11.2	13.6	16.9
Peoples+	3.6	3.4	4.8	4.6
Peoples-Equitable+	3.8	n/a	n/a	n/a
PGW	14.8	10.5	21.2	19.8
UGI Gas++	11.3	8.8	7.6	10.7
UGI North++	11.9	n/a	n/a	n/a
Average	**11.2**	**8.4**	**13.0**	**14.2**

+ Due to the Peoples Natural Gas merger, effective Jan. 1, 2020, the Peoples data includes Peoples-Equitable.
++ Due to the UGI Gas merger, effective Jan. 1, 2020, the UGI Gas data includes UGI Central and UGI North.

Payment Arrangement Requests

During 2022, BCS handled 9,408 PARs from residential natural gas customers of the various NGDCs (9,397) and NGSs (11). The five major NGDCs represented 99% (9,320) of the total PARs.

PAR Rate, Justified PAR Rate, and Percent of Justified PARs

The following tables show the PAR Rate, the Justified PAR Rate, and the Percent of Justified PARs for each major NGDC in 2019, 2020, 2021 and 2022. A complaint is considered "justified" if it is found that the utility did not comply with Commission Orders, policies, regulations, reports, Secretarial Letters, or tariffs. BCS evaluates a statistically valid sampling of complaints for each utility.

The PAR rate is the number of PARs for each 1,000 residential customers.

The justified PAR rate is the estimated number of justified PARs for each 1,000 residential customers based on a statistically valid sampling of complaints. It is not a percentage. The justified rate is a normalized ratio useful for comparing utility performance among the various companies.

From 2019 to 2022, the justified PAR rates for Columbia and PGW increased, while the rates decreased for NFG, Peoples and UGI Gas. The 2022 justified PAR rates for PGW was greater than the 2022 industry average.

The percent of justified PARs is the estimated number of justified complaints divided by the total number of complaints received (multiplied by 100). The percent of justified PARs represents a utility's individual performance.

2022 Residential Payment Arrangement Request (PAR) Rates, Justified PAR Rates, and Percent of Justified PARs Major Natural Gas Distribution Companies

Utility	PAR Rate	Justified PAR Rate	Percent of Justified PARs
Columbia	1.35	0.04	3.1%
NFG	1.79	0.07	3.7%
Peoples	1.71	0.03*	1.5%*
PGW	8.21	1.43*	17.5%*
UGI Gas	5.49	0.14*	2.5%*
Average	**3.71**	**0.34**	**8.9%**

* Based on a probability sample of complaints

2019-22 Residential Payment Arrangement Request (PAR) Numbers/Rates
Major Natural Gas Distribution Companies

Utility	2019		2020		2021		2022	
	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
Columbia	469	1.17	62	0.15	338	0.83	552	1.35
NFG	610	3.10	56	0.28	219	1.11	353	1.79
Peoples+	870	2.59	114	0.19	769	1.30	1,018	1.71
Peoples-Equitable+	685	2.76	n/a	n/a	n/a	n/a	n/a	n/a
PGW	4,739	9.87	526	1.08	2,676	5.47	4,001	8.21
UGI Gas++	2,330	6.35	628	1.04	1,033	1.69	3,396	5.49
UGI North++	1,505	9.58	n/a	n/a	n/a	n/a	n/a	n/a
Total	**11,208**		**1,386**		**5,035**		**9,320**	
Average of Rates		**5.06**		**0.55**		**2.08**		**3.71**

* The PAR rate is the number of PARs for each 1,000 residential customers
\+ Due to the Peoples Natural Gas merger, effective Jan. 1, 2020, the Peoples data includes Peoples-Equitable.
++ Due to the UGI Gas merger, effective Jan. 1, 2020, the UGI Gas data includes UGI Central and UGI North.

2019-22 Justified Residential Payment Arrangement Request (PAR) Numbers/Rates
Major Natural Gas Distribution Companies

Utility	2019		2020		2021		2022	
	Number**	Rate***	Number**	Rate***	Number**	Rate***	Number**	Rate***
Columbia	12	0.03	0	0.00	13	0.03	17	0.04
NFG	48	0.24	3	0.02	43	0.22	13	0.07
Peoples+	63*	0.19*	16	0.03	50*	0.08*	15*	0.03*
Peoples-Equitable+	49	0.20	n/a	n/a	n/a	n/a	n/a	n/a
PGW	508*	1.06*	41	0.08	270*	0.55*	699*	1.43*
UGI Gas++	274*	0.75*	65	0.11	68*	0.11*	86*	0.14*
UGI North++	161*	1.03*	n/a	n/a	n/a	n/a	n/a	n/a
Total	**1,115**		**125**		**444**		**830**	
Average of Rates		**0.50**		**0.05**		**0.20**		**0.34**

* Based on a probability sample of complaints.
** Estimated based on the number of PAR complaints in CSIS: 2020 as of June 4, 2021; 2021 as of Sept. 10, 2022; and 2022 as of May 5, 2023.
*** The justified PAR rate is the estimated number of justified PARs for each 1,000 residential customers based on a statistically valid sampling of complaints. The justified PAR rate is a normalized ratio useful for comparing utility performance among the various companies. It is not a percentage.
\+ Due to the Peoples Natural Gas merger, effective Jan. 1, 2020, the Peoples data includes Peoples-Equitable.
++ Due to the UGI Gas merger, effective Jan. 1, 2020, the UGI Gas data includes UGI Central and UGI North.

2019-22 Number/Percent of Justified Residential Payment Arrangement Requests (PARs)
Major Natural Gas Distribution Companies

Utility	2019		2020		2021		2022	
	Number**	Percent***	Number**	Percent***	Number**	Percent***	Number**	Percent***
Columbia	12	2.6%	0	0.0%	13	3.8%	17	3.1%
NFG	48	7.9%	3	5.4%	43	19.6%	13	3.7%
Peoples+	63*	7.2%	16	14.0%	50*	6.5%	15*	1.5%*
Peoples-Equitable+	49	7.2%	n/a	n/a	n/a	n/a	n/a	n/a
PGW	508*	10.7%	41	7.8%	270*	10.1%	699*	17.5%*
UGI Gas++	274*	11.8%	65	10.4%	68*	6.6%	86*	2.5%*
UGI North++	161*	10.7%	n/a	n/a	n/a	n/a	n/a	n/a
Total	**1,115**		**125**		**444**		**830**	
Average		**9.9%**		**9.0%**		**8.8%**		**8.9%**

* Based on a probability sample of complaints.

** Estimated based on the number of PAR complaints in CSIS: 2020 as of June 4, 2021and 2021 as of Sept. 10, 2022; and 2022 as of May 5, 2023

*** The percent of justified PARs is the estimated number of justified complaints divided by the total number of PARs received (multiplied by 100). The percent of justified PARs represents a utility's individual performance.

\+ Due to the Peoples Natural Gas merger, effective Jan. 1, 2020, the Peoples data includes Peoples-Equitable.

++ Due to the UGI Gas merger, effective Jan. 1, 2020, the UGI Gas data includes UGI Central and UGI North.

PAR Response Time

Response time is the number of days from the date BCS first contacts the utility regarding a complaint to the date on which the utility provides BCS with its initial informal complaint report. Response time quantifies the speed of a utility's response to BCS PAR complaints. The calculation for average response excludes undisputed PARs and CURE complaints.

There was a wide range of PAR response times among the major EDCs in 2022, from a low of 2.4 days for Peoples to a high of 14.4 days for PGW.

2019-22 Average Response Time to BCS
Residential Payment Arrangement Requests (PARs)
Major Natural Gas Distribution Companies

Utility	Number of Days			
	2019	2020	2021	2022
Columbia	2.4	4.2	6.3	3.0
NFG	6.3	6.0	6.7	7.6
Peoples+	2.3	2.2	2.4	2.4
Peoples-Equitable+	2.1	n/a	n/a	n/a
PGW	7.6	4.6	15.5	14.4
UGI Gas++	6.2	5.6	2.5	5.6
UGI North++	6.3	n/a	n/a	n/a
Average	**4.3**	**3.2**	**10.4**	**7.7**

+ Due to the Peoples Natural Gas merger, effective Jan. 1, 2020, the Peoples data includes Peoples-Equitable.
++ Due to the UGI Gas merger, effective Jan. 1, 2020, the UGI Gas data includes UGI Central and UGI North.

Termination and Reconnection of Service

Each month, the electric utilities report to the Commission the number of residential accounts that they terminated for non-payment during the previous month. They also report the number of previously terminated residential accounts that they reconnected during the month. Some NGDCs maintain a fairly consistent pattern of termination behavior, while others fluctuate from year to year. The number of reconnections varies from year to year and from utility to utility, depending on a variety of factors. The NGDC reconnects a customer's terminated service when a customer either pays their debt in full or makes a significant payment on the debt and agrees to a payment arrangement for the balance owed to the utility or presents a medical certificate.

The following tables indicate the annual number of residential accounts each of the five largest NGDCs terminated and reconnected in 2019, 2020, 2021 and 2022. The first table also presents the termination rates for each of these utilities. The termination rate is the number of service terminations divided by the number of residential customers, expressed as a percent. Due to the Covid 19 pandemic, residential terminations were suspended from March 13, 2020, to March 31, 2021. Utilities were encouraged to reconnect residential

customers for health and safety reasons. This significantly impacted 2020 utility terminations and reconnections.

Residential Service Terminations/Termination Rates
Major Natural Gas Distribution Companies

Utility	Residential Service Terminations				Termination Rates*			
	2019	2020**	2021	2022	2019	2020**	2021	2022
Columbia	10,770	12	9,760	11,380	2.69	0.00	2.39	2.78
NFG	7,533	0	7,091	6,861	3.83	0.00	3.58	3.49
Peoples+	11,255	823	23,754	15,335	3.35	0.14	4.01	2.58
Peoples-Equitable+	9,444	n/a	n/a	n/a	3.81	n/a	n/a	n/a
PGW	29,048	0	15,669	14,410	6.05	0.00	3.21	2.96
UGI Gas++	10,657	356	23,013	26,882	2.90	0.06	3.76	4.35
UGI North++	6,652	n/a	n/a	n/a	4.24	n/a	n/a	n/a
Total	**85,359**	**1,191**	**79,287**	**74,868**				
Average					**3.91**	**0.05**	**3.45**	**3.25**

* The termination rate is the number of service terminations divided by the number of residential customers, expressed as a percent.

** Due to the Covid 19 pandemic, residential terminations were suspended from March 13, 2020, to March 31, 2021. This significantly impacted 2020 utility terminations and reconnections.

\+ Due to the Peoples Natural Gas merger, effective Jan. 1, 2020, the Peoples data includes Peoples-Equitable.

++ Due to the UGI Gas merger, effective Jan. 1, 2020, the UGI Gas data includes UGI Central and UGI North.

Residential Service Reconnections
Major Natural Gas Distribution Companies

Utility	2019	2020*	2021	2022
Columbia	6,153	235	5,503	6,760
NFG	4,926	167	5,095	5,003
Peoples+	7,648	988	18,349	11,840
Peoples-Equitable+	6,598	n/a	n/a	n/a
PGW	20,986	1,256	10,567	9,716
UGI Gas++	7,825	579	17,239	19,924
UGI North++	4,839	n/a	n/a	n/a
Total	**58,975**	**3,225**	**56,753**	**53,243**

* Due to the Covid 19 pandemic, residential terminations were suspended from March 13, 2020, to March 31, 2021. Utilities were encouraged to reconnect residential customers for health and safety reasons. This significantly impacted 2020 utility terminations and reconnections.

\+ Due to the Peoples Natural Gas merger, effective Jan. 1, 2020, the Peoples data includes Peoples-Equitable.

++ Due to the UGI Gas merger, effective Jan. 1, 2020, the UGI Gas data includes UGI Central and UGI North.

Compliance

BCS provides utilities with written notice of alleged violations or infractions of the statutes and regulations found during BCS complaint handling. Utilities are provided the opportunity to review and respond or appeal. The use of "infraction rate" is intended to help the Commission monitor and maintain customer services at the same level of quality for all distribution customers, regardless of who supplies their natural gas under retail competition (66 Pa.C.S. § 2206(a)).

The infraction rates in the table that follows are based on the review of informal complaints that residential consumers filed with BCS from 2019 through 2022. Infractions identified on complaints involving competition issues are included in the infraction statistics. The Infraction Category tables present detailed information about the infractions identified in complaints to the BCS.

The infraction rate is the number of informally verified infractions per 1,000 residential customers. Dividing per 1,000 customers normalizes the data for comparison purposes. The infraction rate is not a percentage. The credit standards and deposits category is a high percentage infraction area. Appendix B-1 provides a list of the infractions included in each infraction category.

Commission Infraction Rates*
Major Natural Gas Distribution Companies

Utility	2019	2020	2021	2022
Columbia	0.00	0.00	0.03	0.02
NFG	0.07	0.06	0.16	0.10
Peoples+	0.01	0.01	0.06	0.02
Peoples-Equitable+	0.03	n/a	n/a	n/a
PGW	0.18	0.28	0.47	0.83
UGI Gas++	0.14	0.04	0.13	0.18
UGI North++	0.25	n/a	n/a	n/a

* The infraction rate is the number of informally verified infractions per 1,000 residential customers. Dividing per 1,000 customers normalizes the data for comparison purposes. The infraction rate is not a percentage.
+ Due to the Peoples Natural Gas merger, effective Jan. 1, 2020, the Peoples data includes Peoples-Equitable.
++ Due to the UGI Gas merger, effective Jan. 1, 2020, the UGI Gas data includes UGI Central and UGI North.

2022 Number and Percent of Major Natural Gas Distribution Company Infractions*

Category**	Columbia	NFG	Peoples	PGW	UGI Gas	Gas Industry
Billing and Payment	0	0	2	29	3	**34**
	0%	0%	15%	7%	3%	**5%**
Meter Reading	0	2	0	10	6	**18**
	0%	10%	0%	2%	6%	**4%**
Make-Up Bills	1	1	0	10	1	**13**
	10%	5%	0%	2%	1%	**4%**
Transfer of Accounts	0	1	0	6	0	**7**
	0%	5%	0%	1%	0%	**1%**
Credit Standards and Deposits	3	3	3	88	23	**120**
	30%	15%	23%	22%	21%	**22%**
Termination Grounds	3	1	1	10	15	**30**
	30%	5%	8%	2%	14%	**12%**
Termination Procedures	0	1	0	42	16	**59**
	0%	5%	0%	10%	15%	**6%**
Reconnection of Service	1	2	2	30	16	**51**
	10%	10%	15%	7%	15%	**11%**
Liability – Responsibility for Bills	0	0	0	18	0	**18**
	0%	0%	0%	4%	0%	**1%**
Landlord/Ratepayer	0	0	0	4	0	**4**
	0%	0%	0%	1%	0%	**<1%**
Dispute Handling	0	7	1	97	14	**119**
	0%	35%	8%	24%	13%	**16%**
Other	2	2	4	61	15	**84**
	20%	10%	31%	15%	14%	**18%**
Total*	**10**	**20**	**13**	**405**	**109**	**557**

* The number of verified infractions identified by BCS as of May 4, 2023.

** Appendix B-1 provides a list of the infractions included in each infraction category.

9. Water Industry

In 2022, 74 water utilities were regulated by the PUC. Tables in this chapter present Consumer Complaint and PAR information. The water utilities are categorized into three groupings based on the amount of the utility's annual revenue, including Class A water utilities, Class B water utilities, and Class C water utilities. Some municipal water utilities are subject to PUC regulation because they operate beyond their municipal boundary; however, the data for municipal water utilities is not included in this report.

Class A water utilities generate annual revenues of $1 million or more for three consecutive years. In 2022, nine Class A water utilities served residential customers including:

- Aqua Pennsylvania Inc. (**Aqua**)
- Audubon Water Co. (**Audubon**)
- Columbia Water Co. (**Columbia**)
- Community Utilities of PA (**Community Utilities**)
- Newtown Artesian Water Co. (**Newtown Artesian**)
- Pennsylvania American Water Co. (**PAWC**)
- Veolia Water Bethel f/k/a SUEZ Water Bethel (**Veolia Bethel**)
- Veolia Water PA f/k/a SUEZ Water PA (**Veolia PA**)
- York Water Co. (**York**)

The number of residential customers served by these utilities in 2022 ranged from 2,452 residential customers for Veolia Water Bethel to 642,776 residential customers for PAWC.

Data for the Class A water utilities in this chapter are presented two ways; PAWC and Aqua are presented individually by utility and the rest are combined under the category of "Other Class A" utilities. Data representing Class A industry averages includes combined data for all Class A water utilities (both the individual data for PAWC and Aqua, as well as the combined data from the "Other Class A" utilities).

Compared to Class A water utilities, Class B and Class C utilities have lower annual revenues and typically fewer residential customers.

In 2022, seven Class B utilities were operating in Pennsylvania. These utilities had annual revenues between $200,000 and $999,999 and served 303 to 1,353 residential customers.

In 2022, there were 36 Class C utilities. The annual revenue for these utilities was less than $200,000 and they served customers ranging from one to 550.

The Commission has limited jurisdiction over municipally owned water and sewer utilities. The Commission's jurisdiction is limited to regulating the rates and service of customers that are outside the boundaries of the municipalities.

Chapter 32, Water and Sewer Authorities in Cities of the Second Class was added to Title 66 of the Public Utility Code on Dec. 21, 2017. The addition of Chapter 32 resulted in full PUC regulation of the Pittsburgh Water & Sewer Authority (PWSA), effective April 1, 2018. Although PWSA is a municipal water and sewer authority, 66 Pa.C.S.A. § 3202 provides that Commission laws, regulations, orders, etc. apply to PWSA in the same manner as a public utility. A Municipal Water and Sewer section distinguishes PWSA from the major public water utilities as PWSA works to implement policies and procedures that will fulfill the requirements of

PUC laws, regulations, and policies. PWSA is addressed later in this chapter in the Municipal Water, Sewer and Stormwater section.

Most residential Consumer Complaints and PARs to BCS concern the Class A water utilities. The tables on the pages that follow are specific to the Class A water utilities in 2022.

Total Complaint Rate

The following table shows the Total Complaint Rate, which is the number of all complaints (FCRs and NFIs combined) for each 1,000 residential customers.

2019-22 Residential Total Complaint Numbers/Rates
Major Class A Water Utilities

Utility	2019		2020		2021		2022	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Aqua	985	2.44	399	0.98	823	2.01	945	2.29
PAWC	4,116	6.71	1,435	2.28	2,459	3.89	2,711	4.22
Large Class A Total	**5,101**		**1,834**		**3,282**		**3,656**	
Large Class A Average of Rates		**5.01**		**1.77**		**3.15**		**3.46**
Audubon	3	1.11	11	4.18	7	2.61	6	2.23
Columbia	35	3.60	10	1.02	7	0.71	12	1.10
Community Utilities	10	3.80	35	13.26	21	7.93	22	8.30
Newtown Artesian	1	0.10	0	0.00	3	0.31	4	0.41
Veolia Bethel	0	0.00	1	0.41	0	0.00	1	0.41
Veolia PA	103	1.83	59	1.03	88	1.51	76	1.29
York	119	1.92	45	0.72	44	0.69	106	1.58
"Other Class A" Total	**271**		**161**		**170**		**227**	
"Other Class A" Average of Rates*		**1.86**		**1.10**		**1.14**		**1.47**
All Class A Total	**5,372**		**1,995**		**3,452**		**3,883**	
All Class A Average of Rates**		**4.62**		**1.69**		**2.90**		**3.21**

* Calculated based on the rate of "Other Class A" utilities as a whole.

** Calculated based on the rates of Aqua, PAWC, and "Other Class A" utilities as a whole.

Consumer Complaints

During 2022, BCS handled a total of 1,234 Consumer Complaints from residential customers of the various water utilities. The major Class A water utilities represented 85% (1,047) of the total Consumer Complaints.

While a majority of Consumer Complaints involved the Class A water utilities in 2022, the Commission devoted a significant amount of attention to the smaller water utilities to help educate them about customer service and billing compliance concerns.

During 2022, BCS handled 13 complaints for small water utilities, with 38% (5 complaints) involving billing disputes.

Consumer Complaint Categories

The following table shows the number and percentage of 2022 complaints in each of the 14 categories used by BCS policy analysts for compliance evaluation. These categories are for all evaluated residential complaints filed with BCS.

Of the 725 Consumer Complaints evaluated in 2022 for the Class A water utilities, approximately 35% concerned billing disputes. See Appendix D-1 for an explanation of complaint categories.

Number and Percent of Consumer Complaints by Dispute Category
2022 Complaints Evaluated*
Major Class A Water Utilities

Category**	Aqua	PAWC	Large Class A Avg	Audubon	Columbia	Community Utilities	Newtown Artesian	Veolia Bethel	Veolia PA	York	"Other Class A" Avg***	All Class A Water ****
Billing Disputes	93	148	**241**	1	0	3	2	0	2	6	**14**	**255**
	40%	34%	**36%**	33%	0%	30%	100%	0%	10%	29%	**23%**	**35%**
Termination or PAR Procedures	38	72	**110**	0	1	0	0	0	1	1	**3**	**113**
	16%	17%	**17%**	0%	20%	0%	0%	0%	5%	5%	**5%**	**16%**
Metering	21	55	**76**	0	0	0	0	0	10	1	**11**	**87**
	9%	13%	**11%**	0%	0%	0%	0%	0%	50%	5%	**18%**	**12%**
Service Quality	14	38	**52**	2	0	4	0	0	2	4	**12**	**64**
	6%	9%	**8%**	67%	0%	40%	0%	0%	10%	19%	**19%**	**9%**
Rates	28	7	**35**	0	1	2	0	0	0	0	**3**	**38**
	12%	2%	**5%**	0%	20%	20%	0%	0%	0%	0%	**5%**	**5%**
Credit and Deposits	11	17	**28**	0	1	0	0	0	0	0	**1**	**29**
	5%	4%	**4%**	0%	20%	0%	0%	0%	0%	0%	**2%**	**4%**
Damages	5	21	**26**	0	0	0	0	0	1	0	**1**	**27**
	2%	5%	**4%**	0%	0%	0%	0%	0%	5%	0%	**2%**	**4%**
Discontinuance/ Transfer	3	16	**19**	0	1	0	0	0	2	0	**3**	**22**
	1%	4%	**3%**	0%	20%	0%	0%	0%	10%	0%	**5%**	**3%**
Personnel Problems	2	16	**18**	0	0	1	0	0	0	1	**2**	**20**
	1%	4%	**3%**	0%	0%	10%	0%	0%	0%	5%	**3%**	**3%**
Other Payment Issues	10	7	**17**	0	0	0	0	0	1	1	**2**	**19**
	4%	2%	**3%**	0%	0%	0%	0%	0%	5%	5%	**3%**	**3%**
Service Interruptions	0	12	**12**	0	0	0	0	0	1	0	**1**	**13**
	0%	3%	**2%**	0%	0%	0%	0%	0%	5%	0%	**2%**	**2%**
Service Extensions	3	5	**8**	0	0	0	0	1	0	0	**1**	**9**
	1%	1%	**1%**	0%	0%	0%	0%	100%	0%	0%	**2%**	**1%**
Scheduling Delays	2	3	**5**	0	0	0	0	0	0	0	**0**	**5**
	1%	1%	**1%**	0%	0%	0%	0%	0%	0%	0%	**0%**	**1%**
All Other Problems	3	13	**16**	0	1	0	0	0	0	7	**8**	**24**
	1%	3%	**2%**	0%	20%	0%	0%	0%	0%	33%	**13%**	**3%**
Total*	**233**	**430**	**663**	**3**	**5**	**10**	**2**	**1**	**20**	**21**	**62**	**725**

* Based on residential complaints opened in 2022 and evaluated by BCS as of May 5, 2023.

** Categories are for all evaluated residential complaints filed with BCS. See Appendix D-1 for an explanation of complaint categories.

*** Calculated based on the rate of "Other Class A" utilities as a whole.

**** Calculated based on the rates of Aqua, PAWC, and "Other Class A" utilities as a whole.

Consumer Complaint Rate, Justified Consumer Complaint Rate, and Percent of Justified Consumer Complaints

The following tables show the Consumer Complaint Rate, the Justified Consumer Complaint Rate, and the Percent of Justified Consumer Complaints for each Class A water utility in 2019, 2020, 2021 and 2022. A complaint is considered "justified" if it is found that the utility did not comply with Commission Orders, policies, regulations, reports, Secretarial Letters, or tariffs. BCS evaluates a statistically valid sampling of complaints for each utility.

The Consumer Complaint rate is the number of Consumer Complaints for each 1,000 residential customers.

The justified Consumer Complaint rate is the estimated number of justified Consumer Complaints for each 1,000 residential customers based on a statistically valid sampling of complaints. The justified Consumer Complaint rate is a normalized ratio useful for comparing utility performance among the various utility companies. It is not a percentage.

The Large Class A average justified Consumer Complaint rate increased from 0.12 in 2019 to 0.21 in 2022.

The percent of justified Consumer Complaints is the estimated number of justified complaints divided by the total number of complaints received (multiplied by 100). The percent of justified Consumer Complaints represents a utility's individual performance.

2022 Residential Consumer Complaint Rates, Justified Consumer Complaint Rates, and Percent of Justified Consumer Complaints Major Class A Water Utilities

Utility	Consumer Complaint Rate	Justified Consumer Complaint Rate	Percent of Justified Consumer Complaints
Aqua	0.73	0.15	20.3%
PAWC	1.06	0.27*	25.1%*
Large Class A Average	**0.89**	**0.21**	**23.6%**
Audubon	1.11	0.37	33.3%
Columbia	0.46	0.28	60.0%
Community Utilities	3.77	0.00	0.0%
Newtown Artesian	0.21	0.00	0.0%
Veolia Bethel	0.41	0.00	0.0%
Veolia PA	0.41	0.07	16.7%
York	0.31	0.01	4.8%
"Other Class A" Average**	**0.43**	**0.06**	**13.6%**
All Class A Average***	**0.74**	**0.16**	**23.0%**

* Based on a probability sample of complaints

** Calculated based on the rate of "Other Class A" utilities as a whole.

*** Calculated based on the rates of Aqua, PAWC, and "Other Class A" utilities as a whole.

2019-22 Residential Consumer Complaint Numbers/Rates
Major Class A Water Utilities

Utility	2019		2020		2021		2022	
	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
Aqua	249	0.62	164	0.40	290	0.71	300	0.73
PAWC	575	0.94	549	0.87	723	1.14	681	1.06
Large Class A Total	**824**		**713**		**1,013**		**981**	
Large Class A Average of Rates		**0.78**		**0.64**		**0.93**		**0.89**
Audubon	2	0.74	1	0.38	5	1.86	3	1.11
Columbia	1	0.10	1	0.10	1	0.10	5	0.46
Community Utilities	2	0.76	23	8.71	0	0.00	10	3.77
Newtown Artesian	0	0.00	0	0.00	2	0.21	2	0.21
Veolia Bethel	0	0.00	1	0.41	0	0.00	1	0.41
Veolia PA	34	0.60	24	0.42	38	0.65	24	0.41
York	20	0.32	9	0.14	11	0.17	21	0.31
"Other Class A" Total	**59**		**59**		**57**		**66**	
"Other Class A" Avg. of Rates**		**0.41**		**0.03**		**0.38**		**0.43**
All Class A Total	**883**		**772**		**1,070**		**1,047**	
All Class A Average of Rates***		**0.65**		**0.56**		**0.74**		**0.74**

* The Consumer Complaint rate is the number of Consumer Complaints for each 1,000 residential customers.
** Calculated based on the rate of "Other Class A" utilities as a whole.
*** Calculated based on the rates of Aqua, PAWC and "Other Class A" utilities as a whole.

2019-22 Justified Residential Consumer Complaint Numbers/Rates
Major Class A Water Utilities

Utility	2019		2020		2021		2022	
	Number**	Rate***	Number**	Rate***	Number**	Rate***	Number**	Rate***
Aqua	36	0.09	30	0.07	40	0.10	61	0.15
PAWC	94	0.15	28	0.04	73*	0.12*	171*	0.27*
Large Class A Total	**130**		**58**		**113**		**232**	
Large Class A Average of Rates		**0.12**		**0.06**		**0.11**		**0.21**
Audubon	0	0.00	0	0.00	0	0.00	1	0.37
Columbia	0	0.00	0	0.00	0	0.00	3	0.28
Community Utilities	0	0.00	1	0.38	0	0.00	0	0.00
Newtown Artesian	0	0.00	0	0.00	0	0.00	0	0.00
Veolia Bethel	0	0.00	1	0.41	0	0.00	0	0.00
Veolia PA	3	0.05	1	0.02	7	0.12	4	0.07
York	1	0.02	0	0.00	0	0.00	1	0.01
"Other Class A" Total	**4**		**3**		**7**		**9**	
"Other Class A" Avg. of Rates**		**0.03**		**0.03**		**0.05**		**0.06**
All Class A Total	**134**		**61**		**120**		**241**	
All Class A Average of Rates***		**0.09**		**0.05**		**0.09**		**0.16**

* Based on a probability sample of complaints.

** Estimated based on the number of Consumer Complaints in CSIS: 2020 as of June 4, 2021; 2021 as of Sept. 10, 2022; and 2022 as of May 5, 2023.

*** The justified Consumer Complaint rate is the estimated number of justified Consumer Complaints for each 1,000 residential customers based on a statistically valid sampling of complaints. The justified Consumer Complaint rate is a normalized ratio useful for comparing utility performance among the various companies. It is not a percentage.

**** Calculated based on the rate of "Other Class A" utilities as a whole.

***** Calculated based on the rates of Aqua, PAWC, and "Other Class A" utilities as a whole.

2019-22 Number/Percent of Justified Residential Consumer Complaints
Major Class A Water Utilities

Utility	2019		2020		2021			
	Number**	Percent***	Number**	Percent***	Number**	Percent***	Number**	Percent***
Aqua	36	14.5%	30	18.3%	40	13.8%	61	20.3%
PAWC	94	16.3%	28	5.1%	73*	10.1%	171*	25.1%*
Large Class A Total	**130**		**58**		**113**		**232**	
Large Class A Average		**15.8%**		**8.1%**		**11.2%**		**23.6%**
Audubon	0	0.0%	0	0.0%	0	0.0%	1	33.3%
Columbia	0	0.0%	0	0.0%	0	0.0%	3	60.0%
Community Utilities	0	0.0%	1	4.3%	0	0.0%	0	0.0%
Newtown Artesian	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Veolia Bethel	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Veolia PA	3	8.8%	1	4.2%	7	18.4%	4	16.7%
York	1	5.0%	0	0.0%	0	0.0%	1	4.8%
"Other Class A" Total	**4**		**3**		**7**		**9**	
"Other Class A" Avg.****		**6.8%**		**5.1%**		**12.3%**		**13.6%**
All Class A Total	**134**		**61**		**120**		**241**	
All Class A Average*****		**15.2%**		**7.9%**		**11.2%**		**23.0%**

* Based on a probability sample of complaints.

** Estimated based on the number of Consumer Complaints in CSIS: 2020 as of June 4, 2021; 2021 as of Sept. 10, 2022; and 2022 as of May 5, 2023.

*** The percent of justified Consumer Complaints is the estimated number of justified complaints divided by the total number of complaints received (multiplied by 100). The percent of justified Consumer Complaints represents a utility's individual performance.

**** Calculated based on the rate of "Other Class A" utilities as a whole.

***** Calculated based on the rates of Aqua, PAWC, and "Other Class A" utilities as a whole.

Consumer Complaint Response Time

Response time is the number of days from the date BCS first contacts the utility regarding a complaint to the date the utility provides BCS with its initial informal complaint report. Response time quantifies the speed of a utility's response to BCS Consumer Complaints. Average response time includes all residential Class A water Consumer Complaints except complaints processed through CURE.

The Large Class A water utility average response time decreased from 21.2 days in 2019 to 11.3 days in 2022.

2019-22 Average Response Time to BCS
Residential Consumer Complaints
Major Class A Water Utilities

Utility	Number of Days			
	2019	2020	2021	2022
Aqua	22.5	14.6	13.7	3.1
PAWC	20.6	12.0	16.1	15.0
Large Class A Average	**21.2**	**12.5**	**15.4**	**11.3**
Audubon	24.5	9.0	17.6	9.0
Columbia	1.0	5.0	7.0	7.0
Community Utilities	4.5	7.4	0.0	11.1
Newtown Artesian	0.0	0.0	6.0	10.5
Veolia Bethel	0.0	27.0	0.0	20.0
Veolia PA	30.5	29.0	25.6	24.8
York	4.4	10.0	6.8	7.1
"Other Class A" Average*	**20.1**	**16.2**	**20.1**	**14.2**
All Class A Average**	**21.1**	**12.9**	**15.7**	**11.5**

* Calculated based on the rate of "Other Class A" utilities as a whole.

** Calculated based on the rates of Aqua, PAWC, and "Other Class A" utilities as a whole.

Payment Arrangement Requests

During 2022, BCS handled 1,991 PARs from residential water customers of the various water utilities. The major Class A water utilities represented 97% (1,936) of the total PARs.

PAR Rate, Justified PAR Rate, and Percent of Justified PARs

The following tables show the PAR Rate, the Justified PAR Rate, and the Percent of Justified PARs for each Class A water utility in 2019, 2020, 2021 and 2022. A complaint is considered "justified" if it is found that the utility did not comply with Commission Orders, policies, regulations, reports, Secretarial Letters, or tariffs. BCS evaluates a statistically valid sampling of complaints for each utility.

The PAR rate is the number of PARs for each 1,000 residential customers.

The justified PAR rate is the estimated number of justified PARs for each 1,000 residential customers based on a statistically valid sampling of complaints. It is not a percentage. The justified rate is a normalized ratio useful for comparing utility performance among the various utility companies.

The Large Class A average justified PAR rate decreased from 0.60 in 2019 to 0.33 in 2022.

The percent of justified PARs is the estimated number of justified complaints divided by the total number of complaints received (multiplied by 100). The percent of justified PARs represents a utility's individual performance.

2022 Residential Payment Arrangement Request (PAR) Rates, Justified PAR Rates, and Percent of Justified PARs Major Class A Water Utilities

Utility	PAR Rate	Justified PAR Rate	Percent of Justified PARs
Aqua	0.87	0.24	27.5%
PAWC	2.33	0.42*	18.2%*
Large Class A Average	**1.60**	**0.33**	**20.0%**
Audubon	0.37	0.00	0.0%
Columbia	0.37	0.00	0.0%
Community Utilities	3.39	0.75	22.2%
Newtown Artesian	0.10	0.00	0.0%
Veolia Bethel	0.00	0.00	0.0%
Veolia PA	0.53	0.08	16.1%
York	0.46	0.12	25.8%
"Other Class A" Average**	**0.50**	**0.07**	**19.5%**
All Class A Average***	**1.23**	**0.25**	**20.0%**

* Based on a probability sample of complaints.
** Calculated based on the rate of "Other Class A" utilities as a whole.
*** Calculated based on the rates of Aqua, PAWC, and "Other Class A" utilities as a whole.

2019-22 Residential Payment Arrangement Request (PAR) Numbers/Rates
Major Class A Water Utilities

Utility	2019		2020		2021		2022	
	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
Aqua	529	1.31	113	0.28	252	0.62	360	0.87
PAWC	2,766	4.51	469	0.75	1,222	1.93	1,499	2.33
Large Class A Total	**3,295**		**582**		**1,474**		**1,859**	
Large Class A Average of Rates		**2.91**		**0.51**		**1.27**		**1.60**
Audubon	0	0.00	0	0.00	0	0.00	1	0.37
Columbia	30	3.08	6	0.61	5	0.51	4	0.37
Community Utilities	2	0.76	2	0.76	2	0.76	9	3.39
Newtown Artesian	1	0.10	0	0.00	1	0.10	1	0.10
Veolia Bethel	0	0.00	0	0.00	0	0.00	0	0.00
Veolia PA	48	0.85	11	0.19	29	0.50	31	0.53
York	80	1.29	21	0.33	25	0.39	31	0.46
"Other Class A" Total	**161**		**40**		**62**		**77**	
"Other Class A" Avg. of Rates**		**1.11**		**0.27**		**0.42**		**0.50**
All Class A Total	**3,456**		**622**		**1,536**		**1,936**	
All Class A Average of Rates***		**2.31**		**0.43**		**0.99**		**1.23**

* The PAR rate is the number of PARs for each 1,000 residential customers.

** Calculated based on the rate of "Other Class A" utilities as a whole.

*** Calculated based on the rates of Aqua, PAWC, and "Other Class A" utilities as a whole.

2019-22 Justified Residential Payment Arrangement Request (PAR) Numbers/Rates
Major Class A Water Utilities

Utility	2019		2020		2021		2022	
	Number**	Rate***	Number**	Rate***	Number**	Rate***	Number**	Rate***
Aqua	45	0.11	5	0.01	39	0.62	99	0.24
PAWC	669*	1.09*	75	0.12	133*	1.93*	273*	0.42*
Large Class A Total	**714**		**80**		**172**		**372**	
Large Class A Average of Rates		**0.60**		**0.07**		**1.27**		**0.33**
Audubon	0	0.00	0	0.00	0	0.00	0	0.00
Columbia	0	0.00	2	0.20	0	0.51	0	0.00
Community Utilities	0	0.00	0	0.00	1	0.76	2	0.75
Newtown Artesian	0	0.00	0	0.00	0	0.10	0	0.00
Veolia Bethel	0	0.00	0	0.00	0	0.00	0	0.00
Veolia PA	0	0.00	0	0.00	5	0.50	5	0.08
York	2	0.03	0	0.00	0	0.39	8	0.12
"Other Class A" Total	**2**		**2**		**6**		**15**	
"Other Class A" Avg. of Rates****		**0.01**		**0.02**		**0.42**		**0.07**
All Class A Total	**716**		**82**		**178**		**387**	
All Class A Average of Rates*****		**0.41**		**0.05**		**0.99**		**0.25**

* Based on a probability sample of complaints.

** Estimated based on the number of PAR complaints in CSIS: 2020 as of June 4, 2021; 2021 as of Sept. 10, 2022; and 2022 as of May 5, 2023.

*** The justified PAR rate is the estimated number of justified PARs for each 1,000 residential customers based on a statistically valid sampling of complaints. The justified PAR rate is a normalized ratio useful for comparing utility performance among the various companies. It is not a percentage.

**** Calculated based on the rate of "Other Class A" utilities as a whole.

***** Calculated based on the rates of Aqua, PAWC, and "Other Class A" utilities as a whole.

2019-22 Number/Percent of Justified Residential Payment Arrangement Requests (PARs) Major Class A Water Utilities

Utility	2019		2020		2021		2022	
	Number**	Percent***	Number**	Percent***	Number**	Percent***	Number**	Percent***
Aqua	45	8.5%	5	4.4%	39	15.5%	99	27.5%
PAWC	669*	24.2%*	75	16.0%	133*	10.9%*	273*	18.2%*
Large Class A Total	**714**		**80**		**172**		**372**	
Large Class A Average		**21.7%**		**13.7%**		**11.7%**		**20.0%**
Audubon	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Columbia	0	0.0%	2	33.3%	0	0.0%	0	0.0%
Community Utilities	0	0.0%	0	0.0%	1	50.0%	2	22.2%
Newtown Artesian	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Veolia Bethel	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Veolia PA	0	0.0%	0	0.0%	5	17.2%	5	16.1%
York	2	2.5%	0	0.0%	0	0.0%	8	25.8%
"Other Class A" Total	**2**		**2**		**6**		**15**	
"Other Class A" Average****		**1.2%**		**5.0%**		**9.7%**		**19.5%**
All Class A Total	**716**		**82**		**178**		**387**	
All Class A Average*****		**20.7%**		**13.2%**		**11.6%**		**20.0%**

* Based on a probability sample of complaints.

** Estimated based on the number of PAR complaints in CSIS: 2020 as of June 4, 2021; 2021 as of Sept. 10, 2022; and 2022 as of May 5, 2023.

*** The percent of justified PARs is the estimated number of justified complaints divided by the total number of PARs received (multiplied by 100). The percent of justified PARs represents a utility's individual performance.

**** Calculated based on the rate of "Other Class A" utilities as a whole.

***** Calculated based on the rates of Aqua, PAWC, and "Other Class A" utilities as a whole.

PAR Response Time

Response time is the number of days from the date BCS first contacts the utility regarding a complaint to the date on which the utility provides BCS with its initial informal complaint report. Response time quantifies the speed of a utility's response to BCS PAR complaints. The calculation for average response excludes undisputed PARs and CURE complaints.

Aqua's response time decreased by 14.1 days from 15.6 days in 2019 to 1.5 days in 2022, and PAWC's response time decreased by 6.1 days from 12.3 days in 2019 to 6.2 days in 2022.

2019-22 Average Response Time to BCS
Residential Payment Arrangement Requests (PARs)
Major Class A Water Utilities

Utility	Number of Days			
	2019	2020	2021	2022
Aqua	15.6	14.4	6.2	1.5
PAWC	12.3	8.9	8.4	6.2
Large Class A Average	**13.0**	**7.3**	**8.5**	**4.4**
Audubon	0.0	0.0	0.0	2.0
Columbia	10.3	5.4	10.7	13.3
Community Utilities	5.0	3.5	3.5	12.4
Newtown Artesian	5.0	0.0	30.0	2.0
Veolia Bethel	0.0	0.0	0.0	0.0
Veolia PA	29.7	24.3	18.5	20.8
York	4.0	3.6	4.7	5.3
"Other Class A" Average*	**11.9**	**9.9**	**12.8**	**13.2**
All Class A Average**	**13.0**	**7.5**	**8.7**	**4.8**

* Calculated based on the rate of "Other Class A" utilities as a whole.

** Calculated based on the rates of Aqua, PAWC, and "Other Class A" utilities as a whole.

Termination and Reconnection of Service

Each month, the electric utilities report to the Commission the number of residential accounts that they terminated for non-payment during the previous month. They also report the number of previously terminated residential accounts that they reconnected during the month. Some water utilities maintain a fairly consistent pattern of termination behavior, while others fluctuate from year to year. The number of reconnections varies from year to year and from utility to utility, depending on a variety of factors. The water utility reconnects a customer's terminated service when a customer either pays their debt in full or makes a significant payment on the debt and agrees to a payment arrangement for the balance owed to the utility or presents a medical certificate.

The following tables indicate the annual number of residential accounts each of the Class A water utilities terminated and reconnected in 2019, 2020, 2021 and 2022. The first table also presents the termination rates for each of these utilities. The termination rate is the number of service terminations divided by the number of residential customers, expressed as a percent. Due to the Covid 19 pandemic, residential terminations were suspended from March 13, 2020, to March 31, 2021. Utilities were encouraged to reconnect residential customers for health and safety reasons. This significantly impacted 2020 utility terminations and reconnections.

Residential Service Terminations/Termination Rates
Major Class A Water Utilities

Utility	Residential Service Terminations				Termination Rates*			
	2019	2020**	2021	2022	2019	2020**	2021	2022
Aqua	7,125	1,255	7,070	5,585	1.76	0.31	1.70	1.35
PAWC	22,749	1,580	20,340	24,625	3.71	0.25	3.21	3.83
Large Class A Total	**29,874**	**2,835**	**27,410**	**30,210**				
Large Class A Average					**3.21**	**0.35**	**2.63**	**2.86**
Audubon	13	0	7	29	0.48	0.00	0.26	1.08
Columbia	240	59	132	264	2.47	0.60	1.34	2.43
Community Utilities	158	55	25	80	6.00	2.08	0.94	3.02
Newtown Artesian	33	0	18	14	0.34	0.00	0.19	0.14
Veolia Bethel	0	0	0	0	0.00	0.00	0.00	0.00
Veolia PA	534	82	367	570	0.95	0.14	0.63	0.97
York	883	179	495	269	1.42	0.29	0.78	0.40
"Other Class A" Total	**1,861**	**375**	**1,044**	**1,226**				
"Other Class A" Average* **					**1.28**	**0.26**	**0.70**	**0.79**
All Class A Total	**31,735**	**3,210**	**28,454**	**31,436**				
All Class A Average** **					**2.97**	**0.34**	**2.39**	**2.60**

* The termination rate is the number of service terminations divided by the number of residential customers, expressed as a percent.

** Due to the Covid 19 pandemic, residential terminations were suspended from March 13, 2020, to March 31, 2021. This significantly impacted 2020 utility terminations and reconnections.

*** Calculated based on the rate of "Other Class A" utilities as a whole.

**** Calculated based on the rates of Aqua, PAWC, and "Other Class A" utilities as a whole.

Residential Service Reconnections
Major Class A Water Utilities

Utility	2019	2020*	2021	2022
Aqua	5,135	619	5,090	4,879
PAWC	18,620	1,873	14,239	16,663
Large Class A Total	**23,755**	**2,492**	**19,329**	**21,542**
Audubon	10	0	5	25
Columbia	183	46	118	228
Community Utilities	102	51	15	55
Newtown Artesian	32	0	13	9
Veolia Bethel	0	0	0	0
Veolia PA	198	72	180	386
York	509	117	217	145
"Other Class A" Total	**1,034**	**286**	**548**	**848**
All Class A Total	**24,789**	**2,778**	**19,877**	**22,390**

* Due to the Covid 19 pandemic, residential terminations were suspended from March 13, 2020, to March 31, 2021. Utilities were encouraged to reconnect residential customers for health and safety reasons. This significantly impacted 2020 utility terminations and reconnections.

Compliance

BCS provides water utilities with written notice of alleged violations or infractions of the statutes and regulations found during BCS complaint handling. Utilities are provided opportunity to review and respond or appeal. The use of "infraction rate" is intended to help the Commission monitor and maintain customer services at the same level of quality for all customers.

The infraction rates in the table that follows are based on the review of informal complaints that residential consumers filed with BCS from 2019 through 2022. The Infraction Category tables present detailed information about the infractions identified in 2022 complaints to the BCS.

The infraction rate is the number of informally verified infractions per 1,000 residential customers. Dividing per 1,000 customers normalizes the data for comparison purposes. The infraction rate is not a percentage. The reconnection of service category is a high percentage infraction area. Appendix B-1 provides a list of the infractions included in each infraction category.

Commission Infraction Rates*
Major Class A Water Utilities

Utility	2019	2020	2021	2022
Aqua	0.14	0.08	0.12	0.35
PAWC	0.22	0.06	0.24	0.58
Audubon	0.00	0.00	0.00	0.00
Columbia	0.00	0.10	0.00	0.09
Community Utilities	0.00	0.00	0.76	0.38
Newtown Artesian	0.00	0.00	0.00	0.00
Veolia Bethel	0.00	0.82	0.00	0.00
Veolia PA	0.12	0.02	0.22	0.14
York	0.02	0.00	0.00	0.03

* The infraction rate is the number of informally verified infractions per 1,000 residential customers. Dividing per 1,000 customers normalizes the data for comparison purposes. The infraction rate is not a percentage.

2022 Number and Percent of Major Water Utility Infractions*

Category**	Aqua	PAWC	Audubon	Columbia	Community Utilities	Newtown Artesian	Veolia Bethel	Veolia PA	York	All Class A Water
Billing and Payment	7	29	0	0	0	0	0	0	0	**36**
	5%	8%	0%	0%	0%	0%	0%	0%	0%	**1%**
Meter Reading	5	3	0	0	0	0	0	0	0	**8**
	3%	1%	0%	0%	0%	0%	0%	0%	0%	**<1%**
Make-Up Bills	3	10	0	0	0	0	0	2	0	**15**
	2%	3%	0%	0%	0%	0%	0%	25%	0%	**3%**
Transfer of Accounts	0	3	0	1	0	0	0	0	0	**4**
	0%	1%	0%	100%	0%	0%	0%	0%	0%	**11%**
Credit Standards and Deposits	5	36	0	0	0	0	0	0	0	**41**
	3%	10%	0%	0%	0%	0%	0%	0%	0%	**1%**
Termination Grounds	11	22	0	0	0	0	0	0	0	**33**
	8%	6%	0%	0%	0%	0%	0%	0%	0%	**2%**
Termination Procedures	26	50	0	0	0	0	0	3	0	**79**
	18%	13%	0%	0%	0%	0%	0%	38%	0%	**8%**
Reconnection of Service	45	112	0	0	1	0	0	2	1	**161**
	31%	30%	0%	0%	100%	0%	0%	25%	50%	**26%**
Liability – Responsibility for Bills	0	0	0	0	0	0	0	0	0	**0**
	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Landlord/Ratepayer	1	8	0	0	0	0	0	0	0	**9**
	1%	2%	0%	0%	0%	0%	0%	0%	0%	**<1%**
Dispute Handling	38	84	0	0	0	0	0	1	1	**124**
	26%	23%	0%	0%	0%	0%	0%	13%	50%	**12%**
Other	4	14	0	0	0	0	0	0	0	**18**
	3%	4%	0%	0%	0%	0%	0%	0%	0%	**1%**
Total	**145**	**371**	**0**	**1**	**1**	**0**	**0**	**8**	**2**	**528**

* The number of verified infractions identified by BCS as of May 4, 2023.

** Appendix B-1 provides a list of the infractions included in each infraction category.

Municipal Water, Sewer and Stormwater

The Commission's jurisdiction over municipal water and sewer utilities, including stormwater, is limited to regulating the rates and service of customers that are outside the boundaries of the municipalities. However, with the passage of Act 65 of 2017, Chapter 32 was added to Title 66 of the Public Utility Code. The enactment of this law resulted in the PUC gaining regulatory authority over the Pittsburgh Water and Sewer Authority (**PWSA**) regarding the provision of utility water, wastewater and stormwater service, effective Apr. 1, 2018. This section was added to this report to separate and distinguish municipal water, sewer, and stormwater data from the data of the major water utilities. In this section, only PWSA data is included.

Act 65 required PWSA to file a Compliance Plan with the PUC detailing how the authority would bring its existing operating systems and procedures into compliance with applicable rules, regulations, and orders of the Commission. The law mandated the PUC to conduct an in-depth review of PWSA's Compliance Plan to ensure the Authority's compliance with the Public Utility Code and the Commission's regulations. The Commission's review of the PWSA Compliance Plan, which was filed by the Authority on Sept. 28, 2018, at Docket No. M-2018-2640802 (water) and Docket No. M-2018-2640803 (wastewater), was divided into a two-stage process. Stage 1 focused on urgent infrastructure remediation and improvement and the revenue and financing requirements of maintaining service that supports public health and safety, followed by Stage 2, which focused on PWSA billing and collection issues and the development of a proposed PWSA stormwater tariff. The PUC finalized the Stage 1 proceeding on February 4, 2021. The Stage 2 proceeding pertaining to PWSA billing and collections issues was concluded by the PUC on July 14, 2022, followed by the finalization of the Stage 2 stormwater proceeding on August 25, 2022.

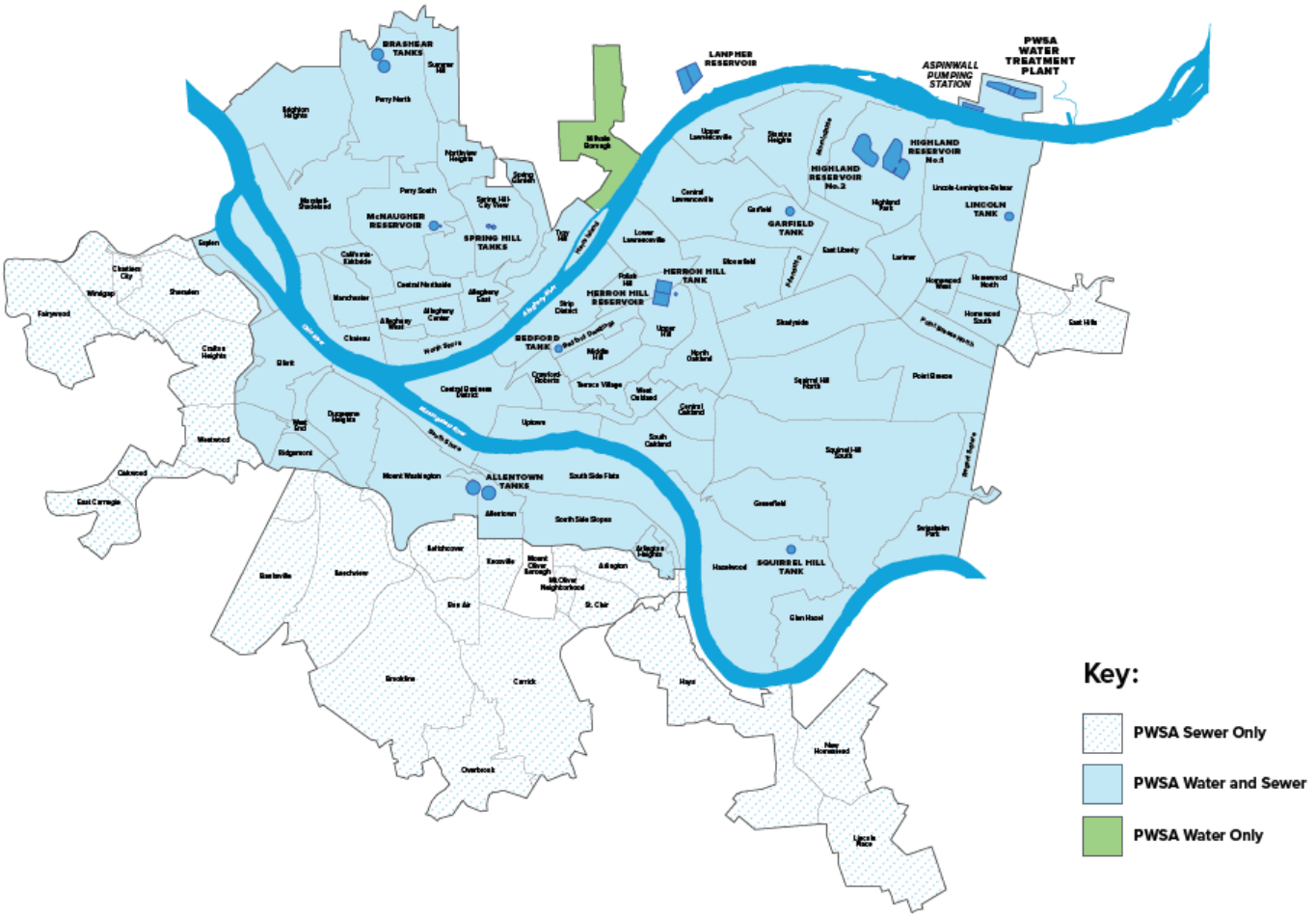
Stage 2 Compliance Plan: Chapters 14 & 56, DSLPA and Collections: On March 14, 2022, a Joint Petition for Settlement Regarding PWSA's April 9, 2021, Stage 2 Compliance Plan: Chapters 14 & 56, DSLPA and Collections was filed by the Pittsburgh Water and Sewer Authority, the PUC's Bureau of Investigation and Enforcement, the Office of Consumer Advocate (OCA), Pittsburgh UNITED, and the City of Pittsburgh. The Joint Petition was approved without modification through the issuance of a Recommended Decision by Administrative Law Judge Eranda Vero and Administrative Law Judge Gail M. Chiodo on May 19, 2022, with provisions for the submission of Exceptions and Replies to Exceptions on the Recommended Decision. With no Exceptions or Replies to Exceptions filed, the PUC issued an Order dated July 14, 2022, which approved the March 14, 2022, Joint Petition concerning the Stage 2 Compliance Plan: Chapters 14 & 56, DSLPA and Collections.

Stage 2 Compliance Plan: Stormwater: On Jan. 20, 2022, PWSA submitted a Revised Stage 2 Compliance Plan: Stormwater. On June 9, 2022, a Joint Petition for Settlement Regarding PWSA's Jan. 20, 2022, Stage 2 Compliance Plan: Stormwater (Revised) was filed by PWSA, OCA, Pittsburgh United, and the City of Pittsburgh. The Joint Petition was approved without modification through the issuance of a Recommended Decision by Administrative Law Judge Eranda Vero and Administrative Law Judge Gail M. Chiodo on July 19, 2022, with provisions for the submission of Exceptions and Replies to Exceptions on the Recommended Decision. With no Exceptions or Replies to Exceptions filed, the PUC issued an Order dated August 25, 2022, which approved the July 19, 2022, Joint Petition concerning the Stage 2 Compliance Plan: Stormwater (Revised)

In response to the final Orders entered on July 14, 2022, and Aug. 25, 2022, as explained above, PWSA was required to submit Compliance Tariffs that reflect the stipulations in each of the final Orders. By Secretarial Letter dated Nov. 17, 2022, the PUC announced that Supplement No. 1 to Tariff Storm Water – Pa. P.U.C. No. 1 was effective on November 2, 2022.

PWSA is the largest water, sewer and stormwater authority in Pennsylvania and currently serves nearly 100,000 residential customers throughout the City of Pittsburgh and surrounding communities. In addition to providing water, wastewater, and stormwater services, PWSA provides wastewater conveyance to city residents served by the Pennsylvania-American Water Co. and provides water to Millvale Borough residents, whose water system was acquired by the Authority in 2009. The map below provides a detailed illustration of the territory currently served by PWSA. It is important to note that PWSA also provides billing services for the ALCOSAN, whose charges for sewage treatment appear on the billing statements of PWSA customers.

PWSA Service Areas



Given its divergent services and customer base, PWSA regulation is often complex. For these reasons, the PWSA informal complaint data presented in this chapter are designated as PWSA-Water or PWSA-Sewer based upon the nature of the complaint. As an example, a PWSA-Sewer complaint may involve the sewer service, but the customer may receive both water and sewer bills or just a sewer bill from PWSA. In addition to providing water and sewer services, PWSA also provides stormwater services and serves approximately 5,366 Stormwater only customers. With the enactment of PWSA's stormwater fee on Jan. 12, 2022, the PUC, for the first time, acquired regulatory authority over the provision of stormwater services by a jurisdictional utility.

The data provided in the tables below include PWSA informal complaint activity for 2022. It should be clarified that PUC regulatory jurisdiction over PWSA was not effective until Apr. 1, 2018. Contacts prior to April 1, 2018, were tracked and categorized as FCRs. In addition, it is important to note that data on PWSA

infractions is not provided in this section as it is for the major water utilities. Despite the conclusion of the compliance proceedings for Stage 1 and Stage 2 as identified above, BCS is continuing to monitor PWSA's implementation of compliance initiatives emanating from the Stage 1 and Stage 2 proceedings. Therefore, it is premature for BCS to report this data currently. BCS will publish PWSA infraction data in future UCARE reports.

Total Complaint Rate

The following table shows the Total Complaint Rate, which is the number of all complaints (FCRs and NFIs combined) for each 1,000 residential customers.

2019-22 Residential Total Complaint Numbers/Rates
Municipal Water and Sewer Utilities

Utility	2019		2020		2021		2022	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
PWSA-Water	380	3.89	273	2.79	276	2.82	271	2.73
PWSA-Sewer	128	1.31	67	0.68	47	0.48	47	0.47
Total	**508**		**340**		**323**		**318**	
Average of Rates		**2.60**		**1.74**		**1.65**		**1.60**

First Contact Resolutions (FCRs)

The following table shows the number of residential FCR complaints.

2019-22 Residential FCRs
Municipal Water and Sewer Utilities

Utility	2019	2020	2021	2022
PWSA-Water	72	69	73	63
PWSA-Sewer	26	11	19	13
Average	**98**	**80**	**92**	**76**

Consumer Complaints

The following table shows the Consumer Complaint Rate, which is the number of Consumer Complaints for each 1,000 residential customers.

2019-22 Residential Consumer Complaint Numbers/Rates
Municipal Water and Sewer Utilities

Utility	2019		2020		2021		2022	
	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
PWSA-Water	192	1.96	180	1.84	180	1.84	174	1.75
PWSA-Sewer	55	0.56	37	0.38	20	0.20	26	0.26
Total	**247**		**217**		**200**		**200**	
Average of Rates		**1.26**		**1.11**		**1.02**		**1.01**

* The Consumer Complaint rate is the number of Consumer Complaints for each 1,000 residential customers.

Consumer Complaint Response Time

Response time is the number of days from the date BCS first contacts the utility regarding a complaint to the date on which the utility provides BCS with its initial informal complaint report. Response time quantifies the speed of a utility's response to BCS PAR complaints. The calculation for average response excludes undisputed PARs and CURE complaints.

The average response time for PWSA increased from 8.7 days in 2019 to 13.2 days in 2022.

2019-22 Average Response Time to BCS
Residential Consumer Complaints
Municipal Water and Sewer Utilities

Utility	Number of Days			
	2019	2020	2021	2022
PWSA-Water	8.4	8.8	11.1	13.0
PWSA-Sewer	10.2	8.0	10.1	14.8
Average	**8.7**	**8.7**	**11.1**	**13.2**

Payment Arrangement Requests

The PAR Rate is the number of PARs for each 1,000 residential customers.

2019-22 Residential Payment Arrangement Request (PAR) Rates
Municipal Water and Sewer Utilities

Utility	2019		2020		2021		2022	
	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
PWSA-Water	127	1.30	32	0.33	27	0.28	34	0.34
PWSA-Sewer	48	0.49	21	0.21	8	0.08	8	0.08
Total	**175**		**53**		**35**		**42**	
Average of Rates		**0.90**		**0.27**		**0.18**		**0.21**

* The PAR rate is the number of PARs for each 1,000 residential customers.

PAR Response Time

Response time is the number of days from the date BCS first contacts the utility regarding a complaint to the date on which the utility provides BCS with its initial informal complaint report. Response time quantifies the speed of a utility's response to BCS PAR complaints. The calculation for average response excludes undisputed PARs and CURE complaints.

From 2019 to 2022, the average response time for PWSA increased by 5.3 days, from 5.6 days to 10.9 days.

2019-22 Average Response Time to BCS
Residential Payment Arrangement Requests (PARs)
Municipal Water and Sewer Utilities

Utility	Number of Days			
	2019	2020	2021	2022
PWSA-Water	5.7	6.8	8.9	10.4
PWSA-Sewer	7.0	7.1	10.3	8.1
Average	**5.6**	**6.6**	**9.5**	**10.9**

Termination and Reconnection of Service

The termination rate is the number of service terminations divided by the number of residential customers, expressed as a percent. The number of PWSA terminations represents the total number of residential customers who were terminated. This total includes customers who received combined water and sewer services, customers who only received sewer service, and those customers who received water service only. The number of PWSA reconnections represents the total number of residential customers who were reconnected. This total includes customers who received combined water and sewer services, customers who only received sewer service, and those customers who received water service only. Due to the Covid 19 pandemic, residential terminations were suspended from March 13, 2020, to March 31, 2021. Utilities were

encouraged to reconnect residential customers for health and safety reasons. This significantly impacted 2020 utility terminations and reconnections.

Residential Service Terminations/Termination Rates
Municipal Water and Sewer Utilities

Utility	Residential Service Terminations				Termination Rates*			
	2019	2020**	2021	2022	2019	2020**	2021	2022
PWSA	2,437	206	177	440	2.49	0.21	0.18	0.44

* The termination rate is the number of service terminations divided by the number of residential customers, expressed as a percent.

** Due to the Covid 19 pandemic, residential terminations were suspended from March 13, 2020, to March 31, 2021. This significantly impacted 2020 utility terminations and reconnections.

Residential Service Reconnections
Municipal Water and Sewer Utilities

Utility	2019	2020*	2021	2022
PWSA	2,029	137	257	151

* Due to the Covid 19 pandemic, residential terminations were suspended from March 13, 2020, to March 31, 2021. Utilities were encouraged to reconnect residential customers for health and safety reasons. This significantly impacted 2020 utility terminations and reconnections.

Stormwater Complaints

In 2022, PWSA began assessing a separate stormwater fee to fund stormwater projects and initiatives necessary to improve stormwater management in Pittsburgh. BCS tracks the number of PWSA complaints that contain a stormwater component. The following table shows the total number of residential PWSA informal complaints in 2022, compared to the number of complaints that included a dispute regarding stormwater. Overall, in 2022, 7% of the residential informal complaints for PWSA included a dispute regarding stormwater.

2022 Stormwater Complaints
Residential Informal Complaints (Consumer Complaints and PARs)
Municipal Water and Sewer Utilities

Utility	Total Number of Complaints	Total Number of Complaints with a Stormwater Component	% of Complaints with a Stormwater Component
	2022	2022	2022
PWSA-Water	208	9	4%
PWSA-Sewer	34	9	27%
Total	**242**	**18**	**7%**

Programs That Assist Low-Income Customers

Several water utilities voluntarily operate programs to assist low-income customers in maintaining water service.

Aqua Pennsylvania Inc. (Aqua) – The Helping Hand Program is for customers at 200% of the federal poverty level and below. Prior to April 2020, a customer account must have been more than 21 days past due with at least $110 unpaid water bills to qualify for the program. Beginning April 2020, program requirements were relaxed due to the COVID-19 pandemic and various outreach methods, including proactive outreach and support to the low-income customer base not enrolled on the program, were used to increase customer awareness of the program. The relaxed requirements continued through 2022. Additionally, all eligible customers enrolled in the program received a credit and all Helping Hand customers that made a payment during the month received a $25 credit.

Each household enrolled in the Helping Hand program receives a conservation kit that contains water saving devices. The customer also receives water usage and conservation information. Customers who make their payments on time and in full receive a credit of $25 per month applied to their arrearage.

At the end of December 2022, there were 688 active participants in the Helping Hand program. The company provided $55,950 in arrearage forgiveness credits to 2,238 program participants.

Aqua received approval in its recent base rate proceeding to initiate a Customer Assistance Program (CAP) for its customers. Building upon the assistance provided through Helping Hand, the CAP maintains the $25 per month credit towards pre-programs arrearages for timely payments made. It also incorporates a tiered discount program, providing the highest level of discount to those with the lowest incomes. As with Helping Hand, incomes up to 200% of Federal Poverty Level can qualify. Customers must provide income documentation or complete a Zero Income Form to enroll and will be recertified on a recurring basis according to their income type. Customers with high usage may be identified for a conservation kit or kits can also be requested by participants.

As the rollout of the program was dependent on significant billing system changes, only about a dozen customers were enrolled at the end of 2022, but that figure has already grown to 500 as of April 2023. A comprehensive consumer education and outreach plan was developed and is underway in 2023.

Pennsylvania American Water Co. (PAWC) – In 1991, PAWC established the “Help to Others” (H2O) program. Beginning March 8, 2021, the H2O program increased the benefit to its water customers by providing an 85% discount on their monthly service fees – a savings of about $15 per month in 2022 and a 10% discount on their volumetric water usage. In addition to a discount for water, PAWC increased the discount for wastewater customers. A 30% discount was provided on the total wastewater billing for customers who qualified. There were 28,759 customers in 2022 who were billed at the discounted rate (as of December 2022).

The H2O program also provides water-saving devices and conservation education. Nearly 1,800 income-eligible customers during the 2022 calendar year were provided with water-saving devices.

As part of the H2O program, PAWC participates with the Dollar Energy Fund to provide cash grants of up to $500 per year for qualifying water and wastewater customers. Dollar Energy Fund is a hardship fund administrator that provides cash assistance to utility customers who need help in paying their utility bills. In 2022 PAWC’s annual contribution for grants to income-eligible water customers was $500,000. The company’s contribution for wastewater grants to income-eligible customers was $100,000.

During the 2022 calendar year, PAWC's shareholders and customers provided $380,174 in hardship fund benefits to 1,238 water customers for an average benefit of $307. In addition, PAWC's shareholders provided $71,333 in grants for the 2022 calendar year for wastewater customers. The funds provided benefits to 215 customers for an average benefit of $332.

Pittsburgh Water and Sewer Authority (PWSA) – PWSA's internal PGH2O Cares team administers its customer assistance programs for low income, residential customers in need.

The Bill Discount Program provides a percentage-based reduction of fixed monthly water, wastewater conveyance and stormwater charges for customers who are at or below 150% of the Federal Poverty Level. In 2022, bill discounts increased to 100% of the fixed monthly water and wastewater conveyance base charges and 85% of the stormwater charges. A total of 6,073 customers were enrolled in the Bill Discount Program. PGH2O Cares personnel proactively reach out to customers to recertify for the Bill Discount Program every two years. For customers with past due balances who are enrolled in the Bill Discount Program, PWSA credits their account in the amount of $30 for each on-time, monthly payment in an active payment plan to assist with reducing their arrears. In 2022, PWSA provided 9,113 Arrearage Forgiveness Credits, expunging $261,900 in customer debt.

The Hardship Grant Program extends grants up to $300 per year for customers who are at or below 150% of the Federal Poverty Level. The PGH2O Cares team accepts grant applications from customers without a termination notice or sincere effort of payment. In 2022, PWSA provided $80,910 in grants to 337 customers for an average benefit of $240.

The Winter Moratorium provides confirmed low-income customers who are at or below 300% of the Federal Poverty Level with the assurance that their water service will not be terminated due to non-payment from December 1st through March 31st. The PGH2O Cares team provides payment counseling and payment arrangements to those customers with past due charges.

The Community Environmental Project offered private side lead line replacements for customers who are at or below 300% of the Federal Poverty Level. PWSA started construction in late 2018 and the program was completed in early 2021. Private side service line materials were funded by a $1.8 million settlement with the Pennsylvania Department of Environmental Protection. During the program, PWSA worked at 732 locations, verified that 308 of these locations did not have either public or private lead service lines, and replaced 389 private and 288 public lead service lines. A total of over $4.3 million was spent on the program, including the $1.8 million associated with private lead service line replacements.

In October 2020, PWSA rolled out a Line Replacement Reimbursement Program. This income-based reimbursement program provides for 100% reimbursement of private side lead service line replacement costs for customers who are at or below 300% of the Federal Poverty Level, with a decreasing reimbursement percentage to 500% of the Federal Poverty Level, after which water customers are eligible for a $1,000 stipend if they hire a private plumber and replace their own private lead service line. During 2022, a total of 303 applications were approved for reimbursement, and 33 reimbursements were paid at a total cost of nearly $167,000.

PWSA customers who are billed for sewage treatment charges on behalf of the Allegheny County Sanitary Authority (ALCOSAN) are also eligible for assistance through ALCOSAN's Clean Water Assistance Fund. This program follows the same income requirements as PWSA's Bill Discount Program. In 2022, ALCOSAN provided $155,510 in grants to 3,849 eligible PWSA customers.

Veolia Water Bethel (Veolia Bethel) – Veolia Bethel implemented the "Veolia Cares" program in 2005. Veolia Cares is a nonprofit 501(c)(3) organization that provides financial assistance to customers who experience a temporary financial crisis caused by such occurrences as a job loss, severe illness, casualty or extensive military service. Cash grants up to $300 are provided to qualifying customers who are first screened by the Salvation Army for eligibility. To be eligible for a grant, customers must have made a nominal payment within the last 90 days. During the 2022 program year, the utility did not provide any grants.

Veolia Water Pennsylvania (Veolia PA) – Veolia PA implemented the "Veolia Cares" program in 2005. Veolia Cares is a nonprofit 501(c)(3) organization that provides financial assistance to customers who experience a temporary financial crisis caused by such occurrences as a job loss, severe illness, casualty or extensive military service. Cash grants up to $300 are provided to qualifying customers who are first screened by the Salvation Army for eligibility. To be eligible for a grant, customers must have made a nominal payment within the last 90 days. During the 2022 program year, the utility provided grants totaling $10,603 to qualifying customers.

York Water Co. – In 2005, the York Water Co. established the "York Water Cares" program. This program offers qualified customers up to $120 in arrearage forgiveness benefits and plumbing repairs. The repairs are designed to help the customer conserve and reduce overall water usage.

The utility expended $544 in 2022 for customer plumbing repairs and enrolled a total of three new customers in 2022 in the York Water Cares program. As of program end 2022, eight customers received arrearage forgiveness benefits totaling $390 for an average benefit of approximately $48 per customer. The utility anticipates an annual savings of $825 in 2022 in costs for termination proceedings that may be avoided as a result of customer participation in the York Water Cares program.

Federal Low Income Household Water Assistance Program (LIHWAP) – On January 4, 2022, LIHWAP opened in Pennsylvania to assist in providing relief to residential water and wastewater customers who had difficulty paying their bills. The Federal government recognized that the COVID-19 pandemic amplified unaffordability concerns for many families. This temporary Federal emergency grant program:

- restored water and wastewater service to 760 homes in Pennsylvania;
- prevented 10,200 Pennsylvania families from having their water and wastewater services disconnected; and
- served over 38,000 Pennsylvania families in total.

By October 2022, Pennsylvania's $43.2 million LIHWAP budget was fully spent and the program ended.

10. Telecommunications Industry

During 2022, BCS handled Consumer Complaints related to basic voice service, broadband, Lifeline, payment arrangement requests (PARs) and FCRs from the customers of a variety of telecommunications service providers, including incumbent local exchange carriers (ILECs), competitive local exchange carriers (CLECs), long-distance companies, resellers and eligible telecommunications carriers (ETCs).

In 2022, there were 536 providers of telecommunications services with certificates of public convenience in Pennsylvania. Of these, 35 were ILECs. The ILECs included 30 non-major utilities that each served less than 50,000 residential customers and five major utilities that each served over 50,000 residential customers. In 2022, based on § 64.201 reporting, Pennsylvania local exchange carriers supplied service to an average of 796,589 residential telecommunications service access lines each month.

Because the five major ILECs provided voice telecommunications service to the vast majority of those telecommunications access service lines (an average of 672,934 residential service lines each in 2022), this chapter will focus on the five major ILECs – Brightspeed f/k/a CenturyLink (**Brightspeed**), Frontier Communications Commonwealth Telephone Co. (**Frontier Commonwealth**), Verizon North LLC (**Verizon North**), Verizon Pennsylvania LLC (**Verizon PA**), and Windstream Communications (**Windstream**).

Since 2017, BCS has included information related to broadband access service disputes within the telecommunications section of the annual UCARE. The Chapter 30 Broadband information currently provided in the report includes the information contained in the Pennsylvania Broadband Bill of Rights. Specifically, pursuant to Chapter 30 of the Code, Pennsylvania consumers have the right to obtain service from all ILECs covered by Chapter 30, which includes the five major ILECs, within ten (10) business days of the request for broadband access service and the service must meet the following broadband speed requirements: 1.544 megabits per second (Mbps) download and 0.128 Mbps upload.

The majority of broadband related complaints received by BCS include a dispute regarding voice telecommunications service. For tracking and evaluative purposes, BCS assigns a telecommunications quality of service "reason for contact" code to these complaints. BCS identifies issues related to jurisdictional broadband by using a special indicator on the complaint; however, that indicator does not track the specific Chapter 30 issue at this time.

When BCS identifies instances when the ILEC may have failed to meet their Chapter 30 obligations, the ILEC is notified of the infraction. These informal infractions are reported later in this chapter in the Infraction Categories tables.

Unlike the electric, gas, and water chapters, the analyses of the five utilities that appear in this chapter include complaints about competition-related issues such as slamming, competition-related service complaints and billing problems. This is the 18th year that competition-related complaints are included in the analyses of the telecommunications utilities.

Act 183 of 2004 replaced the original Chapter 30 that expired due to the sunset provisions included in the Act. Among other issues, it provided the opportunity for an ILEC to petition the Commission for a determination of the competitive status of its services that are also offered by other providers. On March 4, 2015, the Commission entered an Opinion and Order at Docket Nos. P-2014-2446303 and P-2014-2446304, which granted competitive reclassification for basic local exchange telecommunications services in

153 of the 504 Verizon PA and Verizon North wire centers throughout the state.[12] The reclassification temporarily waived certain sections of 52 Pa. Code, Chapters 63[13] and 64[14] for a maximum of five years or until the Commission promulgates a final rulemaking addressing competitive reclassification.

On Sept. 21, 2020, the Commission initiated a rulemaking for Chapters 63 and 64 in response to changes in competitive market conditions in the telecommunications industry and to address whether the waivers granted in the 2015 Verizon Reclassification order should be made permanent on an industry wide basis. In August 2022, the Commission finalized the rulemaking making many of the temporary waivers from the Reclassification Order permanent, rescinding obsolete regulations, and creating several new regulations. The new regulations allow for electronic billing, and electronic suspension and termination notices, and require regulated LECs to provide consumers with an annual confidentiality statement.

The finalized regulations also made the Automatic Customer Transfer (warm transfer) available to all regulated LECs. Warm transfer is a voluntary process used to resolve consumer complaints. Currently, only Verizon and Frontier telecommunications utilities participate in the process. Verizon has participated in the process since 2012, while Frontier began their participation in October 2021. When a complainant contacts BCS to file an informal complaint involving Verizon or Frontier, the customer is offered an opportunity for a "warm transfer" back to the utility to attempt to resolve the complaint one last time directly with the utility. If the utility resolves the complaint to the customer's satisfaction, the utility submits an abbreviated report to BCS and the informal complaint is withdrawn or closed. BCS may ask for additional information from the utility if the customer is not satisfied and the case will be investigated further by BCS staff.

2020-22 Warm Transfers Completed
Residential Informal Complaints (Consumer Complaints and PARs)
Major Local Telecommunications Utilities

Utility	Total Number of Complaints			Total Number of Warm Transfers Completed			% of Warm Transfers Completed		
	2020	2021	2022	2020	2021	2022	2020	2021	2022
Frontier Commonwealth*	N/A	122	228	N/A	5	18	N/A	4%	8%
Verizon North	81	70	29	14	13	4	17%	19%	14%
Verizon PA	798	951	593	97	160	73	12%	17%	12%
Total	**879**	**1,432**	**850**	**111**	**178**	**95**	**13%**	**12%**	**11%**

*Frontier Commonwealth began accepting warm transfers in October 2021.

Total Complaint Rate

The following tables show the Total Complaint Rate, which is the number of all complaints (FCRs and NFIs combined) for each 1,000 residential customers.

[12] See Appendix B of Docket Nos. P-2014-2446303 and P-2014-2446304, March 4, 2015.
[13] See Appendix D of Docket Nos. P-2014-2446303 and P-2014-2446304, March 4, 2015.
[14] See Appendix E of Docket Nos. P-2014-2446303 and P-2014-2446304, March 4, 2015.

2019-22 Residential Total Complaint Numbers/Rates
Major Local Telecommunications Utilities

Utility	2019		2020		2021		2022	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Brightspeed	77	0.72	75	0.74	233	2.47	177	2.15
Frontier Commonwealth	199	2.49	118	1.60	165	2.43	291	4.60
Verizon North	116	1.02	113	1.09	94	1.04	40	0.50
Verizon PA	1,298	2.36	1,114	2.23	1,356	3.17	839	2.25
Windstream	108	1.43	120	1.61	136	1.73	112	1.49
Total	**1,798**		**1,540**		**1,984**		**1,459**	
Average of Rates		**1.94**		**1.81**		**2.61**		**2.17**

Consumer Complaints

Although BCS handled Consumer Complaints about different types of telecommunications service providers in 2022, the complaints predominantly came from the residential customers of the five major ILECs.

During 2022, BCS handled 1,201 Consumer Complaints from residential customers of the various telecommunications service providers. The five major ILECs represented 88% (1,062) of the total Consumer Complaints, while 14 Consumer Complaints were received for the non-major ILECs. In 2022, 71 Consumer Complaints were from residential customers of the CLECs operating in Pennsylvania, and BCS handled 41 Consumer Complaints regarding ETCs that provide Lifeline services. The remaining Consumer Complaints in 2022 were from residential customers of other telecommunications providers such as long-distance carriers, resellers and Voice over Internet Protocol (VoIP).

Consumer Complaint Categories

The following table shows the number and percentage of 2022 Consumer Complaints in each of the 11 categories used by BCS policy analysts for compliance evaluation. These categories are for all evaluated residential complaints filed with BCS.

Of the 862 Consumer Complaints evaluated, the top category of telecommunications complaints accounts for three quarters of the total: 75% unsatisfactory service complaints. See Appendix D-2 for an explanation of complaint categories.

Number and Percent of Consumer Complaints by Dispute Category
2022 Complaints Evaluated*
Major Local Telecommunications Utilities

Category**	Brightspeed	Frontier Common-wealth	Verizon North	Verizon PA***	Wind-stream	Telecom-munications Industry
Unsatisfactory Service	84	177	20	308	61	**650**
	74%	88%	74%	70%	79%	**75%**
Service Delivery	16	16	2	42	9	**85**
	14%	8%	7%	9%	12%	**10%**
Billing Disputes	7	1	3	27	3	**41**
	6%	1%	11%	6%	4%	**5%**
Service Terminations	3	1	0	13	0	**17**
	3%	1%	0%	3%	0%	**2%**
Discontinuance/Transfer	0	0	0	9	0	**9**
	0%	0%	0%	2%	0%	**1%**
Competition	0	0	0	0	0	**0**
	0%	0%	0%	0%	0%	**0%**
Annoyance Calls	0	0	0	2	0	**2**
	0%	0%	0%	<1%	0%	**<1%**
Non-Recurring Charges	0	1	0	2	0	**3**
	0%	1%	0%	<1%	0%	**<1%**
Toll Services	1	1	0	0	1	**3**
	1%	1%	0%	0%	1%	**<1%**
Credit and Deposits	0	0	0	1	0	**1**
	0%	0%	0%	<1%	0%	**<1%**
All Other Problems	2	5	2	39	3	**51**
	2%	2%	7%	9%	4%	**6%**
Total	**113**	**202**	**27**	**443**	**77**	**862**

* Based on residential complaints opened in 2022 and evaluated by BCS as of May 5, 2023.
** Categories are for all evaluated residential complaints filed with BCS. See Appendix D-2 for an explanation of complaint categories.
*** Based on a probability sample of complaints.

Consumer Complaint Rate, Justified Consumer Complaint Rate, and Percent of Justified Consumer Complaints

The following tables show the Consumer Complaint Rate, the Justified Consumer Complaint Rate, and the Percent of Justified Consumer Complaints for each major telecommunications utilities in 2019, 2020, 2021 and 2022. A complaint is considered “justified” if it is found that the utility did not comply with Commission Orders, policies, regulations, reports, Secretarial Letters, or tariffs. BCS evaluates a statistically valid sampling of complaints for each utility.

The Consumer Complaint rate is the number of Consumer Complaints for each 1,000 residential customers.

The justified Consumer Complaint rate is the estimated number of justified Consumer Complaints for each 1,000 residential customers based on a statistically valid sampling of complaints. The justified Consumer Complaint rate is a normalized ratio useful for comparing utility performance among the various utility companies. It is not a percentage.

From 2019 to 2022, the justified Consumer Complaint rates increased for Brightspeed and Frontier Commonwealth, while the rates decreased for Verizon North, Verizon PA and Windstream. Frontier Commonwealth had a 2022 justified Consumer Complaint rate that was higher than the industry average.

The percent of justified Consumer Complaints is the estimated number of justified complaints divided by the total number of complaints received (multiplied by 100). The percent of justified Consumer Complaints represents a utility's individual performance.

2022 Residential Consumer Complaint Rates, Justified Consumer Complaint Rates, and Percent of Justified Consumer Complaints Major Local Telecommunications Utilities

Utility	Consumer Complaint Rate	Justified Consumer Complaint Rate	Percent of Justified Consumer Complaints
Brightspeed	1.61	0.94	58.3%
Frontier Commonwealth	3.58	2.66	74.3%
Verizon North	0.36	0.21	58.6%
Verizon PA	1.57	0.94	60.1%
Windstream	1.19	0.51	42.7%
Average	**1.66**	**1.05**	**61.4%**

* Based on a probability sample of complaints

2019-22 Residential Consumer Complaint Numbers/Rates
Major Local Telecommunications Utilities

Utility	2019		2020		2021		2022	
	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
Brightspeed	48	0.45	51	0.50	176	1.87	132	1.61
Frontier Commonwealth	138	1.73	83	1.13	121	1.78	226	3.58
Verizon North	82	0.72	81	0.78	70	0.78	29	0.36
Verizon PA	839	1.53	795	1.59	944	2.20	586	1.57
Windstream	85	1.12	94	1.26	110	1.40	89	1.19
Total	**1,192**		**1,104**		**1,421**		**1,062**	
Average of Rates		**1.11**		**1.05**		**1.61**		**1.66**

* The Consumer Complaint rate is the number of Consumer Complaints for each 1,000 residential customers.

2019-22 Justified Residential Consumer Complaint Numbers/Rates
Major Local Telecommunications Utilities

Utility	2019		2020		2021		2022	
	Number**	Rate***	Number**	Rate***	Number**	Rate***	Number**	Rate***
Brightspeed	19	0.18	27	0.27	106	1.12	77	0.94
Frontier Commonwealth	93	1.16	41	0.56	64	0.94	168	2.66
Verizon North	51	0.45	50	0.48	40	0.44	17	0.21
Verizon PA	550*	1.00*	456*	0.91*	520*	1.21*	352*	0.94*
Windstream	48	0.63	42	0.56	48	0.61	38	0.51
Total	**761**		**616**		**778**		**652**	
Average of Rates		**0.69**		**0.56**		**0.87**		**1.05**

* Based on a probability sample of complaints.

** Estimated based on the number of Consumer Complaints in CSIS: 2020 as of June 4, 2021; 2021 as of Sept. 10, 2022; and 2022 as of May 5, 2023.

*** The justified Consumer Complaint rate is the estimated number of justified Consumer Complaints for each 1,000 residential customers based on a statistically valid sampling of complaints. The justified Consumer Complaint rate is a normalized ratio useful for comparing utility performance among the various companies. It is not a percentage.

2019-22 Number/ Percent of Justified Residential Consumer Complaints
Major Telecommunications Utilities

Utility	2019		2020		2021		2022	
	Number**	Percent***	Number**	Percent***	Number**	Percent***	Number**	Percent***
Brightspeed	19	39.6%	27	52.9%	106	60.2%	77	58.3%
Frontier Commonwealth	93	67.4%	41	49.4%	64	52.9%	168	74.3%
Verizon North	51	62.2%	50	61.7%	40	57.1%	17	58.6%
Verizon PA	550*	65.6%*	456*	57.4%*	520*	55.1%*	352*	60.1%*
Windstream	48	56.5%	42	44.7%	48	43.6%	38	42.7%
Total	**761**		**616**		**778**		**652**	
Average		**63.8%**		**55.8%**		**54.8%**		**61.4%**

* Based on a probability sample of complaints.

** Estimated based on the number of Consumer Complaints in CSIS: 2020 as of June 4, 2021; 2021 as of Sept. 10, 2022; and 2022 as of May 5, 2023.

*** The percent of justified Consumer Complaints is the estimated number of justified complaints divided by the total number of complaints received (multiplied by 100). The percent of justified Consumer Complaints represents a utility's individual performance.

Consumer Complaint Response Time

Response time is the number of days from the date BCS first contacts the utility regarding a complaint to the date the utility provides BCS with its initial informal complaint report. Response time quantifies the speed of a utility's response to BCS Consumer Complaints. Response time to Consumer Complaints for the telecommunications utilities is calculated using all categories of Consumer Complaints, including automatic customer transfers (also known as Warm Transfer).

Verizon PA had the shortest Consumer Complaint response time in 2022, while Brightspeed took the most time to respond.

2019-22 Average Response Time to BCS
Residential Consumer Complaints
Major Local Telecommunications Utilities

Utility	Number of Days			
	2019	2020	2021	2022
Brightspeed	17.1	21.1	21.7	25.5
Frontier Commonwealth	12.9	10.3	13.0	19.7
Verizon North	14.0	13.8	13.3	17.1
Verizon PA	13.3	13.4	15.1	14.2
Windstream	16.1	12.6	15.4	16.0
Average	**13.6**	**13.5**	**16.7**	**17.0**

Payment Arrangement Requests (PARs)

Telecommunications service consists of three components: basic service, non-basic service and toll service. BCS does not handle requests for payment arrangements that involve toll or non-basic services because with respect to telecommunications payment arrangements, the PUC does not exert payment arrangement jurisdiction over competitive services. For the telecommunications industry, PARs are principally contacts to BCS or to utilities involving a request for payment terms for arrearages associated with basic service. Failure to enter into a payment arrangement or pay arrearages due for basic service may result in suspension, and subsequent termination, of basic service.[15] Suspension of basic telecommunications service involves the temporary cessation of service without the consent of the customer, while termination of basic service is the permanent cessation of service. The majority of PARs are from customers who contact BCS to request payment arrangements after they have received a suspension notice.

Under Chapter 64, a customer contact in response to a suspension notice is a dispute (as the term is defined in Section 64.2) only if the contact includes a disagreement with respect to the application of a provision of Chapter 64. Where telecommunications complaints involving telecommunications service suspension are concerned, failure to negotiate a payment arrangement does not in itself mean that a dispute

[15] Suspension or termination of basic local exchange service can also occur when a customer refuses to voluntarily transition their service from traditional copper to fiber during an ILEC's network transformation.

exists. Consequently, in this report, telecommunications complaints that involve PARs have been separated from telecommunications PARs that also involve a dispute. For the telecommunications industry, PARs that involve a dispute are classified as Consumer Complaints. During 2022, BCS handled 13 PARs from residential customers of the various telecommunications service providers. The five major telecommunications utilities represented 85% (11) of the totals PARs.

The 2019, 2020, 2021 and 2022 justified PAR rates and response times for the major telecommunications utilities are presented in the tables that follow.

PAR Rate, Justified PAR Rate, and Percent of Justified PARs

The following tables show the PAR Rate, the Justified PAR Rate, and the Percent of Justified PARs for each major telecommunications utility in 2019, 2020, 2021 and 2022. A complaint is considered "justified" if it is found that the utility did not comply with Commission Orders, policies, regulations, reports, Secretarial Letters, or tariffs. BCS evaluates a statistically valid sampling of complaints for each utility.

The PAR rate is the number of PARs for each 1,000 residential customers.

The justified PAR rate is the estimated number of justified PARs for each 1,000 residential customers based on a statistically valid sampling of complaints. It is not a percentage. The justified rate is a normalized ratio useful for comparing utility performance among the various utility companies.

The percent of justified PARs is the estimated number of justified complaints divided by the total number of complaints received (multiplied by 100). The percent of justified PARs represents a utility's individual performance.

2022 Residential Payment Arrangement Request (PAR) Rates, Justified PAR Rates, and Percent of Justified PARs Major Local Telecommunications Utilities

Utility	PAR Rate	Justified PAR Rate	Percent of Justified PARs
Brightspeed	0.00	0.00	0.0%
Frontier Commonwealth	0.03	0.03	100.0%
Verizon North	0.00	0.00	0.0%
Verizon PA	0.02	0.00	14.3%
Windstream	0.03	0.00	0.0%
Average	**0.02**	**0.01**	**27.3%**

2019-22 Residential Payment Arrangement Request (PAR) Numbers/Rates
Major Local Telecommunications Utilities

Utility	2019		2020		2021		2022	
	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
Brightspeed	6	0.06	0	0.00	2	0.02	0	0.00
Frontier Commonwealth	2	0.03	5	0.07	1	0.01	2	0.03
Verizon North	1	0.01	0	0.00	0	0.00	0	0.00
Verizon PA	10	0.02	3	0.01	7	0.02	7	0.02
Windstream	0	0.00	3	0.04	1	0.01	2	0.03
Total	**19**		**11**		**11**		**11**	
Average of Rates		**0.02**		**0.02**		**0.01**		**0.02**

* The PAR rate is the number of PARs for each 1,000 residential customers.

2019-22 Justified Residential Payment Arrangement Request (PAR) Numbers/Rates
Major Local Telecommunications Utilities

Utility	2019		2020		2021		2022	
	Number*	Rate**	Number*	Rate**	Number*	Rate**	Number*	Rate**
Brightspeed	0	0.00	0	0.00	0	0.00	0	0.00
Frontier Commonwealth	1	0.01	3	0.04	0	0.00	2	0.03
Verizon North	0	0.00	0	0.00	0	0.00	0	0.00
Verizon PA	2	0.00	3	0.01	4	0.01	1	0.00
Windstream	0	0.00	0	0.00	0	0.00	0	0.00
Total	**3**		**6**		**4**		**3**	
Average of Rates		**0.00**		**0.01**		**0.00**		**0.01**

* Estimated based on the number of PAR complaints in CSIS: 2020 as of June 4, 2021; 2021 as of Sept. 10, 2022; and 2022 as of May 5, 2023.

** The justified PAR rate is the estimated number of justified PARs for each 1,000 residential customers based on a statistically valid sampling of complaints. The justified PAR rate is a normalized ratio useful for comparing utility performance among the various companies. It is not a percentage.

2019-22 Number/Percent of Justified Residential Payment Arrangement Requests (PARs)
Major Local Telecommunications Utilities

Utility	2019		2020		2021		2022	
	Number*	Percent**	Number*	Percent**	Number*	Percent**	Number*	Percent**
Brightspeed	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Frontier Commonwealth	1	50.0%	3	60.0%	0	0.0%	2	100.0%
Verizon North	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Verizon PA	2	20.0%	3	100.0%	4	57.1%	1	14.3%
Windstream	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	**3**		**6**		**4**		**3**	
Average		**15.8%**		**54.5%**		**36.4%**		**27.3%**

* Estimated based on the number of PAR complaints in CSIS: 2020 as of June 4, 2021; 2021 as of Sept. 10, 2022; and 2022 as of May 5, 2023.

** The percent of justified PARs is the estimated number of justified complaints divided by the total number of PARs received (multiplied by 100). The percent of justified PARs represents a utility's individual performance.

PAR Response Time

Response time is the number of days from the date BCS first contacts the utility regarding a complaint to the date on which the utility provides BCS with its initial informal complaint report. Response time quantifies the speed of a utility's response to BCS PAR complaints. The calculation for average response is calculated using all categories of PARs, including automatic customer transfers (also known as Warm Transfer).

From 2019 to 2022, the average response time to PARs for Verizon PA and Windstream increased, while the average response time decreased for Brightspeed, Frontier Commonwealth and Verizon North.

2019-22 Average Response Time to BCS
Residential Payment Arrangement Requests (PARs)
Major Local Telecommunications Utilities

Utility	Number of Days			
	2019	2020	2021	2022
Brightspeed	21.7	0.0	26.0	0.0
Frontier Commonwealth	19.0	12.4	13.0	8.0
Verizon North	1.0	0.0	0.0	0.0
Verizon PA	5.9	10.7	10.1	11.3
Windstream	0.0	3.5	8.0	18.5
Average	**12.0**	**10.1**	**13.1**	**9.6**

Termination of Service

Chapter 64 defines suspension as a temporary cessation of service without the consent of the customer. Termination of service, according to Chapter 64, is the permanent end of service after a suspension without the consent of the customer. Most PARs are complaints relating to the termination of telecommunications service and are registered during the suspension phase. Many customers who have their basic service suspended are able to make payment arrangements and avoid termination. Those seeking to restore service are treated by the service providers as applicants.

Previously the termination rate for the telecommunications industry was calculated in the UCARE reports as the number of terminations for each 1,000 residential customers; however, the termination rate for the telecommunications industry is now being calculated consistent with the other industries as defined below. The 2019-2021 termination rates have been updated in the table below.

The termination rate is the number of service terminations divided by the number of residential customers, expressed as a percent. Due to the Covid 19 pandemic, residential terminations were suspended from March 13, 2020, to March 31, 2021. This significantly impacted 2020 utility terminations.

Residential Service Terminations/Termination Rates
Major Local Telecommunications Utilities

Utility	Residential Service Terminations				Termination Rates*			
	2019	2020**	2021	2022	2019	2020**	2021	2022
Brightspeed	5,736	636	3,912	4,308	5.34	0.63	4.15	5.24
Frontier Commonwealth	2,268	720	1,548	1,152	2.84	0.98	2.28	1.82
Verizon North	2,556	588	2,316	1,332	2.26	0.57	2.57	1.67
Verizon PA	14,232	3,288	13,536	7,308	2.59	0.66	3.16	1.96
Windstream	2,976	1,692	2,592	3,192	3.94	2.27	3.31	4.25
Total	**27,768**	**6,924**	**23,904**	**17,292**				
Average					**3.00**	**0.81**	**3.15**	**2.57**

* The termination rate is the number of service terminations divided by the number of residential customers, expressed as a percent.

** Due to the Covid 19 pandemic, residential terminations were suspended from March 13, 2020, to March 31, 2021. This significantly impacted 2020 utility terminations and reconnections.

Compliance

BCS provides utilities with written notice of alleged violations or infractions of the statutes and regulations found during BCS complaint handling. Utilities are provided opportunity to review and respond or appeal. The use of "infraction rate" is intended to help the Commission monitor and maintain customer services at the same level of quality for all telecommunications customers, regardless of who provides their telecommunications services.

The infraction rates in the table that follows are based on informal complaints that residential complainants filed with BCS from 2019 through 2022. The Infraction Category tables present detailed information about the infractions identified in 2022 complaints to the BCS.

The infraction rate is the number of informally verified infractions per 1,000 residential customers. Dividing per 1,000 customers normalizes the data for comparison purposes. The infraction rate is not a percentage. The category with customer trouble reports is consistently a high percentage infraction area. Appendix B-2 provides a list of the infractions included in each infraction category.

Commission Infraction Rates*
Major Local Telecommunications Utilities

Utility	2019	2020	2021	2022
Brightspeed	0.32	0.45	3.26	2.08
Frontier Commonwealth	5.84	1.58	4.06	6.77
Verizon North	1.87	1.36	1.37	0.65
Verizon PA	2.93	2.20	2.12	2.89
Windstream	2.51	0.95	2.02	1.16

* The infraction rate is the number of informally verified infractions per 1,000 residential customers. Dividing per 1,000 customers normalizes the data for comparison purposes. The infraction rate is not a percentage.

2022 Number and Percent of Major Local Telecommunications Utility Infractions*

Category**	Brightspeed	Frontier Common-wealth	Verizon North	Verizon PA	Wind-stream	Telecom-munications Industry
Broadband	3	0	1	8	0	**12**
	2%	0%	2%	1%	0%	**1%**
Network Modernization Plans	5	29	2	21	4	**61**
	3%	7%	4%	2%	5%	**4%**
Complaint Procedures	37	68	18	206	27	**356**
	22%	16%	35%	19%	31%	**24%**
Quality of Service	13	28	7	98	13	**159**
	8%	7%	13%	9%	15%	**10%**
Service Records	11	58	5	310	8	**392**
	6%	14%	10%	29%	9%	**14%**
Customer Trouble Reports	76	204	12	315	22	**629**
	44%	48%	23%	29%	25%	**34%**
Installation of Service	0	0	0	1	0	**1**
	0%	0%	0%	<1%	0%	**<1%**
Migration	0	0	0	1	0	**1**
	0%	0%	0%	<1%	0%	**<1%**
Billing and Payment	3	5	1	8	0	**17**
	2%	1%	2%	1%	0%	**1%**
Slamming and Cramming	0	0	0	0	0	**0**
	0%	0%	0%	0%	0%	**0%**
Credit and Deposits	0	0	0	0	0	**0**
	0%	0%	0%	0%	0%	**0%**
Suspension and Termination	0	1	0	1	2	**4**
	0%	<1%	0%	<1%	2%	**1%**
Dispute Procedures	5	1	1	17	1	**25**
	3%	<1%	2%	2%	1%	**2%**
Other	18	34	5	90	10	**157**
	11%	8%	10%	8%	11%	**10%**
Total	**171**	**428**	**52**	**1,076**	**87**	**1,814**

* The number of verified infractions identified by BCS as of May 4, 2023.

** Appendix B-2 provides a list of the infractions included in each infraction category.

Universal Service Programs

As part of its ongoing responsibilities, BCS monitors the universal service programs of local telecommunications companies and ETCs. For the telecommunications industry, universal service programs[16] include Lifeline Service (Lifeline),[17] Lifeline 100 Service (Lifeline 100)[18] through Verizon PA and Verizon North and the Verizon PA Universal Telephone Assistance Program (UTAP). These programs ensure that low-income consumers have access to telecommunications service by providing discounts or credits for telecommunications service. The Commission approved the implementation of Pennsylvania's first universal service program for local telecommunications companies in 1989.[19] In December 1997, the Commission approved Lifeline service plans for 44 incumbent telecommunications utilities which led to the statewide implementation of telecommunications utilities' Lifeline programs in 1998.

Lifeline

The Commission's May 19, 2005, Final Lifeline Order (Final Order), at Docket No. M-00051871 expanded the Lifeline program eligibility to be consistent with the Federal Communications Commission's (FCC) programs.[20] The Final Order added an income-only based factor (income at or below 135% of the federal poverty guidelines) as a new criterion for Pennsylvania's Lifeline program eligibility. Second, the Final Order directed all carriers designated by the Commission as Eligible Telecommunication Carriers (ETCs)[21] to implement the Lifeline provisions contained in Chapter 30. Under these provisions,[22] ETCs are to inform new and existing customers about the availability of Lifeline services. They also must permit eligible Lifeline service customers to purchase any number of optional services (i.e., call waiting) at the tariffed rates for these services.

In August 2010, the Commission adopted the final Policy Statement on the Commonwealth of Pennsylvania Guidelines for Designation and Annual Recertification as an ETC for purposes of Federal Universal Service Support (ETC Guidelines).[23] Designation as an ETC for provision of Lifeline service permits the wireline and wireless providers to participate in the federal Universal Service Fund's (USF) Lifeline program in order to receive low-income support from the federal USF.[24]

On March 2, 2012, the FCC issued a Final Rule[25] which reformed and began to modernize the federal USF Lifeline program. The reforms were intended to accomplish the following: (1) strengthen protections against waste, fraud and abuse; (2) improve program administration and accountability; (3) improve

[16] With the exception of UTAP, these programs are supported fully or in part by federal universal service funds.
[17] Lifeline f/k/a/ Lifeline 135 in previous UCARE reports.
[18] Lifeline 100 f/k/a Lifeline in previous UCARE reports.
[19] The Link-Up America Program was the first universal service program. The FCC eliminated this program in 2012.
[20] FCC Report and Order and Further Notice of Proposed Rulemaking in the Matter of Lifeline and Link-Up, at CC Docket No. 04-87, WC Docket No. 03-109.
[21] Jurisdictional ETCs include all ILECs and other providers of communications services that have obtained ETC designation from the state commission or the FCC. The Commission designates wireless providers as ETCs. ETCs may receive federal universal service funding.
[22] 66 Pa. C.S. § 3019 (f)(1-4).
[23] Docket No. M-2010-2164741, July 29, 2010, which codifies the guidelines at 52 Pa. Code § 69.2501.
[24] 47 U.S.C. § 214(e)(3-4) In a community where no telecommunications utility provides services supported by federal universal support mechanisms, the FCC (for interstate) and PUC (for intrastate) will determine which telecommunications utility is best able to provide such service. Any telecommunications utility ordered to provide such service will be designated as an ETC for that community and become eligible to receive universal service support. This is the carrier of last resort (COLR) obligation.
[25] 47 C.F.R. Part 54 – Universal Service

enrollment and consumer disclosures; (4) initiate modernization of the program for broadband; and (5) constrain the growth of the program to reduce the burden of all who contribute to the federal USF.

The Commission's Nov. 9, 2016, Order at Docket No. M-2016-2566383 adopted the eligibility criteria from the FCC's Lifeline and Link Up Reform and Modernization, Third Report and Order (2016 Order), WC Docket No. 11-42 released Apr. 27, 2016. Effective Dec. 2, 2016, eligibility for Lifeline support was streamlined to include the following programs: Supplemental Nutrition Assistance Program (SNAP), Medicaid, Supplemental Security Insurance (SSI), Federal Public Housing Assistance and Veterans Pension Benefits. The income-based eligibility (135% of Federal Poverty Guidelines) did not change. The Commission's order required ETCs designated by the Commission to adhere to all federal ETC rules, regulations and standards including: (1) broadband as a supported service; (2) minimum service standards for broadband; (3) mobile voice and mobile broadband access services;[26] (4) the establishment of a National Verifier; and (5) port freeze rules.[27] Port freeze rules were eliminated in a subsequent Lifeline order.

Currently Lifeline is offered by ILECs, CLECs, and certain wireless, cable and satellite companies. As of Dec. 31, 2022, there were 254,489 low-income Pennsylvania consumers enrolled in Lifeline. Wireless, cable, and satellite ETCs provided Lifeline service to 246,164 of those consumers. The vast majority of Lifeline participants (246,158) in Pennsylvania chose a wireless ETC to provide their service. The following table shows enrollment activity for the major telecommunications utilities' Lifeline programs in 2019, 2020, 2021 and 2022. Information regarding total Lifeline enrollment can be found in the Lifeline Tracking Report.

2019-22 Lifeline Service Activity

Utility	Total Number of Customers Who Received Lifeline Service				Total Number of Customers Enrolled as of December			
	2019	2020	2021	2022	2019	2020	2021	2022
Brightspeed	760	685	502	445	607	474	412	369
Frontier Commonwealth	848	780	602	558	733	565	528	447
Verizon North*	1,903	1,518	1,374	1,186	1,042	925	800	668
Verizon PA*	10,190	8,484	7,542	6,532	7,828	6,965	6,017	4,944
Windstream	1,220	1,053	1,204	1,189	906	923	941	867
Total	**14,921**	**12,520**	**11,224**	**9,910**	**11,116**	**9,852**	**8,698**	**7,295**

* Includes customers enrolled in both the Lifeline and Lifeline 100 programs.

As of Dec. 1, 2022, the monthly Lifeline credit for stand-alone voice service is $5.25, or $9.25 for bundled service that meets the minimum standards for broadband. The monthly discount for the Verizon companies' Lifeline 100 is $7.75.

[26] As of Dec. 1, 2019, the minimum standard for wireless talk is 1,000 minutes, the minimum wireless broadband usage is 2 GB per month on a 3G or better network. For bundled service, only one service must meet the minimum standard. The minimum standard for fixed broadband is 18 Mbps download and 2 Mbps upload, with minimum usage of 1,000 GB per month.

[27] In its 2016 Lifeline Order, the FCC established port freeze rules, during which Lifeline subscribers were not eligible to change providers. The port freeze for voice only service was 60 days, the port freeze for broadband and wireless broadband service was 12 months.

As of Dec. 1, 2022, the minimum broadband standard for Lifeline subscribers who receive wireline service is 25 Mbps download and 3 Mbps upload, with a minimum of 1,280 GB of usage each month. If the wireline provider is unable to meet minimum speed standard, they must provide the highest performing broadband service available with at least 4 Mbps download and 1 Mbps upload. For Lifeline subscribers who receive service through wireless ETCs, the minimum standard is 4.5 GB per month of 3G or better mobile data.

Universal Telephone Assistance Program

Verizon PA implemented UTAP along with its Lifeline service program as part of a settlement agreement that was approved by the Commission Aug. 4, 1995 (P-00930715, P-00950958). Verizon PA is the only utility that offers a financial assistance program that helps existing Lifeline 100 customers and qualified Lifeline 100 applicants (with a pre-existing basic service arrearage) to restore their basic telecommunications service. The Dollar Energy Fund manages UTAP and distributes funds to qualified customers and Lifeline applicants. The following table shows the number of customers enrolled in the Verizon PA Lifeline 100 program and the UTAP grants provided in 2019, 2020, 2021 and 2022.

2019-22 Verizon PA Lifeline 100 and UTAP Summary

	2019	2020	2021	2022
Total Number of Customers Enrolled as of December	3,435	2,814	2,446	2,282
Number of Customers Given Assistance	13	4	0	0
Total Amount of Funds Distributed	$994	$247	$0	$0
Average Grant Amount	$76.46	$61.75	$0.00	$0

Automatic Notification Program

The Lifeline service automatic notification provision at 66 Pa.C.S. § 3019(f)(5) requires that all jurisdictional ETCs provide the Department of Human Services (DHS), formerly the Department of Public Welfare, with service descriptions, subscription forms, contact telephone numbers and service area information so DHS can notify its clients about the availability of Lifeline service. In 2005, a working group consisting of representatives of the PUC, Pennsylvania Telephone Association, the Office of Consumer Advocate and the Pennsylvania Utility Law Project worked with DHS to implement this provision. Commission staff coordinated with members of the working group to develop subscription forms and listings of utility contacts by county. Commission staff continues to provide DHS with copies of informational brochures and a link to the Commission's website for information about utilities that offer Lifeline programs.

ETC Designation

In its 2005 First Universal Service Report and Order, the FCC established minimum requirements for telecommunications carriers to be designated as ETCs and encouraged states that exercise jurisdiction over ETC designation to adopt the same requirements.[28] This order applied to both wireline and wireless carriers.

[28] See Matter of Federal-State Joint Board of Universal Service, First Report and Order, CC Docket No. 96-45, 20 FCC Rcd 6371 (released March 17, 2005).

On Apr. 11, 2008, the FCC conditionally designated TracFone Wireless, Inc. (TracFone) as the first wireless ETC in PA. The FCC's designation allowed TracFone to provide Lifeline service and receive reimbursement for Lifeline from the Federal USF but did not make the utility eligible for USF high-cost support.[29] At the time of the FCC designation, Pennsylvania had not yet exerted jurisdiction over wireless providers for the purpose of ETC designation.

On Aug. 2, 2010, the PUC entered its Final Policy Statement Order, at Docket No. M-2010-2164741. This order adopted the FCC minimum requirements for ETC designation but also established additional state specific requirements.[30] On Dec. 22, 2010, Virgin Mobile USA, LP became the first wireless ETC designated by the PA PUC.

Non-Traditional ETC Designation

In 2018, the FCC conducted the Connect America Fund Phase II, Auction 903 to allocate support to provide broadband in certain eligible areas across the United States. Auction 903 ran from July 24, 2018, to Aug. 21, 2018. Pennsylvania had five winning bidders that will deploy broadband at 54,812 locations for a total of $56,831,061 in support over 10 years. Among the auction winners were several non-traditional telecommunications providers including an electric cooperative and two satellite providers.

On Dec. 7, 2020, the FCC released the results of the Rural Digital Opportunity Fund, Auction 904. Pennsylvania had 13 winning bidders that will deploy broadband to 184,505 eligible locations for a total of $368,743,200 in support over 10 years. The winners included traditional telecommunications providers, cable providers, fiber providers, fixed wireless hybrid providers, and satellite providers. Sixty-four percent of the winning bids in PA were for broadband meeting or exceeding 100 Mbps download speeds, while a number of the winning bids were for gigabit (1,000 Mbps) broadband speeds.

To be eligible to receive support from both Auction 903 and Auction 904, each of the winning bidders must be designated as an ETC in Pennsylvania. The following table shows the ETCs approved to operate in PA as of Dec. 30, 2022.

[29] See TracFone ETC Designation Order, CC Docket No. 96-45, Order, 23 FCC Rcd 6206 (released April 11, 2008).
[30] See 66 Pa. C.S. § 3019(f).

2022 PA Wireless and Non-Traditional ETCs

Utility	PUC Docket #	Date of ETC Designation
Airvoice Wireless d/b/a Feel Safe Wireless	P-2013-2379431	7/9/2014
American Broadband d/b/a American Assistance	P-2013-2362571	11/5/2015
AmeriMex d/b/a Safety Net Wireless	P-2013-2369557	3/6/2014
Boomerang Wireless d/b/a enTouch Wireless	P-2014-2421056	9/1/2016
Centre WISP	P-2021-3024219	8/15/2021
Claverack Communications d/b/a Claverack Rural Electric Coop	P-2021-3023996	7/15/2021
Global Connection Inc. d/b/a Stand Up Wireless	P-2011-2245213	9/13/2012
iWireless d/b/a Access Wireless	P-2011-2235119	9/3/2015
Limitless Mobile	P-2012-2287339	5/24/2012
Q-Link	P-2011-2275830	4/18/2013
Sage Telecom d/b/a TruConnect	P-2013-2398807	1/15/2015
Tag Mobile	P-2011-2241542	12/5/2012
Telrite Corp d/b/a Life Wireless	P-2011-2398807	9/26/2013
T-Mobile d/b/a InReach Wireless**	P-2011-2275748	5/24/2012
Time Warner Cable d/b/a Charter (cable) Spectrum (voice)	P-2021-3023594	7/15/2021
Tracfone d/b/a Safelink*	n/a	n/a
Tri-County Electric Cooperative d/b/a Tri-County Connections	P-2018-3005127	4/27/2019
Velocity.Net Communications	P-2018-3006180	1/16/2020
Viasat Carrier Services	P-2018-3004983	4/30/2020
Virgin Mobile d/b/a Assurance Wireless	P-2010-2155915	12/22/2010
Youngsville TV d/b/a Blue Fiber	P-2021-3023604	8/26/2021
YourTel America d/b/a TerraCom	P-2011-2226044	10/14/2011
Zito West d/b/a Zito Mifflin County	P-2021-3023622	9/15/2021

* The FCC approved Tracfone as an ETC for the purpose of providing Lifeline service prior to the PUC exercising its authority to designate ETCs.

** T-Mobile d/b/a InReach Wireless abandoned their ETC designation as of 12/31/2022.

National Lifeline Verifier

The National Verifier shifts the responsibility for determining Lifeline eligibility from ETCs to the program's administrator, the Universal Service Administrative Company (USAC). The National Verifier is a centralized system that confirms identity, and eligibility for Lifeline by accessing data in the National Lifeline Accountability Database (NLAD), federal and state databases. In Pennsylvania, USAC accesses the DHS Compass database to confirm consumer eligibility for Lifeline based on participation in SNAP, Medicaid or SSI.

On Dec. 4, 2018, the National Verifier launched in Pennsylvania. Initially, ETCs were not required to use the verifier; however, 23 Pennsylvania ETCs successfully used the verifier to obtain an eligibility decision during the first month. As of March 5, 2019, applicants must receive an approved eligibility decision from the National Verifier to enroll in Lifeline. To receive an eligibility decision, applicants have the option of applying

for Lifeline through the ETC of their choice, submitting the Universal Lifeline Application and Household Worksheet by mail or by applying through the consumer portal at checklifeline.org.

Chapter 30 Broadband

Act 183 of 2004 also addressed balancing the mandated deployment of broadband facilities while promoting the provision of Universal Service. In both the original Chapter 30 enacted in 1993 and its replacement in 2004, all ILECs were required to provide 100% broadband availability to their retail access lines by Dec. 31, 2015 . Act 183 granted ILECs reductions to their Commission-mandated productivity offsets in their already approved alternative ratemaking plans if they advanced their 100% broadband deployment target date to 2008 or 2013, except for Verizon Pennsylvania, LLC, which retained its 2015 target date but also received a reduction in its productivity offset.

In 2017, the Commission published the Pennsylvania Broadband Bill of Rights to help educate consumers of their right to broadband under Pennsylvania law. Specifically, Pennsylvania consumers have the right to service within 10 business days of the request for broadband service and the service must meet the following speed requirements:

- 1.544 megabits per second (Mbps) download
- 0.128 Mbps upload

The Pennsylvania Broadband Bill of Rights directed consumers to contact BCS if their local telecommunications company cannot provide broadband, or the service does not meet Pennsylvania requirements.

Many of the telecommunication complaints that BCS receives, also include issues with broadband speed and/or availability. The following table shows the total number of residential telecommunications informal complaints in 2019, 2020, 2021 and 2022 for each of the five major telecommunications utilities, compared to the number of complaints that included a dispute regarding broadband speed, access or availability. Overall, in 2022, 30% of the residential informal complaints for the major telecommunications utilities included a dispute regarding broadband speed, access, or availability, compared to 36% in 2019.

2019-22 Chapter 30 Broadband Complaints
Residential Informal Complaints (Consumer Complaints and PARs)
Major Local Telecommunications Utilities

Utility	Total Number of Complaints				Total Number of Complaints with a Broadband Component				% of Complaints with a Broadband Component			
	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021	2022
Brightspeed	54	51	178	132	23	17	55	54	43%	33%	31%	41%
Frontier Commonwealth	140	88	122	228	80	31	54	106	57%	35%	44%	46%
Verizon North	83	81	70	29	26	29	26	7	31%	36%	37%	24%
Verizon PA	849	798	951	593	266	208	217	111	31%	26%	23%	19%
Windstream	85	97	111	91	36	42	35	41	42%	43%	32%	45%
Total	**1,211**	**1,115**	**1,432**	**1,073**	**431**	**327**	**387**	**319**	**36%**	**29%**	**27%**	**30%**

Glossary of Terms

Automatic Customer Transfer (also known as Warm Transfer) – The process through which BCS is able to immediately and contemporaneously transfer a customer inquiry or service or billing complaint to a jurisdictional telecommunications public utility that has voluntarily elected to participate in such an arrangement.

Broadband – A communication channel using any technology and having a bandwidth equal to or greater than 1.544 Mbps in the downstream direction and equal to or greater than 0.128 Mbps in the upstream direction.

Change in Income – A decrease in household income of 20% or more if the customer's household income level exceeds 200% of the Federal poverty level or a decrease in household income of 10% or more if the customer's household income level is 200% or less of the Federal poverty level.

Competitive Local Exchange Carrier (CLEC) – A telecommunications provider that competes with other incumbent local exchange telecommunications providers to provide local telecommunications service.

Consumer Complaint Rate – The number of Consumer Complaints per 1,000 residential customers.

Consumer Complaints – Complaints to BCS involving billing, service, rates, and other issues not related to requests for payment terms.

Cramming – The submission or inclusion of unauthorized, misleading or deceptive charges for products or services on an end-user customer's local telecommunications bill.

Customer Assistance Programs (CAPs) – Payment assistance and debt forgiveness programs for low-income households. CAPs are intended to provide more affordable monthly bills based on a set energy burden standard. CAP billing credits may be applied to ongoing usage as long as the household remains current and timely in paying its monthly CAP payments. CAP charges may take the form of a discounted price on actual usage on either all or a portion of the usage,[31] a percentage of the monthly bill,[32] or a monthly amount that is calculated upon a percentage of the household income.[33] Percentage of income plans are correlated directly to the household's income and the utility's energy burden targets. CAP's debt forgiveness feature freezes a household's unpaid past debt upon entry into the program. As long as the household remains current and timely on their future CAP payments, the past debt is not collected and is forgiven in incremental amounts over time.

Customer Assistance and Referral Evaluation Services (CARES) – Social service and referral program for households encountering some form of extenuating circumstance or emergency that results in the household's inability to pay for utility service. Qualifying households may receive counseling and/or direct referrals to community resources that can aid the family in resolving the emergency.

CURE (Customer & Utility Resolution Effort) Complaint – A voluntary program designed to better manage workload, improve customer satisfaction, and reduce costs. The utility contacts the complainant and attempts to achieve a resolution. If mutual satisfaction is reached, the utility and complainant notify BCS the informal

[31] Also referred to as "rate discount bill."
[32] Also referred to as "percent of bill."
[33] Also referred to as a "percent of income payment" (PIP).

complaint can be closed without further investigation, and the utility isn't required to submit a full utility report.

Electric Distribution Company (EDC) – The owner of the power lines and equipment necessary to deliver purchased electricity to the customer.

Electric Generation Supplier (EGS) – A person or corporation, generator, broker, marketer, aggregator or other entity that sells electricity, using the transmission or distribution facilities of an EDC.

First Contact Resolution (FCR) Complaints – Formerly labeled as "Inquiries." FCRs are contacts to BCS that did not require follow-up investigation beyond the initial contact or call-back.

Hardship Funds – Programs that make cash grants available to qualifying households to assist in the payment of outstanding debt owed to the utility. They are paid directly to the utility and generally funded through contributions made by the public that are matched by the utility.

Incumbent Local Exchange Carrier (ILEC) – A telecommunications utility that was providing local telecommunications service in 1996 to customers in a specific geographic area designated by the FCC and held a certificate from the PUC.

Infraction – A misapplication or infringement of a Commission statute or regulation, particularly the standards and billing practices for residential utility service.

Infraction Rate – The number of informally verified infractions per 1,000 residential customers (includes infractions drawn from both Consumer Complaints and PARs).

Justified Consumer Complaint Rate – The number of justified Consumer Complaints per 1,000 residential customers.

Justified Payment Arrangement Request Rate – The number of justified PARs per 1,000 residential customers.

Local Exchange Carrier (LEC) – A public utility that provides basic telecommunications service. The term does not exclude the utility's provision of toll service in addition to basic service.

Low-Income Usage Reduction Program (LIURP) – An energy conservation and education program. Qualifying households receive an energy audit to assess household condition and energy usage; free installation of energy conservation and energy efficiency measures such as insulation, air sealing, and appliance installation if cost effective; and, free education on energy conservation and usage reduction.

Major Class A Water Utility – A non-municipal water utility with annual revenues of $1 million or more for three consecutive years.

Major Electric Distribution Company (EDC) – An EDC with more than 100,000 residential customers.

Major Natural Gas Distribution Company (NGDC) – An NGDC with more than 100,000 residential customers.

Major Local Telecommunications Utility – An ILEC that served over 50,000 residential customers. The major local telecommunications utilities provided voice telecommunications service to the vast majority of the telecommunications access service lines.

Natural Gas Distribution Company (NGDC) – A natural gas utility regulated by the PUC that owns the gas lines and equipment necessary to deliver natural gas to the customer.

Natural Gas Supplier (NGS) – An entity other than an NGDC that sells, or arranges to sell, natural gas to customers using the distribution lines of an NGDC.

Non-Major Electric Utility – An EDC with less than 100,000 residential customers or an EGS.

Non-Major Natural Gas Utility – An NGDC with less than 100,000 residential customers or an NGS.

Non-Major Telecommunications Utility – An incumbent local exchange carrier that served less than 50,000 residential customers, a CLEC, a long-distance company, an IXC, a reseller, or an ETC.

Non-Major Water Utility – A municipal water utility or a non-municipal water utility with revenues of either less than $1 million annually or greater than $1 million annually for no more than two consecutive years.

Payment Arrangement Request Rate – The number of PARs per 1,000 residential customers.

Payment Arrangement Requests (PARs) – Requests for payment arrangements principally include one of the following situations: suspension / termination of service is pending; service has been suspended/terminated and the complainant needs payment terms to have service restored; or, the complainant wants to retire an arrearage.

People-Delivered Utility Service – Scheduling delays, conduct of personnel, and damages.

Problem Categories – A breakdown of residential Consumer Complaints by specific problem categories such as billing, credit and deposits, service quality, rates, etc.

Response Time in Days – The time span in days from the date of BCS's first contact with the utility regarding a complaint to the date on which the utility provides BCS with its report regarding the complaint. Response time quantifies the speed of a utility's response to BCS Consumer Complaints and PARs.

Significant Change in Circumstances – Any of the following criteria when verified by the public utility and experienced by customers with household income less than 300% of the Federal poverty level: (1) The onset of a chronic or acute illness resulting in a significant loss in the customer's household income. (2) Catastrophic damage to the customer's residence resulting in a significant net cost to the customer's household. (3) Loss of the customer's residence. (4) Increase in the customer's number of dependents in the household.

Slamming – The unauthorized switching of a customer's service provider or supplier. In telecommunications, slamming refers to changing a customer's local exchange carrier or primary long-distance service provider without the customer's consent. In electric and gas, slamming refers to changing the customer's supply provider without customer authorization.

Termination Rate – For the electric and gas industries, termination rate is the number of service terminations divided by the number of residential customers. For the telecommunications industry, termination rate is the number of service terminations per 1,000 residential customers.

List of Acronyms

Acronym	Definition
ALCOSAN	Allegheny County Sanitary Authority
BCS	Bureau of Consumer Services
CAP	Customer Assistance Program
CARES	Customer Assistance and Referral Evaluation Services
CLEC	Competitive Local Exchange Carrier
COLR	Carrier of Last Resort
CRS	Collections Reporting System
CSIS	Consumer Services Information System
CTS	Compliance Tracking System
CURE	Customer & Utility Resolution Effort
d/b/a	Doing Business As
DHS	Department of Human Services
DSLPA	Discontinuance of Services to Leased Premises Act
EDC	Electric Distribution Company
EGS	Electric Generation Supplier
ETC	Eligible Telecommunications Carrier
FCC	Federal Communications Commission
FCR	First Contact Resolution (f/k/a Inquiries)
f/k/a	Formerly Known As
FPIG	Federal Poverty Income Guidelines
GI	General Inquiry
H2O	Help to Others
ILEC	Incumbent Local Exchange Carrier
LEC	Local Exchange Carrier
LECRS	Local Exchange Carrier Reporting System
LIHWAP	Low Income Household Water Assistance Program
LIURP	Low-Income Usage Reduction Program
Mbps	Megabits per second
NFI	Needs Further Investigation (i.e., consumer complaint and PARs)
NGDC	Natural Gas Distribution Company
NGS	Natural Gas Supplier
NLAD	National Lifeline Accountability Database
NOPR	Notice of Proposed Rulemaking
OALJ	Office of Administrative Law Judge
OCA	Office of Consumer Advocate
PAR	Payment Arrangement Request
PAWC	Pennsylvania American Water Co.
PIP	Percent of Income Payment
PUC	Public Utility Commission
PWSA	Pittsburgh Water and Sewer Authority
SNAP	Supplemental Nutrition Assistance Program
SSI	Supplemental Security Insurance
UCARE	Utility Consumer Activities Report and Evaluation
USAC	Universal Service Administrative Company
USF	Universal Service Fund
UTAP	Universal Telephone Assistance Program
VoIP	Voice over Internet Protocol

Appendices

Appendix A

2019-22 Number of Residential Customers
Major Electric Distribution Companies

Utility	2019	2020	2021	2022
Duquesne	538,534	541,210	543,300	545,897
Met-Ed	504,685	508,753	512,216	515,226
PECO+	1,505,328	1,518,942	1,530,346	1,538,908
Penelec	500,877	501,635	501,816	501,009
Penn Power	146,018	147,020	148,138	148,927
PPL	1,233,837	1,243,501	1,251,196	1,256,135
UGI-Electric	55,131	54,969	55,084	55,122
West Penn	627,499	630,039	632,415	631,990
Total	**5,111,909**	**5,146,069**	**5,174,511**	**5,193,214**

+ PECO statistics include electric and gas.

2019-22 Number of Residential Customers
Major Natural Gas Distribution Companies

Utility	2019	2020	2021	2022
Columbia	400,044	405,653	407,892	409,611
NFG	196,778	197,945	198,007	196,742
Peoples+	335,583	591,996	593,089	594,250
Peoples-Equitable+	247,801	n/a	n/a	n/a
PGW	480,347	486,934	488,817	487,335
UGI-Gas++	367,175	604,375	611,631	618,589
UGI North++	157,025	n/a	n/a	n/a
Total	**2,184,753**	**2,286,903**	**2,299,436**	**2,306,527**

+ Due to the Peoples Natural Gas merger, effective Jan. 1, 2020, the Peoples data includes Peoples-Equitable.
++ Due to the UGI Gas merger, effective Jan. 1, 2020, the UGI Gas data includes UGI Central and UGI North.

Appendix A (Continued)

2019-22 Number of Residential Customers
Major Class A Water Utilities

Utility	2019	2020	2021	2022
Aqua	404,017	406,313	409,411	412,598
PAWC	613,434	628,402	632,758	642,776
Large Class A Total	**1,017,451**	**1,034,715**	**1,042,169**	**1,055,374**
Audubon	2,712	2,631	2,687	2,695
Columbia	9,733	9,778	9,838	10,886
Community Utilities[4]	2,632	2,640	2,647	2,651
Newtown Artesian	9,625	9,639	9,649	9,658
Veolia Bethel	2,462	2,439	2,450	2,452
Veolia PA	56,266	57,138	58,175	58,926
York	62,128	62,697	63,323	67,214
"Other Class A" Total	**145,558**	**146,962**	**148,769**	**154,482**
All Class A Total	**1,163,009**	**1,181,677**	**1,190,938**	**1,209,856**

2019-22 Number of Residential Customers
Municipal Water and Sewer Utilities

Utility	2019	2020	2021	2022
PWSA	97,726	97,834	97,915	99,183

2019-22 Number of Residential Customers
Major Local Telecommunications Utilities

Utility	2019	2020	2021	2022
Brightspeed	107,497	101,327	94,357	82,160
Frontier Commonwealth	79,861	73,598	68,032	63,202
Verizon North	113,253	103,753	90,239	79,746
Verizon PA	550,138	498,595	428,220	372,782
Windstream	75,613	74,511	78,396	75,044
Total	**926,362**	**851,784**	**759,244**	**672,934**

Appendix B-1

Categories of Infractions
Electric, Gas and Water

Billing and Payment – 56.2-Definition of Billing Month, 56.2-Definition of Billing Period, 56.11, 56.12(7)-(8), 56.15, 56.21(1)-(5), 56.22, 56.24, and 56.25

Meter Reading – 56.12(1)-(6)

Make-Up Bills – 56.14, 57.24, 59.22, and 65.9

Transfer of Accounts – 56.16, 56.36(b)(3), and 56.72

Credit Standards and Deposits – 56.31-35, 56.36(b)(1)-(2), 56.37, 56.38, 56.41, 56.42, 56.51, 56.53, and 1404

Termination Grounds – 56.2-Definition of Delinquent Acct. and 56.81-83

Termination Procedures – 56.21(6), 56.91-97, 56.99, 56.100, 56.111, 56.112, 56.114, 56.335, 56.340, and 1406

Reconnection of Service – 56.115, 56.191(a)-(c), 56.421, and 1407

Liability - Responsibility for Bills – 56.2-Definition of Applicant, 56.2-Definition of Customer, 56.191(d)-(e), and 56.285

Landlord/Ratepayer – 1521-1533

Dispute Handling – 56.2-Definition of Dispute, 56.2-Definition of Initial Inquiry, 56.141-152, 56.181, 59.21(f)(1), 59.21(f)(3) and 65.3(a)

Other – 56.1, 56.202, 56.71, 57.22, 57.172, 65.8, 501, 1501, Tariff, and Moratorium Order M-2020-3019244

Appendix B-2
Categories of Infractions
Telecommunications

Broadband – 3012-Definition of Broadband

Network Modernization Plans – 3014

Complaint Procedures – 63.1, 63.15, and 63.59

Quality of Service – 63.14, 63.23, 63.53, and 63.63

Service Records – 63.22

Customer Trouble Reports – 63.24, 63.57, and 64.52

Installation of Service – 63.58

Migration – 63.201-221

Billing and Payment – 53.85, 64.1, 64.12-14, 64.16, 64.18-19, 64.24, and 64.53

Slamming and Cramming – 64.23

Credit and Deposits – 64.32-34 and 64.36

Suspension and Termination – 64.61, 64.63, 64.71-74, 64.81, 64.101, 64.102, 64.121-123, 64.133, and 64.181

Dispute Procedures – 64.2 Definition of Dispute, 64.141, 64.142, 64.153, and 64.191

Other – 63.65(4), 501(c), 1501, and Tariff

Appendix C

2022 Residential Informal Complaints (Consumer Complaints and PARs) for Non-Major Utilities Not Included in Industry Chapters

Utility*	Number of Complaints	Total Number of Complaints Includes Secondary Utility Complaints**
ELECTRIC		
Pike County Light and Power (EDC)	11	11
Other Electric Distribution Companies (EDCs)***	3	3
4 Choice Energy (EGS)	39	44
AEP Energy (EGS)	7	9
Ambit Energy (EGS)	14	16
American Power & Gas of PA (EGS)	22	22
AP Gas and Electric d/b/a APG&E (EGS)	30	36
Atlantic Energy (EGS)	11	12
Better Buy Energy (EGS)	0	9
Cirro Energy (EGS)	9	14
Clean Choice Energy f/k/a Ethical Energy (EGS)	47	57
Cleansky Energy f/k/a Titan Gas & Power (EGS)	69	84
Clearview Electric (EGS)	20	23
Constellation Energy Power Choice (EGS)	0	7
Discount Power (EGS)	21	22
Elec-Direct Energy Services (EGS)	20	31
Eligo Energy PA (EGS)	28	34
Energy Harbor f/k/a First Energy Solutions (EGS)	49	58
Energy Plus Holdings (EGS)	8	11
Frontier Utilities Northeast (EGS)	21	25
Great American Power (EGS)	0	5
Green Mountain Energy (EGS)	20	24
Greenlight Energy (EGS)	12	16
IDT Energy (EGS)	9	10
Indra Energy (EGS)	28	34
Inspire Energy Holdings (EGS)	109	120
Interstate Gas Supply d/b/a IGS Energy (EGS)	33	35

* Only those non-major utilities having five or more complaints are listed individually. Non-major utilities having less than five residential complaints are included in the appropriate general category for their industry (e.g., "Other Electric Distribution Companies" or "Other CLECs," etc.)

** Includes complaints where the non-major utility is listed as the secondary utility.

*** Total number of complaints for those utilities having fewer than five residential complaints. See the last table in Appendix C for a list of these utilities.

Appendix C (Continued)

2022 Residential Informal Complaints (Consumer Complaints and PARs) for Non-Major Utilities Not Included in Industry Chapters

Utility*	Number of Complaints	Total Number of Complaints Includes Secondary Utility Complaints**
ELECTRIC (continued)		
Just Energy PA (EGS)	13	17
Liberty Power (EGS)	0	5
Major Energy Services (EGS)	32	35
Mpower Energy NJ (EGS)	17	19
National Gas and Electric (EGS)	12	14
New Energy Ventured - Mid Atlantic (EGS)	5	11
New Wave Energy (EGS)	156	163
Nextera Energy Service PA (EGS)	23	26
Nordic Energy Services (EGS)	12	17
North American Power and Gas (EGS)	5	5
NRG Home (EGS)	87	106
Ntherm (EGS)	33	36
Park Power (EGS)	12	14
Pennsylvania Gas and Electric (EGS)	11	12
Planet Energy PA d/b/a Riterate or Value Plus (EGS)	61	67
Pure Energy USA (EGS)	31	39
Residents Energy (EGS)	23	27
RPA Energy d/b/a Green Choice Energy (EGS)	10	10
Rushmore Energy (EGS)	0	5
SFE Energy (EGS)	76	86
Shipley Oil (EGS)	12	13
Smartenergy.com (EGS)	108	128
South Bay Energy (EGS)	5	5
Spring Power & Gas (EGS)	7	12
Star Energy Partners (EGS)	11	11
Statewise Energy (EGS)	19	19
Stream Energy (EGS)	19	22

* Only those non-major utilities having five or more complaints are listed individually. Non-major utilities having less than five residential complaints are included in the appropriate general category for their industry (e.g., “Other Electric Distribution Companies” or “Other CLECs,” etc.)

** Includes complaints where the non-major utility is listed as the secondary utility.

*** Total number of complaints for those utilities having fewer than five residential complaints. See the last table in Appendix C for a list of these utilities.

Appendix C (Continued)

2022 Residential Informal Complaints (Consumer Complaints and PARs) for Non-Major Utilities Not Included in Industry Chapters

Utility*	Number of Complaints	Total Number of Complaints Includes Secondary Utility Complaints**
ELECTRIC (continued)		
Think Energy / Engie Retail (EGS)	9	10
Tomorrow Energy (EGS)	60	67
Town Square Energy East (EGS)	5	8
Verde Energy USA (EGS)	31	35
WGL Energy Services f/k/a WGES (EGS)	10	11
Xoom Energy PA (EGS)	6	6
Yep Energy (EGS)	7	8
Other Electric Generation Suppliers (EGSs)***	65	57
Total Non-Major Electric	**1,633**	**1,898**
GAS		
Peoples Gas Co. f/k/a Peoples TWP (NGDC)	109	113
Other Natural Gas Distribution Companies (NGDCs)***	6	6
Cleansky Energy f/k/a Titan Gas & Power (NGS)	5	5
Direct Energy Services (NGS)	0	5
Dominion Energy Solutions (NGS)	42	53
IGS (Interstate Gas Supply) (NGS)	40	50
Indra Energy (NGS)	19	21
Mpower Energy NJ (NGS)	12	14
Nordic Energy Services (NGS)	7	11
NRG Home (NGS)	15	18
Ntherm (NGS)	5	5
Pennsylvania Energy	9	12
Pennsylvania Gas and Electric (NGS)	6	6
Residents Energy (NGS)	7	7
SFE Energy (NGS)	19	20
Statewise Energy (NGS)	8	8
Tomorrow Energy (NGS)	20	20

* Only those non-major utilities having five or more complaints are listed individually. Non-major utilities having less than five residential complaints are included in the appropriate general category for their industry (e.g., "Other Electric Distribution Companies" or "Other CLECs," etc.)

** Includes complaints where the non-major utility is listed as the secondary utility.

*** Total number of complaints for those utilities having fewer than five residential complaints. See the last table in Appendix C for a list of these utilities.

Appendix C (Continued)

2022 Residential Informal Complaints (Consumer Complaints and PARs) for Non-Major Utilities Not Included in Industry Chapters

Utility*	Number of Complaints	Total Number of Complaints Includes Secondary Utility Complaints**
GAS		
Xoom Energy PA (NGS)	6	7
Other Natural Gas Suppliers (NGSs)***	50	50
Total Non-Major Gas	**385**	**431**
WATER		
Reynolds Water (WP)	5	
Other Private Water***	8	
City of Lancaster (WM)	12	
City of Philadelphia (WM)	6	
Other Municipal Water***	3	
Total Non-Major Water	**34**	
TELECOMMUNICATIONS		
TDS Telecom (Mahanoy & Mahantango) (ILEC)	6	
Other Incumbent Local Exchange Carriers (ILECs)***	8	
Atlantic Broadband (CLEC)	6	
Frontier Communications CTSI (CLEC)	17	
Windstream Communications (CLEC)	20	
Zito Media Voice (CLEC)	11	
Other Competitive Local Exchange Carriers (CLECs)***	19	
Assurance Wireless (Virgin Mobile) (ETC)	19	
Safelink Wireless (Tracfone) (ETC)	13	
T-mobile (Inreach) (ETC)	13	
Other Providers of Telecommunications Services***	9	
Total Non-Major Telecommunications	**141**	

* Only those non-major utilities having five or more complaints are listed individually. Non-major utilities having less than five residential complaints are included in the appropriate general category for their industry (e.g., "Other Electric Distribution Companies" or "Other CLECs," etc.)

** Includes complaints where the non-major utility is listed as the secondary utility.

*** Total number of complaints for those utilities having fewer than five residential complaints. See the last table in Appendix C for a list of these utilities.

Appendix C (Continued)

2022 Residential Informal Complaints (Consumer Complaints and PARs) for Non-Major Utilities Not Included in Industry Chapters

Utilities with Less Than Five Residential Complaints
ELECTRIC
Other EDCs: Citizens Electric Co. of Lewisburg and Wellsboro Electric
Other EGSs: Agway Energy Services, All American Power and Gas, Alpha Gas and Electric, Astral Energy, Brighten Energy, Choose Energy, Community Energy, Dynegy Energy Services, Ecoplus Power, Energy Co-Op, Energy Rewards/Comcast/Everyday Energy, Engie Resources, Gateway Energy, Josco Energy USA, Just Energy Solutions f/k/a Commerce, Median Energy PA, Plymouth Rock Energy, Power Up Energy, Powervine Energy, Public Power, Respond Power, Santanna Energy Services, Smart Touch Energy, Smartenergy, Spark Energy, Starion Energy of PA, Sunrise Power and Gas, Sunwave Gas and Power PA, Trieagle Energy, Viridian Energy, and Vista Energy Marketing
GAS
Other NGDCs: Herman Oil and Gas, Northeast Heat and Light, Pine-Roe Gas, and Riemer Natural Gas f/k/a Herman Riemer Gas Co.
Other NGSs: Alpha Gas and Electric, American Power and Gas of PA, Atlantic Energy, Constellation Energy Gas Choice f/k/a MxEnergy, Discount Power, Eligo Energy PA, Energy Harbor, Frontier Utilities Northeast, Green Mountain Energy Co., Greenlight Energy, IDT Energy, Inspire Energy Holdings, Major Energy, Median Energy, National Gas and Electric, New Wave Energy, North American Power and Gas, Park Power, Planet Energy PA d/b/a Riterate or Value Plus, Provision Power and Gas, RPA Energy d/b/a Green Choice Energy, Santanna Energy Services, Shipley Energy (Shipley Oil Service), Smartenergy Holdings, Spring Power and Gas, Verde Energy USA PA, Volunteer Energy Services, and WGL Energy Services f/k/a WGES
WATER
Other Private Water: Conneaut Lake Park, Finch Hill Water Co., Hidden Valley Utility Services, Springhouse Waterworks f/k/a Imperial Point, and Templeton Water
Other Municipal Water: Borough of Ambler, Borough of Schuylkill Haven, and City of Lebanon
TELECOMMUNICATIONS
Other ILECs: Armstrong Telephone Co., Consolidated Communications f/k/a North Pgh, North Penn Telephone Co., and TDS Telecom f/k/a Sugar Valley Telephone
Other CLECs: Armstrong Telecommunications, AT&T Local, Bandwidth.com, Clear Rate Communications, Lingo Communications f/k/a Birch Residential, RCN Telecom of PA, and Service Electric Telephone
Other Providers of Telecommunications Services: Airtalk Wireless f/k/a Feel Safe (Airvoice) (ETC), Entouch Wireless (Boomerang Wireless) (ETC), and Qlink Wireless (ETC)

Appendix D-1

Classification of Consumer Complaints
Electric, Gas and Water

Billing Disputes – Complaints about bills from the utility: high bills, inaccurate bills or balances, installation charges, customer charges, service charges, repair charges, late payment charges, frequency of bills, and the misapplication of payment on bills.

Competition – Complaints about issues that are directly related to competition: enrollment/eligibility, application and licensing, supplier selection, changing/switching suppliers (includes slamming), advertising and sales, billing, contracts, and credit and deposits. This category also includes any complaints about more general competition issues such as consumer education, pilot programs, and restructuring.

Credit and Deposits – Complaints about a utility's requirements to provide service: the applicant must pay another person's bill; the applicant must complete an application; the applicant must provide identification; or the applicant must pay a security deposit. This category also includes complaints about the amount of or the amortization of a deposit, the payment of interest on a deposit or the failure of a utility to return a deposit to the customer.

Damages – Complaints about a utility's lack of payment or lack of restored property related to damages to equipment, appliances or property due to service outages, utility construction or repair, and improperly delivered or transferred service.

Discontinuance/Transfer – Complaints related to the responsibility for or the amount of bills after discontinuance or transfer of service: the customer requested discontinuance of service and the utility failed to finalize the account as requested or transferred a balance to a new or existing account from the account of another person or location.

Metering – Billing complaints directly related to the reading of or the failure to read the customer's meter and the accuracy of the meter readings (utility reading, customer supplied reading or misreading).

Other Payment Issues – Complaints about the amount of budget bills or the transfer of a customer's debt to a collection agency.

Personnel Problems – Complaints about performance by utility personnel: a utility representative did not finish the job correctly; a meter reader entered a customer's home to read the meter without knocking; utility personnel will not perform a requested service; business office personnel treated the customer rudely; and, the utility mismanaged its operations. This category also includes any complaints about sales such as appliance sales by the utility, as well as complaints about a utility's CAP program or procedures.

Rates – General or specific complaints about a utility's rates: general or specific rates are too high; the utility's rates are being used to recover advertising costs; or the customer is being billed on the incorrect rate.

Scheduling Delays – Complaints about problems with a utility's scheduling: delays in scheduling or repairing service or relocating poles, failures to keep scheduled meetings or appointments and lack of accessibility to customers.

Service Extensions – Complaints about line extensions or installation of service: the responsibility for line extensions, the cost and payment for line extensions, inspection requirements, delay in installation, connection or disconnection of service, and denial of service extensions.

Service Interruptions – Complaints about service interruptions: the frequency of service interruptions, the duration of interruptions or the lack of prior notice regarding interruptions.

Service Quality – Complaints about a utility's product: the quality of the product is poor (water quality, voltage or pressure); the utility's equipment is unsatisfactory or unsafe; the utility fails to act on a complaint about safety; the utility plans to abandon service; the utility does not offer needed service; the utility wants to change location of equipment; or the utility providing service is not certified by the Commission (de facto).

Termination or PAR Procedures – Complaints about termination and/or payment arrangement procedures: the customer claims no termination notice was received; the utility failed to honor a medical certificate; or there was a delay in reconnection after the bill was paid.

All Other Problems – All other complaints that do not fit into the above categories, including, but not limited to, credit application procedures.

Appendix D-2

Classification of Consumer Complaints
Telecommunications

Annoyance Calls – Complaints about the utility's failure to resolve problems related to receiving unsolicited sales calls or harassing calls. This includes the utility's failure to change the phone number or initiate an investigation and problems with auto dialers and fax machines.

Billing Disputes – Complaints about bills from the utility: high bills, inaccurate bills or balances, installation charges, customer charges, service charges, repair charges, late payment charges, frequency of bills, and the misapplication of payment on bills.

Competition – Complaints about changing/switching service providers, slamming, cramming, competition-related billing problems, contracts, competition-related service problems, and all other problems associated with competition in the telecommunications marketplace.

Credit and Deposits – Complaints about a utility's requirements to provide service: applicant payment of another person's bill, completion of an application, provision of identification or payment of a security deposit. This category also includes complaints about the amount of or the amortization of a deposit, the payment of interest on a deposit or the failure of a utility to return a deposit to the customer.

Discontinuance/Transfer – Complaints related to responsibility for or the amount of bills after discontinuance or transfer of service; utility failure to finalize the account as requested; or the utility's transfer of a balance to a new or existing account from the account of another person or location.

Non-Recurring Charges – Complaints about one-time charges for installation of basic and/or non-basic services.

Service Delivery – Complaints about delays in service installations or disconnections of service and failures to keep scheduled appointments, lack of facilities to provide service, unauthorized transfer of service, unavailability of special services, and the rudeness of business office personnel.

Service Terminations – Complaints about suspension or termination procedures when there is no need for a payment arrangement.

Toll Services – Complaints about charges for local toll and/or long-distance toll services.

Unsatisfactory Service – Complaints about poor service quality, problems with the assignment of phone numbers, incorrect information in phone directories, lack of directories, equal access to toll network, and service interruptions and outages.

All Other Problems – All other complaints that do not fit into the above categories, including complaints about extended area of service (limited local calling area), rates (general or specific rates are too high or the customer is being billed on the incorrect rate), and sales of non-basic service (including the availability of certain services). Also included are complaints that were taken in by BCS but closed before they could be investigated because the complainant resolved the complaint with the utility or withdrew the complaint. In addition, some complaints are non-jurisdictional.

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PAPUC

Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120
www.puc.pa.gov
1-800-692-7380

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
	:	
v.	:	**Docket No. R-2023-3044549**
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	:	
PEOPLES NATURAL GAS COMPANY LLC	:	
	:	

PREPARED REBUTTAL TESTIMONY OF
RUDOLPH HANECHAK
FINANCIAL ANALYSIS & BUDGET MANAGER
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: April 18, 2024
DATE ADMITTED: _____

Peoples Statement No. 10-R

PREPARED REBUTTAL TESTIMONY OF
RUDOLPH HANECHAK

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Rudolph Hanechak. My business address is 375 North Shore Drive, Pittsburgh, PA 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by PNG Companies LLC ("PNG Companies") as Financial Analysis and Budget Manager. PNG Companies provides various administrative functions for Peoples Natural Gas Company LLC ("Peoples" or the "Company") including Budgeting.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 10.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I am presenting testimony in rebuttal of certain expense positions and recommendations of the Bureau of Investigation and Enforcement ("I&E") witness Christopher Keller and the Office of Consumer Advocate ("OCA") witness Dante Mugrace.

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. No.

Q. DO ANY OF THE PARTIES MAKE AN ADJUSTMENT TO NON-INCOME TAXES?

A. Yes. Both I&E Witness Keller and OCA Witness Mugrace propose adjustments to payroll taxes as a result of a proposed change in labor expense to increase the vacancy credit. Mr. Mugrace also proposes a reduction to incentive compensation (STI) to remove financial related metrics.

Q. WHAT IS THE RESULT OF THEIR PROPOSED ADJUSTMENTS?

A. I&E Witness Keller's proposed adjustment would reduce payroll taxes by $216,212 and Witness Mugrace's proposed adjustment would reduce payroll taxes by $411,718.

Q. DO YOU AGREE WITH THE PROPOSED ADJUSTMENTS TO PAYROLL TAXES?

A. No. I do not agree with the adjustments to payroll taxes on the grounds that I do not agree with the proposed change to the vacancy credit or the incentive compensation adjustment. For additional rebuttal of the proposed adjustments to the vacancy credit and incentive compensation please refer to Peoples Statement No. 2-R the rebuttal testimony of Andrew Wachter.

Q. DO YOU AGREE WITH THEIR CALCULATION OF THE PROPOSED ADJUSTMENTS TO PAYROLL TAXES IF EITHER OF THEIR POSITIONS IS ACCEPTED?

A. Yes. If the additional vacancy credit and STI adjustments are accepted, then the calculations proposed are accurate.

Q. WHAT IS THE COMPANY'S PROPOSED CHANGE TO THEIR PAYROLL TAX EXPENSE ADJUSTMENTS?

A. I propose increasing the payroll taxes from I&E Witness Keller by $216,212 and Witness Mugrace's by $411,718 to reflect the original submission.

Q. DID MR. MUGRACE MAKE ANY ADDITIONAL RECOMMENDED CHANGES TO TAXES OTHER THAN INCOME?

A. Yes. Mr. Mugrace proposes a reduction to property taxes of $9,370 based on a reduction in Gas Plant In Service ("GPIS").

Q. PLEASE FURTHER EXPLAIN THE ADJUSTMENT TO PROPERTY TAX.

A. Overall, the recommended changes to GPIS should be rejected for the reasons discussed in both the rebuttal testimony of Paul Becker - Peoples Statement No. 5-R and Dawn Folks - Peoples Statement No. 11-R. Thus, the proposed changes to property tax should be rejected as well.

In addition, Mr. Mugrace calculates the property tax rate using the submitted property tax of $1,064,828 as a ratio of the submitted GPIS of $5,587,906,895 resulting in an incorrect ratio of .00032. Mr. Mugrace then applies this rate to the proposed GPIS reduction of ($29,282,008) resulting in the proposed reduction of $9,370. If this

methodology is accepted the correct ratio would have been .0001906. However, for the reason discussed below this should be rejected.

Q. ARE THEIR OTHER ERRORS WITH OCA'S ADJUSTMENT TO PROPERTY TAX?

A. Yes. First, the GPIS that Mr. Mugrace proposes to disallow is not subject to property tax in Pennsylvania. Second, I also disagree with the calculation itself. The correct ratio would have been .0001906 (1,064,828 / 5,587,906,895).

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
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v.	:	**Docket No. R-2023-3044549**
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PEOPLES NATURAL GAS COMPANY LLC	:	
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PREPARED REBUTTAL TESTIMONY OF
RUDOLPH HANECHAK
FINANCIAL ANALYSIS & BUDGET MANAGER
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: April 18, 2024
DATE ADMITTED: _____

Peoples Statement No. 10-R

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A. I am presenting testimony in rebuttal of certain expense positions and recommendations of the Bureau of Investigation and Enforcement ("I&E") witness Christopher Keller and the Office of Consumer Advocate ("OCA") witness Dante Mugrace.

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A. Yes. If the additional vacancy credit and STI adjustments are accepted, then the calculations proposed are accurate.

Q. WHAT IS THE COMPANY'S PROPOSED CHANGE TO THEIR PAYROLL TAX EXPENSE ADJUSTMENTS?

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BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED REBUTTAL TESTIMONY OF DAWN M. FOLKS SENIOR FINANCE AND RATES ANALYST ON BEHALF OF PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: April 18, 2024
DATE ADMITTED: _____

Peoples Statement No. 11-R

PREPARED REBUTTAL TESTIMONY OF
DAWN M. FOLKS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Dawn M. Folks. My business address is 375 North Shore Drive, Pittsburgh, PA 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by PNG Companies LLC ("PNG Companies" or "PNG") as a Finance and Rates Analyst. I provide rates and regulatory services for Peoples Natural Gas Company LLC.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 11.

Q. HAVE YOU REVIEWED THE DIRECT TESTIMONY SUBMITTED BY OTHER PARTIES?

A. Yes. In particular, regarding this Rebuttal Testimony, I have reviewed the Direct Testimony submitted by Dante Mugrace and Roger Colton on behalf of the Office of Consumer Advocate ("OCA"), Ethan Cline on behalf of the Bureau of Investigation and Enforcement ("I&E") and Robert Knecht on behalf of the Office of Small Business Advocate ("OSBA").

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my Rebuttal Testimony is fourfold: 1) address the OCA recommendation regarding reducing rate base by $27,819,503 for inflation adjustments, 2) respond to I&E request that PNG provides an update of its actual plant additions and retirements, 3) respond to OCA's recommended additions to Rule 3 in PNG Tariff Gas- PA PUC No. 48 and 4) address OBSA's statement on the Company's design day method with regards to the LGS class design day demand in particular.

Q. WHAT IS OCA WITNESS MUGRACE'S RECOMMENDATION WITH RESPECT TO THE COMPANY'S RATE BASE CLAIM?

A. Dante Mugrace is recommending a total adjustment of $27,819,503 related to the complete disallowance of the inflation adjustments that are included in the balances for each of Peoples' categories of plant.

Q. WHAT IS YOUR RESPONSE TO MUGRACE'S RECOMMENDATION TO ADJUST THE COMPANY'S RATE BASE CLAIM?

A. I do not agree with Mr. Mugrace's recommendation to remove inflation adjustments. Mr. Mugrace's recommendation to omit inflation in its entirety on future investments and expenses ignores real world reality. Refer to the Company witness Paul Becker, Peoples Natural Gas Statement No. 5-R, for further explanation on the Company's position regarding these adjustments.

Q. WHAT IS I&E WITNESS CLINE'S RECOMMENDATION WITH RESPECT TO THE COMPANY'S RATE BASE CLAIM?

A. Ethan Cline acknowledges the Company's claimed combined rate base for the FPFTY is $4,215,125,164 and the rate base for the FTY ending August 31, 2024 is $3,658,410,801 without issue and requests that actuals be provided for the FTY and FPFTY by March 1, 2026. Mr. Cline believes there is value in determining how closely Peoples' projected investments in future facilities compare with the actual investments that are made by the end of the FTY and FPFTY.

Q. WERE THERE ANY ADDITIONAL RECOMMENDATIONS REGARDING RATE BASE?

A. Yes. Both OCA and I&E recommend changes to the claim for Cash Working Capital in Rate Base. These adjustments should also be denied for the reasons set forth in Company witness Krista Snyder's Rebuttal Testimony, Peoples Natural Gas Statement No. 12-R.

Mr. Mugrace also had a recommendation for an adjustment related to an incident in Robinson. This adjustment should also be denied for the reasons set forth in Company witness Paul Becker's, Rebuttal Testimony Peoples Natural Gas Statement No. 5-R.

In addition, Mr. Mugrace had rate base adjustments related to deferred taxes in Act 40. These adjustments should also be denied for the reasons set forth in Company witness Christine Saball's Rebuttal Testimony, Peoples Natural Gas Statement No. 6-R.

Q. WHAT IS YOUR RECOMMENDATION WITH RESPECT TO I&E'S PROPOSAL TO PROVIDE UPDATES TO PEOPLES NATURAL PLANT ADDITIONS?

A. I can agree with Mr. Cline's recommendation to provide an update that includes actual plant additions and retirements, no later than March 1, 2026, for the twelve months ending August 31, 2024 and for the twelve months ending September 30, 2025.

Q. WERE THERE ANY TARIFF CHANGES PROPOSED THAT YOU WOULD LIKE TO DISCUSS?

A. Yes. Roger Colton proposed additions to the language the Company's proposed tariff, specifically regarding rules for deposit for residential customers. Colton suggests that additional language be added to Rule 3.C (Gas-PA PUC No. 48, Original Page 19), that mirrors the language of 52 Pa. Code § 56.32(e), "*Provide income documents or other information attesting to his or her eligibility for state benefits based on household income eligibility requirements that are consistent with those of the public utility's Customer Assistance Program"* and Rule 3.D (Gas-PA PUC No. 48, Original Page 20) that mirrors the language of 52 Pa. Code § 56.41(B)(4), "*Notwithstanding subsection (D), the Company may not require a cash deposit from a customer who is, based upon household income, confirmed to be eligible for a customer assistance program. A customer is confirmed to be eligible for a customer assistance program by the public utility if the customer provides income documents or other information attesting to his or her eligibility for state benefits based on household income eligibility requirement that are consistent with those of the public utility's Customer Assistance Program.*" Therefore, extending the exemption to customers eligible for the customer assistance program.

Q. WERE THERE ANY OTHER TARIFF CHANGES PROPOSED IN PEOPLES RULE 3 -RULES FOR DEPOSIT BY MR. COLTON?

A. Yes. Roger Colton also proposed additional tariff language added in (Rule 3.E (2), Gas-PA PUC No. 48, Original Page No. 19, "the Applicant is unable to establish creditworthiness to the satisfaction of the Company through the use of a generally accepted credit scoring methodology which employs standards for using the methodology that fall within the range of general industry practice." However, I do want to point out that the rule that Mr. Colton quotes in his testimony is actually Rule 3.B(2), Gas PA PUC No. 48, Original Page No. 19 not Rule 3.E(2), Gas PA PUC No. 48, Original Page No. 19. Mr. Colton believes that this provision, standing alone, carries with it an elevated risk of discrimination and suggests that the Company add the following language to this rule. *"provided that the methodology does not directly, or have the effect of, discriminating based on a protected class as set forth in the federal Equal Credit Opportunity Act."*

Q. DO YOU AGREE WITH THE CHANGES COLTON PROPOSED IN THE RETAIL TARIFF?

A. The Company accepts all three of Mr. Colton's recommended tariff language additions as outlined above. Exhibit DMF-1R includes the red-lined tariff language additions in Gas-PA PUC No. 48, Original Pages 19 and 20.

Q. ARE THERE ANY OTHER CHANGES TO THE PROPOSED RETAIL TARIFF THAT YOU WOULD LIKE TO MENTION?

A. Yes. In response to OSBA-I-12(J), Peoples explained their intention to propose the WNA mechanism on a bills rendered basis, not a service rendered basis. And as such, the Company will adjust its tariff to reflect the mechanism as bills rendered. Exhibit DMF-2R includes the red-lined tariff language change in Gas-PA PUC No. 48, Original Pages 79. Further explanation can be found in Company witness Carol Scanlon's, Rebuttal Testimony Peoples Statement No. 3-R.

Q. WHAT IS OSBA WITNESS KNECHT'S COMMENTS WITH RESPECT TO THE COMPANY'S DESIGN DAY DEMAND ALLOCATORS?

A. Mr. Knecht outlines in his testimony how the Company allocates the design day demands to the various rate classes based on historical normalized usage factors for base load and heat load. Mr. Knecht agrees with the Company's design day methodology. Mr. Knecht then comments that it appears that actual peak demands on recent peak days have substantially exceeded the "design" demands for the LGS class using the response provided in OSBA-I-34.

Q. WHAT IS YOUR RESPONSE TO KNECHT'S CONCLUSION?

A. First, it seems as if Mr. Knecht is assuming that the breakout of volumes by rate class presented in the Company's Exhibit 17 COS10 are true actuals. In the response to OBSA-I-34 the Company explained that actual send out volumes from gas supply were used to find the three peak days over the last three winters. There is no obvious way to recognize

those individual peak day data by rate class without daily metered data by class. The Company allocated these total volumes by customer class using the average forecasted volumes, which are for an average day situation not a peak day situation. Therefore, the LGS are a group of customers that are not generally heat sensitive, it is expected that the demand percentages for that class would be larger on an average day with respect to the total demand and smaller on a design day with respect to the total demand. The data by class is estimated not actuals and would be different if the company used a percentage spread using their design day model instead which would then decrease the LGS data presented in Exhibit 17 COS 10. See Exhibit DMF-3R for the data allocated by design day factors. As a result, I do not agree with Mr. Knecht's assumption that the Rate LGS demands on actual peak days exceeded the assumed design conditions and the Company's design day rate class allocation percentages originally provided in this case are the most accurate to use.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

RULES AND REGULATION

2. CHARACTER OF SERVICE

The Company offers firm service, unless otherwise provided in this tariff.

3. RULES FOR DEPOSIT

RESIDENTIAL CUSTOMERS

A. A deposit from a Customer shall conform to the requirements of all applicable Commission regulations and statutory requirements. Deposits required by the Company for services under this Tariff shall not be based on unpaid charges for gas supply services provided by an NGS.

B. The Company may also require a security deposit from an Applicant if any of the following conditions exist:

1) The Applicant was a residential distribution service Customer of the Company whose service was terminated for any of the following reasons:
   a. Nonpayment of an undisputed delinquent account.
   b. Failure to complete payment of a deposit, provide a guarantee, or establish credit.
   c. Failure to permit access to meters, service connections or other property of the Company for the purpose of replacement, maintenance, repair or meter reading.
   d. Unauthorized use of the utility service delivered on or about the affected dwelling.
   e. Failure to comply with the material terms of a settlement or payment agreement.
   f. Fraud or material misrepresentation of identity for the purpose of obtaining utility service.
   g. Tampering with meters, including, but not limited to, bypassing a meter or removal of an automatic meter reading device or other Company equipment.
   h. Violating Tariff provisions which endanger the safety of a person or the integrity of the Company's gas delivery system.

2) The Applicant is unable to establish creditworthiness to the satisfaction of the Company through the use of a generally accepted credit scoring methodology which employs standards for using the methodology that fall within the range of general industry practice, provided that the methodology does not directly, or have the effect of, discriminating based on a protected class as set forth in the federal Equal Credit Opportunity Act.

3) The Applicant has failed to comply with any material term or condition of a settlement or payment agreement.

C. If an Applicant is required to post a security deposit, the Applicant may, in the alternative:

1) Furnish a written guaranty from a third party, which can, to the Company's satisfaction, establish credit in Applicant's favor sufficient to assure payment to the Company upon demand of an amount equal to that which would otherwise be required in a security deposit.

2) Provide income documents or other information attesting to his or her eligibility for state benefits based on household income eligibility requirements that are consistent with those of the public utility's Customer Assistance Program.

A written guaranty in a form acceptable to the Company must be received by the Company prior to commencement of utility service to any Applicant who elects the foregoing alternative to the posting of a security deposit.

3. RULES FOR DEPOSIT (continued)

D. The Company may require an existing or terminated Customer to post a security deposit in order to re-establish credit under any of the following circumstances, after giving the Customer due notice of its intention to require a security deposit in accordance with prevailing Commission regulations:

1) The existing Customer has been delinquent on any two (2) consecutive bills or three (3) or more bills within the preceding twelve (12) month period.

2) The existing Customer has failed to comply with a material term or condition of a settlement or payment agreement, as defined in applicable Commission regulations.

3) The Customer's utility service has been terminated and the Customer desires reconnection.

Notwithstanding subsection (D), the Company may not require a cash deposit from a customer who is, based upon household income, confirmed to be eligible for a customer assistance program. A customer is confirmed to be eligible for a customer assistance program by the public utility if the customer provides income documents or other information attesting to his or her eligibility for state benefits based on household income eligibility requirement that are consistent with those of the public utility's Customer Assistance Program.

E. When the Company requires a security deposit from an Applicant or Customer, the due date for the payment of such security deposit will be in accordance with the applicable Commission regulations.

F. A security deposit may be required in an amount equal to twice the average estimated monthly bill of the Applicant. This estimate shall be based upon prior consumption for like service at the subject premises, wherever available. Should the character or degree of the Customer's usage materially change, or if it is established clearly that either will materially change in the immediate future, the amount of the deposit may be adjusted at the request of either the Company or the Customer.

G. All residential deposits shall bear interest at the simple annual interest rate determined by the Secretary of Revenue for interest on the underpayment of tax under section 806 of the act of April 9, 1929 (P.L. 343, No. 176), known as the Fiscal Code. Such interest will be credited to the Customer's account at the end of each year after the date of the deposit and if return of deposit results in a credit balance on the account, the credit may be returned to customer in the form of a refund check.

H. The Company shall refund or apply to a Customer's outstanding balance any security deposit held, plus accrued interest, under the following conditions:

1) Upon discontinuance or termination of service.

2) After a Customer has paid bills for utility service in full and on time for twelve (12) consecutive months.

3) At the option of the Company, a security deposit including accrued interest may be refunded in whole or in part at any time earlier than the time stated in this Rule.

4) After the Company has held the Customer deposit for a maximum of 24 months, if none of the above conditions are met.

RIDER
WEATHER NORMALIZATION ADJUSTMENT (WNA)

APPLICATION AND PURPOSE

A Weather Normalization Adjustment ("WNA") shall be applied to Residential, Commercial SGS, and Commercial MGS customers receiving service under Rate Schedules RS, CAP, SGS, and MGS for service rendered during the heating season of October 1st through May 31st.

WNA is a distribution charge adjustment and is considered a basic service charge.

Calculated WNA amounts shall be subject to Rider DSIC, Rider STAS, Rider Tax Repairs Surcredit, and Rider TCJA. No additional riders or surcharges will be applied to the calculated WNA.

CALCULATION

The WNA will be applied to bills ~~service~~ rendered October 1st through May 31st and shall be calculated on a customer account specific basis in accordance with the formula below:

WNBM = BLMM+ [(NHDD/AHDD) x (AMUM-BLMM)]
WNAM = WNBM – AMUM
WNAM = WNAC x Distribution Charge

a) Weather Normalized Billing Mcfs ("WNBM") will be calculated as the Base Load Monthly Mcfs ("BLMM") added to the product of the [Normal Heating Degree Days ("NHDD") divided by the Actual Heating Degree Days ("AHDD")] and the [Actual Monthly Usage Mcfs ("AMUM") less the BLMM]. Weather Normalized Billing Mcfs (WNBM) will only be calculated if the AMUM exceeds the BLMM. WNA will not be applicable for the billing period if AMUM is less than the BLMM.

b) BLMM shall be established for each customer by averaging the actual daily consumption from the billing system, measured in Mcf, for service rendered July 1st thru August 31st of the most recent period.

c) AMUM shall be measured for each customer and billing cycle.

d) NHDD shall be based upon the heating degree days utilized to develop the revenue requirement in the Company's general rate case proceeding at Docket No. R-2023-3044549. NHDD shall be updated in future general rate case proceedings.

e) AHDD shall be the actual experienced heating degree days during the billing cycle days for the customer based upon experienced actual temperatures as reported by the National Oceanic and Atmospheric Administration (NOAA) for weather stations utilized by the Company for the area.

f) AMUM will be subtracted from the WNBM to compute the Weather Normalized Adjustment Mcfs ("WNAM").

Exhibit DMF-3R

Peoples Natural Gas Company LLC - Combined Divisions

(All Volumes in Mcf)

	Date	12/23/2022	1/26/2022	2/16/2021
Temperature	High	2	17	25
	Average	-2	8	17
	Low	-5	-2	8
Requirements	Retail			
	Residential	559,035	489,913	441,736
	SGS	80,235	70,314	63,400
	MGS	41,520	36,386	32,808
	LGS	1,520	1,332	1,201
	Transport			
	Residential	107,515	94,221	84,956
	SGS	80,215	70,296	63,384
	MGS	109,270	95,760	86,343
	LGS	158,623	139,010	125,340
	CU & UFG	71,990	63,089	56,885
	Total	1,209,923	1,060,321	956,053
Supply	Utility			
	Interstate			
	EGTS	35,017	36,481	33,200
	Nat'l Fuel	13,520	11,625	8,849
	Columbia	4,704	4,866	4,939
	Tennessee	29,880	23,523	11,250
	Texas Eastern	30,684	31,811	12,791
	Equitrans	361,850	263,262	250,572
	AVC	296,054	279,949	255,201
	Other Utility	2,588	13,337	9,954
	On system Storage	54,989	32,481	22,373
	Transportation			
	Interstate			
	EGTS	90,705	83,427	63,472
	Nat'l Fuel	-	-	-
	Columbia	597	606	80
	Tennessee	-	-	2,135
	Texas Eastern	4,327	4,808	4,731
	Equitrans	125,384	122,810	128,432
	AVC	67,621	55,047	40,083
	Local Gas *	92,003	96,289	107,991
	Total	1,209,923	1,060,321	956,053

* Local Gas is a combination of utility and transporter purchased gas

All Volumes in Mcf

BEFORE THE
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PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED REBUTTAL TESTIMONY OF KRISTA SNYDER FINANCIAL ANALYST ON BEHALF OF PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: April 18, 2024
DATE ADMITTED: _____

Peoples Statement No. 12-R

PREPARED REBUTTAL TESTIMONY OF
KRISTA SNYDER

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Krista Snyder and my business address is 375 North Shore Drive, Pittsburgh, Pennsylvania 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by PNG Companies LLC ("PNG Companies" or "PNG") as a Financial Rates Analyst. I provide rates and regulatory services for Peoples Natural Gas Company LLC, a direct subsidiary of PNG.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 12.

Q. HAVE YOU REVIEWED THE DIRECT TESTIMONY SUBMITTED BY OTHER PARTIES?

A. Yes. Regarding this Rebuttal Testimony, I have reviewed the Direct Testimony submitted by Christopher Keller on behalf of the Bureau of Investigation and Enforcement ("I&E") and the Direct Testimony submitted by Dante Mugrace on behalf of the Office of Consumer Advocate ("OCA").

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. In direct testimony, I&E's witness Keller and OCA's witness Mugrace made statements and suggested modifications regarding Cash Working Capital ("CWC") claim that I previously provided. I will rebut certain of those positions and recommendations in this testimony. I am also sponsoring Exhibit KMS-R-1, a revised Cash Working Capital ("CWC") claim.

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. Yes. Exhibit KMS-R1.

Q. HOW HAVE YOU ARRANGED YOUR REBUTTAL TESTIMONY?

A. I have arranged my rebuttal testimony by subject matter. Where more than one witness has addressed the same subject matter with testimony that I wish to rebut, I address all of that testimony in the same section. I will address the following issues in the order listed: (1) Revisions to the CWC claim identified in testimony from I&E; and (2) response to OCA's proposed adjustments to the CWC claim.

Q. PLEASE EXPLAIN THE REVISIONS TO THE CASH WORKING CAPITAL CLAIM IDENTIFIED DURING DISCOVERY.

A. There were certain CWC claim adjustments identified in witness Keller's testimony relating to Payroll, Pension and Benefits, Taxes Other than Income and Other O&M Expenses. Also, a revised Exhibit 4, Schedule No. 1 was filed by the Company on March 12, 2024, which increases the claim for O&M expenses based on identified during

discovery. All these changes have been incorporated into **Peoples Exhibit No. KMS-R-1**. Please note that there are no other changes to my direct testimony.

Q. DO YOU AGREE WITH WITNESS KELLER'S CLAIM THAT THE CWC ALLOWANCE SHOULD BE $35,564,531?

A. No.

Q. WHAT DO YOU RECOMMEND?

A. I recommend an allowance of $35,661,101 or an increase of $96,570 to I&E's proposed allowance.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation is based on the following: (1) to reflect the revisions made to the initial CWC claim, as noted above; and (2) to reflect the adjustments to CWC resulting from O&M expenses that have been accepted by the Company in response to adjustments from discovery.

Q. DO YOU AGREE WITH OCA WITNESS MUGRACE'S ADJUSTMENTS TO THE COMPANY'S CWC?

A. No. Mr. Mugrace has made different expense adjustments that impact the CWC claim. The Company does not accept these expense adjustments so the associated cash working capital adjustments should not be accepted.

Q. IF ALL MUGRACE ADJUSTMENTS ARE TO BE ACCPETED, IS HIS CASH WORKING CAPITAL CLAIM CORRECT?

A. No. While the $91.9 million adjustment for Interest Expense agree to the OCA adjustment, I do not agree with the total adjustment of $1.64 million to cash working capital. Because there was no mention of adjustments to short term debt in Mugrace's Direct Testimony, this should not be included, and the total adjustment should only include long term debt.

Q. HAVE YOU ADJUSTED THE LEAD-LAG STUDY TO AGREE WITH FPFTY LEVEL OF EXPENSES AT PROPOSED RATES?

A. Yes. I have included the revisions described above and expenses consistent with Peoples' rebuttal testimony. The final rebuttal CWC is $35,661,101 as shown on **Peoples Exhibit KMS-R-1**, which is attached hereto.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

Line No.	Description	Revenue Lag	Expense Lead	Net Lag	CWC Factor	Adjusted Historic Test Year Expenses	Historic Test Year Cash Working Capital Requirement	Future Test Year Expenses	Future Test Year Cash Working Capital Requirement	Fully Projected Future Test Year Expenses	Fully Projected Future Test Year Cash Working Capital Requirement
	(A)	(B)	(C)	(D)	(E)	(F)	(G)				
1	**Gas Purchase Costs**	59.44	(35.49)	23.95	0.0656	317,606,717	20,835,917	317,734,843	20,844,322	317,688,615	20,841,289
2	**Payroll**	59.44	(15.55)	43.89	0.1202	67,817,447	8,154,415	72,327,386	8,696,693	73,231,160	8,805,363
3	**Pensions and Benefits**	59.44	(30.63)	28.81	0.0789	24,642,192	1,944,857	28,259,271	2,230,331	27,270,031	2,152,256
4	**Taxes Other Than Income Taxes**	59.44	(51.86)	7.58	0.0208	12,636,610	262,459	14,433,429	299,779	15,136,955	314,391
5	**Other O&M Expenses**	59.44	(42.40)	17.03	0.0467	111,504,586	5,203,357	107,561,038	5,019,331	114,594,711	5,347,557
	Income Taxes										
6	State	59.44	(54.78)	4.66	0.0128	674,317	8,614	31,327	400	-	-
7	Federal	59.44	(37.00)	22.44	0.0615	-	-	-	-	-	-
	Interest Expense										
8	Long Term Debt	59.44	(67.26)	(7.82)	(0.0214)	60,606,300	(1,298,935)	65,570,364	(1,405,326)	83,973,864	(1,799,756)
9	Short Term Debt	59.44	-	59.44	0.1628	-	-	-	-	-	-
10	**Total**					$ 595,488,169	$ 35,110,684	$ 605,917,658	$ 35,685,530	$ 631,895,334	$ 35,661,101

Line No.	Description	Revenue Lag	Expense Lead	Net Lag	CWC Factor	Adjusted Historic Test Year Expenses	Historic Test Year Cash Working Capital Requirement	Future Test Year Expenses	Future Test Year Cash Working Capital Requirement	Fully Projected Future Test Year Expenses	Fully Projected Future Test Year Cash Working Capital Requirement
	(A)	(B)	(C)	(D)	(E)	(F)	(G)				
1	**Gas Purchase Costs**	59.44	(35.49)	23.95	0.0656	291,416,000	19,117,730	291,499,330	19,123,197	291,418,538	19,117,897
2	**Payroll**	59.44	(15.55)	43.89	0.1202	50,794,622	6,107,579	54,724,635	6,580,127	57,466,901	6,909,858
3	**Pensions and Benefits**	59.44	(30.63)	28.81	0.0789	18,771,866	1,481,548	21,959,596	1,733,136	23,105,877	1,823,605
4	**Taxes Other Than Income Taxes**	59.44	(51.86)	7.58	0.0208	10,349,635	214,959	12,074,920	250,793	12,930,136	268,556
5	**Other O&M Expenses**	59.44	(42.40)	17.03	0.0467	98,675,363	4,604,682	94,592,350	4,414,148	105,256,946	4,911,811
	Income Taxes										
6	State	59.44	(54.78)	4.66	0.0128	-	-	241,139	3,080	58,200	743
7	Federal	59.44	(37.00)	22.44	0.0615	(70,009,296)	(4,303,682)	(89,342,484)	(5,492,151)	(88,685,698)	(5,451,776)
	Interest Expense										
8	Long Term Debt	59.44	(67.26)	(7.82)	(0.0214)	55,013,446	(1,179,067)	59,734,601	(1,280,252)	77,003,607	(1,650,367)
9	Short Term Debt	59.44	-	59.44	0.1628	-	-	-	-	-	-
10	**Total**					$ 455,011,635	$ 26,043,750	$ 445,484,087	$ 25,332,078	$ 478,554,508	$ 25,930,327

Line No.	Description	Revenue Lag	Expense Lead	Net Lag	CWC Factor	Adjusted Historic Test Year Expenses	Historic Test Year Cash Working Capital Requirement	Future Test Year Expenses	Future Test Year Cash Working Capital Requirement	Fully Projected Future Test Year Expenses	Fully Projected Future Test Year Cash Working Capital Requirement
	(A)	(B)	(C)	(D)	(E)	(F)	(G)				
1	**Gas Purchase Costs**	59.44	(35.49)	23.95	0.0656	26,190,717	1,718,187	26,235,512	1,721,125	26,270,077	1,723,393
2	**Payroll**	59.44	(15.55)	43.89	0.1202	17,022,826	2,046,836	17,602,751	2,116,567	18,040,179	2,169,163
3	**Pensions and Benefits**	59.44	(30.63)	28.81	0.0789	5,870,326	463,309	6,299,675	497,195	6,556,227	517,443
4	**Taxes Other Than Income Taxes**	59.44	(51.86)	7.58	0.0208	2,286,975	47,500	2,358,509	48,986	2,423,031	50,326
5	**Other O&M Expenses**	59.44	(42.40)	17.03	0.0467	12,829,223	598,675	12,968,689	605,183	14,168,919	661,192
	Income Taxes										
6	State	59.44	(54.78)	4.66	0.0128	674,317	8,614	(209,813)	(2,680)	(76,914)	(983)
7	Federal	59.44	(37.00)	22.44	0.0615	(6,386,832)	(392,618)	(2,502,323)	(153,825)	(2,640,023)	(162,290)
	Interest Expense										
8	Long Term Debt	59.44	(67.26)	(7.82)	(0.0214)	5,592,855	(119,868)	5,835,763	(125,074)	6,970,256	(149,389)
9	Short Term Debt	59.44	-	59.44	0.1628	-	-	-	-	-	-
10	**Total**					$ 64,080,406	$ 4,370,635	$ 68,588,764	$ 4,707,476	$ 71,711,752	$ 4,808,855

Calculation of Revenue Lag Time

Line No.	Description	(A) Reference or Factor	(B) Accounts Receivable Balance End of Month	(C) Total Monthly Sales	(D) A/R Turnover	(E) Days Lag
					(C) / (B)	365 / (D)
1	Annual Number of Days					365
2	August, 2022		$ 59,670			
3	September		$ 55,669	$ 34,249		
4	October		$ 62,479	$ 69,507		
5	November		$ 76,407	$ 101,366		
6	December		$ 124,460	$ 161,132		
7	January		$ 148,218	$ 131,758		
8	February		$ 162,211	$ 111,818		
9	March		$ 163,405	$ 113,310		
10	April		$ 135,879	$ 46,953		
11	May		$ 105,002	$ 36,479		
12	June		$ 83,129	$ 24,294		
13	July		$ 70,614	$ 22,503		
14	August, 2023		$ 62,113	$ 25,855		
15	Total	Sum Ln3 to Ln14	$ 1,249,587			
16	Average A/R Balance		$ 104,132	$ 879,224		
17	Factor				8.44	43.23
18	Collection Days Lag					43.23
19	Billing Lag					1.00
20	Service Lag			365 / 12 * 0.5		15.21
21	Total Revenue Lag Days	Sum Ln17 to Ln19				**59.44**

Calculation of Purchased Gas Costs

Weighted Expense Lead Time: **35.49** **days**

Line No.	(A) Company	(B) Period Start	(C) Period End	(D) Payment Amount	(E) Payment Date	(F) Service Lead Time	(G) Payment Lead Time	(H) Total Lead Time	(I) Weighting Factor	(J) Weighted Lead Time
1	Eastern Gas Transmision and Storage, Inc.	9/1/2022	9/30/2022	$ (1,255,477.15)	10/13/2022	14.5	13.00	27.50	0.359%	0.10
2	Equitrans	9/1/2022	9/30/2022	$ (6,429,112.69)	10/5/2022	14.5	5.00	19.50	1.837%	0.36
3	Eastern Gas Transmision and Storage, Inc.	9/1/2022	9/30/2022	$ (26,427.51)	10/17/2022	14.5	17.00	31.50	0.008%	0.00
4	Texas Eastern Transmission, LP	9/1/2022	9/30/2022	$ (336,756.70)	10/20/2022	14.5	20.00	34.50	0.096%	0.03
5	Tennessee Gas Pipeline	9/1/2022	9/30/2022	$ (19,014.81)	10/24/2022	14.5	24.00	38.50	0.005%	0.00
6	EQT Energy (PNG NAESB)	9/1/2022	9/30/2022	$ (26,037,847.00)	10/25/2022	14.5	25.00	39.50	7.440%	2.94
7	Mpower	9/1/2022	9/30/2022	$ 27,298.14	10/25/2022	14.5	25.00	39.50	-0.008%	(0.00)
8	National Fuel Gas Supply	9/1/2022	9/30/2022	$ (149,457.53)	10/25/2022	14.5	25.00	39.50	0.043%	0.02
9	NextEra Energy	9/1/2022	9/30/2022	$ (5,412,453.20)	10/25/2022	14.5	25.00	39.50	1.546%	0.61
10	Sequent Energy Management	9/1/2022	9/30/2022	$ (3,740,793.12)	10/25/2022	14.5	25.00	39.50	1.069%	0.42
11	SFE Energy	9/1/2022	9/30/2022	$ 13,018.28	10/25/2022	14.5	25.00	39.50	-0.004%	(0.00)
12	SouthStar	9/1/2022	9/30/2022	$ 108,072.00	10/25/2022	14.5	25.00	39.50	-0.031%	(0.01)
13	XTO	9/1/2022	9/30/2022	$ (857,995.30)	10/25/2022	14.5	25.00	39.50	0.245%	0.10
14	Eastern Gas Transmision and Storage, Inc.	9/1/2022	9/30/2022	$ (171,583.00)	10/13/2022	14.5	13.00	27.50	0.049%	0.01
15	Equitrans	9/1/2022	9/30/2022	$ (361,949.69)	10/5/2022	14.5	5.00	19.50	0.103%	0.02
16	Eastern Gas Transmision and Storage, Inc.	9/1/2022	9/30/2022	$ (2,675.46)	10/17/2022	14.5	17.00	31.50	0.001%	0.00
17	Texas Eastern Transmission, LP	9/1/2022	9/30/2022	$ (108,393.89)	10/20/2022	14.5	20.00	34.50	0.031%	0.01
18	Columbia Gas Transmission LLC	9/1/2022	9/30/2022	$ (59,986.95)	10/24/2022	14.5	24.00	38.50	0.017%	0.01
19	Range Resources	9/1/2022	9/30/2022	$ (2,238,850.00)	10/25/2022	14.5	25.00	39.50	0.640%	0.25
20	Sequent Energy Management	9/1/2022	9/30/2022	$ (2,529,327.24)	10/25/2022	14.5	25.00	39.50	0.723%	0.29
21	Eastern Gas Transmision and Storage, Inc.	10/1/2022	10/31/2022	$ (1,270,271.64)	11/14/2022	15.0	14.00	29.00	0.363%	0.11
22	Equitrans	10/1/2022	10/31/2022	$ (6,744,594.08)	11/15/2022	15.0	15.00	30.00	1.927%	0.58
23	Tennessee Gas Pipeline	10/1/2022	10/31/2022	$ 17.81	11/21/2022	15.0	21.00	36.00	0.000%	(0.00)
24	EQT Energy	10/1/2022	10/31/2022	$ (8,270,900.00)	11/25/2022	15.0	25.00	40.00	2.363%	0.95
25	EQT Energy (PNG NAESB)	10/1/2022	10/31/2022	$ (14,074,000.00)	11/25/2022	15.0	25.00	40.00	4.021%	1.61
26	Mpower	10/1/2022	10/31/2022	$ 29,048.88	11/25/2022	15.0	25.00	40.00	-0.008%	(0.00)
27	National Fuel Gas Supply	10/1/2022	10/31/2022	$ (148,845.14)	11/25/2022	15.0	25.00	40.00	0.043%	0.02
28	Sequent Energy Management	10/1/2022	10/31/2022	$ (7,023,271.58)	11/25/2022	15.0	25.00	40.00	2.007%	0.80
29	SFE Energy	10/1/2022	10/31/2022	$ 17,292.09	11/25/2022	15.0	25.00	40.00	-0.005%	(0.00)
30	SouthStar	10/1/2022	10/31/2022	$ 64,177.44	11/25/2022	15.0	25.00	40.00	-0.018%	(0.01)
31	Texas Eastern Transmission, LP	10/1/2022	10/31/2022	$ (336,756.70)	12/20/2022	15.0	50.00	65.00	0.096%	0.06
32	Eastern Gas Transmision and Storage, Inc.	10/1/2022	10/31/2022	$ (174,289.58)	11/14/2022	15.0	14.00	29.00	0.050%	0.01
33	Equitrans	10/1/2022	10/31/2022	$ (369,115.91)	11/15/2022	15.0	15.00	30.00	0.105%	0.03
34	Columbia Gas Transmission LLC	10/1/2022	10/31/2022	$ (69,643.13)	11/21/2022	15.0	21.00	36.00	0.020%	0.01
35	Texas Eastern Transmission, LP	10/1/2022	10/31/2022	$ (109,913.00)	11/21/2022	15.0	21.00	36.00	0.031%	0.01
36	Range Resources	10/1/2022	10/31/2022	$ (603,450.00)	11/25/2022	15.0	25.00	40.00	0.172%	0.07
37	Sequent Energy Management	10/1/2022	10/31/2022	$ (3,297,078.55)	11/25/2022	15.0	25.00	40.00	0.942%	0.38
38	Eastern Gas Transmision and Storage, Inc.	11/1/2022	11/30/2022	$ (1,261,989.15)	12/12/2022	14.5	12.00	26.50	0.361%	0.10
39	Eastern Gas Transmision and Storage, Inc.	11/1/2022	11/30/2022	$ (20,095.36)	12/15/2022	14.5	15.00	29.50	0.006%	0.00

Line No.	(A) Company	(B) Period Start	(C) Period End	(D) Payment Amount	(E) Payment Date	(F) Service Lead Time	(G) Payment Lead Time	(H) Total Lead Time	(I) Weighting Factor	(J) Weighted Lead Time
40	Equitrans	11/1/2022	11/30/2022	$ (12,312,915.46)	12/15/2022	14.5	15.00	29.50	3.518%	1.04
41	Texas Eastern Transmission, LP	11/1/2022	11/30/2022	$ (464,618.56)	12/20/2022	14.5	20.00	34.50	0.133%	0.05
42	Tennessee Gas Pipeline	11/1/2022	11/30/2022	$ 3,992.75	12/22/2022	14.5	22.00	36.50	-0.001%	(0.00)
43	Colonial Energy	11/1/2022	11/30/2022	$ (22,000.00)	12/28/2022	14.5	28.00	42.50	0.006%	0.00
44	EQT Energy (EGC NAESB)	11/1/2022	11/30/2022	$ (863,929.53)	12/21/2022	14.5	21.00	35.50	0.247%	0.09
45	EQT Energy (PNG NAESB)	11/1/2022	11/30/2022	$ (21,341,715.62)	12/21/2022	14.5	21.00	35.50	6.098%	2.16
46	IGS	11/1/2022	11/30/2022	$ 1,252,083.00	12/27/2022	14.5	27.00	41.50	-0.358%	(0.15)
47	Mid Atlantic Energy Services	11/1/2022	11/30/2022	$ 6,144.63	12/15/2022	14.5	15.00	29.50	-0.002%	(0.00)
48	Mpower	11/1/2022	11/30/2022	$ 39,156.41	12/28/2022	14.5	28.00	42.50	-0.011%	(0.00)
49	Sequent Energy Management	11/1/2022	11/30/2022	$ (3,326,535.22)	12/27/2022	14.5	27.00	41.50	0.950%	0.39
50	SFE Energy	11/1/2022	11/30/2022	$ 26,506.26	12/23/2022	14.5	23.00	37.50	-0.008%	(0.00)
51	UGI Energy Services	11/1/2022	11/30/2022	$ 1,139,046.28	12/23/2022	14.5	23.00	37.50	-0.325%	(0.12)
52	National Fuel Gas Supply	11/1/2022	11/30/2022	$ (151,627.71)	12/27/2022	14.5	27.00	41.50	0.043%	0.02
53	Eastern Gas Transmision and Storage, Inc.	11/1/2022	11/30/2022	$ (230,960.90)	12/12/2022	14.5	12.00	26.50	0.066%	0.02
54	Eastern Gas Transmision and Storage, Inc.	11/1/2022	11/30/2022	$ (3,278.51)	12/15/2022	14.5	15.00	29.50	0.001%	0.00
55	Equitrans	11/1/2022	11/30/2022	$ (379,015.22)	12/15/2022	14.5	15.00	29.50	0.108%	0.03
56	Texas Eastern Transmission, LP	11/1/2022	11/30/2022	$ (92,492.88)	12/20/2022	14.5	20.00	34.50	0.026%	0.01
57	Tennessee Gas Pipeline Company, LLC	11/1/2022	11/30/2022	$ 3.39	12/21/2022	14.5	21.00	35.50	0.000%	(0.00)
58	Columbia Gas Transmission LLC	11/1/2022	11/30/2022	$ (69,081.05)	12/22/2022	14.5	22.00	36.50	0.020%	0.01
59	Eastern Gas Transmision and Storage, Inc.	12/1/2022	12/31/2022	$ (1,260,309.57)	1/13/2023	15.0	13.00	28.00	0.360%	0.10
60	Equitrans	12/1/2022	12/31/2022	$ (12,554,287.40)	1/13/2023	15.0	13.00	28.00	3.587%	1.00
61	Eastern Gas Transmision and Storage, Inc.	12/1/2022	12/31/2022	$ (39,186.39)	1/17/2023	15.0	17.00	32.00	0.011%	0.00
62	Texas Eastern Transmission, LP	12/1/2022	12/31/2022	$ (359,762.55)	1/20/2023	15.0	20.00	35.00	0.103%	0.04
63	Tennessee Gas Pipeline	12/1/2022	12/31/2022	$ 4,278.61	1/23/2023	15.0	23.00	38.00	-0.001%	(0.00)
64	Colonial Energy	12/1/2022	12/31/2022	$ (288,965.00)	1/25/2023	15.0	25.00	40.00	0.083%	0.03
65	Direct Energy	12/1/2022	12/31/2022	$ 226,183.90	1/25/2023	15.0	25.00	40.00	-0.065%	(0.03)
66	EQT Energy (EGC NAESB)	12/1/2022	12/31/2022	$ (17,914,788.54)	1/25/2023	15.0	25.00	40.00	5.119%	2.05
67	EQT Energy (PNG NAESB)	12/1/2022	12/31/2022	$ (18,067,621.82)	1/25/2023	15.0	25.00	40.00	5.162%	2.06
68	IGS	12/1/2022	12/31/2022	$ 1,204,349.69	1/25/2023	15.0	25.00	40.00	-0.344%	(0.14)
69	Mid Atlantic Energy Services	12/1/2022	12/31/2022	$ 279,892.65	1/25/2023	15.0	25.00	40.00	-0.080%	(0.03)
70	Mpower	12/1/2022	12/31/2022	$ 79,124.35	1/25/2023	15.0	25.00	40.00	-0.023%	(0.01)
71	National Fuel Gas Supply	12/1/2022	12/31/2022	$ (153,098.09)	1/25/2023	15.0	25.00	40.00	0.044%	0.02
72	Sequent Energy Management	12/1/2022	12/31/2022	$ (5,666,164.25)	1/25/2023	15.0	25.00	40.00	1.619%	0.65
73	SFE Energy	12/1/2022	12/31/2022	$ 69,352.24	1/25/2023	15.0	25.00	40.00	-0.020%	(0.01)
74	Snyder	12/1/2022	12/31/2022	$ (414,252.48)	1/25/2023	15.0	25.00	40.00	0.118%	0.05
75	SouthStar	12/1/2022	12/31/2022	$ 94,679.50	1/25/2023	15.0	25.00	40.00	-0.027%	(0.01)
76	UGI Energy Services	12/1/2022	12/31/2022	$ 2,673,022.52	1/25/2023	15.0	25.00	40.00	-0.764%	(0.31)
77	United Energy Trading	12/1/2022	12/31/2022	$ 1,428,957.50	1/25/2023	15.0	25.00	40.00	-0.408%	(0.16)
78	Eastern Gas Transmision and Storage, Inc.	12/1/2022	12/31/2022	$ (235,191.36)	1/13/2023	15.0	13.00	28.00	0.067%	0.02
79	Equitrans	12/1/2022	12/31/2022	$ (401,672.31)	1/13/2023	15.0	13.00	28.00	0.115%	0.03
80	Eastern Gas Transmision and Storage, Inc.	12/1/2022	12/31/2022	$ (7,227.20)	1/17/2023	15.0	17.00	32.00	0.002%	0.00
81	Texas Eastern Transmission, LP	12/1/2022	12/31/2022	$ (97,788.00)	1/20/2023	15.0	20.00	35.00	0.028%	0.01

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82	Columbia Gas Transmission LLC	12/1/2022	12/31/2022	$ (70,348.02)	1/23/2023	15.0	23.00	38.00	0.020%	0.01
83	Sequent Energy Management	12/1/2022	12/31/2022	$ (122,800.00)	1/25/2023	15.0	25.00	40.00	0.035%	0.01
84	Eastern Gas Transmision and Storage, Inc.	1/1/2023	1/31/2023	$ 139,844.12	2/13/2023	15.0	13.00	28.00	-0.040%	(0.01)
85	Equitrans	1/1/2023	1/31/2023	$ (12,344,069.69)	2/15/2023	15.0	15.00	30.00	3.527%	1.06
86	Tennessee Gas Pipeline	1/1/2023	1/31/2023	$ 12,176.12	2/21/2023	15.0	21.00	36.00	-0.003%	(0.00)
87	Texas Eastern Transmission, LP	1/1/2023	1/31/2023	$ (401,209.80)	2/21/2023	15.0	21.00	36.00	0.115%	0.04
88	Colonial Energy	1/1/2023	1/31/2023	$ (22,000.00)	2/24/2023	15.0	24.00	39.00	0.006%	0.00
89	EQT Energy (EGC NAESB)	1/1/2023	1/31/2023	$ (10,582,587.55)	2/24/2023	15.0	24.00	39.00	3.024%	1.18
90	EQT Energy (PNG NAESB)	1/1/2023	1/31/2023	$ (1,683,951.25)	2/24/2023	15.0	24.00	39.00	0.481%	0.19
91	IGS	1/1/2023	1/31/2023	$ 1,004,400.00	2/24/2023	15.0	24.00	39.00	-0.287%	(0.11)
92	Mid Atlantic Energy Services	1/1/2023	1/31/2023	$ 216,997.94	2/24/2023	15.0	24.00	39.00	-0.062%	(0.02)
93	Mpower	1/1/2023	1/31/2023	$ 34,543.71	2/24/2023	15.0	24.00	39.00	-0.010%	(0.00)
94	Sequent Energy Management	1/1/2023	1/31/2023	$ (1,937,623.33)	2/24/2023	15.0	24.00	39.00	0.554%	0.22
95	SFE Energy	1/1/2023	1/31/2023	$ 52,949.39	2/24/2023	15.0	24.00	39.00	-0.015%	(0.01)
96	UGI Energy Services	1/1/2023	1/31/2023	$ 1,695,798.73	2/24/2023	15.0	24.00	39.00	-0.485%	(0.19)
97	United Energy Trading	1/1/2023	1/31/2023	$ 1,403,593.95	2/24/2023	15.0	24.00	39.00	-0.401%	(0.16)
98	National Fuel Gas Supply	1/1/2023	1/31/2023	$ (155,973.33)	2/23/2023	15.0	23.00	38.00	0.045%	0.02
99	Eastern Gas Transmision and Storage, Inc.	1/1/2023	1/31/2023	$ (225,223.06)	2/13/2023	15.0	13.00	28.00	0.064%	0.02
100	Equitrans	1/1/2023	1/31/2023	$ (377,190.27)	2/15/2023	15.0	15.00	30.00	0.108%	0.03
101	Columbia Gas Transmission LLC	1/1/2023	1/31/2023	$ (70,240.31)	2/21/2023	15.0	21.00	36.00	0.020%	0.01
102	Tennessee Gas Pipeline Company, LLC	1/1/2023	1/31/2023	$ (1,169.12)	2/21/2023	15.0	21.00	36.00	0.000%	0.00
103	Texas Eastern Transmission, LP	1/1/2023	1/31/2023	$ (106,928.00)	2/21/2023	15.0	21.00	36.00	0.031%	0.01
104	Eastern Gas Transmision and Storage, Inc.	2/1/2023	2/28/2023	$ (1,154,434.47)	3/13/2023	13.5	13.00	26.50	0.330%	0.09
105	Equitrans	2/1/2023	2/28/2023	$ (12,335,378.00)	3/15/2023	13.5	15.00	28.50	3.525%	1.00
106	Tennessee Gas Pipeline	2/1/2023	2/28/2023	$ 5,111.13	3/20/2023	13.5	20.00	33.50	-0.001%	(0.00)
107	Texas Eastern Transmission, LP	2/1/2023	2/28/2023	$ (358,987.98)	3/20/2023	13.5	20.00	33.50	0.103%	0.03
108	Colonial Energy	2/1/2023	2/28/2023	$ (102,000.00)	3/24/2023	13.5	24.00	37.50	0.029%	0.01
109	EQT Energy (EGC NAESB)	2/1/2023	2/28/2023	$ (8,508,164.89)	3/24/2023	13.5	24.00	37.50	2.431%	0.91
110	EQT Energy (PNG NAESB)	2/1/2023	2/28/2023	$ (1,672,271.90)	3/24/2023	13.5	24.00	37.50	0.478%	0.18
111	IGS	2/1/2023	2/28/2023	$ 692,023.38	3/24/2023	13.5	24.00	37.50	-0.198%	(0.07)
112	Mid Atlantic Energy Services	2/1/2023	2/28/2023	$ 173,950.50	3/24/2023	13.5	24.00	37.50	-0.050%	(0.02)
113	Mpower	2/1/2023	2/28/2023	$ 17,187.76	3/24/2023	13.5	24.00	37.50	-0.005%	(0.00)
114	Sequent Energy Management	2/1/2023	2/28/2023	$ (1,351,325.97)	3/24/2023	13.5	24.00	37.50	0.386%	0.14
115	SFE Energy	2/1/2023	2/28/2023	$ 34,553.33	3/24/2023	13.5	24.00	37.50	-0.010%	(0.00)
116	SouthStar	2/1/2023	2/28/2023	$ 4,082.48	3/24/2023	13.5	24.00	37.50	-0.001%	(0.00)
117	UGI Energy Services	2/1/2023	2/28/2023	$ 994,425.60	3/24/2023	13.5	24.00	37.50	-0.284%	(0.11)
118	United Energy Trading	2/1/2023	2/28/2023	$ 591,920.00	3/24/2023	13.5	24.00	37.50	-0.169%	(0.06)
119	National Fuel Gas Supply	2/1/2023	2/28/2023	$ (154,446.37)	3/27/2023	13.5	27.00	40.50	0.044%	0.02
120	Eastern Gas Transmision and Storage, Inc.	2/1/2023	2/28/2023	$ (98,927.56)	3/13/2023	13.5	13.00	26.50	0.028%	0.01
121	Equitrans	2/1/2023	2/28/2023	$ (385,675.81)	3/15/2023	13.5	15.00	28.50	0.110%	0.03
122	Columbia Gas Transmission LLC	2/1/2023	2/28/2023	$ (70,095.78)	3/20/2023	13.5	20.00	33.50	0.020%	0.01
123	Texas Eastern Transmission, LP	2/1/2023	2/28/2023	$ (95,302.00)	3/20/2023	13.5	20.00	33.50	0.027%	0.01

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124	Sequent Energy Management	2/1/2023	2/28/2023	$ (8,700.00)	3/24/2023	13.5	24.00	37.50	0.002%	0.00
125	Eastern Gas Transmision and Storage, Inc.	3/1/2023	3/31/2023	$ (1,120,943.93)	4/13/2023	15.0	13.00	28.00	0.320%	0.09
126	Equitrans	3/1/2023	3/31/2023	$ (12,413,960.59)	4/13/2023	15.0	13.00	28.00	3.547%	0.99
127	Eastern Gas Transmision and Storage, Inc.	3/1/2023	3/31/2023	$ (29,580.06)	4/17/2023	15.0	17.00	32.00	0.008%	0.00
128	Texas Eastern Transmission, LP	3/1/2023	3/31/2023	$ 297,987.21	4/20/2023	15.0	20.00	35.00	-0.085%	(0.03)
129	Tennessee Gas Pipeline	3/1/2023	3/31/2023	$ (2,888.52)	4/24/2023	15.0	24.00	39.00	0.001%	0.00
130	Colonial Energy	3/1/2023	3/31/2023	$ (22,000.00)	4/25/2023	15.0	25.00	40.00	0.006%	0.00
131	EQT Energy (EGC NAESB)	3/1/2023	3/31/2023	$ (8,792,887.07)	4/25/2023	15.0	25.00	40.00	2.512%	1.00
132	EQT Energy (PNG NAESB)	3/1/2023	3/31/2023	$ (1,362,351.42)	4/25/2023	15.0	25.00	40.00	0.389%	0.16
133	IGS	3/1/2023	3/31/2023	$ 329,918.00	4/25/2023	15.0	25.00	40.00	-0.094%	(0.04)
134	Mpower	3/1/2023	3/31/2023	$ 11,705.51	4/25/2023	15.0	25.00	40.00	-0.003%	(0.00)
135	National Fuel Gas Supply	3/1/2023	3/31/2023	$ (152,606.61)	4/25/2023	15.0	25.00	40.00	0.044%	0.02
136	Sequent Energy Management	3/1/2023	3/31/2023	$ (1,424,652.01)	4/25/2023	15.0	25.00	40.00	0.407%	0.16
137	SFE Energy	3/1/2023	3/31/2023	$ 25,338.53	4/25/2023	15.0	25.00	40.00	-0.007%	(0.00)
138	UGI Energy Services	3/1/2023	3/31/2023	$ 634,081.24	4/25/2023	15.0	25.00	40.00	-0.181%	(0.07)
139	Eastern Gas Transmision and Storage, Inc.	3/1/2023	3/31/2023	$ (221,001.00)	4/13/2023	15.0	13.00	28.00	0.063%	0.02
140	Equitrans	3/1/2023	3/31/2023	$ (373,433.34)	4/13/2023	15.0	13.00	28.00	0.107%	0.03
141	Eastern Gas Transmision and Storage, Inc.	3/1/2023	3/31/2023	$ (1,208.10)	4/17/2023	15.0	17.00	32.00	0.000%	0.00
142	Texas Eastern Transmission, LP	3/1/2023	3/31/2023	$ (93,705.52)	4/20/2023	15.0	20.00	35.00	0.027%	0.01
143	Columbia Gas Transmission LLC	3/1/2023	3/31/2023	$ (70,132.07)	4/24/2023	15.0	24.00	39.00	0.020%	0.01
144	Tennessee Gas Pipeline Company, LLC	3/1/2023	3/31/2023	$ 18.22	4/24/2023	15.0	24.00	39.00	0.000%	(0.00)
145	Eastern Gas Transmision and Storage, Inc.	4/1/2023	4/30/2023	$ (1,120,131.43)	5/11/2023	14.5	11.00	25.50	0.320%	0.08
146	Eastern Gas Transmision and Storage, Inc.	4/1/2023	4/30/2023	$ (28,239.07)	5/12/2023	14.5	12.00	26.50	0.008%	0.00
147	Equitrans	4/1/2023	4/30/2023	$ (6,481,423.53)	5/15/2023	14.5	15.00	29.50	1.852%	0.55
148	Texas Eastern Transmission, LP	4/1/2023	4/30/2023	$ (263,124.45)	5/22/2023	14.5	22.00	36.50	0.075%	0.03
149	Dynegy Marketing and Trade	4/1/2023	4/30/2023	$ (36,503.85)	5/25/2023	14.5	25.00	39.50	0.010%	0.00
150	EQT Energy (EGC NAESB)	4/1/2023	4/30/2023	$ (4,718,850.00)	5/25/2023	14.5	25.00	39.50	1.348%	0.53
151	National Fuel Gas Supply	4/1/2023	4/30/2023	$ (148,555.66)	5/25/2023	14.5	25.00	39.50	0.042%	0.02
152	NextEra Energy	4/1/2023	4/30/2023	$ (1,599,125.52)	5/25/2023	14.5	25.00	39.50	0.457%	0.18
153	Sequent Energy Management	4/1/2023	4/30/2023	$ (718,651.61)	5/25/2023	14.5	25.00	39.50	0.205%	0.08
154	Tennessee Gas Pipeline	4/1/2023	4/30/2023	$ 2,069.90	5/25/2023	14.5	25.00	39.50	-0.001%	(0.00)
155	Eastern Gas Transmision and Storage, Inc.	4/1/2023	4/30/2023	$ (214,371.00)	5/11/2023	14.5	11.00	25.50	0.061%	0.02
156	Equitrans	4/1/2023	4/30/2023	$ (309,660.33)	5/15/2023	14.5	15.00	29.50	0.088%	0.03
157	Columbia Gas Transmission LLC	4/1/2023	4/30/2023	$ (63,636.44)	5/22/2023	14.5	22.00	36.50	0.018%	0.01
158	Texas Eastern Transmission, LP	4/1/2023	4/30/2023	$ (77,562.25)	5/22/2023	14.5	22.00	36.50	0.022%	0.01
159	EQT Energy (EGC NAESB)	4/1/2023	4/30/2023	$ (562,350.00)	5/25/2023	14.5	25.00	39.50	0.161%	0.06
160	Sequent Energy Management	4/1/2023	4/30/2023	$ (23,562.50)	5/25/2023	14.5	25.00	39.50	0.007%	0.00
161	Tomorrow Energy	5/1/2023	5/31/2023	$ (8,266.59)	5/25/2023	15.0	(6.00)	9.00	0.002%	0.00
162	Eastern Gas Transmision and Storage, Inc.	5/1/2023	5/31/2023	$ (1,144,684.19)	6/12/2023	15.0	12.00	27.00	0.327%	0.09
163	Equitrans	5/1/2023	5/31/2023	$ (6,552,939.12)	6/15/2023	15.0	15.00	30.00	1.872%	0.56
164	Texas Eastern Transmission, LP	5/1/2023	5/31/2023	$ (260,995.05)	6/20/2023	15.0	20.00	35.00	0.075%	0.03
165	Tennessee Gas Pipeline	5/1/2023	5/31/2023	$ 1,033.03	6/22/2023	15.0	22.00	37.00	0.000%	(0.00)

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166	EQT Energy (EGC NAESB)	5/1/2023	5/31/2023	$ (4,522,782.51)	6/22/2023	15.0	22.00	37.00	1.292%	0.48
167	NextEra Energy	5/1/2023	5/31/2023	$ (1,312,207.50)	6/22/2023	15.0	22.00	37.00	0.375%	0.14
168	Range Resources	5/1/2023	5/31/2023	$ (362,895.00)	6/22/2023	15.0	22.00	37.00	0.104%	0.04
169	Sequent Energy Management	5/1/2023	5/31/2023	$ 97,362.88	6/28/2023	15.0	28.00	43.00	-0.028%	(0.01)
170	SouthStar	5/1/2023	5/31/2023	$ 16,932.51	6/23/2023	15.0	23.00	38.00	-0.005%	(0.00)
171	National Fuel Gas Supply	5/1/2023	5/31/2023	$ (151,100.27)	6/26/2023	15.0	26.00	41.00	0.043%	0.02
172	Eastern Gas Transmision and Storage, Inc.	5/1/2023	5/31/2023	$ (198,249.00)	6/12/2023	15.0	12.00	27.00	0.057%	0.02
173	Eastern Gas Transmision and Storage, Inc.-usage	5/1/2023	5/31/2023	$ (3,750.32)	6/12/2023	15.0	12.00	27.00	0.001%	0.00
174	Equitrans	5/1/2023	5/31/2023	$ (389,092.88)	6/15/2023	15.0	15.00	30.00	0.111%	0.03
175	Texas Eastern Transmission, LP	5/1/2023	5/31/2023	$ (78,628.00)	6/20/2023	15.0	20.00	35.00	0.022%	0.01
176	Columbia Gas Transmission LLC	5/1/2023	5/31/2023	$ (63,256.73)	6/22/2023	15.0	22.00	37.00	0.018%	0.01
177	Colonial Energy	5/1/2023	5/31/2023	$ (130,579.75)	6/22/2023	15.0	22.00	37.00	0.037%	0.01
178	EQT Energy (EGC NAESB)	5/1/2023	5/31/2023	$ (1,233,180.00)	6/22/2023	15.0	22.00	37.00	0.352%	0.13
179	Range Resources	5/1/2023	5/31/2023	$ (83,626.00)	6/22/2023	15.0	22.00	37.00	0.024%	0.01
180	Sequent Energy Management	5/1/2023	5/31/2023	$ (3,496.50)	6/28/2023	15.0	28.00	43.00	0.001%	0.00
181	Eastern Gas Transmision and Storage, Inc.	6/1/2023	6/30/2023	$ (1,073,350.45)	7/13/2023	14.5	13.00	27.50	0.307%	0.08
182	Eastern Gas Transmision and Storage, Inc.	6/1/2023	6/30/2023	$ (22,819.86)	7/14/2023	14.5	14.00	28.50	0.007%	0.00
183	Equitrans	6/1/2023	6/30/2023	$ (6,512,874.53)	7/13/2023	14.5	13.00	27.50	1.861%	0.51
184	Texas Eastern Transmission, LP	6/1/2023	6/30/2023	$ (260,995.05)	7/20/2023	14.5	20.00	34.50	0.075%	0.03
185	Tennessee Gas Pipeline	6/1/2023	6/30/2023	$ 4,917.07	7/24/2023	14.5	24.00	38.50	-0.001%	(0.00)
186	Colonial Energy	6/1/2023	6/30/2023	$ (632,390.55)	7/25/2023	14.5	25.00	39.50	0.181%	0.07
187	EQT Energy (EGC NAESB)	6/1/2023	6/30/2023	$ (1,498,355.10)	7/25/2023	14.5	25.00	39.50	0.428%	0.17
188	EQT Energy (PNG NAESB)	6/1/2023	6/30/2023	$ (2,180,904.00)	7/25/2023	14.5	25.00	39.50	0.623%	0.25
189	National Fuel Gas Supply	6/1/2023	6/30/2023	$ (149,804.42)	7/25/2023	14.5	25.00	39.50	0.043%	0.02
190	NextEra Energy	6/1/2023	6/30/2023	$ (776,936.69)	7/25/2023	14.5	25.00	39.50	0.222%	0.09
191	Sequent Energy Management	6/1/2023	6/30/2023	$ 393,522.89	7/25/2023	14.5	25.00	39.50	-0.112%	(0.04)
192	SouthStar	6/1/2023	6/30/2023	$ 12,959.10	7/25/2023	14.5	25.00	39.50	-0.004%	(0.00)
193	Eastern Gas Transmision and Storage, Inc.	6/1/2023	6/30/2023	$ (196,713.02)	7/13/2023	14.5	13.00	27.50	0.056%	0.02
194	Eastern Gas Transmision and Storage, Inc.	6/1/2023	6/30/2023	$ (3,629.34)	7/14/2023	14.5	14.00	28.50	0.001%	0.00
195	Equitrans	6/1/2023	6/30/2023	$ (446,722.14)	7/13/2023	14.5	13.00	27.50	0.128%	0.04
196	Texas Eastern Transmission, LP	6/1/2023	6/30/2023	$ (82,138.00)	7/20/2023	14.5	20.00	34.50	0.023%	0.01
197	Columbia Gas Transmission LLC	6/1/2023	6/30/2023	$ (63,333.05)	7/24/2023	14.5	24.00	38.50	0.018%	0.01
198	Colonial Energy	6/1/2023	6/30/2023	$ (121,954.00)	7/25/2023	14.5	25.00	39.50	0.035%	0.01
199	EQT Energy (EGC NAESB)	6/1/2023	6/30/2023	$ (1,306,800.00)	7/25/2023	14.5	25.00	39.50	0.373%	0.15
200	Range Resources	6/1/2023	6/30/2023	$ (31,622.50)	7/25/2023	14.5	25.00	39.50	0.009%	0.00
201	Eastern Gas Transmision and Storage, Inc.	7/1/2023	7/31/2023	$ (1,120,767.80)	8/11/2023	15.0	11.00	26.00	0.320%	0.08
202	Eastern Gas Transmision and Storage, Inc.	7/1/2023	7/31/2023	$ (29,892.44)	8/14/2023	15.0	14.00	29.00	0.009%	0.00
203	Equitrans	7/1/2023	7/31/2023	$ (6,577,235.25)	8/15/2023	15.0	15.00	30.00	1.879%	0.56
204	Tennessee Gas Pipeline	7/1/2023	7/31/2023	$ (7,581.62)	8/21/2023	15.0	21.00	36.00	0.002%	0.00
205	Texas Eastern Transmission, LP	7/1/2023	7/31/2023	$ (265,603.04)	8/21/2023	15.0	21.00	36.00	0.076%	0.03
206	Colonial Energy	7/1/2023	7/31/2023	$ (259,230.00)	8/25/2023	15.0	25.00	40.00	0.074%	0.03
207	EQT Energy (PNG NAESB)	7/1/2023	7/31/2023	$ (3,976,470.00)	8/25/2023	15.0	25.00	40.00	1.136%	0.45

Line No.	(A) Company	(B) Period Start	(C) Period End	(D) Payment Amount	(E) Payment Date	(F) Service Lead Time	(G) Payment Lead Time	(H) Total Lead Time	(I) Weighting Factor	(J) Weighted Lead Time
208	National Fuel Gas Supply	7/1/2023	7/31/2023	$ (150,025.83)	8/25/2023	15.0	25.00	40.00	0.043%	0.02
209	NextEra Energy	7/1/2023	7/31/2023	$ (1,287,303.24)	8/25/2023	15.0	25.00	40.00	0.368%	0.15
210	Sequent Energy Management	7/1/2023	7/31/2023	$ 498,840.87	8/25/2023	15.0	25.00	40.00	-0.143%	(0.06)
211	SouthStar	7/1/2023	7/31/2023	$ 1,470.00	8/25/2023	15.0	25.00	40.00	0.000%	(0.00)
212	Eastern Gas Transmision and Storage, Inc.	7/1/2023	7/31/2023	$ (206,895.40)	8/11/2023	15.0	11.00	26.00	0.059%	0.02
213	Eastern Gas Transmision and Storage, Inc.	7/1/2023	7/31/2023	$ (3,750.32)	8/14/2023	15.0	14.00	29.00	0.001%	0.00
214	Equitrans	7/1/2023	7/31/2023	$ (463,828.13)	8/15/2023	15.0	15.00	30.00	0.133%	0.04
215	Columbia Gas Transmission LLC	7/1/2023	7/31/2023	$ (62,879.94)	8/21/2023	15.0	21.00	36.00	0.018%	0.01
216	Texas Eastern Transmission, LP	7/1/2023	7/31/2023	$ (82,038.00)	8/21/2023	15.0	21.00	36.00	0.023%	0.01
217	Colonial Energy	7/1/2023	7/31/2023	$ (133,935.50)	8/25/2023	15.0	25.00	40.00	0.038%	0.02
218	EQT Energy (PNG NAESB)	7/1/2023	7/31/2023	$ (1,450,000.00)	8/25/2023	15.0	25.00	40.00	0.414%	0.17
219	Sequent Energy Management	7/1/2023	7/31/2023	$ (37,112.74)	8/25/2023	15.0	25.00	40.00	0.011%	0.00
220	Eastern Gas Transmision and Storage, Inc.	8/1/2023	8/31/2023	$ (1,118,708.51)	9/11/2023	15.0	11.00	26.00	0.320%	0.08
221	Eastern Gas Transmision and Storage, Inc.	8/1/2023	8/31/2023	$ (23,887.43)	9/15/2023	15.0	15.00	30.00	0.007%	0.00
222	Equitrans	8/1/2023	8/31/2023	$ (6,309,610.93)	9/15/2023	15.0	15.00	30.00	1.803%	0.54
223	Texas Eastern Transmission, LP	8/1/2023	8/31/2023	$ (261,339.35)	9/20/2023	15.0	20.00	35.00	0.075%	0.03
224	Colonial Energy	8/1/2023	8/31/2023	$ (122,307.50)	9/25/2023	15.0	25.00	40.00	0.035%	0.01
225	EQT Energy (PNG NAESB)	8/1/2023	8/31/2023	$ (970,920.00)	9/25/2023	15.0	25.00	40.00	0.277%	0.11
226	National Fuel Gas Supply	8/1/2023	8/31/2023	$ (149,833.43)	9/25/2023	15.0	25.00	40.00	0.043%	0.02
227	NextEra Energy	8/1/2023	8/31/2023	$ (977,061.00)	9/25/2023	15.0	25.00	40.00	0.279%	0.11
228	Range Resources	8/1/2023	8/31/2023	$ (438,025.00)	9/25/2023	15.0	25.00	40.00	0.125%	0.05
229	Sequent Energy Management	8/1/2023	8/31/2023	$ 241,570.50	9/25/2023	15.0	25.00	40.00	-0.069%	(0.03)
230	Tennessee Gas Pipeline	8/1/2023	8/31/2023	$ 1.50	9/25/2023	15.0	25.00	40.00	0.000%	(0.00)
231	Eastern Gas Transmision and Storage, Inc.	8/1/2023	8/31/2023	$ (217,041.00)	9/11/2023	15.0	11.00	26.00	0.062%	0.02
232	Eastern Gas Transmision and Storage, Inc.	8/1/2023	8/31/2023	$ (3,051.49)	9/15/2023	15.0	15.00	30.00	0.001%	0.00
233	Equitrans	8/1/2023	8/31/2023	$ (448,040.83)	9/15/2023	15.0	15.00	30.00	0.128%	0.04
234	Texas Eastern Transmission, LP	8/1/2023	8/31/2023	$ (94,518.00)	9/20/2023	15.0	20.00	35.00	0.027%	0.01
235	Colonial Energy	8/1/2023	8/31/2023	$ (87,237.50)	9/25/2023	15.0	25.00	40.00	0.025%	0.01
236	Columbia Gas Transmission LLC	8/1/2023	8/31/2023	$ (62,784.20)	9/25/2023	15.0	25.00	40.00	0.018%	0.01
237	EQT Energy (PNG NAESB)	8/1/2023	8/31/2023	$ (1,171,800.00)	9/25/2023	15.0	25.00	40.00	0.335%	0.13
238	Sequent Energy Management	8/1/2023	8/31/2023	$ (24,831.00)	9/25/2023	15.0	25.00	40.00	0.007%	0.00
239	Local Producer Gas Payments - Ensyte	9/1/2022	9/30/2022	$ (5,291,524.75)	10/31/2022	14.5	31.00	45.50	1.512%	0.69
240	Local Producer Gas Payments - Ensyte	10/1/2022	10/31/2022	$ (2,951,946.61)	11/30/2022	15.0	30.00	45.00	0.843%	0.38
241	Local Producer Gas Payments - Ensyte	11/1/2022	11/30/2022	$ (2,285,063.54)	12/30/2022	14.5	30.00	44.50	0.653%	0.29
242	Local Producer Gas Payments - Ensyte	12/1/2022	12/31/2022	$ (2,739,747.50)	1/31/2023	15.0	31.00	46.00	0.783%	0.36
243	Local Producer Gas Payments - Ensyte	1/1/2023	1/31/2023	$ (1,822,668.67)	2/28/2023	15.0	28.00	43.00	0.521%	0.22
244	Local Producer Gas Payments - Ensyte	2/1/2023	2/28/2023	$ (1,156,679.74)	3/31/2023	13.5	31.00	44.50	0.330%	0.15
245	Local Producer Gas Payments - Ensyte	3/1/2023	3/31/2023	$ (1,021,095.38)	4/28/2023	15.0	28.00	43.00	0.292%	0.13
246	Local Producer Gas Payments - Ensyte	4/1/2023	4/30/2023	$ (783,507.94)	5/31/2023	14.5	31.00	45.50	0.224%	0.10
247	Local Producer Gas Payments - Ensyte	5/1/2023	5/31/2023	$ (790,378.37)	6/30/2023	15.0	30.00	45.00	0.226%	0.10
248	Local Producer Gas Payments - Ensyte	6/1/2023	6/30/2023	$ (637,858.05)	7/31/2023	14.5	31.00	45.50	0.182%	0.08
249	Local Producer Gas Payments - Ensyte	7/1/2023	7/31/2023	$ (716,132.66)	8/31/2023	15.0	31.00	46.00	0.205%	0.09

Line No.	(A) Company	(B) Period Start	(C) Period End	(D) Payment Amount	(E) Payment Date	(F) Service Lead Time	(G) Payment Lead Time	(H) Total Lead Time	(I) Weighting Factor	(J) Weighted Lead Time
250	Local Producer Gas Payments - Ensyte	8/1/2023	8/31/2023	$ (689,239.40)	9/30/2023	15.0	30.00	45.00	0.197%	0.09
251				$ (349,988,398.75)						

Calculation of Payroll Lead Time

Weighted Expense Lead Time: **15.55** days

Line No.		(A) Type	(B) Pay Period End Date	(C) Pay Date	(D) Payroll Amount	(E) Pay Period Begin	(F) Mid Point of Pay Period	(G) Payment Lead Time	(H) Total Lead Time	(I) Weighting Factor	(J) Weighted Lead Time
1	1M4	Union Payroll	8/27/2022	9/7/2022	$ 3,021,634.09	8/14/2022	6.5	11.00	17.50	2.25%	0.39
2	1M4	Union Payroll	9/10/2022	9/21/2022	$ 2,923,246.51	8/28/2022	6.5	11.00	17.50	2.17%	0.38
3	1M4	Union Payroll	9/24/2022	10/5/2022	$ 3,036,298.23	9/11/2022	6.5	11.00	17.50	2.26%	0.39
4	1M4	Union Payroll	10/8/2022	10/19/2022	$ 3,050,487.41	9/25/2022	6.5	11.00	17.50	2.27%	0.40
5	1M4	Union Payroll	10/22/2022	11/2/2022	$ 3,123,004.54	10/9/2022	6.5	11.00	17.50	2.32%	0.41
6	1M4	Union Payroll	11/5/2022	11/16/2022	$ 3,098,721.40	10/23/2022	6.5	11.00	17.50	2.30%	0.40
7	1M4	Union Payroll	11/19/2022	11/30/2022	$ 3,165,378.16	11/6/2022	6.5	11.00	17.50	2.35%	0.41
8	1M4	Union Payroll	12/3/2022	12/14/2022	$ 3,118,444.57	11/20/2022	6.5	11.00	17.50	2.32%	0.41
9	1M4	Union Payroll	12/17/2022	12/28/2022	$ 3,117,968.11	12/4/2022	6.5	11.00	17.50	2.32%	0.41
10	1M4	Union Payroll	12/31/2022	1/11/2023	$ 3,605,944.43	12/18/2022	6.5	11.00	17.50	2.68%	0.47
11	1M4	Union Payroll	1/14/2023	1/25/2023	$ 3,133,009.57	1/1/2023	6.5	11.00	17.50	2.33%	0.41
12	1M4	Union Payroll	1/28/2023	2/8/2023	$ 3,168,077.13	1/15/2023	6.5	11.00	17.50	2.35%	0.41
13	1M4	Union Payroll	2/11/2023	2/22/2023	$ 3,279,269.60	1/29/2023	6.5	11.00	17.50	2.44%	0.43
14	1M4	Union Payroll	2/25/2023	3/8/2023	$ 3,160,467.55	2/12/2023	6.5	11.00	17.50	2.35%	0.41
15	1M4	Union Payroll	3/11/2023	3/22/2023	$ 3,106,737.35	2/26/2023	6.5	11.00	17.50	2.31%	0.40
16	1M4	Union Payroll	3/25/2023	4/5/2023	$ 3,133,107.82	3/12/2023	6.5	11.00	17.50	2.33%	0.41
17	1M4	Union Payroll	4/8/2023	4/19/2023	$ 3,144,143.38	3/26/2023	6.5	11.00	17.50	2.34%	0.41
18	1M4	Union Payroll	4/22/2023	5/3/2023	$ 3,084,845.30	4/9/2023	6.5	11.00	17.50	2.29%	0.40
19	1M4	Union Payroll	5/6/2023	5/17/2023	$ 3,050,327.22	4/23/2023	6.5	11.00	17.50	2.27%	0.40
20	1M4	Union Payroll	5/20/2023	5/31/2023	$ 3,110,983.19	5/7/2023	6.5	11.00	17.50	2.31%	0.40
21	1M4	Union Payroll	6/3/2023	6/14/2023	$ 3,091,574.46	5/21/2023	6.5	11.00	17.50	2.30%	0.40
22	1M4	Union Payroll	6/17/2023	6/28/2023	$ 3,083,458.80	6/4/2023	6.5	11.00	17.50	2.29%	0.40
23	1M4	Union Payroll	7/1/2023	7/12/2023	$ 3,115,733.94	6/18/2023	6.5	11.00	17.50	2.32%	0.41
24	1M4	Union Payroll	7/15/2023	7/26/2023	$ 3,079,566.00	7/2/2023	6.5	11.00	17.50	2.29%	0.40
25	1M4	Union Payroll	7/29/2023	8/9/2023	$ 3,137,538.48	7/16/2023	6.5	11.00	17.50	2.33%	0.41
26	1M4	Union Payroll	8/12/2023	8/23/2023	$ 3,159,114.19	7/30/2023	6.5	11.00	17.50	2.35%	0.41
27	CWA	Union Payroll	9/4/2022	9/14/2022	$ 54,392.73	8/22/2022	6.5	10.00	16.50	0.04%	0.01
28	CWA	Union Payroll	9/18/2022	9/28/2022	$ 53,128.06	9/5/2022	6.5	10.00	16.50	0.04%	0.01
29	CWA	Union Payroll	10/2/2022	10/12/2022	$ 56,527.51	9/19/2022	6.5	10.00	16.50	0.04%	0.01
30	CWA	Union Payroll	10/16/2022	10/26/2022	$ 56,730.65	10/3/2022	6.5	10.00	16.50	0.04%	0.01
31	CWA	Union Payroll	10/30/2022	11/9/2022	$ 53,685.08	10/17/2022	6.5	10.00	16.50	0.04%	0.01
32	CWA	Union Payroll	11/13/2022	11/23/2022	$ 66,581.54	10/31/2022	6.5	10.00	16.50	0.05%	0.01
33	CWA	Union Payroll	11/27/2022	12/7/2022	$ 55,174.21	11/14/2022	6.5	10.00	16.50	0.04%	0.01
34	CWA	Union Payroll	12/11/2022	12/21/2022	$ 57,003.13	11/28/2022	6.5	10.00	16.50	0.04%	0.01
35	CWA	Union Payroll	12/25/2022	1/4/2023	$ 57,326.01	12/12/2022	6.5	10.00	16.50	0.04%	0.01
36	CWA	Union Payroll	1/8/2023	1/18/2023	$ 53,702.08	12/26/2022	6.5	10.00	16.50	0.04%	0.01
37	CWA	Union Payroll	1/22/2023	2/1/2023	$ 55,096.74	1/9/2023	6.5	10.00	16.50	0.04%	0.01
38	CWA	Union Payroll	2/5/2023	2/15/2023	$ 54,621.63	1/23/2023	6.5	10.00	16.50	0.04%	0.01
39	CWA	Union Payroll	2/19/2023	3/1/2023	$ 57,378.70	2/6/2023	6.5	10.00	16.50	0.04%	0.01
40	CWA	Union Payroll	3/5/2023	3/15/2023	$ 54,841.90	2/20/2023	6.5	10.00	16.50	0.04%	0.01
41	CWA	Union Payroll	3/19/2023	3/29/2023	$ 51,576.37	3/6/2023	6.5	10.00	16.50	0.04%	0.01
42	CWA	Union Payroll	4/2/2023	4/12/2023	$ 48,860.70	3/20/2023	6.5	10.00	16.50	0.04%	0.01
43	CWA	Union Payroll	4/16/2023	4/26/2023	$ 50,055.99	4/3/2023	6.5	10.00	16.50	0.04%	0.01
44	CWA	Union Payroll	4/30/2023	5/10/2023	$ 51,576.78	4/17/2023	6.5	10.00	16.50	0.04%	0.01

Line No.		(A) Type	(B) Pay Period End Date	(C) Pay Date	(D) Payroll Amount	(E) Pay Period Begin	(F) Mid Point of Pay Period	(G) Payment Lead Time	(H) Total Lead Time	(I) Weighting Factor	(J) Weighted Lead Time
45	CWA	Union Payroll	5/14/2023	5/24/2023	$ 53,423.80	5/1/2023	6.5	10.00	16.50	0.04%	0.01
46	CWA	Union Payroll	5/28/2023	6/7/2023	$ 55,436.29	5/15/2023	6.5	10.00	16.50	0.04%	0.01
47	CWA	Union Payroll	6/11/2023	6/21/2023	$ 54,856.23	5/29/2023	6.5	10.00	16.50	0.04%	0.01
48	CWA	Union Payroll	6/25/2023	7/5/2023	$ 57,416.08	6/12/2023	6.5	10.00	16.50	0.04%	0.01
49	CWA	Union Payroll	7/9/2023	7/19/2023	$ 52,784.91	6/26/2023	6.5	10.00	16.50	0.04%	0.01
50	CWA	Union Payroll	7/23/2023	8/2/2023	$ 55,595.27	7/10/2023	6.5	10.00	16.50	0.04%	0.01
51	CWA	Union Payroll	8/6/2023	8/16/2023	$ 54,450.30	7/24/2023	6.5	10.00	16.50	0.04%	0.01
52	CWA	Union Payroll	8/20/2023	8/30/2023	$ 52,267.98	8/7/2023	6.5	10.00	16.50	0.04%	0.01
53	1M6	Salaried Payroll	9/3/2022	9/9/2022	$ 717,548.07	8/21/2022	6.5	6.00	12.50	0.53%	0.07
54	1M6	Salaried Payroll	9/17/2022	9/23/2022	$ 724,898.47	9/4/2022	6.5	6.00	12.50	0.54%	0.07
55	1M6	Salaried Payroll	10/1/2022	10/7/2022	$ 715,375.83	9/18/2022	6.5	6.00	12.50	0.53%	0.07
56	1M6	Salaried Payroll	10/15/2022	10/21/2022	$ 720,203.67	10/2/2022	6.5	6.00	12.50	0.54%	0.07
57	1M6	Salaried Payroll	10/29/2022	11/4/2022	$ 715,663.12	10/16/2022	6.5	6.00	12.50	0.53%	0.07
58	1M6	Salaried Payroll	11/12/2022	11/18/2022	$ 722,281.50	10/30/2022	6.5	6.00	12.50	0.54%	0.07
59	1M6	Salaried Payroll	11/26/2022	12/2/2022	$ 729,200.64	11/13/2022	6.5	6.00	12.50	0.54%	0.07
60	1M6	Salaried Payroll	12/10/2022	12/16/2022	$ 719,395.65	11/27/2022	6.5	6.00	12.50	0.53%	0.07
61	1M6	Salaried Payroll	12/24/2022	12/30/2022	$ 728,003.25	12/11/2022	6.5	6.00	12.50	0.54%	0.07
62	1M6	Salaried Payroll	1/7/2023	1/13/2023	$ 736,734.93	12/25/2022	6.5	6.00	12.50	0.55%	0.07
63	1M6	Salaried Payroll	1/21/2023	1/27/2023	$ 716,677.38	1/8/2023	6.5	6.00	12.50	0.53%	0.07
64	1M6	Salaried Payroll	2/4/2023	2/10/2023	$ 709,757.74	1/22/2023	6.5	6.00	12.50	0.53%	0.07
65	1M6	Salaried Payroll	2/18/2023	2/24/2023	$ 715,150.23	2/5/2023	6.5	6.00	12.50	0.53%	0.07
66	1M6	Salaried Payroll	3/4/2023	3/10/2023	$ 712,511.56	2/19/2023	6.5	6.00	12.50	0.53%	0.07
67	1M6	Salaried Payroll	3/18/2023	3/24/2023	$ 718,336.00	3/5/2023	6.5	6.00	12.50	0.53%	0.07
68	1M6	Salaried Payroll	4/1/2023	4/6/2023	$ 731,388.31	3/19/2023	6.5	5.00	11.50	0.54%	0.06
69	1M6	Salaried Payroll	4/15/2023	4/21/2023	$ 741,819.95	4/2/2023	6.5	6.00	12.50	0.55%	0.07
70	1M6	Salaried Payroll	4/29/2023	5/5/2023	$ 749,984.82	4/16/2023	6.5	6.00	12.50	0.56%	0.07
71	1M6	Salaried Payroll	5/13/2023	5/19/2023	$ 747,458.78	4/30/2023	6.5	6.00	12.50	0.56%	0.07
72	1M6	Salaried Payroll	5/27/2023	6/2/2023	$ 738,219.00	5/14/2023	6.5	6.00	12.50	0.55%	0.07
73	1M6	Salaried Payroll	6/10/2023	6/16/2023	$ 751,684.22	5/28/2023	6.5	6.00	12.50	0.56%	0.07
74	1M6	Salaried Payroll	6/24/2023	6/30/2023	$ 734,655.03	6/11/2023	6.5	6.00	12.50	0.55%	0.07
75	1M6	Salaried Payroll	7/8/2023	7/14/2023	$ 739,217.14	6/25/2023	6.5	6.00	12.50	0.55%	0.07
76	1M6	Salaried Payroll	7/22/2023	7/28/2023	$ 725,360.60	7/9/2023	6.5	6.00	12.50	0.54%	0.07
77	1M6	Salaried Payroll	8/5/2023	8/11/2023	$ 726,934.09	7/23/2023	6.5	6.00	12.50	0.54%	0.07
78	1M6	Salaried Payroll	8/19/2023	8/25/2023	$ 795,710.80	8/6/2023	6.5	6.00	12.50	0.59%	0.07
79	7TY	Salaried Payroll	9/3/2022	9/9/2022	$ 1,396,726.44	8/21/2022	6.5	6.00	12.50	1.04%	0.13
80	7TY	Salaried Payroll	9/17/2022	9/23/2022	$ 1,441,205.47	9/4/2022	6.5	6.00	12.50	1.07%	0.13
81	7TY	Salaried Payroll	10/1/2022	10/7/2022	$ 1,397,981.95	9/18/2022	6.5	6.00	12.50	1.04%	0.13
82	7TY	Salaried Payroll	10/15/2022	10/21/2022	$ 1,314,417.34	10/2/2022	6.5	6.00	12.50	0.98%	0.12
83	7TY	Salaried Payroll	10/29/2022	11/4/2022	$ 1,475,913.42	10/16/2022	6.5	6.00	12.50	1.10%	0.14
84	7TY	Salaried Payroll	11/12/2022	11/18/2022	$ 1,301,339.93	10/30/2022	6.5	6.00	12.50	0.97%	0.12
85	7TY	Salaried Payroll	11/26/2022	12/2/2022	$ 1,332,186.90	11/13/2022	6.5	6.00	12.50	0.99%	0.12
86	7TY	Salaried Payroll	12/10/2022	12/16/2022	$ 1,318,329.95	11/27/2022	6.5	6.00	12.50	0.98%	0.12
87	7TY	Salaried Payroll	12/24/2022	12/30/2022	$ 1,355,433.54	12/11/2022	6.5	6.00	12.50	1.01%	0.13
88	7TY	Salaried Payroll	1/7/2023	1/13/2023	$ 1,146,073.71	12/25/2022	6.5	6.00	12.50	0.85%	0.11
89	7TY	Salaried Payroll	1/21/2023	1/27/2023	$ 1,195,528.03	1/8/2023	6.5	6.00	12.50	0.89%	0.11
90	7TY	Salaried Payroll	2/4/2023	2/10/2023	$ 1,164,282.69	1/22/2023	6.5	6.00	12.50	0.87%	0.11
91	7TY	Salaried Payroll	2/18/2023	2/24/2023	$ 1,464,705.65	2/5/2023	6.5	6.00	12.50	1.09%	0.14

Line No.		(A) Type	(B) Pay Period End Date	(C) Pay Date	(D) Payroll Amount	(E) Pay Period Begin	(F) Mid Point of Pay Period	(G) Payment Lead Time	(H) Total Lead Time	(I) Weighting Factor	(J) Weighted Lead Time
92	7TY	Salaried Payroll	3/4/2023	3/10/2023	$ 1,138,918.46	2/19/2023	6.5	6.00	12.50	0.85%	0.11
93	7TY	Salaried Payroll	3/18/2023	3/24/2023	$ 1,158,886.96	3/5/2023	6.5	6.00	12.50	0.86%	0.11
94	7TY	Salaried Payroll	4/1/2023	4/6/2023	$ 1,146,945.19	3/19/2023	6.5	5.00	11.50	0.85%	0.10
95	7TY	Salaried Payroll	4/15/2023	4/21/2023	$ 1,202,105.58	4/2/2023	6.5	6.00	12.50	0.89%	0.11
96	7TY	Salaried Payroll	4/29/2023	5/5/2023	$ 1,159,532.98	4/16/2023	6.5	6.00	12.50	0.86%	0.11
97	7TY	Salaried Payroll	5/13/2023	5/19/2023	$ 1,201,746.48	4/30/2023	6.5	6.00	12.50	0.89%	0.11
98	7TY	Salaried Payroll	5/27/2023	6/2/2023	$ 1,215,013.93	5/14/2023	6.5	6.00	12.50	0.90%	0.11
99	7TY	Salaried Payroll	6/10/2023	6/16/2023	$ 1,211,685.08	5/28/2023	6.5	6.00	12.50	0.90%	0.11
100	7TY	Salaried Payroll	6/24/2023	6/30/2023	$ 1,189,125.82	6/11/2023	6.5	6.00	12.50	0.88%	0.11
101	7TY	Salaried Payroll	7/8/2023	7/14/2023	$ 1,212,633.76	6/25/2023	6.5	6.00	12.50	0.90%	0.11
102	7TY	Salaried Payroll	7/22/2023	7/28/2023	$ 1,265,934.24	7/9/2023	6.5	6.00	12.50	0.94%	0.12
103	7TY	Salaried Payroll	8/5/2023	8/11/2023	$ 1,198,413.24	7/23/2023	6.5	6.00	12.50	0.89%	0.11
104	7TY	Salaried Payroll	8/19/2023	8/25/2023	$ 1,225,389.22	8/6/2023	6.5	6.00	12.50	0.91%	0.11
105					$ 134,538,198.84						

Calculation of Pension & Benefits Lead Time

Weighted Expense Lead Time: **30.63** **days**

Line No.	(A) Pensions & Benefits	(B) End of Period	(C) Paid Date		(D) Amount	(E) Service Lead Time	(F) Payment Lead Time	(G) Total Lead Time	(H) Weighting Factor	(I) Weighted Lead Time
1	Benefits - Medical - Salary & Union	9/30/2022	8/19/2022	$	1,201,091.32	15.21	(42.00)	(26.79)	5.752%	(1.54)
2	Benefits - Medical - Salary & Union	10/31/2022	9/16/2022	$	1,240,522.49	15.21	(45.00)	(29.79)	5.941%	(1.77)
3	Benefits - Medical - Salary & Union	11/30/2022	11/1/2022	$	1,093,712.30	15.21	(29.00)	(13.79)	5.238%	(0.72)
4	Benefits - Medical - Salary & Union	12/31/2022	11/17/2022	$	1,162,104.90	15.21	(44.00)	(28.79)	5.565%	(1.60)
5	Benefits - Medical - Salary & Union	1/31/2023	12/16/2022	$	1,200,231.36	15.21	(46.00)	(30.79)	5.748%	(1.77)
6	Benefits - Medical - Salary & Union	2/28/2023	1/20/2023	$	1,440,420.83	15.21	(39.00)	(23.79)	6.898%	(1.64)
7	Benefits - Medical - Salary & Union	3/31/2023	2/16/2023	$	1,337,595.39	15.21	(43.00)	(27.79)	6.406%	(1.78)
8	Benefits - Medical - Salary & Union	4/30/2023	3/17/2023	$	1,338,249.76	15.21	(44.00)	(28.79)	6.409%	(1.85)
9	Benefits - Medical - Salary & Union	5/31/2023	4/14/2023	$	1,240,474.53	15.21	(47.00)	(31.79)	5.940%	(1.89)
10	Benefits - Medical - Salary & Union	6/30/2023	5/13/2023	$	1,343,660.29	15.21	(48.00)	(32.79)	6.435%	(2.11)
11	Benefits - Medical - Salary & Union	7/31/2023	6/16/2023	$	1,304,415.12	15.21	(45.00)	(29.79)	6.247%	(1.86)
12	Benefits - Medical - Salary & Union	8/31/2023	7/17/2023	$	1,284,320.54	15.21	(45.00)	(29.79)	6.150%	(1.83)
13	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	9/30/2022	10/4/2022	$	374,354.91	15.21	4.00	19.21	1.793%	0.34
14	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	10/31/2022	10/18/2022	$	(119,290.88)	15.21	(13.00)	2.21	-0.571%	(0.01)
15	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	11/30/2022	11/23/2022	$	53,142.27	15.21	(7.00)	8.21	0.254%	0.02
16	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	12/31/2022	1/9/2023	$	59,605.64	15.21	9.00	24.21	0.285%	0.07
17	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	1/31/2023	2/17/2023	$	138,922.66	15.21	17.00	32.21	0.665%	0.21
18	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	2/28/2023	4/3/2023	$	92,211.53	15.21	34.00	49.21	0.442%	0.22
19	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	3/31/2023	4/17/2023	$	96,109.93	15.21	17.00	32.21	0.460%	0.15
20	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	4/30/2023	5/10/2023	$	96,047.40	15.21	10.00	25.21	0.460%	0.12
21	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	5/31/2023	5/24/2023	$	711,154.74	15.21	(7.00)	8.21	3.406%	0.28
22	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	6/30/2023	6/20/2023	$	144,124.08	15.21	(10.00)	5.21	0.690%	0.04
23	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	7/31/2023	7/25/2023	$	149,545.80	15.21	(6.00)	9.21	0.716%	0.07
24	Benefits - Dental, Life, LTD, IDI, Voluntary Benefits	8/31/2023	8/29/2023	$	147,187.36	15.21	(2.00)	13.21	0.705%	0.09
25	Pension Contribution	12/31/2021	8/3/2022	$	2,571,430.00	182.50	215.00	397.50	12.314%	48.95
26	Health Equity - HSA Employer Amortization	9/30/2022		$	105,856.98	7.02	1.00	8.02	0.507%	0.04
27	Health Equity - HSA Employer Amortization	10/31/2022		$	107,893.37	7.02	1.00	8.02	0.517%	0.04
28	Health Equity - HSA Employer Amortization	11/30/2022		$	108,146.25	7.02	1.00	8.02	0.518%	0.04
29	Health Equity - HSA Employer Amortization	12/31/2022		$	134,033.37	7.02	1.00	8.02	0.642%	0.05
30	Health Equity - HSA Employer Amortization	1/31/2023		$	89,194.58	7.02	1.00	8.02	0.427%	0.03
31	Health Equity - HSA Employer Amortization	2/28/2023		$	89,194.50	7.02	1.00	8.02	0.427%	0.03
32	Health Equity - HSA Employer Amortization	3/31/2023		$	89,683.11	7.02	1.00	8.02	0.429%	0.03
33	Health Equity - HSA Employer Amortization	4/30/2023		$	89,683.11	7.02	1.00	8.02	0.429%	0.03
34	Health Equity - HSA Employer Amortization	5/31/2023		$	90,133.53	7.02	1.00	8.02	0.432%	0.03
35	Health Equity - HSA Employer Amortization	6/30/2023		$	92,896.39	7.02	1.00	8.02	0.445%	0.04
36	Health Equity - HSA Employer Amortization	7/31/2023		$	91,774.65	7.02	1.00	8.02	0.439%	0.04
37	Health Equity - HSA Employer Amortization	8/31/2023		$	92,145.80	7.02	1.00	8.02	0.441%	0.04
38				$	20,881,979.91					

Calculation of Other O&M Lead Time

Weighted Expense Lead Time: **42.40** **days**

Line No.	(A) Name	(B) Inv Amount	(C) Invoice Date	(D) Paid Date	(E) Service Lead Time	(F) Payment Lead Time	(G) Total Lead Time	(H) Weighting Factor	(I) Weighed Lead Time
1	Selection Item 1	$ (645.30)	1/10/2023	2/9/2023	15.21	30.00	45.21	0.022%	0.01
2	Selection Item 2	$ (233.78)	1/10/2023	2/9/2023	15.21	30.00	45.21	0.008%	0.00
3	Selection Item 3	$ (182.72)	1/10/2023	2/9/2023	15.21	30.00	45.21	0.006%	0.00
4	Selection Item 4	$ (213.96)	1/10/2023	2/9/2023	15.21	30.00	45.21	0.007%	0.00
5	Selection Item 5	$ (62.22)	1/10/2023	2/9/2023	15.21	30.00	45.21	0.002%	0.00
6	Selection Item 6	$ (635.27)	1/2/2023	1/12/2023	15.21	10.00	25.21	0.022%	0.01
7	Selection Item 7	$ (143.48)	1/3/2023	1/12/2023	15.21	9.00	24.21	0.005%	0.00
8	Selection Item 8	$ (19,848.00)	1/10/2023	1/19/2023	15.21	9.00	24.21	0.680%	0.16
9	Selection Item 9	$ (6.67)	1/7/2023	2/2/2023	15.21	26.00	41.21	0.000%	0.00
10	Selection Item 10	$ (13.66)	1/7/2023	2/2/2023	15.21	26.00	41.21	0.000%	0.00
11	Selection Item 11	$ (445.17)	1/16/2023	2/9/2023	15.21	24.00	39.21	0.015%	0.01
12	Selection Item 12	$ (5,441.12)	1/10/2023	1/19/2023	15.21	9.00	24.21	0.186%	0.05
13	Selection Item 13	$ (48.04)	1/10/2023	1/19/2023	15.21	9.00	24.21	0.002%	0.00
14	Selection Item 14	$ (42.80)	1/10/2023	1/19/2023	15.21	9.00	24.21	0.001%	0.00
15	Selection Item 15	$ (47.15)	1/10/2023	1/19/2023	15.21	9.00	24.21	0.002%	0.00
16	Selection Item 16	$ (12,793.33)	1/10/2023	1/19/2023	15.21	9.00	24.21	0.438%	0.11
17	Selection Item 17	$ (7,616.91)	1/10/2023	1/19/2023	15.21	9.00	24.21	0.261%	0.06
18	Selection Item 18	$ (18,445.00)	1/3/2023	1/19/2023	15.21	16.00	31.21	0.632%	0.20
19	Selection Item 19	$ (73.87)	1/10/2023	2/7/2023	15.21	28.00	43.21	0.003%	0.00
20	Selection Item 20	$ (18,000.00)	1/5/2023	2/2/2023	15.21	28.00	43.21	0.616%	0.27
21	Selection Item 21	$ (242.00)	1/18/2023	2/15/2023	15.21	28.00	43.21	0.008%	0.00
22	Selection Item 22	$ (83.12)	1/18/2023	2/15/2023	15.21	28.00	43.21	0.003%	0.00
23	Selection Item 23	$ (41.16)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.001%	0.00
24	Selection Item 24	$ (43.27)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.001%	0.00
25	Selection Item 25	$ (41.62)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.001%	0.00
26	Selection Item 26	$ (61.73)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.002%	0.00
27	Selection Item 27	$ (48.21)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.002%	0.00
28	Selection Item 28	$ (156.72)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.005%	0.00
29	Selection Item 29	$ (48.98)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.002%	0.00
30	Selection Item 30	$ (44.12)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.002%	0.00
31	Selection Item 31	$ (49.15)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.002%	0.00
32	Selection Item 32	$ (199.92)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.007%	0.00
33	Selection Item 33	$ (58.23)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.002%	0.00
34	Selection Item 34	$ (47.04)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.002%	0.00
35	Selection Item 35	$ (64.65)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.002%	0.00

Line No.	(A) Name		(B) Inv Amount	(C) Invoice Date	(D) Paid Date	(E) Service Lead Time	(F) Payment Lead Time	(G) Total Lead Time	(H) Weighting Factor	(I) Weighed Lead Time
36	Selection Item 36	$	(87.52)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.003%	0.00
37	Selection Item 37	$	(85.05)	1/14/2023	1/26/2023	15.21	12.00	27.21	0.003%	0.00
38	Selection Item 38	$	(20,967.00)	2/7/2023	5/4/2023	15.21	86.00	101.21	0.718%	0.73
39	Selection Item 39	$	(10,190.00)	11/30/2022	6/15/2023	15.21	197.00	212.21	0.349%	0.74
40	Selection Item 40	$	(500.00)	2/21/2023	5/25/2023	15.21	93.00	108.21	0.017%	0.02
41	Selection Item 41	$	(32.50)	2/28/2023	3/9/2023	15.21	9.00	24.21	0.001%	0.00
42	Selection Item 42	$	(1,970.00)	2/20/2023	3/16/2023	15.21	24.00	39.21	0.067%	0.03
43	Selection Item 43	$	(3,050.00)	2/20/2023	3/16/2023	15.21	24.00	39.21	0.104%	0.04
44	Selection Item 44	$	(102.50)	2/20/2023	3/16/2023	15.21	24.00	39.21	0.004%	0.00
45	Selection Item 45	$	(86.00)	2/20/2023	3/16/2023	15.21	24.00	39.21	0.003%	0.00
46	Selection Item 46	$	(10,557.50)	2/28/2023	3/23/2023	15.21	23.00	38.21	0.362%	0.14
47	Selection Item 47	$	(100.00)	3/2/2023	3/9/2023	15.21	7.00	22.21	0.003%	0.00
48	Selection Item 48	$	(68.00)	2/21/2023	3/23/2023	15.21	30.00	45.21	0.002%	0.00
49	Selection Item 49	$	(233.19)	3/7/2023	4/6/2023	15.21	30.00	45.21	0.008%	0.00
50	Selection Item 50	$	(679,061.50)	2/28/2023	3/30/2023	15.21	30.00	45.21	23.258%	10.51
51	Selection Item 51	$	(1,142.42)	3/18/2023	4/13/2023	15.21	26.00	41.21	0.039%	0.02
52	Selection Item 52	$	(362.66)	3/13/2023	4/6/2023	15.21	24.00	39.21	0.012%	0.00
53	Selection Item 53	$	(403.00)	3/10/2023	4/6/2023	15.21	27.00	42.21	0.014%	0.01
54	Selection Item 54	$	(104.00)	3/15/2023	4/13/2023	15.21	29.00	44.21	0.004%	0.00
55	Selection Item 55	$	(13,485.00)	3/1/2023	3/30/2023	15.21	29.00	44.21	0.462%	0.20
56	Selection Item 56	$	(67.42)	3/15/2023	3/23/2023	15.21	8.00	23.21	0.002%	0.00
57	Selection Item 57	$	(59.32)	3/15/2023	3/23/2023	15.21	8.00	23.21	0.002%	0.00
58	Selection Item 58	$	(100.00)	3/15/2023	3/23/2023	15.21	8.00	23.21	0.003%	0.00
59	Selection Item 59	$	(23.94)	3/22/2023	4/20/2023	15.21	29.00	44.21	0.001%	0.00
60	Selection Item 60	$	(117.00)	3/23/2023	4/20/2023	15.21	28.00	43.21	0.004%	0.00
61	Selection Item 61	$	(50.74)	3/23/2023	4/20/2023	15.21	28.00	43.21	0.002%	0.00
62	Selection Item 62	$	(39.98)	3/23/2023	4/20/2023	15.21	28.00	43.21	0.001%	0.00
63	Selection Item 63	$	(5.99)	3/23/2023	4/20/2023	15.21	28.00	43.21	0.000%	0.00
64	Selection Item 64	$	(456.00)	3/22/2023	6/8/2023	15.21	78.00	93.21	0.016%	0.01
65	Selection Item 65	$	(995.87)	3/22/2023	4/20/2023	15.21	29.00	44.21	0.034%	0.02
66	Selection Item 66	$	(482.50)	3/22/2023	4/20/2023	15.21	29.00	44.21	0.017%	0.01
67	Selection Item 67	$	(482.50)	3/22/2023	4/20/2023	15.21	29.00	44.21	0.017%	0.01
68	Selection Item 68	$	(982.15)	3/20/2023	4/13/2023	15.21	24.00	39.21	0.034%	0.01
69	Selection Item 69	$	(3,000.00)	2/3/2023	4/6/2023	15.21	62.00	77.21	0.103%	0.08
70	Selection Item 70	$	(1,170.00)	2/22/2023	3/30/2023	15.21	36.00	51.21	0.040%	0.02
71	Selection Item 71	$	(14,363.38)	3/6/2023	5/4/2023	15.21	59.00	74.21	0.492%	0.37
72	Selection Item 72	$	(990.00)	3/9/2023	6/15/2023	15.21	98.00	113.21	0.034%	0.04
73	Selection Item 73	$	(1,023.15)	3/7/2023	6/8/2023	15.21	93.00	108.21	0.035%	0.04

Line No.	(A) Name	(B) Inv Amount	(C) Invoice Date	(D) Paid Date	(E) Service Lead Time	(F) Payment Lead Time	(G) Total Lead Time	(H) Weighting Factor	(I) Weighed Lead Time
74	Selection Item 74	$ (87.94)	4/1/2023	4/6/2023	15.21	5.00	20.21	0.003%	0.00
75	Selection Item 75	$ (24,000.00)	4/6/2023	5/4/2023	15.21	28.00	43.21	0.822%	0.36
76	Selection Item 76	$ (19,800.00)	3/31/2023	4/27/2023	15.21	27.00	42.21	0.678%	0.29
77	Selection Item 77	$ (44,960.65)	4/4/2023	4/13/2023	15.21	9.00	24.21	1.540%	0.37
78	Selection Item 78	$ (40.76)	4/1/2023	4/13/2023	15.21	12.00	27.21	0.001%	0.00
79	Selection Item 79	$ (74.28)	4/1/2023	4/13/2023	15.21	12.00	27.21	0.003%	0.00
80	Selection Item 80	$ (31.80)	4/3/2023	4/13/2023	15.21	10.00	25.21	0.001%	0.00
81	Selection Item 81	$ (7.95)	4/3/2023	4/13/2023	15.21	10.00	25.21	0.000%	0.00
82	Selection Item 82	$ (112.30)	4/3/2023	4/13/2023	15.21	10.00	25.21	0.004%	0.00
83	Selection Item 83	$ (4,918.42)	3/27/2023	4/13/2023	15.21	17.00	32.21	0.168%	0.05
84	Selection Item 84	$ (588.04)	4/2/2023	4/13/2023	15.21	11.00	26.21	0.020%	0.01
85	Selection Item 85	$ (121.00)	4/11/2023	5/11/2023	15.21	30.00	45.21	0.004%	0.00
86	Selection Item 86	$ (295.00)	4/4/2023	5/4/2023	15.21	30.00	45.21	0.010%	0.00
87	Selection Item 87	$ (18.49)	4/10/2023	5/4/2023	15.21	24.00	39.21	0.001%	0.00
88	Selection Item 88	$ (23.36)	4/7/2023	5/4/2023	15.21	27.00	42.21	0.001%	0.00
89	Selection Item 89	$ (60.65)	3/29/2023	4/27/2023	15.21	29.00	44.21	0.002%	0.00
90	Selection Item 90	$ (1,622.00)	4/5/2023	5/4/2023	15.21	29.00	44.21	0.056%	0.02
91	Selection Item 91	$ (544.52)	3/30/2023	4/27/2023	15.21	28.00	43.21	0.019%	0.01
92	Selection Item 92	$ (170.03)	3/27/2023	4/20/2023	15.21	24.00	39.21	0.006%	0.00
93	Selection Item 93	$ (181.18)	3/27/2023	4/20/2023	15.21	24.00	39.21	0.006%	0.00
94	Selection Item 94	$ (1,155.87)	4/7/2023	5/4/2023	15.21	27.00	42.21	0.040%	0.02
95	Selection Item 95	$ (5,796.80)	4/13/2023	5/11/2023	15.21	28.00	43.21	0.199%	0.09
96	Selection Item 96	$ (10,800.00)	3/20/2023	5/4/2023	15.21	45.00	60.21	0.370%	0.22
97	Selection Item 97	$ (10,800.00)	4/3/2023	5/4/2023	15.21	31.00	46.21	0.370%	0.17
98	Selection Item 98	$ (10,800.00)	4/17/2023	5/11/2023	15.21	24.00	39.21	0.370%	0.15
99	Selection Item 99	$ (691.23)	3/31/2023	4/27/2023	15.21	27.00	42.21	0.024%	0.01
100	Selection Item 100	$ (128,304.00)	3/31/2023	4/27/2023	15.21	27.00	42.21	4.394%	1.85
101	Selection Item 101	$ (120.00)	4/12/2023	4/27/2023	15.21	15.00	30.21	0.004%	0.00
102	Selection Item 102	$ (120.00)	4/12/2023	4/27/2023	15.21	15.00	30.21	0.004%	0.00
103	Selection Item 103	$ (120.00)	4/12/2023	4/27/2023	15.21	15.00	30.21	0.004%	0.00
104	Selection Item 104	$ (182.00)	4/10/2023	5/4/2023	15.21	24.00	39.21	0.006%	0.00
105	Selection Item 105	$ (665,102.00)	3/31/2023	4/27/2023	15.21	27.00	42.21	22.780%	9.61
106	Selection Item 106	$ (550.00)	4/20/2023	5/18/2023	15.21	28.00	43.21	0.019%	0.01
107	Selection Item 107	$ (413.00)	4/20/2023	5/18/2023	15.21	28.00	43.21	0.014%	0.01
108	Selection Item 108	$ (420.00)	4/20/2023	5/18/2023	15.21	28.00	43.21	0.014%	0.01
109	Selection Item 109	$ (402.50)	4/20/2023	5/18/2023	15.21	28.00	43.21	0.014%	0.01
110	Selection Item 110	$ (4,961.25)	3/3/2023	5/4/2023	15.21	62.00	77.21	0.170%	0.13
111	Selection Item 111	$ (169.00)	4/26/2023	5/25/2023	15.21	29.00	44.21	0.006%	0.00

Line No.	(A) Name	(B) Inv Amount	(C) Invoice Date	(D) Paid Date	(E) Service Lead Time	(F) Payment Lead Time	(G) Total Lead Time	(H) Weighting Factor	(I) Weighed Lead Time
112	Selection Item 112	$ (107.17)	5/1/2023	5/4/2023	15.21	3.00	18.21	0.004%	0.00
113	Selection Item 113	$ (200.00)	5/4/2023	5/11/2023	15.21	7.00	22.21	0.007%	0.00
114	Selection Item 114	$ (100.00)	5/4/2023	5/11/2023	15.21	7.00	22.21	0.003%	0.00
115	Selection Item 115	$ (1,000.00)	4/27/2023	5/25/2023	15.21	28.00	43.21	0.034%	0.01
116	Selection Item 116	$ (10,874.23)	4/30/2023	5/25/2023	15.21	25.00	40.21	0.372%	0.15
117	Selection Item 117	$ (4,365.60)	4/21/2023	5/18/2023	15.21	27.00	42.21	0.150%	0.06
118	Selection Item 118	$ (35.21)	4/28/2023	5/11/2023	15.21	13.00	28.21	0.001%	0.00
119	Selection Item 119	$ (132.15)	4/30/2023	5/11/2023	15.21	11.00	26.21	0.005%	0.00
120	Selection Item 120	$ (114.30)	5/1/2023	5/11/2023	15.21	10.00	25.21	0.004%	0.00
121	Selection Item 121	$ (4,774.88)	3/17/2023	5/11/2023	15.21	55.00	70.21	0.164%	0.11
122	Selection Item 122	$ (515.00)	1/12/2023	5/11/2023	15.21	119.00	134.21	0.018%	0.02
123	Selection Item 123	$ (500.00)	1/12/2023	5/11/2023	15.21	119.00	134.21	0.017%	0.02
124	Selection Item 124	$ (482.50)	1/12/2023	5/11/2023	15.21	119.00	134.21	0.017%	0.02
125	Selection Item 125	$ (515.00)	1/12/2023	5/11/2023	15.21	119.00	134.21	0.018%	0.02
126	Selection Item 126	$ (9,820.00)	4/26/2023	5/11/2023	15.21	15.00	30.21	0.336%	0.10
127	Selection Item 127	$ (1.50)	5/5/2023	6/1/2023	15.21	27.00	42.21	0.000%	0.00
128	Selection Item 128	$ (5,437.32)	5/8/2023	5/25/2023	15.21	17.00	32.21	0.186%	0.06
129	Selection Item 129	$ (2,051.71)	5/4/2023	5/25/2023	15.21	21.00	36.21	0.070%	0.03
130	Selection Item 130	$ (1,881.68)	5/7/2023	5/25/2023	15.21	18.00	33.21	0.064%	0.02
131	Selection Item 131	$ (7,048.50)	5/4/2023	5/25/2023	15.21	21.00	36.21	0.241%	0.09
132	Selection Item 132	$ (281.00)	5/22/2023	6/15/2023	15.21	24.00	39.21	0.010%	0.00
133	Selection Item 133	$ (120.00)	5/15/2023	6/8/2023	15.21	24.00	39.21	0.004%	0.00
134	Selection Item 134	$ (15,219.00)	4/28/2023	5/23/2023	15.21	25.00	40.21	0.521%	0.21
135	Selection Item 135	$ (41.98)	5/12/2023	6/8/2023	15.21	27.00	42.21	0.001%	0.00
136	Selection Item 136	$ (21,390.00)	5/17/2023	5/25/2023	15.21	8.00	23.21	0.733%	0.17
137	Selection Item 137	$ (10,800.00)	5/1/2023	6/8/2023	15.21	38.00	53.21	0.370%	0.20
138	Selection Item 138	$ (10,800.00)	5/15/2023	6/8/2023	15.21	24.00	39.21	0.370%	0.15
139	Selection Item 139	$ (33.99)	5/23/2023	6/22/2023	15.21	30.00	45.21	0.001%	0.00
140	Selection Item 140	$ (6,360.00)	5/22/2023	6/15/2023	15.21	24.00	39.21	0.218%	0.09
141	Selection Item 141	$ (115.25)	5/22/2023	6/8/2023	15.21	17.00	32.21	0.004%	0.00
142	Selection Item 142	$ (350.00)	4/7/2023	6/8/2023	15.21	62.00	77.21	0.012%	0.01
143	Selection Item 143	$ (115.75)	5/25/2023	6/22/2023	15.21	28.00	43.21	0.004%	0.00
144	Selection Item 144	$ (1,800.24)	5/4/2023	6/1/2023	15.21	28.00	43.21	0.062%	0.03
145	Selection Item 145	$ (366.29)	5/5/2023	6/1/2023	15.21	27.00	42.21	0.013%	0.01
146	Selection Item 146	$ (18,000.00)	5/15/2023	6/8/2023	15.21	24.00	39.21	0.616%	0.24
147	Selection Item 147	$ (17,250.00)	4/28/2023	6/1/2023	15.21	34.00	49.21	0.591%	0.29
148	Selection Item 148	$ (12,840.00)	5/1/2023	6/8/2023	15.21	38.00	53.21	0.440%	0.23
149	Selection Item 149	$ (4,365.60)	3/31/2023	6/8/2023	15.21	69.00	84.21	0.150%	0.13

Line No.	(A) Name	(B) Inv Amount	(C) Invoice Date	(D) Paid Date	(E) Service Lead Time	(F) Payment Lead Time	(G) Total Lead Time	(H) Weighting Factor	(I) Weighed Lead Time
150	Selection Item 150	$ (142.00)	5/23/2023	6/22/2023	15.21	30.00	45.21	0.005%	0.00
151	Selection Item 151	$ (154.72)	5/22/2023	6/15/2023	15.21	24.00	39.21	0.005%	0.00
152	Selection Item 152	$ (52.97)	5/30/2023	6/29/2023	15.21	30.00	45.21	0.002%	0.00
153	Selection Item 153	$ (79.37)	5/30/2023	6/29/2023	15.21	30.00	45.21	0.003%	0.00
154	Selection Item 154	$ (57,500.00)	5/8/2023	6/8/2023	15.21	31.00	46.21	1.969%	0.91
155	Selection Item 155	$ (5,188.00)	5/26/2023	6/15/2023	15.21	20.00	35.21	0.178%	0.06
156	Selection Item 156	$ (23.00)	6/1/2023	6/8/2023	15.21	7.00	22.21	0.001%	0.00
157	Selection Item 157	$ (39.70)	5/26/2023	6/8/2023	15.21	13.00	28.21	0.001%	0.00
158	Selection Item 158	$ (34.87)	5/31/2023	6/8/2023	15.21	8.00	23.21	0.001%	0.00
159	Selection Item 159	$ (5,470.00)	1/31/2023	6/8/2023	15.21	128.00	143.21	0.187%	0.27
160	Selection Item 160	$ (65.45)	5/31/2023	6/29/2023	15.21	29.00	44.21	0.002%	0.00
161	Selection Item 161	$ (2,295.00)	5/31/2023	6/8/2023	15.21	8.00	23.21	0.079%	0.02
162	Selection Item 162	$ (41.15)	6/1/2023	6/29/2023	15.21	28.00	43.21	0.001%	0.00
163	Selection Item 163	$ (57,500.00)	6/7/2023	7/6/2023	15.21	29.00	44.21	1.969%	0.87
164	Selection Item 164	$ (28.98)	6/7/2023	7/6/2023	15.21	29.00	44.21	0.001%	0.00
165	Selection Item 165	$ (21,600.00)	5/31/2023	6/29/2023	15.21	29.00	44.21	0.740%	0.33
166	Selection Item 166	$ (25,200.00)	6/2/2023	6/29/2023	15.21	27.00	42.21	0.863%	0.36
167	Selection Item 167	$ (315.70)	2/8/2023	6/22/2023	15.21	134.00	149.21	0.011%	0.02
168	Selection Item 168	$ (21.99)	6/9/2023	7/6/2023	15.21	27.00	42.21	0.001%	0.00
169	Selection Item 169	$ (307.50)	4/5/2023	6/15/2023	15.21	71.00	86.21	0.011%	0.01
170	Selection Item 170	$ (605.82)	6/1/2023	6/15/2023	15.21	14.00	29.21	0.021%	0.01
171	Selection Item 171	$ (113.49)	6/1/2023	6/15/2023	15.21	14.00	29.21	0.004%	0.00
172	Selection Item 172	$ (6,747.29)	6/6/2023	6/15/2023	15.21	9.00	24.21	0.231%	0.06
173	Selection Item 173	$ (6,373.75)	6/7/2023	6/15/2023	15.21	8.00	23.21	0.218%	0.05
174	Selection Item 174	$ (2,186.31)	6/7/2023	6/15/2023	15.21	8.00	23.21	0.075%	0.02
175	Selection Item 175	$ (1,899.53)	6/5/2023	6/15/2023	15.21	10.00	25.21	0.065%	0.02
176	Selection Item 176	$ (413.00)	6/5/2023	6/29/2023	15.21	24.00	39.21	0.014%	0.01
177	Selection Item 177	$ (437.50)	6/5/2023	6/29/2023	15.21	24.00	39.21	0.015%	0.01
178	Selection Item 178	$ (375.00)	6/5/2023	6/29/2023	15.21	24.00	39.21	0.013%	0.01
179	Selection Item 179	$ (437.50)	6/5/2023	6/29/2023	15.21	24.00	39.21	0.015%	0.01
180	Selection Item 180	$ (440.00)	6/5/2023	6/29/2023	15.21	24.00	39.21	0.015%	0.01
181	Selection Item 181	$ (817.88)	6/6/2023	7/6/2023	15.21	30.00	45.21	0.028%	0.01
182	Selection Item 182	$ (437.50)	6/6/2023	7/6/2023	15.21	30.00	45.21	0.015%	0.01
183	Selection Item 183	$ (2,200.00)	6/30/2023	7/27/2023	15.21	27.00	42.21	0.075%	0.03
184	Selection Item 184	$ (64.99)	7/10/2023	8/3/2023	15.21	24.00	39.21	0.002%	0.00
185	Selection Item 185	$ (16,800.00)	6/30/2023	7/27/2023	15.21	27.00	42.21	0.575%	0.24
186	Selection Item 186	$ (43.55)	6/16/2023	7/13/2023	15.21	27.00	42.21	0.001%	0.00
187	Selection Item 187	$ (2,200.00)	6/1/2023	7/27/2023	15.21	56.00	71.21	0.075%	0.05

Line No.	(A) Name	(B) Inv Amount	(C) Invoice Date	(D) Paid Date	(E) Service Lead Time	(F) Payment Lead Time	(G) Total Lead Time	(H) Weighting Factor	(I) Weighed Lead Time
188	Selection Item 188	$ (281.00)	7/12/2023	8/10/2023	15.21	29.00	44.21	0.010%	0.00
189	Selection Item 189	$ (69.19)	6/28/2023	7/13/2023	15.21	15.00	30.21	0.002%	0.00
190	Selection Item 190	$ (554.83)	7/2/2023	7/13/2023	15.21	11.00	26.21	0.019%	0.00
191	Selection Item 191	$ (9,994.00)	7/7/2023	7/20/2023	15.21	13.00	28.21	0.342%	0.10
192	Selection Item 192	$ (182,451.50)	6/30/2023	7/20/2023	15.21	20.00	35.21	6.249%	2.20
193	Selection Item 193	$ (495,083.00)	6/30/2023	7/20/2023	15.21	20.00	35.21	16.956%	5.97
194	Selection Item 194	$ (12.00)	6/16/2023	7/20/2023	15.21	34.00	49.21	0.000%	0.00
195	Selection Item 195	$ (1,756.00)	6/15/2023	7/20/2023	15.21	35.00	50.21	0.060%	0.03
196	Selection Item 196	$ (403.00)	6/15/2023	7/20/2023	15.21	35.00	50.21	0.014%	0.01
197	Selection Item 197	$ (19,316.00)	6/15/2023	7/20/2023	15.21	35.00	50.21	0.662%	0.33
198	Selection Item 198	$ (5,000.00)	4/14/2023	7/13/2023	15.21	90.00	105.21	0.171%	0.18
199	Selection Item 199	$ (24,222.00)	6/22/2023	7/20/2023	15.21	28.00	43.21	0.830%	0.36
200		$ (2,919,734.05)							

Calculation of Taxes Other than Income Lead Time

Weighted Expense Lead Time: **51.86** **days**

Line No.	(A) Type of Tax	(B) Begin of Period	(C) MidPoint Method	(D) End of Period	(E) Payment Date		(F) Amount	(G) Service Lead Time	(H) Payment Lead Time	(I) Total Lead time	(J) Weighting Factor	(K) Weighted Lead Time
1	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	9/6/2022	$	394.54	182.00	(177.00)	5.00	0.00%	0.00
2	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	11/2/2022	$	4,754.93	182.00	(120.00)	62.00	0.03%	0.02
3	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	12/15/2022	$	2,800.00	182.00	(77.00)	105.00	0.02%	0.02
4	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	12/22/2022	$	13,091.13	182.00	(70.00)	112.00	0.08%	0.09
5	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	2/8/2023	$	1,375.03	182.00	(22.00)	160.00	0.01%	0.01
6	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	2/20/2023	$	331.18	182.00	(10.00)	172.00	0.00%	0.00
7	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	3/7/2023	$	5,709.97	182.00	5.00	187.00	0.03%	0.06
8	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	3/22/2023	$	215.55	182.00	20.00	202.00	0.00%	0.00
9	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	4/14/2023	$	9,284.71	182.00	43.00	225.00	0.05%	0.12
10	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	5/4/2023	$	4,196.98	182.00	63.00	245.00	0.02%	0.06
11	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	5/10/2023	$	14,260.66	182.00	69.00	251.00	0.08%	0.21
12	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	5/11/2023	$	1,312.75	182.00	70.00	252.00	0.01%	0.02
13	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	6/13/2023	$	2,036.27	182.00	103.00	285.00	0.01%	0.03
14	PA Local Property Taxes	9/1/2022	3/2/2023	8/31/2023	8/15/2023	$	1,100.60	182.00	166.00	348.00	0.01%	0.02
15	PA and Local Sales Tax	9/1/2022	9/15/2022	9/30/2022	9/20/2022	$	115,285.00	14.50	4.50	19.00	0.68%	0.13
16	PA and Local Sales Tax	9/1/2022	9/15/2022	9/30/2022	10/11/2022	$	240,931.80	14.50	25.50	40.00	1.42%	0.57
17	PA and Local Sales Tax	10/1/2022	10/16/2022	10/31/2022	10/11/2022	$	136,188.00	15.00	(5.00)	10.00	0.80%	0.08
18	PA and Local Sales Tax	10/1/2022	10/16/2022	10/31/2022	11/14/2022	$	470,326.79	15.00	29.00	44.00	2.77%	1.22
19	PA and Local Sales Tax	11/1/2022	11/15/2022	11/30/2022	11/14/2022	$	259,849.00	14.50	(1.50)	13.00	1.53%	0.20
20	PA and Local Sales Tax	11/1/2022	11/15/2022	11/30/2022	12/14/2022	$	594,770.75	14.50	28.50	43.00	3.51%	1.51
21	PA and Local Sales Tax	12/1/2022	12/16/2022	12/31/2022	12/14/2022	$	638,197.00	15.00	(2.00)	13.00	3.76%	0.49
22	PA and Local Sales Tax	12/1/2022	12/16/2022	12/31/2022	1/18/2023	$	1,230,071.01	15.00	33.00	48.00	7.25%	3.48
23	PA and Local Sales Tax	1/1/2023	1/16/2023	1/31/2023	1/18/2023	$	742,864.00	15.00	2.00	17.00	4.38%	0.74
24	PA and Local Sales Tax	1/1/2023	1/16/2023	1/31/2023	2/15/2023	$	1,396,665.16	15.00	30.00	45.00	8.24%	3.71
25	PA and Local Sales Tax	2/1/2023	2/14/2023	2/28/2023	2/15/2023	$	929,816.00	13.50	0.50	14.00	5.48%	0.77
26	PA and Local Sales Tax	2/1/2023	2/14/2023	2/28/2023	3/17/2023	$	928,266.47	13.50	30.50	44.00	5.47%	2.41
27	PA and Local Sales Tax	3/1/2023	3/16/2023	3/31/2023	3/17/2023	$	707,770.00	15.00	1.00	16.00	4.17%	0.67
28	PA and Local Sales Tax	3/1/2023	3/16/2023	3/31/2023	4/18/2023	$	967,693.45	15.00	33.00	48.00	5.71%	2.74
29	PA and Local Sales Tax	4/1/2023	4/15/2023	4/30/2023	4/18/2023	$	477,347.00	14.50	2.50	17.00	2.82%	0.48
30	PA and Local Sales Tax	4/1/2023	4/15/2023	4/30/2023	5/16/2023	$	485,800.40	14.50	30.50	45.00	2.86%	1.29
31	PA and Local Sales Tax	5/1/2023	5/16/2023	5/31/2023	5/16/2023	$	294,485.00	15.00	-	15.00	1.74%	0.26
32	PA and Local Sales Tax	5/1/2023	5/16/2023	5/31/2023	6/13/2023	$	173,281.55	15.00	28.00	43.00	1.02%	0.44
33	PA and Local Sales Tax	6/1/2023	6/15/2023	6/30/2023	6/13/2023	$	162,242.00	14.50	(2.50)	12.00	0.96%	0.11
34	PA and Local Sales Tax	6/1/2023	6/15/2023	6/30/2023	7/18/2023	$	139,950.45	14.50	32.50	47.00	0.83%	0.39
35	PA and Local Sales Tax	7/1/2023	7/16/2023	7/31/2023	7/18/2023	$	143,787.00	15.00	2.00	17.00	0.85%	0.14
36	PA and Local Sales Tax	7/1/2023	7/16/2023	7/31/2023	8/15/2023	$	90,731.80	15.00	30.00	45.00	0.54%	0.24
37	PA and Local Sales Tax	8/1/2023	8/16/2023	8/31/2023	8/15/2023	$	182,574.00	15.00	(1.00)	14.00	1.08%	0.15
38	PA and Local Sales Tax	8/1/2023	8/16/2023	8/31/2023	9/12/2023	$	39,237.82	15.00	27.00	42.00	0.23%	0.10
39	PA and Local Use Tax	9/1/2022	9/15/2022	9/30/2022	9/20/2022	$	74,050.00	14.50	4.50	19.00	0.44%	0.08
40	PA and Local Use Tax	9/1/2022	9/15/2022	9/30/2022	10/11/2022	$	16,957.11	14.50	25.50	40.00	0.10%	0.04
41	PA and Local Use Tax	10/1/2022	10/16/2022	10/31/2022	10/11/2022	$	85,976.00	15.00	(5.00)	10.00	0.51%	0.05

Line No.	(A) Type of Tax	(B) Begin of Period	(C) MidPoint Method	(D) End of Period	(E) Payment Date	(F) Amount	(G) Service Lead Time	(H) Payment Lead Time	(I) Total Lead time	(J) Weighting Factor	(K) Weighted Lead Time
42	PA and Local Use Tax	10/1/2022	10/16/2022	10/31/2022	11/14/2022	$ 75,844.03	15.00	29.00	44.00	0.45%	0.20
43	PA and Local Use Tax	11/1/2022	11/15/2022	11/30/2022	11/14/2022	$ 89,203.00	14.50	(1.50)	13.00	0.53%	0.07
44	PA and Local Use Tax	11/1/2022	11/15/2022	11/30/2022	12/14/2022	$ 79,459.38	14.50	28.50	43.00	0.47%	0.20
45	PA and Local Use Tax	12/1/2022	12/16/2022	12/31/2022	12/14/2022	$ 206,325.00	15.00	(2.00)	13.00	1.22%	0.16
46	PA and Local Use Tax	12/1/2022	12/16/2022	12/31/2022	1/18/2023	$ 61,865.79	15.00	33.00	48.00	0.36%	0.18
47	PA and Local Use Tax	1/1/2023	1/16/2023	1/31/2023	1/18/2023	$ 109,045.00	15.00	2.00	17.00	0.64%	0.11
48	PA and Local Use Tax	1/1/2023	1/16/2023	1/31/2023	2/15/2023	$ (10,437.96)	15.00	30.00	45.00	-0.06%	(0.03)
49	PA and Local Use Tax	2/1/2023	2/14/2023	2/28/2023	2/15/2023	$ 76,896.00	13.50	0.50	14.00	0.45%	0.06
50	PA and Local Use Tax	2/1/2023	2/14/2023	2/28/2023	3/17/2023	$ 22,161.16	13.50	30.50	44.00	0.13%	0.06
51	PA and Local Use Tax	3/1/2023	3/16/2023	3/31/2023	3/17/2023	$ 90,245.00	15.00	1.00	16.00	0.53%	0.09
52	PA and Local Use Tax	3/1/2023	3/16/2023	3/31/2023	4/18/2023	$ 68,863.40	15.00	33.00	48.00	0.41%	0.19
53	PA and Local Use Tax	4/1/2023	4/15/2023	4/30/2023	4/18/2023	$ 151,525.00	14.50	2.50	17.00	0.89%	0.15
54	PA and Local Use Tax	4/1/2023	4/15/2023	4/30/2023	5/16/2023	$ (48,265.37)	14.50	30.50	45.00	-0.28%	(0.13)
55	PA and Local Use Tax	5/1/2023	5/16/2023	5/31/2023	5/16/2023	$ 33,184.00	15.00	-	15.00	0.20%	0.03
56	PA and Local Use Tax	5/1/2023	5/16/2023	5/31/2023	6/13/2023	$ 160,245.79	15.00	28.00	43.00	0.94%	0.41
57	PA and Local Use Tax	6/1/2023	6/15/2023	6/30/2023	6/13/2023	$ 39,203.00	14.50	(2.50)	12.00	0.23%	0.03
58	PA and Local Use Tax	6/1/2023	6/15/2023	6/30/2023	7/18/2023	$ 116,462.88	14.50	32.50	47.00	0.69%	0.32
59	PA and Local Use Tax	7/1/2023	7/16/2023	7/31/2023	7/18/2023	$ 30,445.00	15.00	2.00	17.00	0.18%	0.03
60	PA and Local Use Tax	7/1/2023	7/16/2023	7/31/2023	8/15/2023	$ 125,235.99	15.00	30.00	45.00	0.74%	0.33
61	PA and Local Use Tax	8/1/2023	8/16/2023	8/31/2023	8/15/2023	$ 63,528.00	15.00	(1.00)	14.00	0.37%	0.05
62	PA and Local Use Tax	8/1/2023	8/16/2023	8/31/2023	9/12/2023	$ 148,050.40	15.00	27.00	42.00	0.87%	0.37
63	PA Excise Alternative Fuel Tax	9/1/2022	9/15/2022	9/30/2022	10/11/2022	$ 1,231.07	14.50	25.50	40.00	0.01%	0.00
64	PA Excise Alternative Fuel Tax	10/1/2022	10/16/2022	10/31/2022	11/14/2022	$ 1,201.83	15.00	29.00	44.00	0.01%	0.00
65	PA Excise Alternative Fuel Tax	11/1/2022	11/15/2022	11/30/2022	12/14/2022	$ 1,097.41	14.50	28.50	43.00	0.01%	0.00
66	PA Excise Alternative Fuel Tax	12/1/2022	12/16/2022	12/31/2022	1/18/2023	$ 1,188.62	15.00	33.00	48.00	0.01%	0.00
67	PA Excise Alternative Fuel Tax	1/1/2023	1/16/2023	1/31/2023	2/17/2023	$ 1,154.37	15.00	32.00	47.00	0.01%	0.00
68	PA Excise Alternative Fuel Tax	2/1/2023	2/14/2023	2/28/2023	3/17/2023	$ 1,057.61	13.50	30.50	44.00	0.01%	0.00
69	PA Excise Alternative Fuel Tax	3/1/2023	3/16/2023	3/31/2023	4/18/2023	$ 1,408.12	15.00	33.00	48.00	0.01%	0.00
70	PA Excise Alternative Fuel Tax	4/1/2023	4/15/2023	4/30/2023	5/16/2023	$ 844.02	14.50	30.50	45.00	0.00%	0.00
71	PA Excise Alternative Fuel Tax	5/1/2023	5/16/2023	5/31/2023	6/13/2023	$ 766.74	15.00	28.00	43.00	0.00%	0.00
72	PA Excise Alternative Fuel Tax	6/1/2023	6/15/2023	6/30/2023	7/18/2023	$ 985.19	14.50	32.50	47.00	0.01%	0.00
73	PA Excise Alternative Fuel Tax	7/1/2023	7/16/2023	7/31/2023	8/15/2023	$ 642.59	15.00	30.00	45.00	0.00%	0.00
74	PA Excise Alternative Fuel Tax	8/1/2023	8/16/2023	8/31/2023	9/12/2023	$ 907.30	15.00	27.00	42.00	0.01%	0.00
75	U.S DOT Pipeline Safety User Fee	1/1/2023	7/2/2023	12/31/2023	5/11/2023	$ 60,006.60	182.00	(52.00)	130.00	0.35%	0.46
76	U.S DOT Pipeline Safety User Fee	1/1/2023	7/2/2023	12/31/2023	7/12/2023	$ 3,934.65	182.00	10.00	192.00	0.02%	0.04
77	U.S DOT Underground Natural Gas Storage Fee	1/1/2023	7/2/2023	12/31/2023	7/6/2023	$ 59,231.00	182.00	4.00	186.00	0.35%	0.65
78	Federal Excise - Alternative Fuels Tax	7/1/2022	8/15/2022	9/30/2022	10/10/2022	$ (1,864.55)	45.50	55.50	101.00	-0.01%	(0.01)
79	Federal Excise - Alternative Fuels Tax	10/1/2022	11/15/2022	12/31/2022	1/24/2023	$ (2,041.73)	45.50	69.50	115.00	-0.01%	(0.01)
80	Federal Excise - Alternative Fuels Tax	1/1/2023	2/14/2023	3/31/2023	4/18/2023	$ (1,998.07)	44.50	62.50	107.00	-0.01%	(0.01)
81	Federal Excise - Alternative Fuels Tax	4/1/2023	5/16/2023	6/30/2023	7/12/2023	$ (1,432.92)	45.00	57.00	102.00	-0.01%	(0.01)
82	Federal Heavy Highway Tax	7/1/2022	12/30/2022	6/30/2023	7/5/2023	$ 15,039.42	182.00	187.00	369.00	0.09%	0.33
83	PURTA	1/1/2023	7/2/2023	12/31/2023	5/1/2023	$ 866,025.00	182.00	(62.00)	120.00	5.11%	6.13
84	PURTA	1/1/2023	7/2/2023	12/31/2023	5/1/2023	$ 93,000.00	182.00	(62.00)	120.00	0.55%	0.66
85	PA PUC Assessment	7/1/2022	12/30/2022	6/30/2023	10/10/2022	$ 2,235,182.50	182.00	(81.00)	101.00	13.18%	13.31

Line No.		(A) Type of Tax	(B) Begin of Period	(C) MidPoint Method	(D) End of Period	(E) Payment Date	(F) Amount	(G) Service Lead Time	(H) Payment Lead Time	(I) Total Lead time	(J) Weighting Factor	(K) Weighted Lead Time
86	WV Gas Stored		1/1/2022	7/2/2022	12/31/2022	2/9/2023	$ 72,309.00	182.00	222.00	404.00	0.43%	1.72
87	WV Gas Stored		1/1/2022	7/2/2022	12/31/2022	8/17/2023	$ 72,309.00	182.00	411.00	593.00	0.43%	2.53
88							$ 16,957,248.12					

Calculation of Income Tax Lead Time - State & Federal

Line No.	Period Covered Beginning	Period Covered End	Mid-Point of Period	Date Paid	(Lead) / Lag Days (D) - (C)	Payment Schedule	Dollar Weighted Days
	(A)	(B)	(C)	(D)	(F)	(E)	(G)
	Federal Income Tax						
1	1/1/2022	12/31/2022	7/2/2022	9/15/2022	75.00	25.0%	18.75
2	1/1/2022	12/31/2022	7/2/2022	12/15/2022	166.00	25.0%	41.50
3	1/1/2023	12/31/2023	7/2/2023	4/17/2023	(76.00)	25.0%	(19.00)
4	1/1/2023	12/31/2023	7/2/2023	6/15/2023	(17.00)	25.0%	(4.25)
						100.0%	**37.00**
	State Income Tax						
5	1/1/2022	12/31/2022	7/2/2022	9/15/2022	75.00	22.5%	16.88
6	1/1/2022	12/31/2022	7/2/2022	12/15/2022	166.00	22.5%	37.35
7	1/1/2022	12/31/2022	7/2/2022	4/17/2023	289.00	10.0%	28.90
8	1/1/2023	12/31/2023	7/2/2023	3/15/2023	(109.00)	22.5%	(24.53)
9	1/1/2023	12/31/2023	7/2/2023	6/15/2023	(17.00)	22.5%	(3.83)
						100.0%	**54.78**

Calculation of Interest Expense Lead Time - Both Short Term and Long Term

Line No.	(A) Date of Issuance	(B) Date of Maturity	(C) Payment Date	(D) Start of Period	(E) End of Period	(F) Mid Point of Half	(G) Payment Lead Time	(H) Principal	(I) Interest	(J) Payment	(K) Nominal Net Lead	(L) Weighting Factor	(M) Weighted Lead
1	12/19/2013	12/19/2023	6/19/2023	12/19/2022	6/19/2023	3/20/2023	90.75	$ 144,746,400	4.10%	$ 2,967,301	90.75	11.59%	10.52
2	12/19/2013	12/19/2025	6/19/2023	12/19/2022	6/19/2023	3/20/2023	90.75	$ 110,007,200	4.25%	$ 2,337,653	90.75	8.81%	8.00
3	12/18/2017	12/18/2027	6/18/2023	12/19/2022	6/19/2023	3/20/2023	89.75	$ 178,911,000	3.38%	$ 3,023,596	89.75	14.33%	12.86
4	12/18/2017	12/18/2032	6/18/2023	12/19/2022	6/19/2023	3/20/2023	89.75	$ 178,911,000	3.63%	$ 3,247,235	89.75	14.33%	12.86
5	10/31/2021	4/15/2030	9/30/2023	8/1/2023	8/31/2023	8/16/2023	45.00	$ 183,149,854	2.70%	$ 2,476,186	45.00	14.67%	6.60
6	10/31/2021	4/15/2050	9/30/2023	8/1/2023	8/31/2023	8/16/2023	45.00	$ 219,779,827	3.35%	$ 3,682,411	45.00	17.60%	7.92
7	12/31/2021	5/31/2031	9/30/2023	8/1/2023	8/31/2023	8/16/2023	45.00	$ 65,364,587	2.40%	$ 784,375	45.00	5.24%	2.36
8	12/31/2021	5/31/2052	9/30/2023	8/1/2023	8/31/2023	8/16/2023	45.00	$ 81,705,732	5.30%	$ 2,165,202	45.00	6.54%	2.94
9	10/31/2021	4/15/2030	9/30/2023	8/1/2023	8/31/2023	8/16/2023	45.00	$ 38,636,364	2.70%	$ 522,364	45.00	3.09%	1.39
10	10/31/2021	4/15/2050	9/30/2023	8/1/2023	8/31/2023	8/16/2023	45.00	$ 46,363,636	3.34%	$ 773,137	45.00	3.71%	1.67
11	10/31/2017	10/31/2023	7/31/2023	10/31/2022	7/31/2023	1/30/2023	181.75	$ 909,090	5.99%	$ 27,227	181.75	0.07%	0.13
12	**Historical Test Year - Long Term Debt Outstanding**							**$ 1,248,484,690**		**$ 22,006,686**			**LT DEBT**
									1.76%		**Weighted Expense Lead Time:**		**67.26**

ST Debt from previous month; est invoice on 25th of the month, int "paid" by month end

(A) ST Debt	(B) End of Period	(C) Posting Date	(D) Paid Date	(E) Amount	(F) Service Lead Time	(G) Payment Lead time	(H) Total Lead Time	(I) Weighting Factor	(J) Weighted Lead Time
NOT APPLICABLE									

ST DEBT
Weighted Expense Lead Time: -

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED REBUTTAL TESTIMONY OF
JOHN J. SPANOS
ON BEHALF OF
PEOPLES NATURAL GAS COMPANY, LLC

DATE SERVED: April 18, 2024 Peoples Statement No. 14-R
DATE ADMITTED: _____

PREPARED REBUTTAL TESTIMONY OF
JOHN J. SPANOS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. John J. Spanos. My business address is 207 Senate Avenue, Camp Hill, Pennsylvania.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am associated with the firm of Gannett Fleming Valuation and Rate Consultants, LLC (Gannett Fleming) as President. I have been associated with the firm since June 1986.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 14.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of this testimony is to address and rebut the depreciation expense adjustments set forth by Office of Consumer Advocate ("OCA") witness Dante Mugrace. Mr. Mugrace's position includes adjustments to plant in service amounts, accumulated depreciation balances and depreciation expense for the fully projected future test year ("FPFTY").

Q. WHAT IS THE BASIS FOR OCA'S ADJUSTMENTS TO DEPRECIATION EXPENSE?

A. Mr. Mugrace's adjustments for depreciation expense are the result of his proposal to eliminate the application of inflation factors to some of the capital additions proposed in the rate case. This results in lower plant balances and a lower proposed depreciation expense as of the end of the fully projected future test year, September 30, 2025.

Q. HAS WITNESS MUGRACE RECOMMENDED ADJUSTMENTS TO THE PLANT IN SERVICE AS OF AUGUST 31, 2023, AUGUST 31, 2024 AND SEPTEMBER 30, 2025?

A. Yes. Mr. Mugrace proposes reducing the additions for each of the three test years, thus reducing the year-end plant balances used in the calculations of depreciation expense. These proposed changes, totaling $27,819,503, are summarized by function in Table 1 of Mr. Mugrace's testimony (page 9). Please note that the other proposed changes to rate base are discussed in Peoples Natural Gas Statement No. 5-R – the Rebuttal Testimony of Paul Becker, Peoples Natural Gas Statement No. 6-R – the Rebuttal Testimony of Christine Saball and Peoples Natural Gas Statement No. 11-R – the Rebuttal Testimony of Dawn Folks,

Q. HAS WITNESS MUGRACE RECOMMENDED ADJUSTMENTS TO THE ACCUMULATED DEPRECIATION BALANCE AS OF SEPTEMBER 30, 2025?

A. Yes. While witness Mugrace agrees with the method of development of the accumulated depreciation balances used in the Depreciation Studies, due to his proposed changes in plant, he also proposes an adjustment to the accumulated depreciation amount used in the FPFTY calculation. His proposed reduction of the accumulated depreciation is

approximately $727,743 and is summarized in schedule DM-6 of his testimony (part of Appendix B). He calculates this adjustment by multiplying his proposed changes in plant balance (i.e., the total of changes for all three test years) by the proposed composite depreciation rates from the Company's FPFTY calculations.

Q. WHAT ADJUSTMENT DOES WITNESS MUGRACE PROPOSE TO DEPRECIATION EXPENSE FOR THE FULLY PROJECTED FUTURE TEST YEAR?

A. To determine his proposed adjustment to depreciation expense, witness Mugrace uses the same process he used to determine his adjustment to accumulated depreciation. Thus, his adjustment amount of $727,743 is the same as the adjustment proposed for the accumulated depreciation. This is shown in schedule DM-35 of his testimony.

Q. IS THE CALCULATION OF DEPRECIATION RATES AND EXPENSE FOR FUTURE TEST YEARS AS WITNESS MUGRACE HAS PROPOSED, CORRECT?

A. No, it is not. First, the book reserve is brought forward based on many calculations to annualize the depreciation accruals, retirements, amortization of net salvage, cost of removal, gross salvage, acquisitions and adjustments. The annualized depreciation accruals are determined by calculating the average plant balance for the test year by the depreciation rates for each individual account. The amortization of net salvage is determined based on the incurred cost of removal and gross salvage for the five years prior. The projected retirements, cost of removal and gross salvage are determined on a yearly basis in order to properly establish an end of test yearbook reserve. This is critical in order

to properly annualize the book reserve in a consistent manner to the plant balance. This removes the over or under recovery concerns for new vintages within the year. Once the future test year (August 31, 2024) is determined, the same process must occur for the fully projected future test year (September 30, 2025). Consequently, each account's depreciation rate and expense needs to be calculated on the vintage plant balance and book reserve as of the same date.

Q. FURTHER EXPLAIN WHY WITNESS MUGRACE'S ADJUSTMENTS SHOULD NOT BE CONSIDERED REASONABLE.

A. As mentioned above, his calculations do not properly address the required details of making plant adjustments. When plant additions are adjusted, the specific amount that is changed by account is required in order to properly adjust the development of the book reserve and forecasted expense at the account level because each account is individually developed based on the remaining life calculation. Mr. Mugrace just takes a high level functional rate which not only is inaccurate for the future test year but then is magnified for the fully forecasted future test year. Depreciation requires account by account development of plant balances and book reserve development each year.

Q. CAN YOU SUMMARIZE THE ADJUSTMENTS MADE BY WITNESS MUGRACE?

A. Yes. Witness Mugrace proposes to reduce rate base and, as a result, to reduce depreciation reserve and depreciation expense for the fully projected future test year. His over-simplification of the development of future test year plant in service and accumulated

depreciation balances is inconsistent with the approved standard practices for developing future test year rate base as well as inappropriately develops accumulated depreciation components by mixing factors of different time periods to achieve his desired amounts. His inappropriate calculations should not be used in developing rate base for the fully projected future test year.

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. No.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	
	:	

PREPARED REBUTTAL TESTIMONY OF HEATHER DOYLE-CONLEY VICE PRESIDENT, CUSTOMER OPERATIONS ON BEHALF OF PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: 4-18-2024
DATE ADMITTED: _____

Peoples Statement No. 16-R

PREPARED REBUTTAL TESTIMONY OF
HEATHER DOYLE-CONLEY

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Heather Doyle-Conley. My business address is 375 North Shore Drive, Pittsburgh, PA 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Essential Utilities, Inc. as the Vice President, Customer Operations. In this role, I lead customer operations for Peoples Natural Gas Company LLC[1] ("Peoples", "Peoples Natural Gas" or "the Company") and Aqua Water and Wastewater.

Q. PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE AND YOUR ROLE WITH THE COMPANY.

A. I have been employed by the Company since February of 1990 and have held various positions of increasing responsibility in Customer Service. Currently, as Vice President of Customer Operations, I lead our Customer Operation teams at Aqua (water & wastewater) and Peoples across 10 states with Pennsylvania being our largest customer base. In this role I am responsible for approximately 300 employees across a number of departments including: Contact Centers, Billing, Credit, Collections and Cash Management teams.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?

[1] Peoples Natural Gas Company LLC currently has two tariffed divisions under the PUC, "Peoples Natural Gas Division" and "Peoples Gas Division".

A. No.

Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN ANY REGULATORY PROCEEDING?

A. Yes, I submitted rebuttal testimony and rejoinder testimony in Peoples last base rate proceeding at Docket No. R-2018-3006818.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I will respond to aspects of the direct testimony submitted by Ms. Barbara Alexander and Mr. Roger Colton on behalf of the Office of Consumer Advocate ("OCA") and Mr. Harry Geller on behalf of The Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania ("CAUSE-PA").

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. Yes, I am sponsoring Exhibits HDC-R1, HDC-R2, HDC-R3, HDC-R4 and HDC-R5.

Q. HOW HAVE YOU ARRANGED YOUR REBUTTAL TESTIMONY?

A. I will address the various topics raised by parties in relation to my area of responsibility, denoting each subject by a heading. My testimony will address concerns raised by certain OCA and CAUSE-PA witnesses related to residential security deposits, collections, disconnections, disputes and CAP enrollment.

SECURITY DEPOSITS

Q. PLEASE DESCRIBE THE GENERAL CONCERNS RAISED BY CAUSE-PA WITNESS GELLER, AS YOU UNDERSTAND THEM, RELATED TO RESIDENTIAL SECURITY DEPOSIT.

A. The general concerns asserted by CAUSE-PA witness Geller involve the application of security deposits to low income consumers. On this issue, Mr. Geller states, "The Company has not clarified any process for screening for low income security deposits other than Customer Assistance Program ("CAP") enrollment and receipt of LIHEAP funds.[2]" I would first like to clarify that security deposits are not requested from customers who self-attest to being low income. The Company does not require a customer to complete the CAP enrollment process or to obtain a LIHEAP grant in order to confirm their low income status. With their verbal indication of low income status, security deposits are not requested or billed. If a security deposit exists on an account, perhaps from a prior time period in which the customer was not low income, that deposit would be credited to the account at the time of CAP enrollment.

I do understand the concerns raised by Mr. Geller regarding the settlement commitment from the prior base rate proceeding in which Peoples agreed to review accounts to identify any security deposits held on low income accounts in order for those deposits to be refunded. The review was to occur at least once every six months[3]. Even though Peoples does not request security deposits from low income consumers, based on their verbal indication of their low income status, I recognize that some consumers may

[2] Geller, Page 18, lines 8 and 9.
[3] Geller, Page 17, lines 13 through 16.

have been charged a security deposit at a time when their income was higher. I agree with Mr. Geller that those security deposits, when identified, should be removed from the associated accounts. This year, Peoples pulled and reviewed account data from 2019 to present to identify any security deposits held on low income accounts. Those deposits have been refunded. The Company will commit to implementing a periodic review process by which we ensure the identification and release of any security deposits that may be held by low income households.

Q. WITH RESPECT TO DEPOSITS, WHAT DID OCA WITNESS COLTON SUGGEST IN HIS TESTIMONY?

A. On pages 42-44 of his testimony, Mr. Colton proposed additions to the language the Company's proposed tariff, specifically regarding rules for deposit for residential customers.

Q. DOES THE COMPANY AGREE WITH OCA WITNESS COLTON'S RECOMMENDATIONS REGARDING SECURITY DEPOSITS?

A. Yes. The Company accepts Mr. Colton's recommendations and reflects the tariff language as illustrated by Exhibit DMR-1R, sponsored by Company witness Folks.

Q. WITH ELSE DOES WITNESS COLTON RECOMMEND WITH RESPECT TO DEPOSITS AND NOTICE?

A. Mr. Colton recommended that the Company provide a stand-alone written notice informing customers of their right to enroll in CAP.

Q DOES THE COMPANY AGREE WITH WITNESS COLTON'S NOTICE RECOMMENDATION?

A. No. A notice is not required since the Company already does not charge a deposit when customer reports low income and customers are educated about CAP upon reporting low income. For more background and information about procedures related to deposits, see the documentation attached hereto as Exhibits HDC-R1, HDC-R2 and HDC-R3.

COLLECTIONS

Q. LET'S BEGIN WITH OCA MR. COLTON'S DISCUSSION REGARDING THE BALANCES CARRIED BY CONSUMERS, AND IN PARTICULAR, CONFIRMED LOW INCOME CONSUMERS. WOULD YOU LIKE TO RESPOND TO HIS COMMENTS ON THIS TOPIC?

A. Yes. On page 16 of his testimony, Mr. Colton includes a table reflecting average arrears for residential and confirmed low income consumers. A copy of the table is shown here:

Table 5. Average Arrears: Residential vs. Confirmed Low-Income (2020 – 2022)
(BCS 2022 Report on Universal Service Programs and Collections Performance)

	Residential	Confirmed Low-Income	Ratio (Conf'd LI to Residential)
2020*	$449.90	$617.26	1.37
2021	$466.51	$718.87	1.54
2022	$394.22	$599.51	1.52

* Beginning in 2020, Peoples began reporting combined data for what, in prior years, had been separate reporting for Peoples and for Peoples (Equitable)

Mr. Colton raises a concern about the level of working capital required to support these levels of arrears. I would like to note that during 2020, an extended moratorium was in

place for all residential consumers due to the COVID-19 pandemic. When the moratorium ended at the end of March 2021, customers were offered an additional payment arrangement, regardless of the number of prior payment arrangements, under Pennsylvania Public Utility Commission ("PUC" or "Commission") requirements for pandemic assistance. Balances for residential consumers, both generally and confirmed low income, climbed during 2020 and 2021 while these special provisions were in place and began heading downwards again in 2022. This trend is likely to be seen across all Pennsylvania utilities and is not indicative of the Company under-performing in collections and therefore having a negative impact on working capital.

Mr. Colton also raises the concern that the level of debt carried through these three years is significantly higher for the confirmed low income population than the general residential population. As noted in the testimony of Mr. Geller and Mr. Colton, and responded to in the rebuttal testimony of Ms. Black on behalf of Peoples, the method by which Peoples reported its confirmed low income consumers excluded those who self-attested as low income. As a result, the residential figures shown above by Mr. Colton reflect a cross-section of income levels, including low income customers that did not participate in CAP nor receive a Low Income Home Energy Assistance Program ("LIHEAP") grant. Therefore, when considering the percentage of customers in arrears, the reported confirmed low income group has a much higher percentage of debt than the general population, which includes low income consumers that do not participate in CAP or LIHEAP.

I think it's important to recognize that LIHEAP is structured to provide the highest benefit to those with arrearages. While customers can receive a LIHEAP cash grant based

on income for the household, these grants are limited, typically around $200 or $300 annually. Customers receive higher grants through LIHEAP Crisis when their arrears reach a level that would put them at risk of service termination. Further, customers often enroll in CAP as a result of collections activities, therefore one can assume that CAP customers included in the reported confirmed low income category were payment troubled prior to enrolling in CAP, increasing the likelihood of ongoing arrears.

Q. CONTINUING ON THE TOPIC OF COLLECTIONS, MS. ALEXANDER MADE A RECOMMENDATION IN HER TESTIMONY ON PAGE 7 REGARDING THE HANDLING OF TENANTS IN SHARED PREMISES COLLECTIONS SITUATIONS, ALSO REFERENCING MEDICALS AND PFAs. PLEASE DESCRIBE HER RECOMMENDATION AND SHARE YOUR RESPONSE.

A. Ms. Alexander recommended the following provisions on this topic:[4]

- *Peoples' policies and disclosures should reflect that landlords may not retaliate against their tenants for 1) the tenant exercising their right to pay the utility bill to continue service under the landlord's name, and 2) to recover this payment by deducting the payment from their rental payment.*

- *Peoples should accept from tenants; medical certificates and protection from abuse orders, or court orders issued by a court 1 of competent jurisdiction in the Commonwealth, which provide clear evidence of domestic abuse.*

The above concerns are generally addressed in Peoples' Tenant Notice, Exhibit HDC-R5. The notice advises tenants of their right to pay current changes with the right to deduct from their rent. If the tenant wishes to deduct a payment made toward the utility service from their rent, the tenant would provide that communication to their landlord. Should the landlord call to confirm, our representatives would validate payment was made. Our

[4] Alexander Direct, Page 7.

Customer Service Representatives are trained not to share any personal information. Attached Exhibit HDC-R4, shows the high level of importance the Company places on customer privacy.

In regards to the moratorium recommendation, Peoples does not shut off residential heat customers during December through March, regardless of income. Medicals are offered to tenants as well.

Lastly, I disagree with Ms. Alexander's proposal regarding Protection from Abuse Orders ("PFAs"). PFAs protect the victim of domestic abuse from bills accrued by their abuser and provide other protections, such as an additional notice prior to termination. However, since we are discussing tenants' rights, and the tenant is not responsible for the utility bill, it would not be appropriate for the landlord to receive those protections. I address this in more depth below.

DISCONNECTIONS

Q. OCA'S MR. COLTON IS CONCERNED ABOUT THE DISCONNECTION RATE FOR LOW INCOME HOUSEHOLDS, INCLUDING THE LENGTH OF TIME BETWEEN DISCONNECTION AND RESTORATION OF SERVICE. PLEASE RESPOND TO HIS TESTIMONY ON THIS MATTER.

A. As Mr. Colton notes in his testimony, and I would agree, termination of service is a serious measure and it is an action of last resort. It is always our desire to work with customers with arrearages and assist them in identifying resources, such as LIHEAP, Dollar Energy Fund, CAP or payment arrangements. The steps in our collections process is automated and is based on level of arrearages. Customers receive multiple notifications, including a

written 10 day notice and personal contact attempts prior to termination in compliance with Chapter 56 regulations. If a customer has self-attested to low income status and is not enrolled in CAP, a standalone CAP notice is mailed prior to the termination notice, in order to encourage these customers to enroll in CAP to avoid termination. If no resolution regarding the arrearages has occurred, termination may take place.

Mr. Colton notes that reported confirmed low income consumers remain without service long than other consumers and measures reconnections in increments of 7 days[5]. It is important to note that often low income consumers rely on LIHEAP or the Dollar Energy Fund to restore service. These programs are typically not available during the summer when most terminations of service occur, thus leading to a higher period of time without service.

Q. MR. COLTON RAISES A CONCERN REGARDING TERMINATION OF A PARTICULAR DEMOGRAPHIC OF CUSTOMERS. WOULD YOU LIKE TO ADDRESS THIS?

A. Yes. Mr. Colton completed an analysis of race demographics by zip code across the Company's service territory and correlated that information with statistics on termination of service. He notes that he sees no indication of intentional discrimination[6] on the part of the Company, but concludes that termination for Black households is occurring more often. He recommends a root cause analysis of termination of service in 40 zip codes to identify the reason for the level of termination among Black households.

[5] Colton, Page 20, Chart
[6] Colton, Page 20, Lines 10-13.

Q. DO YOU AGREE WITH THIS RECOMMENDATION?

A. I do not. As I mentioned earlier in my testimony, collections activities, including termination, are strictly arrears based. Mr. Colton noted he did not see any intention that the Company initiates termination of service in a discriminatory manner and Mr. Colton is indeed correct. The Company does not disconnect service based on demographics and does not discriminate.

DISPUTES

Q. MS. ALEXANDER PROVIDED A RECOMMENDATION REGARDING CUSTOMER DISPUTES. PLEASE DESCRIBE THIS RECOMMENDATION AND RESPOND.

A. Ms. Alexander recommends a professionally conducted root cause analysis of the Company's disputes and informal complaints. I do not agree with Ms. Alexander's recommendation in the manner described. Our team of senior customer service representatives, supervisors and managers are constantly and consistently working closely with our training department and IT resources to address issues that arise through the Company dispute process. We take customer satisfaction seriously and already track certain data points, review customer disputes and discuss any needed improvements. As Ms. Alexander notes in her testimony, we have zero percent of disputes not responded to within 30 days[7]. And I would note that our customer satisfaction results also reflect excellent service. As ranked amongst other PA utilities, Peoples is a leader in overall

[7] Alexander, Page 13, Line 21.

customer satisfaction with the highest scores in the last three years, 91% in 2023*, 89% in 2022 and 92% in 2021[8]. For more information on Ms. Alexander's recommendation, please see Statement No. 9-R from witness Rita Black.

CAP ENROLLMENT

Q. PLEASE DESCRIBE THE RECOMMENDATION MADE BY MR. COLTON REGARDING THE USE OF SPEECH ANALYTICS IN IDENTIFYING POTENTIAL CAP ENROLLEES.

A. Peoples agrees with the importance of identifying low-income customers as quickly as possible. The Company stresses the importance of obtaining up-to-date income information to all employees from the time of new-hire training through refresher training that occurs on a regular basis. Peoples Customer Service Representatives are trained and skilled in identifying low income customers and as normal course of business refer customer to CAP. People does not agree that speech analytics is needed to identify potential CAP enrollees. See the rebuttal testimony of Rita Black, pages 9-10 for more information about the many ways the Company works to identify potential CAP enrollees and encourage enrollment.

PFA'S AND MEDICAL CERTIFICATIONS

Q. WHAT DOES OCA WITNESS ALEXANDER RECOMMEND CONCERNING PFA'S AND MEDICAL CERTIFICATES?

[8] I note that 2023 data is still pending. *See* PUC Customer Service Performance Report. https://www.puc.pa.gov/filing-resources/reports/customer-service-performance-reports/

A. On page 25 of her testimony, Ms. Alexander states that Peoples should accept medical certificates and PFAs from tenants. While we do accept medical certificates, we do not accept PFAs. PFAs protect the victim of domestic abuse from bills accrued in the name of their abuser and provide additional notice, such as the 48 hour notice prior to termination. It is not appropriate to provide PFA protections to a landlord because their tenant has a PFA. Peoples already has a process for accepting medicals provided by tenants but does not agree to accept a PFA from a tenant. See Exhibit HDC – R5 regarding medical certificates.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

Residential New Service

Revised: 8-30-2023

PEOPLES

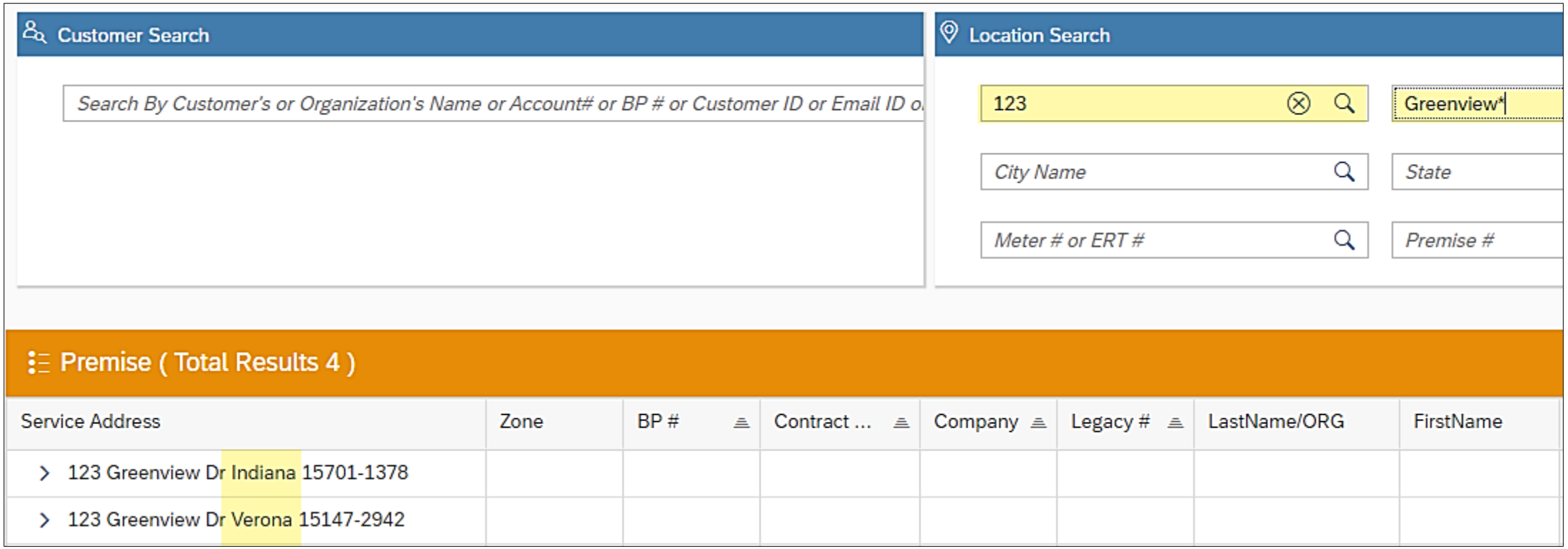
Learning Objectives

After you complete this module, you will be able to:

- List **required information** the caller must provide
- Verify a caller's **identity/credit worthiness**
- Discuss the importance of updating **Income & Occupancy** data
- Explain how a residential **security deposit** is calculated
- List acceptable **options in lieu of a deposit**
- Name different residential account options

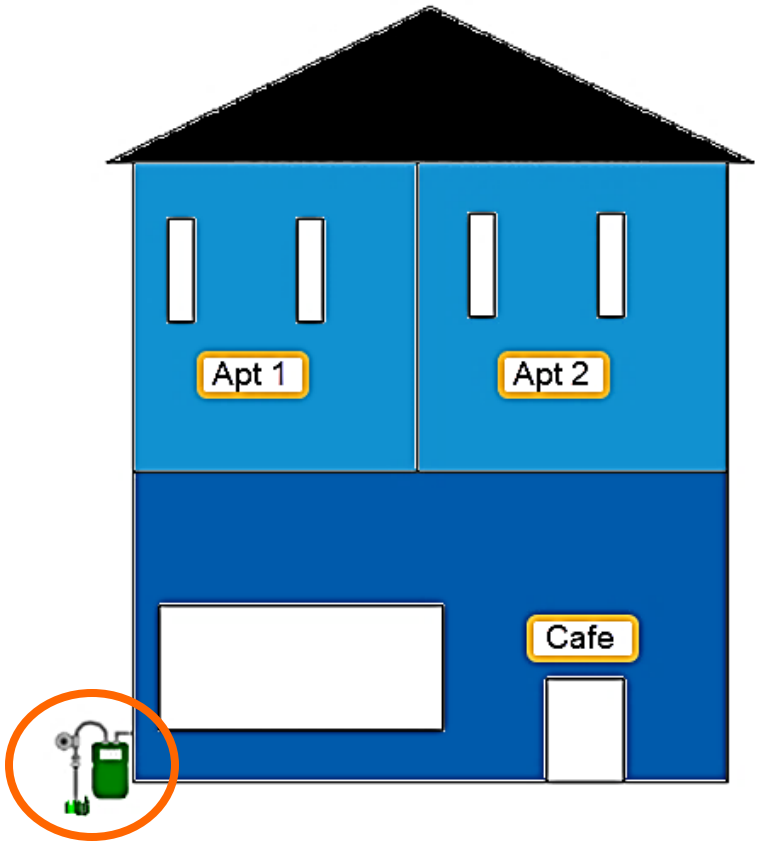
Obtain Service Address

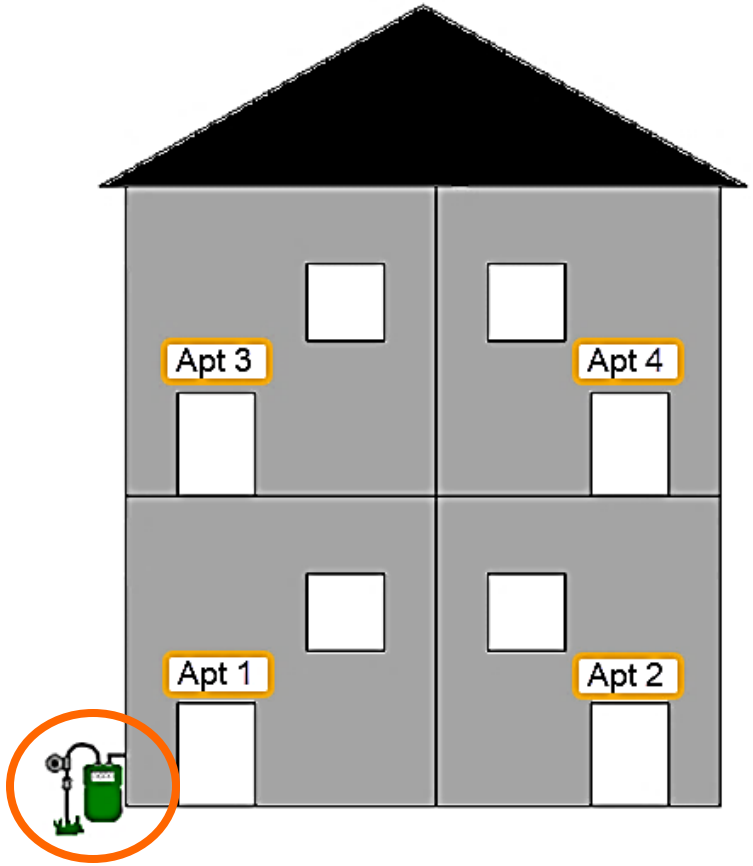
- Make sure we provide service at the address **BEFORE** obtaining other information from the caller
- Verify the **CORRECT** address with the customer

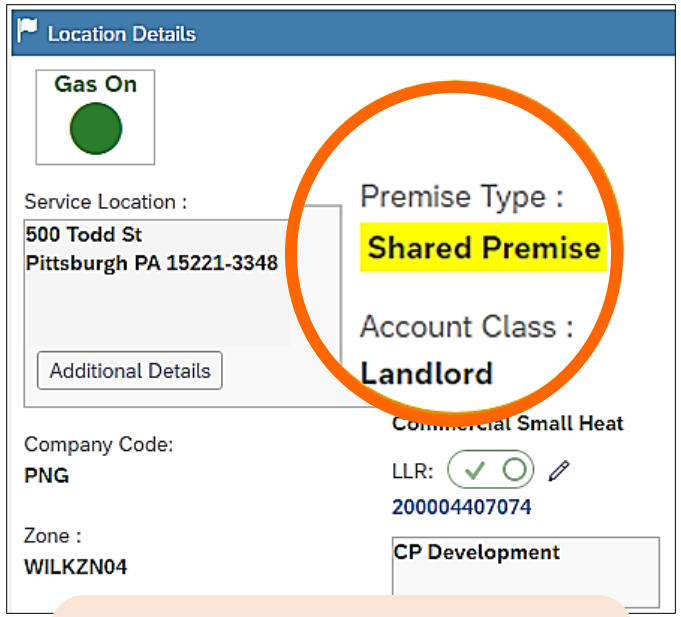


Shared Premise

When a **single gas meter** **supplies gas to multiple units**, service for a **Shared Premise** must be in the **property owner's name**







Never put gas service for a "**House Meter**" in a **tenant's** name

PEOPLES

Shared Premise Start Service = BACK OFFICE

- You cannot Start Service at a **Shared Premise** in EzServ
- Caller must provide **proof of ownership** (Bill of Sale or Deed required)

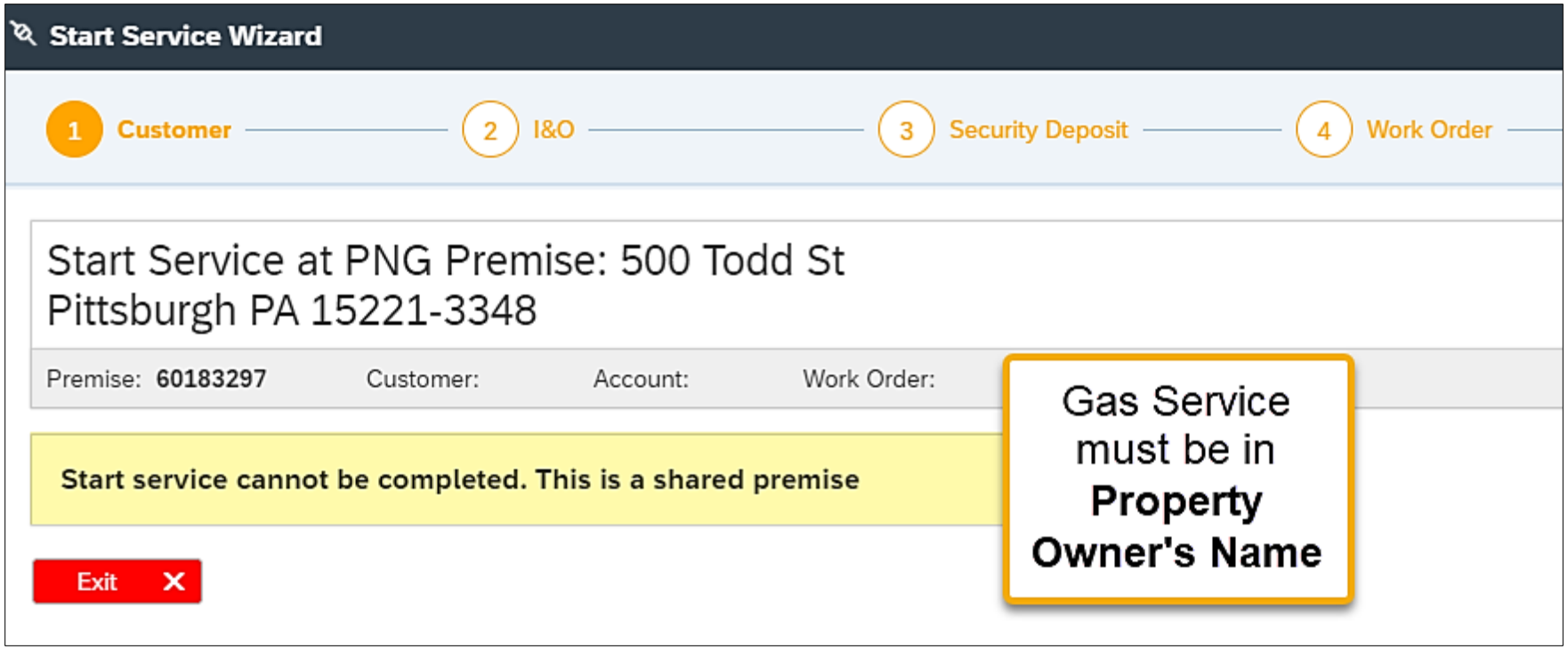


EXHIBIT HDC - R1

Name Switching?

If gas is **OFF** & balance ≥ **$500**, watch for **Name Game Clues**

- **Multiple Calls** for Termination, Reconnection, etc.
- Caller has **Same Last Name** as previous customer
- Caller's **Phone No.** is listed on account
- Caller's **Birth Date** appears in previous customer's Income & Occupancy data
- Caller **previously had service** (final bill past due)
- Caller associated with **Service Address** (via Credit Agency verification)
  - **If caller benefited from gas service**, *they are responsible for unpaid balance* per 66 Pa. C.S. § 1407 (D)

- Term Notice (p. 2) - If service is shut off, ANY adult occupant who has been living at the premise may have to pay all or portions of this bill to have service restored.

PEOPLES

Who can Start Service?

- Accounts must be set up by the **responsible party**
- Accounts are <u>not</u> to be set up by **3rd party callers**

Applicants

- Never had gas service with us
  OR
- Previously had service AND it is past the date on which the final bill should have been paid

Obtain Customer Information

- ❑ Service address with **Zip Code**
- ❑ First and Last Name
- ❑ Social Security Number
- ❑ Full mailing address
- ❑ Good phone number
- ❑ Phone Type (work, cell, etc.)
- ❑ Consent to text
- ❑ Email address

Verify Applicant's Identity

- We must positively identify and determine credit worthiness of **ALL** applicants
- To **verify ID** and credit risk, we run an online query via a **Credit Reporting Agency**
- **Credit risk** is determined using a generally accepted credit scoring method

✓ Pass **Next** *Create the Account and continue to IO*

! Fail **Exit** ✕ *Exit the Wizard and mail a Denial of Service letter*

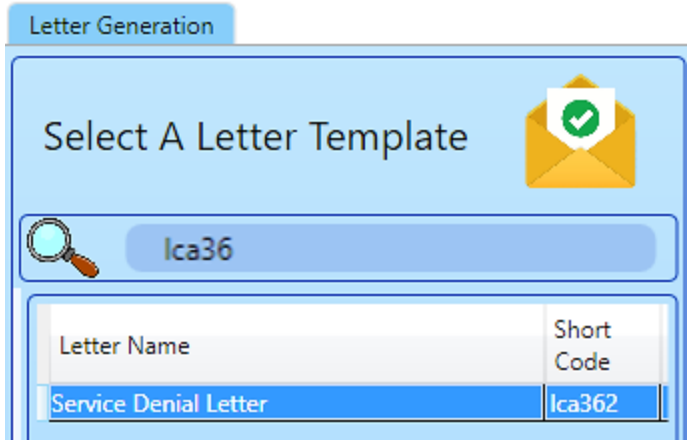
Credit Result:	**Pass**
Security Deposit Required:	**Yes**
Id Match Condition:	**C (Match)**
Vantage Score:	**468**

Positive ID/Credit Check

If ID Check…	Then Caller must…
Discrepancy occurs (No Match, deceased SSN, SSN matched another name, fraud alert, etc.) *or* caller **does not want to provide SSN** or driver's license number	Send copy of **valid Government-issued Photo ID**

Acceptable forms of Government-issued Photo ID:

- Driver's License
- Government Employee ID
- Military ID
- Passport
- Green Card

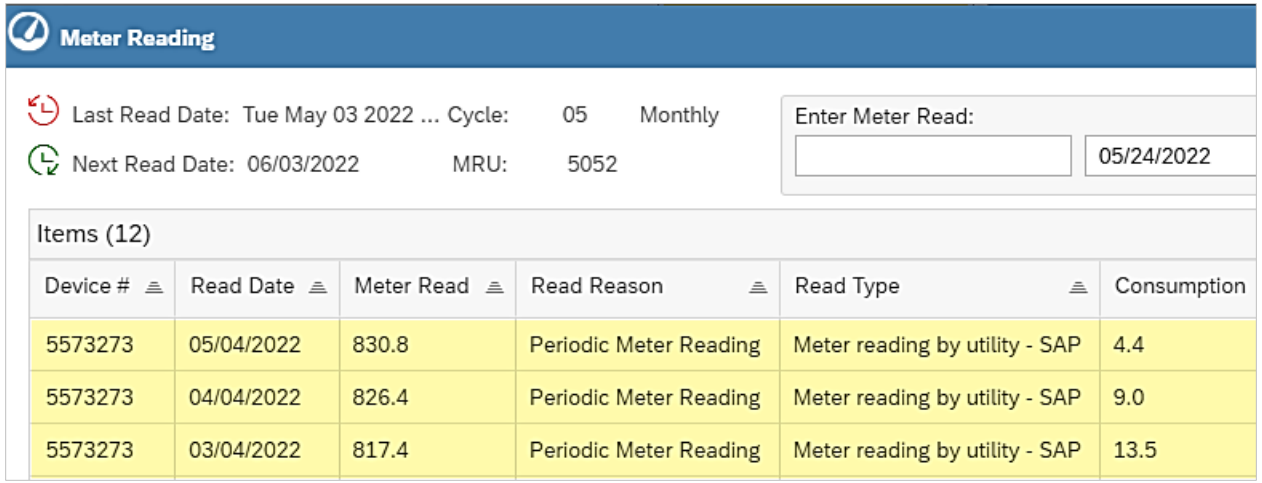


If **PA** must send ID required **Service Denial Letter (lca362)**

Contract Start Date – Soft Close Eligible

If the **PA** property is **eligible for a Soft Close** transfer, a **Move Out Notice** box appears

If the last 3 meter readings were **Actual** reads,
we can estimate gas usage for the customer's initial bill

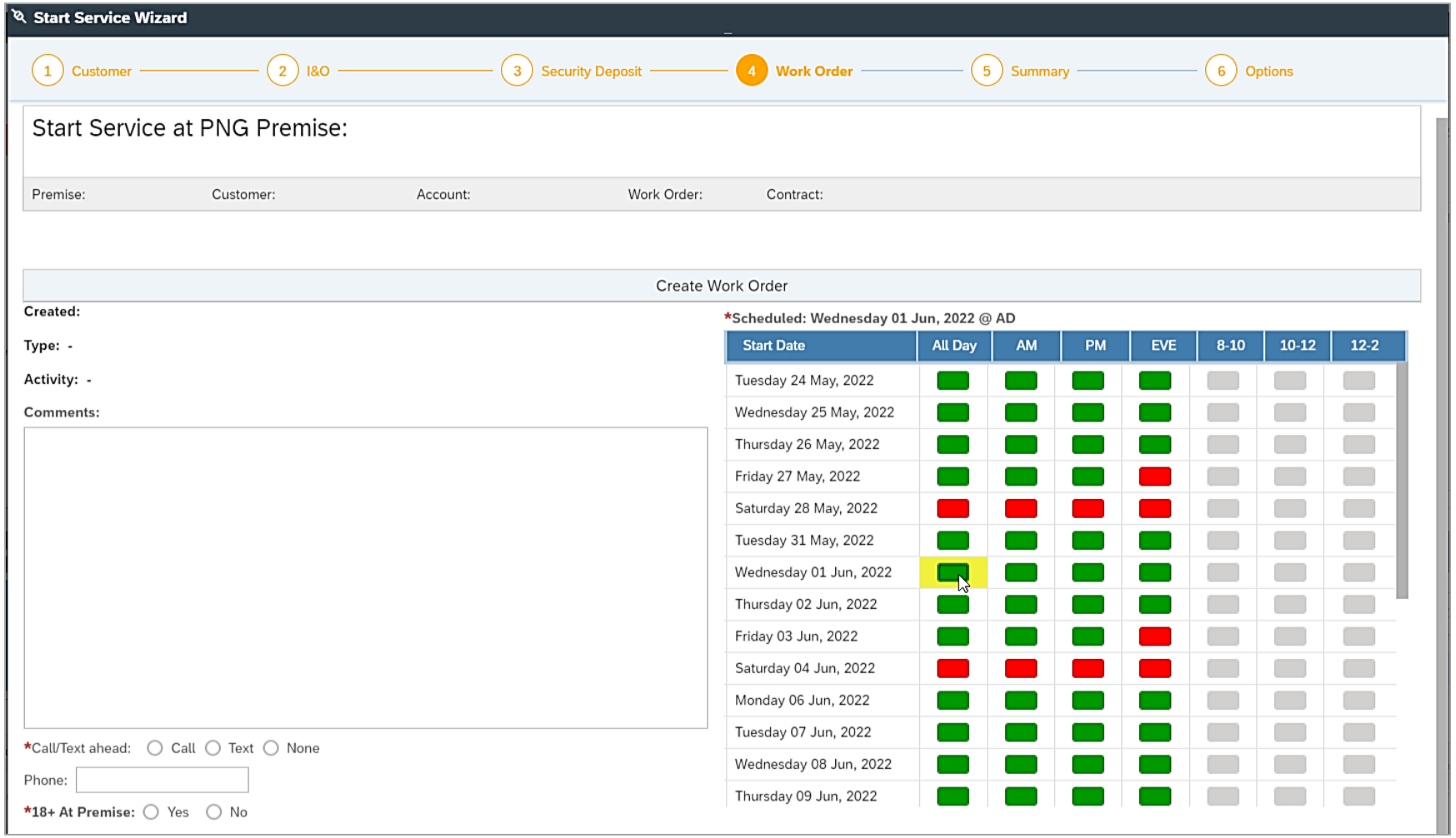


Device #	Read Date	Meter Read	Read Reason	Read Type	Consumption
5573273	05/04/2022	830.8	Periodic Meter Reading	Meter reading by utility - SAP	4.4
5573273	04/04/2022	826.4	Periodic Meter Reading	Meter reading by utility - SAP	9.0
5573273	03/04/2022	817.4	Periodic Meter Reading	Meter reading by utility - SAP	13.5

Contract Start Date – Soft Close Ineligible

If the property is **ineligible** for a **Soft Close** transfer, the **Create Work Order** screen appears

You must select a **Start Date**, indicate if a **Call Ahead** is needed, & if an **adult (18+)** will be at the Premise (**PREM**) to admit our service technician



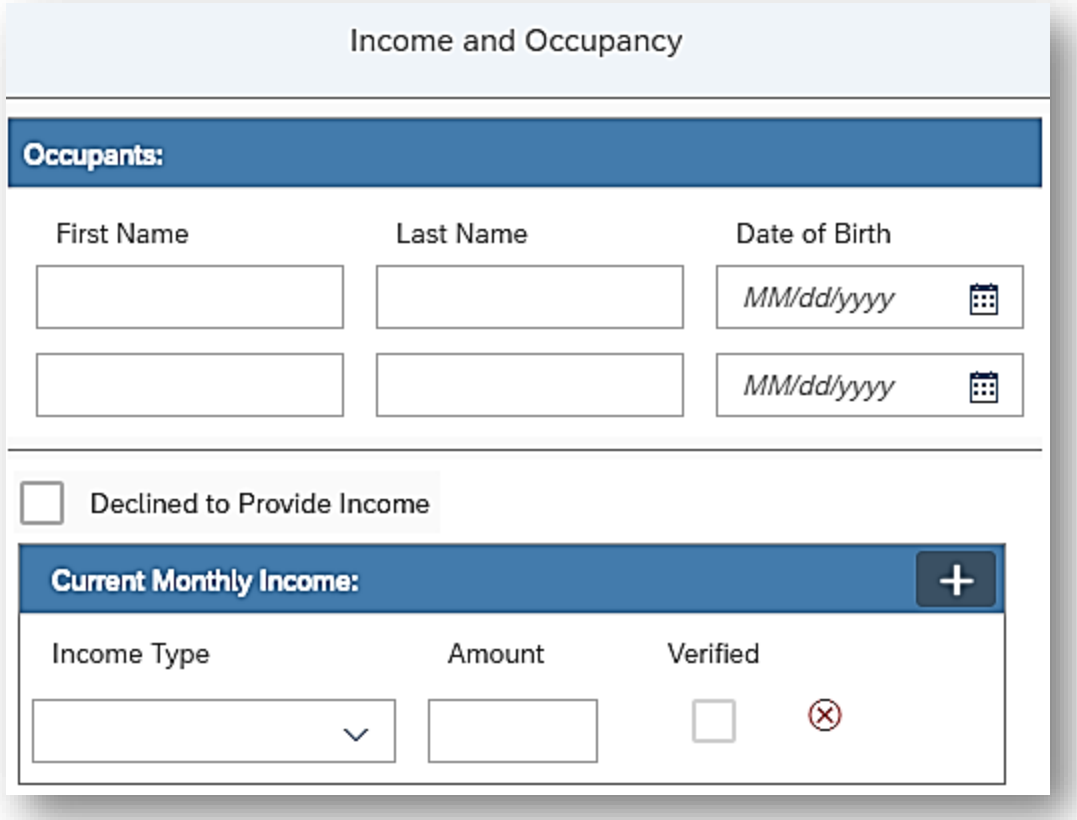
Income & Occupancy

Income

- "What is the household **gross monthly income** before deductions?"

Occupancy

- "**How many people** will be residing at the property?"
- "May I have your **birth date**?"
- "May I please have the names and birthdates for the other occupants?"



Security Deposit Information

- Company needs to secure account/receivables
- Deposit policies must be equitable and nondiscriminatory
- Must be **18 years old** or older; could be emancipated minor
- Based on the **credit risk of the individual** applicant/customer
- Not based on:
  - Economic character of the area
  - Credit history of property
  - Race, sex, national origins, marital status

Waive Security Deposit for…

Income **Level 1** household

Customer: Robert Jones **Heat:**

Income Level: 1 **LIHEAP Cash:**

Occupants: 1 **Special Household Members** (0)

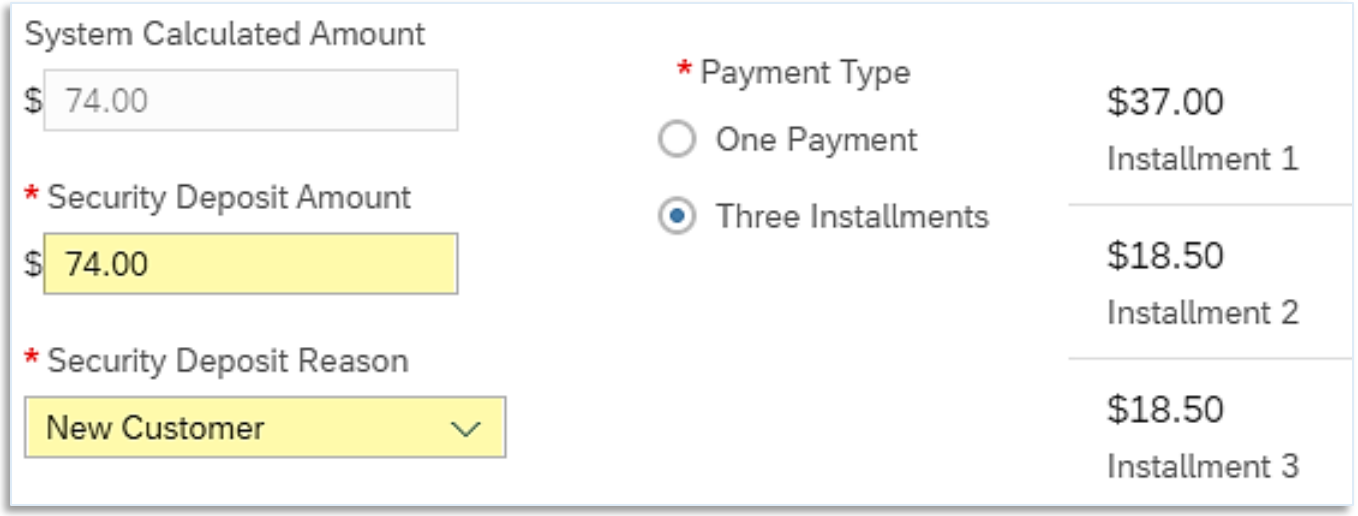
Robert	Jones	03/10/1982

Current Monthly Income: $1000.00

UNEMPLOYMENT	**1000.00**

Residential Security Deposits

- Applied to account after **12 months** of good payments OR after **24 months** regardless of payment history
- Interest applied at competitive rate
- Minimum deposit: **$20.00**
- Billable over 90 days in **3 installments**:
  - 50% first bill
  - 25% second bill
  - 25% third bill



- Must send **Deposit Required for New Applicant Letter (rje005)** to any applicant required to pay a Security Deposit

Residential Security Deposit Calculation

Security deposit is **1/6** of **estimated annual bill** based on **12 month average** premise gas usage

Budget x 2 = Residential Deposit

What Can we Accept in Lieu of a Deposit?

If applicant cannot afford to pay a deposit, they can provide a:

- **3rd party guarantor** (Not for commercial)
- **Surety bond** (Generally Commercial)
- **Letter of credit** (Residential and Commercial)

Call Summary

Recap these details with the caller:

- Start Service Date
- Premise Address
- Work Order/Soft Close
- Mailing Address effective on [Contract Start Date]
- Security Deposit details, if applicable

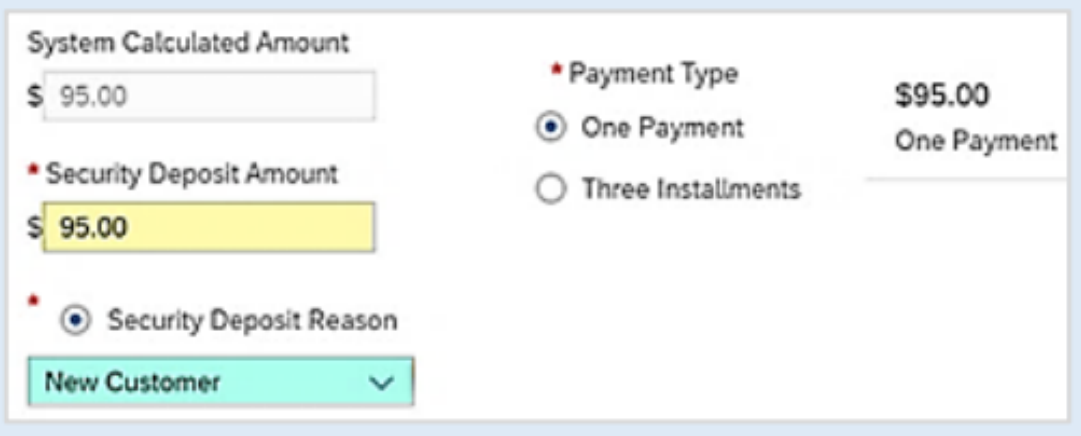
Residential Account Options

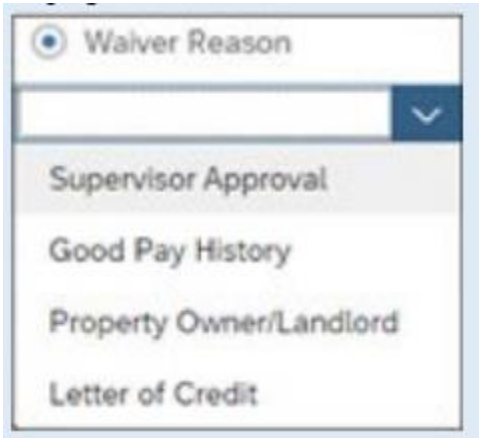
Review these options with the customer:

- Payment Options
- eAccount
  - Customer can register for our online portal.
  - Customer can manage their account online (i.e. register for e-billing, e-notification, etc.)
- Opt Out Choices
- Assistance Program Referrals (CAP, LIHEAP, etc.)
- Budget Billing: makes monthly gas bill more affordable
- Warranty Programs

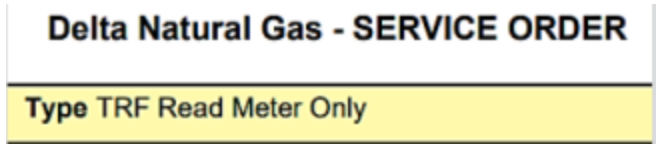
KY Delta Start Service

- Ask for **SSN**; may send Driver's License or show ID at TON
- **$95 Security Deposit** for **new Residential applicant;** due in **one payment**
- Waiver reason **– Supervisor Approval**, if **no deposit**





- No **Soft Close** transfer: **TRF – Read Meter Only**



PEOPLES

Knowledge Check

1. Name two pieces of information we need to obtain from the applicant/customer.
2. How do we **verify a caller's identity**?
3. Why do we update **income and occupancy** information?
4. How is a residential **security deposit** calculated?
5. What can we accept **in lieu of a deposit**?
6. Name two Residential **account options**.

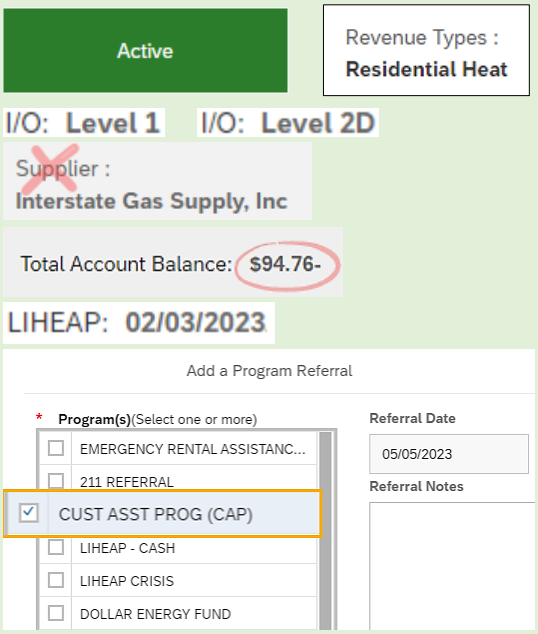
Customer Assistance Program (CAP) QRG

CAP is a payment plan for **PA Residential Heat** customers based on income, *rather than on gas usage*. CAP helps make natural gas more affordable for income-eligible households because customers pay a percentage of their income *or* the Budget amount, *whichever is less*.

Determine Eligibility

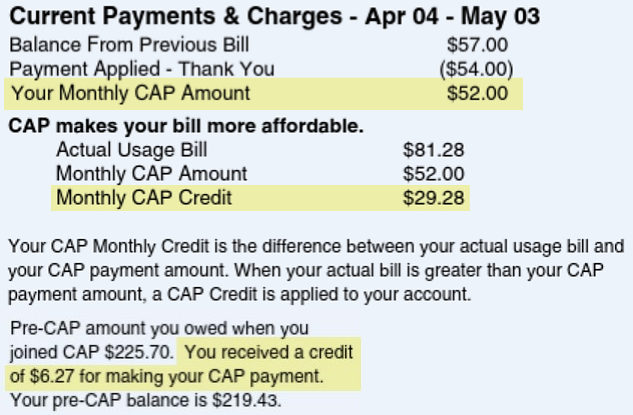
- **Active PA Residential Heat** account
- Household income at or below 150% of Federal Poverty Level (FPL) (I/O: **Level 1**) *or* 151 - 200% FPL (I/O: **Level 2D**) for E CAP
- Customer must **cancel Supplier** contract
- **Credit Balance** must be exhausted prior to CAP Enrollment
- Customer must provide **Proof of Income** (unless they're a recent **LIHEAP** recipient)
- **E CAP**: Apply for DEF Hardship grant before enrollment with outstanding balance of **$800+** when DEF grant is available or **$300** when DEF not available

Note: CAP is not available in **KY** or **WV**



CAP Benefits

- Affordable Budget (**Monthly CAP Amount**)
- **Monthly CAP Credit** (difference between Actual Usage and Monthly CAP Amount)
- **Arrearage Forgiveness**
  Credits given each month CAP Amount is paid to eliminate **Pre-CAP Balance** over 3 years
- No Security Deposit
- No Late Payment Charge (LPC)
- Referrals to other Universal Service Programs



CAP Customers Agree to:

- Pay Monthly CAP Amount on time
- Enroll in weatherization program, if eligible
- Apply for LIHEAP Cash, Crisis or DEF
- Report changes in income &/or household occupancy within 30 days
- Provide monthly meter reading access
- Periodically recertify depending on income type

CAP customers must periodically re-certify with DEF:

Income Type	CAP Recertification
$0 Income	**6 mos.**
Earned Income	**2 yrs.**
Fixed Income/LIHEAP	**3 yrs.**

DEF removes CAP if no income documentation is provided or if income exceeds CAP eligibility limit

CAP Budget Calculation

Tier	Federal Poverty Level	Income Level	Monthly CAP Amount ($25 minimum)
1	At or below 50% FPL	**1**	4% gross mo. income
2	51% - 100% FPL	**1**	5% gross mo. income
3	101% - 150% FPL	**1**	6% gross mo. income
4	151% - 200% FPL	**2D**	11% gross mo. income

EXHIBIT HDC-R3

Quote Full Past Due Balance → **Can't Pay Past Due? Update I/O** → **Level 1** - No Dep *or* RCF / **Level 2D** - No Dep → If **After Final Bill Due Date** send Service Denial Letter **lca362** → **RCF Due Before TCR** → **Bill Dep 50-25-25 Unless Noted**

RESIDENTIAL RECONNECTION - Same Name/Same Address

	Level 1	Level 2D*, 2 or 3	Level 4 (*or* no income provided)
0 Co. PAR or Defaulted on **1 Co. PAR**	1/24 Past Due Bal *or* $0 due w/POI & CAP Enrollment - No RCF - No Sec Dep	1/12 Past Due Bal + RCF [$56 PNGC/EGCP or $50 PTWP] + Sec Dep (billed 50-25-25) ***Lvl 2D-No Dep**: If ***no prior CAP***, apply for DEF *(Make GFP & Provide POI)*; then apply for E-CAP	Full Past Due Bal + RCF [$56 PNGC/EGCP or $50 PTWP] + Sec Dep (billed 50-25-25)

IMPORTANT: If applicable, edit EzServ-created **Credit-Reconnection** Exception Case to **Transfer Remaining Balance** & set up **Reconnection PAR** or **CAP Refresh**

	Level 1 & 2D	Level 2, 3 & 4
Defaulted on **2 Co. PARs** or **1 PUC PAR**	Full Past Due + RCF (**2D only**) *or* if **no prior CAP***, $0 due w/POI & CAP Enrollment* ***DEF will process CAP**. No POI @DEF Agency if LIHEAP accepted for TCR	Full Past Due Bal + RCF [$56 PNGC/EGCP or $50 PTWP] + Sec Dep (billed 50-25-25)

Level 4 Life Event (serious illness, family death or significant event affecting household): **Pay 1/3 to Reconnect** & **Credit Reconnection** Exception Case for **2 mo. Recon PAR**

	No Previous CAP/PAR (**Only PAR = 1 CAP**)	Previous CAP/PAR
Defaulted on **CAP**	• Off ≤ **9 mos.**, Past Due CAP (*See bill BEFORE Final Bill*) *or* 1/24 Past Due Utility Bal (If 1/24 paid, **Fresh Start** CAP #2) • Off > **9 mos.**, 1/24 Past Due Utility Bal (*See Final Bill*)	• Off ≤ **9 mo.**, Past Due CAP (*See bill BEFORE Final Bill*) • Off > **9 mo.**, Past Due Utility Bal (*See Final Bill*)
Landlord/ Tenant (Shared Meter)	**Landlord** Full Past Due Balance + RCF [$115 PNGC/EGCP or $100 PTWP] + Sec Dep (billed 50-25-25)	**Tenant** Tenant Amount + Valid ID + Proof they are tenant (lease, etc.)

RESIDENTIAL TRANSFERS [Same Name/Different Address – Old Address Past Final Due Date w/Past Due Balance]

	Level 1	Level 2D, 2 & 3	Level 4 (or income not provided)
Defaulted on **0** or **1 PAR**	1/24 Past Due Bal No Sec Dep	1/12 Past Due Bal + Sec Dep (billed 50-25-25) • No Dep if Level **2D**	Full Past Due Bal + Sec Dep (billed 50-25-25)

IMPORTANT: If applicable, create **Credit-Balance Transfer** Exception Case to **Transfer Remaining Balance** & set up **Reconnection PAR**

Defaulted on **2 PARs** or **1 PUC PAR**	**Gas OFF** at **New Premise**	Quote Full Old Premise Account Balance (Level **1 & 2D**: offer 1/24 with income proof for CAP enrollment) • Level 1 & 2D = No Dep • Level 2, 3, 4 = Sec Dep (billed 50-25-25)
	Gas ON at **New Premise**	Tell customer Old Premise Account Balance will be transferred to New Account • Level 1 & 2D = No Dep • Level 2, 3, 4 = Sec Dep (billed 50-25-25) • Create **Credit Exception Case** to **Transfer Remaining Balance** to **Reconnection PAR**

COMMERCIAL – GAS OFF

Straight Commercial	Full Past Due Balance + RCF [$115 PNGC/EGCP or $100 PTWP] + Full Sec Dep

EXHIBIT HDC-R3

Reconnection Checklist

Gas OFF - Quote Reconnection Amount

- ☐ **Update I/O** for **ALL customers,** including **CAP** participants
- ☐ If eligible for **Crisis Direct Referral,** add **Direct Referral to Crisis** **Dunning Hold** & add **Program Referral**
- ☐ Provide **$ Amt** required to **Reconnect Service**
- ☐ Display **Security Deposit**
  - If **Paid**, do **not** quote deposit
  - If **Requested**, quote a **new deposit for Income Level 2, 3 or 4 (No Deposit for Level 1 or 2D)**
- ☐ If eligible, refer to **Energy Assistance** (LIHEAP, DEF) & add **Program Referral**
- ☐ If **not** past **Final Bill Due Date**, offer Medical Certification
- ☐ If **Unauthorized Usage** noted, quote **Full Documented Amount**
- ☐ If necessary, instruct customer to **Call Back with Payment Confirmation No.** to schedule reconnection
- ☐ **PA Only:** After **Final Bill Due Date** send **Service Denied Letter (lca362)**
- ☐ **Note Account**: I/R: Quoted $100 (1/12 of $1,200) + $56 RCF for TCR; adv $175 SD to be billed; Sent Denial Ltr

RECONNECTION (TCR Scheduling)

- ☐ **Confirm** or **Update I/O**
- ☐ If gas was turned **"Off in Error"** or **"Medical Received"** appears on account
  - Note work order with reason for **Same Day** & Supervisor who approved
  - Change work order to TODAY's date
- ☐ If full debt OR reconnection amount **PAID,** note **confirmation #** & proceed with reconnection
- ☐ For routine **PA Reconnection, April - Nov**, no special circumstances; we have 3 calendar days for reconnect -- Work order defaults to next day
- ☐ **WV** schedule **SAME** day if PAID **before 4 pm** or on **Friday**
- ☐ **KY** schedule **SAME** day if PAID **before 2 pm**
- ☐ If account is **Final** and reconnection requested at:
  - SAME address, at same service address *Landing* page, click Start/Stop Service > **Reconnect Service**
  - DIFFERENT address, at new service address *Landing* page & click Start/Stop Service > **Start Service**
    - ☐ Create **Credit-Reconnection** Exception Case to Transfer Balance
    - ☐ If **Reconnection PAR** required, add details to **Credit-Reconnection** Exception Case
- ☐ Verify that the **Reconnection Order** dropped
  - Document **Work Order #** in Interaction Record (IR)

Customer Privacy QRG

You are not required to validate caller information for **Emergency Orders**

Caller Identification & Account Verification

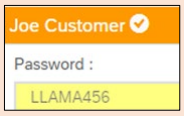
Before you provide ANY information,
ASK the caller to provide information to verify they are who they claim to be…

- May I have the **Service Address** with Zip Code?
- With **whom** am I speaking? (First & Last Name)
- **If the caller claims to be the customer**, **ASK**, "May I have the **last 4 digits** of your **SSN**?"

IMPORTANT: If an account has a **Password**, it must be provided & is acceptable in lieu of last 4 #s of SSN

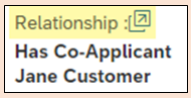
- **If the caller is not the customer**, **ASK**, "What is your relationship to (Customer Name)?"
- Please verify the **phone no.**, **type** & **email**

Password Protected



If an account has a password, provide information only to an authorized party

Co-Applicant



Treat Co-Applicant as the Ratepayer

If an account is not Password Protected & caller is not a Co-Applicant, provide **limited information**:

Ratepayer's Spouse Living at Residence

If the spouse verifies one of the following:

- Last 4 digits of ratepayer's SSN
- Account number
- Date and amount of last payment

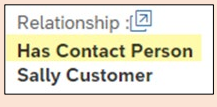
Then you may discuss:

Permitted Items	Spouse may also:
▪ **Amount Due**	❖ Make a payment
▪ **Due Date**	❖ Dispute a bill
▪ **Meter Read Date**	❖ Provide a meter reading
▪ **Usage Amount**	❖ Make a PAR

Note: Do not add a spouse as a co-applicant without the Ratepayer's permission

Family Member or Non-Related Party

Ratepayer MUST provide approval before we can discuss **Permitted Items**



PUC Urges Continued High Vigilance with Questionable Energy Marketing

If a caller asks for an **Account Number**, be careful. Callers might use dubious means to obtain information for unethical reasons.

Social Services Agency

Record agency name, caller's full name & call back phone number. You may provide only the following:

- Amount Due
- Due Date
- Meter Read Date
- Usage Amount
- Gas On or Off
- Termination Date
- Termination Amount
- Restore Service Amount
- Heating Source
- Residential Account
- 90-day Payment History
- CAP Amount
- CAP Recertification Date
- Recent Grants

Real Estate Agent

Provide **Average Annual Usage** Only
Document caller's full name & callback phone no.

Note: Provide ALL other information ONLY to Ratepayer or Co-Applicant.

Attorneys, Police, Courts, etc.

Do **not** provide any account data. Email **Legal@Peoples-gas.com** for requests such as warrants, subpoenas, interrogatories, etc. from:

- Police Officers
- City, State, Federal Agencies
- Regulatory Agencies
- Attorneys, Insurance Carriers
- Private Investigators
- Magistrate Offices, Judges or Courts

If you are not sure if you should send a request to Legal for review, please contact your Supervisor.

Media

Do **not** provide any account data
(See Quality Customer Service QRG **Media** or High Profile Calls section)

Elected or Regulatory Official

Do **not** provide any account data
(See Quality Customer Service QRG Media or **High Profile Calls** section)

EXHIBIT HDC-R5

DATE NOTICE IS RENDERED: _____

PEOPLES An Essential Utilities Company

30 DAY SHUT OFF NOTICE TO TENANTS

WARNING: THE PEOPLES GAS SERVICE TO _____ MAY BE SHUT OFF ON OR AFTER _____ BECAUSE THE PEOPLES GAS BILL HAS NOT BEEN PAID. TO STOP THE SHUT OFF OF YOUR UTILITY SERVICE YOU MUST DO ONE OF THE FOLLOWING:

1. You can join with the other tenants to pay the Peoples Gas bill for the last 30 days preceding this notice or you can pay the total bill yourself. Either way, you do not have to pay a deposit or get credit granted in your name. You will not have to pay your landlord's other debts or the debts of the prior tenants. The utility service will remain in the name of the landlord.
2. You may deduct your payment to Peoples Gas from your rent due now or from future rent. We will tell your landlord how much you paid for that utility service.

ADDITIONAL INFORMATION:

1. The bill which must be paid to continue service is $_____
2. Your landlord cannot punish you if you pay the utility bill. Your landlord cannot raise your rent, cannot evict you, and cannot take action against you in any other way for paying the utility bill and deducting it from your rent. You have the right to recover money damages from the landlord for any damages or injury they cause you for exercising your rights as a result of this notice.
3. You have the right to dispute the accuracy of this bill and have certain other rights. If you would like further information regarding these rights call our business office at **1-800-222-5101** Monday through Friday from 7:00 a.m. to 5:00 p.m.

DO YOU HAVE ANY QUESTIONS?

If you have questions about your utility service, please contact Peoples at **1-800-222-5101.** If, after you talk with us, you are not satisfied, you may contact the Pennsylvania Public Utility Commission at their toll free number, 1-800-692-7380, or write the Residential Termination Unit, Bureau of Consumer Services, Pennsylvania Public Utility Commission, P.O. Box 3265, Harrisburg, PA 17105-3265. YOU SHOULD CALL OR WRITE BEFORE THE SHUTOFF. TO AVOID SHUT OFF, YOUR LETTER TO MUST BE RECEIVED BEFORE THE SHUT OFF DATE.

You must make the payment directly to us by check or money order. **Call our business office at 1-800-222-5101 to discuss this notice.** We require you to provide us some form of current identification, such as a driver's license, photo identification, food stamp or medical assistance identification or any similar document from a local, city, state or federal government agency that contains your name and address. You will also need to provide proof that you are a tenant residing at the property, such as a lease or proof of an exchange of rent.

MEDICAL EMERGENCY NOTICE

Let us know if you or someone living at the residence is **SERIOUSLY ILL.** We will delay the shut off if a licensed physician, physician assistant or nurse practitioner states the shut off will harm the ill person. We will not shut off your gas service during this illness as long as you **provide a letter from your doctor, physician assistant, nurse practitioner certifying the illness.** The letter must include the following information:

- The name of the occupant who resides at the residence who is seriously ill.
- The expected duration of the illness.

- The name, office address and telephone number of the certifying physician, nurse practitioner or physician assistant.
- The signature of the certifying physician, nurse practitioner or physician assistant.

To talk to us, please call our business office at 1-800-222-5101 Monday through Friday from 7:00 a.m. – 5:00 p.m.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	
	:	

PREPARED SURREBUTTAL TESTIMONY OF
RITA F. BLACK
DIRECTOR, COMMUNITY ASSISTANCE PROGRAMS
ESSENTIAL UTILITIES

DATE SERVED: May 3, 2024 Peoples Statement No. 9-SR
DATE ADMITTED: _____

PREPARED SURREBUTTAL TESTIMONY OF
RITA F. BLACK

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Rita F. Black and my business address is located at 375 North Shore Drive, Pittsburgh, Pennsylvania 15212

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Essential Utilities, Inc. as the Director of Community Assistance Programs. In this role, I lead assistance programs for Peoples Natural Gas Company LLC[1] ("Peoples", "Peoples Natural Gas" or "the Company"), Aqua Pennsylvania Inc. and Aqua Pennsylvania Wastewater, Inc. (collectively "Aqua PA"), as well as these companies' affiliated regulated utilities operating in other states.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 9 and my rebuttal testimony is set forth in Peoples Statement No. 9-R.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. I am responding to the rebuttal testimony of Mr. Christopher Keller on behalf of the Bureau of Investigation and Enforcement ("I&E").

[1] Peoples Natural Gas Company LLC currently has two tariffed divisions under the PUC, "Peoples Natural Gas Division" and "Peoples Gas Division".

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. No.

Q. HOW HAVE YOU ARRANGED YOUR SURREBUTTAL TESTIMONY?

A. Mr. Keller provided rebuttal testimony on two topics: Low Income Usage Reduction Program ("LIURP") and the Company's hardship fund. I will address LIURP first, followed by hardship fund.

Q. PLEASE SUMMARIZE MR. KELLER'S TESTIMONY WITH REGARDS TO LIURP.

A. Mr. Keller addresses the Direct Testimony of Mr. Harry Geller on behalf of The Coalition for Affordability Utility Services and Energy Efficiency in Pennsylvania ("CAUSE-PA") and Ms. Jennifer Warabak on behalf of Pennsylvania Weatherization Providers Task Force ("PWPTF") in which both witnesses recommend increases to the Company's LIURP budget. Mr. Keller disagrees with the proposals by Mr. Geller and Ms. Warabak, both of which I addressed in my own Rebuttal Testimony, to increase the LIURP budget. He provides two main reasons for his disagreement. First, he points to the Company's inability to fully utilize its current LIURP budget over the past several years, leading to carryover dollars into subsequent years. Secondly, he notes the Commission recently approved

Peoples' Universal Service and Energy Conservation Plan ("USECP")[2] and that process considered program performance and provisions.[3]

Q. DO YOU AGREE WITH MR. KELLER?

A. I do. As noted in my Rebuttal Testimony, a realistic budget that can be fully utilized in a given year is the most appropriate use of ratepayer funds.[4] Further, I strongly agree with Mr. Keller that the USECP process is the appropriate venue for establishing and approving program budgets as that rigorous process is solely focused on universal service programs and addresses not only funding levels, but eligibility and needs assessments. The USECP process includes input from stakeholders, when combined with input from the Policy team of the Bureau of Consumer Services, results in a thorough review of the Company's programs. As noted in Mr. Keller's testimony, and reflected in responses to discovery in this proceeding, Peoples has been unable to fully expend its LIURP budget in the past several years on a combined basis. While Peoples Natural Gas Division was able to fully spend its budget in 2023, for example, Peoples Gas Division continues to have significant carryover.

Q. LET'S MOVE ON TO THE HARDSHIP FUND. PLEASE SUMMARIZE MR. KELLER'S TESTIMONY ON THIS TOPIC.

---

[2] Peoples Natural Gas Company LLC Universal Service and Energy Conservation Plan for 2019-2024, Docket No. M-2018-3003177 (Order entered on May 12, 2022).

[3] Keller, Page 4, Lines 7 through 13.

[4] Black, Statement 9-R, page 17, lines 13 through 15.

A. Mr. Keller briefly summarizes the proposals to increase the Company's hardship fund, as proposed in the testimony of Witnesses Geller and Warabak. He does not respond directly to the proposals to increase funding, but rather focuses his testimony on this topic to funding sources.

Q. PLEASE DESCRIBE THE FUNDING SOURCES FOR THE COMPANY'S HARDSHIP FUND.

A. The hardship fund receives funding from three sources: 1) shareholder donations; 2) customer donations; and 3) fundraising efforts of its administrator, Dollar Energy Fund ("DEF"). The hardship fund does not receive any funding from ratepayers through rates.

Q. IS THE COMPANY PROPOSING ANY CHANGE TO THE FUNDING SOURCES FOR THE HARDSHIP FUND?

A. No.

Q. WITNESS KELLER STATES HE IS 'NOT ARGUING AGAINST MR. GELLER'S RECOMMENDATION TO INCREASE FUNDING FOR HARDSHIP GRANTS'[5] AND MAKES SIMILAR COMMENTS REGARDING MS. WARABAK'S INCREASE PROPOSAL. WOULD YOU LIKE TO RESPOND TO THE PROPOSALS TO INCREASE FUNDING?

A. Yes. As noted in my Rebuttal testimony, I do not believe an increase is necessary. Hardship programs are funds of last resort. They were developed with the intention of

[5] Keller, Page 5, Lines 3 and 4.

providing a resource when customers fall behind on utility bills and have no other resources with which to pay their utility service. It is important to recall that unlike most utility Customer Assistance Programs ("CAP"), Peoples' CAP includes a Pilot CAP Expansion that allows customers with incomes up to 200% of Federal Poverty Level ("FPL"), the same eligibility threshold of the Company's hardship fund, to participate in CAP and benefit from Arrearage Forgiveness. Therefore, customers with arrears larger than the $500 maximum hardship grant can roll those arrears into CAP and become eligible for Arrearage Forgiveness benefits to extinguish that debt over time. It is my opinion that the Company's suite of universal service programs work together to support customers who face financial difficulty due to any number of factors, from external economic challenges, to changes in Peoples' rates. Therefore, I do not believe an increase to the hardship fund is necessary.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**Docket No. R-2024-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED REJOINDER TESTIMONY OF ANDREW P. WACHTER DIRECTOR OF FINANCE AND REGULATION PNG COMPANIES LLC

DATE SERVED: May 8, 2024
DATE ADMITTED: _____

Peoples Statement No. 2-RJ

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I. INTRODUCTION AND SUMMARY

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Andrew P. Wachter, and my business address is 375 North Shore Drive, Suite 600, Pittsburgh, PA 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed as Director, Finance and Regulation for PNG Companies LLC ("PNG"). I provide services to Peoples Natural Gas Company LLC ("Peoples" or the "Company") and its two divisions: the Peoples Natural Gas Division ("PNGD") and the Peoples Gas Company Division ("PGD"). As Director, Finance and Regulation, I oversee the Rates and Regulatory department and the Financial, Planning and Analysis department at Peoples and its affiliates.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 2, and my rebuttal testimony is set forth in Peoples Statement No. 2-R.

Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?

A. I am presenting testimony in response to certain expense positions and recommendations contained in the surrebuttal testimony submitted by David Evrard, Dante Mugrace, Barbara Alexander and Roger Colton on behalf of the Office of Consumer Advocate ("OCA"), by Christopher Keller and Ethan Cline on behalf of the Bureau of Investigation and Enforcement and Robert D. Knecht of the Office of Small Business Advocate ("OSBA").

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. No.

Q. HOW HAVE YOU ARRANGED YOUR REJOINDER TESTIMONY?

A. I have arranged my rejoinder testimony by subject matter. Where more than one witness has addressed the same subject matter with testimony that I wish to rebut, I address all of that testimony in the same section. I will address the following issues in the order listed.

- Updates to Original Filing
- Gas Supply Expense
- 5-Year Average Annual Increases and Inflation Adjustments
- Labor/Vacancy Adjustments
- Incentive Compensation
- Corporate Insurance
- Employee Expenses

- Travel and Entertainment Expenses
- Company Memberships
- Advertising Expenses
- Materials and Supplies
- Rate Case Expense
- Pension Expense
- PBOP Expense
- Outside Services – Contracted
- Outside Services – IT
- Payment Processing Expenses
- Uncollectible Accounts Expense
- Non-Basic Service From Third Party Programs
- Gathering System Charges
- Synergy Savings
- Cost of Other Proposals
- Public Input Hearing Comments

II. RESPONSE TO OTHER PARTIES ADJUSTMENTS

A. UPDATES TO ORIGINAL FILING

Q. DID ANY PARTY FILE SURREBUTTAL ON YOUR UPDATES TO THE ORIGINAL FILING?

A. Yes, both I&E Witness Keller and OCA witness Mugrace filed Surrebuttal on this matter.

Q. DID I&E WITNESS KELLER ACCEPT YOUR UPDATES TO THE ORIGINAL FILING?

A. Yes. The updates to the original filing were reflected in Mr. Keller's revised revenue requirement.

Q. DID OCA WITNESS MUGRACE'S SURREBUTTAL REFLECT YOUR UPDATES TO THE ORIGINAL FILING?

A. No. Mr. Mugrace did not include my updates to the original filing in his revised revenue requirement because he does not believe that the Company should be allowed to recover specific expenses greater than those originally claimed. (OCA St. No. 2SR, p. 3). Based upon advice from counsel, the Company may make corrections to its claims to justify the revenue requirement it requested in the filing. Under Mr. Mugrace's proposal, the Company could only adjust expenses down but not up. This approach is one-sided and unreasonable. The adjustments were provided to the parties on March 13, 2024, and they should be considered as support for the filed revenue requirement and proposed increase in rates. He also made other assertions about such items, and they will be addressed by topic later in my Rejoinder Testimony.

B. <u>GAS SUPPLY EXPENSE</u>

Q. DID I&E WITNESS CLINE AGREE WITH YOUR REBUTTAL TESTIMONY REGARDING AN INADVERTENT ERROR HE MADE WITH REGARD TO GAS SUPPLY EXPENSE?

A. Yes. I&E Witness Cline agrees that if his proposed adjustment to change the Heating Degree Days ("HDDs") utilized to develop revenue at existing rates is accepted then an additional gas supply expense of $4,548,129 must be included in the case. This increases the proposed rate increase recommended by I&E to $88,073,129 from $83,525,000. I&E's total updated revenue requirement is $89,866,000. (I&E St. No. 1-SR, p. 3)

Please note that the Company continues to disagree with changing the HDDs utilized to develop revenue at existing rates which has been addressed by Company witness Scanlon.

C. 5-YEAR AVERAGE ANNUAL INCREASES AND INFLATION ADJUSTMENTS

Q. DID ANY PARTY FILE SURREBUTTAL ON THE COMPANY'S CORPORATE INSURANCE EXPENSE CLAIM?

A. Yes, OCA witness Mugrace filed Surrebuttal regarding this claim.

Q. DID OCA WITNESS MUGRACE'S SURREBUTTAL CHANGE YOUR POSITION ON YOUR USE OF 5-YEAR AVERAGE ANNUAL INCREASES?

A. No. Mr. Mugrace makes similar arguments to those made in his direct testimony. He introduces the concept that costs stabilized in 2022 (page 13) but the chart on page 15 of my Rebuttal testimony clearly shows otherwise. He also tries to reiterate his position that these are not known and measurable. I disagree for two reasons. First, these are based upon actual experience in these expense categories. Second, I have demonstrated that

inflation is ongoing and has consistently existed since before the 1960s which further validates the increases I proposed (see the chart on page 15 of my Rebuttal Testimony).

D. LABOR/VACANCY ADJUSTMENTS

Q. DID ANY PARTY FILE SURREBUTTAL ON THE COMPANY'S LABOR CLAIM?

A. Yes, both I&E Witness Keller and OCA witness Mugrace filed Surrebuttal on this claim.

Q. DID I&E WITNESS KELLER'S SURREBUTTAL CHANGE YOUR POSITION ON THE YOUR CALCULATION OF THE VACANCY RATE?

A. It does not.

Q. DID OCA WITNESS MUGRACE'S SURREBUTTAL CHANGE YOUR POSITION ON THE YOUR CALCULATION OF THE VACANCY RATE?

A. It does not. First, Mr. Mugrace argues that the error he made by adding his 2.7% vacancy adjustment to our original vacancy credit of 8 employees should be rejected as I did not provide support for the calculation. Mr. Mugrace did not address the concept of the adjustment beyond that. The $247,205 adjustment was calculated by taking the total salary of the eight employees of $564,946 and netted out the capitalization to arrive at the adjustment of $247,205. Please note that the Company inadvertently excluded benefits which are typically around 30% of salary. The Company is not claiming the additional approximately $74,000 of benefits because this oversight was discovered while preparing Rejoinder Testimony. Mr. Mugrace did not remove our as filed vacancy adjustment of

eight employees prior to calculating his adjustment thus necessitating this adjustment. Failure to make this adjustment double counts the 8 vacancies.

Second, he makes further arguments on why adjustments to the original filing (see Section II. A. above) should be rejected as such information was available at the time of filing. Based upon advice from counsel I am not aware that this is the standard.

Third, Mr. Mugrace questions the difference between the $411,967 adjustment and the $538,590. The original adjustment for labor was $411,976 whereas the $538,590 represents the impact including merit and other benefits as provided in the revised Exhibit 4 (see **Exhibit No. APW-R-1** attached to my Rebuttal Testimony).

E. INCENTIVE COMPENSATION

Q. DID ANY PARTY FILE SURREBUTTAL ON THE COMPANY'S INCENTIVE COMPENSATION CLAIM?

A. Yes, OCA witness Mugrace filed Surrebuttal on this claim.

Q. DID OCA WITNESS MUGRACE'S SURREBUTTAL CHANGE YOUR POSITION ON INCENTIVE COMPENSATION EXPENSE BASED UPON FINANCIAL METRICS?

A. It does not. Overall, Mr. Mugrace believes our compensation levels are appropriate. However, he continues to make arguments about the financial metrics and diversity metrics in the Company's incentive compensation plan.

Regarding financial metrics, my rebuttal testimony addresses the arguments he reiterates in his Surrebuttal testimony. However, he introduces a new concept on page 16

of his Surrebuttal testimony where he makes the statement that "It is not the responsibility of ratepayers to be required to recover the costs, as it is clearly the responsibility of the Company to share in the burden of absorbing these costs." I am not aware of any such requirement. Mr. Mugrace has not challenged the overall level of the Company's compensation. Incentive compensation is a necessary part of overall compensation in order to attract and retain employees, which directly benefits customers. Offering incentive compensation is a standard practice among utilities in Pennsylvania.

Q. DID OCA WITNESS MUGRACE'S SURREBUTTAL CHANGE YOUR POSITION ON INCENTIVE COMPENSATION EXPENSE BASED UPON DIVERSITY METRICS?

A. It does not. Our diversity goals were established to promote a workforce that matches the diversity of our customer base and to promote diversity in our procurement practices. By aligning our workforce to our customer base, it enables our employees to better respond to the needs of those communities. Further, procuring goods and services from diverse vendors at comparable costs helps promote a more economically vibrant and diverse community. The information I provided in **Exhibit No. APW-R-5** and **Exhibit No. APW-R-6**, provide sufficient support to refute Mr. Mugrace's claims.

Q. ARE THERE ANY CORRECTIONS/CLARIFICATIONS TO MR. MUGRACE'S SURREBUTTAL TESTIMONY ON INCENTIVE COMPENSATION NECESSARY?

A. Yes. On Line 3 of page 17 of Mr. Mugrace's Surrebuttal testimony he references an amount being a percent of total compensation. That is inaccurate. The percent he quotes is the percentage of total *incentive* compensation rather than total compensation. As such, the percent to total compensation would only be 3.4%.

F. CORPORATE INSURANCE

Q. DID ANY PARTY FILE SURREBUTTAL ON THE COMPANY'S CORPORATE INSURANCE EXPENSE CLAIM?

A. Yes, both I&E Witness Keller and OCA witness Mugrace filed Surrebuttal on this claim.

Q. DID I&E WITNESS KELLER'S OR OCA WITNESS MUGRACE'S SURREBUTTAL CHANGE YOUR POSITION ON CORPORATE INSURANCE EXPENSE?

A. They do not.

G. EMPLOYEE EXPENSES

Q. DID ANY PARTY FILE SURREBUTTAL ON THE EMPLOYEE EXPENSES CLAIM?

A. Yes, OCA witness Mugrace filed Surrebuttal regarding this claim.

Q. DID OCA WITNESS MUGRACE'S SURREBUTTAL CHANGE YOUR POSITION ON EMPLOYEE EXPENSES?

A. It does not.

H. TRAVEL AND ENTERTAINMENT EXPENSES

Q. DID ANY PARTY FILE SURREBUTTAL ON THE COMPANY'S TRAVEL AND ENTERTAINMENT EXPENSE CLAIM?

A. Yes, OCA witness Mugrace filed Surrebuttal regarding this claim.

Q. DID OCA WITNESS MUGRACE'S SURREBUTTAL CHANGE YOUR POSITION ON TRAVEL AND ENTERTAINMENT EXPENSE?

A. It does not.

I. COMPANY MEMBERSHIPS

Q. DID ANY PARTY FILE SURREBUTTAL ON THE COMPANY'S CORPORATE MEMBERSHIPS EXPENSE CLAIM?

A. Yes, OCA witness Mugrace filed Surrebuttal regarding this claim.

Q. DID OCA WITNESS MUGRACE'S SURREBUTTAL CHANGE YOUR POSITION ON COMPANY MEMBERSHIP EXPENSE?

A. It does not. Regarding Mr. Mugrace's reference to the regulations at 66 Pa. C.S. Section 1316.1 none of the memberships cited are fraternal, social or sports clubs thus the regulations do not apply.

J. ADVERTISING EXPENSES

Q. DID ANY PARTY FILE SURREBUTTAL ON THE COMPANY'S ADVERTISING EXPENSE CLAIM?

A. Yes, both I&E Witness Keller and OCA witness Mugrace filed Surrebuttal on this claim.

Q. DID I&E WITNESS KELLER'S SURREBUTTAL CHANGE YOUR POSITION ON COMPANY ADVERTISING EXPENSE?

A. It does not. Mr. Keller introduces the concept that advertising at sporting events is not directly targeted towards our customers thus it should not be recoverable. I am not aware of that as a basis for exclusion. The advertising of key safety and customer messages through its relations with the sports teams create unparalleled exposure for these key messages beyond that which could be achieved through other forms of advertising. Further, the fact that some people who are not customers may also hear the message is irrelevant and has no impact on what is heard by our customers.

Q. DID OCA WITNESS MUGRACE'S SURREBUTTAL CHANGE YOUR POSITION ON COMPANY ADVERTISING EXPENSE?

A. It does not and is related to his "inflation" adjustments and is covered in Section III. C. above.

K. <u>MATERIALS AND SUPPLIES</u>

Q. DID ANY PARTY FILE SURREBUTTAL ON THE COMPANY'S MATERIALS AND SUPPLIES EXPENSE?

A. Yes, OCA witness Mugrace filed Surrebuttal regarding this claim.

Q. DID OCA WITNESS MUGRACE'S SURREBUTTAL CHANGE YOUR POSITION ON MATERIALS AND SUPPLIES EXPENSE?

A. It does not.

L. <u>OTHER O&M</u>

Q. DID ANY PARTY FILE SURREBUTTAL ON THE COMPANY'S OTHER O&M EXPENSE CLAIM?

A. Yes, OCA witness Mugrace filed Surrebuttal regarding this claim.

Q. DID OCA WITNESS MUGRACE'S SURREBUTTAL CHANGE YOUR POSITION ON OTHER O&M EXPENSE?

A. It does not and relates to Incentive Compensation which is addressed in Section II. E. above.

M. <u>RATE CASE EXPENSE</u>

Q. DID ANY PARTY FILE SURREBUTTAL ON THE COMPANY'S RATE CASE EXPENSE CLAIM?

A. Yes, both I&E Witness Keller and OCA witness Mugrace filed Surrebuttal on this claim.

Q. DID I&E WITNESS KELLER'S OR OCA WITNESS MUGRACE'S SURREBUTTAL CHANGE YOUR POSITION ON THE YOUR CLAIM FOR RATE CASE EXPENSES?

A. It does not. I have clearly demonstrated why the Company's rate case filing history should be normalized for unique circumstances that caused extended periods of time between previous rate case filings. These items are unlikely to occur in the next two years.

Q. MR. KELLER CLAIMS ON PAGE 26 OF HIS SURREBUTTAL TESTIMONY THAT THE EQUITABLE ACQUISITION BEING THE REASON FOR THE PERIOD BETWEEN THE 2012 AND 2018 RATE CASE FURTHER SUPPORTS HIS POSITION?

A. I disagree. The Equitable acquisition was a one-time event that is not going to happen in the near future. Thus, as show in **Exhibit No. APW-R-10**, attached to my Rebuttal Testimony clearly demonstrates that my originally proposed amortization is reasonable.

Q. DO YOU AGREE WITH MR. KELLER'S CLAIM REGARDING PRECEDENT APPLYING IN THIS CIRCUMSTANCE?

A. Mr. Keller has not made a clear argument that the facts and circumstances of the referenced cases apply here. The Peoples situation is unique in that the time between the last two base rate case filings were delayed due to unique circumstances that are not expected to occur in the near future. Mr. Keller has not demonstrated that those cases included unique circumstances such as those experienced by Peoples to use a historical approach.

I would argue that history must be normalized for the unique, significant circumstances that may impact the time between rate case proceedings thus appropriately normalizing the expense claim.

N. PENSION EXPENSE

Q. DID ANY PARTY FILE SURREBUTTAL ON THE COMPANY'S PENSION EXPENSE CLAIM?

A. Yes, both I&E Witness Keller and OCA witness Mugrace filed Surrebuttal on this claim.

Q. DID I&E WITNESS KELLER'S SURREBUTTAL CHANGE YOUR CLAIM FOR PENSION EXPENSE?

A. It does not. However, to be clear, although I said that Mr. Keller's proposal is not unreasonable, the Company's original proposal for a 2-year average is most appropriate for developing revenue requirement in this proceeding.

Q. ARE THERE ANY CORRECTIONS YOU WOULD LIKE TO YOUR REBUTTAL TESTIMONY ON PENSION EXPENSE?

A. Yes. I inadvertently had a blank for the number of years in a sentence in my Rebuttal Testimony on page 49, lines 1-3. The full sentence should read:

> *Ratepayers have received the benefit of the Company contributing more to pensions than the accrual amount over the past* ***two***[1] *years.*

[1] Emphasis added.

Q. DID OCA WITNESS MUGRACE'S SURREBUTTAL CHANGE YOUR POSITION ON PENSION EXPENSE?

A. It does not. However, I note that Mr. Mugrace claims that pension funding has not changed since the acquisition is clearly wrong. The chart on lines 3 through 7 on page 28 of Mr. Mugrace's Surrebuttal Testimony shows contributions in excess of $5.3M in 2021 and 2022 (the first two full calendar years after the Essential acquisition on March 16, 2020), whereas the average contributions in 2018 through 2020 were less than $1.2M.

O. PBOP EXPENSE

Q. DID ANY PARTY FILE SURREBUTTAL ON THE COMPANY'S PBOP EXPENSE CLAIM?

A. Yes, both I&E Witness Keller and OCA witness Mugrace filed Surrebuttal on this claim.

Q. DID I&E WITNESS KELLER'S SURREBUTTAL CHANGE YOUR POSITION ON PBOP EXPENSE?

A. It does not. My Direct and Rebuttal testimony clearly show that the Company will be filing more frequent base rate cases and that there were unique circumstances which cause the historical time between base rate cases. As such, the Company's proposed amortization for PBOP expense is appropriate.

Q. DID OCA WITNESS MUGRACE'S SURREBUTTAL CHANGE YOUR POSITION ON PBOP EXPENSE?

A. It does not. Mr. Mugrace just reiterated his position regarding the updates to the original filing as discussed above in Section II. A.

P. OUTSIDE SERVICES – CONTRACTED

Q. DID ANY PARTY FILE SURREBUTTAL ON THE COMPANY'S OUTSIDE SERVICES – CONTRACTED EXPENSE CLAIM?

A. Yes, both I&E Witness Keller and OCA witness Mugrace filed Surrebuttal on this claim. I&E Witness Keller withdrew his proposed adjustment of $810,857 to Outside Services – Contracted.

Q. DID OCA WITNESS MUGRACE'S SURREBUTTAL CHANGE YOUR POSITION ON OUTSIDE SERVICES – CONTRACTED EXPENSE?

A. It does not. However, I note that Mr. Mugrace accepted my annual costs for the Bridge Work, Pressure Tests, Additional Pig Runs, Additional Pipeline Maintenance/Corrosion and Additional Right of Way Maintenance totaling $2,592,893. His other arguments relate to his "inflation" adjustments which are addressed in Section II. C. above.

Q. OUTSIDE SERVICES – IT

Q. DID ANY PARTY FILE SURREBUTTAL ON THE COMPANY'S OUTSIDE SERVICES – IT EXPENSE CLAIM?

A. Yes, OCA witness Mugrace filed Surrebuttal on this claim whereby he rescinded his adjustment of $1,117,500 related to annual costs related to various tax software maintenance, financial software maintenance, document storage, safety, Security

Information and Event Management (SEIM) and HR Information System for employee management.

R. OUTSIDE SERVICES – A&G

Q. DID ANY PARTY FILE SURREBUTTAL ON THE COMPANY'S OUTSIDE SERVICES – A&G EXPENSE CLAIM?

A. No.

S. PAYMENT PROCESSING EXPENSES

Q. DID ANY PARTY FILE SURREBUTTAL ON THE COMPANY'S PAYMENT PROCESSING EXPENSE CLAIM?

A. Yes, OCA witness Mugrace filed Surrebuttal regarding this claim.

Q. DID OCA WITNESS MUGRACE'S SURREBUTTAL CHANGE YOUR POSITION ON PAYMENT PROCESSING EXPENSE?

A. It does not.

T. UNCOLLECTIBLE ACCOUNTS EXPENSE

Q. DID ANY PARTY FILE SURREBUTTAL ON THE COMPANY'S UNCOLLECTIBLE ACCOUNTS EXPENSE CLAIM?

A. Yes, both I&E Witness Keller and OCA witness Mugrace filed Surrebuttal on this claim.

Q. DID I&E WITNESS KELLER'S SURREBUTTAL CHANGE YOUR POSITION ON THE YOUR CLAIM FOR UNCOLLECTIBLE ACCOUNTS EXPENSES?

A. It does not.

Q. DID MR. KELLER APPROPRIATELY SUMMARIZE YOUR REBUTTAL TESTIMONY ON UNCOLLECTIBLE ACCOUNTS EXPENSE?

A. It is not clear so I will reiterate my position word for word.

For the reasons noted in the Company' rebuttal testimony and now surrebuttal testimony, the I&E's *revenue* (emphasis added) adjustments are unreasonable and, in many circumstances, contrary to Commission precedent. Therefore, the I&E's adjustment to uncollectible accounts expense also should not be accepted.

I will note that Mr. Keller and I agree that ultimate recovery should be calculated based on the rate increase approved in this proceeding.

U. NON-BASIC SERVICE FROM THIRD PARTY PROGRAMS

Q. DID ANY PARTY FILE SURREBUTTAL ON YOUR NON-BASIS SERVICE FROM THIRD PARTY PROGRAMS TESTIMONY?

A. Yes, OCA witness Alexander filed Surrebuttal on this matter.

Q. DID OCA WITNESS ALEXANDER'S SURREBUTTAL CHANGE YOUR POSITION ON NON-BASIC SERVICE FROM THIRD PARTY PROGRAM?

A. It does not.

V. GATHERING SYSTEM CHARGES

Q. PLEASE DISCUSS OSBA WITNESS KNECHT'S SURREBUTTAL ON YOUR GATHERING SYSTEM COST REBUTTAL TESTIMONY.

A. Company witness Palombo at Peoples Statement No. 4-RJ and Company Witness Zarumba at Peoples Statement No. 15-RJ will address Mr. Knecht's Surrebuttal Testimony regarding the Gathering System Cost recovery. My Rebuttal Testimony at Peoples Statement No 2-R was specifically limited to addressing the cost o the gathering system base rate costs from customers via the Purchased Gas Costs Mechanism.

Q. DOES MR. KNECHT DISPUTE YOUR REBUTTAL TESTIMONY REGARDING THE RECOVERY OF GATHERING SYSTEM BASE RATES FROM CUSTOMERS VIA THE PURCHASED GAS COSTS MECHANISM?

A. He did not offer an assessment that base rate costs like return and depreciation on Company facilities cannot be recovered in a purchased gas cot proceeding. As mentioned above, Company witness Zarumba at Peoples Statement No. 15-RJ will fully address Mr. Knecht's Surrebuttal Testimony regarding the Gathering System Cost recovery.

W. SYNERGY SAVINGS

Q. DID ANY PARTY FILE SURREBUTTAL ON THE SYNERGY SAVINGS?

A. Yes, OCA Witness Evrard filed Surrebuttal testimony.

Q. DOES MR. EVRARD'S REBUTTAL TESTIMONY CHANGE YOUR POSITION ON SYNERGY SAVINGS?

A. It does not.

X. COST OF OTHER PROPOSALS

Q. DID ANY PARTY FILE SURREBUTTAL ON THE COMPANY'S COST OF OTHER PARTIES' PROGRAM PROPOSALS IN THEIR REBUTTAL TESTIMONY?

A. Yes, both OCA Witness Alexander and OCA witness Colton filed Surrebuttal on this claim.

Q. PLEASE ADDRESS OCA WITNESS ALEXANDER'S SURREBUTTAL ON THE COST OF HER PROPOSALS?

A. First, Ms. Alexander misstates my position. As stated on page 61 of my Rebuttal Testimony, I recognized that the recommendations made by her "would potentially impact costs". I did not definitely say that they would. Rather, I proposed that certain accommodations be made for future recovery of incremental costs incurred as a result of recommendations made by the other parties in this proceeding.

Second, she claims that we have not properly evaluated whether current expenses could be better allocated to achieve her recommendations. I would argue that the burden is on her to support the cost/benefit of her recommendations and that it is not something that should be expected of the Company in this short timeframe.

Q. PLEASE ADDRESS OCA WITNESS COLTON'S SURREBUTTAL ON THE COST OF HIS PROPOSALS?

A. We appreciate the information provided by OCA Witness Colton. However, the Company's request that certain accommodations be made for future recovery of incremental costs incurred as a result of recommendations made by the other parties in this proceeding is reasonable considering the unknown ultimate impact of such recommendations as the Company has not had sufficient time during this proceeding to evaluate the true impact of Mr. Colton's recommendations.

Y. PUBLIC INPUT HEARING COMMENTS

Q. DID ANY **PARTY FILE SURREBUTTAL TESTIMONY REGARDING YOUR PUBLIC HEARING COMMENTS REBUTTAL TESTIMONY?**

A. No.

Z. EMPLOYEE BENEFITS

Q. DID ANY PARTY FILE SURREBUTTAL ON THE COMPANY'S OTHER EMPLOYEE BENEFITS EXPENSE CLAIM?

A. Yes, I&E Witness Keller filed Surrebuttal on this claim.

Q. DID I&E WITNESS KELLER'S SURREBUTTAL CHANGE YOUR POSITION ON OTHER EMPLOYEE BENEFITS EXPENSE?

A. It does not. However, one point of clarity. Mr. Keller claims that I did not address his other employee benefits recommended adjustment. I agree that I did not separately call this out, but they are included within my Rebuttal Testimony arguments regarding Mr.

Keller's vacancy credit adjustment and why all aspects of that adjustment should be rejected.

III. CONCLUSION

Q. DOES THIS CONCLUDE YOUR REJOINDER TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	
	:	

PREPARED REJOINDER TESTIMONY OF
EDWARD A. PALOMBO,
VICE PRESIDENT, RELIABILITY
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: May 8, 2024 Peoples Statement No. 4-RJ
DATE ADMITTED: _____

PREPARED REJOINDER TESTIMONY OF
EDWARD A. PALOMBO

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Edward A. Palombo. My business address is 375 North Shore Drive, Pittsburgh, Pennsylvania 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Peoples Natural Gas Company LLC ("Peoples" or "Company") as Vice President, Reliability.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 4, and my rebuttal testimony is set forth in Peoples Statement No. 4-R.

Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?

A. I will respond to the surrebuttal testimony of PIOGA witnesses Weaver and Jacobs concerning matters raised by Appalachian producers of conventional gas supplies, including rates charged by the Company for delivery of those gas supplies (the "gathering rate") and standards for receipt of that gas into the Companies facilities. I will also respond to matters raised in OSBA witness Knecht's surrebuttal testimony concerning the gathering rate and the Company's proposal to recover a portion the Allegheny Valley Connector ("AVC") costs from Peoples Gas Division customers.

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. Yes, I am sponsoring **Exhibit No. EP-RJ-1.**

Q. HOW HAVE YOU ARRANGED YOUR REJOINDER TESTIMONY?

A. I will addresses the issues by subject and address the surrebuttal comments by each witness on each topic in the same section of my rejoinder testimony.

Q. **PLEASE RESPOND TO PIOGA WITNESS WEAVER'S CONTENTION THAT THE COMPANY HAS NOT COMMITTED TO APPLY A UNIFORM STANDARD FOR THE AMOUNT OF WATER VAPOR IN GAS THAT MAY BE DELIVERED INTO THE COMPANY'S PIPELINES.**

A. Peoples is committed to apply a moisture curve standard uniformly across its entire system. The moisture curve is the amount of moisture in the gas that may be received based on the pressure of the gas at the receipt point. This standard is used because the amount of water vapor that can be retained in the gas increases as the pressure increases. It is important to make certain the water vapor does not liquify and result in corrosion of our pipelines and other facilities.

Q. PLEASE RESPOND TO MR WEAVER'S CONTINUING CONTENTION THAT APPALACHIAN PRODUCERS THAT DELIVER GAS INTO THE PEOPLES GAS DIVISION SYSTEM SHOULD NOT HAVE TO PAY THE GATHERING FEE

BECAUSE THE PIPELINES THE GAS IS DELIVERED INTO ARE NOT CURRENTLY CLASSIFIED AS GATHERING FACILITIES.

A. I will not repeat my prior testimony on this argument other than to say that the facilities are gathering Appalachian gas. More importantly, from my perspective, the gathering fee is designed to recognize that the Company's facilities provide the producers with a way to deliver gas to a market. It is appropriate, in the Company's view, that the producers that deliver into the Peoples Gas Division system pay some of the costs of the Company's facilities since they benefit from those facilities. I think this was recognized by the Commission in the Company's last base rate case when the Commission approved a settlement, joined by PIOGA, that approved the expansion of the Equitable Division gathering rate ("AGS") to the Peoples Natural Gas Division system. It is reasonable to now extend the gathering rate to Peoples Gas Division system which was subsequently combined with Peoples Natural Gas Division.

Q. IN YOUR PRIOR TESTIMONY YOU INDICATED THAT IT IS APPROPRIATE FOR PRODUCERS TO PAY SOME INCREASE IN THE GATHERING RATE TO CONTRIBUTE TO THE INCREASE IN RATES ULTIMATELY ALLOWED IN THIS CASE. PIOGA WITNESS WEAVER CONTENDS THAT THE COMPANY HAS NOT SHOWN THAT THE INCREASE IS CAUSED BY AN INCREASE IN GATHERING SYSTEM COSTS. PLEASE COMMENT.

A. On April 20, 2024, the Company provided data in an interrogatory response that shows that the gathering investment by the Company has increased by $6,422,559 since our last base rate proceeding. This response is provided as my **Exhibit No. EP-RJ-1** to this testimony.

These investments are to improve or replace gathering facilities, which benefit producers. I also note that the Company has not proposed that producers on the Peoples Natural Gas Division system will receive an increased gathering rate, we have proposed only that producers into the Peoples Gas Division system contribute to cost recovery.

Q. PIOGA WITNESS WEAVER ALSO STATES THAT THE COST OF FACILITIES ON THE PEOPLES GAS DIVISION SYSTEM HAVE NOT BEEN INCLUDED IN DEVELOPING THE GATHERING RATE. IS THIS A BASIS FOR NOT APPLYING THE GATHERING RATE TO PRODUCERS INTO THE PEOPLES GAS DIVISION SYSTEM?

A. No, not in my opinion. Adding the cost of the Peoples Gas Division facilities would just increase the costs to be recovered under the gathering rate. The Company already proposes that customers pay most gathering costs and producers pay only about a third of the costs. Also, I note that the Company seeks to combine all costs into one Company with one set of rates for all customers in this proceeding.

Q. OSBA KNECHT RECOMMENDS IN HIS SURREBUTTAL THAT PEOPLES DESIGN GATHERING CHARGES THAT WOULD BE BASED ON WHICH CUSTOMERS RECEIVE THE APPALACHIAN SUPPLIES IN IT NEXT CASE. IS THAT PRACTICAL?

A. As Mr. Knecht suggests, gas purchased by the Company for sales customers already includes the cost for gathering. However, it would be very difficult to track Appalachian gas that flows into marketer/NGS pools and determine what customers ultimately receive

that gas. In addition, it is very difficult to determine which customers ultimately burn local production gas as it varies based upon customer demand. For example, the volumes of local production can extend deeper downstream into the distribution systems and reach more customers when temperatures are warmer than colder temperatures. However, since customer demand can change hourly, daily, weekly, or monthly, it is difficult to determine the extent of customers. In any event, what might be done in a future rate case is not a basis for exempting producers on the Peoples Gas Division system from paying a gathering rate when rates in this case become effective.

Q. PIOGA WITNESS WEAVER REPEATS HIS CONTENTIONS IN HIS DIRECT TESTIMONY THAT PEOPLES HAS A DUTY TO ACCEPT APPALACHIAN GAS AND MANAGE ITS SYSTEMS TO MAXIMIZE THE USE OF SUCH GAS. PLEASE COMMENT.

A. I refer to my rebuttal testimony. Our first responsibility is to provide safe and reliable service to our customers. The Company must balance the cost of local production with many other factors to determine the optimal daily blend of supplies to service customers, such as (but not limited to) interstate contractual obligations, pipeline construction and maintenance activities, customer demand, and upstream supply interruptions. I do not think that restrictive rules to benefit Appalachian supplies provides any additional benefits to customers.

Q. PLEASE RESPOND TO PIOGA WITNESS JACOBS REQUEST TO PROVIDING ADVANCE COMMUNICATIONS TO CURE AND CHANGING ANNUAL INSPECTION REPORTS TO REQUESTS FOR REPORTS.

A. Peoples believes the current annual testing is consistent within the industry and meets the requirements in PA Code Chapter 59 for testing correctors and charts for accuracy. While PA Code Chapter 59 provides for longer testing intervals for various size meters, an annual test or calibration is required at least annually, and a record of the most recent verifications must be kept for each device. To move to a testing interval on an as-requested basis would create additional administrative work in coordinating the test with the integrators, and field technicians as opposed to the current annual test.

Q. PLEASE RESPOND TO OSBA WITNESS KNECHT'S COMMENT IN SURREBUTTAL THAT YOU DID NOT EXPLAIN HOW THE AVC INTERSTATE CAPACITY CAN BE USED TO SERVE CUSTOMERS ON THE PEOPLES GAS DIVISION SYSTEM.

A. As Ms. Scanlon explains in Peoples Statement No. 3, the Company proposes to spread the costs of AVC capacity, which is currently a gas capacity cost charged to only Peoples Natural Gas Division customers, to all customers. As Ms. Scanlon explains this will reduce Peoples Natural Gas Division's bills to customers and increase Peoples Gas Division's bills on a total bill basis and unify rates across the Company.

The Peoples Gas Division system has interconnects with the AVC system that physically deliver gas directly to Peoples Gas Division's pipelines and customers. In addition, Peoples Natural Gas Division has intercompany connections with Peoples Gas

Division that provide the ability to redeliver AVC supplies from Peoples Natural Gas Division to Peoples Gas Division. With a combined gas cost across the system, Peoples is able to use the upstream AVC capacity to supply gas to Peoples Gas customers through normal displacement opportunities.

Q. DOES THIS CONCLUDE YOUR REJOINDER TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-X-005

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples Statement No. 4-R (Palombo) at p.8, lines 3-6.

a. Please identify the portions of the (a) rate increase proposed in this proceeding and (b) rising costs that drive this proceeding that are attributable to producers.

b. Please identify where the portions identified in your response to 3.a. above are included in Peoples Exhibit RNZ-3.

Answer: Overall, the producers contribute to various increases in costs that drive the rate increase. The most explicit indication is the overall cost of the gathering system in this case of $32,982,446 (see Exhibit RNZ-3 attached to Peoples Statement No. 15 - the Direct Testimony of Ralph Zarumba) compared to the cost of the gathering system in the last case of $26,559,887.

Submit Date: 4/29/2024

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
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	:	
v.	:	**Docket No. R-2023-3044549**
	:	
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	
	:	

PREPARED REJOINDER TESTIMONY OF
PAUL BECKER
VICE PRESIDENT, CONSTRUCTION & ENGINEERING
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: May 8, 2024 Peoples Statement No. 5-RJ
DATE ADMITTED: _____

PREPARED REJOINDER TESTIMONY OF
PAUL BECKER

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Paul Becker. My business address is 375 North Shore Drive, Pittsburgh, PA 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Peoples Natural Gas Company LLC ("Peoples" or the "Company") as the Vice President, Construction and Engineering.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 5, and my rebuttal testimony is set forth in Peoples Statement No. 5-R.

Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?

A. I will respond to the Surrebuttal Testimony of OCA witness Mugrace.

Q. HOW HAVE YOU ARRANGED YOUR REJOINDER TESTIMONY?

A. My rejoinder testimony responds to two of Mr. Mugrace's assertions: (1) inflation as it relates to the Company's capital expenditures and (2) the Company's recovery of its capital pipe replacement costs specific to Robinson Township, Pennsylvania.

Q. **ARE YOU SPONSORING ANY EXHIBITS?**

A. Yes. Exhibit PB-1-RJ.

INFLATION IN THE COMPANY'S CAPITAL WORK PLAN

Q. WHAT DOES MR. MUGRACE STATE ABOUT THE COMPANY'S INCLUSION OF INFLATION IN ITS CAPITAL PLAN PROJECTIONS?

A. In his surrebuttal testimony pages 4-5, Mr. Mugrace asserts that any allowance for inflation should not be included for ratemaking purposes and then suggests the Company remove the inflationary amounts from its capital plans because of the uncertainty in both the magnitude of inflation and the timing of Peoples' capital plans.

Q. HOW DO YOU RESPOND TO MR. MUGRACE'S ASSERTS ABOUT INFLATION AND THE COMPANY'S CAPITAL PLAN?

A. If, for argument's sake, inflation was zero or less than projected, Peoples would still invest the total budgeted capital amounts as outlined in the case and would simply complete more projects and replace more mileage. Peoples has an inventory of work and has shown its ability to consistently execute its capital pipeline replacement program (as evidenced by the Company's ability to meet or exceed its LTIIP mileage commitments). Moreover, from an operational perspective, investing and replacing as much old (at risk) pipe with every capital dollar available in the FPFTY in this case, will help improve the safety and reliability of its system, and will improve the environment through reduced emissions.

REPLACEMENT OF BARE STEEL IN THE ROBINSON EVENT

Q. WHAT DOES MR. MUGRACE ASSERT WITH RESPECT TO THE COMPANY'S INCLUSION OF CAPITAL COSTS FOR THE REPLACEMENT OF BARE STEEL PIPE IN ROBINSON?

A. Mr. Mugrace disallows the inclusion of $1.46M of capital invested in the replacement of the bare steel pipes in Robinson because he claims that the replacement would not have occurred in the periods at issue in this case. Mr. Mugrace goes on to state on pages 6-7 of his surrebuttal testimony, that the Company needs to "overcome the fact that, but-for the Robinson incident, the pipeline replacement costs would not be part of this case."

Q. **HOW DOES THE COMPANY RESPOND TO MR. MUGRACE'S ASSERTIONS?**

A. What Mr. Mugrace fails to understand is that even if the Bureau of Investigation and Enforcement's ("I&E") Gas Safety Division had not directed[1] the Company to accelerate the Robinson pipe replacement, Peoples would have invested the $1.46M of capital that it used for Robinson on other bare steel replacement pipe projects during the same time period/capital year. As such, whether it was the Robinson pipes specifically or other bare steel pipes up for replacement in the context of the Company's LTIIP, the Company consistently spends the capital plan amounts on its capital work plans and should be granted recovery of such investments. As mentioned above, the Company has an extensive inventory of work to be done. It is normal course of business for Peoples to adjust the schedule and the portfolio of projects throughout the year to manage the capital, the miles

[1] See Exhibit PB-1-RJ which is an e-mail exchange between the Company and I&E wherein I&E directed the Company to accelerate the replacement of the bare steel in Robinson.

of work, and the priorities of the work. Individual Projects are moved in and out of the schedule routinely and other bare steel pipeline replacement projects would have been executed if not for the request to accelerate the Robinson bare steel projects. Given that other work/projects would have been done with the $1.46M during the same period, there is no net impact.

Q. DO YOU HAVE ANY FURTHER RESPONSE TO MR. MUGRACE ON THIS TOPIC?

A. Yes. I note that not once did Mr. Mugrace question the prudency of the capital investment associated with the replacement of bare steel in Robinson. Mr. Mugrace did not challenge the prudency of this project as he cannot dispute that the replacement of bare steel pipe is necessary work for Peoples. The Company maintains that these costs should be included in rate base as they are prudent investments. The Robinson capital project was prudently incurred in order to maintain the safety and reliability of the Company's natural gas distribution system.

Q. DOES THIS CONCLUDE YOUR REJOINDER TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XXVII-001

Witness: Becker, Paul **Title:** Vice President Construction &Engineering

Question: Reference Peoples Statement No. 5R, pp. 8-9, where witness Paul Becker testifies that “the PUC Gas Safety Division directed Peoples to accelerate the replacement” of bare steel pipe in Robinson for which OCA witness Mugrace recommended exclusion of the replacement cost. Provide any and all documentation demonstrating that the PUC Gas Safety Division directed Peoples to accelerate the replacement.

Answer: Please see attached.

Submit Date: 4/29/2024

Becker, Paul

From: Horensky, Robert <rhorensky@pa.gov>
Sent: Tuesday, May 5, 2020 10:39 AM
To: Gregorini, Joseph
Cc: Palombo, Edward A; Thomas, Robert M; Kline, David; Matse, Matthew; Kanaskie, Richard
Subject: Peoples Gas Overpressure- NRC 1276429-Indiana County- Robinson, PA

[External email: Use caution with links and attachments]

Mr. Gregorini-

On April 29th, an overpressure incident occurred on Peoples Gas's distribution system in Robinson, PA in Indiana County. This was reported to the NRC at #1276429. Peoples Gas over-pressured the mains, services and customer piping while performing maintenance at a district regulator station. The system is a one way feed and supplied by a single regulator with a pressure relief and bypass. This event affected 227 homes and businesses.

Having reviewed the data provided to I&E Safety thus far for the Robinson overpressure incident, I&E Safety has the following safety related requirements of Peoples Gas. This email will be followed by a formal letter that will be sent via email:

1. Accelerate the replacement of the following gas assets:
    a. All bare steel piping affected by the overpressure .
    b. All metallic service lines that are not under Cathodic Protection and any leaking service.
    c. Any asset that has leaked as a result of the overpressure.
2. Repair and replace any customer owned service line that is leaking.
3. Provide I&E Safety with a timeframe of the scheduled replacement work.
4. Continue daily leak survey of all mains and services until all of the bare steel mains and services are replaced .
5. Perform a walking leak survey of all mains and services once weekly until all replacements are complete.
6. Provide Dave Kline and Matt Matse with daily leak survey results. The results should be tabulated and comprehensive.
7. Monitor any post incident appliance failures and develop a program to address.
8. Provide the public in Robinson with an update of the event and Peoples efforts to remediate. Notify this office of this awareness effort.
9. Access any and all structures immediately where piping, or appliances, downstream of the meter or curb valve was, or could have been, affected by overpressure on 4/29.
10. Consider immediate review of low pressure regulator station maintenance policy and procedures.
11. Consider immediate review of low pressure regulator station configurations.
12. Consider immediate review of Operator Qualification training for regulator technicians.
13. Consider immediate review of Quality Assurance/Quality Control for regulator station work involving low pressure systems.
14. Consider immediate review of Quality Assurance/Quality Control for regulator station work involving systems with one way feeds.
15. Continue to work with I&E Safety Engineers during the course of the investigation.

Sincerely,

Rob Horensky, Manager
Safety Division
Bureau of Investigation and Enforcement
Pennsylvania Public Utility Commission
717 497-4711

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED REJOINDER TESTIMONY OF
CHRISTINE SABALL
VICE PRESIDENT, TAX
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: May 8, 2023 Peoples Statement No. 6-RJ
DATE ADMITTED: _____

PREPARED REJOINDER TESTIMONY OF
CHRISTINE SABALL

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Christine Saball, and my business address is 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed as Vice President, Tax for Essential Utilities, Inc. ("Essential"), the parent company of Peoples Natural Gas Company LLC ("Peoples" or the "Company").

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 6, and my rebuttal testimony is set forth in Peoples Statement No. 6-R.

Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?

A. The purpose of my Rejoinder Testimony is to address the Surrebuttal Testimony of OCA Witness, Mr. Mugrace, related to substantiation of the 50% portion of the CTA adjustment requirement for general corporate purposes. In addition, I will address the calculations of the Rate Base ADIT impacts that are a result of his adjustments to Operating income and to Gas Plant in Service/Accumulated Depreciation.

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. No, I am not.

Q. WHY DOES MR. MUGRACE BELIEVE THAT A CTA ADJUSTMENT SHOULD BE INCLUDED IN THE CASE?

A. In OCA Statement 2SR, pages 32-33, Mr. Mugrace states that while I specified how 50% of the differential was used for reliability or infrastructure related investments, the 50% of the differential to be used for general corporate purposes was not specified and is presumed to benefit the Company's shareholders or affiliates and should therefore be included as an adjustment. Mr. Mugrace also believes that ACT 40 requires the Company to provide evidence of actual application of its differential to reliability or infrastructure related investments and its general corporate purposes.

Q. WAS 50% OF THE DIFFERENTIAL USED FOR GENERAL CORPORATE PURPOSES IN ACCORDANCE WITH ACT 40?

A. Yes, it was. The O&M claim in this case in the amount of over $200M constitutes general corporate purposes that far exceed the $27,460 (per OCA Statement 2, Exhibit DM-3) differential, so the ACT 40 requirement is satisfied and the OCA's $27,460 adjustment for the differential should be rejected.

Q. DO YOU AGREE WITH MR. MUGRACE'S BELIEF THAT ACT 40 REQUIRES THE COMPANY TO PROVIDE EVIDENCE OF ACTUAL APPLICATION OF THE DIFFERENTIAL?

A. No, I do not. The Company has been advised by Counsel that OCA's interpretation of Act 40 of 2016, as requiring proof that the CTA amount has been used specifically to reduce ratepayer obligations, has been rejected by the Commission and affirmed by the Commonwealth Court.

Q. DID MR. MUGRACE MAKE ANY ADJUSTMENTS TO RATE BASE ADIT?

A. Yes, he did. In his direct testimony, Exhibit DM-6, Mr. Mugrace proposed an adjustment of $152,826 to the ADIT (decrease to rate base) related to adjustments to gas plant in service and accumulated depreciation. Then in his rebuttal testimony, he revised the ADIT adjustment to be $85,995 (increase to rate base) in Exhibit DM-SR-8, subsequent to the rebuttal testimony that I filed.

Q. DO YOU AGREE WITH MR. MUGRACE'S REVISED ADJUSTMENT TO ADIT?

A. No, I do not. As shown in my Exhibit CLS-2, as a result of being in a taxable loss for federal income tax purposes, any adjustment to ADIT results in an offsetting adjustment to the Federal NOL ADIT Asset for a zero-rate base impact. Mr. Mugrace did not calculate the impact on the Federal NOL ADIT Asset. The $85,995 ADIT adjustment increasing rate base should be removed.

Q. ARE THERE ANY OTHER ISSUES WITH THE TAX CALCULATIONS THAT YOU WOULD LIKE TO ADDRESS?

A. Yes, there is. In his direct testimony, Exhibit DM-6, Mr. Mugrace proposed various adjustments to operating income which resulted in an adjustment to total tax expense. In

my rebuttal testimony, I stated that any change to the deferred income tax in total income tax expense must be carried through to adjust accumulated deferred income taxes (Company Statement No. 6-R, page 4) and calculated a $16,485,401 ADIT adjustment to rate base in Exhibit CLS-3.

Q. DID MR. MUGRACE INCLUDE AN ADJUSTMENT TO ADIT ALONG WITH THE OPERATING INCOME ADJUSTMENTS HE PROPOSED?

A. No, he did not.

Q. DOES THIS CONCLUDE YOUR REJOINDER TESTIMONY AT THIS TIME?

A. Yes, it does. Thank you.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
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v.	:	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED REJOINDER TESTIMONY OF
LUKE RAVENSTAHL
VICE PRESIDENT OF SALES AND MARKETING
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: May 8, 2024 Peoples Statement No. 7-RJ
DATE ADMITTED: _____

PREPARED REJOINDER TESTIMONY OF
LUKE RAVENSTAHL

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Luke Ravenstahl. My business address is 375 North Shore Drive, Pittsburgh, PA 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Peoples Natural Gas Company LLC ("Peoples" or the "Company") as the Vice President of Sales and Marketing.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 7, and my rebuttal testimony is set forth in Peoples Statement No.7-R.

Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?

A. The purpose of my rejoinder testimony is to respond to other parties' surrebuttal testimonies concerning the use of electricity as a competitive alternative. I will specifically respond to the following witnesses:

- I&E Witness Cline – on electricity as a competitive alternative;
- OCA Witness Johnson – on electricity as a competitive alternative and price wars.

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. No.

Q. WHAT DOES I&E WITNESS CLINE ASSERT IN HIS SURREBUTTAL TESTIMONY REGARDING ELECTRICITY AS A COMPETITIVE ALTERNATIVE?

A. I&E Witness Cline continues to recommend that the Commission reject the Company's proposal to include electric service as a viable competitive alternative due to there being "inequity in eligibility for discounted rates from electric service."

Q. DO YOU HAVE ANY FURTHER RESPONSE TO MR. CLINE'S ASSERTION? PLEASE EXPLAIN.

A. Yes. Mr. Cline states that allowing electricity to become a competitive alternative would result in "harm to smaller commercial customers who are unable to afford the investment necessary to switch from natural gas service to electric service." Mr. Cline's assertions only take existing customers into account. Mr. Cline does not address potential applicants or those who are not yet on the Company's system who may desire natural gas service. As an example, the Company's proposal to add electricity as a potential competitive alternative is intended to provide an avenue for an applicant assessing their energy needs to have the ability to choose from all available energy sources and compare them. Moreover, that potential customer should be able to choose between electric and natural gas if that applicant wants. The Company's tariff provision would allow that potential customer to look at all available options and choose what they want and need.

Q. DO YOU HAVE ANY FURTHER COMMENT ON USING ELECTRICITY AS A COMPETITIVE ALTERNATIVE?

A. To address Mr. Cline's concerns regarding inequitable eligibility, the Company would consider limiting the use of electricity as a competitive alternative and apply it only to new applicants or existing customers wishing to add new load. This would allow new applicants or, existing customers expanding their businesses or replacing existing equipment the ability to choose their energy source if indeed that potential user is evaluating the use or expansion of natural gas or electric, for example.

Q. WHAT DOES OCA WITNESS JOHNSON ASSERT IN HIS SURREBUTTAL TESTIMONY ABOUT THE COMPANY'S PROPOSAL TO ADD ELECTRICITY AS A COMPETITIVE ALTERNATIVE?

A. Mr. Johnson claims that since the Company's proposal to add electricity as a competitive alternative would not apply to residential customers, it "may be both inequitable and discriminatory." Mr. Johnson further asserts that the Company's request should be denied.

Q. HOW DO YOU RESPOND TO MR. JOHNSON'S ASSERTIONS ABOUT INEQUITY AND DISCRIMINATION?

A. The Company's proposal is not inequitable and is not discriminatory. Currently, the Company's Tariff Rule 20 is applied to commercial and industrial customers in practice. The Company is not actively seeking to entice customers to move away from existing utility services. With its proposal, the Company is actually seeking to provide equal and

non-discriminatory access to natural gas for new customers or existing customers looking to expand or replace equipment, both of whom who desire natural gas.

Q. DO YOU HAVE ANY FURTHER RESPONSE TO MR. JOHNSON'S ASSERTIONS ABOUT PRICE WARS?

A. The Company's proposal to add electricity as a competitive alternative is intended to promote energy choice for consumers. As noted above, the Company would be amenable to limiting the applicability of this provision to new customers coming onto its system or existing customers looking to add new load or a new natural gas use. Doing so would limit any "price wars" between existing users of natural gas and electric regarding existing load. The applicability of this provision, as an example, would allow a potential new user with new load the ability to choose from all available energy options for its business.

Q. DOES THIS CONCLUDE YOUR REJOINDER TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
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v.	:	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED REJOINDER TESTIMONY OF
RITA F. BLACK
DIRECTOR, COMMUNITY ASSISTANCE PROGRAMS
ESSENTIAL UTILITIES

DATE SERVED:
DATE ADMITTED: _____

Peoples Statement No. 9-RJ

PREPARED REJOINDER TESTIMONY OF
RITA F. BLACK

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Rita F. Black and my business address is located at 375 North Shore Drive, Pittsburgh, Pennsylvania 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Essential Utilities, Inc. as the Director of Community Assistance Programs. In this role, I lead assistance programs for Peoples Natural Gas Company LLC[1] ("Peoples", "Peoples Natural Gas" or "the Company"), Aqua Pennsylvania Inc. and Aqua Pennsylvania Wastewater, Inc. (collectively "Aqua PA"), as well as these companies' affiliated regulated utilities operating in other states.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT, REBUTTAL, AND SURREBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 9, my rebuttal testimony is set forth in Peoples Statement No. 9-R, and my surrebuttal testimony is set forth in Peoples Statement No. 9-SR.

Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?

[1] Peoples Natural Gas Company LLC currently has two tariffed divisions under the PUC, "Peoples Natural Gas Division" and "Peoples Gas Division".

A. I will provide clarification regarding the Company's reporting of confirmed low income ("CLI") customer counts. I will also respond to surrebuttal testimony of Harry Geller on behalf of the Coalition for Affordability Utility Services and Energy Efficiency in Pennsylvania ("CAUSE-PA").

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. No.

Q. HOW HAVE YOU ARRANGED YOUR REJOINDER TESTIMONY?

A. I will first address the confirmed low income count issue that was raised by Mr. Geller and Roger Colton on behalf of the Office of Consumer Advocate ("OCA"). I will then address surrebuttal testimony by Mr. Geller regarding the use of hardship fund dollars.

Q. LET'S BEGIN WITH THE CONFIRMED LOW INCOME COUNT ISSUE. DO YOU HAVE NEW INFORMATION TO SHARE WITH PARTIES REGARDING THIS ISSUE?

A. Yes I do. Preparations for the Universal Service Report are completed by an analyst employed by the Company, using data derived from the Company's customer information system. I met with the analyst to review our 2023 Universal Service Report submission methods. We are currently in the data verification stage of annual reporting with members of the Bureau of Consumer Services ("BCS"). Annually, utilities submit their required reports by April 1. BCS staff review the submissions and reach out to the utilities if they identify any discrepancies or inconsistencies. They also often ask the utility to validate

their submissions before publication. In the case of 2023 data, we are to provide our final verifications and submit any changes by May 14, 2024.

As the analyst and I reviewed the reported information, we identified that the definition of reported CLI that I had been using throughout my testimony was only partially accurate. While we used the limited definition of receipt of Low Income Home Energy Assistance Program ("LIHEAP") and/or Customer Assistance Program ("CAP") participation as proxy for CLI in some particular report responses, the use was extremely limited.

Q. PLEASE CONTINUE.

A. The limited definition was used for the counting of termination notices and reconnections reported. However, the more inclusive definition, including those who provided verbal indication of their low income status, was used in response to all of the other questions. This is important as the main focus of the report is to show both the residential body as a whole and CLI as a sub-set across a number of categories including arrears and payment arrangements.

Q. WITH THIS CLARITY AROUND THE USE OF THE LIMITED DEFINITION, DOES THE COMPANY PLAN TO CORRECT ITS FILED 2023 UNIVERSAL SERVICE COLLECTIONS REPORT?

A. Yes. The analyst is currently working to revise the responses to 2023, on or before the May 14, 2024 deadline, to replace the current counts of termination and reconnection with a full count of customers who have indicated low income status. Further, we identified

that while the majority of the report uses the low income indicator as CLI, we likely missed customers who have received a LIHEAP grant, but have not had contact with the Company to provide verbal indication of their low income status. Therefore, we will ensure those customers are also included in the CLI reporting. The final revised report will be provided not only to BCS, but to parties of this case as an update to CAUSE-PA Set IV Question 5.

Q. ON PAGES 10 AND 11 OF HIS TESTIMONY, MR. GELLER RESPONDS TO YOUR REBUTTAL TESTIMONY REGARDING USING A HARDSHIP GRANT TO PAY DOWN AN ARREARAGE PRIOR TO ENROLLMENT IN CAP. WOULD YOU LIKE TO RESPOND TO HIS TESTIMONY ON THIS TOPIC?

A. Yes. Mr. Geller states, "Peoples should be ordered to apply Hardship Fund grants directly to a CAP or E-CAP[2] applicant or participant's asked-to-pay amount, following full enrollment in the program."[3] He likens this treatment of the rules surrounding LIHEAP payment application for CAP participants. I would first like to clarify that there are two types of LIHEAP payments. The first is LIHEAP cash, which is an income eligible grant based on household composition and income. This grant is not related to arrears and it is intended to support the ongoing payment of utility bills by LIHEAP eligible consumers. For this reason, the LIHEAP cash grant is applied to the CAP ask-to-pay amount only. The second type of LIHEAP grant is the LIHEAP Crisis grant. The Crisis grant is only provided to households with arrears that are facing termination of service or attempting to restore service. LIHEAP Crisis must be posted to the arrears and cannot be used to pay any current

[2] "E-CAP" is a commonly used abbreviation referring to the Company's Pilot CAP Expansion for customers with incomes between 151 and 200% of Federal Poverty Level.

[3] Geller, Page 11, Lines 1 through 3.

portion of a customer's bill. Hardship funds are similar to LIHEAP Crisis in that they are intended to be a fund of last resort to assist customers with arrears. As such, hardship funds should be posted to the arrears that were evaluated when determining eligibility for the grant. This treatment is not only consistent with the handling of LIHEAP payments, it protects non-CAP ratepayers from higher costs related to deferred balances that were intended to be paid by the hardship fund.

Q. MR. GELLER ALSO RAISES A CONCERN THAT PEOPLES LIMITS HARDSHIP FUND GRANTS TO NEW CAP AND E-CAP ENROLLEES. IS THIS ACCURATE?

A. No. Customers that are actively participating in CAP and E-CAP and fall into arrears are eligible to apply for and receive hardship fund grants to pay those arrears.

Q. DOES THIS CONCLUDE YOUR REJOINDER TESTIMONY?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
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PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED REJOINDER TESTIMONY OF DAWN M. FOLKS SENIOR FINANCE AND RATES ANALYST ON BEHALF OF PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: May 8, 2024
DATE ADMITTED:

Peoples Statement No. 11-RJ

PREPARED REJOINDER TESTIMONY OF
DAWN M. FOLKS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Dawn M. Folks. My business address is 375 North Shore Drive, Pittsburgh, PA 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by PNG Companies LLC ("PNG Companies" or "PNG") as a Finance and Rates Analyst. I provide rates and regulatory services for Peoples Natural Gas Company LLC ("Company").

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 11, and my rebuttal testimony is set forth in Peoples Statement No. 11-R.

Q. HAVE YOU REVIEWED THE DIRECT AND REBUTTAL TESTIMONY SUBMITTED BY OTHER PARTIES?

A. Yes. I have reviewed the Surrebuttal Testimony submitted by Robert Knecht on behalf of the Office of Small Business Advocate ("OSBA").

Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?

A. The purpose of my Rejoinder Testimony is in response to Mr. Knecht's Surrebuttal Testimony, specifically on Design Day Demand Allocator.

Q. DID MR. KNECHT RESPOND TO YOUR REBUTTAL TESTIMONY?

A. Yes. I explained in my rebuttal testimony that the peak day data originally supplied in Exhibit 17 COS 10, was derived from actual send out data and then spread by rate class using percentage allocation from an average day. It was assumed by Mr. Knecht that the Company supplied actual data since the Company does have some daily metered LGS customers. While it is true that the Company does have a few LGS customer that are daily metered, we do not have the data available for the entire rate class. Therefore, while the total send out is in fact accurate and reliable, the spread by rate classes is estimated because there is no obvious way to recognize data by rate class without daily metered data by class. Therefore, I pointed out the inaccuracy of using this specific LGS data spread in Mr. Knecht's calculations because it was using an average day spread. In rebuttal, I supplied Exhibit DMF-3R, which gave Mr. Knecht the new data spread that used design day allocation factors instead of average day allocation factors which was more appropriate to use in the ACOSS. Mr. Knecht accepted my rebuttal testimony and modified his surrebuttal ACOSS to use the Rate LGS design Day demand values developed by the Company.

In responding to my testimony, Mr. Knecht states that I claimed the Company's filing was "inaccurate and unreliable." (OSBA St. No. 1S, p. 8.) I disagree with this characterization for the reasons that I explain above.

Q. DOES THIS CONCLUDE YOUR REJOINDER TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED REJOINDER TESTIMONY OF JOHN J. SPANOS ON BEHALF OF PEOPLES NATURAL GAS COMPANY, LLC

DATE SERVED: May 8, 2024
DATE ADMITTED: _____

Peoples Statement No. 14-RJ

PREPARED REJOINDER TESTIMONY OF
JOHN J. SPANOS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. John J. Spanos. My business address is 207 Senate Avenue, Camp Hill, Pennsylvania.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am associated with the firm of Gannett Fleming Valuation and Rate Consultants, LLC (Gannett Fleming) as President. I have been associated with the firm since June 1986.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony is set forth in Peoples Statement No. 14, and my rebuttal testimony is set forth in Peoples Statement No. 14-R.

Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?

A. I will address the surrebuttal testimony of Office of Consumer Advocate("OCA") Witness Dante Mugrace related to the proper manner at which to update the accumulated depreciation and depreciation expense. Although, I do not agree with the plant adjustments witness Mugrace has made that is not what I will address. My testimony will address his discussion related to use of a composite functional rate for his reduction in depreciation expense and accumulated depreciation.

Q. IS THE ACCUMULATED DEPRECIATION AND DEPRECIATION EXPENSE DEVELOPED BASED ON AN ACCOUNT LEVEL?

A. Yes. There is a detailed depreciation calculation that is affected by the plant additions and retirements by account which leads to the development of the annual expense and accumulated depreciation (book reserve) that is utilized in the remaining life calculation for each account. Therefore, additions to some accounts affect the book reserve differently than other accounts. For example, reducing the plant additions for a long lived account has a smaller impact on the accumulated depreciation than would reducing the plant additions for a short lived account. Consequently, if the accumulated depreciation has not been adjusted consistent with the change in plant balances then the impact of depreciation expense will not be accurate.

Q. DO CHANGES TO THE PLANT AND ACCUMULATED DEPRECIATION FOR THE FUTURE TEST YEAR AFFECT THE FULLY FORECASTED TEST YEAR?

A. Yes. The rates from the future test year are utilized to develop the accumulated depreciation for the fully forecasted test year so the improper development by using the composite functional rate gets magnified when incorporating the development in the new year. Consequently, witness Mugrace's opinion that composite functional rates for depreciation being okay because it is utilized in other areas is not appropriate and creates inaccurate results.

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. No.

Q. DOES THIS CONCLUDE YOUR REJOINDER TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	
	:	

PREPARED REJOINDER TESTIMONY OF HEATHER DOYLE-CONLEY VICE PRESIDENT, CUSTOMER OPERATIONS ON BEHALF OF PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED:
DATE ADMITTED: _____

Peoples Statement No. 16-RJ

PREPARED REJOINDER TESTIMONY OF
HEATHER DOYLE-CONLEY

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Heather Doyle-Conley. My business address is 375 North Shore Drive, Pittsburgh, PA 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Essential Utilities, Inc. as the Vice President, Customer Operations. In this role, I lead customer operations for Peoples Natural Gas Company LLC[1] ("Peoples", "Peoples Natural Gas" or "the Company") and Aqua Water and Wastewater.

Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN THIS PROCEEDING?

A. Yes, my rebuttal testimony is set forth in Peoples Statement No. 16-R. I did not submit direct testimony in this proceeding.

Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?

A. I will respond to particular aspects of the surrebuttal testimony of witnesses Barbara Alexander and Roger Colton, on behalf of the Office of Consumer Advocate ("OCA") and Harry Geller, on behalf of the Coalition For Affordable Utility Services and Energy Efficiency in Pennsylvania ("CAUSE-PA").

[1] Peoples Natural Gas Company LLC currently has two tariffed divisions under the PUC, "Peoples Natural Gas Division" and "Peoples Gas Division".

Q. ARE YOU SPONSORING ANY ADDITIONAL EXHIBITS?

A. No.

Q. HOW HAVE YOU ARRANGED YOUR REJOINDER TESTIMONY?

A. I will first respond to Ms. Alexander, followed by Mr. Colton and Mr. Geller.

Q. IN HER SURREBUTTAL TESTIMONY, MS. ALEXANDER STATES, "SECOND, IF PEOPLES IS WILLING TO PROVIDE MEDICAL EMERGENCY RIGHTS TO A TENANT, THERE IS NO BASIS FOR REFUSING TO PROVIDE THE PFA RIGHTS."[2] WOULD YOU LIKE TO RESPOND?

A. Yes. Medical certificates and the protections available to utility consumers with active protection from abuse orders are functionally different. A medical certificate is submitted by a medical provider when an occupant of a residence has a serious medical condition or a condition that requires continuation of service to treat the condition. If a tenant has such a medical condition and a valid medical certification is provided, it is wholly appropriate for Peoples to honor such a certificate. The Statement of purpose and policy for PFAs, as found in §56.251, states "…These subchapters establish and enforce uniform, fair and equitable residential public utility service standards governing eligibility criteria, credit and deposit practices, and account billing, termination and customer complaint procedures." A tenant does not have an obligation to pay the utility bill in the name of the landlord, therefore the protections provided by a PFA are not necessary.

[2] Alexander, Page 13, lines 5 and 6

Q. MOVING ON TO MR. COLTON'S TESTIMONY, ON PAGE 10 OF HIS SURREBUTTAL TESTIMONY HE AGAIN RAISES A CONCERN REGARDING "THE RACIALLY DISPARATE IMPACT OF PEOPLES NONPAYMENT SERVICE DISCONNECTIONS."[3] WOULD YOU LIKE TO RESPOND?

A. Yes. I believe it is helpful to describe the collections process in more detail than previously provided in my rebuttal testimony. The collections process is automated. It first identifies accounts with arrears that have reached a threshold for potential disconnection of service. Any account that exceeds the threshold would first receive a notice of disconnection that provides not only the amount of arrears, but also offers information to the customer about contacting the Company to discuss payment arrangements, provide a medical certificate and to contact the Pennsylvania Public Utility Commission. The notice also includes information on available cash assistance, such as the Company's hardship fund and the Low Income Home Energy Program ("LIHEAP"). If customers do not respond to the notice, the account moves into the next step which is personal contact. Personal contact attempts can be made via telephone or field visit, depending on the availability of a working phone number for the household. If the account arrears have not yet been addressed, the account will finally move to the creation of a service order for field service teams to disconnect the gas service. This is a color-blind process that does not consider any demographical information about the customer or the area in which the customer resides.

Q. ON PAGE 11, LINE 17 OF HIS TESTIMONY, HE STATES "PEOPLES EXPLICITLY ACKNOWLEDGES THAT CONDUCT COULD BE

[3] Colton, Page 10, Lines 14 and 15.

DISCRIMINATORY, EVEN IF THERE IS A LACK OF ANY INTENTIONAL DISCRIMINATION AND THAT SUCH DISCRIMINATION WOULD BE INAPPROPRIATE." DO YOU AGREE WITH HIS CHARACTERIZATION?

A. No, I do not. In that section of his testimony, Mr. Colton appears to connect our agreement to change tariff language that describes the Company's security deposit evaluation process to indicate that the Company 'explicitly acknowledges' that its conduct could be discriminatory. Adding the additional tariff language was an effort to make the implicit non-discrimination of the Company's current process more explicit.

Q. MR. COLTON ALSO ADDRESSES THE USE OF VERINT LINGUISTICS ANALYTICS SOFTWARE FOR THE PURPOSES OF IDENTIFYING POTENTIAL CAP ELIGIBLE CUSTOMERS. HE STATES, "THE SOFTWARE I RECOMMEND THAT PEOPLES USE IS NOT NEW, BUT IS *EXISTING* SOFTWARE USED BY THE COMPANY."[4] WOULD YOU LIKE TO RESPOND TO THIS STATEMENT?

A. Yes. Mr. Colton implies that the Company can easily 'turn on' this functionality and begin using it to identify potential low income customers. While the suggested functionality may be available in Verint, it would take considerable dedicated time, effort and expense to begin using the software for this purpose. It is important to note that the Company already uses a dedicated phone queue for customers that are calling to inquire about universal service programs. All outreach materials, including information on the Company's website pertaining to programs, refers customers to call 1-800-400-WARM (9276). This phone

[4] Colton, Page 13, lines 3 and 4.

line is received in our main call center on an independent queue that identifies to the answering agent that the caller is seeking assistance or may be income eligible for, low income programs.

Q. WITNESS GELLER STATES, "PEOPLES SHOULD COMMIT TO THE IMMEDIATE RELEASE OF ALL IMPROPERLY HELD SECURITY DEPOSITS, AND THE IMPLEMENTATION OF A POLICY THAT WILL ENSURE FULL COMPLIANCE WITH THE TERMS OF THE 2018 RATE CASE SETTLEMENT."[5] PLEASE RESPOND.

A. First, I would like to assure Mr. Geller that all security deposits were reviewed and any security deposits identified on low income accounts were immediately released. The process to review deposits on a regular basis, in compliance with the 2018 rate case settlement, has been implemented. Further, employee training to reinforce the policy to ensure future security deposits are not requested from low income customers and applicants has been implemented.

Q. DOES THIS CONCLUDE YOUR REJOINDER TESTIMONY AT THIS TIME?

A. Yes. I reserve the right to supplement my testimony as additional issues arise during the course of this proceeding. Thank you.

[5] Geller, Page 5, lines 14 through 16.

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission, et al.	:	
	:	
v.	:	Docket No. R-2023-3044549
	:	
Peoples Natural Gas Company LLC.	:	

DIRECT TESTIMONY OF HARRY GELLER

ON BEHALF OF

THE COALITION FOR AFFORDABLE UTILITY SERVICES AND ENERGY EFFICIENCY IN PENNSYLVANIA ("CAUSE-PA")

March 22, 2024

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CAUSE-PA STATEMENT 1
PREPARED DIRECT TESTIMONY OF HARRY S. GELLER

I. INTRODUCTION

Q: Please state your name, occupation, and business address.

A: My name is Harry S. Geller. I am an attorney. I retired as Executive Director of the Pennsylvania Utility Law Project (PULP), but have maintained an office at 118 Locust St., Harrisburg, PA 17101, for the purpose of providing consulting services and assistance to low income individuals and the organizations which represent them in utility and energy matters.

Q: Briefly outline your education and professional background.

A: I received my B.A. degree from Harpur College, State University of New York at Binghamton in 1966, and a J.D. degree from Washington College of Law, American University in 1969. Upon graduation from law school, I worked at several organizations dedicated to serving low income households. Beginning 1988, I served as the Executive Director of PULP, a statewide legal aid project dedicated to protecting the rights of low income utility customers. At PULP, I represented low income individuals to resolve issues impacting their ability to maintain energy and utility services to their homes and supported organizations advocating for improved utility access and affordability. I also consulted and co-counseled on a wide variety of individual utility consumer cases, and participated in multiple task forces, work groups and advisory panels, including serving as chair of the Department of Human Services' LIHEAP Advisory Committee and the Pennsylvania Public Utility Commission's Consumer Advisory Committee. I frequently trained communities, legal aid staff, and advocacy groups across Pennsylvania on a range of utility and energy matters affecting Pennsylvania's low income population. I retired from PULP on June 30, 2015. Since that time, I have continued to provide consulting services for PULP and its clients,

as well as other organizations serving the low income community. In sum, I have over 50 years' experience working on behalf of households in poverty, including the past 30 years focusing specifically on utility and energy issues affecting low income consumers. My resume is attached as Appendix A.

Q: Please describe the focus of your work over the past fifty years, including relevant work experience on issues of low income families' ability to afford essential services such as utilities?

A: Through the entirety of my career, I have represented low income individuals and organizations serving low income populations in a wide variety of legal matters, including family law, public benefits, unemployment compensation, utility shut-offs, debtor/creditor, and housing-related disputes. Over the past 30 years, my focus has been to ensure that low income households can connect to, afford, and maintain utility and energy services.

In all these legal matters, I worked almost exclusively on behalf of individuals and households that subsist on incomes at or below 150% of the Federal Poverty Level (FPL). Through this work, I have had a close view of the daily lives of countless of our poorest citizens. I have spent thousands of hours assisting clients, combing through their budgets to see whether it is even possible to make ends meet. Over the years, I have consistently seen the near total absence of the ability of low income families to afford the most basic monthly necessities with the incomes they have, even assuming heroic self-control and conscientious budgeting and spending. Every month, my clients faced the stark reality of having to choose which bills they can forgo with the least drastic consequences.

Q: Have you testified in any proceedings before the Pennsylvania PUC?

A: Yes. I have presented testimony in many proceedings before the PUC. I have included a complete list in my resume, which I have attached as Appendix A.

Q. For whom are you testifying in this proceeding?

A. I am testifying on behalf of the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania (CAUSE-PA).

Q: What is the purpose of your testimony?

A: CAUSE-PA intervened in this proceeding to ensure that the proposed rate increase, rate design, and tariff changes will not adversely affect the ability of low income customers of Peoples Natural Gas Company, LLC (Peoples or the Company) to connect to, maintain, and afford natural gas service, which is essential for heating, cooking, and hot water – all critical components to a safe and healthy home.

In furtherance of these stated intentions for intervention, the purpose of my testimony is to assess Peoples' existing and proposed rates, tariff, rules, procedures, and programs to determine whether they are just, reasonable, and appropriately designed to ensure that low income Pennsylvanians within Peoples' service territory are able to equitably access and maintain safe and affordable utility services.

Q: How is your testimony organized?

A: My testimony is divided into five sections. After my section I introduction, in section II, I discuss the financial impact that Peoples' proposed residential rate increase will have on its low income ratepayers. In section III, I discuss customer service issues affecting low income customers, and the need for critical improvements to customer service policies and protocols to ensure equitable access to service for vulnerable populations in Peoples' service territory. In

section IV, I will discuss Peoples' proposed rate design including its proposed substantial increase to the residential fixed customer charge and its proposed Weather Normalization Adjustment charge (WNA). Finally, in section V, I will summarize the recommendations and proposals which I provided throughout my direct testimony.

II. RATE IMPACT ON LOW INCOME HOUSEHOLDS

Q: Please summarize Peoples' requested rate increase as it applies to residential customers.

A: Peoples' proposed rate increase is estimated at approximately $156.0 million and seeks to consolidate the tariffs of Peoples Natural Gas Division (PNG) and Peoples Gas Division (PG). If the Commission was to approve Peoples' full request, the total bill for PGND residential customer using 80 Mcf per year would increase from $73.16 to $88.79 per month or by 21.4% and the total bill for a PG residential customer using 80 Mcf per year would increase from $84.00 to $90.35 per month or by 7.6%.[1]

The dollar increase for individual customers depends on each customer's level of usage. However, a substantial portion of the impact of Peoples' proposed rate increase for residential customers comes from a large increase to the fixed monthly service charge. Peoples proposes to increase its residential customer charge from $14.50 in PNG Division and $15.75 in PG Division to $21.50 across both divisions, meaning a $7.00 (48%) per month increase for PNG Division customers and $5.75 (36.5%) for PG division customers.[2]

[1] Rate Filing Cover Letter
[2] Ex. DF-2.

Q: What level of income qualifies a household as a "low income"?

A: With some exceptions, most utility assistance programs require households to have income that is not greater than 150% of the federal poverty level (FPL) to qualify. The FPL is a measure of poverty based exclusively on income and household size, but not the composition of the household (i.e., whether the household consists of adults or children) or geography. As a baseline, in 2024, a family of four at 150% FPL has a gross annual income of just $46,800.[3] This is insufficient income to support a family of this size and is substantially less than a household this size needs to meet their basic expenses in Pennsylvania.[4]

The Commission's definition of "low income customer" is correlated to the nationwide FPL and thus does not capture all customers residing in Peoples' service territory whose income is inadequate to afford basic needs. To assess actual levels of economic hardship across a given region, poverty experts often use the Self Sufficiency Standard - a benchmark developed to determine how much income a household needs to afford life's most basic necessities (food, rent, clothing, medicine/medical care, childcare, utilities, transportation, and taxes) without assistance.[5] Unlike the federal poverty level, which does not change based on geographic location or family composition, the Self Sufficiency Standard measures the income necessary to meet a family's basic needs based on average costs at the county level. In 2021, the average Self Sufficiency Standard for a family of four (two adults and two school-aged children) living in the counties served by Peoples' (both PG and PNG divisions) was $61,533. This requires an income of $14,733 per year

[3] U.S. Dept. of Health and Human Services, 2024 U.S. Federal Poverty Guidelines, available at https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines
[4] Self Sufficiency Standard, http://www.selfsufficiencystandard.org/Pennsylvania.
[5] Id.

more than a four-person household with income at 150% FPL makes in a given year, leaving these families with a budget deficit of approximately $1,227.75 per month.[6]

Most of Peoples' low income customers do not have income that is anywhere close to the Self Sufficiency standard – or the Commission's low income threshold at 150% FPL. The average annual income for Peoples' currently identified confirmed low income customers is $19,576 - and is just $19,145 for Peoples' customers currently enrolled in its Customer Assistance Program (CAP).[7]

Q: How does Peoples assess how many low income customers are in its service territory?

A: Like other large regulated public utilities in Pennsylvania, Peoples tracks its low income customer population two ways: "*estimated low income customers*" and "*confirmed low income customers*." However, Peoples also maintains a different, internal definition of confirmed low income customers that is narrower than, and somewhat conflicting with, the Commission's definition of the same term.[8] As I will further explain later in discussing the identification and enrollment of low income customers in universal service programs,[9] the operation of Peoples' internal definition of low income customers adds additional confusion to the ability to accurately measure the number of low income customers in Peoples' service territory.

Section 62.2 of the Commission's regulations defines the term "confirmed low-income residential customer account" as:

> Accounts where the NGDC has obtained information that would reasonably place the customer in a low-income designation. This information may include receipt of LIHEAP funds (Low-Income Home Energy Assistance Program), self-certification by the customer, income source or information obtained in § 56.97(b) (relating to procedures upon rate-payer or occupant contact prior to termination).[10]

[6] See id. (2021 Pennsylvania Data Set).
[7] CAUSE-PA II-8.
[8] See 52 Pa. Code §62.2.
[9] See infra pp. 6-10, 16-23.
[10] 2022 Universal Service Report at 3, 7.

The Commission's annual Universal Service and Collections Performance Report (herein Universal Service Report) further clarifies that "confirmed low income customers" are those for whom the utility has "obtained information that would reasonably place them within this FPIG level" and the data is reported as "an average of the 12 months of month-end data" reported by the utility.[11] According to the Commission's 2022 Universal Service Report (the most recent report available), Peoples reported to the Commission that it had 108,055 confirmed low income customers in 2022, representing 18% of its residential customer class.[12]

Aside from its reporting to the Commission, Peoples maintains a much more restrictive internal definition of confirmed low income customers, counting only those that are actively enrolled in CAP or who have received a Low Income Home Energy Assistance Program (LIHEAP) grant in the past 24 months.[13] According to this internal definition, Peoples only classified 52,973 customers as low income – based on the average count on the last day of each month of 2022.[14] This accounts for *less than half* of the customers the Company reported to the Commission as "confirmed low income" during this same period.[15] Peoples used this restrictive definition to respond to discovery questions, which I believe results in a significant undercount of Peoples' low income customers.[16]

This inconsistency and undercounting detrimentally impacts the ability of customers to access certain protections, such as the exemption of low income customers from the collection of security deposits, which is based on customers status as confirmed low income customers.[17] It also

[11] Id. at 7.
[12] Id.
[13] CAUSE-PA II-3.
[14] CAUSE-PA II-4.
[15] 2022 Universal Service Report at 7.
[16] CAUSE-PA IV-6.
[17] 52 Pa Code § 56.32(e).

makes it more difficult to analyze Peoples' universal service program performance relative to its universal service reporting data and the reporting data of other NGDCs.

Notably, Peoples' definition of confirmed low income customer is even more restrictive than the definition used by Philadelphia Gas Works (PGW), which the Commission deemed as a flawed interpretation of the Commission's regulation. In a recent decision, the Commission found that PGW's process for identifying low income customers was flawed, stating: "PGW's reading of the confirmed low income designation appears to limit the pool of Confirmed Low-Income Customers by only counting customers enrolled in CRP, receiving LIHEAP, and on low-income payment agreements."[18] The Commission pointed to section 62.2 of the regulations, explaining that the term is broadly defined and that the enumeration of examples provided therein "does not imply the exclusion of others if the information is obtained by the Company and would reasonably place the customer in a low income designation."[19]

I recommend that Peoples adopt a consistent, broader definition of confirmed low income customers consistent with the Commission's regulation 62.2, including any information provided by the customer that reasonably places the customer in a low income designation. Such information should include, at a minimum, collection of customer information through the income and CAP screening process that I recommend later in my discussion about CAP enrollment,[20] as well as:

- Enrollment or participation in a universal service or energy conservation program (CAP, LIURP, Hardship Fund, or CARES.
- Receipt of a cash or crisis LIHEAP grant.
- Receipt of a other emergency utility assistance.

[18] Pa. PUC v. PGW, R-2023-3037933, Final Order at 221 (Entered Nov. 9, 2023).
[19] Id.
[20] See infra p. 28.

- Indication by the customer of inability to pay current bill and/or requests for income based payment arrangements.
- Contact immediately prior to termination.
- CARES contacts and other referrals to low income programs.
- Self-certification by the customer.
- Income information received based on request for a medical certificate.

For the purposes of evaluating the actual number of low income customers in Peoples' service territory, the "estimated low income customer" count, developed by the Commission's Bureau of Consumer Services (BCS) and reported by Peoples to BCS, presents a more accurate and reliable picture of Peoples' low income consumers. To develop its estimated low income customer count, Peoples uses a Household Poverty file provided by BCS, based on census data, to estimate its low income customer count.[21] Peoples multiplies the percentage of residents in each county with income at or below 150% FPL by the company's total count of residential customers to estimate the likely number of low income customers in its service territory.[22] As of January 31, 2024, Peoples reported 135,425 estimated low income customers in PNG division (23% of residential customers) and 13,048 in PG division (22% of residential customers).[23] In total, as of January 31, 2024, Peoples had 148,473 estimated low income customers across both divisions.

Both the estimated and confirmed low income customer counts that Peoples reports to BCS reflect the fact that a substantial percentage (between 18-23%) of Peoples customers have income at or below 150%. However, Peoples' estimated low income customer count, as reported to BCS, is a more appropriate measure of the number of low income customers in its service territory for

[21] See CAUSE-PA II-12.
[22] Id.
[23] Id.; see also CAUSE-PA II-7 (595,138 residential customers PNG division customers and 59,728 residential PG division customers as of Jan. 31, 2024).

evaluating its universal service enrollment and measuring the need for low income universal service assistance in its service territory.[24]

Consistent with the Commission's recent decision in the PGW case, I recommend that Peoples be required to apply its estimated low income customer count, using the methodology developed by BCS, to assess the impact of rates on its low income customers, to evaluate the adequacy and effectiveness of its universal service programs to serve the needs of its low income customer base, and to make adjustments to its outreach and educational efforts to improve its reach for low income consumers.[25] These estimated numbers should form the basis of the budget projections within the Company's USECP.

Q: How would Peoples' proposed rate increase impact low income households?

A: Peoples' proposed rate increase will worsen existing energy insecurity, placing many low income families at risk of deep and lasting consequences to their health, safety, and wellbeing and negatively impacting the communities in which they live and work. As I explained earlier, low income families lack sufficient income to afford basic necessities without assistance.

To contextualize the impact of the proposed increase on low income households, it is helpful to look at the relative energy burden (the percentage of income a household pays for energy costs) of low income households. To be affordable, a household's total housing costs – *including*

[24] See 52 Pa. Code § 62.5 ("(xiii) The total number of low-income households. NGDCs may estimate this number using census data or other information the NGDC finds appropriate.").

[25] See Pa. PUC v. PGW, R-2023-3037933, Final Order at 221-222 (Ent'd Nov. 9, 2023):

> Next, we also agree with the ALJs' conclusion that the BCS census-based estimated low-income count, which is collected and published by the federal government and readily accessible to PGW, falls within the scope of information that would reasonably place the customer in a low-income designation under Section 62.2. Additionally, we **find this data to be a more accurate tool for assessing the number of eligible customers and the effectiveness of PGW's universal service program participation and outreach than PGW's current methodology**.

utility costs - should account for no more than 30% of the household's total income.[26] But across Pennsylvania, households with income at or below 150% FPL spend as much as 29% of their income on *energy costs alone*.[27] In comparison, BCS estimates that the energy burden of Pennsylvania's residential customers as a whole (excluding those enrolled in a Customer Assistance Program (CAP)) is roughly 4%.[28]

Energy insecurity resulting from high energy burdens impacts roughly 1 in 4 Pennsylvania households. According to the United States Census Bureau's Household Pulse Survey, roughly 25% of Pennsylvania households were unable to afford their home energy bills in 2023, compared to 23% nationwide.[29]

High energy burdens, and resulting energy insecurity, can have a profound impact on families – causing many to forego food, medicine, and other basic necessities in order to maintain energy services to their home. According to the Energy Information Administration (EIA) Residential Energy Consumption Survey (RECS) released in 2022, 27.2% of United States residents reported experiencing energy insecurity; 19.9% reported reducing or forgoing food or medicine to pay for energy costs; and 10% reported leaving their homes at unhealthy temperatures because they could not afford to pay for energy.[30] Importantly, energy insecurity is more

[26] US Dep't of Housing & Urban Development, Affordable Housing, available at https://www.hud.gov/program_offices/comm_planning/affordablehousing.

[27] See Fisher, Sheehan & Colton, The Home Energy Affordability Gap: Pennsylvania (April 2021), http://www.homeenergyaffordabilitygap.com/03a_affordabilityData.html.

[28] Energy Affordability for Low income Customers, Docket No. M-2017-2587711, Order, at 8 (Jan. 17, 2019); see also Diana Hernandez, Energy Insecurity: A Framework for Understanding Energy, the Built Environment, and Health Among Vulnerable Populations in the Context of Climate Change, 103(4) Am. J. Pub. Health (2013), *available at* http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3673265/#bib20.

[29] US Census Bureau, Household Pulse Survey: Pennsylvania, Unable to Pay Energy Bill (January 9-February 5, 2024), https://www.census.gov/data-tools/demo/hhp/#/?measures=ENERGYBILL&s_state=00042.

[30] United States Energy Information Administration, 2020 Residential Energy Consumptions Survey, Table HC11.1 Household energy insecurity, 2020 available at: https://www.eia.gov/consumption/residential/data/2020/hc/pdf/HC%2011.1.pdf .

pronounced for low income Black families. EIA's RECS data revealed that 52% of Black and African American households experience energy insecurity, compared to 23.2% of white households – and nearly 40.2% of Black and African American households report foregoing food or medicine to pay energy costs, compared to 16.8% of white households.[31] These disparities are driven in large part by inequities in housing quality and, in turn, home efficiency.

There is no reason to believe that low income households within People's service territory fare any better than the state and national averages. Given the high rate of payment trouble and service termination affecting its low income customers, discussed below, I am deeply concerned that disparities in energy insecurity across class and race divisions will be exacerbated by Peoples' proposal to substantially increase rates. It is imperative that all necessary measures be taken to mitigate the affordability challenges facing Peoples' low income customers, especially in light of its current rate proposal.

Q: Is there evidence that low income customers cannot afford Peoples' service at current rates?

A: Yes. There are strong indicators that Peoples' gas service is already unaffordable for low income households. A vastly disproportionate percentage of Peoples' payment troubled residential customers are low income.[32] In response to discovery, Peoples reported that, as of January 2024, it had 25,057 payment troubled residential customers across both divisions, of which 10,467 (42%) were confirmed low income customers. [33] These 10,467 payment troubled customers accounted

[31] Id.
[32] CAUSE-PA II-16, II-17 ("Peoples identifies a missed payment on a payment arrangement as 'payment troubled.'").
[33] CAUSE-PA II-16 (For PNG division, 9,779 out of 23,082 payment troubled residential customers were confirmed low income. For PG division, 688 out of 1,975 payment troubled customers were confirmed low income.); see also CAUSE-PA II-17 (Peoples identities a missed payment on a payment arrangement as "payment troubled.").

for **20%** of Peoples' 51,433 confirmed low income customers that month.[34] This high rate of payment trouble among confirmed low income customers stands in stark contrast to the 4**%** of Peoples' residential customers who were payment troubled during that same month.[35]

This large discrepancy in the rate of payment trouble among Peoples' low income customers demonstrates that its' low income consumers already struggle to pay for gas service and will likely experience increased payment trouble if the proposed rate increase is approved without taking necessary measures to mitigate the impact of the increase on low income households.

Q: Would the proposed rate increase worsen the threat of termination for low income customers?

A: Yes. Peoples' low income customers already have a markedly higher rate of termination compared to residential customers as a whole. Using Peoples' 2023 numbers, despite comprising only 7.9% of residential customers, [36] confirmed low income customers accounted for 17.4% of residential terminations.[37] Table 1 shows the termination rates among Peoples residential customer categories:

[34] See CAUSE-PA II-4 (46,894 confirmed low income in PNG and 4,539 confirmed low income in PG as of Jan. 2024).
[35] See CAUSE-PA II-16 (Jan. 2024 payment troubled residential customers: 23,082 for PNG and 1,975 for PG.) See also CAUSE-PA II-7 (595,138 PNG residential customers and 59,728 PG residential customers as of Jan. 2024).
[36] OCA IX-2.
[37] CAUSE-PA II-13

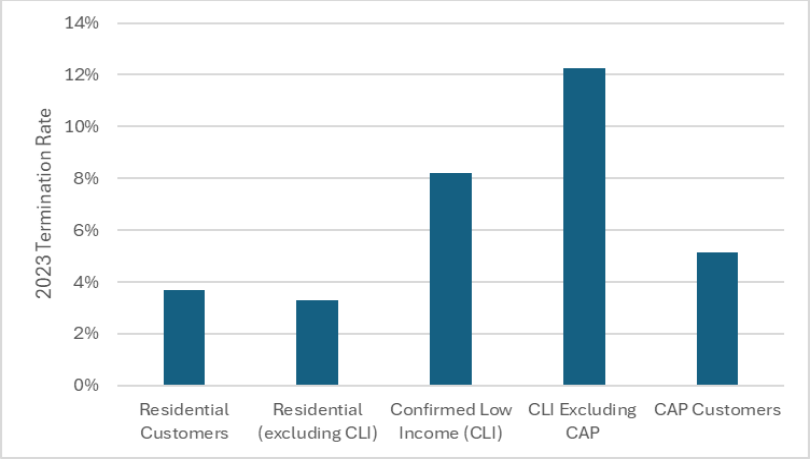
Table 1 – 2023 Peoples Residential Termination Rates

	Residential Customers	Residential (excluding CLI)	Confirmed Low Income (CLI)	CLI Excluding CAP	CAP Customers
Customers[38]	653,651	602,653	50,998	21,873	29,125
Terminations[39]	23,959	19,780	4,179	2,679	1,500
Termination Rate	4%	3%	8%	12%	5%

In 2023, Peoples' confirmed low income termination rate was approximately 8% and, for confirmed low income customer who were not enrolled in CAP, the termination rate was 12%.[40] Thus, termination rates for low income customers, especially those not enrolled in CAP, were far higher than termination rates for residential customers who were not confirmed low income.[41]

The following chart more clearly demonstrates the large disparity in termination rates among Peoples residential customer groups.

Chart 1 – Peoples 2023 Residential Termination Rates



[38] As of Dec. 31, 2023. See CAUSE-PA II-4, II-5, II-7.
[39] CAUSE-PA II-13.
[40] CAUSE-PA II-4, II-13(50,998 confirmed low income customers across both divisions as of Dec. 2023. 4,179 confirmed low income terminations); CAUSE-PA II-7 (CLI non-CAP customers: 19,632 PNG, 2,241 PG (Total 21,873)); CAUSE-PA II-13 (CLI non-CAP terminations: 2,313 PNG 366 PG (2,679 Total)).
[41] CAUSE-PA II-7, II-13 (653,651 residential customers across both divisions as of Dec. 2023. 23,959 residential terminations).

The disparity in involuntary termination rates for Peoples' low income customers underscores the need to improve rate affordability by further strengthening the availability of assistance for low income consumers through its universal service programs to help mitigate the impact of any potential rate increase.

Q: How does the involuntary termination of gas service impact a household?

A: Involuntary termination of gas service can have a deep and lasting impact on the health and wellbeing of the entire household and the surrounding community. When service is terminated, households are exposed to unsafe temperatures, which can create or exacerbate health conditions, and disrupts family unity.[42] Young children in households experiencing energy insecurity are also more likely to face housing and food insecurity.[43] Children in families facing energy insecurity have greater odds of poor health and developmental problems.[44] The lack of water heating can also prevent proper sanitation and hygiene,[45] And, when a family cannot use their stove to prepare meals at home, it adds significant costs to purchase prepared food. Following involuntary termination, renters often face eviction and/or termination of public housing assistance. Involuntary termination is also a common catalyst to homelessness, as inability to reconnect to service at a new address can form the basis for denial of public or private housing.[46]

[42] National Consumer Law Center, Protecting Seriously Ill Consumers from Utility Disconnections, at 5 (2022), available at: https://www.nclc.org/resources/report-protecting-seriously-ill-consumers-from-utility-disconnections-what-states-can-do-to-save-lives-now/ .
[43] Id. at 6.
[44] Rosenberg J, Rosenthal A, Castillo S, Edwards E, Erickson C, Nogelo P, Fenick AM. Medical Certification for Utility Shut-Off Protection and Health-Related Social Needs. Pediatrics. (2022) available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9647589/ .
[45] Zhang X, Warner ME, Grant M. Water Shutoff Moratoria Lowered COVID-19 Infection and Death Across U.S. States. Am J Prev Med. (2022), available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8433038/ .
[46] See Joint State Government Commission, General Assembly of the Commonwealth of Pennsylvania, Homelessness in Pennsylvania: Causes, Impacts, and Solutions: A Task Force and Advisory Committee Report (2016), available at: http://jsg.legis.state.pa.us/resources/documents/ftp/documents/HR550%201%20page%20summary%204-6-2016.pdf.

Involuntary terminations are also dangerous to the physical safety of the household and their surrounding community. When a family is unable to use a primary heating system, they often resort to dangerous, high usage / high cost heating methods – such as electric space-heaters, electric stoves, and/or portable generators – which increases the risk of carbon monoxide poisoning and house fires.[47] Heating equipment is a leading cause of fires in U.S. homes.[48] Space heaters are most often responsible for home heating equipment fires, accounting for more than two in five fires, as well as the vast majority of the deaths and injuries in home fires caused by heating equipment.[49]

As of February 2023, Peoples reported that at least 60 of its gas heating homes across both divisions were *known* to be without a central heating source in the winter months, and at least 19 households were *known* to be using a potentially unsafe alternative heating source.[50] This is dangerous to the life and health of the individual family and the surrounding community, and is driven primarily by the inability of that family to afford the cost of service. Increasing the cost of service and the affordability gap, without concurrently providing strong mitigation will exacerbate the health and safety consequences to Pennsylvania's most economically vulnerable households, which are disproportionately single parents with young children, people of color, seniors, and people with a disability.[51]

[47] Richard Campbell, Home Heating Fires, National Fire Protection Association (NFPA), (Jan. 2021), available at: https://www.nfpa.org/News-and-Research/Data-research-and-tools/US-Fire-Problem/Heating-equipment
[48] Id.
[49] Id.
[50] Pa. PUC, 2023 Cold Weather Survey Results – Gas, available at: https://www.puc.pa.gov/media/2779/cold_weather_survey_results-2023v3.pdf
[51] See United States Census Bureau, 2021 American Community Survey 1-Year Estimates, available at: https://data.census.gov/table?q=poverty+in+Philadelphia+city,+Pennsylvania&tid=ACSST1Y2021.S1701 .

Peoples must take steps to protect its most vulnerable customers from the harsh consequences of its proposed rate increase. I will make several recommendations later in my testimony that will enable Peoples to better protect these vulnerable customers.

III. LOW INCOME CUSTOMER SERVICE ISSUES

a. Low Income Security Deposit Prohibition

Q: You previously indicated that Peoples' methods for tracking confirmed low income customers detrimentally impacts the ability of customers to access certain protections, such as the exemption of low income customers from the collection of security deposits. Why?

A: Section 56.32(e) of the Commission's regulations prohibits utilities from collecting security deposits from customers who are confirmed to be income eligible for its customer assistance programs.

According to the settlement in Peoples' last rate case, Peoples agreed:

> Peoples Natural agrees to automatically review its residential accounts at least once every six months to ensure it is not holding deposits for customers who are confirmed low income. If it discovers that deposits are being held, Peoples Natural will refund those deposits to customers within 30 days.[52]

Peoples indicated in response to discovery that it does not have a process to automatically return security deposits to confirmed low income customers other than those who enroll in CAP.[53] I understand from counsel that the legal issues related to Peoples noncompliance with this settlement term will be addressed in briefing, but it has been nearly five years since Peoples agreed to implement this process and they have apparently failed to comply. Based on Peoples' multiple inconsistent definitions of confirmed low income customer, it is difficult to determine whether

[52] Pa. PUC v. Peoples, R-2018-3006818, Joint Petition for Approval of Settlement Stipulation at ¶ 56 (Submitted Jul. 9, 2019).
[53] CAUSE-PA I-8.

Peoples is actually complying with the regulation and its settlement obligations regarding which customers are granted the security deposit exemption. For example, in response to CAUSE-PA's first set of interrogatories, Peoples indicated that it only returns security deposits "as a condition of participating in CAP" or "customer notification of a LIHEAP grant."[54] However, when asked later whether the Company was holding security deposits from any customer who meets the reporting definition of CLI that Peoples uses for reporting universal service data to the Commission, the Company responded that "The Company is not holding any deposits for customers meeting this definition."[55] The Company has not clarified any process for screening for low income security deposits other than enrollment in CAP and receipt of LIHEAP funds.

I note here that the Commission has issued explicit guidance on this issue and was clear that a low income household does not need to enroll in CAP or another universal service program for the prohibition on security deposits to apply.[56] In its Attachment A to its Ch. 56 Rulemaking Order, the Commission clarified that the prohibition on collecting security deposits from low income customers is "referring to eligibility based upon the customer's household income – *not on other miscellaneous eligibility criteria that can vary by utility*."[57] The Commission also stated:

> Regarding the concerns expressed about this same section by LICRG that it is eligibility and not actual enrollment into CAP that determines the customer's exemption from deposit requirements, we agree and point out that ***this section specifies "eligible," not "enrolled" or "participating."*** We think this language is sufficient direction that the customer only has to be "eligible" and not actually enrolled in CAP to be exempt from a deposit request.[58]

[54] CAUSE-PA I-8.
[55] CAUSE-PA IV-7.
[56] 52 Pa. Code § 56.32(e).
[57] Rulemaking to Amend the Provisions of 52 Pa. Code, Chapter 56 to Comply with the Amended Provisions of 66 Pa. C.S. Ch. 14, L-2015-2508421, Final Rulemaking Order, Attach. One at 48 (Feb. 28, 2019).
[58] Id. (emphasis added).

The Commission also requires both verbal notice of the exemption to be provided to applicants and customers *at the time the security deposit is assessed*, as well as instructions for how the applicant or customer can verify income.[59]

The imposition of a security deposit can pose a huge barrier to low income customers who already struggle to connect to and maintain service. As I explained above in addressing Peoples confirmed low income customer count, there are many more ways that a customer can confirm they are income eligible aside from actual CAP and LIHEAP enrollment. While I believe all eligible households should be encouraged to enroll in CAP and participate in LIHEAP, these are neither prerequisites nor the only circumstances which trigger the statutory and regulatory prohibition. Further, as Peoples offers its Extended Customer Assistance Program (E-CAP) to customers between 151-200% FPL, any customers indicating they have income in this range should be considered "income eligible for a customer assistance program" and should also be exempt from security deposit requirements.[60]

I recommend that Peoples apply the security deposit exemption in all circumstances where a customer has indicted low income status. The Commission should require Peoples to develop an automated process to immediately refund all security deposits held for customers which meet the definition of "confirmed low income customer" under section 62.2, consistent with the discussion of this term, above. Peoples should be further ordered to inform all consumers of the prohibition at the time a security deposit is assessed and provide information about how Peoples gathers income information to prevent imposition of a deposit and what customers can do to access the exemption if it is not automatically applied. Peoples should be required to explain the low income security deposit prohibition and request income information through the course of any

[59] Id.; see also 52 Pa. Code §§ 56.36, 56.286.
[60] 52 Pa. Code § 56.32(e).

communication (written or verbal) regarding a security deposit. This proactive approach would help ensure that Peoples is not unlawfully assessing and collecting security deposits from economically vulnerable households.

b. Customer Assistance Program (CAP)

Q: Please briefly describe Peoples Customer Assistance Program (CAP).

A: Peoples Customer Assistance Program provides a discounted bill and arrearage forgiveness to low income customers at or below 150% FPL. Peoples also offers an "Extended CAP" or "E-CAP" program for customers between 151-200% FPL. Peoples' CAP rates are calculated on a monthly basis to determine the lesser of the participant's average monthly bill or percentage of income.[61] CAP accounts are subject to a minimum bill of $25.[62] Peoples' CAP percentage of income payments (PIP) are tiered based on household income as follows:

- 0 to 50% FPL - 4%
- 51 to 100% FPL - 5%
- 101 to 150% FPL - 6%
- 151 to 200% FPL - 11%[63]

Q: How will the proposed rate increase affect CAP customer bills?

A: CAP customers who receive the average CAP rate bill will pay the full rate increase, up to their respective percentage of income rate.[64] In those cases, Peoples will switch those customers into the percentage of income rate through their monthly CAP rate review.[65] For customers currently paying the percentage of income payment amount, an increase to the average bill amount as a result of a change in rates would not impact their payment, but will increase and accelerate

[61] Peoples St. 9 at 3-4.
[62] Id.
[63] Id. at 4.
[64] CAUSE-PA II-1.
[65] Id.

the CAP shortfall (the difference between the customer's calculated usage bill and their CAP rate).[66] Peoples indicated in response to discovery that it does not actively track how many customers are enrolled in each CAP rate, so it is not possible to quantify the number of households currently receiving the average CAP rate that will be directly impacted by the rate increase or the financial impact these households will experience.[67] Nevertheless, while the availability of the percentage of income rate will help mitigate the impact for some CAP participants, CAP participants on the average bill CAP rate will pay higher rates and, in turn, the cost of the program will increase.

Q: Do you have concerns about the number of Peoples customers that are enrolled in Peoples' CAP?

A: Yes. Peoples' CAP can help mitigate unaffordability of rates and reduce payment trouble and terminations among vulnerable customers. Strengthening the availability of CAP and other assistance for low income consumers would help low income customers to better afford service and help mitigate the impact of any potential rate increase. However, Peoples' CAP is reaching only a small percentage of *confirmed* low income customers and an even smaller percentage of its *estimated* low income customers.

Peoples' CAP enrollment has declined by approximately 13% across both divisions since 2019.[68] As shown in Chart 1, PNG CAP enrollment increased during the pandemic before significantly declining from a high of 35,171 in June 2021, to its current low of 26,842 as of January 2024, which is substantially lower even than pre-pandemic levels.[69]

[66] Peoples USECP at 13.
[67] CAUSE-PA II-2.
[68] CAUSE-PA II-5 (29091 CAP customers across both divisions as of Jan. 2024; 33377 CAP customers across both divisions as of Oct. 2019).
[69] Id.

Chart 1 - PNG CAP Enrollment[70]

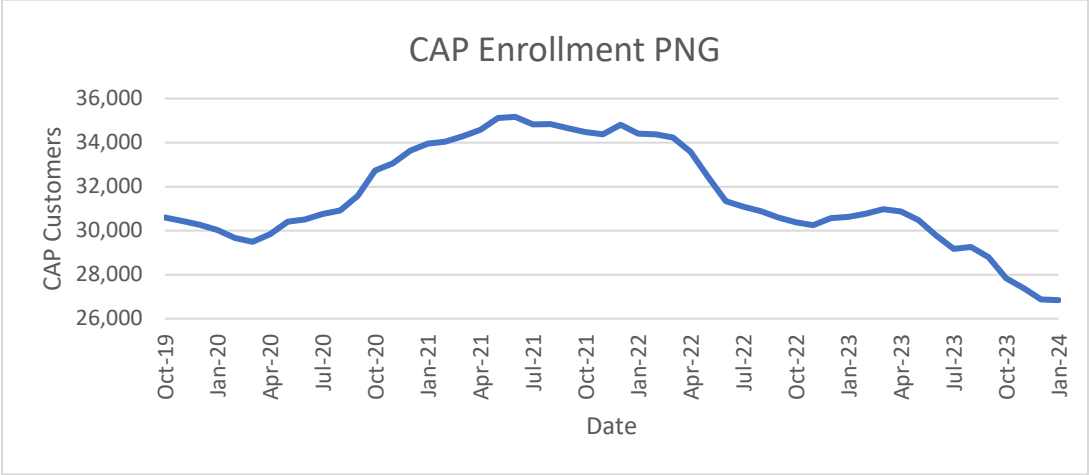
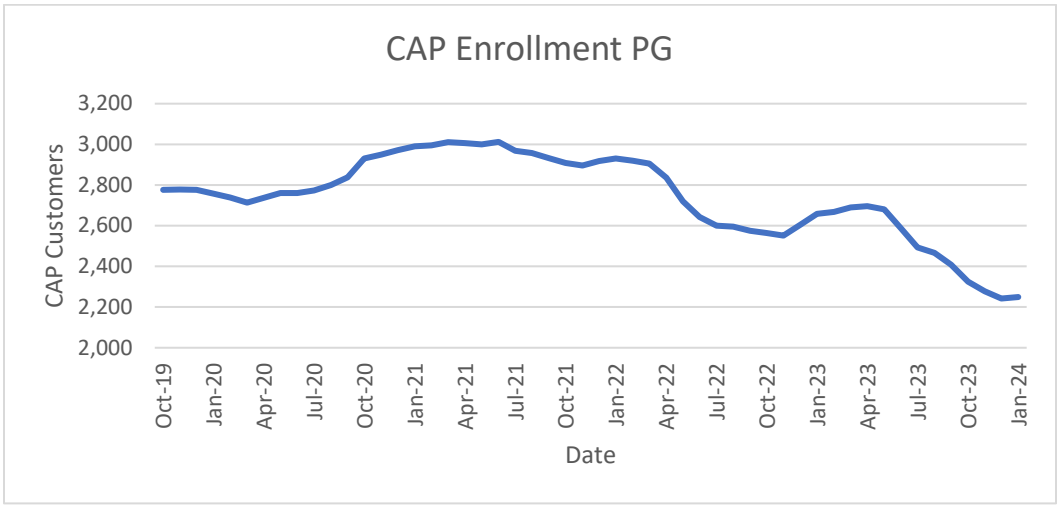


Chart 2 shows that PG division has followed a similar pattern, with CAP enrollment reaching a high of 3,012 in June 2021 and dropping to its current low below 2,250 in December 2023 and January 2024.[71]

Chart 2 – PG CAP Enrollment[72]

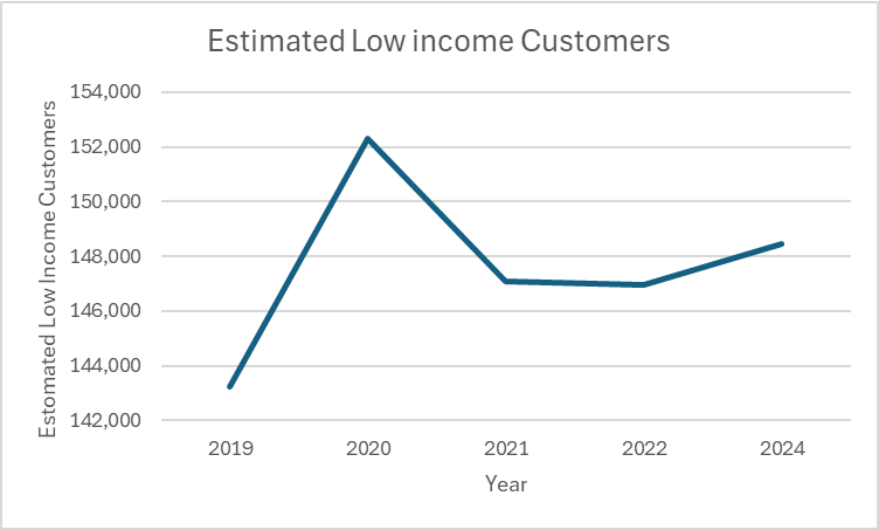


This steep decline in enrollment is especially concerning, considering that the number of estimated low income customers in Peoples' service territory has actually increased by

[70] Id.
[71] Id.
[72] Id.

approximately 4% since 2019.[73] Chart 3 shows that, while the spike of estimated low income customers due to the pandemic has come down from its high of 152,309 in 2020, Peoples' estimated low income count remains substantially higher than its pre-pandemic level.

Chart 3 – Peoples' Estimated Low Income Customers[74]



While some of the recent decline can be attributed to the reinstitution of CAP recertification requirements after the pandemic,[75] this does not explain why Peoples CAP enrollment is below pre-pandemic levels despite an increase in its low income population over that same period. The 29,091 customers enrolled in CAP as of January 2024 only account for 20% of Peoples' 148,473 estimated low income customers. ***Peoples must take immediate steps to increase outreach and enrollment of the remaining 80% of its estimated low income population that is not enrolled currently in CAP***. It is critical that Peoples address the disparate rates of payment trouble and terminations among low income customers, which will grow more pronounced if its substantial rate increase proposal is approved.

[73] See CAUSE-PA II-12 (148,473 as of Jan. 1, 2024 for PNG and PG combined); see also 2019 Universal Service Report at 7 (143,228 estimated low income customers for Peoples and Peoples Equitable combined).
[74] CAUSE-PA II-12 (148,473 as of Jan. 1, 2024); 2022 Universal Service Report at 10 (estimated low income customers 2020-2022); 2019 Universal Service Report at 7.
[75] See CAUSE-PA IV-3.

Q: Has Peoples proposed changes to its universal service programs as part of this rate case?

A: Yes. Peoples is proposing to remove the section 'Payments Toward Arrearage' from its tariff to reflect the change approved in the Company's most recent USECP to eliminate the $5 copay towards pre-program arrearages.[76] I strongly support this change, as it is in line with the Company's recent changes to its Universal Service and Energy Conservation Plan and the Commission's Final CAP Policy Statement Order. Elimination of the $5 CAP copayment will help CAP customers afford service by more closely aligning their bills with the customers' ability to pay. This will help CAP customers afford their monthly bill, which will help reduce low income terminations and, in turn, uncollectible expenses for the Company.

Peoples is also proposing to remove language from the tariff, which states 'Customers will automatically be enrolled in CAP if: a. the customer has defaulted on a payment arrangement, and b. the customer has received a LIHEAP payment within the past two years.[77] This provision refers to automatic enrollment, which the Company does not currently perform.[78]

Q: Do you agree with Peoples' proposal to eliminate its tariff provision that requires LIHEAP auto-enrollment?[79]

A: No. Considering the steep decline in Peoples' CAP enrollment, the *substantial* number of LIHEAP recipients who are not enrolled in CAP, and the struggles facing low income customers throughout its service territory, Peoples should be focusing on ways to simplify and improve CAP enrollment, not eliminating pathways to enrollment. This concern is especially true for low income customers who have already had their income vetted through the Department of Human Services'

[76] Peoples St. 9 at 6.
[77] Id. at 7.
[78] Id.
[79] See Peoples St. 9 at 7; Ex. RFB-2.

(DHS) income screening process for participation in LIHEAP. Peoples has clarified that customers receiving a LIHEAP grant are able to enroll in the program without providing income documentation, but that such enrollment is voluntary and initiated by the customer.[80] However, based on Peoples low and declining enrollment numbers, this alternative process has not proven effective enrolling LIHEAP recipients into CAP.

As of January 2024, Peoples reported 51,433 "confirmed low income customers" across both divisions, but only 29,091 were enrolled in CAP.[81] Thus, 22,342 (43%) of confirmed low income customers received LIHEAP funds but were not enrolled in CAP as required by its own tariff and Commission rules.[82] This means that these customers received LIHEAP grants and were certified to have income at or below 150% FPL, yet were not able to access the discounted bill and arrearage management benefits provided through Peoples' CAP.

Although the Company is currently unable to determine when this provision was added to the tariff and under what circumstances, Peoples' LIHEAP auto-enrollment provision dates back at least to Peoples' April 3, 2000 Tariff[83] and has remained in full force and effect since.[84] Peoples has not explained why it has not been following the rules in its own tariff for so many years. Peoples is required to follow the rules and procedures set forth in its Commission approved tariff. I understand from CAUSE-PA's counsel that the legal issues regarding Peoples' duty to follow the provisions of its tariff and provide the most advantageous rate to customers will be addressed through briefing.

[80] Peoples St. 9 at 7.
[81] CAUSE-PA II-4, II-5.
[82] CAUSE-PA II-7.
[83] CAUSE-PA IV-8.
[84] See 66 Pa.C.S. § 103.

While LIHEAP is a critically important program and provides life-sustaining assistance to those in need, it is not sufficient to remediate the affordability challenges facing Peoples' low income customers. In Pennsylvania, LIHEAP cash grants are intended to provide only supplemental assistance in the winter heating season, and is not enough to mitigate the financial harm of a rate increase. Furthermore, many customers designate their LIHEAP grant to their electric provider as a secondary or supplemental heating source. To date in the 2023-2024 LIHEAP season, the average LIHEAP Cash grant for low income gas customers is $364.[85] Peoples proposed rates would increase the annual bill for a typical PNG division customer (the vast majority of Peoples customers) by $187.56. Thus, the proposed rate increase alone would absorb more than half (51.5%) of the average LIHEAP cash grant for these customers. [86] After paying for the proposed increase, very little of the grant will be left to address existing affordability challenges.

Now is not the time for Peoples to close the door on LIHEAP auto-enrollment, especially in light of the Company's continued decline in CAP enrollment, the substantial number of Peoples customers who received a LIHEAP grant but were not enrolled in CAP, and Peoples' substantial proposed rate increase. Notably, the Commission recently approved a LIHEAP auto-enrollment program in UGI's electric division rate case.[87] According to the settlement in that case, once DHS begins sharing LIHEAP participant income data with utilities, UGI Electric will implement required modifications to its IT system and processes to use that data to automatically enroll non-

[85] See Appendix C, PA DHS, Energy Assistance Summary (EASUM), September 9, 2023 through March 14, 2024.
[86] See Rate Filing Cover Letter (The total bill for PGND residential customer using 80 Mcf per year would increase from $73.16 to $88.79 per month.).
[87] See Pa. PUC v. UGI Utilities, Inc. Electric Division, R-2022-3037368, Joint Petition for Approval of Settlement of All Issues at ¶ 60(c) (Submitted July 14, 2023).

shopping LIHEAP recipients into CAP, and to recertify income and eligibility for current CAP participants.[88]

For the reasons stated, the removal of the LIHEAP auto-enrollment provisions in Peoples' tariff is unwarranted, ill-considered, and ill-timed. However, I do recommend that Peoples amend the language in its tariff to further simplify auto-enrollment. Peoples' tariff currently states: "Customers will automatically be enrolled in CAP if: (a) the customer has defaulted on a payment arrangement, and (b) the customer has received a LIHEAP payment within the past two years."[89] Defaulting on a payment arrangement is not now and should not become a prerequisite to accessing simplified CAP enrollment. I recommend that, instead of removing the LIHEAP auto-enrollment process, Peoples keep its current tariff language but amend the language by removing the required payment arrangement default, which will make the process more effective at addressing the unmet need in Peoples' territory. I further recommend that Peoples be required to file a Petition to amend its USECP to permit auto-enrollment and auto-recertification, and to work with its USAG to develop the details of the program - including customer communications. Within 90 days of the final order in this case, Peoples should file a petition that includes amended budget projections, identifies a proposed process for auto-enrollment, and proposes any amendments to its USECP which are necessary to facilitate auto-enrollment.

All households automatically enrolled in CAP through this process should be marked as confirmed low income customers and eligible for reconnection waiver, security deposit exemption, and winter shutoff protections.

[88] Id.
[89] Tariff at 2nd rev. p. 37.

Taking this approach will help implement LIHEAP auto-enrollment in a useful and meaningful way to improve rate affordability, as opposed to the Company's proposal to simply remove it from the tariff, which would be counterproductive to the improvement of Peoples' CAP enrollment.

Q: Do you have other suggestions about how Peoples can improve CAP enrollment?

A: Yes. To more accurately identify and better serve its low income customer base, I recommend that Peoples screen all new and moving customers for income level at the time their service is established. For existing customers, Peoples should routinely screen for income on any non-emergency calls, and/or should inquire whether there has been any update to their income information already noted in their account. Upon establishing an online account, and once annually thereafter, customers should be given the opportunity to voluntarily self-disclose any changes to their income information. All customers identified as low income through this process should be referred for enrollment in Peoples' universal service programs. Consumers should be able to opt out of disclosing their income if they so choose but should first be informed that they may be eligible for lower rates or energy efficiency measures.

Improving the identification of low income customers, and better matching them to critical rate assistance and usage reduction services at the earliest opportunity is essential to improving Peoples' ability to provide just and reasonable rates and services to low income households – especially in light of Peoples' request to substantially increase residential rates through this proceeding. It would also help improve the ability of Peoples, the Commission, and stakeholders to assess Peoples customer service metrics – including its credit, collections, termination, reconnection, complaint, and universal service data – to determine whether and to what extent its rates, policies, and programs are just and reasonable in appropriately serving the needs of its low income customers.

c. Low Income Usage Reduction Program

Q: Please briefly describe Peoples' Low Income Usage Reduction Program (LIURP).

A: LIURP provides free weatherization and energy efficiency measures to low income, high usage households, including but not limited to a heating system clean and tune, energy audit, and air sealing and insulation.[90] The program is available to customers at or below 150% FPL and special needs customers with incomes between 151 and 200% FPL. PNG and PG divisions currently use different LIURP minimum usage thresholds of 140 Mcf and 120 Mcf respectively.[91] However, as both divisions are brought together under a single tariff, Peoples seeks to apply the lower 120 Mcf LIURP minimum usage threshold currently utilized by PG division to PNG as well. In 2023, the average usage for low income Peoples customers ranged between 78.5-107 Mcf of gas for the year.

Peoples' proposed 120 Mcf minimum usage threshold would require customers use between 12%-53% above average to qualify for LIURP. I recommend the Commission approve this proposal to adopt the 120 Mcf minimum usage threshold as it will make the program more accessible, which as I will explain further, is important to help the affordability challenges facing low income households.

Q: How can LIURP help low income customers address affordability challenges?

A: Peoples' LIURP is a critical universal service program designed to improve energy efficiency, bill affordability, reduce arrearages, and termination rates over the long term, and work in tandem with CAP to help reduce uncontrollably high usage attributable to home energy inefficiencies that low income households cannot afford to address on their own.[92] Peoples has

[90] Peoples St. 9 at 5; Peoples USECP at 20.
[91] Peoples St. 9 at 5.
[92] 52 Pa. Code § 58.1.

achieved high energy savings from LIURP, averaging about *20 percent* of the customers' pre-treatment natural gas usage.[93] Throughout Pennsylvania, gas heating customers who receive LIURP services achieve 14.5% energy reduction with average annual bill savings of $220 per year.[94] Bill reductions through comprehensive energy efficiency and conservation efforts improve affordability and help to ensure that low income customers remain connected to service at more affordable rates. It is especially important to improve the availability of LIURP to high usage families to mitigate the disproportionately high burden if Peoples' proposed rate increase is approved.

Q: Is Peoples LIURP adequately funded to mitigate the impact of the proposed rate increase?

A: No. Peoples' LIURP program could help mitigate the impact of its proposed rate increase on low income high-use households by installing a range of efficiency and weatherization measures to reduce unnecessarily high usage in low income households that cannot otherwise afford to adopt efficiency measures. But Peoples' LIURP is not adequately funded to meet the currently identified need of its low income customer base – let alone serve to offset the increased energy burdens resulting from its rate proposal in this proceeding.

Peoples' confirmed low income customers consistently have average usage that is *22-23% higher* average annual usage than residential customers who are not confirmed low income.[95] Table 2 shows the difference in average annual usage between these two subsets of customers.

[93] 2019-2024 USECP, Attach. A at 19.
[94] 2022 Universal Service Report at 57.
[95] CAUSE-PA II-14.

TABLE 2: Average Annual Customer Usage (Mcf)[96]

	2019	2020	2021	2022	2023
Confirmed Low Income	106.4	98.3	103.8	106.6	96
Residential excluding low income	87.3	80.7	84.7	86.7	78.5
Difference	22%	22%	23%	23%	22%

This disparity in usage is likely the result of disparities in access to efficient housing and heating equipment.[97] Considering that Peoples' LIURP can provide approximately 20 percent reduction of low income customers' pre-treatment natural gas usage, the program can and does help address this disparity in usage rates.[98]

In 2023, Peoples reported the lowest LIURP budget projected spending per residential customer of any NGDC. Table 3 shows 2023 projected LIURP spending per customer among all PA NGDCs.

Table 3: LIURP Spending Per Customer[99]

Utility	2022 Residential Customers	2023 Projected LIURP Spending	2023 Projected Monthly Spending Per Customer
NFG	196,741	$3,388,596	$1.43
PGW	487,336	$8,105,134	$1.39
Columbia	409,611	$5,893,673	$1.20
UGI Utilities – Gas	618,589	$3,964,350	$0.53
PECO-Gas	500,154	$3,150,000	$0.52
Peoples	**594,250**	**$3,466,437**	**$0.49**
Total / Industry Avg.	2,806,681	$27,968,190	$0.83

[96] CAUSE-PA II-14.
[97] Diana Hernández, Energy Insecurity And Health: America's Hidden Hardship, Health Affairs Health Policy Brief, (June 2023) ("The physical manifestations of energy insecurity include dated, malfunctioning, or nonexistent heating and cooling equipment; poor insulation; drafts; and reliance on older, less efficient lighting systems and domestic appliances such as refrigerators, stoves, and hot water heaters.").
[98] Ex. RFB-1, Attachment A at 19.
[99] 2022 Universal Service Report at 7, 54.

As this table demonstrates, Peoples had the lowest LIURP budget per capita in 2023 and well below the industry average. For example, Peoples budget is roughly on par with NFG's budget – yet NFG has roughly 400,000 (67%) fewer residential customers than Peoples.

Further, a substantial portion of Peoples' 2023 budget consisted of unspent rollover funds accumulated through the pandemic, when it was difficult to perform work inside homes. Table 4 shows Peoples LIURP budget, spending, and jobs completed as reported to the Universal Service Advisory Group (USAG) at its January 2024 meeting.

Table 4: USAG January 2024 LIURP Presentation[100]

	Peoples Natural	**Peoples Gas**	**Total**
2023 Spend	$3,469,514	$301,075	$3,770,589
2023 Completed Jobs	290	27	317
2024 Budget (including rollover)	$2,753,076	$511,410	$3,264,486
Current Annual Approved Budget	$2,750,000	$280,000	$3,030,000

As this table shows, Peoples spent $3,770,589 across both divisions in 2023. However, despite the demonstrated need for services, and the fact that Peoples has the lowest spending per capita among NGDCs in 2023, the lack of additional rollover funds means that the Company's LIURP budget will actually *decrease* by 13% to $3,264,486 for 2024.

As of 2020, Peoples estimated that it had approximately 12,832 customers eligible for LIURP services for its PNG division.[101] Since then, it has served approximately 2,000

[100] See Peoples' January 2024 USAG presentation, Attached hereto as Appendix D.
[101] 2019-2024 USECP, Attach. G. Notably, it is unclear how Peoples' estimated this figure, given the substantial deviation from the 23,923 LIURP-eligible customers identified in the needs assessment for its previous USECP; see Peoples 2015-2017 USECP, Attachment A, p. 2.

households.[102] However, the Company is proposing to lower the LIURP minimum usage threshold for PNG division, which will expand the potential number of eligible households. Even at its 2023 completion rate of 317 LIURP jobs per year, Peoples will not be able to serve an adequate number of households to address the identified needs within a reasonable amount of time, let alone at a 13% lower budget.

I strongly recommend that the Company increase its LIURP budget to address current and anticipated need for comprehensive usage reduction services. First, Peoples should increase their annual LIURP budget equal to the actual 2023 spend for each division (e.g., $3,469,514 for Peoples Natural Gas and $301,075 for Peoples Gas, in addition to the rollover from the prior year). In addition, to the extent the Commission approves any increase in residential rates, Peoples should further increase its annual LIURP budget for each division by a percentage equal to the approved residential rate increase. These adjustments to the LIURP budget would help to address current unmet need as well as increased need following any increase in rate.

d. Hardship Fund

Q: Please briefly describe Peoples' Hardship Fund.

A: Peoples' Hardship Fund is administered by Dollar Energy Fund and provides grants of up to $500 and is available for customers with income at or below 200% FPL.[103] Peoples' Expert Witness Rita Black also states that all customers receiving a hardship fund grant are then enrolled into Peoples' CAP.[104]

[102] Id. at 22.
[103] People's St. 9 at 4.
[104] Id.

Q: Is Peoples' Hardship Fund appropriately funded to address low income household arrearages?

A: No. As I have noted, I am concerned that Peoples' method of counting its confirmed low income customers is incorrect and results in an inadequate identification of at-need customers within its service territory, as well as a disproportionately high level of arrears and terminations among its low income customers. As of January 2024, despite making up just 7.9% of residential customers, confirmed low income customers (according to Peoples' narrow internal definition, which includes only customers who are enrolled in CAP and/or received a LIHEAP grant),[105] account for 25.7% of total dollars in debt.[106] Further, of the 53,931 residential customers in an active payment arrangement, 58% of those are confirmed low income customers. [107] Those confirmed low income customers carry 43.9% of the actual debt in dollars held by residential customers in an active payment arrangement.[108] As of January 2024, Peoples reported that the 6,283 of its confirmed low income customers, *excluding CAP enrollees*, are carrying arrearages.[109] The average debt of these customers is $492.24.[110]

As explained above, People's low income customers also face terminations at disproportionate levels compared to residential customers as a whole, evidencing a substantial unmet need for emergency assistance to maintain gas services to their home. If Peoples' proposed rate increase is approved, the need for hardship fund assistance will grow. As noted, Peoples' proposed rate increase, alone, accounts for over 50% of the average LIHEAP grant. This is true,

[105] CAUSE-PA II-3.
[106] CAUSE-PA II-20(1),(3).
[107] CAUSE-PA II-18(1),(3).
[108] Id.
[109] CAUSE-PA II-18(1), (4); CAUSE-PA II-19(1), (4).
[110] OCA IX-9(b).

also, of Peoples' Hardship Fund grants. It is imperative that the Commission take steps to expand Peoples' Hardship Fund to improve the availability of emergency grant assistance to those in need of emergency grant assistance to maintain gas service to their home.

Q: Do you have any recommendations regarding Peoples' Hardship Fund?

A: Yes. I recommend that Peoples increase its maximum grant amount and annual hardship fund budget, and that Peoples take additional steps to refocus the hardship fund program to reduce disproportionately high low income termination rates and more appropriately target its hardship grants to help customers most in need of assistance. This is particularly critical in light of Peoples' proposal to substantially increase rates.

First, I recommend that Peoples increase its maximum grant amount to $600. Raising the limit for the hardship fund will help further the explicit statutory purpose of universal service programs to assist low income customers to maintain gas service to their home – providing a greater level of relief to experiencing a hardship to prevent termination of service. Increasing the Hardship Fund grant amounts will also help ensure adequate relief is available following any increase in rates as a result of the present proceeding. The goal of the Hardship Fund – as with all universal service programming – is to assist low income families to maintain service to their home. Thus, I recommend that Peoples raise the maximum grant level to adequately address the level of arrears accrued by its low income customers and provide the emergency funds necessary to prevent terminations in light of increasing rates.

In addition to increasing the maximum grant amount, I also recommend that Peoples increase funding available for grant assistance. As explained above, low income customers already struggle to afford service and are at a greater risk of service termination compared to residential customers as a whole. Any increase to the cost of essential utility service, such as People's

currently proposed rate increase, will worsen these struggles and lead to an increased threat of involuntary termination – while at the same time eroding both the adequacy and effectiveness of Peoples' current maximum grant levels *and* available funding. I therefore recommend, in addition to increasing the grant amount, that the Commission require Peoples to increase funding for its Hardship Fund to address unaffordability felt by low income customers at both present and proposed rates.

At a minimum, I recommend that Peoples be required to increase its hardship fund budget by a percentage equal to any residential rate increase approved in this proceeding. This increased level of grant funding will help the program budget better keep pace with the cost of residential service and ensure that the policies, protections, and services which are currently in place to avoid termination are appropriately modified so that they are not as significantly reduced as a result of any approved rate increase.

IV. RATE DESIGN

a. Residential Fixed Customer Charge

Q: Please briefly describe Peoples' residential fixed customer charge proposal.

A: In its filing, Peoples seeks to consolidate the tariffs of PNG Division and PG Division and increase the fixed monthly residential customer charge from $14.50 in PNG Division and $15.75 in PG Division to $21.50 across both divisions.[111] This would be a 48% percent increase to the residential customer charge for PNG division customers and 37% for PG division customers.

[111] Ex. DF-2.

Q: How would Peoples' proposed increase to the fixed customer charge impact low income households?

A: This level of increase to the fixed charge will undermine the ability for consumers to control costs through energy efficiency and conservation. While most low income customers participating in a CAP are shielded – at least in part - from the full brunt of the rate increase, thousands of low income customers are not enrolled in CAP, and will experience a substantial hardship as a result of Peoples' proposed rate increase. As discussed, due to disparities in housing and heating system efficiency, low income households often have greater potential to reduce energy and gain cost benefits through comprehensive efficiency and conservation measures. Low income customers already struggle profoundly to pay for gas service and rely on the ability to offset high bills through conservation and usage reduction. Regardless of the level of household usage, any increase to the fixed charge erodes the ability of consumers to effectively deploy efficiency and conservation measures to achieve bill savings.

Q: Would Peoples' proposed increase to the fixed charge impact the effectiveness of its Low Income Usage Reduction Program (LIURP)?

A: Yes. Peoples' proposal to dramatically increase its fixed charge will undermine the regulatory goals for LIURP. The Commission's LIURP regulations explicitly provide that LIURP is intended to help low income customers to reduce their bills and, in turn, to "decrease the incidence and risk of customer payment delinquencies and the attendant utility costs associated with uncollectible accounts expense, collection costs and arrearage carrying costs."[112] Increasing

[112] 52 Pa. Code § 58.1 ("The programs are intended to assist low-income customers conserve energy and reduce residential energy bills. The reduction in energy bills should decrease the incidence and risk of customer payment delinquencies and the attendant utility costs associated with uncollectible accounts expense, collection costs and arrearage carrying costs.").

the fixed customer charge at the level proposed by Peoples limits the ability of the LIURP program to help program participants who are not enrolled in CAP (or who are enrolled in CAP and pay the average bill rate) to achieve meaningful bill savings.

LIURP is effective at achieving these goals. In 2020, the most recent year where industry-wide data is available, LIURP saved an annual of $220 per year, or $18.30 per month, corresponding to an estimated percentage of 14.5%.[113] The ability to save money through energy efficiency is tied directly to a bill structure that bases costs on throughput. But as more residential customer costs are shifted to the fixed charge, the achievable bill savings – and the corresponding impact on bill payment behavior – will erode.

Q: Do you have any recommendations regarding Peoples' residential customer charge proposal?

A: Yes. Based on my analysis above regarding the effect of fixed charge increases on low income customers' ability to achieve bill savings through energy efficiency measures, I recommend that Peoples' fixed monthly customer charges remain static for both divisions.

b. Weather Normalization Adjustment Charge (WNA)

Q: Please briefly describe Peoples' proposed Weather Normalization Adjustment.

A: Peoples' proposed Weather Normalization Adjustment (WNA) is a bill adjustment applied to certain customer classes (including residential customers) from October 1 through May 31 that attempts to break the link between the revenue collected through the volumetric rate and the effects of variations in temperature.[114] Peoples claims that the WNA would provide "symmetric

[113] 2022 Universal Service Report at 57 (Estimated annual bill reductions are based on the average of the public utility results from each category of LIURP jobs completed in the program year, evaluated in following year, and reported in the year after that.)
[114] Peoples St. 3 at 16-17.

protection" to customers and the Company by protecting the utility from reduced revenue due to warmer weather - while also protecting customers from higher bills due to colder than normal weather.[115] However, in practice, the other WNAs implemented in Pennsylvania service territories have nearly always resulted in higher charges for residential consumers and shifted all risk of changing weather from utilities onto consumers.[116] Utility distribution rates are based on expected throughput during normal weather. When temperatures are warmer than normal, which they have been for the last several years, WNAs result in a higher bill for residential customers.

Q: Do you support Peoples' proposed adoption of a WNA in this proceeding?

A: No. Peoples' proposed WNA would prevent residential customers from realizing bill savings that result from warming weather trends and would shift all weather-related risk from the utility to the consumer. Low income customers struggle to afford service and need to retain every ability to realize bill savings due to reduced usage, even reduced usage due to changing weather.

As I explained earlier, the vast majority of low income customers in Peoples' service territory are not enrolled in CAP and are therefore not only already paying an unaffordable full tariff rate but will now have to pay extra, even if they use less gas for heat and would lose the opportunity to recognize bill savings resulting from reduced usage during warmer winters.

Residential customers will receive no practical benefit from implementation of the WNA. Any risk of increased bills due to colder than normal winters will likely be outweighed by the increasing frequency of warmer winters. Further, the risk of varying bills due to colder than normal winters can be mitigated by enrollment in CAP or budget billing. While Peoples touts that the WNA will produce more predictable bills, a more predictable but less affordable bill will not

[115] Peoples St. 15 at 55-56.

[116] See Pa. PUC v. Columbia Gas of Pa., Inc., R-2020-3018835, Columbia St. 3 at 17-18 (Submitted Apr. 24, 2020); see also Pa. PUC v. Philadelphia Gas Works, R-2017-2586783, PGW Annual WNA Reporting (filed Dec. 31, 2019; June 9, 2021; Jan. 6, 2022).

benefit low income customers who already struggle to afford service. Thus, I recommend that the Commission reject Peoples' proposed WNA.

V. CONCLUSION

Q: Please summarize your recommendations.

A: I have made several recommendations throughout my testimony, each with the goal of improving the services provided to low income households and ensuring that Peoples' low income customers can reasonably afford service in the face of the proposed rate increase. Indeed, rates are not just and reasonable if they are unaffordable for a substantial segment of Peoples' customer base. Specifically, I recommend that the Commission order Peoples to:

- Revise its internal definition of confirmed low income customers to include any information provided by the customer that reasonably places the customer in a low income designation, consistent with the Commission's regulations at section 62.2.
- Fully adhere to the statutory security deposit prohibition for all confirmed low income customers, as defined by section 62.2.
- Immediately refund any currently held security deposits to any customer classified as confirmed low income under section 62.2, and on a monthly basis thereafter.
- Use the estimated low income customer count, calculated pursuant to the BCS methodology, to analyze and assess universal service program needs and budget.
- Amend its existing LIHEAP auto-enrollment language in its tariff to eliminate the requirement that a customer breach a payment agreement.
- File a Petition within 90 days of a final order in this case seeking authorization to amend its USECP to permit auto-enrollment, as explained in my testimony.
- Screen all new and moving customers for income level at the time their service is established and routinely thereafter during non-emergency calls or contacts, and refer potentially eligible customers to enroll in appropriate universal service programs.
- Approve Peoples' proposal to adopt the 120 Mcf LIURP minimum usage threshold.
- Increase Peoples' annual LIURP budget to match 2023 spending levels. Additionally, if any rate increase is approved in this proceeding, increase the LIURP budget further by an amount proportionally equal to the percentage of any approved increase in residential rates.
- Increase the maximum hardship fund grant to $600.

- Increase funding for the Hardship Fund, at a minimum, by the percentage of any approved residential rate increase.
- Reject Peoples' proposal to increase the residential customer charge.
- Reject Peoples' inequitable and unjust WNA proposal.

Q: Does that conclude your direct testimony?

A: Yes.

THE COALITION FOR AFFORDABLE UTILITY SERVICE AND ENERGY EFFICIENCY IN PENNSYLVANIA

APPENDIX A

RESUME OF HARRY S. GELLER

RESUME OF HARRY S. GELLER

EDUCATIONAL BACKGROUND:

Harpur College, State University of New York at Binghamton, B.A. 1966
Washington College of Law, American University, J.D. 1969
New York University Law School, courses in Urban Affairs and Poverty Law, as part of Volunteers in Service to America (VISTA) Program 1969-1971

EMPLOYMENT:

1988 – 2015 Executive Director, Pennsylvania Utility Law Project (PULP), a project of the civil non-profit Pennsylvania Legal Aid Network. PULP is dedicated to providing technical support, information sharing, and representation to low-income individuals and organizations, assisting and advocating for the low income in utility and energy matters. Responsibilities include project oversight, case consultation, co-counseling, and participation on task forces, work groups and advisory panels, community education and training in utility and energy matters affecting the low income.

While at PULP, served in the following capacities:

- Chairman, Low-Income Home Energy Assistance Program (LIHEAP) Advisory Committee to the Secretary, Pennsylvania Department of Human Services
- Member, Pennsylvania Public Utility Commission, Consumer Advisory Council Coordinator, Pennsylvania Legal Services Utility/Energy Work Groups
- Member, Weatherization Policy Advisory Committee to the Department of Community and Economic Development
- Member, PECO Universal Service Advisory Committee and LIURP Subcommittee

1974-1987 Staff Attorney, Managing Attorney and ultimately, Executive Director of Legal Services, Incorporated (LSI), a civil legal services program serving Adams, Cumberland, Franklin and Fulton Counties. Through a restructuring with other legal services programs, LSI became part of what is now known as MidPenn Legal Services and Franklin County Legal Services.

1971-1972 Staff Attorney, New York City Legal Aid Society, Criminal Court and Supreme Court Branches, New York County.

1969-1971 Volunteer in Service to America (VISTA) assigned to the New York University Law School Project on Urban Affairs and Poverty Law.

BAR ADMISSIONS

New York State
Commonwealth of Pennsylvania
United States District Court, Middle District of Pennsylvania

Cases in which Harry S. Geller has participated as a witness before the Pennsylvania Public Utility Commission since July 1, 2015

- Pennsylvania Public Utility Commission v. Pa. American Water Co., R-2023-3043189, R-2023-3043190,
- Pennsylvania Public Utility Commission v. Philadelphia Gas Works, R-2023-3037933,
- Pennsylvania Public Utility Commission v. Philadelphia Gas Works, R-2022-3034229, P- 2022-3034264
- Pennsylvania Public Utility Commission v. National Fuel Gas Distribution Corporation, R-2022-3035730
- Pennsylvania Public Utility Commission v. Columbia Gas of Pa., Docket No.
- R-2022-3031211
- Pennsylvania Public Utility Commission v. Pa. American Water Co., Docket Nos.
- R-2022-3031672 & -3031673
- Pennsylvania Public Utility Commission v. UGI Utilities, Inc. – Gas Division, R-2021- 3030218.
- Joint Petition of MetEd, Penelec, Penn Power, and West Penn Power for Approval of their Default Service Programs for the Period Commencing June 1, 2023 through May 31, 2027, Docket Nos. P-2021-3030012, -13, -14, -21
- Pennsylvania Public Utility Commission v. Aqua Pennsylvania, Inc. and Aqua Pennsylvania Wastewater, Inc., Docket Nos. R-2021-3027385, R- 2021-3027386.
- Pennsylvania Public Utility Commission v. Pittsburgh Water and Sewer Authority, R-2021-3024773, R-2021-3024774, R-2021-3024779.
- Pennsylvania Public Utility Commission v. Duquesne Light Company, R-2021- 3024750.
- Pennsylvania Public Utility Commission v. PECO Energy – Electric Division, R-2021-3024601.
- Pennsylvania Public Utility Commission v. Columbia Gas of Pennsylvania, Inc., R-2021-3024296.
- Tenant Union Representative Network v. PECO Energy Company, C-2020-3021557
- Pennsylvania Public Utility Commission v. Philadelphia Gas Works, R-2020-3017206.
- Petition of PPL Electric Utilities Corporation for Approval of a Default Service Program for the Period of June 1, 2021 through May 31 , 2025, Docket No. P-2020-3019356.
- Petition of PECO Energy Company for Approval of Its Default Service Program for the Period from June 1, 2021 through May 31, 2025, Docket No. P-2020-3019290.
- Petition of Duquesne Light Company For Approval of Default Service Plan For The Period June 1, 2021 Through May 31, 2025, Docket No. P-2020-3019522.
- Joint Application of Aqua America, Inc., Aqua Pennsylvania, Inc., Aqua Pennsylvania Wastewater, Inc., Peoples Natural Gas Company LLC and Peoples Gas Company LLC for all of the Authority and Necessary Certificates of Public Convenience to Approve a Change in Control of Peoples Natural Gas Company LLC, and Peoples Gas Company LLC by way of the Purchase of all of LDC Funding LLC's Membership Interests by Aqua America, Inc., Docket Nos. A-2018-3006061, A-2018-3006062, A-2018-3006063.

- Pennsylvania Public Utility Commission v. Aqua Pennsylvania, Inc. et al. Docket Nos. R2018-3003558 et seq.
- Pennsylvania Public Utility Commission v. Duquesne Light Company, Docket No. R-2018-3000124.
- Pennsylvania Public Utility Commission v. PECO Energy Company- Electric Division, Docket No. R-2018-3000164.
- Joint Petition of MetEd, Penelec, Penn Power, and West Penn Power for Approval of their Default Service Programs for the period commencing June 1, 2019 through May 31, 2023, Docket Nos. P-2017-2637855, P-2017-2637857, P-2017-2637858; P-2017-2637866.
- Pennsylvania Public Utility Commission et al. v. Philadelphia Gas Works, Docket No. R-2017-2586783.
- PECO Energy Company's Pilot Plan for an Advance Payments Program and Petition for Temporary Waiver of Portions of the Commission's Regulations with Respect to that Plan, Docket No. P-2016-2573023.
- Petition of PECO Energy Company for Approval of a Default Service Program for the Period of June 1, 2017 through May 31, 2019, Docket No. P-2016-2534980.
- Petition of PPL Electric Utilities Corporation for Approval of a Default Service Program and Procurement Plan for the Period of June 1, 2017 through May 31, 2021, Docket No. P-2016-2526627.
- Petition of Duquesne Light Company for Approval of a Default Service Program for the Period of June 1, 2017 through May 31, 2021, Docket No. P-2016-2543140.
- Pennsylvania Public Utility Commission et al. v. Columbia Gas of Pennsylvania, Inc., Docket No. R-2016-2529660.
- Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company,
- Pennsylvania Power Company, and West Penn Power Company for Approval of their Default Service Programs for the period commencing June 1, 2017 through May 31, 2019, Docket Nos. P-2015-2511333, P-2015-25113351, P-2015-2511355, P-2015-2511356.
- Petition of PPL Electric Utilities Corporation for Approval of its Energy Efficiency and Conservation Plan, Docket No. M-2015-2515642.

THE COALITION FOR AFFORDABLE UTILITY SERVICE AND ENERGY EFFICIENCY IN PENNSYLVANIA

APPENDIX B

CITED DISCOVERY RESPONSES

Coalition for Affordable Utility Service and Energy Efficiency in Pennsylvania (CAUSE-PA) to Peoples Natural Gas Co. LLC (Peoples)

- CAUSE-PA I-8.
- CAUSE-PA II-1.
- CAUSE-PA II-2
- CAUSE-PA II-3.
- CAUSE-PA II-4.
- CAUSE-PA II-5
- CAUSE-PA II-7.
- CAUSE-PA II-8.
- CAUSE-PA II-12.
- CAUSE-PA II-13.
- CAUSE-PA II-14.
- CAUSE-PA II-16.
- CAUSE-PA II-17.
- CAUSE-PA II-18.
- CAUSE-PA II-19.
- CAUSE-PA II-20.
- CAUSE-PA IV-3.
- CAUSE-PA IV-6.
- CAUSE-PA IV-7.
- CAUSE-PA IV-8.

Office of Consumer Advocate (OCA) to Peoples Natural Gas Co. LLC (Peoples)

- OCA IX-9.

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: CAUSE-I-008

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: Please describe the steps Peoples use to investigate whether they are holding security deposit of confirmed low income customers, and the procedures related to how the security deposit is returned to a confirmed low income customer. Please also provide a copy of any policies, procedures, or other documents which describe Peoples existing policies related to collection and return of security deposits from low income customers.

Answer: Customer who are enrolled in CAP will have security deposits removed as a condition of participating in the program. Peoples does not have a process to automatically return security deposits upon receipt of a LIHEAP grant, however the company does return the deposit upon customer notification of LIHEAP grant.

Submit Date: 2/20/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: CAUSE-II-001

Witness: Scanlon, Carol **Title:** Rates Manager

Question: Please identify the bill impacts of the proposed rate increase on customers enrolled in Peoples' Customer Assistance Program by payment plan type. If you are unable to identify the bill impact, or assert that there will be no impact, please explain.

Answer: Customers participating in CAP pay the lower of their percentage of income payment amount, or the calculated average bill amount, whichever is lower. CAP customers are exempt from the universal service rider. On a monthly basis, during the billing process, CAP accounts are reviewed to ensure they are on the most affordable payment option available to the household. If a change is necessary, the bill will denote a payment change will be occurring the following month. To the extent that approved rates from this proceeding increase a CAP customer's average bill amount, and that average bill is currently lower than their ask to pay, the customer's payment would change to either the new average bill amount, or the percentage of income payment, whichever is lower. For customers currently paying the percentage of income payment amount, an increase to the average bill amount as a result of a change in rates would not impact their payment.

Submit Date: 2/26/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: CAUSE-II-002

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: From 2019 to present, disaggregated by division, month, and year, please identify the number of CAP customers whose bills were calculated based on:

a. Average monthly bill;

b. Percentage of income (disaggregated by income tier);

c. Minimum bill; or

d. Other (please specify).

Please provide this data in a live excel spreadsheet.

Answer: This data is not readily available. However, the Company is further evaluating if it can be compiled. An updated response will be provided if the information becomes available.

Submit Date: 2/26/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: CAUSE-II-003

Witness: Black, Rita **Title:** Community Assistance Programs Director

Question: Please identify all categories or identifiers that Peoples includes when calculating its "confirmed low income customer" count.

Answer: Peoples counts all CAP participants, as income documentation or the zero income form are submitted to confirm low income status. In addition to CAP participation, Peoples also considers receipt of LIHEAP cash or crisis grants within the past 24 months as indicative of confirmed low income.

Submit Date: 2/26/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: CAUSE-II-004

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: For 2019 to present, disaggregated by division, month, and year, how many Peoples customers were/are categorized as a confirmed low income customer? Please provide this data in a live excel spreadsheet.

Answer: Please see attached Excel file.

Submit Date: 2/26/2024

CAUSE-PA-II-4

Division	Month	LOW INC Accts	Division	Month	LOW INC Accts
Peoples Natural Gas Company	20191031	44,667	Peoples Gas Company	20191031	4,477
Peoples Natural Gas Company	20191130	44,824	Peoples Gas Company	20191130	4,559
Peoples Natural Gas Company	20191231	45,555	Peoples Gas Company	20191231	4,679
Peoples Natural Gas Company	20200131	45,942	Peoples Gas Company	20200131	4,751
Peoples Natural Gas Company	20200229	46,062	Peoples Gas Company	20200229	4,792
Peoples Natural Gas Company	20200331	46,472	Peoples Gas Company	20200331	4,853
Peoples Natural Gas Company	20200430	46,965	Peoples Gas Company	20200430	4,891
Peoples Natural Gas Company	20200531	47,433	Peoples Gas Company	20200531	4,906
Peoples Natural Gas Company	20200630	47,390	Peoples Gas Company	20200630	4,899
Peoples Natural Gas Company	20200731	47,475	Peoples Gas Company	20200731	4,881
Peoples Natural Gas Company	20200831	45,945	Peoples Gas Company	20200831	4,702
Peoples Natural Gas Company	20200930	46,288	Peoples Gas Company	20200930	4,709
Peoples Natural Gas Company	20201031	46,917	Peoples Gas Company	20201031	4,726
Peoples Natural Gas Company	20201130	46,922	Peoples Gas Company	20201130	4,718
Peoples Natural Gas Company	20201231	47,891	Peoples Gas Company	20201231	4,774
Peoples Natural Gas Company	20210131	48,268	Peoples Gas Company	20210131	4,785
Peoples Natural Gas Company	20210228	48,732	Peoples Gas Company	20210228	4,824
Peoples Natural Gas Company	20210331	49,264	Peoples Gas Company	20210331	4,866
Peoples Natural Gas Company	20210430	49,456	Peoples Gas Company	20210430	4,864
Peoples Natural Gas Company	20210531	49,510	Peoples Gas Company	20210531	4,790
Peoples Natural Gas Company	20210630	49,105	Peoples Gas Company	20210630	4,737
Peoples Natural Gas Company	20210731	48,330	Peoples Gas Company	20210731	4,653
Peoples Natural Gas Company	20210831	47,960	Peoples Gas Company	20210831	4,597
Peoples Natural Gas Company	20210930	47,593	Peoples Gas Company	20210930	4,553
Peoples Natural Gas Company	20211031	47,267	Peoples Gas Company	20211031	4,489
Peoples Natural Gas Company	20211130	47,394	Peoples Gas Company	20211130	4,557
Peoples Natural Gas Company	20211231	48,649	Peoples Gas Company	20211231	4,641
Peoples Natural Gas Company	20220131	48,696	Peoples Gas Company	20220131	4,702
Peoples Natural Gas Company	20220228	49,176	Peoples Gas Company	20220228	4,725
Peoples Natural Gas Company	20220331	49,643	Peoples Gas Company	20220331	4,800
Peoples Natural Gas Company	20220430	49,623	Peoples Gas Company	20220430	4,802
Peoples Natural Gas Company	20220531	48,942	Peoples Gas Company	20220531	4,709
Peoples Natural Gas Company	20220630	48,371	Peoples Gas Company	20220630	4,651
Peoples Natural Gas Company	20220731	47,833	Peoples Gas Company	20220731	4,595
Peoples Natural Gas Company	20220831	47,567	Peoples Gas Company	20220831	4,576
Peoples Natural Gas Company	20220930	47,048	Peoples Gas Company	20220930	4,522
Peoples Natural Gas Company	20221031	46,885	Peoples Gas Company	20221031	4,513
Peoples Natural Gas Company	20221130	47,489	Peoples Gas Company	20221130	4,610
Peoples Natural Gas Company	20221231	48,471	Peoples Gas Company	20221231	4,732
Peoples Natural Gas Company	20230131	48,903	Peoples Gas Company	20230131	4,834
Peoples Natural Gas Company	20230228	49,716	Peoples Gas Company	20230228	4,919
Peoples Natural Gas Company	20230331	50,278	Peoples Gas Company	20230331	4,970
Peoples Natural Gas Company	20230430	50,627	Peoples Gas Company	20230430	5,022
Peoples Natural Gas Company	20230531	51,045	Peoples Gas Company	20230531	5,065
Peoples Natural Gas Company	20230630	50,285	Peoples Gas Company	20230630	4,949
Peoples Natural Gas Company	20230731	49,335	Peoples Gas Company	20230731	4,808
Peoples Natural Gas Company	20230831	48,923	Peoples Gas Company	20230831	4,723
Peoples Natural Gas Company	20230930	46,920	Peoples Gas Company	20230930	4,488
Peoples Natural Gas Company	20231031	46,280	Peoples Gas Company	20231031	4,437
Peoples Natural Gas Company	20231130	46,398	Peoples Gas Company	20231130	4,453
Peoples Natural Gas Company	20231231	46,515	Peoples Gas Company	20231231	4,483

Peoples Natural Gas Company	20240131	46,894	Peoples Gas Company	20240131	4,539

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: CAUSE-II-005

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: For 2019 to present, disaggregated by division, month, and year, how many Peoples' customers were enrolled in CAP? Please provide this data in a live excel spreadsheet.

Answer: Please see attached Excel file.

Submit Date: 2/26/2024

CAUSE-PA-II-5

Division	Month	CAP Accts	Division	Month	CAP Accts
Peoples Natural Gas Company	20191031	30,600	Peoples Gas Company	20191031	2,777
Peoples Natural Gas Company	20191130	30,434	Peoples Gas Company	20191130	2,778
Peoples Natural Gas Company	20191231	30,266	Peoples Gas Company	20191231	2,777
Peoples Natural Gas Company	20200131	30,036	Peoples Gas Company	20200131	2,758
Peoples Natural Gas Company	20200229	29,669	Peoples Gas Company	20200229	2,738
Peoples Natural Gas Company	20200331	29,491	Peoples Gas Company	20200331	2,713
Peoples Natural Gas Company	20200430	29,846	Peoples Gas Company	20200430	2,737
Peoples Natural Gas Company	20200531	30,403	Peoples Gas Company	20200531	2,761
Peoples Natural Gas Company	20200630	30,505	Peoples Gas Company	20200630	2,760
Peoples Natural Gas Company	20200731	30,754	Peoples Gas Company	20200731	2,773
Peoples Natural Gas Company	20200831	30,917	Peoples Gas Company	20200831	2,800
Peoples Natural Gas Company	20200930	31,583	Peoples Gas Company	20200930	2,838
Peoples Natural Gas Company	20201031	32,732	Peoples Gas Company	20201031	2,931
Peoples Natural Gas Company	20201130	33,051	Peoples Gas Company	20201130	2,950
Peoples Natural Gas Company	20201231	33,634	Peoples Gas Company	20201231	2,971
Peoples Natural Gas Company	20210131	33,959	Peoples Gas Company	20210131	2,991
Peoples Natural Gas Company	20210228	34,043	Peoples Gas Company	20210228	2,995
Peoples Natural Gas Company	20210331	34,288	Peoples Gas Company	20210331	3,011
Peoples Natural Gas Company	20210430	34,585	Peoples Gas Company	20210430	3,006
Peoples Natural Gas Company	20210531	35,116	Peoples Gas Company	20210531	3,000
Peoples Natural Gas Company	20210630	35,171	Peoples Gas Company	20210630	3,012
Peoples Natural Gas Company	20210731	34,832	Peoples Gas Company	20210731	2,969
Peoples Natural Gas Company	20210831	34,850	Peoples Gas Company	20210831	2,958
Peoples Natural Gas Company	20210930	34,658	Peoples Gas Company	20210930	2,932
Peoples Natural Gas Company	20211031	34,481	Peoples Gas Company	20211031	2,909
Peoples Natural Gas Company	20211130	34,377	Peoples Gas Company	20211130	2,896
Peoples Natural Gas Company	20211231	34,817	Peoples Gas Company	20211231	2,918
Peoples Natural Gas Company	20220131	34,407	Peoples Gas Company	20220131	2,931
Peoples Natural Gas Company	20220228	34,372	Peoples Gas Company	20220228	2,920
Peoples Natural Gas Company	20220331	34,227	Peoples Gas Company	20220331	2,905
Peoples Natural Gas Company	20220430	33,583	Peoples Gas Company	20220430	2,836

Peoples Natural Gas Company	20220531	32,431	Peoples Gas Company	20220531	2,720
Peoples Natural Gas Company	20220630	31,337	Peoples Gas Company	20220630	2,642
Peoples Natural Gas Company	20220731	31,087	Peoples Gas Company	20220731	2,600
Peoples Natural Gas Company	20220831	30,895	Peoples Gas Company	20220831	2,595
Peoples Natural Gas Company	20220930	30,598	Peoples Gas Company	20220930	2,575
Peoples Natural Gas Company	20221031	30,373	Peoples Gas Company	20221031	2,564
Peoples Natural Gas Company	20221130	30,244	Peoples Gas Company	20221130	2,552
Peoples Natural Gas Company	20221231	30,565	Peoples Gas Company	20221231	2,605
Peoples Natural Gas Company	20230131	30,622	Peoples Gas Company	20230131	2,658
Peoples Natural Gas Company	20230228	30,773	Peoples Gas Company	20230228	2,668
Peoples Natural Gas Company	20230331	30,972	Peoples Gas Company	20230331	2,690
Peoples Natural Gas Company	20230430	30,874	Peoples Gas Company	20230430	2,696
Peoples Natural Gas Company	20230531	30,482	Peoples Gas Company	20230531	2,680
Peoples Natural Gas Company	20230630	29,788	Peoples Gas Company	20230630	2,587
Peoples Natural Gas Company	20230731	29,170	Peoples Gas Company	20230731	2,493
Peoples Natural Gas Company	20230831	29,256	Peoples Gas Company	20230831	2,466
Peoples Natural Gas Company	20230930	28,795	Peoples Gas Company	20230930	2,408
Peoples Natural Gas Company	20231031	27,830	Peoples Gas Company	20231031	2,325
Peoples Natural Gas Company	20231130	27,388	Peoples Gas Company	20231130	2,278
Peoples Natural Gas Company	20231231	26,883	Peoples Gas Company	20231231	2,242
Peoples Natural Gas Company	20240131	26,842	Peoples Gas Company	20240131	2,249

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: CAUSE-II-007

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: For 2019 to present, disaggregated by division, month, and year, please identify the following:

1. The total number of residential customers; and

2. The total number of confirmed low income customers not enrolled in CAP.

Please provide this data in a live excel spreadsheet.

Answer: Please see attached Excel file.

Submit Date: 2/26/2024

CAUSE-PA-II-7

Division	Month	#1	#2
Peoples Natural Gas Company	20191031	584,276	14,067
Peoples Natural Gas Company	20191130	586,331	14,390
Peoples Natural Gas Company	20191231	588,100	15,289
Peoples Natural Gas Company	20200131	588,283	15,906
Peoples Natural Gas Company	20200229	588,414	16,393
Peoples Natural Gas Company	20200331	589,212	16,981
Peoples Natural Gas Company	20200430	587,606	17,119
Peoples Natural Gas Company	20200531	587,599	17,030
Peoples Natural Gas Company	20200630	588,579	16,885
Peoples Natural Gas Company	20200731	590,942	16,721
Peoples Natural Gas Company	20200831	590,578	15,028
Peoples Natural Gas Company	20200930	589,349	14,705
Peoples Natural Gas Company	20201031	590,820	14,185
Peoples Natural Gas Company	20201130	590,913	13,871
Peoples Natural Gas Company	20201231	591,949	14,257
Peoples Natural Gas Company	20210131	591,518	14,309
Peoples Natural Gas Company	20210228	591,530	14,689
Peoples Natural Gas Company	20210331	592,608	14,976
Peoples Natural Gas Company	20210430	593,243	14,871
Peoples Natural Gas Company	20210531	591,798	14,394
Peoples Natural Gas Company	20210630	591,382	13,934
Peoples Natural Gas Company	20210731	590,540	13,498
Peoples Natural Gas Company	20210831	590,821	13,110
Peoples Natural Gas Company	20210930	588,079	12,935
Peoples Natural Gas Company	20211031	589,379	12,786
Peoples Natural Gas Company	20211130	591,453	13,017
Peoples Natural Gas Company	20211231	592,043	13,832
Peoples Natural Gas Company	20220131	592,337	14,289
Peoples Natural Gas Company	20220228	592,191	14,804
Peoples Natural Gas Company	20220331	593,251	15,416
Peoples Natural Gas Company	20220430	593,822	16,040
Peoples Natural Gas Company	20220531	593,002	16,511
Peoples Natural Gas Company	20220630	592,350	17,034
Peoples Natural Gas Company	20220731	591,301	16,746
Peoples Natural Gas Company	20220831	591,986	16,672

Division	Month	#1	#2
Peoples Gas Company	20191031	58,121	1,700
Peoples Gas Company	20191130	58,451	1,781
Peoples Gas Company	20191231	58,595	1,902
Peoples Gas Company	20200131	58,688	1,993
Peoples Gas Company	20200229	58,699	2,054
Peoples Gas Company	20200331	58,780	2,140
Peoples Gas Company	20200430	58,609	2,154
Peoples Gas Company	20200531	58,569	2,145
Peoples Gas Company	20200630	58,598	2,139
Peoples Gas Company	20200731	58,702	2,108
Peoples Gas Company	20200831	58,692	1,902
Peoples Gas Company	20200930	58,773	1,871
Peoples Gas Company	20201031	58,998	1,795
Peoples Gas Company	20201130	59,002	1,768
Peoples Gas Company	20201231	59,076	1,803
Peoples Gas Company	20210131	58,962	1,794
Peoples Gas Company	20210228	58,985	1,829
Peoples Gas Company	20210331	59,131	1,855
Peoples Gas Company	20210430	59,129	1,858
Peoples Gas Company	20210531	58,900	1,790
Peoples Gas Company	20210630	58,790	1,725
Peoples Gas Company	20210731	58,671	1,684
Peoples Gas Company	20210831	58,666	1,639
Peoples Gas Company	20210930	58,602	1,621
Peoples Gas Company	20211031	58,771	1,580
Peoples Gas Company	20211130	59,062	1,661
Peoples Gas Company	20211231	59,151	1,723
Peoples Gas Company	20220131	59,160	1,771
Peoples Gas Company	20220228	59,156	1,805
Peoples Gas Company	20220331	59,319	1,895
Peoples Gas Company	20220430	59,345	1,966
Peoples Gas Company	20220531	59,194	1,989
Peoples Gas Company	20220630	59,099	2,009
Peoples Gas Company	20220731	58,900	1,995
Peoples Gas Company	20220831	58,939	1,981

Peoples Natural Gas Company	20220930	590,439	16,450
Peoples Natural Gas Company	20221031	591,845	16,512
Peoples Natural Gas Company	20221130	593,038	17,245
Peoples Natural Gas Company	20221231	594,028	17,906
Peoples Natural Gas Company	20230131	594,365	18,281
Peoples Natural Gas Company	20230228	594,044	18,943
Peoples Natural Gas Company	20230331	595,497	19,306
Peoples Natural Gas Company	20230430	595,122	19,753
Peoples Natural Gas Company	20230531	594,579	20,563
Peoples Natural Gas Company	20230630	592,075	20,497
Peoples Natural Gas Company	20230731	591,068	20,165
Peoples Natural Gas Company	20230831	591,100	19,667
Peoples Natural Gas Company	20230930	589,307	18,125
Peoples Natural Gas Company	20231031	591,893	18,450
Peoples Natural Gas Company	20231130	593,274	19,010
Peoples Natural Gas Company	20231231	594,059	19,632
Peoples Natural Gas Company	20240131	595,138	20,052

Peoples Gas Company	20220930	58,986	1,947
Peoples Gas Company	20221031	59,228	1,949
Peoples Gas Company	20221130	59,412	2,058
Peoples Gas Company	20221231	59,438	2,127
Peoples Gas Company	20230131	59,542	2,176
Peoples Gas Company	20230228	59,490	2,251
Peoples Gas Company	20230331	59,678	2,280
Peoples Gas Company	20230430	59,597	2,326
Peoples Gas Company	20230531	59,324	2,385
Peoples Gas Company	20230630	59,152	2,362
Peoples Gas Company	20230731	58,916	2,315
Peoples Gas Company	20230831	58,942	2,257
Peoples Gas Company	20230930	59,006	2,080
Peoples Gas Company	20231031	59,392	2,112
Peoples Gas Company	20231130	59,576	2,175
Peoples Gas Company	20231231	59,592	2,241
Peoples Gas Company	20240131	59,728	2,290

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: CAUSE-II-008

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: What is the average annual income of:

1. Peoples' current identified confirmed low income customers?

2. Peoples' customers currently enrolled in CAP?

Answer: 1. $19,576

2. $19,145

Submit Date: 2/26/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: CAUSE-II-012

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: As of the most current date, how many estimated low income customers reside in Peoples' service territory, disaggregated by division? Please explain how Peoples arrived at its estimated figures and include citation and/or copies of any and all workpapers used to perform this estimation.

Answer: The Company uses the most recent Household Poverty file provided by BCS to estimate it's low income customer count. This file is attached in the response. The percentages of each county (< 150%) are multiplied by the companies total count of residential customers.

As of January 31st, 2024:

Peoples Natural Gas Company: 135,425

Peoples Gas Company: 13,048

Submit Date: 2/26/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: CAUSE-II-013

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: From 2019 to present, disaggregated by division, month, and year, how many customers were terminated for nonpayment each month, for the following customer segments:

1. All residential customers;
2. Residential customers, excluding confirmed low income customers;
3. Confirmed low income customers;
4. Confirmed low income customers, excluding CAP customers;
5. CAP customers.

Please provide this data in a live excel spreadsheet.

Answer: Please see attached Excel file.

Submit Date: 2/26/2024

Peoples Natural Gas Company					
Month/Year	**1.**	**2.**	**3.**	**4.**	**5.**
2019	20666	15896	4770	2648	2122
Apr	3691	3105	586	358	228
May	4142	3423	719	447	272
Jun	3387	2685	702	460	242
Jul	2965	2179	786	464	322
Aug	2482	1796	686	369	317
Sep	1791	1249	542	266	276
Oct	1895	1252	643	252	391
Nov	313	207	106	32	74
2021	23755	19060	4695	2220	2475
Apr	5055	4184	871	432	439
May	5060	4140	920	407	513
Jun	3843	2979	864	467	397
Jul	2960	2231	729	347	382
Aug	2621	2077	544	253	291
Sep	1851	1519	332	148	184
Oct	1080	880	200	86	114
Nov	1285	1050	235	80	155
2020	823	823			
Nov	823	823			
2022	15259	11141	4118	1528	2590
Apr	4520	3810	710	333	377
May	2232	1403	829	227	602
Jun	2352	1646	706	274	432
Jul	2032	1469	563	263	300
Aug	1424	952	472	181	291
Sep	955	726	229	61	168
Oct	1027	662	365	121	244
Nov	717	473	244	68	176
2023	21361	17680	3681	2313	1368
Apr	3709	3347	362	343	19
May	6683	5930	753	610	143
Jun	2812	1928	884	389	495
Jul	3074	2376	698	421	277
Aug	2356	1944	412	284	128
Sep	1154	954	200	120	80
Oct	692	518	174	57	117
Nov	881	683	198	89	109

Peoples Gas Company					
Month/Year	**1.**	**2.**	**3.**	**4.**	**5.**
2019	2350	1743	607	431	176
Apr	6	6			
May	186	146	40	37	3
Jun	839	642	197	154	43
Jul	598	427	171	121	50
Aug	341	236	105	68	37
Sep	202	154	48	32	16
Oct	161	117	44	18	26
Nov	17	15	2	1	1
2021	2424	1942	482	298	184
Apr	662	539	123	75	48
May	406	335	71	41	30
Jun	349	261	88	56	32
Jul	405	310	95	54	41
Aug	287	237	50	36	14
Sep	174	143	31	19	12
Oct	58	47	11	8	3
Nov	83	70	13	9	4
2020	63	63			
Nov	63	63			
2022	1614	1226	388	203	185
Apr	430	365	65	42	23
May	271	188	83	37	46
Jun	301	238	63	35	28
Jul	241	172	69	39	30
Aug	135	95	40	15	25
Sep	92	75	17	9	8
Oct	73	48	25	12	13
Nov	71	45	26	14	12
2023	2598	2100	498	366	132
Apr	667	584	83	83	
May	680	583	97	81	16
Jun	455	333	122	71	51
Jul	245	178	67	53	14
Aug	234	187	47	33	14
Sep	113	86	27	15	12
Oct	115	82	33	16	17
Nov	89	67	22	14	8

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: CAUSE-II-014

Witness: Black, Rita **Title:** Community Assistance Programs Director

Question: From 2019 to present, please provide the mean and median customer usage, disaggregated by division, month, and year, for each of the following customer segments:

1. All residential customers;
2. Residential customers, excluding confirmed low income customers;
3. Confirmed low income customers;
4. Confirmed low income customers, excluding CAP customers;
5. CAP customers.

Please provide this data in a live excel spreadsheet.

Answer: Please see attached Excel file.

Submit Date: 2/26/2024

CAUSE-PA-II-14

Mean Usage

Division	Month	1	2	3	4	5	Division	Month	1	2	3	4	5
Peoples Natural Gas Company	201901	15.2	15.0	18.1	14.2	19.8	Peoples Gas Company	201901	14.6	14.5	16.0	13.4	17.5
Peoples Natural Gas Company	201902	17.1	16.8	19.9	15.7	21.8	Peoples Gas Company	201902	16.4	16.2	18.5	15.5	20.3
Peoples Natural Gas Company	201903	14.5	14.2	17.2	13.6	18.8	Peoples Gas Company	201903	14.2	14.1	15.6	13.3	16.9
Peoples Natural Gas Company	201904	8.8	8.6	11.1	8.7	12.2	Peoples Gas Company	201904	8.8	8.7	9.9	8.2	11.0
Peoples Natural Gas Company	201905	3.6	3.5	4.6	3.5	5.1	Peoples Gas Company	201905	4.1	4.0	4.5	3.8	4.9
Peoples Natural Gas Company	201906	2.0	2.0	2.4	1.9	2.6	Peoples Gas Company	201906	2.1	2.1	2.1	1.7	2.3
Peoples Natural Gas Company	201907	1.6	1.5	1.7	1.3	1.8	Peoples Gas Company	201907	1.6	1.6	1.4	1.2	1.6
Peoples Natural Gas Company	201908	1.3	1.3	1.4	1.2	1.5	Peoples Gas Company	201908	1.3	1.3	1.2	1.0	1.3
Peoples Natural Gas Company	201909	1.4	1.4	1.5	1.2	1.6	Peoples Gas Company	201909	1.3	1.3	1.2	1.0	1.4
Peoples Natural Gas Company	201910	2.3	2.2	2.8	2.2	3.1	Peoples Gas Company	201910	2.2	2.2	2.5	2.0	2.7
Peoples Natural Gas Company	201911	7.8	7.6	9.8	7.5	10.9	Peoples Gas Company	201911	7.1	7.0	8.2	6.9	9.1
Peoples Natural Gas Company	201912	13.4	13.2	15.9	12.7	17.5	Peoples Gas Company	201912	12.7	12.6	14.3	12.0	15.8
Peoples Natural Gas Company	202001	14.1	13.9	16.8	13.6	18.5	Peoples Gas Company	202001	13.7	13.6	15.3	12.9	17.0
Peoples Natural Gas Company	202002	14.2	13.9	16.8	13.6	18.5	Peoples Gas Company	202002	13.5	13.4	15.1	12.9	16.8
Peoples Natural Gas Company	202003	12.0	11.9	14.2	11.7	15.7	Peoples Gas Company	202003	11.6	11.4	13.2	11.4	14.8
Peoples Natural Gas Company	202004	7.9	7.7	9.8	7.8	10.9	Peoples Gas Company	202004	8.1	8.0	9.3	7.9	10.3
Peoples Natural Gas Company	202005	6.6	6.5	7.9	6.4	8.8	Peoples Gas Company	202005	6.4	6.4	7.3	6.2	8.2
Peoples Natural Gas Company	202006	2.7	2.7	3.2	2.5	3.6	Peoples Gas Company	202006	2.7	2.7	2.9	2.5	3.3
Peoples Natural Gas Company	202007	1.5	1.5	1.5	1.2	1.6	Peoples Gas Company	202007	1.4	1.4	1.3	1.1	1.4
Peoples Natural Gas Company	202008	1.3	1.3	1.3	1.1	1.4	Peoples Gas Company	202008	1.2	1.3	1.1	0.9	1.2
Peoples Natural Gas Company	202009	1.5	1.5	1.6	1.3	1.8	Peoples Gas Company	202009	1.5	1.5	1.4	1.2	1.6
Peoples Natural Gas Company	202010	2.8	2.7	3.7	2.8	4.2	Peoples Gas Company	202010	2.8	2.7	3.2	2.6	3.6
Peoples Natural Gas Company	202011	6.1	5.9	7.7	5.9	8.5	Peoples Gas Company	202011	6.2	6.2	7.1	6.0	7.9
Peoples Natural Gas Company	202012	11.4	11.2	13.8	10.9	15.0	Peoples Gas Company	202012	10.9	10.8	12.2	10.4	13.3
Peoples Natural Gas Company	202101	16.0	15.7	19.1	15.3	20.7	Peoples Gas Company	202101	15.4	15.2	17.3	14.8	18.9
Peoples Natural Gas Company	202102	17.5	17.3	20.5	16.6	22.3	Peoples Gas Company	202102	16.7	16.5	18.6	15.9	20.2
Peoples Natural Gas Company	202103	13.4	13.1	16.2	13.0	17.7	Peoples Gas Company	202103	13.1	12.9	15.0	12.6	16.5
Peoples Natural Gas Company	202104	7.0	6.8	8.8	7.0	9.7	Peoples Gas Company	202104	7.3	7.2	8.5	7.1	9.3
Peoples Natural Gas Company	202105	5.1	5.0	6.4	4.9	7.0	Peoples Gas Company	202105	5.0	4.9	5.8	4.8	6.4
Peoples Natural Gas Company	202106	2.5	2.4	2.9	2.2	3.2	Peoples Gas Company	202106	2.6	2.6	2.9	2.3	3.2

Peoples Natural Gas Company	202107	1.5	1.5	1.5	1.2	1.6	Peoples Gas Company	202107	1.4	1.4	1.3	1.1	1.4
Peoples Natural Gas Company	202108	1.3	1.3	1.4	1.1	1.5	Peoples Gas Company	202108	1.3	1.3	1.2	1.0	1.3
Peoples Natural Gas Company	202109	1.4	1.4	1.5	1.2	1.6	Peoples Gas Company	202109	1.3	1.4	1.2	1.0	1.4
Peoples Natural Gas Company	202110	1.9	1.8	2.4	1.8	2.6	Peoples Gas Company	202110	1.9	1.9	2.2	1.8	2.4
Peoples Natural Gas Company	202111	6.3	6.2	8.1	6.1	8.8	Peoples Gas Company	202111	6.1	6.0	7.0	6.0	7.6
Peoples Natural Gas Company	202112	12.4	12.2	15.0	11.9	16.2	Peoples Gas Company	202112	12.1	11.9	13.7	11.8	14.9
Peoples Natural Gas Company	202201	14.9	14.6	17.7	14.2	19.1	Peoples Gas Company	202201	14.2	14.0	16.1	13.9	17.4
Peoples Natural Gas Company	202202	18.5	18.2	22.3	18.0	24.1	Peoples Gas Company	202202	18.0	17.8	20.5	17.7	22.3
Peoples Natural Gas Company	202203	12.3	12.1	14.9	12.1	16.1	Peoples Gas Company	202203	12.6	12.5	14.3	12.4	15.6
Peoples Natural Gas Company	202204	9.2	9.0	11.3	9.2	12.4	Peoples Gas Company	202204	9.1	9.0	10.2	8.8	11.2
Peoples Natural Gas Company	202205	4.8	4.7	6.2	5.0	6.8	Peoples Gas Company	202205	5.1	5.0	5.8	5.0	6.4
Peoples Natural Gas Company	202206	1.9	1.8	2.1	1.7	2.3	Peoples Gas Company	202206	1.9	1.9	1.9	1.6	2.1
Peoples Natural Gas Company	202207	1.4	1.4	1.5	1.2	1.6	Peoples Gas Company	202207	1.3	1.4	1.2	1.0	1.4
Peoples Natural Gas Company	202208	1.3	1.3	1.3	1.1	1.4	Peoples Gas Company	202208	1.2	1.3	1.1	0.9	1.2
Peoples Natural Gas Company	202209	1.4	1.4	1.5	1.2	1.6	Peoples Gas Company	202209	1.3	1.4	1.2	1.0	1.4
Peoples Natural Gas Company	202210	3.6	3.5	4.6	3.6	5.1	Peoples Gas Company	202210	3.5	3.4	3.9	3.4	4.3
Peoples Natural Gas Company	202211	6.5	6.3	8.2	6.6	9.1	Peoples Gas Company	202211	6.4	6.3	7.4	6.6	8.1
Peoples Natural Gas Company	202212	12.6	12.4	15.0	12.3	16.6	Peoples Gas Company	202212	12.9	12.7	14.7	12.9	16.2
Peoples Natural Gas Company	202301	15.4	15.1	18.3	15.1	20.2	Peoples Gas Company	202301	14.2	14.0	15.8	13.8	17.5
Peoples Natural Gas Company	202302	13.9	13.7	16.6	13.6	18.4	Peoples Gas Company	202302	13.8	13.6	15.5	13.4	17.2
Peoples Natural Gas Company	202303	11.0	10.8	13.3	10.9	14.8	Peoples Gas Company	202303	10.8	10.7	12.1	10.5	13.4
Peoples Natural Gas Company	202304	8.2	8.0	10.2	8.3	11.4	Peoples Gas Company	202304	8.4	8.3	9.5	8.1	10.6
Peoples Natural Gas Company	202305	4.7	4.6	5.9	4.8	6.6	Peoples Gas Company	202305	4.8	4.7	5.4	4.6	6.1
Peoples Natural Gas Company	202306	2.0	2.0	2.3	1.9	2.6	Peoples Gas Company	202306	2.0	2.0	2.0	1.7	2.3
Peoples Natural Gas Company	202307	1.5	1.5	1.6	1.3	1.7	Peoples Gas Company	202307	1.5	1.5	1.3	1.1	1.5
Peoples Natural Gas Company	202308	1.3	1.3	1.3	1.1	1.4	Peoples Gas Company	202308	1.3	1.3	1.1	0.9	1.2
Peoples Natural Gas Company	202309	1.4	1.4	1.5	1.2	1.6	Peoples Gas Company	202309	1.4	1.4	1.3	1.1	1.4
Peoples Natural Gas Company	202310	2.5	2.4	3.1	2.4	3.5	Peoples Gas Company	202310	2.4	2.4	2.6	2.3	3.0
Peoples Natural Gas Company	202311	6.5	6.3	7.9	6.4	8.9	Peoples Gas Company	202311	6.5	6.4	7.4	6.5	8.3
Peoples Natural Gas Company	202312	11.6	11.4	14.0	11.5	15.8	Peoples Gas Company	202312	10.9	10.8	12.0	10.6	13.5
Peoples Natural Gas Company	202401	14.7	14.5	17.2	14.3	19.3	Peoples Gas Company	202401	14.1	14.0	15.6	13.8	17.4

Median Usage

Division	Month	1	2	3	4	5	Division	Month	1	2	3	4	5
Peoples Natural Gas Company	201901	13.8	13.6	16.5	13.0	18.3	Peoples Gas Company	201901	13.6	13.4	14.9	12.7	16.2
Peoples Natural Gas Company	201902	15.6	15.4	18.4	14.5	20.4	Peoples Gas Company	201902	15.2	15.0	17.3	14.5	19.1
Peoples Natural Gas Company	201903	13.3	13.1	15.9	12.5	17.6	Peoples Gas Company	201903	13.2	13.1	14.5	12.3	15.6
Peoples Natural Gas Company	201904	7.8	7.6	9.8	7.6	11.0	Peoples Gas Company	201904	7.9	7.8	8.9	7.2	10.0
Peoples Natural Gas Company	201905	3.1	3.0	3.9	3.0	4.4	Peoples Gas Company	201905	3.4	3.4	3.7	3.0	4.1
Peoples Natural Gas Company	201906	1.6	1.6	2.0	1.6	2.3	Peoples Gas Company	201906	1.6	1.6	1.7	1.4	1.9
Peoples Natural Gas Company	201907	1.2	1.2	1.4	1.1	1.6	Peoples Gas Company	201907	1.2	1.2	1.2	1.0	1.3
Peoples Natural Gas Company	201908	1.1	1.1	1.2	1.0	1.3	Peoples Gas Company	201908	1.0	1.0	1.0	0.8	1.1
Peoples Natural Gas Company	201909	1.1	1.1	1.3	1.0	1.5	Peoples Gas Company	201909	1.0	1.0	1.1	0.9	1.2
Peoples Natural Gas Company	201910	1.7	1.7	2.2	1.7	2.4	Peoples Gas Company	201910	1.6	1.6	1.9	1.6	2.1
Peoples Natural Gas Company	201911	6.8	6.6	8.6	6.6	9.7	Peoples Gas Company	201911	6.0	5.9	7.3	6.2	8.2
Peoples Natural Gas Company	201912	12.3	12.2	14.6	11.8	16.3	Peoples Gas Company	201912	11.7	11.6	13.2	11.0	14.6
Peoples Natural Gas Company	202001	13.0	12.8	15.6	12.6	17.3	Peoples Gas Company	202001	12.7	12.6	14.2	12.1	15.9
Peoples Natural Gas Company	202002	13.0	12.9	15.5	12.6	17.2	Peoples Gas Company	202002	12.6	12.4	14.0	12.0	15.7
Peoples Natural Gas Company	202003	11.1	11.0	13.1	10.7	14.6	Peoples Gas Company	202003	10.7	10.6	12.2	10.5	13.7
Peoples Natural Gas Company	202004	7.2	7.1	8.9	7.2	10.0	Peoples Gas Company	202004	7.4	7.3	8.4	7.1	9.4
Peoples Natural Gas Company	202005	5.9	5.8	7.1	5.7	7.9	Peoples Gas Company	202005	5.7	5.6	6.5	5.5	7.4
Peoples Natural Gas Company	202006	2.1	2.1	2.4	2.0	2.7	Peoples Gas Company	202006	2.1	2.0	2.3	1.9	2.6
Peoples Natural Gas Company	202007	1.2	1.2	1.3	1.1	1.5	Peoples Gas Company	202007	1.1	1.1	1.1	0.9	1.2
Peoples Natural Gas Company	202008	1.1	1.1	1.2	0.9	1.3	Peoples Gas Company	202008	1.0	1.0	0.9	0.8	1.1
Peoples Natural Gas Company	202009	1.2	1.2	1.4	1.1	1.5	Peoples Gas Company	202009	1.2	1.2	1.2	1.0	1.3
Peoples Natural Gas Company	202010	2.2	2.2	3.0	2.2	3.4	Peoples Gas Company	202010	2.3	2.3	2.7	2.2	3.1
Peoples Natural Gas Company	202011	5.3	5.2	6.8	5.2	7.6	Peoples Gas Company	202011	5.7	5.6	6.6	5.5	7.3
Peoples Natural Gas Company	202012	10.3	10.1	12.6	10.1	13.9	Peoples Gas Company	202012	10.0	9.9	11.4	9.8	12.4
Peoples Natural Gas Company	202101	14.5	14.3	17.6	14.2	19.3	Peoples Gas Company	202101	14.4	14.2	16.2	14.0	17.6
Peoples Natural Gas Company	202102	16.0	15.9	19.0	15.4	20.7	Peoples Gas Company	202102	15.6	15.4	17.5	14.9	19.1
Peoples Natural Gas Company	202103	12.1	12.0	14.7	11.8	16.2	Peoples Gas Company	202103	11.9	11.7	13.6	11.4	15.0
Peoples Natural Gas Company	202104	6.3	6.2	7.9	6.2	8.7	Peoples Gas Company	202104	6.6	6.6	7.6	6.4	8.5
Peoples Natural Gas Company	202105	4.5	4.5	5.7	4.4	6.3	Peoples Gas Company	202105	4.4	4.4	5.2	4.3	5.7
Peoples Natural Gas Company	202106	2.0	1.9	2.4	1.9	2.6	Peoples Gas Company	202106	2.0	2.0	2.3	1.9	2.6

Peoples Natural Gas Company	202107	1.2	1.2	1.3	1.1	1.5	Peoples Gas Company	202107	1.1	1.1	1.1	0.9	1.2
Peoples Natural Gas Company	202108	1.1	1.1	1.2	0.9	1.3	Peoples Gas Company	202108	1.0	1.0	1.0	0.8	1.1
Peoples Natural Gas Company	202109	1.1	1.1	1.3	1.0	1.4	Peoples Gas Company	202109	1.0	1.0	1.1	0.9	1.2
Peoples Natural Gas Company	202110	1.5	1.5	1.9	1.5	2.1	Peoples Gas Company	202110	1.5	1.5	1.8	1.4	2.0
Peoples Natural Gas Company	202111	5.2	5.1	6.7	5.1	7.5	Peoples Gas Company	202111	5.2	5.1	6.1	5.2	6.6
Peoples Natural Gas Company	202112	11.3	11.2	13.8	11.0	15.0	Peoples Gas Company	202112	11.2	11.1	12.9	11.0	13.8
Peoples Natural Gas Company	202201	13.4	13.2	16.1	13.0	17.6	Peoples Gas Company	202201	13.0	12.9	14.9	12.9	16.2
Peoples Natural Gas Company	202202	16.9	16.7	20.7	16.6	22.5	Peoples Gas Company	202202	16.6	16.4	18.8	16.6	20.6
Peoples Natural Gas Company	202203	11.2	11.1	13.6	11.0	14.9	Peoples Gas Company	202203	11.7	11.6	13.3	11.6	14.4
Peoples Natural Gas Company	202204	8.3	8.2	10.3	8.4	11.4	Peoples Gas Company	202204	8.4	8.3	9.4	8.1	10.3
Peoples Natural Gas Company	202205	4.1	4.0	5.3	4.2	5.9	Peoples Gas Company	202205	4.4	4.4	5.0	4.3	5.6
Peoples Natural Gas Company	202206	1.5	1.4	1.8	1.4	2.0	Peoples Gas Company	202206	1.5	1.5	1.6	1.3	1.8
Peoples Natural Gas Company	202207	1.1	1.1	1.3	1.1	1.4	Peoples Gas Company	202207	1.0	1.0	1.0	0.9	1.2
Peoples Natural Gas Company	202208	1.0	1.0	1.1	0.9	1.3	Peoples Gas Company	202208	0.9	0.9	0.9	0.8	1.0
Peoples Natural Gas Company	202209	1.1	1.1	1.3	1.1	1.4	Peoples Gas Company	202209	1.0	1.0	1.0	0.9	1.1
Peoples Natural Gas Company	202210	2.9	2.8	3.7	2.9	4.3	Peoples Gas Company	202210	2.8	2.8	3.2	2.7	3.5
Peoples Natural Gas Company	202211	5.6	5.5	7.2	5.8	8.1	Peoples Gas Company	202211	5.8	5.7	6.8	5.9	7.4
Peoples Natural Gas Company	202212	11.5	11.3	13.8	11.3	15.4	Peoples Gas Company	202212	11.8	11.7	13.7	12.0	15.1
Peoples Natural Gas Company	202301	14.0	13.9	16.9	14.0	19.0	Peoples Gas Company	202301	13.1	13.0	14.7	12.9	16.1
Peoples Natural Gas Company	202302	12.8	12.6	15.3	12.6	17.2	Peoples Gas Company	202302	12.8	12.7	14.5	12.6	16.1
Peoples Natural Gas Company	202303	10.1	10.0	12.2	10.0	13.7	Peoples Gas Company	202303	10.1	10.0	11.3	9.8	12.5
Peoples Natural Gas Company	202304	7.3	7.2	9.1	7.4	10.3	Peoples Gas Company	202304	7.6	7.5	8.6	7.4	9.7
Peoples Natural Gas Company	202305	4.2	4.1	5.2	4.2	6.0	Peoples Gas Company	202305	4.3	4.2	4.8	4.1	5.5
Peoples Natural Gas Company	202306	1.5	1.5	1.9	1.6	2.2	Peoples Gas Company	202306	1.6	1.5	1.7	1.5	1.9
Peoples Natural Gas Company	202307	1.2	1.2	1.4	1.1	1.5	Peoples Gas Company	202307	1.1	1.1	1.1	1.0	1.3
Peoples Natural Gas Company	202308	1.0	1.0	1.1	0.9	1.3	Peoples Gas Company	202308	0.9	0.9	0.9	0.8	1.1
Peoples Natural Gas Company	202309	1.1	1.1	1.3	1.1	1.4	Peoples Gas Company	202309	1.1	1.1	1.1	0.9	1.2
Peoples Natural Gas Company	202310	1.9	1.9	2.4	1.9	2.8	Peoples Gas Company	202310	1.8	1.8	2.1	1.8	2.4
Peoples Natural Gas Company	202311	5.7	5.6	7.0	5.6	8.0	Peoples Gas Company	202311	5.7	5.7	6.5	5.7	7.5
Peoples Natural Gas Company	202312	10.5	10.4	12.7	10.5	14.6	Peoples Gas Company	202312	10.1	10.0	11.2	9.9	12.5
Peoples Natural Gas Company	202401	13.3	13.1	15.6	13.1	17.8	Peoples Gas Company	202401	13.1	13.0	14.5	13.0	16.1

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: CAUSE-II-016

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: From 2019 to present, please provide the number of payment troubled customers, disaggregated by division, month, year, and the following customer segments:

1. All residential customers;
2. Residential customers, excluding confirmed low income customers;
3. Confirmed low income customers;
4. Confirmed low income customers, excluding CAP customers;
5. CAP customers.

Please provide this data in a live excel spreadsheet.

Answer: Please see attached Excel file.

Submit Date: 2/26/2024

CAUSE-II-16

Accounts - Payment Troubled

Division	Month	1	2	3	4	5	Division	Month	1	2	3	4	5
Peoples Natural Gas Company	201901	34,226	21,269	12,957	1,986	10,971	Peoples Gas Company	201901	3,533	2,464	1,069	214	855
Peoples Natural Gas Company	201902	34,960	20,933	14,027	1,985	12,042	Peoples Gas Company	201902	3,685	2,448	1,237	226	1,011
Peoples Natural Gas Company	201903	33,847	20,069	13,778	2,067	11,711	Peoples Gas Company	201903	3,571	2,296	1,275	237	1,038
Peoples Natural Gas Company	201904	34,245	20,926	13,319	2,234	11,085	Peoples Gas Company	201904	3,681	2,372	1,309	249	1,060
Peoples Natural Gas Company	201905	33,378	21,424	11,954	2,292	9,662	Peoples Gas Company	201905	3,611	2,455	1,156	247	909
Peoples Natural Gas Company	201906	33,113	21,873	11,240	2,350	8,890	Peoples Gas Company	201906	3,423	2,403	1,020	244	776
Peoples Natural Gas Company	201907	30,091	21,155	8,936	2,279	6,657	Peoples Gas Company	201907	3,149	2,341	808	240	568
Peoples Natural Gas Company	201908	28,161	20,500	7,661	2,189	5,472	Peoples Gas Company	201908	2,875	2,249	626	229	397
Peoples Natural Gas Company	201909	26,161	19,459	6,702	1,997	4,705	Peoples Gas Company	201909	2,654	2,124	530	196	334
Peoples Natural Gas Company	201910	24,521	18,528	5,993	1,875	4,118	Peoples Gas Company	201910	2,434	1,998	436	175	261
Peoples Natural Gas Company	201911	25,416	18,511	6,905	1,889	5,016	Peoples Gas Company	201911	2,454	1,942	512	195	317
Peoples Natural Gas Company	201912	29,482	19,769	9,713	2,065	7,648	Peoples Gas Company	201912	2,847	2,081	766	229	537
Peoples Natural Gas Company	202001	31,762	19,783	11,979	2,051	9,927	Peoples Gas Company	202001	3,098	2,125	973	229	744
Peoples Natural Gas Company	202002	32,240	19,241	12,999	2,095	10,902	Peoples Gas Company	202002	3,144	2,080	1,064	231	833
Peoples Natural Gas Company	202003	31,752	18,374	13,378	2,117	11,259	Peoples Gas Company	202003	3,117	1,987	1,130	235	895
Peoples Natural Gas Company	202004	29,665	16,712	12,953	2,043	10,909	Peoples Gas Company	202004	2,909	1,785	1,124	229	895
Peoples Natural Gas Company	202005	28,231	15,978	12,253	1,928	10,324	Peoples Gas Company	202005	2,761	1,691	1,070	224	846
Peoples Natural Gas Company	202006	28,235	15,766	12,469	1,899	10,569	Peoples Gas Company	202006	2,751	1,662	1,089	227	862
Peoples Natural Gas Company	202007	27,252	15,355	11,897	1,895	10,001	Peoples Gas Company	202007	2,659	1,616	1,043	230	813
Peoples Natural Gas Company	202008	26,468	15,269	11,199	1,770	9,428	Peoples Gas Company	202008	2,584	1,613	971	201	770
Peoples Natural Gas Company	202009	24,744	14,182	10,562	1,621	8,940	Peoples Gas Company	202009	2,313	1,454	859	185	674
Peoples Natural Gas Company	202010	23,531	12,675	10,856	1,488	9,367	Peoples Gas Company	202010	2,168	1,296	872	160	712
Peoples Natural Gas Company	202011	21,292	11,172	10,120	1,292	8,827	Peoples Gas Company	202011	1,927	1,154	773	139	634
Peoples Natural Gas Company	202012	25,436	12,810	12,626	1,372	11,254	Peoples Gas Company	202012	2,308	1,300	1,008	150	858
Peoples Natural Gas Company	202101	25,885	12,352	13,533	1,320	12,212	Peoples Gas Company	202101	2,407	1,301	1,106	146	960
Peoples Natural Gas Company	202102	27,313	12,500	14,813	1,354	13,457	Peoples Gas Company	202102	2,464	1,303	1,161	150	1,011
Peoples Natural Gas Company	202103	23,866	10,133	13,659	1,196	12,367	Peoples Gas Company	202103	2,153	1,027	1,124	127	992
Peoples Natural Gas Company	202104	20,358	7,952	12,277	1,046	11,127	Peoples Gas Company	202104	1,818	845	965	97	859
Peoples Natural Gas Company	202105	20,437	8,561	11,741	936	10,629	Peoples Gas Company	202105	1,887	927	953	95	848
Peoples Natural Gas Company	202106	21,042	9,670	11,218	935	10,128	Peoples Gas Company	202106	1,974	1,055	905	106	786
Peoples Natural Gas Company	202107	20,777	10,791	9,910	1,025	8,801	Peoples Gas Company	202107	1,735	1,023	705	111	586
Peoples Natural Gas Company	202108	19,439	11,032	8,353	1,040	7,200	Peoples Gas Company	202108	1,697	1,072	624	128	484
Peoples Natural Gas Company	202109	17,464	11,060	6,388	880	5,468	Peoples Gas Company	202109	1,517	1,091	426	95	331
Peoples Natural Gas Company	202110	17,367	11,388	5,965	861	5,045	Peoples Gas Company	202110	1,480	1,104	376	91	282
Peoples Natural Gas Company	202111	17,704	11,233	6,463	890	5,540	Peoples Gas Company	202111	1,523	1,105	418	89	327
Peoples Natural Gas Company	202112	20,795	11,516	9,278	879	8,347	Peoples Gas Company	202112	1,871	1,237	633	105	524
Peoples Natural Gas Company	202201	23,480	12,066	11,409	975	10,400	Peoples Gas Company	202201	2,084	1,288	794	114	675
Peoples Natural Gas Company	202202	24,392	11,807	12,573	1,007	11,525	Peoples Gas Company	202202	2,144	1,248	895	123	768
Peoples Natural Gas Company	202203	23,907	10,965	12,881	1,046	11,781	Peoples Gas Company	202203	2,209	1,209	996	144	845
Peoples Natural Gas Company	202204	21,207	9,275	11,793	1,099	10,590	Peoples Gas Company	202204	2,000	1,030	955	144	788
Peoples Natural Gas Company	202205	22,196	10,880	11,256	1,166	10,014	Peoples Gas Company	202205	1,980	1,140	839	140	696
Peoples Natural Gas Company	202206	22,895	12,362	10,458	1,251	9,095	Peoples Gas Company	202206	2,063	1,283	774	148	618
Peoples Natural Gas Company	202207	21,892	12,583	9,272	1,246	7,935	Peoples Gas Company	202207	1,917	1,284	628	149	474
Peoples Natural Gas Company	202208	19,460	12,700	6,722	1,004	5,616	Peoples Gas Company	202208	1,760	1,336	423	122	295

Peoples Natural Gas Company	202209	18,231	12,128	6,078	1,046	4,986
Peoples Natural Gas Company	202210	18,302	11,877	6,413	1,136	5,219
Peoples Natural Gas Company	202211	19,756	12,063	7,685	1,230	6,398
Peoples Natural Gas Company	202212	23,284	12,911	10,365	1,394	8,917
Peoples Natural Gas Company	202301	24,834	13,021	11,810	1,491	10,293
Peoples Natural Gas Company	202302	24,417	12,812	11,592	1,414	10,105
Peoples Natural Gas Company	202303	23,515	11,795	11,695	1,476	10,150
Peoples Natural Gas Company	202304	22,968	10,660	12,301	1,504	10,732
Peoples Natural Gas Company	202306	22,274	12,728	9,449	1,440	7,846
Peoples Natural Gas Company	202307	21,132	12,701	8,431	1,582	6,849
Peoples Natural Gas Company	202308	21,519	12,750	8,767	1,541	7,074
Peoples Natural Gas Company	202309	20,871	12,715	8,142	1,473	6,637
Peoples Natural Gas Company	202310	20,184	12,703	7,481	1,435	6,046
Peoples Natural Gas Company	202311	20,113	12,661	7,446	1,367	6,035
Peoples Natural Gas Company	202312	22,238	13,480	8,755	1,384	7,329
Peoples Natural Gas Company	202401	23,082	13,301	9,779	1,460	8,302

Peoples Gas Company	202209	1,629	1,250	379	118	260
Peoples Gas Company	202210	1,674	1,250	423	139	280
Peoples Gas Company	202211	1,787	1,245	541	148	391
Peoples Gas Company	202212	2,088	1,340	748	165	576
Peoples Gas Company	202301	2,211	1,336	875	168	706
Peoples Gas Company	202302	2,185	1,303	882	154	722
Peoples Gas Company	202303	2,156	1,203	951	168	774
Peoples Gas Company	202304	2,113	1,115	998	188	803
Peoples Gas Company	202306	1,963	1,242	717	175	533
Peoples Gas Company	202307	1,878	1,244	634	186	448
Peoples Gas Company	202308	1,915	1,290	625	164	447
Peoples Gas Company	202309	1,798	1,244	550	149	389
Peoples Gas Company	202310	1,622	1,150	472	140	332
Peoples Gas Company	202311	1,618	1,141	476	134	339
Peoples Gas Company	202312	1,890	1,288	602	145	454
Peoples Gas Company	202401	1,975	1,287	688	146	540

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: CAUSE-II-017

Witness: Black, Rita **Title:** Community Assistance Programs Director

Question: Please explain how Peoples defines the term “payment troubled.”

Answer: Peoples identities a missed payment on a payment arrangement as "payment troubled".

Submit Date: 2/26/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: CAUSE-II-018

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: From 2019 to present, disaggregated by division, month, and year, please provide the number of customers with an active payment arrangement and total debt associated with these accounts for each of the following customer segments:

1. All residential customers;
2. Residential customers, excluding confirmed low income customers;
3. Confirmed low income customers;
4. Confirmed low income customers, excluding CAP customers;
5. CAP customers.

Please provide this data in a live excel spreadsheet.

Answer: Please see the attached Excel file.

Submit Date: 2/26/2024

CAUSE-PA-II-18

Accounts - Active Payment Arrangement

Division	Month	1	2	3	4	5	Division	Month	1	2	3	4	5
Peoples Natural Gas Company	201901	62,119	26,911	35,208	2,401	32,807	Peoples Gas Cor	201,901	6,696	3,250	3,446	277	3,169
Peoples Natural Gas Company	201902	62,099	27,026	35,073	2,370	32,703	Peoples Gas Cor	201,902	6,668	3,253	3,415	280	3,135
Peoples Natural Gas Company	201903	62,071	26,907	35,164	2,547	32,617	Peoples Gas Cor	201,903	6,562	3,154	3,408	302	3,106
Peoples Natural Gas Company	201904	63,718	28,507	35,211	2,789	32,422	Peoples Gas Cor	201,904	6,752	3,328	3,424	314	3,110
Peoples Natural Gas Company	201905	66,239	30,199	36,040	2,997	33,043	Peoples Gas Cor	201,905	7,036	3,548	3,488	332	3,156
Peoples Natural Gas Company	201906	66,049	30,424	35,625	2,991	32,634	Peoples Gas Cor	201,906	6,857	3,477	3,380	327	3,053
Peoples Natural Gas Company	201907	64,607	29,695	34,912	2,906	32,006	Peoples Gas Cor	201,907	6,622	3,370	3,252	314	2,938
Peoples Natural Gas Company	201908	62,932	28,837	34,095	2,768	31,327	Peoples Gas Cor	201,908	6,430	3,291	3,139	298	2,841
Peoples Natural Gas Company	201909	61,657	28,238	33,419	2,574	30,845	Peoples Gas Cor	201,909	6,313	3,237	3,076	265	2,811
Peoples Natural Gas Company	201910	60,577	27,573	33,004	2,544	30,460	Peoples Gas Cor	201,910	6,145	3,121	3,024	259	2,765
Peoples Natural Gas Company	201911	59,689	26,870	32,819	2,575	30,244	Peoples Gas Cor	201,911	6,046	3,004	3,042	279	2,763
Peoples Natural Gas Company	201912	59,359	26,682	32,677	2,676	30,001	Peoples Gas Cor	201,912	6,049	2,980	3,069	306	2,763
Peoples Natural Gas Company	202001	59,070	26,467	32,603	2,711	29,891	Peoples Gas Cor	202,001	5,989	2,957	3,032	316	2,716
Peoples Natural Gas Company	202002	57,847	26,099	31,748	2,754	28,992	Peoples Gas Cor	202,002	5,939	2,950	2,989	317	2,672
Peoples Natural Gas Company	202003	56,751	25,070	31,681	2,832	28,847	Peoples Gas Cor	202,003	5,770	2,804	2,966	328	2,638
Peoples Natural Gas Company	202004	56,441	24,497	31,944	2,849	29,094	Peoples Gas Cor	202,004	5,711	2,749	2,962	328	2,634
Peoples Natural Gas Company	202005	56,526	24,178	32,348	2,801	29,546	Peoples Gas Cor	202,005	5,693	2,706	2,987	323	2,664
Peoples Natural Gas Company	202006	56,936	23,947	32,989	2,753	30,235	Peoples Gas Cor	202,006	5,722	2,671	3,051	319	2,732
Peoples Natural Gas Company	202007	56,820	23,442	33,378	2,703	30,674	Peoples Gas Cor	202,007	5,688	2,613	3,075	312	2,763
Peoples Natural Gas Company	202008	56,344	23,111	33,233	2,380	30,852	Peoples Gas Cor	202,008	5,647	2,580	3,067	272	2,795
Peoples Natural Gas Company	202009	56,162	22,409	33,753	2,283	31,469	Peoples Gas Cor	202,009	5,575	2,491	3,084	258	2,826
Peoples Natural Gas Company	202010	56,117	21,446	34,671	2,103	32,567	Peoples Gas Cor	202,010	5,533	2,383	3,150	231	2,919
Peoples Natural Gas Company	202011	56,626	21,702	34,924	2,058	32,865	Peoples Gas Cor	202,011	5,537	2,375	3,162	228	2,934
Peoples Natural Gas Company	202012	56,574	21,223	35,351	2,042	33,309	Peoples Gas Cor	202,012	5,512	2,334	3,178	229	2,949
Peoples Natural Gas Company	202101	56,392	20,974	35,418	2,013	33,404	Peoples Gas Cor	202,101	5,485	2,306	3,179	229	2,950
Peoples Natural Gas Company	202102	56,196	20,834	35,361	2,062	33,297	Peoples Gas Cor	202,102	5,433	2,285	3,148	230	2,918
Peoples Natural Gas Company	202103	55,589	20,377	35,098	2,069	32,895	Peoples Gas Cor	202,103	5,319	2,197	3,117	231	2,879
Peoples Natural Gas Company	202104	57,000	21,515	35,325	2,067	33,092	Peoples Gas Cor	202,104	5,361	2,248	3,095	221	2,861
Peoples Natural Gas Company	202105	58,118	21,986	35,950	2,021	33,668	Peoples Gas Cor	202,105	5,451	2,296	3,144	224	2,899
Peoples Natural Gas Company	202106	59,434	22,357	36,859	2,030	34,587	Peoples Gas Cor	202,106	5,514	2,275	3,216	243	2,951

Peoples Natural Gas Company	202107	59,161	22,382	36,661	2,030	34,480	Peoples Gas Cor	202,107	5,448	2,254	3,183	235	2,937
Peoples Natural Gas Company	202108	58,537	21,894	36,582	1,942	34,484	Peoples Gas Cor	202,108	5,409	2,238	3,167	228	2,924
Peoples Natural Gas Company	202109	57,989	21,538	36,408	1,917	34,415	Peoples Gas Cor	202,109	5,339	2,205	3,132	220	2,909
Peoples Natural Gas Company	202110	57,363	21,183	36,134	1,906	34,124	Peoples Gas Cor	202,110	5,285	2,176	3,108	217	2,883
Peoples Natural Gas Company	202111	56,755	20,755	35,963	1,909	33,976	Peoples Gas Cor	202,111	5,244	2,146	3,096	221	2,866
Peoples Natural Gas Company	202112	55,912	19,741	36,153	2,001	34,056	Peoples Gas Cor	202,112	5,218	2,110	3,106	230	2,863
Peoples Natural Gas Company	202201	55,102	19,507	35,576	1,981	33,537	Peoples Gas Cor	202,201	5,178	2,096	3,078	223	2,847
Peoples Natural Gas Company	202202	54,874	19,520	35,331	2,023	33,241	Peoples Gas Cor	202,202	5,228	2,156	3,069	231	2,831
Peoples Natural Gas Company	202203	54,693	19,414	35,204	2,122	32,999	Peoples Gas Cor	202,203	5,160	2,081	3,074	261	2,804
Peoples Natural Gas Company	202204	56,151	21,358	34,637	2,380	32,117	Peoples Gas Cor	202,204	5,394	2,361	3,018	282	2,712
Peoples Natural Gas Company	202205	54,881	21,045	33,762	2,459	31,202	Peoples Gas Cor	202,205	5,224	2,299	2,921	293	2,619
Peoples Natural Gas Company	202206	54,269	20,751	33,434	2,529	30,763	Peoples Gas Cor	202,206	5,140	2,242	2,891	300	2,580
Peoples Natural Gas Company	202207	53,484	20,331	33,098	2,413	30,551	Peoples Gas Cor	202,207	5,060	2,201	2,852	293	2,552
Peoples Natural Gas Company	202208	52,557	19,653	32,850	2,329	30,391	Peoples Gas Cor	202,208	4,957	2,111	2,845	280	2,552
Peoples Natural Gas Company	202209	51,119	18,776	32,305	2,133	30,094	Peoples Gas Cor	202,209	4,800	2,001	2,798	255	2,541
Peoples Natural Gas Company	202210	50,416	18,534	31,850	2,035	29,731	Peoples Gas Cor	202,210	4,756	1,985	2,768	249	2,513
Peoples Natural Gas Company	202211	49,842	18,161	31,656	2,108	29,464	Peoples Gas Cor	202,211	4,722	1,952	2,768	266	2,499
Peoples Natural Gas Company	202212	49,731	18,113	31,597	2,128	29,392	Peoples Gas Cor	202,212	4,720	1,953	2,765	270	2,482
Peoples Natural Gas Company	202301	50,066	18,621	31,431	2,152	29,232	Peoples Gas Cor	202,301	4,860	2,037	2,823	267	2,552
Peoples Natural Gas Company	202302	50,631	19,076	31,531	2,261	29,165	Peoples Gas Cor	202,302	4,882	2,056	2,825	282	2,533
Peoples Natural Gas Company	202303	51,272	19,569	31,673	2,364	29,210	Peoples Gas Cor	202,303	4,938	2,091	2,844	294	2,539
Peoples Natural Gas Company	202304	54,658	22,649	31,993	2,684	29,220	Peoples Gas Cor	202,304	5,271	2,366	2,904	339	2,553
Peoples Natural Gas Company	202305	56,622	24,040	32,460	3,101	29,179	Peoples Gas Cor	202,305	5,414	2,471	2,940	377	2,551
Peoples Natural Gas Company	202306	56,601	24,147	32,332	3,181	28,922	Peoples Gas Cor	202,306	5,400	2,474	2,921	390	2,517
Peoples Natural Gas Company	202307	55,850	23,838	32,012	3,140	28,872	Peoples Gas Cor	202,307	5,285	2,428	2,857	377	2,480
Peoples Natural Gas Company	202308	54,814	22,929	31,867	2,973	28,695	Peoples Gas Cor	202,308	5,069	2,290	2,778	332	2,430
Peoples Natural Gas Company	202309	53,582	22,337	31,210	2,721	28,440	Peoples Gas Cor	202,309	4,924	2,234	2,684	294	2,374
Peoples Natural Gas Company	202310	52,251	22,012	30,239	2,635	27,604	Peoples Gas Cor	202,310	4,821	2,222	2,599	287	2,312
Peoples Natural Gas Company	202311	50,971	21,509	29,435	2,632	26,721	Peoples Gas Cor	202,311	4,749	2,210	2,535	296	2,232
Peoples Natural Gas Company	202312	49,788	20,908	28,866	2,643	26,138	Peoples Gas Cor	202,312	4,641	2,161	2,479	288	2,185
Peoples Natural Gas Company	202401	49,319	20,525	28,790	2,632	26,134	Peoples Gas Cor	202,401	4,612	2,127	2,485	286	2,196

		Total Debt - Active Payment Arran				
Division	**Month**	**1**	**2**	**3**	**4**	**5**
Peoples Natural Gas Company	201901	35,478,531	20,320,704	15,157,827	1,749,684	13,408,142
Peoples Natural Gas Company	201902	40,264,343	23,018,566	17,245,777	1,979,455	15,266,322
Peoples Natural Gas Company	201903	42,260,910	24,383,006	17,877,904	2,216,781	15,661,123
Peoples Natural Gas Company	201904	41,555,238	24,164,260	17,390,978	2,341,921	15,049,057
Peoples Natural Gas Company	201905	38,268,375	22,448,070	15,820,305	2,094,649	13,725,657
Peoples Natural Gas Company	201906	34,793,248	20,633,478	14,159,770	1,894,226	12,265,544
Peoples Natural Gas Company	201907	30,065,938	18,057,683	12,008,254	1,676,091	10,332,163
Peoples Natural Gas Company	201908	25,937,744	15,719,853	10,217,891	1,413,125	8,804,765
Peoples Natural Gas Company	201909	22,952,358	14,157,126	8,795,232	1,206,914	7,588,318
Peoples Natural Gas Company	201910	19,571,420	12,963,828	6,607,592	1,083,176	5,524,416
Peoples Natural Gas Company	201911	20,101,924	13,264,419	6,837,505	1,147,058	5,690,447
Peoples Natural Gas Company	201912	25,801,559	16,209,331	9,592,228	1,498,721	8,093,507
Peoples Natural Gas Company	202001	30,924,542	18,514,757	12,409,785	1,823,057	10,586,528
Peoples Natural Gas Company	202002	34,112,157	20,159,282	13,952,875	2,106,680	11,845,355
Peoples Natural Gas Company	202003	36,126,913	21,252,852	14,874,061	2,322,898	12,550,124
Peoples Natural Gas Company	202004	35,828,324	20,742,099	15,086,225	2,338,813	12,746,929
Peoples Natural Gas Company	202005	35,082,246	20,066,094	15,016,152	2,238,325	12,777,228
Peoples Natural Gas Company	202006	33,854,764	19,213,701	14,641,063	2,182,127	12,458,253
Peoples Natural Gas Company	202007	31,529,324	17,790,009	13,739,315	2,062,998	11,675,590
Peoples Natural Gas Company	202008	29,581,375	16,782,309	12,799,066	1,765,707	11,032,693
Peoples Natural Gas Company	202009	27,528,359	15,249,732	12,278,626	1,574,291	10,703,680
Peoples Natural Gas Company	202010	26,903,201	13,701,010	13,202,191	1,432,036	11,769,374
Peoples Natural Gas Company	202011	25,063,068	13,185,159	11,877,909	1,331,910	10,545,238
Peoples Natural Gas Company	202012	28,362,129	14,585,177	13,776,951	1,466,370	12,310,582
Peoples Natural Gas Company	202101	31,515,189	16,031,519	15,483,670	1,625,170	13,853,061
Peoples Natural Gas Company	202102	35,434,528	18,102,598	17,331,868	1,881,518	15,449,325
Peoples Natural Gas Company	202103	36,482,242	18,716,928	17,628,845	2,026,727	15,455,714
Peoples Natural Gas Company	202104	35,636,523	18,704,422	16,726,852	1,999,235	14,576,345
Peoples Natural Gas Company	202105	34,599,758	18,572,952	15,817,019	1,832,538	13,737,757
Peoples Natural Gas Company	202106	33,125,352	18,059,908	14,796,912	1,647,373	12,909,499

Peoples Natural Gas Company	202107	29,871,282	17,250,852	12,502,320	1,516,665	10,832,802
Peoples Natural Gas Company	202108	26,411,329	15,679,546	10,619,338	1,304,874	9,082,448
Peoples Natural Gas Company	202109	21,544,513	14,424,692	7,079,060	1,130,183	5,873,790
Peoples Natural Gas Company	202110	16,970,542	13,371,360	3,567,906	926,251	2,541,715
Peoples Natural Gas Company	202111	16,534,245	12,915,473	3,602,522	927,097	2,634,116
Peoples Natural Gas Company	202112	19,257,660	13,188,838	6,062,814	1,025,864	4,932,916
Peoples Natural Gas Company	202201	24,620,013	15,536,539	9,079,193	1,322,025	7,711,873
Peoples Natural Gas Company	202202	30,826,995	18,655,033	12,152,489	1,694,996	10,394,051
Peoples Natural Gas Company	202203	33,532,903	20,229,561	13,192,378	1,978,297	11,126,907
Peoples Natural Gas Company	202204	32,516,049	19,931,521	12,384,640	2,225,710	9,972,484
Peoples Natural Gas Company	202205	30,399,087	19,125,402	11,202,809	2,211,313	8,854,323
Peoples Natural Gas Company	202206	26,905,760	17,760,448	9,043,504	2,042,165	6,815,467
Peoples Natural Gas Company	202207	24,267,242	16,251,995	7,972,879	1,770,899	6,030,584
Peoples Natural Gas Company	202208	19,000,811	14,726,436	4,235,140	1,302,092	2,768,734
Peoples Natural Gas Company	202209	17,110,520	13,125,828	3,955,038	1,153,218	2,725,144
Peoples Natural Gas Company	202210	17,262,515	12,881,288	4,370,030	1,158,311	3,142,192
Peoples Natural Gas Company	202211	18,089,560	13,065,958	5,015,960	1,255,221	3,661,764
Peoples Natural Gas Company	202212	24,048,053	15,770,314	8,272,945	1,659,740	6,529,036
Peoples Natural Gas Company	202301	30,329,675	19,108,185	11,217,009	2,120,169	9,050,154
Peoples Natural Gas Company	202302	33,880,951	21,894,068	11,971,356	2,424,752	9,413,557
Peoples Natural Gas Company	202303	37,093,604	23,698,140	13,357,163	2,770,709	10,429,042
Peoples Natural Gas Company	202304	39,130,470	25,071,836	14,051,451	3,044,204	10,865,259
Peoples Natural Gas Company	202305	37,497,211	23,561,091	13,745,422	2,998,941	10,489,967
Peoples Natural Gas Company	202306	33,888,311	21,972,464	11,789,294	2,463,543	9,043,428
Peoples Natural Gas Company	202307	31,195,797	19,493,871	11,701,926	2,071,731	9,630,195
Peoples Natural Gas Company	202308	29,043,975	16,883,963	12,155,939	1,781,753	10,121,347
Peoples Natural Gas Company	202309	27,295,794	15,479,054	11,792,479	1,478,866	10,273,463
Peoples Natural Gas Company	202310	24,683,754	14,639,662	10,044,092	1,256,312	8,787,780
Peoples Natural Gas Company	202311	23,589,812	13,859,344	9,727,771	1,146,611	8,470,216
Peoples Natural Gas Company	202312	25,582,235	14,429,179	11,150,081	1,235,178	9,846,441
Peoples Natural Gas Company	202401	28,609,824	15,918,489	12,689,760	1,506,010	11,157,707

gement

Division	Month	1	2	3	4	5
Peoples Gas Company	201901	4,448,430	2,848,191	1,600,239	260,276	1,339,963
Peoples Gas Company	201902	5,137,701	3,254,997	1,882,704	308,668	1,574,036
Peoples Gas Company	201903	5,408,810	3,428,960	1,979,849	347,231	1,632,619
Peoples Gas Company	201904	5,477,890	3,469,145	2,008,744	353,492	1,655,253
Peoples Gas Company	201905	5,180,019	3,299,403	1,880,616	315,602	1,565,013
Peoples Gas Company	201906	4,291,636	2,765,373	1,526,264	243,434	1,282,830
Peoples Gas Company	201907	3,536,481	2,332,483	1,203,998	215,231	988,767
Peoples Gas Company	201908	2,994,367	2,024,678	969,689	175,896	793,792
Peoples Gas Company	201909	2,591,914	1,790,185	801,729	142,460	659,269
Peoples Gas Company	201910	2,146,530	1,594,637	551,893	126,895	424,998
Peoples Gas Company	201911	2,141,446	1,555,472	585,975	147,345	438,630
Peoples Gas Company	201912	2,839,478	1,919,397	920,081	209,149	710,931
Peoples Gas Company	202001	3,445,838	2,191,130	1,254,708	260,193	994,516
Peoples Gas Company	202002	3,821,077	2,394,013	1,427,063	283,875	1,143,189
Peoples Gas Company	202003	4,049,476	2,512,994	1,536,483	312,357	1,224,126
Peoples Gas Company	202004	3,938,132	2,427,382	1,510,750	313,192	1,197,558
Peoples Gas Company	202005	3,819,612	2,333,233	1,486,379	304,930	1,181,449
Peoples Gas Company	202006	3,634,681	2,198,833	1,435,847	302,594	1,133,254
Peoples Gas Company	202007	3,338,737	2,024,581	1,314,155	287,749	1,026,407
Peoples Gas Company	202008	3,107,285	1,903,239	1,204,046	246,771	957,274
Peoples Gas Company	202009	2,800,255	1,707,821	1,092,434	226,385	866,049
Peoples Gas Company	202010	2,672,168	1,531,136	1,141,031	212,715	928,316
Peoples Gas Company	202011	2,392,130	1,423,611	968,519	198,724	769,795
Peoples Gas Company	202012	2,726,130	1,582,443	1,143,687	216,054	927,633
Peoples Gas Company	202101	3,165,477	1,786,336	1,379,141	250,783	1,128,358
Peoples Gas Company	202102	3,608,855	2,036,269	1,572,586	283,015	1,289,572
Peoples Gas Company	202103	3,692,882	2,092,811	1,597,290	303,368	1,282,896
Peoples Gas Company	202104	3,440,098	2,017,107	1,410,629	258,957	1,140,741
Peoples Gas Company	202105	3,302,716	1,985,030	1,310,668	234,005	1,062,459
Peoples Gas Company	202106	3,094,909	1,854,785	1,214,426	250,478	937,605

Peoples Gas Company	202107	2,654,278	1,691,948	948,040	211,259	725,885
Peoples Gas Company	202108	2,347,411	1,567,709	776,571	184,673	568,178
Peoples Gas Company	202109	1,826,045	1,417,258	408,605	160,044	246,482
Peoples Gas Company	202110	1,327,236	1,318,186	7,574	129,916	-122,804
Peoples Gas Company	202111	1,299,723	1,301,011	-1,080	132,059	-129,285
Peoples Gas Company	202112	1,828,063	1,536,567	291,158	154,030	130,668
Peoples Gas Company	202201	2,410,074	1,775,453	633,711	188,913	436,840
Peoples Gas Company	202202	3,169,747	2,191,127	977,910	241,308	736,117
Peoples Gas Company	202203	3,491,241	2,317,652	1,164,113	293,310	854,159
Peoples Gas Company	202204	3,376,194	2,298,171	1,052,458	294,160	731,760
Peoples Gas Company	202205	3,060,328	2,151,147	907,110	276,178	627,867
Peoples Gas Company	202206	2,693,546	1,954,687	729,312	276,887	438,877
Peoples Gas Company	202207	2,345,879	1,738,575	600,765	227,297	361,190
Peoples Gas Company	202208	1,714,187	1,512,879	201,074	159,724	24,664
Peoples Gas Company	202209	1,466,194	1,338,744	127,452	131,460	-5,735
Peoples Gas Company	202210	1,427,299	1,283,436	143,322	134,441	5,170
Peoples Gas Company	202211	1,478,844	1,280,297	198,285	140,566	52,514
Peoples Gas Company	202212	2,131,287	1,609,655	521,587	197,030	314,380
Peoples Gas Company	202301	2,841,901	1,980,363	861,538	241,802	617,382
Peoples Gas Company	202302	3,247,759	2,299,511	948,072	279,613	655,096
Peoples Gas Company	202303	3,564,077	2,451,552	1,109,707	313,239	776,548
Peoples Gas Company	202304	3,673,315	2,479,783	1,193,341	360,826	803,151
Peoples Gas Company	202305	3,368,699	2,241,256	1,122,844	317,585	786,687
Peoples Gas Company	202306	2,965,062	2,057,946	899,931	263,665	611,664
Peoples Gas Company	202307	2,616,318	1,797,437	818,881	196,909	621,972
Peoples Gas Company	202308	2,252,556	1,466,866	785,832	152,203	618,381
Peoples Gas Company	202309	2,060,737	1,313,546	740,377	122,549	595,335
Peoples Gas Company	202310	1,796,289	1,227,160	569,129	104,451	464,678
Peoples Gas Company	202311	1,772,767	1,182,814	590,319	108,980	471,991
Peoples Gas Company	202312	1,993,909	1,267,616	726,530	101,704	622,580
Peoples Gas Company	202401	2,362,683	1,451,541	911,142	137,894	772,261

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: CAUSE-II-019

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: From 2019 to present, disaggregated by division, month, and year, please provide the number of customers in debt without an active payment arrangement and the total debt associated with these accounts for each of the following customer segments:

1. All residential customers;
2. Residential customers, excluding confirmed low income customers;
3. Confirmed low income customers;
4. Confirmed low income customers, excluding CAP customers;
5. CAP customers.

Please provide this data in a live excel spreadsheet.

Answer: Please see attached Excel file.

Submit Date: 2/26/2024

CAUSE-II-19

		Accounts - NO Payment Arrange				
Division	**Month**	**1**	**2**	**3**	**4**	**5**
Peoples Natural Gas Company	201901	93,056	79,119	13,937	2,956	10,971
Peoples Natural Gas Company	201902	104,156	88,717	15,439	3,392	12,042
Peoples Natural Gas Company	201903	119,486	103,596	15,890	4,166	11,711
Peoples Natural Gas Company	201904	79,106	63,892	15,214	4,031	11,085
Peoples Natural Gas Company	201905	71,297	58,165	13,132	3,379	9,662
Peoples Natural Gas Company	201906	68,825	56,705	12,120	3,143	8,890
Peoples Natural Gas Company	201907	76,172	66,262	9,910	3,136	6,657
Peoples Natural Gas Company	201908	75,915	67,370	8,545	2,951	5,472
Peoples Natural Gas Company	201909	63,999	56,730	7,269	2,498	4,705
Peoples Natural Gas Company	201910	60,021	53,715	6,306	2,148	4,118
Peoples Natural Gas Company	201911	63,924	56,874	7,050	2,019	5,016
Peoples Natural Gas Company	201912	81,908	71,580	10,328	2,674	7,648
Peoples Natural Gas Company	202001	75,758	62,834	12,924	2,990	9,927
Peoples Natural Gas Company	202002	84,156	69,772	14,384	3,467	10,902
Peoples Natural Gas Company	202003	86,171	70,787	15,384	4,119	11,259
Peoples Natural Gas Company	202004	78,182	63,250	14,932	4,018	10,909
Peoples Natural Gas Company	202005	76,531	62,379	14,152	3,817	10,324
Peoples Natural Gas Company	202006	73,890	59,594	14,296	3,718	10,569
Peoples Natural Gas Company	202007	70,663	57,047	13,616	3,606	10,001
Peoples Natural Gas Company	202008	69,874	57,170	12,704	3,274	9,428
Peoples Natural Gas Company	202009	66,324	54,318	12,006	3,055	8,940
Peoples Natural Gas Company	202010	72,618	60,107	12,511	3,142	9,367
Peoples Natural Gas Company	202011	55,684	44,465	11,219	2,388	8,827
Peoples Natural Gas Company	202012	70,390	56,518	13,872	2,611	11,254
Peoples Natural Gas Company	202101	71,042	56,001	15,041	2,819	12,212
Peoples Natural Gas Company	202102	77,037	60,185	16,852	3,386	13,457
Peoples Natural Gas Company	202103	70,488	54,418	16,070	3,369	12,367
Peoples Natural Gas Company	202104	65,871	51,079	14,792	3,176	11,127
Peoples Natural Gas Company	202105	65,798	51,655	14,143	2,828	10,629
Peoples Natural Gas Company	202106	64,814	51,789	13,025	2,505	10,128
Peoples Natural Gas Company	202107	64,130	52,751	11,379	2,332	8,801
Peoples Natural Gas Company	202108	59,608	50,091	9,517	2,129	7,200
Peoples Natural Gas Company	202109	61,775	54,787	6,988	1,388	5,468
Peoples Natural Gas Company	202110	59,535	53,156	6,379	1,191	5,045
Peoples Natural Gas Company	202111	58,009	51,248	6,761	1,142	5,540
Peoples Natural Gas Company	202112	69,158	59,332	9,826	1,342	8,347
Peoples Natural Gas Company	202201	76,402	64,052	12,350	1,779	10,400
Peoples Natural Gas Company	202202	90,353	76,401	13,952	2,228	11,525
Peoples Natural Gas Company	202203	108,848	93,813	15,035	3,009	11,781
Peoples Natural Gas Company	202204	111,600	97,194	14,406	3,433	10,590
Peoples Natural Gas Company	202205	100,639	86,629	14,010	3,690	10,014
Peoples Natural Gas Company	202206	99,084	85,747	13,337	3,919	9,095
Peoples Natural Gas Company	202207	91,799	79,867	11,932	3,733	7,935

Peoples Natural Gas Company	202208	79,753	71,782	7,971	2,134	5,616
Peoples Natural Gas Company	202209	70,855	63,677	7,178	2,000	4,986
Peoples Natural Gas Company	202210	66,253	58,714	7,539	2,129	5,219
Peoples Natural Gas Company	202211	72,995	64,050	8,945	2,415	6,398
Peoples Natural Gas Company	202212	84,626	72,160	12,466	3,312	8,917
Peoples Natural Gas Company	202301	94,390	79,555	14,835	4,371	10,293
Peoples Natural Gas Company	202302	99,646	84,811	14,835	4,429	10,105
Peoples Natural Gas Company	202303	104,526	89,131	15,395	4,965	10,150
Peoples Natural Gas Company	202304	110,047	93,636	16,411	5,421	10,732
Peoples Natural Gas Company	202305	100,451	84,824	15,627	5,125	10,134
Peoples Natural Gas Company	202306	86,022	73,415	12,607	4,353	7,846
Peoples Natural Gas Company	202307	73,880	63,392	10,488	3,589	6,849
Peoples Natural Gas Company	202308	71,970	61,404	10,566	3,325	7,074
Peoples Natural Gas Company	202309	68,709	59,237	9,472	2,723	6,637
Peoples Natural Gas Company	202310	64,170	55,683	8,487	2,428	6,046
Peoples Natural Gas Company	202311	66,988	58,271	8,717	2,459	6,035
Peoples Natural Gas Company	202312	73,392	63,254	10,138	2,656	7,329
Peoples Natural Gas Company	202401	73,250	61,795	11,455	3,043	8,302

ment

Division	Month	1	2	3	4	5
Peoples Gas Company	201901	9,496	8,301	1,195	338	855
Peoples Gas Company	201902	11,121	9,697	1,424	412	1,011
Peoples Gas Company	201903	12,227	10,655	1,572	533	1,038
Peoples Gas Company	201904	7,862	6,302	1,560	500	1,060
Peoples Gas Company	201905	7,034	5,679	1,355	427	909
Peoples Gas Company	201906	7,097	5,863	1,234	434	776
Peoples Gas Company	201907	8,714	7,714	1,000	403	568
Peoples Gas Company	201908	7,352	6,614	738	326	397
Peoples Gas Company	201909	5,502	4,915	587	248	334
Peoples Gas Company	201910	5,272	4,778	494	228	261
Peoples Gas Company	201911	5,702	5,177	525	206	317
Peoples Gas Company	201912	7,396	6,584	812	275	537
Peoples Gas Company	202001	7,795	6,680	1,115	371	744
Peoples Gas Company	202002	8,428	7,154	1,274	441	833
Peoples Gas Company	202003	8,210	6,817	1,393	497	895
Peoples Gas Company	202004	7,487	6,085	1,402	505	895
Peoples Gas Company	202005	7,698	6,362	1,336	490	846
Peoples Gas Company	202006	7,067	5,773	1,294	431	862
Peoples Gas Company	202007	7,048	5,766	1,282	468	813
Peoples Gas Company	202008	6,919	5,740	1,179	408	770
Peoples Gas Company	202009	6,294	5,218	1,076	402	674
Peoples Gas Company	202010	6,314	5,221	1,093	380	712
Peoples Gas Company	202011	4,957	4,042	915	281	634
Peoples Gas Company	202012	6,416	5,242	1,174	316	858
Peoples Gas Company	202101	6,739	5,429	1,310	349	960
Peoples Gas Company	202102	7,301	5,883	1,418	407	1,011
Peoples Gas Company	202103	7,035	5,614	1,421	413	992
Peoples Gas Company	202104	6,422	5,110	1,312	415	859
Peoples Gas Company	202105	6,839	5,585	1,254	366	848
Peoples Gas Company	202106	6,588	5,478	1,110	279	786
Peoples Gas Company	202107	6,164	5,287	877	264	586
Peoples Gas Company	202108	5,737	4,994	743	244	484
Peoples Gas Company	202109	5,708	5,206	502	159	331
Peoples Gas Company	202110	5,474	5,051	423	134	282
Peoples Gas Company	202111	5,759	5,311	448	116	327
Peoples Gas Company	202112	6,661	5,989	672	140	524
Peoples Gas Company	202201	7,331	6,419	912	215	675
Peoples Gas Company	202202	7,863	6,809	1,054	269	768
Peoples Gas Company	202203	11,515	10,287	1,228	362	845
Peoples Gas Company	202204	13,023	11,720	1,303	473	788
Peoples Gas Company	202205	11,499	10,332	1,167	456	696
Peoples Gas Company	202206	10,737	9,639	1,098	437	618
Peoples Gas Company	202207	10,143	9,225	918	419	474

Peoples Gas Company	202208	9,267	8,727	540	231	295
Peoples Gas Company	202209	7,050	6,564	486	212	260
Peoples Gas Company	202210	6,607	6,095	512	220	280
Peoples Gas Company	202211	7,015	6,339	676	278	391
Peoples Gas Company	202212	8,211	7,238	973	369	576
Peoples Gas Company	202301	8,516	7,339	1,177	459	706
Peoples Gas Company	202302	8,963	7,749	1,214	469	722
Peoples Gas Company	202303	11,214	9,839	1,375	587	774
Peoples Gas Company	202304	11,460	10,004	1,456	632	803
Peoples Gas Company	202305	8,984	7,736	1,248	537	677
Peoples Gas Company	202306	9,120	8,083	1,037	483	533
Peoples Gas Company	202307	6,759	5,946	813	362	448
Peoples Gas Company	202308	6,878	6,065	813	356	447
Peoples Gas Company	202309	6,441	5,726	715	305	389
Peoples Gas Company	202310	5,728	5,119	609	276	332
Peoples Gas Company	202311	5,885	5,284	601	244	339
Peoples Gas Company	202312	6,861	6,113	748	282	454
Peoples Gas Company	202401	6,519	5,651	868	322	540

					Total Debt - NO Paym	
Division	**Month**	**1**	**2**	**3**	**4**	**5**
Peoples Natural Gas Company	201901	32,758,103	22,880,810	9,877,293	1,171,052	8,691,381
Peoples Natural Gas Company	201902	41,452,096	30,037,285	11,414,811	1,575,259	9,833,148
Peoples Natural Gas Company	201903	45,968,932	34,490,500	11,478,433	2,013,397	9,447,498
Peoples Natural Gas Company	201904	34,785,073	24,170,878	10,614,195	2,124,731	8,358,463
Peoples Natural Gas Company	201905	25,180,149	16,656,245	8,523,904	1,594,252	6,823,188
Peoples Natural Gas Company	201906	19,900,056	12,440,813	7,459,242	1,321,387	6,008,895
Peoples Natural Gas Company	201907	17,903,468	11,976,869	5,926,599	1,163,171	4,592,542
Peoples Natural Gas Company	201908	14,692,727	9,676,104	5,016,623	1,009,137	3,867,110
Peoples Natural Gas Company	201909	11,936,582	7,744,964	4,191,618	707,788	3,409,905
Peoples Natural Gas Company	201910	10,934,454	7,264,588	3,669,867	576,581	3,045,855
Peoples Natural Gas Company	201911	13,458,827	9,044,850	4,413,977	583,549	3,818,414
Peoples Natural Gas Company	201912	22,951,158	15,968,463	6,982,695	937,954	6,042,433
Peoples Natural Gas Company	202001	29,307,107	19,444,626	9,862,481	1,318,536	8,537,974
Peoples Natural Gas Company	202002	34,693,543	23,385,687	11,307,856	1,694,334	9,602,230
Peoples Natural Gas Company	202003	38,438,640	26,313,442	12,125,198	2,086,241	10,033,688
Peoples Natural Gas Company	202004	34,965,635	23,001,353	11,964,283	2,025,087	9,935,961
Peoples Natural Gas Company	202005	32,251,536	20,915,151	11,336,385	1,896,945	9,432,186
Peoples Natural Gas Company	202006	30,114,244	18,705,256	11,408,988	1,811,116	9,593,060
Peoples Natural Gas Company	202007	27,612,425	16,687,152	10,925,273	1,640,969	9,273,239
Peoples Natural Gas Company	202008	26,071,128	15,713,122	10,358,007	1,427,812	8,928,038
Peoples Natural Gas Company	202009	25,000,476	14,767,602	10,232,875	1,268,416	8,957,936
Peoples Natural Gas Company	202010	25,163,050	14,296,964	10,866,086	1,246,535	9,618,959
Peoples Natural Gas Company	202011	23,032,046	12,529,830	10,502,217	1,146,718	9,349,639
Peoples Natural Gas Company	202012	30,042,362	16,687,169	13,355,193	1,378,940	11,972,096
Peoples Natural Gas Company	202101	34,762,345	20,108,677	14,653,667	1,629,027	13,002,448
Peoples Natural Gas Company	202102	41,307,119	24,962,365	16,344,754	2,126,467	14,199,672
Peoples Natural Gas Company	202103	40,241,126	24,493,606	15,747,520	2,258,312	13,123,140
Peoples Natural Gas Company	202104	33,987,177	19,825,028	14,162,149	2,130,335	11,373,897
Peoples Natural Gas Company	202105	27,629,340	15,097,398	12,531,942	1,577,018	10,096,539
Peoples Natural Gas Company	202106	22,400,361	11,788,349	10,612,012	1,072,897	9,038,407
Peoples Natural Gas Company	202107	18,523,583	9,435,142	9,088,441	873,641	7,943,140
Peoples Natural Gas Company	202108	14,902,057	7,625,711	7,276,346	676,702	6,332,231
Peoples Natural Gas Company	202109	12,818,729	7,193,276	5,625,453	465,017	5,019,669
Peoples Natural Gas Company	202110	11,924,911	6,572,628	5,352,283	438,874	4,738,806
Peoples Natural Gas Company	202111	13,739,204	8,100,310	5,638,895	439,436	5,114,136
Peoples Natural Gas Company	202112	20,394,849	12,282,186	8,112,663	512,749	7,500,199
Peoples Natural Gas Company	202201	28,323,543	17,847,840	10,475,702	808,949	9,563,598
Peoples Natural Gas Company	202202	38,070,531	26,047,395	12,023,135	1,176,540	10,705,537
Peoples Natural Gas Company	202203	43,290,762	30,768,874	12,521,888	1,567,048	10,698,537
Peoples Natural Gas Company	202204	39,757,879	28,672,365	11,085,514	1,811,087	8,834,431
Peoples Natural Gas Company	202205	34,264,659	24,474,713	9,789,946	1,865,160	7,662,525
Peoples Natural Gas Company	202206	28,391,244	20,120,124	8,271,120	1,709,247	6,209,560
Peoples Natural Gas Company	202207	23,080,157	16,005,717	7,074,441	1,406,172	5,358,655

Peoples Natural Gas Company	202208	18,343,956	13,187,890	5,156,066	839,440	4,068,818
Peoples Natural Gas Company	202209	16,294,132	11,527,290	4,766,841	753,667	3,796,709
Peoples Natural Gas Company	202210	17,569,577	12,304,568	5,265,009	812,344	4,260,196
Peoples Natural Gas Company	202211	21,360,620	15,145,488	6,215,133	986,154	5,120,597
Peoples Natural Gas Company	202212	32,244,780	23,327,547	8,917,233	1,562,149	7,175,080
Peoples Natural Gas Company	202301	42,592,359	31,287,140	11,305,218	2,497,767	8,654,261
Peoples Natural Gas Company	202302	49,714,563	37,533,591	12,180,972	2,984,332	8,952,843
Peoples Natural Gas Company	202303	52,741,385	39,914,982	12,826,403	3,415,046	9,101,187
Peoples Natural Gas Company	202304	47,712,634	34,639,347	13,073,287	3,451,794	9,344,946
Peoples Natural Gas Company	202305	37,039,760	24,859,490	12,180,270	2,882,656	8,838,077
Peoples Natural Gas Company	202306	26,503,592	17,687,311	8,816,281	1,999,251	6,363,413
Peoples Natural Gas Company	202307	20,943,329	13,676,701	7,266,628	1,447,865	5,762,907
Peoples Natural Gas Company	202308	18,473,789	11,028,629	7,445,160	1,024,534	6,266,564
Peoples Natural Gas Company	202309	16,320,370	9,196,483	7,123,886	749,560	6,264,353
Peoples Natural Gas Company	202310	15,512,063	8,742,167	6,769,896	703,144	6,041,744
Peoples Natural Gas Company	202311	16,583,650	9,397,682	7,185,969	750,768	6,171,434
Peoples Natural Gas Company	202312	20,638,351	12,032,440	8,605,911	840,873	7,656,166
Peoples Natural Gas Company	202401	26,083,517	15,801,662	10,281,855	1,193,124	9,006,888

ent Arrangement

Division	Month	1	2	3	4	5
Peoples Gas Company	201901	3,846,269	2,815,637	1,030,632	195,043	834,278
Peoples Gas Company	201902	5,035,351	3,792,967	1,242,384	256,588	985,215
Peoples Gas Company	201903	5,746,502	4,425,720	1,320,782	322,436	996,333
Peoples Gas Company	201904	4,409,353	3,079,794	1,329,559	333,240	996,320
Peoples Gas Company	201905	3,489,635	2,332,940	1,156,695	313,388	817,781
Peoples Gas Company	201906	3,181,415	2,162,811	1,018,604	371,576	612,167
Peoples Gas Company	201907	2,312,764	1,585,163	727,602	226,580	462,619
Peoples Gas Company	201908	1,486,134	1,012,781	473,354	119,511	340,571
Peoples Gas Company	201909	1,121,086	750,063	371,023	74,835	291,127
Peoples Gas Company	201910	1,028,790	725,628	303,162	62,086	238,573
Peoples Gas Company	201911	1,240,687	883,165	357,522	56,405	299,187
Peoples Gas Company	201912	2,207,072	1,567,898	639,174	111,084	528,089
Peoples Gas Company	202001	3,022,974	2,096,837	926,136	154,090	772,046
Peoples Gas Company	202002	3,576,499	2,481,870	1,094,629	215,893	878,736
Peoples Gas Company	202003	3,886,452	2,687,172	1,199,280	245,439	953,576
Peoples Gas Company	202004	3,567,318	2,396,847	1,170,471	249,612	920,367
Peoples Gas Company	202005	3,320,128	2,183,626	1,136,501	257,304	879,197
Peoples Gas Company	202006	3,050,953	1,909,965	1,140,988	236,929	903,103
Peoples Gas Company	202007	2,782,644	1,698,913	1,083,731	235,615	841,876
Peoples Gas Company	202008	2,636,188	1,617,864	1,018,324	193,815	823,579
Peoples Gas Company	202009	2,488,084	1,544,908	943,176	177,886	765,290
Peoples Gas Company	202010	2,509,822	1,504,044	1,005,778	170,890	833,545
Peoples Gas Company	202011	2,217,636	1,323,896	893,740	138,435	755,305
Peoples Gas Company	202012	2,905,599	1,720,133	1,185,466	161,022	1,024,445
Peoples Gas Company	202101	3,458,771	2,112,015	1,346,757	203,580	1,139,949
Peoples Gas Company	202102	4,058,121	2,592,154	1,465,967	252,667	1,213,300
Peoples Gas Company	202103	4,015,465	2,556,785	1,458,680	263,193	1,182,132
Peoples Gas Company	202104	3,358,599	2,023,495	1,335,104	319,401	961,944
Peoples Gas Company	202105	2,661,137	1,513,978	1,147,159	217,528	887,907
Peoples Gas Company	202106	2,203,160	1,268,234	934,926	100,765	774,910
Peoples Gas Company	202107	1,795,942	1,077,922	718,020	111,666	564,267
Peoples Gas Company	202108	1,270,789	710,839	559,950	57,995	485,223
Peoples Gas Company	202109	1,162,160	744,009	418,151	46,689	348,683
Peoples Gas Company	202110	1,034,870	691,206	343,664	35,676	300,231
Peoples Gas Company	202111	1,284,585	897,205	387,380	33,681	352,698
Peoples Gas Company	202112	2,026,024	1,432,300	593,723	56,189	534,097
Peoples Gas Company	202201	2,697,406	1,897,198	800,208	86,866	693,332
Peoples Gas Company	202202	3,592,210	2,634,624	957,586	143,354	805,969
Peoples Gas Company	202203	4,646,835	3,586,021	1,060,814	176,308	860,224
Peoples Gas Company	202204	4,529,569	3,562,493	967,075	238,876	675,215
Peoples Gas Company	202205	3,825,355	3,065,107	760,249	184,700	553,920
Peoples Gas Company	202206	3,010,687	2,377,823	632,864	163,241	428,077
Peoples Gas Company	202207	2,302,911	1,835,614	467,297	119,469	318,133

Peoples Gas Company	202208	1,753,633	1,461,256	292,377	66,948	208,295
Peoples Gas Company	202209	1,474,956	1,184,376	290,580	56,298	213,515
Peoples Gas Company	202210	1,599,549	1,259,439	340,110	74,642	253,875
Peoples Gas Company	202211	1,960,409	1,536,473	423,936	99,751	321,691
Peoples Gas Company	202212	3,122,365	2,434,712	687,653	171,860	481,004
Peoples Gas Company	202301	4,005,103	3,128,907	876,196	268,274	602,155
Peoples Gas Company	202302	4,772,752	3,779,638	993,114	316,072	656,933
Peoples Gas Company	202303	5,250,147	4,173,205	1,076,942	364,150	701,927
Peoples Gas Company	202304	4,734,220	3,657,516	1,076,704	351,606	705,146
Peoples Gas Company	202305	3,117,408	2,223,181	894,226	254,965	597,631
Peoples Gas Company	202306	2,310,471	1,709,290	601,181	166,280	409,349
Peoples Gas Company	202307	1,658,610	1,146,971	511,639	139,908	367,393
Peoples Gas Company	202308	1,592,836	1,119,985	472,851	101,800	366,600
Peoples Gas Company	202309	1,318,816	877,300	441,516	69,898	337,320
Peoples Gas Company	202310	1,200,352	816,206	384,146	63,109	320,852
Peoples Gas Company	202311	1,326,385	919,994	406,392	54,801	338,996
Peoples Gas Company	202312	1,807,145	1,228,923	578,222	72,703	497,253
Peoples Gas Company	202401	2,303,720	1,597,295	706,425	99,649	604,184

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: CAUSE-II-020

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: From 2019 to present, disaggregated by division, month, and year, please provide the total dollars in debt and the average arrearage level for each of the following Peoples customer segments:

1. All residential customers;
2. Residential customers, excluding confirmed low income customers;
3. Confirmed low income customers;
4. Confirmed low income customers, excluding CAP customers;
5. CAP customers.

Please provide this data in a live excel spreadsheet.

Answer: Please see attached Excel file.

Submit Date: 2/26/2024

CAUSE-II-20

Division	Month	1	2	3	4	Total De 5
Peoples Natural Gas Company	201901	81,703,159	66,003,858	15,699,302	2,276,613	13,408,142
Peoples Natural Gas Company	201902	109,557,973	90,844,873	18,713,100	3,440,306	15,266,322
Peoples Natural Gas Company	201903	120,140,634	100,120,046	20,020,588	4,342,036	15,661,123
Peoples Natural Gas Company	201904	104,994,844	85,262,784	19,732,060	4,552,257	15,049,057
Peoples Natural Gas Company	201905	79,948,584	62,518,263	17,430,321	3,596,812	13,725,657
Peoples Natural Gas Company	201906	60,221,424	44,861,464	15,359,959	2,965,615	12,265,544
Peoples Natural Gas Company	201907	39,856,042	26,955,893	12,900,149	2,397,221	10,332,163
Peoples Natural Gas Company	201908	22,107,489	11,341,181	10,766,308	1,819,900	8,804,765
Peoples Natural Gas Company	201909	7,397,810	-1,443,670	8,841,480	1,179,404	7,588,318
Peoples Natural Gas Company	201910	-4,963,862	-10,765,314	5,801,452	230,931	5,524,416
Peoples Natural Gas Company	201911	4,568,451	-1,200,576	5,769,027	69,237	5,690,447
Peoples Natural Gas Company	201912	35,496,711	26,275,341	9,221,371	1,127,327	8,093,507
Peoples Natural Gas Company	202001	54,463,452	41,675,765	12,787,687	2,195,970	10,586,528
Peoples Natural Gas Company	202002	76,271,468	61,137,151	15,134,317	3,277,096	11,845,355
Peoples Natural Gas Company	202003	86,808,022	70,083,493	16,724,528	4,168,818	12,550,124
Peoples Natural Gas Company	202004	79,579,047	62,685,092	16,893,955	4,143,071	12,746,929
Peoples Natural Gas Company	202005	73,987,992	57,298,580	16,689,411	3,904,112	12,777,228
Peoples Natural Gas Company	202006	59,666,811	43,562,524	16,104,287	3,640,566	12,458,253
Peoples Natural Gas Company	202007	45,174,044	30,240,458	14,933,586	3,246,093	11,675,590
Peoples Natural Gas Company	202008	32,280,452	18,616,062	13,664,390	2,629,071	11,032,693
Peoples Natural Gas Company	202009	20,175,256	7,299,177	12,876,079	2,166,034	10,703,680
Peoples Natural Gas Company	202010	13,846,871	139,385	13,707,487	1,937,279	11,769,374
Peoples Natural Gas Company	202011	6,379,499	-5,067,905	11,447,404	895,787	10,545,238
Peoples Natural Gas Company	202012	33,821,238	20,104,886	13,716,351	1,401,962	12,310,582
Peoples Natural Gas Company	202101	60,472,335	44,224,299	16,248,036	2,372,522	13,853,061
Peoples Natural Gas Company	202102	90,235,570	71,133,148	19,102,422	3,634,261	15,449,325
Peoples Natural Gas Company	202103	93,750,523	73,622,694	20,127,829	4,180,239	15,455,714
Peoples Natural Gas Company	202104	83,010,550	63,617,930	19,392,620	4,038,090	14,576,345
Peoples Natural Gas Company	202105	72,652,879	54,560,316	18,092,563	3,273,271	13,737,757
Peoples Natural Gas Company	202106	54,280,217	38,266,722	16,013,495	2,445,157	12,909,499
Peoples Natural Gas Company	202107	38,111,094	24,866,558	13,244,536	2,004,159	10,832,802
Peoples Natural Gas Company	202108	21,033,050	10,001,084	11,031,966	1,473,270	9,082,448
Peoples Natural Gas Company	202109	4,248,206	-1,497,253	5,745,460	-363,147	5,873,790
Peoples Natural Gas Company	202110	-11,785,943	-12,421,825	635,882	-2,187,355	2,541,715
Peoples Natural Gas Company	202111	-6,729,914	-7,101,949	372,034	-2,405,976	2,634,116
Peoples Natural Gas Company	202112	21,943,851	18,988,834	2,955,017	-2,201,270	4,932,916
Peoples Natural Gas Company	202201	55,225,054	48,181,128	7,043,925	-838,631	7,711,873
Peoples Natural Gas Company	202202	95,415,765	83,888,827	11,526,938	902,615	10,394,051
Peoples Natural Gas Company	202203	99,676,599	86,206,214	13,470,386	2,009,405	11,126,907
Peoples Natural Gas Company	202204	94,916,169	81,589,131	13,327,038	2,771,838	9,972,484
Peoples Natural Gas Company	202205	78,329,821	66,319,083	12,010,739	2,768,650	8,854,323
Peoples Natural Gas Company	202206	58,380,980	48,850,629	9,530,350	2,229,531	6,815,467
Peoples Natural Gas Company	202207	41,500,643	33,413,342	8,087,301	1,608,062	6,030,584

Peoples Natural Gas Company	202208	19,880,109	18,355,480	1,524,629	-1,653,344	2,768,734
Peoples Natural Gas Company	202209	5,721,544	4,541,074	1,180,471	-1,832,933	2,725,144
Peoples Natural Gas Company	202210	3,371,589	1,914,931	1,456,658	-1,945,878	3,142,192
Peoples Natural Gas Company	202211	6,940,448	5,240,673	1,699,776	-2,181,223	3,661,764
Peoples Natural Gas Company	202212	55,064,821	48,375,143	6,689,678	-125,545	6,529,036
Peoples Natural Gas Company	202301	89,022,725	77,301,812	11,720,914	2,441,618	9,050,154
Peoples Natural Gas Company	202302	111,288,797	98,583,700	12,705,097	2,893,844	9,413,557
Peoples Natural Gas Company	202303	120,150,287	104,842,889	15,307,398	4,398,507	10,429,042
Peoples Natural Gas Company	202304	103,837,848	87,827,363	16,010,485	4,721,795	10,865,259
Peoples Natural Gas Company	202305	76,432,982	61,477,329	14,955,653	3,785,818	10,489,967
Peoples Natural Gas Company	202306	53,358,348	41,473,113	11,885,235	2,157,783	9,043,428
Peoples Natural Gas Company	202307	36,345,980	25,507,394	10,838,585	1,153,146	9,630,195
Peoples Natural Gas Company	202308	20,867,113	10,089,538	10,777,576	251,052	10,121,347
Peoples Natural Gas Company	202309	8,433,613	-1,580,429	10,014,042	-408,682	10,273,463
Peoples Natural Gas Company	202310	-3,676,330	-10,277,392	6,601,062	-2,211,663	8,787,780
Peoples Natural Gas Company	202311	-5,545,525	-11,608,031	6,062,506	-2,780,257	8,470,216
Peoples Natural Gas Company	202312	9,396,131	1,803,574	7,592,557	-2,439,725	9,846,441
Peoples Natural Gas Company	202401	39,210,347	28,922,366	10,287,981	-988,738	11,157,707

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Division	Month	1	2	3	4	5
Peoples Gas Company	201901	10,020,950	8,267,010	1,753,941	412,666	1,339,963
Peoples Gas Company	201902	13,196,767	11,022,264	2,174,503	599,885	1,574,036
Peoples Gas Company	201903	14,522,848	12,154,258	2,368,590	733,959	1,632,619
Peoples Gas Company	201904	12,888,876	10,496,361	2,392,516	737,263	1,655,253
Peoples Gas Company	201905	10,573,238	8,327,940	2,245,298	654,759	1,565,013
Peoples Gas Company	201906	8,270,475	6,344,018	1,926,457	608,766	1,282,830
Peoples Gas Company	201907	5,241,171	3,811,542	1,429,629	402,460	988,767
Peoples Gas Company	201908	2,945,840	1,904,568	1,041,272	234,208	793,792
Peoples Gas Company	201909	1,193,588	399,552	794,036	129,707	659,269
Peoples Gas Company	201910	23,826	-405,782	429,608	2,109	424,998
Peoples Gas Company	201911	398,094	-21,251	419,345	-22,593	438,630
Peoples Gas Company	201912	3,443,417	2,570,554	872,862	161,931	710,931
Peoples Gas Company	202001	5,778,674	4,469,676	1,308,999	314,483	994,516
Peoples Gas Company	202002	7,468,168	5,883,604	1,584,564	441,375	1,143,189
Peoples Gas Company	202003	8,607,220	6,843,856	1,763,364	538,973	1,224,126
Peoples Gas Company	202004	8,022,271	6,282,074	1,740,196	542,146	1,197,558
Peoples Gas Company	202005	7,120,117	5,397,404	1,722,713	541,265	1,181,449
Peoples Gas Company	202006	5,734,429	4,105,510	1,628,919	494,709	1,133,254
Peoples Gas Company	202007	4,335,491	2,847,095	1,488,396	455,749	1,026,407
Peoples Gas Company	202008	3,090,273	1,776,412	1,313,861	355,656	957,274
Peoples Gas Company	202009	1,859,535	692,318	1,167,216	301,285	866,049
Peoples Gas Company	202010	1,379,429	165,820	1,213,609	283,950	928,316
Peoples Gas Company	202011	453,546	-415,465	869,011	99,215	769,795
Peoples Gas Company	202012	3,230,231	2,131,254	1,098,977	171,344	927,633
Peoples Gas Company	202101	5,820,387	4,345,128	1,475,259	343,673	1,128,358
Peoples Gas Company	202102	8,600,142	6,814,508	1,785,633	496,061	1,289,572
Peoples Gas Company	202103	9,106,933	7,240,438	1,866,496	558,311	1,282,896
Peoples Gas Company	202104	8,070,514	6,292,444	1,778,069	576,974	1,140,741
Peoples Gas Company	202105	6,683,694	5,123,325	1,560,368	446,738	1,062,459
Peoples Gas Company	202106	5,182,204	3,842,940	1,339,265	324,527	937,605
Peoples Gas Company	202107	3,720,793	2,669,311	1,051,482	276,700	725,885
Peoples Gas Company	202108	2,101,224	1,320,530	780,694	177,333	568,178
Peoples Gas Company	202109	653,975	427,315	226,659	-44,862	246,482
Peoples Gas Company	202110	-945,226	-528,516	-416,710	-303,245	-122,804
Peoples Gas Company	202111	-408,174	89,534	-497,708	-366,198	-129,285
Peoples Gas Company	202112	2,650,222	2,777,653	-127,431	-268,667	130,668
Peoples Gas Company	202201	5,748,540	5,354,988	393,551	-72,506	436,840
Peoples Gas Company	202202	10,222,720	9,273,140	949,580	202,445	736,117
Peoples Gas Company	202203	10,793,959	9,552,886	1,241,073	347,555	854,159
Peoples Gas Company	202204	9,885,468	8,652,415	1,233,053	432,182	731,760
Peoples Gas Company	202205	8,382,769	7,362,568	1,020,202	370,106	627,867
Peoples Gas Company	202206	6,338,932	5,524,630	814,303	321,411	438,877
Peoples Gas Company	202207	4,542,622	3,919,889	622,733	217,440	361,190

Peoples Gas Company	202208	2,258,068	2,391,257	-133,189	-191,912	24,664
Peoples Gas Company	202209	728,396	931,579	-203,183	-219,193	-5,735
Peoples Gas Company	202210	523,631	738,857	-215,226	-235,317	5,170
Peoples Gas Company	202211	586,421	782,777	-196,356	-257,390	52,514
Peoples Gas Company	202212	5,541,118	5,136,971	404,148	40,082	314,380
Peoples Gas Company	202301	8,641,738	7,664,232	977,506	349,153	617,382
Peoples Gas Company	202302	11,278,420	10,204,727	1,073,693	381,400	655,096
Peoples Gas Company	202303	11,650,359	10,293,727	1,356,632	544,854	776,548
Peoples Gas Company	202304	10,015,140	8,573,546	1,441,593	587,724	803,151
Peoples Gas Company	202305	6,965,624	5,710,402	1,255,223	410,905	786,687
Peoples Gas Company	202306	4,665,239	3,771,485	893,755	236,919	611,664
Peoples Gas Company	202307	2,840,745	2,092,633	748,112	121,802	621,972
Peoples Gas Company	202308	1,312,326	663,496	648,829	11,029	618,381
Peoples Gas Company	202309	-35,590	-611,753	576,163	-62,934	595,335
Peoples Gas Company	202310	-1,237,005	-1,406,611	169,606	-295,257	464,678
Peoples Gas Company	202311	-1,102,340	-1,253,590	151,250	-342,106	471,991
Peoples Gas Company	202312	201,978	-129,155	331,133	-302,144	622,580
Peoples Gas Company	202401	3,298,206	2,640,046	658,160	-118,347	772,261

		Average Arrearage				
Division	**Month**	**1**	**2**	**3**	**4**	**5**
Peoples Natural Gas Company	201901	139.21	112.46	26.75	3.88	22.84
Peoples Natural Gas Company	201902	186.83	154.92	31.91	5.87	26.03
Peoples Natural Gas Company	201903	204.41	170.35	34.06	7.39	26.65
Peoples Natural Gas Company	201904	178.48	144.93	33.54	7.74	25.58
Peoples Natural Gas Company	201905	136.04	106.38	29.66	6.12	23.36
Peoples Natural Gas Company	201906	102.89	76.65	26.24	5.07	20.96
Peoples Natural Gas Company	201907	68.18	46.12	22.07	4.10	17.68
Peoples Natural Gas Company	201908	37.84	19.41	18.43	3.11	15.07
Peoples Natural Gas Company	201909	12.71	-2.48	15.19	2.03	13.04
Peoples Natural Gas Company	201910	-8.50	-18.43	9.93	0.40	9.46
Peoples Natural Gas Company	201911	7.79	-2.05	9.84	0.12	9.71
Peoples Natural Gas Company	201912	60.36	44.68	15.68	1.92	13.76
Peoples Natural Gas Company	202001	92.58	70.84	21.74	3.73	18.00
Peoples Natural Gas Company	202002	129.62	103.90	25.72	5.57	20.13
Peoples Natural Gas Company	202003	147.33	118.94	28.38	7.08	21.30
Peoples Natural Gas Company	202004	135.43	106.68	28.75	7.05	21.69
Peoples Natural Gas Company	202005	125.92	97.51	28.40	6.64	21.74
Peoples Natural Gas Company	202006	101.37	74.01	27.36	6.19	21.17
Peoples Natural Gas Company	202007	76.44	51.17	25.27	5.49	19.76
Peoples Natural Gas Company	202008	54.66	31.52	23.14	4.45	18.68
Peoples Natural Gas Company	202009	34.23	12.39	21.85	3.68	18.16
Peoples Natural Gas Company	202010	23.44	0.24	23.20	3.28	19.92
Peoples Natural Gas Company	202011	10.80	-8.58	19.37	1.52	17.85
Peoples Natural Gas Company	202012	57.14	33.96	23.17	2.37	20.80
Peoples Natural Gas Company	202101	102.23	74.76	27.47	4.01	23.42
Peoples Natural Gas Company	202102	152.55	120.25	32.29	6.14	26.12
Peoples Natural Gas Company	202103	158.20	124.24	33.96	7.05	26.08
Peoples Natural Gas Company	202104	139.93	107.24	32.69	6.81	24.57
Peoples Natural Gas Company	202105	122.77	92.19	30.57	5.53	23.21
Peoples Natural Gas Company	202106	91.79	64.71	27.08	4.13	21.83
Peoples Natural Gas Company	202107	64.54	42.11	22.43	3.39	18.34
Peoples Natural Gas Company	202108	35.60	16.93	18.67	2.49	15.37
Peoples Natural Gas Company	202109	7.22	-2.55	9.77	-0.62	9.99
Peoples Natural Gas Company	202110	-20.00	-21.08	1.08	-3.71	4.31
Peoples Natural Gas Company	202111	-11.38	-12.01	0.63	-4.07	4.45
Peoples Natural Gas Company	202112	37.06	32.07	4.99	-3.72	8.33
Peoples Natural Gas Company	202201	93.23	81.34	11.89	-1.42	13.02
Peoples Natural Gas Company	202202	161.12	141.66	19.46	1.52	17.55
Peoples Natural Gas Company	202203	168.02	145.31	22.71	3.39	18.76
Peoples Natural Gas Company	202204	159.84	137.40	22.44	4.67	16.79
Peoples Natural Gas Company	202205	132.09	111.84	20.25	4.67	14.93
Peoples Natural Gas Company	202206	98.56	82.47	16.09	3.76	11.51
Peoples Natural Gas Company	202207	70.19	56.51	13.68	2.72	10.20

Peoples Natural Gas Company	202208	33.58	31.01	2.58	-2.79	4.68
Peoples Natural Gas Company	202209	9.69	7.69	2.00	-3.10	4.62
Peoples Natural Gas Company	202210	5.70	3.24	2.46	-3.29	5.31
Peoples Natural Gas Company	202211	11.70	8.84	2.87	-3.68	6.17
Peoples Natural Gas Company	202212	92.70	81.44	11.26	-0.21	10.99
Peoples Natural Gas Company	202301	149.78	130.06	19.72	4.11	15.23
Peoples Natural Gas Company	202302	187.34	165.95	21.39	4.87	15.85
Peoples Natural Gas Company	202303	201.76	176.06	25.71	7.39	17.51
Peoples Natural Gas Company	202304	174.48	147.58	26.90	7.93	18.26
Peoples Natural Gas Company	202305	128.55	103.40	25.15	6.37	17.64
Peoples Natural Gas Company	202306	90.12	70.05	20.07	3.64	15.27
Peoples Natural Gas Company	202307	61.49	43.15	18.34	1.95	16.29
Peoples Natural Gas Company	202308	35.30	17.07	18.23	0.42	17.12
Peoples Natural Gas Company	202309	14.31	-2.68	16.99	-0.69	17.43
Peoples Natural Gas Company	202310	-6.21	-17.36	11.15	-3.74	14.85
Peoples Natural Gas Company	202311	-9.35	-19.57	10.22	-4.69	14.28
Peoples Natural Gas Company	202312	15.82	3.04	12.78	-4.11	16.57
Peoples Natural Gas Company	202401	65.88	48.60	17.29	-1.66	18.75

Division	Month	1	2	3	4	5
Peoples Gas Company	201901	171.31	141.32	29.98	7.05	22.91
Peoples Gas Company	201902	225.91	188.68	37.22	10.27	26.94
Peoples Gas Company	201903	247.96	207.52	40.44	12.53	27.88
Peoples Gas Company	201904	219.97	179.14	40.83	12.58	28.25
Peoples Gas Company	201905	180.34	142.04	38.30	11.17	26.69
Peoples Gas Company	201906	141.41	108.47	32.94	10.41	21.93
Peoples Gas Company	201907	90.23	65.62	24.61	6.93	17.02
Peoples Gas Company	201908	50.90	32.91	17.99	4.05	13.72
Peoples Gas Company	201909	20.68	6.92	13.75	2.25	11.42
Peoples Gas Company	201910	0.41	-6.98	7.39	0.04	7.31
Peoples Gas Company	201911	6.81	-0.36	7.17	-0.39	7.50
Peoples Gas Company	201912	58.77	43.87	14.90	2.76	12.13
Peoples Gas Company	202001	98.46	76.16	22.30	5.36	16.95
Peoples Gas Company	202002	127.23	100.23	26.99	7.52	19.48
Peoples Gas Company	202003	146.43	116.43	30.00	9.17	20.83
Peoples Gas Company	202004	136.88	107.19	29.69	9.25	20.43
Peoples Gas Company	202005	121.57	92.15	29.41	9.24	20.17
Peoples Gas Company	202006	97.86	70.06	27.80	8.44	19.34
Peoples Gas Company	202007	73.86	48.50	25.36	7.76	17.49
Peoples Gas Company	202008	52.65	30.27	22.39	6.06	16.31
Peoples Gas Company	202009	31.64	11.78	19.86	5.13	14.74
Peoples Gas Company	202010	23.38	2.81	20.57	4.81	15.73
Peoples Gas Company	202011	7.69	-7.04	14.73	1.68	13.05
Peoples Gas Company	202012	54.68	36.08	18.60	2.90	15.70
Peoples Gas Company	202101	98.71	73.69	25.02	5.83	19.14
Peoples Gas Company	202102	145.80	115.53	30.27	8.41	21.86
Peoples Gas Company	202103	154.01	122.45	31.57	9.44	21.70
Peoples Gas Company	202104	136.49	106.42	30.07	9.76	19.29
Peoples Gas Company	202105	113.48	86.98	26.49	7.58	18.04
Peoples Gas Company	202106	88.15	65.37	22.78	5.52	15.95
Peoples Gas Company	202107	63.42	45.50	17.92	4.72	12.37
Peoples Gas Company	202108	35.82	22.51	13.31	3.02	9.68
Peoples Gas Company	202109	11.16	7.29	3.87	-0.77	4.21
Peoples Gas Company	202110	-16.08	-8.99	-7.09	-5.16	-2.09
Peoples Gas Company	202111	-6.91	1.52	-8.43	-6.20	-2.19
Peoples Gas Company	202112	44.80	46.96	-2.15	-4.54	2.21
Peoples Gas Company	202201	97.17	90.52	6.65	-1.23	7.38
Peoples Gas Company	202202	172.81	156.76	16.05	3.42	12.44
Peoples Gas Company	202203	181.96	161.04	20.92	5.86	14.40
Peoples Gas Company	202204	166.58	145.80	20.78	7.28	12.33
Peoples Gas Company	202205	141.62	124.38	17.23	6.25	10.61
Peoples Gas Company	202206	107.26	93.48	13.78	5.44	7.43
Peoples Gas Company	202207	77.12	66.55	10.57	3.69	6.13

Peoples Gas Company	202208	38.31	40.57	-2.26	-3.26	0.42
Peoples Gas Company	202209	12.35	15.79	-3.44	-3.72	-0.10
Peoples Gas Company	202210	8.84	12.47	-3.63	-3.97	0.09
Peoples Gas Company	202211	9.87	13.18	-3.30	-4.33	0.88
Peoples Gas Company	202212	93.23	86.43	6.80	0.67	5.29
Peoples Gas Company	202301	145.14	128.72	16.42	5.86	10.37
Peoples Gas Company	202302	189.59	171.54	18.05	6.41	11.01
Peoples Gas Company	202303	195.22	172.49	22.73	9.13	13.01
Peoples Gas Company	202304	168.05	143.86	24.19	9.86	13.48
Peoples Gas Company	202305	117.42	96.26	21.16	6.93	13.26
Peoples Gas Company	202306	78.87	63.76	15.11	4.01	10.34
Peoples Gas Company	202307	48.22	35.52	12.70	2.07	10.56
Peoples Gas Company	202308	22.26	11.26	11.01	0.19	10.49
Peoples Gas Company	202309	-0.60	-10.37	9.76	-1.07	10.09
Peoples Gas Company	202310	-20.83	-23.68	2.86	-4.97	7.82
Peoples Gas Company	202311	-18.50	-21.04	2.54	-5.74	7.92
Peoples Gas Company	202312	3.39	-2.17	5.56	-5.07	10.45
Peoples Gas Company	202401	55.22	44.20	11.02	-1.98	12.93

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: CAUSE-IV-003

Witness: Black, Rita **Title:** Community Assistance Programs Director

Question: In reference to CAUSE-II-005, from May 2021 to January 2024, please explain why the amount of Peoples Natural Gas Company CAP accounts decreased to the best of your knowledge. Please provide copies of any studies or reports conducted to evaluate the cause of the decline in CAP enrollment.

Answer: During the pandemic (2020 and 2021), there were two significant changes to the Company's CAP participation procedures as a result of Commission guidance and the Company's desire to support low income households in need of CAP participation. First, if a customer wished to enroll in CAP and income documentation was not readily available, the account could be enrolled using verbal attestation. Second, if a participating CAP account reached the recertification date and the customer failed to complete the recertification process, the account was not dismissed from CAP.

Further, for most of 2020, an extended moratorium was in place to prevent utility terminations. Once the moratorium was lifted in 2021, all customers were offered an opportunity for an additional payment arrangement (sometimes referred to as a Covid PAR), regardless of prior payment arrangement history. CAP enrollment is closely impacted by collections activities as customers may not seek to enroll in CAP until they are faced with possible loss of utility service. During the extended moratoriums and the ability to establish additional payment arrangements, without the application process and documentation required to participate in CAP, many customers choose the payment arrangement option rather than CAP. These reasons led to overall low CAP applications.

CAP enrollment levels began to drop off further when dismissal for failure to recertify was reinstituted in January of 2022. During 2022 and 2023, we saw an increase in dismissals from customers who failed to provide current income documents to validate their continued eligibility and those that enrolled without income documentation, due the pandemic, were required to provide it for the first time. Further, as wages increased, we have received anecdotal feedback that customers who previously qualified no longer met the income threshold, or assumed they no longer met it, thereby causing them to not respond to recertification efforts.

Submit Date: 3/18/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: CAUSE-IV-006

Witness: Black, Rita **Title:** Community Assistance Programs Director

Question: Please reference Peoples' response to CAUSE-PA II-3. Does Peoples definition of "confirmed low income customer" in this interrogatory differ from the definition of the same term that Peoples utilizes for purposes of reporting data to the Commission for inclusion in the Universal Service report? If yes:

1. Please explain the difference between the two definitions.

2. Please explain the specific situations where each definition is used.

3. Please indicate for each interrogatory in CAUSE-PA Sets I and II, which "confirmed low income customer" definition was used for the response.

Answer: Yes.

1. The definition of 'confirmed low income' used throughout the responses to CAUSE sets I and II identified 'confirmed low income' as an account that was active in CAP and/or had received LIHEAP in the prior 24 months. In those cases, income documentation had been received by either the Company or the state for purposes of enrolling the customer in CAP or LIHEAP, thereby confirming low income status.

For the Universal Service collections reporting data, in which all residential accounts are shown in one column and the second column is 'confirmed low income', any customer within the Company's billing system denoted as having income at or below 150% of the federal poverty level is counted as 'confirmed low income' for that report.

2. Refer to the response to 1.

3. Refer to the response to 1.

Submit Date: 3/18/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: CAUSE-IV-007

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: How many security deposits currently being held for customers who meet reporting definition of CLI that Peoples uses for reporting universal service data to the Commission?

Answer: The Company is not holding any deposits for customers meeting this definition.

Submit Date: 3/18/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: CAUSE-IV-008

Witness: Black, Rita **Title:** Community Assistance Programs Director

Question: Please refer to Peoples Statement at 6-7, referencing the removal of condition number 7 (LIHEAP autoenrollment). Please explain the origination of the LIHEAP autoenrollment provision including when and why it was added to the tariff. Please also provide copies of any settlement documents or other related document referencing the inclusion of LIHEAP autoenrollment in the tariff.

Answer: The earliest tariff referencing this provision that could be located is dated 4/3/2000 and is attached. Due to the advanced age of the provision, the Company is unable to determine exactly when this provision was added to the tariff and under what circumstances. It is not the practice of the Company to auto-enroll customers into CAP and it is not provided as an enrollment mechanism in the currently approved Universal Service and Energy Conservation Plan.

The Company notes that customers can be enrolled in CAP, using receipt of LIHEAP as proof of eligibility and eliminating the necessity of providing income documentation, if the customer desires enrollment and provides their verbal household information and permission to enroll.

Submit Date: 3/18/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-IX-009

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: In Excel format, for each month for the most recent 36 months available, please provide the mean natural gas arrears (in dollars) for:

a) Residential customers as a whole;

b) Confirmed low-income customers (without CAP participants);

c) Confirmed low-income customers (with CAP participants);

d) CAP participants.

Answer: Please see attached Excel file.

Submit Date: 2/23/2024

Month	#9 - Mean Arrears				#10 - Median Arrears			
	A	B	C	D	A	B	C	D
202102	606.78	663.51	644.96	820.00	272.66	316.98	369.37	480.33
202103	644.53	702.71	634.48	798.85	311.48	343.13	359.31	456.97
202104	649.37	742.03	615.59	770.19	310.56	371.28	340.99	434.22
202105	612.04	693.52	589.85	745.05	277.44	339.69	314.53	408.90
202106	584.80	652.94	565.98	728.81	238.91	301.22	294.74	390.08
202107	549.56	632.48	576.49	741.21	196.18	272.07	292.02	388.44
202108	529.28	582.11	573.00	735.30	179.99	241.68	281.78	382.30
202109	478.76	604.71	577.63	745.00	143.07	261.29	286.53	386.91
202110	487.52	627.96	595.85	777.36	145.13	271.74	296.42	405.91
202111	490.67	630.96	605.33	776.75	150.23	279.01	302.81	403.16
202112	462.37	618.49	601.64	755.50	134.15	248.66	298.51	377.31
202201	492.07	613.82	599.55	746.01	180.51	252.31	299.66	369.39
202202	518.76	598.02	591.54	735.79	225.86	256.87	316.62	375.80
202203	549.85	606.81	591.75	726.62	269.71	279.27	317.33	380.63
202204	577.18	642.11	576.12	694.72	286.23	310.62	303.96	362.84
202205	520.14	606.68	557.14	659.91	236.87	288.36	283.95	340.67
202206	483.16	582.37	529.57	634.84	213.03	270.43	254.33	314.01
202207	459.26	534.44	529.53	632.81	201.70	262.86	253.40	311.19
202208	451.06	523.71	561.47	658.88	196.40	245.78	275.78	327.82
202209	448.42	560.47	623.94	714.52	190.53	279.12	290.31	348.65
202210	461.23	552.30	620.80	732.46	196.31	288.28	285.15	361.35
202211	468.03	550.78	628.06	734.14	199.53	275.64	285.64	346.55
202212	483.89	562.37	592.67	705.54	215.83	274.39	272.66	326.02
202301	533.87	571.10	591.70	713.19	267.60	300.03	282.05	333.65
202302	580.20	596.05	594.18	722.86	321.73	331.53	293.59	357.10
202303	627.89	668.46	615.33	743.55	358.51	405.74	310.93	384.18
202304	643.44	696.16	626.48	752.14	351.06	420.33	320.78	394.04
202305	637.77	675.35	634.59	761.61	332.27	393.29	329.76	401.40
202306	586.59	618.37	616.07	742.47	266.85	305.42	317.82	388.29
202307	562.29	604.38	831.26	1,190.12	256.75	313.73	459.38	783.45
202308	533.36	542.25	636.13	786.49	214.03	259.31	319.75	414.74
202309	513.27	523.45	651.21	816.08	192.82	247.47	337.70	434.26
202310	493.11	540.29	535.00	1,122.36	174.45	287.59	183.12	936.54
202311	514.49	505.46	694.56	858.04	192.67	238.31	358.53	473.74
202312	497.93	489.71	677.88	855.09	175.34	220.43	348.53	466.29
202401	522.24	492.24	675.89	854.48	200.15	222.86	339.38	462.74

THE COALITION FOR AFFORDABLE UTILITY SERVICE AND ENERGY EFFICIENCY IN PENNSYLVANIA

APPENDIX C

ENERGY ASSISTANCE SUMMARY (EASUM) REPORT

9/9/2023 - 3/14/2024

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 01

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	483	$167,709	34	$347
	Renter	687	$246,215	48	$358
	RenterWithHeat	7	$1,620	0	$231
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	224	$77,718	16	$347
	Roomer	0	$0	0	$0
	Other	17	$6,612	1	$389
RACE	AmericanIndian	5	$1,519	0	$304
	Other	88	$31,511	6	$358
	NativeHawaiian	3	$1,600	0	$533
	Black	73	$25,736	5	$353
	White	1,218	$429,131	86	$352
	Asian	4	$1,266	0	$316
	Unknown	27	$9,111	2	$337
DISABLED	YES	371	$113,793	26	$307
	NO	1,047	$386,081	74	$369
AGE 60 & ABV	YES	653	$205,912	46	$315
	NO	765	$293,962	54	$384
AGE 5 & BLW	YES	250	$95,035	18	$380
	NO	1,168	$404,839	82	$347
PAY_TYPE	DIRECT	16	$5,110	1	$319
	PROVIDER	1,403	$495,064	99	$353
REFUNDS		34	$7,995		$235

AVERAGE HOUSEHOLD SIZE: 2.98

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	745	$265,561	53	$356
	FuelOil	232	$81,004	16	$349
	Coal	2	$600	0	$300
	NaturalGas	272	$93,079	19	$342
	Kerosene	10	$4,556	1	$456
	Propane	155	$54,219	11	$350
	WoodOrOther	2	$855	0	$428
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	49	$46,900	3	$957
	1000 - 1999	5	$5,000	0	$1,000
	2000 - 2999	13	$12,179	1	$937
	3000 - 3999	15	$11,283	1	$752
	4000 - 4999	12	$8,820	1	$735
	5000 - 5999	23	$14,192	2	$617
	6000 - 6999	21	$10,722	1	$511
	7000 - 7999	24	$10,955	2	$456
	8000 - 8999	17	$6,631	1	$390
	9000 - 9999	21	$7,082	1	$337
	10000 - 10999	34	$10,948	2	$322
	11000 - 11999	162	$49,006	11	$303
	12000 - 12999	77	$23,229	5	$302
	13000 - 13999	58	$17,400	4	$300
	14000 - 14999	66	$19,827	5	$300
	15000 - 15999	68	$20,250	5	$298
	16000 - 16999	76	$22,800	5	$300
	17000 - 17999	72	$21,450	5	$298
	18000 - 18999	90	$27,000	6	$300
	19000 - 19999	66	$19,800	5	$300
	> 19999	449	$134,400	32	$299
PAYMENT TYPE	Regular	1,418	$499,874		$353
	Reissue	0	$0		$0
	Secondpay	1	$300		$300
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,419	$500,174		$352
RECOUPMENTS		0	$0		$0
NET PAID			$500,174		
PMT SUB TYPE	APD	0	$0		$0
	STD	1,419	$500,174		$352

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 02

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	7,566	$2,808,132	33	$371
	Renter	10,255	$4,169,063	45	$407
	RenterWithHeat	273	$56,581	1	$207
	SubsidizedWithHeat	3	$1,642	0	$547
	SubsidizedNoHeat	4,696	$1,929,634	20	$411
	Roomer	10	$3,175	0	$318
	Other	187	$77,170	1	$413
RACE	AmericanIndian	113	$52,521	0	$465
	Other	641	$271,775	3	$424
	NativeHawaiian	17	$10,739	0	$632
	Black	9,339	$3,843,971	41	$412
	White	12,186	$4,592,356	53	$377
	Asian	267	$102,093	1	$382
	Unknown	427	$171,942	2	$403
DISABLED	YES	6,398	$1,959,404	28	$306
	NO	16,592	$7,085,993	72	$427
AGE 60 & ABV	YES	9,455	$3,041,161	41	$322
	NO	13,535	$6,004,236	59	$444
AGE 5 & BLW	YES	3,937	$1,723,682	17	$438
	NO	19,053	$7,321,715	83	$384
PAY_TYPE	DIRECT	165	$52,435	1	$318
	PROVIDER	22,890	$9,016,179	99	$394
REFUNDS		319	$85,741		$269

AVERAGE HOUSEHOLD SIZE: 2.9

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	7,806	$3,180,164	34	$407
	FuelOil	243	$91,119	1	$375
	Coal	0	$0	0	$0
	NaturalGas	14,857	$5,745,607	65	$387
	Kerosene	29	$9,202	0	$317
	Propane	53	$18,242	0	$344
	WoodOrOther	0	$0	0	$0
	BlendedFuel	2	$1,063	0	$532
INCOME RANGE	0 - 999	1,832	$1,813,667	8	$990
	1000 - 1999	311	$309,000	1	$994
	2000 - 2999	295	$286,653	1	$972
	3000 - 3999	321	$250,099	1	$779
	4000 - 4999	338	$235,105	1	$696
	5000 - 5999	277	$153,628	1	$555
	6000 - 6999	322	$155,593	1	$483
	7000 - 7999	421	$178,019	2	$423
	8000 - 8999	349	$129,104	2	$370
	9000 - 9999	458	$146,740	2	$320
	10000 - 10999	729	$218,628	3	$300
	11000 - 11999	3,749	$1,116,043	16	$298
	12000 - 12999	1,042	$309,168	5	$297
	13000 - 13999	1,063	$315,450	5	$297
	14000 - 14999	1,010	$300,900	4	$298
	15000 - 15999	1,021	$304,500	4	$298
	16000 - 16999	1,045	$310,200	5	$297
	17000 - 17999	1,026	$306,000	4	$298
	18000 - 18999	964	$287,700	4	$298
	19000 - 19999	971	$288,750	4	$297
	> 19999	5,445	$1,629,450	24	$299
PAYMENT TYPE	Regular	22,990	$9,045,397		$393
	Reissue	6	$1,906		$318
	Secondpay	47	$16,129		$343
	Underpay	10	$3,882		$388
	Extraordinary	2	$1,300		$650
TOTAL PMT		23,055	$9,068,614		$393
RECOUPMENTS		2	$539		$270
NET PAID			$9,068,075		
PMT SUB TYPE	APD	0	$0		$0
	STD	23,055	$9,068,614		$393

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 03

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	956	$356,945	49	$373
	Renter	789	$299,402	41	$379
	RenterWithHeat	25	$4,358	1	$174
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	118	$45,495	6	$386
	Roomer	4	$600	0	$150
	Other	42	$19,591	2	$466
RACE	AmericanIndian	4	$1,444	0	$361
	Other	15	$7,599	1	$507
	NativeHawaiian	2	$1,300	0	$650
	Black	29	$10,839	1	$374
	White	1,870	$699,523	97	$374
	Asian	0	$0	0	$0
	Unknown	14	$5,686	1	$406
DISABLED	YES	576	$173,994	30	$302
	NO	1,358	$552,397	70	$407
AGE 60 & ABV	YES	916	$290,883	47	$318
	NO	1,018	$435,508	53	$428
AGE 5 & BLW	YES	253	$108,678	13	$430
	NO	1,681	$617,713	87	$367
PAY_TYPE	DIRECT	57	$16,486	3	$289
	PROVIDER	1,881	$711,036	97	$378
REFUNDS		17	$3,776		$222

AVERAGE HOUSEHOLD SIZE: 2.92

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	511	$205,972	26	$403
	FuelOil	203	$73,268	10	$361
	Coal	4	$1,200	0	$300
	NaturalGas	1,053	$385,796	54	$366
	Kerosene	27	$10,583	1	$392
	Propane	126	$46,500	7	$369
	WoodOrOther	8	$2,472	0	$309
	BlendedFuel	2	$600	0	$300
INCOME RANGE	0 - 999	131	$129,800	7	$991
	1000 - 1999	16	$16,000	1	$1,000
	2000 - 2999	16	$16,000	1	$1,000
	3000 - 3999	18	$15,358	1	$853
	4000 - 4999	12	$8,736	1	$728
	5000 - 5999	24	$14,572	1	$607
	6000 - 6999	31	$16,106	2	$520
	7000 - 7999	23	$10,767	1	$468
	8000 - 8999	21	$7,940	1	$378
	9000 - 9999	21	$7,297	1	$347
	10000 - 10999	41	$12,784	2	$312
	11000 - 11999	319	$94,771	17	$297
	12000 - 12999	84	$25,110	4	$299
	13000 - 13999	100	$29,700	5	$297
	14000 - 14999	82	$24,450	4	$298
	15000 - 15999	94	$28,050	5	$298
	16000 - 16999	92	$27,450	5	$298
	17000 - 17999	117	$34,950	6	$299
	18000 - 18999	77	$22,950	4	$298
	19000 - 19999	89	$26,400	5	$297
	> 19999	525	$156,900	27	$299
PAYMENT TYPE	Regular	1,934	$726,391		$376
	Reissue	2	$450		$225
	Secondpay	1	$300		$300
	Underpay	1	$381		$381
	Extraordinary	0	$0		$0
TOTAL PMT		1,938	$727,522		$375
RECOUPMENTS		10	$1,502		$150
NET PAID			$726,020		
PMT SUB TYPE	APD	0	$0		$0
	STD	1,938	$727,522		$375

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 04

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,776	$666,386	40	$375
	Renter	2,202	$900,607	49	$409
	RenterWithHeat	61	$12,184	1	$200
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	403	$173,875	9	$431
	Roomer	1	$177	0	$177
	Other	43	$15,661	1	$364
RACE	AmericanIndian	17	$6,283	0	$370
	Other	110	$48,817	2	$444
	NativeHawaiian	4	$1,900	0	$475
	Black	789	$328,735	18	$417
	White	3,502	$1,357,245	78	$388
	Asian	12	$4,300	0	$358
	Unknown	52	$21,610	1	$416
DISABLED	YES	1,280	$395,555	29	$309
	NO	3,206	$1,373,335	71	$428
AGE 60 & ABV	YES	1,848	$595,597	41	$322
	NO	2,638	$1,173,293	59	$445
AGE 5 & BLW	YES	703	$311,545	16	$443
	NO	3,783	$1,457,345	84	$385
PAY_TYPE	DIRECT	28	$9,178	1	$328
	PROVIDER	4,477	$1,766,589	99	$395
REFUNDS		106	$25,783		$243

AVERAGE HOUSEHOLD SIZE: 2.9

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	1,639	$660,318	37	$403
	FuelOil	423	$162,619	9	$384
	Coal	0	$0	0	$0
	NaturalGas	2,260	$883,039	50	$391
	Kerosene	30	$12,256	1	$409
	Propane	119	$45,294	3	$381
	WoodOrOther	4	$1,713	0	$428
	BlendedFuel	11	$3,651	0	$332
INCOME RANGE	0 - 999	389	$386,500	9	$994
	1000 - 1999	39	$39,000	1	$1,000
	2000 - 2999	46	$46,000	1	$1,000
	3000 - 3999	55	$45,855	1	$834
	4000 - 4999	52	$37,654	1	$724
	5000 - 5999	49	$29,264	1	$597
	6000 - 6999	59	$30,877	1	$523
	7000 - 7999	63	$28,856	1	$458
	8000 - 8999	77	$30,514	2	$396
	9000 - 9999	69	$23,596	2	$342
	10000 - 10999	144	$43,486	3	$302
	11000 - 11999	583	$174,676	13	$300
	12000 - 12999	179	$53,262	4	$298
	13000 - 13999	206	$61,500	5	$299
	14000 - 14999	206	$61,500	5	$299
	15000 - 15999	236	$70,350	5	$298
	16000 - 16999	214	$63,150	5	$295
	17000 - 17999	180	$53,100	4	$295
	18000 - 18999	215	$64,050	5	$298
	19000 - 19999	199	$59,250	4	$298
	> 19999	1,226	$366,450	27	$299
PAYMENT TYPE	Regular	4,486	$1,768,890		$394
	Reissue	3	$750		$250
	Secondpay	14	$4,427		$316
	Underpay	1	$700		$700
	Extraordinary	1	$1,000		$1,000
TOTAL PMT		4,505	$1,775,767		$394
RECOUPMENTS		3	$750		$250
NET PAID			$1,775,017		
PMT SUB TYPE	APD	0	$0		$0
	STD	4,505	$1,775,767		$394

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 05

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,143	$404,996	53	$354
	Renter	791	$305,098	36	$386
	RenterWithHeat	10	$1,706	0	$171
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	154	$56,540	7	$367
	Roomer	1	$500	0	$500
	Other	72	$26,178	3	$364
RACE	AmericanIndian	4	$1,900	0	$475
	Other	31	$10,150	1	$327
	NativeHawaiian	1	$300	0	$300
	Black	10	$4,926	0	$493
	White	2,116	$775,029	97	$366
	Asian	1	$313	0	$313
	Unknown	8	$2,400	0	$300
DISABLED	YES	589	$185,740	27	$315
	NO	1,582	$609,278	73	$385
AGE 60 & ABV	YES	1,119	$352,108	52	$315
	NO	1,052	$442,910	48	$421
AGE 5 & BLW	YES	298	$114,808	14	$385
	NO	1,873	$680,210	86	$363
PAY_TYPE	DIRECT	12	$2,949	1	$246
	PROVIDER	2,170	$794,657	99	$366
REFUNDS		11	$3,004		$273

AVERAGE HOUSEHOLD SIZE: 3.15

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	532	$199,646	25	$375
	FuelOil	1,350	$490,472	62	$363
	Coal	25	$7,984	1	$319
	NaturalGas	21	$7,102	1	$338
	Kerosene	67	$23,281	3	$347
	Propane	106	$40,377	5	$381
	WoodOrOther	56	$21,047	3	$376
	BlendedFuel	14	$5,109	1	$365
INCOME RANGE	0 - 999	117	$114,169	5	$976
	1000 - 1999	14	$14,000	1	$1,000
	2000 - 2999	12	$12,000	1	$1,000
	3000 - 3999	13	$12,428	1	$956
	4000 - 4999	17	$14,411	1	$848
	5000 - 5999	19	$13,113	1	$690
	6000 - 6999	11	$6,207	1	$564
	7000 - 7999	32	$16,497	1	$516
	8000 - 8999	35	$15,367	2	$439
	9000 - 9999	42	$15,984	2	$381
	10000 - 10999	46	$15,774	2	$343
	11000 - 11999	281	$86,342	13	$307
	12000 - 12999	71	$21,313	3	$300
	13000 - 13999	108	$32,400	5	$300
	14000 - 14999	99	$29,700	5	$300
	15000 - 15999	106	$31,800	5	$300
	16000 - 16999	142	$42,000	7	$296
	17000 - 17999	124	$37,200	6	$300
	18000 - 18999	97	$29,100	4	$300
	19000 - 19999	98	$29,400	5	$300
	> 19999	686	$205,500	32	$300
PAYMENT TYPE	Regular	2,171	$795,018		$366
	Reissue	2	$251		$126
	Secondpay	8	$1,928		$241
	Underpay	1	$409		$409
	Extraordinary	0	$0		$0
TOTAL PMT		2,182	$797,606		$366
RECOUPMENTS		20	$5,167		$258
NET PAID			$792,439		
PMT SUB TYPE	APD	0	$0		$0
	STD	2,182	$797,606		$366

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 06

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	2,150	$776,947	35	$361
	Renter	3,502	$1,285,629	57	$367
	RenterWithHeat	94	$18,530	2	$197
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	372	$144,105	6	$387
	Roomer	6	$2,058	0	$343
	Other	40	$19,276	1	$482
RACE	AmericanIndian	10	$3,772	0	$377
	Other	2,346	$854,764	38	$364
	NativeHawaiian	26	$10,141	0	$390
	Black	500	$184,210	8	$368
	White	3,079	$1,113,613	50	$362
	Asian	26	$8,871	0	$341
	Unknown	177	$71,174	3	$402
DISABLED	YES	1,429	$441,959	23	$309
	NO	4,735	$1,804,586	77	$381
AGE 60 & ABV	YES	2,197	$694,948	36	$316
	NO	3,967	$1,551,597	64	$391
AGE 5 & BLW	YES	1,506	$583,937	24	$388
	NO	4,658	$1,662,608	76	$357
PAY_TYPE	DIRECT	120	$37,198	2	$310
	PROVIDER	6,070	$2,217,857	98	$365
REFUNDS		172	$46,342		$269

AVERAGE HOUSEHOLD SIZE: 3.69

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	2,519	$922,755	41	$366
	FuelOil	1,475	$551,227	24	$374
	Coal	5	$1,500	0	$300
	NaturalGas	1,881	$669,596	31	$356
	Kerosene	43	$15,872	1	$369
	Propane	238	$84,695	4	$356
	WoodOrOther	3	$900	0	$300
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	316	$311,500	5	$986
	1000 - 1999	45	$45,000	1	$1,000
	2000 - 2999	55	$53,701	1	$976
	3000 - 3999	53	$43,969	1	$830
	4000 - 4999	72	$52,951	1	$735
	5000 - 5999	63	$36,462	1	$579
	6000 - 6999	69	$34,991	1	$507
	7000 - 7999	98	$43,578	2	$445
	8000 - 8999	90	$35,510	1	$395
	9000 - 9999	117	$40,446	2	$346
	10000 - 10999	189	$59,005	3	$312
	11000 - 11999	658	$197,091	11	$300
	12000 - 12999	226	$67,441	4	$298
	13000 - 13999	238	$71,100	4	$299
	14000 - 14999	262	$77,250	4	$295
	15000 - 15999	246	$73,050	4	$297
	16000 - 16999	267	$79,650	4	$298
	17000 - 17999	275	$81,900	4	$298
	18000 - 18999	284	$84,600	5	$298
	19000 - 19999	275	$82,200	4	$299
	> 19999	2,266	$675,150	37	$298
PAYMENT TYPE	Regular	6,164	$2,246,545		$364
	Reissue	8	$2,927		$366
	Secondpay	18	$5,583		$310
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		6,190	$2,255,055		$364
RECOUPMENTS		14	$4,828		$345
NET PAID			$2,250,227		
PMT SUB TYPE	APD	0	$0		$0
	STD	6,190	$2,255,055		$364

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 07

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	2,048	$707,289	42	$345
	Renter	2,015	$788,267	42	$391
	RenterWithHeat	68	$13,429	1	$197
	SubsidizedWithHeat	1	$300	0	$300
	SubsidizedNoHeat	642	$259,960	13	$405
	Roomer	2	$650	0	$325
	Other	65	$24,562	1	$378
RACE	AmericanIndian	10	$4,145	0	$414
	Other	42	$18,534	1	$441
	NativeHawaiian	3	$900	0	$300
	Black	242	$98,253	5	$406
	White	4,506	$1,656,386	93	$368
	Asian	8	$3,439	0	$430
	Unknown	30	$12,800	1	$427
DISABLED	YES	1,496	$461,625	31	$309
	NO	3,345	$1,332,832	69	$398
AGE 60 & ABV	YES	2,038	$638,704	42	$313
	NO	2,803	$1,155,753	58	$412
AGE 5 & BLW	YES	799	$312,013	17	$391
	NO	4,042	$1,482,444	83	$367
PAY_TYPE	DIRECT	87	$24,503	2	$282
	PROVIDER	4,774	$1,777,668	98	$372
REFUNDS		30	$10,096		$337

AVERAGE HOUSEHOLD SIZE: 3.33

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	1,255	$499,800	26	$398
	FuelOil	1,122	$407,326	23	$363
	Coal	17	$5,100	0	$300
	NaturalGas	2,147	$767,086	44	$357
	Kerosene	104	$38,296	2	$368
	Propane	86	$32,541	2	$378
	WoodOrOther	17	$6,875	0	$404
	BlendedFuel	93	$37,433	2	$403
INCOME RANGE	0 - 999	287	$282,800	6	$985
	1000 - 1999	30	$30,000	1	$1,000
	2000 - 2999	46	$45,871	1	$997
	3000 - 3999	44	$38,873	1	$883
	4000 - 4999	44	$33,449	1	$760
	5000 - 5999	44	$27,978	1	$636
	6000 - 6999	56	$30,340	1	$542
	7000 - 7999	59	$28,372	1	$481
	8000 - 8999	62	$25,902	1	$418
	9000 - 9999	79	$28,997	2	$367
	10000 - 10999	116	$36,885	2	$318
	11000 - 11999	727	$216,140	15	$297
	12000 - 12999	205	$60,750	4	$296
	13000 - 13999	202	$59,700	4	$296
	14000 - 14999	229	$68,400	5	$299
	15000 - 15999	252	$75,150	5	$298
	16000 - 16999	249	$73,950	5	$297
	17000 - 17999	234	$70,050	5	$299
	18000 - 18999	195	$58,050	4	$298
	19000 - 19999	200	$60,000	4	$300
	> 19999	1,481	$442,800	31	$299
PAYMENT TYPE	Regular	4,841	$1,794,457		$371
	Reissue	2	$470		$235
	Secondpay	14	$5,533		$395
	Underpay	3	$1,011		$337
	Extraordinary	1	$700		$700
TOTAL PMT		4,861	$1,802,171		$371
RECOUPMENTS		15	$3,874		$258
NET PAID			$1,798,297		
PMT SUB TYPE	APD	0	$0		$0
	STD	4,861	$1,802,171		$371

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 08

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	791	$273,180	45	$345
	Renter	843	$312,518	48	$371
	RenterWithHeat	12	$2,187	1	$182
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	89	$33,317	5	$374
	Roomer	1	$162	0	$162
	Other	38	$14,658	2	$386
RACE	AmericanIndian	5	$2,540	0	$508
	Other	24	$9,895	1	$412
	NativeHawaiian	1	$300	0	$300
	Black	18	$6,863	1	$381
	White	1,712	$611,388	97	$357
	Asian	5	$1,557	0	$311
	Unknown	9	$3,479	1	$387
DISABLED	YES	538	$168,730	30	$314
	NO	1,236	$467,292	70	$378
AGE 60 & ABV	YES	778	$242,107	44	$311
	NO	996	$393,915	56	$395
AGE 5 & BLW	YES	327	$124,206	18	$380
	NO	1,447	$511,816	82	$354
PAY_TYPE	DIRECT	74	$24,872	4	$336
	PROVIDER	1,815	$640,360	96	$353
REFUNDS		230	$56,635		$246

AVERAGE HOUSEHOLD SIZE: 3.68

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	529	$192,017	30	$363
	FuelOil	449	$165,663	25	$369
	Coal	13	$4,600	1	$354
	NaturalGas	486	$167,304	27	$344
	Kerosene	4	$1,637	0	$409
	Propane	222	$77,299	13	$348
	WoodOrOther	48	$18,212	3	$379
	BlendedFuel	23	$9,290	1	$404
INCOME RANGE	0 - 999	68	$67,500	4	$993
	1000 - 1999	11	$11,000	1	$1,000
	2000 - 2999	12	$12,000	1	$1,000
	3000 - 3999	14	$12,836	1	$917
	4000 - 4999	16	$13,940	1	$871
	5000 - 5999	8	$5,426	0	$678
	6000 - 6999	14	$8,587	1	$613
	7000 - 7999	20	$10,457	1	$523
	8000 - 8999	29	$13,222	2	$456
	9000 - 9999	28	$10,807	2	$386
	10000 - 10999	42	$14,399	2	$343
	11000 - 11999	245	$76,802	14	$313
	12000 - 12999	79	$24,025	4	$304
	13000 - 13999	76	$22,696	4	$299
	14000 - 14999	72	$21,675	4	$301
	15000 - 15999	90	$26,850	5	$298
	16000 - 16999	105	$31,200	6	$297
	17000 - 17999	93	$27,750	5	$298
	18000 - 18999	80	$23,700	5	$296
	19000 - 19999	84	$24,900	5	$296
	> 19999	588	$176,250	33	$300
PAYMENT TYPE	Regular	1,774	$636,022		$359
	Reissue	5	$2,276		$455
	Secondpay	109	$26,727		$245
	Underpay	1	$207		$207
	Extraordinary	0	$0		$0
TOTAL PMT		1,889	$665,232		$352
RECOUPMENTS		1	$181		$181
NET PAID			$665,051		
PMT SUB TYPE	APD	0	$0		$0
	STD	1,889	$665,232		$352

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 09

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,770	$649,306	37	$367
	Renter	1,950	$722,235	40	$370
	RenterWithHeat	141	$25,905	3	$184
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	942	$327,989	19	$348
	Roomer	8	$2,610	0	$326
	Other	33	$11,323	1	$343
RACE	AmericanIndian	14	$6,325	0	$452
	Other	417	$152,565	9	$366
	NativeHawaiian	13	$4,450	0	$342
	Black	580	$214,081	12	$369
	White	3,568	$1,271,993	74	$357
	Asian	122	$40,812	3	$335
	Unknown	130	$49,142	3	$378
DISABLED	YES	1,342	$407,350	28	$304
	NO	3,502	$1,332,018	72	$380
AGE 60 & ABV	YES	2,333	$738,051	48	$316
	NO	2,511	$1,001,317	52	$399
AGE 5 & BLW	YES	746	$282,965	15	$379
	NO	4,098	$1,456,403	85	$355
PAY_TYPE	DIRECT	176	$51,546	4	$293
	PROVIDER	4,686	$1,695,210	96	$362
REFUNDS		95	$28,546		$300

AVERAGE HOUSEHOLD SIZE: 2.86

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	2,434	$876,405	50	$360
	FuelOil	1,121	$420,947	23	$376
	Coal	0	$0	0	$0
	NaturalGas	1,086	$374,870	22	$345
	Kerosene	3	$884	0	$295
	Propane	199	$66,112	4	$332
	WoodOrOther	1	$150	0	$150
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	271	$264,500	6	$976
	1000 - 1999	31	$31,000	1	$1,000
	2000 - 2999	32	$29,885	1	$934
	3000 - 3999	45	$36,861	1	$819
	4000 - 4999	32	$23,610	1	$738
	5000 - 5999	45	$26,040	1	$579
	6000 - 6999	50	$25,228	1	$505
	7000 - 7999	76	$33,264	2	$438
	8000 - 8999	74	$28,174	2	$381
	9000 - 9999	63	$20,912	1	$332
	10000 - 10999	103	$31,147	2	$302
	11000 - 11999	644	$190,947	13	$297
	12000 - 12999	204	$59,850	4	$293
	13000 - 13999	205	$60,150	4	$293
	14000 - 14999	227	$66,750	5	$294
	15000 - 15999	201	$59,250	4	$295
	16000 - 16999	259	$76,950	5	$297
	17000 - 17999	272	$81,000	6	$298
	18000 - 18999	247	$73,200	5	$296
	19000 - 19999	240	$70,200	5	$292
	> 19999	1,523	$450,450	31	$296
PAYMENT TYPE	Regular	4,844	$1,739,368		$359
	Reissue	1	$300		$300
	Secondpay	14	$6,083		$434
	Underpay	3	$1,005		$335
	Extraordinary	0	$0		$0
TOTAL PMT		4,862	$1,746,756		$359
RECOUPMENTS		2	$450		$225
NET PAID			$1,746,306		
PMT SUB TYPE	APD	0	$0		$0
	STD	4,862	$1,746,756		$359

Energy Assistance Summary (EASUM)

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County 10

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,327	$473,859	43	$357
	Renter	1,155	$427,815	37	$370
	RenterWithHeat	29	$5,053	1	$174
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	532	$189,097	17	$355
	Roomer	3	$1,012	0	$337
	Other	55	$22,536	2	$410
RACE	AmericanIndian	5	$1,508	0	$302
	Other	45	$19,854	1	$441
	NativeHawaiian	2	$600	0	$300
	Black	88	$35,248	3	$401
	White	2,919	$1,049,141	94	$359
	Asian	9	$2,556	0	$284
	Unknown	33	$10,465	1	$317
DISABLED	YES	966	$295,986	31	$306
	NO	2,135	$823,386	69	$386
AGE 60 & ABV	YES	1,431	$454,632	46	$318
	NO	1,670	$664,740	54	$398
AGE 5 & BLW	YES	400	$152,658	13	$382
	NO	2,701	$966,714	87	$358
PAY_TYPE	DIRECT	35	$11,384	1	$325
	PROVIDER	3,081	$1,112,301	99	$361
REFUNDS		67	$16,999		$254

AVERAGE HOUSEHOLD SIZE: 2.81

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	1,135	$423,247	37	$373
	FuelOil	299	$113,799	10	$381
	Coal	0	$0	0	$0
	NaturalGas	1,343	$466,840	43	$348
	Kerosene	34	$12,308	1	$362
	Propane	254	$91,365	8	$360
	WoodOrOther	18	$5,659	1	$314
	BlendedFuel	18	$6,154	1	$342
INCOME RANGE	0 - 999	134	$133,500	4	$996
	1000 - 1999	36	$36,000	1	$1,000
	2000 - 2999	24	$24,000	1	$1,000
	3000 - 3999	30	$24,924	1	$831
	4000 - 4999	29	$21,628	1	$746
	5000 - 5999	22	$13,189	1	$600
	6000 - 6999	33	$17,321	1	$525
	7000 - 7999	35	$16,079	1	$459
	8000 - 8999	43	$17,369	1	$404
	9000 - 9999	61	$20,827	2	$341
	10000 - 10999	98	$30,143	3	$308
	11000 - 11999	485	$144,725	16	$298
	12000 - 12999	138	$41,267	4	$299
	13000 - 13999	147	$43,800	5	$298
	14000 - 14999	140	$41,850	5	$299
	15000 - 15999	175	$52,050	6	$297
	16000 - 16999	174	$52,050	6	$299
	17000 - 17999	161	$48,150	5	$299
	18000 - 18999	140	$41,850	5	$299
	19000 - 19999	168	$50,250	5	$299
	> 19999	828	$248,400	27	$300
PAYMENT TYPE	Regular	3,101	$1,119,372		$361
	Reissue	1	$300		$300
	Secondpay	13	$3,921		$302
	Underpay	1	$92		$92
	Extraordinary	0	$0		$0
TOTAL PMT		3,116	$1,123,685		$361
RECOUPMENTS		9	$2,300		$256
NET PAID			$1,121,385		
PMT SUB TYPE	APD	0	$0		$0
	STD	3,116	$1,123,685		$361

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 11

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	3,062	$1,099,187	52	$359
	Renter	2,160	$823,988	36	$381
	RenterWithHeat	104	$18,545	2	$178
	SubsidizedWithHeat	1	$311	0	$311
	SubsidizedNoHeat	494	$214,296	8	$434
	Roomer	1	$322	0	$322
	Other	123	$53,006	2	$431
RACE	AmericanIndian	3	$900	0	$300
	Other	137	$59,807	2	$437
	NativeHawaiian	2	$1,300	0	$650
	Black	463	$193,184	8	$417
	White	5,262	$1,927,172	89	$366
	Asian	11	$3,585	0	$326
	Unknown	67	$23,707	1	$354
DISABLED	YES	1,706	$521,477	29	$306
	NO	4,239	$1,688,178	71	$398
AGE 60 & ABV	YES	2,764	$867,634	46	$314
	NO	3,181	$1,342,021	54	$422
AGE 5 & BLW	YES	892	$363,955	15	$408
	NO	5,053	$1,845,700	85	$365
PAY_TYPE	DIRECT	108	$25,784	2	$239
	PROVIDER	5,863	$2,196,222	98	$375
REFUNDS		40	$11,980		$300

AVERAGE HOUSEHOLD SIZE: 2.91

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	1,251	$492,962	21	$394
	FuelOil	2,248	$828,712	38	$369
	Coal	159	$54,286	3	$341
	NaturalGas	2,059	$751,234	35	$365
	Kerosene	28	$9,742	0	$348
	Propane	127	$44,596	2	$351
	WoodOrOther	44	$17,023	1	$387
	BlendedFuel	29	$11,100	0	$383
INCOME RANGE	0 - 999	363	$355,926	6	$981
	1000 - 1999	49	$48,882	1	$998
	2000 - 2999	45	$44,330	1	$985
	3000 - 3999	52	$43,305	1	$833
	4000 - 4999	73	$56,312	1	$771
	5000 - 5999	52	$32,307	1	$621
	6000 - 6999	63	$34,229	1	$543
	7000 - 7999	86	$40,588	1	$472
	8000 - 8999	81	$33,329	1	$411
	9000 - 9999	125	$44,714	2	$358
	10000 - 10999	151	$47,096	3	$312
	11000 - 11999	883	$259,976	15	$294
	12000 - 12999	253	$74,861	4	$296
	13000 - 13999	252	$74,850	4	$297
	14000 - 14999	263	$78,300	4	$298
	15000 - 15999	295	$87,300	5	$296
	16000 - 16999	274	$81,600	5	$298
	17000 - 17999	256	$75,900	4	$296
	18000 - 18999	291	$86,850	5	$298
	19000 - 19999	268	$79,800	5	$298
	> 19999	1,770	$529,200	30	$299
PAYMENT TYPE	Regular	5,945	$2,209,655		$372
	Reissue	0	$0		$0
	Secondpay	26	$12,351		$475
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		5,971	$2,222,006		$372
RECOUPMENTS		15	$6,512		$434
NET PAID			$2,215,494		
PMT SUB TYPE	APD	0	$0		$0
	STD	5,971	$2,222,006		$372

Energy Assistance Summary (EASUM)

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County 12

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	130	$44,336	49	$341
	Renter	90	$32,817	34	$365
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	41	$13,969	15	$341
	Roomer	0	$0	0	$0
	Other	4	$1,900	2	$475
RACE	AmericanIndian	2	$600	1	$300
	Other	1	$300	0	$300
	NativeHawaiian	0	$0	0	$0
	Black	3	$927	1	$309
	White	258	$90,895	97	$352
	Asian	1	$300	0	$300
	Unknown	0	$0	0	$0
DISABLED	YES	67	$20,225	25	$302
	NO	198	$72,797	75	$368
AGE 60 & ABV	YES	149	$48,278	56	$324
	NO	116	$44,744	44	$386
AGE 5 & BLW	YES	21	$7,183	8	$342
	NO	244	$85,839	92	$352
PAY_TYPE	DIRECT	1	$300	0	$300
	PROVIDER	264	$92,722	100	$351
REFUNDS		11	$2,301		$209

AVERAGE HOUSEHOLD SIZE: 2.55

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	100	$37,241	38	$372
	FuelOil	28	$9,340	11	$334
	Coal	1	$300	0	$300
	NaturalGas	96	$31,975	36	$333
	Kerosene	3	$1,468	1	$489
	Propane	27	$9,500	10	$352
	WoodOrOther	10	$3,198	4	$320
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	11	$10,300	4	$936
	1000 - 1999	0	$0	0	$0
	2000 - 2999	4	$4,000	2	$1,000
	3000 - 3999	2	$1,798	1	$899
	4000 - 4999	1	$800	0	$800
	5000 - 5999	0	$0	0	$0
	6000 - 6999	1	$580	0	$580
	7000 - 7999	3	$1,955	1	$652
	8000 - 8999	2	$894	1	$447
	9000 - 9999	1	$452	0	$452
	10000 - 10999	5	$1,623	2	$325
	11000 - 11999	40	$12,120	15	$303
	12000 - 12999	11	$3,300	4	$300
	13000 - 13999	13	$3,900	5	$300
	14000 - 14999	9	$2,700	3	$300
	15000 - 15999	16	$4,800	6	$300
	16000 - 16999	14	$4,200	5	$300
	17000 - 17999	14	$4,200	5	$300
	18000 - 18999	22	$6,600	8	$300
	19000 - 19999	24	$7,200	9	$300
	> 19999	72	$21,600	27	$300
PAYMENT TYPE	Regular	265	$93,022		$351
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		265	$93,022		$351
RECOUPMENTS		0	$0		$0
NET PAID			$93,022		
PMT SUB TYPE	APD	0	$0		$0
	STD	265	$93,022		$351

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 13

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	923	$319,509	43	$346
	Renter	876	$334,260	41	$382
	RenterWithHeat	10	$2,302	0	$230
	SubsidizedWithHeat	1	$300	0	$300
	SubsidizedNoHeat	313	$117,805	15	$376
	Roomer	0	$0	0	$0
	Other	28	$13,127	1	$469
RACE	AmericanIndian	7	$2,898	0	$414
	Other	94	$38,490	4	$409
	NativeHawaiian	2	$1,075	0	$538
	Black	81	$31,233	4	$386
	White	1,926	$698,614	90	$363
	Asian	4	$1,369	0	$342
	Unknown	37	$13,624	2	$368
DISABLED	YES	625	$196,228	29	$314
	NO	1,526	$591,075	71	$387
AGE 60 & ABV	YES	997	$320,131	46	$321
	NO	1,154	$467,172	54	$405
AGE 5 & BLW	YES	407	$161,991	19	$398
	NO	1,744	$625,312	81	$359
PAY_TYPE	DIRECT	21	$7,006	1	$334
	PROVIDER	2,147	$785,067	99	$366
REFUNDS		34	$9,131		$269

AVERAGE HOUSEHOLD SIZE: 3.09

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	847	$309,535	39	$365
	FuelOil	971	$359,182	45	$370
	Coal	73	$24,614	3	$337
	NaturalGas	125	$44,488	6	$356
	Kerosene	37	$14,140	2	$382
	Propane	94	$34,144	4	$363
	WoodOrOther	4	$1,200	0	$300
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	80	$77,900	4	$974
	1000 - 1999	20	$19,500	1	$975
	2000 - 2999	15	$15,000	1	$1,000
	3000 - 3999	22	$20,854	1	$948
	4000 - 4999	26	$22,110	1	$850
	5000 - 5999	24	$16,210	1	$675
	6000 - 6999	24	$14,061	1	$586
	7000 - 7999	27	$14,289	1	$529
	8000 - 8999	33	$14,938	2	$453
	9000 - 9999	41	$15,967	2	$389
	10000 - 10999	52	$17,964	2	$345
	11000 - 11999	247	$77,286	11	$313
	12000 - 12999	94	$28,368	4	$302
	13000 - 13999	81	$24,406	4	$301
	14000 - 14999	91	$27,150	4	$298
	15000 - 15999	107	$31,950	5	$299
	16000 - 16999	103	$30,900	5	$300
	17000 - 17999	111	$33,150	5	$299
	18000 - 18999	120	$36,000	6	$300
	19000 - 19999	117	$34,950	5	$299
	> 19999	716	$214,350	33	$299
PAYMENT TYPE	Regular	2,151	$787,303		$366
	Reissue	3	$752		$251
	Secondpay	12	$3,500		$292
	Underpay	2	$518		$259
	Extraordinary	0	$0		$0
TOTAL PMT		2,168	$792,073		$365
RECOUPMENTS		3	$952		$317
NET PAID			$791,121		
PMT SUB TYPE	APD	0	$0		$0
	STD	2,168	$792,073		$365

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 14

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	747	$267,488	43	$358
	Renter	780	$312,207	44	$400
	RenterWithHeat	11	$1,650	1	$150
	SubsidizedWithHeat	1	$182	0	$182
	SubsidizedNoHeat	184	$68,901	10	$374
	Roomer	1	$150	0	$150
	Other	30	$12,966	2	$432
RACE	AmericanIndian	4	$1,900	0	$475
	Other	34	$16,230	2	$477
	NativeHawaiian	3	$1,600	0	$533
	Black	71	$28,660	4	$404
	White	1,606	$598,930	92	$373
	Asian	18	$8,370	1	$465
	Unknown	18	$7,854	1	$436
DISABLED	YES	464	$143,811	26	$310
	NO	1,290	$519,733	74	$403
AGE 60 & ABV	YES	770	$254,641	44	$331
	NO	984	$408,903	56	$416
AGE 5 & BLW	YES	266	$99,703	15	$375
	NO	1,488	$563,841	85	$379
PAY_TYPE	DIRECT	23	$7,655	1	$333
	PROVIDER	1,735	$656,743	99	$379
REFUNDS		51	$11,876		$233

AVERAGE HOUSEHOLD SIZE: 2.94

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	721	$284,140	41	$394
	FuelOil	749	$271,936	43	$363
	Coal	19	$6,962	1	$366
	NaturalGas	143	$53,857	8	$377
	Kerosene	17	$6,707	1	$395
	Propane	78	$29,943	4	$384
	WoodOrOther	27	$9,999	2	$370
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	110	$109,300	6	$994
	1000 - 1999	21	$21,000	1	$1,000
	2000 - 2999	11	$11,000	1	$1,000
	3000 - 3999	13	$11,722	1	$902
	4000 - 4999	13	$10,318	1	$794
	5000 - 5999	18	$11,564	1	$642
	6000 - 6999	27	$15,244	2	$565
	7000 - 7999	30	$14,902	2	$497
	8000 - 8999	23	$9,708	1	$422
	9000 - 9999	37	$13,564	2	$367
	10000 - 10999	57	$18,442	3	$324
	11000 - 11999	222	$66,794	13	$301
	12000 - 12999	72	$21,186	4	$294
	13000 - 13999	77	$22,800	4	$296
	14000 - 14999	75	$22,350	4	$298
	15000 - 15999	84	$25,050	5	$298
	16000 - 16999	87	$26,100	5	$300
	17000 - 17999	91	$27,300	5	$300
	18000 - 18999	96	$28,800	5	$300
	19000 - 19999	70	$21,000	4	$300
	> 19999	520	$155,400	30	$299
PAYMENT TYPE	Regular	1,754	$663,544		$378
	Reissue	1	$300		$300
	Secondpay	3	$554		$185
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,758	$664,398		$378
RECOUPMENTS		1	$139		$139
NET PAID			$664,259		
PMT SUB TYPE	APD	0	$0		$0
	STD	1,758	$664,398		$378

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 15

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	893	$342,602	29	$384
	Renter	1,490	$563,802	48	$378
	RenterWithHeat	48	$9,762	2	$203
	SubsidizedWithHeat	2	$600	0	$300
	SubsidizedNoHeat	637	$243,904	21	$383
	Roomer	2	$300	0	$150
	Other	23	$9,954	1	$433
RACE	AmericanIndian	20	$8,158	1	$408
	Other	279	$106,280	9	$381
	NativeHawaiian	3	$2,246	0	$749
	Black	858	$328,554	28	$383
	White	1,774	$661,098	57	$373
	Asian	74	$30,968	2	$418
	Unknown	87	$33,620	3	$386
DISABLED	YES	768	$236,380	25	$308
	NO	2,327	$934,544	75	$402
AGE 60 & ABV	YES	1,300	$436,307	42	$336
	NO	1,795	$734,617	58	$409
AGE 5 & BLW	YES	640	$252,233	21	$394
	NO	2,455	$918,691	79	$374
PAY_TYPE	DIRECT	100	$32,318	3	$323
	PROVIDER	3,017	$1,144,416	97	$379
REFUNDS		112	$29,547		$264

AVERAGE HOUSEHOLD SIZE: 3.18

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	1,628	$619,249	53	$380
	FuelOil	593	$232,031	19	$391
	Coal	0	$0	0	$0
	NaturalGas	630	$228,108	20	$362
	Kerosene	11	$3,780	0	$344
	Propane	231	$87,057	7	$377
	WoodOrOther	2	$699	0	$350
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	200	$197,200	6	$986
	1000 - 1999	43	$42,869	1	$997
	2000 - 2999	28	$25,474	1	$910
	3000 - 3999	42	$33,114	1	$788
	4000 - 4999	28	$19,964	1	$713
	5000 - 5999	39	$21,326	1	$547
	6000 - 6999	43	$21,123	1	$491
	7000 - 7999	61	$25,711	2	$421
	8000 - 8999	42	$15,202	1	$362
	9000 - 9999	60	$19,769	2	$329
	10000 - 10999	86	$26,903	3	$313
	11000 - 11999	351	$105,866	11	$302
	12000 - 12999	124	$37,253	4	$300
	13000 - 13999	139	$41,100	4	$296
	14000 - 14999	143	$42,750	5	$299
	15000 - 15999	147	$43,050	5	$293
	16000 - 16999	165	$49,350	5	$299
	17000 - 17999	163	$48,750	5	$299
	18000 - 18999	139	$41,250	4	$297
	19000 - 19999	151	$44,850	5	$297
	> 19999	901	$268,050	29	$298
PAYMENT TYPE	Regular	3,095	$1,170,924		$378
	Reissue	6	$1,500		$250
	Secondpay	14	$4,158		$297
	Underpay	2	$152		$76
	Extraordinary	0	$0		$0
TOTAL PMT		3,117	$1,176,734		$378
RECOUPMENTS		0	$0		$0
NET PAID			$1,176,734		
PMT SUB TYPE	APD	0	$0		$0
	STD	3,117	$1,176,734		$378

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 16

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	474	$161,928	39	$342
	Renter	468	$170,848	39	$365
	RenterWithHeat	6	$958	0	$160
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	242	$98,368	20	$406
	Roomer	1	$434	0	$434
	Other	19	$7,244	2	$381
RACE	AmericanIndian	4	$1,200	0	$300
	Other	13	$4,383	1	$337
	NativeHawaiian	0	$0	0	$0
	Black	43	$19,557	4	$455
	White	1,138	$410,731	94	$361
	Asian	0	$0	0	$0
	Unknown	12	$3,909	1	$326
DISABLED	YES	401	$121,841	33	$304
	NO	809	$317,939	67	$393
AGE 60 & ABV	YES	563	$175,804	47	$312
	NO	647	$263,976	53	$408
AGE 5 & BLW	YES	156	$65,888	13	$422
	NO	1,054	$373,892	87	$355
PAY_TYPE	DIRECT	18	$8,269	1	$459
	PROVIDER	1,202	$434,549	99	$362
REFUNDS		72	$15,181		$211

AVERAGE HOUSEHOLD SIZE: 2.91

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	451	$179,540	37	$398
	FuelOil	54	$17,977	4	$333
	Coal	1	$300	0	$300
	NaturalGas	632	$217,479	52	$344
	Kerosene	6	$2,656	0	$443
	Propane	50	$15,774	4	$315
	WoodOrOther	15	$5,652	1	$377
	BlendedFuel	1	$402	0	$402
INCOME RANGE	0 - 999	61	$61,000	5	$1,000
	1000 - 1999	12	$12,000	1	$1,000
	2000 - 2999	10	$10,000	1	$1,000
	3000 - 3999	4	$3,017	0	$754
	4000 - 4999	10	$7,713	1	$771
	5000 - 5999	14	$8,791	1	$628
	6000 - 6999	11	$5,914	1	$538
	7000 - 7999	16	$7,640	1	$478
	8000 - 8999	11	$4,325	1	$393
	9000 - 9999	20	$7,158	2	$358
	10000 - 10999	26	$7,917	2	$304
	11000 - 11999	230	$69,240	19	$301
	12000 - 12999	70	$21,015	6	$300
	13000 - 13999	51	$15,300	4	$300
	14000 - 14999	61	$18,300	5	$300
	15000 - 15999	47	$14,100	4	$300
	16000 - 16999	66	$19,650	5	$298
	17000 - 17999	49	$14,550	4	$297
	18000 - 18999	50	$15,000	4	$300
	19000 - 19999	49	$14,700	4	$300
	> 19999	342	$102,450	28	$300
PAYMENT TYPE	Regular	1,210	$439,780		$363
	Reissue	1	$121		$121
	Secondpay	9	$2,918		$324
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,220	$442,819		$363
RECOUPMENTS		3	$1,363		$454
NET PAID			$441,456		
PMT SUB TYPE	APD	0	$0		$0
	STD	1,220	$442,818		$363

Energy Assistance Summary (EASUM)

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	2,119	$768,573	55	$363
	Renter	1,328	$525,221	34	$395
	RenterWithHeat	83	$15,346	2	$185
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	248	$109,995	6	$444
	Roomer	8	$1,996	0	$250
	Other	94	$43,685	2	$465
RACE	AmericanIndian	3	$1,600	0	$533
	Other	39	$17,746	1	$455
	NativeHawaiian	2	$1,300	0	$650
	Black	31	$12,809	1	$413
	White	3,783	$1,422,695	98	$376
	Asian	4	$1,750	0	$438
	Unknown	18	$6,916	0	$384
DISABLED	YES	1,118	$339,747	29	$304
	NO	2,762	$1,125,069	71	$407
AGE 60 & ABV	YES	1,789	$570,781	46	$319
	NO	2,091	$894,035	54	$428
AGE 5 & BLW	YES	563	$231,675	15	$412
	NO	3,317	$1,233,141	85	$372
PAY_TYPE	DIRECT	97	$24,977	2	$257
	PROVIDER	3,804	$1,446,722	98	$380
REFUNDS		239	$45,121		$189

AVERAGE HOUSEHOLD SIZE: 3.03

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	746	$309,480	19	$415
	FuelOil	2,093	$785,474	54	$375
	Coal	87	$28,512	2	$328
	NaturalGas	593	$204,535	15	$345
	Kerosene	33	$13,192	1	$400
	Propane	253	$92,303	7	$365
	WoodOrOther	62	$25,678	2	$414
	BlendedFuel	13	$5,642	0	$434
INCOME RANGE	0 - 999	237	$230,500	6	$973
	1000 - 1999	49	$48,500	1	$990
	2000 - 2999	38	$38,000	1	$1,000
	3000 - 3999	30	$28,036	1	$935
	4000 - 4999	30	$25,344	1	$845
	5000 - 5999	28	$19,219	1	$686
	6000 - 6999	42	$24,873	1	$592
	7000 - 7999	51	$25,208	1	$494
	8000 - 8999	57	$25,898	1	$454
	9000 - 9999	67	$26,629	2	$397
	10000 - 10999	94	$32,121	2	$342
	11000 - 11999	453	$135,453	12	$299
	12000 - 12999	157	$47,023	4	$300
	13000 - 13999	174	$51,062	4	$293
	14000 - 14999	148	$44,250	4	$299
	15000 - 15999	179	$53,100	5	$297
	16000 - 16999	188	$55,950	5	$298
	17000 - 17999	200	$59,550	5	$298
	18000 - 18999	196	$58,500	5	$298
	19000 - 19999	190	$56,700	5	$298
	> 19999	1,271	$378,600	33	$298
PAYMENT TYPE	Regular	3,880	$1,464,816		$378
	Reissue	3	$1,600		$533
	Secondpay	16	$4,457		$279
	Underpay	2	$826		$413
	Extraordinary	0	$0		$0
TOTAL PMT		3,901	$1,471,699		$377
RECOUPMENTS		3	$670		$223
NET PAID			$1,471,029		
PMT SUB TYPE	APD	0	$0		$0
	STD	3,901	$1,471,699		$377

Energy Assistance Summary (EASUM)

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County 18

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	621	$215,242	46	$347
	Renter	582	$217,986	43	$375
	RenterWithHeat	13	$2,300	1	$177
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	99	$45,422	7	$459
	Roomer	1	$500	0	$500
	Other	33	$11,831	2	$359
RACE	AmericanIndian	3	$954	0	$318
	Other	16	$8,624	1	$539
	NativeHawaiian	0	$0	0	$0
	Black	25	$10,624	2	$425
	White	1,290	$467,569	96	$362
	Asian	3	$900	0	$300
	Unknown	12	$4,610	1	$384
DISABLED	YES	365	$112,325	27	$308
	NO	984	$380,956	73	$387
AGE 60 & ABV	YES	663	$206,854	49	$312
	NO	686	$286,427	51	$418
AGE 5 & BLW	YES	219	$88,251	16	$403
	NO	1,130	$405,030	84	$358
PAY_TYPE	DIRECT	14	$4,100	1	$293
	PROVIDER	1,339	$490,301	99	$366
REFUNDS		40	$9,083		$227

AVERAGE HOUSEHOLD SIZE: 2.97

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	451	$178,464	33	$396
	FuelOil	621	$217,927	46	$351
	Coal	15	$5,329	1	$355
	NaturalGas	144	$50,313	11	$349
	Kerosene	3	$1,127	0	$376
	Propane	99	$33,696	7	$340
	WoodOrOther	15	$6,125	1	$408
	BlendedFuel	1	$300	0	$300
INCOME RANGE	0 - 999	63	$61,800	5	$981
	1000 - 1999	12	$12,000	1	$1,000
	2000 - 2999	14	$13,500	1	$964
	3000 - 3999	15	$13,318	1	$888
	4000 - 4999	12	$9,450	1	$788
	5000 - 5999	9	$5,820	1	$647
	6000 - 6999	15	$8,543	1	$570
	7000 - 7999	17	$8,561	1	$504
	8000 - 8999	9	$3,915	1	$435
	9000 - 9999	20	$7,601	1	$380
	10000 - 10999	35	$11,640	3	$333
	11000 - 11999	158	$47,572	12	$301
	12000 - 12999	54	$16,111	4	$298
	13000 - 13999	54	$16,050	4	$297
	14000 - 14999	60	$17,850	4	$298
	15000 - 15999	60	$18,000	4	$300
	16000 - 16999	72	$21,600	5	$300
	17000 - 17999	97	$28,950	7	$298
	18000 - 18999	74	$22,200	5	$300
	19000 - 19999	65	$19,500	5	$300
	> 19999	434	$129,300	32	$298
PAYMENT TYPE	Regular	1,349	$493,281		$366
	Reissue	0	$0		$0
	Secondpay	3	$951		$317
	Underpay	0	$0		$0
	Extraordinary	1	$169		$169
TOTAL PMT		1,353	$494,401		$365
RECOUPMENTS		4	$1,524		$381
NET PAID			$492,877		
PMT SUB TYPE	APD	0	$0		$0
	STD	1,353	$494,401		$365

Energy Assistance Summary (EASUM)

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	810	$285,138	38	$352
	Renter	1,028	$392,897	49	$382
	RenterWithHeat	9	$2,425	0	$269
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	221	$74,559	10	$337
	Roomer	0	$0	0	$0
	Other	41	$14,942	2	$364
RACE	AmericanIndian	5	$1,749	0	$350
	Other	66	$27,585	3	$418
	NativeHawaiian	0	$0	0	$0
	Black	51	$18,784	2	$368
	White	1,945	$705,479	92	$363
	Asian	10	$3,954	0	$395
	Unknown	32	$12,410	2	$388
DISABLED	YES	519	$163,552	25	$315
	NO	1,590	$606,409	75	$381
AGE 60 & ABV	YES	1,039	$325,693	49	$313
	NO	1,070	$444,268	51	$415
AGE 5 & BLW	YES	312	$125,054	15	$401
	NO	1,797	$644,907	85	$359
PAY_TYPE	DIRECT	14	$4,378	1	$313
	PROVIDER	2,099	$767,016	99	$365
REFUNDS		101	$23,728		$235

AVERAGE HOUSEHOLD SIZE: 2.83

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	787	$281,984	37	$358
	FuelOil	667	$244,680	32	$367
	Coal	21	$8,400	1	$400
	NaturalGas	376	$139,244	18	$370
	Kerosene	10	$4,400	0	$440
	Propane	185	$67,537	9	$365
	WoodOrOther	9	$4,739	0	$527
	BlendedFuel	54	$18,977	3	$351
INCOME RANGE	0 - 999	103	$101,500	5	$985
	1000 - 1999	12	$12,000	1	$1,000
	2000 - 2999	14	$14,000	1	$1,000
	3000 - 3999	17	$15,322	1	$901
	4000 - 4999	12	$10,184	1	$849
	5000 - 5999	19	$13,227	1	$696
	6000 - 6999	27	$15,455	1	$572
	7000 - 7999	20	$10,714	1	$536
	8000 - 8999	29	$12,875	1	$444
	9000 - 9999	30	$11,526	1	$384
	10000 - 10999	62	$21,239	3	$343
	11000 - 11999	272	$84,813	13	$312
	12000 - 12999	87	$26,356	4	$303
	13000 - 13999	109	$32,700	5	$300
	14000 - 14999	99	$29,700	5	$300
	15000 - 15999	108	$32,400	5	$300
	16000 - 16999	127	$37,950	6	$299
	17000 - 17999	107	$32,100	5	$300
	18000 - 18999	110	$33,000	5	$300
	19000 - 19999	105	$31,500	5	$300
	> 19999	640	$191,400	30	$299
PAYMENT TYPE	Regular	2,109	$769,961		$365
	Reissue	1	$1,000		$1,000
	Secondpay	3	$433		$144
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		2,113	$771,394		$365
RECOUPMENTS		1	$300		$300
NET PAID			$771,094		
PMT SUB TYPE	APD	0	$0		$0
	STD	2,113	$771,394		$365

Energy Assistance Summary (EASUM)

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,273	$445,681	45	$350
	Renter	1,246	$438,423	44	$352
	RenterWithHeat	41	$6,944	1	$169
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	222	$86,175	8	$388
	Roomer	2	$1,500	0	$750
	Other	58	$20,986	2	$362
RACE	AmericanIndian	7	$2,299	0	$328
	Other	30	$10,720	1	$357
	NativeHawaiian	1	$300	0	$300
	Black	86	$30,205	3	$351
	White	2,695	$948,585	95	$352
	Asian	8	$2,400	0	$300
	Unknown	15	$5,200	1	$347
DISABLED	YES	1,020	$311,691	36	$306
	NO	1,822	$688,018	64	$378
AGE 60 & ABV	YES	1,397	$438,612	49	$314
	NO	1,445	$561,097	51	$388
AGE 5 & BLW	YES	388	$148,915	14	$384
	NO	2,454	$850,794	86	$347
PAY_TYPE	DIRECT	74	$22,469	3	$304
	PROVIDER	2,776	$980,761	97	$353
REFUNDS		216	$45,931		$213

AVERAGE HOUSEHOLD SIZE: 3.12

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	727	$262,272	26	$361
	FuelOil	271	$93,110	10	$344
	Coal	15	$5,467	1	$364
	NaturalGas	1,164	$397,992	41	$342
	Kerosene	5	$1,608	0	$322
	Propane	554	$200,210	19	$361
	WoodOrOther	54	$19,726	2	$365
	BlendedFuel	52	$19,324	2	$372
INCOME RANGE	0 - 999	112	$108,900	4	$972
	1000 - 1999	19	$19,000	1	$1,000
	2000 - 2999	17	$17,000	1	$1,000
	3000 - 3999	31	$26,338	1	$850
	4000 - 4999	21	$16,267	1	$775
	5000 - 5999	27	$16,709	1	$619
	6000 - 6999	17	$9,573	1	$563
	7000 - 7999	25	$11,586	1	$463
	8000 - 8999	28	$11,524	1	$412
	9000 - 9999	54	$19,652	2	$364
	10000 - 10999	72	$22,219	3	$309
	11000 - 11999	462	$137,431	16	$297
	12000 - 12999	111	$33,310	4	$300
	13000 - 13999	145	$43,500	5	$300
	14000 - 14999	138	$41,250	5	$299
	15000 - 15999	133	$39,750	5	$299
	16000 - 16999	138	$40,950	5	$297
	17000 - 17999	121	$35,850	4	$296
	18000 - 18999	134	$39,900	5	$298
	19000 - 19999	144	$42,750	5	$297
	> 19999	893	$266,250	31	$298
PAYMENT TYPE	Regular	2,842	$999,709		$352
	Reissue	3	$1,387		$462
	Secondpay	4	$1,900		$475
	Underpay	1	$234		$234
	Extraordinary	0	$0		$0
TOTAL PMT		2,850	$1,003,230		$352
RECOUPMENTS		9	$3,379		$375
NET PAID			$999,851		
PMT SUB TYPE	APD	0	$0		$0
	STD	2,850	$1,003,230		$352

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 21

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,078	$380,833	32	$353
	Renter	1,773	$674,000	52	$380
	RenterWithHeat	19	$3,856	1	$203
	SubsidizedWithHeat	2	$600	0	$300
	SubsidizedNoHeat	474	$170,210	14	$359
	Roomer	3	$450	0	$150
	Other	45	$17,031	1	$378
RACE	AmericanIndian	8	$3,587	0	$448
	Other	339	$132,964	10	$392
	NativeHawaiian	7	$4,948	0	$707
	Black	390	$145,412	11	$373
	White	2,451	$885,765	72	$361
	Asian	79	$31,002	2	$392
	Unknown	120	$43,302	4	$361
DISABLED	YES	753	$229,586	22	$305
	NO	2,641	$1,017,394	78	$385
AGE 60 & ABV	YES	1,307	$421,781	39	$323
	NO	2,087	$825,199	61	$395
AGE 5 & BLW	YES	754	$292,090	22	$387
	NO	2,640	$954,890	78	$362
PAY_TYPE	DIRECT	28	$10,011	1	$358
	PROVIDER	3,378	$1,241,266	99	$367
REFUNDS		112	$23,185		$207

AVERAGE HOUSEHOLD SIZE: 2.93

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	1,903	$705,219	56	$371
	FuelOil	567	$199,539	17	$352
	Coal	5	$2,138	0	$428
	NaturalGas	648	$242,764	19	$375
	Kerosene	52	$19,776	2	$380
	Propane	214	$76,044	6	$355
	WoodOrOther	5	$1,500	0	$300
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	213	$211,238	6	$992
	1000 - 1999	31	$30,808	1	$994
	2000 - 2999	27	$24,488	1	$907
	3000 - 3999	24	$17,934	1	$747
	4000 - 4999	32	$21,235	1	$664
	5000 - 5999	41	$21,418	1	$522
	6000 - 6999	33	$15,070	1	$457
	7000 - 7999	49	$19,866	1	$405
	8000 - 8999	46	$15,958	1	$347
	9000 - 9999	64	$19,509	2	$305
	10000 - 10999	95	$29,226	3	$308
	11000 - 11999	312	$94,340	9	$302
	12000 - 12999	151	$44,966	4	$298
	13000 - 13999	145	$43,596	4	$301
	14000 - 14999	170	$50,978	5	$300
	15000 - 15999	162	$48,600	5	$300
	16000 - 16999	209	$62,550	6	$299
	17000 - 17999	154	$46,200	5	$300
	18000 - 18999	165	$49,350	5	$299
	19000 - 19999	176	$52,350	5	$297
	> 19999	1,095	$327,300	32	$299
PAYMENT TYPE	Regular	3,394	$1,246,980		$367
	Reissue	1	$300		$300
	Secondpay	10	$3,697		$370
	Underpay	0	$0		$0
	Extraordinary	1	$300		$300
TOTAL PMT		3,406	$1,251,277		$367
RECOUPMENTS		3	$900		$300
NET PAID			$1,250,377		
PMT SUB TYPE	APD	0	$0		$0
	STD	3,406	$1,251,277		$367

Energy Assistance Summary (EASUM)

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County 22

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,352	$468,812	28	$347
	Renter	2,583	$920,010	54	$356
	RenterWithHeat	41	$8,940	1	$218
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	766	$286,561	16	$374
	Roomer	2	$300	0	$150
	Other	29	$14,603	1	$504
RACE	AmericanIndian	30	$10,642	1	$355
	Other	602	$218,871	13	$364
	NativeHawaiian	18	$6,196	0	$344
	Black	1,681	$603,487	35	$359
	White	2,197	$769,602	46	$350
	Asian	105	$37,540	2	$358
	Unknown	140	$52,888	3	$378
DISABLED	YES	1,322	$402,059	28	$304
	NO	3,451	$1,297,167	72	$376
AGE 60 & ABV	YES	1,783	$557,699	37	$313
	NO	2,990	$1,141,527	63	$382
AGE 5 & BLW	YES	1,062	$391,133	22	$368
	NO	3,711	$1,308,093	78	$352
PAY_TYPE	DIRECT	53	$17,930	1	$338
	PROVIDER	4,742	$1,687,520	99	$356
REFUNDS		195	$42,227		$217

AVERAGE HOUSEHOLD SIZE: 3.26

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	2,459	$874,038	52	$355
	FuelOil	769	$267,024	16	$347
	Coal	12	$4,300	0	$358
	NaturalGas	1,367	$495,004	29	$362
	Kerosene	4	$1,406	0	$352
	Propane	156	$55,404	3	$355
	WoodOrOther	6	$2,050	0	$342
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	207	$205,000	4	$990
	1000 - 1999	45	$45,000	1	$1,000
	2000 - 2999	26	$25,404	1	$977
	3000 - 3999	28	$22,305	1	$797
	4000 - 4999	51	$35,900	1	$704
	5000 - 5999	54	$30,832	1	$571
	6000 - 6999	59	$29,648	1	$503
	7000 - 7999	67	$29,473	1	$440
	8000 - 8999	69	$26,522	1	$384
	9000 - 9999	97	$32,397	2	$334
	10000 - 10999	147	$44,755	3	$304
	11000 - 11999	627	$187,240	13	$299
	12000 - 12999	217	$64,650	5	$298
	13000 - 13999	211	$63,000	4	$299
	14000 - 14999	197	$59,100	4	$300
	15000 - 15999	247	$73,500	5	$298
	16000 - 16999	232	$69,450	5	$299
	17000 - 17999	224	$66,600	5	$297
	18000 - 18999	225	$67,050	5	$298
	19000 - 19999	193	$57,750	4	$299
	> 19999	1,550	$463,650	32	$299
PAYMENT TYPE	Regular	4,773	$1,699,226		$356
	Reissue	4	$1,288		$322
	Secondpay	18	$4,936		$274
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		4,795	$1,705,450		$356
RECOUPMENTS		2	$185		$92
NET PAID			$1,705,265		
PMT SUB TYPE	APD	0	$0		$0
	STD	4,795	$1,705,450		$356

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 23

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	2,343	$845,761	28	$361
	Renter	4,210	$1,530,917	50	$364
	RenterWithHeat	122	$22,408	1	$184
	SubsidizedWithHeat	2	$600	0	$300
	SubsidizedNoHeat	1,744	$640,295	21	$367
	Roomer	6	$1,709	0	$285
	Other	47	$20,582	1	$438
RACE	AmericanIndian	25	$11,839	0	$474
	Other	451	$169,655	5	$376
	NativeHawaiian	10	$2,850	0	$285
	Black	4,825	$1,762,677	57	$365
	White	2,721	$963,124	32	$354
	Asian	327	$110,914	4	$339
	Unknown	115	$41,213	1	$358
DISABLED	YES	2,495	$767,176	29	$307
	NO	5,979	$2,295,096	71	$384
AGE 60 & ABV	YES	3,425	$1,077,055	40	$314
	NO	5,049	$1,985,217	60	$393
AGE 5 & BLW	YES	1,841	$698,849	22	$380
	NO	6,633	$2,363,423	78	$356
PAY_TYPE	DIRECT	149	$45,687	2	$307
	PROVIDER	8,341	$3,022,128	98	$362
REFUNDS		191	$50,999		$267

AVERAGE HOUSEHOLD SIZE: 3.3

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	2,583	$925,371	30	$358
	FuelOil	767	$296,451	9	$387
	Coal	0	$0	0	$0
	NaturalGas	5,104	$1,832,896	60	$359
	Kerosene	0	$0	0	$0
	Propane	20	$7,554	0	$378
	WoodOrOther	0	$0	0	$0
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	374	$369,800	4	$989
	1000 - 1999	88	$87,081	1	$990
	2000 - 2999	85	$78,574	1	$924
	3000 - 3999	87	$67,361	1	$774
	4000 - 4999	116	$79,600	1	$686
	5000 - 5999	105	$57,475	1	$547
	6000 - 6999	115	$53,421	1	$465
	7000 - 7999	133	$54,056	2	$406
	8000 - 8999	135	$50,332	2	$373
	9000 - 9999	183	$57,825	2	$316
	10000 - 10999	231	$70,964	3	$307
	11000 - 11999	1,248	$375,373	15	$301
	12000 - 12999	354	$105,360	4	$298
	13000 - 13999	396	$117,300	5	$296
	14000 - 14999	382	$113,250	5	$296
	15000 - 15999	363	$108,300	4	$298
	16000 - 16999	457	$136,200	5	$298
	17000 - 17999	428	$127,950	5	$299
	18000 - 18999	383	$113,250	5	$296
	19000 - 19999	348	$103,800	4	$298
	> 19999	2,463	$735,000	29	$298
PAYMENT TYPE	Regular	8,474	$3,062,272		$361
	Reissue	1	$300		$300
	Secondpay	14	$4,943		$353
	Underpay	0	$0		$0
	Extraordinary	1	$300		$300
TOTAL PMT		8,490	$3,067,815		$361
RECOUPMENTS		8	$1,539		$192
NET PAID			$3,066,276		
PMT SUB TYPE	APD	0	$0		$0
	STD	8,490	$3,067,815		$361

Energy Assistance Summary (EASUM)

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County 24

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	400	$148,955	55	$372
	Renter	240	$87,868	33	$366
	RenterWithHeat	2	$300	0	$150
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	66	$28,032	9	$425
	Roomer	0	$0	0	$0
	Other	15	$4,849	2	$323
RACE	AmericanIndian	1	$300	0	$300
	Other	6	$2,687	1	$448
	NativeHawaiian	0	$0	0	$0
	Black	6	$1,800	1	$300
	White	705	$263,017	98	$373
	Asian	0	$0	0	$0
	Unknown	5	$2,200	1	$440
DISABLED	YES	206	$65,055	28	$316
	NO	517	$204,949	72	$396
AGE 60 & ABV	YES	332	$106,959	46	$322
	NO	391	$163,045	54	$417
AGE 5 & BLW	YES	93	$34,036	13	$366
	NO	630	$235,968	87	$375
PAY_TYPE	DIRECT	11	$3,150	2	$286
	PROVIDER	714	$267,925	98	$375
REFUNDS		66	$15,182		$230

AVERAGE HOUSEHOLD SIZE: 2.79

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	193	$77,927	27	$404
	FuelOil	29	$8,976	4	$310
	Coal	3	$936	0	$312
	NaturalGas	442	$161,047	61	$364
	Kerosene	3	$1,067	0	$356
	Propane	43	$16,107	6	$375
	WoodOrOther	10	$3,944	1	$394
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	39	$38,300	5	$982
	1000 - 1999	5	$5,000	1	$1,000
	2000 - 2999	7	$7,000	1	$1,000
	3000 - 3999	2	$1,791	0	$896
	4000 - 4999	13	$10,616	2	$817
	5000 - 5999	8	$5,193	1	$649
	6000 - 6999	10	$5,630	1	$563
	7000 - 7999	9	$4,306	1	$478
	8000 - 8999	10	$4,292	1	$429
	9000 - 9999	16	$5,989	2	$374
	10000 - 10999	21	$6,978	3	$332
	11000 - 11999	87	$26,242	12	$302
	12000 - 12999	20	$6,167	3	$308
	13000 - 13999	38	$11,400	5	$300
	14000 - 14999	36	$10,800	5	$300
	15000 - 15999	34	$10,050	5	$296
	16000 - 16999	48	$14,400	7	$300
	17000 - 17999	46	$13,650	6	$297
	18000 - 18999	38	$11,400	5	$300
	19000 - 19999	36	$10,800	5	$300
	> 19999	200	$60,000	28	$300
PAYMENT TYPE	Regular	723	$270,004		$373
	Reissue	0	$0		$0
	Secondpay	2	$1,071		$536
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		725	$271,075		$374
RECOUPMENTS		1	$771		$771
NET PAID			$270,304		
PMT SUB TYPE	APD	0	$0		$0
	STD	725	$271,075		$374

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 25

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	2,934	$1,042,907	35	$355
	Renter	4,431	$1,682,426	53	$380
	RenterWithHeat	99	$17,653	1	$178
	SubsidizedWithHeat	1	$300	0	$300
	SubsidizedNoHeat	923	$362,197	11	$392
	Roomer	3	$727	0	$242
	Other	38	$17,846	0	$470
RACE	AmericanIndian	33	$12,912	0	$391
	Other	418	$153,187	5	$366
	NativeHawaiian	9	$4,562	0	$507
	Black	1,615	$615,390	19	$381
	White	6,213	$2,285,478	74	$368
	Asian	72	$26,392	1	$367
	Unknown	69	$26,135	1	$379
DISABLED	YES	2,810	$862,024	33	$307
	NO	5,619	$2,262,032	67	$403
AGE 60 & ABV	YES	2,955	$929,740	35	$315
	NO	5,474	$2,194,316	65	$401
AGE 5 & BLW	YES	1,754	$701,037	21	$400
	NO	6,675	$2,423,019	79	$363
PAY_TYPE	DIRECT	113	$31,701	1	$281
	PROVIDER	8,328	$3,098,521	99	$372
REFUNDS		801	$170,966		$213

AVERAGE HOUSEHOLD SIZE: 3.52

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	2,256	$868,013	27	$385
	FuelOil	71	$27,173	1	$383
	Coal	1	$300	0	$300
	NaturalGas	5,852	$2,134,796	69	$365
	Kerosene	0	$0	0	$0
	Propane	233	$86,532	3	$371
	WoodOrOther	16	$7,242	0	$453
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	458	$452,300	5	$988
	1000 - 1999	65	$65,000	1	$1,000
	2000 - 2999	61	$61,000	1	$1,000
	3000 - 3999	89	$76,191	1	$856
	4000 - 4999	103	$79,125	1	$768
	5000 - 5999	112	$68,585	1	$612
	6000 - 6999	101	$53,912	1	$534
	7000 - 7999	140	$65,138	2	$465
	8000 - 8999	118	$48,325	1	$410
	9000 - 9999	164	$58,627	2	$357
	10000 - 10999	264	$81,747	3	$310
	11000 - 11999	1,265	$374,452	15	$296
	12000 - 12999	340	$101,254	4	$298
	13000 - 13999	362	$108,450	4	$300
	14000 - 14999	364	$108,300	4	$298
	15000 - 15999	338	$100,650	4	$298
	16000 - 16999	411	$121,800	5	$296
	17000 - 17999	338	$100,650	4	$298
	18000 - 18999	356	$106,350	4	$299
	19000 - 19999	340	$101,700	4	$299
	> 19999	2,640	$790,500	31	$299
PAYMENT TYPE	Regular	8,429	$3,124,056		$371
	Reissue	1	$259		$259
	Secondpay	8	$4,545		$568
	Underpay	2	$362		$181
	Extraordinary	1	$1,000		$1,000
TOTAL PMT		8,441	$3,130,222		$371
RECOUPMENTS		5	$2,859		$572
NET PAID			$3,127,363		
PMT SUB TYPE	APD	0	$0		$0
	STD	8,441	$3,130,222		$371

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 26

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	3,500	$1,256,206	45	$359
	Renter	3,187	$1,220,649	41	$383
	RenterWithHeat	48	$9,193	1	$192
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	733	$306,872	10	$419
	Roomer	4	$900	0	$225
	Other	231	$96,833	3	$419
RACE	AmericanIndian	15	$6,608	0	$441
	Other	49	$18,882	1	$385
	NativeHawaiian	10	$5,092	0	$509
	Black	491	$207,281	6	$422
	White	7,072	$2,626,011	92	$371
	Asian	7	$2,522	0	$360
	Unknown	59	$24,257	1	$411
DISABLED	YES	2,602	$802,647	34	$308
	NO	5,101	$2,088,006	66	$409
AGE 60 & ABV	YES	3,583	$1,134,035	47	$317
	NO	4,120	$1,756,618	53	$426
AGE 5 & BLW	YES	1,066	$455,222	14	$427
	NO	6,637	$2,435,431	86	$367
PAY_TYPE	DIRECT	72	$21,065	1	$293
	PROVIDER	7,668	$2,882,074	99	$376
REFUNDS		133	$35,250		$265

AVERAGE HOUSEHOLD SIZE: 3.48

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	2,239	$876,238	29	$391
	FuelOil	2,496	$922,532	32	$370
	Coal	42	$12,600	1	$300
	NaturalGas	2,185	$803,636	28	$368
	Kerosene	312	$116,764	4	$374
	Propane	349	$127,989	5	$367
	WoodOrOther	66	$24,768	1	$375
	BlendedFuel	14	$6,126	0	$438
INCOME RANGE	0 - 999	470	$464,500	6	$988
	1000 - 1999	75	$75,000	1	$1,000
	2000 - 2999	70	$68,760	1	$982
	3000 - 3999	57	$48,015	1	$842
	4000 - 4999	95	$70,150	1	$738
	5000 - 5999	77	$46,345	1	$602
	6000 - 6999	71	$38,296	1	$539
	7000 - 7999	106	$50,218	1	$474
	8000 - 8999	93	$37,313	1	$401
	9000 - 9999	141	$50,600	2	$359
	10000 - 10999	226	$72,388	3	$320
	11000 - 11999	1,538	$467,212	20	$304
	12000 - 12999	301	$89,956	4	$299
	13000 - 13999	346	$103,650	4	$300
	14000 - 14999	285	$85,200	4	$299
	15000 - 15999	303	$90,450	4	$299
	16000 - 16999	363	$108,600	5	$299
	17000 - 17999	331	$99,150	4	$300
	18000 - 18999	324	$97,200	4	$300
	19000 - 19999	296	$88,800	4	$300
	> 19999	2,135	$638,850	28	$299
PAYMENT TYPE	Regular	7,703	$2,890,653		$375
	Reissue	1	$300		$300
	Secondpay	33	$11,063		$335
	Underpay	1	$62		$62
	Extraordinary	2	$1,061		$530
TOTAL PMT		7,740	$2,903,139		$375
RECOUPMENTS		11	$3,273		$298
NET PAID			$2,899,866		
PMT SUB TYPE	APD	0	$0		$0
	STD	7,740	$2,903,139		$375

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 27

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	155	$57,632	66	$372
	Renter	44	$15,022	19	$341
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	28	$9,743	12	$348
	Roomer	0	$0	0	$0
	Other	8	$3,871	3	$484
RACE	AmericanIndian	0	$0	0	$0
	Other	2	$600	1	$300
	NativeHawaiian	0	$0	0	$0
	Black	1	$1,000	0	$1,000
	White	229	$83,768	97	$366
	Asian	1	$300	0	$300
	Unknown	2	$600	1	$300
DISABLED	YES	69	$21,615	29	$313
	NO	166	$64,653	71	$389
AGE 60 & ABV	YES	152	$50,904	65	$335
	NO	83	$35,364	35	$426
AGE 5 & BLW	YES	13	$3,900	6	$300
	NO	222	$82,368	94	$371
PAY_TYPE	DIRECT	3	$1,600	1	$533
	PROVIDER	237	$86,223	99	$364
REFUNDS		16	$4,835		$302

AVERAGE HOUSEHOLD SIZE: 2.25

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	73	$23,852	31	$327
	FuelOil	9	$3,119	4	$347
	Coal	2	$852	1	$426
	NaturalGas	67	$25,633	29	$383
	Kerosene	3	$1,140	1	$380
	Propane	66	$23,448	28	$355
	WoodOrOther	12	$7,024	5	$585
	BlendedFuel	3	$1,200	1	$400
INCOME RANGE	0 - 999	14	$14,000	6	$1,000
	1000 - 1999	0	$0	0	$0
	2000 - 2999	1	$1,000	0	$1,000
	3000 - 3999	2	$1,790	1	$895
	4000 - 4999	1	$800	0	$800
	5000 - 5999	1	$552	0	$552
	6000 - 6999	3	$1,783	1	$594
	7000 - 7999	4	$2,114	2	$528
	8000 - 8999	3	$1,278	1	$426
	9000 - 9999	4	$1,725	2	$431
	10000 - 10999	3	$972	1	$324
	11000 - 11999	34	$10,754	14	$316
	12000 - 12999	13	$3,900	6	$300
	13000 - 13999	13	$3,900	6	$300
	14000 - 14999	9	$2,700	4	$300
	15000 - 15999	11	$3,300	5	$300
	16000 - 16999	16	$4,800	7	$300
	17000 - 17999	8	$2,400	3	$300
	18000 - 18999	15	$4,500	6	$300
	19000 - 19999	15	$4,500	6	$300
	> 19999	65	$19,500	28	$300
PAYMENT TYPE	Regular	235	$86,268		$367
	Reissue	2	$450		$225
	Secondpay	3	$1,105		$368
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		240	$87,823		$366
RECOUPMENTS		2	$486		$243
NET PAID			$87,337		
PMT SUB TYPE	APD	0	$0		$0
	STD	240	$87,823		$366

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 28

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,027	$368,080	37	$358
	Renter	1,364	$523,895	50	$384
	RenterWithHeat	19	$5,017	1	$264
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	306	$120,093	11	$392
	Roomer	0	$0	0	$0
	Other	37	$17,182	1	$464
RACE	AmericanIndian	9	$3,213	0	$357
	Other	168	$70,602	6	$420
	NativeHawaiian	5	$2,088	0	$418
	Black	182	$70,206	7	$386
	White	2,304	$853,344	84	$370
	Asian	11	$4,960	0	$451
	Unknown	74	$29,854	3	$403
DISABLED	YES	743	$229,832	27	$309
	NO	2,010	$804,435	73	$400
AGE 60 & ABV	YES	1,192	$375,605	43	$315
	NO	1,561	$658,662	57	$422
AGE 5 & BLW	YES	483	$196,275	18	$406
	NO	2,270	$837,992	82	$369
PAY_TYPE	DIRECT	44	$18,515	2	$421
	PROVIDER	2,724	$1,020,277	98	$375
REFUNDS		94	$20,172		$215

AVERAGE HOUSEHOLD SIZE: 3.01

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	1,589	$608,908	58	$383
	FuelOil	638	$233,243	23	$366
	Coal	3	$900	0	$300
	NaturalGas	297	$104,310	11	$351
	Kerosene	81	$34,282	3	$423
	Propane	132	$47,738	5	$362
	WoodOrOther	13	$4,886	0	$376
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	202	$200,800	7	$994
	1000 - 1999	15	$14,500	1	$967
	2000 - 2999	16	$15,666	1	$979
	3000 - 3999	31	$24,818	1	$801
	4000 - 4999	26	$18,278	1	$703
	5000 - 5999	26	$15,179	1	$584
	6000 - 6999	25	$12,097	1	$484
	7000 - 7999	30	$13,276	1	$443
	8000 - 8999	38	$14,550	1	$383
	9000 - 9999	60	$19,816	2	$330
	10000 - 10999	76	$23,175	3	$305
	11000 - 11999	309	$93,336	11	$302
	12000 - 12999	121	$36,212	4	$299
	13000 - 13999	123	$36,964	4	$301
	14000 - 14999	134	$40,050	5	$299
	15000 - 15999	148	$44,400	5	$300
	16000 - 16999	135	$40,350	5	$299
	17000 - 17999	129	$38,700	5	$300
	18000 - 18999	153	$45,750	6	$299
	19000 - 19999	155	$46,500	6	$300
	> 19999	801	$239,850	29	$299
PAYMENT TYPE	Regular	2,753	$1,034,267		$376
	Reissue	2	$450		$225
	Secondpay	13	$4,075		$313
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		2,768	$1,038,792		$375
RECOUPMENTS		4	$769		$192
NET PAID			$1,038,023		
PMT SUB TYPE	APD	0	$0		$0
	STD	2,768	$1,038,792		$375

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 29

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	220	$82,584	39	$375
	Renter	236	$87,299	42	$370
	RenterWithHeat	1	$150	0	$150
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	88	$36,891	16	$419
	Roomer	0	$0	0	$0
	Other	18	$7,078	3	$393
RACE	AmericanIndian	2	$600	0	$300
	Other	4	$1,200	1	$300
	NativeHawaiian	0	$0	0	$0
	Black	14	$4,333	2	$310
	White	541	$206,569	96	$382
	Asian	0	$0	0	$0
	Unknown	2	$1,300	0	$650
DISABLED	YES	169	$52,452	30	$310
	NO	394	$161,550	70	$410
AGE 60 & ABV	YES	275	$89,935	49	$327
	NO	288	$124,067	51	$431
AGE 5 & BLW	YES	76	$30,778	13	$405
	NO	487	$183,224	87	$376
PAY_TYPE	DIRECT	5	$1,532	1	$306
	PROVIDER	560	$213,089	99	$381
REFUNDS		4	$1,410		$352

AVERAGE HOUSEHOLD SIZE: 2.88

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	237	$95,716	42	$404
	FuelOil	255	$93,929	45	$368
	Coal	1	$300	0	$300
	NaturalGas	0	$0	0	$0
	Kerosene	12	$4,395	2	$366
	Propane	36	$12,990	6	$361
	WoodOrOther	22	$6,672	4	$303
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	36	$36,000	6	$1,000
	1000 - 1999	4	$4,000	1	$1,000
	2000 - 2999	7	$6,951	1	$993
	3000 - 3999	9	$7,312	2	$812
	4000 - 4999	5	$3,993	1	$799
	5000 - 5999	6	$3,646	1	$608
	6000 - 6999	5	$2,613	1	$523
	7000 - 7999	6	$2,719	1	$453
	8000 - 8999	5	$2,050	1	$410
	9000 - 9999	18	$6,124	3	$340
	10000 - 10999	13	$4,044	2	$311
	11000 - 11999	85	$25,500	15	$300
	12000 - 12999	38	$11,400	7	$300
	13000 - 13999	23	$6,900	4	$300
	14000 - 14999	28	$8,400	5	$300
	15000 - 15999	22	$6,600	4	$300
	16000 - 16999	14	$4,200	2	$300
	17000 - 17999	33	$9,900	6	$300
	18000 - 18999	36	$10,800	6	$300
	19000 - 19999	21	$6,300	4	$300
	> 19999	149	$44,550	26	$299
PAYMENT TYPE	Regular	563	$214,002		$380
	Reissue	1	$300		$300
	Secondpay	1	$319		$319
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		565	$214,621		$380
RECOUPMENTS		6	$956		$159
NET PAID			$213,665		
PMT SUB TYPE	APD	0	$0		$0
	STD	565	$214,621		$380

Energy Assistance Summary (EASUM)

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	650	$241,272	46	$371
	Renter	609	$239,690	43	$394
	RenterWithHeat	5	$750	0	$150
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	129	$52,405	9	$406
	Roomer	0	$0	0	$0
	Other	29	$11,980	2	$413
RACE	AmericanIndian	2	$1,300	0	$650
	Other	6	$3,156	0	$526
	NativeHawaiian	0	$0	0	$0
	Black	11	$3,734	1	$339
	White	1,394	$533,807	98	$383
	Asian	5	$2,200	0	$440
	Unknown	4	$1,900	0	$475
DISABLED	YES	491	$150,824	35	$307
	NO	931	$395,273	65	$425
AGE 60 & ABV	YES	668	$212,747	47	$318
	NO	754	$333,350	53	$442
AGE 5 & BLW	YES	180	$77,883	13	$433
	NO	1,242	$468,214	87	$377
PAY_TYPE	DIRECT	21	$8,610	1	$410
	PROVIDER	1,406	$539,296	99	$384
REFUNDS		26	$4,777		$184

AVERAGE HOUSEHOLD SIZE: 3.29

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	546	$214,153	38	$392
	FuelOil	321	$130,616	23	$407
	Coal	2	$600	0	$300
	NaturalGas	383	$136,958	27	$358
	Kerosene	49	$16,787	3	$343
	Propane	107	$41,406	8	$387
	WoodOrOther	14	$5,577	1	$398
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	102	$101,300	7	$993
	1000 - 1999	13	$13,000	1	$1,000
	2000 - 2999	7	$6,866	0	$981
	3000 - 3999	20	$16,975	1	$849
	4000 - 4999	25	$18,154	2	$726
	5000 - 5999	14	$8,331	1	$595
	6000 - 6999	15	$7,655	1	$510
	7000 - 7999	19	$8,640	1	$455
	8000 - 8999	17	$6,558	1	$386
	9000 - 9999	22	$7,427	2	$338
	10000 - 10999	54	$16,890	4	$313
	11000 - 11999	267	$80,801	19	$303
	12000 - 12999	66	$19,800	5	$300
	13000 - 13999	53	$15,900	4	$300
	14000 - 14999	64	$19,200	5	$300
	15000 - 15999	55	$16,500	4	$300
	16000 - 16999	66	$19,800	5	$300
	17000 - 17999	52	$15,600	4	$300
	18000 - 18999	58	$17,250	4	$297
	19000 - 19999	50	$14,850	4	$297
	> 19999	383	$114,600	27	$299
PAYMENT TYPE	Regular	1,422	$546,097		$384
	Reissue	0	$0		$0
	Secondpay	5	$1,809		$362
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,427	$547,906		$384
RECOUPMENTS		5	$959		$192
NET PAID			$546,947		
PMT SUB TYPE	APD	0	$0		$0
	STD	1,427	$547,906		$384

Energy Assistance Summary (EASUM)

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	838	$293,586	51	$350
	Renter	636	$246,232	38	$387
	RenterWithHeat	24	$3,982	1	$166
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	92	$31,844	6	$346
	Roomer	2	$304	0	$152
	Other	64	$24,130	4	$377
RACE	AmericanIndian	1	$812	0	$812
	Other	16	$6,056	1	$378
	NativeHawaiian	2	$1,300	0	$650
	Black	35	$12,105	2	$346
	White	1,588	$575,292	96	$362
	Asian	2	$913	0	$456
	Unknown	12	$3,600	1	$300
DISABLED	YES	435	$132,867	26	$305
	NO	1,221	$467,211	74	$383
AGE 60 & ABV	YES	838	$263,707	51	$315
	NO	818	$336,371	49	$411
AGE 5 & BLW	YES	254	$97,043	15	$382
	NO	1,402	$503,035	85	$359
PAY_TYPE	DIRECT	32	$8,077	2	$252
	PROVIDER	1,628	$593,725	98	$365
REFUNDS		18	$4,756		$264

AVERAGE HOUSEHOLD SIZE: 3.08

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	356	$132,875	21	$373
	FuelOil	1,060	$381,408	64	$360
	Coal	25	$8,148	2	$326
	NaturalGas	79	$26,608	5	$337
	Kerosene	21	$6,626	1	$316
	Propane	61	$23,239	4	$381
	WoodOrOther	54	$21,174	3	$392
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	90	$88,800	5	$987
	1000 - 1999	9	$9,000	1	$1,000
	2000 - 2999	13	$13,000	1	$1,000
	3000 - 3999	15	$13,523	1	$902
	4000 - 4999	10	$7,817	1	$782
	5000 - 5999	13	$8,269	1	$636
	6000 - 6999	10	$5,953	1	$595
	7000 - 7999	16	$8,246	1	$515
	8000 - 8999	10	$4,542	1	$454
	9000 - 9999	11	$4,133	1	$376
	10000 - 10999	37	$12,390	2	$335
	11000 - 11999	208	$62,905	13	$302
	12000 - 12999	64	$19,200	4	$300
	13000 - 13999	83	$24,600	5	$296
	14000 - 14999	85	$25,500	5	$300
	15000 - 15999	91	$26,850	5	$295
	16000 - 16999	88	$26,100	5	$297
	17000 - 17999	103	$30,300	6	$294
	18000 - 18999	87	$25,800	5	$297
	19000 - 19999	81	$24,000	5	$296
	> 19999	532	$159,150	32	$299
PAYMENT TYPE	Regular	1,656	$600,078		$362
	Reissue	0	$0		$0
	Secondpay	2	$574		$287
	Underpay	0	$0		$0
	Extraordinary	2	$1,150		$575
TOTAL PMT		1,660	$601,802		$363
RECOUPMENTS		7	$3,050		$436
NET PAID			$598,752		
PMT SUB TYPE	APD	0	$0		$0
	STD	1,660	$601,802		$363

Energy Assistance Summary (EASUM)

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,226	$436,332	47	$356
	Renter	1,126	$421,027	43	$374
	RenterWithHeat	24	$4,493	1	$187
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	196	$73,484	7	$375
	Roomer	0	$0	0	$0
	Other	59	$22,256	2	$377
RACE	AmericanIndian	7	$2,734	0	$391
	Other	42	$18,193	2	$433
	NativeHawaiian	0	$0	0	$0
	Black	59	$24,871	2	$422
	White	2,496	$903,023	95	$362
	Asian	5	$1,561	0	$312
	Unknown	22	$7,210	1	$328
DISABLED	YES	909	$279,037	35	$307
	NO	1,722	$678,555	65	$394
AGE 60 & ABV	YES	1,170	$374,395	44	$320
	NO	1,461	$583,197	56	$399
AGE 5 & BLW	YES	346	$135,006	13	$390
	NO	2,285	$822,586	87	$360
PAY_TYPE	DIRECT	48	$15,504	2	$323
	PROVIDER	2,601	$947,034	98	$364
REFUNDS		73	$17,229		$236

AVERAGE HOUSEHOLD SIZE: 3.16

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	717	$267,951	27	$374
	FuelOil	709	$262,145	27	$370
	Coal	23	$7,893	1	$343
	NaturalGas	743	$266,978	28	$359
	Kerosene	171	$58,244	6	$341
	Propane	215	$73,983	8	$344
	WoodOrOther	27	$10,254	1	$380
	BlendedFuel	26	$10,144	1	$390
INCOME RANGE	0 - 999	136	$133,500	5	$982
	1000 - 1999	21	$21,000	1	$1,000
	2000 - 2999	16	$15,500	1	$969
	3000 - 3999	20	$17,139	1	$857
	4000 - 4999	23	$18,154	1	$789
	5000 - 5999	23	$14,441	1	$628
	6000 - 6999	26	$13,839	1	$532
	7000 - 7999	39	$18,517	1	$475
	8000 - 8999	25	$10,063	1	$403
	9000 - 9999	55	$19,912	2	$362
	10000 - 10999	79	$24,955	3	$316
	11000 - 11999	428	$130,372	16	$305
	12000 - 12999	107	$31,950	4	$299
	13000 - 13999	125	$37,200	5	$298
	14000 - 14999	114	$34,050	4	$299
	15000 - 15999	105	$31,500	4	$300
	16000 - 16999	119	$35,700	5	$300
	17000 - 17999	129	$38,550	5	$299
	18000 - 18999	109	$32,700	4	$300
	19000 - 19999	97	$29,100	4	$300
	> 19999	835	$249,450	32	$299
PAYMENT TYPE	Regular	2,631	$957,592		$364
	Reissue	0	$0		$0
	Secondpay	13	$3,678		$283
	Underpay	3	$63		$21
	Extraordinary	2	$1,205		$602
TOTAL PMT		2,649	$962,538		$363
RECOUPMENTS		6	$1,737		$290
NET PAID			$960,801		
PMT SUB TYPE	APD	0	$0		$0
	STD	2,649	$962,538		$363

Energy Assistance Summary (EASUM)

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	741	$255,487	53	$345
	Renter	480	$177,047	34	$369
	RenterWithHeat	17	$2,604	1	$153
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	128	$45,041	9	$352
	Roomer	1	$150	0	$150
	Other	32	$14,297	2	$447
RACE	AmericanIndian	1	$300	0	$300
	Other	11	$5,478	1	$498
	NativeHawaiian	0	$0	0	$0
	Black	9	$2,754	1	$306
	White	1,376	$485,494	98	$353
	Asian	0	$0	0	$0
	Unknown	2	$600	0	$300
DISABLED	YES	441	$133,126	32	$302
	NO	958	$361,500	68	$377
AGE 60 & ABV	YES	694	$218,500	50	$315
	NO	705	$276,126	50	$392
AGE 5 & BLW	YES	187	$71,946	13	$385
	NO	1,212	$422,680	87	$349
PAY_TYPE	DIRECT	25	$6,209	2	$248
	PROVIDER	1,382	$491,526	98	$356
REFUNDS		75	$16,195		$216

AVERAGE HOUSEHOLD SIZE: 3.02

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	332	$123,171	24	$371
	FuelOil	112	$42,155	8	$376
	Coal	6	$1,800	0	$300
	NaturalGas	808	$277,894	58	$344
	Kerosene	5	$1,710	0	$342
	Propane	130	$46,096	9	$355
	WoodOrOther	6	$1,800	0	$300
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	70	$68,600	5	$980
	1000 - 1999	2	$2,000	0	$1,000
	2000 - 2999	6	$6,000	0	$1,000
	3000 - 3999	7	$6,168	1	$881
	4000 - 4999	10	$8,081	1	$808
	5000 - 5999	16	$10,116	1	$632
	6000 - 6999	12	$6,595	1	$550
	7000 - 7999	13	$6,222	1	$479
	8000 - 8999	16	$6,525	1	$408
	9000 - 9999	31	$10,612	2	$342
	10000 - 10999	37	$11,785	3	$319
	11000 - 11999	184	$55,023	13	$299
	12000 - 12999	70	$20,700	5	$296
	13000 - 13999	54	$16,099	4	$298
	14000 - 14999	61	$18,300	4	$300
	15000 - 15999	85	$25,500	6	$300
	16000 - 16999	71	$21,300	5	$300
	17000 - 17999	68	$20,100	5	$296
	18000 - 18999	68	$20,400	5	$300
	19000 - 19999	73	$21,450	5	$294
	> 19999	445	$133,050	32	$299
PAYMENT TYPE	Regular	1,399	$494,626		$354
	Reissue	3	$517		$172
	Secondpay	4	$1,892		$473
	Underpay	1	$700		$700
	Extraordinary	0	$0		$0
TOTAL PMT		1,407	$497,735		$354
RECOUPMENTS		0	$0		$0
NET PAID			$497,735		
PMT SUB TYPE	APD	0	$0		$0
	STD	1,407	$497,735		$354

Energy Assistance Summary (EASUM)

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	289	$100,871	40	$349
	Renter	352	$133,833	49	$380
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	48	$17,135	7	$357
	Roomer	1	$150	0	$150
	Other	26	$9,821	4	$378
RACE	AmericanIndian	0	$0	0	$0
	Other	29	$12,788	4	$441
	NativeHawaiian	0	$0	0	$0
	Black	7	$2,800	1	$400
	White	671	$242,100	94	$361
	Asian	1	$1,000	0	$1,000
	Unknown	8	$3,122	1	$390
DISABLED	YES	202	$61,231	28	$303
	NO	514	$200,579	72	$390
AGE 60 & ABV	YES	362	$110,977	51	$307
	NO	354	$150,833	49	$426
AGE 5 & BLW	YES	105	$43,507	15	$414
	NO	611	$218,303	85	$357
PAY_TYPE	DIRECT	15	$5,835	2	$389
	PROVIDER	703	$256,340	98	$365
REFUNDS		13	$2,920		$225

AVERAGE HOUSEHOLD SIZE: 2.97

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	262	$99,682	37	$380
	FuelOil	353	$124,813	49	$354
	Coal	1	$300	0	$300
	NaturalGas	0	$0	0	$0
	Kerosene	5	$2,200	1	$440
	Propane	76	$28,236	11	$372
	WoodOrOther	18	$6,279	3	$349
	BlendedFuel	1	$300	0	$300
INCOME RANGE	0 - 999	45	$44,300	6	$984
	1000 - 1999	2	$2,000	0	$1,000
	2000 - 2999	7	$6,870	1	$981
	3000 - 3999	5	$4,001	1	$800
	4000 - 4999	3	$2,167	0	$722
	5000 - 5999	7	$4,104	1	$586
	6000 - 6999	10	$5,063	1	$506
	7000 - 7999	6	$2,769	1	$462
	8000 - 8999	8	$3,244	1	$406
	9000 - 9999	11	$3,739	2	$340
	10000 - 10999	17	$5,203	2	$306
	11000 - 11999	78	$23,250	11	$298
	12000 - 12999	25	$7,500	3	$300
	13000 - 13999	32	$9,600	4	$300
	14000 - 14999	41	$12,300	6	$300
	15000 - 15999	37	$11,100	5	$300
	16000 - 16999	42	$12,600	6	$300
	17000 - 17999	38	$11,400	5	$300
	18000 - 18999	40	$12,000	6	$300
	19000 - 19999	40	$12,000	6	$300
	> 19999	222	$66,600	31	$300
PAYMENT TYPE	Regular	716	$261,810		$366
	Reissue	0	$0		$0
	Secondpay	1	$300		$300
	Underpay	0	$0		$0
	Extraordinary	1	$65		$65
TOTAL PMT		718	$262,175		$365
RECOUPMENTS		2	$170		$85
NET PAID			$262,005		
PMT SUB TYPE	APD	0	$0		$0
	STD	718	$262,175		$365

Energy Assistance Summary (EASUM)

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County 35

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	2,084	$745,072	37	$358
	Renter	2,705	$1,029,694	49	$381
	RenterWithHeat	151	$28,914	3	$191
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	557	$211,810	10	$380
	Roomer	16	$2,436	0	$152
	Other	60	$24,608	1	$410
RACE	AmericanIndian	7	$3,067	0	$438
	Other	456	$181,416	8	$398
	NativeHawaiian	16	$6,878	0	$430
	Black	400	$158,567	7	$396
	White	4,437	$1,595,701	80	$360
	Asian	40	$16,760	1	$419
	Unknown	217	$80,145	4	$369
DISABLED	YES	1,554	$466,896	28	$300
	NO	4,019	$1,575,638	72	$392
AGE 60 & ABV	YES	2,442	$769,019	44	$315
	NO	3,131	$1,273,515	56	$407
AGE 5 & BLW	YES	950	$376,924	17	$397
	NO	4,623	$1,665,610	83	$360
PAY_TYPE	DIRECT	170	$37,436	3	$220
	PROVIDER	5,409	$2,007,447	97	$371
REFUNDS		205	$45,258		$221

AVERAGE HOUSEHOLD SIZE: 2.94

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	1,741	$636,343	31	$366
	FuelOil	588	$220,916	11	$376
	Coal	24	$7,900	0	$329
	NaturalGas	2,907	$1,060,737	52	$365
	Kerosene	27	$9,833	0	$364
	Propane	271	$101,193	5	$373
	WoodOrOther	8	$3,100	0	$388
	BlendedFuel	7	$2,512	0	$359
INCOME RANGE	0 - 999	274	$267,324	5	$976
	1000 - 1999	40	$40,000	1	$1,000
	2000 - 2999	45	$44,500	1	$989
	3000 - 3999	45	$40,180	1	$893
	4000 - 4999	72	$58,050	1	$806
	5000 - 5999	56	$37,124	1	$663
	6000 - 6999	66	$36,777	1	$557
	7000 - 7999	101	$50,675	2	$502
	8000 - 8999	82	$35,441	1	$432
	9000 - 9999	99	$36,782	2	$372
	10000 - 10999	155	$51,276	3	$331
	11000 - 11999	752	$217,654	13	$289
	12000 - 12999	239	$70,669	4	$296
	13000 - 13999	268	$79,282	5	$296
	14000 - 14999	230	$67,650	4	$294
	15000 - 15999	261	$78,000	5	$299
	16000 - 16999	303	$89,700	5	$296
	17000 - 17999	272	$81,000	5	$298
	18000 - 18999	259	$76,800	5	$297
	19000 - 19999	285	$84,900	5	$298
	> 19999	1,669	$498,750	30	$299
PAYMENT TYPE	Regular	5,573	$2,042,534		$367
	Reissue	0	$0		$0
	Secondpay	6	$2,349		$392
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		5,579	$2,044,883		$367
RECOUPMENTS		0	$0		$0
NET PAID			$2,044,883		
PMT SUB TYPE	APD	0	$0		$0
	STD	5,579	$2,044,883		$367

Energy Assistance Summary (EASUM)

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County 36

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,450	$489,858	28	$338
	Renter	3,077	$1,071,051	58	$348
	RenterWithHeat	140	$24,153	3	$173
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	563	$214,844	11	$382
	Roomer	3	$1,061	0	$354
	Other	28	$12,178	1	$435
RACE	AmericanIndian	21	$7,570	0	$360
	Other	1,155	$399,754	22	$346
	NativeHawaiian	10	$3,796	0	$380
	Black	593	$211,538	11	$357
	White	3,185	$1,084,059	61	$340
	Asian	84	$29,618	2	$353
	Unknown	213	$76,810	4	$361
DISABLED	YES	1,429	$428,949	27	$300
	NO	3,832	$1,384,196	73	$361
AGE 60 & ABV	YES	1,991	$607,031	38	$305
	NO	3,270	$1,206,114	62	$369
AGE 5 & BLW	YES	1,161	$426,201	22	$367
	NO	4,100	$1,386,944	78	$338
PAY_TYPE	DIRECT	120	$27,369	2	$228
	PROVIDER	5,168	$1,793,163	98	$347
REFUNDS		180	$35,199		$196

AVERAGE HOUSEHOLD SIZE: 3.55

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	2,797	$966,705	53	$346
	FuelOil	972	$326,033	18	$335
	Coal	6	$1,800	0	$300
	NaturalGas	1,099	$388,091	21	$353
	Kerosene	17	$5,356	0	$315
	Propane	368	$124,560	7	$338
	WoodOrOther	2	$600	0	$300
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	203	$193,302	4	$952
	1000 - 1999	31	$29,876	1	$964
	2000 - 2999	41	$38,011	1	$927
	3000 - 3999	56	$41,449	1	$740
	4000 - 4999	45	$30,339	1	$674
	5000 - 5999	55	$29,079	1	$529
	6000 - 6999	50	$23,861	1	$477
	7000 - 7999	75	$30,505	1	$407
	8000 - 8999	66	$23,389	1	$354
	9000 - 9999	86	$26,683	2	$310
	10000 - 10999	143	$42,701	3	$299
	11000 - 11999	542	$159,600	10	$294
	12000 - 12999	213	$63,300	4	$297
	13000 - 13999	232	$68,850	4	$297
	14000 - 14999	232	$69,150	4	$298
	15000 - 15999	244	$71,700	5	$294
	16000 - 16999	264	$77,400	5	$293
	17000 - 17999	251	$73,200	5	$292
	18000 - 18999	274	$80,100	5	$292
	19000 - 19999	239	$69,750	5	$292
	> 19999	1,919	$570,900	36	$297
PAYMENT TYPE	Regular	5,261	$1,813,145		$345
	Reissue	1	$300		$300
	Secondpay	24	$6,487		$270
	Underpay	1	$300		$300
	Extraordinary	1	$300		$300
TOTAL PMT		5,288	$1,820,532		$344
RECOUPMENTS		4	$618		$154
NET PAID			$1,819,914		
PMT SUB TYPE	APD	0	$0		$0
	STD	5,288	$1,820,532		$344

Energy Assistance Summary (EASUM)

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,543	$544,037	52	$353
	Renter	1,227	$479,449	41	$391
	RenterWithHeat	21	$3,756	1	$179
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	122	$49,031	4	$402
	Roomer	0	$0	0	$0
	Other	63	$27,441	2	$436
RACE	AmericanIndian	7	$3,500	0	$500
	Other	29	$13,963	1	$481
	NativeHawaiian	0	$0	0	$0
	Black	301	$119,370	10	$397
	White	2,615	$957,822	88	$366
	Asian	8	$2,400	0	$300
	Unknown	16	$6,659	1	$416
DISABLED	YES	880	$270,314	30	$307
	NO	2,096	$833,400	70	$398
AGE 60 & ABV	YES	1,307	$418,379	44	$320
	NO	1,669	$685,335	56	$411
AGE 5 & BLW	YES	479	$195,597	16	$408
	NO	2,497	$908,117	84	$364
PAY_TYPE	DIRECT	30	$9,836	1	$328
	PROVIDER	2,948	$1,094,981	99	$371
REFUNDS		47	$14,477		$308

AVERAGE HOUSEHOLD SIZE: 3.11

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	1,009	$391,575	34	$388
	FuelOil	355	$138,830	12	$391
	Coal	2	$704	0	$352
	NaturalGas	1,404	$497,275	47	$354
	Kerosene	51	$20,391	2	$400
	Propane	117	$40,716	4	$348
	WoodOrOther	5	$1,875	0	$375
	BlendedFuel	33	$12,348	1	$374
INCOME RANGE	0 - 999	168	$165,400	6	$985
	1000 - 1999	18	$18,000	1	$1,000
	2000 - 2999	22	$22,000	1	$1,000
	3000 - 3999	31	$25,817	1	$833
	4000 - 4999	38	$28,961	1	$762
	5000 - 5999	28	$17,235	1	$616
	6000 - 6999	31	$16,869	1	$544
	7000 - 7999	47	$23,072	2	$491
	8000 - 8999	39	$15,366	1	$394
	9000 - 9999	48	$17,072	2	$356
	10000 - 10999	94	$29,912	3	$318
	11000 - 11999	393	$118,905	13	$303
	12000 - 12999	135	$40,505	5	$300
	13000 - 13999	147	$44,100	5	$300
	14000 - 14999	128	$38,100	4	$298
	15000 - 15999	134	$40,200	5	$300
	16000 - 16999	153	$45,900	5	$300
	17000 - 17999	149	$44,700	5	$300
	18000 - 18999	136	$40,800	5	$300
	19000 - 19999	135	$40,500	5	$300
	> 19999	902	$270,300	30	$300
PAYMENT TYPE	Regular	2,976	$1,103,714		$371
	Reissue	0	$0		$0
	Secondpay	2	$1,103		$552
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		2,978	$1,104,817		$371
RECOUPMENTS		0	$0		$0
NET PAID			$1,104,817		
PMT SUB TYPE	APD	0	$0		$0
	STD	2,978	$1,104,817		$371

Energy Assistance Summary (EASUM)

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County 38

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	811	$285,044	35	$351
	Renter	1,262	$469,678	54	$372
	RenterWithHeat	47	$9,040	2	$192
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	219	$88,197	9	$403
	Roomer	4	$950	0	$238
	Other	6	$1,955	0	$326
RACE	AmericanIndian	3	$750	0	$250
	Other	575	$215,594	24	$375
	NativeHawaiian	4	$1,900	0	$475
	Black	115	$40,525	5	$352
	White	1,578	$569,391	67	$361
	Asian	17	$6,550	1	$385
	Unknown	57	$20,154	2	$354
DISABLED	YES	614	$186,154	26	$303
	NO	1,735	$668,710	74	$385
AGE 60 & ABV	YES	920	$291,546	39	$317
	NO	1,429	$563,318	61	$394
AGE 5 & BLW	YES	513	$195,240	22	$381
	NO	1,836	$659,624	78	$359
PAY_TYPE	DIRECT	65	$16,469	3	$253
	PROVIDER	2,290	$840,056	97	$367
REFUNDS		38	$8,971		$236

AVERAGE HOUSEHOLD SIZE: 3.57

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	886	$339,422	38	$383
	FuelOil	706	$254,392	30	$360
	Coal	0	$0	0	$0
	NaturalGas	615	$212,179	26	$345
	Kerosene	12	$4,427	1	$369
	Propane	125	$42,118	5	$337
	WoodOrOther	4	$2,026	0	$506
	BlendedFuel	1	$300	0	$300
INCOME RANGE	0 - 999	120	$117,300	5	$978
	1000 - 1999	26	$25,500	1	$981
	2000 - 2999	18	$17,150	1	$953
	3000 - 3999	18	$14,237	1	$791
	4000 - 4999	17	$13,060	1	$768
	5000 - 5999	26	$16,191	1	$623
	6000 - 6999	24	$12,708	1	$530
	7000 - 7999	28	$13,380	1	$478
	8000 - 8999	27	$11,320	1	$419
	9000 - 9999	45	$16,240	2	$361
	10000 - 10999	64	$20,102	3	$314
	11000 - 11999	260	$79,481	11	$306
	12000 - 12999	87	$25,845	4	$297
	13000 - 13999	89	$26,250	4	$295
	14000 - 14999	88	$25,950	4	$295
	15000 - 15999	114	$33,750	5	$296
	16000 - 16999	100	$29,400	4	$294
	17000 - 17999	118	$35,100	5	$297
	18000 - 18999	103	$30,450	4	$296
	19000 - 19999	105	$31,050	4	$296
	> 19999	872	$260,400	37	$299
PAYMENT TYPE	Regular	2,349	$854,864		$364
	Reissue	1	$150		$150
	Secondpay	5	$1,511		$302
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		2,355	$856,525		$364
RECOUPMENTS		3	$567		$189
NET PAID			$855,958		
PMT SUB TYPE	APD	0	$0		$0
	STD	2,355	$856,525		$364

Energy Assistance Summary (EASUM)

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,761	$616,129	30	$350
	Renter	3,098	$1,117,711	52	$361
	RenterWithHeat	54	$10,824	1	$200
	SubsidizedWithHeat	1	$300	0	$300
	SubsidizedNoHeat	985	$359,690	17	$365
	Roomer	2	$359	0	$180
	Other	32	$13,586	1	$425
RACE	AmericanIndian	14	$5,153	0	$368
	Other	809	$298,409	14	$369
	NativeHawaiian	39	$16,101	1	$413
	Black	656	$239,395	11	$365
	White	4,144	$1,463,778	70	$353
	Asian	86	$29,348	1	$341
	Unknown	185	$66,415	3	$359
DISABLED	YES	1,519	$469,577	26	$309
	NO	4,414	$1,649,022	74	$374
AGE 60 & ABV	YES	2,318	$734,051	39	$317
	NO	3,615	$1,384,548	61	$383
AGE 5 & BLW	YES	1,261	$473,192	21	$375
	NO	4,672	$1,645,407	79	$352
PAY_TYPE	DIRECT	38	$9,824	1	$259
	PROVIDER	5,926	$2,117,792	99	$357
REFUNDS		174	$33,683		$194

AVERAGE HOUSEHOLD SIZE: 3.34

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	3,462	$1,236,399	58	$357
	FuelOil	947	$344,639	16	$364
	Coal	1	$150	0	$150
	NaturalGas	1,385	$490,972	23	$354
	Kerosene	42	$13,692	1	$326
	Propane	92	$31,547	2	$343
	WoodOrOther	4	$1,200	0	$300
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	276	$271,400	5	$983
	1000 - 1999	50	$49,000	1	$980
	2000 - 2999	46	$44,988	1	$978
	3000 - 3999	46	$37,011	1	$805
	4000 - 4999	45	$33,288	1	$740
	5000 - 5999	52	$30,055	1	$578
	6000 - 6999	55	$28,655	1	$521
	7000 - 7999	83	$35,620	1	$429
	8000 - 8999	83	$31,496	1	$379
	9000 - 9999	103	$34,006	2	$330
	10000 - 10999	140	$42,809	2	$306
	11000 - 11999	781	$233,371	13	$299
	12000 - 12999	226	$67,744	4	$300
	13000 - 13999	263	$78,606	4	$299
	14000 - 14999	261	$78,000	4	$299
	15000 - 15999	242	$72,300	4	$299
	16000 - 16999	290	$86,250	5	$297
	17000 - 17999	294	$87,450	5	$297
	18000 - 18999	246	$73,350	4	$298
	19000 - 19999	242	$72,300	4	$299
	> 19999	2,109	$630,900	36	$299
PAYMENT TYPE	Regular	5,933	$2,118,599		$357
	Reissue	7	$1,147		$164
	Secondpay	19	$6,268		$330
	Underpay	5	$1,602		$320
	Extraordinary	0	$0		$0
TOTAL PMT		5,964	$2,127,616		$357
RECOUPMENTS		15	$4,104		$274
NET PAID			$2,123,512		
PMT SUB TYPE	APD	0	$0		$0
	STD	5,964	$2,127,616		$357

Energy Assistance Summary (EASUM)

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	4,213	$1,524,444	38	$362
	Renter	5,321	$2,139,738	48	$402
	RenterWithHeat	106	$18,380	1	$173
	SubsidizedWithHeat	1	$300	0	$300
	SubsidizedNoHeat	1,202	$535,271	11	$445
	Roomer	5	$1,119	0	$224
	Other	161	$63,824	1	$396
RACE	AmericanIndian	26	$9,498	0	$365
	Other	1,729	$713,312	16	$413
	NativeHawaiian	56	$26,416	1	$472
	Black	925	$409,696	8	$443
	White	8,027	$3,027,444	73	$377
	Asian	41	$13,277	0	$324
	Unknown	205	$83,433	2	$407
DISABLED	YES	2,635	$811,178	24	$308
	NO	8,374	$3,471,898	76	$415
AGE 60 & ABV	YES	4,467	$1,450,713	41	$325
	NO	6,542	$2,832,363	59	$433
AGE 5 & BLW	YES	2,277	$968,487	21	$425
	NO	8,732	$3,314,589	79	$380
PAY_TYPE	DIRECT	169	$45,917	2	$272
	PROVIDER	10,861	$4,244,054	98	$391
REFUNDS		274	$64,650		$236

AVERAGE HOUSEHOLD SIZE: 3.03

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	3,638	$1,503,039	33	$413
	FuelOil	2,117	$826,910	19	$391
	Coal	115	$39,866	1	$347
	NaturalGas	4,483	$1,672,445	41	$373
	Kerosene	53	$20,376	0	$384
	Propane	558	$200,724	5	$360
	WoodOrOther	6	$2,628	0	$438
	BlendedFuel	39	$17,088	0	$438
INCOME RANGE	0 - 999	709	$702,671	6	$991
	1000 - 1999	137	$136,500	1	$996
	2000 - 2999	119	$118,500	1	$996
	3000 - 3999	123	$112,297	1	$913
	4000 - 4999	130	$109,010	1	$839
	5000 - 5999	111	$73,333	1	$661
	6000 - 6999	135	$79,754	1	$591
	7000 - 7999	177	$89,668	2	$507
	8000 - 8999	164	$73,469	1	$448
	9000 - 9999	229	$89,512	2	$391
	10000 - 10999	306	$103,050	3	$337
	11000 - 11999	1,300	$395,349	12	$304
	12000 - 12999	455	$135,363	4	$298
	13000 - 13999	479	$142,650	4	$298
	14000 - 14999	470	$139,500	4	$297
	15000 - 15999	470	$139,950	4	$298
	16000 - 16999	500	$149,400	5	$299
	17000 - 17999	532	$158,550	5	$298
	18000 - 18999	524	$156,600	5	$299
	19000 - 19999	520	$155,250	5	$299
	> 19999	3,419	$1,022,700	31	$299
PAYMENT TYPE	Regular	11,009	$4,283,076		$389
	Reissue	5	$1,216		$243
	Secondpay	15	$4,979		$332
	Underpay	1	$700		$700
	Extraordinary	0	$0		$0
TOTAL PMT		11,030	$4,289,971		$389
RECOUPMENTS		2	$450		$225
NET PAID			$4,289,521		
PMT SUB TYPE	APD	0	$0		$0
	STD	11,030	$4,289,971		$389

Energy Assistance Summary (EASUM)

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,304	$450,534	34	$346
	Renter	2,026	$748,347	53	$369
	RenterWithHeat	93	$14,601	2	$157
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	365	$137,406	9	$376
	Roomer	2	$384	0	$192
	Other	65	$22,217	2	$342
RACE	AmericanIndian	9	$4,650	0	$517
	Other	61	$19,972	2	$327
	NativeHawaiian	2	$1,465	0	$732
	Black	512	$190,050	13	$371
	White	3,237	$1,143,938	84	$353
	Asian	4	$1,200	0	$300
	Unknown	30	$12,214	1	$407
DISABLED	YES	1,081	$329,477	28	$305
	NO	2,774	$1,044,012	72	$376
AGE 60 & ABV	YES	1,689	$524,289	44	$310
	NO	2,166	$849,200	56	$392
AGE 5 & BLW	YES	695	$266,857	18	$384
	NO	3,160	$1,106,632	82	$350
PAY_TYPE	DIRECT	94	$18,308	2	$195
	PROVIDER	3,788	$1,363,054	98	$360
REFUNDS		136	$29,282		$215

AVERAGE HOUSEHOLD SIZE: 3.13

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	1,234	$459,701	32	$373
	FuelOil	1,076	$383,207	28	$356
	Coal	16	$5,155	0	$322
	NaturalGas	1,287	$438,854	33	$341
	Kerosene	7	$2,938	0	$420
	Propane	189	$67,439	5	$357
	WoodOrOther	23	$8,897	1	$387
	BlendedFuel	23	$7,298	1	$317
INCOME RANGE	0 - 999	155	$150,300	4	$970
	1000 - 1999	32	$32,000	1	$1,000
	2000 - 2999	27	$27,000	1	$1,000
	3000 - 3999	40	$35,662	1	$892
	4000 - 4999	30	$24,056	1	$802
	5000 - 5999	36	$23,698	1	$658
	6000 - 6999	40	$22,262	1	$557
	7000 - 7999	55	$26,002	1	$473
	8000 - 8999	50	$21,188	1	$424
	9000 - 9999	72	$26,167	2	$363
	10000 - 10999	104	$33,278	3	$320
	11000 - 11999	474	$138,726	12	$293
	12000 - 12999	164	$48,150	4	$294
	13000 - 13999	188	$55,050	5	$293
	14000 - 14999	173	$51,450	4	$297
	15000 - 15999	215	$63,750	6	$297
	16000 - 16999	209	$62,100	5	$297
	17000 - 17999	201	$59,400	5	$296
	18000 - 18999	197	$58,650	5	$298
	19000 - 19999	189	$56,250	5	$298
	> 19999	1,204	$358,350	31	$298
PAYMENT TYPE	Regular	3,855	$1,373,489		$356
	Reissue	5	$988		$198
	Secondpay	20	$6,351		$318
	Underpay	2	$534		$267
	Extraordinary	0	$0		$0
TOTAL PMT		3,882	$1,381,362		$356
RECOUPMENTS		6	$1,642		$274
NET PAID			$1,379,720		
PMT SUB TYPE	APD	0	$0		$0
	STD	3,882	$1,381,362		$356

Energy Assistance Summary (EASUM)

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	673	$240,723	52	$358
	Renter	427	$156,243	33	$366
	RenterWithHeat	4	$612	0	$153
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	160	$62,609	12	$391
	Roomer	0	$0	0	$0
	Other	24	$7,858	2	$327
RACE	AmericanIndian	5	$1,500	0	$300
	Other	13	$6,000	1	$462
	NativeHawaiian	0	$0	0	$0
	Black	6	$3,652	0	$609
	White	1,260	$455,693	98	$362
	Asian	1	$300	0	$300
	Unknown	3	$900	0	$300
DISABLED	YES	420	$130,548	33	$311
	NO	868	$337,497	67	$389
AGE 60 & ABV	YES	585	$184,395	45	$315
	NO	703	$283,650	55	$403
AGE 5 & BLW	YES	194	$75,956	15	$392
	NO	1,094	$392,089	85	$358
PAY_TYPE	DIRECT	12	$3,913	1	$326
	PROVIDER	1,280	$466,106	99	$364
REFUNDS		44	$9,788		$222

AVERAGE HOUSEHOLD SIZE: 3.37

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	300	$114,898	23	$383
	FuelOil	9	$3,006	1	$334
	Coal	4	$1,900	0	$475
	NaturalGas	892	$317,948	69	$356
	Kerosene	1	$300	0	$300
	Propane	44	$15,931	3	$362
	WoodOrOther	38	$14,062	3	$370
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	58	$58,000	5	$1,000
	1000 - 1999	12	$12,000	1	$1,000
	2000 - 2999	9	$9,000	1	$1,000
	3000 - 3999	9	$8,198	1	$911
	4000 - 4999	8	$6,553	1	$819
	5000 - 5999	20	$13,015	2	$651
	6000 - 6999	10	$5,659	1	$566
	7000 - 7999	12	$5,906	1	$492
	8000 - 8999	15	$6,464	1	$431
	9000 - 9999	22	$8,254	2	$375
	10000 - 10999	50	$16,470	4	$329
	11000 - 11999	177	$53,026	14	$300
	12000 - 12999	47	$14,100	4	$300
	13000 - 13999	46	$13,800	4	$300
	14000 - 14999	48	$14,400	4	$300
	15000 - 15999	71	$21,300	6	$300
	16000 - 16999	52	$15,450	4	$297
	17000 - 17999	68	$20,400	5	$300
	18000 - 18999	58	$17,400	5	$300
	19000 - 19999	48	$14,400	4	$300
	> 19999	448	$134,250	35	$300
PAYMENT TYPE	Regular	1,288	$468,045		$363
	Reissue	0	$0		$0
	Secondpay	4	$1,974		$494
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,292	$470,019		$364
RECOUPMENTS		2	$1,300		$650
NET PAID			$468,719		
PMT SUB TYPE	APD	0	$0		$0
	STD	1,292	$470,019		$364

Energy Assistance Summary (EASUM)

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,586	$564,634	42	$356
	Renter	1,650	$646,018	44	$392
	RenterWithHeat	27	$4,966	1	$184
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	445	$188,107	12	$423
	Roomer	1	$150	0	$150
	Other	48	$20,059	1	$418
RACE	AmericanIndian	7	$3,006	0	$429
	Other	52	$19,622	1	$377
	NativeHawaiian	4	$2,042	0	$510
	Black	570	$226,156	15	$397
	White	3,073	$1,152,630	82	$375
	Asian	12	$5,347	0	$446
	Unknown	39	$15,131	1	$388
DISABLED	YES	1,242	$378,937	33	$305
	NO	2,515	$1,044,997	67	$416
AGE 60 & ABV	YES	1,517	$477,495	40	$315
	NO	2,240	$946,439	60	$423
AGE 5 & BLW	YES	648	$283,924	17	$438
	NO	3,109	$1,140,010	83	$367
PAY_TYPE	DIRECT	57	$19,530	2	$343
	PROVIDER	3,709	$1,407,102	98	$379
REFUNDS		314	$66,452		$212

AVERAGE HOUSEHOLD SIZE: 3.1

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	1,207	$472,963	32	$392
	FuelOil	253	$93,696	7	$370
	Coal	2	$600	0	$300
	NaturalGas	2,105	$787,234	56	$374
	Kerosene	8	$2,435	0	$304
	Propane	137	$47,928	4	$350
	WoodOrOther	14	$6,010	0	$429
	BlendedFuel	31	$13,068	1	$422
INCOME RANGE	0 - 999	252	$249,600	7	$990
	1000 - 1999	32	$32,000	1	$1,000
	2000 - 2999	35	$34,594	1	$988
	3000 - 3999	44	$36,178	1	$822
	4000 - 4999	44	$32,808	1	$746
	5000 - 5999	39	$22,896	1	$587
	6000 - 6999	47	$24,306	1	$517
	7000 - 7999	53	$23,703	1	$447
	8000 - 8999	52	$20,401	1	$392
	9000 - 9999	58	$19,942	2	$344
	10000 - 10999	128	$38,925	3	$304
	11000 - 11999	566	$168,881	15	$298
	12000 - 12999	177	$52,650	5	$297
	13000 - 13999	165	$49,200	4	$298
	14000 - 14999	181	$54,300	5	$300
	15000 - 15999	159	$46,650	4	$293
	16000 - 16999	187	$55,950	5	$299
	17000 - 17999	164	$49,200	4	$300
	18000 - 18999	167	$50,100	4	$300
	19000 - 19999	168	$50,250	4	$299
	> 19999	1,038	$311,100	28	$300
PAYMENT TYPE	Regular	3,757	$1,423,934		$379
	Reissue	0	$0		$0
	Secondpay	9	$2,698		$300
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		3,766	$1,426,632		$379
RECOUPMENTS		3	$633		$211
NET PAID			$1,425,999		
PMT SUB TYPE	APD	0	$0		$0
	STD	3,766	$1,426,632		$379

Energy Assistance Summary (EASUM)

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	774	$257,665	42	$333
	Renter	875	$323,790	48	$370
	RenterWithHeat	16	$2,750	1	$172
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	121	$50,587	7	$418
	Roomer	0	$0	0	$0
	Other	37	$11,995	2	$324
RACE	AmericanIndian	2	$600	0	$300
	Other	28	$12,332	2	$440
	NativeHawaiian	0	$0	0	$0
	Black	35	$15,614	2	$446
	White	1,751	$615,360	96	$351
	Asian	2	$600	0	$300
	Unknown	5	$2,281	0	$456
DISABLED	YES	530	$159,868	29	$302
	NO	1,293	$486,919	71	$377
AGE 60 & ABV	YES	893	$278,819	49	$312
	NO	930	$367,968	51	$396
AGE 5 & BLW	YES	304	$117,595	17	$387
	NO	1,519	$529,192	83	$348
PAY_TYPE	DIRECT	18	$5,103	1	$284
	PROVIDER	1,815	$644,673	99	$355
REFUNDS		59	$13,778		$234

AVERAGE HOUSEHOLD SIZE: 3.22

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	554	$204,254	30	$369
	FuelOil	863	$303,320	47	$351
	Coal	8	$2,400	0	$300
	NaturalGas	218	$76,259	12	$350
	Kerosene	14	$4,514	1	$322
	Propane	88	$28,326	5	$322
	WoodOrOther	59	$21,830	3	$370
	BlendedFuel	19	$5,884	1	$310
INCOME RANGE	0 - 999	83	$81,570	5	$983
	1000 - 1999	9	$9,000	0	$1,000
	2000 - 2999	14	$13,741	1	$982
	3000 - 3999	16	$13,198	1	$825
	4000 - 4999	15	$11,468	1	$765
	5000 - 5999	13	$8,133	1	$626
	6000 - 6999	15	$7,902	1	$527
	7000 - 7999	13	$6,044	1	$465
	8000 - 8999	15	$6,191	1	$413
	9000 - 9999	27	$9,755	1	$361
	10000 - 10999	44	$14,218	2	$323
	11000 - 11999	224	$66,867	12	$299
	12000 - 12999	69	$20,700	4	$300
	13000 - 13999	87	$25,950	5	$298
	14000 - 14999	63	$18,750	3	$298
	15000 - 15999	91	$27,000	5	$297
	16000 - 16999	93	$27,600	5	$297
	17000 - 17999	96	$28,650	5	$298
	18000 - 18999	116	$34,500	6	$297
	19000 - 19999	100	$29,850	5	$298
	> 19999	620	$185,700	34	$300
PAYMENT TYPE	Regular	1,823	$646,787		$355
	Reissue	0	$0		$0
	Secondpay	10	$2,989		$299
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,833	$649,776		$354
RECOUPMENTS		3	$824		$275
NET PAID			$648,952		
PMT SUB TYPE	APD	0	$0		$0
	STD	1,833	$649,776		$354

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,543	$554,440	47	$359
	Renter	1,397	$527,036	42	$377
	RenterWithHeat	15	$3,153	0	$210
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	299	$108,874	9	$364
	Roomer	3	$450	0	$150
	Other	37	$16,657	1	$450
RACE	AmericanIndian	13	$4,647	0	$357
	Other	521	$194,677	16	$374
	NativeHawaiian	17	$9,921	1	$584
	Black	479	$179,295	15	$374
	White	2,119	$767,973	64	$362
	Asian	36	$12,991	1	$361
	Unknown	109	$41,106	3	$377
DISABLED	YES	787	$247,869	24	$315
	NO	2,507	$962,741	76	$384
AGE 60 & ABV	YES	1,460	$475,814	44	$326
	NO	1,834	$734,796	56	$401
AGE 5 & BLW	YES	613	$233,800	19	$381
	NO	2,681	$976,810	81	$364
PAY_TYPE	DIRECT	36	$12,588	1	$350
	PROVIDER	3,271	$1,202,456	99	$368
REFUNDS		58	$13,795		$238

AVERAGE HOUSEHOLD SIZE: 3.15

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	2,007	$740,406	61	$369
	FuelOil	644	$242,098	20	$376
	Coal	10	$3,917	0	$392
	NaturalGas	146	$51,300	4	$351
	Kerosene	100	$38,537	3	$385
	Propane	370	$128,467	11	$347
	WoodOrOther	14	$4,985	0	$356
	BlendedFuel	3	$900	0	$300
INCOME RANGE	0 - 999	163	$159,500	5	$979
	1000 - 1999	30	$29,500	1	$983
	2000 - 2999	22	$22,000	1	$1,000
	3000 - 3999	28	$24,763	1	$884
	4000 - 4999	27	$21,035	1	$779
	5000 - 5999	32	$20,858	1	$652
	6000 - 6999	34	$19,078	1	$561
	7000 - 7999	61	$30,119	2	$494
	8000 - 8999	48	$20,607	1	$429
	9000 - 9999	65	$24,895	2	$383
	10000 - 10999	86	$27,543	3	$320
	11000 - 11999	310	$95,661	9	$309
	12000 - 12999	135	$40,651	4	$301
	13000 - 13999	136	$40,650	4	$299
	14000 - 14999	144	$43,200	4	$300
	15000 - 15999	170	$50,850	5	$299
	16000 - 16999	148	$44,250	4	$299
	17000 - 17999	169	$50,700	5	$300
	18000 - 18999	142	$42,300	4	$298
	19000 - 19999	184	$55,050	6	$299
	> 19999	1,160	$347,400	35	$299
PAYMENT TYPE	Regular	3,294	$1,210,610		$368
	Reissue	1	$300		$300
	Secondpay	11	$4,049		$368
	Underpay	1	$85		$85
	Extraordinary	0	$0		$0
TOTAL PMT		3,307	$1,215,044		$367
RECOUPMENTS		3	$981		$327
NET PAID			$1,214,063		
PMT SUB TYPE	APD	0	$0		$0
	STD	3,307	$1,215,044		$367

Energy Assistance Summary (EASUM)

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,754	$662,214	29	$378
	Renter	3,081	$1,153,088	51	$374
	RenterWithHeat	97	$20,614	2	$213
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	1,108	$429,850	18	$388
	Roomer	5	$2,249	0	$450
	Other	43	$19,090	1	$444
RACE	AmericanIndian	26	$12,339	0	$475
	Other	520	$193,634	9	$372
	NativeHawaiian	15	$5,718	0	$381
	Black	1,883	$733,090	31	$389
	White	3,105	$1,147,158	51	$369
	Asian	357	$124,542	6	$349
	Unknown	182	$70,624	3	$388
DISABLED	YES	1,425	$441,669	23	$310
	NO	4,663	$1,845,436	77	$396
AGE 60 & ABV	YES	2,518	$824,786	41	$328
	NO	3,570	$1,462,319	59	$410
AGE 5 & BLW	YES	1,187	$464,472	19	$391
	NO	4,901	$1,822,633	81	$372
PAY_TYPE	DIRECT	195	$72,501	3	$372
	PROVIDER	5,914	$2,220,703	97	$375
REFUNDS		182	$50,575		$278

AVERAGE HOUSEHOLD SIZE: 2.92

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	2,903	$1,074,805	48	$370
	FuelOil	933	$372,937	15	$400
	Coal	0	$0	0	$0
	NaturalGas	2,165	$811,222	36	$375
	Kerosene	1	$300	0	$300
	Propane	84	$27,241	1	$324
	WoodOrOther	2	$600	0	$300
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	421	$414,421	7	$984
	1000 - 1999	56	$55,226	1	$986
	2000 - 2999	46	$42,938	1	$933
	3000 - 3999	63	$47,462	1	$753
	4000 - 4999	52	$36,609	1	$704
	5000 - 5999	78	$43,202	1	$554
	6000 - 6999	70	$35,892	1	$513
	7000 - 7999	94	$39,851	2	$424
	8000 - 8999	101	$37,968	2	$376
	9000 - 9999	117	$38,836	2	$332
	10000 - 10999	176	$55,650	3	$316
	11000 - 11999	702	$213,730	12	$304
	12000 - 12999	253	$76,170	4	$301
	13000 - 13999	258	$76,650	4	$297
	14000 - 14999	291	$87,000	5	$299
	15000 - 15999	265	$78,300	4	$295
	16000 - 16999	308	$91,800	5	$298
	17000 - 17999	317	$94,650	5	$299
	18000 - 18999	279	$83,250	5	$298
	19000 - 19999	270	$80,550	4	$298
	> 19999	1,870	$556,650	31	$298
PAYMENT TYPE	Regular	6,088	$2,287,105		$376
	Reissue	5	$1,286		$257
	Secondpay	13	$3,951		$304
	Underpay	2	$712		$356
	Extraordinary	1	$150		$150
TOTAL PMT		6,109	$2,293,204		$375
RECOUPMENTS		4	$1,050		$262
NET PAID			$2,292,154		
PMT SUB TYPE	APD	0	$0		$0
	STD	6,109	$2,293,204		$375

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	155	$56,320	40	$363
	Renter	150	$55,152	39	$368
	RenterWithHeat	4	$611	1	$153
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	71	$25,021	18	$352
	Roomer	0	$0	0	$0
	Other	7	$2,168	2	$310
RACE	AmericanIndian	1	$300	0	$300
	Other	17	$8,439	4	$496
	NativeHawaiian	2	$1,595	1	$798
	Black	8	$2,400	2	$300
	White	355	$124,617	92	$351
	Asian	0	$0	0	$0
	Unknown	4	$1,921	1	$480
DISABLED	YES	95	$28,530	25	$300
	NO	292	$110,742	75	$379
AGE 60 & ABV	YES	201	$62,749	52	$312
	NO	186	$76,523	48	$411
AGE 5 & BLW	YES	55	$21,853	14	$397
	NO	332	$117,419	86	$354
PAY_TYPE	DIRECT	3	$461	1	$154
	PROVIDER	387	$140,317	99	$363
REFUNDS		13	$4,168		$321

AVERAGE HOUSEHOLD SIZE: 2.43

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	180	$66,217	47	$368
	FuelOil	107	$39,782	28	$372
	Coal	0	$0	0	$0
	NaturalGas	55	$17,358	14	$316
	Kerosene	5	$1,945	1	$389
	Propane	39	$13,670	10	$351
	WoodOrOther	0	$0	0	$0
	BlendedFuel	1	$300	0	$300
INCOME RANGE	0 - 999	14	$14,000	4	$1,000
	1000 - 1999	3	$3,000	1	$1,000
	2000 - 2999	4	$4,000	1	$1,000
	3000 - 3999	3	$2,645	1	$882
	4000 - 4999	5	$4,029	1	$806
	5000 - 5999	2	$1,190	1	$595
	6000 - 6999	5	$2,808	1	$562
	7000 - 7999	4	$2,013	1	$503
	8000 - 8999	4	$1,643	1	$411
	9000 - 9999	8	$3,044	2	$380
	10000 - 10999	9	$3,049	2	$339
	11000 - 11999	59	$17,980	15	$305
	12000 - 12999	16	$4,650	4	$291
	13000 - 13999	25	$7,571	6	$303
	14000 - 14999	18	$5,400	5	$300
	15000 - 15999	17	$5,100	4	$300
	16000 - 16999	23	$6,900	6	$300
	17000 - 17999	34	$10,200	9	$300
	18000 - 18999	20	$6,000	5	$300
	19000 - 19999	21	$6,150	5	$293
	> 19999	93	$27,900	24	$300
PAYMENT TYPE	Regular	387	$139,272		$360
	Reissue	1	$1,000		$1,000
	Secondpay	1	$300		$300
	Underpay	1	$206		$206
	Extraordinary	0	$0		$0
TOTAL PMT		390	$140,778		$361
RECOUPMENTS		1	$300		$300
NET PAID			$140,478		
PMT SUB TYPE	APD	0	$0		$0
	STD	390	$140,778		$361

Energy Assistance Summary (EASUM)

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County 48

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,263	$455,952	32	$361
	Renter	1,935	$708,839	49	$366
	RenterWithHeat	37	$7,434	1	$201
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	701	$252,636	18	$360
	Roomer	3	$800	0	$267
	Other	31	$13,962	1	$450
RACE	AmericanIndian	15	$4,419	0	$295
	Other	690	$250,472	17	$363
	NativeHawaiian	11	$4,700	0	$427
	Black	429	$164,196	11	$383
	White	2,692	$966,265	68	$359
	Asian	41	$16,348	1	$399
	Unknown	92	$33,223	2	$361
DISABLED	YES	1,051	$322,140	26	$307
	NO	2,919	$1,117,483	74	$383
AGE 60 & ABV	YES	1,580	$507,135	40	$321
	NO	2,390	$932,488	60	$390
AGE 5 & BLW	YES	822	$317,110	21	$386
	NO	3,148	$1,122,513	79	$357
PAY_TYPE	DIRECT	63	$21,289	2	$338
	PROVIDER	3,926	$1,423,950	98	$363
REFUNDS		125	$29,530		$236

AVERAGE HOUSEHOLD SIZE: 3.02

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	1,844	$672,381	46	$365
	FuelOil	808	$292,905	20	$363
	Coal	4	$1,200	0	$300
	NaturalGas	1,122	$406,048	28	$362
	Kerosene	59	$21,087	1	$357
	Propane	128	$44,502	3	$348
	WoodOrOther	5	$1,500	0	$300
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	207	$205,000	5	$990
	1000 - 1999	32	$31,000	1	$969
	2000 - 2999	37	$36,314	1	$981
	3000 - 3999	29	$23,582	1	$813
	4000 - 4999	34	$25,015	1	$736
	5000 - 5999	34	$19,342	1	$569
	6000 - 6999	41	$20,914	1	$510
	7000 - 7999	44	$19,787	1	$450
	8000 - 8999	49	$18,828	1	$384
	9000 - 9999	67	$23,082	2	$345
	10000 - 10999	104	$32,319	3	$311
	11000 - 11999	467	$140,072	12	$300
	12000 - 12999	180	$53,994	5	$300
	13000 - 13999	160	$47,874	4	$299
	14000 - 14999	188	$56,100	5	$298
	15000 - 15999	177	$52,800	4	$298
	16000 - 16999	201	$60,000	5	$299
	17000 - 17999	210	$62,700	5	$299
	18000 - 18999	198	$59,250	5	$299
	19000 - 19999	174	$52,200	4	$300
	> 19999	1,337	$399,450	34	$299
PAYMENT TYPE	Regular	3,970	$1,439,623		$363
	Reissue	1	$150		$150
	Secondpay	17	$5,316		$313
	Underpay	1	$150		$150
	Extraordinary	0	$0		$0
TOTAL PMT		3,989	$1,445,239		$362
RECOUPMENTS		7	$1,463		$209
NET PAID			$1,443,776		
PMT SUB TYPE	APD	0	$0		$0
	STD	3,989	$1,445,239		$362

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,703	$618,055	47	$363
	Renter	1,454	$565,925	40	$389
	RenterWithHeat	18	$3,565	0	$198
	SubsidizedWithHeat	1	$300	0	$300
	SubsidizedNoHeat	353	$129,694	10	$367
	Roomer	2	$300	0	$150
	Other	69	$27,631	2	$400
RACE	AmericanIndian	5	$1,500	0	$300
	Other	138	$56,850	4	$412
	NativeHawaiian	4	$1,636	0	$409
	Black	125	$51,319	3	$411
	White	3,273	$1,213,320	91	$371
	Asian	11	$3,337	0	$303
	Unknown	44	$17,508	1	$398
DISABLED	YES	934	$287,179	26	$307
	NO	2,666	$1,058,291	74	$397
AGE 60 & ABV	YES	1,539	$480,746	43	$312
	NO	2,061	$864,724	57	$420
AGE 5 & BLW	YES	663	$275,650	18	$416
	NO	2,937	$1,069,820	82	$364
PAY_TYPE	DIRECT	33	$9,727	1	$295
	PROVIDER	3,585	$1,340,860	99	$374
REFUNDS		93	$20,850		$224

AVERAGE HOUSEHOLD SIZE: 3.14

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	1,113	$416,450	31	$374
	FuelOil	1,560	$593,012	43	$380
	Coal	50	$20,084	1	$402
	NaturalGas	747	$266,718	21	$357
	Kerosene	1	$300	0	$300
	Propane	120	$44,779	3	$373
	WoodOrOther	9	$4,127	0	$459
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	209	$205,900	6	$985
	1000 - 1999	30	$30,000	1	$1,000
	2000 - 2999	35	$35,000	1	$1,000
	3000 - 3999	24	$21,150	1	$881
	4000 - 4999	45	$35,269	1	$784
	5000 - 5999	36	$22,606	1	$628
	6000 - 6999	34	$18,851	1	$554
	7000 - 7999	68	$31,727	2	$467
	8000 - 8999	51	$21,090	1	$414
	9000 - 9999	71	$25,156	2	$354
	10000 - 10999	97	$31,085	3	$320
	11000 - 11999	401	$119,586	11	$298
	12000 - 12999	168	$50,250	5	$299
	13000 - 13999	134	$40,050	4	$299
	14000 - 14999	171	$51,150	5	$299
	15000 - 15999	176	$52,800	5	$300
	16000 - 16999	194	$57,750	5	$298
	17000 - 17999	171	$51,300	5	$300
	18000 - 18999	177	$52,800	5	$298
	19000 - 19999	172	$51,450	5	$299
	> 19999	1,136	$340,500	32	$300
PAYMENT TYPE	Regular	3,600	$1,345,470		$374
	Reissue	0	$0		$0
	Secondpay	18	$5,117		$284
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		3,618	$1,350,587		$373
RECOUPMENTS		13	$4,247		$327
NET PAID			$1,346,340		
PMT SUB TYPE	APD	0	$0		$0
	STD	3,618	$1,350,587		$373

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 50

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	399	$137,902	40	$346
	Renter	461	$156,621	47	$340
	RenterWithHeat	4	$717	0	$179
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	94	$33,046	10	$352
	Roomer	0	$0	0	$0
	Other	28	$12,796	3	$457
RACE	AmericanIndian	1	$300	0	$300
	Other	12	$4,044	1	$337
	NativeHawaiian	0	$0	0	$0
	Black	17	$7,932	2	$467
	White	945	$324,725	96	$344
	Asian	3	$1,600	0	$533
	Unknown	8	$2,481	1	$310
DISABLED	YES	277	$83,972	28	$303
	NO	709	$257,110	72	$363
AGE 60 & ABV	YES	483	$151,399	49	$313
	NO	503	$189,683	51	$377
AGE 5 & BLW	YES	166	$59,853	17	$361
	NO	820	$281,229	83	$343
PAY_TYPE	DIRECT	28	$9,166	3	$327
	PROVIDER	962	$332,708	97	$346
REFUNDS		18	$2,830		$157

AVERAGE HOUSEHOLD SIZE: 3.21

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	415	$141,059	42	$340
	FuelOil	397	$140,789	40	$355
	Coal	7	$2,800	1	$400
	NaturalGas	0	$0	0	$0
	Kerosene	19	$5,965	2	$314
	Propane	138	$46,069	14	$334
	WoodOrOther	9	$4,100	1	$456
	BlendedFuel	1	$300	0	$300
INCOME RANGE	0 - 999	37	$34,900	4	$943
	1000 - 1999	10	$10,000	1	$1,000
	2000 - 2999	5	$4,963	1	$993
	3000 - 3999	5	$4,336	1	$867
	4000 - 4999	6	$4,485	1	$748
	5000 - 5999	5	$2,987	1	$597
	6000 - 6999	6	$2,879	1	$480
	7000 - 7999	7	$3,217	1	$460
	8000 - 8999	9	$3,724	1	$414
	9000 - 9999	14	$4,930	1	$352
	10000 - 10999	23	$7,138	2	$310
	11000 - 11999	129	$38,935	13	$302
	12000 - 12999	45	$13,538	5	$301
	13000 - 13999	49	$14,550	5	$297
	14000 - 14999	38	$11,250	4	$296
	15000 - 15999	43	$12,900	4	$300
	16000 - 16999	55	$16,500	6	$300
	17000 - 17999	41	$12,300	4	$300
	18000 - 18999	61	$18,150	6	$298
	19000 - 19999	51	$15,300	5	$300
	> 19999	347	$104,100	35	$300
PAYMENT TYPE	Regular	986	$341,082		$346
	Reissue	0	$0		$0
	Secondpay	4	$792		$198
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		990	$341,874		$345
RECOUPMENTS		2	$318		$159
NET PAID			$341,556		
PMT SUB TYPE	APD	0	$0		$0
	STD	990	$341,874		$345

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 51

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	20,543	$7,099,868	38	$346
	Renter	26,662	$10,131,439	49	$380
	RenterWithHeat	330	$75,583	1	$229
	SubsidizedWithHeat	7	$1,950	0	$279
	SubsidizedNoHeat	6,623	$2,504,485	12	$378
	Roomer	21	$7,908	0	$377
	Other	527	$219,889	1	$417
RACE	AmericanIndian	134	$57,748	0	$431
	Other	9,978	$3,591,548	18	$360
	NativeHawaiian	123	$49,911	0	$406
	Black	30,496	$11,346,621	56	$372
	White	9,986	$3,582,836	18	$359
	Asian	3,262	$1,109,517	6	$340
	Unknown	734	$302,941	1	$413
DISABLED	YES	16,637	$5,084,998	30	$306
	NO	38,076	$14,956,124	70	$393
AGE 60 & ABV	YES	26,070	$8,250,926	48	$316
	NO	28,643	$11,790,196	52	$412
AGE 5 & BLW	YES	8,793	$3,512,630	16	$399
	NO	45,920	$16,528,492	84	$360
PAY_TYPE	DIRECT	546	$201,435	1	$369
	PROVIDER	54,219	$19,863,463	99	$366
REFUNDS		718	$218,325		$304

AVERAGE HOUSEHOLD SIZE: 3.18

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	15,854	$6,108,920	29	$385
	FuelOil	1,839	$667,784	3	$363
	Coal	0	$0	0	$0
	NaturalGas	37,019	$13,263,721	68	$358
	Kerosene	1	$697	0	$697
	Propane	0	$0	0	$0
	WoodOrOther	0	$0	0	$0
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	3,089	$3,065,000	6	$992
	1000 - 1999	412	$407,291	1	$989
	2000 - 2999	449	$411,214	1	$916
	3000 - 3999	645	$476,016	1	$738
	4000 - 4999	741	$486,941	1	$657
	5000 - 5999	648	$342,731	1	$529
	6000 - 6999	653	$302,804	1	$464
	7000 - 7999	963	$387,149	2	$402
	8000 - 8999	792	$281,353	1	$355
	9000 - 9999	1,135	$348,627	2	$307
	10000 - 10999	1,843	$555,550	3	$301
	11000 - 11999	12,321	$3,693,246	23	$300
	12000 - 12999	2,253	$673,650	4	$299
	13000 - 13999	2,447	$732,300	4	$299
	14000 - 14999	2,176	$650,400	4	$299
	15000 - 15999	2,391	$714,750	4	$299
	16000 - 16999	2,646	$790,050	5	$299
	17000 - 17999	2,305	$689,700	4	$299
	18000 - 18999	1,957	$584,700	4	$299
	19000 - 19999	1,896	$567,150	3	$299
	> 19999	12,951	$3,880,500	24	$300
PAYMENT TYPE	Regular	54,713	$20,041,122		$366
	Reissue	5	$1,729		$346
	Secondpay	35	$17,597		$503
	Underpay	7	$2,250		$321
	Extraordinary	5	$2,200		$440
TOTAL PMT		54,765	$20,064,898		$366
RECOUPMENTS		23	$8,861		$385
NET PAID			$20,056,037		
PMT SUB TYPE	APD	0	$0		$0
	STD	54,765	$20,064,898		$366

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	565	$211,180	54	$374
	Renter	370	$139,726	35	$378
	RenterWithHeat	1	$150	0	$150
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	103	$42,366	10	$411
	Roomer	1	$150	0	$150
	Other	10	$5,511	1	$551
RACE	AmericanIndian	11	$3,543	1	$322
	Other	92	$36,966	9	$402
	NativeHawaiian	4	$1,200	0	$300
	Black	92	$36,369	9	$395
	White	814	$305,789	78	$376
	Asian	5	$1,938	0	$388
	Unknown	32	$13,278	3	$415
DISABLED	YES	237	$73,253	23	$309
	NO	813	$325,830	77	$401
AGE 60 & ABV	YES	415	$139,095	40	$335
	NO	635	$259,988	60	$409
AGE 5 & BLW	YES	195	$77,718	19	$399
	NO	855	$321,365	81	$376
PAY_TYPE	DIRECT	7	$1,979	1	$283
	PROVIDER	1,046	$397,717	99	$380
REFUNDS		12	$3,073		$256

AVERAGE HOUSEHOLD SIZE: 3.1

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	591	$231,497	56	$392
	FuelOil	214	$81,097	20	$379
	Coal	2	$600	0	$300
	NaturalGas	54	$18,226	5	$338
	Kerosene	18	$7,609	2	$423
	Propane	161	$56,566	15	$351
	WoodOrOther	5	$1,711	0	$342
	BlendedFuel	5	$1,777	0	$355
INCOME RANGE	0 - 999	66	$66,000	6	$1,000
	1000 - 1999	3	$3,000	0	$1,000
	2000 - 2999	12	$12,000	1	$1,000
	3000 - 3999	10	$8,929	1	$893
	4000 - 4999	7	$5,753	1	$822
	5000 - 5999	17	$10,963	2	$645
	6000 - 6999	10	$5,713	1	$571
	7000 - 7999	23	$11,658	2	$507
	8000 - 8999	10	$4,192	1	$419
	9000 - 9999	19	$7,013	2	$369
	10000 - 10999	29	$9,710	3	$335
	11000 - 11999	95	$29,360	9	$309
	12000 - 12999	50	$15,092	5	$302
	13000 - 13999	34	$10,200	3	$300
	14000 - 14999	33	$9,900	3	$300
	15000 - 15999	48	$14,400	5	$300
	16000 - 16999	58	$17,400	6	$300
	17000 - 17999	42	$12,600	4	$300
	18000 - 18999	51	$15,300	5	$300
	19000 - 19999	42	$12,600	4	$300
	> 19999	391	$117,300	37	$300
PAYMENT TYPE	Regular	1,050	$399,083		$380
	Reissue	0	$0		$0
	Secondpay	2	$600		$300
	Underpay	1	$13		$13
	Extraordinary	0	$0		$0
TOTAL PMT		1,053	$399,696		$380
RECOUPMENTS		0	$0		$0
NET PAID			$399,696		
PMT SUB TYPE	APD	0	$0		$0
	STD	1,053	$399,696		$380

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 53

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	268	$92,352	52	$345
	Renter	168	$63,800	32	$380
	RenterWithHeat	1	$150	0	$150
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	54	$22,518	10	$417
	Roomer	0	$0	0	$0
	Other	27	$10,515	5	$389
RACE	AmericanIndian	1	$300	0	$300
	Other	2	$600	0	$300
	NativeHawaiian	0	$0	0	$0
	Black	5	$1,595	1	$319
	White	506	$185,640	98	$367
	Asian	1	$300	0	$300
	Unknown	3	$900	1	$300
DISABLED	YES	155	$46,985	30	$303
	NO	363	$142,350	70	$392
AGE 60 & ABV	YES	269	$83,968	52	$312
	NO	249	$105,367	48	$423
AGE 5 & BLW	YES	63	$26,025	12	$413
	NO	455	$163,310	88	$359
PAY_TYPE	DIRECT	11	$4,664	2	$424
	PROVIDER	507	$184,671	98	$364
REFUNDS		15	$2,974		$198

AVERAGE HOUSEHOLD SIZE: 3.25

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	115	$45,001	22	$391
	FuelOil	12	$4,403	2	$367
	Coal	12	$4,083	2	$340
	NaturalGas	318	$113,114	61	$356
	Kerosene	2	$600	0	$300
	Propane	45	$17,914	9	$398
	WoodOrOther	14	$4,220	3	$301
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	27	$25,600	5	$948
	1000 - 1999	6	$6,000	1	$1,000
	2000 - 2999	3	$3,000	1	$1,000
	3000 - 3999	4	$3,622	1	$906
	4000 - 4999	1	$805	0	$805
	5000 - 5999	6	$3,929	1	$655
	6000 - 6999	4	$2,246	1	$562
	7000 - 7999	11	$5,451	2	$496
	8000 - 8999	5	$2,306	1	$461
	9000 - 9999	6	$2,374	1	$396
	10000 - 10999	14	$4,543	3	$324
	11000 - 11999	81	$24,457	16	$302
	12000 - 12999	14	$4,200	3	$300
	13000 - 13999	33	$9,902	6	$300
	14000 - 14999	21	$6,300	4	$300
	15000 - 15999	24	$7,200	5	$300
	16000 - 16999	37	$11,100	7	$300
	17000 - 17999	19	$5,700	4	$300
	18000 - 18999	22	$6,600	4	$300
	19000 - 19999	23	$6,900	4	$300
	> 19999	157	$47,100	30	$300
PAYMENT TYPE	Regular	518	$189,335		$366
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		518	$189,335		$366
RECOUPMENTS		0	$0		$0
NET PAID			$189,335		
PMT SUB TYPE	APD	0	$0		$0
	STD	518	$189,335		$366

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 54

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	2,773	$1,016,676	52	$367
	Renter	2,060	$799,646	39	$388
	RenterWithHeat	35	$5,664	1	$162
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	375	$133,638	7	$356
	Roomer	3	$1,085	0	$362
	Other	92	$39,065	2	$425
RACE	AmericanIndian	17	$6,369	0	$375
	Other	377	$157,218	7	$417
	NativeHawaiian	17	$7,142	0	$420
	Black	162	$68,512	3	$423
	White	4,679	$1,721,512	88	$368
	Asian	12	$4,774	0	$398
	Unknown	74	$30,247	1	$409
DISABLED	YES	1,378	$422,436	26	$307
	NO	3,960	$1,573,338	74	$397
AGE 60 & ABV	YES	2,488	$784,599	47	$315
	NO	2,850	$1,211,175	53	$425
AGE 5 & BLW	YES	897	$359,945	17	$401
	NO	4,441	$1,635,829	83	$368
PAY_TYPE	DIRECT	72	$21,931	1	$305
	PROVIDER	5,293	$1,985,820	99	$375
REFUNDS		125	$34,043		$272

AVERAGE HOUSEHOLD SIZE: 3.04

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	1,644	$615,367	31	$374
	FuelOil	2,918	$1,105,458	55	$379
	Coal	366	$131,290	7	$359
	NaturalGas	180	$63,617	3	$353
	Kerosene	21	$7,946	0	$378
	Propane	199	$68,624	4	$345
	WoodOrOther	10	$3,472	0	$347
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	307	$305,100	6	$994
	1000 - 1999	40	$40,000	1	$1,000
	2000 - 2999	45	$44,500	1	$989
	3000 - 3999	42	$38,910	1	$926
	4000 - 4999	57	$46,694	1	$819
	5000 - 5999	45	$30,263	1	$673
	6000 - 6999	59	$33,945	1	$575
	7000 - 7999	75	$37,739	1	$503
	8000 - 8999	75	$32,488	1	$433
	9000 - 9999	78	$30,066	1	$385
	10000 - 10999	111	$36,771	2	$331
	11000 - 11999	618	$186,210	12	$301
	12000 - 12999	213	$63,322	4	$297
	13000 - 13999	233	$69,748	4	$299
	14000 - 14999	255	$76,050	5	$298
	15000 - 15999	236	$70,650	4	$299
	16000 - 16999	294	$87,900	6	$299
	17000 - 17999	254	$75,900	5	$299
	18000 - 18999	265	$79,050	5	$298
	19000 - 19999	284	$84,900	5	$299
	> 19999	1,751	$524,700	33	$300
PAYMENT TYPE	Regular	5,338	$1,995,774		$374
	Reissue	0	$0		$0
	Secondpay	25	$10,616		$425
	Underpay	2	$1,361		$680
	Extraordinary	0	$0		$0
TOTAL PMT		5,365	$2,007,751		$374
RECOUPMENTS		3	$700		$233
NET PAID			$2,007,051		
PMT SUB TYPE	APD	0	$0		$0
	STD	5,365	$2,007,751		$374

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 55

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	330	$113,090	39	$343
	Renter	424	$157,048	51	$370
	RenterWithHeat	5	$1,100	1	$220
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	57	$21,385	7	$375
	Roomer	2	$535	0	$268
	Other	19	$7,115	2	$374
RACE	AmericanIndian	0	$0	0	$0
	Other	23	$11,027	3	$479
	NativeHawaiian	2	$1,300	0	$650
	Black	9	$4,100	1	$456
	White	800	$282,946	96	$354
	Asian	3	$900	0	$300
	Unknown	0	$0	0	$0
DISABLED	YES	185	$57,626	22	$311
	NO	652	$242,647	78	$372
AGE 60 & ABV	YES	392	$127,306	47	$325
	NO	445	$172,967	53	$389
AGE 5 & BLW	YES	144	$54,339	17	$377
	NO	693	$245,934	83	$355
PAY_TYPE	DIRECT	21	$6,120	2	$291
	PROVIDER	821	$295,289	98	$360
REFUNDS		16	$2,967		$185

AVERAGE HOUSEHOLD SIZE: 3.06

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	304	$112,775	36	$371
	FuelOil	371	$131,417	44	$354
	Coal	2	$600	0	$300
	NaturalGas	57	$21,432	7	$376
	Kerosene	7	$2,768	1	$395
	Propane	85	$28,035	10	$330
	WoodOrOther	8	$2,250	1	$281
	BlendedFuel	3	$996	0	$332
INCOME RANGE	0 - 999	39	$38,500	5	$987
	1000 - 1999	5	$5,000	1	$1,000
	2000 - 2999	3	$2,924	0	$975
	3000 - 3999	7	$5,690	1	$813
	4000 - 4999	10	$7,670	1	$767
	5000 - 5999	4	$2,690	0	$672
	6000 - 6999	4	$2,220	0	$555
	7000 - 7999	13	$6,335	2	$487
	8000 - 8999	17	$7,200	2	$424
	9000 - 9999	13	$4,522	2	$348
	10000 - 10999	18	$5,925	2	$329
	11000 - 11999	94	$28,924	11	$308
	12000 - 12999	33	$10,023	4	$304
	13000 - 13999	26	$7,800	3	$300
	14000 - 14999	38	$11,400	5	$300
	15000 - 15999	30	$9,000	4	$300
	16000 - 16999	50	$15,000	6	$300
	17000 - 17999	39	$11,700	5	$300
	18000 - 18999	48	$14,400	6	$300
	19000 - 19999	39	$11,700	5	$300
	> 19999	307	$91,650	37	$299
PAYMENT TYPE	Regular	837	$300,273		$359
	Reissue	0	$0		$0
	Secondpay	5	$1,136		$227
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		842	$301,409		$358
RECOUPMENTS		3	$536		$179
NET PAID			$300,873		
PMT SUB TYPE	APD	0	$0		$0
	STD	842	$301,409		$358

Energy Assistance Summary (EASUM)

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,652	$593,103	49	$359
	Renter	1,315	$496,922	39	$378
	RenterWithHeat	52	$8,675	2	$167
	SubsidizedWithHeat	1	$300	0	$300
	SubsidizedNoHeat	243	$100,906	7	$415
	Roomer	1	$150	0	$150
	Other	104	$43,665	3	$420
RACE	AmericanIndian	7	$2,681	0	$383
	Other	32	$10,883	1	$340
	NativeHawaiian	2	$600	0	$300
	Black	25	$11,445	1	$458
	White	3,284	$1,211,855	98	$369
	Asian	1	$300	0	$300
	Unknown	17	$5,957	1	$350
DISABLED	YES	929	$284,968	28	$307
	NO	2,439	$958,753	72	$393
AGE 60 & ABV	YES	1,692	$537,881	50	$318
	NO	1,676	$705,840	50	$421
AGE 5 & BLW	YES	464	$190,768	14	$411
	NO	2,904	$1,052,953	86	$363
PAY_TYPE	DIRECT	67	$16,064	2	$240
	PROVIDER	3,378	$1,253,207	98	$371
REFUNDS		74	$22,935		$310

AVERAGE HOUSEHOLD SIZE: 3.03

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	836	$320,256	25	$383
	FuelOil	1,572	$577,302	47	$367
	Coal	113	$43,747	3	$387
	NaturalGas	439	$154,538	13	$352
	Kerosene	137	$50,348	4	$368
	Propane	202	$70,446	6	$349
	WoodOrOther	47	$19,684	1	$419
	BlendedFuel	22	$7,400	1	$336
INCOME RANGE	0 - 999	175	$172,600	5	$986
	1000 - 1999	39	$38,896	1	$997
	2000 - 2999	25	$24,628	1	$985
	3000 - 3999	24	$21,208	1	$884
	4000 - 4999	28	$23,149	1	$827
	5000 - 5999	38	$24,820	1	$653
	6000 - 6999	37	$20,932	1	$566
	7000 - 7999	50	$25,117	1	$502
	8000 - 8999	43	$18,577	1	$432
	9000 - 9999	65	$24,133	2	$371
	10000 - 10999	83	$27,549	2	$332
	11000 - 11999	479	$142,612	14	$298
	12000 - 12999	158	$46,950	5	$297
	13000 - 13999	155	$46,050	5	$297
	14000 - 14999	159	$47,400	5	$298
	15000 - 15999	144	$42,900	4	$298
	16000 - 16999	180	$53,700	5	$298
	17000 - 17999	159	$47,100	5	$296
	18000 - 18999	167	$49,200	5	$295
	19000 - 19999	163	$48,600	5	$298
	> 19999	997	$297,600	30	$298
PAYMENT TYPE	Regular	3,368	$1,243,721		$369
	Reissue	2	$600		$300
	Secondpay	75	$24,950		$333
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		3,445	$1,269,271		$368
RECOUPMENTS		13	$3,487		$268
NET PAID			$1,265,784		
PMT SUB TYPE	APD	0	$0		$0
	STD	3,445	$1,269,271		$368

Energy Assistance Summary (EASUM)

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	85	$31,551	39	$371
	Renter	75	$27,788	34	$371
	RenterWithHeat	2	$320	1	$160
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	53	$17,536	24	$331
	Roomer	0	$0	0	$0
	Other	4	$1,978	2	$494
RACE	AmericanIndian	0	$0	0	$0
	Other	0	$0	0	$0
	NativeHawaiian	0	$0	0	$0
	Black	4	$1,718	2	$430
	White	212	$76,555	97	$361
	Asian	0	$0	0	$0
	Unknown	3	$900	1	$300
DISABLED	YES	58	$17,688	26	$305
	NO	161	$61,485	74	$382
AGE 60 & ABV	YES	141	$45,764	64	$325
	NO	78	$33,409	36	$428
AGE 5 & BLW	YES	17	$7,362	8	$433
	NO	202	$71,811	92	$356
PAY_TYPE	DIRECT	6	$2,920	3	$487
	PROVIDER	215	$76,853	97	$357
REFUNDS		4	$762		$190

AVERAGE HOUSEHOLD SIZE: 2.31

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	101	$32,185	46	$319
	FuelOil	78	$30,191	36	$387
	Coal	1	$300	0	$300
	NaturalGas	0	$0	0	$0
	Kerosene	2	$1,316	1	$658
	Propane	25	$8,771	11	$351
	WoodOrOther	9	$5,510	4	$612
	BlendedFuel	3	$900	1	$300
INCOME RANGE	0 - 999	10	$10,000	5	$1,000
	1000 - 1999	0	$0	0	$0
	2000 - 2999	1	$1,000	0	$1,000
	3000 - 3999	3	$2,903	1	$968
	4000 - 4999	1	$800	0	$800
	5000 - 5999	0	$0	0	$0
	6000 - 6999	3	$1,788	1	$596
	7000 - 7999	2	$1,073	1	$536
	8000 - 8999	6	$2,829	3	$472
	9000 - 9999	6	$2,309	3	$385
	10000 - 10999	4	$1,426	2	$356
	11000 - 11999	40	$12,129	18	$303
	12000 - 12999	9	$2,700	4	$300
	13000 - 13999	14	$4,216	6	$301
	14000 - 14999	10	$3,000	5	$300
	15000 - 15999	10	$3,000	5	$300
	16000 - 16999	11	$3,300	5	$300
	17000 - 17999	15	$4,500	7	$300
	18000 - 18999	11	$3,300	5	$300
	19000 - 19999	10	$3,000	5	$300
	> 19999	53	$15,900	24	$300
PAYMENT TYPE	Regular	219	$79,173		$362
	Reissue	1	$300		$300
	Secondpay	1	$300		$300
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		221	$79,773		$361
RECOUPMENTS		1	$300		$300
NET PAID			$79,473		
PMT SUB TYPE	APD	0	$0		$0
	STD	221	$79,773		$361

Energy Assistance Summary (EASUM)

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	586	$205,598	47	$351
	Renter	542	$214,146	44	$395
	RenterWithHeat	4	$600	0	$150
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	86	$28,966	7	$337
	Roomer	0	$0	0	$0
	Other	22	$8,599	2	$391
RACE	AmericanIndian	4	$1,328	0	$332
	Other	26	$10,792	2	$415
	NativeHawaiian	1	$300	0	$300
	Black	8	$3,800	1	$475
	White	1,192	$438,249	96	$368
	Asian	2	$600	0	$300
	Unknown	7	$2,840	1	$406
DISABLED	YES	311	$100,290	25	$322
	NO	929	$357,619	75	$385
AGE 60 & ABV	YES	588	$188,871	47	$321
	NO	652	$269,038	53	$413
AGE 5 & BLW	YES	225	$88,421	18	$393
	NO	1,015	$369,488	82	$364
PAY_TYPE	DIRECT	16	$6,055	1	$378
	PROVIDER	1,233	$455,115	99	$369
REFUNDS		25	$6,188		$248

AVERAGE HOUSEHOLD SIZE: 3.3

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	349	$130,131	28	$373
	FuelOil	516	$189,204	42	$367
	Coal	5	$1,500	0	$300
	NaturalGas	36	$13,941	3	$387
	Kerosene	34	$13,355	3	$393
	Propane	249	$92,863	20	$373
	WoodOrOther	39	$12,160	3	$312
	BlendedFuel	12	$4,755	1	$396
INCOME RANGE	0 - 999	69	$67,600	6	$980
	1000 - 1999	10	$10,000	1	$1,000
	2000 - 2999	3	$3,000	0	$1,000
	3000 - 3999	9	$8,494	1	$944
	4000 - 4999	7	$5,963	1	$852
	5000 - 5999	8	$5,726	1	$716
	6000 - 6999	11	$6,529	1	$594
	7000 - 7999	20	$10,688	2	$534
	8000 - 8999	13	$6,010	1	$462
	9000 - 9999	21	$8,657	2	$412
	10000 - 10999	32	$11,493	3	$359
	11000 - 11999	148	$47,534	12	$321
	12000 - 12999	54	$16,284	4	$302
	13000 - 13999	54	$16,081	4	$298
	14000 - 14999	62	$18,600	5	$300
	15000 - 15999	58	$17,400	5	$300
	16000 - 16999	73	$21,900	6	$300
	17000 - 17999	56	$16,800	5	$300
	18000 - 18999	54	$16,200	4	$300
	19000 - 19999	44	$13,200	4	$300
	> 19999	434	$129,750	35	$299
PAYMENT TYPE	Regular	1,240	$457,909		$369
	Reissue	1	$439		$439
	Secondpay	8	$2,822		$353
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,249	$461,170		$369
RECOUPMENTS		28	$8,259		$295
NET PAID			$452,911		
PMT SUB TYPE	APD	0	$0		$0
	STD	1,249	$461,170		$369

Energy Assistance Summary (EASUM)

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	549	$200,688	47	$366
	Renter	510	$193,930	44	$380
	RenterWithHeat	9	$2,050	1	$228
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	75	$32,438	6	$433
	Roomer	0	$0	0	$0
	Other	29	$11,509	2	$397
RACE	AmericanIndian	4	$1,652	0	$413
	Other	17	$6,655	1	$391
	NativeHawaiian	0	$0	0	$0
	Black	17	$6,145	1	$361
	White	1,125	$423,392	96	$376
	Asian	1	$300	0	$300
	Unknown	8	$2,471	1	$309
DISABLED	YES	324	$101,761	28	$314
	NO	848	$338,854	72	$400
AGE 60 & ABV	YES	519	$170,248	44	$328
	NO	653	$270,367	56	$414
AGE 5 & BLW	YES	205	$82,190	17	$401
	NO	967	$358,425	83	$371
PAY_TYPE	DIRECT	20	$7,123	2	$356
	PROVIDER	1,158	$436,319	98	$377
REFUNDS		32	$9,726		$304

AVERAGE HOUSEHOLD SIZE: 3.38

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	301	$122,174	26	$406
	FuelOil	42	$15,507	4	$369
	Coal	31	$10,232	3	$330
	NaturalGas	676	$245,966	58	$364
	Kerosene	2	$1,307	0	$654
	Propane	90	$36,173	8	$402
	WoodOrOther	30	$9,256	3	$309
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	67	$66,000	6	$985
	1000 - 1999	10	$10,000	1	$1,000
	2000 - 2999	11	$11,000	1	$1,000
	3000 - 3999	15	$13,727	1	$915
	4000 - 4999	10	$8,142	1	$814
	5000 - 5999	8	$5,196	1	$650
	6000 - 6999	11	$6,358	1	$578
	7000 - 7999	18	$8,988	2	$499
	8000 - 8999	17	$7,690	1	$452
	9000 - 9999	26	$9,713	2	$374
	10000 - 10999	31	$10,106	3	$326
	11000 - 11999	140	$42,038	12	$300
	12000 - 12999	50	$15,000	4	$300
	13000 - 13999	63	$18,900	5	$300
	14000 - 14999	56	$16,507	5	$295
	15000 - 15999	44	$13,200	4	$300
	16000 - 16999	61	$18,300	5	$300
	17000 - 17999	44	$13,200	4	$300
	18000 - 18999	46	$13,800	4	$300
	19000 - 19999	56	$16,650	5	$297
	> 19999	388	$116,100	33	$299
PAYMENT TYPE	Regular	1,172	$440,615		$376
	Reissue	0	$0		$0
	Secondpay	5	$2,627		$525
	Underpay	1	$200		$200
	Extraordinary	0	$0		$0
TOTAL PMT		1,178	$443,442		$376
RECOUPMENTS		1	$684		$684
NET PAID			$442,758		
PMT SUB TYPE	APD	0	$0		$0
	STD	1,178	$443,442		$376

Energy Assistance Summary (EASUM)

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County 60

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	269	$94,721	31	$352
	Renter	372	$141,217	43	$380
	RenterWithHeat	1	$150	0	$150
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	209	$79,317	24	$380
	Roomer	0	$0	0	$0
	Other	11	$5,123	1	$466
RACE	AmericanIndian	2	$767	0	$384
	Other	30	$12,297	3	$410
	NativeHawaiian	0	$0	0	$0
	Black	39	$17,269	5	$443
	White	785	$288,395	91	$367
	Asian	2	$600	0	$300
	Unknown	4	$1,200	0	$300
DISABLED	YES	222	$68,902	26	$310
	NO	640	$251,626	74	$393
AGE 60 & ABV	YES	389	$125,024	45	$321
	NO	473	$195,504	55	$413
AGE 5 & BLW	YES	122	$50,974	14	$418
	NO	740	$269,554	86	$364
PAY_TYPE	DIRECT	10	$3,700	1	$370
	PROVIDER	856	$318,973	99	$373
REFUNDS		48	$11,044		$230

AVERAGE HOUSEHOLD SIZE: 2.62

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	465	$173,502	54	$373
	FuelOil	275	$100,934	32	$367
	Coal	4	$1,200	0	$300
	NaturalGas	32	$12,174	4	$380
	Kerosene	2	$600	0	$300
	Propane	79	$30,618	9	$388
	WoodOrOther	5	$1,500	1	$300
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	57	$57,000	7	$1,000
	1000 - 1999	3	$3,000	0	$1,000
	2000 - 2999	2	$1,981	0	$990
	3000 - 3999	9	$7,400	1	$822
	4000 - 4999	12	$8,974	1	$748
	5000 - 5999	12	$7,261	1	$605
	6000 - 6999	6	$3,017	1	$503
	7000 - 7999	11	$4,783	1	$435
	8000 - 8999	12	$4,788	1	$399
	9000 - 9999	16	$5,548	2	$347
	10000 - 10999	25	$7,718	3	$309
	11000 - 11999	101	$30,408	12	$301
	12000 - 12999	38	$11,400	4	$300
	13000 - 13999	51	$15,300	6	$300
	14000 - 14999	40	$12,000	5	$300
	15000 - 15999	39	$11,700	5	$300
	16000 - 16999	62	$18,600	7	$300
	17000 - 17999	36	$10,800	4	$300
	18000 - 18999	51	$15,300	6	$300
	19000 - 19999	38	$11,400	4	$300
	> 19999	241	$72,150	28	$299
PAYMENT TYPE	Regular	862	$320,528		$372
	Reissue	0	$0		$0
	Secondpay	3	$1,995		$665
	Underpay	1	$150		$150
	Extraordinary	0	$0		$0
TOTAL PMT		866	$322,673		$373
RECOUPMENTS		0	$0		$0
NET PAID			$322,673		
PMT SUB TYPE	APD	0	$0		$0
	STD	866	$322,673		$373

Energy Assistance Summary (EASUM)

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County 61

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	969	$350,286	48	$361
	Renter	683	$257,518	34	$377
	RenterWithHeat	9	$1,700	0	$189
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	305	$122,283	15	$401
	Roomer	1	$150	0	$150
	Other	40	$14,808	2	$370
RACE	AmericanIndian	11	$4,101	1	$373
	Other	26	$11,422	1	$439
	NativeHawaiian	2	$600	0	$300
	Black	38	$15,187	2	$400
	White	1,917	$711,041	96	$371
	Asian	1	$300	0	$300
	Unknown	12	$4,094	1	$341
DISABLED	YES	723	$221,866	36	$307
	NO	1,284	$524,879	64	$409
AGE 60 & ABV	YES	864	$269,870	43	$312
	NO	1,143	$476,875	57	$417
AGE 5 & BLW	YES	307	$127,758	15	$416
	NO	1,700	$618,987	85	$364
PAY_TYPE	DIRECT	18	$5,367	1	$298
	PROVIDER	1,995	$744,994	99	$373
REFUNDS		122	$26,728		$219

AVERAGE HOUSEHOLD SIZE: 3.25

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	554	$216,454	28	$391
	FuelOil	58	$20,322	3	$350
	Coal	4	$1,310	0	$328
	NaturalGas	1,169	$427,397	58	$366
	Kerosene	3	$1,321	0	$440
	Propane	185	$66,854	9	$361
	WoodOrOther	28	$10,839	1	$387
	BlendedFuel	6	$2,248	0	$375
INCOME RANGE	0 - 999	120	$118,800	6	$990
	1000 - 1999	13	$13,000	1	$1,000
	2000 - 2999	12	$12,000	1	$1,000
	3000 - 3999	28	$24,135	1	$862
	4000 - 4999	20	$15,472	1	$774
	5000 - 5999	21	$12,983	1	$618
	6000 - 6999	16	$8,602	1	$538
	7000 - 7999	27	$13,021	1	$482
	8000 - 8999	17	$6,952	1	$409
	9000 - 9999	36	$13,262	2	$368
	10000 - 10999	53	$16,603	3	$313
	11000 - 11999	347	$103,531	17	$298
	12000 - 12999	77	$23,100	4	$300
	13000 - 13999	98	$29,121	5	$297
	14000 - 14999	85	$25,500	4	$300
	15000 - 15999	85	$25,513	4	$300
	16000 - 16999	84	$25,200	4	$300
	17000 - 17999	70	$21,000	3	$300
	18000 - 18999	93	$27,900	5	$300
	19000 - 19999	80	$23,850	4	$298
	> 19999	625	$187,200	31	$300
PAYMENT TYPE	Regular	2,007	$746,745		$372
	Reissue	0	$0		$0
	Secondpay	6	$3,616		$603
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		2,013	$750,361		$373
RECOUPMENTS		5	$1,434		$287
NET PAID			$748,927		
PMT SUB TYPE	APD	0	$0		$0
	STD	2,013	$750,361		$373

Energy Assistance Summary (EASUM)

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	585	$213,764	53	$365
	Renter	448	$166,039	41	$371
	RenterWithHeat	14	$2,897	1	$207
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	36	$12,520	3	$348
	Roomer	1	$150	0	$150
	Other	21	$7,337	2	$349
RACE	AmericanIndian	2	$909	0	$454
	Other	7	$2,912	1	$416
	NativeHawaiian	1	$300	0	$300
	Black	12	$4,300	1	$358
	White	1,078	$391,918	98	$364
	Asian	1	$1,000	0	$1,000
	Unknown	4	$1,368	0	$342
DISABLED	YES	343	$105,711	31	$308
	NO	762	$296,996	69	$390
AGE 60 & ABV	YES	491	$156,101	44	$318
	NO	614	$246,606	56	$402
AGE 5 & BLW	YES	138	$54,839	12	$397
	NO	967	$347,868	88	$360
PAY_TYPE	DIRECT	29	$10,009	3	$345
	PROVIDER	1,081	$393,959	97	$364
REFUNDS		64	$13,762		$215

AVERAGE HOUSEHOLD SIZE: 3.07

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	253	$94,713	23	$374
	FuelOil	12	$4,063	1	$339
	Coal	2	$600	0	$300
	NaturalGas	621	$226,092	56	$364
	Kerosene	3	$966	0	$322
	Propane	183	$65,390	17	$357
	WoodOrOther	29	$10,283	3	$355
	BlendedFuel	2	$600	0	$300
INCOME RANGE	0 - 999	60	$59,500	5	$992
	1000 - 1999	3	$3,000	0	$1,000
	2000 - 2999	11	$11,000	1	$1,000
	3000 - 3999	10	$8,590	1	$859
	4000 - 4999	11	$8,165	1	$742
	5000 - 5999	6	$3,692	1	$615
	6000 - 6999	10	$5,093	1	$509
	7000 - 7999	22	$10,122	2	$460
	8000 - 8999	13	$5,326	1	$410
	9000 - 9999	24	$8,657	2	$361
	10000 - 10999	38	$11,992	3	$316
	11000 - 11999	147	$44,141	13	$300
	12000 - 12999	52	$15,463	5	$297
	13000 - 13999	58	$17,466	5	$301
	14000 - 14999	54	$16,200	5	$300
	15000 - 15999	47	$13,800	4	$294
	16000 - 16999	56	$16,500	5	$295
	17000 - 17999	52	$15,300	5	$294
	18000 - 18999	48	$14,400	4	$300
	19000 - 19999	51	$15,150	5	$297
	> 19999	332	$99,150	30	$299
PAYMENT TYPE	Regular	1,105	$402,707		$364
	Reissue	0	$0		$0
	Secondpay	4	$1,111		$278
	Underpay	1	$150		$150
	Extraordinary	0	$0		$0
TOTAL PMT		1,110	$403,968		$364
RECOUPMENTS		2	$450		$225
NET PAID			$403,518		
PMT SUB TYPE	APD	0	$0		$0
	STD	1,110	$403,968		$364

Energy Assistance Summary (EASUM)

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County 63

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,935	$710,152	45	$367
	Renter	1,946	$763,284	45	$392
	RenterWithHeat	25	$4,203	1	$168
	SubsidizedWithHeat	1	$300	0	$300
	SubsidizedNoHeat	354	$152,388	8	$430
	Roomer	0	$0	0	$0
	Other	74	$35,577	2	$481
RACE	AmericanIndian	7	$2,896	0	$414
	Other	47	$17,679	1	$376
	NativeHawaiian	3	$972	0	$324
	Black	412	$162,833	10	$395
	White	3,819	$1,460,616	88	$382
	Asian	9	$3,436	0	$382
	Unknown	38	$17,472	1	$460
DISABLED	YES	1,283	$394,990	30	$308
	NO	3,052	$1,270,914	70	$416
AGE 60 & ABV	YES	1,888	$604,728	44	$320
	NO	2,447	$1,061,176	56	$434
AGE 5 & BLW	YES	691	$294,587	16	$426
	NO	3,644	$1,371,317	84	$376
PAY_TYPE	DIRECT	43	$20,607	1	$479
	PROVIDER	4,302	$1,650,947	99	$384
REFUNDS		94	$22,276		$237

AVERAGE HOUSEHOLD SIZE: 2.98

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	1,688	$676,374	39	$401
	FuelOil	498	$195,236	11	$392
	Coal	3	$900	0	$300
	NaturalGas	1,955	$725,308	45	$371
	Kerosene	107	$35,649	2	$333
	Propane	79	$30,774	2	$390
	WoodOrOther	4	$1,363	0	$341
	BlendedFuel	1	$300	0	$300
INCOME RANGE	0 - 999	309	$306,400	7	$992
	1000 - 1999	50	$50,000	1	$1,000
	2000 - 2999	41	$39,982	1	$975
	3000 - 3999	45	$36,119	1	$803
	4000 - 4999	54	$37,984	1	$703
	5000 - 5999	53	$30,555	1	$577
	6000 - 6999	44	$22,275	1	$506
	7000 - 7999	68	$30,511	2	$449
	8000 - 8999	79	$30,944	2	$392
	9000 - 9999	85	$28,128	2	$331
	10000 - 10999	140	$43,230	3	$309
	11000 - 11999	645	$194,576	15	$302
	12000 - 12999	181	$54,000	4	$298
	13000 - 13999	212	$63,600	5	$300
	14000 - 14999	173	$51,750	4	$299
	15000 - 15999	185	$55,200	4	$298
	16000 - 16999	211	$63,150	5	$299
	17000 - 17999	212	$63,450	5	$299
	18000 - 18999	197	$58,950	5	$299
	19000 - 19999	214	$64,200	5	$300
	> 19999	1,136	$339,900	26	$299
PAYMENT TYPE	Regular	4,335	$1,665,904		$384
	Reissue	1	$1,000		$1,000
	Secondpay	7	$3,667		$524
	Underpay	2	$983		$492
	Extraordinary	0	$0		$0
TOTAL PMT		4,345	$1,671,554		$385
RECOUPMENTS		6	$2,674		$446
NET PAID			$1,668,880		
PMT SUB TYPE	APD	0	$0		$0
	STD	4,345	$1,671,554		$385

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

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Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	673	$236,840	49	$352
	Renter	586	$216,872	43	$370
	RenterWithHeat	4	$600	0	$150
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	86	$34,237	6	$398
	Roomer	0	$0	0	$0
	Other	27	$10,682	2	$396
RACE	AmericanIndian	10	$3,766	1	$377
	Other	38	$14,904	3	$392
	NativeHawaiian	1	$300	0	$300
	Black	20	$6,724	1	$336
	White	1,293	$468,543	94	$362
	Asian	3	$994	0	$331
	Unknown	11	$4,000	1	$364
DISABLED	YES	333	$105,465	24	$317
	NO	1,043	$393,766	76	$378
AGE 60 & ABV	YES	710	$229,874	52	$324
	NO	666	$269,357	48	$404
AGE 5 & BLW	YES	204	$77,569	15	$380
	NO	1,172	$421,662	85	$360
PAY_TYPE	DIRECT	9	$3,100	1	$344
	PROVIDER	1,376	$499,886	99	$363
REFUNDS		24	$6,251		$260

AVERAGE HOUSEHOLD SIZE: 2.77

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	486	$178,026	35	$366
	FuelOil	447	$162,152	32	$363
	Coal	9	$2,704	1	$300
	NaturalGas	106	$38,218	8	$361
	Kerosene	30	$11,575	2	$386
	Propane	261	$94,145	19	$361
	WoodOrOther	15	$4,719	1	$315
	BlendedFuel	22	$7,692	2	$350
INCOME RANGE	0 - 999	56	$54,600	4	$975
	1000 - 1999	14	$14,000	1	$1,000
	2000 - 2999	8	$8,000	1	$1,000
	3000 - 3999	8	$7,529	1	$941
	4000 - 4999	5	$4,550	0	$910
	5000 - 5999	17	$11,807	1	$695
	6000 - 6999	8	$4,763	1	$595
	7000 - 7999	20	$10,466	1	$523
	8000 - 8999	22	$10,085	2	$458
	9000 - 9999	22	$9,179	2	$417
	10000 - 10999	38	$13,842	3	$364
	11000 - 11999	175	$55,902	13	$319
	12000 - 12999	61	$18,476	4	$303
	13000 - 13999	61	$18,332	4	$301
	14000 - 14999	72	$21,600	5	$300
	15000 - 15999	64	$19,050	5	$298
	16000 - 16999	64	$19,050	5	$298
	17000 - 17999	84	$25,200	6	$300
	18000 - 18999	81	$24,300	6	$300
	19000 - 19999	73	$21,750	5	$298
	> 19999	423	$126,750	31	$300
PAYMENT TYPE	Regular	1,376	$499,231		$363
	Reissue	2	$1,150		$575
	Secondpay	6	$2,576		$429
	Underpay	1	$29		$29
	Extraordinary	0	$0		$0
TOTAL PMT		1,385	$502,986		$363
RECOUPMENTS		2	$339		$170
NET PAID			$502,647		
PMT SUB TYPE	APD	0	$0		$0
	STD	1,385	$502,986		$363

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 65

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	3,956	$1,417,437	45	$358
	Renter	3,691	$1,398,849	42	$379
	RenterWithHeat	69	$12,200	1	$177
	SubsidizedWithHeat	2	$495	0	$248
	SubsidizedNoHeat	1,001	$393,188	11	$393
	Roomer	3	$1,012	0	$337
	Other	161	$67,217	2	$417
RACE	AmericanIndian	15	$7,622	0	$508
	Other	163	$67,548	2	$414
	NativeHawaiian	8	$3,306	0	$413
	Black	558	$222,542	6	$399
	White	8,012	$2,938,583	90	$367
	Asian	28	$11,718	0	$418
	Unknown	99	$39,079	1	$395
DISABLED	YES	2,405	$738,489	27	$307
	NO	6,478	$2,551,909	73	$394
AGE 60 & ABV	YES	4,286	$1,361,175	48	$318
	NO	4,597	$1,929,223	52	$420
AGE 5 & BLW	YES	1,145	$471,698	13	$412
	NO	7,738	$2,818,700	87	$364
PAY_TYPE	DIRECT	94	$28,072	1	$299
	PROVIDER	8,812	$3,270,195	99	$371
REFUNDS		132	$33,620		$255

AVERAGE HOUSEHOLD SIZE: 2.88

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	3,057	$1,164,323	34	$381
	FuelOil	1,556	$565,130	18	$363
	Coal	12	$4,033	0	$336
	NaturalGas	3,590	$1,307,378	40	$364
	Kerosene	274	$102,412	3	$374
	Propane	345	$126,714	4	$367
	WoodOrOther	37	$15,381	0	$416
	BlendedFuel	12	$5,027	0	$419
INCOME RANGE	0 - 999	518	$510,483	6	$985
	1000 - 1999	78	$78,000	1	$1,000
	2000 - 2999	71	$71,000	1	$1,000
	3000 - 3999	80	$66,745	1	$834
	4000 - 4999	94	$70,456	1	$750
	5000 - 5999	93	$55,013	1	$592
	6000 - 6999	105	$54,316	1	$517
	7000 - 7999	96	$43,171	1	$450
	8000 - 8999	133	$52,372	1	$394
	9000 - 9999	198	$68,686	2	$347
	10000 - 10999	268	$81,974	3	$306
	11000 - 11999	1,247	$372,816	14	$299
	12000 - 12999	409	$122,116	5	$299
	13000 - 13999	434	$129,750	5	$299
	14000 - 14999	419	$125,100	5	$299
	15000 - 15999	418	$125,250	5	$300
	16000 - 16999	422	$126,000	5	$299
	17000 - 17999	429	$128,250	5	$299
	18000 - 18999	444	$132,750	5	$299
	19000 - 19999	475	$142,050	5	$299
	> 19999	2,452	$734,100	28	$299
PAYMENT TYPE	Regular	8,883	$3,290,398		$370
	Reissue	3	$508		$169
	Secondpay	16	$6,307		$394
	Underpay	3	$1,010		$337
	Extraordinary	1	$44		$44
TOTAL PMT		8,906	$3,298,267		$370
RECOUPMENTS		13	$4,850		$373
NET PAID			$3,293,417		
PMT SUB TYPE	APD	0	$0		$0
	STD	8,906	$3,298,267		$370

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 66

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	383	$145,794	46	$381
	Renter	310	$118,358	37	$382
	RenterWithHeat	4	$1,328	0	$332
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	119	$46,522	14	$391
	Roomer	0	$0	0	$0
	Other	18	$7,541	2	$419
RACE	AmericanIndian	3	$1,517	0	$506
	Other	11	$4,106	1	$373
	NativeHawaiian	1	$1,000	0	$1,000
	Black	3	$900	0	$300
	White	812	$310,820	97	$383
	Asian	1	$300	0	$300
	Unknown	3	$900	0	$300
DISABLED	YES	202	$65,366	24	$324
	NO	632	$254,177	76	$402
AGE 60 & ABV	YES	405	$132,665	49	$328
	NO	429	$186,878	51	$436
AGE 5 & BLW	YES	129	$54,947	15	$426
	NO	705	$264,596	85	$375
PAY_TYPE	DIRECT	8	$2,428	1	$304
	PROVIDER	831	$318,602	99	$383
REFUNDS		7	$2,513		$359

AVERAGE HOUSEHOLD SIZE: 2.9

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	268	$101,846	32	$380
	FuelOil	320	$124,908	38	$390
	Coal	14	$4,459	2	$318
	NaturalGas	8	$2,400	1	$300
	Kerosene	28	$12,344	3	$441
	Propane	176	$67,276	21	$382
	WoodOrOther	11	$3,362	1	$306
	BlendedFuel	9	$2,948	1	$328
INCOME RANGE	0 - 999	51	$49,100	6	$963
	1000 - 1999	7	$7,000	1	$1,000
	2000 - 2999	8	$7,500	1	$938
	3000 - 3999	3	$2,917	0	$972
	4000 - 4999	7	$6,807	1	$972
	5000 - 5999	6	$4,420	1	$737
	6000 - 6999	12	$7,617	1	$635
	7000 - 7999	15	$8,251	2	$550
	8000 - 8999	8	$3,736	1	$467
	9000 - 9999	13	$5,533	2	$426
	10000 - 10999	33	$12,253	4	$371
	11000 - 11999	114	$37,134	14	$326
	12000 - 12999	39	$11,994	5	$308
	13000 - 13999	40	$12,031	5	$301
	14000 - 14999	34	$10,200	4	$300
	15000 - 15999	38	$11,400	5	$300
	16000 - 16999	32	$9,600	4	$300
	17000 - 17999	45	$13,500	5	$300
	18000 - 18999	31	$9,300	4	$300
	19000 - 19999	40	$11,850	5	$296
	> 19999	258	$77,400	31	$300
PAYMENT TYPE	Regular	834	$319,543		$383
	Reissue	1	$300		$300
	Secondpay	4	$1,187		$297
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		839	$321,030		$383
RECOUPMENTS		3	$554		$185
NET PAID			$320,476		
PMT SUB TYPE	APD	0	$0		$0
	STD	839	$321,030		$383

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 67

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	2,089	$725,634	36	$347
	Renter	3,208	$1,127,339	55	$351
	RenterWithHeat	65	$10,520	1	$162
	SubsidizedWithHeat	1	$300	0	$300
	SubsidizedNoHeat	450	$160,218	8	$356
	Roomer	3	$450	0	$150
	Other	59	$22,586	1	$383
RACE	AmericanIndian	30	$10,139	1	$338
	Other	894	$322,541	15	$361
	NativeHawaiian	20	$5,995	0	$300
	Black	868	$306,155	15	$353
	White	3,847	$1,324,625	65	$344
	Asian	34	$13,181	1	$388
	Unknown	182	$64,411	3	$354
DISABLED	YES	1,613	$489,760	27	$304
	NO	4,262	$1,557,287	73	$365
AGE 60 & ABV	YES	2,259	$708,411	38	$314
	NO	3,616	$1,338,636	62	$370
AGE 5 & BLW	YES	1,305	$478,239	22	$366
	NO	4,570	$1,568,808	78	$343
PAY_TYPE	DIRECT	106	$26,309	2	$248
	PROVIDER	5,782	$2,025,591	98	$350
REFUNDS		138	$29,120		$211

AVERAGE HOUSEHOLD SIZE: 3.4

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	2,589	$909,623	44	$351
	FuelOil	676	$238,205	12	$352
	Coal	2	$600	0	$300
	NaturalGas	2,232	$770,584	38	$345
	Kerosene	21	$7,268	0	$346
	Propane	344	$116,767	6	$339
	WoodOrOther	11	$4,000	0	$364
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	238	$236,738	4	$995
	1000 - 1999	27	$26,906	0	$997
	2000 - 2999	35	$32,710	1	$935
	3000 - 3999	45	$34,540	1	$768
	4000 - 4999	56	$38,669	1	$691
	5000 - 5999	57	$31,474	1	$552
	6000 - 6999	69	$32,435	1	$470
	7000 - 7999	95	$39,177	2	$412
	8000 - 8999	74	$26,089	1	$353
	9000 - 9999	95	$30,514	2	$321
	10000 - 10999	136	$41,382	2	$304
	11000 - 11999	624	$187,101	11	$300
	12000 - 12999	254	$75,926	4	$299
	13000 - 13999	254	$75,786	4	$298
	14000 - 14999	295	$87,900	5	$298
	15000 - 15999	273	$81,300	5	$298
	16000 - 16999	288	$85,200	5	$296
	17000 - 17999	276	$82,800	5	$300
	18000 - 18999	297	$87,600	5	$295
	19000 - 19999	286	$85,050	5	$297
	> 19999	2,101	$627,750	36	$299
PAYMENT TYPE	Regular	5,875	$2,047,047		$348
	Reissue	1	$300		$300
	Secondpay	11	$4,412		$401
	Underpay	1	$141		$141
	Extraordinary	0	$0		$0
TOTAL PMT		5,888	$2,051,900		$348
RECOUPMENTS		5	$3,217		$643
NET PAID			$2,048,683		
PMT SUB TYPE	APD	0	$0		$0
	STD	5,888	$2,051,900		$348

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

STATE WIDE

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	109,041	$38,875,508	39	$357
	Renter	129,024	$48,991,514	46	$380
	RenterWithHeat	2,930	$563,111	1	$192
	SubsidizedWithHeat	29	$9,080	0	$313
	SubsidizedNoHeat	34,188	$13,273,511	12	$388
	Roomer	156	$42,684	0	$274
	Other	3,707	$1,526,309	1	$412
RACE	AmericanIndian	799	$327,199	0	$410
	Other	25,179	$9,397,536	9	$373
	NativeHawaiian	511	$222,181	0	$435
	Black	62,528	$23,854,259	22	$381
	White	180,268	$65,897,156	65	$366
	Asian	5,311	$1,852,483	2	$349
	Unknown	4,479	$1,730,903	2	$386
DISABLED	YES	79,496	$24,384,755	28	$307
	NO	199,579	$78,896,962	72	$395
AGE 60 & ABV	YES	122,711	$38,977,749	44	$318
	NO	156,364	$64,303,968	56	$411
AGE 5 & BLW	YES	48,329	$19,345,800	17	$400
	NO	230,746	$83,935,917	83	$364
PAY_TYPE	DIRECT	4,073	$1,255,663	1	$308
	PROVIDER	276,049	$102,379,407	99	$371
REFUNDS		7,425	$1,788,857		$241

AVERAGE HOUSEHOLD SIZE: 3.07

* Counts, Amounts ($), % and AVG from HOUSING, RACE, DISABLED, OVER-60 and INCOME RANGE category are from Regular payments only

** Counts, Amounts ($), % and AVG from PAY_TYPE category are from All Payment Types (Regular, Reissue, Secondpay, Underpay and Extraordinary)

*** Counts, Amounts ($), % and AVG from PAYMENT_SENT category are from All Payment Types (Regular, Reissue, Secondpay, Underpay and Extraordinary)

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	97,304	$36,943,650	35	$380
	FuelOil	47,107	$17,400,721	17	$369
	Coal	1,414	$492,855	1	$349
	NaturalGas	118,465	$43,086,814	42	$364
	Kerosene	2,331	$862,569	1	$370
	Propane	10,670	$3,821,310	4	$358
	WoodOrOther	1,172	$442,342	0	$377
	BlendedFuel	612	$231,456	0	$378
INCOME RANGE	0 - 999	15,997	$15,793,209	6	$987
	1000 - 1999	2,418	$2,402,835	1	$994
	2000 - 2999	2,361	$2,279,810	1	$966
	3000 - 3999	2,799	$2,270,272	1	$811
	4000 - 4999	3,097	$2,253,865	1	$728
	5000 - 5999	2,969	$1,737,990	1	$585
	6000 - 6999	3,156	$1,616,970	1	$512
	7000 - 7999	4,275	$1,908,547	2	$446
	8000 - 8999	3,896	$1,525,415	1	$392
	9000 - 9999	5,280	$1,799,432	2	$341
	10000 - 10999	8,101	$2,527,427	3	$312
	11000 - 11999	42,794	$12,839,837	15	$300
	12000 - 12999	11,779	$3,515,188	4	$298
	13000 - 13999	12,495	$3,725,789	4	$298
	14000 - 14999	12,156	$3,626,187	4	$298
	15000 - 15999	12,649	$3,771,163	5	$298
	16000 - 16999	13,837	$4,123,800	5	$298
	17000 - 17999	13,068	$3,900,000	5	$298
	18000 - 18999	12,498	$3,727,650	4	$298
	19000 - 19999	12,211	$3,643,200	4	$298
	> 19999	81,231	$24,288,750	29	$299
PAYMENT TYPE	Regular	279,075	$103,281,717		$370
	Reissue	108	$33,316		$308
	Secondpay	847	$287,912		$340
	Underpay	69	$21,180		$307
	Extraordinary	23	$10,945		$476
TOTAL PMT		280,122	$103,635,070		$370
RECOUPMENTS		353	$106,925		$303
NET PAID			$103,528,145		
PMT SUB TYPE	APD	0	$0		$0
	STD	280,122	$103,635,070		$370

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 01

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	171	$93,101	46	$544
	Renter	183	$86,989	50	$475
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	10	$4,593	3	$459
	Roomer	0	$0	0	$0
	Other	5	$1,747	1	$349
RACE	AmericanIndian	3	$1,970	1	$657
	Other	14	$6,601	4	$472
	NativeHawaiian	0	$0	0	$0
	Black	11	$4,949	3	$450
	White	332	$169,264	90	$510
	Asian	0	$0	0	$0
	Unknown	9	$3,645	2	$405
DISABLED	YES	110	$52,983	30	$482
	NO	259	$133,447	70	$515
AGE 60 & ABV	YES	177	$87,611	48	$495
	NO	192	$98,819	52	$515
AGE 5 & BLW	YES	68	$33,829	18	$497
	NO	301	$152,601	82	$507
PAY_TYPE	DIRECT	1	$1,000	0	$1,000
	PROVIDER	368	$185,430	100	$504
REFUNDS		0	$0		$0

AVERAGE HOUSEHOLD SIZE: 3.57

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	61	$25,368	17	$416
	FuelOil	194	$115,393	53	$595
	Coal	1	$1,000	0	$1,000
	NaturalGas	16	$5,935	4	$371
	Kerosene	3	$2,419	1	$806
	Propane	93	$35,316	25	$380
	WoodOrOther	1	$1,000	0	$1,000
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	7	$3,790	2	$541
	1000 - 1999	0	$0	0	$0
	2000 - 2999	0	$0	0	$0
	3000 - 3999	3	$1,312	1	$437
	4000 - 4999	2	$1,349	1	$674
	5000 - 5999	2	$254	1	$127
	6000 - 6999	2	$2,000	1	$1,000
	7000 - 7999	6	$3,475	2	$579
	8000 - 8999	5	$2,616	1	$523
	9000 - 9999	2	$1,603	1	$802
	10000 - 10999	13	$6,444	4	$496
	11000 - 11999	32	$18,658	9	$583
	12000 - 12999	16	$7,838	4	$490
	13000 - 13999	12	$6,363	3	$530
	14000 - 14999	15	$6,341	4	$423
	15000 - 15999	14	$7,208	4	$515
	16000 - 16999	16	$9,385	4	$587
	17000 - 17999	8	$3,994	2	$499
	18000 - 18999	16	$7,423	4	$464
	19000 - 19999	25	$11,474	7	$459
	> 19999	173	$84,902	47	$491
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	369	$186,430		$505
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		369	$186,430		$505
RECOUPMENTS		0	$0		$0
NET PAID			$186,430		

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 02

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	445	$251,227	24	$565
	Renter	990	$498,005	53	$503
	RenterWithHeat	10	$4,763	1	$476
	SubsidizedWithHeat	22	$11,705	1	$532
	SubsidizedNoHeat	387	$162,924	21	$421
	Roomer	0	$0	0	$0
	Other	12	$7,623	1	$635
RACE	AmericanIndian	5	$1,900	0	$380
	Other	42	$19,192	2	$457
	NativeHawaiian	0	$0	0	$0
	Black	979	$469,034	52	$479
	White	801	$427,347	43	$534
	Asian	8	$3,470	0	$434
	Unknown	31	$15,304	2	$494
DISABLED	YES	534	$249,794	29	$468
	NO	1,332	$686,455	71	$515
AGE 60 & ABV	YES	433	$228,242	23	$527
	NO	1,433	$708,007	77	$494
AGE 5 & BLW	YES	410	$200,920	22	$490
	NO	1,456	$735,328	78	$505
PAY_TYPE	DIRECT	0	$0	0	$0
	PROVIDER	1,867	$936,722	100	$502
REFUNDS		10	$4,525		$452

AVERAGE HOUSEHOLD SIZE: 3.57

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	1,022	$474,923	55	$465
	FuelOil	172	$121,330	9	$705
	Coal	0	$0	0	$0
	NaturalGas	612	$302,661	33	$495
	Kerosene	35	$20,565	2	$588
	Propane	22	$15,015	1	$682
	WoodOrOther	0	$0	0	$0
	BlendedFuel	3	$1,755	0	$585
INCOME RANGE	0 - 999	206	$106,439	11	$517
	1000 - 1999	37	$15,661	2	$423
	2000 - 2999	20	$8,188	1	$409
	3000 - 3999	23	$13,374	1	$581
	4000 - 4999	29	$16,801	2	$579
	5000 - 5999	20	$11,382	1	$569
	6000 - 6999	23	$10,578	1	$460
	7000 - 7999	36	$21,192	2	$589
	8000 - 8999	23	$12,483	1	$543
	9000 - 9999	39	$18,659	2	$478
	10000 - 10999	49	$28,808	3	$588
	11000 - 11999	261	$120,466	14	$462
	12000 - 12999	67	$32,778	4	$489
	13000 - 13999	53	$28,343	3	$535
	14000 - 14999	63	$32,035	3	$508
	15000 - 15999	54	$24,026	3	$445
	16000 - 16999	67	$35,718	4	$533
	17000 - 17999	62	$26,568	3	$429
	18000 - 18999	59	$28,863	3	$489
	19000 - 19999	50	$24,286	3	$486
	> 19999	625	$319,600	33	$511
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,866	$936,248		$502
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	1	$474		$474
TOTAL PMT		1,867	$936,722		$502
RECOUPMENTS		0	$0		$0
NET PAID			$936,722		

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 03

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	215	$128,913	56	$600
	Renter	156	$88,896	40	$570
	RenterWithHeat	1	$285	0	$285
	SubsidizedWithHeat	2	$452	1	$226
	SubsidizedNoHeat	5	$1,997	1	$399
	Roomer	0	$0	0	$0
	Other	7	$5,305	2	$758
RACE	AmericanIndian	1	$418	0	$418
	Other	1	$161	0	$161
	NativeHawaiian	0	$0	0	$0
	Black	2	$804	1	$402
	White	381	$223,467	99	$587
	Asian	0	$0	0	$0
	Unknown	1	$1,000	0	$1,000
DISABLED	YES	125	$68,311	32	$546
	NO	261	$157,538	68	$604
AGE 60 & ABV	YES	153	$96,594	40	$631
	NO	233	$129,254	60	$555
AGE 5 & BLW	YES	53	$29,302	14	$553
	NO	333	$196,546	86	$590
PAY_TYPE	DIRECT	6	$1,710	2	$285
	PROVIDER	380	$224,138	98	$590
REFUNDS		0	$0		$0

AVERAGE HOUSEHOLD SIZE: 3.58

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	107	$42,811	28	$400
	FuelOil	153	$105,665	40	$691
	Coal	4	$1,999	1	$500
	NaturalGas	27	$18,222	7	$675
	Kerosene	13	$10,605	3	$816
	Propane	76	$41,009	20	$540
	WoodOrOther	5	$4,730	1	$946
	BlendedFuel	1	$808	0	$808
INCOME RANGE	0 - 999	31	$18,361	8	$592
	1000 - 1999	1	$34	0	$34
	2000 - 2999	2	$1,880	1	$940
	3000 - 3999	2	$1,159	1	$580
	4000 - 4999	5	$2,345	1	$469
	5000 - 5999	3	$1,874	1	$625
	6000 - 6999	9	$5,806	2	$645
	7000 - 7999	4	$1,654	1	$414
	8000 - 8999	1	$602	0	$602
	9000 - 9999	3	$1,090	1	$363
	10000 - 10999	9	$4,555	2	$506
	11000 - 11999	48	$29,543	12	$615
	12000 - 12999	16	$10,264	4	$642
	13000 - 13999	20	$13,174	5	$659
	14000 - 14999	9	$5,370	2	$597
	15000 - 15999	14	$8,124	4	$580
	16000 - 16999	13	$7,554	3	$581
	17000 - 17999	18	$11,649	5	$647
	18000 - 18999	19	$10,149	5	$534
	19000 - 19999	14	$8,900	4	$636
	> 19999	145	$81,764	38	$564
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	386	$225,848		$585
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		386	$225,848		$585
RECOUPMENTS		0	$0		$0
NET PAID			$225,848		

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 04

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	370	$211,927	41	$573
	Renter	472	$244,105	52	$517
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	52	$16,383	6	$315
	Roomer	0	$0	0	$0
	Other	12	$8,349	1	$696
RACE	AmericanIndian	1	$1,000	0	$1,000
	Other	17	$9,922	2	$584
	NativeHawaiian	0	$0	0	$0
	Black	154	$67,126	17	$436
	White	729	$398,925	80	$547
	Asian	0	$0	0	$0
	Unknown	5	$3,791	1	$758
DISABLED	YES	288	$144,475	32	$502
	NO	618	$336,289	68	$544
AGE 60 & ABV	YES	313	$176,982	35	$565
	NO	593	$303,782	65	$512
AGE 5 & BLW	YES	156	$81,577	17	$523
	NO	750	$399,187	83	$532
PAY_TYPE	DIRECT	0	$0	0	$0
	PROVIDER	906	$480,764	100	$531
REFUNDS		3	$966		$322

AVERAGE HOUSEHOLD SIZE: 3.3

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	217	$92,808	24	$428
	FuelOil	358	$238,438	40	$666
	Coal	0	$0	0	$0
	NaturalGas	203	$81,999	22	$404
	Kerosene	26	$17,198	3	$661
	Propane	86	$40,292	9	$469
	WoodOrOther	3	$2,315	0	$772
	BlendedFuel	13	$7,714	1	$593
INCOME RANGE	0 - 999	74	$34,130	8	$461
	1000 - 1999	1	$1,000	0	$1,000
	2000 - 2999	8	$3,349	1	$419
	3000 - 3999	8	$5,609	1	$701
	4000 - 4999	6	$4,164	1	$694
	5000 - 5999	10	$4,705	1	$470
	6000 - 6999	6	$3,012	1	$502
	7000 - 7999	17	$10,325	2	$607
	8000 - 8999	10	$6,345	1	$634
	9000 - 9999	9	$6,552	1	$728
	10000 - 10999	31	$13,741	3	$443
	11000 - 11999	117	$53,910	13	$461
	12000 - 12999	35	$16,332	4	$467
	13000 - 13999	34	$20,364	4	$599
	14000 - 14999	34	$18,650	4	$549
	15000 - 15999	30	$15,316	3	$511
	16000 - 16999	38	$20,021	4	$527
	17000 - 17999	35	$17,820	4	$509
	18000 - 18999	39	$20,664	4	$530
	19000 - 19999	36	$21,486	4	$597
	> 19999	328	$183,267	36	$559
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	906	$480,764		$531
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		906	$480,764		$531
RECOUPMENTS		0	$0		$0
NET PAID			$480,764		

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 05

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	898	$515,652	56	$574
	Renter	593	$336,464	37	$567
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	54	$31,362	3	$581
	Roomer	0	$0	0	$0
	Other	71	$38,185	4	$538
RACE	AmericanIndian	4	$2,176	0	$544
	Other	22	$13,706	1	$623
	NativeHawaiian	0	$0	0	$0
	Black	5	$1,999	0	$400
	White	1,578	$901,147	98	$571
	Asian	1	$409	0	$409
	Unknown	6	$2,226	0	$371
DISABLED	YES	491	$261,357	30	$532
	NO	1,125	$660,306	70	$587
AGE 60 & ABV	YES	826	$453,110	51	$549
	NO	790	$468,553	49	$593
AGE 5 & BLW	YES	242	$150,250	15	$621
	NO	1,374	$771,413	85	$561
PAY_TYPE	DIRECT	6	$1,544	0	$257
	PROVIDER	1,610	$920,119	100	$572
REFUNDS		0	$0		$0

AVERAGE HOUSEHOLD SIZE: 3.43

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	47	$25,800	3	$549
	FuelOil	1,306	$751,130	81	$575
	Coal	23	$18,856	1	$820
	NaturalGas	0	$0	0	$0
	Kerosene	49	$31,482	3	$642
	Propane	123	$42,348	8	$344
	WoodOrOther	53	$43,505	3	$821
	BlendedFuel	15	$8,541	1	$569
INCOME RANGE	0 - 999	63	$43,294	4	$687
	1000 - 1999	2	$864	0	$432
	2000 - 2999	9	$5,360	1	$596
	3000 - 3999	2	$1,508	0	$754
	4000 - 4999	3	$2,362	0	$787
	5000 - 5999	7	$5,101	0	$729
	6000 - 6999	5	$3,603	0	$721
	7000 - 7999	10	$7,568	1	$757
	8000 - 8999	19	$10,739	1	$565
	9000 - 9999	26	$13,461	2	$518
	10000 - 10999	35	$20,384	2	$582
	11000 - 11999	188	$102,612	12	$546
	12000 - 12999	63	$35,248	4	$559
	13000 - 13999	66	$35,429	4	$537
	14000 - 14999	76	$39,252	5	$516
	15000 - 15999	65	$35,069	4	$540
	16000 - 16999	93	$52,720	6	$567
	17000 - 17999	97	$54,180	6	$559
	18000 - 18999	63	$36,858	4	$585
	19000 - 19999	87	$48,692	5	$560
	> 19999	637	$367,357	39	$577
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,616	$921,663		$570
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,616	$921,663		$570
RECOUPMENTS		1	$4		$4
NET PAID			$921,659		

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 06

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	705	$406,404	43	$576
	Renter	847	$516,340	52	$610
	RenterWithHeat	6	$2,738	0	$456
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	64	$37,379	4	$584
	Roomer	1	$700	0	$700
	Other	13	$6,652	1	$512
RACE	AmericanIndian	1	$726	0	$726
	Other	567	$339,151	35	$598
	NativeHawaiian	3	$1,964	0	$655
	Black	141	$86,956	9	$617
	White	881	$515,118	54	$585
	Asian	6	$3,493	0	$582
	Unknown	37	$22,803	2	$616
DISABLED	YES	422	$244,802	26	$580
	NO	1,214	$725,410	74	$598
AGE 60 & ABV	YES	572	$329,304	35	$576
	NO	1,064	$640,909	65	$602
AGE 5 & BLW	YES	407	$253,940	25	$624
	NO	1,229	$716,273	75	$583
PAY_TYPE	DIRECT	3	$651	0	$217
	PROVIDER	1,633	$969,561	100	$594
REFUNDS		5	$959		$192

AVERAGE HOUSEHOLD SIZE: 4.21

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	287	$148,555	18	$518
	FuelOil	1,114	$696,304	68	$625
	Coal	2	$1,988	0	$994
	NaturalGas	88	$59,399	5	$675
	Kerosene	22	$15,995	1	$727
	Propane	120	$47,321	7	$394
	WoodOrOther	3	$651	0	$217
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	67	$40,433	4	$603
	1000 - 1999	5	$4,092	0	$818
	2000 - 2999	7	$5,142	0	$735
	3000 - 3999	12	$7,507	1	$626
	4000 - 4999	18	$11,257	1	$625
	5000 - 5999	7	$5,195	0	$742
	6000 - 6999	8	$4,581	0	$573
	7000 - 7999	21	$13,098	1	$624
	8000 - 8999	19	$11,873	1	$625
	9000 - 9999	23	$15,303	1	$665
	10000 - 10999	41	$22,536	3	$550
	11000 - 11999	154	$84,396	9	$548
	12000 - 12999	47	$28,400	3	$604
	13000 - 13999	68	$34,796	4	$512
	14000 - 14999	55	$29,865	3	$543
	15000 - 15999	61	$34,758	4	$570
	16000 - 16999	53	$33,831	3	$638
	17000 - 17999	74	$42,565	5	$575
	18000 - 18999	78	$43,380	5	$556
	19000 - 19999	54	$34,046	3	$630
	> 19999	764	$463,157	47	$606
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,636	$970,212		$593
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,636	$970,212		$593
RECOUPMENTS		0	$0		$0
NET PAID			$970,212		

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 07

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	848	$453,565	51	$535
	Renter	682	$351,563	41	$515
	RenterWithHeat	3	$1,208	0	$403
	SubsidizedWithHeat	2	$481	0	$240
	SubsidizedNoHeat	75	$38,763	5	$517
	Roomer	0	$0	0	$0
	Other	37	$21,691	2	$586
RACE	AmericanIndian	3	$2,948	0	$983
	Other	10	$5,138	1	$514
	NativeHawaiian	2	$993	0	$496
	Black	52	$23,379	3	$450
	White	1,566	$828,054	95	$529
	Asian	2	$1,567	0	$784
	Unknown	12	$5,193	1	$433
DISABLED	YES	556	$282,254	34	$508
	NO	1,091	$585,017	66	$536
AGE 60 & ABV	YES	722	$380,132	44	$526
	NO	925	$487,139	56	$527
AGE 5 & BLW	YES	287	$154,390	17	$538
	NO	1,360	$712,881	83	$524
PAY_TYPE	DIRECT	1	$345	0	$345
	PROVIDER	1,648	$867,605	100	$526
REFUNDS		2	$68		$34

AVERAGE HOUSEHOLD SIZE: 3.63

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	259	$115,835	16	$447
	FuelOil	1,009	$563,232	61	$558
	Coal	5	$4,816	0	$963
	NaturalGas	75	$42,927	5	$572
	Kerosene	101	$52,557	6	$520
	Propane	102	$34,769	6	$341
	WoodOrOther	13	$8,191	1	$630
	BlendedFuel	83	$44,944	5	$541
INCOME RANGE	0 - 999	53	$30,976	3	$584
	1000 - 1999	5	$2,903	0	$581
	2000 - 2999	5	$4,528	0	$906
	3000 - 3999	3	$1,649	0	$550
	4000 - 4999	3	$1,269	0	$423
	5000 - 5999	8	$3,656	0	$457
	6000 - 6999	11	$4,921	1	$447
	7000 - 7999	10	$6,308	1	$631
	8000 - 8999	8	$5,489	0	$686
	9000 - 9999	27	$14,238	2	$527
	10000 - 10999	27	$11,225	2	$416
	11000 - 11999	243	$121,208	15	$499
	12000 - 12999	64	$33,969	4	$531
	13000 - 13999	62	$32,244	4	$520
	14000 - 14999	74	$38,405	4	$519
	15000 - 15999	75	$41,132	5	$548
	16000 - 16999	75	$36,115	5	$482
	17000 - 17999	70	$37,112	4	$530
	18000 - 18999	61	$30,779	4	$505
	19000 - 19999	78	$41,511	5	$532
	> 19999	684	$366,632	42	$536
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,647	$867,271		$527
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	2	$679		$340
TOTAL PMT		1,649	$867,950		$526
RECOUPMENTS		0	$0		$0
NET PAID			$867,950		

Energy Assistance Summary (EASUM)

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County 08

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	426	$257,096	49	$604
	Renter	420	$226,208	48	$539
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	5	$2,644	1	$529
	Roomer	0	$0	0	$0
	Other	19	$10,715	2	$564
RACE	AmericanIndian	2	$992	0	$496
	Other	6	$4,114	1	$686
	NativeHawaiian	0	$0	0	$0
	Black	5	$3,201	1	$640
	White	850	$485,717	98	$571
	Asian	2	$1,000	0	$500
	Unknown	5	$1,640	1	$328
DISABLED	YES	265	$148,875	30	$562
	NO	605	$347,789	70	$575
AGE 60 & ABV	YES	392	$214,384	45	$547
	NO	478	$282,280	55	$591
AGE 5 & BLW	YES	156	$91,468	18	$586
	NO	714	$405,196	82	$568
PAY_TYPE	DIRECT	15	$5,951	2	$397
	PROVIDER	857	$490,980	98	$573
REFUNDS		8	$3,210		$401

AVERAGE HOUSEHOLD SIZE: 4.06

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	83	$43,920	10	$529
	FuelOil	459	$295,447	53	$644
	Coal	11	$9,877	1	$898
	NaturalGas	42	$16,777	5	$399
	Kerosene	3	$1,941	0	$647
	Propane	205	$79,430	24	$387
	WoodOrOther	37	$29,122	4	$787
	BlendedFuel	30	$20,149	3	$672
INCOME RANGE	0 - 999	30	$22,237	3	$741
	1000 - 1999	2	$1,919	0	$960
	2000 - 2999	3	$1,797	0	$599
	3000 - 3999	4	$2,595	0	$649
	4000 - 4999	6	$3,771	1	$628
	5000 - 5999	3	$1,474	0	$491
	6000 - 6999	4	$2,162	0	$540
	7000 - 7999	7	$4,585	1	$655
	8000 - 8999	7	$4,588	1	$655
	9000 - 9999	4	$3,115	0	$779
	10000 - 10999	26	$13,077	3	$503
	11000 - 11999	117	$62,097	13	$531
	12000 - 12999	23	$14,467	3	$629
	13000 - 13999	37	$17,913	4	$484
	14000 - 14999	24	$11,821	3	$493
	15000 - 15999	36	$22,923	4	$637
	16000 - 16999	52	$29,239	6	$562
	17000 - 17999	40	$22,745	5	$569
	18000 - 18999	42	$21,340	5	$508
	19000 - 19999	37	$19,721	4	$533
	> 19999	366	$213,079	42	$582
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	870	$496,664		$571
	Reissue	0	$0		$0
	Secondpay	2	$267		$134
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		872	$496,931		$570
RECOUPMENTS		0	$0		$0
NET PAID			$496,931		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	670	$384,557	53	$574
	Renter	489	$275,188	39	$563
	RenterWithHeat	5	$4,413	0	$883
	SubsidizedWithHeat	1	$615	0	$615
	SubsidizedNoHeat	81	$44,408	6	$548
	Roomer	0	$0	0	$0
	Other	18	$9,455	1	$525
RACE	AmericanIndian	4	$2,500	0	$625
	Other	84	$45,514	7	$542
	NativeHawaiian	2	$1,696	0	$848
	Black	114	$66,053	9	$579
	White	1,010	$573,677	80	$568
	Asian	12	$5,983	1	$499
	Unknown	38	$23,211	3	$611
DISABLED	YES	354	$202,549	28	$572
	NO	910	$516,085	72	$567
AGE 60 & ABV	YES	596	$321,850	47	$540
	NO	668	$396,784	53	$594
AGE 5 & BLW	YES	213	$129,230	17	$607
	NO	1,051	$589,404	83	$561
PAY_TYPE	DIRECT	0	$0	0	$0
	PROVIDER	1,264	$718,634	100	$569
REFUNDS		2	$1,792		$896

AVERAGE HOUSEHOLD SIZE: 3.38

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	175	$98,105	14	$561
	FuelOil	940	$558,605	74	$594
	Coal	0	$0	0	$0
	NaturalGas	36	$20,977	3	$583
	Kerosene	1	$31	0	$31
	Propane	112	$40,916	9	$365
	WoodOrOther	0	$0	0	$0
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	68	$41,626	5	$612
	1000 - 1999	5	$3,354	0	$671
	2000 - 2999	4	$2,486	0	$622
	3000 - 3999	10	$7,481	1	$748
	4000 - 4999	3	$1,532	0	$511
	5000 - 5999	7	$3,749	1	$536
	6000 - 6999	11	$6,846	1	$622
	7000 - 7999	19	$9,376	2	$493
	8000 - 8999	15	$8,176	1	$545
	9000 - 9999	18	$9,000	1	$500
	10000 - 10999	28	$16,600	2	$593
	11000 - 11999	102	$54,878	8	$538
	12000 - 12999	30	$17,413	2	$580
	13000 - 13999	35	$20,590	3	$588
	14000 - 14999	47	$26,159	4	$557
	15000 - 15999	51	$29,034	4	$569
	16000 - 16999	45	$25,478	4	$566
	17000 - 17999	67	$39,228	5	$585
	18000 - 18999	66	$36,236	5	$549
	19000 - 19999	58	$29,518	5	$509
	> 19999	575	$329,873	45	$574
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,264	$718,634		$569
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,264	$718,634		$569
RECOUPMENTS		0	$0		$0
NET PAID			$718,634		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	419	$249,651	49	$596
	Renter	339	$174,916	39	$516
	RenterWithHeat	2	$879	0	$440
	SubsidizedWithHeat	4	$1,341	0	$335
	SubsidizedNoHeat	69	$30,001	8	$435
	Roomer	0	$0	0	$0
	Other	27	$10,970	3	$406
RACE	AmericanIndian	3	$2,101	0	$700
	Other	13	$7,076	2	$544
	NativeHawaiian	0	$0	0	$0
	Black	26	$11,322	3	$435
	White	811	$443,804	94	$547
	Asian	0	$0	0	$0
	Unknown	7	$3,454	1	$493
DISABLED	YES	283	$147,472	33	$521
	NO	577	$320,286	67	$555
AGE 60 & ABV	YES	356	$197,634	41	$555
	NO	504	$270,123	59	$536
AGE 5 & BLW	YES	123	$68,807	14	$559
	NO	737	$398,951	86	$541
PAY_TYPE	DIRECT	4	$1,813	0	$453
	PROVIDER	856	$465,944	100	$544
REFUNDS		5	$1,120		$224

AVERAGE HOUSEHOLD SIZE: 3.19

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	231	$104,938	27	$454
	FuelOil	272	$187,003	32	$688
	Coal	0	$0	0	$0
	NaturalGas	47	$31,427	5	$669
	Kerosene	33	$20,650	4	$626
	Propane	245	$103,188	28	$421
	WoodOrOther	14	$11,655	2	$832
	BlendedFuel	18	$8,897	2	$494
INCOME RANGE	0 - 999	41	$24,143	5	$589
	1000 - 1999	6	$3,465	1	$578
	2000 - 2999	3	$2,056	0	$685
	3000 - 3999	4	$2,545	0	$636
	4000 - 4999	8	$3,792	1	$474
	5000 - 5999	4	$1,995	0	$499
	6000 - 6999	19	$10,568	2	$556
	7000 - 7999	9	$4,952	1	$550
	8000 - 8999	19	$10,019	2	$527
	9000 - 9999	14	$7,848	2	$561
	10000 - 10999	26	$14,397	3	$554
	11000 - 11999	118	$64,392	14	$546
	12000 - 12999	45	$20,822	5	$463
	13000 - 13999	41	$21,547	5	$526
	14000 - 14999	29	$14,713	3	$507
	15000 - 15999	30	$15,382	3	$513
	16000 - 16999	49	$24,941	6	$509
	17000 - 17999	31	$17,656	4	$570
	18000 - 18999	29	$17,875	3	$616
	19000 - 19999	26	$14,205	3	$546
	> 19999	307	$168,952	36	$550
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	860	$467,757		$544
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		860	$467,757		$544
RECOUPMENTS		0	$0		$0
NET PAID			$467,757		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,803	$1,131,925	62	$628
	Renter	961	$598,114	33	$622
	RenterWithHeat	7	$1,377	0	$197
	SubsidizedWithHeat	1	$177	0	$177
	SubsidizedNoHeat	54	$27,096	2	$502
	Roomer	0	$0	0	$0
	Other	81	$54,774	3	$676
RACE	AmericanIndian	3	$1,999	0	$666
	Other	38	$20,932	1	$551
	NativeHawaiian	1	$1,000	0	$1,000
	Black	97	$52,005	3	$536
	White	2,723	$1,710,672	94	$628
	Asian	5	$3,000	0	$600
	Unknown	40	$23,854	1	$596
DISABLED	YES	846	$510,152	29	$603
	NO	2,061	$1,303,310	71	$632
AGE 60 & ABV	YES	1,388	$835,766	48	$602
	NO	1,519	$977,697	52	$644
AGE 5 & BLW	YES	455	$293,434	16	$645
	NO	2,452	$1,520,028	84	$620
PAY_TYPE	DIRECT	16	$1,713	1	$107
	PROVIDER	2,891	$1,811,749	99	$627
REFUNDS		0	$0		$0

AVERAGE HOUSEHOLD SIZE: 3.2

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	236	$104,193	8	$441
	FuelOil	2,252	$1,470,413	77	$653
	Coal	104	$92,530	4	$890
	NaturalGas	53	$30,987	2	$585
	Kerosene	35	$15,232	1	$435
	Propane	153	$56,016	5	$366
	WoodOrOther	38	$22,983	1	$605
	BlendedFuel	36	$21,107	1	$586
INCOME RANGE	0 - 999	140	$90,849	5	$649
	1000 - 1999	9	$6,357	0	$706
	2000 - 2999	11	$8,695	0	$790
	3000 - 3999	10	$5,661	0	$566
	4000 - 4999	21	$14,476	1	$689
	5000 - 5999	23	$16,043	1	$698
	6000 - 6999	18	$11,896	1	$661
	7000 - 7999	34	$23,750	1	$699
	8000 - 8999	34	$23,636	1	$695
	9000 - 9999	45	$29,295	2	$651
	10000 - 10999	65	$45,304	2	$697
	11000 - 11999	362	$207,832	12	$574
	12000 - 12999	110	$69,800	4	$635
	13000 - 13999	114	$66,550	4	$584
	14000 - 14999	129	$76,510	4	$593
	15000 - 15999	95	$58,092	3	$611
	16000 - 16999	124	$78,931	4	$637
	17000 - 17999	123	$76,042	4	$618
	18000 - 18999	140	$86,696	5	$619
	19000 - 19999	119	$72,398	4	$608
	> 19999	1,178	$743,441	41	$631
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	2,907	$1,813,462		$624
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		2,907	$1,813,462		$624
RECOUPMENTS		0	$0		$0
NET PAID			$1,813,462		

Energy Assistance Summary (EASUM)

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County 12

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	52	$28,379	71	$546
	Renter	18	$11,641	25	$647
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	1	$114	1	$114
	Roomer	0	$0	0	$0
	Other	2	$1,749	3	$874
RACE	AmericanIndian	2	$713	3	$356
	Other	0	$0	0	$0
	NativeHawaiian	0	$0	0	$0
	Black	0	$0	0	$0
	White	70	$40,171	96	$574
	Asian	1	$1,000	1	$1,000
	Unknown	0	$0	0	$0
DISABLED	YES	21	$9,021	29	$430
	NO	52	$32,863	71	$632
AGE 60 & ABV	YES	29	$16,844	40	$581
	NO	44	$25,040	60	$569
AGE 5 & BLW	YES	6	$4,573	8	$762
	NO	67	$37,311	92	$557
PAY_TYPE	DIRECT	0	$0	0	$0
	PROVIDER	73	$41,884	100	$574
REFUNDS		3	$751		$250

AVERAGE HOUSEHOLD SIZE: 3.47

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	8	$2,929	11	$366
	FuelOil	23	$16,872	32	$734
	Coal	0	$0	0	$0
	NaturalGas	5	$2,432	7	$486
	Kerosene	4	$2,430	5	$608
	Propane	27	$11,770	37	$436
	WoodOrOther	6	$5,450	8	$908
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	2	$1,907	3	$954
	1000 - 1999	0	$0	0	$0
	2000 - 2999	1	$360	1	$360
	3000 - 3999	0	$0	0	$0
	4000 - 4999	1	$898	1	$898
	5000 - 5999	0	$0	0	$0
	6000 - 6999	0	$0	0	$0
	7000 - 7999	1	$815	1	$815
	8000 - 8999	0	$0	0	$0
	9000 - 9999	1	$764	1	$764
	10000 - 10999	0	$0	0	$0
	11000 - 11999	2	$1,466	3	$733
	12000 - 12999	4	$1,991	5	$498
	13000 - 13999	5	$2,422	7	$484
	14000 - 14999	2	$1,711	3	$856
	15000 - 15999	1	$114	1	$114
	16000 - 16999	3	$365	4	$122
	17000 - 17999	6	$3,384	8	$564
	18000 - 18999	3	$2,136	4	$712
	19000 - 19999	7	$3,014	10	$431
	> 19999	34	$20,537	47	$604
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	73	$41,884		$574
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		73	$41,884		$574
RECOUPMENTS		0	$0		$0
NET PAID			$41,884		

Energy Assistance Summary (EASUM)

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County 13

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	705	$406,788	51	$577
	Renter	541	$314,168	39	$581
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	111	$59,779	8	$539
	Roomer	0	$0	0	$0
	Other	21	$12,101	2	$576
RACE	AmericanIndian	6	$3,957	0	$660
	Other	62	$39,466	4	$637
	NativeHawaiian	1	$1,000	0	$1,000
	Black	50	$28,108	4	$562
	White	1,229	$703,291	89	$572
	Asian	2	$1,746	0	$873
	Unknown	28	$15,268	2	$545
DISABLED	YES	418	$242,159	30	$579
	NO	960	$550,677	70	$574
AGE 60 & ABV	YES	637	$355,569	46	$558
	NO	741	$437,267	54	$590
AGE 5 & BLW	YES	306	$173,140	22	$566
	NO	1,072	$619,696	78	$578
PAY_TYPE	DIRECT	7	$2,663	1	$380
	PROVIDER	1,372	$790,252	99	$576
REFUNDS		2	$273		$136

AVERAGE HOUSEHOLD SIZE: 3.3

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	72	$40,713	5	$565
	FuelOil	1,095	$629,633	79	$575
	Coal	70	$55,358	5	$791
	NaturalGas	3	$1,338	0	$446
	Kerosene	31	$20,020	2	$646
	Propane	99	$40,270	7	$407
	WoodOrOther	4	$3,500	0	$875
	BlendedFuel	4	$2,005	0	$501
INCOME RANGE	0 - 999	27	$17,053	2	$632
	1000 - 1999	9	$5,224	1	$580
	2000 - 2999	3	$2,150	0	$717
	3000 - 3999	10	$6,890	1	$689
	4000 - 4999	12	$6,291	1	$524
	5000 - 5999	11	$6,691	1	$608
	6000 - 6999	12	$8,702	1	$725
	7000 - 7999	10	$6,271	1	$627
	8000 - 8999	16	$9,001	1	$563
	9000 - 9999	25	$14,749	2	$590
	10000 - 10999	31	$16,081	2	$519
	11000 - 11999	122	$71,176	9	$583
	12000 - 12999	61	$34,982	4	$573
	13000 - 13999	49	$29,741	4	$607
	14000 - 14999	64	$35,120	5	$549
	15000 - 15999	60	$34,062	4	$568
	16000 - 16999	56	$35,889	4	$641
	17000 - 17999	65	$35,147	5	$541
	18000 - 18999	81	$44,445	6	$549
	19000 - 19999	71	$39,368	5	$554
	> 19999	583	$333,802	42	$573
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,378	$792,835		$575
	Reissue	0	$0		$0
	Secondpay	1	$80		$80
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,379	$792,915		$575
RECOUPMENTS		0	$0		$0
NET PAID			$792,915		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	494	$256,069	56	$518
	Renter	340	$173,796	39	$511
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	28	$12,032	3	$430
	Roomer	0	$0	0	$0
	Other	20	$9,198	2	$460
RACE	AmericanIndian	0	$0	0	$0
	Other	10	$5,513	1	$551
	NativeHawaiian	0	$0	0	$0
	Black	14	$6,713	2	$480
	White	852	$435,240	97	$511
	Asian	3	$2,032	0	$677
	Unknown	3	$1,598	0	$533
DISABLED	YES	256	$127,580	29	$498
	NO	626	$323,515	71	$517
AGE 60 & ABV	YES	470	$229,304	53	$488
	NO	412	$221,792	47	$538
AGE 5 & BLW	YES	111	$61,735	13	$556
	NO	771	$389,360	87	$505
PAY_TYPE	DIRECT	1	$1,000	0	$1,000
	PROVIDER	882	$450,122	100	$510
REFUNDS		8	$2,282		$285

AVERAGE HOUSEHOLD SIZE: 3.07

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	50	$24,982	6	$500
	FuelOil	722	$372,878	82	$516
	Coal	7	$5,494	1	$785
	NaturalGas	7	$3,017	1	$431
	Kerosene	10	$7,384	1	$738
	Propane	72	$24,695	8	$343
	WoodOrOther	14	$12,646	2	$903
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	24	$14,563	3	$607
	1000 - 1999	2	$1,630	0	$815
	2000 - 2999	4	$2,768	0	$692
	3000 - 3999	5	$2,883	1	$577
	4000 - 4999	6	$3,230	1	$538
	5000 - 5999	6	$3,404	1	$567
	6000 - 6999	5	$3,283	1	$657
	7000 - 7999	13	$5,471	1	$421
	8000 - 8999	6	$4,383	1	$730
	9000 - 9999	13	$6,291	1	$484
	10000 - 10999	14	$6,592	2	$471
	11000 - 11999	114	$54,446	13	$478
	12000 - 12999	37	$20,240	4	$547
	13000 - 13999	30	$16,064	3	$535
	14000 - 14999	50	$24,689	6	$494
	15000 - 15999	40	$20,786	5	$520
	16000 - 16999	43	$22,152	5	$515
	17000 - 17999	44	$21,381	5	$486
	18000 - 18999	63	$27,344	7	$434
	19000 - 19999	40	$20,702	5	$518
	> 19999	322	$168,526	37	$523
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	882	$451,095		$511
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	1	$27		$27
TOTAL PMT		883	$451,122		$511
RECOUPMENTS		0	$0		$0
NET PAID			$451,122		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	233	$145,995	37	$627
	Renter	328	$203,855	52	$622
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	62	$37,222	10	$600
	Roomer	0	$0	0	$0
	Other	7	$4,294	1	$613
RACE	AmericanIndian	6	$3,536	1	$589
	Other	43	$24,559	7	$571
	NativeHawaiian	0	$0	0	$0
	Black	161	$103,112	26	$640
	White	402	$250,227	64	$622
	Asian	1	$1,000	0	$1,000
	Unknown	17	$8,932	3	$525
DISABLED	YES	187	$105,915	30	$566
	NO	443	$285,451	70	$644
AGE 60 & ABV	YES	285	$170,850	45	$599
	NO	345	$220,516	55	$639
AGE 5 & BLW	YES	128	$83,493	20	$652
	NO	502	$307,873	80	$613
PAY_TYPE	DIRECT	6	$2,768	1	$461
	PROVIDER	625	$388,625	99	$622
REFUNDS		0	$0		$0

AVERAGE HOUSEHOLD SIZE: 3.64

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	83	$52,651	13	$634
	FuelOil	397	$272,783	63	$687
	Coal	0	$0	0	$0
	NaturalGas	21	$15,259	3	$727
	Kerosene	7	$6,481	1	$926
	Propane	121	$43,843	19	$362
	WoodOrOther	1	$349	0	$349
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	25	$18,440	4	$738
	1000 - 1999	2	$952	0	$476
	2000 - 2999	4	$3,577	1	$894
	3000 - 3999	5	$3,346	1	$669
	4000 - 4999	5	$3,564	1	$713
	5000 - 5999	2	$1,096	0	$548
	6000 - 6999	9	$4,364	1	$485
	7000 - 7999	10	$5,364	2	$536
	8000 - 8999	10	$7,704	2	$770
	9000 - 9999	17	$9,185	3	$540
	10000 - 10999	16	$11,586	3	$724
	11000 - 11999	65	$38,444	10	$591
	12000 - 12999	29	$17,090	5	$589
	13000 - 13999	29	$16,027	5	$553
	14000 - 14999	23	$16,744	4	$728
	15000 - 15999	20	$12,355	3	$618
	16000 - 16999	21	$11,794	3	$562
	17000 - 17999	28	$16,280	4	$581
	18000 - 18999	30	$19,527	5	$651
	19000 - 19999	24	$12,062	4	$503
	> 19999	255	$160,864	41	$631
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	630	$391,366		$621
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	1	$27		$27
TOTAL PMT		631	$391,393		$620
RECOUPMENTS		0	$0		$0
NET PAID			$391,393		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	129	$69,263	49	$537
	Renter	106	$49,696	40	$469
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	22	$8,474	8	$385
	Roomer	0	$0	0	$0
	Other	8	$5,150	3	$644
RACE	AmericanIndian	1	$682	0	$682
	Other	0	$0	0	$0
	NativeHawaiian	0	$0	0	$0
	Black	4	$2,612	2	$653
	White	258	$127,441	97	$494
	Asian	0	$0	0	$0
	Unknown	2	$1,847	1	$924
DISABLED	YES	102	$47,186	38	$463
	NO	163	$85,396	62	$524
AGE 60 & ABV	YES	111	$60,987	42	$549
	NO	154	$71,596	58	$465
AGE 5 & BLW	YES	36	$21,200	14	$589
	NO	229	$111,382	86	$486
PAY_TYPE	DIRECT	9	$1,993	3	$221
	PROVIDER	256	$130,590	97	$510
REFUNDS		2	$287		$144

AVERAGE HOUSEHOLD SIZE: 3.4

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	95	$38,785	36	$408
	FuelOil	44	$31,333	17	$712
	Coal	0	$0	0	$0
	NaturalGas	45	$21,464	17	$477
	Kerosene	8	$1,493	3	$187
	Propane	56	$30,036	21	$536
	WoodOrOther	14	$7,975	5	$570
	BlendedFuel	3	$1,497	1	$499
INCOME RANGE	0 - 999	11	$5,953	4	$541
	1000 - 1999	0	$0	0	$0
	2000 - 2999	2	$502	1	$251
	3000 - 3999	0	$0	0	$0
	4000 - 4999	1	$721	0	$721
	5000 - 5999	0	$0	0	$0
	6000 - 6999	2	$1,490	1	$745
	7000 - 7999	5	$3,044	2	$609
	8000 - 8999	0	$0	0	$0
	9000 - 9999	4	$2,280	2	$570
	10000 - 10999	3	$1,155	1	$385
	11000 - 11999	36	$16,249	14	$451
	12000 - 12999	15	$5,625	6	$375
	13000 - 13999	17	$8,208	6	$483
	14000 - 14999	8	$3,905	3	$488
	15000 - 15999	12	$4,708	5	$392
	16000 - 16999	11	$5,128	4	$466
	17000 - 17999	12	$7,168	5	$597
	18000 - 18999	6	$2,803	2	$467
	19000 - 19999	10	$4,041	4	$404
	> 19999	110	$59,601	42	$542
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	265	$132,582		$500
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		265	$132,582		$500
RECOUPMENTS		0	$0		$0
NET PAID			$132,582		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	2,041	$1,034,514	63	$507
	Renter	1,075	$531,931	33	$495
	RenterWithHeat	5	$2,307	0	$461
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	45	$18,106	1	$402
	Roomer	0	$0	0	$0
	Other	79	$41,709	2	$528
RACE	AmericanIndian	1	$1,000	0	$1,000
	Other	34	$16,815	1	$495
	NativeHawaiian	2	$1,329	0	$664
	Black	17	$9,273	1	$545
	White	3,175	$1,592,215	98	$501
	Asian	4	$1,946	0	$486
	Unknown	12	$5,988	0	$499
DISABLED	YES	968	$465,161	30	$481
	NO	2,277	$1,163,405	70	$511
AGE 60 & ABV	YES	1,592	$775,998	49	$487
	NO	1,653	$852,569	51	$516
AGE 5 & BLW	YES	436	$239,532	13	$549
	NO	2,809	$1,389,034	87	$494
PAY_TYPE	DIRECT	15	$2,820	0	$188
	PROVIDER	3,230	$1,625,746	100	$503
REFUNDS		22	$5,233		$238

AVERAGE HOUSEHOLD SIZE: 3.21

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	200	$81,639	6	$408
	FuelOil	2,478	$1,280,195	76	$517
	Coal	71	$57,435	2	$809
	NaturalGas	19	$9,077	1	$478
	Kerosene	43	$20,090	1	$467
	Propane	344	$125,840	11	$366
	WoodOrOther	74	$45,896	2	$620
	BlendedFuel	16	$8,394	0	$525
INCOME RANGE	0 - 999	122	$72,567	4	$595
	1000 - 1999	18	$11,008	1	$612
	2000 - 2999	15	$8,558	0	$571
	3000 - 3999	18	$11,763	1	$654
	4000 - 4999	15	$6,392	0	$426
	5000 - 5999	10	$5,113	0	$511
	6000 - 6999	20	$10,891	1	$545
	7000 - 7999	24	$12,730	1	$530
	8000 - 8999	39	$13,725	1	$352
	9000 - 9999	58	$27,688	2	$477
	10000 - 10999	63	$32,883	2	$522
	11000 - 11999	319	$146,212	10	$458
	12000 - 12999	111	$55,674	3	$502
	13000 - 13999	116	$52,598	4	$453
	14000 - 14999	156	$77,998	5	$500
	15000 - 15999	131	$68,159	4	$520
	16000 - 16999	170	$86,956	5	$512
	17000 - 17999	183	$86,689	6	$474
	18000 - 18999	159	$79,400	5	$499
	19000 - 19999	177	$91,716	5	$518
	> 19999	1,316	$666,981	41	$507
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	3,245	$1,628,566		$502
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		3,245	$1,628,566		$502
RECOUPMENTS		0	$0		$0
NET PAID			$1,628,566		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	499	$257,872	59	$517
	Renter	318	$164,385	38	$517
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	1	$914	0	$914
	Roomer	0	$0	0	$0
	Other	25	$13,428	3	$537
RACE	AmericanIndian	1	$622	0	$622
	Other	6	$4,074	1	$679
	NativeHawaiian	0	$0	0	$0
	Black	8	$4,922	1	$615
	White	820	$422,313	97	$515
	Asian	2	$999	0	$500
	Unknown	6	$3,668	1	$611
DISABLED	YES	231	$116,718	27	$505
	NO	612	$319,880	73	$523
AGE 60 & ABV	YES	470	$228,640	56	$486
	NO	373	$207,958	44	$558
AGE 5 & BLW	YES	125	$71,125	15	$569
	NO	718	$365,474	85	$509
PAY_TYPE	DIRECT	0	$0	0	$0
	PROVIDER	843	$436,599	100	$518
REFUNDS		1	$2		$2

AVERAGE HOUSEHOLD SIZE: 3.09

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	27	$17,118	3	$634
	FuelOil	678	$353,116	80	$521
	Coal	14	$11,333	2	$810
	NaturalGas	11	$3,407	1	$310
	Kerosene	4	$2,198	0	$550
	Propane	99	$39,918	12	$403
	WoodOrOther	10	$9,510	1	$951
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	14	$8,231	2	$588
	1000 - 1999	3	$1,524	0	$508
	2000 - 2999	3	$2,046	0	$682
	3000 - 3999	4	$2,292	0	$573
	4000 - 4999	3	$1,695	0	$565
	5000 - 5999	3	$1,920	0	$640
	6000 - 6999	4	$2,541	0	$635
	7000 - 7999	2	$1,506	0	$753
	8000 - 8999	4	$3,593	0	$898
	9000 - 9999	12	$7,844	1	$654
	10000 - 10999	20	$10,495	2	$525
	11000 - 11999	96	$48,650	11	$507
	12000 - 12999	38	$18,518	5	$487
	13000 - 13999	29	$16,236	3	$560
	14000 - 14999	39	$18,416	5	$472
	15000 - 15999	40	$18,537	5	$463
	16000 - 16999	27	$15,154	3	$561
	17000 - 17999	60	$27,839	7	$464
	18000 - 18999	47	$22,470	6	$478
	19000 - 19999	51	$22,208	6	$435
	> 19999	344	$184,884	41	$537
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	843	$436,599		$518
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		843	$436,599		$518
RECOUPMENTS		0	$0		$0
NET PAID			$436,599		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	514	$266,989	50	$519
	Renter	467	$244,102	46	$523
	RenterWithHeat	1	$1,000	0	$1,000
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	14	$5,882	1	$420
	Roomer	0	$0	0	$0
	Other	22	$12,885	2	$586
RACE	AmericanIndian	1	$319	0	$319
	Other	18	$9,890	2	$549
	NativeHawaiian	0	$0	0	$0
	Black	18	$8,833	2	$491
	White	970	$506,212	95	$522
	Asian	0	$0	0	$0
	Unknown	11	$5,604	1	$509
DISABLED	YES	281	$141,628	28	$504
	NO	737	$389,231	72	$528
AGE 60 & ABV	YES	488	$250,893	48	$514
	NO	530	$279,965	52	$528
AGE 5 & BLW	YES	153	$84,589	15	$553
	NO	865	$446,270	85	$516
PAY_TYPE	DIRECT	2	$1,233	0	$616
	PROVIDER	1,016	$529,626	100	$521
REFUNDS		0	$0		$0

AVERAGE HOUSEHOLD SIZE: 3.09

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	42	$26,107	4	$622
	FuelOil	655	$360,177	64	$550
	Coal	12	$11,728	1	$977
	NaturalGas	30	$16,536	3	$551
	Kerosene	9	$5,139	1	$571
	Propane	202	$70,352	20	$348
	WoodOrOther	8	$5,675	1	$709
	BlendedFuel	60	$35,145	6	$586
INCOME RANGE	0 - 999	32	$21,656	3	$677
	1000 - 1999	5	$3,370	0	$674
	2000 - 2999	2	$1,369	0	$684
	3000 - 3999	2	$1,231	0	$616
	4000 - 4999	7	$3,059	1	$437
	5000 - 5999	3	$2,085	0	$695
	6000 - 6999	6	$2,973	1	$496
	7000 - 7999	10	$6,853	1	$685
	8000 - 8999	12	$6,147	1	$512
	9000 - 9999	17	$8,243	2	$485
	10000 - 10999	13	$7,874	1	$606
	11000 - 11999	111	$53,299	11	$480
	12000 - 12999	34	$16,067	3	$473
	13000 - 13999	40	$20,173	4	$504
	14000 - 14999	39	$20,822	4	$534
	15000 - 15999	54	$26,265	5	$486
	16000 - 16999	71	$36,616	7	$516
	17000 - 17999	59	$30,231	6	$512
	18000 - 18999	53	$25,627	5	$484
	19000 - 19999	46	$24,334	5	$529
	> 19999	402	$212,566	39	$529
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,018	$530,859		$521
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,018	$530,859		$521
RECOUPMENTS		0	$0		$0
NET PAID			$530,859		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	667	$314,284	56	$471
	Renter	468	$218,774	39	$467
	RenterWithHeat	2	$951	0	$476
	SubsidizedWithHeat	9	$3,312	1	$368
	SubsidizedNoHeat	12	$4,051	1	$338
	Roomer	1	$370	0	$370
	Other	36	$17,877	3	$497
RACE	AmericanIndian	4	$1,994	0	$498
	Other	11	$4,172	1	$379
	NativeHawaiian	0	$0	0	$0
	Black	21	$9,652	2	$460
	White	1,149	$539,959	96	$470
	Asian	5	$1,263	0	$253
	Unknown	5	$2,580	0	$516
DISABLED	YES	414	$199,060	35	$481
	NO	781	$360,559	65	$462
AGE 60 & ABV	YES	567	$253,213	47	$447
	NO	628	$306,406	53	$488
AGE 5 & BLW	YES	194	$98,377	16	$507
	NO	1,001	$461,242	84	$461
PAY_TYPE	DIRECT	13	$5,957	1	$458
	PROVIDER	1,182	$553,662	99	$468
REFUNDS		3	$740		$247

AVERAGE HOUSEHOLD SIZE: 3.52

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	261	$97,036	22	$372
	FuelOil	243	$138,394	20	$570
	Coal	10	$8,518	1	$852
	NaturalGas	66	$30,294	6	$459
	Kerosene	7	$3,936	1	$562
	Propane	500	$214,716	42	$429
	WoodOrOther	45	$32,474	4	$722
	BlendedFuel	63	$34,253	5	$544
INCOME RANGE	0 - 999	38	$20,384	3	$536
	1000 - 1999	4	$1,874	0	$468
	2000 - 2999	5	$3,284	0	$657
	3000 - 3999	10	$3,741	1	$374
	4000 - 4999	11	$5,482	1	$498
	5000 - 5999	7	$3,345	1	$478
	6000 - 6999	8	$3,152	1	$394
	7000 - 7999	9	$3,972	1	$441
	8000 - 8999	5	$3,084	0	$617
	9000 - 9999	9	$4,762	1	$529
	10000 - 10999	18	$9,033	2	$502
	11000 - 11999	164	$73,477	14	$448
	12000 - 12999	48	$20,843	4	$434
	13000 - 13999	72	$33,002	6	$458
	14000 - 14999	46	$19,318	4	$420
	15000 - 15999	48	$25,803	4	$538
	16000 - 16999	59	$24,573	5	$416
	17000 - 17999	61	$25,327	5	$415
	18000 - 18999	56	$26,227	5	$468
	19000 - 19999	44	$22,452	4	$510
	> 19999	472	$226,267	40	$479
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,195	$559,619		$468
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,195	$559,619		$468
RECOUPMENTS		0	$0		$0
NET PAID			$559,619		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	362	$189,226	47	$523
	Renter	369	$201,709	48	$547
	RenterWithHeat	1	$269	0	$269
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	21	$9,676	3	$461
	Roomer	0	$0	0	$0
	Other	22	$11,328	3	$515
RACE	AmericanIndian	2	$759	0	$380
	Other	50	$29,338	6	$587
	NativeHawaiian	1	$975	0	$975
	Black	46	$25,968	6	$565
	White	641	$336,828	83	$525
	Asian	9	$5,395	1	$599
	Unknown	26	$12,945	3	$498
DISABLED	YES	198	$104,016	26	$525
	NO	577	$308,192	74	$534
AGE 60 & ABV	YES	327	$167,672	42	$513
	NO	448	$244,536	58	$546
AGE 5 & BLW	YES	160	$88,767	21	$555
	NO	615	$323,441	79	$526
PAY_TYPE	DIRECT	3	$1,192	0	$397
	PROVIDER	774	$411,992	100	$532
REFUNDS		1	$189		$189

AVERAGE HOUSEHOLD SIZE: 3.43

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	100	$56,369	13	$564
	FuelOil	440	$237,784	57	$540
	Coal	3	$2,563	0	$854
	NaturalGas	32	$18,846	4	$589
	Kerosene	38	$25,200	5	$663
	Propane	160	$69,447	21	$434
	WoodOrOther	2	$1,998	0	$999
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	37	$22,760	5	$615
	1000 - 1999	2	$924	0	$462
	2000 - 2999	4	$2,767	1	$692
	3000 - 3999	3	$1,367	0	$456
	4000 - 4999	0	$0	0	$0
	5000 - 5999	2	$1,000	0	$500
	6000 - 6999	5	$1,895	1	$379
	7000 - 7999	9	$5,489	1	$610
	8000 - 8999	11	$5,828	1	$530
	9000 - 9999	13	$7,137	2	$549
	10000 - 10999	20	$11,319	3	$566
	11000 - 11999	66	$35,472	9	$537
	12000 - 12999	29	$15,047	4	$519
	13000 - 13999	29	$12,859	4	$443
	14000 - 14999	40	$20,793	5	$520
	15000 - 15999	36	$16,261	5	$452
	16000 - 16999	43	$20,677	6	$481
	17000 - 17999	34	$18,580	4	$546
	18000 - 18999	45	$24,142	6	$536
	19000 - 19999	26	$15,737	3	$605
	> 19999	320	$172,019	41	$538
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	775	$412,208		$532
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	2	$976		$488
TOTAL PMT		777	$413,184		$532
RECOUPMENTS		0	$0		$0
NET PAID			$413,184		

Energy Assistance Summary (EASUM)

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County 22

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	488	$276,182	45	$566
	Renter	482	$277,157	45	$575
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	94	$43,226	9	$460
	Roomer	0	$0	0	$0
	Other	9	$5,332	1	$592
RACE	AmericanIndian	8	$5,640	1	$705
	Other	114	$64,328	11	$564
	NativeHawaiian	2	$568	0	$284
	Black	282	$156,638	26	$555
	White	625	$352,364	58	$564
	Asian	12	$7,385	1	$615
	Unknown	30	$14,975	3	$499
DISABLED	YES	314	$160,482	29	$511
	NO	759	$441,414	71	$582
AGE 60 & ABV	YES	418	$220,583	39	$528
	NO	655	$381,314	61	$582
AGE 5 & BLW	YES	242	$149,637	23	$618
	NO	831	$452,259	77	$544
PAY_TYPE	DIRECT	0	$0	0	$0
	PROVIDER	1,073	$601,897	100	$561
REFUNDS		4	$544		$136

AVERAGE HOUSEHOLD SIZE: 3.42

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	214	$98,401	20	$460
	FuelOil	619	$380,514	58	$615
	Coal	10	$7,680	1	$768
	NaturalGas	104	$61,423	10	$591
	Kerosene	4	$1,774	0	$444
	Propane	118	$49,268	11	$418
	WoodOrOther	4	$2,837	0	$709
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	39	$25,209	4	$646
	1000 - 1999	4	$2,593	0	$648
	2000 - 2999	5	$4,109	0	$822
	3000 - 3999	3	$1,818	0	$606
	4000 - 4999	3	$1,739	0	$580
	5000 - 5999	1	$139	0	$139
	6000 - 6999	13	$7,222	1	$556
	7000 - 7999	11	$7,102	1	$646
	8000 - 8999	12	$7,257	1	$605
	9000 - 9999	7	$3,395	1	$485
	10000 - 10999	30	$13,019	3	$434
	11000 - 11999	137	$67,015	13	$489
	12000 - 12999	42	$24,443	4	$582
	13000 - 13999	52	$27,141	5	$522
	14000 - 14999	33	$17,352	3	$526
	15000 - 15999	56	$28,626	5	$511
	16000 - 16999	50	$26,012	5	$520
	17000 - 17999	42	$22,887	4	$545
	18000 - 18999	45	$24,453	4	$543
	19000 - 19999	58	$34,304	5	$591
	> 19999	430	$256,061	40	$595
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,073	$601,897		$561
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,073	$601,897		$561
RECOUPMENTS		0	$0		$0
NET PAID			$601,897		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	429	$267,937	36	$625
	Renter	575	$362,281	48	$630
	RenterWithHeat	6	$4,063	1	$677
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	178	$111,501	15	$626
	Roomer	0	$0	0	$0
	Other	10	$8,150	1	$815
RACE	AmericanIndian	7	$3,620	1	$517
	Other	57	$39,040	5	$685
	NativeHawaiian	2	$1,075	0	$538
	Black	747	$465,064	62	$623
	White	367	$234,268	31	$638
	Asian	7	$4,205	1	$601
	Unknown	11	$6,662	1	$606
DISABLED	YES	380	$231,981	32	$610
	NO	818	$521,951	68	$638
AGE 60 & ABV	YES	428	$257,213	36	$601
	NO	770	$496,720	64	$645
AGE 5 & BLW	YES	269	$175,834	22	$654
	NO	929	$578,099	78	$622
PAY_TYPE	DIRECT	0	$0	0	$0
	PROVIDER	1,198	$753,933	100	$629
REFUNDS		4	$1,518		$380

AVERAGE HOUSEHOLD SIZE: 3.79

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	166	$104,701	14	$631
	FuelOil	610	$398,373	51	$653
	Coal	0	$0	0	$0
	NaturalGas	417	$247,783	35	$594
	Kerosene	0	$0	0	$0
	Propane	5	$3,075	0	$615
	WoodOrOther	0	$0	0	$0
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	50	$36,782	4	$736
	1000 - 1999	11	$9,222	1	$838
	2000 - 2999	8	$6,052	1	$756
	3000 - 3999	15	$8,757	1	$584
	4000 - 4999	14	$8,458	1	$604
	5000 - 5999	6	$4,391	1	$732
	6000 - 6999	14	$9,722	1	$694
	7000 - 7999	12	$7,431	1	$619
	8000 - 8999	13	$9,612	1	$739
	9000 - 9999	19	$11,193	2	$589
	10000 - 10999	32	$20,615	3	$644
	11000 - 11999	135	$78,176	11	$579
	12000 - 12999	47	$26,966	4	$574
	13000 - 13999	42	$25,800	4	$614
	14000 - 14999	45	$25,512	4	$567
	15000 - 15999	45	$29,257	4	$650
	16000 - 16999	56	$31,531	5	$563
	17000 - 17999	39	$23,598	3	$605
	18000 - 18999	47	$28,899	4	$615
	19000 - 19999	43	$24,799	4	$577
	> 19999	505	$327,158	42	$648
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,198	$753,933		$629
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,198	$753,933		$629
RECOUPMENTS		0	$0		$0
NET PAID			$753,933		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	72	$39,751	57	$552
	Renter	41	$19,984	32	$487
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	10	$3,237	8	$324
	Roomer	0	$0	0	$0
	Other	4	$1,350	3	$338
RACE	AmericanIndian	0	$0	0	$0
	Other	2	$983	2	$492
	NativeHawaiian	0	$0	0	$0
	Black	0	$0	0	$0
	White	125	$63,338	98	$507
	Asian	0	$0	0	$0
	Unknown	0	$0	0	$0
DISABLED	YES	41	$21,967	32	$536
	NO	86	$42,355	68	$492
AGE 60 & ABV	YES	65	$34,429	51	$530
	NO	62	$29,893	49	$482
AGE 5 & BLW	YES	14	$7,059	11	$504
	NO	113	$57,262	89	$507
PAY_TYPE	DIRECT	0	$0	0	$0
	PROVIDER	127	$64,322	100	$506
REFUNDS		1	$337		$337

AVERAGE HOUSEHOLD SIZE: 3.06

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	33	$14,198	26	$430
	FuelOil	30	$16,443	24	$548
	Coal	1	$1,000	1	$1,000
	NaturalGas	19	$7,130	15	$375
	Kerosene	3	$2,689	2	$896
	Propane	34	$15,925	27	$468
	WoodOrOther	7	$6,936	6	$991
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	6	$2,126	5	$354
	1000 - 1999	0	$0	0	$0
	2000 - 2999	1	$220	1	$220
	3000 - 3999	0	$0	0	$0
	4000 - 4999	1	$181	1	$181
	5000 - 5999	0	$0	0	$0
	6000 - 6999	1	$202	1	$202
	7000 - 7999	0	$0	0	$0
	8000 - 8999	1	$192	1	$192
	9000 - 9999	3	$1,710	2	$570
	10000 - 10999	2	$858	2	$429
	11000 - 11999	15	$7,033	12	$469
	12000 - 12999	6	$2,673	5	$446
	13000 - 13999	7	$3,955	6	$565
	14000 - 14999	4	$1,325	3	$331
	15000 - 15999	6	$4,948	5	$825
	16000 - 16999	10	$6,062	8	$606
	17000 - 17999	10	$4,420	8	$442
	18000 - 18999	5	$2,421	4	$484
	19000 - 19999	7	$3,141	6	$449
	> 19999	42	$22,854	33	$544
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	127	$64,322		$506
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		127	$64,322		$506
RECOUPMENTS		0	$0		$0
NET PAID			$64,322		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	400	$200,802	31	$502
	Renter	775	$379,242	60	$489
	RenterWithHeat	3	$1,526	0	$509
	SubsidizedWithHeat	10	$3,544	1	$354
	SubsidizedNoHeat	102	$44,120	8	$433
	Roomer	0	$0	0	$0
	Other	4	$1,594	0	$398
RACE	AmericanIndian	5	$2,088	0	$418
	Other	41	$19,881	3	$485
	NativeHawaiian	0	$0	0	$0
	Black	361	$173,899	28	$482
	White	873	$428,293	67	$491
	Asian	6	$3,062	0	$510
	Unknown	8	$3,606	1	$451
DISABLED	YES	464	$212,400	36	$458
	NO	830	$418,429	64	$504
AGE 60 & ABV	YES	316	$140,638	24	$445
	NO	978	$490,191	76	$501
AGE 5 & BLW	YES	298	$152,535	23	$512
	NO	996	$478,293	77	$480
PAY_TYPE	DIRECT	4	$1,335	0	$334
	PROVIDER	1,290	$629,494	100	$488
REFUNDS		20	$4,658		$233

AVERAGE HOUSEHOLD SIZE: 4.27

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	603	$274,566	47	$455
	FuelOil	62	$33,217	5	$536
	Coal	1	$1,000	0	$1,000
	NaturalGas	412	$220,304	32	$535
	Kerosene	0	$0	0	$0
	Propane	207	$94,656	16	$457
	WoodOrOther	9	$7,086	1	$787
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	65	$30,913	5	$476
	1000 - 1999	8	$4,479	1	$560
	2000 - 2999	6	$2,907	0	$484
	3000 - 3999	10	$5,206	1	$521
	4000 - 4999	15	$6,195	1	$413
	5000 - 5999	13	$7,038	1	$541
	6000 - 6999	25	$12,697	2	$508
	7000 - 7999	12	$5,211	1	$434
	8000 - 8999	16	$7,679	1	$480
	9000 - 9999	15	$9,052	1	$603
	10000 - 10999	31	$12,168	2	$393
	11000 - 11999	175	$83,055	14	$475
	12000 - 12999	39	$16,093	3	$413
	13000 - 13999	47	$21,352	4	$454
	14000 - 14999	33	$13,421	3	$407
	15000 - 15999	38	$14,822	3	$390
	16000 - 16999	36	$17,089	3	$475
	17000 - 17999	46	$23,532	4	$512
	18000 - 18999	50	$25,452	4	$509
	19000 - 19999	31	$16,442	2	$530
	> 19999	582	$295,416	45	$508
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,294	$630,829		$488
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,294	$630,829		$488
RECOUPMENTS		0	$0		$0
NET PAID			$630,829		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	2,085	$1,282,448	50	$615
	Renter	1,749	$1,012,207	42	$579
	RenterWithHeat	2	$740	0	$370
	SubsidizedWithHeat	8	$2,519	0	$315
	SubsidizedNoHeat	162	$72,277	4	$446
	Roomer	1	$208	0	$208
	Other	165	$98,786	4	$599
RACE	AmericanIndian	11	$7,076	0	$643
	Other	18	$12,955	0	$720
	NativeHawaiian	7	$3,486	0	$498
	Black	191	$98,236	5	$514
	White	3,914	$2,328,117	94	$595
	Asian	4	$2,047	0	$512
	Unknown	27	$17,269	1	$640
DISABLED	YES	1,530	$885,958	37	$579
	NO	2,642	$1,583,228	63	$599
AGE 60 & ABV	YES	2,020	$1,201,066	48	$595
	NO	2,152	$1,268,120	52	$589
AGE 5 & BLW	YES	544	$324,661	13	$597
	NO	3,628	$2,144,526	87	$591
PAY_TYPE	DIRECT	9	$2,969	0	$330
	PROVIDER	4,163	$2,466,218	100	$592
REFUNDS		2	$139		$70

AVERAGE HOUSEHOLD SIZE: 3.71

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	463	$208,527	11	$450
	FuelOil	2,674	$1,681,892	64	$629
	Coal	31	$25,049	1	$808
	NaturalGas	220	$99,434	5	$452
	Kerosene	343	$229,134	8	$668
	Propane	383	$175,188	9	$457
	WoodOrOther	43	$39,933	1	$929
	BlendedFuel	15	$10,029	0	$669
INCOME RANGE	0 - 999	177	$111,423	4	$630
	1000 - 1999	21	$11,529	1	$549
	2000 - 2999	23	$13,684	1	$595
	3000 - 3999	18	$10,702	0	$595
	4000 - 4999	19	$10,483	0	$552
	5000 - 5999	24	$15,908	1	$663
	6000 - 6999	21	$13,742	1	$654
	7000 - 7999	52	$30,203	1	$581
	8000 - 8999	39	$24,189	1	$620
	9000 - 9999	53	$30,222	1	$570
	10000 - 10999	108	$61,362	3	$568
	11000 - 11999	823	$471,394	20	$573
	12000 - 12999	160	$90,585	4	$566
	13000 - 13999	154	$88,777	4	$576
	14000 - 14999	173	$101,822	4	$589
	15000 - 15999	140	$84,697	3	$605
	16000 - 16999	195	$121,664	5	$624
	17000 - 17999	193	$110,002	5	$570
	18000 - 18999	153	$92,233	4	$603
	19000 - 19999	153	$93,829	4	$613
	> 19999	1,472	$879,738	35	$598
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	4,172	$2,469,186		$592
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		4,172	$2,469,186		$592
RECOUPMENTS		0	$0		$0
NET PAID			$2,469,186		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	74	$38,854	81	$525
	Renter	13	$5,685	14	$437
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	3	$1,195	3	$398
	Roomer	0	$0	0	$0
	Other	1	$980	1	$980
RACE	AmericanIndian	0	$0	0	$0
	Other	1	$766	1	$766
	NativeHawaiian	0	$0	0	$0
	Black	1	$632	1	$632
	White	89	$45,317	98	$509
	Asian	0	$0	0	$0
	Unknown	0	$0	0	$0
DISABLED	YES	37	$18,383	41	$497
	NO	54	$28,331	59	$525
AGE 60 & ABV	YES	49	$25,134	54	$513
	NO	42	$21,581	46	$514
AGE 5 & BLW	YES	12	$5,370	13	$448
	NO	79	$41,345	87	$523
PAY_TYPE	DIRECT	2	$930	2	$465
	PROVIDER	89	$45,785	98	$514
REFUNDS		1	$80		$80

AVERAGE HOUSEHOLD SIZE: 2.83

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	11	$4,326	12	$393
	FuelOil	9	$5,039	10	$560
	Coal	1	$430	1	$430
	NaturalGas	2	$807	2	$404
	Kerosene	2	$1,271	2	$636
	Propane	57	$29,830	63	$523
	WoodOrOther	6	$3,888	7	$648
	BlendedFuel	3	$1,123	3	$374
INCOME RANGE	0 - 999	6	$4,000	7	$667
	1000 - 1999	0	$0	0	$0
	2000 - 2999	0	$0	0	$0
	3000 - 3999	0	$0	0	$0
	4000 - 4999	0	$0	0	$0
	5000 - 5999	0	$0	0	$0
	6000 - 6999	0	$0	0	$0
	7000 - 7999	0	$0	0	$0
	8000 - 8999	0	$0	0	$0
	9000 - 9999	2	$1,203	2	$602
	10000 - 10999	0	$0	0	$0
	11000 - 11999	9	$6,369	10	$708
	12000 - 12999	4	$1,941	4	$485
	13000 - 13999	2	$1,456	2	$728
	14000 - 14999	3	$1,758	3	$586
	15000 - 15999	3	$2,141	3	$714
	16000 - 16999	2	$866	2	$433
	17000 - 17999	3	$832	3	$277
	18000 - 18999	5	$2,481	5	$496
	19000 - 19999	4	$2,125	4	$531
	> 19999	48	$21,542	53	$449
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	91	$46,715		$513
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		91	$46,715		$513
RECOUPMENTS		0	$0		$0
NET PAID			$46,715		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	375	$185,319	50	$494
	Renter	349	$181,712	47	$521
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	9	$2,860	1	$318
	Roomer	0	$0	0	$0
	Other	17	$8,754	2	$515
RACE	AmericanIndian	0	$0	0	$0
	Other	35	$18,624	5	$532
	NativeHawaiian	0	$0	0	$0
	Black	26	$11,267	3	$433
	White	665	$335,135	89	$504
	Asian	2	$525	0	$262
	Unknown	22	$13,094	3	$595
DISABLED	YES	242	$113,806	32	$470
	NO	508	$264,839	68	$521
AGE 60 & ABV	YES	344	$171,025	46	$497
	NO	406	$207,620	54	$511
AGE 5 & BLW	YES	137	$71,624	18	$523
	NO	613	$307,021	82	$501
PAY_TYPE	DIRECT	18	$3,461	2	$192
	PROVIDER	732	$375,184	98	$513
REFUNDS		4	$1,072		$268

AVERAGE HOUSEHOLD SIZE: 3.39

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	103	$45,576	14	$442
	FuelOil	493	$256,724	66	$521
	Coal	2	$365	0	$182
	NaturalGas	6	$4,233	1	$706
	Kerosene	43	$28,923	6	$673
	Propane	87	$33,824	12	$389
	WoodOrOther	16	$9,000	2	$562
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	43	$25,909	6	$603
	1000 - 1999	3	$1,320	0	$440
	2000 - 2999	3	$1,545	0	$515
	3000 - 3999	3	$1,829	0	$610
	4000 - 4999	1	$642	0	$642
	5000 - 5999	4	$2,276	1	$569
	6000 - 6999	3	$1,905	0	$635
	7000 - 7999	9	$3,935	1	$437
	8000 - 8999	9	$3,993	1	$444
	9000 - 9999	10	$4,824	1	$482
	10000 - 10999	25	$11,388	3	$456
	11000 - 11999	92	$44,324	12	$482
	12000 - 12999	18	$8,746	2	$486
	13000 - 13999	34	$15,166	5	$446
	14000 - 14999	27	$13,589	4	$503
	15000 - 15999	27	$10,848	4	$402
	16000 - 16999	45	$23,470	6	$522
	17000 - 17999	24	$12,612	3	$526
	18000 - 18999	41	$21,510	5	$525
	19000 - 19999	47	$19,352	6	$412
	> 19999	282	$149,462	38	$530
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	750	$378,645		$505
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		750	$378,645		$505
RECOUPMENTS		0	$0		$0
NET PAID			$378,645		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	149	$75,729	44	$508
	Renter	151	$75,590	44	$501
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	26	$12,198	8	$469
	Roomer	0	$0	0	$0
	Other	16	$7,594	5	$475
RACE	AmericanIndian	5	$1,319	1	$264
	Other	2	$1,024	1	$512
	NativeHawaiian	0	$0	0	$0
	Black	7	$3,447	2	$492
	White	327	$164,977	96	$505
	Asian	0	$0	0	$0
	Unknown	1	$345	0	$345
DISABLED	YES	109	$51,574	32	$473
	NO	233	$119,538	68	$513
AGE 60 & ABV	YES	196	$94,552	57	$482
	NO	146	$76,560	43	$524
AGE 5 & BLW	YES	46	$23,892	13	$519
	NO	296	$147,220	87	$497
PAY_TYPE	DIRECT	4	$1,000	1	$250
	PROVIDER	338	$170,112	99	$503
REFUNDS		0	$0		$0

AVERAGE HOUSEHOLD SIZE: 3.14

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	31	$12,893	9	$416
	FuelOil	249	$125,361	73	$503
	Coal	2	$1,000	1	$500
	NaturalGas	0	$0	0	$0
	Kerosene	8	$4,163	2	$520
	Propane	29	$13,947	8	$481
	WoodOrOther	23	$13,747	7	$598
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	11	$6,604	3	$600
	1000 - 1999	0	$0	0	$0
	2000 - 2999	1	$191	0	$191
	3000 - 3999	2	$990	1	$495
	4000 - 4999	4	$2,368	1	$592
	5000 - 5999	2	$1,301	1	$650
	6000 - 6999	1	$595	0	$595
	7000 - 7999	2	$1,025	1	$512
	8000 - 8999	4	$1,575	1	$394
	9000 - 9999	4	$1,875	1	$469
	10000 - 10999	6	$3,229	2	$538
	11000 - 11999	54	$24,768	16	$459
	12000 - 12999	15	$8,734	4	$582
	13000 - 13999	11	$5,777	3	$525
	14000 - 14999	12	$5,958	4	$496
	15000 - 15999	15	$7,630	4	$509
	16000 - 16999	8	$3,375	2	$422
	17000 - 17999	29	$14,331	8	$494
	18000 - 18999	29	$13,808	8	$476
	19000 - 19999	16	$7,782	5	$486
	> 19999	116	$59,194	34	$510
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	342	$171,112		$500
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		342	$171,112		$500
RECOUPMENTS		0	$0		$0
NET PAID			$171,112		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	290	$168,156	50	$580
	Renter	261	$152,003	45	$582
	RenterWithHeat	1	$140	0	$140
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	15	$5,055	3	$337
	Roomer	0	$0	0	$0
	Other	12	$7,831	2	$653
RACE	AmericanIndian	0	$0	0	$0
	Other	3	$1,927	1	$642
	NativeHawaiian	0	$0	0	$0
	Black	6	$4,185	1	$698
	White	568	$325,324	98	$573
	Asian	0	$0	0	$0
	Unknown	2	$1,751	0	$876
DISABLED	YES	247	$138,452	43	$561
	NO	332	$194,733	57	$587
AGE 60 & ABV	YES	248	$133,056	43	$537
	NO	331	$200,130	57	$605
AGE 5 & BLW	YES	79	$49,022	14	$621
	NO	500	$284,164	86	$568
PAY_TYPE	DIRECT	1	$648	0	$648
	PROVIDER	578	$332,538	100	$575
REFUNDS		0	$0		$0

AVERAGE HOUSEHOLD SIZE: 3.8

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	99	$53,751	17	$543
	FuelOil	327	$193,346	56	$591
	Coal	2	$2,000	0	$1,000
	NaturalGas	17	$8,007	3	$471
	Kerosene	45	$29,458	8	$655
	Propane	75	$37,683	13	$502
	WoodOrOther	14	$8,941	2	$639
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	38	$23,974	7	$631
	1000 - 1999	2	$1,951	0	$976
	2000 - 2999	3	$2,761	1	$920
	3000 - 3999	3	$1,365	1	$455
	4000 - 4999	9	$6,095	2	$677
	5000 - 5999	7	$4,137	1	$591
	6000 - 6999	4	$2,200	1	$550
	7000 - 7999	7	$3,792	1	$542
	8000 - 8999	4	$2,551	1	$638
	9000 - 9999	3	$2,886	1	$962
	10000 - 10999	22	$13,853	4	$630
	11000 - 11999	105	$54,621	18	$520
	12000 - 12999	27	$13,503	5	$500
	13000 - 13999	26	$12,959	4	$498
	14000 - 14999	16	$9,320	3	$582
	15000 - 15999	21	$13,066	4	$622
	16000 - 16999	26	$12,559	4	$483
	17000 - 17999	20	$11,232	3	$562
	18000 - 18999	20	$10,762	3	$538
	19000 - 19999	11	$7,363	2	$669
	> 19999	205	$122,236	35	$596
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	579	$333,186		$575
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		579	$333,186		$575
RECOUPMENTS		0	$0		$0
NET PAID			$333,186		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	764	$408,387	55	$535
	Renter	520	$275,523	37	$530
	RenterWithHeat	4	$2,328	0	$582
	SubsidizedWithHeat	2	$556	0	$278
	SubsidizedNoHeat	45	$19,464	3	$433
	Roomer	0	$0	0	$0
	Other	57	$32,356	4	$568
RACE	AmericanIndian	0	$0	0	$0
	Other	11	$6,815	1	$620
	NativeHawaiian	0	$0	0	$0
	Black	29	$17,725	2	$611
	White	1,343	$709,659	96	$528
	Asian	1	$999	0	$999
	Unknown	8	$3,416	1	$427
DISABLED	YES	381	$199,021	27	$522
	NO	1,011	$539,593	73	$534
AGE 60 & ABV	YES	762	$378,301	55	$496
	NO	630	$360,313	45	$572
AGE 5 & BLW	YES	213	$124,263	15	$583
	NO	1,179	$614,351	85	$521
PAY_TYPE	DIRECT	0	$0	0	$0
	PROVIDER	1,392	$738,614	100	$531
REFUNDS		0	$0		$0

AVERAGE HOUSEHOLD SIZE: 3.29

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	53	$25,183	4	$475
	FuelOil	1,191	$616,220	86	$517
	Coal	16	$14,392	1	$900
	NaturalGas	2	$578	0	$289
	Kerosene	23	$11,231	2	$488
	Propane	66	$30,365	5	$460
	WoodOrOther	41	$40,644	3	$991
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	45	$30,227	3	$672
	1000 - 1999	2	$1,244	0	$622
	2000 - 2999	3	$2,343	0	$781
	3000 - 3999	9	$4,934	1	$548
	4000 - 4999	3	$2,412	0	$804
	5000 - 5999	5	$2,413	0	$483
	6000 - 6999	4	$2,488	0	$622
	7000 - 7999	13	$7,392	1	$569
	8000 - 8999	10	$6,858	1	$686
	9000 - 9999	10	$6,233	1	$623
	10000 - 10999	17	$9,457	1	$556
	11000 - 11999	178	$96,401	13	$542
	12000 - 12999	47	$26,274	3	$559
	13000 - 13999	63	$33,747	5	$536
	14000 - 14999	72	$35,091	5	$487
	15000 - 15999	76	$38,179	5	$502
	16000 - 16999	66	$31,794	5	$482
	17000 - 17999	84	$40,226	6	$479
	18000 - 18999	87	$43,450	6	$499
	19000 - 19999	71	$32,748	5	$461
	> 19999	527	$284,702	38	$540
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,392	$738,614		$531
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,392	$738,614		$531
RECOUPMENTS		0	$0		$0
NET PAID			$738,614		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	625	$391,549	54	$626
	Renter	475	$283,329	41	$596
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	18	$7,966	2	$443
	Roomer	0	$0	0	$0
	Other	30	$18,336	3	$611
RACE	AmericanIndian	4	$2,348	0	$587
	Other	17	$10,188	1	$599
	NativeHawaiian	0	$0	0	$0
	Black	11	$6,935	1	$630
	White	1,110	$679,414	97	$612
	Asian	0	$0	0	$0
	Unknown	6	$2,295	1	$382
DISABLED	YES	461	$271,695	40	$589
	NO	687	$429,484	60	$625
AGE 60 & ABV	YES	525	$324,463	46	$618
	NO	623	$376,717	54	$605
AGE 5 & BLW	YES	151	$94,762	13	$628
	NO	997	$606,418	87	$608
PAY_TYPE	DIRECT	7	$1,817	1	$260
	PROVIDER	1,142	$699,662	99	$613
REFUNDS		2	$702		$351

AVERAGE HOUSEHOLD SIZE: 3.59

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	89	$45,824	8	$515
	FuelOil	649	$407,909	57	$629
	Coal	14	$13,707	1	$979
	NaturalGas	11	$5,801	1	$527
	Kerosene	182	$113,378	16	$623
	Propane	153	$79,154	13	$517
	WoodOrOther	24	$21,566	2	$899
	BlendedFuel	26	$13,841	2	$532
INCOME RANGE	0 - 999	43	$31,980	4	$744
	1000 - 1999	7	$4,474	1	$639
	2000 - 2999	2	$518	0	$259
	3000 - 3999	7	$3,404	1	$486
	4000 - 4999	6	$4,227	1	$704
	5000 - 5999	5	$3,576	0	$715
	6000 - 6999	4	$1,980	0	$495
	7000 - 7999	9	$4,959	1	$551
	8000 - 8999	6	$3,062	1	$510
	9000 - 9999	20	$12,546	2	$627
	10000 - 10999	30	$17,664	3	$589
	11000 - 11999	212	$124,654	18	$588
	12000 - 12999	34	$19,174	3	$564
	13000 - 13999	28	$17,487	2	$625
	14000 - 14999	36	$23,258	3	$646
	15000 - 15999	38	$23,055	3	$607
	16000 - 16999	59	$34,006	5	$576
	17000 - 17999	52	$29,647	5	$570
	18000 - 18999	42	$27,156	4	$647
	19000 - 19999	44	$24,690	4	$561
	> 19999	464	$289,666	40	$624
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,148	$701,180		$611
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	1	$300		$300
TOTAL PMT		1,149	$701,480		$611
RECOUPMENTS		0	$0		$0
NET PAID			$701,480		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	205	$108,630	58	$530
	Renter	127	$64,463	36	$508
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	7	$3,024	2	$432
	Roomer	0	$0	0	$0
	Other	13	$8,143	4	$626
RACE	AmericanIndian	0	$0	0	$0
	Other	2	$1,999	1	$1,000
	NativeHawaiian	0	$0	0	$0
	Black	5	$2,992	1	$598
	White	343	$178,270	97	$520
	Asian	0	$0	0	$0
	Unknown	2	$1,000	1	$500
DISABLED	YES	123	$63,341	35	$515
	NO	229	$120,920	65	$528
AGE 60 & ABV	YES	147	$77,322	42	$526
	NO	205	$106,939	58	$522
AGE 5 & BLW	YES	52	$28,813	15	$554
	NO	300	$155,448	85	$518
PAY_TYPE	DIRECT	1	$1,000	0	$1,000
	PROVIDER	351	$183,261	100	$522
REFUNDS		3	$141		$47

AVERAGE HOUSEHOLD SIZE: 3.44

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	81	$35,118	23	$434
	FuelOil	96	$56,615	27	$590
	Coal	2	$1,991	1	$996
	NaturalGas	32	$18,580	9	$581
	Kerosene	4	$2,738	1	$684
	Propane	132	$64,219	38	$487
	WoodOrOther	5	$5,000	1	$1,000
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	23	$13,249	7	$576
	1000 - 1999	1	$1,000	0	$1,000
	2000 - 2999	0	$0	0	$0
	3000 - 3999	3	$1,446	1	$482
	4000 - 4999	2	$867	1	$434
	5000 - 5999	5	$1,944	1	$389
	6000 - 6999	3	$1,638	1	$546
	7000 - 7999	5	$2,489	1	$498
	8000 - 8999	3	$1,334	1	$445
	9000 - 9999	2	$1,303	1	$652
	10000 - 10999	12	$6,180	3	$515
	11000 - 11999	27	$12,419	8	$460
	12000 - 12999	15	$6,720	4	$448
	13000 - 13999	18	$8,217	5	$456
	14000 - 14999	15	$6,595	4	$440
	15000 - 15999	19	$9,797	5	$516
	16000 - 16999	20	$10,986	6	$549
	17000 - 17999	13	$7,708	4	$593
	18000 - 18999	7	$2,636	2	$377
	19000 - 19999	10	$6,490	3	$649
	> 19999	149	$81,244	42	$545
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	352	$184,261		$523
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		352	$184,261		$523
RECOUPMENTS		0	$0		$0
NET PAID			$184,261		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	268	$133,265	52	$497
	Renter	220	$116,557	43	$530
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	0	$0	0	$0
	Roomer	0	$0	0	$0
	Other	26	$12,604	5	$485
RACE	AmericanIndian	0	$0	0	$0
	Other	24	$12,151	5	$506
	NativeHawaiian	0	$0	0	$0
	Black	2	$1,000	0	$500
	White	480	$244,555	93	$509
	Asian	1	$714	0	$714
	Unknown	7	$4,005	1	$572
DISABLED	YES	156	$74,252	30	$476
	NO	358	$188,173	70	$526
AGE 60 & ABV	YES	292	$139,858	57	$479
	NO	222	$122,567	43	$552
AGE 5 & BLW	YES	76	$40,934	15	$539
	NO	438	$221,491	85	$506
PAY_TYPE	DIRECT	2	$1,620	0	$810
	PROVIDER	512	$260,805	100	$509
REFUNDS		0	$0		$0

AVERAGE HOUSEHOLD SIZE: 3.22

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	14	$10,316	3	$737
	FuelOil	384	$201,711	75	$525
	Coal	0	$0	0	$0
	NaturalGas	0	$0	0	$0
	Kerosene	4	$2,202	1	$550
	Propane	94	$37,296	18	$397
	WoodOrOther	17	$10,016	3	$589
	BlendedFuel	1	$885	0	$885
INCOME RANGE	0 - 999	20	$14,566	4	$728
	1000 - 1999	3	$1,695	1	$565
	2000 - 2999	1	$730	0	$730
	3000 - 3999	1	$370	0	$370
	4000 - 4999	0	$0	0	$0
	5000 - 5999	7	$3,285	1	$469
	6000 - 6999	2	$1,173	0	$586
	7000 - 7999	6	$3,167	1	$528
	8000 - 8999	7	$3,726	1	$532
	9000 - 9999	3	$2,402	1	$801
	10000 - 10999	10	$4,373	2	$437
	11000 - 11999	41	$19,490	8	$475
	12000 - 12999	11	$5,498	2	$500
	13000 - 13999	21	$11,314	4	$539
	14000 - 14999	26	$12,469	5	$480
	15000 - 15999	27	$12,718	5	$471
	16000 - 16999	30	$15,605	6	$520
	17000 - 17999	29	$13,382	6	$461
	18000 - 18999	37	$18,737	7	$506
	19000 - 19999	28	$14,642	5	$523
	> 19999	204	$103,083	40	$505
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	514	$262,425		$511
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		514	$262,425		$511
RECOUPMENTS		0	$0		$0
NET PAID			$262,425		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	606	$347,156	50	$573
	Renter	565	$328,748	47	$582
	RenterWithHeat	7	$4,606	1	$658
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	20	$11,098	2	$555
	Roomer	0	$0	0	$0
	Other	10	$5,667	1	$567
RACE	AmericanIndian	0	$0	0	$0
	Other	64	$39,394	5	$616
	NativeHawaiian	3	$2,042	0	$681
	Black	63	$38,360	5	$609
	White	1,037	$592,006	86	$571
	Asian	6	$4,584	0	$764
	Unknown	35	$20,889	3	$597
DISABLED	YES	352	$199,779	29	$568
	NO	856	$497,496	71	$581
AGE 60 & ABV	YES	520	$289,630	43	$557
	NO	688	$407,645	57	$593
AGE 5 & BLW	YES	192	$118,953	16	$620
	NO	1,016	$578,322	84	$569
PAY_TYPE	DIRECT	3	$1,999	0	$666
	PROVIDER	1,205	$695,276	100	$577
REFUNDS		5	$2,369		$474

AVERAGE HOUSEHOLD SIZE: 3.37

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	127	$76,409	11	$602
	FuelOil	584	$360,449	48	$617
	Coal	7	$6,150	1	$879
	NaturalGas	186	$125,411	15	$674
	Kerosene	20	$14,800	2	$740
	Propane	271	$105,125	22	$388
	WoodOrOther	5	$4,377	0	$875
	BlendedFuel	8	$4,555	1	$569
INCOME RANGE	0 - 999	57	$35,860	5	$629
	1000 - 1999	4	$1,523	0	$381
	2000 - 2999	1	$607	0	$607
	3000 - 3999	11	$5,373	1	$488
	4000 - 4999	7	$3,507	1	$501
	5000 - 5999	8	$6,085	1	$761
	6000 - 6999	9	$6,258	1	$695
	7000 - 7999	17	$9,665	1	$569
	8000 - 8999	15	$8,858	1	$591
	9000 - 9999	18	$11,488	1	$638
	10000 - 10999	43	$23,846	4	$555
	11000 - 11999	134	$70,822	11	$529
	12000 - 12999	38	$19,917	3	$524
	13000 - 13999	54	$28,271	4	$524
	14000 - 14999	48	$31,009	4	$646
	15000 - 15999	55	$32,590	5	$593
	16000 - 16999	65	$34,790	5	$535
	17000 - 17999	47	$27,616	4	$588
	18000 - 18999	43	$22,450	4	$522
	19000 - 19999	68	$37,712	6	$555
	> 19999	466	$279,029	39	$599
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,208	$697,275		$577
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,208	$697,275		$577
RECOUPMENTS		0	$0		$0
NET PAID			$697,275		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	364	$197,385	34	$542
	Renter	633	$375,040	59	$592
	RenterWithHeat	11	$7,611	1	$692
	SubsidizedWithHeat	1	$384	0	$384
	SubsidizedNoHeat	50	$27,587	5	$552
	Roomer	0	$0	0	$0
	Other	13	$5,977	1	$460
RACE	AmericanIndian	4	$2,753	0	$688
	Other	182	$107,608	17	$591
	NativeHawaiian	3	$2,183	0	$728
	Black	100	$58,783	9	$588
	White	732	$412,178	68	$563
	Asian	9	$4,243	1	$471
	Unknown	42	$26,235	4	$625
DISABLED	YES	329	$179,672	31	$546
	NO	743	$434,311	69	$585
AGE 60 & ABV	YES	416	$224,723	39	$540
	NO	656	$389,260	61	$593
AGE 5 & BLW	YES	243	$153,183	23	$630
	NO	829	$460,800	77	$556
PAY_TYPE	DIRECT	5	$1,820	0	$364
	PROVIDER	1,069	$613,178	100	$574
REFUNDS		11	$3,352		$305

AVERAGE HOUSEHOLD SIZE: 3.81

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	185	$106,221	17	$574
	FuelOil	625	$392,985	58	$629
	Coal	4	$1,570	0	$392
	NaturalGas	71	$44,734	7	$630
	Kerosene	9	$5,816	1	$646
	Propane	178	$62,657	17	$352
	WoodOrOther	0	$0	0	$0
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	26	$16,998	2	$654
	1000 - 1999	1	$845	0	$845
	2000 - 2999	5	$1,899	0	$380
	3000 - 3999	8	$4,910	1	$614
	4000 - 4999	4	$2,545	0	$636
	5000 - 5999	10	$5,631	1	$563
	6000 - 6999	7	$4,289	1	$613
	7000 - 7999	13	$7,039	1	$541
	8000 - 8999	13	$5,793	1	$446
	9000 - 9999	18	$10,511	2	$584
	10000 - 10999	27	$15,212	3	$563
	11000 - 11999	99	$51,492	9	$520
	12000 - 12999	36	$20,335	3	$565
	13000 - 13999	33	$19,309	3	$585
	14000 - 14999	43	$22,887	4	$532
	15000 - 15999	40	$20,903	4	$523
	16000 - 16999	55	$31,796	5	$578
	17000 - 17999	47	$25,402	4	$540
	18000 - 18999	56	$29,783	5	$532
	19000 - 19999	54	$30,804	5	$570
	> 19999	477	$285,601	44	$599
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,072	$613,983		$573
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	2	$1,015		$508
TOTAL PMT		1,074	$614,998		$573
RECOUPMENTS		0	$0		$0
NET PAID			$614,998		

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	472	$231,831	49	$491
	Renter	415	$175,757	43	$424
	RenterWithHeat	2	$595	0	$298
	SubsidizedWithHeat	46	$9,770	5	$212
	SubsidizedNoHeat	14	$3,567	1	$255
	Roomer	0	$0	0	$0
	Other	20	$12,420	2	$621
RACE	AmericanIndian	2	$1,020	0	$510
	Other	8	$3,936	1	$492
	NativeHawaiian	0	$0	0	$0
	Black	89	$34,761	9	$391
	White	862	$389,391	89	$452
	Asian	2	$1,341	0	$670
	Unknown	6	$3,490	1	$582
DISABLED	YES	323	$136,501	33	$423
	NO	646	$297,439	67	$460
AGE 60 & ABV	YES	369	$172,810	38	$468
	NO	600	$261,129	62	$435
AGE 5 & BLW	YES	172	$81,340	18	$473
	NO	797	$352,599	82	$442
PAY_TYPE	DIRECT	6	$1,224	1	$204
	PROVIDER	963	$432,715	99	$449
REFUNDS		0	$0		$0

AVERAGE HOUSEHOLD SIZE: 3.44

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	245	$76,757	25	$313
	FuelOil	347	$194,593	36	$561
	Coal	0	$0	0	$0
	NaturalGas	160	$59,812	17	$374
	Kerosene	50	$23,414	5	$468
	Propane	124	$56,023	13	$452
	WoodOrOther	9	$4,042	1	$449
	BlendedFuel	34	$19,298	4	$568
INCOME RANGE	0 - 999	61	$29,113	6	$477
	1000 - 1999	3	$844	0	$281
	2000 - 2999	4	$1,973	0	$493
	3000 - 3999	6	$2,445	1	$408
	4000 - 4999	8	$5,346	1	$668
	5000 - 5999	7	$2,221	1	$317
	6000 - 6999	11	$4,066	1	$370
	7000 - 7999	20	$8,102	2	$405
	8000 - 8999	11	$3,906	1	$355
	9000 - 9999	12	$5,155	1	$430
	10000 - 10999	13	$6,141	1	$472
	11000 - 11999	116	$47,126	12	$406
	12000 - 12999	33	$16,169	3	$490
	13000 - 13999	40	$16,356	4	$409
	14000 - 14999	47	$20,754	5	$442
	15000 - 15999	50	$21,637	5	$433
	16000 - 16999	47	$19,989	5	$425
	17000 - 17999	36	$16,572	4	$460
	18000 - 18999	37	$16,780	4	$454
	19000 - 19999	34	$13,887	4	$408
	> 19999	373	$175,358	38	$470
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	969	$433,940		$448
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		969	$433,940		$448
RECOUPMENTS		0	$0		$0
NET PAID			$433,940		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	462	$253,882	50	$550
	Renter	431	$236,057	47	$548
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	30	$13,430	3	$448
	Roomer	0	$0	0	$0
	Other	3	$2,000	0	$667
RACE	AmericanIndian	0	$0	0	$0
	Other	182	$100,610	20	$553
	NativeHawaiian	1	$1,000	0	$1,000
	Black	34	$17,828	4	$524
	White	684	$372,682	74	$545
	Asian	1	$421	0	$421
	Unknown	24	$12,828	3	$534
DISABLED	YES	254	$132,417	27	$521
	NO	672	$372,952	73	$555
AGE 60 & ABV	YES	405	$209,428	44	$517
	NO	521	$295,941	56	$568
AGE 5 & BLW	YES	192	$110,025	21	$573
	NO	734	$395,344	79	$539
PAY_TYPE	DIRECT	0	$0	0	$0
	PROVIDER	926	$505,369	100	$546
REFUNDS		1	$560		$560

AVERAGE HOUSEHOLD SIZE: 3.7

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	124	$59,222	13	$478
	FuelOil	654	$379,585	71	$580
	Coal	0	$0	0	$0
	NaturalGas	38	$19,701	4	$518
	Kerosene	6	$3,373	1	$562
	Propane	102	$41,777	11	$410
	WoodOrOther	1	$1,000	0	$1,000
	BlendedFuel	1	$711	0	$711
INCOME RANGE	0 - 999	39	$24,970	4	$640
	1000 - 1999	4	$2,007	0	$502
	2000 - 2999	7	$3,383	1	$483
	3000 - 3999	3	$1,688	0	$563
	4000 - 4999	3	$1,947	0	$649
	5000 - 5999	1	$128	0	$128
	6000 - 6999	3	$1,310	0	$437
	7000 - 7999	10	$5,149	1	$515
	8000 - 8999	12	$5,768	1	$481
	9000 - 9999	9	$4,796	1	$533
	10000 - 10999	18	$9,375	2	$521
	11000 - 11999	78	$42,545	8	$545
	12000 - 12999	30	$15,907	3	$530
	13000 - 13999	37	$19,017	4	$514
	14000 - 14999	26	$12,299	3	$473
	15000 - 15999	35	$18,527	4	$529
	16000 - 16999	53	$28,332	6	$535
	17000 - 17999	48	$25,758	5	$537
	18000 - 18999	43	$20,867	5	$485
	19000 - 19999	37	$19,702	4	$532
	> 19999	429	$241,329	46	$563
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	926	$505,369		$546
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		926	$505,369		$546
RECOUPMENTS		0	$0		$0
NET PAID			$505,369		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	588	$314,899	48	$536
	Renter	560	$331,929	46	$593
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	62	$33,560	5	$541
	Roomer	0	$0	0	$0
	Other	12	$6,111	1	$509
RACE	AmericanIndian	1	$1,000	0	$1,000
	Other	148	$82,541	12	$558
	NativeHawaiian	5	$3,987	0	$797
	Black	127	$74,928	10	$590
	White	886	$492,387	73	$556
	Asian	21	$11,599	2	$552
	Unknown	34	$20,058	3	$590
DISABLED	YES	296	$164,935	24	$557
	NO	926	$521,565	76	$563
AGE 60 & ABV	YES	488	$255,744	40	$524
	NO	734	$430,755	60	$587
AGE 5 & BLW	YES	268	$164,104	22	$612
	NO	954	$522,395	78	$548
PAY_TYPE	DIRECT	3	$1,285	0	$428
	PROVIDER	1,219	$685,215	100	$562
REFUNDS		3	$1,439		$480

AVERAGE HOUSEHOLD SIZE: 3.7

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	154	$99,003	13	$643
	FuelOil	874	$476,313	72	$545
	Coal	0	$0	0	$0
	NaturalGas	97	$61,442	8	$633
	Kerosene	35	$22,272	3	$636
	Propane	59	$24,974	5	$423
	WoodOrOther	3	$2,495	0	$832
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	37	$20,397	3	$551
	1000 - 1999	5	$3,530	0	$706
	2000 - 2999	5	$3,243	0	$649
	3000 - 3999	8	$6,607	1	$826
	4000 - 4999	13	$8,122	1	$625
	5000 - 5999	1	$556	0	$556
	6000 - 6999	11	$6,277	1	$571
	7000 - 7999	16	$10,774	1	$673
	8000 - 8999	13	$7,426	1	$571
	9000 - 9999	8	$3,726	1	$466
	10000 - 10999	24	$12,090	2	$504
	11000 - 11999	120	$62,544	10	$521
	12000 - 12999	34	$17,604	3	$518
	13000 - 13999	37	$20,987	3	$567
	14000 - 14999	48	$26,913	4	$561
	15000 - 15999	48	$24,395	4	$508
	16000 - 16999	37	$21,125	3	$571
	17000 - 17999	52	$28,962	4	$557
	18000 - 18999	58	$32,273	5	$556
	19000 - 19999	49	$26,713	4	$545
	> 19999	598	$342,235	49	$572
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,222	$686,499		$562
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,222	$686,499		$562
RECOUPMENTS		0	$0		$0
NET PAID			$686,499		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,581	$940,563	51	$595
	Renter	1,384	$834,666	44	$603
	RenterWithHeat	3	$1,569	0	$523
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	97	$53,251	3	$549
	Roomer	0	$0	0	$0
	Other	54	$26,758	2	$496
RACE	AmericanIndian	6	$3,743	0	$624
	Other	404	$259,822	13	$643
	NativeHawaiian	18	$9,674	1	$537
	Black	140	$89,845	4	$642
	White	2,507	$1,469,167	80	$586
	Asian	2	$1,114	0	$557
	Unknown	42	$23,442	1	$558
DISABLED	YES	804	$442,057	26	$550
	NO	2,315	$1,414,750	74	$611
AGE 60 & ABV	YES	1,449	$809,868	46	$559
	NO	1,670	$1,046,939	54	$627
AGE 5 & BLW	YES	569	$366,523	18	$644
	NO	2,550	$1,490,284	82	$584
PAY_TYPE	DIRECT	1	$425	0	$425
	PROVIDER	3,120	$1,857,190	100	$595
REFUNDS		9	$6,149		$683

AVERAGE HOUSEHOLD SIZE: 3.1

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	215	$135,780	7	$632
	FuelOil	2,030	$1,265,160	65	$623
	Coal	62	$56,155	2	$906
	NaturalGas	235	$157,166	8	$669
	Kerosene	47	$29,487	2	$627
	Propane	496	$191,228	16	$386
	WoodOrOther	4	$4,000	0	$1,000
	BlendedFuel	30	$17,831	1	$594
INCOME RANGE	0 - 999	162	$111,074	5	$686
	1000 - 1999	12	$7,677	0	$640
	2000 - 2999	15	$9,205	0	$614
	3000 - 3999	13	$9,155	0	$704
	4000 - 4999	20	$13,088	1	$654
	5000 - 5999	22	$14,157	1	$644
	6000 - 6999	19	$14,631	1	$770
	7000 - 7999	30	$21,621	1	$721
	8000 - 8999	35	$23,325	1	$666
	9000 - 9999	48	$31,771	2	$662
	10000 - 10999	70	$42,176	2	$603
	11000 - 11999	348	$197,997	11	$569
	12000 - 12999	136	$76,549	4	$563
	13000 - 13999	133	$70,155	4	$527
	14000 - 14999	156	$91,628	5	$587
	15000 - 15999	123	$77,516	4	$630
	16000 - 16999	146	$80,232	5	$550
	17000 - 17999	176	$96,538	6	$549
	18000 - 18999	175	$101,714	6	$581
	19000 - 19999	145	$84,014	5	$579
	> 19999	1,135	$682,584	36	$601
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	3,119	$1,856,807		$595
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	2	$808		$404
TOTAL PMT		3,121	$1,857,615		$595
RECOUPMENTS		0	$0		$0
NET PAID			$1,857,615		

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	749	$407,375	49	$544
	Renter	677	$380,856	45	$563
	RenterWithHeat	5	$2,523	0	$505
	SubsidizedWithHeat	2	$1,263	0	$632
	SubsidizedNoHeat	29	$18,377	2	$634
	Roomer	0	$0	0	$0
	Other	53	$23,990	3	$453
RACE	AmericanIndian	2	$902	0	$451
	Other	13	$6,609	1	$508
	NativeHawaiian	2	$727	0	$364
	Black	102	$62,990	7	$618
	White	1,382	$755,316	91	$547
	Asian	2	$1,700	0	$850
	Unknown	12	$6,141	1	$512
DISABLED	YES	432	$224,261	29	$519
	NO	1,083	$610,123	71	$563
AGE 60 & ABV	YES	721	$375,795	48	$521
	NO	794	$458,590	52	$578
AGE 5 & BLW	YES	258	$151,154	17	$586
	NO	1,257	$683,230	83	$544
PAY_TYPE	DIRECT	7	$1,908	0	$273
	PROVIDER	1,509	$832,517	100	$552
REFUNDS		2	$147		$74

AVERAGE HOUSEHOLD SIZE: 3.33

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	123	$73,982	8	$601
	FuelOil	1,038	$583,579	69	$562
	Coal	11	$8,477	1	$771
	NaturalGas	106	$59,466	7	$561
	Kerosene	4	$1,871	0	$468
	Propane	175	$75,711	12	$433
	WoodOrOther	20	$14,486	1	$724
	BlendedFuel	38	$16,812	3	$442
INCOME RANGE	0 - 999	47	$25,311	3	$539
	1000 - 1999	5	$3,021	0	$604
	2000 - 2999	4	$2,891	0	$723
	3000 - 3999	8	$4,678	1	$585
	4000 - 4999	12	$8,798	1	$733
	5000 - 5999	12	$6,621	1	$552
	6000 - 6999	8	$6,091	1	$761
	7000 - 7999	20	$11,354	1	$568
	8000 - 8999	15	$8,317	1	$554
	9000 - 9999	19	$12,066	1	$635
	10000 - 10999	29	$15,261	2	$526
	11000 - 11999	159	$81,414	10	$512
	12000 - 12999	46	$25,087	3	$545
	13000 - 13999	58	$30,515	4	$526
	14000 - 14999	66	$38,004	4	$576
	15000 - 15999	77	$38,895	5	$505
	16000 - 16999	59	$30,406	4	$515
	17000 - 17999	81	$41,895	5	$517
	18000 - 18999	85	$46,081	6	$542
	19000 - 19999	78	$41,838	5	$536
	> 19999	627	$355,839	41	$568
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,515	$834,384		$551
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	1	$40		$40
TOTAL PMT		1,516	$834,424		$550
RECOUPMENTS		0	$0		$0
NET PAID			$834,424		

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 42

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	131	$71,919	57	$549
	Renter	79	$40,836	34	$517
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	1	$192	0	$192
	SubsidizedNoHeat	13	$4,753	6	$366
	Roomer	0	$0	0	$0
	Other	5	$1,970	2	$394
RACE	AmericanIndian	1	$1,000	0	$1,000
	Other	0	$0	0	$0
	NativeHawaiian	0	$0	0	$0
	Black	1	$335	0	$335
	White	227	$118,335	99	$521
	Asian	0	$0	0	$0
	Unknown	0	$0	0	$0
DISABLED	YES	70	$35,170	31	$502
	NO	159	$84,500	69	$531
AGE 60 & ABV	YES	71	$34,349	31	$484
	NO	158	$85,321	69	$540
AGE 5 & BLW	YES	34	$17,733	15	$522
	NO	195	$101,938	85	$523
PAY_TYPE	DIRECT	1	$217	0	$217
	PROVIDER	228	$119,453	100	$524
REFUNDS		3	$784		$261

AVERAGE HOUSEHOLD SIZE: 4.05

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	68	$34,609	30	$509
	FuelOil	8	$5,266	3	$658
	Coal	2	$2,000	1	$1,000
	NaturalGas	72	$33,634	31	$467
	Kerosene	2	$1,000	1	$500
	Propane	48	$17,589	21	$366
	WoodOrOther	29	$25,572	13	$882
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	8	$5,162	3	$645
	1000 - 1999	1	$335	0	$335
	2000 - 2999	1	$237	0	$237
	3000 - 3999	2	$1,665	1	$832
	4000 - 4999	4	$970	2	$242
	5000 - 5999	3	$2,168	1	$723
	6000 - 6999	2	$828	1	$414
	7000 - 7999	6	$3,090	3	$515
	8000 - 8999	4	$1,759	2	$440
	9000 - 9999	1	$1,000	0	$1,000
	10000 - 10999	10	$5,132	4	$513
	11000 - 11999	29	$15,242	13	$526
	12000 - 12999	4	$2,712	2	$678
	13000 - 13999	5	$3,068	2	$614
	14000 - 14999	6	$2,679	3	$446
	15000 - 15999	17	$6,560	7	$386
	16000 - 16999	3	$1,609	1	$536
	17000 - 17999	9	$5,103	4	$567
	18000 - 18999	4	$1,821	2	$455
	19000 - 19999	13	$6,130	6	$472
	> 19999	97	$52,400	42	$540
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	229	$119,670		$523
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		229	$119,670		$523
RECOUPMENTS		0	$0		$0
NET PAID			$119,670		

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	301	$155,410	50	$516
	Renter	262	$127,996	43	$489
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	3	$725	0	$242
	SubsidizedNoHeat	32	$10,880	5	$340
	Roomer	0	$0	0	$0
	Other	9	$4,459	1	$495
RACE	AmericanIndian	2	$998	0	$499
	Other	7	$2,401	1	$343
	NativeHawaiian	2	$1,550	0	$775
	Black	81	$33,945	13	$419
	White	513	$259,391	85	$506
	Asian	1	$874	0	$874
	Unknown	1	$311	0	$311
DISABLED	YES	233	$113,063	38	$485
	NO	374	$186,406	62	$498
AGE 60 & ABV	YES	231	$121,354	38	$525
	NO	376	$178,116	62	$474
AGE 5 & BLW	YES	106	$51,878	17	$489
	NO	501	$247,591	83	$494
PAY_TYPE	DIRECT	1	$584	0	$584
	PROVIDER	606	$298,886	100	$493
REFUNDS		5	$2,069		$414

AVERAGE HOUSEHOLD SIZE: 3.43

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	107	$39,380	18	$368
	FuelOil	206	$110,594	34	$537
	Coal	1	$1,000	0	$1,000
	NaturalGas	141	$70,936	23	$503
	Kerosene	10	$4,972	2	$497
	Propane	99	$46,212	16	$467
	WoodOrOther	9	$8,105	1	$901
	BlendedFuel	34	$18,272	6	$537
INCOME RANGE	0 - 999	33	$15,254	5	$462
	1000 - 1999	4	$2,696	1	$674
	2000 - 2999	2	$1,212	0	$606
	3000 - 3999	6	$2,145	1	$358
	4000 - 4999	6	$2,143	1	$357
	5000 - 5999	3	$1,384	0	$461
	6000 - 6999	4	$2,147	1	$537
	7000 - 7999	3	$1,118	0	$373
	8000 - 8999	13	$6,781	2	$522
	9000 - 9999	3	$1,337	0	$446
	10000 - 10999	15	$7,985	2	$532
	11000 - 11999	81	$38,075	13	$470
	12000 - 12999	29	$15,157	5	$523
	13000 - 13999	19	$8,225	3	$433
	14000 - 14999	26	$14,266	4	$549
	15000 - 15999	26	$12,922	4	$497
	16000 - 16999	39	$18,436	6	$473
	17000 - 17999	17	$9,642	3	$567
	18000 - 18999	22	$10,400	4	$473
	19000 - 19999	22	$9,885	4	$449
	> 19999	234	$118,259	39	$505
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	607	$299,470		$493
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		607	$299,470		$493
RECOUPMENTS		0	$0		$0
NET PAID			$299,470		

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	625	$331,041	52	$530
	Renter	522	$278,683	43	$534
	RenterWithHeat	1	$364	0	$364
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	29	$13,086	2	$451
	Roomer	0	$0	0	$0
	Other	36	$18,314	3	$509
RACE	AmericanIndian	1	$910	0	$910
	Other	11	$4,676	1	$425
	NativeHawaiian	0	$0	0	$0
	Black	18	$9,413	1	$523
	White	1,178	$623,607	97	$529
	Asian	0	$0	0	$0
	Unknown	5	$2,883	0	$577
DISABLED	YES	368	$192,245	30	$522
	NO	845	$449,243	70	$532
AGE 60 & ABV	YES	642	$323,284	53	$504
	NO	571	$318,204	47	$557
AGE 5 & BLW	YES	210	$117,568	17	$560
	NO	1,003	$523,920	83	$522
PAY_TYPE	DIRECT	1	$274	0	$274
	PROVIDER	1,213	$641,332	100	$529
REFUNDS		3	$417		$139

AVERAGE HOUSEHOLD SIZE: 3.43

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	86	$43,053	7	$501
	FuelOil	930	$487,138	77	$524
	Coal	5	$4,393	0	$879
	NaturalGas	16	$8,317	1	$520
	Kerosene	6	$3,797	0	$633
	Propane	101	$38,176	8	$378
	WoodOrOther	49	$44,880	4	$916
	BlendedFuel	20	$11,735	2	$587
INCOME RANGE	0 - 999	37	$24,858	3	$672
	1000 - 1999	0	$0	0	$0
	2000 - 2999	5	$2,260	0	$452
	3000 - 3999	4	$2,009	0	$502
	4000 - 4999	9	$4,926	1	$547
	5000 - 5999	8	$4,180	1	$522
	6000 - 6999	7	$4,855	1	$694
	7000 - 7999	6	$5,163	0	$860
	8000 - 8999	7	$3,697	1	$528
	9000 - 9999	12	$6,196	1	$516
	10000 - 10999	33	$17,108	3	$518
	11000 - 11999	112	$58,339	9	$521
	12000 - 12999	54	$26,355	4	$488
	13000 - 13999	36	$21,602	3	$600
	14000 - 14999	50	$26,174	4	$523
	15000 - 15999	50	$24,409	4	$488
	16000 - 16999	56	$28,005	5	$500
	17000 - 17999	58	$30,635	5	$528
	18000 - 18999	57	$28,872	5	$507
	19000 - 19999	65	$34,899	5	$537
	> 19999	544	$285,353	45	$525
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,213	$641,488		$529
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	1	$118		$118
TOTAL PMT		1,214	$641,606		$529
RECOUPMENTS		0	$0		$0
NET PAID			$641,606		

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 45

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	671	$369,988	57	$551
	Renter	454	$261,688	39	$576
	RenterWithHeat	2	$1,149	0	$574
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	33	$17,041	3	$516
	Roomer	0	$0	0	$0
	Other	15	$8,493	1	$566
RACE	AmericanIndian	4	$2,076	0	$519
	Other	142	$80,848	12	$569
	NativeHawaiian	7	$4,371	1	$624
	Black	144	$82,852	12	$575
	White	820	$459,437	70	$560
	Asian	14	$7,301	1	$522
	Unknown	44	$21,474	4	$488
DISABLED	YES	308	$170,102	26	$552
	NO	867	$488,257	74	$563
AGE 60 & ABV	YES	600	$316,549	51	$528
	NO	575	$341,810	49	$594
AGE 5 & BLW	YES	170	$102,153	14	$601
	NO	1,005	$556,207	86	$553
PAY_TYPE	DIRECT	7	$1,600	1	$229
	PROVIDER	1,168	$656,759	99	$562
REFUNDS		5	$1,010		$202

AVERAGE HOUSEHOLD SIZE: 3.26

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	117	$73,296	10	$626
	FuelOil	605	$351,023	51	$580
	Coal	12	$6,378	1	$532
	NaturalGas	9	$6,950	1	$772
	Kerosene	101	$56,750	9	$562
	Propane	317	$153,165	27	$483
	WoodOrOther	10	$8,996	1	$900
	BlendedFuel	4	$1,803	0	$451
INCOME RANGE	0 - 999	39	$26,956	3	$691
	1000 - 1999	9	$5,890	1	$654
	2000 - 2999	1	$909	0	$909
	3000 - 3999	1	$858	0	$858
	4000 - 4999	4	$3,147	0	$787
	5000 - 5999	6	$2,934	1	$489
	6000 - 6999	8	$5,051	1	$631
	7000 - 7999	15	$7,375	1	$492
	8000 - 8999	18	$11,398	2	$633
	9000 - 9999	27	$14,610	2	$541
	10000 - 10999	19	$13,308	2	$700
	11000 - 11999	111	$59,843	9	$539
	12000 - 12999	34	$17,593	3	$517
	13000 - 13999	54	$27,478	5	$509
	14000 - 14999	59	$30,286	5	$513
	15000 - 15999	55	$27,398	5	$498
	16000 - 16999	56	$34,774	5	$621
	17000 - 17999	59	$32,597	5	$552
	18000 - 18999	45	$20,138	4	$448
	19000 - 19999	61	$31,185	5	$511
	> 19999	494	$284,631	42	$576
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,175	$658,359		$560
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,175	$658,359		$560
RECOUPMENTS		0	$0		$0
NET PAID			$658,359		

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 46

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	443	$257,852	38	$582
	Renter	554	$334,385	48	$604
	RenterWithHeat	4	$2,145	0	$536
	SubsidizedWithHeat	3	$961	0	$320
	SubsidizedNoHeat	136	$81,204	12	$597
	Roomer	0	$0	0	$0
	Other	11	$5,754	1	$523
RACE	AmericanIndian	4	$2,133	0	$533
	Other	85	$50,478	7	$594
	NativeHawaiian	3	$1,544	0	$515
	Black	379	$227,844	33	$601
	White	635	$373,957	55	$589
	Asian	19	$11,220	2	$591
	Unknown	26	$15,126	2	$582
DISABLED	YES	279	$159,572	24	$572
	NO	872	$522,729	76	$599
AGE 60 & ABV	YES	409	$227,845	36	$557
	NO	742	$454,456	64	$612
AGE 5 & BLW	YES	249	$152,518	22	$613
	NO	902	$529,783	78	$587
PAY_TYPE	DIRECT	1	$322	0	$322
	PROVIDER	1,150	$681,979	100	$593
REFUNDS		4	$3,871		$968

AVERAGE HOUSEHOLD SIZE: 3.58

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	164	$98,563	14	$601
	FuelOil	791	$465,250	69	$588
	Coal	0	$0	0	$0
	NaturalGas	152	$98,561	13	$648
	Kerosene	2	$1,326	0	$663
	Propane	42	$18,602	4	$443
	WoodOrOther	0	$0	0	$0
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	76	$52,382	7	$689
	1000 - 1999	5	$3,900	0	$780
	2000 - 2999	6	$3,996	1	$666
	3000 - 3999	11	$6,452	1	$587
	4000 - 4999	4	$1,519	0	$380
	5000 - 5999	2	$1,184	0	$592
	6000 - 6999	11	$8,163	1	$742
	7000 - 7999	8	$4,082	1	$510
	8000 - 8999	11	$6,247	1	$568
	9000 - 9999	17	$10,176	1	$599
	10000 - 10999	21	$11,949	2	$569
	11000 - 11999	100	$57,060	9	$571
	12000 - 12999	43	$24,093	4	$560
	13000 - 13999	24	$13,039	2	$543
	14000 - 14999	46	$26,850	4	$584
	15000 - 15999	32	$17,390	3	$543
	16000 - 16999	46	$25,179	4	$547
	17000 - 17999	50	$27,501	4	$550
	18000 - 18999	48	$28,239	4	$588
	19000 - 19999	63	$31,366	5	$498
	> 19999	527	$321,534	46	$610
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,151	$682,301		$593
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,151	$682,301		$593
RECOUPMENTS		0	$0		$0
NET PAID			$682,301		

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 47

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	95	$44,976	60	$473
	Renter	49	$23,925	31	$488
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	8	$3,885	5	$486
	Roomer	0	$0	0	$0
	Other	6	$4,232	4	$705
RACE	AmericanIndian	0	$0	0	$0
	Other	0	$0	0	$0
	NativeHawaiian	0	$0	0	$0
	Black	5	$1,994	3	$399
	White	150	$73,268	95	$488
	Asian	0	$0	0	$0
	Unknown	3	$1,756	2	$585
DISABLED	YES	50	$23,358	32	$467
	NO	108	$53,660	68	$497
AGE 60 & ABV	YES	83	$41,289	53	$497
	NO	75	$35,730	47	$476
AGE 5 & BLW	YES	23	$11,707	15	$509
	NO	135	$65,311	85	$484
PAY_TYPE	DIRECT	0	$0	0	$0
	PROVIDER	158	$77,019	100	$487
REFUNDS		0	$0		$0

AVERAGE HOUSEHOLD SIZE: 3.01

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	7	$4,984	4	$712
	FuelOil	96	$49,015	61	$511
	Coal	0	$0	0	$0
	NaturalGas	1	$1,000	1	$1,000
	Kerosene	2	$1,377	1	$688
	Propane	52	$20,644	33	$397
	WoodOrOther	0	$0	0	$0
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	6	$3,460	4	$577
	1000 - 1999	0	$0	0	$0
	2000 - 2999	1	$271	1	$271
	3000 - 3999	0	$0	0	$0
	4000 - 4999	2	$911	1	$456
	5000 - 5999	1	$1,000	1	$1,000
	6000 - 6999	0	$0	0	$0
	7000 - 7999	1	$785	1	$785
	8000 - 8999	0	$0	0	$0
	9000 - 9999	4	$1,616	3	$404
	10000 - 10999	6	$2,699	4	$450
	11000 - 11999	15	$7,496	9	$500
	12000 - 12999	5	$1,836	3	$367
	13000 - 13999	9	$4,608	6	$512
	14000 - 14999	12	$5,450	8	$454
	15000 - 15999	3	$1,467	2	$489
	16000 - 16999	2	$797	1	$398
	17000 - 17999	13	$7,238	8	$557
	18000 - 18999	11	$5,078	7	$462
	19000 - 19999	11	$4,052	7	$368
	> 19999	56	$28,256	35	$505
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	158	$77,019		$487
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		158	$77,019		$487
RECOUPMENTS		0	$0		$0
NET PAID			$77,019		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	536	$281,686	50	$526
	Renter	455	$252,323	43	$555
	RenterWithHeat	1	$114	0	$114
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	58	$29,701	5	$512
	Roomer	0	$0	0	$0
	Other	14	$8,850	1	$632
RACE	AmericanIndian	4	$1,390	0	$348
	Other	130	$69,619	12	$536
	NativeHawaiian	5	$2,052	0	$410
	Black	71	$35,260	7	$497
	White	833	$451,961	78	$543
	Asian	2	$1,280	0	$640
	Unknown	19	$11,111	2	$585
DISABLED	YES	278	$145,371	26	$523
	NO	786	$427,303	74	$544
AGE 60 & ABV	YES	485	$250,333	46	$516
	NO	579	$322,340	54	$557
AGE 5 & BLW	YES	223	$115,328	21	$517
	NO	841	$457,345	79	$544
PAY_TYPE	DIRECT	1	$435	0	$435
	PROVIDER	1,063	$572,239	100	$538
REFUNDS		1	$630		$630

AVERAGE HOUSEHOLD SIZE: 3.3

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	119	$66,116	11	$556
	FuelOil	719	$395,167	68	$550
	Coal	1	$1,000	0	$1,000
	NaturalGas	48	$25,458	5	$530
	Kerosene	59	$35,652	6	$604
	Propane	112	$43,929	11	$392
	WoodOrOther	6	$5,353	1	$892
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	34	$21,712	3	$639
	1000 - 1999	3	$3,000	0	$1,000
	2000 - 2999	4	$2,500	0	$625
	3000 - 3999	5	$3,796	0	$759
	4000 - 4999	4	$2,492	0	$623
	5000 - 5999	3	$2,290	0	$763
	6000 - 6999	15	$9,269	1	$618
	7000 - 7999	10	$7,186	1	$719
	8000 - 8999	7	$4,590	1	$656
	9000 - 9999	13	$6,143	1	$473
	10000 - 10999	19	$10,936	2	$576
	11000 - 11999	85	$44,677	8	$526
	12000 - 12999	33	$15,922	3	$482
	13000 - 13999	45	$24,027	4	$534
	14000 - 14999	37	$18,824	3	$509
	15000 - 15999	56	$26,269	5	$469
	16000 - 16999	64	$35,683	6	$558
	17000 - 17999	53	$27,328	5	$516
	18000 - 18999	50	$26,462	5	$529
	19000 - 19999	45	$22,445	4	$499
	> 19999	479	$257,125	45	$537
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,064	$572,673		$538
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,064	$572,673		$538
RECOUPMENTS		0	$0		$0
NET PAID			$572,673		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,173	$655,641	58	$559
	Renter	744	$433,724	37	$583
	RenterWithHeat	2	$1,329	0	$664
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	45	$24,724	2	$549
	Roomer	0	$0	0	$0
	Other	43	$23,166	2	$539
RACE	AmericanIndian	1	$624	0	$624
	Other	59	$34,646	3	$587
	NativeHawaiian	2	$770	0	$385
	Black	46	$25,286	2	$550
	White	1,871	$1,062,137	93	$568
	Asian	5	$2,972	0	$594
	Unknown	23	$12,149	1	$528
DISABLED	YES	486	$273,460	24	$563
	NO	1,521	$865,124	76	$569
AGE 60 & ABV	YES	912	$497,318	45	$545
	NO	1,095	$641,265	55	$586
AGE 5 & BLW	YES	372	$211,358	19	$568
	NO	1,635	$927,225	81	$567
PAY_TYPE	DIRECT	11	$5,268	1	$479
	PROVIDER	1,996	$1,133,315	99	$568
REFUNDS		7	$585		$84

AVERAGE HOUSEHOLD SIZE: 3.35

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	59	$40,106	3	$680
	FuelOil	1,749	$994,081	87	$568
	Coal	35	$29,397	2	$840
	NaturalGas	46	$28,178	2	$613
	Kerosene	2	$1,000	0	$500
	Propane	106	$39,829	5	$376
	WoodOrOther	10	$5,992	0	$599
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	92	$62,601	5	$680
	1000 - 1999	4	$3,600	0	$900
	2000 - 2999	9	$5,807	0	$645
	3000 - 3999	10	$6,674	0	$667
	4000 - 4999	21	$10,919	1	$520
	5000 - 5999	11	$6,870	1	$625
	6000 - 6999	18	$9,792	1	$544
	7000 - 7999	20	$13,582	1	$679
	8000 - 8999	10	$7,704	0	$770
	9000 - 9999	32	$19,433	2	$607
	10000 - 10999	52	$25,809	3	$496
	11000 - 11999	203	$109,199	10	$538
	12000 - 12999	79	$42,021	4	$532
	13000 - 13999	72	$40,195	4	$558
	14000 - 14999	89	$48,369	4	$543
	15000 - 15999	99	$52,511	5	$530
	16000 - 16999	89	$46,756	4	$525
	17000 - 17999	85	$48,458	4	$570
	18000 - 18999	111	$62,551	6	$564
	19000 - 19999	94	$50,246	5	$535
	> 19999	805	$464,545	40	$577
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	2,007	$1,138,583		$567
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		2,007	$1,138,583		$567
RECOUPMENTS		1	$0		$0
NET PAID			$1,138,583		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	258	$135,289	47	$524
	Renter	245	$137,034	45	$559
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	22	$11,780	4	$535
	Roomer	0	$0	0	$0
	Other	20	$11,128	4	$556
RACE	AmericanIndian	0	$0	0	$0
	Other	6	$3,434	1	$572
	NativeHawaiian	0	$0	0	$0
	Black	7	$4,231	1	$604
	White	527	$285,123	97	$541
	Asian	1	$628	0	$628
	Unknown	4	$1,813	1	$453
DISABLED	YES	164	$84,178	30	$513
	NO	381	$211,052	70	$554
AGE 60 & ABV	YES	258	$133,992	47	$519
	NO	287	$161,238	53	$562
AGE 5 & BLW	YES	104	$54,183	19	$521
	NO	441	$241,047	81	$547
PAY_TYPE	DIRECT	9	$2,823	2	$314
	PROVIDER	537	$292,986	98	$546
REFUNDS		1	$997		$997

AVERAGE HOUSEHOLD SIZE: 3.61

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	28	$14,628	5	$522
	FuelOil	350	$201,572	64	$576
	Coal	4	$2,717	1	$679
	NaturalGas	0	$0	0	$0
	Kerosene	18	$11,746	3	$653
	Propane	138	$59,255	25	$429
	WoodOrOther	6	$4,691	1	$782
	BlendedFuel	1	$622	0	$622
INCOME RANGE	0 - 999	12	$6,559	2	$547
	1000 - 1999	5	$3,726	1	$745
	2000 - 2999	2	$917	0	$458
	3000 - 3999	3	$1,883	1	$628
	4000 - 4999	2	$1,194	0	$597
	5000 - 5999	2	$1,325	0	$662
	6000 - 6999	3	$1,777	1	$592
	7000 - 7999	6	$3,333	1	$556
	8000 - 8999	2	$1,429	0	$714
	9000 - 9999	3	$1,010	1	$337
	10000 - 10999	7	$3,465	1	$495
	11000 - 11999	71	$33,221	13	$468
	12000 - 12999	24	$12,882	4	$537
	13000 - 13999	25	$12,092	5	$484
	14000 - 14999	34	$17,323	6	$510
	15000 - 15999	16	$8,984	3	$562
	16000 - 16999	23	$12,701	4	$552
	17000 - 17999	13	$5,755	2	$443
	18000 - 18999	25	$14,779	5	$591
	19000 - 19999	28	$15,491	5	$553
	> 19999	239	$135,385	44	$566
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	545	$295,230		$542
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	1	$578		$578
TOTAL PMT		546	$295,808		$542
RECOUPMENTS		0	$0		$0
NET PAID			$295,808		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	3,031	$1,635,479	38	$540
	Renter	4,029	$2,195,739	50	$545
	RenterWithHeat	14	$8,744	0	$625
	SubsidizedWithHeat	2	$1,119	0	$560
	SubsidizedNoHeat	858	$452,866	11	$528
	Roomer	0	$0	0	$0
	Other	96	$57,977	1	$604
RACE	AmericanIndian	29	$17,942	0	$619
	Other	1,180	$632,952	15	$536
	NativeHawaiian	14	$9,743	0	$696
	Black	5,581	$3,046,697	70	$546
	White	1,007	$543,122	13	$539
	Asian	121	$55,886	2	$462
	Unknown	98	$45,581	1	$465
DISABLED	YES	2,485	$1,285,399	31	$517
	NO	5,545	$3,066,526	69	$553
AGE 60 & ABV	YES	2,992	$1,559,750	37	$521
	NO	5,038	$2,792,174	63	$554
AGE 5 & BLW	YES	1,750	$978,040	22	$559
	NO	6,280	$3,373,884	78	$537
PAY_TYPE	DIRECT	2	$500	0	$250
	PROVIDER	8,029	$4,351,866	100	$542
REFUNDS		28	$11,832		$423

AVERAGE HOUSEHOLD SIZE: 3.72

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	1,905	$1,023,725	24	$537
	FuelOil	2,107	$1,310,203	26	$622
	Coal	0	$0	0	$0
	NaturalGas	4,016	$2,017,496	50	$502
	Kerosene	2	$500	0	$250
	Propane	0	$0	0	$0
	WoodOrOther	0	$0	0	$0
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	434	$270,535	5	$623
	1000 - 1999	53	$30,907	1	$583
	2000 - 2999	66	$42,284	1	$641
	3000 - 3999	74	$45,495	1	$615
	4000 - 4999	87	$55,785	1	$641
	5000 - 5999	74	$43,001	1	$581
	6000 - 6999	62	$33,983	1	$548
	7000 - 7999	122	$69,358	2	$569
	8000 - 8999	87	$46,105	1	$530
	9000 - 9999	142	$81,232	2	$572
	10000 - 10999	211	$121,592	3	$576
	11000 - 11999	1,236	$624,233	15	$505
	12000 - 12999	289	$146,649	4	$507
	13000 - 13999	303	$159,575	4	$527
	14000 - 14999	323	$166,611	4	$516
	15000 - 15999	308	$160,707	4	$522
	16000 - 16999	347	$187,104	4	$539
	17000 - 17999	288	$144,675	4	$502
	18000 - 18999	307	$155,133	4	$505
	19000 - 19999	270	$142,694	3	$528
	> 19999	2,947	$1,624,265	37	$551
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	8,030	$4,351,924		$542
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	1	$442		$442
TOTAL PMT		8,031	$4,352,366		$542
RECOUPMENTS		1	$0		$0
NET PAID			$4,352,366		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	296	$165,729	58	$560
	Renter	171	$95,748	33	$560
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	41	$21,120	8	$515
	Roomer	0	$0	0	$0
	Other	5	$3,732	1	$746
RACE	AmericanIndian	3	$1,427	1	$476
	Other	41	$24,909	8	$608
	NativeHawaiian	1	$199	0	$199
	Black	38	$24,080	7	$634
	White	417	$228,613	81	$548
	Asian	0	$0	0	$0
	Unknown	13	$7,103	3	$546
DISABLED	YES	133	$68,460	26	$515
	NO	380	$217,871	74	$573
AGE 60 & ABV	YES	241	$125,908	47	$522
	NO	272	$160,422	53	$590
AGE 5 & BLW	YES	75	$43,537	15	$580
	NO	438	$242,793	85	$554
PAY_TYPE	DIRECT	0	$0	0	$0
	PROVIDER	513	$286,330	100	$558
REFUNDS		1	$1,098		$1,098

AVERAGE HOUSEHOLD SIZE: 3.17

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	56	$35,140	11	$628
	FuelOil	242	$148,610	47	$614
	Coal	2	$2,000	0	$1,000
	NaturalGas	10	$7,026	2	$703
	Kerosene	14	$10,223	3	$730
	Propane	177	$73,346	35	$414
	WoodOrOther	7	$6,995	1	$999
	BlendedFuel	5	$2,988	1	$598
INCOME RANGE	0 - 999	21	$16,085	4	$766
	1000 - 1999	0	$0	0	$0
	2000 - 2999	3	$1,800	1	$600
	3000 - 3999	2	$1,181	0	$590
	4000 - 4999	2	$1,998	0	$999
	5000 - 5999	0	$0	0	$0
	6000 - 6999	9	$4,016	2	$446
	7000 - 7999	2	$1,658	0	$829
	8000 - 8999	1	$319	0	$319
	9000 - 9999	6	$4,987	1	$831
	10000 - 10999	13	$7,647	3	$588
	11000 - 11999	41	$20,250	8	$494
	12000 - 12999	20	$12,297	4	$615
	13000 - 13999	16	$6,205	3	$388
	14000 - 14999	22	$11,872	4	$540
	15000 - 15999	31	$12,890	6	$416
	16000 - 16999	35	$19,086	7	$545
	17000 - 17999	26	$14,328	5	$551
	18000 - 18999	21	$11,750	4	$560
	19000 - 19999	20	$10,881	4	$544
	> 19999	222	$127,081	43	$572
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	513	$286,330		$558
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		513	$286,330		$558
RECOUPMENTS		0	$0		$0
NET PAID			$286,330		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	53	$32,913	56	$621
	Renter	32	$17,510	34	$547
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	1	$231	1	$231
	Roomer	0	$0	0	$0
	Other	8	$4,434	9	$554
RACE	AmericanIndian	0	$0	0	$0
	Other	0	$0	0	$0
	NativeHawaiian	0	$0	0	$0
	Black	3	$1,000	3	$333
	White	91	$54,088	97	$594
	Asian	0	$0	0	$0
	Unknown	0	$0	0	$0
DISABLED	YES	37	$18,496	39	$500
	NO	57	$36,592	61	$642
AGE 60 & ABV	YES	46	$27,154	49	$590
	NO	48	$27,934	51	$582
AGE 5 & BLW	YES	16	$9,873	17	$617
	NO	78	$45,215	83	$580
PAY_TYPE	DIRECT	2	$628	2	$314
	PROVIDER	92	$54,460	98	$592
REFUNDS		0	$0		$0

AVERAGE HOUSEHOLD SIZE: 4.05

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	15	$7,253	16	$484
	FuelOil	5	$3,902	5	$780
	Coal	7	$6,430	7	$919
	NaturalGas	10	$6,158	11	$616
	Kerosene	1	$1,000	1	$1,000
	Propane	42	$16,351	45	$389
	WoodOrOther	14	$13,994	15	$1,000
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	6	$2,863	6	$477
	1000 - 1999	1	$144	1	$144
	2000 - 2999	0	$0	0	$0
	3000 - 3999	0	$0	0	$0
	4000 - 4999	0	$0	0	$0
	5000 - 5999	1	$1,000	1	$1,000
	6000 - 6999	1	$1,000	1	$1,000
	7000 - 7999	1	$1,000	1	$1,000
	8000 - 8999	1	$386	1	$386
	9000 - 9999	1	$325	1	$325
	10000 - 10999	7	$1,875	7	$268
	11000 - 11999	13	$5,438	14	$418
	12000 - 12999	0	$0	0	$0
	13000 - 13999	1	$835	1	$835
	14000 - 14999	4	$2,528	4	$632
	15000 - 15999	4	$2,522	4	$630
	16000 - 16999	5	$3,611	5	$722
	17000 - 17999	2	$2,000	2	$1,000
	18000 - 18999	2	$1,640	2	$820
	19000 - 19999	5	$2,315	5	$463
	> 19999	39	$25,606	41	$657
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	94	$55,088		$586
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		94	$55,088		$586
RECOUPMENTS		0	$0		$0
NET PAID			$55,088		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	2,505	$1,488,742	62	$594
	Renter	1,382	$836,789	34	$605
	RenterWithHeat	1	$851	0	$851
	SubsidizedWithHeat	5	$1,067	0	$213
	SubsidizedNoHeat	85	$50,724	2	$597
	Roomer	0	$0	0	$0
	Other	84	$49,979	2	$595
RACE	AmericanIndian	11	$6,685	0	$608
	Other	268	$174,244	7	$650
	NativeHawaiian	7	$5,316	0	$759
	Black	114	$67,092	3	$589
	White	3,622	$2,150,162	89	$594
	Asian	5	$3,595	0	$719
	Unknown	35	$21,059	1	$602
DISABLED	YES	1,056	$613,309	26	$581
	NO	3,006	$1,814,843	74	$604
AGE 60 & ABV	YES	1,962	$1,137,629	48	$580
	NO	2,100	$1,290,524	52	$615
AGE 5 & BLW	YES	693	$445,707	17	$643
	NO	3,369	$1,982,446	83	$588
PAY_TYPE	DIRECT	20	$7,733	0	$387
	PROVIDER	4,042	$2,420,420	100	$599
REFUNDS		7	$1,338		$191

AVERAGE HOUSEHOLD SIZE: 3.26

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	118	$70,570	3	$598
	FuelOil	3,342	$2,008,569	82	$601
	Coal	341	$250,168	8	$734
	NaturalGas	13	$8,269	0	$636
	Kerosene	13	$8,349	0	$642
	Propane	228	$76,590	6	$336
	WoodOrOther	7	$5,638	0	$805
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	174	$127,085	4	$730
	1000 - 1999	22	$14,765	1	$671
	2000 - 2999	23	$15,940	1	$693
	3000 - 3999	22	$13,448	1	$611
	4000 - 4999	24	$15,966	1	$665
	5000 - 5999	25	$15,197	1	$608
	6000 - 6999	23	$15,367	1	$668
	7000 - 7999	43	$28,274	1	$658
	8000 - 8999	41	$25,162	1	$614
	9000 - 9999	40	$26,149	1	$654
	10000 - 10999	75	$44,754	2	$597
	11000 - 11999	432	$245,390	11	$568
	12000 - 12999	145	$85,558	4	$590
	13000 - 13999	137	$77,214	3	$564
	14000 - 14999	207	$118,881	5	$574
	15000 - 15999	174	$105,096	4	$604
	16000 - 16999	219	$122,373	5	$559
	17000 - 17999	216	$120,841	5	$559
	18000 - 18999	202	$121,974	5	$604
	19000 - 19999	190	$108,942	5	$573
	> 19999	1,627	$979,063	40	$602
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	4,062	$2,428,153		$598
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		4,062	$2,428,153		$598
RECOUPMENTS		0	$0		$0
NET PAID			$2,428,153		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	249	$120,063	45	$482
	Renter	269	$139,353	49	$518
	RenterWithHeat	1	$242	0	$242
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	19	$8,141	3	$428
	Roomer	0	$0	0	$0
	Other	14	$7,680	3	$549
RACE	AmericanIndian	0	$0	0	$0
	Other	12	$6,674	2	$556
	NativeHawaiian	0	$0	0	$0
	Black	5	$2,351	1	$470
	White	534	$266,080	97	$498
	Asian	1	$374	0	$374
	Unknown	0	$0	0	$0
DISABLED	YES	119	$56,759	22	$477
	NO	433	$218,721	78	$505
AGE 60 & ABV	YES	296	$138,387	54	$468
	NO	256	$137,092	46	$536
AGE 5 & BLW	YES	90	$52,202	16	$580
	NO	462	$223,278	84	$483
PAY_TYPE	DIRECT	15	$3,921	3	$261
	PROVIDER	537	$271,558	97	$506
REFUNDS		1	$1		$1

AVERAGE HOUSEHOLD SIZE: 3.37

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	12	$7,198	2	$600
	FuelOil	436	$231,740	79	$532
	Coal	0	$0	0	$0
	NaturalGas	3	$1,811	1	$604
	Kerosene	4	$1,764	1	$441
	Propane	83	$29,118	15	$351
	WoodOrOther	11	$2,518	2	$229
	BlendedFuel	3	$1,330	1	$443
INCOME RANGE	0 - 999	11	$6,192	2	$563
	1000 - 1999	0	$0	0	$0
	2000 - 2999	0	$0	0	$0
	3000 - 3999	4	$2,081	1	$520
	4000 - 4999	2	$755	0	$378
	5000 - 5999	3	$1,768	1	$589
	6000 - 6999	1	$248	0	$248
	7000 - 7999	4	$1,832	1	$458
	8000 - 8999	7	$2,177	1	$311
	9000 - 9999	6	$3,619	1	$603
	10000 - 10999	7	$2,778	1	$397
	11000 - 11999	50	$24,508	9	$490
	12000 - 12999	17	$7,631	3	$449
	13000 - 13999	15	$8,327	3	$555
	14000 - 14999	33	$14,755	6	$447
	15000 - 15999	15	$6,063	3	$404
	16000 - 16999	25	$13,245	5	$530
	17000 - 17999	31	$14,429	6	$465
	18000 - 18999	34	$17,326	6	$510
	19000 - 19999	30	$15,747	5	$525
	> 19999	256	$131,397	46	$513
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	552	$275,479		$499
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		552	$275,479		$499
RECOUPMENTS		0	$0		$0
NET PAID			$275,479		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,112	$767,566	55	$690
	Renter	796	$506,406	40	$636
	RenterWithHeat	1	$136	0	$136
	SubsidizedWithHeat	3	$1,228	0	$409
	SubsidizedNoHeat	26	$13,680	1	$526
	Roomer	0	$0	0	$0
	Other	75	$50,190	4	$669
RACE	AmericanIndian	5	$4,548	0	$910
	Other	9	$8,109	0	$901
	NativeHawaiian	1	$998	0	$998
	Black	13	$7,661	1	$589
	White	1,975	$1,310,597	98	$664
	Asian	0	$0	0	$0
	Unknown	10	$7,294	0	$729
DISABLED	YES	601	$380,673	30	$633
	NO	1,412	$958,533	70	$679
AGE 60 & ABV	YES	981	$653,678	49	$666
	NO	1,032	$685,528	51	$664
AGE 5 & BLW	YES	313	$217,938	16	$696
	NO	1,700	$1,121,268	84	$660
PAY_TYPE	DIRECT	5	$1,814	0	$363
	PROVIDER	2,009	$1,338,340	100	$666
REFUNDS		0	$0		$0

AVERAGE HOUSEHOLD SIZE: 3.35

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	139	$65,126	7	$469
	FuelOil	1,429	$994,553	71	$696
	Coal	72	$65,592	4	$911
	NaturalGas	15	$3,905	1	$260
	Kerosene	124	$87,838	6	$708
	Propane	175	$75,296	9	$430
	WoodOrOther	36	$32,437	2	$901
	BlendedFuel	23	$14,459	1	$629
INCOME RANGE	0 - 999	87	$60,942	4	$700
	1000 - 1999	8	$6,076	0	$760
	2000 - 2999	11	$7,379	1	$671
	3000 - 3999	7	$5,236	0	$748
	4000 - 4999	10	$8,211	0	$821
	5000 - 5999	13	$10,825	1	$833
	6000 - 6999	20	$15,969	1	$798
	7000 - 7999	22	$18,699	1	$850
	8000 - 8999	21	$13,894	1	$662
	9000 - 9999	29	$19,712	1	$680
	10000 - 10999	47	$33,244	2	$707
	11000 - 11999	255	$161,548	13	$634
	12000 - 12999	83	$53,960	4	$650
	13000 - 13999	76	$47,546	4	$626
	14000 - 14999	89	$58,332	4	$655
	15000 - 15999	70	$44,030	3	$629
	16000 - 16999	106	$68,950	5	$650
	17000 - 17999	83	$55,805	4	$672
	18000 - 18999	83	$60,619	4	$730
	19000 - 19999	103	$67,649	5	$657
	> 19999	790	$520,582	39	$659
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	2,013	$1,339,206		$665
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	1	$948		$948
TOTAL PMT		2,014	$1,340,154		$665
RECOUPMENTS		0	$0		$0
NET PAID			$1,340,154		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	50	$28,649	57	$573
	Renter	30	$15,088	34	$503
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	3	$718	3	$239
	Roomer	0	$0	0	$0
	Other	4	$2,671	5	$668
RACE	AmericanIndian	0	$0	0	$0
	Other	0	$0	0	$0
	NativeHawaiian	0	$0	0	$0
	Black	0	$0	0	$0
	White	85	$46,126	98	$543
	Asian	0	$0	0	$0
	Unknown	2	$1,000	2	$500
DISABLED	YES	29	$13,936	33	$481
	NO	58	$33,190	67	$572
AGE 60 & ABV	YES	49	$26,984	56	$551
	NO	38	$20,142	44	$530
AGE 5 & BLW	YES	11	$6,078	13	$553
	NO	76	$41,049	87	$540
PAY_TYPE	DIRECT	0	$0	0	$0
	PROVIDER	87	$47,126	100	$542
REFUNDS		0	$0		$0

AVERAGE HOUSEHOLD SIZE: 3.26

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	1	$244	1	$244
	FuelOil	55	$31,392	63	$571
	Coal	0	$0	0	$0
	NaturalGas	0	$0	0	$0
	Kerosene	2	$1,456	2	$728
	Propane	25	$10,234	29	$409
	WoodOrOther	3	$3,000	3	$1,000
	BlendedFuel	1	$800	1	$800
INCOME RANGE	0 - 999	5	$3,684	6	$737
	1000 - 1999	0	$0	0	$0
	2000 - 2999	0	$0	0	$0
	3000 - 3999	0	$0	0	$0
	4000 - 4999	0	$0	0	$0
	5000 - 5999	0	$0	0	$0
	6000 - 6999	1	$111	1	$111
	7000 - 7999	0	$0	0	$0
	8000 - 8999	0	$0	0	$0
	9000 - 9999	1	$1,000	1	$1,000
	10000 - 10999	2	$1,176	2	$588
	11000 - 11999	14	$7,602	16	$543
	12000 - 12999	1	$244	1	$244
	13000 - 13999	1	$772	1	$772
	14000 - 14999	5	$2,283	6	$457
	15000 - 15999	5	$2,280	6	$456
	16000 - 16999	6	$2,624	7	$437
	17000 - 17999	4	$3,083	5	$771
	18000 - 18999	3	$1,685	3	$562
	19000 - 19999	5	$2,975	6	$595
	> 19999	34	$17,607	39	$518
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	87	$47,126		$542
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		87	$47,126		$542
RECOUPMENTS		0	$0		$0
NET PAID			$47,126		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	511	$277,673	56	$543
	Renter	373	$196,245	41	$526
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	15	$7,079	2	$472
	Roomer	0	$0	0	$0
	Other	15	$8,566	2	$571
RACE	AmericanIndian	2	$1,270	0	$635
	Other	17	$7,641	2	$449
	NativeHawaiian	3	$1,000	0	$333
	Black	4	$2,093	0	$523
	White	877	$472,235	96	$538
	Asian	5	$1,857	1	$371
	Unknown	6	$3,469	1	$578
DISABLED	YES	275	$145,766	30	$530
	NO	639	$343,798	70	$538
AGE 60 & ABV	YES	438	$225,939	48	$516
	NO	476	$263,625	52	$554
AGE 5 & BLW	YES	183	$101,679	20	$556
	NO	731	$387,885	80	$531
PAY_TYPE	DIRECT	3	$2,000	0	$667
	PROVIDER	912	$487,967	100	$535
REFUNDS		3	$1,324		$441

AVERAGE HOUSEHOLD SIZE: 3.7

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	38	$21,881	4	$576
	FuelOil	531	$300,754	58	$566
	Coal	4	$4,000	0	$1,000
	NaturalGas	1	$1,000	0	$1,000
	Kerosene	42	$26,168	5	$623
	Propane	255	$103,599	28	$406
	WoodOrOther	27	$23,635	3	$875
	BlendedFuel	16	$8,527	2	$533
INCOME RANGE	0 - 999	30	$19,472	3	$649
	1000 - 1999	2	$751	0	$376
	2000 - 2999	2	$1,641	0	$820
	3000 - 3999	2	$1,237	0	$618
	4000 - 4999	2	$1,411	0	$706
	5000 - 5999	5	$3,227	1	$645
	6000 - 6999	4	$505	0	$126
	7000 - 7999	7	$3,739	1	$534
	8000 - 8999	6	$3,653	1	$609
	9000 - 9999	14	$8,527	2	$609
	10000 - 10999	17	$9,608	2	$565
	11000 - 11999	102	$49,274	11	$483
	12000 - 12999	34	$17,867	4	$526
	13000 - 13999	30	$13,921	3	$464
	14000 - 14999	37	$19,344	4	$523
	15000 - 15999	37	$16,746	4	$453
	16000 - 16999	53	$28,246	6	$533
	17000 - 17999	41	$20,396	4	$497
	18000 - 18999	45	$22,376	5	$497
	19000 - 19999	43	$20,523	5	$477
	> 19999	401	$227,100	44	$566
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	914	$489,564		$536
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	1	$402		$402
TOTAL PMT		915	$489,966		$535
RECOUPMENTS		0	$0		$0
NET PAID			$489,966		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	119	$75,575	44	$635
	Renter	136	$68,200	51	$501
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	11	$4,486	4	$408
	Roomer	0	$0	0	$0
	Other	3	$2,000	1	$667
RACE	AmericanIndian	1	$766	0	$766
	Other	1	$142	0	$142
	NativeHawaiian	0	$0	0	$0
	Black	3	$488	1	$163
	White	262	$147,675	97	$564
	Asian	0	$0	0	$0
	Unknown	2	$1,191	1	$596
DISABLED	YES	92	$43,265	34	$470
	NO	177	$106,996	66	$604
AGE 60 & ABV	YES	107	$64,494	40	$603
	NO	162	$85,767	60	$529
AGE 5 & BLW	YES	52	$28,362	19	$545
	NO	217	$121,899	81	$562
PAY_TYPE	DIRECT	3	$417	1	$139
	PROVIDER	266	$149,844	99	$563
REFUNDS		1	$59		$59

AVERAGE HOUSEHOLD SIZE: 3.62

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	94	$39,928	35	$425
	FuelOil	30	$21,439	11	$715
	Coal	21	$19,655	8	$936
	NaturalGas	33	$20,104	12	$609
	Kerosene	2	$99	1	$50
	Propane	65	$28,960	24	$446
	WoodOrOther	24	$20,076	9	$836
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	12	$5,949	4	$496
	1000 - 1999	2	$599	1	$300
	2000 - 2999	1	$534	0	$534
	3000 - 3999	6	$2,914	2	$486
	4000 - 4999	4	$1,628	1	$407
	5000 - 5999	2	$1,494	1	$747
	6000 - 6999	0	$0	0	$0
	7000 - 7999	1	$211	0	$211
	8000 - 8999	5	$1,882	2	$376
	9000 - 9999	2	$649	1	$324
	10000 - 10999	7	$4,552	3	$650
	11000 - 11999	36	$14,604	13	$406
	12000 - 12999	8	$4,247	3	$531
	13000 - 13999	6	$3,347	2	$558
	14000 - 14999	8	$5,133	3	$642
	15000 - 15999	7	$4,562	3	$652
	16000 - 16999	18	$11,212	7	$623
	17000 - 17999	12	$5,827	4	$486
	18000 - 18999	9	$5,355	3	$595
	19000 - 19999	12	$7,237	4	$603
	> 19999	111	$68,326	41	$616
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	269	$150,261		$559
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		269	$150,261		$559
RECOUPMENTS		0	$0		$0
NET PAID			$150,261		

Energy Assistance Summary (EASUM)

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County 60

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	161	$87,610	38	$544
	Renter	198	$101,033	47	$510
	RenterWithHeat	1	$457	0	$457
	SubsidizedWithHeat	4	$3,225	1	$806
	SubsidizedNoHeat	48	$21,616	11	$450
	Roomer	0	$0	0	$0
	Other	10	$4,255	2	$426
RACE	AmericanIndian	2	$1,000	0	$500
	Other	9	$4,470	2	$497
	NativeHawaiian	0	$0	0	$0
	Black	24	$13,996	6	$583
	White	386	$198,626	91	$515
	Asian	0	$0	0	$0
	Unknown	1	$104	0	$104
DISABLED	YES	105	$52,986	25	$505
	NO	317	$165,210	75	$521
AGE 60 & ABV	YES	188	$92,737	45	$493
	NO	234	$125,460	55	$536
AGE 5 & BLW	YES	63	$36,067	15	$572
	NO	359	$182,130	85	$507
PAY_TYPE	DIRECT	5	$1,489	1	$298
	PROVIDER	417	$216,707	99	$520
REFUNDS		1	$150		$150

AVERAGE HOUSEHOLD SIZE: 3.01

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	59	$33,683	14	$571
	FuelOil	279	$148,694	66	$533
	Coal	5	$1,964	1	$393
	NaturalGas	2	$1,127	0	$564
	Kerosene	1	$379	0	$379
	Propane	72	$29,639	17	$412
	WoodOrOther	4	$2,710	1	$678
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	26	$13,901	6	$535
	1000 - 1999	1	$807	0	$807
	2000 - 2999	0	$0	0	$0
	3000 - 3999	0	$0	0	$0
	4000 - 4999	2	$1,513	0	$756
	5000 - 5999	4	$3,280	1	$820
	6000 - 6999	1	$664	0	$664
	7000 - 7999	5	$2,425	1	$485
	8000 - 8999	5	$2,553	1	$511
	9000 - 9999	5	$2,799	1	$560
	10000 - 10999	7	$3,855	2	$551
	11000 - 11999	31	$13,836	7	$446
	12000 - 12999	13	$5,979	3	$460
	13000 - 13999	16	$6,794	4	$425
	14000 - 14999	16	$7,810	4	$488
	15000 - 15999	17	$6,556	4	$386
	16000 - 16999	30	$15,380	7	$513
	17000 - 17999	20	$9,522	5	$476
	18000 - 18999	29	$13,317	7	$459
	19000 - 19999	24	$13,514	6	$563
	> 19999	170	$93,691	40	$551
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	422	$218,196		$517
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		422	$218,196		$517
RECOUPMENTS		0	$0		$0
NET PAID			$218,196		

Energy Assistance Summary (EASUM)

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Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	284	$135,118	61	$476
	Renter	135	$66,810	29	$495
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	4	$1,325	1	$331
	SubsidizedNoHeat	24	$8,992	5	$375
	Roomer	0	$0	0	$0
	Other	15	$8,033	3	$536
RACE	AmericanIndian	3	$1,800	1	$600
	Other	3	$1,603	1	$534
	NativeHawaiian	0	$0	0	$0
	Black	11	$6,288	2	$572
	White	439	$208,910	95	$476
	Asian	0	$0	0	$0
	Unknown	6	$1,677	1	$280
DISABLED	YES	169	$79,436	37	$470
	NO	293	$140,842	63	$481
AGE 60 & ABV	YES	179	$87,068	39	$486
	NO	283	$133,210	61	$471
AGE 5 & BLW	YES	81	$37,963	18	$469
	NO	381	$182,315	82	$479
PAY_TYPE	DIRECT	5	$746	1	$149
	PROVIDER	458	$219,561	99	$479
REFUNDS		5	$1,151		$230

AVERAGE HOUSEHOLD SIZE: 3.49

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	168	$67,240	36	$400
	FuelOil	43	$25,889	9	$602
	Coal	3	$2,992	1	$997
	NaturalGas	65	$26,700	14	$411
	Kerosene	1	$982	0	$982
	Propane	149	$71,410	32	$479
	WoodOrOther	30	$23,434	6	$781
	BlendedFuel	3	$1,631	1	$544
INCOME RANGE	0 - 999	41	$20,959	9	$511
	1000 - 1999	0	$0	0	$0
	2000 - 2999	2	$1,146	0	$573
	3000 - 3999	3	$1,479	1	$493
	4000 - 4999	4	$2,142	1	$536
	5000 - 5999	2	$406	0	$203
	6000 - 6999	2	$1,210	0	$605
	7000 - 7999	3	$1,000	1	$333
	8000 - 8999	5	$1,280	1	$256
	9000 - 9999	6	$1,638	1	$273
	10000 - 10999	6	$4,267	1	$711
	11000 - 11999	60	$24,594	13	$410
	12000 - 12999	26	$11,420	6	$439
	13000 - 13999	16	$7,474	3	$467
	14000 - 14999	18	$9,456	4	$525
	15000 - 15999	16	$7,042	3	$440
	16000 - 16999	11	$7,551	2	$686
	17000 - 17999	18	$10,328	4	$574
	18000 - 18999	19	$9,031	4	$475
	19000 - 19999	17	$7,785	4	$458
	> 19999	187	$90,071	40	$482
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	462	$220,278		$477
	Reissue	1	$29		$29
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		463	$220,307		$476
RECOUPMENTS		0	$0		$0
NET PAID			$220,307		

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 62

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	166	$88,648	60	$534
	Renter	100	$50,674	36	$507
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	1	$753	0	$753
	Roomer	0	$0	0	$0
	Other	8	$5,323	3	$665
RACE	AmericanIndian	1	$678	0	$678
	Other	2	$998	1	$499
	NativeHawaiian	0	$0	0	$0
	Black	3	$680	1	$227
	White	269	$143,042	98	$532
	Asian	0	$0	0	$0
	Unknown	0	$0	0	$0
DISABLED	YES	85	$47,174	31	$555
	NO	190	$98,224	69	$517
AGE 60 & ABV	YES	120	$63,286	44	$527
	NO	155	$82,112	56	$530
AGE 5 & BLW	YES	38	$21,487	14	$565
	NO	237	$123,911	86	$523
PAY_TYPE	DIRECT	2	$508	1	$254
	PROVIDER	273	$144,890	99	$531
REFUNDS		1	$79		$79

AVERAGE HOUSEHOLD SIZE: 3.35

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	53	$25,102	19	$474
	FuelOil	10	$6,227	4	$623
	Coal	0	$0	0	$0
	NaturalGas	38	$14,533	14	$382
	Kerosene	2	$1,584	1	$792
	Propane	141	$78,220	51	$555
	WoodOrOther	30	$19,113	11	$637
	BlendedFuel	1	$618	0	$618
INCOME RANGE	0 - 999	13	$6,664	5	$513
	1000 - 1999	0	$0	0	$0
	2000 - 2999	1	$510	0	$510
	3000 - 3999	3	$1,355	1	$452
	4000 - 4999	2	$507	1	$254
	5000 - 5999	3	$2,445	1	$815
	6000 - 6999	1	$678	0	$678
	7000 - 7999	6	$3,247	2	$541
	8000 - 8999	5	$2,094	2	$419
	9000 - 9999	4	$2,791	1	$698
	10000 - 10999	7	$4,298	3	$614
	11000 - 11999	39	$17,861	14	$458
	12000 - 12999	9	$4,196	3	$466
	13000 - 13999	7	$3,702	3	$529
	14000 - 14999	16	$7,955	6	$497
	15000 - 15999	18	$8,143	7	$452
	16000 - 16999	10	$6,595	4	$660
	17000 - 17999	14	$6,483	5	$463
	18000 - 18999	11	$6,263	4	$569
	19000 - 19999	7	$3,729	3	$533
	> 19999	99	$55,882	36	$564
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	275	$145,398		$529
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		275	$145,398		$529
RECOUPMENTS		0	$0		$0
NET PAID			$145,398		

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 63

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	529	$320,252	48	$605
	Renter	492	$272,039	45	$553
	RenterWithHeat	1	$237	0	$237
	SubsidizedWithHeat	6	$1,451	1	$242
	SubsidizedNoHeat	54	$21,264	5	$394
	Roomer	0	$0	0	$0
	Other	19	$11,389	2	$599
RACE	AmericanIndian	1	$997	0	$997
	Other	10	$5,128	1	$513
	NativeHawaiian	0	$0	0	$0
	Black	107	$49,640	10	$464
	White	971	$565,233	88	$582
	Asian	3	$1,803	0	$601
	Unknown	9	$3,830	1	$426
DISABLED	YES	380	$206,531	35	$544
	NO	721	$420,100	65	$583
AGE 60 & ABV	YES	462	$271,031	42	$587
	NO	639	$355,601	58	$556
AGE 5 & BLW	YES	168	$98,104	15	$584
	NO	933	$528,528	85	$566
PAY_TYPE	DIRECT	1	$163	0	$163
	PROVIDER	1,100	$626,469	100	$570
REFUNDS		2	$203		$102

AVERAGE HOUSEHOLD SIZE: 3.39

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	283	$123,019	26	$435
	FuelOil	460	$317,850	42	$691
	Coal	0	$0	0	$0
	NaturalGas	177	$67,723	16	$383
	Kerosene	121	$83,856	11	$693
	Propane	55	$29,186	5	$531
	WoodOrOther	5	$4,998	0	$1,000
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	61	$36,991	6	$606
	1000 - 1999	4	$1,232	0	$308
	2000 - 2999	12	$5,801	1	$483
	3000 - 3999	11	$4,945	1	$450
	4000 - 4999	3	$1,268	0	$423
	5000 - 5999	8	$5,672	1	$709
	6000 - 6999	5	$1,826	0	$365
	7000 - 7999	9	$5,785	1	$643
	8000 - 8999	18	$11,905	2	$661
	9000 - 9999	19	$10,865	2	$572
	10000 - 10999	37	$19,261	3	$521
	11000 - 11999	188	$101,016	17	$537
	12000 - 12999	48	$27,615	4	$575
	13000 - 13999	48	$28,166	4	$587
	14000 - 14999	33	$20,685	3	$627
	15000 - 15999	37	$24,553	3	$664
	16000 - 16999	42	$20,868	4	$497
	17000 - 17999	45	$25,052	4	$557
	18000 - 18999	55	$28,655	5	$521
	19000 - 19999	37	$20,011	3	$541
	> 19999	379	$222,969	34	$588
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,101	$626,632		$569
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		1,101	$626,632		$569
RECOUPMENTS		1	$1,000		$1,000
NET PAID			$625,632		

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 64

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	459	$261,317	57	$569
	Renter	305	$168,200	38	$551
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	19	$9,038	2	$476
	Roomer	0	$0	0	$0
	Other	19	$11,118	2	$585
RACE	AmericanIndian	3	$2,412	0	$804
	Other	19	$9,806	2	$516
	NativeHawaiian	2	$1,000	0	$500
	Black	9	$6,393	1	$710
	White	760	$425,208	95	$559
	Asian	3	$1,669	0	$556
	Unknown	6	$3,185	1	$531
DISABLED	YES	187	$108,079	23	$578
	NO	615	$341,594	77	$555
AGE 60 & ABV	YES	433	$236,962	54	$547
	NO	369	$212,711	46	$576
AGE 5 & BLW	YES	117	$67,236	15	$575
	NO	685	$382,437	85	$558
PAY_TYPE	DIRECT	1	$509	0	$509
	PROVIDER	801	$449,164	100	$561
REFUNDS		1	$97		$97

AVERAGE HOUSEHOLD SIZE: 2.94

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	20	$12,180	2	$609
	FuelOil	432	$273,597	54	$633
	Coal	4	$3,991	0	$998
	NaturalGas	5	$3,337	1	$667
	Kerosene	27	$20,768	3	$769
	Propane	276	$107,212	34	$388
	WoodOrOther	15	$13,941	2	$929
	BlendedFuel	23	$14,647	3	$637
INCOME RANGE	0 - 999	19	$12,939	2	$681
	1000 - 1999	5	$2,205	1	$441
	2000 - 2999	1	$1,000	0	$1,000
	3000 - 3999	3	$1,734	0	$578
	4000 - 4999	1	$972	0	$972
	5000 - 5999	5	$4,089	1	$818
	6000 - 6999	3	$1,341	0	$447
	7000 - 7999	5	$3,530	1	$706
	8000 - 8999	4	$2,654	0	$664
	9000 - 9999	15	$8,267	2	$551
	10000 - 10999	22	$14,288	3	$649
	11000 - 11999	112	$62,281	14	$556
	12000 - 12999	29	$13,956	4	$481
	13000 - 13999	28	$15,130	3	$540
	14000 - 14999	40	$23,315	5	$583
	15000 - 15999	32	$17,703	4	$553
	16000 - 16999	45	$25,121	6	$558
	17000 - 17999	65	$31,866	8	$490
	18000 - 18999	34	$18,507	4	$544
	19000 - 19999	41	$22,253	5	$543
	> 19999	293	$166,522	37	$568
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	802	$449,673		$561
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		802	$449,673		$561
RECOUPMENTS		2	$900		$450
NET PAID			$448,773		

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 65

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	1,261	$822,882	51	$653
	Renter	1,067	$656,991	43	$616
	RenterWithHeat	6	$1,442	0	$240
	SubsidizedWithHeat	2	$370	0	$185
	SubsidizedNoHeat	83	$33,862	3	$408
	Roomer	0	$0	0	$0
	Other	62	$40,114	2	$647
RACE	AmericanIndian	4	$1,527	0	$382
	Other	36	$18,146	1	$504
	NativeHawaiian	5	$2,452	0	$490
	Black	134	$69,584	5	$519
	White	2,280	$1,451,578	92	$637
	Asian	3	$1,114	0	$371
	Unknown	19	$11,260	1	$593
DISABLED	YES	735	$450,390	30	$613
	NO	1,746	$1,105,270	70	$633
AGE 60 & ABV	YES	1,115	$724,340	45	$650
	NO	1,366	$831,319	55	$609
AGE 5 & BLW	YES	350	$205,771	14	$588
	NO	2,131	$1,349,889	86	$633
PAY_TYPE	DIRECT	2	$1,518	0	$759
	PROVIDER	2,481	$1,554,452	100	$627
REFUNDS		9	$1,290		$143

AVERAGE HOUSEHOLD SIZE: 3.28

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	463	$195,007	19	$421
	FuelOil	1,232	$912,983	50	$741
	Coal	5	$4,957	0	$991
	NaturalGas	173	$85,588	7	$495
	Kerosene	250	$177,498	10	$710
	Propane	311	$138,921	13	$447
	WoodOrOther	38	$34,435	2	$906
	BlendedFuel	9	$6,271	0	$697
INCOME RANGE	0 - 999	134	$81,141	5	$606
	1000 - 1999	15	$11,183	1	$746
	2000 - 2999	22	$11,403	1	$518
	3000 - 3999	16	$13,564	1	$848
	4000 - 4999	20	$11,985	1	$599
	5000 - 5999	8	$5,886	0	$736
	6000 - 6999	16	$9,424	1	$589
	7000 - 7999	23	$14,262	1	$620
	8000 - 8999	31	$17,430	1	$562
	9000 - 9999	33	$24,976	1	$757
	10000 - 10999	76	$49,566	3	$652
	11000 - 11999	359	$222,865	14	$621
	12000 - 12999	87	$56,483	4	$649
	13000 - 13999	106	$68,605	4	$647
	14000 - 14999	117	$70,312	5	$601
	15000 - 15999	98	$66,216	4	$676
	16000 - 16999	119	$73,995	5	$622
	17000 - 17999	104	$63,849	4	$614
	18000 - 18999	111	$69,595	4	$627
	19000 - 19999	112	$69,955	5	$625
	> 19999	874	$542,964	35	$621
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	2,481	$1,555,660		$627
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	2	$310		$155
TOTAL PMT		2,483	$1,555,970		$627
RECOUPMENTS		1	$456		$456
NET PAID			$1,555,514		

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 66

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	242	$132,442	48	$547
	Renter	205	$106,033	40	$517
	RenterWithHeat	0	$0	0	$0
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	52	$22,957	10	$441
	Roomer	0	$0	0	$0
	Other	10	$5,110	2	$511
RACE	AmericanIndian	2	$627	0	$314
	Other	3	$1,707	1	$569
	NativeHawaiian	1	$274	0	$274
	Black	1	$1,000	0	$1,000
	White	497	$261,631	98	$526
	Asian	0	$0	0	$0
	Unknown	5	$1,302	1	$260
DISABLED	YES	143	$75,076	28	$525
	NO	366	$191,466	72	$523
AGE 60 & ABV	YES	242	$127,452	48	$527
	NO	267	$139,090	52	$521
AGE 5 & BLW	YES	81	$44,927	16	$555
	NO	428	$221,615	84	$518
PAY_TYPE	DIRECT	0	$0	0	$0
	PROVIDER	509	$266,542	100	$524
REFUNDS		1	$150		$150

AVERAGE HOUSEHOLD SIZE: 3.16

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	29	$12,631	6	$436
	FuelOil	266	$154,332	52	$580
	Coal	6	$5,455	1	$909
	NaturalGas	1	$512	0	$512
	Kerosene	26	$16,660	5	$641
	Propane	155	$62,260	30	$402
	WoodOrOther	14	$7,240	3	$517
	BlendedFuel	12	$7,452	2	$621
INCOME RANGE	0 - 999	21	$11,628	4	$554
	1000 - 1999	1	$581	0	$581
	2000 - 2999	1	$391	0	$391
	3000 - 3999	1	$274	0	$274
	4000 - 4999	4	$1,725	1	$431
	5000 - 5999	1	$619	0	$619
	6000 - 6999	11	$5,834	2	$530
	7000 - 7999	4	$2,187	1	$547
	8000 - 8999	2	$595	0	$298
	9000 - 9999	7	$3,990	1	$570
	10000 - 10999	8	$5,248	2	$656
	11000 - 11999	68	$37,662	13	$554
	12000 - 12999	17	$10,367	3	$610
	13000 - 13999	31	$15,891	6	$513
	14000 - 14999	17	$9,074	3	$534
	15000 - 15999	35	$15,223	7	$435
	16000 - 16999	17	$7,963	3	$468
	17000 - 17999	41	$22,275	8	$543
	18000 - 18999	14	$7,535	3	$538
	19000 - 19999	19	$10,445	4	$550
	> 19999	189	$97,034	37	$513
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	509	$266,542		$524
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	0	$0		$0
TOTAL PMT		509	$266,542		$524
RECOUPMENTS		0	$0		$0
NET PAID			$266,542		

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

County 67

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	514	$266,007	36	$518
	Renter	824	$399,691	58	$485
	RenterWithHeat	1	$1,000	0	$1,000
	SubsidizedWithHeat	0	$0	0	$0
	SubsidizedNoHeat	72	$28,771	5	$400
	Roomer	0	$0	0	$0
	Other	22	$13,058	2	$594
RACE	AmericanIndian	9	$5,086	1	$565
	Other	163	$74,253	11	$456
	NativeHawaiian	2	$1,556	0	$778
	Black	204	$91,266	14	$447
	White	1,020	$519,606	71	$509
	Asian	3	$1,578	0	$526
	Unknown	32	$15,183	2	$474
DISABLED	YES	446	$210,340	31	$472
	NO	987	$498,188	69	$505
AGE 60 & ABV	YES	521	$255,503	36	$490
	NO	912	$453,025	64	$497
AGE 5 & BLW	YES	308	$148,856	21	$483
	NO	1,125	$559,672	79	$497
PAY_TYPE	DIRECT	13	$6,214	1	$478
	PROVIDER	1,421	$704,309	99	$496
REFUNDS		1	$92		$92

AVERAGE HOUSEHOLD SIZE: 3.79

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	398	$183,125	28	$460
	FuelOil	510	$312,192	36	$612
	Coal	1	$669	0	$669
	NaturalGas	226	$88,828	16	$393
	Kerosene	18	$12,962	1	$720
	Propane	272	$105,016	19	$386
	WoodOrOther	8	$5,735	1	$717
	BlendedFuel	0	$0	0	$0
INCOME RANGE	0 - 999	46	$22,487	3	$489
	1000 - 1999	3	$1,238	0	$413
	2000 - 2999	6	$3,704	0	$617
	3000 - 3999	3	$1,517	0	$506
	4000 - 4999	12	$5,948	1	$496
	5000 - 5999	7	$3,167	0	$452
	6000 - 6999	7	$2,377	0	$340
	7000 - 7999	15	$6,111	1	$407
	8000 - 8999	19	$8,991	1	$473
	9000 - 9999	20	$8,927	1	$446
	10000 - 10999	34	$13,597	2	$400
	11000 - 11999	119	$55,906	8	$470
	12000 - 12999	58	$31,465	4	$542
	13000 - 13999	58	$27,873	4	$481
	14000 - 14999	60	$30,814	4	$514
	15000 - 15999	56	$28,829	4	$515
	16000 - 16999	70	$32,156	5	$459
	17000 - 17999	63	$26,028	4	$413
	18000 - 18999	70	$35,545	5	$508
	19000 - 19999	64	$32,536	4	$508
	> 19999	643	$329,314	45	$512
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	1,433	$708,528		$494
	Reissue	0	$0		$0
	Secondpay	0	$0		$0
	Underpay	0	$0		$0
	Extraordinary	1	$1,996		$1,996
TOTAL PMT		1,434	$710,524		$495
RECOUPMENTS		2	$1,025		$512
NET PAID			$709,499		

Energy Assistance Summary (EASUM)

9/9/2023 - 3/14/2024

STATE WIDE

Crisis Demographic Report By Household (LIH660-R03)

	ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	39,487	$22,333,964	49	$566
	Renter	34,473	$19,162,779	43	$556
	RenterWithHeat	123	$64,098	0	$521
	SubsidizedWithHeat	143	$47,781	0	$334
	SubsidizedNoHeat	3,932	$1,944,146	5	$494
	Roomer	3	$1,278	0	$426
	Other	1,701	$971,915	2	$571
RACE	AmericanIndian	202	$119,719	0	$593
	Other	4,589	$2,613,419	6	$569
	NativeHawaiian	110	$66,522	0	$605
	Black	11,254	$6,117,006	14	$544
	White	62,393	$34,902,994	78	$559
	Asian	325	$170,392	0	$524
	Unknown	989	$535,910	1	$542
DISABLED	YES	23,938	$12,846,995	30	$537
	NO	55,924	$31,678,967	70	$566
AGE 60 & ABV	YES	35,145	$19,131,831	44	$544
	NO	44,717	$25,394,130	56	$568
AGE 5 & BLW	YES	14,132	$8,185,617	18	$579
	NO	65,730	$36,340,345	82	$553
PAY_TYPE	DIRECT	292	$97,475	0	$334
	PROVIDER	79,595	$44,438,003	100	$558
REFUNDS		240	$74,829		$312

AVERAGE HOUSEHOLD SIZE: 3.44

* Counts, Amounts ($), % and AVG from HOUSING, RACE, DISABLED, OVER-60 and INCOME RANGE category are from Regular payments only

** Counts, Amounts ($), % and AVG from PAY_TYPE category are from All Payment Types (Regular, Reissue, Secondpay, Underpay and Extraordinary)

*** Counts, Amounts ($), % and AVG from PAYMENT_SENT category are from All Payment Types (Regular, Reissue, Secondpay, Underpay and Extraordinary)

	ITEM	COUNT	AMOUNT	%	AVG
PAYMENT SENT	Electric	11,402	$5,614,126	14	$492
	FuelOil	45,412	$27,084,186	57	$596
	Coal	1,034	$839,220	1	$812
	NaturalGas	8,846	$4,561,944	11	$516
	Kerosene	2,166	$1,380,744	3	$637
	Propane	9,358	$3,901,191	12	$417
	WoodOrOther	988	$773,104	1	$782
	BlendedFuel	656	$371,447	1	$566
INCOME RANGE	0 - 999	3,585	$2,218,936	4	$619
	1000 - 1999	362	$218,744	0	$604
	2000 - 2999	394	$240,765	0	$611
	3000 - 3999	468	$281,530	1	$602
	4000 - 4999	544	$321,507	1	$591
	5000 - 5999	478	$287,300	1	$601
	6000 - 6999	585	$340,185	1	$582
	7000 - 7999	877	$517,241	1	$590
	8000 - 8999	831	$470,137	1	$566
	9000 - 9999	1,124	$649,434	1	$578
	10000 - 10999	1,862	$1,042,356	2	$560
	11000 - 11999	9,856	$5,214,563	12	$529
	12000 - 12999	2,929	$1,584,828	4	$541
	13000 - 13999	3,039	$1,628,112	4	$536
	14000 - 14999	3,355	$1,818,983	4	$542
	15000 - 15999	3,220	$1,739,437	4	$540
	16000 - 16999	3,730	$2,044,943	5	$548
	17000 - 17999	3,678	$1,969,782	5	$536
	18000 - 18999	3,642	$1,982,976	5	$544
	19000 - 19999	3,469	$1,889,136	4	$545
	> 19999	31,807	$18,049,365	40	$567
	Not Reported	0	$0	0	$0
PAYMENT TYPE	Regular	79,862	$44,525,961		$558
	Reissue	1	$29		$29
	Secondpay	3	$347		$116
	Underpay	0	$0		$0
	Extraordinary	21	$9,140		$435
TOTAL PMT		79,887	$44,535,477		$557
RECOUPMENTS		9	$3,385		$376
NET PAID			$44,532,092		

THE COALITION FOR AFFORDABLE UTILITY SERVICE AND ENERGY EFFICIENCY IN PENNSYLVANIA

APPENDIX D

PEOPLES UNIVERSAL SERVICE ADVISORY GROUP PRESENTATION

January 24, 2024

PEOPLES USAG

JANUARY 24, 2024

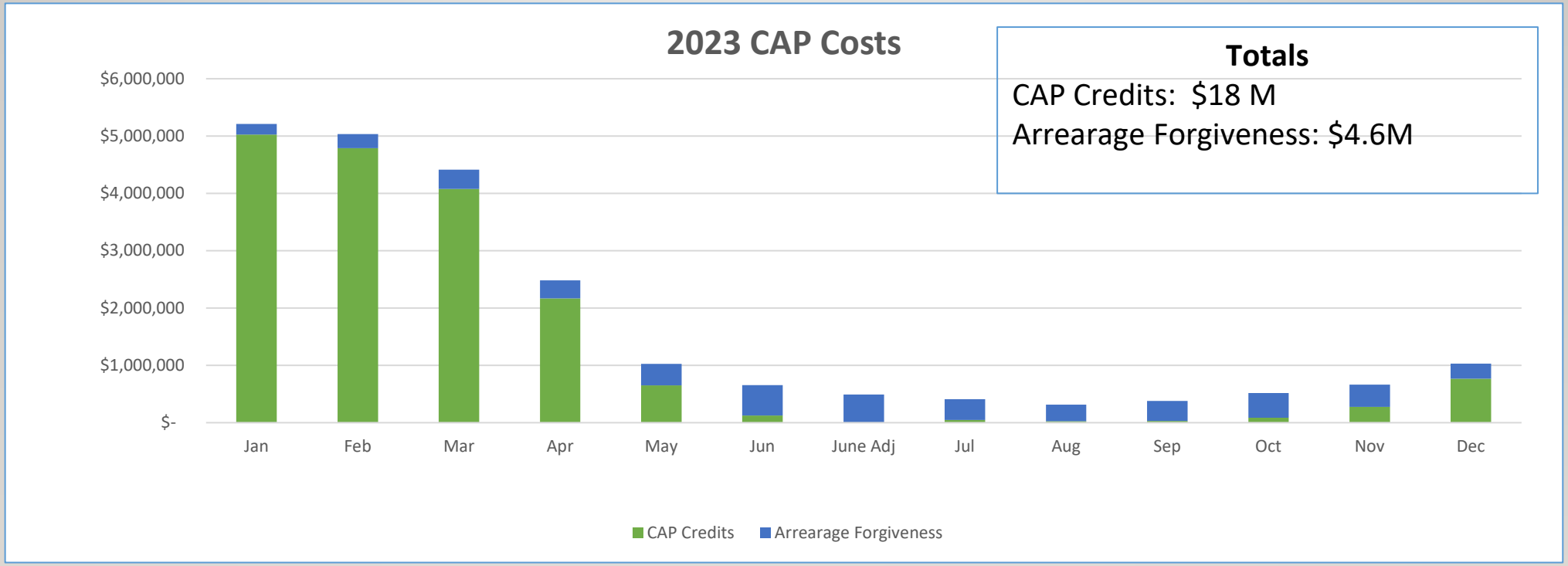
AGENDA

- Program Statistics
- Base Rate Case Filed
- CAP Enrollment
- 2024 Advisory Group Planning

CURRENT CAP PARTICIPATION

	October USAG	December
Peoples Division	30,126	28,159
Peoples Gas LLC	2,542	2,338
Total	**32,668**	**30,497**

CAP BENEFITS COST TRACKING



2022 costs were $21.9 million

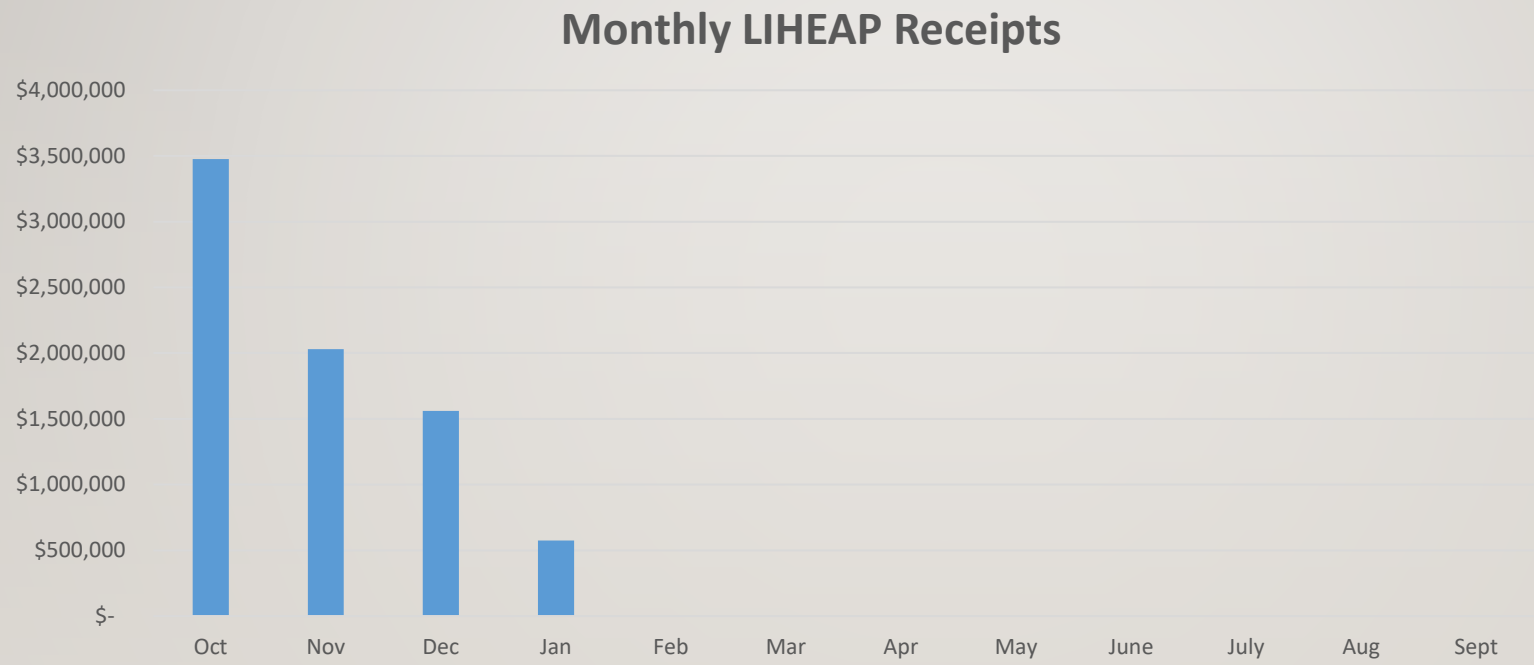
DOLLAR ENERGY FUND

Dollar Energy	Grant program opened 10/1/23
Grants provided through 1/19/24 Funds currently available	$174,090 to 410 households $781,579 current balance*

*Benefit of Dollar Energy Fund winter fundraising efforts will be added to the Fund.

Reminder: Peoples Natural Gas and Peoples Gas were combined into one Fund last year.

LIHEAP UPDATE



$19.5 million rec'd in 2022/2023 year.

$7.6 million program year-to-date receipts

LIHEAP Cash minimum $300/ LIHEAP Crisis maximum $1,000

Program scheduled to close April 5th.

LIURP UPDATE

	Peoples Natural Gas	Peoples Gas
2023 Spend	$3,469,514	$301,075
Completed Jobs	290	27
Former Peoples Division	176	
Former Equitable Division	*114*	
2024 Budget	*$2,753,076*	$511,410

**Please note: Figures above are preliminary as year-end closing processes are still underway.*

The former Equitable Gas has been fully integrated into Peoples Natural Gas and all jobs and dollars are reported to the PUC under Peoples Natural Gas.

BASE RATE CASE FILING

- Peoples filed a request with the PA Public Utility Commission in late December.
- The filing brings Peoples Natural Gas and Peoples Gas together in one tariff and one rider for the recovery of Universal Service program costs.
- Generally programs at both companies have the same eligibility requirements, with the exception of LIURP
  - Peoples Natural Gas requires 140 MCF annually for participation
  - Peoples Gas requires 120 MCF annually for participation
  - We proposed the combined LIURP program should use the lower threshold (120 MCF)

CAP PARTICIPATION

January 2023 USAG Meeting

Current CAP Participation

	October USAG	Current
Peoples Division	30,161	30,111
Peoples Gas LLC	2,539	2,548
Total	32,700	32,659

Today

CURRENT CAP PARTICIPATION

	October USAG	December
Peoples Division	30,126	28,159
Peoples Gas LLC	2,542	2,338
Total	**32,668**	**30,497**

Enrollment levels have been flat all year and are now dipping lower

LOW CAP PARTICIPATION

- During the pandemic, dismissal for failure to recertify was paused.
- Customers could enroll with verbal income if income documentation was not easily attainable during the pandemic.
- Gas rates in 2023 decreased, lowering residential bills
- Participation in LIHEAP is generally flat as well, despite outreach efforts
- Other natural gas utilities are also reporting flat and/or lower than desired participation

2024 FOCUS AREAS

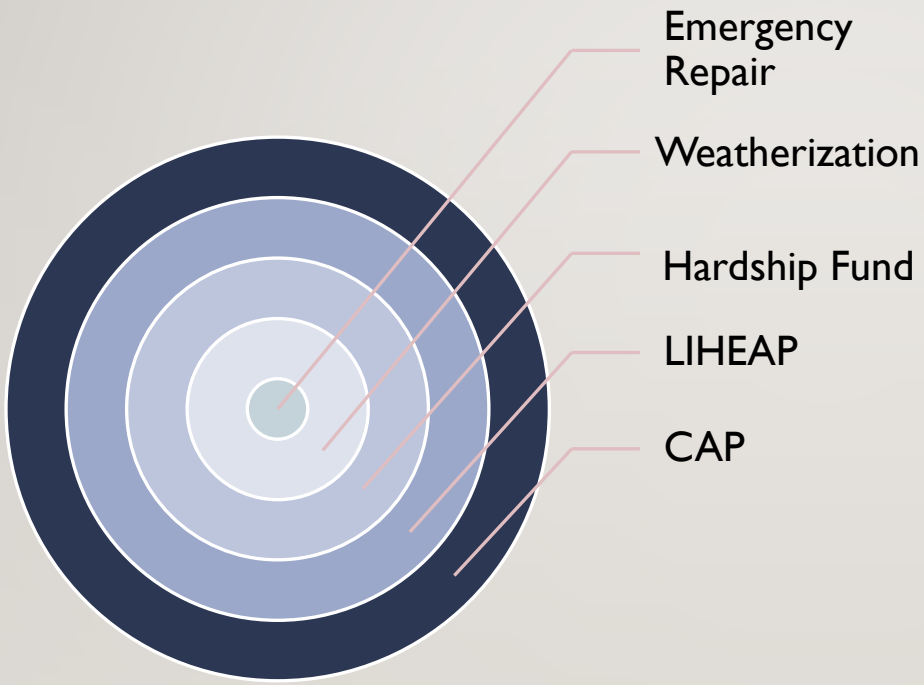
- Increased efforts at Dollar Energy Fund to ensure all grant recipients are also enrolled in CAP.
- Direct calls underway to LIHEAP recipients not on CAP to gain verbal income and permission to enroll in CAP.
- Enroll Emergency Repair Program participants in CAP if they are not yet participating (with customer permission).
- Working with Dollar Energy Fund on IVR improvements to improve experience & keep customers engaged.

Other utility best practices we should consider?

DISCUSSION: WHAT KEEPS ELIGIBLE CUSTOMERS FROM ENROLLING/REMAINING IN CAP?

- Awareness?
- Difficulty in applying?
- Confusion with LIHEAP?
- Problems with outreach messaging?
- What else?

REMEMBER: ASSISTANCE IS AVAILABLE

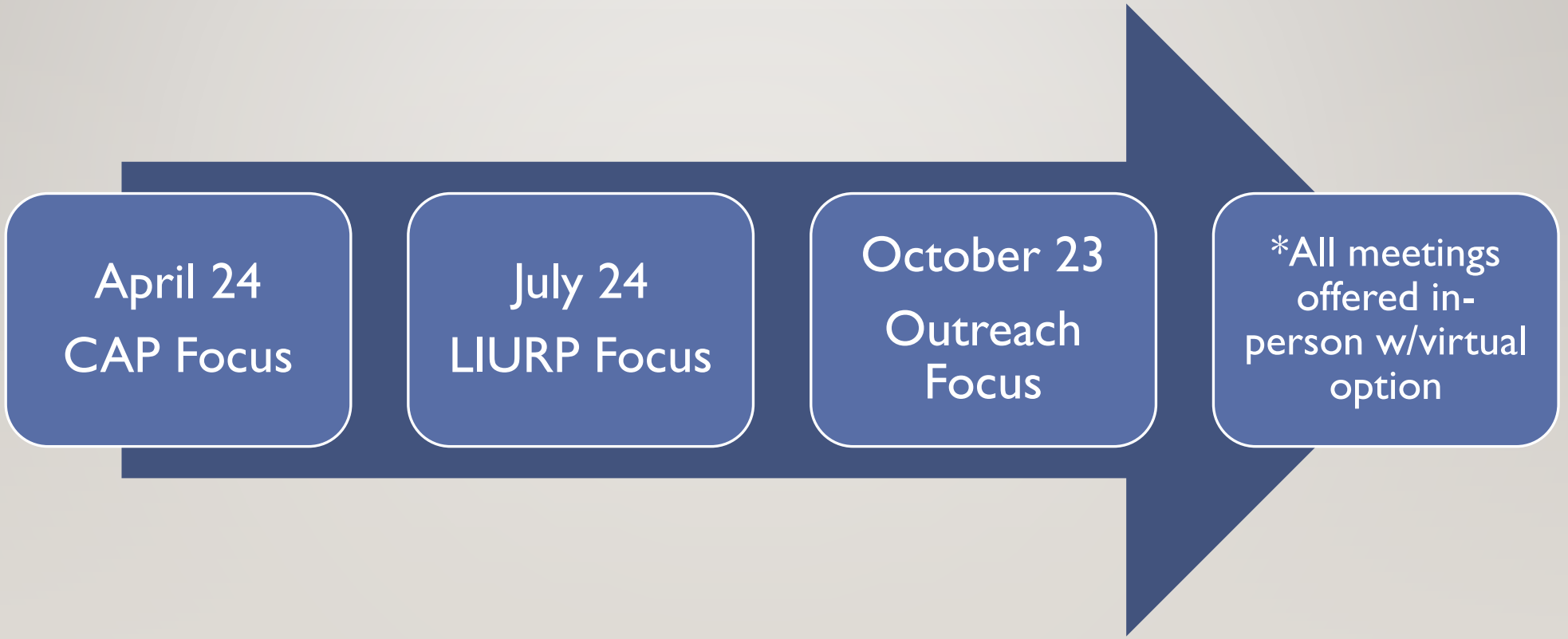


Email: PeoplesHelps@peoples-gas.com

Phone: 1-800-400-WARM (9276)

Website: https://www.peoples-gas.com/assistance

LOOKING AHEAD



BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission, et al.	:	
	:	
v.	:	Docket No. R-2018-3006818
	:	
Peoples Natural Gas Company LLC.	:	

SURREBUTTAL TESTIMONY OF HARRY GELLER

ON BEHALF OF

THE COALITION FOR AFFORDABLE UTILITY SERVICES AND ENERGY EFFICIENCY IN PENNSYLVANIA ("CAUSE-PA")

May 3, 2024

PREPARED SURREBUTTAL TESTIMONY OF HARRY S. GELLER

Q: Please state your name, occupation, and business address.

A: My name is Harry S. Geller, Esq. I retired as Executive Director of the Pennsylvania Utility Law Project (PULP), but have maintained an office at 118 Locust St., Harrisburg, PA 17101, for the purpose of providing consulting services and assistance to low income individuals and the organizations which represent them in utility and energy matters.

Q: Did you previously submit testimony in this proceeding?

A: Yes. I submitted direct testimony on behalf of the Coalition for Affordability Utility Services and Energy Efficiency in Pennsylvania (CAUSE-PA) pre-marked as CAUSE-PA Statement 1. In my direct testimony, I examined the potential impact of the proposed rate increase on Peoples' low income customers and made recommendations about how to mitigate that potential impact through better identification and enrollment of low income customers into Peoples' Customer Assistance Program (CAP), improvements to its Hardship Fund and its Low Income Usage Reduction Program (LIURP), modifications to its customer service policies, and improved equity in its proposed rate design.[1]

Q: What is the purpose of your Surrebuttal Testimony?

A: My surrebuttal testimony responds to the Rebuttal Testimony of Peoples Natural Gas Company, LLC (Peoples) witnesses Rita Black[2] and Heather Doyle-Conley,[3] and Bureau of Investigation and Enforcement (I&E) witness Christopher Keller.[4] My silence with respect to any

[1] See CAUSE-PA St.1.
[2] Peoples St. 9-R.
[3] Peoples St. 16-R.
[4] I&E St. 1-R.

other issues raised in the rebuttal testimony of these witnesses or any other witness in this proceeding should not be taken as an endorsement of or agreement with their positions. Rather, I stand by my analysis contained in my direct testimony, and nothing stated in rebuttal has changed or revised my positions as stated therein.

Q: How is your testimony organized?

A: I will begin by responding to the Company's rebuttal testimony regarding Peoples' tracking of its confirmed low income customers and related issues regarding its security deposit collection and retention policies. I will then address Peoples' and I&E's rebuttal regarding my recommendations to improve Peoples' Universal Service and Energy Conservation programming to address increased need for assistance as a result of Peoples' proposed rate increase. Finally, I will address Ms. Doyle-Conley's response to concerns raised in OCA witness Barbara Alexanders' direct testimony[5] regarding the application of medical certificate and domestic violence protections for tenants.

a. Security Deposits and Confirmed Low Income Designation

Q: Please briefly describe Peoples' rebuttal to your direct testimony regarding Peoples' confirmed low income designations.

A: In my direct testimony, I explained that Peoples seems to maintain separate definitions of "confirmed low income customers" that do not align with the Commission's definition in section 62.2 of the regulations.[6] I expressed my concern that the more restrictive definition of confirmed low income is resulting in an undercounting of confirmed low income customers, which detrimentally impacts the analysis necessary for evaluating low income programming and customers' access to consumer protections.

[5] OCA St. 5.
[6] 52 Pa. Code 62.2.

In rebuttal, Ms. Black clarifies that the Company uses low income census data provided by the Commission's Bureau of Consumer Services (BCS) to determine its estimated low income customer count and to complete its universal service program needs assessments.[7] She also indicates that the Company agrees to modify its definition for "confirmed low income" for its 2024 reports, consistent with Commission's definition of the term.[8]

I appreciate that the Company utilizes the estimated low income count in its needs assessment and has agreed to amend the data included in its universal service and collections reports to comply with the regulatory definition of confirmed low income customers. However, it is unclear whether Peoples' agreement to comply with the regulatory definition is limited to 2024 – or if Peoples intends to change its policy on a forward going basis.

Peoples should not maintain separate definitions for quantifying or categorizing confirmed low income customers, for any purpose. To the extent that Peoples finds it necessary to separately track the number of customers who specifically receive LIHEAP funds and/or enroll in CAP, the Company should develop a separate distinct term for those customers. The term "confirmed low income" has a specific definition under the Commission's regulations and maintaining and utilizing an alternative term leads to undue confusion. I recommend that the Commission specifically require Peoples to utilize the Commission's definition in all future reporting.

Further, I continue to question why the confirmed low income customer counts provided in discovery were even lower than those reported by Peoples to BCS for the Universal Service Report. As I explained in my direct testimony, Peoples' witness Heather Doyle-Conely's indicated in response to discovery that the Company only classified approximately 53,000 customers as low income in 2022, which is less than half of the 108,055 customers the Company reported to the

[7] Peoples St. 9-R at 6.
[8] *Id*. at 5; 52 Pa. Code § 62.2.

Commission as "confirmed low income."[9] This discrepancy was not addressed or resolved by Peoples' witnesses through rebuttal.

Q: Please briefly describe Peoples' rebuttal to your direct testimony regarding Peoples' security deposit policies.

A: In my direct testimony, I explained that, according to Peoples' discovery responses, the Company requires CAP enrollment and/or receipt of Low Income Home Energy Assistance Program (LIHEAP) funds for Peoples to reverse an assessed security deposit or return a previously collected security deposit. I pointed out that Peoples had agreed in a prior settlement to "automatically review its residential accounts every six months" and refund security deposits collected from confirmed low income customers within 30 days of this review.[10] I recommended that Peoples adopt a consistent definition of confirmed low income reflecting the regulatory definition, and return security deposits to all customers who fall within that definition, consistent with the terms of this prior settlement agreement. In turn, I recommended that the Commission require Peoples to explain the low income security deposit prohibition and request income information at the time a security deposit is initially assessed to ensure that low income consumers are informed of and able to easily access this critical statutory protection.[11]

In rebuttal, Ms. Black clarifies that the Company accepts verbal attestation of income for security deposit exemption.[12] She explains that, "At the start of service, the Company asks for income information in order to determine if a security deposit and connection fee should be waived and as an opportunity to refer income eligible customers into universal service programs."[13]

[9] CAUSE-PA St. 1 at 7.
[10] *Id*. at 17.
[11] *Id*. at 19.
[12] Peoples St. 9-R at 5.
[13] *Id*. at 4.

Ms. Doyle-Conley also indicates that "With their verbal indication of low income status, security deposits are not requested or billed."[14] She indicates that the Company will commit to implementing a periodic review process by which the Company will "ensure the identification and release of any security deposits that may be held by low income households." [15]

While I appreciate this future commitment, I remain troubled that this process for releasing deposits was not implemented in compliance with the terms of settlement in Peoples' 2018 rate case, and in accordance with statutory and regulatory requirements.[16] It is insufficient for Peoples to commit to releasing improperly held security deposits in the future, presumably sometime after the conclusion of this proceeding. Low income customers – those with income at or below 150% of the federal poverty level – are severely income constrained, and struggle to make ends meet. Assessing and then holding a security deposit for any length of time can exacerbate financial insecurity – depriving low income consumers of several hundred dollars that are desperately needed to cover basic life necessities.

Peoples should commit to the *immediate* release of all improperly held security deposits, and the implementation of a policy that will ensure full compliance with the terms of the 2018 rate case settlement. This includes an "*automatic*" semiannual (6 month) review and release of any and all collected security deposits held for confirmed low income customers, utilizing the Commission's definition of that term.

To help ensure compliance now, and in the future, I recommend that the Commission require Peoples to develop an implementation plan, which it should share with stakeholders at the earliest possible Universal Service Advisory Group (USAG) meeting following the issuance of a

[14] Peoples St. 16-R at 3.
[15] *Id.* at 4.
[16] 66 Pa. C.S. § 1404(a.1); 56 Pa. Code §§ 56.32(e), 56.53(f).

final order in this proceeding. Peoples should further be ordered to clarify that security deposits will be applied to a customer's "asked to pay" amount – or, *at the election of the customer*, returned by check. If a security deposit is credited to a customer upon their enrollment in CAP, it should be applied toward the customers' monthly asked to pay amount, and not the balances deferred through the CAP program.

Finally, I continue to recommend that Peoples inform all consumers of the prohibition on security deposits for customers who are income eligible for Peoples customer assistance program and provide information about how a consumer can request this exemption if it is not automatically applied or if they later experience a reduction in income, consistent with my prior testimony.[17]

b. Low Income Programs

Q: Please briefly describe other parties' rebuttal to your direct testimony regarding Peoples' low income programs.

A: In my direct testimony, I voiced concern about Peoples declining CAP enrollment numbers and the adequacy of its program budgets, especially in light of Peoples large, proposed rate increase, which will disproportionately impact low income customers. I made several recommendations to improve Peoples' low income programs to serve the increased need for assistance following any approved rate increase. This included a recommendation that Peoples retain its existing LIHEAP auto-enrollment language in its tariff but eliminate the requirement that a customer breach a payment agreement to be auto-enrolled in the program. To fully effectuate this long-standing tariff language, I suggested that Peoples file a Petition to amend its USECP to integrate auto-enrollment utilizing granular LIHEAP recipient data, which the Department of Human Services (DHS) is poised to begin sharing with utilities in Fall 2024.

[17] CAUSE-PA St. 1 at 19-20.

In addition to addressing auto-enrollment, I recommended a process for increased screening of customers for income level and program eligibility. In turn, I recommended that Peoples increase its LIURP and Hardship fund budgets and the maximum hardship fund grant amount to help offset the stark financial impact of any approved rate increase in this case.

In response to my recommendations, Peoples witness, Ms. Black, indicates that she shares my concerns about Peoples' declining CAP enrollment and argues that Peoples has already implemented some of the screening processes that I recommended. She indicates that she is looking ahead to the benefit of LIHEAP data sharing. However, she argues that initiating a petition to provide auto-enrollment is premature. She argues that since the Company's CAP extends to 200% FPL, which is the same as the income requirements for the hardship fund, the programs can already absorb the impact of the increase and an increased hardship fund budget is not necessary.[18] She also disagrees with my recommendation that the maximum grant amount be increased because hardship funds are typically applied to back balances before they are enrolled into arrearage forgiveness through CAP.[19] Regarding my recommendation for an increased LIURP budget, Ms. Black asserts that, before the Company increases its LIURP budget, it needs to first complete the number of projected annual LIURP jobs so that it can fully spend the LIURP budget in the year it is intended, eliminating carryover.[20]

I&E witness Christopher Keller also opposes my recommendations to increase funding for Peoples' LIURP and hardship fund.[21] He argues that Peoples has not exhausted its LIURP budget for several years and questions the correlation between LIURP funding and Peoples' proposed rate increase. He asserts that increased rates will not affect income qualifications or job costs and

[18] Peoples St. 9-R at 14-15.
[19] *Id*. at 15-16.
[20] *Id*. at 18.
[21] I&E St. 1-R at 3-4.

argues that it is inappropriate to increase the LIURP budget in this proceeding without consideration and evaluation of all universal service program performance indicators – subject to the opportunity for comments of all stakeholders and interested parties.[22]

Q: How do you respond to Ms. Black's assertion that filing a petition for LIHEAP autoenrollment is premature?

A: As I explained in my direct testimony, considering the steep decline in Peoples' CAP enrollment and the substantial number of LIHEAP recipients who are not enrolled in CAP, Peoples should be focusing on ways to simplify and improve CAP enrollment.[23] One of the best, most effective ways to do this is to ***proactively*** prepare for the introduction of DHS LIHEAP data sharing so that it can implement enrollment procedures as soon as the data becomes available. I note that the Commission's process for ruling on such petitions takes substantial time – with review times spanning multiple years. Peoples' last USECP was originally filed in 2018 but was not approved until 2022. Peoples' next USECP will be for program years 2029 through 2033 and is not due to be filed with the Commission until April 1, 2028.[24] This leaves open the distinct possibility that Peoples will not seek to utilize LIHEAP data to improve and streamline universal service enrollment until 2029.

As I noted in my direct testimony, the Commission recently approved a LIHEAP auto-enrollment program in UGI's electric division rate case to help offset the impact of the approved rate increase on low income customers.[25] Similarly, the Commission approved a LIHEAP auto-recertification program in the recent FirstEnergy Pennsylvania (FE PA) merger proceeding to help

[22] *Id*.
[23] CAUSE-Pa St. 1 at 24.
[24] The Commission's USECP filing schedule is published on its website here: https://www.puc.pa.gov/electricity/universal-service/ .
[25] CAUSE-PA St. 1 at 26.

ensure the merger would result in an affirmative public benefit.[26] Once DHS begins sharing LIHEAP participant income data with utilities, UGI and FE PA will be ready to implement required modifications to its IT system and processes to streamline CAP enrollment and/or to recertify income and eligibility.[27] Like UGI and FE PA, Peoples needs to act now to develop policies for effective utilization of LIHEAP data when the data becomes available.

Given Peoples' documented struggle to improve its CAP enrollment to serve identified need, and given the substantial number of LIHEAP recipients who are not enrolled in CAP it is vital that Peoples be ***proactive*** and act promptly in petitioning the Commission for approval to streamline CAP enrollment and recertification through LIHEAP data sharing when it becomes available. For consumers struggling to pay gas bills without the benefit of CAP enrollment, any delay will needlessly exacerbate their financial difficulties.

Q: How do you respond to Ms. Black's rebuttal testimony regarding the hardship fund?

A: In her rebuttal, Ms. Black asserts that Peoples' universal service programs "appropriately manage customers who face financial difficulty."[28] She points to the fact that Peoples Extended CAP (E-CAP) is available to households with income up to 200% FPL, and notes that customers who are income eligible for the hardship fund are now eligible for CAP or E-CAP. Of particular concern, Ms. Black explains that if a CAP or E-CAP customer receives a hardship fund grant, it is applied to the CAP enrollee's underlying balance (*which is eligible for deferment and forgiveness over time through the program*) – not the enrollee's asked to pay amount.[29] She asserts that the

[26] *Joint Application of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company, West Penn Power Company, Keystone Appalachian Transmission Company, Mid-Atlantic Interstate Transmission, LLC, and FirstEnergy Pennsylvania Electric Company for All of the Necessary Authority, Approvals, and Certificates of Public Convenience*, Docket Nos. A-2023-3038771, -792, -793, -794, A--795, -807, -808, Joint Petition for Approval of Settlement of All Issues, at ¶ 47 (Final Order approving settlement entered Dec. 7, 2023).
[27] *Id.*
[28] Peoples St. 9 at 14-15.
[29] *Id*. at 16.

availability of hardship funds for CAP and E-CAP customers obviates the need for any further improvements to the availability of hardship fund assistance in light of Peoples' proposed rate increase.

First, I note that while universal programs are intended to be complementary, one cannot be a substitute for another. The availability of one program does not obviate the need for another. CAP and Hardship Fund serve different needs and types of energy insecurity: Hardship Fund provides financial assistance for households facing a current and acute utility debt, while CAP provides longer-term rate affordability and debt management. In practice, there are many households that may be unable to have their balances deferred through CAP due to prior program enrollment, or who may be income qualified but otherwise ineligible for or unable to enroll in CAP or E-CAP. These households may need the hardship fund as an option of last resort to stay connected.

Second, I am concerned about Peoples' policy of applying Hardship Fund grants to pay down a balance that will otherwise be deferred and eligible for forgiveness through CAP. This policy results in no additional benefit to the grantee. Hardship Fund grants are intended to provide direct financial support for households with current acute financial needs – not to be applied to past debts that are frozen and will ultimately be forgiven, or to offset the cost of CAP by reducing debts that will be frozen and forgiven over time through participation in CAP. I note that Ms. Black argues that increasing the maximum Hardship Fund from $500 to $600 "will only accelerate the depletion of the hardship fund without providing additional support to maintain utility service as CAP is already providing that important safety net."[30] I share Ms. Black's concern, which is equally applicable to the $500 maximum grants that Peoples is currently using to apply to balances

[30] *Id*. at 16.

which are already eligible for deferment through CAP or E-CAP. Peoples should be ordered to apply Hardship Fund grants directly to a CAP or E-CAP applicant or participant's asked-to-pay amount, following full enrollment in the program. This would not only be the appropriate policy but would be in accord with the purpose and letter of DHS' parallel policy of requiring that LIHEAP grants be applied to the "asked to pay" amount and not to arrears which are frozen and eligible for forgiveness over time.[31]

Finally, based on Ms. Black's description of Peoples' Hardship Fund policy with respect to CAP and E-CAP participants, I am concerned that Peoples appears to limit Hardship Fund grants to new CAP and E-CAP enrollees. Both CAP / E-CAP applicants *and* CAP / E-CAP participants should be eligible for emergency hardship fund assistance to help resolve an acute financial hardship. This is particularly true, given CAP participants are not eligible for a payment arrangement if they fall behind on their CAP bills. CAP provides critical bill assistance, but it does not eliminate the fragile financial reality of low income households. A car repair bill, dental visit, or any other unanticipated financial burden can cause tremendous repercussions that quickly compound the fragile financial circumstances of low income families – even those enrolled in CAP. Thus, I recommend that Peoples be required to allow CAP and E-CAP participants (along with new enrollees) to access assistance through the Hardship Fund.

Q: How do you respond to Ms. Black and Mr. Keller's rebuttal testimony regarding Peoples' LIURP budget?

A: Both Ms. Black and Mr. Keller argue that it is not appropriate to increase the LIURP budget because Peoples has been unable to spend its current LIURP over the past several years.[32]

[31] *Pa. Low Income Home Energy Assistance Program: Fiscal Year 2024 Final State Plan*, at § 601.45 (application of benefits) https://www.dhs.pa.gov/Services/Assistance/Documents/Heating%20Assistance_LIHEAP/FY2024-LIHEAP-Final-State-Plan.pdf .

[32] Peoples St. 9-R at 17-18; I&E St. 1-R at 3-4.

However, as I explained in my direct testimony, in 2023, Peoples spent $3,770,589 to complete 317 LIURP jobs, which is approximately $740,000 more than its current 2024 budget. While this additional $740,000 in funds came from rollover from the pandemic related shutdowns, the 2023 spending demonstrates that Peoples is already in a position and has the capacity to not only spend its full LIURP budget in the year it is intended, but to substantially exceed that production. In fact, if Peoples were to maintain its 2023 level of LIURP production it will have fully spent its allocated 2024 budget plus the remaining $234,486 of rollover, leaving it with a budget deficit of over $500,000. This will mean that if Peoples does not increase its budget as I have recommended, it will have to reduce the number of LIURP jobs it completes annually despite the increasing need and demonstrated capacity for providing this level of services.

There is no evidence that Peoples' rollover budget in recent years was a result of a lack of need in Peoples service territory. To the contrary, Peoples inability to fully expend its budget was a result of the cessation of LIURP production during the pandemic and the struggle to ramp back up production after the shut-down.[33] If Peoples now begins to reduce the number of LIURP jobs produced annually due to budgetary constraints it is not only failing to address the current need, but may struggle to maintain workforce and ramp back up again in the future. It is also important to keep in mind that the cost of labor and materials has substantially increased in the past several years. Thus, I continue to strongly recommend that Peoples maintain a LIURP budget that will allow it to continue to complete at least 317 LIURP jobs per year, consistent with its demonstrated 2023 program performance capabilities.

Regarding Ms. Black's and Mr. Keller's assertion that LIURP budgets should only be adjusted through a USECP proceeding due to evaluation of program performance indicators and

[33] CAUSE-PA St. 1 at 32.

provision of comments by all stakeholders and interested parties, as explained above, Peoples' next USECP is not due to be filed until April 2028 – with a target effective date of 2029-2033. This is far too long to wait for Peoples to implement meaningful, currently needed improvements to its universal service programming and to offset the financial impact of any approved rate increase resulting from this case.

Further, this case has provided the parties with the additional benefit of the ability to conduct formal discovery and evaluations of Peoples' program data that were and are presently not possible in the less formal USECP proceeding, which was/is limited to comments and reply comments. Addressing these current and important low income customer needs now, in this rate case proceeding, in no way negates the ability of Peoples to propose, the Commission to review, and others to comment on the appropriate LIURP to be budgeted and implemented for 2029-2033.The LIURP budget established through the USECP did not take into account the substantial increase in rates proposed by Peoples in this case. While Mr. Keller argues that the proposed rate increase will not impact the income qualifications or cost of materials for the LIURP program, it will increase the cost of volumetric rates, which will disproportionately impact low income high usage households. As I explained in my direct testimony, Peoples' confirmed low income customers consistently have average usage that is *22-23% higher* average annual usage than Peoples' population of residential customers -- excluding those with confirmed low income -- due to disparities in access to efficient housing and heating equipment.[34] The proposed rate increase will result in disproportionately higher bills for these high use low income customers, further compounding the fact that they already struggle to afford their current rates. This disproportionate impact on low income, high usage families is likely to result in increased payment trouble and

[34] *Id*. at 30-31.

termination – as well as a corresponding increase in the need for LIURP to help bring down the cost of utility bills. Peoples' LIURP can provide approximately 20 percent reduction of low income customers' pre-treatment natural gas usage. Indeed, the program can and does help address disparities in usage, in turn lessening the disproportionate impact of any approved rate increase on low income high usage customers.[35] However, as I also explained in my direct testimony, Peoples' LIURP is not adequately funded to meet the currently identified need of its low income customers – let alone to offset the increased energy burdens resulting from its current rate proposal.[36]

As the regulation regarding the purpose of LIURP states: "The programs are intended to assist low income customers conserve energy and reduce residential energy bills. The reduction in energy bills should decrease the incidence and risk of customer payment delinquencies and the attendant utility costs associated with uncollectible accounts expense, collection costs and arrearage carrying costs."[37] Thus, it is wholly appropriate to increase the LIURP budget to account for the increased rates resulting from any increase approved by the Commission in this case.

c. Domestic Violence Protections

Q: Is there other rebuttal testimony you would like to address?

A: Yes. In direct testimony, OCA witness Barbara Alexander recommended that Peoples allow tenants in master metered buildings to access domestic violence protections by submitting a Protection from Abuse Order (PFA) or other court order evidencing domestic violence.[38] Peoples witness Doyle-Conley disagreed, noting concern the protections could be used to benefit landlord ratepayers.[39] However, I believe Ms. Doyle-Conley's concerns about the protections benefiting

[35] *Id*.
[36] *Id*. at 30.
[37] Peoples St. 9-R at 17 (quoting 20 Pa. Code §58.1).
[38] OCA St. 5 at 7.
[39] Peoples St. 16-R at 11-12.

landlords are misplaced and miss the point. While I understand from CAUSE-PA's counsel that the legal aspects of this issue will be discussed through briefing, it is important to note that the provision of special protections to domestic violence victims and survivors is not optional. These protections are required by statute and regulation due in large part to their vital protection for the safety of vulnerable customers whose abusers often use the victims' housing and utility insecurity as a tool to manipulate them back into the abusive situation. The special protections in the Code are designed to prevent this by helping the PFA recipient, or victim of violence covered by another court order, achieve economic independence from their abuser without the threat of utility termination hanging over their head.

All Pennsylvania consumers with a PFA/other court order are entitled to the protections guaranteed in statute and regulation, and this includes circumstances where the victim/survivor is a tenant. Chief among the protections afforded to a victim/survivor with a PFA or other applicable court order is the protection from liability for debts accrued by any third party.[40]

Ms. Alexander's recommendation to protect non-customer tenants with a PFA or court order who are victims of violence is akin to the current Commission policy of protecting non-customer tenants with a medical certificate. In each case, public policy and statute addresses a specific protection for specific vulnerable, at-risk individuals. Thus, it is important that **both** sets of protections be provided to tenants in master metered buildings.

Q: Does this conclude your surrebuttal testimony?

A: Yes.

[40] 66 Pa. C.S. § 1417; 52 Pa. Code § 56.285. (Domestic violence protections are not limited to protecting a victim/survivor from bills accrued by their abuser – the protections prevent the transfer of debt from any third party to a victim/survivor. Where the bill is in a landlord's name, the protections would apply to the tenant submitting the PFA/court order, not the account holder.).

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
Peoples Natural Gas Company LLC	:	

VERIFICATION

I, Harry S. Geller, Esq., verify that the following testimony was prepared by me or under my direct supervision, and are true and correct to the best of my knowledge, information, and belief:

- CAUSE-PA Statement 1, The Direct Testimony of Harry S. Geller, Esq. & Appendices A, B, C, and D.
- CAUSE-PA Statement 1-SR, The Surrebuttal Testimony of Harry S. Geller, Esq.

I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Harry S. Geller, Esq.
118 Locust Street
Harrisburg, PA 17101

Date: May 8, 2023

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket No.: R-2023-3044549
v.	:	
	:	
Peoples Natural Gas Company LLC	:	

DIRECT TESTIMONY

OF

DAVID T. EVRARD

On behalf of the

PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

Date Served: March 22, 2024

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Introduction

Q. Please state your name and business address.

A. My name is David Evrard and my business address is 555 Walnut Street, 5th Floor, Harrisburg, PA.

Q. By whom are you employed and in what capacity?

A. I am employed by the Office of Consumer Advocate (OCA) as an Assistant Consumer Advocate.

Q. What is the purpose of your testimony in this case?

A. I have been asked to provide an overview of this case from the OCA's perspective, including discussion of the OCA's view on certain regulatory policy positions. In addition, I will introduce and synthesize the OCA's other witnesses who address the specific rate requests filed by the Company and will provide overall recommendations.

Q. Have you previously provided testimony before the Pennsylvania Public Utility Commission?

A. No, I have not.

Q. What are your qualifications to provide this testimony in this case?

A. I have served as an Assistant Consumer Advocate for nineteen years, engaged primarily in cases involving electric and natural gas utilities and related matters. For more than ten years, I represented the OCA in the Gas Cost Rate proceedings of Peoples Natural Gas, People Gas and Peoples Gas' forerunner, T.W. Philips Gas and Oil Co. Prior to my time at the OCA, I served as a legal assistant and attorney for the Pennsylvania Electric Association (PEA), one of the predecessor organizations that combined to form what is now the Energy Association of Pennsylvania (EAP). At EAP, I served as Vice President

and Secretary. My combined service with PEA and EAP totaled more than twenty-four years. Thus, I have worked for more than 40 years in the field of legal and regulatory matters involving utilities, primarily energy companies. I received my undergraduate degree in Economics from Rider College (now University) in Lawrenceville, NJ and Master of Business Administration and Juris Doctor degrees from the University of South Carolina.

Q. Have you prepared Exhibits to accompany your testimony?

A. Yes, I am offering Exhibit DE-1, which is attached to my testimony. This exhibit outlines the factors under Section 1330 of the Public Utility Code concerning Peoples Natural Gas Company LLC's (Peoples)[1] proposed Weather Normalization Adjustment. I am also offering Exhibit DE-2 which is a summary of the public input testimony offered by consumers during the course of the six public input hearings held in this case from March 5 through March 7, 2024.

Q. Do you have any other preliminary matters to address?

A. Yes, there are occasions where I may refer to decisions by regulatory agencies, courts, statutes and regulations. This should not be considered a legal opinion as I am not acting as an OCA attorney in this proceeding. Any reference or citation would be related to supporting my opinion about the public policy that I discuss below.

[1] For purposes of clarity and consistency, in the course of my testimony, I refer to Peoples Natural Gas Company LLC as "Peoples" and I refer to Peoples' two operating divisions as follows: Peoples Natural Gas Division (PNGD) and Peoples Gas Division (PGD).

Summary

Q. Please summarize your conclusions and recommendations.

A. Overall, my conclusion is that Peoples has not supported the need for many of its claims and proposals in this case. Peoples' lack of support extends to its requested annual revenue increase of approximately $156 million, its Weather Normalization Adjustment (WNA) proposal, and its proposed return on equity of 11.75%. My overarching recommendation is that the Commission should adopt, in totality, the adjustments and recommendations of all OCA witnesses in this case, each of whom I will discuss below. Consistent with the OCA's other witnesses, I recommend the following: that Peoples receive an increase in annual operating revenue of no more than $10,786,713 (which is $145,239,409 lower than Peoples' request), that Peoples' WNA proposal be rejected, and that Peoples' capital structure, overall rate of return, including its allowed return on equity, be set at the levels recommended by OCA witness Rothschild. I will present an overview of OCA's testimony below.

Overview of the Case

Q. Please provide your general understanding of Peoples' proposed revenue increase in this case.

A. Peoples seeks an annual revenue increase of $156 million for its distribution service. If approved as filed, the increase would provide the PNGD with an annual revenue increase of increase of $148,558,437, or approximately 21.8%, and the PGD with an annual revenue increase of $7,466,250 million, or approximately 7.8%. For residential customers currently served under the PNGD Tariff, this would amount to a 21.4% increase over current rates. For residential customers served under the PGD Tariff, this would be a 7.6% increase over

current rates. Peoples proposes to merge the rates of the PNGD and PGD customers as part of this case, and the combined total increase for both PNGD and PGD customers, approximately $156 million, is an increase of 18.7% on a total annual revenue basis.

Q. What else is Peoples proposing in this case?

A. Among other things, the Company proposes to increase the residential customer charges of PNGD and PGD customers from $14.50 and $15.75, respectively, to $21.50 Peoples also proposes Tariff revisions in its filing including the following: (1) implementation of a Weather Normalization Adjustment (WNA); and (2) adjusting its Tax Repairs Surcredit, Tax Cuts and Jobs Act Surcharge, and Allegheny Valley Capacity Charge; and (3) revising Rule 20 of its tariff competitive customer designation to certain customers on the basis of their claimed access to electricity as a competitive alternative. In addition, Peoples has proposed a 25-basis point adder to its estimate of an 11.50% cost of equity, due to the Company's purported exceptional management performance.

Introduction of OCA Witnesses

Q. Please briefly introduce the OCA's witnesses for this case:

A. Along with my testimony, the OCA offers five additional witnesses whose testimony supports its overall position and slate of recommendations in this case. I will introduce each witness and give a brief overview of their respective testimonies below. While my testimony summarizes the OCA's positions on Peoples' various proposals, it is intended to provide the broad regulatory policy considerations that underlie those positions. For the details of particular positions, I will defer to each individual witness's testimony and their specific expertise.

In OCA Statement 2, Dante Mugrace recognizes the revenue impact of the overall OCA position, which is comprised of his recommended adjustments to Peoples' claims as well as the revenue implications of all the OCA witnesses' testimony. Mr. Murgrace also addresses Peoples tax proposals, and he presents an analysis of the proposed Weather Normalization Adjustment (WNA) that demonstrates that the proposal is flawed, unprecedented in comparison to other jurisdictional utilities that Peoples cites, and should be rejected. Importantly, Mr. Mugrace also quantifies the detrimental impact that ratepayers would face if Peoples' request for a management performance premium, which is a .25% adder to its proposed equity cost rate of 11.5%, were approved. Mr. Mugrace shows that, all else being equal, at the Company's requested ratemaking rate base, the elimination of the 25 basis point adder alone would reduce the Company's proposed revenue requirement increase by more than $7.46 million (OCA Statement 2 at 4-5).

In OCA Statement 3, Aaron Rothschild analyzes Peoples' rate of return claims. He addresses the appropriate capital structure for ratemaking, the Company's return on equity, and its overall cost of capital. Mr. Rothschild recommends rejecting Peoples' claimed capital structure of 54.67% common equity and 47.2% debt. Instead, Mr. Rothschild supports a capital structure consisting of 50% equity and 50% debt, which is consistent with the similarly-situated companies in his proxy group. Mr. Rothschild recommends a return on equity of 8.02%, which is within his recommended range of 7.67%-8.37% and an overall rate of return of 6.20% at his 50/50 capital structure. However, if the Commission accepts Peoples' proposed capital structure, Mr. Rothschild recommends that the authorized return on equity be reduced to 7.84%

In OCA Statement 4, Clarence Johnson reviews and analyzes the cost of service (COS) studies and rate design proposals included in Peoples' filings and makes recommendations to reflect the appropriate assignment of costs. Mr. Johnson also explains why Peoples' proposal to significantly raise the customer charges of PNGD and PGD customers from $14.50 and $15.75, respectively, to $21.50 is unsupported and should be denied. Additionally, Mr. Johnson analyzes Peoples' WNA proposal and explains how the impact of the WNA will not only fail to benefit ratepayers, but that a review of data provided in this case demonstrates that the net impact is likely to be detrimental to customers by causing confusion, disincentivizing conservation, and producing higher bills. Finally, Mr. Johnson will also explain the multiple reasons why Peoples' proposals to extend the competitive customer designation to certain customers on the basis of their claimed access to electricity as a competitive alternative is flawed and should not be accepted.

In OCA Statement 5, Barbara Alexander addresses Peoples' customer service performance, as well as its consumer protection policies and programs, and she makes recommendations to address issues related to those matters. Ms. Alexander also recommends improvements to Peoples' training programs to ensure compliance with the Commission's regulations regarding service termination, and implementation of policies necessary to recognize and disclose tenants' right to remain with gas service under certain conditions related to shared service premises. Ms. Alexander also recommends rejection of Peoples' WNA proposal and explains that customers who desire bill stability to mitigate bill volatility can and should be encouraged to enroll in budget billing. Additionally, Ms. Alexander opposes Peoples' practice of offering an on-bill warranty

program on the basis that it is misleading and poses an unnecessary risk of confusion and additional costs for Peoples' consumers. Ms. Alexander also makes recommendations for Peoples to improve customer education about shopping for a natural gas supplier to ensure that customers have tools to make informed decisions. This is important in this case because data demonstrates that higher rates paid as a result of retail shopping have impacted collections and uncollectible accounts. Finally, Ms. Alexander opposes Peoples' request for a management premium adder and she identifies areas where customers' access to important information is limited, such as through the notification of this rate increase and in the limited "business hours" available for customers to speak with a live customer service representative.

In OCA Statement 6, Roger Colton addresses issues that include overall affordability, impact of the unaffordability of Peoples' bills on collections, the appropriate Peoples response to unaffordable bills for low-income customers, the adverse impact of the proposed increase and WNA proposal on customers, and the reasonableness of proposed changes in the Peoples tariff.. Mr. Colton recommends multiple changes in Peoples' customer service programs, practices, and related matters to help all Peoples' customers have reasonable access to affordable utility service.

Summary of Peoples

Q. Please describe Peoples.

A. Peoples is the surviving entity resulting from the merger of Peoples Natural Gas Company LLC with Peoples Gas Company LLC, which was approved by the Commission in August 2022.[2] Under the terms of the merger, the two entities were to maintain separate

[2] Joint Application of Peoples Natural Gas Company LLC and Peoples Gas Company LLC for All of the Authority and Necessary Certificates of Public Convenience to Merge Peoples Natural Gas Company LLC and Peoples Gas

distribution base rates until a future rate case[3], which happens to be the instant proceeding in which unification of the two entities' base rates is proposed.

Q. Did Peoples' customers have the opportunity to comment on the Company's proposed increases?

A. Yes, six Public Input Hearings were held in this case. Specifically, in-person public input hearings were held daily at 1 p.m. and 6 p.m. on Tuesday, March 5 and Wednesday March 6 in Monroeville, PA and Butler, PA, respectively. Additionally telephonic hearings were held at 1 p.m. and 6 p.m. on March 7. In addition, there have been six Formal Complaints filed with the Commission by individual consumers as well twenty-four Informal Complaints filed by Peoples' customers.

Q. Did you have the opportunity to review the transcripts of the public input hearings in this case?

A. Yes.

Q. Please summarize the public input hearing testimony in this case.

A. Testimony at the Public Input Hearings was of two types – testimony from individual Peoples customers who expressed opposition to the rate increase; and testimony from individuals representing various organizations who either work with Peoples or have been assisted by Peoples in some way and who testified favorably to their relationship with the Company and either supported the rate increase or offered no opinion on the merits of the

Company LLC, Docket No. A-2021-3029831 et al, Order (August 25, 2022), noting that the Order adopted the Initial Decision recommending approval of an underlying settlement.

[3] Joint Application of Peoples Natural Gas Company LLC and Peoples Gas Company LLC for All of the Authority and Necessary Certificates of Public Convenience to Merge Peoples Natural Gas Company LLC and Peoples Gas Company LLC, Docket No. A-2021-3029831 et al, Initial Decision, p. 8, ¶33 (July 6, 2022).

increase. There were a few areas of testimony from consumers,[4] which are summarized in Exhibit DE-2, that were particularly concerning.

Multiple customers found the rate case notice provided by Peoples to be ineffective. Specifically, several customers were not certain whether the Company's proposed WNA was included in the projected rate increase of 21% for PNGD customers and 7% for PGD customers. Those customers were troubled to learn that any rate increase resulting from the WNA was not included in the noticed rate impact. Another customer stated that the notices were not representative of a potential bill increase, where her bill was higher than the noticed amount at a lower-than-noticed usage.

Two customers requested that the Company not be permitted to implement its WNA. *See* Exhibit DE-2. The first customer to testify has had difficulty receiving an accurate DSIC calculation on his monthly bills, and is concerned that, if the WNA is implemented, its much more complicated calculation will be inaccurate and cost customers more money. He testified that he believes the WNA is contrary Section 1330 of the Public Utility Code because it charges customers for infrastructure they do not use. Similarly, the second customer testified that the WNA is unfair because it charges customers for gas they do not use.

Two customers also indicated that they had quality of service concerns with the Company's practices. One customer stated that he had a meter installed in front of a window, which is a violation of the Commission's regulations and poses a safety concern. The other customer testified that he had been waiting for the Company to test his meter for

[4] Exhibit DE-2 excludes testimony provided by witness who testified about Peoples' role as a good corporate citizen, as most had no position on the rate increase, and/or the organization the witness represented relied, at least in part, on financial and other support from Peoples.

four weeks, had repeated issues receiving service from the Company's field technicians because they did not keep their appointments, and that the Company's call center hours made it difficult to get help.

Peoples' Acquisition by Aqua

Q. When did Peoples become a subsidiary of Essential?

A. In 2020, the Commission approved the acquisition of Peoples Natural Gas LLC by Aqua America Inc., which later changed its name to Essential Utilities, Inc. More specifically, the Commission approved a joint settlement between the OCA, Peoples, Aqua, and several other parties agreeing to the acquisition under defined parameters that were, from the OCA's perspective, intended to protect ratepayers from being harmed by the acquisition.[5]

Q. Why does Peoples acquisition by Aqua matter in this case?

A. The acquisition matters because of certain commitments made in the course of settling the case. I refer to the Commission's Order approving the Joint Petition for Non-Unanimous Settlement, where the Commission acknowledged that the Joint Applicants (Aqua and Peoples) expressed a commitment "throughout the entire proceeding" to pass along any future cost savings or rate benefits resulting from operational efficiencies in future rate proceedings[6]. The Commission further noted that the ALJ identified this commitment in her Recommended Decision and the Joint Applicants did not file exceptions to it.

Q. Why are you pointing this out?

A. I point this out because it is not clear whether the cost savings and operational efficiencies anticipated in the Aqua-Peoples acquisition are captured or reflected in the revenue

[5] Joint Application of Aqua America et al. to Approve a Change in Control of Peoples Natural Gas Company LLC et al, Docket Nos. A-2018-3006061, Opinion and Order, January 16, 2020 ("Acquisition Order").
[6] Acquisition Order at 177, footnote 37.

requirement proposed for this case. What is clear is that despite the promises and commitments made in that case, Peoples is now requesting that consumers pay $156 million more each year driven primarily by its choice of capital structure and an excessive allowed return on equity of 11.75% without showing marked synergies or improvements resulting from the acquisition. Ensuring that customers are not left holding the proverbial bag on the acquisition costs and impacts is essential to both the Consumer Advocate, who is empowered to represent the interests of consumers before the Commission,[7] and to the Commission, which is required to give "due consideration to the interests of consumers"[8] when setting rates. It is also important to recognize that the Commission has broad authority to consider consumer interests in all areas of ratemaking, given its administrative power and authority to regulate public utilities in Pennsylvania.[9]

Assuming for the sake of argument that acquisition-related cost savings and efficiencies are embedded in the requested revenue requirement, one wonders whether those savings could not be outstripped by a single ratemaking component such as an excessive return on equity proposal, or by the accumulation of other unjustified rate proposals detailed by the OCA witnesses in this case. It is the nature of traditional ratemaking that teasing out the plusses and minuses of particular item of expense is difficult at best. I simply bring the acquisition case commitments to the Commission's attention as a reminder of what was anticipated when the acquisition was approved.

As mentioned, Peoples and Aqua are now part of Essential Utilities. While customers were told that there would be affirmative public benefits as a result of the

[7] 71 P.S. §§ 309-1, et seq.
[8] 71 P.S. §309-5(2).
[9] 66 Pa. C.S. §501

acquisition, in its first base rate case under its new ownership, Peoples is asking customers to pay an 11.75% return on equity, inclusive of a .25% management performance adder. While Mr. Rothschild will discuss Peoples' excessive rate of return request in his testimony in greater detail, asking Peoples' customers to support an 11.75% return on equity post-acquisition is unreasonable.

Q. In this case, has Peoples quantified any acquisition-related cost-savings or synergies that offset the revenue requirement Peoples may have required on a standalone basis?

A. Not as far as I can tell. Despite this proceeding being an ideal opportunity for Peoples to demonstrate all of the value that the acquisition presented to Peoples' customers, Peoples has instead elected to use this opportunity to request a revenue requirement increase that is excessive. As mentioned above, based on the instant filing, the OCA remains skeptical that the benefits touted by Peoples and Aqua in the acquisition proceeding are actually benefitting Peoples' customers nearly four years after the settlement.

While Peoples' claims that it is a "valuable corporate citizen" which "should lead the decision makers to authorize a 0.25 addition to the determination of the return on common equity",[10] those claims conflate corporate goodwill with ratemaking. This is best exemplified in that by proposing to charge higher rates to customers in the form of a management adder, Peoples seeks indirectly to have customers pay for the Company's corporate citizenship activity. I note that the Public Utility Code prohibits Peoples from recovering charges for fraternal, social or sports clubs or organizations through rates.[11] Here, however, through its management adder, Peoples does indirectly what the Code prohibits it from doing directly because it uses its donations and "good corporate citizen"

[10] Peoples Statement No. 1, pp. 25-26.
[11] 66 Pa. C.S. § 1316.1.

claims as part of the basis to impose higher rates by way of the management adder. Peoples' responsibility is to provide safe and adequate service at reasonable rates, not to spend money on corporate goals and charge ratepayers for these costs through a management adder.

Q. What impact does the .25% addition have on Peoples' revenue requirement?

A.. Exclusion of the management effectiveness bonus would reduce the Company's revenue requirement by $7,461,843.

Purpose of the Ratemaking Process

Q. Why did Peoples file for a general rate increase?

A. According to Company witness Mr. Huwar, Peoples filed this case in fulfillment of a commitment made as part of the settlement of the Company's Tax Repair Election Petition in 2021.[12] In that settlement, Peoples committed to file a base rate case by no later than December 31, 2023. Peoples' previous base rate proceedings were in 2019 for PNGD and in 2013 for PGD.[13] Mr. Huwar claims that the primary driver for this case is the Company's ongoing infrastructure modernization program which requires significant capital investment to replace aging infrastructure.[14]

[12] Peoples Statement No. 1, p. 3.
[13] Id.
[14] Id. at 26.

Q. How were PNGD and PGD customers notified of the requested rate increase?

A. Peoples mailed a combined notice of the proposed rate increase to all of its customers in both divisions – Peoples Natural Gas division and Peoples Gas Division. OCA witness Alexander included a copy of the notices as an exhibit to her testimony as Exhibit BA-6. As shown on Exhibit BA-6, Peoples sent the same public notice of this rate case to all its customers without separating the notices to its two divisions even though the bill impacts differ between those two divisions. Peoples' notice directed customers to call the Company if they were uncertain about which division provided their service, thereby placing the burden on the customer to take additional steps to determine how much more money they may have to pay for service. The burden was exacerbated because, as Ms. Alexander describes in her testimony, Peoples' live customer service hours are limited to traditional business hours, making customers' access to information about the rate increase even more difficult to obtain for those who may not be able to call during the limited hours.

Q. Was the combined notice sufficient?

A. No, it did not inform all Peoples' customers of the impact of the proposed increase on their rates. After laying out the effects of the proposed increase for customers of each division, customers who were uncertain of which division they were served by, or which customer class they were in, were instructed to call the Company for this information. This was an extra step customers should not have been asked to take. Requiring customers to call the Company in order to understand the impact of the proposed rate increase on their rates is not adequate or efficient notice. Separate notices tailored to the customers of each division would have properly informed the customers of the rate impact. It could have also eliminated any confusion on the part of customers potentially confused by the similarity in

names between Peoples Natural and Peoples Gas. In this case, the importance of clearly designating the customers' operating division as part of an effective notice is underscored by the significance of the differences in the magnitude of the projected increase. I note that the total bill for a PNGD residential customer using 80 Mcf per year was projected to increase from $73.16 to $88.79 per month or by 21.4%., but the total bill for a Peoples Gas Division residential customer using 80 Mcf per year was only projected to increase from $84.00 to $90.35 per month or by 7.6%. As the significantly higher increase for PNGD customers reveals, the operating division distinction will matter greatly to customers, but Peoples determined to leave it to customers to figure it out on their own.

Q. Why does an effective notice matter?

A. The customer notice is the means by which customers first become aware of an impending rate hike, which may well impact their budget, their access to service, and how they choose to respond to the prospective increase. Importantly, it serves as the gateway for further action on their part, whether that means filing a formal complaint, complaining informally, testifying at a Public Input Hearing, or if they so choose, doing nothing. As such, clarity is essential to customer understanding of how their rates will be affected. Avoiding any potential confusion should be an important goal when designing a customer notice.

Q. Do you have recommendations to improve the notice?

A. While the difficulty with the notice that I identified may not be a problem in the future as Peoples proposes to unify the tariffs for the PNGD and PGD divisions and these entities have already legally merged, I encourage Peoples to develop notices that do not place unfair burdens on the customer. Another way Peoples could do this is by considering whether usage of 80Mcf per year is a fair metric to rely upon in notices, as I note that the

summary included in Exhibit DE-2 identifies a customer who testified that the 80Mcf metric was understated.

Traditional vs. Alternative Ratemaking

Q. In general terms, can you describe the difference between traditional cost-of-service regulation and regulation that utilizes so-called alternative ratemaking mechanisms?

A. Yes, since the earliest days of public utility regulation, regulators have applied a common set of regulatory principles and practices to the task of setting utility rates. This traditional type of regulation is referred to as "cost-of-service regulation" because regulators set a utility's rates so that it has a reasonable opportunity to recover the "prudent" and "used and useful" costs the utility incurs in providing service to its customers, plus a reasonable rate of return on its invested capital (its profit). Under this type of regulation, once the utility regulator sets a utility's rates, those rates remain in effect until the utility requests, and the regulator approves, a change. In the absence of any form of stay-out obligation, rate changes can be requested at any time.

In more recent times, utilities, various interest groups, commissions and even state legislatures have put forward alternatives to traditional ratemaking. There are many variants of this type of alternative regulation, but the common theme is that rates are set differently from the traditional approach. Among these variants are things such as performance-based rates which allows a utility to earn a larger return if it meets certain performance goals or increases efficiency. Other times a utility is permitted to automatically change certain aspects of its rates without a full-scale review of all of its costs as would occur in a typical cost-of-service review. Sometimes alternative regulation can "guarantee" a utility a certain amount of revenue.

Q: Please describe traditional cost-of-service ratemaking in Pennsylvania.

A: Traditional cost-of-service ratemaking in Pennsylvania involves a set of well-established methodologies, norms, and standards for analyzing and determining a utility's cost of providing service and setting just and reasonable rates. Fundamentally, under cost-of service ratemaking, a utility's rates are based on costs either experienced or projected in a test year, including the utility's prudent and necessary expenses, used and useful plant investment, reasonable debt financing costs, and no more than a reasonable profit sufficient to keep a private company in the public utility business. Private companies that enter into the public utility business should be fully aware of the governmental interest and indeed the legal requirement for the utility's provision and maintenance of adequate, efficient, safe, and reasonable utility service and facilities as are necessary or proper for the accommodation, convenience, and safety of consumers and the public. This means that these companies are subject to significant oversight to restrain the exercise of their monopoly power to ensure that they do not charge rates for service that are excessive. The regulatory power of the Commission, exercised through traditional cost-of-service ratemaking serves as a check on any such excess.

Q: Does traditional cost-of-service ratemaking benefit consumers and public utility companies?

A: Yes. Traditional cost-of-service ratemaking should benefit both consumers and public utility companies.

Q: Please explain.

A. Public utilities typically have no competition for the service they provide in their certificated service territories. They are natural monopolies. Traditional cost-of-service

ratemaking serves as a substitute for the beneficial effects of competition by setting rates on a prospective basis. Because the utility can recover its authorized costs (or authorized revenue requirement) on a prospective basis, the utility is given the opportunity to recover its authorized profit, but such recovery *is not* guaranteed – just as recovery of costs and profits are not guaranteed in a competitive marketplace. To fully recover the authorized costs and return on equity, once rates are set, the utility must go forward and operate efficiently and control its costs and pace of growth, if any. All of this must be done while providing and maintaining adequate, efficient, safe, and reasonable service and facilities.

Q: What is the most beneficial aspect of traditional cost-of-service ratemaking for consumers?

A: The most beneficial aspect of traditional cost-of-service ratemaking is the lack of guaranteed recovery for the utility while the utility remains obligated to provide and maintain adequate, efficient, safe, and reasonable service and facilities. This means that the public utility company faces the risk of under recovery due to normal business risks and management underperformance if it fails to control costs or if it asks for rates to be set based on inaccurate sales projections. Under traditional ratemaking, the utility – not its guaranteed consumer base – bears the risk of recovery until it files for another base rate increase and reflects the increased costs or decreased sales in new prospective rates granted by the Commission after a record is developed in that case.

Q: Why is it beneficial for consumers that the risk of recovery be placed with the public utility company?

A: Placing the risk of recovery of authorized costs (or authorized revenue requirement) on

the public utility company creates an incentive for the utility's management to manage its normal business risks and perform its service duties efficiently – just as competition would place similar pressure on performance in a competitive marketplace where firms compete for consumers and sales. The utility also faces normal business risks that affect cost recovery in between rate cases, such as weather, recessions, changing technologies, and other sources of sales fluctuations. Indeed, the utility management is faced with having to operate efficiently, control costs, and achieve growth at a sustainable pace. While the utility is and should be given the opportunity to earn its authorized return on equity to remain financially stable based on efficient management performance, the lack of guaranteed recovery protects consumers from having to overpay for a utility management's underperformance. In addition, it should be noted that a utility is presumably compensated for the degree of risk it carries through the rate of return on equity it earns as investors price the level of risk into the returns they require. The utility's customers, by contrast, receive no compensation for bearing risks that may be shifted to them.

Peoples' Transfer of Risk to Customers

Alternative Ratemaking Mechanisms

Q. Can public utilities recover costs which are not based in the cost of service?

A. Yes. The Commission and Public Utility Code permit public utilities to earn revenue outside of cost-of-service-based ratemaking through different types of "alternative ratemaking." This is authorized by Section 1330 of the Public Utility Code.

Q. What are some examples of alternative ratemaking?

A. As I noted earlier, there are many different forms of alternative ratemaking. Section 1330 of the Public Utility Code mentions a number of them including revenue decoupling mechanisms, multiyear rate plans, formula rates and performance-based rates. Others would include cost trackers, infrastructure surcharges like the existing DSIC charges, and straight fixed – variable rates under which a utility recovers its fixed costs through a fixed monthly charge and its variable rates through volumetric charges.

Q. Has Peoples already availed itself of other alternative ratemaking mechanisms in existing rates?

A. Yes. Before the Commission considers any other proposals made in this case, it is important to note that Peoples has already significantly benefitted from other alternative ratemaking proposals that shift the risk of meeting its revenue target to customers. These include Peoples use of a fully-projected future test, by which Peoples enjoys the benefit of designing rates now for what it anticipates costs and investor expectations to be through September 30, 2025.[15] Additionally, Peoples has implemented a distribution system improvement charge, which enables it to recover the costs for the repair and replacement of eligible property outside the confines of a rate case, thereby further eliminating regulatory lag and decoupling those costs from rates.

Q. Is Peoples seeking to implement an additional alternative ratemaking mechanism in this case?

A. Yes, Peoples' is proposing a WNA, which is a form of revenue decoupling.

[15] Peoples Statement No. 2, p. 12.

Q. What is a revenue decoupling mechanism?

A. A revenue-decoupling mechanism allows a utility to adjust its rates between rate cases when sales deviate from some baseline level. A good example would be the periodic adjustment of rates for a gap between actual sales and the projected test-year sales upon which base rates were set. If a utility's actual sales per customer over a specific period fall below the level embedded in existing rates, the utility could increase its rates to compensate for the revenue shortfall. If actual sales exceeded the test-year sales projections, the utility would provide a credit to its customers. The objective of such a mechanism is to helps stabilize a utility's revenues and earnings, making it more indifferent to the level of actual sales and thus removing any financial harm from customer energy efficiency efforts.

Q. What effect do alternative ratemaking mechanisms have on the risk of recovery?

A. While it may not be the case with all forms of alternative ratemaking, revenue decoupling, or at least partial revenue decoupling, as is being proposed in this case via the WNA, definitely has the effect of shifting the risk of recovery of certain costs from the utility to its customers.

Q. What guidance does the General Assembly offer regarding the use of alternative ratemaking mechanisms?

A. Code Section 1330 provides the declaration of policy from the General Assembly where it declares that "it is the Commonwealth's policy that utility ratemaking should encourage and sustain investment through appropriate cost-recovery mechanisms to enhance the safety, security, reliability or availability of utility infrastructure and be consistent with the efficient consumption of utility service." 66 Pa. C.S. § 1330(a)(2).

Proposed Weather Normalization Adjustment

Q. What is a weather normalization adjustment (WNA)?

A A WNA adjusts customers' distribution charges by comparing actual versus normal weather conditions for a month, typically during cold weather months. In this case the Company proposes that its WNA would be in effect from October through May. The actual versus normal weather comparison is based on Heating Degree Days (HDDs). If normal HDDs exceed the actual number of HDDs, indicating a warmer than normal month, customers will receive an additional charge on their bill to achieve the level of revenue that would have been received under "normal" weather conditions. Conversely, if normal HDDs are below the actual HDDs, indicating a colder than normal month, customers will receive a credit on their bill, again to achieve the level of revenue that would have been received under "normal" weather conditions.

Q. What is the purpose of a WNA?

A. The primary purpose of the WNA is to stabilize a utility's revenues during periods when weather variations can result in fluctuations to its revenues.

Q. Is a WNA a revenue decoupling mechanism?

A. Though a form of revenue decoupling mechanism, a WNA accounts for just one of the factors – weather -- that can cause a utility's revenue to fluctuate. I note that Peoples witness Paul Moul also classified the WNA as a decoupling mechanism[16].

Q. Do other natural gas utilities in Pennsylvania use WNAs?

Yes, WNAs are in place for National Fuel Gas (NFG), UGI Gas, Columbia Gas, and the Philadelphia Gas Works. However, it is important note, as OCA witness Mugrace explains

[16] Peoples Statement No. 13, pp. 9-10.

in more detail, the WNAs in place for these utilities differ significantly from what Peoples is proposing here. While I defer to witness Mugrace, I note that, among other things, Peoples has not proposed any of the guardrails that the other utilities have implemented in an attempt to protect consumers.

Q. How does Peoples propose to implement the WNA?

A. The WNA is a charge that Peoples proposes to assess only on the following classes of customers: residential including CAP, commercial SGS, and commercial MGS customers. Peoples explains that by implementing the WNA, it will adjust the customer delivery charges based upon "normal historic weather patterns." According to Peoples, if the weather a customer experiences is colder than normal weather, through a WNA mechanism, that customer would receive a credit on the bill. If the weather a customer experiences is warmer than normal, that customer would receive an additional charge on the bill. (Peoples Statement No. 1 page 14). Peoples claims that consistent with the revenue forecasting methodology, these customer classes are predominantly weather sensitive**.** Peoples proposes to assess the WNA to the identified customer classes for service rendered during the heating season months, specifically October 1, through May 31 (Peoples Statement No. 3, p. 17).

Q. How have the OCA's other witnesses addressed the WNA issue?

A. In OCA Statement 2, witness Dante Mugrace will provide information about the calculation of the WNA, and, from an accounting standpoint, he will provide additional analysis and facts that support rejection of the WNA, including why Peoples cannot credibly rely upon other utilities' approved WNA mechanisms to support its distinguishable proposal here. Additionally, in OCA Statement 3, witness Aaron Rothschild explains that there is no

established nexus between Peoples' WNA proposal and Peoples' alleged financial risk. In OCA Statement 4, witness Clarence Johnson opposes the WNA in the context of rate design and provides information that reveals why Peoples' customers may be harmed by the WNA in the form of bill confusion, decreased conservation incentives, and higher bills. In Statement 5, OCA witness Barbara Alexander examines the WNA from a customer-service perspective, and her testimony demonstrates that customers will not be able to access basic information about the WNA charge on their bills, which will prevent them from verifying their bill and add to its complexity. Finally, in OCA Statement 6, witness Roger Colton refutes Peoples' claims that low-income customers will not be impacted by the WNA as he presents data and analysis to illustrate the detrimental impact of the WNA to all customers, not just low-income customers.

Q. How does Peoples determine what weather is "normal"?

A. The testimonies of Peoples witnesses Scanlon and Zarumba explain in detail how the Company arrived at what it considers to be normal weather, which it determined to be 5,341 HDDs annually. Generally, Peoples' process involved the averaging of two methods of estimating normal HDDs -- a 20-year averaging of HDDs together with the average resulting from a 65-year statistical regression model of HDDs.

Q. Do other utilities in Pennsylvania use the same method to determine "normal" weather?

A. Not to my knowledge. I am informed by counsel that none of the four utilities with WNAs have used a 65-year statistical regression model in their calculation of the WNA.

Q. Aside from the calculation method, are there other differences between the WNA proposed by Peoples and the ones used by other public utilities in Pennsylvania?

A. Yes, each of the other Pennsylvania gas utilities with WNAs employ what is referred to as a "deadband," typically 3%. Through the deadband, if actual HDDs differ from normal HDDs by less than 3%, no WNA adjustment is applied. As indicated by Peoples witness Zarumba, the Company is not proposing a deadband for its WNA mechanism.

Q. Have there been any recent issues with WNAs in Pennsylvania?

A. Yes. In May 2022, the operation of PGW's WNA mechanism produced substantial increases in the bills of some of its customers. The weather in Philadelphia that month was unusually warm and gas consumption was low. High bills were not experienced by all customers, rather it affected customers in particular billing cycles. The impacts of those adjustments were so substantial that PGW eventually refunded the excessive WNA charges for the month of May. The fact that the impact on PGW's customers could be affected by something as random as their billing cycle assignment, even though all experienced the same weather, is concerning.

Q. Why does PGW's WNA experience matter in this case?

A. PGW's experience demonstrates that WNA mechanisms can result in harm to customers by subjecting them to higher bills that result from weather anomalies. Customers are much less likely to be able to absorb these costs, even in the short term, than a utility company like Peoples. The inequity of passing the risk on to customers is highlighted even more so with Peoples' WNA proposal, because as OCA witnesses Mugrace and Johnson explain, Peoples does not propose any protective customer measures, such as a deadband.

The Commission's Distribution Rate Considerations Weigh Heavily Against the WNA

Q. What does the Commission consider when determining if an alternative distribution ratemaking mechanism is just and reasonable?

The Commission considers, among other things, the 14 distribution rate considerations:

(1) How the ratemaking mechanism and rate design align revenues with cost causation principles as to both fixed and variable costs.

(2) How the ratemaking mechanism and rate design impact the fixed utility's capacity utilization.

(3) Whether the ratemaking mechanism and rate design reflect the level of demand associated with the customer's anticipated consumption levels.

(4) How the ratemaking mechanism and rate design limit or eliminate interclass and intraclass cost shifting.

(5) How the ratemaking mechanism and rate design limit or eliminate disincentives for the promotion of efficiency programs.

(6) How the ratemaking mechanism and rate design impact customer incentives to employ efficiency measures and distributed energy resources.

(7) How the ratemaking mechanism and rate design impact low-income customers and support consumer assistance programs.

(8) How the ratemaking mechanism and rate design impact customer rate stability principles.

(9) How weather impacts utility revenue under the ratemaking mechanism and rate design.

(10) How the ratemaking mechanism and rate design impact the frequency of rate case filings and affect regulatory lag.

(11) If or how the ratemaking mechanism and rate design interact with other revenue sources, such as Section 1307 automatic adjustment surcharges, 66 Pa.C.S. § 1307 (relating to sliding scale of rates; adjustments), riders such as 66 Pa.C.S. § 2804(9) (relating to standards for restructuring of electric industry) or system improvement charges, 66 Pa.C.S. § 1353 (relating to distribution system improvement charge).

(12) Whether the alternative ratemaking mechanism and rate design include appropriate consumer protections.

(13) Whether the alternative ratemaking mechanism and rate design are understandable to consumers.

(14) How the ratemaking mechanism and rate design will support improvements in utility reliability.

52 Pa. Code §69.3302.

Q. What is the purpose of the Commission's policy statement for evaluating distribution rate considerations in the context of alternative ratemaking proposals?

A. The Commission's policy statement at 52 Pa. Code §69.3302 expands alternative ratemaking policy objectives to include reducing disincentives for promoting §1330 objectives. Additionally, the policy statement recognizes the goals of providing incentives to improve system economic efficiency and avoiding unnecessary future capital investments, while (1) ensuring adequate utility revenue to maintain the safe, secure and reliable operation of its system and (2) reflecting sound cost of service principles and a rate structure that is just and reasonable and considers customer impacts.[17] The above distribution rate consideration factors were adopted by the Commission in the *Fixed Utility Distribution Rates Policy Statement*, at Docket No. M-2015-2518883, on July 11, 2019, in an implementation proceeding resulting from the enactment of Section 1330 of the Public Utility Code, the portion of the Code relating to alternative ratemaking for utilities. Should the Company fail to carry its burden of proof that the proposed WNA is just and reasonable, as informed by the above factors, then the Commission should not approve the WNA.

[17] **§69.3301. Purpose and scope.** Federal and State policy initiatives promote the efficient use of electricity, natural gas and water through technologies and information, including distributed energy resources. The purpose of this policy statement is to invite the proposal, within a utility's base rate proceeding, of fixed utility distribution ratemaking mechanisms and rate designs that further promote these Federal and State policy objectives, the objectives of 66 Pa. C.S. § 1330 (relating to alternative ratemaking for utilities), and may include reducing disincentives for promoting these objectives, providing incentives to improve system economic efficiency, and avoiding unnecessary future capital investments while ensuring that fixed utilities receive adequate revenue to maintain the safe, secure and reliable operation of their distribution systems. At the same time, an alternative rate design methodology should reflect the sound application of cost of service principles, establish a rate structure that is just and reasonable, and consider customer impacts.

Q. In Statement No. 3, Peoples' witness Scanlon evaluated the WNA under the Commission's policy statement factors and determined that the factors weighed in favor of approving the WNA. Do you agree?

A. I do not. I too reviewed the WNA in the context of each of the fourteen policy statement factors, and my analysis demonstrates that the factors weigh heavily against the WNA. For ease of reference, I included my analysis as DE Exhibit 1, and it reviews each of the factors in a manner that is responsive to Ms. Scanlon's claims. I incorporate my analysis here, and in totality, it demonstrates that Peoples' WNA is not a just and reasonable rate**.**

Q. Do you recommend that the proposed WNA for Peoples be adopted?

A. No, I do not. Aside from the points I have raised here and the application of the alternative ratemaking factors that weigh heavily against the WNA, the testimony of OCA witnesses Mugrace, Johnson, Alexander, and Colton further demonstrates that the WNA should not be approved.

Conclusion

Q. What is your overall recommendation?

A. Overall, I recommend that the Commission adopt, in totality, the adjustments and recommendations of all OCA witnesses in this case. While I will not summarize each recommendation, consistent with the points made at the outset of my testimony, my recommendations include the following: that Peoples receive an increase in annual operating revenue of no more than $10,786,713 (which is $145,239,409 lower than Peoples' request), that Peoples' WNA proposal be rejected, and that Peoples' capital structure, overall rate of return, including its allowed return on equity, be set at the levels recommended by OCA witness Rothschild

Q. Does this conclude your direct testimony?

A. Yes it does.

Peoples Natural Gas LLC
Response to Distribution Rates – Statement of Policy
Proposed Weather Normalization Adjustment

52 Pa. Code § 69.3302. Distribution rate considerations.

(a) In determining just and reasonable alternative distribution ratemaking mechanisms and rate designs that promote the purpose and scope of this statement of policy and the objectives of 66 Pa. C.S. § 1330 (relating to alternative ratemaking for utilities), the Commission may consider, among other relevant factors, the following:

(1) How the ratemaking mechanism and rate design align revenues with cost causation principles as to both fixed and variable costs.

Peoples

Peoples' proposed WNA is designed to recover distribution revenues needed to satisfy the cost-of-service requirement determined in this proceeding, while lessening the variance between actual and projected distribution revenues due to weather. Peoples recovers a significant portion of fixed costs through volumetric rates. These fixed costs do not vary with the amount of gas delivered to customers and are composed of fixed operation and maintenance ("O&M") expenses, administrative and general expenses, depreciation, certain taxes, a portion of working capital requirements, and return on investment. These costs also do not vary due to changes in temperature. Thus, a WNA mechanism will better align distribution revenues with cost causation principles; appropriately accounting for variation in usage due to weather.

OCA

Peoples' WNA represents a clear misalignment between revenue and cost causation because it bills customers based upon hypothetical usage, and not upon actual cost-based usage. To the extent that a WNA only smooths the Company's revenues by reducing variance between monthly bills which results from less-than-predicted usage, it remains an extra step between costs incurred due to actual usage and the customer paying for those costs through rates. In other words, the WNA is, if perfectly revenue neutral, a continuation of the status quo with regard to aligning revenues with

cost causation. However, no other natural gas distribution company in Pennsylvania has indicated a perfectly revenue neutral WNA, meaning Peoples' proposed WNA likely dissociates revenues from cost causation.

(2) How the ratemaking mechanism and rate design impact the fixed utility's capacity utilization.

Peoples

Peoples' WNA proposal does not impact capacity utilization.

OCA

Peoples' proposed WNA is unrelated to capacity utilization since the determining metric for the charge is weather and not utilization..

(3) Whether the ratemaking mechanism and rate design reflect the level of demand associated with the customer's anticipated consumption levels.

Peoples

Customer specific usage factors corresponding to the customer's individual demand are continually updated by the Company and reflect the level of demand associated with said customer's expected consumption levels.

OCA

While Ms. Scanlon claims that the use of customer-specific base load factors reflect a customer's individual demand, and, therefore, are associated with the customer's expected consumption levels, her claim fails to address the heart of this factor's concern. (Peoples St. 3 at 20:18-21.) Specifically, the Peoples' WNA – even with a customer-specific base load factor – reflects an anticipation that the customer's actual demand will be at a lower level than their anticipated consumption, or else the Company would not have requested a WNA be implemented. As stated above, there is no reason to believe that Peoples' WNA will be revenue neutral. If Peoples' WNA is generating revenue, then it inherently does not reflect the level of demand associated with the customer's anticipated consumption levels, because the WNA only generates revenue if the demand is less than anticipated.

(4) How the ratemaking mechanism and rate design limit or eliminate interclass and intraclass cost shifting.

Peoples

Because Peoples Natural Gas's proposed WNA mechanism applies to rates which are based upon the specific revenue allocation and rate design ultimately approved by the Commission, the WNA mechanism will reduce the potential for interclass or intraclass cost shifting related to usage variances brought on by weather from the same weather assumptions incorporated into establishing the Company's rates.

OCA

Peoples' WNA is only being charged to those that Peoples' has identified as "heat-sensitive customers", which includes residential and small- and medium-sized commercial customers. (Peoples St. 3 at 17:7-8.) As a result, any revenue generated from the WNA reduces the deficits the Company experiences as a result of other customer classes, including recipients of competitive flex rates, or other rates offered by Peoples which may be below the cost-of-service, or require no cost-of-service basis. The result is not a limitation of cost shifting, but an exacerbation of it , which may be limited only by a cold winter.

(5) How the ratemaking mechanism and rate design limit or eliminate disincentives for the promotion of efficiency programs.

Peoples

Peoples' proposed WNA only addresses variations due to weather and does not affect customers' ability to pursue energy efficiency measures. Further Peoples will continue to promote the use of energy efficiency measures to its customers.

OCA

The proposed WNA disincentivizes energy efficiency programs because it imposes a disconnect between cost-savings for customers to participate in energy efficiency programming. The disincentive exists in that by relying upon temperature variances to impose a WNA regardless of reduced usage that may otherwise result from participation in an energy efficiency program, Peoples insert an artificial variable that would mitigate at least some cost-savings contingent on the weather..

(6) How the ratemaking mechanism and rate design impact customer incentives to employ efficiency measures and distributed energy resources.

Peoples

Peoples' customers will continue to be incentivized to use and employ energy efficiency measures and distributed energy resources because a reduction in the customer's ultimate usage will still reduce their overall bill.

OCA

Peoples' proposed WNA only considers the impact of weather on a customer's usage. If a customer reduces usage for reasons not related to the weather, such as pursuing cost savings, replacing a furnace, switching to electric appliances, or using less gas, Peoples' WNA is incapable of considering increased efficiency when calculating the hypothetical, weather-dependent usage. Customers are disincentivized from improving efficiency because they will be paying for gas they do not use – charged at the distribution rate – under Peoples' WNA. While the Company claims that efficiency will still result in a lower overall bill, decreases to a customer's bill will not be as impactful as if the WNA were not in place, limiting customers' incentives to use less gas. (Peoples St. 3 at 21:1-2.)

(7) How the ratemaking mechanism and rate design impact low-income customers and support consumer assistance programs.

Peoples

As proposed, under Peoples WNA mechanism, customers enrolled in CAP will see lower bill variability for distribution costs during colder than normal billing cycles. Relatedly, customers who are currently enrolled to pay their bills based off of a percentage of their household income will see little to no affect to their bills under the WNA mechanism.

OCA

Peoples' WNA will impact low-income customers and does not support consumer assistance programs (CAP). All residential customers will be assessed a WNA, including CAP customers. (Peoples St. 3 at 17:7-8.) OCA witness Colton further addresses the detrimental impact in OCA Statement 6. As Mr. Colton explain in more depth,, CAP customers will not directly pay the WNA charge; instead, they will continue to pay monthly bills in accordance with their CAP bill. As a result, the amount of WNA revenue which the Company is unable to collect from CAP customers will be collected from non-CAP customers, as a quasi-universal service rider.

(Peoples St. 3 at 18:5-19:4.) The WNA proposal has an obvious negative impact on the Company's ability to provide affordable service to low-income customers because it will increase the burden upon low-income customers who have not been enrolled in assistance programming by adding more expense to their bills.

(8) How the ratemaking mechanism and rate design impact customer rate stability principles.

Peoples

As proposed, Peoples' WNA mechanism would provide customers with more stable bills on an annual basis and, during the cold weather heating months, the WNA will directly reduce bill volatility through the WNA adjustment should weather be abnormally warm or cold.

OCA

As proposed, Peoples' WNA decreases customer rate stability because it obscures price signals for customers by dissociating their monthly bill from their actual usage. As a result, a customer is less likely to be able to predict what their bill should be at the end of the month based off of usage, such as what temperature they set their thermostat to, than under Peoples' current billing practices. As indicated by Peoples customer Nick Hoffman during a March 5 public input hearing held in this case, being subject to a WNA charge would make bills difficult to budget. Transcript at 57-58.

(9) How weather impacts utility revenue under the ratemaking mechanism and rate design.

Peoples

Peoples' proposed WNA adjusts a customer's bill due to variations from normal weather and will be in effect during the heating season months (October through May). Further it only applies to certain of the Company's customer classes (Residential including CAP, Commercial SGS, and Commercial MGS) and it does not guarantee that Peoples will recover 100% of its authorized distribution revenues, however, does reduce the amount of weather-related variation in customer bills and the Company's utility distribution revenue.

OCA

Weather will significantly impact Peoples' revenue under the proposed WNA. Warmer weather results in greater revenues while colder weather results in lesser revenues. However, as weather

continues to warm over time, it becomes more and more likely that Peoples' revenues will increase, instead of being revenue neutral, virtually eliminating any weather-related risk for Peoples and transferring that risk to customers..

(10) How the ratemaking mechanism and rate design impact the frequency of rate case filings and affect regulatory lag.

Peoples

The WNA will not impact the Company's rate case frequency or have an effect on regulatory lag.

OCA

As Peoples admits, the Company's proposed WNA does not benefit customers in the form of reducing its rate case frequency or have an effect on regulatory lag, if approved.

(11) If or how the ratemaking mechanism and rate design interact with other revenue sources, such as Section 1307 automatic adjustment surcharges, 66 Pa.C.S. § 1307 (relating to sliding scale of rates; adjustments), riders such as 66 Pa.C.S. § 2804(9) (relating to standards for restructuring of electric industry) or system improvement charges, 66 Pa.C.S. § 1353 (relating to distribution system improvement charge).

Peoples

Peoples' proposed WNA only applies to distribution related charges recovering the base distribution revenue requirement from customers subject to the WNA during October through May of each year. WNA amounts will be subject to STAS, DSIC, TRS, and TCJA riders.

OCA

Peoples' WNA revenues will interact with the STAS, DSIC, TRS, and TCJA riders, likely increasing the charges customers will pay in surcharges in addition to the WNA charges on their bill.

(12) Whether the alternative ratemaking mechanism and rate design include appropriate consumer protections.

Peoples

Peoples' proposed WNA mechanism will adjust bills to reflect the revenues that would be recovered under normal weather. Peoples

will not recover additional distribution revenues due to colder weather that result in relatively higher usage by customers subject to the WNA.

OCA

Peoples has proposed no consumer protections for its WNA. Other Pennsylvania NGDCs which have implemented WNAs have adopted consumer protection measures, including the implementation of a deadband, and exclusion of May from the months in effect. Peoples has proposed no such protections.

(13) Whether the alternative ratemaking mechanism and rate design are understandable to consumers.

Peoples

Peoples' WNA is not new within the NGDC landscape. Several other NGDCs in Pennsylvania have implemented WNA mechanisms. Peoples' proposed WNA is similar to that of those other Pennsylvania NGDCs and, further, Peoples will develop and employ consumer education and customer service training should the WNA mechanism be approved, as well as provide notice of the WNA to its customers pursuant to the Commission's alternative ratemaking notice requirements.

OCA

At the Public Input Hearings in this case, multiple witnesses testified that they did not understand the WNA and did not understand how the WNA may impact their monthly bills if the Company's rate increase were approved. The Company's notice stated: "This filing also includes a request for the approval of a Weather Normalization Adjustment (WNA) as an alternative rate mechanism in accordance with 66 Pa. C.S. § 1330. The WNA would adjust certain customers' bills to reflect normalized weather conditions." (OCA-I-002.) This notice is not in plain language and does not adequately explain the WNA or how dramatically it could impact customers' bills, let alone how the Company will calculate the WNA charge on a customer's bills each month. Further, the Company is not proposing to include their WNA as a separate line item on a customer's bill, as discussed in greater detail inOCA Statement 5 by witness Barbara Alexander, which would preclude customers from understanding the actual impact the WNA will have on their monthly bills. Not only is the WNA a difficult to understand mechanism for most consumers, but Peoples' proposed WNA is particularly difficult to understand due to how it is calculated, and the Company has done itself no favors

by providing inadequate information to consumers regarding the WNA.

(14) How the ratemaking mechanism and rate design will support improvements in utility reliability.

Peoples

Peoples' cost-of-service is inclusive of investments and costs to continue to enhance the safety and reliability of Peoples' system. Indeed, the WNA will stabilize the recovery of these costs, thereby assisting the Company to continue to pursue improvements to its system.

OCA

Peoples has not presented any evidence that implementing the WNA will support improvements in utility reliability. Peoples relies upon claims that that the WNA will stabilize revenues and thereby assist in the ability to pursue improvements, but it fails to tie WNA-based revenue to reliability commitments or infrastructure improvement metrics. , On the contrary, the WNA will provide additional revenues which are not cost-based and are not dedicated to infrastructure upgrades; instead, it is possible or likely that the proceeds of the WNA will bolster the Company's return on equity and go into the pockets of shareholders.

SMMARY OF PUBLIC INPUT HEARING TESTIMONY

March 5, 2024, at 1 p.m., in Monroeville, PA:

1. Nick Hoffman, a customer from Indiana, PA, noticed that the DSIC charge on his monthly bill has been inaccurate for the past three months. As such, he expressed concern regarding Peoples' ability to accurately calculate a weather normalization adjustment (WNA), which is much more complicated than the DSIC charge calculation. Further, he was not sure whether any rate increase resulting from WNA was included in the noticed rate impact of 21.4%, as Peoples claimed the WNA was revenue neutral. Mr. Hoffman expressed doubt that the WNA would be revenue neutral because temperatures continue to rise, meaning that the WNA would increase bills each month. He also indicated concern that Peoples' WNA would have similar results to UGI's, which saw significant increases to customer bills recently, resulting in a cap. Mr. Hoffman believes that it is easier to deny the WNA at the outset than to try and reform it after customers suffer. He testified that enduring changes in weather is an inherent part of the natural gas distribution business, and now Peoples wants to get rid of risk associated with warming weather. Mr. Hoffman cited to 66 Pa.C.S. Section 1330(a)(1), stating that it is not in the public interest to approve the WNA because the WNA charges increase as Peoples' infrastructure is used less, despite the statute's statement that costs for utility infrastructure are recovered consistent with the use of that infrastructure. He concluded by remarking that the WNA does not appear to be essential to the revenue or profit of Peoples or its parent company. Tr. 47-61; Exh. NH-1.
2. Benjamin John Chiszar, a customer from Pittsburgh, testified that he is opposed to the requested rate increase. Ms. Chiszar expressed frustration with the requested rate increase, namely because Peoples' request was made during a time of significant financial strain for many customers in the Company's service territory. He stated that Peoples should pay for the maintenance and repair of the service lines and other infrastructure it owns out of its profits and not rates. Mr. Chiszar was concerned that the hearing was poorly attended because there was not enough notice provided and because many customers believe that the rate increase will be approved regardless of public input. Tr. 83-90.

March 5, 2024, at 6 p.m., in Monroeville, PA:

3. Richard Culbertson, a customer from Pittsburgh, testified that he believes Peoples does not maintain adequate books and records and should be audited, including its claims for expenses and rate base, and the results of the audit should be publicly available. Mr. Culbertson is unsure whether customer-owned service lines replaced by the Company are included in rate base or considered donations, when the Company can refuse to service customer-owned lines. He also testified that Peoples installed a gas meter in front of a window on his property, which is not permitted under the Commission's regulations. Tr. 123-151; Exh. RC-1.

March 6, 2024, at 1 p.m., in Butler, PA:

4. James Iman, a customer from Butler, testified that the rate increase comes at a time when Peoples' customers are already struggling financially. Mr. Iman is concerned that, give the current financial conditions, customers will be forced to choose between essential services, such as food, medication, and rent, in order to afford Peoples' requested increase. He also noted that income levels which qualify for customer assistance do not reflect current financial realities. Tr. 179-180.

5. Joseph Byrnes, a customer from Wexford, testified that, as a retired person living on Social Security benefits, the annual increase in Social Security benefits is not sufficient to cover the increased cost of gas under Peoples' proposal. Before retirement, Mr. Byrnes stated, he did not receive an 18% increase to his salary at any one point, and does not understand why Peoples should receive one in this case. Instead, Mr. Byrnes urged Peoples to reduce its costs and minimize any required increase. Tr. 182.

March 6, 2024, at 6 p.m., in Butler, PA:

6. Lou Ann Byrnes, a customer from Wexford, testified regarding her concerns about the weather normalization adjustment (WNA). Specifically, she said that the WNA is unfair to customers who are penalized for using less gas, and that she believes rate increases associated with the WNA are included in the Company's noticed increase of 21.4%. Ms. Byrnes also indicated that Peoples' determination of 80 Mcf as a metric for the estimated bill increase was much lower that her average usage level. As a school counselor, before retiring, Ms. Byrnes saw a number of students whose families were unable to afford to heat their homes and had to choose between household essentials every day. She is concerned that, under the Company's requested increase, the number of families who are forced to choose between eating and heating their homes will increase. Ms. Byrnes emphasized that the Commission's mission statement is to protect the public interest and balance the needs of consumers at reasonable rates, and, as such, she believes the Commission should deny or limit any rate increase. Tr. 214-222.

7. Mark Krenitsky, a customer from Meridian, complained of a number of service issues from dealing with Peoples. Specifically, Mr. Krenitsky has no gas service in one of his rental properties because Peoples took the meter at the property and has not returned it yet. He has had difficulty getting field technicians from Peoples to his property or responsive answers from call center staff when trying to get working gas service, including the inability to reach anyone after 5:00 p.m. Tr. 223-229.

8. John Kramer, a customer from Butler, operates several rental properties. He pays for gas service for some of them, and the tenant pays for gas service in others. Mr. Kramer testified that additional costs would be detrimental to him and his tenants. He gave an example of a tenant who had to move out because he could no longer afford to rent the property; while Mr. Kramer and the tenant were able to try and recover back-payments on rent, the tenant was unable to get assistance for a significant arrearage balance with Peoples, despite being on a payment program. While Mr. Kramer said that he would try and postpone passing on

any costs for increased gas bills to his tenants, he testified that, eventually, the rate increase by Peoples will result in higher rent for the customers whose gas service he pays for. Tr. 230-235.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission,	:	
	:	
v.	:	Docket No. R- 2023-3044549
	:	
Peoples Natural Gas Company LLC	:	
	:	

VERIFICATION

I, David T. Evrard, hereby state that the facts above set forth in my Direct Testimony, OCA Statement 1, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: March 22, 2024

Signature: David T Evrard

David T. Evrard
Assistant Consumer Advocate

Address: Office of Consumer Advocate
555 Walnut St.
5th Floor
Harrisburg, PA 17101

OCA Statement 2

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	**)**	
v.	**)**	**Docket No. R-2023-3044549**
Peoples Natural Gas Company, LLC	**)**	

DIRECT TESTIMONY OF

DANTE MUGRACE

ON BEHALF OF THE

COMMONWEALTH OF PENNSYLVANIA

OFFICE OF CONSUMER ADVOCATE

March 22, 2024

PUBLIC VERSION

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I. STATEMENT OF QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Dante Mugrace. My business address is 22 Brooks Avenue, Gaithersburg, MD 20877.

Q. WHAT IS YOUR PRESENT OCCUPATION?

A. I am a Senior Consultant with the Economic and Management Consulting Firm of PCMG and Associates, LLC. (PCMG). In my capacity as a Senior Consultant, I am responsible for evaluating and examining rate and rate related proceedings before various governmental entities, preparing expert testimony recommending revenue requirement, as well as, offering opinions on economic policy and policy issues and methodologies used to set a value on a utility's rate base and cost of service components of revenue requirement.

Q. PLEASE SUMMARIZE YOUR PROFESSIONAL EXPERIENCE.

A. PCMG is an association of experts in utility regulation and policy, economics, accounting and finance. PCMG's members have over 75 years collective experience providing assistance to counsel and expert testimony regarding the regulation of electric, gas, water and wastewater utilities that operate under local, state and federal jurisdictions. PCMG focuses on areas regarding revenue requirement, cost of service, rate design, cost of capital and rate of return. Prior to my association with PCMG, I was employed as a Senior Consultant with the consulting firm of Snavely King Majoros and Associates (SKM) from 2013 to 2015, in the same capacity as PCMG. Prior to SKM I was employed by the New Jersey Board of Public Utilities (NJBPU) from 1983 to my retirement in 2011. During my tenure at the NJBPU, I held various Accounting, Rate Analyst, Supervisory and Management Positions. My last position was Bureau Chief of Rates in the Agency's Water Division (Bureau Chief of Rates). I held this position for nearly 10 years. My resume is attached as Appendix A.

Q. WHAT EXPERIENCE DO YOU HAVE IN THE AREA OF UTILITY RATE SETTING PROCEEDINGS AND OTHER UTILITY MATTERS?

A. In my capacity as Bureau Chief of Rates at NJBPU, I was responsible for overseeing the rate process regarding administrative, financial, and managerial functions of the Rates

Bureau. My primary duties were to ensure that the jurisdictional utilities had sufficient revenues to cover their operating expenses, the ability to earn a reasonable rate of return on plant investments, and to ensure that the provision of safe, adequate and proper service at reasonable rates was met. During my time at the NJBPU, I was involved in hundreds of rate and rate related proceedings. In my capacity as a Senior Consultant previously with SKM and now with PCMG, I have been and am currently involved in rate and rate related proceedings before the Commissions in the Commonwealths of Massachusetts and Pennsylvania, and the States of Maine, Maryland, New Jersey, New York, North Dakota, and Ohio. I was involved in the Generic Proceedings to Establish Parameters for the Next Generation Performance Based Rate Plans before the Alberta Utilities Commission. I was involved in transmission formula rate plans before the Federal Energy Regulatory Commission (FERC) regarding the PECO Energy Company on behalf of the Pennsylvania OCA and the Rockland Electric Company on behalf of the NJ Division of Rate Counsel.

Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?

A. I hold a Master of Business Administration (MBA) degree with a concentration in Strategic Management from Pace University-Lubin School of Business in New York, New York. I hold a Master of Public Administration (MPA) degree from Kean University in Union, New Jersey. I hold a Bachelor of Science (BS) degree in Accounting from Saint Peter's University in Jersey City, New Jersey.

II. PURPOSE OF TESTIMONY

Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

A. I am testifying on behalf of the Pennsylvania Office of the Consumer Advocate (OCA).

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to calculate and to make a recommendation regarding the Peoples Natural Gas Company, LLC (Peoples or Company) base rate case proceeding. My recommendations include the setting of the Company's Rate Base Valuation, and Pro Forma Operating Income at Present Rates for the Fully Projected Future Test Year Period

Ending September 30, 2025. On December 29, 2023, Peoples filed a base rate case with the Pennsylvania Public Utility Commission (PAPUC or Commission) requesting an overall increase in rates for its gas distribution service of $156.00 million or 18.725% above current rates. The filing is predicated on the combined operations of Peoples Natural Gas Division (PNGD) and Peoples Gas Division (PGD) Companies. PNGD and PGD are legally merged but remain as two divisions before the Commission. Both PNGD and PGD have separate base rates and accounting books and records. Peoples has requested all of the necessary approvals from the Commission to fully merge its two divisions (PNGD and PGD).[1] My recommendations incorporate the components of Peoples as one single entity (combined basis). Included in my recommended position on Rate Base Valuation and Operating Income, I am also incorporating the recommendations of OCA witness Mr. Aaron Rothschild with respect to the overall rate of return, any adjustments to OCA witness Mr. Clarence Johnson on certain rate design issues, and any adjustments to OCA witness Mr. Colton on Universal Service adjustments.

III. REVENUE REQUIREMENT ISSUES

A. SUMMARY

Q. WHAT REVENUE DEFICIENCIES OR ADJUSTMENTS ARE YOU RECOMMENDING?

A. Based upon the use of Peoples' proposed fully projected future test year ending September 30, 2025, I have the following recommendations:

- My recommended Rate Base balance is $4,207,419,461, which is $7,705,703 lower than the Peoples's proposed Rate Base balance of $4,215,125,164.
- My overall Rate of Return based upon OCA witness Mr. Rothschild's recommendation is 6.20%, which includes a Common Equity component of 8.02%.

[1] The Commission has approved the Joint Application for merger of the Peoples Gas Division and the Peoples Natural Gas Division on August 25, 2022 in Docket Nos. A-2021-3029831 and A-2021-3029833. The Commission has also approved the Peoples Gas Division and Peoples Natural Gas Division Purchased Gas Cost Rates in the 2022 1307 (f) Proceeding in Docket Nos. R-2023-3037928, et. al.

- My recommended Operating Revenue at Present Rates is computed at $833,215,510, which is the same at Peoples' Present Rate Revenue of $833,215,508.[2]
- My recommended Operation and Maintenance Expenses are $203,741,414, which is $23,269,392 lower than Peoples' proposed Operation and Maintenance Expenses of $227,010,806.
- My recommended Income Taxes are ($91,344,434), which is ($32,049,042) lower than Peoples's proposed Income Taxes of ($59,295,392).
- Overall, based on each of these pieces, I recommend a revenue requirement increase of $7,701,077 which is $148,325,045 lower than Peoples's proposed revenue requirement increase of $156,026,122.

B. RATE OF RETURN

Q. WHAT HAS PEOPLES PROPOSED WITH RESPECT TO ITS OVERALL RATE OF RETURN?

A. Peoples**'** witness Mr. Paul Moul has proposed an overall Rate of Return of 8.40% including a Return on Equity of 11.75%.

Q. WHAT HAS OCA WITNESS MR. AARON ROTHSCHILD PROPOSED WITH RESPECT TO HIS RECOMMENDED OVERALL RATE OF RETURN?

A. Mr. Rothschild has recommended an overall Rate of Return of 6.20% with a Return on Equity of 8.02%

Q. WHAT EFFECT DOES MR. ROTHSCHILD'S REMOVAL OF MR. MOUL'S MANAGEMENT PERFORMANCE PREMIUM OF 0.25% HAVE ON THE COMPANY'S REVENUE REQUIREMENT?

A. The effect of removing the 0.25% Management Performance Premium from the Company's Cost of Equity would be a reduction from Peoples' filed 11.75% Equity Cost Rate less 0.25% equals 11.50%. Incorporating this into the overall rate of return would be

[2] Any differences between Peoples's Operating Revenues at Present Rates in its filing and my Exhibits are due to rounding.

an 8.267% instead of Peoples's 8.40%. The revenue requirement impact would be a reduction of about $7,461,843[3].

Q. DID PEOPLES PROVIDE ANY UPDATED DOCUMENTS SUBSEQUENT TO THE FILING OF ITS RATE CASE?

A. Yes. While Peoples filed its rate case on December 29, 2023, on February 16, 2024, Peoples provided updates related to errors and omissions from the original filing. These updates relate to its Exhibits to Post-Retirement Benefits Other than Pension, (Exhibit No. 4 Schedule 1, page 11), Schedule of Expenses (Exhibit No. 4 Schedule No. 22) and its Current Gas Storage (Exhibit No. 1 Schedule 6). Peoples stated that the revisions to Exhibit No. 4 Schedule No. 22 do not impact the revenue requirement. With respect to Exhibit No. 4 Schedule No. 1 page 11, Peoples indicated through the discovery process that it will file under separate cover all changes to the revenue requirement. (OCA Set 15-5).

Q. WHAT DID PEOPLES PROVIDE WITH RESPECT ITS UPDATED DOCUMENTS?

A. Peoples provided revisions to its filing on March 13, 2024. Peoples noted that the revisions increase the revenue requirement by $996,345. Peoples noted that it intends to make this update in its rebuttal testimony, along with other adjustments, if any, that Peoples may agree to resulting from other parties' direct testimony.

Q. DO YOU HAVE ANY UPDATES WITH RESPECT TO THE COMPANY'S UPDATED DOCUMENTS TO CERTAIN O&M EXPENSES?

A. I note that Peoples' revisions does not provide a full picture of its revenue requirement in its revised exhibits in that it has not updated any other components that affect its increased $996,345 revenue requirement such as rate base components, and the flow through of other components (taxes, uncollectible accounts, late payment charges and cash working

[3] (Rate Base of $4.215 billion times the rate of return of 8.267% equals $348.464 million or a reduction from Peoples' proposed income requirement $354.265 million or $5.800 million multiplied by the gross revenue factor of 1.28640527 equals $7.462million).

capital). I am still reviewing Peoples' revised exhibits and will await Peoples' rebuttal testimony before I recommended any further adjustments. I also note that Peoples cannot claim a higher revenue requirement amount than what customers have been noticed for. Given this, I am not making any further adjustments to my revenue requirement recommendation at this point.

C. RATE BASE (Measures of Value)[4]

1. Utility Plant in Service (GPIS)

Q. WHAT HAS PEOPLES PROPOSED REGARDING ITS GAS PLANT IN SERVICE?

A. Peoples has proposed a GPIS balance in the combined amount of $5,587,906,895[5] for the fully projected future test year ending September 30, 2025. (Peoples' Exhibit No. 8, Schedule No. 2). Included in that balance are plant additions that Peoples expects to place in service during the future test year period ending September 30, 2024, in the amount of $494,633,645, and an additional $592,024,502 for the Fully Projected Future Test period ending September 30, 2025, a total addition to plant of $1,086,658,147. (Peoples' Exhibit No. 8, Schedule No. 2). Peoples' Fully Projected Future Test Period (FPFTY) and its Measure of Value is in accordance with Act 11 of 2012.

Q. WHAT ARE THE REQUIREMENTS OF THE USE OF A FPFTY PERIOD?

A. With the enactment of Act 11 of 2012, Peoples is allowed to use a fully projected future test year to establish base rates. The FPFTY is defined as the 12-month period that begins with the first month that the new rates will be placed in service, after application of the full suspension period permitted under Section 1308(d). (Peoples Statement No. 11 page 4).

Q. DID PEOPLES COMPLY WITH THESE REQUIREMENTS?

A. Yes.

[4] I am accepting Peoples balances related to Customer Advances and Customer Deposits.
[5] Differences between the Company's balance and my balance are due to rounding.

Q. BECAUSE IT IS BASED UPON A FULLY PROJECTED TEST PERIOD, DOES PEOPLES' FPFTY RELY UPON PROJECTIONS OF WHAT COSTS AND EXPENSES WILL BE IN THE FUTURE?

A. Yes. Because Peoples' filing is built upon a FPFTY, many of its claims are built upon assumptions of what expenses and revenue will be in the future, for a test year that ends on September 30, 2025. In that sense, Peoples relies upon inflation adjustments and CPI indices projections simply to support its revenue requirement for 2025. As the combined testimony of OCA witnesses will explain, Peoples' budget projections have not always materialized, and in many respects have been significantly over projected through the adjustments of inflation factors and CPI indices.

Q. WHAT HAS PEOPLES INCLUDED IN THE DEVELOPMENT OF ITS GPIS?

A. Peoples' witness Mr. Huwar stated that Peoples has included costs related to its Long-Term Infrastructure Improvement Plan (LTIIP). Mr. Huwar stated that the most recently approved LTIIP in January of 2021 targeted replacement of 871 miles of at-risk pipe for a total cost of $1.512 billion related to mains and services. (Peoples Statement No. 1 page 12). Peoples' second combined distribution LTIIP maintained its commitment to replace all at-risk pipelines over a twenty-year period. Peoples has stated that as of October 2023, about 485 miles or 56% of the projected 871 total miles in the Company's current LTIIP have been replaced at a cost of $918 million or 63% of the estimated program costs for mains and services of $1.5 billion. (Peoples Statement No. 5 page 4). Peoples' witness Mr. Becker stated that the LTIIP includes three other programs related to pipeline work programs. They are (1) the Gathering Pipeline Replacement Program (GP); (2) the Goodwin Tombaugh Program (GT); and (3) the Mainline Extension Program (MLX). A breakdown of these costs is shown in response to OCA Set 8-023. Peoples has prepared an exhibit showing the total plant additions from the Peoples' 2023 and 2024 capital budgets and the amount of Construction Work in Program (CWIP) as of August 31, 2023, that will close to plant in 2023 or early 2024. (Peoples Exhibit No. DF-1). (Peoples Statement No. 11 page 5).

Q. WHAT CHANGES DO YOU HAVE WITH RESPECT TO PEOPLES' PROPOSED LEVEL OF GPIS FOR ITS FULLY PROJECTED FUTURE TEST YEAR PERIOD ENDING SEPTEMBER 30, 2025?

A. In response to OCA-7-2, Peoples stated that it included inflation related adjustments to compute its projected capital expenditures in the FTY and the FPFTY periods. Peoples utilized an inflation factor for its LTIIP capital expenditures of 2.31% in 2024 and 2.40% in 2025. Peoples utilized an inflation factor for its General Plant (GP) of 4.00% in 2024 and 3.50% in 2025. Peoples utilized an inflation factor for its Mainline Extension Program (MLX) of 3.50% in 2025. In response to OCA Set 7-8, Peoples stated that its LTIIP capital expenditures are accounted for in the following accounts: 367.0, 369.0, 376.1, 376.2, 380.00, 381.0 and 381.1. I am recommending removing these inflation related adjustments from Peoples FTY and FPFTY capital expenditures.

Q. WHY ARE YOU RECOMMENDING REMOVAL OF THESE INFLATION COSTS IN THE DEVELOPMENT OF PEOPLES' REVENUE REQUIREMENT?

A. I am recommending disallowance of these inflation related costs because these types of costs are not known and measurable in setting rates for service. These types of adjustments should not be used for ratemaking purposes because they do not provide a good index of cost increases, but rather reflect an overall broad, blanket-type economic adjustment that are typically applied to goods and services that may not be directly related to costs incurred by Peoples. Inflation adjustments do not address any particular or individual expense category. These are simply forecasts and predictions of cost estimates. As goods and services fluctuate over time, applying escalation adjustments to adjust costs is not a proper approach that should be utilized in setting rates for utility services. While such inflation types of adjustments are used to develop economic data as in changes to broad baskets of consumer goods and services such as housing, clothing, food, etc., utilizing inflation adjustments for ratemaking purposes is not reasonable.

Q. WHAT I ADJUSTMENT ARE YOU RECOMMENDING WITH RESPECT TO PEOPLES' GPIS FOR THE FPFTY PERIOD?

A. I am recommending a total adjustment of $27,819,503 related to the disallowance of the Inflation adjustments that are included in the balances for each of Peoples' categories of plant as detailed below:

1

TABLE I

Gas Production Plant - PNGD Mainline Extension Program (MLX)	Additions HTY-FTY	Additions FTY-STUB	Additions FPFTY
FPFTY Additions			$ 7,265,751
Inflation Rate			3.50%
Inflation Adjustment			**$ 254,301**
Transmission Plant - PNGD			
Mains Transmission Plant	$80,639,319	$11,107,893	$123,520,256
Measuring & Reg. Equipment	$1,382,850	$ 350,000	$ 2,840,000
Transmission Plant - PGD			
Mains Transmission Plant	$ 3,298,055	$ 321,401	$ 3,274,759
Measuring & Reg. Equipment	$ 412,945	$ 50,000	$ 500,000
Total	$ 85,733,169	$1,829,294	$130,135,015
Inflation Rate	2.31%	2.31%	2.40%
Inflation Adjustment	$ 1,980,436	$ 273,257	$ 3,123,240
Total Inflation Adjustment			**5,376,933**
Distribution Plant - PNGD			
Mains- Distribution Low Pressure	$ 113,638,696	$11,596,294	$118,183,270
Mains- Distribution Reg. Pressure	$ 128,444,177	$ 13,107,124	$133,580,843
Meas. & Reg. Equipment	$ 5,663,123	$ 1,008,432	$ 11,400,448
Service-Distribution Plant	$ 85,623,277	$10,112,778	$ 94,286,328
Meters- Distribution Plant	$ 5,383,138	$ 1,372,971	$ 5,679,100
Meters - ERT-Distribution Plant	$ 5,872,014	$ 282,038	$ 5,202,828
Distribution Plant - PGD			
Mains- Distribution Low Pressure	$ 8,804,457	$ 774,269	$ 7,909,211
Mains- Distribution Reg. Pressure	$ 4,435,329	$ 390,045	$ 3,984,340
Meas. & Reg. Equipment	$ 2,517,181	$ 270,108	$ 2,856,912
Service-Distribution Plant	$ 9,652,400	$ 706,212	$ 6,583,023
Meters- Distribution Plant	$ 531,755	$ 206,076	$ 949,588
Meters - ERT-Distribution Plant	$ 657,012	$ 114,667	$ 824,060
Total	$ 371,222,559	$ 39,941,014	$ 391,439,951
Inflation Rate	2.31%	2.31%	2.40%
Inflation Adjustment	$ 8,575,241	$ 922,637	$ 9,394,559
Total Inflation Adjustment			**$ 18,892,437**

General Plant - PNGD	$ 46,967,208	$ 2,607,242	$ 30,040,719
General Plant - PGD	$ 5,133,623	$ 113,666	$ 1,472,455
Total	$ 52,100,831	$ 2,720,908	$ 31,513,174
Inflation Rate	4.00%	4.00%	3.50%
Inflation Adjustment	$ 2,084,033	$ 108,836	$ 1,102,961
Total Inflation Adjustment			**$ 3,295,831**

GRAND TOTAL **$ 27,819,503**

Q. WHAT OTHER ADJUSTMENT DO YOU HAVE REGARDING PEOPLES' GPIS BALANCE?

A. In response to OCA Set 21-001, Peoples was asked about costs related to private property damages by the incident in Robinson on April 29, 2020 and the costs of replacement, as well as all incidences and claims arising out of the Robinson incident. Peoples provided total costs replacement of those facilities in the amount of $1,462,407. Peoples stated that the facilities were considered target assets eligible for replacement as part of Peoples LTIIP and as such were capitalized into rate base and included in the revenue requirement. Peoples stated that it was not making a claim related to the repair and / or replacement of any public or private property that resulted from the incident in Robinson on April 29, 2020 in this base rate case other than those assets provided of $1,462,407.

Q. WHAT IS YOUR RECOMMENDATION?

A. I am recommending disallowing these costs in rate base and from the revenue requirement. These costs should have been covered by insurance or through shareholder funding. Ratepayers should not be required to fund costs related to property damages or incidences resulting directly from Peoples' actions and occurring from Peoples' contractors in performing the work that caused the damages. The fact that this incident was not covered by insurance or through shareholder funding does not give Peoples the right to merely pass these costs onto ratepayers. This incident occurred under the auspices of Peoples' personnel and the responsibility of covering the costs should stay with Peoples.

My recommendation is also shown on my Exhibit DM-5.

2. Accumulated Depreciation

Q. WHAT HAS PEOPLES CALCULATED WITH RESPECT TO ITS ACCUMULATED DEPRECIATION?

A. Peoples computed accumulated depreciation in the amount of $1,456,324,493 as shown on Peoples' Exhibit 8, Schedule No. 2 page 3, and on Exhibit 5C as reflected in Peoples's Witness Mr. Spanos' depreciation study. Peoples' Witness Ms. Dawn Folks stated that the claim for Accrued (or Accumulated) Depreciation was supplied by Mr. Spanos and the appropriate measure of Accrued Depreciation for use as the deduction from the original cost in determining Peoples' rate base is Peoples Adjusted Book Depreciation reserve as of September 30, 2025. (Peoples Statement No. 11 page 8).

Q. WHAT IS YOUR RECOMMENDATION?

A. I am accepting Peoples's methodology related to its Accumulated Depreciation development. My recommended adjustments related to my GPIS adjustments of $27,819,503, the adjustment related to the incident occurrence related to the Robinson event and Peoples's proposed Depreciation Rates for each of Peoples' categories of plant. (Spanos Exhibit 5C – I-5 and my Exhibit DM-35). My adjustment is a decrease to Peoples's Accumulated Depreciation of $727,749. My recommendation is shown on my Exhibit DM-6.

3. Working Capital[6]

Q. WHAT IS INCLUDED IN PEOPLES' WORKING CAPITAL?

A. Peoples has included Materials and Supplies of $5,569,985, Prepayments of $5,776,406, Gas Storage Underground - Current balances of $46,876,831. Peoples calculated a Cash Working Capital Requirements of $36,256,917, as shown on Peoples Exhibit No. 8, Schedule No. 2, page 3. The total proposed Working Capital is as follows:

[6] I am accepting Peoples balances related to Materials and Supplies, Gas Stored Underground and Prepayments.

Gas Storage Underground - Current	$46,876,831
Materials and Supplies -	$ 5,569,985
Prepayments	$ 5,776,406
Cash Working Capital	$36,256,917[7]
Total	$94,480,139

Q. WHAT ADJUSTMENTS DO YOU HAVE WITH RESPECT TO PEOPLES' WORKING CAPITAL?

A. I am accepting Peoples' proposed balances related to Gas Storage Underground – Current, Materials and Supplies and Prepayments. My adjustments are related to my adjustments to Peoples' Operating and Maintenance (O&M) expenses that were used to calculate the Cash Working Capital balance of $36,256,917. In calculating my recommended working capital, I used Peoples's methodology along with my recommended O&M expense adjustments. My balances compute as follows:

	Peoples	PA OCA
Materials and Supplies	$ 5,569,985	$ 5,569,985
Prepayments	$ 5,776,406	$ 5,776,406
CWC	$36,256,917	$35,001,694
Gas Storage Underground	$46,876,831	$46,876,831
Subtotal	$94,480,139	$93,224,916

Q. WHAT CHANGES DO YOU HAVE REGARDING PEOPLES' CASH WORKING CAPITAL (CWC) REQUIREMENTS OF $36,256,917 AS NOTED ABOVE?

A. Using my recommended levels of O&M Expenses along with Peoples' CWC Factors as shown on Peoples' Exhibit KMS-1, for each of Peoples's CWC components, along with my recommended levels of expenses, taxes other than income taxes, and interest expense

[7] Peoples Exhibit KMS-1

on long-term debt my recommended level of CWC is $35,001,694 and is shown on my Exhibit DM-7.

4. Deferred Income Taxes and Excess ADIT

Q. WHAT DID PEOPLES PROPOSE WITH RESPECT TO ITS ACCUMULATED DEFERRED INCOME TAXES (ADIT)?

A. Peoples proposed an ADIT balance of $3,232,844 as shown Peoples' Exhibit No. 8, Schedule No. 2, page 3, and Peoples Exhibit No. 7 Schedule 8- Attachment 2. A detailed breakdown of the balance is reflected on Peoples' Exhibit No. 7 Schedule 8- Attachment 2. In its development of the ADIT balance of $3,232,844, Peoples's witness Ms. Saball stated that the development of Peoples' Deferred Income Taxes represents the flow through of accelerated depreciation (subject to the normalization rules) and based upon the settlement in Peoples's Related Tariff Sur-credits Associated with Tax Repairs Election in Docket No. P-2020-3021191 (TRS) there is an exception related to Section 481 (a) adjustment to the tax repairs change in accounting method. (Peoples' Statement No. 6 page 11). Pursuant to the Section 481 (a), which is the so-called catch up adjustment, Peoples has agreed to amortize the tax effect of that deduction in the manner set forth in the settlement of the TRS. (Peoples Statement No. 6 page 11). I will discuss the pertinent parts of Peoples's development of its Deferred Income Tax calculation below.

Q. WHAT DID PEOPLES CLAIM WITH RESPECT TO THE DEFERRED TAXES RELATED TO TAX DEPRECIATION AND BOOK DEPRECIATION?

A. Ms. Saball stated that as to accelerated depreciation related to property subject to the normalization requirements, Peoples records deferred taxes which is the accounting and ratemaking mechanism that implements the normalization requirement the Internal Revenue Service (IRS) imposed as a condition for using the liberalized depreciation methodologies allowed for income tax purposes. (Peoples Statement No. 6 page 12). The normalization requirement does not permit the tax benefit of the tax depreciation in excess of book depreciation to be flowed through to customers as a tax deduction in the year(s) those deductions occur. Instead the tax effects of those amounts are recorded as deferred taxes. These taxes will be paid to the government later in the life of the depreciable asset

when the relationship between book and tax depreciation reverses. (Peoples Statement No. 6 page 12).

Q. WHAT DID PEOPLES CLAIM REGARDING THE CATCH-UP ADJUSTMENT TO CUSTOMERS ON THE COMPANY'S DEFERRED INCOME TAX EXPENSE?

A. Ms. Saball stated that Peoples, when changing its accounting method for its Peoples Natural Gas Division (PNGD), is providing a rate reduction to customers through a sur-credit on customer bills over a five-year period in accordance with the terms of the TRS. The sur-credit is calculated based on the respective basis and rate at 7.89% (Pennsylvania Tax Rate) and at 21% (Federal Tax Rate). As the sur-credit is provided, the regulatory liability that accounts for the benefits to be returned, amortizes to and reduces Peoples's deferred income tax expense. The reduction is calculated at $20,947,437 in the FPFTY period. (Peoples' Statement No. 6 page 14, and Peoples Exhibit No. 7, Statement No. 8, line 39).

Q. WHAT DID PEOPLES CLAIM REGARDING ITS EXCESS ADIT ON THE PEOPLES DEFERRED INCOME TAXES?

A. Ms. Saball stated that the deferred tax expense is reduced by the flow-back to customers of a portion of the excess ADIT resulting from the reduction in the federal tax rate from 35% to 21% resulting from the Tax Cuts and Jobs Act of 2017. The balance was computed using the Average Rate Assumption Method (ARAM) and results in an adjustment of $1,757,485 in the HTY and $831,898 in the FPFTY periods. (Peoples Statement No. 6 page 14, and Peoples Exhibit No. 7, Statement 8 – Attachment 1 Line 37).

Q. WHAT DID PEOPLES STATE REGARDING ITS NET OPERATING LOSS (NOL)?

A. Ms. Saball stated that the Federal NOL is estimated to increase to over $1.1 billion by the FPFTY. This is due to the increasing level of tax deductions greater than book income. The State NOL utilized an offset 40% of the current year taxable income and the creation and utilization of Federal NOLs does not impact the overall federal income tax expense because deferrals of the benefits of the federal NOL are recorded to deferred income tax expense. (Peoples Statement No. 6 page 15). In response to OCA-Set 8 – 24, Peoples explained its NOL carryforward for both state and federal income tax purposes, which are

the result of tax greater than book timing differences. Increased capital spending has resulted in a greater level of tax depreciation and tax repairs. The NOL balance is due to Peoples' inability to monetize the NOL as a result of the 40% taxable income limitation imposed by currently enacted laws and the ongoing level of tax greater than book timing differences.

Q. WHAT HAS PEOPLES STATED REGARDING ITS TAX REPAIRS DEDUCTION?

A. Ms. Saball stated that Peoples made an election to define its units property under the IRS tangible property regulations which allowed Peoples to prospectively deduct as an operating expense on its income tax returns, the costs of certain asset improvements that otherwise would be capitalized and depreciated for income tax purposes (Tax Repair Election). As a result of making the tax repair election, Peoples was also required to calculate a one-time "catch-up deduction" that involved a restatement of Peoples tax books and records to conform to what they would have looked like if the new method had always been used. (Statement No. 6 page 27). The effect of the catch-up deduction was an additional tax deduction of about $425 million which was claimed as a deduction on the Peoples 2020 and 2021 Federal and State income tax returns. Peoples is currently in an NOL position which prevents it from currently receiving the cash benefit of the catch-up deduction. (Statement No. 6 page 28). Peoples stated that its Tax Repairs Surcharge Rider is based upon the surcharge the Company is currently using in its tariff. (OCA Set 8- 19).

Q. ARE YOU CHALLENGING MS. SABALL'S CLAIMS SUMMARIZED ABOVE?

A. No.

Q. DO YOU HAVE ANY OTHER ADJUSTMENTS TO PEOPLES' ADIT BALANCE?

A. No, I reviewed the responses to OCA Set 8-24, 25 and 27, related to Peoples's explanation of its NOL Carryforward, the catch-up adjustment and the adjustments related to the development of its Deferred Income Taxes to calculate the Rate Base balance ADIT of $3,232,844.

Q. WHAT IS YOUR TOTAL ADJUSTMENT RELATED TO PEOPLES' ADIT BALANCE?

A. As I made adjustments to Peoples' GPIS and the related adjustments to its Accumulated Depreciation, I am making adjustments to reflect the deferred tax associated with my GPIS adjustments. Using my recommended Accumulated Depreciation adjustment of $727,749, and Peoples's Deferred Tax Rate of 21%, my recommended Deferred Tax balance is an adjustment of $152,826. My recommendation is shown on my Exhibit DM-8.

D. OPERATING INCOME

1. Operating Revenues

Q. WHAT HAS PEOPLES PROPOSED AS ITS OPERATING REVENUE AT PRESENT RATES AND PROPOSED RATES?

A. As shown on Peoples Exhibit 2, Schedule 4, and on Exhibit 3 Schedule 15 Attachment A, Peoples has projected pro-forma revenues at present rates in the amount of $833,215,508. In computing its present rate revenues, the Company used a 20-year weather normalization period with a 65-year regression to normalize the revenues through the historic test year period ending December 31, 2022 (Peoples Statement No. 3 page 5). The Company calculated its proposed revenue at proposed rates under its FPFTY by adding its revenue requirement increase of $156,016,122 to its present rate revenue of $833,215,508 to arrive at its proposed revenues at proposed rates of $989,241,631. (Peoples' Company Exhibit No. 2 Schedule No. 4 page 2 of 7).

Q. DID PEOPLES UPDATE ITS OPERATING REVENUE SUBSEQUENT TO THE INITIAL FILING?

A. No, Peoples did not update its Operating Revenue subsequent to the initial filing.

Q. DO YOU HAVE ANY ADJUSTMENTS TO PEOPLES' PRESENT RATE REVENUE?

A. No I do not. My recommendation is shown on my Exhibit DM-9.

a. Weather Normalization Adjustment

Q. WHAT HAS PEOPLES PROPOSED WITH RESPECT TO ITS WEATHER NORMALIZATION ADJUSTMENT (WNA)?

A. In this proceeding, Peoples is requesting a WNA. Mr. Huwar stated that by implementing the WNA, Peoples will adjust the customer delivery charges based upon "normal historic weather patterns." If the weather a customer experiences is colder than normal weather, through a WNA mechanism, that customer would receive a credit on the bill. If the weather a customer experiences is warmer than normal, that customer would receive an additional charge on the bill. (Peoples Statement No. 1 page 14). Mr. Huwar claimed that a WNA mechanism provides the customer with more predictable winter bills and in turn stabilizes Peoples revenues for the same period. Mr. Huwar claims that a WNA mechanism has benefits for both the Company and the customer in that Peoples is able to bring in steady, predictable revenue while in turn, the customer is afforded stable distribution charges during typically high usage winter months. (Peoples Statement No. 1 page 14). Mr. Huwar opined that the Commission should approve Peoples' WNA Mechanism because he claims that it benefits both the customer and the Company to reflect normal weather for distribution changes on a monthly billed basis, and Peoples is engaged in modernizing its infrastructure, and it is important to keep utility revenues stable as possible in order to attract capital necessary to fund its modernization program. (Statement No. 1 page 15).

Q. DOES PEOPLES PROPOSE TO CHARGE THE WNA TO ALL CUSTOMERS?

A. No. Peoples proposes to assess the WNA only to the following classes of customers: residential including CAP, commercial SGS, and commercial MGS customers. Peoples claims that consistent with the revenue forecasting methodology, these customer classes are predominantly weather sensitive**.** (Peoples Statement No. 3, p. 17).

Q. FOR WHICH MONTHS DOES PEOPLES PROPOSE TO CHARGE A WNA?

A. The WNA will apply to services rendered during the heating season months, specifically October 1, through May 31. (Peoples Statement No. 3 page 17). According to the response to OCA-I-6, the WNA mechanism would not be reflected as a separate line item, but rather it would be included with the base delivery (distribution) charge component and shown in the total charge amount displayed as the delivery item on the bill. OCA Witness Ms.

Barbara Alexander provides more information on the way Peoples WNA will affect customers' bills.

Q. DOES PEOPLES CONSIDER THE WNA MECHANISM A DECOUPLING MECHANISM?

A. It is unclear because its witnesses contradict each other on that point According to Mr. Zarumba, the WNA is not a decoupling mechanism. Mr. Zarumba claims that a decoupling mechanism is designed to adjust revenue variation triggered by several variables introducing volatility in the utility revenue stream, but that Peoples' proposed WNA mechanism has a narrower focus and only adjusts for the variation in the normal Heating Degree Days in a specific time period. (Peoples Statement No. 15 page 56). Mr. Zarumba argues that the WNA mechanism only applies to the non-base load consumption and does not address reduction in usage associated with adopting more efficient end-use equipment, customer defection to other fuels and other similar variables. (Peoples Statement No. 15 page 56). However, Peoples' witness Paul R. Moul identifies the WNA as a revenue decoupling mechanism (Peoples Statement No. 13, p. 9). Despite the differences in Peoples' witnesses' characterization of the WNA, it is clear that the mechanism would operate to distribute weather risk to customers while stabilizing Peoples' revenues.

Q. HOW IS PEOPLES' PROPOSED WNA MECHANISM DIFFERENT FROM THAT OF PEOPLES CURRENT WEATHER NORMALIZATION METHODOLOGY?

A. According to the response to OCA Set 7-10, Peoples stated that presently, delivery charges on the customer's bill are based upon actual weather and not normalized weather. In response to OCA Set 8-22 (side by side comparison of rates), Peoples provided a comparison of its proposed WNA rate effect and its present methodology to calculate weather not normalized. The WNA shows a monthly adjustment of ($3.96), (page 2) as compared to the present rate calculation of ($3.56) or a difference of $0.40. This represents HDDs as normal to using the 20-year average of HDDs as normal in a case where weather is colder than normal. On page 3, the WNA calculation compared HDDs as normal to using the 20-year average HDDs as normal in a case where weather is warmer than normal. This shows an adjustment of $1.58 under the proposed WNA and the present adjustment of $2.38 or a difference of $0.80. see response to OCA-8-37 – effect of the current 20-year normalization period and Peoples proposed WNA mechanism.

Q. HOW IS PEOPLES' WNA CALCULATED?

A. According to witness Ms. Scanlon, the WNA is calculated and developed by dividing the normal number of Heating Degree Days (NHDDs) by the number of actual Heating Degree Days (AHDDs) to create a WNA factor (NHDD/AHDD). Peoples is proposing that the normal number of HDDs used in the WNA calculation will be based upon the HDDs utilized to develop the revenue requirement in this proceeding and would remain the same until a future base rate case proceeding. (Statement No. 3 page 16). Then, the customer's heat sensitive consumption is determined by subtracting the base load value – or the customer's average daily usage in the months of July and August, in MCF – from their actual usage that month, in MCF. Heat sensitive consumption is multiplied by the WNA factor, and added to the base load value, to determine the weather normalized usage in MCF, or what Peoples would have expected the customer to have used that month. The customer's actual usage is subtracted from their weather normalized usage to reach Peoples' normal weather adjustment to the customer's bill. The adjustment is multiplied by the distribution charge to calculate the WNA, charging the customer for the difference between their actual and expected usage.

By way of example, Ms. Scanlon, in Exhibit CAS-1, used an NHDD value of 914 and an AHDD value of 956, which produced a WNA factor of 0.956. Ms. Scanlon's next step in the WNA calculation was to determine the baseload amount (BLMM) of 2.2 Mcf and heat sensitive amount of the customer's actual monthly consumption (AMUM) of 13.5 Mcf. The result is the heat sensitive consumption for the month of 11.3 Mcf. (13.5 Mcf minus 2.2 Mcf). The heat sensitive consumption was then multiplied by the WNA factor developed as shown on Exhibit CAS-1 and added back to the baseload amount to calculate a weather normalization consumption amount of 13.0 Mcf. The difference between the weather normalization consumption amount and the customer's actual total monthly consumption is the weather normalized adjusted Mcf (WNAM) amount of (0.50). The amount was then multiplied by the distribution rate charge of $3.9608 to arrive at the weather normalization adjustment dollar amount of $(1.98) that will be included on a customer bill. (Statement No. 3 page 16-17). Below is the WNA calculation:

Normal Heating Degree Days	914 NHDD
Actual Heating Degree Days	956 AHDD
WNA Factor (914/956)	0.956
Total Monthly MCF Consumption	13.5 AMUM
Base Load MCF Consumption	2.2 BLMM
Heat Sensitive MCF (13.5 – 2.2)	11.3
Weather Normalization Billing Mcf (2.2 + (0.956 x 11.3)	13.0 WNBM
Weather Normalization Adjustment (13.0 -13.5)	(0.50)
Distribution Charge as of 10/1/2023	$3.9608
WNA ($0.50 x $3.9608)	($1.98)

As one can see in the calculation above, this is a complex model that will make it difficult for customers to understand what exactly is included in their bill, which will not be shown on the bill because Peoples intends to include this calculation in its distribution charge and shown as a total amount on customers' bills.

Q, HOW DOES THE COMPANY PROPOSE CALCULATING THE "NORMAL" NUMBER OF HDDS IN A GIVEN YEAR?

A. The Company has proposed determining the "normal" number of HDDs by averaging the number of HDDs over the past 20 years with the results of a 65-year regression model. The regression model uses the number of HDDs in each year for the past 65 years to create a linear equation where the independent variable is the number of years from the beginning of the sample, and the dependent variable is the number of HDDs in the year. The results of the regression model "predict" the number of HDDs in a given year. However, Peoples anticipates that the prediction of the regression model will be too low for use in the WNA, which is why they propose averaging the regression model's results with the 20-year average temperature. (Statement No. 3 pages 5-6). Both the results of the regression model and the 20-year average predict an annual number of NHDDs, not a monthly number, though a monthly number is used to calculate the WNA charge.

Q. HOW DOES PEOPLES PROPOSE CALCULATING THE "NORMAL" NUMBER OF HDDS IN A GIVEN MONTH, FOR THE PURPOSES OF THE WNA?

A. Peoples is using an "average of day method" to determine the number of NHDDs in a given month. Specifically, Peoples took the number of HDDs for each individual day from January 1, 2013 until December 31, 2022 and averaged the value (for example, all of the HDD values for January 1 were added together and divided by 10). All daily averaged values are added together to create an average year, either leap or non-leap. Then, the averaged values for each day were divided by the sum of the averaged year to determine the average daily percentage of HDDs each day represented in a given year. This percentage is then multiplied by the annual normal number of HDDs – calculated as outlined above – to create a daily normal value. Daily normal values are added up for each month to create the NHDD value used in the WNA calculation. (OSBA Set I-012).

Q. DO ANY OTHER REGULATED PENNSYLVANIA GAS UTILITIES HAVE A WNA MECHANISM?

A. Yes, according to the response to OCA Set I-4, Columbia Gas and UGI have a pilot WNA program. Peoples are unaware of the remaining utilities having pilot WNA programs (PGW, National Fuel). In response to OCA Set 7-9, Peoples' stated that the following Pennsylvania gas utilities have received approval for a WNA: (1) National Fuel – June 15, 2023); (2) UGI Gas – September 15, 2022; (3) Columbia Gas – May 23, 2013 and; (4) PGW – August 8, 2022.

Q. IS PEOPLES ENTITLED TO IMPLEMENT ITS WNA PROPOSAL SIMPLY BECAUSE OTHER REGULATED GAS UTILITIES MAY HAVE WNAs?

A. No. Peoples has to justify and demonstrate that its proposed WNA is just and reasonable and that its proposal produces rates that are reasonably recoverable from ratepayers. Just because other regulated gas utilities in Pennsylvania have a WNA implemented, does not give carte blanche approval for Peoples to have one also. Peoples should support its own WNA mechanism and its development on its own and not rely on the fact that other regulated gas utilities in Pennsylvania have one, especially considering the differences between Peoples' proposed WNA and the others implemented in Pennsylvania.

Q. IS PEOPLES' WNA PROPOSAL SIGNIFICANTLY DIFFERENT THAT THE WNAs THAT OTHER UTILITIES HAVE IMPLEMENTED?

A. Yes. Ms. Scanlon stated that Peoples' WNA is based upon a 65-year regression for the periods ending December 31, 2022, which Peoples believed provides for a reasonable basis for the WNA. Currently, the natural gas distribution companies which have a Commission-approved WNA utilize a 20-year average to determine the "normal" number of HDDs. Peoples is proposing to use the average of the 65-year regression model result with the average of the 20-year due to the concept of gradualism, so that the negative slope of the 65-year model is less likely to predict a normal number of HDDs higher than the actual HDDs in a given month. The 65-year regression model produces a result of 5,240 HDDs. In Peoples Natural Gas Division's last base rate case in 2018, the HDDs employed in the forecasting model were 5,416, In order to transition from the prior methodology to this new methodology Peoples are utilizing an average of 20-year average and the new methodology. (Statement No. 3 page 5-6).

Further, Peoples is not proposing a deadband because Peoples' witness Mr. Zarumba stated that it will reduce the effectiveness of the WNA and reduce the value to both Peoples and customers. (Statement No. 15 page 57). Mr. Zarumba stated that the policy goal of the WNA is to reduce the revenue fluctuations associated with non-normal weather conditions. The dead band implicitly stated that the policy goal of the WNA is less important for smaller weather variations than significant weather variation. (Statement No. 15 page 57). Currently, three of the four utilities which have a Commission-approved WNA utilize a deadband. Only PGW, a cash flow utility, does not have a deadband, but as explained by other witnesses in this case, the lack of consumer protections that have existed for PGW's WNA led to significant and harmful overbilling that warranted emergency action by PGW.

Q. WHAT ARE YOUR RECOMMENDATIONS REGARDING PEOPLES'S WNA MECHANISM?

A. I am recommending that the Commission not adopt Peoples's proposed WNA mechanism. The definition of a WNA has nothing to do with how much natural gas a customer is using. It has to do with the weather outside the home. Adopting a WNA would push more volatility onto customers, reducing the risk of recovery away from Peoples. A WNA may increase customers' bills month to month based upon adjustments related to weather, and

not based upon gas usage. Peoples stated that the WNA will bring steady and predictable revenues during the winter months (when customer usage typically increases). Peoples stated that it will reduce some of the volatility associated with weather on a customer's bill. (which means the volatile risk will be passed onto customers, and away from Peoples). Peoples stated that it will keep rates stable, which may increase revenues recovery from customers. (Peoples Statement No. 1, page 15). Rate stability that is driven by artificial constructs such as the WNA is not likely a virtue that customers will appreciate as it will very likely have the effect of increasing customers' bills despite decreased gas usage. This inverse relationship will be both frustrating to customers and bears little to no relationship to cost causation. Peoples stated that instituting a WNA will increase in revenues due to Peoples engaging in modernizing its infrastructure, (Peoples' Statement No. 1 page 15) reducing the risk recovery and placing the risk onto ratepayers. This is problematic as a regulated company is not guaranteed 100% of its revenue requirement recovery, it is given the opportunity to recover these costs. Peoples should not expect all of its known and measurable costs be recovery from ratepayers, and business decision risks or financial risks should remain with Peoples as it would if it were forced to compete in an open market rather than its exclusive franchise.

Q. WHAT ARE YOUR OTHER REASONS FOR DISALLOWING A WNA?

A. Weather cannot be predicted accurately and with certainty. On certain days when weather is warmer than usual, the WNA will have the effect of increasing a residential customer's bill as shown in response to OCA-8-22 (page 3 of 3). On certain days when weather is colder than usual, the WNA will have the effect of decreasing a residential customer's bill as shown in response to OCA-8-22 (page 2 of 3). As an example, in February of this year, weather has been warmer than usual, and if the WNA was in effect, residential customers would be paying a higher rate. (opposite of reducing rates due to less gas usage). Conversely, if weather were colder than normal during a winter period, residential customer would be paying a lower rate. (opposite of increasing rates due to more gas usage). In sum, weather changes constantly, and in the event that winter weather is or becomes warmer than usual, residential customers would be paying a higher rate, even though residential customers are actively conserving gas usage in those periods. Peoples'

proposed WNA inappropriately adjusts rates without considering other changes in total revenues and expenses. Under Peoples' WNA proposal, no matter how much natural gas is actually used, or the reason for variation in the customer's usage from "normal" levels, the customers would pay for a normalized level of natural gas usage whether they use that natural gas or not. A given level of revenues would result regardless of the amount of natural gas purchased by Peoples. Peoples has not demonstrated that its revenue recovery is unstable nor has demonstrated that its recovery of costs is inadequate. Therefore, it would be inappropriate for Peoples to implement a WNA because it would not be a just and reasonable rate.

Q. WHAT IS YOUR RECOMMENDATION REGARDING PEOPLES' WNA PROPOSAL?

A. I am recommending that Peoples WNA proposal should be rejected for all of the reasons stated above and the reasons stated by the other OCA witnesses as well.

2. OPERATION AND MAINTENANCE EXPENSES

Q. WHAT HAS PEOPLES PROPOSED WITH RESPECT TO ITS OPERATION AND MAINTENANCE EXPENSES (O&M)?

A. Mr. Wachter stated that Peoples total O&M Expenses for the FPFTY period is $227,010,806 (Peoples' Exhibit No. 4 Schedule 1). This is comprised of total O&M Expenses of $223,598,704 of expenses at present rates and $3,412,102 for additional uncollectible expenses shown on Exhibit No. 2 Schedule 4.

Q. HOW DID PEOPLES DEVELOP ITS O&M EXPENSES TO SET RATES FOR SERVICE?

A. According to Mr. Wachter, he started with the per books O&M expenses of $192,351,147 for the HTY as shown on Exhibit 4 Schedule 1. To that balance Mr. Wachter made HTY, FTY and FPFTY adjustments to determine the normal level of O&M expenses of $203,039,623 for the FTY and $223,598,704 for the FPTY periods. (Peoples Statement No. 2 page 9).

a. Gas Supply Expenses

Q. WHAT DID PEOPLES PROPOSE REGARDING ITS GAS SUPPLY EXPENSES?

A. Peoples proposed an annualized Gas Supply Expense for its FPFTY period of $317,688,615 as shown on Peoples' Exhibit 2 Schedule 4 page 2. (See also Exhibit No. 3 Schedule No. 15 Attachment C).

Q. DO YOU HAVE ANY ADJUSTMENTS TO PEOPLES' GAS SUPPLY EXPENSE?

A. No I am accepting Peoples' proposed Gas Supply Expense of $317,688,615. My recommendation is shown on my Exhibit DM-10.

b. Labor

Q. WHAT DID PEOPLES PROPOSE WITH RESPECT TO ITS LABOR EXPENSE?

A. As shown on Peoples' Exhibit 4, Schedule 1, page 4, Peoples proposed to increase Labor Expenses from its HTY period of $55,181,109 to $69,463,580 for its FPFTY period, an increase of $14,282,471. Included in Peoples's calculation of its Labor are increases and adjustments related to Merit Increases. (3.25% for Clerical Union Labor and Non-Union Labor, 4.00% for Manual Union Employees) during the FTY and FPFTY periods; Increases related to Progression and Promotion to its Clerical – Union and Manual Union Employees and; Additional Employee Headcount and Vacancies to be filled through the FTY and FPFTY periods. (Exhibit 4, Schedule 1, page 5). Peoples reflected normalized labor costs that reflects the impacts of the Service Agreement between Peoples and PNG. (Peoples Statement No. 2 page 10). Peoples utilized an O&M Labor Percentage based upon a blended rate between PNGD labor ratio of 44.75% and PGD labor ratio of 60.34% to arrive at an annualized adjustment of $7,422,979 (Peoples' Exhibit No. 4 Schedule 1 page 5). Peoples total Labor Expense was based upon a full complement of employees of 1,465 as of the FPFTY period. (Statement No. 2 page 12).

Q. WHAT DID PEOPLES PROPOSED WITH RESPECT TO ITS LABOR CLAIM OF FILLING ESTIMATED VACANCIES?

A. I noted that Peoples is proposing to include 29 full time employees in the future test year and an additional 8 full time employees in the FPFTY period. (OCA Set 7-21) These additional employees will add $411,975 to Peoples' Labor Expense. (OCA-Set 7-21 which refers to I&E RE-06. Peoples has not provided a date in which these expected employees

are to be hired and placed in their positions, nor has provided a timeline of the hiring process. I believe that not all of these employees will be hired during the FTY and the FPFTY periods. Companies typically always have a level of vacancies throughout any given year due to terminations, retirements, layoffs and the inability to hire employees to fit within the companies' organization. Given that additional employees will be hired periodically throughout the FPFTY period up to September 30, 2025, I am recommending a vacancy rate ratio be implemented.

Q. WHY ARE YOUR RECOMMENDING A VACANCY RATE RATIO?

A. I am recommending a vacancy rate adjustment, because in response to OCA-Set 7-24, Peoples stated that the additional 53 employee proposed to be included in its Labor costs is now 64 additional employees, as they were not included in the original labor adjustment. Further, Peoples has added an additional labor cost of $411,975 for which Peoples have not revised its labor cost, nor has provided estimated average salaries for these additional employees. It is uncertain whether or not Peoples will actually hire the number of employees it has proposed. Peoples has not offset this balance with a vacancy credit. (OCA Set 7-24). According to Mr. Wachter (Peoples' Statement No. 2 page 11), routine and / or normal position vacancies which occur as a result of termination, or retirements were assumed to be filled by employees with equivalent pay or by temporary employees while the positions are being filled. Mr. Wachter added in expected routine/normal vacancies as of the end of the HTY as well as added the salaries related to incremental FTE employees expected in the FTY. Mr. Wachter stated that a certain level of vacancies is expected during the FTY and the FPFTY. Peoples estimated that 29 FTEs and 8 FTEs will be vacant on average during the FTY and the FPFTY, respectively, and expects to be at pre-COVID average vacancy levels by September 30, 2025, the end of the FPFTY. (Peoples' Statement No. 2 page 12). In response to OCA Set 7–21 and 24, Peoples amended its level of employees to 72 open positions with 45 to be filled in the FTY and 19 in the FPFTY and 8 remaining vacant past the FPFTY period. (I&E RE-006).

Q. HOW DID YOU CALCULATE YOUR VACANCY RATE RATIO ADJUSTMENT?

A. In response to OCA-7-20, Peoples provided a vacancy rate ratio of 2.7% which is to be expected in 2024. I took Peoples' Per Books balance as of August 31, 2023 of $55,181,109 and added the annualization adjustment of $7,422,979 to arrive at $62,604,088. I then added $1,948,704 to arrive at Mr. Wachter's annualized FTY labor balance of $64,552,792 (Peoples' Statement No. 2 page 12 and Peoples's Exhibit No. 4, Schedule No. 1 page 5). I then took the expected vacancy rate of 2.7% and multiplied that by the FTY labor balance of $64,552,892 to arrive at $1,742,925. My adjustments are shown on my Exhibit DM-11.[8]

c. <u>Short Term Incentive Program (STI) /Incentive Compensation</u>

Q. WHAT DID PEOPLES PROPOSE RELATED TO ITS STI INCENTIVE COMPENSATION?

A. Peoples has proposed to include total STI-Incentive Compensation of $5,624,024 for the FPFTY period as shown on Exhibit 4, Schedule 1, pages 2 and 6. Peoples began with an Incentive Compensation Balance Per books of $6,823,130 HTY period. Peoples made adjustments to its STI-Incentive Compensation in the HTY normalized period of ($1,609,771), $280,149 in the FTY period and $130,516 in the FPFTY period. Peoples then allocated its STI-Incentive Compensation in the same manner as it allocates its Labor Charges to Capital using a Combined O&M Labor Percentage factor to arrive at the FPFTY balance of $5,624,024. **(BEGIN CONFIDENTIAL)** [redacted] **(END CONFIDENTIAL).**

Q. PLEASE DESCRIBE PEOPLES STI-INCENTIVE COMPENSATION PROGRAM.

A. Mr. Wachter stated that it is important for Peoples to recover this expenses in order to retain talent and Peoples must offer benefits comparable to other companies. Offering Incentive Compensation in one way for Peoples to retain talent by offering market-based incentives

[8] Any differences are due to rounding

to Company employees. (Peoples' Statement No. 2 page 14). Mr. Wachter stated that the Company has undertaken research to ensure that it offers market-based compensation and incentive programs. Eliminating or reducing these programs would have a significant impact on the Company's ability to attract and retain competent employees. (Peoples' Statement No. 2 page 14). As detailed in OCA Set 7-28, Peoples's provided a breakdown of its total proposed STI as follows:

(BEGIN HIGHLY CONFIDENTIAL)

(END HIGHLY CONFIDENTIAL)

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE LEVEL OF STI-INCENTIVE COMPENSATION TO BE INCLUDED IN REVENUE REQUIREMENT?

A. I am recommending that Peoples' STI that was or expected to be paid out for Financial Performance of **(BEGIN CONFIDENTIAL)** [redacted] **(END CONFIDENTIAL)** be disallowed from Peoples' revenue requirement increase. My recommendation is based upon the fact that this type of incentive compensation payments is aligned with Peoples' **(BEGIN CONFIDENTIAL)** [redacted] **(END CONFIDENTIAL)** with minimal or

[9] Differences due to rounding

none being attributable to the benefit of customers, nor related to customer service performances and measures, safety and environmental issues, and other customer related issues. I do not believe that ratepayers should pay for this type of incentive compensation, which promotes shareholders' interest and the alignment of shareholder growth. While I am not opposing Peoples's STI plan, what I am opposing are the costs related to Peoples' recovery of its STI related to financial performance through ratepayers. The shareholders, not the ratepayers, should be required to fund the STI that is related to financial performance and other incentive compensation that relates to financial performance.

Q. WHAT OTHER ADJUSTMENT DO YOU HAVE WITH RESPECT TO PEOPLES' STI-INCENTIVE COMPENSATION?

A. I am recommending disallowance of Peoples' Diversity, Equity and Inclusion (DEI) costs of **(BEGIN CONFIDENTIAL)** [redacted] **(END CONFIDENTIAL)**. I believe this type of incentive does not provide ratepayer benefits in the provision of safe and reliable utility service. These types of incentive costs reflect organizational frameworks which seek to promote the fair treatment and full participation of all people who have been subject to discrimination. I do not see a nexus between DEI and ratepayer benefits in the areas of customer service, customer engagement or customer participation. I believe these types of incentive costs should be borne by Peoples' or its shareholders. If Peoples believes these incentive costs do provide customer benefits then Peoples should be burdened with providing the dollars and not the ratepayers.

Q. WHAT ARE YOUR RECOMMENDATIONS RELATED TO PEOPLES' OTHER STI INCENTIVE COSTS?

A. I am accepting Peoples' remaining balance of **(BEGIN CONFIDENTIAL)** [redacted] **(END CONFIDENTIAL)**. I believe these remaining STI incentives appear to benefit customers in the areas of **(BEGIN CONFIDENTIAL)** [redacted] **(END CONFIDENTIAL)**.

d. Pension Expense

Q. WHAT HAS PEOPLES PROPOSED RELATED TO ITS PENSION EXPENSE?

A. Peoples has proposed and has calculated its Pension Expense based upon a two-year average of contributions made in 2022 of $5,670,000 and $5,670,000 in 2023. (Peoples' Statement No. 2 page 14, Exhibit No. 4 Statement No. 1 page 10). Peoples began with an HTY balance of $4,497,434 and adjusted the balance to $1,172,566 to arrive at the 2-Year average contribution balance of $5,670,000.

Q. WHAT IS YOUR RECOMMENDATION?

A. In response to OCA-7-31, Peoples provided a schedule of Pension Contributions for the five year period 2018-2022. Peoples stated that the pension funding amount for the Essential Utilities, Inc. Retirement Income Plan is determined each year based upon the recommendation of management and subject to approval by Essential's Retirement and Employee Benefits Committee. The balances are as follows:

2018	$735,802
2019	$2,290,746
2020	$560,190
2021	$5,343,118
2022	$5,408,063

These annual contributions have fluctuated from a high of $5,408,063 in 2022 to a low of $560,190 in 2020. Peoples stated that the funding amount will be an amount greater than or equal to the minimum required contribution and less than or equal to the maximum tax-deductible contribution. Given the yearly variances, it is reasonable to normalize the costs as the prior costs show varying fluctuations over the five-year period (2018-2022). Using my five-year normalization period results in a normalized balance of $2,867,584 ($14,337,919/5).

My recommendation is shown on my Exhibit DM-13.

e. Post-Retirement Other Than Pensions (PBOP)

Q. WHAT HAS PEOPLES PROPOSED AND CALCULATED RELATED TO ITS POST-RETIREMENT BENEFITS OTHER THAN PENSIONS?

A. Peoples has proposed a PBOP balance for its FPFTY period of $2,414,041 as shown on Peoples Exhibit 4 Schedule 1 page 2 and 11. Peoples began with its HTY balance of $2,864,116 and adjusted this balance by $779,921 (net expense) and ($450,075) (FTY Adjustment). Peoples amortized the recovery of its prior period net under-collection of $1,634,119, amortized over a two-year period. (Peoples' Statement No. 2 page 15). The FTY balance is $2,414,041. Pursuant to the Commission Order in Docket No. R-00943111 Peoples has been accounting for PBOPs on the same basis that these costs are recovered in rates, which is on an accrual basis consistent with FAS 106 and the prior Commission Order. (Peoples Statement No. 2 page 14). Under Peoples existing benefits programs, the total FPFTY PBOP expenses is calculated at $2,414,041 which is the projections provided by Peoples actuary as well as the previously discussed amortization period. (Peoples' Statement No. 2 page 15). Peoples is proposing to track the actual PBOP costs and amortize the cumulative difference between actual and projected costs in Peoples next base rate proceeding. The amount to be tracked is $779,921. This treatment is consistent with the past ratemaking treatment of these costs and anticipates that differences between the rate allowance and actual accruals be tracked and amortized over a period to be determined by Peoples in the next base rate proceeding. (Peoples Statement No. 2 page 15).

Q. WHAT IS YOUR RECOMMENDATION?

A. In reviewing the response to OCA-Set 7- 31, Peoples provided a schedule of PBOP costs for the five years period 2018-2022. The balances are as follows:

2018	$1,472,143
2019	$1,186,742
2020	$1,473,256
2021	$1,636,734
2022	$1,246,063

As in the Pension Contributions, PBOP costs have fluctuated from a high of $1,636,734 in 2021 to a low of $1,186,742 in 2019. As in my recommendation to normalize Pension Costs over a five-year period, I am recommending normalizing PBOB costs over the same five year period. Using a five-year normalization period would result in a balance of $1,438,988 ($7,194,938/5). I have placed my adjustment on my Exhibit DM-14 Line 1, or an adjustment of $208,991 for a HTY Book Balance of $1,438,988. I am also adjusting my recommended employee vacancy to Labor Expense. I used the ratio of Peoples' Labor Balance of $69,463,581 to Peoples' PBOP Balance of $2,414,040 to arrive at a percentage of 3.475%. I then took my recommended Labor Balance of $67,720,883 and multiplied it by 3.475% to arrive at a PBOP Balance of $2,353,301, a reduction of $60,739. The sum of these two adjustments is $148,251. My recommendation is shown on my Exhibit DM-14.

f. Benefits Compensation Adjustment

Q. WHAT DID PEOPLES PROPOSE RELATED TO ITS BENEFITS COMPENSATION ADJUSTMENT?

A. Peoples has proposed a level of its Benefits Compensation Adjustment of $20,985,623 for the FPFTY period which include the cost of the benefits for vacant positions filled and annualized for changes in costs relative to the anticipated results from future open seasons. (Peoples' Statement No. 2 page 15-16). Medical and other benefits were increased based upon information provided by third-party benefits consultants. 401(k) benefits were increased consistent with merit increases utilized to develop the labor claim. (Peoples' Statement No. 2 page 16). Peoples began with an HTY period balance of $17,283,769 as shown on Peoples's Exhibit 4 Schedule 1 page 2 and 12 on an annualized basis. Peoples then added $2,277,950 to annualize the benefits under the FTY period. (Exhibit No. 4 Schedule 1 page 12). Peoples adjusted its FTY Benefits by adding $1,423,904 during its FPFTY period. (Peoples's Exhibit No. 4 Schedule No. 1 page 12 of 33).

Q. WHAT IS INCLUDED IN PEOPLES' BENEFITS COMPENSATION ADJUSTMENT?

A. According to Peoples response to OCA-7-32 Other Benefits consists of VEBA benefits, Recruiting, Tuition Reimbursement, Employee Relations, Safety Functions, and Other Miscellaneous Employee Benefits.

Q. WHAT IS YOUR ADJUSTMENT TO PEOPLES' BENEFITS COMPENSATION ADJUSTMENT?

A. Since I incorporated a vacancy ratio adjustment of 2.7% to arrive at my Labor balance $67,720,883, I am adjusting Peoples's Benefits Compensation accordingly. I took Peoples' proposed FPFTY Benefits of $20,985,623 and divided that by Peoples' proposed Labor Expense in the FPFTY of $69,463,581 to arrive at a ratio of 30.21%. I then took my recommended Labor Expense of $67,720,883and multiplied that by 30.21%[10] to arrive at a Benefits Expense of $20,458,479. This is a reduction of $527,144.

Q. WHAT ARE YOUR OTHER ADJUSTMENTS?

A. As per Peoples' Exhibit 19- RR -30, Peoples included costs related to Employee Service and Safety Awards of $221,500, and Employee Events of $32,937. Peoples has provided no further information related to these expenses. In response to OCA Set 7-32, Peoples was asked to provide a detailed breakdown of costs and description of the elements included in the Benefits Compensation adjustment. I do not believe Peoples' fully justified related to Employee Service and Safety Awards or Employee Events costs, nor has provided whether these costs relate to ratepayer benefits. I am recommending disallowance of these costs totaling $254,437. My recommendation is shown on my Exhibit DM-15.

g. <u>Outside Services - Contracted</u>

Q. WHAT HAS PEOPLES PROPOSED RELATED TO ITS OUTSIDE SERVICES – CONTRACTED?

A. Peoples proposed total Outside Services – Contracted in the amount of $28,657,932 for the FPFTY period (Peoples's Exhibit 4 Schedule 1 page 2 and 13). Peoples began with its HTY balance of $24,124,704 and made adjustments for inflation of 3.75% during the FTY period

[10] In response to I&E RE-22, Peoples' calculated a benefits adjustment of 30% of Labor using a two-year average cost per employee salary.

and 3.75% during the FPFTY period. These inflation increases represented the recent 5-year annualized increases in these costs. (Peoples' Statement No. 2 page 17). Peoples also included $2,592,893 in the FTY period that relates to anticipated costs associated with its Bridge Work, Pressure Tests, Additional Pig-Run Costs, Additional Pipeline maintenance/corrosion costs and Additional right of way maintenance. (Peoples' Statement No. 2 page 16-17).

Q. DO YOU HAVE ANY ADJUSTMENTS WITH RESPECT TO PEOPLES OUTSIDE SERVICES-CONTRACTED?

A. Yes. My first adjustment is to Peoples' inclusion of inflation related increases to adjust its FTY and FPFTY period balances. The Company's 3.75% inflation adjustment in the FTY period amounts to an increase of $904,595 and in the FPFTY period of $1,035,740 for a total inflationary increase of $1,940,335. These inflationary adjustments are not actually known and measurable because they do not reflect the true cost of expenses. Inflation adjustments are typically blanket adjustments or increases which do not directly relate to actual costs expected to be incurred by Peoples in the period in which rates are to be set. Costs should be based upon evidence or documentation that supports Peoples' adjustments. More definitive types of increases or adjustments are contractually related increases or escalation adjustments that are predetermined in contracts or service agreements entered into by Peoples and third-party vendors. Essentially, my recommended Outside Services – Contracted retains the balance at the HTY period. With respect to Peoples' adjustment to its Bridge Work, Pressure Tests, Additional Pig Run Costs, Pipeline Maintenance/Corrosion and Right of Way costs of $2,592,893, I am recommending normalizing these costs over three-years or $864,298 annually, in the same manner as I normalized rate case expenses as discussed in section w of my testimony. Peoples has not specifically identified whether these costs are annual costs or one-time costs. Mr. Wachter stated that these costs are included in the FTY and the FPFTY periods. Mr. Wachter has not stated that these costs are recurring, therefore, my normalization adjustment benefits future periods between rate case proceedings.

Q. WHAT IS YOUR RECOMMENDATION?

A. My recommendation with respect to Peoples' Outside Services - Contracted is an adjustment of $3,668,930 and is shown on my Exhibit DM-16.

h. <u>Outside Services – IT</u>

Q. WHAT HAS PEOPLES PROPOSED REGARDING ITS OUTSIDE SERVICES – IT?

A. Peoples proposed a total balance related to its Outside Services – IT of $10,223,964 as shown on Peoples Exhibit No. 4 Schedule 1 page 2 and 14). Peoples began with a Per Books balance in the HTY period of $8,596,499 and added an inflation adjustment of 2.39% or $205,356 in the FTY, and an inflation adjustment of 2.39% or $236,958 in the FPFTY periods. Peoples stated that these inflation increases represented a 5-year annualized increase in these costs. (Peoples' Statement No. 2 page 17). Peoples also included $1,117,550 in the FTY period, and an additional $67,600 in the FPFTY period related to various adjustments on maintenance contracts and new software systems. (Peoples' Statement No. 2 page 17).

Q. WHAT ADJUSTMENTS DO YOU HAVE WITH RESPECT TO PEOPLES OUTSIDE SERVICES – IT COSTS?

A. As discussed previously in my testimony, my first adjustment is to Peoples' inclusion of inflation related increases to adjust its FTY and FPFTY period balances. The Company's 2.39% inflation adjustment in the FTY period amounts to an increase of $205,356 and in the FPFTY period of $236,958 for a total inflationary increase of $442,314. My arguments for removing these inflationary types of adjustments are the same arguments that I previously discussed above. Costs should be based upon evidence or documentation that supports Peoples's adjustments. More definitive types of increases or adjustments are contractually related increases or escalation adjustments that are predetermined in contracts or service agreements entered into by Peoples and third-party vendors. Essentially, my recommended Outside Services – IT stays the balance at the HTY period. With respect to the adjustments for IT software maintenance contracts, I am recommending normalizing these costs over three-years or $372,517 annually, in the same manner as I normalized rate

case expenses as discussed in section w of my testimony. Peoples has not specifically identified whether these costs are annual costs or one-time costs. Mr. Wachter stated that these costs are included in the FTY and the FPFTY periods. Mr. Wachter has not stated that these costs are recurring, therefore, my normalization adjustment benefits future periods between rate case proceedings.

Q. WHAT IS YOUR RECOMMENDATION?

A. My recommendation related to Outside Services – IT is an adjustment of $1,187,347 and is shown on my Exhibit DM-17.

i. <u>Outside Services – A&G</u>

Q. WHAT DID PEOPLES PROPOSE REGARDING ITS OUTSIDE SERVICES – A&G?

A. Peoples proposed a total expense level of $3,383,833 for its FPFTY period related to its Outside Services – A&G as shown on Exhibit 4 Schedule 1 page 2 and 15. The Company began with its HTY period of $2,955,571. Peoples included an inflation adjustment of 7.00% or $206,890 in its FTY period, and an additional 7.00% inflation adjustment or $221,372 in its FPFTY period. The total adjusted expenses from the HTY period to the FPFTY period is an increase of $428,262. The 7.00% increase represents the recent 5-year annualized increase in this costs in determining the FTY and FPFTY expense. (Peoples' Statement No. 2 page 17).

Q. WHAT ARE YOUR ADJUSTMENTS?

A. My first adjustment is to Peoples' use of inflation factors of 7.00% or $206,890 in the FTY period and an additional 7.00% or $221,372 in the FPFTY period for a total Inflation adjustment of $428,262. As I previously stated above, in my Outside Services – Contracted Expense adjustments, I am removing the Inflation Adjustments in the FTY and the FPFTY periods. These costs are not reflective of true costs and are not under any service contract adjustments or escalation clause adjustments that are predetermined by Peoples and third-party vendors.

Q. WHAT IS YOUR RECOMMENDATION?

A. My recommendation is to reduce Peoples' proposed Outside Services - A&G by $428,262. My recommendation is shown on my Exhibit DM-18.

j. Building Lease Adjustment

Q. WHAT DID PEOPLES PROPOSE WITH RESPECT TO ITS BUILDING LEASES?

A. Peoples proposed a Building Lease balance of $4,584,081 for its FPFTY period. (Peoples' Exhibit 4 Schedule 1 page 2 and 16). Peoples began with its HTY period balance of $6,184,363 and reduced that balance by $1,600,282 related to capitalization to arrive at a balance of $4,584,081. Peoples adjusted this balance by the HTY balance of $3,902,706 to arrive at an adjustment of $681,375. Peoples did not make any adjustments in the FTY and in the FPFTY periods.

Q. WHAT IS INCLUDED IN THE COMPANY'S BUILDING LEASE EXPENSE?

A. These Building Leases relate to the Company's main office and call center operations in Pittsburgh, PA and in Etna and Grove City field office facilities. (Peoples' Statement No. 2 page 18).

Q. ARE YOU AWAITING ANY ADDITIONAL INFORMATION FROM PEOPLES THAT MAY FURTHER INFORM YOUR POSITION REGARDING PEOPLES' CLAIMED LEASE EXPENSE?

A. Yes. I am awaiting Peoples' response to an inquiry I made through the discovery process in an attempt to gauge whether any of Peoples' lease expense should be allocated to its unregulated affiliates that may also be sharing the premises. Pending the information I am awaiting; I must reserve the right to make adjustments to this expense in the future if warranted.

Q. WHAT IS YOUR RECOMMENDATION?

A. At this time, based upon my review of the updated responses to OCA-8-1, and OCA-8-2, I have no adjustments. For now, I am accepting the Company's proposed FPFTY balance of $4,584,081, an adjustment of $681,375. My recommendation is shown on my Exhibit

DM-19; however, it is subject to change pending further information I am awaiting from Peoples.

k. Corporate Insurance

Q. WHAT HAS PEOPLES PROPOSED RELATED TO ITS CORPORATE INSURANCE?

A. Peoples proposed a Corporate Insurance balance in its FPFTY period of $9,080,331 as shown on Peoples' Exhibit 4 Schedule 1 page 2 and 17. Peoples' Corporate Insurance is composed of Property Insurance, Other Miscellaneous Insurance and Workers Compensation Insurance. The breakdown is as follows:

Per Books	$5,213,687	
Combined Adjustments	$2,218,101	42.55%
Inflation Adjustment FTY	$ 773,601	13.1%
Inflation Adjustment FPFTY	$ 874,843	13.1%
Total	$9,080,331	

Peoples made adjustments to its Insurance by annualizing the most recent premium invoices and increased these costs by 13.1% which represents the average total premium increases experienced from the 2023 invoices as compared to the 2022 premiums and the premium increased experienced from the 2022 invoice as compared to the 2021 premiums. (Peoples Statement No. 2 page 18). Peoples stated that it affirmed the reasonableness of this increase with its third-party insurance brokers, which were feedback from the brokers about the upcoming rates.

Q. WHAT ADJUSTMENTS DO YOU HAVE?

A. In response to OCA-8-3, which refers to the response to I&E RE-27, Peoples was asked to provide support for the proposed 13.1% increase in total premiums. (actually 12.9%). Peoples provided a list of premium invoices for certain of its insurance brokers for the 2021-2023 time period. (I&E RE-27-D and E). Given that these cost estimates are feedback related, and industry date for forecasts beyond this horizon is scarce, as market dynamics can shift dramatically, Peoples' proposal to include 13.1% in each of the FTY and FPFTY

periods is speculative. (Peoples's Statement No. 2 page 18). Further, the feedback information appears to be not a long-term trend but cyclical in nature, which, in my opinion, can change as quickly as they have arisen. I am recommending removal of the 13.1% Premium Increases in each of the FTY period of $773,601 and FPFTY period of $874,943 or a total adjustment of $1,648,544. Peoples proposes an overall increase of its Corporate Insurance of $3,866,644 or 74.16% over current costs of $5,213,687. Peoples adjusted its Corporate insurance by 42.55% to normalize the period from the HTY book balance of $5,213,687 to $2,218,101 or $7,431,788. Peoples then adjusted this balance by 13.1% in each of the FTY and FPFTY periods to arrive at a balance of $9,080,331. (Peoples's Exhibit 4 Schedule 1 page 17).

Q. WHAT IS YOUR RECOMMENDATION?

A. My recommendation disallows Peoples' Premium increases of $773,601 in the FTY and $874,943 in the FPFTY, for a total disallowance of $1,648,544. This is shown on my Exhibit DM-20.

l. Injuries and Damages

Q. WHAT HAS PEOPLES PROPOSED WITH RESPECT TO ITS INJURIES AND DAMAGES EXPENSES?

A. Peoples proposed a level of Injuries and Damages of $2,460,710 for its FPFTY period as shown on Peoples's Exhibit 4 Schedule 1 page 2 and 18. Peoples utilized a three-year average of Injuries and Damages expenses for The Month Ending (TME) August 2023, August 2022 and August 2021 ($2,310,473). Peoples then added an Inflation Factor of 3.20% ($73,935) in the FTY period and an additional Inflation Factor of 3.20% ($76,301) in the FPFTY period.

Q. WHAT ARE YOUR ADJUSTMENTS TO THE PEOPLES' INJURIES AND DAMAGES EXPENSE?

A. My first adjustment is to Peoples' use of Inflation Factors of 3.20% in the FTY period and 3.20% in the FPFTY period for a total adjustment of $150,236. As I indicated previously in my testimony, I removed these inflationary adjustments because they do not reflect the true costs of expenses to be incurred by Peoples. The use of the three-year average that Peoples has proposed takes into consideration the adjustments from year to year, without

adding additional costs such as inflation to develop the balance. In response to OCA Set 8-5, Peoples stated that the adjustments from the balance in August 2021, August 2022 and August 2023 were based upon the three-year average of claims history.

Q. WHAT IS YOUR RECOMMENDATION?

A. I am recommending that $150,236 be removed from Peoples' Injury and Damages. My recommendation is shown on my Exhibit DM-21.

m. Travel

Q. WHAT HAS PEOPLES PROPOSED WITH RESPECT TO TRAVEL?

A. Peoples proposed a balance in its Travel Expenses of $1,014,712 for the FPFTY period. (Peoples' Exhibit No. 4 Statement No. 1 page 2 and 19). Peoples began with its HTY balance of $931,017 and adjusted this balance to include an inflation increase of 4.40% ($40,947) in the FTY and an additional adjustment of 4.40% ($42,748) in the FPFTY periods. Mr. Wachter stated that the increases of 4.40% represents the recent 5-year annualized increase in these costs determining the FTY and FPFTY expenses. (Peoples' Statement No. 2 page 19).

Q. WHAT IS THE BREAKDOWN OF THESE COSTS?

A. In response to OCA Set 8-6, Peoples provided a breakdown of these costs. In that response, Peoples' included costs related to Entertainment of $216,702, Travel and Entertainment Expenses of $237,700, Travel Expense of $229,022 for a total of $683,424. People's also included $570,544 related to Community Relations for a grand total of $1,253,968, an increase of $239,256 over Peoples proposed balance of $1,014,712. My recommendation is shown on my Exhibit DM-22. In response to I&E RE-28, Peoples provided the following breakdown for its FPFTY period: Travel Expenses $158,284; Travel-Meals $27,335; Entertainment Expenses $587,297; Entertainment Expenses Non-Ded $57,679 and Travel & Entertainment Expenses $184,117 for a total of $1,014,712. Given that Peoples has proposed a recovery of $1,104,712, I am using that balance to make my adjustments.

Q. WHAT ARE YOUR ADJUSTMENTS?

A. My first adjustment is to Peoples' use of Inflation Factors of 4.40% in the FTY period and 4.40% in the FPFTY period for a total adjustment of $83,695. As I indicated previously in my testimony, I removed these inflationary adjustments because they do not reflect the true costs of expenses to be incurred by Peoples. My second adjustment is to removal Entertainment Expenses of $587,297, Entertainment Expenses Non-Ded of $57,679, and Travel and Entertainment Expenses of $184,117 for a total disallowance of $829,093.

Q. WHY ARE YOUR REMOVING THE EXPENSES RELATED TO ENTERTAINMENT?

A. Peoples has not provided any such need for these expenses as required in the response to OCA Set 8-6. While I understand the need for travel to perform the duties in a company, ratepayers should not be required to pay for costs that are not related in the provision of utility services. Peoples's response to OCA Set 8-6 does not provide any useful information to evaluate the reasonableness of these costs, nor provides any comfort that Peoples' is requesting ratepayers to absorb costs associated with entertainment, in addition to not knowing what sort of entertainment these costs represent.

Q. WHAT IS YOUR RECOMMENDATION?

A. My recommendation is a total disallowance of $912,788 as shown on my Exhibit DM-22.

n. <u>Company Memberships</u>

Q. WHAT HAS PEOPLES PROPOSED RELATED TO ITS COMPANY MEMBERSHIPS?

A. Peoples proposed a balance of $832,200 related to Company Memberships for its FPFTY period as shown on Peoples's Exhibit 4 Schedule 1 page 2 and 20. Peoples began with an HTY balance of $797,132 and adjusted for Inflation of 2.18% or $17,345 in the FTY period, and an additional Inflation of 2.18% or $17,722 in the FPFTY period. Mr. Wachter stated that the Company Memberships costs has been adjusted for expected increases. (Peoples' Statement No. 2 page 20).

Q. DID PEOPLES PROVIDE A BREAKDOWN OF THESE COSTS?

A. Yes, in response to OCA Set 8-7, which refers to I&E RE-29, Peoples provided a breakdown summing up to the HTY balance of $797,132.

Q. WHAT ARE YOUR ADJUSTMENTS TO PEOPLES' MEMBERSHIPS?

A. I first removed the Inflation Related adjustments of 2.18% in the FTY period of $17,345, and 2.18% in the FPFTY period of $17,722 for a total adjustment of $35,067. As I stated previously in my testimony, these types of adjustments do not reflect the true costs of expenses expected to be incurred by Peoples.

Q. WHAT OTHER ADJUSTMENTS DO YOU HAVE REGARDING THE PEOPLES' EMPLOYEE EXPENSES?

A. I have adjustments related to certain Peoples' Memberships that I consider to be fraternal, social or sports club related. In 66 Pa.C.S. Section 1316.1, Recovery of club dues, "no public utility may charge to its customers as a permissible operating expense for ratemaking purposes membership fees, dues or charges to fraternal, social or sports clubs or organization." As I reviewed Peoples Exhibit No. 19, Schedule RR-31 and RR-32, I have determined that certain of Peoples' Company Memberships relate to and fall under the categories of social organization, chambers of commerce, convention and vacation visitors bureaus and lobbying related expenses.

In reviewing Peoples's Exhibit 19 RR-31 and 32 I believe that certain of the Company's Membership costs that are related to Community Development, Chambers of Commerce, tourism, health and energy related associations should not be recovered from ratepayers, as these types of costs do not provide any benefit to them. These types of costs mainly benefit Peoples as being good corporate citizens, advocacy on policy issues before State and Governmental agencies, social and fraternal related, and civic related initiatives. Ratepayers of Peoples should not be required to pay for such costs that do not benefit them with respect to distribution gas utility service.

Q. PLEASE IDENTIFY WHICH COSTS YOU ARE DISALLOWING.

A. In some of People' Company Memberships expenses, I recommending that the following costs be disallowed as I believe they do not provide any direct benefit to customers The following Table provides a breakdown:

TABLE IV.

Organization	Type	Selected Company Expense	OCA Disallow
Curate Solutions	Civic Related	$ 11,928	$ 11,928
Energy Association of PA	Lobbying	$168,522	$168,522
Pittsburgh Area COC	Civic Related	$ 1,402	$ 1,402
PA COC Business/Industry	Lobbying	$ 16,850	$ 16,850
COC for Greater Phila.	Civic Related	$ 5,000	$ 5,000
Women's Bus. Enter. Nat Council	Civic Related	$ 8,500	$ 8,500
TOTAL DISALLOWANCE		$212,202	$212,202

In response to OCA Set 8-7, and reviewing the description of these dues, believe these do not benefit ratepayers as they represent Chambers of Commerce dues, subscriptions to municipalities, lobbying expenses and other civic related purposes

Q. WHAT IS YOUR RECOMMENDATION?

A. Based upon the above, I am recommending that $212,202 as listed above be disallowed from Peoples' Company Membership expenses. These expenses do not appear to benefit ratepayers in the provision of distribution gas utility service, nor do they provide any direct benefits to ratepayers as far as customer service, safety, reliability or other service performance metrics.

Q. WHAT IS THE TOTAL PEOPLES' COMPANY MEMBERSHIP COSTS YOU ARE DISALLOWING?

A. I am recommending that $212,202 of costs as indicated above be disallowed, in addition to the removal of inflation related adjustments of $17,345 in the FTY period, and $17,722 in the FPFTY period, for a total of $247,269. My recommendations are shown on my Exhibit DM-23.

o. Licenses and Permits

Q. WHAT HAS PEOPLES PROPOSED RELATED TO ITS LICENSES AND PERMITS?

A. Peoples proposed a balance of $746,067 related to Licenses and Permits for its FPFTY period as shown on Peoples' Exhibit 4 Schedule 1 page 2 and 21. Peoples began with an HTY balance of $677,424 and adjusted for Inflation of 3.62% or $33,712 in the FTY period, and an additional Inflation of 3.62% or $34,933 in the FPFTY period. Mr. Wachter stated that the Company Memberships costs has been adjusted for expected increases. (Peoples' Statement No. 2 page 21).

Q. WHAT ARE YOUR ADJUSTMENTS TO PEOPLES' LICENSES AND PERMITS?

A. I first removed the Inflation Related adjustments of $33,712 in the FTY period and $34,931 in the FPFTY period for a total adjustment of $68,645. As I stated previously in my testimony, these types of adjustments do not reflect the true costs of expenses expected to be incurred by Peoples.

Q. WHAT ARE YOUR TOTAL RECOMMENDATIONS?

A. I am recommending a total balance of $677,424 related to the removal of Peoples' inflation adjustments of $68,645. My recommendation is shown on my Exhibit DM-24.

p. Utilities and Fuels Used in Company Operations

Q. WHAT HAS PEOPLES PROPOSED REGARDING ITS UTILITIES AND FUELS USED IN COMPANY OPERATIONS?

A. Peoples has proposed a level of Utilities and Fuels Used in Company Operations of $2,949,856 for the FPFTY period as shown on Peoples' Exhibit 4 Schedule 1 page 2 and 22. Peoples began by using its HTY per books balance of $2,938,901 and removing $161,285 related to the use of gas in Company operations. Peoples then adjusted the HTY–adjusted balance by an inflation factor of 3.05% or $84,825 in the FTY period, Peoples included a 3.05% inflation factor or $87,415 to calculate its FPFTY balance. Mr. Wachter stated that the remaining costs in this category were increased for the FTY and the FPFTY based upon recent increases in this category. (Peoples Statement No. 2 at 20).

Q. WHAT ADJUSTMENTS DO YOU HAVE RELATED TO THE COMPANY'S UTILITIES AND FUELS USED IN ITS OPERATIONS?

A. As I have done in prior adjustments, I removed the FTY inflation adjustment of 3.05% or $87,825 and 3.05% or $87,415 for the FPFTY period for a total removal of $172,240. In response to OCA Set 8-9, Peoples stated that but for Wireless utility costs, there are no contracts for other costs.

Q. WHAT IS YOUR RECOMMENDATION?

A. My adjustment is a decrease of $172,240 related to the removal of the inflation adjustments in the FTY and the FPFTY periods. My recommendation is shown on my Exhibit DM-25.

q. <u>Advertising</u>

Q. WHAT HAS PEOPLES PROPOSED WITH RESPECT TO ITS ADVERTISING EXPENSE?

A. Peoples has proposed a total Advertising Expense of $1,423,933 for the FPFTY period as shown on Peoples' Exhibit 4 Schedule 1 page 2 and 23. Peoples stated that it included only expenses that satisfy at least one criteria set forth in Section 1316(a) of the Public Utility Code. (Statement No. 2 page 20).

Q. HOW DID PEOPLES DEVELOP ITS FPFTY PERIOD BALANCE?

A. Peoples began with its HTY balance of $1,516,137 and subtracted $179,141 related to certain advertising expenses shown in response to OCA Set 8-10, to arrive an adjusted HTY balance of $1,336,997. Peoples then added 3.20% or $42,784 in the FTY period and 3.20% or $44,153 in the FPFTY period for inflation adjustments for a total balance of $1,423,934.

Q. WHAT TYPES OF ADVERTISING EXPENSES ARE INCLUDED IN THE PEOPLES' BALANCE?

A. Peoples has included Advertising Expenses related to digital media, creative production and ad creation, traditional broadcast, print, PR Firm and other (public health, conservation of energy, explanation of billing practices) and other advertising expenses. (Peoples Exhibit No. 4 Schedule 4 page 2 of 2).

Q. WHAT DOES THE PA PUBLIC UTILITY CODE PROVIDE ABOUT WHAT SHOULD BE RECOVERED BY RATEPAYERS REGARDING ADVERTISING EXPENSES?

A. In 66 Pa.C.S.§1316, "no public utility may charge to its customers as a permissible operating expense for ratemaking purposes any direct or indirect expenditure by the utility for political advertising. The commission shall also disallow as operating expense for ratemaking purposes expenditures for other advertising, unless and only to the extent that the commission finds that such advertising is reasonable and meets one or more of the following criteria:

(1) Is required by law or regulation.
(2) Is in support of the issuance, marketing or acquisition of securities or other forms of financing.
(3) Encourages energy independence by promoting the wise development and use of domestic sources of coal, oil or natural gas and does not promote one method of generating electricity as preferable to other methods of generating electricity.
(4) Provides important information to the public regarding safety, rate changes, means of reducing usage or bills, load management or energy conservation.
(5) Provide a direct benefit to ratepayers.
(6) Is for the promotion of community service or economic development.

Q. WHAT ADJUSTMENTS DO YOU HAVE REGARDING PEOPLES'S ADVERTISING EXPENSES?

A. To be consistent with my other adjustments, I am removing the Company's Inflation Adjustments of 3.20% or $42,784 for the FTY period, and 3.20% or $44,153 for the FPFTY period for a total removal of $86,937.

Q. WHAT OTHER ADJUSTMENTS DO YOU HAVE WITH RESPECT TO PEROPLES' ADVERTISING EXPENSES?

A. In reviewing Peoples' Exhibit No. 4 Schedule 4, the majority of Peoples' Advertising Expense are related to Explanation of Billing Practices of $1,165,063 or 87% of the total Advertising in the HTY of $1,336,996. Given that this criteria are related to information billing practices, bills, and rate changes, I am accepting these costs to be included in

Peoples' Advertising Expenses. My adjustment is a reduction of $86,937 related to the Inflation Adjustment and is shown on my Exhibit DM-26.

r. Fleet Maintenance and Fuel

Q. WHAT HAS PEOPLES PROPOSED WITH RESPECT TO ITS FLEET MAINTENANCE AND FUEL?

A. Peoples proposed a level of Fleet Maintenance and Fuel of $1,170,488 for the FPFTY period as shown on Peoples's Exhibit 4 Schedule 1 page 2 and 24. Peoples began with its HTY balance of $1,099,110 and added an FTY inflation adjustment of 3.20% or $35,128 and a FPFTY inflation adjustment of 3.20% or $36,250. Mr. Wachter stated that he adjusted these categories for expected increases based upon historical experience in determining the FTY and the FPFTY expense. (Peoples' Statement No. 2 page 21).

Q. WHAT ADJUSTMENTS DO YOU HAVE?

A. As I adjusted out the inflation factors for the FTY and the FPFTY periods in my other expense adjustments, I am making the same adjustments for Fleet Maintenance & Fuel, which reduces Peoples's adjustments by $35,128 and $36,250, respectively.

Q. WHAT IS YOUR RECOMMENDATION?

A. My recommendation is an adjustment of $71,378 related to the FTY and FPFTY inflation factors. My recommendation is shown on my Exhibit DM-27.

s. Materials & Supplies

Q. WHAT HAS PEOPLES PROPOSED WITH RESPECT TO ITS MATERIALS & SUPPLIES?

A. Peoples has proposed a balance to its Materials & Supplies of $11,848,247 as shown on Peoples' Exhibit 4 Schedule 1 page 2 and 25. Peoples began with its HTY balance of $10,459,149 and added a 2.94% or $307,733 inflation adjustment in its FTY period, and a 2.04% or $338,640 inflation adjustment in its FPFTY period. Peoples also included an

adjustment of $742,725 as an additional incremental adjustment for the expected increase in average cost per fault, higher number of faults expected and the higher cost of anodes. (Peoples Statement No. 2 page 21).

Q. WHAT ADJUSTMENTS DO YOU HAVE REGARDING PEOPLES' MATERIALS & SUPPLIES?

A. I removed the Inflation Adjustments of $307,733 and $338,640, a total of $646,373, in Peoples' FTY and FPFTY periods, respectively. I then reviewed the response to OCA-Set 8-12. I removed a portion of the cost related to the increase in the average cost per fault of $742,725, to remove $49,932 associated with a 5% inflation rate to materials as identified in response to I&E RE-36-D. The base cost is reflected as $692,793. Peoples included the additional cost related to a planned increase within the Damage Prevention and Leak Survey departments.

Q. WHAT IS YOUR RECOMMENDATION FOR MATERIALS AND SUPPLIES?

A. My recommendation is an adjustment of $646,373 related to the FTY and FPFTY inflation factors and the disallowance of the $49,932 related to a 5% inflation rate. This results in a total disallowance of $794,686. My recommendation is shown on my Exhibit DM-28.

t. <u>Other O&M</u>

Q. WHAT DID PEOPLES PROPOSE RELATED TO ITS OTHER O&M?

A. Peoples proposed a FPFTY balance of $23,696,894 as shown on Peoples's Exhibit 4 Schedule 1 page 2 and 26. Peoples began with a HTY balance of $14,965,499 and added an inflation factor of 2.94% or $440,321 in the FTY and an additional inflation factor of 2.94% or $449,212 in the FPFTY period, for a total adjustment of $888,533. Peoples adjusted this balance to remove $138,125 related to the cost of operating the building at 225 N. Main Street in Butler, Pennsylvania as Peoples received approval to sell this building on October 26, 2023. (Peoples Statement No. 2 page 21). Mr. Wachter added an adjustment in the amount of $7,979,987 related to services provided from Essentials Utilities via PNG Companies (the parent company of PNG and PG). These costs represent normalized costs of such items. (Peoples' Statement No. 2 page 21).

Q. WHAT ADJUSTMENTS DO YOU HAVE?

A. My first adjustment is to remove the inflation adjustments of $440,321 in the FTY and $449,212 in the FPFTY periods, for a total disallowance of $889,533. My reasons for the disallowance are consistent to what I have done in prior inflation adjustments removals. To recap, I am recommending disallowance of all inflation related adjustments because I believe these types of adjustments are not known and measurable in setting rates for service and should not be used for ratemaking purposes. These types of adjustments do not provide a good index of known cost increases, but rather reflect an overall broad, blanket-type economic adjustment that are typically applied to all goods and services that may not be directly related or attributable to costs incurred by Peoples.

Q. WHAT IS YOUR NEXT ADJUSTMENT?

A. In response to OCA Set 7-30, which refers to I&E RE-11, Peoples provide costs that are included and allocated from Essential Services to Peoples related to incentive compensation. That amount is **(BEGIN CONFIDENTIAL)** [redacted] **(END CONFIDENTIAL)**. In the same manner as I allocated the metric component to Peoples' STI Incentive, I am a doing the same here. Using the balance of **(BEGIN CONFIDENTIAL)** [redacted] **(END CONFIDENTIAL)**. My reasons for the disallowance related to Financial Performance are the same in my STI Incentive Compensation section testimony.

Q. WHAT ARE YOUR TOTAL ADJUSTMENTS TO PEOPLES' OTHER O&M?

A. My total adjustments to Peoples's Other O&M are the disallowance of the inflation adjustments of $889,533, and the disallowance of the Incentive Compensation of **(BEGIN CONFIDENTIAL)** [redacted] **(END CONFIDENTIAL)**, a total disallowance of $1,775,040. This is shown on my Exhibit DM-29.

u. Debt Issuance Costs

Q. WHAT DID PEOPLES PROPOSE WITH RESPECT TO ITS DEBT-ISSUANCE COSTS?

A. Peoples proposed a Debt Issuance Costs of $404,371 under its FPFTY period as shown on Peoples's Exhibit 4 Schedule 1 page 2 and 27. Mr. Wachter stated that People recently refinanced the revolving credit facility for debt borrowed for less than one-year, which is used to help finance capital expenditures and to fund working capital, particularly in the summer months when revenues are low. Mr. Wachter has included one year's worth of the amortization amounting to $404,371. (Peoples' Statement No. 2 page 22).

Q. WHAT IS YOUR RECOMMENDATION?

A. I am accepting Peoples' proposal. I have no changes to Peoples' adjustments. These costs appear to be known and measurable. These debt issuance costs are expected to be used to help finance capital expenditures and to fund working capital as stated above by Mr. Wachter. In the event additional information is received with respect to the Company's claim for debt issuance costs, I reserve the right to change my recommendation. My recommendation is shown on my Exhibit DM-30. In response to OCA Set 8-14, Peoples stated that these costs are not recovered via interest expense and therefore, it is necessary to claim these costs in O&M.

v. Payment Processing

Q. WHAT HAS PEOPLES PROPOSED RELATED TO ITS PAYMENT PROCESSING FEE?

A. Peoples proposed a FPFTY balance of $2,015,819 under the FPFTY period as shown on Peoples's Exhibit No. 4 Schedule 1, page 2 and 28. Peoples began with a HTY balance of $1,451,959 and to that balance Peoples added $124,419 related to the adoption estimate of extending payment to the Peoples Gas Division. Peoples then adjusted this balance by 7.82% in the FTY of $123,273 and an additional adjustment of 7.82% or $132,913 in the FPFTY periods related to the additional adoption of this payment channel based upon the percentage increase for the twelve months ended (TME) August 31, 2023, as compared to the TME August 31, 2022. The final adjustment of $183,256 reflects a 10% increase in costs the Company expects to incur on such costs upon the expiration of the existing

contract in February 2025. (Peoples' Statement No. 2 page 23-24). Peoples witness Mr. Wachter stated that currently, Peoples' customers make payment through various channels such as mail, web and automatic telephone (IVR). The costs associated with third party payment processing for certain web, IVR and walk-in payments including credit cards at the Peoples Natural Gas Division are borne by customers via base rates. However, for the Peoples Gas Division, such payments are currently borne by the individual customers making such payments. (Peoples Statement No. 2 page 22). Peoples is proposing to pay all costs associated with customer payments directly to its service providers and recover such costs from all customers via base rates rather than a customer – paid transaction costs. If approved, all customers of both divisions will be able to select the payment channel of their choice without consideration of additional convenience or transaction fees subject to certain limitations. (Peoples Statement No. page 22).

Q. HOW DO THESE COSTS BENEFITS CUSTOMERS?

A. Mr. Wachter stated that this will improve the customer experience and align it with the Peoples Natural Gas Division and thus improve customer satisfaction. Customer have frequently voiced dissatisfaction with having to pay transaction fees for making payments. These Processing Fees will eliminate the convenience fees for electronic payments, eliminate the transaction fees for bill payment at authorized walk-in locations, encourage customers use of authorized agents, increase customer satisfaction by allowing customers to pay via the channel of their choice and encourage payment from those who have limited means. (Peoples' Statement No. 2 page 23).

Q. WHAT IS YOUR RESPONSE?

A. Peoples provides sufficient rationale for including these costs generally, but not for its projection of increased adoption. Peoples assumes that additional adoption of this payment channel based upon the percentage increase for the twelve months ending August 31, 2023 as compared to August 31, 2022 will be 7.82% in the FTY and in the FPFTY. Peoples has not provided any evidence to support additional adoption nor provided any support that customers will partake in this payment channel. While it may make sense that some

additional households will increase their update of these payment methods, because we do not have the data any projection about these additional adoptions in the payment channel appear to be speculative in nature. Peoples has included $124,419 related to the adoption for Peoples Gas (PGD) which should be sufficient to cover the payment channel for both entities. Regarding the recovery of additional 10% or $183,256 due to the expiration of Peoples' existing contract in February 2025, this also appears speculative. While it is reasonable to predict that costs will increase when a contract expires, Peoples has provided no further evidence to support this 10% increase.

Q. WHAT ADJUSTMENTS DO YOU HAVE?

A. I am recommending disallowing 50% of the 7.82% in FTY or $61,637 and 50% of the 7.82% or $66,457 in the FPFTY for a total of $128,094. I am also recommending 50% of the disallowance of the 10% or $91,628 for the increase in costs Peoples expects to incur upon the expiration of the existing contract expiring in February of 2025. The increase for the contract is simply too speculative at this juncture and should retain an incentive to try to reduce costs on that contract when it comes up for renewal like it would if it were in a competitive environment rather than serving a captive rate base. Furthermore, Peoples has projected that they will be on every two year rate cycle and, thus, we will have a better sense in 2 years what the cost increases are as a result of these contracts as well as any increased update rate as a result of this policy change. My total disallowance is $219,722. My recommendation is shown on my Exhibit DM-31.

w. <u>Rate Case Expenses</u>

Q. WHAT HAS PEOPLES PROPOSED RELATED TO ITS RATE CASE EXPENSE?

A. Peoples has proposed Rate Case Expenses of $2,062,000 amortized over a two-year period for an annual amount of $1,031,000 as shown on Peoples's Exhibit 4 Schedule 1 page 2 and 29.

Q. WHEN WERE PEOPLES LAST BASE RATE FILINGS?

A. Mr. Wachter stated that Peoples filed base rate case proceedings in 2010, 2012 and 2019. (Peoples Statement No. 2 page 25). The reason for the seven year lapse between 2012 and

2019 was a result of the rate stay out period resulting from the acquisition of the Equitable Gas Company. Further, the main reason for the time that had elapsed between 2019 and this case was the result of the Company receiving accounting and regulatory approval regarding its treatment of the tax repair election in Docket No. P-2020-3021191. Peoples projects two years to be the approximately length of time between the filing of this proceeding and the filing of Peoples' next base rate proceeding given the Company's LTIIP commitments for infrastructure replacement. (Peoples' Statement No. 2 page 25).

Q. WHAT ARE YOUR RECOMMENDATIONS?

A. I am accepting Peoples' Rate Case Expenses in the amount of $2,062,000 but it should be normalized. I am also making an adjustment to Peoples' Rate Case Expense by using a 3.00 year normalization based upon Peoples' Rate Case Expenses in 2008, 2010, 2012, 2019 and this instant rate proceeding which was filed in December 2023. (OCA Set 8-16).

Q. WHAT ARE YOUR SPECIFIC ADJUSTMENTS?

A. I reviewed the response to the Company's OCA Set 8-16 which refers to the response to I&E RE-39 Peoples filed Rate Case proceedings in the following years:

Year	**Entity**	**Docket No.**	
2008	Equitable	R-2008-2029325	
2010	Peoples	R-2010-2201702	
2012	Peoples	R-2012-2285985	
2019	Peoples	R-2018-3006818	
2023	Peoples	R-2023-3044549	
15 years between 2008 and 2023			
Normalization Period		15/5 proceedings	3 years

Based upon the above I am recommending normalizing Peoples' rate case expenses to 3 years. This results in an annual recovery for Rate Case Expenses of (2,062,000/3 years) $687,333, a reduction of $343,667. My recommendation is shown on my Exhibit DM-32.

x. Uncollectible Accounts

Q. WHAT HAS PEOPLES PROPOSED RELATED TO ITS UNCOLLECTIBLE ACCOUNTS?

A. Peoples has proposed an Uncollectible Accounts Expense of $13,635,520 for the FPFTY period as shown on Peoples's Exhibit No 4 Schedule 1 page 2 and 30. Peoples developed its Uncollectible Accounts Expense based upon the relationship between write-offs and revenues. (Peoples Statement No. 2 page 26). Peoples' witness Mr. Wachter stated that he used a normalized three-year average of write-offs as the basis for his adjustment. calculated an uncollectible write – off rate by the use of a three – year average of write offs as the basis for the adjustment. A 2.20% uncollectible rate was used for the residential customer class. (Peoples's Statement No. 2 page 26). No normalization adjustments were used for the commercial and industrial write-offs. (Peoples' Statement No. 2 pages 27). Peoples adjusted its Uncollectible balance by $3,412,102 by multiplying the $156,095,549 of additional revenues by the 2.20% rate uncollectible rate. (Peoples' Exhibit No. 2 Schedule 4).

Q. WHAT IS YOUR RECOMMENDATION?

A. I am accepting Peoples' methodology regarding its uncollectible accounts expense under present rate revenues of $13,635,520. What I am adjusting is my recommended revenue requirement increase of $7,645,946 multiplied by the Company's 2.20% uncollectible account rate to arrive at a recommended uncollectible account expense of $168,211. My recommendation is shown on my Exhibit DM-33. This is carried over to my Exhibit DM-4 Line 3, O&M Expense.

y. Interest on Customer Deposits

Q. WHAT DID PEOPLES PROPOSE WITH RESPECT TO ITS CUSTOMER DEPOSITS?

A. Peoples proposed an interest balance on its Customer Deposits of $284,603 using a 7% interest rate and based upon an average Customer balance of $4,065,751 as shown on Peoples' Exhibit 4 Schedule 1 page 2 and 32. Peoples did not project any adjustment for

its FTY and its FPFTY periods as the Company has not projected any changes to the Customer Deposits balance. (Peoples's Statement No. 2 page 28).

Q. WHAT IS YOUR RECOMMENDATION?

A. I do not have any adjustments to Peoples' Customer Deposits. I am accepting the Peoples' proposal. My recommendation is shown on my Exhibit DM-34.

3. DEPRECIATION EXPENSE

Q. WHAT HAS PEOPLES PROPOSE WITH RESPECT TO ITS DEPRECIATION AND AMORTIZATION EXPENSE?

A. Peoples proposed a Depreciation and Amortization Expense of $129,015,596 as shown on Peoples's Exhibit 2 Schedule 4 and Peoples's witness Mr. Spanos Exhibit 5C page I-5. Peoples has also proposed a five-year amortization of net salvage accrual of $5,204,001 as shown on Mr. Spanos Exhibit 5C page I-5 and I-10.

Q. DID PEOPLES HAVE DEPRECIATION STUDIES PERFORMED FOR USE IN THIS RATE PROCEEDING?

A. Yes. In Peoples Statement No. 14 page 2, Mr. Spanos stated that depreciation studies were conducted for Peoples as of August 31, 2023, August 31, 2024 and September 30, 2025.

Q. WHAT ARE YOUR RECOMMENDATIONS RELATED TO PEOPLES' DEPRECIATION AND AMORTIZATION EXPENSE?

A. I do not have any adjustments to Peoples' depreciation studies nor any adjustments to Peoples' development of its depreciation and amortization expense, or its net salvage accrual. My adjustments reflect my recommended disallowance of plant additions that I have discussed under my Gas Plant In Service balance section. I multiplied my disallowed plant additions by Peoples (Mr. Spanos) depreciation rates as shown on Mr. Spanos'

Exhibit 5C, and shown on my Exhibit DM-35, by plant category. This produces a disallowance in depreciation expense of $727,743.[11]

Q. DO YOU HAVE ANY ADJUSTMENTS TO THE PEOPLES' NET SALVAGE VALUE OF $5,204,001?

A. No. I am accepting Peoples's proposed five-year amortization of its Net Salvage (2020-2024).

4. TAXES OTHER THAN INCOME

Q. WHAT HAS PEOPLES PROPOSED WITH RESPECT TO TAXES OTHER THAN INCOME TAXES?

A. Peoples proposed total Taxes Other than Income in the amount of $15,353,107 as shown on Peoples' Exhibit No. 2 Schedule No. 4 and Exhibit No. 6 Schedule No. 2. These taxes are comprised of related payroll taxes, property taxes, PUC Assessments, sales and use taxes and other.

Q. HOW WERE THE PAYROLL, PUC ASSESSMENTS, PROPERTY, AND OTHER TAXES COMPUTED?

A. According to People's witness Mr. Hanechak, the payroll related taxes, an experience factor based upon historical test year balances and carried that experience factor over to the FPFTY labor. (Peoples's Statement No. 10, page 2). The PUC Assessments were adjusted from the historical year to reflect the most recent assessment by the PUC using a five-year weighted average increase. Property taxes were increased by using a three-year weighted average of the first eight months of each year. (OCA Set 8-32) (Peoples's Statement No. 10 page 3). Mr. Hanechak stated that Peoples had one adjustment to the other category related to Emissions Fees from the present rates balance of $1,261,000 to the FPFTY period of $1,679,000, a difference of $441,000. (Peoples's Statement No. 10 page 3).

[11] Any differences due to rounding

Q. WHAT ARE YOUR ADJUSTMENTS AND YOUR RECOMMENDED LEVEL OF TAXES OTHER THAN INCOME TAXES?

A. I am accepting Peoples' methodology in the calculation of its Taxes Other Than Income. I am making adjustments to Peoples' FICA, FUTA and SUTA taxes that reflect my recommended Labor balance, which includes my adjustments to the Company's vacancy positions and my adjustments to the Company's STI. I removed costs associated with certain STI compensation, and my incorporation my use of a vacancy rate ratio. In calculating my recommended payroll taxes, I am accepting Peoples' use of the Experience Factor as reflected on Peoples' Exhibit No. 6 Schedule 2.

Q. WHAT IS YOUR OTHER ADJUSTMENT TO TAXES OTHER THAN INCOME?

A. I adjusted the Property Taxes to reflect the changes in my recommended GPIS balance. I used the Company's Property tax level of $1,064,828 to the Company's proposed GPIS balance of $5,587,906,895 to calculate a composite Property tax rate of 0.00032%. My adjustment is as follows:

Payroll Taxes	$6,159,904
Property Taxes	$1,055,458
Assessments	$3,435,715
Other	$4,281,000
Total	$14,932,078

My recommendation is shown on my Exhibit DM-36.

5. INCOME TAXES

Q. WHAT DID PEOPLES CALCULATE WITH RESPECT TO ITS INCOME TAXES?

A. Peoples proposed total Income Taxes of ($59,295,394). This is comprised of Net Federal Income Taxes of ($59,276,394), (Peoples' Exhibit 7 Schedule 8 Attachment 1 Line 42), and State Income Taxes of ($18,714), (Line 28). Peoples included Federal Deferred Income Tax ($59,276,679) (Line 41) and $0 for Federal Current Income Taxes (Line 35). Peoples

made a calculation to deduct interest expense using the interest synchronization method (Rate Base times weighted average cost of debt of 1.98% - Exhibit 2 Schedule 4 page 5), or $84,085,080. This is also shown on Peoples' Exhibit 7 Schedule 8 Attachment 1 Line 2).

Q. WHAT OTHER ADJUSTMENTS DID PEOPLES MAKE TO COMPUTE ITS INCOME TAX EXPENSE?

A. According to Ms. Saball, Peoples incorporated adjustments related to the realization of its Pennsylvania State Net Operating Income Loss carryforward, the effects of the tax treatment of its repairs pursuant to the terms of the Joint Petition for Settlement and Approval of Tax Repairs, (OCA Set 8-19) Sur-credit, (OCA Set 8 – 25 and, 29) and Peoples' catch up adjustment. (OCA Set 8 - 30) and the effects of its tax treatment of repairs under Revenue Procedure 2023-15 (OCA Set-8-20) (Gas Safe Harbor), which was recently issued by the Internal Revenue Service (IRS) on April 14, 2023. Finally, Ms. Saball incorporated the reduction in the Pennsylvania Corporate Net Income tax rate. (Peoples Statement No. 6 page 4). Ms. Saball adjusted Peoples' taxable income (Operating Income less Interest Expense) by taking the permanent adjustments related to Meals and Entertainment, Tax Repairs, and Property Basis Difference which calculated to a balance of ($388,317,736) (Peoples' Exhibit No. 7 Schedule No. 8 Line 10 Column I). Ms. Saball then adjusted deferred adjustments related to deferred adjustments to depreciation, Section 163 interest, Contribution in Aid of Construction, cost of removal, and Property basis difference (book and tax depreciation) to compute a balance of ($41,830,224) (Peoples' Exhibit No. 7 Schedule No. 8 Attachment 1 Line 18, Column I). The total Flow Through adjustments are ($388,317,736) and the total Deferred Adjustments are ($41,830,224) for a total balance of ($430,147,960). (Peoples's Exhibit No. 7 Schedule No. 8 Attachment 1 Line 19, Column I).

Q. WHAT DID MS. SABALL INCLUDE IN THE CALCULATION OF PEOPLES' STATE TAXABLE INCOME?

A. Ms. Saball stated that Peoples regulated operations have produced tax net operating losses (NOLs) for Pennsylvania income tax purposes. As of September 30, 2025, Peoples has projected that it will have a state net operating income loss carryforward (NOLC) of over $2 billion. Under Pennsylvania law, this NOLC can offset state taxable income, subject to

both taxable income and time limitations. (Peoples' Statement No. 6, page 10). Pennsylvania law limits the NOLC offset to a percentage of the state taxable income produced. This limit was 35% in 2018 and 2019, and 40% in 2020 and thereafter. (Peoples' Statement No. 6 page 10). This results in a State Taxable Income before the NOL of ($221,271,410) (Peoples Exhibit No. 7 Schedule No. 8 Attachment 1 Line 23 Column I) and a PA Income Tax Expense of ($18,714) (Peoples' Exhibit No. 7 Schedule No. 8 Attachment 1 Line 28 Column I).

Q. WHAT DID MS. SABALL INCLUDE IN THE CALCULATION OF PEOPLES' FEDERAL TAXABLE INCOME?

A. Ms. Saball stated that State Income Taxes are deductible for Federal Tax purposes. Ms. Saball calculated total Federal Taxable Income of ($219,263,596) (Peoples' Exhibit No. 7 Schedule No. 8 Attachment 1 Line 29 Column I) and multiplied that balance by the 21% Federal Income Tax to calculate a Federal Income Tax balance of ($46,041,425). (People's Exhibit No. 7 Schedule No. 8 Attachment 1 Line 32 Column I). Peoples offset this balance by the current year NOL limit of $46,041,425 (OCA Set 8-24) to produce a Federal Income Tax Expense of $0. (Peoples' Statement No. 6 page 11, and Peoples' Exhibit No. 7 Schedule No. 8 Attachment 1, Line 35 Column I).

Q. WHAT DID MS. SABALL STATE REGARDING PEOPLES' DEFERRED INCOME TAX BALANCE OF ($59,276,679)?

A. Ms. Saball stated that Pennsylvania regulatory policy is generally to charge customers a level of tax expense equal to the taxes the utility expects to pay currently. This is referred to as the flow-through tax accounting. There are exceptions to this policy as it relates to Federal tax benefits of accelerated depreciation (which is subject to the tax normalization rules). (Peoples' Statement No. 6 page 11). Also, due to the Settlement of the Petition for Accounting and Regulatory Approvals and Approval of Related Tariff Sur-credits Associated with Tax Repair Election in Docket No. P-2020-3021191 (the TRS) for Peoples' there is also an exception for the Section 481 (a) adjustment related to the tax repairs change in accounting method. Section 481 (a) adjustment is related to the catch-up adjustment in that Peoples' agreed to amortize the tax effect of that deduction in the manner set forth in the settlement of the TRS. (Peoples' Statement No. 6 page 10). Peoples has also included the flow-through of excess accumulated deferred income taxes (Excess

ADIT). Ms. Saball stated that the Excess ADIT is related to the deferred tax expense which is reduced by the flow-back to customers of a portion of the Excess ADIT resulting from the reduction in federal tax rate from 35% to 21% resulting from the Tax Cuts and Jobs Act of 2017 (TCJA) tax rate reduction. (Peoples's Statement No. 6 page 14). The balance included in the calculation of the Federal Income Tax is ($831,898). (OCA Set 8-26). Peoples's Exhibit No. 7 Schedule 8 Attachment 1 Line 37 Column I).

Q. WHAT DID MS. SABALL STATE REGARDING NOLC REFLECTED IN THE TAX EXPENSE?

A. Ms. Saball stated that the Federal NOLC is estimated to increase to over $1.1 billion in the FPFTY which is due to the increasing level of tax deductions greater than book income. State NOLCs utilized offset 40% of the current year taxable income. The creation and utilization of Federal NOLs does not impact the overall federal income tax expense because deferral of the benefits of the Federal NOL are recorded to deferred income tax expense, and the tax consequence of the creation and utilization of the state NOLC are not reflected in deferred income tax expense. (Peoples' Statement No. 6 page 15).

Q. WHAT IS INCLUDED IN PEOPLES' FEDERAL DEFERRED INCOME TAX BALANCE?

A. Ms. Saball stated that Peoples' total projected deferred income tax expense at the FPFTY period is $59,276,678. (Peoples' Statement No. 6 page 15) (Peoples's Exhibit No. 7 Schedule No. 8 Attachment 1 Line3 36-41 Column I). Peoples calculated total Income Taxes of $59,295,304. The components of this balance are as follows:

Federal Income Tax Deferred at 21%	$ 8,544,081
Amortization of Excess ADIT	($ 831,898)
Current Year Federal NOL	($ 46,041,425)
Amortization of 481 (a) Tax Repairs	($20,947,437)
Total Deferred FIT	($59,276,680
PA Deferred Taxes	($ 18,714)
Total	($59,295,3944)

Q. WHAT ARE YOUR RECOMMENDED FEDERAL INCOME TAXES AND RECOMMENDED STATE INCOME TAXES?

A. I reviewed the methodology that Peoples used to compute its Federal and State Income Taxes along with the adjustments related to its Schedule M, Deferred Adjustments, PA NOL Utilizations, Federal NOL, and the components that are included in the Federal Deferred Income Taxes and I accept Peoples' methodology. I also reviewed the Peoples' EDIT flow-back related to the TCJA of 2017. I have no adjustments to Peoples' methodology that was used to develop its Federal and State Income Tax calculation. My adjustments reflect my recommended flow through adjustments related to my adjustments to Peoples' Rate Base balances, and Operating income adjustments. Using Peoples' methodology and the excel workpapers as shown on Peoples' Exhibit No. 7, Schedule No. 8 Attachment 1 and Attachment 2, and the Income Tax rate of 21% and a PA State Income Tax Rate (SIT) of 8.09%, (OCA Set 8-31) I am making adjustments that are related to my recommended Operating Income as follows:

Federal Income Tax Expense - Current	$0
PA State Income Tax Expense - Current	($18,714)
Deferred Income Taxe Expense - Current	($91,325,720)
Total Income Tax Expense - Current	($91,344,434)

Q. DID YOU MAKE ANY ADJUSTMENTS TO PEOPLES' SCHEDULE M ITEMS AND DEFERRED ADJUSTMENTS?

No, I am accepting the Company's adjustments.

Q. WHAT IS YOUR ADJUSTMENT RELATED TO PEOPLES' INTEREST EXPENSE CALCULATION?

A. Using my recommended Rate Base Balance of $4,207,419,461 and using OCA witness Rothschild's recommended cost of debt of 2.185%, my recommended Interest Expense is $91,932,115.

Q. WHAT IS YOUR TOTAL INCOME TAX EXPENSE?

A. My total Income Tax Expense is ($91,344,434) which is $32,049,042 lower than Peoples' ($59,295,394), which is shown on my Exhibit DM-37.

E. ACT 40 REQUIREMENTS (Act 40 of 2016)

Q. WHAT ARE THE ACT 40 REQUIREMENTS?

A. Act 40 took effect on August 11, 2016, which among other things, eliminated the consolidated tax savings adjustment. Prior to Act 40, the Company would have been required to adjust its revenue increase request downward to reflect tax savings associated with filing taxes as part of a parent or holding company. This practice recognized that the Company's ratepayers only paid through rates those taxes that the Company actually paid. Act 40 requires the Company to continue its performance of the consolidated tax savings calculation and provide that consolidated tax savings differential as part of its rate case filing. In part, Act 40 states:

> If an expense or investment is allowed to be included in a public utility's rates for ratemaking purposes, the related income tax deductions and credits shall also be included in the computation of current or deferred income tax expense to reduce rates. If an expense or investment is not allowed to be included in a public utility's rates, the related income tax deductions and credits, including tax losses of the public utility's parent or affiliated companies, shall not be included in the computation of income tax expense to reduce rates. The deferred income taxes used to determine the rate base of a public utility for ratemaking purposes shall be based solely on the tax deductions and credits received by the public utility and shall not include any deductions or credits generated by the expenses or investments of a public utility's parent or any affiliated entity. The income tax expense shall be computed using the statutory income tax rates.

Act 40 further states:

> REVENUE USE- If a differential accrues to a public utility resulting from applying the ratemaking methods employed by the commission prior to the effective date of subsection (a) for ratemaking purposes, the differential shall be used as follows:

(1) Fifty percent to support reliability or infrastructure related to the rate-base eligible capital investment as determined by the commission; and
(2) Fifty percent for general corporate purposes.

As a result, ratepayers now pay taxes in excess of those taxes that the Company actually pays, and the revenue use requirement specifies how those additional revenues are to be applied. Section 1301.1 (b) requires the Company to use 50% of that differential for reliability or infrastructure related capital investment and the remaining 50% for general corporate purposes.

Q. HAS PEOPLES CALCULATED A CONSOLIDATED TAX EXPENSE ADJUSTMENT (CTA)?

A. According to Ms. Saball, Peoples has calculated a CTA, but not for the purposes of flowing through as a ratemaking adjustment to federal income tax expense (Peoples' Statement No. 6 page 22). Ms. Saball stated that with the passage of Act 40, a utility's tax expense for regulatory purposes is calculated on a stand – alone basis and is not subsidized by its affiliates. (Peoples Statement No. 6 page 22).

Q. HAS PEOPLES SATISFIED THE FIRST REQUIREMENT UNDER ACT 40 – 50% OF THE DIFFERENTIAL SPENT ON INFRASTRUCTURE REPLACEMENT?

A. It appears so. According to Ms. Saball, under the FPFTY pipe replacement spending under the LTIIP program will be $508 million. Section 1301.1 (b) requires that $36.7 million (50% of $73 million consolidated tax adjustment) to be spent on infrastructure replacement. For the FPFTY, Peoples will spend 14 times the amount required. (Peoples' Statement No. 6 page 23).

Q. WHAT IS PEOPLES' PROPOSAL FOR THE OTHER 50% OF THE DIFFERENTIAL, WHICH SECTION 1301.1(b)(2) STATES MUST BE USED FOR "GENERAL CORPORATE PURPOSES"?

A. Peoples does not appear to propose a specific treatment for the other 50% of the differential, which Section 1301.1(b)(2) states must be used for "general corporate purposes."

Q. WHAT DO YOU CONCLUDE FROM PEOPLES' FAILURE TO SPECIFY A USE FOR THE 50% OF THE DIFFERENTIAL THAT ACT 40 REQUIRES TO BE USED FOR "GENERAL CORPORATE PURPOSES"?

A. Peoples has identified no specific ways in which that 50% of the differential would be used in any way to benefit Pennsylvania ratepayers. One might conclude from this that Peoples therefore basically intends to use that money for the benefit of its stockholders, and not apply it in any manner to provide a quantifiable ratepayer benefit or in a manner that directly benefits service to Pennsylvania customers.

Q. WHAT DOES "GENERAL CORPORATE PURPOSES" AS USED IN ACT 40 MEAN?

A. Because Peoples is a regulated utility in Pennsylvania, its "general corporate purpose" is to provide regulated utility service in the Commonwealth of Pennsylvania. While the term "general corporate purposes" is rather vague, consistent with that general corporate purpose of regulated utilities, general corporate purposes would include uses for such "differential" revenues as supporting capital expenditures necessary to execute utility business plans, paying off debt, funding construction projects, paying dividends, paying for maintenance and operating expenses, investing in utility plant in Pennsylvania, and providing a source of working capital. Many of these uses for "general corporate purposes" would have a quantifiable benefit to Pennsylvania ratepayers. As I read the entirety of Act 40, the "revenue use differential" addressed in the Act for "general corporate purposes" should mean public utility purposes and uses that result in having some identifiable and quantifiable benefit to Pennsylvania and Peoples ratepayers, rather than just resulting in a windfall of $2.7 million annually (based on the new 21 percent federal income tax rate) to Peoples' shareholders or affiliates.

Q. WHAT SPECIFIC RECOMMENDATION DO YOU HAVE IN THE CURRENT PEOPLES RATE CASE FOR APPLYING THE 50% OF THE "REVENUE USE" DIFFERENTIAL THAT ACT 40 REQUIRES TO BE FOR "GENERAL CORPORATE PURPOSES"?

A. I have reflected the 50% differential for general corporate purposes as a source of non-investor-supplied funding for utility working capital. This is a balance of $27,460 and shown on my Exhibit DM-3.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

APPENDIX A

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RESUME OF DANTE MUGRACE

DANTE MUGRACE

Education

Master Business Administration, MBA Strategic Management, Pace University, Lubin School of Business, New York, NY, 2010

Master Public Administration, MPA, Kean University, Union, NJ, 2001

Bachelor of Science, BS. Accounting, St. Peter's University, Jersey City, NJ, 1983

Position

Senior Consultant – PCMG and Associates	2014 – present
Senior Consultant – Snavely King Majoros and Associates	2013 – 2014
Independent Consultant	2012 – 2013
Bureau Chief/Administrative Analyst/Accountant – New Jersey Board of Public Utilities	1983 – 2011

Professional Experience

Mr. Mugrace has 35 years' experience in all aspects of regulatory accounting and policy including processing, analyzing and evaluating utility rate case petitions before Public Service Commissions. Mr. Mugrace examines and evaluates rate filings, contracts, agreements and rate matters regarding utility operations and provides recommendations as to best course of action. Additionally, Mr. Mugrace analyzes and reviews utility regulatory matters and sets forth recommendations for resolution of issues, calculates total revenue requirement needed to cover operating expenses and rate of return; researches and evaluates regulatory utility matters to assess impact on various classes of customers, regarding rates, service, compliance and cost of service provisions, as well as annual true-up and tracking mechanisms.

Prior to undertaking consulting assignments, Mr. Mugrace was the Bureau Chief Utility Rate Manager for the New Jersey Board of Public Utilities, in which role he managed and assigned tasks to a staff of 12 professionals and supervisory personal in the daily administrative, financial and managerial functions of the Division. Mr. Mugrace's primary duties were to determine whether the utility had sufficient revenues to cover its operating expenses and earn a return on its plant investment and to ensure that the utility provided safe, reliable and continuing utility service to its customers. Mr. Mugrace set rates and charges for utility companies, which had revenues of up to $500 million, and ensured that the revenue requirement provided for recovery of all operating expenses, return on investment and depreciation. Mr. Mugrace was also responsible for reviewing and verifying that the companies' property, plant and equipment (up to $2.5 billion) were used and useful in providing service to its customers. Mr. Mugrace coordinated and met with the New Jersey State Department of Environmental Protection to

determine whether water and wastewater utilities were complying with state regulations and were adhering to any regulatory agency directives or orders. Mr. Mugrace developed ways to minimize the rising costs of water utility services by investigating alternative rate structures, analyzing engineering mechanisms and techniques, looking into the feasibility of mergers and acquisitions within the water industry and reviewing financing, and rate alternatives to minimize the impact on ratepayers. Mr. Mugrace was responsible for ensuring that the rate-case process adhered the statutory timeframe for preparing, reviewing and recommending findings to the Board Commissioners on financial operations, costs, revenues and operating expenses, prior to the litigation proceedings. Mr. Mugrace also examined alternative rate recovery mechanisms and clauses, phase-ins of revenue requirements, deferral mechanisms and pass-through of rate charges. Mr. Mugrace assumed the role of Director during transition periods and Administrative changes. Finally, Mr. Mugrace conducted the recruitment and hiring of employees for placement within the Division and the Board.

Professional and Business Affiliations

- Institute of Public Utilities (IPU) Michigan State University (MSU), National Association of Regulatory Utility Commissioners (NARUC), National Association of State Utility Consumer Advocates (NASUCA)

References

Christine Maloni Hoover, Esq.
Assistant Consumer Advocate
Office of Consumer Advocate
555 Walnut Street 5th Floor, Forum Place
Harrisburg, PA 17101-1923
(717) 783-5048
choover@paoca.org

Victor Schock, Director- Advocacy Staff
North Dakota Public Service Commission
State Capital Building
600 East Boulevard, Dept. 408
Bismarck, ND 58505-0480
(701) 328-2400
Vschock@nd.gov

Susan McClure, Esq.
Managing Attorney, Water
NJ Division of Rate Counsel
140 East Front Street, 4th Floor
Trenton, NJ 08625
(609) 984-1460
smcclure@rpa.nj.gov

Jeff Genzer, Esq., Partner
Duncan, Weinberg, Genzer & Pembroke, P.C.
1615 M. Street, N.W., Suite 800
Washington, D.C. 20036
(202) 467-6370
JCG@dwgp.com

Jeanne M. Fox, Esq.
Former NJ BPU President
(973) 271-0500
Jeannefox1@aol.com

Michael Kammer, Director, Water Division
New Jersey Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Trenton, NJ 08625
(609) 292-2422
Mike.Kammer@bpu.nj.gov

Connie Hughes
Former NJ BPU President/Commissioner
(609) 366-3421
Co.hughes47@gmail.com

Fred Butler, Butler Advisor Services
Former NJ BPU Commissioner
176 Grayson Drive
Belle Mead, NJ 08502
(908) 874-6312
Frederickbutler@comcast.net

Michael Schuler, Esq.
Office of the Ohio Consumer Counsel
10 West Broad Street, Suite 1800
Columbus, OH 43215-3485
(614) 466-9547
Michael.Schuler@occ.ohio.gov

Brian Weeks, Esq.
NJ Division of Rate Counsel
140 East Front Street, 4th Floor
Trenton, NJ 08625
(609) 984-1460
bweeks@rpa.nj.gov

Regulatory Projects and Appearances

1. In Re: Peoples Natural Gas Company, LLC for Approval of a General Base Rate Case increases in Natural Gas Service.
   (Appearance: Revenue Requirement on behalf of the Pennsylvania Office of Consumer Advocate)
   Pennsylvania Public Utility Commission – Docket No. R-2023-3044549

2. In Re: Black Hills Energy Arkansas, Inc. (BHEA) and Summit Utilities Arkansas, Inc. (SUA) for a General Change, or Modification in its Rates, Charges and Tariffs
   (Appearance: Incentive Compensation Proposals on behalf of the Attorney General Office)
   Arkansas Public Service Commission – Docket No. (BHEA) - 23-074-U and Docket No. (SUA) - 23-079-U.

3. In Re: Montana Dakota Utilities Co. for Approval to increase Gas Rates for Natural Gas Service in North Dakota
   (Appearance- Revenue Requirement on behalf of the North Dakota Public Service Commission Advocacy Staff)
   North Dakota Public Service Commission – Docket No. PU-23-341

4. In Re: Otter Tail Power Company for Approval to increase Electric Rates in North Dakota.
   (Appearance: Revenue Requirement on behalf of the North Dakota Public Service Commission Advocacy Staff)
   North Dakota Public Service Commission – Docket No. PU-23-342

5. In Re: New Jersey-American Water Company for Approval to change the level of its Purchased Water and Purchased Wastewater Treatment Adjustment Clause for 2023.
   (Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
   New Jersey Board of Public Utilities – Docket No. WR23110791

6. In Re: Verified Petition of Jersey Central Power & Light Company to establish a Rate for Rider Lost Revenue Adjustment Mechanism for Sales Losses incurred during Program Year 2 Pursuant to the Energy Efficiency and Peak Demand Reductions Programs (PY Rider LRAM Filing).
   (Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
   New Jersey Board of Public Utilities – Docket No. ER23110865

7. In Re: Fitchburg Gas & Electric Company; The Berkshire Gas Company; Boston Gas Company d/b/a National Grid; Liberty Utilities; Eversource Gas of Massachusetts d/b/a Eversource Energy and; NSTAR Gas Company d/b/a Eversource Energy – 2023 Gas System Enhancement Program Plan Filings. (DPU GSEP-01; DPU GSEP-02; DPU GSEP-03; DPU GSEP-04; DPU GSEP-05; and DPU GSEP-06, respectively)
   (Appearance: Accounting Issues on behalf of the Commonwealth of Massachusetts Office of the Attorney General)
   Department of Public Utilities

8. In Re: Northern States Power Company – Advance Determination of Prudence – 345 kV Transmission Line – MN.
(Appearance: Accounting Issues and Revenue Requirement on behalf of the North Dakota Public Service Commission Advocacy Staff.
North Dakota Public Service Commission – Docket No. PU-23-142.

9. In Re: Northern States Power Company – Advance Determination of Prudence- Brookings Second Circuit Project.
(Appearance: Accounting Issues and Revenue Requirement on behalf of the North Dakota Public Service Commission Advocacy Staff.
North Dakota Public Service Commission – Docket No. PU-23-295.

10. In Re: Northern States Power Company – Advance Determination of Prudence – 345 kV Big Stone to Sherburne.
(Appearance: Accounting Issues and Revenue Requirements on behalf of the North Dakota Public Service Commission Advocacy Staff.
North Dakota Public Service Commission – Docket No. PU-23-329.

11. In Re: Rockland Electric Company – Annual Conservation Incentive Program Filing – Reconciliation for the period July 1, 2022 – June 30, 2023.
(Appearance: Accounting Issues on behalf the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. ER23070471

12. In Re: Public Service Electric & Gas Company for Approval of Incremental COVID-19 Costs for Recovery through a New Special Purpose Clause and for Authorization to Recovery Uncollectible Costs for Gas Through the Societal Benefits Charge
13. (Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. ER23070448

14. In Re: Jersey Central Power & Light Company's Verified Petition Seeking Review and Approval of the Net Deferred Costs Included in its COVID-19 Regulatory Asset and Establishment of a COVID-19 Recovery Charge (JCP&L CRC-Filing)
(Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. ER23070453.

15. In Re: Aqua New Jersey, Inc. Petition for 2024 PSTAC Rate and True-up for 2021 and 2022 PSTAC.
(Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. WR23080576

16. In Re: Public Service Electric & Gas Company for Approval of Changes in its Electric Tax Adjustment Credit and Gas Tax Adjustment Credit 2023 (2023 TAC Filing)
(Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. ER23090634 and GR23090635

17. In Re: New Jersey – American Water Company for Deferral Accounting Authority for the Costs of Implementing the Clean Energy Act of 2018 Benchmarking Requirements.
(Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. WF23060346

18. In Re: Public Service Electric & Gas Company – Annual BGSS (2023-2024) Commodity Charge Filing for its Residential Gas Customers under its Periodic Pricing Mechanism and for Changes in its Balancing Charge Rate.
(Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. GR23060331

19. In Re: Public Service Electric & Gas Company – Electric and Gas Green Programs Recovery Charges 2023. (GPRC).
(Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. ER23070423 and GR23070424

20. In Re: Public Service Electric & Gas Company – Electric Solar Pilot Recovery Charge (SPRC) for its Solar Loan I Program (2023).
(Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. ER23060412

21. In Re: Middlesex Water Company for approval of Proposed Cost Recovery of Lead Service Line Replacement Program
(Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. WR23050291

22. In Re: Black Hills Wyoming Gas, LLC d/b/a Black Hills Energy for Approval of a General Rate Increase of $19,262,412 to the Retail Gas Rates.
(Appearance: Revenue Requirement on behalf of the Wyoming Office of Consumer Advocate)
Wyoming Public Service Commission – Docket No. 30026-78-GR-23

23. In Re: Pittsburgh Water and Sewer Authority for an Increase in Rates for Water Service, Wastewater Service and Stormwater Service
(Appearance: Revenue Requirement on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket Nos. R-2023-3039920 (water), R-2023-3039921 (wastewater), and R-2023-3039919 (stormwater)

24. In Re: Massachusetts Electric and Nantucket Electric Companies d/b/a National Grid – Request for recovery of Incremental Storm related expenses associated with fourteen weather events between February 2020 and December 2020.
(Appearance: Storm Cost recovery (Operating and Maintenance Expenses) on behalf of the Massachusetts Office of Attorney General.
Massachusetts Department of Public Utilities – DPU No. 22-43.

25. In Re: Philadelphia Gas Works – for approval of an Increase in rates for Distribution Gas Service for 2023
(Appearance: Revenue Requirement on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket No. R-2023-3037933

26. In Re: Lanai Water Company, Inc. for Review and Approval of Rate Increases, Revised Rate Schedules and Charges to its Tariff.
(Appearance: Revenue Requirement on behalf of the Hawaii Division of Consumer Advocacy)
Hawaii Public Utilities Commission – Docket No. 2022-0233

27. In Re: Hawaii Water Service Company, Inc., For Approval of a General Rate Increase for Its Pukalani Wastewater Division and Certain Tariff Changes
(Appearance: Revenue Requirement on behalf of the Hawaii Division of Consumer Advocacy)
Hawaii Public Utilities Commission – Docket No. 2022-0186

28. In Re: UGI Utilities – Electric Division for Review of an Electric Base Rate Case proceeding for 2023.
(Appearance: Revenue Requirement on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket No. R-2022-3037368

29. In Re: Southern Maryland Electric Cooperative, Inc. (SMECO) for Authority to Revise its Rates and Charges for Electric Service and Certain Rate Design Changes.
(Appearance: Revenue Requirement on behalf of the Maryland Office of People's Counsel)
Maryland Public Service Commission – Case No. 9688

30. In Re: Public Service Electric and Gas Company – 2022 Electric and Gas Tax Adjustment Credit (TAC)
(Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
NJ Board of Public Utilities – BPU Docket Nos. ER22100667 and GR22100668

31. In Re: Public Service Electric and Gas Company – 2022 Green Program Recovery Charge.
(Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
NJ Board of Public Utilities – BPU Docket Nos. ER22070413 and GR22070414

32. In Re: Rockland Electric Company – Annual Conservation Incentive Program Filing – Reconciliation for the Period July 1, 2021 – June 30, 2022.
(Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
NJ Board of Public Utilities – BPU Docket No. ER22070469.

33. In Re: Atlantic City Electric Company for Implementation to its Conservation Incentive Program Rate Mechanism and Associated Customer Class Rate (2022)

(Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
NJ Board of Public Utilities – BPU Docket No. ER22070463

34. In Re: Public Service Electric and Gas Company – 2022/2023 Annual BGSS Commodity Charge filing for its Residential Gas Customers under its Periodic Pricing Mechanism and for changes to its Balancing Charge.
(Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
NJ Board of Public Utilities – BPU Docket No. GR22060363

35. In Re: Citizens' Electric Company of Lewisburg, PA – 2022 Base Rate Case Proceeding for an Increase in Electric Distribution Rates.
(Appearance: Revenue Requirement on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket No. R-2022-3032369

36. In Re: Valley Energy, Inc. – 2022 Base Rate Case for an Increase in Gas Distribution Rates.
(Appearance: Revenue Requirement on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket No. R-2022-3032300

37. In Re: Berkshire Gas Company – 2021 Gas System Enhancement Program Reconciliation Filing.
(Appearance: Revenue Requirement on behalf of the Massachusetts Attorney General's Office)
Massachusetts Department of Public Utilities – D.P.U. 22-GREC-02

38. In Re: Liberty Utilities (New England Natural Gas Company) 2021 Gas System Enhancement Program Reconciliation Filing.
(Appearance: Revenue Requirement on behalf of the Massachusetts Attorney General's Office)
Massachusetts Department of Public Utilities – D.P.U. 22-GREC-04

39. In Re: Eversource Gas Company (Eversource Energy) 2021 Gas System Enhancement Program Reconciliation Filing.
(Appearance: Revenue Requirement on behalf of the Massachusetts Attorney General's Office)
Massachusetts Department of Public Utilities – D.P.U. 22-GREC-05

40. In Re: South Jersey Gas Company – 2022 Base Rate Case Proceeding for an Increase in rates for Distribution Gas Service.
(Appearance: Revenue Requirement, CWC and Consolidated Income Taxes on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. GR22040253

41. In Re: Public Service Electric and Gas Company – 2022 Electric Conservation Incentive Program (CIP) for changes in its Electric CIP rate for 2022.
(Appearance: Revenue Requirement on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. ER22020035

42. In Re: PECO Energy Company-Gas Division – 2022 Base Rate Case Proceeding for an Increase in rates for Distribution Gas Service.
(Appearance: Revenue Requirement on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket No. R-2022-3031113.

43. In Re: Nova Scotia Power Company- 2022-2024 General Rate Application for an Increase in Rates for Electric Service
(Appearance- Review of COSS – Subcontract with Synapse Energy Economics, Inc. on behalf of the Nova Scotia Utility Review Board)
Nova Scotia Utility and Review Board – Docket No. M10431

44. In Re: Georgia Power Company – 2022 Base Rate Case petition for an Increase in rates for Electric Distribution Service
(Appearance: Review of O&M Expenses for calendar years 2023-2025 on behalf of the Georgia Public Service Commission – Docket No. TBD

45. In Re: UGI Utilities Inc, Gas Division – 2022 Base Rate Case petition for an Increase in Distribution Gas Service Rates
(Appearance: Revenue Requirement on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket No. R-2022-3030218

46. In Re: Hawaii-American Water Company – Approval of Rate Increases and Revised Rate Schedules for Wastewater Services – 2021
(Appearances: Revenue Requirement on behalf of the Hawaii Division of Consumer Advocacy)
Hawaii Public Service Commission – Case No. 2021-0063

47. In Re: Kalaeloa Water Company – Approval of a General Rate Increase / Adjustments for Water and Wastewater Services – 2021
(Appearance: Revenue Requirement on behalf of the Hawaii Division of Consumer Advocacy)
Hawaii Public Service Commission – Case No. 2021-0005

48. In Re: Northern States Power Company – 2021 Natural Gas Rate Increase Application
(Appearance: Revenue Requirements on behalf of the Advocacy Staff of the North Dakota Public Service Commission – Case No. PU-21-381

49. In Re: Shore Water Company – Petition for an Increase in Rates for Water Service and Other Relief
(Appearance: New Jersey Division of Rate Counsel – Accounting and Revenue Requirement)
New Jersey Board of Public Utilities – BPU Docket No. WR21091141

50. In Re: Atlantic City Sewerage Company – Petition for an Increase in Rates for Sewerage Service and other Tariff Changes
(Appearance: New Jersey Division of Rate Counsel – Accounting and Revenue Requirement)
New Jersey Board of Public Utilities – BPU Docket No. WR21071006

51. In Re: Gordon's Corner Water Company – Petition for an Increase in Rates and Charges for Water Service
(Appearance: New Jersey Division of Rate Counsel – Accounting and Revenue Requirement)
New Jersey Board of Public Utilities – BPU Docket No. WR21070979

52. In Re: The Petition of HPBS Inc., for review and approval of Central Scheduling System (CSS) charge increase and revised CSS Schedule (2021)
(Appearance – Accounting and Revenue Requirement on behalf of the Hawaii Division of Commerce and Consumer Affairs
Hawaii DCCA – Docket No. PTP-2021-001

53. In Re: The Berkshire Gas Company, 2020 Gas System Enhancement Program Reconciliation Filing
(Appearance – Massachusetts Attorney General's Office – Accounting and Revenue Requirement)
Massachusetts Department of Public Utilities – DPU Docket No. 21-GREC-02

54. In Re: Eversource Gas Company of Massachusetts d/b/a Eversource Energy, 2020 Gas System Enhancement Program Reconciliation Filing
(Appearance – Massachusetts Attorney General's Office – Account and Revenue Requirement)
Massachusetts Department of Public Utilities – DPU Docket No. 21-GREC-05

55. In Re: NSTAR Gas Company d/b/a Eversource Energy, 2020 Gas System Enhancement Program Reconciliation Filing
(Appearance: Massachusetts Attorney General's Office – Accounting and Revenue Requirement)
Massachusetts Department of Public Utilities – DPU Docket No. 21-GREC-06

56. In Re: Joint Petition of New Jersey Natural Gas Company and Public Service Electric and Gas Company for Authorization and Approval of a Waiver of Certain Accounting Treatment Pursuant to the Clean Energy Order

(Appearance – New Jersey Division of Rate Counsel – Accounting and Revenue Requirement.
New Jersey Board of Public Utilities – BPU Docket No. EO20030254

57. In Re: Public Service Electric and Gas Company – 2021/2022 Annual BGSS Commodity Charge Filing for its Residential Gas Customers under its Periodic Pricing Mechanism and for Changes in its Balance Charge.
(Appearance – New Jersey Division of Rate Counsel – Accounting and Revenue Requirement)
New Jersey Board of Public Utilities – BPU Docket No. GR21060878

58. In Re: Middlesex Water Company – Petition for Approval of an Increase in Rates for Water Service and Other Tariff Changes.
(Appearances – New Jersey Division of Rate Counsel – Accounting and Revenue Requirement)
New Jersey Board of Public Utilities – BPU Docket No. WR21050813

59. In Re: New Jersey Natural Gas Company – Petition for an Increase in Gas Base Rates and Changes in its Tariff for Gas Service and for a Change to Depreciation Rates for Gas Property and for Approval of a Base Rate Adjustment Pursuant to the NJ RISE and SAFE II Programs.
(Appearances: New Jersey Division of Rate Counsel – Accounting and Revenue Requirement)
New Jersey Board of Public Utilities – BPU Docket Nos. GR21030679 and GR21030680.

60. In Re: PECO Energy Company – a division of Exelon Corp., for a General Base Rate Case Filing for Electric Operations
(Appearances: Accounting and Policy on behalf of the Pennsylvania Office of the Consumer Advocate)
Pennsylvania Public Utility Commission – Docket No. R-2021-3024601

61. In Re: The Pittsburgh Water and Sewer Authority for approval of increased rates and charges for Water, Wastewater and Stormwater services
(Appearance: Accounting and Policy, and Regulatory Policy on behalf of the Pennsylvania Office of the Consumer Advocate)
Pennsylvania Public Utility Commission – Docket Nos. R-2021-3024773 (Water) R-2021-3024774 (Wastewater) and R-2021-3024779 (Stormwater).

62. In Re: Northern States Power Company – 2021 Electric Base Rate Case Increase
(Appearance: Revenue Requirement on behalf of the Advocacy Staff of the North Dakota Public Service Commission)
North Dakota Public Service Commission – Case No. PUC-20-441

63. In Re: Public Service Electric and Gas Company – Approval of a Tax Adjustment Clause (TAC).
(Appearance; Revenue Requirement on behalf of the New Jersey Division of Rate Counsel)

New Jersey Board of Public Utilities – Docket Nos. ER20100685 and GR20100686.

64. In Re: Pike County Light and Power Company – Approval to increase base rates for Electric and Gas Service.
(Appearance: Revenue Requirement in behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket Nos. R-2020-3022134 (Gas) and R-2020-3022135 (Electric)

65. In Re: Jersey Central Power and Light Company for Approval of JCP&L's Energy Efficiency and Conservation Plan Including Energy Efficiency and Peak Demand Reduction Programs.
(Appearance: Revenue Requirement on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket Nos. QO19010040 and EO20090620

66. In Re: Atlantic City Electric Company for Approval of an Energy Efficiency Program, Cost Recovery Mechanism, and Other Related Relief for Plan Years One Through Three.
(Appearance: Revenue Requirement on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket Nos. QO19010040 and EO20090621

67. In Re: Rockland Electric Company for Approval of Its Energy Efficiency and Peak Demand Reduction Programs.
(Appearance: Revenue Requirement on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket Nos. QO19010040 and EO20090623

68. In Re: Public Service Electric and Gas Company for Approval of Changes in its Electric Green Programs Recovery Charge and its Gas Green Programs Recovery Charge 2020 PSE&G Green Programs Cost Recovery filing
(Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket Nos. ER20060467 and GR20060468

69. In Re: Public Service Electric and Gas Company's 2020/2021 Annual BGSS Commodity Charge filing for its Residential Gas Customers under its Pricing Mechanism and for Changes in its Balance Charge
(Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. GR20060379

70. In Re: Public Service Electric and Gas Company's 2020 Annual Margin Adjustment Clause (MAC)
(Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. GR20060384

71. In Re: South Jersey Gas Company for Approval to Revise the Rider H Rate Associated with the Tax Cuts and Jobs Act of 2017

(Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. GR20060382

72. In Re: Berkshire Gas Company -2019 Gas System Enhancement Program Reconciliation Filing
(Appearance: Revenue Requirement on behalf of the Massachusetts Office of the Attorney General)
Commonwealth of Massachusetts -Department of Public Utilities – DPU 20-GREC-02

73. In Re: Bay States Gas Company d/b/a Columbia Gas – 2019 Gas System Enhancement Program Reconciliation Filing.
(Appearance: Revenue Requirement on behalf of the Massachusetts Office of the Attorney General)
Commonwealth of Massachusetts – Department of Public Utilities – DPU 20-GREC-05

74. In Re: NSTAR Gas Company – 2019 Gas System Enhancement Program Reconciliation Filing
(Appearance: Revenue Requirement on behalf of the Massachusetts Office of the Attorney General)
Commonwealth of Massachusetts – Department of Public Utilities – DPU 20-GREC-06

75. In Re: South Jersey Gas Company for Approval of Increased Base Tariff Rates and Charges for Gas Service, Changes to Depreciation Rates and Other Tariff Revisions.
(Appearances: Revenue Requirement and Cash Working Capital) on behalf of the New Jersey Division of Rate Counsel.
New Jersey Board of Public Utilities – Docket No. GR20030243

76. In Re: Jersey Central Power & Light Company for Review and Approval of Increased in, and Other Adjustments to Rates and Charges for Electric Services and approval of Other Proposed Tariff Revisions (Appearance: Revenue Requirement, Cash Working Capital, Consolidated Income Taxes, LED Conversion and Reliability Roll-In) on behalf of the New Jersey Division of Rate Counsel.
New Jersey Board of Public Utilities – Docket No. ER20020146

77. In Re: The Pittsburgh Water and Sewer Authority for approval of increased rates and charges for water and wastewater service and for approval of a multi-year rate plan.
(Appearance: Accounting and Policy, Customer Service and Regulatory Policy) on behalf of the Pennsylvania Office of the Consumer Advocate)
Pennsylvania Public Utility Commission – Docket Nos. R-2020-3017951 and R-2020-3017970.

78. In Re: New Jersey-American Water Company, Inc. for approval of Increased Base Tariff Rates and Charges for Water and Wastewater Services and Other Tariff Revisions.
(Appearance: Accounting and Revenue Requirement and Cash Working Capital / Consolidated Income Taxes) on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. WR19121516

79. In Re: Hawaiian Electric Company, Inc., for approval of a General Rate Increase and Revised Rate Schedules and Rules.
(Appearance: Accounting and Revenue Requirement on behalf of the Hawaiian Division of Consumer Advocacy)
Hawaii Public Utilities Commission – Docket No. 2019-0085

80. In Re: Mount Olive Villages Water Company for approval of an Increase in Rates for Water Service and Other Tariff Changes.
(Appearance: Accounting and Consulting Services on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. WR19060770

81. In Re: Mount Olive Villages Sewer Company for approval of an Increase in Rates for Sewer Service and Other Tariff Changes.
(Appearance: Accounting and Consulting Services on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. WR19060769

82. In Re: Public Service Electric and Gas Company for approval of changes in its Electric Green Programs Recovery and its Gas Green Programs Recovery Charge (2019 PSE&G Green Programs Cost Recovery Filing).
(Appearance: Accounting and Consulting Services on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket Nos. ER19070764 and GR19070765

83. In Re: Proposed Amendment to N.J.A.C. 14:9- Adoption by reference to the Uniform System of Accounts for Water Utilities and Wastewater Utilities.
(Appearance: Consulting Services on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities- Docket Nos. WX19050612 (Water) and WX19050613 (Wastewater)

84. In Re: Public Service Electric and Gas Company's 2019/2020 Annual BGSS Commodity Charge filing for its Residential Gas Customers Under its Periodic Pricing Mechanism and for Changes in its Balancing Charge.
(Appearance: Revenue Requirement and accounting/consulting services on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. GR190600699

85. In Re: Bay States Gas Company d/b/a Columbia Gas of Massachusetts for Approval of a 2018 Gas System Enhancement Program Reconciliation Filing
(Appearance: Revenue Requirement on behalf of the Massachusetts Office of the Attorney General)
Commonwealth of Massachusetts Department of Public Utilities – Docket No. 19-GREC-05

86. In Re: NSTAR Gas Company d/b/a Eversource Energy for Approval of a 2018 Gas System Enhancement Program Reconciliation Filing
(Appearance: Revenue Requirement on behalf of the Massachusetts Office of the Attorney General)
Commonwealth of Massachusetts Department of Public Utilities – Docket No. 19-GREC-06

87. In Re: Public Service Electric and Gas Company for Approval of Gas Rate Base Adjustments Pursuant to its Gas System Modernization Program (April 2019 GSMP)
(Appearance: Revenue Requirement on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. GR19040522

88. In Re: Kalaeloa Water Company, LLC for Approval of General Rate Case and Revised Rules, Regulations and Rates.
(Appearance: Revenue Requirement on behalf of the Hawaii Division of Consumer Advocacy)
Hawaii Public Utilities Commission – Docket No. 2019-0057

89. In Re: Elizabethtown Gas Company for Approval of an Increase in Rates and Charges for Gas Service, Changes to Depreciation Rates and Other Tariff Revisions.
(Appearance: Revenue Requirement and Other Accounting Issues on behalf of the New Jersey Division of Rate Counsel).
New Jersey Board of Public Utilities – Docket No. GR19040586

90. In Re: Petition of Peoples Natural Gas Company for Approval of an Increase in Rates for Natural Gas Distribution Service.
(Appearance: Revenue Requirement and Other Accounting Issues on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket No. R-2018-3006818

91. In Re: Petition of Aqua New Jersey, Inc. for Approval of an Increase in Rates for Water Service and other Tariff Changes.
(Appearance: Revenue Requirement and other Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. WR18121351

92. In Re: Petition of Public Service Electric and Gas Company for Approval of its Clean Energy Future – Energy Efficiency (CEF-EE) Program on a Regulated Basis.
(Appearance: Revenue Requirement and other Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket Nos. GO18101112 and EO18101113.

93. In Re: Petition of Public Service Electric and Gas Company for Approval of its Clean Energy Future – Energy Vehicle and Energy Storage (CEF-EVES) Program on a Regulated

Basis. (Appearance – Revenue Requirement and other Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. EO18101111.

94. In Re: Petition of New Jersey Natural Gas Company- Request for Deferred Accounting Authority for Costs Related to New Information Technology Systems. (Appearance: Impact on Revenues, prudency of costs on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. GR18101096

95. In Re: Petition for Approval of An Indirect Change in Control of the New Jersey Public Utilities Subsidiaries of SUEZ Water Resources, Inc. and Other Related Approvals. (Appearance: Impact on Rates, Service, Employees, Positive Benefits on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. WM18090982

96. In Re: The Matter of the Merger of Roxbury Water Company into New Jersey American Water Company (Appearance: Impact on Rates, Service and Employees, Positive Benefits on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. WM18080904

97. In Re: The Matter of the Application of Maryland-American Water Company for Authorization to Adjust its Existing Schedule of Tariffs and Rates.
(Appearance: Revenue Requirement on behalf of the Maryland Office of People's Counsel)
Maryland Public Service Commission – Case No. 9487

98. In Re: The Matter of the Joint Petition for Approval of an Increase in Rates for Water and Wastewater Service and Other Tariff Changes for SUEZ Water NJ, Inc., Toms River, Inc., Arlington Hill, Inc., West Milford, Inc., Matchaponix, Inc., and Princeton Meadows, Inc. (Appearance: Revenue Requirement and the development of Consolidated Income Taxes on behalf of the NJ Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. WR18050593

99. In Re: The Matter of the Application of Atlantic City Electric Company to Adjust the Level of its Rider RGGI Rate Associated with its Solar Renewable Energy Certificate Financing Program 2018 (Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. ER18050543

100. In Re: The Matter of the Petition of New Jersey Natural Gas Company's Approval of the Cost Recovery Associated with Energy Efficiency Programs (Appearance; Revenue Requirement on behalf of the NJ Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No, GR18050585

101. In Re: The Matter of Bay States Gas Company d/b/a Columbia Gas of Massachusetts, 2017 Gas System Enhancement Reconciliation Filing (Appearance: Revenue Requirement on behalf of the Massachusetts Attorney General's Office of Ratepayer Advocacy)
    Commonwealth of Massachusetts – Department of Public Utilities – Docket No. D.P.U. 18-GREC-05.

102. In Re; The Matter of NSTAR Gas Company d/b/a Eversource Energy, Gas System Enhancement Program Reconciliation Filing (Appearance: Revenue Requirement on behalf of the Massachusetts Attorney General's Office of Ratepayer Advocacy)
    Commonwealth of Massachusetts – Department of Public Utilities – Docket No. D.P.U. 18-GREC-06.

103. In Re: The Matter of the Merger of SUEZ Water NJ, SUEZ Water Toms River, SUEZ Water Arlington Hills, SUEZ Water West Milford, SUEZ Water Princeton Meadows and SUEZ Water Matchaponix (Appearance: Positive Benefits related to the Merger on behalf of the NJ Division of Rate Counsel)
    New Jersey Board of Public Utilities – BPU Docket No. WR18030266

104. In Re: The Matter of the Columbia Gas of Pennsylvania for a General Rate Increase in Distribution Gas Service (Appearance; Accounting Issues and Revenue Requirement on behalf of the Pennsylvania Office of Consumer Advocate)
    Pennsylvania Public Utility Commission – Docket No. R-2018-2647577

105. In Re: The Matter of the New Jersey Board of Public Utilities Consideration of the Tax Cuts and Jobs Act of 2017 – Generic Proceeding (Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
    New Jersey Board of Public Utilities – BPU Docket No. AX18010001

106. In Re: Acquisition of Elizabethtown Gas, a Division of Pivotal Utilities Holdings, Inc. by ETG Acquisition Corp., a Division of South Jersey Industries, Inc., and Related Transactions. (Appearance: Customer Service Issues/Employee and Labor Relations on behalf of the NJ Division of Rate Counsel)
    New Jersey Board of Public Utilities – BPU Docket No. GM17121309.

107. In Re: Middlesex Water Company – Base Rate Case Proceeding for Water Service. (Appearance: revenue requirement on behalf of the NJ Division of Rate Counsel).
    New Jersey Board of Public Utilities – BPU Docket No. WR17101049.

108. In Re: Township of East Brunswick – Sewer Rate Study – (Evaluation of the existing sewer rate structure and examining and quantify costs for future expansion).

109. In Re: Montana-Dakota Utilities – Base Rate Case Proceeding for Gas Service. (Appearance: revenue requirement on behalf of the North Dakota Public Service Commission). NDPSC Docket No. PU-17-295.

110. In Re: Andover Utility Company – Base Rate Case Proceeding for Wastewater Services. (Appearance: revenue requirement on behalf of the New Jersey Division of Rate Counsel).
New Jersey Board of Public Utilities – BPU Docket No. WR17070726.

111. In Re: Public Service Electric and Gas Company- Approval of Changes in its Electric and Gas Green Programs Recovery Charges "2017 Public Service Electric & Gas Green Programs Cost Recovery Filing. (Appearance: revenue requirement on behalf of the New Jersey Division of Rate Counsel).
New Jersey Board of Public Utilities – BPU Docket Nos. ER17070724 and GR17070725.

112. In Re: Bay States Gas Company d/b/a Columbia Gas of Massachusetts, 2016 Gas System Enhancement Program Reconciliation Filing, (Appearance: revenue requirement on behalf of the Massachusetts Attorney General's Office of Ratepayer Advocacy).
Commonwealth of Massachusetts Department of Public Utilities – Docket No. D.P.U. 17-GREC-05.

113. In Re: NSTAR Gas Company d/b/a Eversource Energy, 2016 Gas System Enhancement Program Reconciliation Filing (Appearance: revenue requirement on behalf of the Massachusetts Attorney General's Office of Ratepayer Advocacy.
Commonwealth of Massachusetts Department of Public Utilities – Docket No. D.P.U. 17-GREC-06.

114. In Re: Petition of Columbia Gas of Maryland – Increase in rates for Distribution Service – (Appearance: revenue requirement on behalf of the Office of People's Counsel) Public Service Commission of Maryland – Case No. 9447

115. In Re: Petition of South Jersey Gas Company – Increase in base rates for gas services – (Appearance: revenue requirement on behalf of the NJ Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. GR17010071

116. In Re: Petition of UGI Penn Natural Gas – Increase in base rates for gas services – (Appearance: revenue requirement on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utilities Commission Docket No. R-2016-2580030

117. In Re: Petition of PJM Interconnection, LLC. – Mid-Atlantic Interstate Transmission, LLC. Formula Rate Filing. (Appearance on behalf of the Pennsylvania Office of Consumer Advocate).
FERC Docket No. ER17-211-000

118. In Re: Petition of Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas Company for approval of Increased Base Tariff Rates and Charges for Gas Service and Other Tariff Revisions (Appearance: revenue requirement on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. GR16090826

119. In Re: Petition of SUEZ Water New Jersey, et al – Approval of a Management and Services Agreement pursuant to N.J.S.A 48: 3-7.1 (Appearance on the reasonableness of contract agreements on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. WO16080806

120. In Re: Petition of SUEZ Water Arlington Hills Inc. – Approval of an Increase in Rates for Wastewater Services and other Tariff Changes (Appearance: revenue requirement on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. WR16050510

121. In Re: Petition of Public Service Electric and Gas Company – 2016 Marginal Adjustment Clause (MAC) (Appearance; reconciliation and rate setting on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. GR16060484

122. In Re: Petition of Public Service Electric and Gas Company for Approval of Changes in its Electric Green Programs Recovery Charges and its Gas Green Program Recovery Charges 2016 PSEG Program Cost Recovery Filing
(Appearance: reconciliation and rate setting on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket Nos. ER16070613 and GR16070614

123. In Re: Petition of the Mount Olive Village Sewer Company, Inc., for Approval of an Increase in Rates for Service (Appearance: revenue requirement on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. WR16050391

124. In Re: Petition of the Mount Olive Village Water Company, Inc. for Approval of an Increase in Rates for Service (Appearance; revenue requirement on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. WR16050390

125. In Re: Petition of Fitchburg Gas and Electric Light Company d/b/a Unitil for Approval of its 2015 Gas System Enhancement Plan Reconciliation Filing (2016) - (Analysis and Advice to Counsel: computation of the revenue requirement and rate impact on behalf of the Massachusetts Attorney General Office of Ratepayer Advocacy)
MA Department of Public Utilities Docket No. D.P.U. 16-GREC-01

126. In Re: Petition of Bay State Gas Company d/b/a Columbia Gas of Massachusetts for Approval of its 2015 Gas System Enhancement Plan Reconciliation Filing (2016) - (Appearance: computation of the revenue requirement and rate impact on behalf of the Massachusetts Attorney General Office of Ratepayer Advocacy)
MA Department of Public Utilities Docket No. D.P.U. 16-GREC-05

127. In Re: Petition for Approval of Gas Infrastructure Contract Between Public Service Company of New Hampshire d/b/a Eversource Energy and Algonquin Gas Transmission, LLC (2016) - (Analysis and Advice to Counsel: compliance with statutes and regulations, review of contract, and ratemaking on behalf of the New Hampshire Office of Consumer Advocate)
    NH Public Utilities Commission Docket No. DE 16-241

128. In Re: Central Maine Power Company, Annual Compliance Filing and Price Change (2016) - (Analysis and Advice to Counsel; tax normalization regulatory asset on behalf of the Maine Office of the Public Advocate)
    ME Public Service Commission Docket No. 2016-00035

129. In Re: Bulletin 2015-10 Generic Proceeding to Establish Parameters for the Next Generation PBR Plans (Appearance: productivity adjustments/performance-based ratemaking on behalf of the Alberta Utilities Consumer Advocate)
    Alberta Utilities Commission Proceeding 20414

130. In Re: The Matter of Request by Emera Maine for Approval of a Rate Change (2016) - (Appearance: revenue requirement on behalf of the Maine Office of the Public Advocate)
    Maine Public Utilities Commission Docket No. 15-00360)

131. In Re: the Matter of the Joint Application of the Southern Company, AGL Resources Inc., and Pivotal Holdings, Inc. d/b/a Elkton Gas (2015-2016) - (Analysis and advice to counsel: customer service impacts, employee impacts, supplier diversity on behalf of the Maryland Office of People's Counsel)
    MD PSC Case No. 9404

132. In Re: The Matter of the Merger of Southern Company and AGL Inc. (2015-2016) - (Appearance: customer service impacts and employee impacts on behalf of the NJ Division of Rate Counsel)
    New Jersey BPU Docket No. GM15101196

133. In Re: The Matter of the United Water New Jersey, Inc., for Approval of an Increase in Rates for Water Service and Other Tariff Changes (2015-2016) - (Appearance: revenue requirements, rate base issues and operating income on behalf of the NJ Division of Rate Counsel)
    New Jersey BPU Docket No. WR15101177

134. In Re: Petition of Boston Gas Company and Colonial Gas Company d/b/a National Grid for Approval of Precedent Agreements with Millennium Pipeline Company, LLC (2015) - (Analysis: review of contract and compliance of the Gas Supply Plan on behalf of the Massachusetts Attorney General Office of Ratepayer Advocacy)
    MA D.P.U. 15-130

135. In Re: Petition of Boston Gas Company and Colonial Gas Company d/b/a National Grid for Approval of Agreements for LNG or Liquefaction Services with GDF Suez Gas NA, LLC;

Northeast Energy Center, LLC; Metro LNG, L.P.; and National Grid LNG (2015) - (Analysis: review of contract and compliance of the Gas Supply Plan on behalf of the Massachusetts Attorney General Office of Ratepayer Advocacy)
MA D.P.U. 15-129

136. In Re: Columbia Gas of Massachusetts CY2014 Targeted Infrastructure Reinvestment Factor (TIRF) Compliance Filing (2015) - (Appearance: computation of the revenue requirement impact on the TIRF on behalf of the Massachusetts Attorney General Office of Ratepayer Advocacy)
MA D.P.U. 15-55

137. In Re: The Matter of the Bay State Gas Company d/b/a Columbia Gas of Massachusetts for Approval of its Targeted Infrastructure Reinvestment Factor (TIRF) for CY 2013 (2014) - (Appearance: computation of the revenue requirement impact on the TIRF)
MA D.P.U. 14-83

138. In Re: The Matter of the Merger of Exelon Corporation and Pepco Holdings, Inc. (Atlantic City Electric Company) (2014-2015) - (Appearance: customer service impacts)
New Jersey BPU Docket No. EM14060581

91. In Re: Public Utilities Commission of Ohio – In the Matter of the Application of Ohio Power Company (American Electric Power Ohio) (AEP Ohio) to Adopt a Final Implementation Plan for the Retail Stability Rider – (Appearance - Accounting Issues) (2014) on behalf of the Ohio Office of Consumer Counsel (OCC)
PUCO Case No. 14-1186-EL-RDR

92. In Re: Public Utilities Commission of Ohio - In the Matter of the Application of Aqua Ohio, Inc. to Increase its Rates and Charges for its Waterworks Service. – Revenue and Rates (2014) - (Appearance: operating income, certain rate base issues and income taxes on behalf of the Ohio Office of Consumer Counsel)
PUCO Case No. 13-2124-WW-AIR

93. In Re: New York Public Service Commission, as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. Revenue Requirement (2013-2014) – (Appearance: revenue requirement, rate base issues and operating income on behalf of the Intervenor, the County of Westchester)
NYPSC Case Nos. 13-E-0030, 13-G-0031 and 13-S-0032, et al

94. In Re: North Dakota Public Service Commission, - Application of Northern States Power Company for Authority to Increase Rates for Electric Service in North Dakota, On-Going Revenue Requirement (2013) - (Appearance: revenue requirement and rate base, operating income, operating and maintenance expenses on behalf of the North Dakota Public Service Commission Staff)
North Dakota Case No. PU-12-813

95. In the Matter of the Petition of New Jersey American Water Company for Authorization to Implement a Distribution System Improvement Charge (DSIC) Order Denying Petition and Instituting Stakeholder Process (2008) - (Case manager on policy decision and revenue requirement impact on behalf of the Staff of the NJ Board of Public Utilities)
    BPU Docket No. WO08050358

96. In the Matter of the Joint Petition of the City of Trenton, New Jersey and New Jersey-American Water Company, Inc. for Authorization of the Purchase and Sale of the Assets of the Outside Water Utility System ("OWUS") of the City of Trenton, New Jersey and for Other Relief Order Adopting Initial Decision, (2008) - (Case manager on the revenue requirement impact on behalf of the Staff of the NJ Board of Public Utilities)
    BPU Docket No. WM08010063

97. In the Matter of the Petition of United Water New Jersey, United Water Toms River, United Water Lambertville, United Water Mid-Atlantic and Gaz de France for Approval as Need for a Change in Ownership and Control (2007) - (Case manager on customer impact, employee impact and impact on rates on behalf of the Staff of the NJ Board of Public Utilities)
    BPU Docket No. WM06110767

98. In the Matter of the Petition of United Water Arlington Hills Sewerage, Inc. for an Increase in Rates for Wastewater Service and Other Tariff Changes (2009) - (Case manager on revenue requirement and overall rate proceeding on behalf of the Staff of the NJ Board of Public Utilities)
    BPU Docket No. WR08100929

99. In the Matter of the Petition of United Water New Jersey Inc. for Approval of an Increase in Rates for Water Service and Other Tariff Changes, (2009) - (Case manager on revenue requirement and overall rate proceeding on behalf of the Staff of the NJ Board of Public Utilities)
    BPU Docket No. WR08090710

100. In the Matter of the Petition of United Water Toms River, Inc. for Approval of an Increase in Rates for Water Service and Other Tariff Changes (2008) - (Case manager on the revenue requirement and overall rate proceeding on behalf of the Staff of the NJ Board of Public Utilities)
    BPU Docket No. WR08030139

101. In the Matter of the Joint Petitioners of New Jersey-American Water Company, Inc., S.J. Services, Inc., South Jersey Water Company, Inc. and Pennsgrove Water Supply Company, Inc. for Among Other Things Approval of a Change in Control of South Jersey Water Supply Company, Inc. and Pennsgrove Water Supply Company, Inc. (2007) - (Case manager on the overall rate proceeding on behalf of the Staff of the NJ Board of Public Utilities)
    BPU Docket No. WM07020076

102. In the Matter of the Petition of Aqua, New Jersey, Inc. for Approval of an Increase in Rates for Water Service and Other Tariff Changes (2008) - (Case manager on revenue requirement and the overall rate proceeding on behalf of the Staff of the NJ Board of Public Utilities)
    BPU Docket No. WR0712095

103. I/M/O the Joint Petition of Thames Water, Aqua Holdings GMBH, on Behalf of Itself and Its Parent Holdings Company, RWE Aktiengesellschaft, Thames Water Aqua US Holdings, Inc., American Water works Company Inc., Thames Water Holdings Incorporated, E 'town Corporation, New Jersey-American Water Company, Inc., Elizabethtown Water Company, the Mount Holly Water Company and Applied Wastewater Management, Inc. for Confirmation that the Board of Public Utilities Does Not Have Jurisdiction Over, or, Alternatively, for Approval of a Proposed Transaction Involving, Among Other Things, the Sale by Thames Water Aqua Holdings GMBH of Up to 100% of the Shares of the Common Stock of American Waterworks Company, Inc. in One or More Public Offerings (2007) - (Case manager on revenue requirement impacts, effect on rates and effect on service on behalf of the Staff of the NJ Board of Public Utilities)
    BPU Docket No. WM06050388

104. In the Matter of the Petition of Elizabethtown Water Company for Approval of an Increase in Rates for Water Service (2007) - (Case manager on revenue requirement and overall rate proceeding on behalf of the Staff of the NJ Board of Public Utilities)
    BPU Docket No. WR03070510

105. In the Matter of the Petition of New Jersey American Water Company, Inc. for Approval of Increased Tariff Rates and Charges for Water and Sewer Service; Increased Depreciation Rates and Other Tariff Revisions (2008) - (Case manager on revenue requirement and overall rate proceeding on behalf of the Staff of the NJ Board of Public Utilities)
    BPU Docket No. WR08010020

106. In the Matter of Middlesex Water Company for Approval of an Increase in its Rates for Water Service and Other Tariff Changes (2007) - (Case manager on overall revenue requirement and overall rate proceeding on behalf of the Staff of the NJ Board of Public Utilities)
    BPU Docket No. WR07040275

107. In the Matter of the Joint Petition of United Water New Jersey, Inc., United Water Arlington Hills, Inc., United Water Hampton, Inc., United Water Vernon Water Hills, Inc., and United Water Lambertville, Inc. for an Increase in Rates and Charges for Water Service and Other Tariff Changes and for Approval to Merge the Operations of the Joint Petitioners into and with United Water New Jersey, Inc. (2007) - (Case manager on revenue requirement and overall rate proceeding on behalf of the Staff of the NJ Board of Public Utilities)
    BPU Docket No. WR07020135

APPENDIX B

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SCHEDULES OF DANTE MUGRACE

EXHIBITS DM-1 THROUGH DM-37

PUBLIC

REVENUE REQUIREMENT

		(1) Company Proposed	Adjustments	OCA	References
1	**Rate Base**	**$ 4,215,125,164**	**$ (7,705,703)**	**$ 4,207,419,461**	
2	Rate of Return	8.405%		6.20%	
3	**Operating Income**	**$ 354,264,935**	**$ (93,615,299)**	**$ 260,649,636**	
4	Operating Income Present Rates	$ 233,699,859	$ 21,006,124	$ 254,705,983	
5	**Operating Deficit**	**$ 120,565,076**	**$ (114,621,424)**	**$ 5,943,652**	
6	Revenue Conversion Factor	1.28640527		1.28640527	
7	Additional Revenues	$ 155,095,549	$ (147,449,603)	$ 7,645,946	
8	Additional Late Fees	$ 930,573	$ (875,442)	$ 55,131	
9	**Additional Revenue Requirement**	**$ 156,026,122**	**$ (148,325,045)**	**$ 7,701,077**	

(1) Company Exhibit 2 Schedule 4 p 6

COST OF CAPITAL

		(1)			
	Company Proposed	**Ratios**	**Cost Rate**	**Weighted Cost**	**References**
1	Debt	45.330%	4.370%	1.98%	
2	Equity	54.670%	11.750%	6.42%	
3	**Total**	**100.000%**		**8.405%**	
	OCA Recommendation				
4	Debt	50.000%	4.370%	2.185%	
5	Equity	50.000%	8.020%	4.010%	
6	**Total**	**100.000%**		**6.195%**	

(1) Exhibit PRM-1 Schedule 1

RATE BASE - MEASURES OF VALUE

		(1) Company FTY Period	(1) Company FPFTY Period	Adjustments	OCA	References
1	Gas Plant In Service	$ 4,995,881,393	$ 5,587,906,895	$ (29,282,008)	$ 5,558,624,887	
2	Gas Plant CWIP	$ -	$ -	$ -	$ -	
3	**Total Gas Plant**	**$ 4,995,881,393**	**$ 5,587,906,895**	**$ (29,282,008)**	**$ 5,558,624,887**	
4	Accumulated Depreciation Reserve	$ 1,374,311,491	$ 1,456,324,499	$ (727,749)	$ 1,455,596,750	
5	Net Gas Plant In Service	$ 3,621,569,902	$ 4,131,582,396	$ (28,554,259)	$ 4,103,028,137	
6	Gas Stored Underground - Non-Current	$ 51,833	$ 51,833	$ -	$ 51,833	
7	**Total Net Gas Plant In Service**	**$ 3,621,621,735**	**$ 4,131,634,229**	**$ (28,554,259)**	**$ 4,103,079,970**	
	Working Capital					
8	Gas Stored Underground - Current	$ 48,395,110	$ 46,876,831	$ -	$ 46,876,831	
9	Materials and Supplies	$ 5,569,985	$ 5,569,985	$ -	$ 5,569,985	
10	Prepayments	$ 5,776,406	$ 5,776,406	$ -	$ 5,776,406	
11	Cash Working Capital	$ 35,577,097	$ 36,256,917	$ (1,255,223)	$ 35,001,694	
12	**Total Working Capital**	**$ 95,318,598**	**$ 94,480,139**	**$ -**	**$ 93,224,916**	
	Deductions					
13	Deferred Income Taxes & EADIT	$ 50,773,165	$ 3,232,844	$ 152,826	$ 3,385,670	
14	Customer Advances	$ 3,690,614	$ 3,690,614	$ -	$ 3,690,614	
16	Customer Deposits	$ 4,065,751	$ 4,065,751	$ -	$ 4,065,751	
16	**Total Deductions**	**$ 58,529,530**	**$ 10,989,209**	**$ 152,826**	**$ 11,142,035**	
17	**Act 40 - Reliability and Infrastructure**			**$ -**	**$ -**	Exh 7 Sch 3 p 2
18	**Act 40 - General Corporate Purposes**			**$ (27,460)**	**$ (27,460)**	Exh 7 Sch 3 p 2 OCA-8-28
19	**Total Rate Base - Measures of Value**	**$ 3,658,410,803**	**$ 4,215,125,159**	**$ (7,705,698)**	**$ 4,207,419,461**	

(1) Company Exhibit 8 Schedule 2 p 3
(2)

STATEMENT OF INCOME

		(1) Company Present Rates	Adjustments	Company Proposed Rates	Adjustments	Present Rates OCA	References
1	Operating Revenues	**$ 833,215,508**	**$ 156,026,122**	**$ 989,241,630**	**$ -**	**$ 833,215,510**	DM-4
2	Gas Supply Expense	$ 317,688,615	$ -	$ 317,688,615	$ -	$ 317,688,615	DM-5
3	O & M Expenses	$ 223,598,704	$ 3,412,102	$ 227,010,806	$ (23,269,392)	$ 203,741,414	DM-10/29
4	Depreciation / Amortization	$ 129,015,598	$ -	$ 129,015,598	$ (727,745)	$ 128,287,853	DM-28
5	Net Salvage Amortized	$ 5,204,000	$ -	$ 5,204,000	$ -	$ 5,204,001	DM-28
6	Taxes Other Than Income	$ 15,353,167	$ -	$ 15,353,167	$ (421,089)	$ 14,932,078	DM-29
7	**Total Operating Expenses**	**$ 690,860,084**	**$ 3,412,102**	**$ 694,272,186**	**$ (24,418,225)**	**$ 669,853,961**	
8	Net Operating Income Before FIT	$ 142,355,424	$ 152,614,020	$ 294,969,444	$ (131,607,895)	$ 163,361,549	
9	Income Taxes	$ (91,344,434)	$ 32,049,042	$ (59,295,392)	$ (32,049,042)	$ (91,344,434)	DM-30
10	**Operating Income**	**$ 233,699,858**	**$ 120,564,978**	**$ 354,264,836**	**$ (99,558,853)**	**$ 254,705,983**	
11	Interest Charges	$ 84,085,080	$ -	$ 84,085,080	$ 7,847,035	$ 91,932,115	DM-30
12	Net Income	**$ 149,614,778**	**$ 120,564,978**	**$ 270,179,756**	**$ (107,405,888)**	**$ 162,773,868**	
13	Rate Base	**$ 4,244,704,201**	**$ -**	**$ 4,215,125,159**	**$ -**	**$ 4,207,419,461**	DM-3
14	Rate of Return	**5.506%**		**8.405%**		**6.195%**	
				$ 354,264,836		**$ 260,649,636**	
	Revenue Conversion Factor		1.28640527		1.28640527	1.28640527	DM-3
			$ 155,095,423		$ 7,645,946		
(2)	Additional Late Fees		$ 930,699		$ 55,131		
			$ 156,026,122	**$ (148,325,045)**	**$ 7,701,077**		

(1) Company Exhibit 2 Schedule 4 p 2
(2) Company Exhibit 2 Schedule 4 p 6

GAS PLANT IN SERVICE

	Acct. No.		(1) Company FPFTYP	Adjustments	OCA	References
1		Intangible Plant Organization	$ 177,885	$ -	$ 177,885	
2		Miscellaneous Intangible Plant	$ 91,100,269	$ -	$ 91,100,269	
3		Gas Production and Gathering Plant	$ 151,670,191	$ (254,301)	$ 151,415,890	
4		Non-Depreciable Plant	$ -	$ -	$ -	
5		Underground Storage Plant	$ 33,115,956	$ -	$ 33,115,956	
6		Non-Depreciable Plant	$ -	$ -	$ -	
7		Transmission Plant	$ 556,478,218	$ (5,376,933)	$ 551,101,285	
8		Non-Depreciable Plant	$ -	$ -	$ -	
9		Distribution Plant	$ 4,109,887,200	$ (18,892,437)	$ 4,090,994,763	
10		Non-Depreciable Plant	$ -	$ -	$ -	
a		Private Property Damage Incidents	$ -	$ (1,462,407)	$ (1,462,407)	OCA-XXI-001
11		General Plant	$ 246,325,381	$ (3,295,831)	$ 243,029,550	
12		Non-Depreciable Plant	$ -	$ -	$ -	
13		Total Depreciable Plant	$ 5,188,755,100	$ (29,281,910)	$ 5,159,473,190	
14		Total Non-Depreciable Plant	$ -	$ -	$ -	
15		CCNC Account 106	$ 399,151,697	$ -	$ 399,151,697	§53.52 (c) (3)
16		**Total Gas Plant In Service**	**$ 5,587,906,797**	**$ (29,281,910)**	**$ 5,558,624,887**	
17		Difference	$ (98)			OCA-8-23 OCA-8-33

(1) Company Exhibit No. DF-1

	Gas Production Plant - PNGD	Additions HTY-FTY	Additions FTY-STUB	Additions FPFTY	
332.00	Mainline Extension Program (MLX)				
	FPFTY Additions			$ 7,265,751	OCA-VII-2
	Inflation Rate			3.50%	
	Inflation Adjustment			**$ 254,301**	
	Transmission Plant - PNGD				OCA-VII-7-2
367.00	Mains Transmission Plant	$ 80,639,319	$ 11,107,893	$ 123,520,256	OCA-VIII-23
369.00	Measuring & Reg. Equipment	$ 1,382,850	$ 350,000	$ 2,840,000	OCA-VIII-8
	Transmission Plant - PGD				
367.00	Mains Transmission Plant	$ 3,298,055	$ 321,401	$ 3,274,759	
369.00	Measuring & Reg. Equipment	$ 412,945	$ 50,000	$ 500,000	
	Total	$ 85,733,169	$ 11,829,294	$ 130,135,015	
	Inflation Rate	2.31%	2.31%	2.40%	
	Inflation Adjustment	$ 1,980,436	$ 273,257	$ 3,123,240	
	Total Inflation Adjustment			**$ 5,376,933**	
	Distribution Plant - PNGD				
376.10	Mains- Distribution Low Pressure	$ 113,638,696	$ 11,596,294	$ 118,183,270	
376.20	Mains- Distribution Reg. Pressure	$ 128,444,177	$ 13,107,124	$ 133,580,843	
378.00	Meas. & Reg. Equipment	$ 5,663,123	$ 1,008,432	$ 11,400,448	
380.00	Service-Distribution Plant	$ 85,623,277	$ 10,112,778	$ 94,286,328	
381.00	Meters- Distribution Plant	$ 5,383,138	$ 1,372,971	$ 5,679,100	
381.10	Meters - ERT-Distribution Plant	$ 5,872,014	$ 282,038	$ 5,202,828	
	Distribution Plant - PGD				
376.10	Mains- Distribution Low Pressure	$ 8,804,457	$ 774,269	$ 7,909,211	
376.20	Mains- Distribution Reg. Pressure	$ 4,435,329	$ 390,045	$ 3,984,340	
378.00	Meas. & Reg. Equipment	$ 2,517,181	$ 270,108	$ 2,856,912	
380.00	Service-Distribution Plant	$ 9,652,400	$ 706,212	$ 6,583,023	
381.00	Meters- Distribution Plant	$ 531,755	$ 206,076	$ 949,588	
381.10	Meters - ERT-Distribution Plant	$ 657,012	$ 114,667	$ 824,060	
	Total	$ 371,222,559	$ 39,941,014	$ 391,439,951	
	Inflation Rate	2.31%	2.31%	2.40%	
	Inflation Adjustment	$ 8,575,241	$ 922,637	$ 9,394,559	
	Total Inflation Adjustment			**$ 18,892,437**	
	General Plant - PNGD	$ 46,967,208	$ 2,607,242	$ 30,040,719	
	General Plant - PGD	$ 5,133,623	$ 113,666	$ 1,472,455	
	Total	$ 52,100,831	$ 2,720,908	$ 31,513,174	
	Inflation Rate	4.00%	4.00%	3.50%	
	Inflation Adjustment	$ 2,084,033	$ 108,836	$ 1,102,961	
	Total Inflation Adjustment			**$ 3,295,831**	

ACCUMULATED DEPRECIATION

		(1) Company FPFTY Period	Adjustments	OCA	References
1	Miscellaneous Intangible Plant	$ 29,670,157	$ -	$ 29,670,157	
2	Production Plant	$ 59,493,782	$ (5,679)	$ 59,488,103	
3	Underground Storage Plant	$ 11,838,198	$ -	$ 11,838,198	
4	Transmission Plant	$ 135,824,172	$ (83,104)	$ 135,741,068	
5	Distribution Plant	$ 1,128,641,622	$ (389,630)	$ 1,128,251,992	
6	General Plant	$ 90,824,303	$ (249,331)	$ 90,574,972	
7	**Total Depreciable Plant**	**$ 1,456,292,234**	**$ (727,743)**	**$ 1,455,564,491**	
8	Non-Depreciable Gas Plant	$ 32,259	$ -	$ 32,259	
9	**Total Depreciable Gas Plant**	**$ 1,456,324,493**	**$ (727,743)**	**$ 1,455,596,750**	

(1) Spanos Exhibit 5B 5C

CASH WORKING CAPITAL

			(1) Company FPFTY Period	Adjustments	OCA	References
	Gas Purchased Costs					
1	FPFTY Expenses	$ 317,688,615			$ 317,688,615	
2	CWC Factor	0.0656029	$ 20,841,288	$ -	**$ 20,841,288**	
	Payroll					
3	FPFTY Expenses	$ 75,087,605			$ 70,270,416	
4	CWC Factor	0.1202407	$ 9,028,584	$ (579,222)	**$ 8,449,362**	OCA-8-34
	Pension and Benefits					
5	FPFTY Expenses	$ 29,066,537			$ 25,633,917	
6	CWC Factor	0.0789238	$ 2,294,043	$ (270,916)	**$ 2,023,127**	
	Taxes Other Than Income					
7	FPFTY Expenses	$ 15,353,167			$ 14,932,078	
8	CWC Factor	0.0207697	$ 318,881	$ (8,746)	**$ 310,135**	
	Other O&M Expenses					
9	FPFTY Expenses	$ 119,444,563			$ 107,668,869	
10	CWC Factor	0.0466650	$ 5,573,876	$ (549,512)	**$ 5,024,363**	OCA-8-35
	Income Taxes					
11	FPFTY State Income Taxes	$ -				
12	FPFTY Federal Income Taxes	$ -				
13	CWC Factor State Income Taxes	0.0128000	$ -			
14	CWC Factor Federal Income Taxes	0.0615000	$ -	$ -	**$ -**	
	Interest Expense					
15	FPFTY Long Term Debt	$ 83,973,864			$ 91,932,115	
16	FPFTY Short Term Debt	$ -				
17	CWC Factor Long Term Debt	(0.0214323)	$ (1,799,756)		$ (1,970,319)	
18	CWC Factor Short Term Debt	0.1628000	$ -		$ 323,738	
19	**Total**		**$ 36,256,916**	**$ (1,255,222)**	**$ 35,001,694**	

(1) Exhibit KMS-1 page 1 of 26

DEFERRED INCOME TAXES

		(1) Company FPFTY Period	Adjustments	OCA	References
1	Net Deferred Tax Liability- Federal	$ 77,238,662	$ -	$ 77,238,662	
2	Net Deferred Tax Liability - State	$ 159,546,665	$ -	$ 159,546,665	
3	Excess Deferred Income Taxes	$ (90,495,350)	$ -	$ (90,495,350)	
4	Historical Test Year Normalization Adj.	$ (18,247,276)	$ -	$ (18,247,276)	
5	Regulatory Asset FAS 109	$ -		$ -	
6	Regulatory Liability PA NOL	$ (43,238,598)		$ (43,238,598)	OCA-8-24
7	Regulatory Liability FAS 109 PA Rate Change	$ (58,778,003)		$ (58,778,003)	OCA-8-25
8	Regulatory Asset 481a Tax Repairs	$ (29,258,944)		$ (29,258,944)	OCA-8-27
	Disallowable GPIS	$ -	$ (152,826)	$ (152,826)	
9	**Total**	**$ (3,232,844)**	$ (152,826)	**$ (3,385,670)**	

(1) Company Exhibit 7 Schedule 8
Attachment 2

OPERATING REVENUES

		(1) Company Present Rates	Adjustments	Company Proposed Rates	Adjustments	Present Rates OCA	References
1	**Tariff Sales**						
2	Residential	$ 530,033,881	$ 102,761,420	$ 632,795,301			
3	SGS	$ 65,723,147	$ 12,712,539	$ 78,435,686			
4	MGS	$ 29,870,969	$ 3,309,415	$ 33,180,384			
5	LGS	$ 1,238,122	$ (42,903)	$ 1,195,219			
6	**Total Tariff Sales**	**$ 626,866,119**	**$ 118,740,471**	**$ 745,606,590**	**$ -**	**$ -**	
7	**Transportation Sales**						
8	Residential	$ 54,365,910	$ 15,972,180	$ 70,338,090			
9	SGS	$ 15,131,722	$ 5,592,783	$ 20,724,505			
10	MGS	$ 54,536,981	$ 13,088,676	$ 67,625,657			
11	LGS	$ 68,115,152	$ (677,841)	$ 67,437,311			
12	**Total Transportation Sales**	**$ 192,149,765**	**$ 33,975,798**	**$ 226,125,563**	**$ -**	**$ -**	
13	**Other Operating Revenues**						
14	Sales for Resale	$ 18,054	$ -	$ 18,054			
15	Forfeited Discounts	$ 5,435,311	$ 930,573	$ 6,365,884			
16	Miscellaneous Service Revenue	$ 1,040,665	$ -	$ 1,040,665			
17	Rent from Gas Property	$ -	$ -	$ -			
18	Other Gas Revenues	$ 7,705,596	$ 2,377,844	$ 10,083,440			
19	**Total Other Operating Revenues**	**$ 14,199,626**	**$ 3,308,417**	**$ 17,508,043**	**$ -**	**$ -**	
20	**Total Operating Revenues**	**$ 833,215,510**	**$ 156,024,686**	**$ 989,240,196**	**$ -**	**$ 833,215,510**	OCA-8-22 OCA-8-36/37

(1) Company Exhibit 3 Schedule 15
Attachment A page 3

OCA-7-9/10

OPERATION AND MAINTENANCE EXPENSES

		(1) Company Proposed	Adjustments	OCA	References
1	**Gas Supply Expenses**	**$ 317,688,615**	**$ -**	**$ 317,688,615**	
	Operation and Maintenance				
2	Labor	$ 69,463,580	$ (1,742,697)	$ 67,720,883	DM-11
3	STI/Incentive Compensation	$ 5,624,024	$ (3,074,490)	$ 2,549,534	DM-12
4	Pension	$ 5,670,000	$ (2,802,416)	$ 2,867,584	DM-13
5	PBOP	$ 2,414,041	$ 148,250	$ 2,562,291	DM-14
6	Other Employee Benefits	$ 20,982,496	$ (778,454)	$ 20,204,042	DM-15
7	Outside Services - Contracted	$ 28,657,932	$ (3,668,930)	$ 24,989,002	DM-16
8	Outside Services - IT	$ 10,223,964	$ (1,187,348)	$ 9,036,616	DM=17
9	Outside Services - A&G	$ 3,383,833	$ (428,262)	$ 2,955,571	DM-18
10	Building Leases	$ 4,584,081	$ 0	$ 4,584,081	DM-19
11	Corporate Insurance	$ 9,080,331	$ (1,648,544)	$ 7,431,787	DM-20
12	Injuries and Damages	$ 2,460,710	$ (150,237)	$ 2,310,473	DM-21
13	Travel	$ 1,014,712	$ (912,788)	$ 101,924	DM-22
14	Company Memberships	$ 832,200	$ (247,270)	$ 584,930	DM-23
15	Licenses & Permits	$ 746,068	$ (68,644)	$ 677,424	DM-24
16	Utilities & Fuels - Company Operations	$ 2,949,856	$ (172,240)	$ 2,777,616	DM-25
17	Advertising	$ 1,423,934	$ (86,938)	$ 1,336,996	DM-26
18	Fleet	$ 1,170,486	$ (71,376)	$ 1,099,110	DM-27
19	Materials & Supplies	$ 11,848,248	$ (794,687)	$ 11,053,561	DM-28
20	Other O&M	$ 23,696,895	$ (1,775,041)	$ 21,921,854	DM-29
21	Debt Issuance Costs	$ 404,371	$ -	$ 404,371	DM-30
22	Payment Processing	$ 2,015,819	$ (219,720)	$ 1,796,099	DM-31
23	Rate Case Expenses	$ 1,031,000	$ (343,667)	$ 687,333	DM-32
24	Uncollectible Accounts	$ 13,635,521	$ (1)	$ 13,635,520	DM-33
25	Total USP/SCR Rider	$ -		$ -	
26	Interest on Customer Deposits	$ 284,603	$ -	$ 284,603	DM-34
27	**Total Operation and Maintenance**	**$ 223,598,705**	**$ (20,025,502)**	**$ 203,573,203**	
					OCA-7-2/3
(1)	Company Exhibit 4 Schedule 1 2				OCA-7-33

LABOR

		(1) Company Proposed	Adjustments	OCA	References
1	**Per Books 9/30/2023**	**$ 55,181,109**	$ -	**$ 55,181,109**	Exh 4 Sch 3 p 5 OCA-7-16
2	Annualized Gross Payroll	$ 7,422,979	$ -	$ 7,422,979	Exh 4 Sch 1
3	**HTY Period - Normalized**	**$ 62,604,088**	**$ -**	**$ 62,604,088**	
4	Non-Union Merit Increase 3.25%	$ 1,415,980	$ -	$ 1,415,980	
5	Clerical Union Labor Increase 3.25%	$ 197,694	$ -	$ 197,694	
6	Manual Union Increase 4.00%	$ 3,264,616	$ -	$ 3,264,616	
8	Total	$ 4,878,290	$ -	$ 4,878,290	
9	**O&M Labor Percentage 46.34%**	**$ 2,260,373**	**$ -**	**$ 2,260,599**	
10	Clerical Union Progression/Promotion	$ 12,060	$ -	$ 12,060	Exh 4 Sch 1 p 5
11	Manual Union Progression/Promotion	$ 607,160	$ -	$ 607,160	
12	Total	$ 619,220	$ -	$ 619,220	
13	**O&M Labor Percentage 46.61%**	**$ 288,628**	**$ -**	**$ 288,628**	
14	Non-Union FTY Adjustments 3.25%	$ 1,738,000	$ -	$ 1,738,000	
15	Clerical FTY Adjustments 3.25%	$ 237,000	$ -	$ 237,000	
16	Manual Union FTY Adjustments 4.00%	$ 553,000	$ -	$ 553,000	
18	Total	$ 2,528,000	$ -	$ 2,528,000	
19	**O&M Labor Percentage 46.68%**	**$ 1,180,173**		**$ 1,180,173**	
20	**FTY Period**	**$ 3,729,173**	**$ -**	**$ 3,729,400**	
21	Non-Union Merit Increase 3.25%	$ 1,518,484		$ 1,518,484	
22	Total Clerical - Union Increase 3.25%	$ 212,213		$ 212,213	
24	Manual Union Increase 3.25%	$ 2,796,305		$ 2,796,305	
25	Total	$ 4,527,003		$ 4,527,003	
26	**O&M Labor Percentage 46.34%**	**$ 2,097,966**		**$ 2,097,966**	
27	Non-Union Progression/Promotion	$ -	$ -	$ -	Exh 4 Sch 1 p 5
28	Clerical Union Progression/Promotion	$ 12,060	$ -	$ 12,060	
	Manual - Union Progression/Promotion	$ 607,160		$ 607,160	
29	Total	$ 619,220	$ -	$ 619,220	
30	**O&M Labor Percentage 46.61%**	**$ 288,628**	**$ -**	**$ 288,628**	
31	Non-Union 3.25%	$ 1,343,000	$ -	$ 1,343,000	
33	Manual - Union 3.25%	$ 237,000	$ -	$ 237,000	
34	Total	$ 1,580,000	$ -	$ 1,580,000	Exh 4 Sch 1 p 28
35	**O&M Labor Percentage 47.07%**	**$ 743,726**	**$ -**	**$ 743,726**	
36	**FPFTY Period**	**$ 3,130,320**	**$ -**	**$ 3,130,320**	
	Vacancy Adjustment		$ (1,742,925)	$ (1,742,925)	OCA-7-20
	Employee Adjustments	$ -	$ -	$ -	OCA-7-21
37	**Total Labor** (Lines 3, 20 51)	**$ 69,463,581**	**$ (1,742,699)**	**$ 67,720,883**	

(1) Company Exhibit 4 Schedule 1 p 5

SHORT-TERM INCENTIVE PROGRAM - STI

		(1) Company Proposed	Adjustments	OCA	References
1	**Per Books 9/30/2023**	**$ 6,823,130**	**$ -**	**$ -**	OCA-7-27
2	HTY Adjustments	$ (1,609,771)			
3	FTY Adjustment	$ 280,149			
4	FPFTY Adjustment	$ 130,516			
5	FPFTY Balance	**$ 5,624,024**			

4 **CONFIDENTIAL - I&E RE-011a** OCA-7-28

			Ratio to Total	OCA Allowed
5				
	Total	**$ 5,624,600**	**100.000%**	

15 OCA-7-28/29
OCA-7-30

(1) Company Exhibit 4 Schedule 1 p 6

PENSION

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Book Balance**	**$ 4,497,434**	**$ -**	**$ 4,497,434**	
2	2022 Net Contributions	$ 5,670,000	$ -	$ 5,670,000	
3	2023 Net Contributions	$ 5,670,000	$ -	$ 5,670,000	
4	2 Year Average	$ 5,670,000	$ -	$ 5,670,000	
5	HTY Adjustment (Line 4 - Line 1)	$ 1,172,566	$ -	$ 1,172,566	
6	**FTY Balance (Line 4)**	**$ 5,670,000**	**$ (2,802,416)**	**$ 2,867,584**	
7	FPFTY Adjustment	$ -	$ -	$ -	
8	**FPFTY Balance**	**$ 5,670,000**	**$ (2,802,416)**	**$ 2,867,584**	OCA-7-31

(1) Company Exhibit 4 Schedule 1 p 10

POST RETIREMENT BENEFITS OTHER THAN PENSION (PBOP)

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Book Balance**	**$ 1,229,997**	**$ 208,991**	**$ 1,438,988**	
2	Prior PBOP Expense Amortization	$ 1,634,119	$ -	$ 1,634,119	
3	**HTY Adjusted Balance 2018**	**$ 2,864,116**	**$ 208,991**	**$ 3,073,107**	
4	FTY Adjustment (Net Expense)	$ 779,921	$ -	$ 779,921	
5	FTY Adjustment	$ (450,076)		$ (450,076)	
6	**FTY Balance**	**$ 2,414,040**	**$ 208,991**	**$ 2,623,031**	
7	FPFTY Adjustment	$ 779,921	$ -	$ 779,921	
8	FPFTY Adjustment	$ -			
9	**FPFTY Balance**	**$ 2,414,040**	**$ 148,251**	**$ 2,562,291**	OCA-7-31
10	Amount to be Tracked	$ 779,921			

(1) Company Exhibit 4 Schedule 1 p 11
Used ratio of Company Labor to OCA
(2) Labor - Schedule DM-6, Line 37

BENEFITS COMPENSATION ADJUSTMENT

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Net Benefits**	**$ 16,409,732**	**$ -**	**$ 16,409,732**	
2	Annualized Benefits	$ 17,283,769	$ -	$ 17,283,769	
3	**HTY Adjusted Benefits**	**$ 874,037**		**$ 874,037**	
4	FTY Benefit Adjustments	$ 19,561,719	$ -	$ 19,561,719	
5	FTY Adjustment	$ 2,277,950	$ -	$ 2,277,950	
6	**FTY Benefits**	**$ 20,985,623**	**$ -**	**$ 20,985,623**	
(3)	Employee Activity / Events		**$ (254,437)**	**$ (254,437)**	OCA-7-25
	xx% of proposed vacancies		$ -	$ -	OCA-7-21
7	Vacancy Rate Adjustment		$ (527,144)	$ (527,144)	
8	FPFTY Benefit Adjustments	$ 1,423,904	$ (527,144)	$ 896,760	
9	**FPFTY Benefits**	**$ 20,985,623**	**$ (781,581)**	**$ 20,204,042**	OCA-7-32
	difference to Income Statement	$ (3,127)			

(1) Company Exhibit 4 Schedule 1 p 12

Used ratio of Company Labor to OCA
(2) Labor Schedule DM-6 Line 37
(3) Company Exhibit No. 19-RR-30

OUTSIDE SERVICES CONTRACTED

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Per Books Balance**	**$ 24,124,704**	**$ -**	**$ 24,124,704**	
2	HTY Adjustments	$ -	$ -	$ -	
3	**HTY Adjusted**	**$ 24,124,704**	**$ -**	**$ 24,124,704**	
4	FTY Inflation Adjustment 3.75%	$ 904,595	$ (904,595)	$ -	
5	FTY Adjustment (2)	$ 2,592,893	$ (1,728,595)	$ 864,298	
6	**FTY Adjusted**	**$ 27,622,192**	**$ (2,633,190)**	**$ 24,989,002**	
7	FPFTY Inflation Adjustment 3.75%	$ 1,035,740	$ (1,035,740)	$ -	
8	FPFTY Adjustment	$ -	$ -	$ -	
9	**FPFTY Adjusted**	**$ 28,657,932**	**$ (3,668,930)**	**$ 24,989,002**	OCA-7-34

(1) Company Exhibit 4 Schedule 1 p 13
(2) Statement No. 2 page 17
Bridge Work
Pressure Tests
Pig Run
Pipeline Maintenance/Corrosion
Right of Way

OUTSIDE SERVICES - IT

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Per Books Balance**	**$ 8,596,499**	**$ -**	**$ 8,596,499**	
2	HTY Adjustments	$ -	$ -	$ -	
3	**HTY Adjusted**	**$ 8,596,499**	**$ -**	**$ 8,596,499**	
4	FTY Inflation Adjustment 2.39%	$ 205,356	$ (205,356)	$ -	
5	FTY Adjustment (2)	$ 1,117,550	$ (745,033)	$ 372,517	
6	**FTY Adjusted**	**$ 9,919,405**	**$ (950,389)**	**$ 8,969,016**	
7	FPFTY Inflation Adjustment 2.39%	$ 236,958	$ (236,958)	$ -	
8	FPFTY Adjustment (2)	$ 67,600	$ -	$ 67,600	
9	**FPFTY Adjusted**	**$ 10,223,963**	**$ (1,187,347)**	**$ 9,036,616**	OCA-7-35

(1) Company Exhibit 4 Schedule 1 p 14
(2) Peoples Statement No. 2 p 17
Maintenance Contracts / Software

OUTSIDE SERVICES - A&G

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Per Books**	**$ 2,955,571**	**$ -**	**$ 2,955,571**	
2	FTY Inflation Adjustment 7.00%	$ 206,890	$ (206,890)	$ -	
3	FTY Adjustment	$ -	$ -	$ -	
4	**FTY Adjusted**	**$ 3,162,461**	**$ (206,890)**	**$ 2,955,571**	
5	FPFTY Inflation Adjustment 7.00%	$ 221,372	$ (221,372)	$ -	
6	FPFTY Adjustment	$ -	$ -	$ -	
7	**FPFTY Adjusted**	**$ 3,383,833**	**$ (428,262)**	**$ 2,955,571**	OCA-7-36

(1) Company Exhibit 4 Schedule 1 p 15

BUILDING LEASES

		(1) Company Proposed	Adjustments	OCA	References
1	**Gross Lease Expense**	**$ 6,184,363**	**$ -**	**$ 6,184,363**	
2	Capitalization Adjustments	$ (1,600,282)	$ -	$ (1,600,282)	
3	**Annualized Lease Expense**	**$ 4,584,081**	**$ -**	**$ 4,584,081**	
4	HTY Per Books Balance	$ 3,902,706	$ -	$ 3,902,706	
5	FPFTY Adjustments	$ -	$ -	$ -	
6	**HTY Adjusted Lease Expense**	**$ 681,375**	**$ -**	**$ 681,375**	OCA-8-1 OCA-8-2

(1) Company Exhibit 4 Schedule 1 p 16

CORPORATE INSURANCE

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Per Books - Property Insurance**	**$ 5,213,687**	**$ -**	**$ 5,213,687**	
	HTY Per Books - Property Insurance	$ 339,066		**$ 339,066**	
2	Premiums 2022/2023 Adjustments	$ (16,604)	$ -	$ (16,604)	
3	**HTY Adjusted - Property Insurance**	**$ 322,462**	**$ -**	**$ 322,462**	
4	HTY Per Books - Other Misc Insurance	$ 4,790,265	$ -	$ 4,790,265	
5	Premiums 2022/2023 Adjustments	$ 2,372,847	$ -	$ 2,372,847	
6	**HTY Adjusted - Other Misc Insurance**	**$ 7,163,112**	**$ -**	**$ 7,163,112**	
6	HTY Per Books - Workers Comp	$ 776,019	$ -	$ 776,019	
7	Premiums 2022/2023 Adjustments	$ 588,925	$ -	$ 588,925	
8	**HTY Adjusted - Workers Comp**	**$ 1,364,944**	**$ -**	**$ 1,364,944**	
9	**Total Corporate Insurance**	**$ 5,905,350**	**$ -**	**$ 5,905,350**	
	Less Capitalization	24.57%		24.57%	
	Adjusted Balance	1,450,730		1,450,944	
	Net Balance	**$ 4,454,620**	**$ -**	**$ 4,454,406**	
10	FTY Premium Increase 13.1%	$ 773,601	$ (773,601)	$ (0)	
11	FPFTY Premium Increase 13.1%	$ 874,943	$ (874,943)	$ (0)	
12	**FPFTY Adjusted**	**$ 7,553,893**	**$ (1,648,544)**	**$ 5,905,349**	OCA-8-3
	Total Proposed Corporate Insurance	**$ 9,080,331**	**$ (1,648,544)**	**$ 7,431,787**	

(1) Company Exhibit 4 Schedule 1 p 17
check for calculation

INJURIES AND DAMAGES

		(1) Company Proposed	Adjustments	OCA	References
1	TME 8/2023 (HTY Per Books)	$ 1,173,800	$ -	$ 1,173,800	
2	TME 8/2022	$ 3,510,553	$ -	$ 3,510,553	
3	TME 8/2021	$ 2,247,067	$ -	$ 2,247,067	
4	**Three-Year Average**	**$ 2,310,473**	**$ -**	**$ 2,310,473**	
5	Difference	1,136,673	-	1,136,673	
6	FTY Inflation Adjustment 3.20%	$ 73,935	$ (73,935)	$ -	
7	FPFTY Inflation Adjustment 3.20%	$ 76,301	$ (76,301)	$ -	
8	**FPFTY Adjusted**	**$ 2,460,710**	**$ (150,236)**	**$ 2,310,473**	OCA-8-5

(1) Company Exhibit 4 Schedule 1 p 18

TRAVEL ADJUSTMENTS

		(1) Company Proposed	Adjustments	OCA	References
1	HTY Per Books	$ 931,017	$ -	$ 931,017	
2	HTY Adjustments	$ -	$ -	$ -	
3	**HTY Adjusted**	**$ 931,017**	**$ -**	**$ 931,017**	
4	FTY Inflation Adjustment 4.40%	$ 40,947	$ (40,947)	$ -	
5	FTY Adjustments	$ -	$ -	$ -	
6	**FTY Adjusted**	**$ 971,964**	**$ (40,947)**	**$ 931,017**	
7	FPFTY Inflation Adjustment 4.40%	$ 42,748	$ (42,748)	$ -	
8	FPFTY Adjustments	$ -	$ (829,093)	$ (829,093)	
9	**FPFTY Adjusted**	**$ 1,014,712**	**$ (912,788)**	**$ 101,924**	OCA-8-6

(1) Company Exhibit 4 Schedule 1 p 19

COMPANY MEMBERSHIPS

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Per Books**	**$ 797,132**	$ (212,202)	$ 584,930	
2	HTY Adjustments	$ -	$ -	$ -	
3	**HTY Adjusted**	**$ 797,132**	**$ (212,202)**	**$ 584,930**	
4	FTY Inflation Adjustment 2.18%	$ 17,345	$ (17,345)	$ -	
5	**FTY Adjusted**	**$ 814,477**	**$ (229,547)**	**$ 584,930**	
6	FPFTY Inflation Adjustment 2.18%	$ 17,722	$ (17,722)	$ -	
7	**FPFTY Adjusted**	**$ 832,199**	**$ (247,269)**	**$ 584,930**	OCA-8-7

(1) Company Exhibit 4 Schedule 1 p 20

LICENSES & PERMITS

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Per Books**	**$ 677,424**	$ -	$ 677,424	
2	HTY Adjustments	$ -	$ -	$ -	
3	**HTY Adjusted**	**$ 677,424**	**$ -**	**$ 677,424**	
4	FTY Inflation Adjustment 4.97%	$ 33,712	$ (33,712)	$ -	
5	**FTY Adjusted**	**$ 711,136**	**$ (33,712)**	**$ 677,424**	
6	FPFTY Inflation Adjustment 4.97%	$ 34,931	$ (34,931)	$ -	
7	**FPFTY Adjusted**	**$ 746,067**	**$ (68,643)**	**$ 677,424**	OCA-8-8

(1) Company Exhibit 4 Schedule 1 p 21

UTILITIES AND FUEL

		(1) Company Proposed	Adjustments	OCA	References
1	HTY Per Books	$ 2,938,901	$ -	$ 2,938,901	
2	HTY Adjustments (Recovered as Gas Costs)	$ (161,285)	$ -	$ (161,285)	
3	**HTY Adjusted**	**$ 2,777,616**	**$ -**	**$ 2,777,616**	
4	FTY Inflation Adjustment 3.05%	$ 84,825	$ (84,825)	$ -	
5	FTY Adjustment	$ -	$ -	$ -	
6	**FTY Adjusted**	**$ 2,862,441**	**$ (84,825)**	**$ 2,777,616**	
7	FPFTY Inflation Adjustment 3.05%	$ 87,415	$ (87,415)	$ -	
8	FTY Adjustment	$ -			
9	**FPFTY Adjusted**	**$ 2,949,856**	**$ (172,240)**	**$ 2,777,616**	OCA-8-9 (Confidential attachment not used to prepare this Exhibit)

(1) Company Exhibit 4 Schedule 1 p 22

ADVERTISING

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Per Books** (Public Relations)	**$ 1,516,137**	**$ -**	**$ 1,516,137**	
2	HTY Adjustments	$ (179,141)	$ -	$ (179,141)	
3	**HTY Adjusted**	**$ 1,336,996**	**$ -**	**$ 1,336,996**	
4	FTY Inflation Adjustment 3.20%	$ 42,784	$ (42,784)	$ -	
5	**FTY Adjusted**	**$ 1,379,780**	**$ (42,784)**	**$ 1,336,996**	
6	FPFTY Inflation Adjustment 3.20%	$ 44,153	$ (44,153)	**$ -**	
7	**FPFTY Adjusted**	**$ 1,423,933**	**$ (86,937)**	**$ 1,336,996**	OCA-8-10

(1) Company Exhibit 4 Schedule 1 p 23

FLEET MAINTENANCE & FUEL

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Per Books**	**$ 1,099,110**	$ -	**$ 1,099,110**	
2	FTY Inflation Adjustment 3.20%	$ 35,128	$ (35,128)	$ -	
3	FPFTY Inflation Adjustment 3.20%	$ 36,250	$ (36,250)	$ -	
4	**FPFTY Adjusted**	**$ 1,170,488**	**$ (71,378)**	**$ 1,099,110**	OCA-8-11

(1) Company Exhibit 4 Schedule 1 p 24

MATERIALS AND SUPPLIES

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Per Books**	**$ 10,459,149**	$ (98,381)	**$ 10,360,768**	
2	FTY Inflation Adjustment 2.94%	$ 307,733	$ (307,733)	$ -	
	FTY Adjustments - Inflation 5.00%	$ 742,725	$ (49,932)	$ 692,793	OCA Set 8-12
	FTY Adjusted	**$ 11,509,607**	**$ (456,046)**	**$ 11,053,561**	
3	FPFTY Inflation Adjustment 2.94%	$ 338,640	$ (338,640)	$ -	
4	**FPFTY Adjusted**	**$ 11,848,247**	**$ (794,686)**	**$ 11,053,561**	

(1) Company Exhibit 4 Schedule 1 p 25

OTHER O & M

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Per Books**	**$ 14,965,499**	**$ -**	**$ 14,965,499**	
2	HTY Adjustments	$ -	$ -	$	
3	HTY Other	$ -	**$ -**	**$**	
4	**HTY Adjusted**	**$ 14,965,499**	**$ -**	**$ 14,965,499**	
5	FTY Inflation Adjustment 2.94%	$ 440,321	$ (440,321)	$	
	FTY Adjustments	$ (138,125)	$ -	$ (138,125)	
6	**FTY Adjusted**	**$ 15,267,695**	**$ (440,321)**	**$ 14,827,374**	
7	FPFTY Inflation Adjustment 2.94%	$ 449,212	$ (449,212)	$	
8	FPFTY Adjustments (Essential)	$ 7,979,987	[redacted]		OCA-7-30
9	**FPFTY Adjusted**	**$ 23,696,894**	**$ (1,775,040)**	**$ 21,921,854**	OCA-8-13 I&E RE-37

(1) Company Exhibit 4 Schedule 1 p 26

[redacted]

I&E RE-11
OCA-VII-4

Travel	$ 874,646	40%	$ 349,858	I&E RE-37
Advertising	$ 21,930	40%	$ 8,772	
Dues & Subscription	$ 512,935	40%	$ 205,174	

DEBT ISSUANCE COSTS

		(1) Company Proposed	Adjustments	OCA	References
1	Revolver Debt Issuance Costs	$ 404,371	$ -	$ 404,371	
2	Proportion Recoverable in O&M	100%		100.00%	
3	Total Revolver Debt Issuance Costs	$ 404,371	$ -	$ 404,371	
4	Unamortized Balance of Prior Revolver	$ -	$ -	$ -	
5	**Total Amortizable Debt Issuance Costs**	**$ 404,371**	**$ -**	**$ 404,371**	OCA-8-14

(1) Company Exhibit 4 Schedule 1 p 27
check for other information to include

PAYMENT PROCESSING FEE

		(1) Company Proposed	Adjustments	OCA	References
1	**Current Payment Processing**	$ 1,451,959	$ -	$ 1,451,959	
2	Peoples Gas Adoption	$ 124,419		$ 124,419	
3	**HTY Adjusted Payment Process Exp.**	**$ 1,576,378**		**$ 1,576,378**	
4	FTY Percentage	7.82%			
5	FTY Adjustment for Payment Process	$ 123,273	$ (61,637)	$ 61,636	
6	FTY Adjustment	$ -	$ -	$ -	
7	**FTY Adjusted for Payment Process**	**$ 1,699,651**	**$ (61,637)**	**$ 1,638,014**	
8	FPFTY Percentage	7.82%			
9	FPFTY Adjustment for Payment Process	$ 132,913	$ (66,456)	$ 66,456	
10	FPFTY Adjustment	$ 183,256	$ (91,628)	$ 91,628	
11	**FPFTY Adjusted for Payment Process**	**$ 2,015,819**	**$ (219,721)**	**$ 1,796,099**	OCA-8-15

(1) Company Exhibit 4 Schedule 1 p 28

RATE CASE EXPENSES

		(1) Company Proposed	Adjustments	OCA	References
1	Consulting Services	$ 744,000			
2	Legal Fees	$ 1,200,000			
3	Advertising - Rate Case	$ 81,000			
4	Miscellaneous, Supplies, Courier, etc.	$ 25,000			
5	Travel	$ 12,000			
6	Total	**$ 2,062,000**		**$ 2,062,000**	
7	Amortization Period - 2 years	2		3	
8	Rate Case Expenses	**$ 1,031,000**	**$ (343,667)**	**$ 687,333**	OCA-8-17

(1) Company Exhibit 4 Schedule 1 p 29

UNCOLLECTIBLE EXPENSE

		(1) Company Proposed	Adjustments	PresentRates OCA	References
	HTY Per Books	**$ 14,518,575**		**$ 14,518,575**	
	Residential				
1	**FPFTY Normalized Revenues**	**$ 584,399,791**		**$ 584,399,791**	(1)
	3 Year Average Uncollectible rate	2.20%		2.20%	
	Annualized Balance	**$ 12,856,795**		**$ 12,856,795**	
	Commercial				
	FPFTY Normalized Revenues	**$ 181,217,924**		**$ 181,217,924**	
	3 Year Average Uncollectible rate	.35% / 1.05%		.35% / 1.05%	
	Annualized Balance	**$ 771,417**		**$ 771,417**	
	Industrial				
	FPFTY Normalized Revenues	**$ 47,452,045**		**$ 47,452,045**	
	3 year Uncollectible rate	0.02%		0.02%	
	Annualized Balance	**$ 7,307**		**$ 7,307**	
	Uncollectible - Normalized Balance	**$ 13,635,520**		**$ 13,635,520**	OCA-7-14
	Additional Uncollectible Accounts				
	Additional Revenues			$ 7,645,946	
	2.20% Uncollectible Rate			2.20%	
	Additional Uncollectibles			$ 168,211	

(1) Company Exhibit No. 4 Schedule 1 page 30

CUSTOMER DEPOSITS

		(1) Company Proposed	Adjustments	OCA	References
1	**Average Customer Balance**	**$ 4,065,751**	**$ -**	**$ 4,065,751**	
2	Interest Rate	7.00%		7.00%	
3	**Interest on Customer Deposits**	**$ 284,603**	**$ -**	**$ 284,603**	

(1) Company Exhibit 4 Schedule 1 p 32

DEPRECIATION / AMORTIZATION
NET SALVAGE ACCRUAL

		(1) Original Cost 30-Sep-25	(2) Depreciation Rate	Depreciation Expense	Adjustments	OCA	References
	Depreciation / Amortization						
1	Intangible Plant	$ 91,213,832	12.4939%	$ 11,396,147	$ -	$ 11,396,147	
2	Production Plant	$ 158,800,471	2.2331%	$ 3,546,242	$ (5,679)	$ 3,540,563	DM-5
3	Underground Storage Plant	$ 33,159,880	2.2027%	$ 730,422	$ -	$ 730,422	
4	Transmission Plant	$ 581,912,736	1.5456%	$ 8,993,791	$ (83,104)	$ 8,910,687	DM-5
5	Distribution Plant	$ 4,473,179,617	1.9142%	$ 85,624,996	$ (389,630)	$ 85,235,366	DM-5
6	General Plant	$ 247,506,976	7.5650%	$ 18,723,999	$ (249,331)	$ 18,474,668	DM-5
7	**Total Depreciable Plant**	**$ 5,585,773,512**		**$ 129,015,596**	**$ (727,743)**	**$ 128,287,853**	Spanos Exh 5B
8	Non-Depreciable Plant	$ 2,209,685		$ -	$ -	$ -	Spanos Exh 5C
9	**Total Gas Plant in Service**	**$ 5,587,983,197**		**$ 129,015,596**	**$ (727,743)**	**$ 128,287,853**	

		(3)	
	Net Salvage Accrual - COR minus Gross Salvage		
10	2020	$ 13,296,667	$ 13,296,667
11	2021	$ 6,602,724	$ 6,602,724
12	2022	$ 384,973	$ 384,973
13	2023	$ 2,907,326	$ 2,907,326
14	2024	$ 2,828,316	$ 2,828,316
15	**Total**	**$ 26,020,006**	**$ 26,020,006** Spanos Exh 5C
16	**5 Year Amortization**	**$ 5,204,001**	**$ 5,204,001**

(1) Spanos Exhibit 5C - I-5
(2) Use of Company Composite Rates
(3) Spanos Exhibit 5C - I-7

TAXES OTHER THAN INCOME

		(1) Company Proposed	Adjustments	OCA	References
1	FICA	$ 6,211,692	$ (389,156)	$ 5,822,536	
2	Unemployment (FUTA / SUTA)	$ 359,931	$ (22,563)	$ 337,368	
3	Property Tax	$ 1,064,828	$ (9,370)	$ 1,055,458	
	PUC Assessment				
4	PUC Assessment	$ 3,435,715	$ -	$ 3,435,715	
5	OCA Assessment	$ -	$ -	$ -	
6	Total Assessment	$ 3,435,715	$ -	$ 3,435,715	
7	Sales and Use Tax	$ 2,602,000	$ -	$ 2,602,000	OCA-8-32
8	Other	$ 1,679,000	$ -	$ 1,679,000	
9	**Total**	**$ 15,353,107**	**$ (421,029)**	**$ 14,932,078**	

(1) Company Exhibit 6 Schedule 2

Differences due to rounding

FEDERAL INCOME TAX

		(1) Company Proposed	Adjustments	Present Rates OCA	References
1	**Operating Income Before Taxes/Interest**	**$ 294,969,444**	**$ (131,607,895)**	**$ 163,361,549**	
2	Less Interest Expense	$ (84,085,080)	$ (7,847,035)	$ (91,932,115)	
3	**Pre-Tax Operating Income (Loss)**	**$ 210,884,364**	**$ (139,454,930)**	**$ 71,429,434**	
	Schedule M Items				
4	Permanent - Meals and Entertainment	$ 839,000	$ -	$ 839,000	
	Tax Repairs - Gross Deduction	$ (430,000,000)		$ (430,000,000)	
	Tax Rapairs Bood Depr & AFUDC	$ 40,000,000		$ 40,000,000	
	Property Basis Difference	$ 843,264		$ 843,264	
	Total Flow Through	**$ (388,317,736)**		**$ (388,317,736)**	
	Deferred Adjustments				
5	Depreciation	$ (46,359,020)	$ -	$ (46,359,020)	
6	Sec 163 Interest	$ 1,873,750	$ -	$ 1,873,750	
7	Contributions in Aid	$ (376,420)	$ -	$ (376,420)	
8	Cost of Removal	$ 4,175,589	$ -	$ 4,175,589	
	Property Basis Difference	$ (1,378,342)		$ (1,378,342)	
	Unicap 263A Inventory	$ 234,219		$ 234,219	
9	Other	$ -	$ -	$ -	
10	**Total Deferred Adjustments**	**$ (41,830,224)**	**$ -**	**$ (41,830,224)**	
	Total Flow Through and Deferred Adjustments	**$ (430,147,960)**		**$ (430,147,960)**	
11	PA Depreciation Adjustment	$ (2,007,814)	$ -	$ (2,007,814)	
12	**Taxable Income Before NOL**	**$ (221,271,410)**	**$ (139,454,930)**	**$ (360,726,340)**	
13	Prior Year PA NOL Utilization	$ -	$ -	$ -	
14	**PA Taxable Income**	**$ (221,271,410)**	**$ (139,454,930)**	**$ (360,726,340)**	
15	PA Income Tax - various	$ (17,956,175)	$ (12,325,459)	$ (30,281,634)	
	Current Year PA NOL Adjustment	$ 17,956,175		$ 30,281,634	
	Other	$ -			
	PA Deferred Tax on Inv.Adj/Line Pack Gas	$ (18,714)		$ (18,714)	
	PA Income Tax Expense	$ (18,714)		$ (18,714)	
16	Federal Taxable Income Before NOL	$ (219,263,596)	**$ (152,614,483)**	**$ (371,878,079)**	
	Prior Year Federal NOL	$ -		$ -	
	Federal Taxable Income	$ (219,263,596)		**$ (371,878,079)**	
17	**Federal Income Tax Expense (21%) Current**	**$ (46,041,425)**	**$ (32,049,041)**	**$ (78,090,467)**	OCA-8-31
	Current Year NOL Adjustment	$ 46,041,425		$ 78,090,467	
	Other	$ -		$ -	
	Federal Current Income Tax Expense	$ (0)		$ -	
18	Federal Income Tax Expense (21%) Deferred	$ 8,544,081	$ -	$ 8,544,081	
19	Amortization of EDIT	$ (831,898)	$ -	$ (831,898)	OCA-8-26
	Current Year Federal NOL	$ (46,041,425)		$ (78,090,467)	
	Amortization of 481 (a) Tax Repairs	$ (20,947,437)		$ (20,947,737)	OCA-8-19
	Other	$ -			OCA-8-20
20	**Federal Deferred Income Tax Expense**	**$ (59,276,679)**	**$ -**	**$ (91,325,720)**	OCA-8-21
					OCA-8-29
21	Total Current and Deferred FIT	**$ (59,276,680)**	**$ (32,049,040)**	**$ (91,325,720)**	OCA-8-30
22	**Total Income Tax Expense**	**$ (59,295,394)**	**$ (32,049,040)**	**$ (91,344,434)**	

(1) Company Exhibit No. 7 Schedule No. 8

APPENDIX C

–

COMPANY EXHIBIT 7, SCHEDULE 8, ATTACHMENT 1, PAGE 2

COMBINED DIVISIONS INCOME TAX PROVISION

MODIFIED AND UPDATED WITH OCA REVENUE REQUIREMENT

EXHIBIT DM-38

Exhibit 7

Schedule 8
Attachment 1
Page 2 of 16

Combined Divisions
Income Tax Provision

Mugrace

Test Year for the 12 Months Ended:

FILING REQUIREMENTS		**Historic**			**Future**			**Fully Projected Future**		
		A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**
53.53.III.A.55						***Present Rates***			***Proposed Rates***	
53.53.III.A.53	Ref	**8/31/2023** *Per Books*	Adjustment	**8/31/2023** *Pro-Forma*	Adjustment	**8/31/2024** *Pro-Forma*	Adjustment	**9/30/2025** *Pro-Forma*	Adjustment	**9/30/2025** *Pro-Forma*
1 Operating Income Before Taxes and Interest	*Ex. 2, Sch. 4*	$ 192,280,799	(32,467,265)	$ 159,813,534	6,399,222	$ 166,212,756	(2,851,207)	$ 163,361,549	131,607,896	$ 294,969,445
2 Less: Interest Expense	*Ex. 2, Sch. 4*	$ 47,986,899	12,619,401	$ 60,606,300	4,964,064	$ 65,570,364	26,361,751	$ 91,932,115	(7,847,035)	$ 84,085,080
3 Pretax Operating Income (Loss)		144,293,900	(45,086,666)	99,207,234	1,435,158	100,642,391	(29,212,957)	71,429,434	139,454,932	210,884,366
Adjustments to Taxable Income (Schedule M Items):										
Flow Through Adjustments										
4 Meals & Entertainment		626,141	-	626,141	155,859	782,000	57,000	839,000	-	839,000
5 Other		603,384	(603,384)	-	-	-	-	-	-	-
6 AFUDC Equity		(763,215)	763,215	-	-	-	-	-	-	-
7 Tax Repairs Gross Deduction		(297,513,887)	-	(297,513,887)	(168,790,233)	(466,304,120)	36,304,120	(430,000,000)	-	(430,000,000)
8 Tax Repairs Book Depr & AFUDC		-	-	-	29,464,733	29,464,733	10,535,266	40,000,000	-	40,000,000
9 Property Basis Differences (LKE)		9,114,232	-	9,114,232	(8,223,991)	890,241	(46,977)	843,264	-	843,264
10 Total Flow Through Adjustments		(287,933,345)	159,831	(287,773,514)	(147,393,631)	(435,167,145)	46,849,408	(388,317,737)	-	(388,317,737)
Deferred Adjustments										
11 Depreciation		(34,002,046)	-	(34,002,046)	(12,100,396)	(46,102,442)	(256,578)	(46,359,020)	-	(46,359,020)
12 Sec 263A Interest		472,217	-	472,217	743,683	1,215,900	657,850	1,873,750	-	1,873,750
13 Contributions in Aid of Construction		(166,094)	-	(166,094)	(238,908)	(405,002)	28,582	(376,420)	-	(376,420)
14 Cost of Removal		4,623,917	-	4,623,917	(1,320,614)	3,303,303	872,286	4,175,589	-	4,175,589
15 Property Basis Differences Other		4,169,942	-	4,169,942	(5,304,245)	(1,134,303)	(244,039)	(1,378,342)	-	(1,378,342)
16 Unicap 263A Inventory		(23,126,781)	15,626,041	(7,500,740)	7,131,756	(368,984)	603,204	234,219	-	234,219
17 Other		106,947,364	(106,947,364)	-	-	-	-	-	-	-
18 Total Deferred Adjustments	*Att. 2*	58,918,519	(91,321,323)	(32,402,804)	(11,088,724)	(43,491,528)	1,661,305	(41,830,223)	-	(41,830,223)
19 Total Adjustments to Taxable Income		(229,014,826)	(91,161,492)	(320,176,318)	(158,482,355)	(478,658,673)	48,510,713	(430,147,960)	-	(430,147,960)
Adjustments to State Taxable Income										
20 PA Depreciation Adjustment		7,329,970	-	7,329,970	(12,824,333)	(5,494,362)	3,486,548	(2,007,814)	-	(2,007,814)
21 PA Taxable Income before NOL		(77,390,955)	(136,248,158)	(213,639,113)	(169,871,530)	(383,510,644)	22,784,303	(360,726,340)	139,454,932	(221,271,408)
22 Prior Year PA NOL Utilization	*Att. 4*	(9,430,933)	9,430,933	-	-	-	-	-	-	-
23 PA Taxable Income		(86,821,888)	(126,817,225)	(213,639,113)	(169,871,530)	(383,510,644)	22,784,303	(360,726,340)	139,454,932	(221,271,408)
24 PA Income Tax Expense (Before Current Year NOL Adj)	Various	(7,506,304)	(12,411,983)	(19,918,287)	(13,280,951)	(33,199,238)	2,858,398	(30,340,840)	12,384,665	(17,956,175)
Current Year PA Net Operating Loss Adjustment	*Att. 4*	(4,610,149)	24,528,436	19,918,287	13,280,951	33,199,238	(2,858,398)	30,340,840	(12,384,665)	17,956,175
Other		(1,502,453)	1,502,453	-	-	-	-	-	-	-
PA Deferred Tax on Inventory Adjustment & Line Pack Gas		(8,891,283)	9,565,599	674,317	(642,990)	31,327	(50,041)	(18,714)	-	(18,714)
Pennsylvania Income Tax Expense		**(22,510,189)**	23,184,506	**674,317**	(642,990)	**31,327**	(50,041)	**(18,714)**	-	**(18,714)**
		-15.60%		0.68%		0.03%		-0.03%		0.00%
Income Subject to Federal Income Tax (Before NOL Adjustment)		(72,604,473)	(148,364,611)	(220,969,084)	(157,047,198)	(378,016,281)	6,138,202	(371,878,079)	152,614,485	(219,263,594)
(Prior Year) Current Year Federal Net Operating Loss Adjustment	*Att. 4*	(180,603,932)	119,149,537	(61,454,395)	61,454,395	-	-	-	-	-
Federal Taxable Income		(253,208,405)	(29,215,075)	(282,423,479)	(95,592,802)	(378,016,281)	6,138,202	(371,878,079)	152,614,485	(219,263,594)
Federal Income Tax Expense Before Current Year NOL Adj		(53,173,765)	(6,276,772)	(59,450,537)	(19,939,461)	(79,389,998)	1,299,531	(78,090,467)	32,049,042	(46,041,425)
Current Year Federal Net Operating Loss Adjustment	*Att. 4*	-	59,450,537	59,450,537	19,939,461	79,389,998	(1,299,531)	78,090,467	(32,049,042)	46,041,425
Other		(2,600,262)	2,600,262	-	-	-	-	-	-	-
Federal Current Income Tax Expense		**(55,774,027)**	55,774,027	-	-	-	-	-	-	-
Federal Deferred Income Tax Expense		(4,195,931)	9,602,893	5,406,963	4,240,724	9,647,687	(1,103,606)	8,544,081	-	8,544,081
Amortization of Excess Deferred Income Taxes		(1,757,485)	352,369	(1,405,116)	250,057	(1,155,059)	323,162	(831,898)	-	(831,898)
Current Year Federal Deferred NOL Adjustment		24,441,020	(83,891,557)	(59,450,537)	(19,939,461)	(79,389,998)	1,299,531	(78,090,467)	32,049,042	(46,041,425)
Amortization of 481(a) Tax Repairs		(22,847,694)	1,900,257	(20,947,437)	-	(20,947,437)	-	(20,947,437)	-	(20,947,437)
Other		10,411,833	(10,411,833)	-	-	-	-	-	-	-
Federal Deferred Income Tax Expense		**6,051,743**	(82,447,871)	**(76,396,128)**	(15,448,680)	**(91,844,807)**	519,087	**(91,325,720)**	32,049,042	**(59,276,678)**
Total Federal Tax Expense (Current and Deferred)		**(49,722,284)**	(26,673,843)	**(76,396,128)**	(15,448,680)	**(91,844,807)**	519,087	**(91,325,720)**	32,049,042	**(59,276,678)**
Total Income Tax Expense		**(72,232,473)**	(3,489,338)	**(75,721,811)**	(16,091,669)	**(91,813,480)**	469,046	**(91,344,434)**	32,049,042	**(59,295,392)**
Other Income and Deductions:										
Other Income and Deductions		2,646,436	(2,646,436)	-	-	-	-	-	-	-
Taxes on Other Income and Deductions		307,536	(307,536)	0	(0)	0	(0)	0	-	0
Net Income		**218,865,273**		**174,929,045**	-	**192,455,872**	-	**162,773,868**	-	**270,179,758**

APPENDIX D

–

COMPANY RESPONSES TO INTERROGATORIES

EXHIBIT DM-39

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VII-002

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Please provide all Inflation Related Factors and Consumer Price Indices that are included in the Company's development of its revenue requirement increase of $156,026,122. (O&M Expenses and Capital Expenditures). What is the dollar value (revenue requirement impact) with respect to the Company's inclusion of all of its Inflation Related Factors and Consumer Price Indices?

Answer: Please see attachment which provides all Inflation Related Factors and Consumer Price Indices that are included in the Company's development of its revenue requirement increase of $156,026,122 for both O&M Expenses and Capital Expenditures.

Submit Date: 2/16/2024

OCA - Set 7 - #2

O&M Expenses

There were only two categories whereby the CPI rate was used. Below are the amounts requested:

	FTY	FPFTY	
Injuries & Damages	73,935	76,301	Exhibit 4, Schedule 1, page 18 of 33, Lines 9 & 12
Advertising	42,784	44,153	Exhibit 4, Schedule 1, page 23 of 33, Lines 5 & 8
Total	**116,719**	**120,454**	

Capital Expenditures

In order to project capital expenditures in the FTY and FPFTY the Company utilized the following methodologies:

	2024	2025	2026	2027	2028	
LTIIP, overall cost per m	2.31	2.4	2.5	2.62	2.82	
GP, increase factor	4.00%	3.50%	3.00%	3.00%	3.00%	
MLX increase factor	-5.00%	3.50%	3.00%	3.00%	3.00%	new starting point of 95% of actual

The methodologies for the categories:

LTIIP - Used the run rates (cost per mile) developed from (i) the portfolio of work we have for 2024 and (ii) a regression line based on 2018-2022 actuals. Please note because these run rates are based in part on actuals they reflect changes based a combination of factors including, but not limited to, portfolio, damage prevention, restoration requirements, corrosion faults, leak repairs, bid price, contractor services renewals, competitive bids, and general inflation. Thus the rate of change in LTIIP is higher than the change rates used in the other programs.

GP - The Company has experienced an average increase in cost per mile of about 8% from 2019 through 2023. To be conservative the company utilized 4% in 2024 and then reduced it to 3.5% in 2025 and 3% thereafter

MLX - The Company has experienced an average increase in cost per mile of about 15% from 2020 through 2023. To be conservative the company utilities 95% of the original projection in 2024 and then an increase rate of 3.5% in 2025 and 3% thereafter

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XXI-001

Witness: Becker, Paul **Title:** Vice President Construction &Engineering

Question: Reference Peoples' Response to OCA Set 18, Question 8. Please answer the following question without limiting the response to the confines of the $305,206.10 amount that Peoples identified in each of its responses to OCA Set 18, Question 8.

Reference the Commission Order entered in the matter captioned Pennsylvania Public Utility Commission, Bureau of Investigation and Enforcement v. Peoples Natural Gas Company LLC; M-2023-3024990 on February 1, 2024. Specifically, reference the Supplemental Record response identified on pages 11-12 of the Order which claim that "The costs of replacing the private property damage by the incident in Robinson on April 29, 2020 totaled $305,206.10." Please provide the following information, noting that this question seeks information about all incident costs and is not intended to be limited to the $305,206.10 identified in the Order:

a. Is Peoples Natural Gas Company LLC making a claim in this base rate case for any distribution line replacement necessary from the incident in Robinson on April 20, 2020? If so, identify the amount claimed and the basis for including the claim in this case. Note that for purposes of this question, "a claim" is not intended to be limited to the $305,206.10 identified in the Commission's Order, but it is intended to encompass all claims arising from the incident in Robinson on April 20, 2020.

b. Identify, by category, cost, and basis, any claims that Peoples Natural Gas Company, LLC is making in this base rate case related to the repair and/or replacement of any public and private property that resulted from the incident in Robinson on April 29, 2020. Note that for purposes of this question, "claims" is not intended to be limited to the $305,206.10 identified in the Commission's Order, but it is intended to encompass all claims related to the repair and/or replacement of any public and private property that resulted from the incident in Robinson on April 29, 2020.

c. Can Peoples confirm that all costs related to the Robinson incident on April 29, 2020 will be covered by insurance and/or through shareholder funding? Note that for purposes of this question, "costs" are not intended to be limited to the $305,206.10 identified in the Commission's Order, but are intended to encompass all costs related to the repair and/or replacement of any public and private property that resulted from the incident in Robinson on April 29, 2020.

Answer: a. As stated in the Joint Petition at M-2023-3024990 at page 7, "the Company replaced approximately 4,552 feet of steel pipe and 133 service lines." The total cost for the replacement

of those facilities was $1,462,406.60. The facilities were considered target assets eligible for replacement as part of the Company's LTIIP and as such were capitalized into rate base, thus they are included in the revenue requirement in this proceeding.

b. The Company is not making any claim(s) related to the repair and/or replacement of any public or private property that resulted from the incident in Robinson on April 29, 2020 in this base rate case other than those assets provided in the response to subpart a.

c. No. There were costs related to the Robinson incident that were not covered by insurance and/or through shareholder funding namely those identified in the response to subpart a.

Submit Date: 3/18/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VIII-024

Witness: Saball, Christine **Title:** Vice President Tax

Question: Refer to Peoples Statement No. 6 page 10. Please provide a brief explanation and development of the Company's Net Operating Loss carryforward of over $2 billion. What resulted in this carry-forward balance of over $2 billion? How many years has the Company proposing to carry-forward this balance for ratemaking purposes?

Answer: The Company's Net Operating Loss ("NOL") carryforwards for both state and federal income tax purposes are the results of tax greater than book timing differences. Increased capital spend has resulted in a greater level of tax depreciation and tax repairs. The carry-forward balance of the Company's gross state NOL (not tax effected) of over $2 billion is due to the Company's inability to monetize the NOL as a result of the 40% taxable income limitation imposed by currently enacted laws and the ongoing level of tax greater than book timing deductions.

The Company proposes to include this balance in ratemaking purposes as long as it has not been monetized, however as discussed in Peoples Statement No. 6, pages 20-21, there is a 20 year carryforward limitation for the use of the State NOL under currently enacted laws which could create a valuation allowance. In the event that the Company is unable to monetize the entire NOL carryforward, the Company will need to defer for recovery amounts that have already been refunded to customers but that will never be monetized by the Company.

Submit Date: 2/16/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VIII-019

Witness: Scanlon, Carol **Title:** Rates Manager

Question: Refer to Peoples Statement No. 2 page 36. What is the Tax Repair Surcharge Rider the Company is proposing to include in this proceeding? Please provide the calculation showing the development of this Surcharge Rider.

Answer: The proposed Tax Repair Surcharge for the Peoples Natural Gas Division is based on the surcharge the Company is currently using in our tariff. This surcharge was calculated and filed with the PUC on March 21, 2023. The surcharge % is applied to the base rate customer and delivery charges to determine the amount per Mcf that is applied to the customer bill. The calculation for the surcharge is attached.

Submit Date: 2/16/2024

Peoples Natural Gas Company
2022 Reconciliation of Tax Repairs Surcredit

		January 2022	February 2022	March 2022	April 2022	May 2022	June 2022	July 2022	August 2022	September 2022	October 2022	November 2022	December 2022	TOTAL
1	Projected Surcredit	$ (4,734,635)	$ (4,296,397)	$ (3,456,445)	$ (2,097,504)	$ (1,474,107)	$ (1,179,343)	$ (1,065,546)	$ (1,074,607)	$ (1,137,899)	$ (1,803,620)	$ (2,888,739)	$ (4,221,695)	$ (29,430,537)
2	Actual Surcredit	$ (4,908,826)	$ (3,943,301)	$ (3,128,019)	$ (2,525,254)	$ (1,555,406)	$ (1,221,133)	$ (1,208,860)	$ (1,221,938)	$ (1,274,482)	$ (2,118,044)	$ (2,837,916)	$ (4,184,748)	$ (30,127,927)
3	Current Period Over/(Under)	$ 174,191	$ (353,096)	$ (328,426)	$ 427,750	$ 81,299	$ 41,790	$ 143,314	$ 147,331	$ 136,583	$ 314,424	$ (50,823)	$ (36,947)	$ 697,390
	Interest Impact													
4	Time Factor	1.75	1.67	1.58	1.50	1.42	1.33	1.25	1.17	1.08	1.00	0.92	0.83	
5	Interest Rate	4.25%	4.25%	4.50%	4.75%	4.75%	5.25%	5.50%	5.75%	5.50%	5.75%	6.25%	6.50%	
6	Interest (Expense)/Income	$ 12,955	$ (25,011)	$ (23,400)	$ 30,477	$ 5,471	$ 2,925	$ 9,853	$ 9,883	$ 8,138	$ 18,079	$ (2,912)	$ (2,001)	$ 44,457

Current Period Over Collection w/ Interest	$ 741,847
Prior Period Over Collection	$ 16,232
Total Over Collection w/ Interest as of 12/31/2022	**$ 758,079**

Rider Tax Repairs Surcredit Calculation

Repair Annual Surcredit-per year for 5 years	$	(29,430,537)	*see below*
Over/(Under) Collection	$	713,622	*see page 1 of 2*
Interest (Expense)/Income	$	44,457	*see page 1 of 2*
Total Repair Annual Surcredit	$	(28,672,458)	
Projected Annual Delivery Rate Revenue	$	419,102,429	
% Surcredit as of April 1, 2022		-6.8414%	

	Federal Income Tax	State Income Tax	State Deduction for Federal		Book Dep. Reversal	Net Tax Benefit	
Gross Tax Base	$ 506,452,174	$ 506,452,174			$ 390,959,027		
Tax Depreciation Through 3/16/2020	(115,493,147)	(99,246,586)		Composite Depreciation Rates	0.017		
Remaining Taxable Basis	$ 390,959,027	$ 407,205,588		Annual Reversal	$ 6,646,303		
Surcredit Proof							
Total Catch Up	$ 390,959,027	$ 407,205,588	$ (407,205,588)		(33,231,517)		
Customer Share	21%	9.990%	2.0979%		100%		
Catch Up - customer share	$ 82,101,396	$ 40,679,838	$ (8,542,766)	$ 114,238,468	$ (33,231,517)		
Giveback period - years	5	5	5		5		
Annual Catch Up-Customer	$ 16,420,279	$ 8,135,968	$ (1,708,553)	$ 22,847,694	$ (6,646,303)		
Net Tax Benefit	$ 16,420,279	$ 8,135,968	$ (1,708,553)	$ 22,847,694	$ (6,646,303)		
Tax Rate					28.89%		
Tax Benefit	$ 16,420,279	$ 8,135,968	$ (1,708,553)	$ 22,847,694	$ (1,920,257)	$ 20,927,437	
Gross Up Factor	1.406	1.406	1.406		1.406		
Surcredit	$ 23,092,060	$ 11,441,721	$ (2,402,761)	**$ 32,131,020**	**$ (2,700,483)**	**$ 29,430,537**	**Annual Refund Customers**
				5	5		
				160,655,100	**(13,502,414)**	**$ 147,152,686**	**Total Refund to Customers**

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VIII-025

Witness: Saball, Christine **Title:** Vice President Tax

Question: Refer to Peoples Statement No. 6 page 14. Please show where each of the following balances are shown and calculated in the Company's Exhibit No. 7 Schedule 8 (or if on another Exhibit/Schedule):

a) Sur-credit calculation of $407.2 million

b) Federal Deduction of $390.9 million

Answer: Items a) and b) above both refer to the deduction for the 481(a) catch-up adjustment. The higher amount of $407.2 million is the State Deduction. The calculation of the Federal and State deductions are included in the attachment to OCA Data Request Set 8, Question #19. The amortization of the 481(a) catch-up adjustment amount is reflected in the Company's Exhibit No. 7 Schedule 8 Attachment 1 page 2 of 16 line 39 as a reduction to tax expense in this case. The offset to revenue is included in Exhibit No. 3. In addition, the Company has included the unamortized balance of the grossed-up Regulatory Liability for the 481(a) adjustment along with the related ADIT-tax gross-up in Schedule 8 Attachment 1 page 3 of 16 lines 42, 54 and 66 as a net reduction to rate base.

Submit Date: 2/19/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VIII-027

Witness: Saball, Christine **Title:** Vice President Tax

Question: Refer to Company Statement No. 6 page 16. The Company stated that the Rate Base ADIT balance is calculated at $47,366,959. Is this balance reflected in the Company's Rate Base (Exhibit No. 8 Schedule No. 2 page 3 of 5 (Combined)? Company Exhibit No. 8 Schedule No. 2 page 3 of 5 shows Deferred Income Taxes and EADIT at $3,232,844 under the FPFTY. Please reconcile these two balances.

Answer: The $47,366,959 represents the balance of ADIT on a combined basis of the normalized rate base timing differences at the current statutory tax rates. There are other tax balances in rate base that are discussed in Company Statement No. 6, pages 16 to 20. The $3,232,844 as shown on Company Exhibit No. 8, Schedule No. 2, page 3 of 5 is the total of all the tax balances in rate base. This agrees to the amount on Company Exhibit No. 7, Schedule 8, page 3 of 16, line 67.

Submit Date: 2/16/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XV-005

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Reference the revised and omitted exhibits filing that Peoples submitted in this case on February 16, 2024. Please provide the following information:

a. Please confirm that Line 4 of Exhibit No. 4, Schedule No. 1, page 2 is not impacted by Peoples' revision to Exh. 4, Sch. 1, pg. 11. If Exhibit No. 4, Schedule No. 1, page 2 is impacted, please provide an updated version of this page.

b. Please confirm that Peoples' revision to Exh. 4, Sch. 22, pgs. 1-4 does not impact the revenue requirement of the History Test Year, Future Test Year, or Fully Projected Future Test Year provided by Peoples in this proceeding.

c. If any corrections are carried over to Exhibit 4, Schedule 1, Peoples should update that schedule as well.

d. Please update Exhibit No. 4 Schedule No. 1 page 2 of 33, to update its request for Post-Retirement Benefits other than Pension (Exhibit No. 4 Schedule No. 1 page 11).

e. Indicate whether any of the corrections and omissions have a revenue requirement impact in this case from the as-filed position. If so, identify the impact(s) and specify how each impact is calculated.

Answer: a. The revision to Exh. 4, Sch. 1, pg. 11 does impact Exhibit No. 1, page 2. Peoples will file the revised Exhibit No. 4, Schedule 1 under separate cover.

b. The revision to Exh. 4, Sch. 22, pgs. 1-4 does not impact the revenue requirement.

c. Peoples will file the revised Exhibit No. 4, Schedule 1 under separate cover.

d. Peoples will file the revised Exhibit No. 4, Schedule 1 under separate cover.

e. The revised Exhibit No. 4, Schedule 1 to be filed under separate cover will outline all changes to the revenue requirement.

Submit Date: 3/4/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-I-004

Witness: Huwar, Michael **Title:** President Peoples

Question: Reference Peoples' Statement No. 1, the Direct Testimony of Michael Huwar, pp. 14-15 whereby Mr. Huwar poses and answers the question "Does Anyone Else Use a WNA Mechanism?" Provide the following information:

a. In Mr. Huwar's identification of PGW, Columbia, National Fuel, and UGI as Pennsylvania gas utilities with WNA mechanisms, did Mr. Huwar perform any research of whether any of the named entities' WNA mechanisms were operating on only a pilot basis? If so, provide any results.

b. In Mr. Huwar's identification of PGW, Columbia, National Fuel, and UGI as Pennsylvania gas utilities with WNA mechanisms, did Mr. Huwar perform any research of whether any of the named entities' WNA mechanisms relied upon deadbands to limit application of the WNA? If so, provide any results.

c. In Mr. Huwar's identification of PGW, Columbia, National Fuel, and UGI as Pennsylvania gas utilities with WNA mechanisms, did Mr. Huwar perform any research of whether any of the named entities' WNA mechanisms excluded certain months from the formula to limit rate volatility? If so, provide any results.

Answer:

a. Yes, Mr. Huwar is aware that Columbia is on its second, 5-year pilot for its WNA program. Mr. Huwar is also aware that UGI's tariff notes that its WNA is a pilot. Mr. Huwar is unaware of whether PGW or NFG have WNAs that are considered "pilots" as their tariffs do not state it.

b. Yes, Mr. Huwar is aware that Columbia, NFG and UGI currently have 3% deadbands for their respective WNA programs, as described in their tariffs. PGW's tariff states that its deadband is 1%.

c. Yes, Mr. Huwar is aware that according to their tariffs, the WNAs of UGI and NFG are in place for October through May. Columbia's WNA currently spans the months of November through May. PGW's tariff states that its WNA is in effect from October through May (except for 2021-2022 which excluded May).

Submit Date: 1/30/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-I-006

Witness: Scanlon, Carol **Title:** Rates Manager

Question: Reference Peoples' Statement No. 3, the Direct Testimony of Carol Scanlon, p. 17 whereby Ms. Scanlon addresses how the WNA will be reflected on customers' bills. Please indicate whether the WNA amount will be reflected as a separate line item on the customers' bills and provide a sample bill for both a residential customer and a residential CAP customer that reflects Peoples' proposed bill treatment of the WNA.

Answer: The WNA amount would not be reflected as a separate line item on the bill, rather it would be included with the base delivery (distribution) charge component and shown in the total charge amount displayed as the delivery line item on the bill. Since the WNA mechanism effectively normalizes the delivery revenue, this will aid the customer in seeing charges on their bill that are more aligned with the weather most recently experienced. Refer to Attachment A for a sample residential customer bill. The delivery line item that will include the WNA amount is designated with a red box.

Residential CAP customer bills do not display the specific current charge types that a residential bill does. The WNA amount would be included in the "Actual Usage Bill" amount shown on a residential CAP customer's bill. Refer to Attachment B for a sample residential CAP customer bill. The actual usage bill amount line item that will include the WNA amount is designated with a red box. The Company notes that a CAP customer's payment is based upon a percentage of income. This would not change as a result of the WNA charge.

Submit Date: 2/2/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VII-009

Witness: Scanlon, Carol **Title:** Rates Manager

Question: Refer to Peoples Statement No. 1, page 14. Please provide the effective dates in which the Commission approved each of the other four Pennsylvania Utilities with WNA mechanisms.

Answer: The Commission approved the WNAs for each of the other four gas utilities as follows:

National Fuel – Order Entered June 15, 2023

UGI Gas - Opinion and Order entered Sept. 15, 2022

Columbia Gas – Opinion and Order entered May 23, 2013

PGW – Order entered Aug. 8, 2002

Note that these were the original approval dates for each of the companies listed.

Submit Date: 2/16/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VII-010

Witness: Scanlon, Carol **Title:** Rates Manager

Question: Refer to Peoples Statement No. 1, page 14. How is the proposed WNA mechanism different from that of the Company's current weather normalization methodology? Please provide the dollar amount or dollar difference from that of the current weather normalization methodology to the proposed WNA mechanism. Please provide all calculations.

Answer: Peoples does not currently have a weather normalization mechanism in place. Presently, delivery charges on the customer's bill are based on actual weather not normalized weather. Also refer to the response to OCA-5-26.

Submit Date: 2/16/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VII-020

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Refer to Peoples Statement No. 2 page 11. Please provide a schedule of routine and normal vacancy positions related to terminations, retirements, etc. for the prior five-years 2018-2022, 2023, and expected 2024.

Answer: A. Please refer to Attachment A.

Submit Date: 2/16/2024

OCA Set 7 #20
Attachment A

	2018	2019	2020	2021	2022	2023	Expected 2024
Avg Vacancy %	2.4%	4.0%	9.0%	5.5%	3.6%	4.2%	2.7%
% of Vacancy							
Terminations	6%	2%	1%	2%	6%	3%	2%
Retirements	3%	4%	2%	5%	9%	5%	4%
Normal	91%	94%	97%	93%	85%	92%	94%

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VII-021

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Refer to Peoples Statement No. 2, page 11. Please provide a schedule of expected hires in the FTY and in the FPFTY periods by salary, positions to be filled, expected hire date, Union/Non-Union/Other, and timeline of the hiring process. Please offset these hires by the Company's estimated 29 FTEs and 8 FTEs estimated vacancies during the FTY and the FPFTY periods, respectively.

Answer: Please refer to I&E RE-06 for a detailed schedule of expected hires.

Submit Date: 3/6/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VII-024

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Refer to Company Exhibit No. 4 Schedule 1 (Labor Annualization) and Peoples Statement No. 2 page 12). Please confirm that the total additional employee count is the difference from the HTY Employee count of 1,412 and the Company's proposed Employee count of 1,465 or 53. Does this balance include any offsets for the vacancy credit?

Answer: Please refer to the response to I&E-RE-6. The 53 was the original difference. However, the Company discovered 11 positions were not included in the original labor adjustment, so the revised number is now 64. The Company is projecting that 8 positions will not be filled by the end of the FPFTY as a result of normal turnover.

Submit Date: 3/6/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VII-028

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Please provide a detailed breakdown of all of the Company's incentive compensation that reflects the performance / metric goals related to each of the Company's categories related to customer service, executive, financial goals, etc. that sums up to the Company's proposed STI/Incentive Compensation of $5,624,024.

Answer: The Company's proposed Incentive Compensation of $5,624,024 consists of Short-Term Incentive (STI), Long-Term Incentive (LTI), Achievement Award, and Spot Award compensation net of capitalization. please refer to the Confidential response in Exhibit 19, RR-27 for compensation program plans and related information. Please refer to updated response to I&E RE-11 for a detailed schedule of prior period STI metrics and results. The FTY and FPFTY projections are based upon 100% achievement of the goals and expect a similar breakdown of goals.

Submit Date: 2/22/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VII-030

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Has the Company included any Incentive type compensation that has been allocated from the Company's Parent Company or from the Company's Service Company? If so, please provide a detailed breakdown and description of each Incentive compensation for the HTY, the FTY and the FPFTY periods.

Answer: Please refer to I&E RE-11 for Service Company costs associated to incentive compensation included in the case.

Submit Date: 2/16/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VII-031

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Refer to Company Exhibit No. 4 Schedule 1 (page 10 and 11). (Pension Adjustment and Post-Retirement Benefits other than Pension).

a) Please provide a schedule breaking down the components and calculations of Post-Retirement Benefits Other than Pensions Costs for the Per Books balance of $1,229,997, the adjustment of $1,634,119, and the adjustment of ($450,075).

b) Please provide a schedule breaking down the components and calculations of the Pension costs for the Per Books balance of $4,497,434, and the breakdown of the net contributions of $5,670,000 (2022-2023 Contributions).

c) Please provide a schedule and a breakdown of Pension Costs and Post-Retirement Benefits Other than Pensions for the past five-year period (2018-2022).

Answer: A. The per books balance is the difference between the expense allowed by the PUC in docket R-2010-2201702 and the gross actuarial expense ($1,471,654 - $75,752) less capitalization of ($165,905). The PBOB adjustment of $1,634,119 represents the prior 2 year average expense amortization. The adjustment of ($450,075) has been restated on I&E RE-18 to $26,377 representing the difference between the FTY and HTY Net Expense ($1,256,374 - $1,229,997).

B. The pension funding amount for the Essential Utilities, Inc. Retirement Income Plan is determined each year based on the recommendation of management and subject to approval by Essential's Retirement and Employee Benefits Committee. The funding amount will be an amount greater than or equal to the minimum required contribution and less than or equal to the maximum tax-deductible contribution.

C. Please refer to Attachment A.

Submit Date: 3/4/2024

OCA Set 7 #31
Attachment A

	2018	2019	2020	2021	2022
Pension	$ 735,802	$ 2,290,746	$ 560,190	$ 5,343,118	$ 5,408,063
PBOB's	$ 1,472,143	$ 1,186,742	$ 1,473,256	$ 1,636,734	$ 1,246,063

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VII-032

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Refer to Company Exhibit 4 Schedule 1 page 12 (Benefits Compensation Adjustment). Please provide the following information:

a) a detailed breakdown and description of the Per Books balance of $16,409,732 related to Medical, Dental, Vision, Life Insurance, Long-Term Disability Insurance, 401K plans and other such programs, the adjustment to arrive at the $874,037 balance;

b) the adjustment to arrive at the $2,277,050 balance (FTY);

c) the adjustment to arrive at the $1,423,904 balance (FPFTY).

d) please also reconcile the balance of $16,409,732 to the balance shown on Company Exhibit No. 4 Schedule 1 of $16,406,605; and

e) please identify all third party consultants that provided information that was relied upon to support these adjustments.

Answer: A. Please refer to I&E RE-20 for a detail break out of the per books balance and Attachment A for the adjustment calculation.

B & C. Please see Attachment B.

D. The balance shown on Exhibit No. 4 Schedule 1 of $16,406,605 is correct and the $16,409,732 on page 12 is overstated by $3,127.

E. Please refer to I&E RE-22 for third party consultants that provided information used to support the adjustments.

Submit Date: 2/16/2024

OCA Set 7 #32
Attachment A

A.	**Other Benefits Per Books**	**$**	**16,409,732**	
	Annualized Other Benefits			
	Per Roster Detail	$	30,087,519	*Refer to Highly Confidential Attachment in I&E*
	Other Benefits not included in the Roster File			
	VEBA -3.75% of Union Wages	$	3,300,000	
	Recruiting	$	150,000	
	Tuition Reimbursement	$	20,000	
	Employee Relations	$	500,000	
	Safety Functions	$	150,000	
	Other Misc Employee Benefits	$	780,000	
	Total Gross Annualized Other Benefits	**$**	**34,987,519**	
	Capitalization	**$**	**(17,703,750)**	
B.	**Total Annualized Other Benefits**	**$**	**17,283,769**	
	Total Adjustment (Line B - Line A)	**$**	**874,037**	

OCA Set 7 #32
Attachment B

		FTY
Other Benefits Annualized as of 8/31/2023	$	34,987,519
Increase on current compliment	$	3,848,627
Other Benefits associated to filled positions	$	758,400
Total Increase	$	4,607,027
Capitalization	$	(2,329,077)
Total FTY Adjustment	$	2,277,950

		FPFTY
Other Benefits FTY	$	39,594,546
Increase on current compliment	$	2,375,673
Other Benefits associated to filled positions	$	497,700
Total Increase	$	2,873,373
Capitalization	$	(1,449,469)
Total FPFTY Adjustment	$	1,423,904

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VII-036

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Refer to Company Exhibit No. 4 Schedule 1 page 15 of 33. Please provide a detailed breakdown and description of the Per Books balance of $2,955,571 related to Outside Services – A&G Adjustment.

Answer: Please refer to the response to I&E-RE-25, Part A for a detailed breakdown and description of the Per Books balance of $2,955,571 related to Outside Services-A&G.

Submit Date: 2/16/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VIII-003

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Refer to Company Exhibit No. 4 Schedule 1 page 2 and 17 of 33. Please provide the following information:

a) a detailed breakdown and description of in the amount of $5,213,687 (Per Books) for the Property Insurance, Other Misc. Insurance, Workers Compensation and Corporate Insurance;

b) provide a breakdown of $5,905,350 as shown on Company Exhibit No. 4 Schedule 1 page 17 of 33 Line 4 Column 8 and reconcile this balance to the Per Books balance of $5,213,687; and

c) Indicate how the Capitalization adjustments were developed? Did the Company rely on any other information in addition to its third-party insurance brokers with respect to the proposed 13.1% cost increase? If so, please provide all relevant data.

Answer: Please refer to attachment for responses to both Parts A and B -- 1000 = PNG; 3100 = PG. For Part C, the Capitalization adjustments were based upon a per book ratio of 26.0% for Peoples Natural Gas and 16.6% for Peoples Gas. Additional information for the proposed cost increase can be found in the response to I&E-RE-27, Part D.

Submit Date: 2/16/2024

OCA - Set 8 - #3, Part A

	1000	3100	Total
Directors & Officers Liability Insurance	316,710	58,837	375,547
Excess Liability/Surty Insurance	3,123,655	557,129	3,680,785
General Property Insurance	529,611	98,389	627,999
Workers' Compensation Insurance	283,720	46,704	330,424
Other Insurance	165,168	33,764	198,933
Total	**4,418,865**	**794,823**	**5,213,687**

OCA - Set 8 - #3, Part B

	Premiums						
	1000	**CAPEX**	**Total**	**3100**	**CAPEX**	**Total**	**Total**
Total Account Property Insurance	374,942	88,607	286,335	61,842	9,112	52,731	339,065
Total Account Directors Insurance	345,709	81,699	264,010	57,021	8,401	48,619	312,630
Total Account Executive Insurance	69,980	16,538	53,442	11,542	1,701	9,842	63,284
Total Account Aircraft Insurance	7,048	1,666	5,383	1,163	171	991	6,374
Total Account Excess Insurance	3,653,928	863,503	2,790,425	602,674	88,797	513,877	3,304,302
Total Account Auto Insurance	220,043	52,001	168,042	39,937	5,884	34,053	202,095
Total Account General Insurance	678,147	160,261	517,886	111,853	16,480	95,373	613,259
Total Account Cyber Insurance	337,163	79,679	257,484	33,410	4,923	28,487	285,971
Total Account Railroad Insurance	2,599	614	1,985	429	63	366	2,351
Total Account Workers Compensation	873,607	206,452	667,154	127,677	18,812	108,865	776,019
Total	**6,563,167**	**1,551,019**	**5,012,147**	**1,047,547**	**154,344**	**893,203**	**5,905,350**

Insurance Premiums of $5,905,350 shown on Exhibit 4, Schedule 1, page 17 of 33, Line 4 Column 8 are for 12-month period October 1, 2022 to September 30, 2023

The Per Books balance of $5,213,687 is for the 12-month period of September 1, 2022 to August 31, 2023

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VIII-006

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Refer to Company Exhibit No. 4 Schedule 1 page 19 of 33. (Travel), Please provide a schedule identifying the need for such Travel, the costs for the Travel, and the employee category that partook in the Travel. Please provide for the HTY Per Books of $931,017.

Answer: Please see attached for schedule for costs for Travel and employee category that partook in the Travel. Refer to I&E-RE-28, Part A for the HTY per books of $931,017.

Submit Date: 2/16/2024

OCA - Set 8 #6

Sum of Total HTY	Column Labels			
Row Labels	**Entertainment Expnse**	**Travel &Ent Exp 2200**	**Travel Expense**	**Grand Total**
Accounting		17,081		17,081
Applications	390	735	1,446	2,571
Auditing		555		555
Business Development		13,486		13,486
Corporate	17,523		420	17,943
Corporate Services	4,347	21,023	19,593	44,964
Customer Service	19,690	1,632	33,721	55,043
Executive	66,434	35,114	25,431	126,979
Finance & Regulation		2,452	1,202	3,654
Government Affairs	31,892	911	10,931	43,735
Human Resources	12,585	3,935	21,258	37,778
IT & Cyber Security		670	1,585	2,255
Legal & Land Rights	1,897	34,200	9,944	46,041
Operations	61,944	105,905	103,490	271,338
Grand Total	**216,702**	**237,700**	**229,022**	**683,424**

Community Relations - OCA, Set 7, #7	570,544
Grand Total	**1,253,968**

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VIII-007

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Refer to Company Exhibit No. 4 Schedule 1 page 20 of 33. (Company Memberships). Please provide a schedule along with the associated costs and the need for each Company Membership totaling $797,132.

Answer: Please see the attached for the need for each Company Membership and associated costs totaling $797,132.

Submit Date: 2/16/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VIII-010

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Refer to Company Exhibit No. 4 Schedule 1 page 23 of 33 (Advertising). Please provide a detailed breakdown and description of the Per Books balance of $1,516,137 and the adjustment of ($179,141) related to each of the Company's categories of Advertising Expenses.

Answer: Please refer to the attached for a detailed breakdown and description of the Per Books balance of $1,516,137 and the adjustment of ($179,141). For additional information related to the adjustment, please refer to the response to I&E-RE-32, Part A.

Submit Date: 2/16/2024

OCA - Set 8 - #10

	Total	Adjustment
Digital Advertising	103,572	(144,488)
Creative Production	38,225	(20,710)
Broadcast	3,154	(4,400)
Print	84,195	(4,200)
PR Firm	64,870	(90,498)
Other	1,222,121	85,155
Total	**1,516,137**	**(179,141)**

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VIII-012

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Refer to Company Exhibit No. 4 Schedule 1 page 25 of 33. (Materials and Supplies) Provide a detailed breakdown and description of the Per Books balance of $10,459,149, and the adjustment of $742,725 related to increase in average cost per fault, higher number of faults and expected higher costs of anodes.

Answer: Please refer to the response to I&E-RE-36, Part A for a detailed breakdown and description of the Per Books balance of $10,459,149. Please refer to the response I&E-RE-36, Part D for a detailed breakdown of the adjustment of $742,725 related to the increase in average cost per fault, higher number of faults and expected higher costs of anodes.

Submit Date: 2/16/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VIII-014

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Refer to Company Exhibit No. 4 Schedule 1 page 27 of 33. (Debt Issuance Costs). Please provide the following information:

a) Do these Debt Issuance Costs require Commission approval? Please explain;

b) Please provide a schedule that shows the development and calculation of the $404,371 balance;

c) What is the Company's rationale to include these costs in rates?

Answer: a) These costs are associated with the Company's Intercompany Demand Note ("Revolver") with its parent company, PNG Companies LLC. Such demand note is approved by the PUC.

b) Please refer to the attachment.

c) These are valid costs associated with the Company's use of the above mentioned Revolver and are not recovered via interest expense. As such, it is necessary to claim these costs in O&M.

Submit Date: 2/16/2024

OCA-VIII-14 Attachment
Debt Issuance Costs
2023 Peoples Natural Gas Rate Case

Total Estimated Debt Issuance Costs - PNG Companies	$	440,000						
Total PNG Companies Revolver	$	300,000,000						
		PNG		**PG**		**Delta**		**Total**
Allocation Percentage		86%		6%		8%		100%
Debt Issuance Cost Allocation	$	376,260	$	28,111	$	35,629	$	440,000
		A		**A**				
PNG + PG Combined	$	404,371	sum of **A**s					

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VIII-016

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Refer to Company Exhibit No. 4 Schedule 1 page 29 of 33. Please provide the following information:

a) the actual rate case expenses incurred by the Company in the past five base rate case proceedings, along with the Docket No. associated with each rate case proceeding; and

b) please provide monthly invoices related to each of the Company's rate case expense categories.

Answer: For Part A, please refer to the attached for the Rate Case proceeding from 2008. For the subsequent three proceedings, please refer to I&E, RE-39. For Part B, please refer to I&E-RE-40 for the monthly invoices related to each of the Company's Rate Case expense categories.

Submit Date: 2/16/2024

OCA - Set 8 - #16

Docket	Date of Filing	Actual Rate Case Expense
R-2008-2029325 (Equitable)	June 30, 2008	$1,040,640

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VIII-020

Witness: Saball, Christine **Title:** Vice President Tax

Question: Refer to Peoples Statement No. 2 page 35. Please show where the Company has calculated and reflected its estimated current repair deduction (Catch-up adjustments) in the Company's filing (Exhibit No. and Schedule No.).

Answer: The current and ongoing tax repairs deductions are reflected in Exhibit No. 7 Schedule 8 Attachment 1 page 2 of 16 line 7. The amount is calculated based on an estimated percentage of capital spend qualifying for tax repairs. As discussed in Company Statement No. 2 beginning on page 31, the catch-up adjustments (or 481(a) adjustment) from the calculations prior to the new IRS rules (gas safe harbor) are being returned to customers of the Peoples Natural Gas Division through the Tax Repair Surcredit and the Company is proposing to refund the additional tax benefits resulting from the gas safe harbor rules, etc. through the Tax Repair Surcredit pursuant to the terms of the Settlement at Docket No. P-2020-3021191. Please refer to the response to OCA-VIII-19 for the detail of the revenue credit.

Submit Date: 2/19/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VIII-022

Witness: Scanlon, Carol **Title:** Rates Manager

Question: Refer to Company Statement No. 3 page 16 and Company Exhibit CAS-1. Please provide the rate and revenue impact on a residential customer using the Company's current 20-year average weather normalization period (Statement No. 3 page 5) and the Company's proposed weather normalization adjustment. Please provide a side-by-side comparison showing all calculations. Please provide all calculations in a life Microsoft Excel Spreadsheet worksheet format.

Answer: Based upon the Company's interpretation of this request, refer to the attachment. Page 1 of the attachment displays the rate case proposed HDDs spread by month compared to the 20-year average HDDs spread by month.

Pages 2 and 3 of the attachment show a side-by-side calculation, using Exhibit CAS-1, for a residential customer in the month of February and applying each of the HDD methodologies presented on page 1 of the attachment. Note that the actual HDD's (Line No. 2 of the WNA calculation) and the customer's monthly and baseload consumption (Line Nos. 4 and 5) are assumptions for purposes of this example.

Page 2 shows a side-by-side WNA calculation that compares using the rate case proposed HDD's as "normal" to using the 20-year average HDDs as "normal" in a case where weather is colder than normal.

Page 3 shows a side-by-side WNA calculation that compares using the rate case proposed HDD's as "normal" to using the 20-year average HDDs as "normal" in a case where weather is warmer than normal.

Submit Date: 2/16/2024

Peoples Natural Gas Company LLC
OCA-VIII-22 Attachment

Year	Annual HDD	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rate Case Proposed Normal HDD's	5,341	1,077	918	732	404	172	33	4	9	86	348	626	932
20 Year Average HDD'S	5,443	1,098	935	746	411	175	34	4	9	88	355	638	949

Actual HDD's - Hypothetical		CTN	1,012
		WTN	876

Peoples Natural Gas Company LLC
OCA-VIII-22 Attachment

WNA Formulas	
Weather Normalization Adjustment (WNA)	WNAM X Distribution Usage Charge
WNAM = Weather Normalized Adjustment MCF	WNBM-AMUM
WNBM = Weather Normalized Billing MCF	BLMM+ [(NHDDA/AHDDA)x(AMUM-BLMM)]
BLMM = Base Load Monthly MCF	Actual average daily consumption for July and August
NHDD = Normal Heating Degree Days	Per revenue requirement

Gray highlighted cells designate input fields.

WNA Calculation Using Rate Case Proposed Normal HDD's
The following example assumes weather for the month is colder than normal

1	Normal Heating Degree Days	918	NHDD	
2	Actual Heating Degree Days	1,012	AHDD	
3	WNA Factor (Line 1 / Line 2)	0.907	NHDD/AHDD	
4	Total Monthly MCF Consumption	13.5	AMUM	
5	Base Load MCF Consumption	2.2	BLMM	
6	Heat Sensitive MCF Consumption (Line 4 - Line 5)	11.3		
7	Weather Normalized Billing MCF (Line 5 + (Line 3 x Line 6))	12.5	WNBM	
8	Weather Normalized Adjusted MCF (Line 7 - Line 4)	(1.00)	WNAM	
9	Distribution Charge 1/	$ 3.9608		
10	**Weather Normalization Adjustment (Line 8 x Line 9)**	**$ (3.96)**	WNA	

1/ Represents Peoples Natural Gas Division residential delivery rate as of Oct 1, 2023
2/ WNA is a delivery charge adjustment
3/ Calculated WNA amounts are subject to STAS, DSIC, and TRS

WNA Formulas	
Weather Normalization Adjustment (WNA)	WNAM X Distribution Usage Charge
WNAM = Weather Normalized Adjustment MCF	WNBM-AMUM
WNBM = Weather Normalized Billing MCF	BLMM+ [(NHDDA/AHDDA)x(AMUM-BLMM)]
BLMM = Base Load Monthly MCF	Actual average daily consumption for July and August
NHDD = Normal Heating Degree Days	Per revenue requirement

Gray highlighted cells designate input fields.

WNA Calculation 20 Year Average HDD'S
The following example assumes weather for the month is colder than normal

1	Normal Heating Degree Days	935	NHDD	
2	Actual Heating Degree Days	1,012	AHDD	
3	WNA Factor (Line 1 / Line 2)	0.924	NHDD/AHDD	
4	Total Monthly MCF Consumption	13.5	AMUM	
5	Base Load MCF Consumption	2.2	BLMM	
6	Heat Sensitive MCF Consumption (Line 4 - Line 5)	11.3		
7	Weather Normalized Billing MCF (Line 5 + (Line 3 x Line 6))	12.6	WNBM	
8	Weather Normalized Adjusted MCF (Line 7 - Line 4)	(0.90)	WNAM	
9	Distribution Charge 1/	$ 3.9608		
10	**Weather Normalization Adjustment (Line 8 x Line 9)**	**$ (3.56)**	WNA	

1/ Represents Peoples Natural Gas Division residential delivery rate as of Oct 1, 2023
2/ WNA is a delivery charge adjustment
3/ Calculated WNA amounts are subject to STAS, DSIC, and TRS

Peoples Natural Gas Company LLC
OCA-VIII-22 Attachment

WNA Formulas	
Weather Normalization Adjustment (WNA)	WNAM X Distribution Usage Charge
WNAM = Weather Normalized Adjustment MCF	WNBM-AMUM
WNBM = Weather Normalized Billing MCF	BLMM+ [(NHDDA/AHDDA)x(AMUM-BLMM)]
BLMM = Base Load Monthly MCF	Actual average daily consumption for July and August
NHDD = Normal Heating Degree Days	Per revenue requirement

Gray highlighted cells designate input fields.

WNA Calculation Using Rate Case Proposed Normal HDD's
The following example assumes weather for the month is warmer than normal

1	Normal Heating Degree Days	918	NHDD	
2	Actual Heating Degree Days	876	AHDD	
3	WNA Factor (Line 1 / Line 2)	1.048	NHDD/AHDD	
4	Total Monthly MCF Consumption	11.0	AMUM	
5	Base Load MCF Consumption	2.2	BLMM	
6	Heat Sensitive MCF Consumption (Line 4 - Line 5)	8.8		
7	Weather Normalized Billing MCF (Line 5 + (Line 3 x Line 6))	11.4	WNBM	
8	Weather Normalized Adjusted MCF (Line 7 - Line 4)	0.40	WNAM	
9	Distribution Charge 1/	$ 3.9608		
10	**Weather Normalization Adjustment (Line 8 x Line 9)**	**$ 1.58**	WNA	

1/ Represents Peoples Natural Gas Division residential delivery rate as of Oct 1, 2023
2/ WNA is a delivery charge adjustment
3/ Calculated WNA amounts are subject to STAS, DSIC, and TRS

WNA Formulas	
Weather Normalization Adjustment (WNA)	WNAM X Distribution Usage Charge
WNAM = Weather Normalized Adjustment MCF	WNBM-AMUM
WNBM = Weather Normalized Billing MCF	BLMM+ [(NHDDA/AHDDA)x(AMUM-BLMM)]
BLMM = Base Load Monthly MCF	Actual average daily consumption for July and August
NHDD = Normal Heating Degree Days	Per revenue requirement

Gray highlighted cells designate input fields.

WNA Calculation 20 Year Average HDD'S
The following example assumes weather for the month is warmer than normal

1	Normal Heating Degree Days	935	NHDD	
2	Actual Heating Degree Days	876	AHDD	
3	WNA Factor (Line 1 / Line 2)	1.067	NHDD/AHDD	
4	Total Monthly MCF Consumption	11.0	AMUM	
5	Base Load MCF Consumption	2.2	BLMM	
6	Heat Sensitive MCF Consumption (Line 4 - Line 5)	8.8		
7	Weather Normalized Billing MCF (Line 5 + (Line 3 x Line 6))	11.6	WNBM	
8	Weather Normalized Adjusted MCF (Line 7 - Line 4)	0.60	WNAM	
9	Distribution Charge 1/	$ 3.9608		
10	**Weather Normalization Adjustment (Line 8 x Line 9)**	**$ 2.38**	WNA	

1/ Represents Peoples Natural Gas Division residential delivery rate as of Oct 1, 2023
2/ WNA is a delivery charge adjustment
3/ Calculated WNA amounts are subject to STAS, DSIC, and TRS

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VIII-024

Witness: Saball, Christine **Title:** Vice President Tax

Question: Refer to Peoples Statement No. 6 page 10. Please provide a brief explanation and development of the Company's Net Operating Loss carryforward of over $2 billion. What resulted in this carry-forward balance of over $2 billion? How many years has the Company proposing to carry-forward this balance for ratemaking purposes?

Answer: The Company's Net Operating Loss ("NOL") carryforwards for both state and federal income tax purposes are the results of tax greater than book timing differences. Increased capital spend has resulted in a greater level of tax depreciation and tax repairs. The carry-forward balance of the Company's gross state NOL (not tax effected) of over $2 billion is due to the Company's inability to monetize the NOL as a result of the 40% taxable income limitation imposed by currently enacted laws and the ongoing level of tax greater than book timing deductions.

The Company proposes to include this balance in ratemaking purposes as long as it has not been monetized, however as discussed in Peoples Statement No. 6, pages 20-21, there is a 20 year carryforward limitation for the use of the State NOL under currently enacted laws which could create a valuation allowance. In the event that the Company is unable to monetize the entire NOL carryforward, the Company will need to defer for recovery amounts that have already been refunded to customers but that will never be monetized by the Company.

Submit Date: 2/16/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VIII-026

Witness: Saball, Christine **Title:** Vice President Tax

Question: Please provide the calculation and development of the Company's proposed Excess ADIT of $1,757,485 (HTY) shown on Company Exhibit No. 7 Schedule No. 8 line 37 and for the FTY and the FPFTY periods.

Answer: Please refer to the attachment.

Submit Date: 2/16/2024

			Timing Diff Activity	DFIT Activity	FAS109 Activity	FT Activity	Excess Activity
Tax Year :		2022					
2022 Gas Year End Estimate							
Peoples Natural Gas Company LLC							
PowerTax Deferred Tax Summary Report							
Grouped By: Total Tax Classes							
	PNG Fed Method/Life		$42,239,086.31	$7,907,918.32	$8,870,208.13	$0.00	($962,289.81)
	PNG Federal Amortization		$0.00	$0.00	$0.00	$0.00	$0.00
	PTWP Fed Method/Life		($967.21)	($203.11)	($203.11)	$0.00	$0.00
Total Tax Classes			$42,238,119.10	$7,907,715.21	$8,870,005.01	$0.00	($962,289.80)
Amortization Type Depreciation Difference Totals:			$42,238,119.10	$7,907,715.21	$8,870,005.01	$0.00	($962,289.80)
	PNG Fed 481a Repair Adj 2020		($1,221,411.55)	($256,496.43)	($256,496.43)	$0.00	$0.00
	PNG Fed 481a Repair Adj 2020 FT		($4,550,353.70)	$0.00	($955,574.28)	($955,574.28)	$0.00
	PNG Fed AFUDC Debt		$751,405.85	$147,529.41	$157,795.23	$0.00	($10,265.82)
	PNG Fed AFUDC Equity		$1,789,301.46	$370,848.19	$375,753.31	$0.00	($4,905.12)
	PNG Fed COR		($4,711,843.52)	($989,487.14)	($989,487.14)	$0.00	$0.00
	PNG Fed Int Dev SW		($3,076,727.51)	($984,764.70)	($646,112.78)	$0.00	($338,651.92)
	PNG Fed Net Book		$0.00	$0.00	$0.00	$0.00	$0.00
	PNG Fed Salvage		$502,984.72	$105,626.79	$105,626.79	$0.00	$0.00
	PNG Fed Tax Repairs FT		$202,266,967.01	$0.00	$42,476,063.07	$42,476,063.07	$0.00
Total Tax Classes			$191,750,322.76	($1,606,743.88)	$40,267,567.78	$41,520,488.80	($353,822.86)
Amortization Type Book Overhead Totals:			$191,750,322.76	($1,606,743.88)	$40,267,567.78	$41,520,488.80	($353,822.86)
	PNG Fed - Util		$0.00	$0.00	$0.00	$0.00	$0.00
	PNG Fed 263A Int-Dist 15		$106,497.07	$32,503.33	$22,364.38	$0.00	$10,138.95
	PNG Fed 263A Int-Dist 20		($823,072.09)	($161,136.57)	($172,845.14)	$0.00	$11,708.57
	PNG Fed 263A Int-Storage		$4,569.94	$1,599.49	$959.69	$0.00	$639.80
	PNG Fed 263A Int-Trans		$60,939.16	$19,523.40	$12,797.22	$0.00	$6,726.18
	PNG Fed 481a Bonus Addback 2020		$1,018,203.98	$213,822.83	$213,822.84	$0.00	($0.01)
	PNG Fed Cap Betterments		$4,925.42	$1,723.90	$1,034.34	$0.00	$689.56
	PNG Fed CIAC-15 YR		$141,477.20	$44,091.70	$29,710.21	$0.00	$14,381.49
	PNG Fed CIAC-20 YR		$124,513.39	$35,947.37	$26,147.81	$0.00	$9,799.56
	PNG Fed Comp HW-5 Yr		$18,969.17	$6,639.21	$3,983.53	$0.00	$2,655.68
	PNG Fed Comp SW-3 Yr		$0.00	$0.00	$0.00	$0.00	$0.00
	PNG Fed CWIP Clr acct dt cv		$0.00	$0.00	$0.00	$0.00	$0.00
	PNG Fed Gas Stored in R&P		$0.00	$0.00	$0.00	$0.00	$0.00
	PNG Fed IP Dist LP 20		$576,573.23	$131,126.41	$121,080.38	$0.00	$10,046.03
	PNG Fed IP Dist RP 15		$113,630.89	$31,635.31	$23,862.49	$0.00	$7,772.82
	PNG Fed PP&E Clr Acct Dt Cv		$0.00	$0.00	$0.00	$0.00	$0.00
Total Tax Classes			$1,347,227.36	$357,476.38	$282,917.75	$0.00	$74,558.63
Amortization Type Tax Overhead Totals:			$1,347,227.36	$357,476.38	$282,917.75	$0.00	$74,558.63
Jurisdiction Totals:			$235,335,669.22	$6,658,447.71	$49,420,490.54	$41,520,488.80	($1,241,554.03) **To A**
Company Totals:			$235,335,669.22	$6,658,447.71	$49,420,490.54	$41,520,488.80	($1,241,554.03)

PNG/EGC	
ETR Tie-out:	
EADIT (A+B)	(1,761,684)
2022 Q3/Q4	50%
	(880,842)
2023 Q1/Q2 (C)	(573,318)
	(1,454,161)

PGC	
ETR Tie-out:	
EADIT (C)	(264,389)
2022 Q3/Q4	50%
	(132,194)
2023 Q1/Q2 (D)	(128,217)
	(260,411)

Total	
ETR Tie-out:	
EADIT	(2,026,073)
2022 Q3/Q4	50%
	(1,013,037)
2023 Q1/Q2	(701,535)
	(1,714,572)
PY True Up	(42,913)
	(1,757,485)

Per Exhibit 7 Statement 8 Attachment 1 page 2 of 16 line 37:

	(1,461,604)	(295,881)	(1,757,485)
Difference=PY True Up	(7,443)	(35,470)	(42,913)

			Timing Diff Activity	DFIT Activity	FAS109 Activity	FT Activity	Excess Activity
Jurisdiction :		Federal					
Tax Year :		2022					
2022 Gas Year End Estimate							
Peoples Natural Gas EGC Division							
PowerTax Deferred Tax Summary Report							
Grouped By: Total Tax Classes							
	PGEGC Fed Method/Life		$13,466,139.03	$2,623,750.60	$2,827,889.20	$0.00	($204,138.60)
	PGEGC Fed ML LKE		$0.00	$0.00	$0.00	$0.00	$0.00
	PGEGC Federal Amortization		$0.00	$0.00	$0.00	$0.00	$0.00
Total Tax Classes			$13,466,139.03	$2,623,750.60	$2,827,889.20	$0.00	($204,138.60)
Amortization Type Depreciation Difference Totals:			$13,466,139.03	$2,623,750.60	$2,827,889.20	$0.00	($204,138.60)
	PGEGC Fed 481a Repair Adj 2020		($515,765.49)	($108,310.76)	($108,310.75)	$0.00	($0.01)
	PGEGC Fed 481a Repair Adj 2020 FT		($2,649,880.92)	$0.00	($556,474.99)	($556,474.99)	$0.00
	PGEGC Fed Accum Book DDA		$0.00	$0.00	$0.00	$0.00	$0.00
	PGEGC Fed Acquisition Adj		($20,005.26)	($7,001.83)	($4,201.10)	$0.00	($2,800.73)
	PGEGC Fed AFUDC Debt		($13,064.55)	($4,358.60)	($2,743.56)	$0.00	($1,615.04)
	PGEGC Fed COR		($4,246,321.93)	($891,727.61)	($891,727.61)	$0.00	$0.00
	PGEGC Fed Int Dev SW		($2,613,114.03)	($880,809.09)	($548,753.95)	$0.00	($332,055.14)
	PGEGC Fed LKE 0.11 FT		($89.27)	$0.00	($18.75)	($18.75)	$0.00
	PGEGC Fed LKE 0.12 FT		($170.31)	$0.00	($35.77)	($35.77)	$0.00
	PGEGC Fed LKE 334513 FT		($11,309.67)	$0.00	($2,375.03)	($2,375.03)	$0.00
	PGEGC Fed LKE Anode FT		($1,963.73)	$0.00	($412.38)	($412.38)	$0.00
	PGEGC Fed LKE Odor FT		($1,391.89)	$0.00	($292.30)	($292.30)	$0.00
	PGEGC Fed LKE Real Prop FT		($776,634.34)	$0.00	($163,093.21)	($163,093.21)	$0.00
	PGEGC Fed Net Book		$0.00	$0.00	$0.00	$0.00	$0.00
	PGEGC Fed Salvage		$332,907.51	$69,910.58	$69,910.58	$0.00	$0.00
Total Tax Classes			($10,516,803.88)	($1,822,297.31)	($2,208,528.81)	($722,702.43)	($336,470.92)
Amortization Type Book Overhead Totals:			($10,516,803.88)	($1,822,297.31)	($2,208,528.81)	($722,702.43)	($336,470.92)
	PGEGC Fed 263A Int-Dist 15		$52,514.00	$15,155.70	$11,027.94	$0.00	$4,127.76
	PGEGC Fed 263A Int-Dist 20		$83,190.89	$25,484.13	$17,470.09	$0.00	$8,014.04
	PGEGC Fed 263A Int-Trans		$1,581.00	$424.97	$332.01	$0.00	$92.96
	PGEGC Fed Cap Betterments		$8,634.33	$3,022.02	$1,813.21	$0.00	$1,208.81
	PGEGC Fed CIAC-15 YR		$13,116.45	$3,493.98	$2,754.45	$0.00	$739.53
	PGEGC Fed CIAC-20 YR		$20,917.58	$6,077.64	$4,392.69	$0.00	$1,684.95
	PGEGC Fed Comp HW-5 Yr		$75.57	$26.45	$15.87	$0.00	$10.58
	PGEGC Fed Comp SW-3 Yr		$0.00	$0.00	$0.00	$0.00	$0.00
	PGEGC Fed IP Dist LP 20		($2,378.38)	$2,739.60	($499.46)	$0.00	$3,239.06
	PGEGC Fed IP Dist RP 15		($14,147.17)	($1,609.42)	($2,970.91)	$0.00	$1,361.49
Total Tax Classes			$163,504.27	$54,815.07	$34,335.90	$0.00	$20,479.17
Amortization Type Tax Overhead Totals:			$163,504.27	$54,815.07	$34,335.90	$0.00	$20,479.17
Jurisdiction Totals:			$3,112,839.42	$856,268.36	$653,696.28	($722,702.43)	($520,130.35) **To B**
Company Totals:			$3,112,839.42	$856,268.36	$653,696.28	($722,702.43)	($520,130.35)

			Timing Diff Activity	DFIT Activity	FAS109 Activity	FT Activity	Excess Activity
Jurisdiction :		Federal					
Tax Year :		2022					
2022 Gas Year End Estimate							
Peoples TWP LLC							
PowerTax Deferred Tax Summary Report							
Grouped By: Total Tax Classes							
	PTWP Fed Method/Life		$8,549,043.54	$1,705,880.79	$1,795,299.14	$0.00	($89,418.35)
	PTWP Federal Amortization		$0.00	$0.00	$0.00	$0.00	$0.00
Total Tax Classes			$8,549,043.54	$1,705,880.79	$1,795,299.14	$0.00	($89,418.35)
Amortization Type Depreciation Difference Totals:			$8,549,043.54	$1,705,880.79	$1,795,299.14	$0.00	($89,418.35)
	PTWP Fed ABFUDC		$0.00	$0.00	$0.00	$0.00	$0.00
	PTWP Fed AFUDC Debt		$27,100.89	$4,325.28	$5,691.19	$0.00	($1,365.91)
	PTWP Fed COR		($400,129.88)	($84,027.27)	($84,027.27)	$0.00	$0.00
	PTWP Fed Inside Meter Rep		($4,773.24)	($1,670.63)	($1,002.38)	$0.00	($668.25)
	PTWP Fed Int Dev SW		($1,497,163.88)	($497,388.61)	($314,404.41)	$0.00	($182,984.20)
	PTWP Fed Net Book		$0.00	$0.00	$0.00	$0.00	$0.00
	PTWP Fed Outside Meter Rep		($12,340.25)	($4,319.09)	($2,591.45)	$0.00	($1,727.64)
	PTWP Fed Salvage		$85,459.10	$17,946.42	$17,946.41	$0.00	$0.01
	PTWP Fed Tax Repair 481a FT		($762,129.64)	$0.00	($160,047.22)	($160,047.22)	$0.00
	PTWP Fed Tax Repairs FT		$18,204,718.32	$0.00	$3,822,990.85	$3,822,990.85	$0.00
	PTWP Fed Tax Repr 481a		($167,988.16)	($41,676.56)	($35,277.51)	$0.00	($6,399.05)
Total Tax Classes			$15,472,753.26	($606,810.46)	$3,249,278.18	$3,662,943.62	($193,145.02)
Amortization Type Book Overhead Totals:			$15,472,753.26	($606,810.46)	$3,249,278.18	$3,662,943.62	($193,145.02)
	PTWP Fed 263A Int-Dist 15		$34,355.51	$9,959.10	$7,214.66	$0.00	$2,744.44
	PTWP Fed 263A Int-Dist20		($47,204.77)	($8,342.39)	($9,913.00)	$0.00	$1,570.61
	PTWP Fed 263A Int-Storage		$59.05	$20.67	$12.40	$0.00	$8.27
	PTWP Fed 263A Int-Trans		$15,789.75	$4,944.08	$3,315.85	$0.00	$1,628.23
	PTWP Fed Cap Betterments		$16,170.34	$5,659.62	$3,395.77	$0.00	$2,263.85
	PTWP Fed CIAC-15 YR		$25,341.32	$7,475.74	$5,321.68	$0.00	$2,154.06
	PTWP Fed CIAC-20 YR		$20,770.22	$6,439.52	$4,361.75	$0.00	$2,077.77
	PTWP Fed Comp HW-5 Yr		$1,795.56	$628.45	$377.07	$0.00	$251.38
	PTWP Fed Comp SW-3 Yr		$0.00	$0.00	$0.00	$0.00	$0.00
	PTWP Fed IP Dist LP 20		($50,502.35)	($8,022.51)	($10,605.49)	$0.00	$2,582.98
	PTWP Fed IP Dist RP 15		$49,428.55	$14,702.53	$10,380.00	$0.00	$4,322.53
	PTWP Fed Tax Repr 481a TO		($17,063.44)	($5,012.82)	($3,583.32)	$0.00	($1,429.50)
Total Tax Classes			$48,939.74	$28,451.99	$10,277.35	$0.00	$18,174.64
Amortization Type Tax Overhead Totals:			$48,939.74	$28,451.99	$10,277.35	$0.00	$18,174.64
Jurisdiction Totals:			$24,070,736.54	$1,127,522.32	$5,054,854.67	$3,662,943.62	($264,388.73) C
Company Totals:			$24,070,736.54	$1,127,522.32	$5,054,854.67	$3,662,943.62	($264,388.73)
01/23/2023 at 5:31 pm	PwrTax - 260						
Grand Totals:			$262,519,245.18	$8,642,238.39	$55,129,041.49	$44,460,729.99	($2,026,073.11)

OCA-VIII-26 Attachment 2 of 2

PowerTax Deferred Tax Summary Report
2023 BOY FCST Gas - Q2 Update

Source: PowerTax

							PTBI %	Prorated EADIT	Per ETR	Diff
PA-PEOPLES GAS COMPANY LLC (TWP)										
Grouped By: Total Tax Classes										
Jurisdiction :	Federal									
Tax Year :	2023	Timing DiffActivity	DFITActivity	FAS109Activity	FTActivity	ExcessActivity				
TWP Fed 481a Amortization		$0.00	$0.00	$0.00	$0.00	$0.00				
TWP Fed COR/Salvage		($592,807.25)	($131,749.67)	($124,489.52)	$0.00	($7,260.15)				
TWP Fed Method/Life		$10,315,531.36	$2,108,599.11	$2,166,261.59	$0.00	($57,662.48)				
Total Tax Classes		$9,722,724.11	$1,976,849.44	$2,041,772.06	$0.00	($64,922.62)				
Amortization Type Method/Life Totals:		$9,722,724.11	$1,976,849.44	$2,041,772.06	$0.00	($64,922.62)				
TWP Fed 263A Int-Dist 15		$10,280.93	$3,053.12	$2,159.00	$0.00	$894.12				
TWP Fed 263A Int-Dist20		($67,711.88)	($13,567.99)	($14,219.49)	$0.00	$651.50				
TWP Fed 263A Int-Storage		$20.14	$7.05	$4.23	$0.00	$2.82				
TWP Fed 263A Int-Trans		$4,906.28	$1,570.41	$1,030.32	$0.00	$540.09				
TWP Fed AFUDC Debt		($19,995.34)	($5,301.27)	($4,199.02)	$0.00	($1,102.25)				
TWP Fed Inside Meter Rep		($1,951.65)	($683.08)	($409.85)	$0.00	($273.23)				
TWP Fed Int Dev SW		($1,580,753.78)	($530,409.64)	($331,958.29)	$0.00	($198,451.35)				
TWP Fed Net Book		$0.00	$0.00	$0.00	$0.00	$0.00				
TWP Fed Outside Meter Rep		($5,045.62)	($1,765.97)	($1,059.58)	$0.00	($706.39)				
TWP Fed Tax Repair 481a FT		($700,617.86)	$0.00	($147,129.75)	($147,129.75)	$0.00				
TWP Fed Tax Repairs FT		$19,187,040.81	$0.00	$4,029,278.57	$4,029,278.57	$0.00				
TWP Fed Tax Repr 481a		($160,253.58)	($39,998.86)	($33,653.25)	$0.00	($6,345.61)				
Total Tax Classes		$16,665,918.45	($587,096.23)	$3,499,842.87	$3,882,148.82	($204,790.29)				
Amortization Type Book Overhead Totals:		$16,665,918.45	($587,096.23)	$3,499,842.87	$3,882,148.82	($204,790.29)				
TWP Fed Cap Betterments		$16,166.70	$5,658.35	$3,395.01	$0.00	$2,263.34				
TWP Fed CIAC-15 YR		$24,281.33	$7,255.07	$5,099.08	$0.00	$2,155.99				
TWP Fed CIAC-20 YR		$20,373.69	$6,333.99	$4,278.47	$0.00	$2,055.52				
TWP Fed Comp HW-5 Yr		$0.00	$0.00	$0.00	$0.00	$0.00				
TWP Fed Comp SW-3 Yr		$0.00	$0.00	$0.00	$0.00	$0.00				
TWP Fed IP Dist LP 20		($45,675.51)	($7,069.71)	($9,591.86)	$0.00	$2,522.15				
TWP Fed IP Dist RP 15		$47,195.95	$14,193.10	$9,911.15	$0.00	$4,281.95				
Total Tax Classes		$62,342.16	$26,370.80	$13,091.85	$0.00	$13,278.95				
Amortization Type Tax Overhead Totals:		$62,342.16	$26,370.80	$13,091.85	$0.00	$13,278.95				
Jurisdiction Totals:		$26,450,984.72	$1,416,124.01	$5,554,706.79	$3,882,148.82	($256,433.96)	50.0%	(128,217)	(128,217)	0
								To D		
PA-PEOPLES NATURAL GAS CO LLC										
Grouped By: Total Tax Classes										
Jurisdiction :	Federal									
Tax Year :	2023	Timing DiffActivity	DFITActivity	FAS109Activity	FTActivity	ExcessActivity				
PNG Fed 481a Amortization		$0.00	$0.00	$0.00	$0.00	$0.00				
PNG Fed COR/Salvage		($8,655,027.32)	($1,817,555.74)	($1,817,555.74)	$0.00	$0.00				
PNG Fed Method/Life		$68,106,642.18	$13,816,794.83	$14,302,394.86	$0.00	($485,600.03)				
PNG Fed ML LKE		$0.00	$0.00	$0.00	$0.00	$0.00				
Total Tax Classes		$59,451,614.86	$11,999,239.09	$12,484,839.12	$0.00	($485,600.03)				
Amortization Type Method/Life Totals:		$59,451,614.86	$11,999,239.09	$12,484,839.12	$0.00	($485,600.03)				
PNG Fed 263A Int-Dist 15		$43,823.82	$13,421.76	$9,203.00	$0.00	$4,218.76				
PNG Fed 263A Int-Dist 20		($954,601.15)	($193,133.74)	($200,466.24)	$0.00	$7,332.50				
PNG Fed 263A Int-Storage		$4,339.75	$1,518.92	$911.35	$0.00	$607.57				
PNG Fed 263A Int-Trans		$14,508.53	$4,703.40	$3,046.79	$0.00	$1,656.61				
PNG Fed 481a Repair Adj 2020 FT		($7,056,856.79)	$0.00	($1,481,939.93)	($1,481,939.93)	$0.00				
PNG Fed 481a Repair Adj 2020 Norm		($1,751,848.91)	($367,888.30)	($367,888.27)	$0.00	($0.03)				
PNG Fed Accum Book DDA		$0.00	$0.00	$0.00	$0.00	$0.00				
PNG Fed Acquisition Adj		$0.00	$0.00	$0.00	$0.00	$0.00				
PNG Fed AFUDC Debt		$2,310,619.12	$475,746.61	$485,230.02	$0.00	($9,483.41)				
PNG Fed AFUDC Equity FT		($91,680.12)	$0.00	($19,252.83)	($19,252.83)	$0.00				
PNG Fed Int Dev SW		($6,160,785.47)	($2,009,429.78)	($1,293,764.95)	$0.00	($715,664.83)				
PNG Fed LKE 0.11 FT		($98.68)	$0.00	($20.72)	($20.72)	$0.00				
PNG Fed LKE 0.12 FT		($7.40)	$0.00	($1.55)	($1.55)	$0.00				
PNG Fed LKE 334513 FT		($3,422.70)	$0.00	($718.77)	($718.77)	$0.00				
PNG Fed LKE Anode FT		($533.62)	$0.00	($112.06)	($112.06)	$0.00				
PNG Fed LKE Odor FT		($646.41)	$0.00	($135.75)	($135.75)	$0.00				
PNG Fed LKE Real Prop FT		($843,609.04)	$0.00	($177,157.90)	($177,157.90)	$0.00				
PNG Fed Net Book		$0.00	$0.00	$0.00	$0.00	$0.00				
PNG Fed Tax Repairs FT		$317,070,157.01	$0.00	$66,584,732.97	$66,584,732.97	$0.00				
Total Tax Classes		$302,579,357.94	($2,075,061.13)	$63,541,665.17	$64,905,393.47	($711,332.82)				
Amortization Type Book Overhead Totals:		$302,579,357.94	($2,075,061.13)	$63,541,665.17	$64,905,393.47	($711,332.82)				
PNG Fed Cap Betterments		$13,556.71	$4,744.85	$2,846.91	$0.00	$1,897.94				
PNG Fed CIAC-15 YR		$149,148.34	$46,354.67	$31,321.15	$0.00	$15,033.52				
PNG Fed CIAC-20 YR		$138,383.76	$40,272.96	$29,060.59	$0.00	$11,212.37				
PNG Fed Comp HW-5 Yr		$0.00	$0.00	$0.00	$0.00	$0.00				
PNG Fed Comp SW-3 Yr		$0.00	$0.00	$0.00	$0.00	$0.00				
PNG Fed Gas Stored in R&P		$0.00	$0.00	$0.00	$0.00	$0.00				
PNG Fed IP Dist LP 20		$536,730.81	$125,803.86	$112,713.47	$0.00	$13,090.39				
PNG Fed IP Dist RP 15		$95,341.04	$29,083.39	$20,021.62	$0.00	$9,061.77				
Total Tax Classes		$933,160.66	$246,259.73	$195,963.74	$0.00	$50,295.99				
Amortization Type Tax Overhead Totals:		$933,160.66	$246,259.73	$195,963.74	$0.00	$50,295.99				
Jurisdiction Totals:		$362,964,133.46	$10,170,437.69	$76,222,468.03	$64,905,393.47	($1,146,636.86)	50.0%	(573,318)	(573,318)	(0)
								To C		

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VIII-029

Witness: Saball, Christine **Title:** Vice President Tax

Question: Refer to Company Statement No. 6 page 30. Please provide the calculation in the development of the Rider Tax Repair Sur-credit of $27.845 million. Please identify all Exhibits and Schedules in which this Rider Tax Repair Sur-credit is shown.

Answer: Please refer to the response to OCA-VIII-19 for the detail of the revenue credit. The difference between the ~$29M provided in OCA-VIII-19 and the $27.8M referenced in the question is a result of different gross up factors to reflect the phase down of the Pennsylvania corporate net income tax. The surcredit is included in Exhibit 7, Schedule 8 Attachment 1. The revenue reduction is included in Line 1 and the reduction to tax expense is reflected on Line 39. It is included as a credit to revenue in Exhibit No. 3.

Submit Date: 2/19/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VIII-030

Witness: Saball, Christine **Title:** Vice President Tax

Question: Refer to Company Statement No. 6 page 36. Please show where the Company reflected the one-time catch up adjustment of $36,461,137 in its filing (Exhibit No. and Schedule No.). Please provide the calculation of this one-time adjustment.

Answer: The $36,461,137 one-time catch adjustment is not reflected in this base rate filing. As explained in Company Statement No. 2 page 35, the Company is proposing to include this amount in the Tax Repairs Surcredit Rider. See Attachment for support for the calculation.

Submit Date: 2/16/2024

OCA-VIII-30 Attachment

PNG Division		PGC Division		
Total Cost for 2012, 2013, 2015-2021 Tax Years	48,573,673	**Total Cost for 2013, 2015-2021 Tax Years**	2,758,061	
Depreciation Related to 2012, 2013, 2015-2021 Tax Years	14,139,768	**Depreciation Related to 2013, 2015-2021 Tax Years**	730,828	
Total 481(a) as of 12/31/21	34,433,905	**Total 481(a) as of 12/31/21**	2,027,232	36,461,137

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VIII-032

Witness: Hanechak, Rudolph **Title:** Financial Analysis & Budget Manager

Question: Refer to Company Exhibit No. 6 Schedule 2 page 2. Please provide the tax rates that were used to develop the FICA, the Unemployment Tax, the Property Tax, the PUC assessment, the Sales and Use Tax and Other Category. Please provide the HTY, the FTY and for the FPFTY periods.

Answer: A. Please refer to Exhibit No. 6 Schedule 2 page 3 for a schedule of Payroll tax rates.

B. An effective rate was not used to develop the per books amount for the Property Tax. The per books amount represents the actual expense incurred for the twelve months ended August 31, 2023. The FTY and FPFTY were developed using an annual weighted average increase of 3.04%.

C. An effective rate was not used to develop the per books amount for the PUC assessment. The per books amount represents the actual expense recorded. Rather than using an estimated effective rate, the 2023 Pro-Forma period adjusts the per book amounts to the most recent PUC invoice. The most recent PUC Assessment invoice was $3,109,691. The FTY and FPFTY include an annual weighted average increase of 5.1%.

D. The Per Books sales and use tax, as shown on Exhibit No. 6 is the actual sales and use tax expense incurred for the twelve months ended August 31, 2023. This amount was rounded and held constant for all future periods presented in the case.

E. An effective rate was not used to develop the per books amount for the Other Taxes. The per books amount represents the actual expense incurred for the twelve months ended August 31, 2023. The FTY and FPFTY consists of the estimated emissions fees subject to the Inflation Reduction Act of 2022. For further information on these Emissions Fees please refer to the Statement No. 4 – the Direct Testimony of Edward Palombo.

Submit Date: 2/16/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VIII-037

Witness: Scanlon, Carol **Title:** Rates Manager

Question: What effect does the Company's proposed WNA have on a residential customer with respect to the current 20-Year average regarding rates? Please provide the calculation to show the difference in revenues between the proposed WNA and the current 20-Year average.

Answer: Based upon the Company's interpretation of this request, refer to the response to OCA-VIII-22 for a side-by-side example of the WNA calculation using the rate case proposed HDD's as "normal" to using the 20-year average HDDs as "normal" for an individual residential customer.

Refer to the response to CAUSE-I-16 for the impact to a typical residential customer's revenue for each year since 2019 if Peoples proposed WNA had been in effect. The response to CAUSE-I-16 is derived using the assumption that the rate case proposed HDD's of 5,341 is considered normal weather for each of those years.

Submit Date: 2/16/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OSBA-I-012

Witness: Scanlon, Carol **Title:** Rates Manager

Question: Reference Peoples Statement No. 3, Weather Normalization Mechanism

a. Please provide the proposed normal heating degree days for each billing cycle that applies to Residential, SGS and MGS customers in the FPFTY, with supporting calculations for the derivation of the normal value in MS Excel electronic format.

b. Please indicate how the Company proposes to address the circumstances that arose in the PGW WNA debacle (see Docket Nos. R-2022-3034229, P-2022-3034264), namely a billing period with unusually low actual HDDs and heating load adjustment multiples that result in extreme billing adjustments, particularly for customers with unusually high non-heating loads.

c. Please explain why July/August is used to derive non-heating base loads rather than a statistical approach. Please also indicate whether cooking and hot water loads in July and August are affected by vacations.

d. Please explain how non-heating base loads will be derived for customers without billing information for the previous summer months.

e. Please identify any automatic checks proposed by the Company to flag unusual billing events that may be magnified by the WNA, such as a billing period with an unusually high heating load per degree day compared to historic norms.

f. Please confirm that the Company's proposed mechanism relies on the assumption that heating load is linearly related to HDDs. If you cannot confirm, please explain your response.

Answer: a. Refer to the attachment. On the "Daily AHDD and NHDD Calc" tab, refer to the tables in columns BT through CF, rows 15-91 for the tables of NHDD by month and day for Leap Years versus Non-Leap Years. These are the NHDD that will be used for the WNA mechanism. Peoples would add the HDD's from these tables that coincide with the billing days in the customer's bill cycle to calculate the NHHD.

In order to derive the daily NHDD's as displayed in the two tables, Peoples calculated the average degree days per day using the last 10 years of AHDD data as the basis. Next, Peoples applied this average to the monthly amount of HDDs as proposed in this case, and then took that result times the annual HDDs proposed as normal in this case. For example, January 1 of a

non leap year = (Jan monthly spread x Daily % of 10yr avg of Jan 1st % of all January) x Annual NHDD. Refer to the attachment labeled (a)-2 for an illustrative example of this.

b. Peoples anticipates that the automatic checks identified in subpart (e) of this response will capture outliers that could result in an extreme billing adjustment.

c. Refer to the attachment. Peoples analyzed monthly HDD data for the ten (10) year period of 2013-2022 to determine months with near zero HDDs. July and August have average HDD of 1.40 and 3.30, respectively. A normal probability was calculated each month, testing the probability that any month would have zero HDD and be included in the baseload calculation. July and August were determined to have a statistically significant normal probability (34.1% and 21.3%). The only other month with a positive value was September, with a probability of 4.9%. September was rejected because the normal probability was significantly lower than July and August. It should also be noted that September had a mean HDD of 58.30, which is 4,046% higher than July and 9,548% higher than August, which supports Peoples conclusion that September HDD behavior is significantly different than July and August.

d. Peoples proposes to use a “standard” base load per rate class for customers that do not have prior billing information for one or both of the non-heating months of July and August. Refer to the attachment for the proposed standard base load amounts. Consistent with Exhibit 19, RR-8, the standard base load amounts are established using the normalized use per customer (UPC) for PNGD & PGD combined based upon a three-year average UPC with conservation per rate class.

e. Peoples has several automatic checks in place that will flag unusual activity prior to billing:

(1) Meter reads are out of tolerance

(2) Billing and/or Invoicing (Dollars billed) are out of tolerance

(3) Each day the billing team also reviews bills with the highest and lowest Mcf and dollar amounts to confirm accuracy.

f. Yes, confirmed.

Submit Date: 3/4/2024

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission,	:	
	:	
v.	:	Docket No. R- 2023-3044549
	:	
Peoples Natural Gas Company LLC	:	
	:	

VERIFICATION

I, Dante Mugrace, hereby state that the facts above set forth in my Direct Testimony, OCA Statement 2, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: March 22, 2024

Signature: Dante Mugrace

Dante Mugrace

Address: PCMG and Associates, LLC
22 Brooks Avenue
Gaithersburg, MD 20877

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No. R- 2023-3044549
	:	
Peoples Natural Gas Company LLC	:	

DIRECT TESTIMONY
OF
AARON L. ROTHSCHILD

COST OF CAPITAL

ON BEHALF OF THE
PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

PUBLIC VERSION

March 22, 2024

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I. STATEMENT OF QUALIFICATIONS

Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.

A. My name is Aaron L. Rothschild. My title is President, and my business address is 15 Lake Road, Ridgefield, CT.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am President of Rothschild Financial Consulting ("RFC").

Q. PLEASE STATE YOUR EDUCATIONAL ACHIEVEMENTS AND PROFESSIONAL DESIGNATIONS.

A. I have a B.A. degree in mathematics from Clark University (1994) and an M.B.A. from Vanderbilt University (1996).

Q. PLEASE DESCRIBE YOUR BUSINESS EXPERIENCE.

A. I performed financial analysis in the telecom industry in the United States and Asia Pacific from 1996 to 2001, investment banking consulting in New York, complex systems science research regarding the power sector at an independent research institute, and I have prepared rate of return testimonies since 2002. See Appendix F for my resume.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION, OR OTHER STATE COMMISSIONS? IF SO, WHICH COMMISSIONS?

A. Yes. I have testified before the Pennsylvania Public Utility Commission. My expert witness experience also includes testifying in over 75 cost of capital proceedings before

the following state commissions: California; Colorado; Connecticut; Delaware; District of Columbia; Florida; New Hampshire; New Jersey; Maryland; North Dakota; Pennsylvania; South Carolina; Tennessee; and Vermont. See Appendix G for the list of dockets for each of my testimonies.

Q. ON WHOSE BEHALF ARE YOU PROVIDING THIS TESTIMONY?

A. I am testifying on behalf of the Pennsylvania Office of Consumer Advocate ("OCA").

II. PURPOSE

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to address the cost of capital for Peoples Natural Gas Company LLC ("Peoples" or the "Company") which includes the following three components:

1. Cost of Equity ("COE")
2. Cost of Debt
3. Capital Structure

Based on my analysis of these cost of capital components, I recommend an allowed rate of return for ratemaking purposes, including an appropriate authorized return on equity ("ROE"), authorized cost of debt, and authorized capital structure.

Q. PLEASE DEFINE THE COE, COST OF DEBT, AND CAPITAL STRUCTURE.

A.

1. **COE:** My COE recommendation is my opinion of the return investors require to provide equity capital to Peoples based on current capital markets. Since investors must pay the market price of a stock to make an investment, investors' required returns are based on the return they expect to receive on the market price of stocks. In other words, Peoples' COE is forward-looking and "market-based." My recommendation is consistent with the following legal standards set by the United States Supreme Court for a fair rate of return: (1) "The return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks"[1] and (2) "[S]ufficient to . . . support its credit and . . . raise the money necessary for the proper discharge of its public duties."[2]
2. **Cost of Debt:** My cost of debt recommendation is based on the actual cost of debt paid by the utility to its sources of credit. For example, if a utility has issued a bond with a 3% interest rate three years ago, its authorized cost of debt should be 3%, even if interest rates are currently higher or lower than 3%.
3. **Capital Structure:** Capital structure is the percentage of equity and debt that makes up the finances of a utility. For example, if a utility raises $1 million of equity capital and $1 million of debt capital, we say it has a capital structure containing 50% equity and 50% debt. The utility has the burden of proof to demonstrate that its requested capital structure for regulatory purposes produces the lowest, reasonable overall cost

[1] Fed. Power Comm'n v. Hope Nat. Gas Co., 320 U.S. 591, 603 (1944).
[2] Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm'n of the State of W. Va. 262 U.S. 679, 692-693 (1923).

of capital. My capital structure recommendation is based on my review of Peoples' justification for its requested regulatory capital structure, the capital structure ratios of other gas utility companies, and the capital structure of Peoples' ultimate parent, Essential Utilities, Inc.. As discussed below, the reported capital structure of a regulated subsidiary is often not representative of how the regulated utility was financed. For example, the parent of a regulated utility can report funds raised through debt financing at the holding company level as equity financing on the books of its regulated utility subsidiary. Therefore, it is important to make sure Peoples' authorized capital structure would not overcharge consumers by including a higher common equity ratio than is appropriate.[3]

Q. WHAT IS THE DIFFERENCE BETWEEN PEOPLES' COST OF EQUITY AND ITS AUTHORIZED RETURN ON EQUITY?

A. The COE is the market-based return investors expect to earn on the market value of any given stock. In other words, the COE is the return investors expect to earn on the market price of equity. As it applies to this proceeding, it is the return investors require to provide equity capital to Peoples. The appropriate authorized ROE is based on the Commission's determination of the COE at the time of the proceeding, after reviewing the evidentiary record, which incorporates investor expectations and balances the needs of ratepayers. Once the Commission issues an authorized ROE, the market-based cost of equity will continue to fluctuate as capital markets inevitably continue to change. The authorized ROE is based on a snapshot of the COE, which is constantly changing.

[3] A higher common equity ratio, all else equal, results in higher rates for consumers because equity is more expensive than debt.

Q. PLEASE DEFINE THE APPROPRIATE RATE OF RETURN.

A. The appropriate Rate of Return (ROR) is based upon the weighted overall cost of capital (WACC) of the current costs of debt and equity at the time of this proceeding. The weighted cost rate is calculated by multiplying the capital structure ratios of the sources of capital (debt, preferred equity, and common equity) times their respective cost rates.

WACC = Cost of Debt X Debt Ratio + COE X Common Equity Ratio + Cost of Preferred Equity X Preferred Equity Ratio.

Q. CALCULATING THE COST OF EQUITY IS A HIGHLY TECHNICAL TOPIC. HOW CAN A DECISION MAKER WHO IS NOT SPECIALIZED IN FINANCE BEST USE THE CONTENT OF THIS TESTIMONY?

A. My testimony includes a thorough technical analysis, including the use of specialized mathematical models. Models are required to determine the cost of equity like a map is required to plan a road trip. Maps and models are useful because they simplify the complexity and vastness of reality into a form that is understandable and useful. A map of Pennsylvania that left out no details would be the same size as the state and thus unusable. A model that included every detail of financial markets (e.g., the trading activity of every single stock investor on earth) would be unusable as well. It is critical to remember that models are simplifications of reality and there are arguably as many "models" as there are investors. My ROE recommendation is based on the best tools I am aware of to calculate Peoples' COE; however, I urge the Commission to test the reasonableness of my model results by comparing them to model results from sources that have nothing to do with this proceeding. For example, I recommend that the Commission consider the long-term equity

return expectations of pension funds and leading financial institutions like the ones shown in Table 4 on page 14.

Q. HAVE YOU REVIEWED PEOPLES' RATE CASE FILING AND DIRECT TESTIMONY?

A. Yes.

III. INTRODUCTION AND SUMMARY OF CONCLUSIONS

Q. HOW IS YOUR TESTIMONY ORGANIZED?

A. First, I will provide a summary of my recommendations, an overview of cost of equity concepts, and explanation of how current capital markets relate to my cost of equity calculations. Second, I will provide a more detailed discussion of current capital markets and how key parameters are impacting equity costs. Third, I will provide my capital structure and cost of debt recommendation. Fourth, I will provide an explanation of the various models I use in my cost of equity calculations. Lastly, I will provide an evaluation of Peoples' rate of return testimony.

Q. PLEASE PROVIDE A SUMMARY OF YOUR RECOMMENDATIONS.

A. I recommend the following cost of capital for Peoples' gas distribution operations:

- An overall cost of capital of 6.20% (6.02% - 6.37%)
- An ROE of 8.02% (7.67% - 8.37%)
- A capital structure containing 50.00% common equity and 50.00% long-term debt
- A debt cost rate of 4.37%

A summary of my cost of capital recommendations for Peoples' gas distribution operations is presented in Table 1 below.

TABLE 1: ALR RECOMMENDED RANGE MIDPOINT - PEOPLES NATURAL GAS COMPANY LLC
Docket No. R-2023-3044549

	Capital Structure Ratios	Cost Rate	Weighted Cost Rate
Long-Term Debt	50.00%	4.37%	2.19%
Short-Term Debt	0.00%	0.00%	0.00%
Preferred Equity	0.00%	0.00%	0.00%
Common Equity	50.00%	8.02%	4.01%
Rate of Return			6.20%

Exhibit ALR-1

If the Commission decides to use Peoples' requested capital structure instead of my recommended capital structure, it would be appropriate to reduce Peoples' authorized ROE because it has lower financial risk. A higher common equity ratio means less debt, a lower chance of financial stress (financial risk), and therefore a lower cost of equity. On the other hand, a lower common equity ratio means more debt, a higher chance of financial stress (financial risk), and therefore a higher cost of equity. Based on a regression analysis of dozens of utility companies, I found a 0.04% reduction in the cost of equity for every 1% increase in the common equity ratio. Applying the results of this regression analysis, I determined that Peoples' authorized ROE should be reduced from 8.02% (7.67% - 8.37%) to 7.84% (7.49% - 8.19%) if their requested regulatory capital structure is used to set rates.

Q. ARE YOU RECOMMENDING A SPECIFIC ROE OF 8.02% OR AN ROE RANGE OF 7.67% TO 8.37%?

A. I recommend both a range of appropriate ROEs and a specific point within that range that I consider to be the most appropriate. It is not possible to measure Peoples' COE with the

precision of measuring temperature with a thermometer. However, my recommended ROE range of 7.67% to 8.37% already eliminates the extreme ends of the results of my models and provides the Commission with a range of ROEs I feel confident will allow Peoples to raise the capital it needs to provide safe and reliable service. I also recommend a specific point of 8.02% within that range that I feel best reflects Peoples' COE.

Q. PLEASE SUMMARIZE HOW YOU DETERMINED YOUR 8.02% COST OF EQUITY RECOMMENDATION FOR PEOPLES.

A. To arrive at my recommendations, I applied the Constant Growth form of the Discounted Cash Flow ("DCF") Model[4] to a proxy group of 5 publicly traded gas utility companies ("RFC Gas Proxy Group")[5] using data available through February 29, 2024. I also used a Capital Asset Pricing Model ("CAPM") analysis as a check on the DCF results, and to ensure the Commission is able to consider how inflation and interest rates are impacting Peoples' cost of equity. I use a proxy group to calculate Peoples' cost of equity because Peoples does not have publicly traded stock data needed for COE models.[6] Additionally, using a proxy group provides more reliable results because it is less likely to be skewed by specific circumstances or anomalies faced by any individual company.

As shown in Table 2 below, Cost of Equity Model Results, the high-end results of my three cost of equity models, including eight variations of the CAPM, range between

[4] The constant growth DCF model is a variant, or version, of the single-stage DCF model that uses a consistent, never-changing growth rate component in perpetuity.

[5] The RFC Gas Group consists of the following five entities: Atmos Energy Corp, Ni Source Inc, Northwest Natural Gas, One Gas, Inc. and Spire, Inc. As I explain later in my testimony, Peoples' witness Moul included eight companies in his proxy group, including all five in the RFC Gas Group; however, I excluded the other three companies Mr. Moul included because they were not in the same risk category as they have considerably more unregulated business operations.

[6] Peoples' parent Essential Utilities has publicly traded stocks, but Essential Utilities owns many utility companies in different states. Therefore, Essential Utilities' stock is not the same as Peoples.

8.07% and 9.43%, with an upper quartile of 8.48%. The low-end results of my three cost of equity models, including eight variations of the CAPM, range between 7.50% and 9.42%, with a lower quartile of 7.78%.

TABLE 2: COST OF EQUITY MODEL RESULTS		
DCF	**Low**	**High**
Constant Growth - Sustainable Growth	8.06%	8.09%
Constant Growth - Option-Implied Growth	9.42%	9.43%
Non-Constant Growth	8.40%	8.74%
CAPM		
Spot (Feb. 29, 2024)		
Risk Free Rate - 3-Month T Bill	7.69%	8.09%
Risk Free Rate - 30-Yr T Bond	7.50%	8.07%
3-Mo. Weighted Average (Dec. 2023 to Feb. 2024)		
Risk Free Rate - 3-Month T Bill	7.82%	8.22%
Risk Free Rate - 30-Yr T Bond	7.62%	8.18%
Outer Quartile Range	**7.78%**	**8.48%**
Midpoint of Range	**8.13%**	

Exhibit ALR-2

Q. ARE YOUR COE MODELS BASED ON ESTABLISHED METHODOLOGIES?

A. Yes. My constant growth DCF model is used by major financial institutions. J.P. Morgan Chase uses the sustainable growth form of the DCF method, as I do, in its 2019 Long-Term Capital Market Assumptions publication.[7] *Principles of Corporate Finance*, a leading financial textbook used in business schools and investment banks around the world, recommends using the very same method I use to calculate the cost of equity for regulated energy utility companies.[8] As discussed in Section F. Capital Asset Pricing Model on page 59, my CAPM is based on methodologies used by Value Line, the Chicago Board of

[7] 23rd Annual Edition, Long-Term Capital Market Assumptions - Time-tested projections to build stronger portfolios, pp. 62-63.
[8] Brealey, Myers, and Allen (2017), Principles of Corporate Finance, 12th Edition, McGraw-Hill Irwin, New York, page 86-87.

Options Exchange (CBOE), and published in peer-reviewed academic journals (e.g., The Review of Financial Studies). My CAPM method has also been recognized by state utility commissions. On April 9, 2020, the Public Service Commission of South Carolina stated the following:

> Amongst the three witnesses, Consumer Affairs Rothschild's approach was unique in that he included the use of both historical and forward-looking, market-based data in his analysis. Based on the testimony and facts presented, the Commission therefore adopts the recommended ROE of 7.46% proposed by witness Rothschild.[9]

In California's 2017 Water Cost of Capital proceedings, a company witness acknowledged the validity of RFC's method. California Administrative Law Judge Bemesderfer stated the following:

> [O]n cross-examination Vilbert [California Water Service Company witness] admitted that Rothschild's use of the method [b x r method] was "reasonable" and that Rothschild had "implemented the methodology correctly" in arriving at his Water Proxy Group ROE of 8.25%.[10]

Q. HOW DO YOUR RECOMMENDATIONS COMPARE TO THE RECOMMENDATIONS OF PEOPLES' WITNESS, MR. MOUL?

A. As shown in Table 3 on page 13, my 8.02% cost of equity and capital structure recommendations result in a 6.20% overall rate of return. Mr. Moul's 11.75% cost of equity and capital structure recommendations result in an overall rate of return of 8.40%.

[9] Order Ruling on Application for Adjustment in Rates, Docket No. 2019-290-WS, Order No. 2020-306, April 9, 2020, page 43.
[10] Proposed Decision of ALJ Bemesderfer, p.19, Public Utility Commission of California, Application No. 17-04-001 (February 6, 2018).

TABLE 3: RECOMMENDATION COMPARISON - ROTHSCHILD AND MOUL

	Cost of Equity	Cost of Debt	Common Equity %	Debt %	Rate of Return
Rothschild [1]	8.02%	4.37%	50.00%	50.00%	6.20%
Moul [2]	11.75%	4.37%	54.67%	45.33%	8.40%

[1] Exhibit ALR-1
[2] Mr. Moul's Direct Testimony, Exhibit PRM-1, page 1 of 29

Mr. Moul and I recommend a different cost of equity for Peoples because we have fundamentally different analytical approaches. I focus on using market data (e.g., stock prices, bond yields, stock option prices) to measure investors' expectations as much as possible. On the other hand, Mr. Moul relies almost exclusively on non-market data, including economists' interest rate forecasts even when market data is available. He increases his DCF result from 10.47% to 11.88% by implementing his so-called leverage adjustment.[11] As discussed below, this adjustment is inappropriate and should be rejected. The Commission has denied Mr. Moul's leverage adjustment in past cases.[12]

I do not agree with Mr. Moul on the appropriate cost of equity for Peoples for many reasons. The reasons I have come to different conclusions include: (1) Mr. Moul's use of non-market data such as interest rate forecasts; (2) the growth rates applied in the Constant Growth DCF model; (3) the implementation of the CAPM; (4) the inclusion of a non-market-based model, the Expected Earnings Analysis; (5) adding a leverage adjustment to his DCF and CAPM results; and (6) adding a size premium adjustment to his CAPM result.

I recommend a different ROE[13] for Peoples than its witness Mr. Moul for many reasons.

[11] Mr. Moul's Direct Testimony, Peoples Statement No. 13, page 24, line 20 and page 25, line 1.
[12] Docket No. R-2017-2640058, Opinion and Order, Page 93
[13] My ROE recommendation is based on Peoples' current market-based COE. As stated previously, the authorized ROE is based on a snapshot of the COE which is constantly changing. In the context of this case my recommended COE and ROE are synonymous.

Q. PLEASE PROVIDE A SUMMARY OF HOW YOUR COST OF EQUITY RECOMMENDATION COMPARES TO THE RETURN EXPECTATIONS OF MAJOR FINANCIAL INSTITUTIONS.

A. As shown in Table 4 below, major financial institutions are informing their clients to expect returns on the overall market (S&P 500) of 6.4% to 9.0%. As stated above, Peoples' authorized ROE should be based investors' expectations as indicated by capital market data, not the opinions of small groups of people including those of major financial institutions. However, I chose to include the equity return expectations of major financial institutions to encourage the Commission to consider why Mr. Moul's 11.75% ROE is significantly higher than the financial mainstream. If there is a good reason for Peoples' COE to be hundreds of basis points higher than the equity return expectations of major financial institutions, I have not seen it.

TABLE 4: U.S. EQUITY RETURN EXPECTATIONS AMONG MAJOR FINANCIAL INSTITUTIONS

Duff & Phelps / Kroll (September 2023) [1]	**9.0%**
Horizon Actuarial Services, LLC Survey - 20 Year Horizon (August 2023) [2]	
U.S. Equity - Large Cap (5.6-10.2%, 50% Percentile - 7.3%)	**7.3%**
U.S. Equity - Small / Mid Cap (5.1-10.9%, 50% Percentile - 7.6%)	**7.6%**
J.P. Morgan Asset Management - Equity Long-Term Returns (2023) [3]	**7.9%**
Charles Schwab - 10-year U.S. Large Cap Returns (January 2024) [4]	**6.2%**

Sources:
[1] Kroll Recommended U.S. ERP and Corresponding RFR to be Used in Computing Cost of Capital: January 2008 - Present, https://www.kroll.com/en/insights/publications/cost-of-capital/recommended-us-equity-risk-premium-and-corresponding-risk-free-rates
Note: Duff & Phelps acquired Kroll in 2021 and rebranded itself as Kroll.
[2] Horizon Actuarial Services, LLC, Survey of Capital Market Assumptions Survey, August 2023, page 18.
Survey participants Include: Bank of New York Mellon, BlackRock, Goldman Sachs Asset Management, J.P. Morgan Asset Management, Merrill, Morgan Stanley Wealth Management, Royal Bank of Canada, UBS.
[3] J.P. Morgan Asset Management - 2024 Long-Term Capital Market Assumptions, 2023, page 12.
[4] Schwab's 2024 Long-Term Capital Market Expectations, January 2, 2024.

The returns on equity shown in Table 4 are anticipated equity returns across the broader stock market, including sectors such as US Large Cap and companies like Tesla and Amazon. These expectations would be expected to be higher than those for utility

stocks because most companies that make up the S&P 500 operate in highly competitive markets. Regulated utility companies like Peoples do not operate in a highly competitive market. Therefore, it is surprising that Mr. Moul recommends an ROE (11.75%) that is significantly higher than financial professionals expect to earn on investments in companies that are operating in highly competitive markets.

Even my cost of equity recommendation of 8.02% (7.67% to 8.37%) for Peoples is in the middle to upper part of the range of these expectations, which should give the Commission more confidence that if they adopt my recommendation, Peoples will be able to raise the capital it needs to provide safe and reliable service.

Q. DO YOU HAVE ADDITIONAL EVIDENCE THAT MR. MOUL'S 11.75% ROE RECOMMENDATION IS HIGHER THAN PEOPLES' MARKET-BASED COE?

A. Yes. The market-to-book ratios of gas utility companies show that investors expect a market return significantly less than 11.75%. The average future expected return on book equity for the five companies in my RFC Gas Proxy Group is 8.60%.[14] If the market price of gas utility stocks was equal to book value then investors could expect to earn a market return equal to about 8.60%. But the market price of gas utility stocks is about one and a half times the book value,[15] which means that investors likely expect to earn less than 8.90% or 11.75%. Appendix A explains why a market-to-book ratio significantly above one means that the market-based COE is significantly less than the expected return on book equity.

[14] Exhibit ALR-3, page 1.
[15] Exhibit ALR-3, page 1, 2 Retention Rate, a) Market-to-Book Ratio.

Q. PLEASE COMPARE PEOPLES' REVENUE REQUIREMENT IF YOUR RECOMMENDATIONS ARE ADOPTED INSTEAD OF MR. MOUL'S.

A. If my 8.02% cost of equity recommendation and capital structure recommendation are used to set rates for Peoples, the rate of return portion of the revenue requirement will be about $324.9 million. On the other hand, if Mr. Moul's 11.75% cost of equity recommendation and capital structure recommendation are used to set rates, the rate of return portion of the annual revenue requirement will be $461.1 million. As shown in Table 5 below, if Mr. Moul's rate of return recommendations are adopted instead of mine, consumers will pay approximately $136.19 million more per year.

TABLE 5: ANNUAL REVENUE IMPACT VS. REQUESTED - PEOPLES NATURAL GAS COMPANY LLC
($ million)

	Rate of Return Portion of Revenue Requirement	Difference Moul Rothschild
Rothschild	$324.91	
Moul	$461.10	$136.19

Source/Inputs:		
Requested Rate Base [1]	$	4,244.7
Federal income tax rate		21.00%
State income tax rate		7.50%
Uncollectable Expense		1.03%

[1] Volume 4, Exhibit 11 Schedule No. 1

Q. YOU RECOMMEND THAT PEOPLES SHOULD BE AUTHORIZED TO EARN AN ROE EQUAL TO ITS MARKET-BASED COST OF EQUITY OF 8.02% (7.67% TO 8.37%). PLEASE EXPLAIN MORE REGARDING THE IMPORTANCE OF DETERMINING THE MARKET-BASED COE AS ACCURATELY AS POSSIBLE.

A. As discussed above, Peoples' authorized ROE should be in line with its market-based COE. In other words, the cost of equity is the return investors expect to earn when they purchase the equity (or stock) of a company. This makes sense because investor-owned utility companies (IOUs) raise money from investors.

Q. DO ACCOUNTING FIGURES AND AUTHORIZED ROES IN OTHER PROCEEDINGS REVEAL THE MARKET-BASED COE?

A. No. It would be insufficient and inaccurate to determine the cost of equity based on accounting information (e.g., revenue, net income, equity book value, or return on book equity) alone, as doing so neglects to account for the information that is revealed through investor's actions in the market. The return investors expect can come in the form of capital gains (stock price appreciation) or dividend payments. As investors buy and sell stock in the market, they convey information about their return expectations and therefore the underlying cost of equity (companies with different risk profiles will have different costs of equity). This is why an accurate COE can only be established by incorporating capital market prices (e.g., stocks, stock options).

Authorized ROEs in other proceedings are applied to rate base, which is nearly identical to book value. Therefore, as explained further below, authorized ROEs in other proceedings do not reflect the market-based COE alone. In fact, the ratio of market prices to book value (market-to-book ratio) indicates that the COE for gas utility companies is significantly lower than authorized ROEs.

Peoples' authorized ROE in this proceeding should not be based on accounting information alone or authorized ROEs of gas utility companies in other proceedings without considering the stock price of those utilities.

Q. DO ANY ROE WITNESSES USE A DIFFERENT DEFINITION FOR THE COST OF EQUITY?

A. All ROE witnesses I have encountered over my more than 20 years in the industry, including Mr. Moul, define the cost of equity as market-based somewhere in their

testimony. Mr. Moul correctly states that he uses "market-determined models."[16] However, as discussed above, Mr. Moul's approach significantly relies on the personal opinions of equity analysts in both his CAPM and DCF analysis instead of the supply and demand of stocks and bonds as indicated by market data. Calculating the cost of equity should be an interpretive approach (e.g., using market data to measure investors' expectations as Mr. Moul did in some parts of his testimony) rather than a speculative one (e.g., using interest rate forecasts instead of investors' expectations as revealed in the market yield).

Q. IS YOUR MARKET-BASED COST OF EQUITY RECOMMENDATION BASED ON YOUR OPINION OF FUTURE STOCK PRICE RETURNS?

A. No. I do not pretend to be able to predict the future. Capital markets are unpredictable and, as explained above, it is investors' expectations that matter since they are the ones providing the capital. Therefore, I provide an expert interpretation of investors' return expectations as indicated by the current market prices of stocks, bonds, and stock options, without attempting to predict future prices.

I do use Value Line and Zacks analyst forecasts to estimate the market-based cost of equity in my Discounted Cash Flow (DCF) analyses. However, I do not use them mechanically and I go to great lengths to distill the sustainable growth component to ensure it is in line with investors' long-term expectations, including using a DCF model that is based only on market data (stock option prices). My Capital Asset Pricing Model (CAPM) is based on a direct measurement of investors' expectations as indicated by market prices instead of analyst forecasts, which have proven to be unrealistic. On May 16, 2022,

[16] Mr. Moul's Direct Testimony, Peoples Statement No. 13, Page 10, lines 7-15, Page1, line 22 and Page 2, line 1.

McKinsey stated that "analysts' near-term forecasts are often overly optimistic and don't always correctly reflect operating performance."[17]

Q. YOU STATED ABOVE THAT ROES AUTHORIZED IN OTHER PROCEEDINGS SHOULD NOT BE USED TO SET THE AUTHORIZED ROE IN THIS PROCEEDING. CAN YOU ELABORATE ON WHY PREVIOUS PROCEEDINGS' ROES ARE NOT AN APPROPRIATE GAUGE FOR PEOPLES' COE?

A. As discussed in Appendix A, when the market to book ratio of a gas utility company is significantly above one, as they are now,[18] it indicates that the utility's COE is lower than its authorized ROE.[19]

In his 1970 book *The Economics of Regulation: Principles and Institutions*, regulatory economist Alfred Kahn explained why the cost of equity is lower than authorized returns when market to book ratios are significantly above one:[20]

> [T]he sharp appreciation in the prices of public utility stocks, to one and half and then two times their book value during this period, reflected ... a growing recognition that the companies in question were in fact being permitted to earn considerably more than their cost of capital. ... The source of the discrepancy between market and book value has been that commissions have been allowing r's [returns on equity] in excess of k [market cost of equity]; if instead they had set r equal to k, or proceeded at some point to do so ... the discrepancy between market and book value ... would have disappeared, or would never have arisen.

[17] David Kohn, Vartika Gupta, Tim Koller, Werner Rehm, *Do consensus estimates accurately reflect operating performance?*, May 16, 2022.
[18] See Exhibit ALR-3, page 1. The market to book ratios of the companies in my proxy group averaged 1.56 over the year ending February 29, 2024.
[19] An authorized ROE is applied to rate base, which is nearly identical to the return on the book value of equity; therefore, authorized ROEs are nearly identical to return on book equity.
[20] Alfred Kahn, *The Economics of Regulation: Principles and Institutions*, Mass. Inst. Tech. at 48 (fn. 69), 50 (1970).

A utility company's COE should not be based on authorized ROEs, which are accounting returns. The COE is set based on what investors in the market expect for a given risk profile. In the case of a utility stock, an increasing market value results in a lower return on market for the same expected return on book, all else equal.

IV. COST OF EQUITY IN TODAY'S FINANCIAL MARKETS

Q. WHY DO YOU CONSIDER CAPITAL MARKETS IN GENERAL?

A. My COE models are designed to reflect capital market conditions. However, it is important to "cross-check" the model results because capital markets are complicated. I consider capital market data in general like a ship captain might use visual landmarks, by comparing them with electronic navigation aids like GPS, and cross-referencing with nautical charts to confirm their position. This process of cross-checking helps to identify and correct any discrepancies or errors in any single source.

Q. PLEASE SUMMARIZE CAPITAL MARKET DEVELOPMENTS THAT IMPACT THE COST OF EQUITY.

A. Market developments that have impacted the cost of equity include:

1. **Inflation and interest rates.** The Federal Reserve (the Fed) has increased short-term interest rates (the Federal Funds rate) from near 0% to a range of 5.25% - 5.50% as of February 29, 2024 to fight inflation.[21] Long-term interest rates have increased as well. Inflation data released on November 14, 2023, indicated that inflation may finally be under control and the core inflation rate has continued to

[21] Federal Reserve Bank of New York. https://www.newyorkfed.org/markets/reference-rates/effr.

decline since then. As shown on Chart 2 on page 26, investors expect the Federal Reserve to start lowering the federal funds next year, but market data indicates that in recent months investors have revised their expectations and now believe the Fed will not decrease the Federal Funds rate as fast. Chart 2 shows that as of December 29, 2023, investors expected the Fed to reduce the Federal Funds Rate to about 3.50% by September 2026. As of February 29, 2024, they expected the Fed to reduce this rate to a little under 4.0%. Long term interest rates risen since December 29, 2023, as well, with the yield on the 30-year U.S. Treasury bond increasing from about 4.0% to about 4.4%. As shown on Chart 3 and Chart 5 starting on page 28, investors expect inflation to decrease sharply over the next few years and long-term interest rates to remain near current levels in coming decades.[22]

2. Stock price performance. Gas utility stocks have been underperforming the overall market (S&P 500) for some time. Chart 6 on page 32 shows that over the past six months ending February 29, 2024, gas utility stocks are down 3.56% while the S&P 500 is up 13.06%. All else being equal, this normally indicates an increasing COE. However, the S&P 500 has been highly impacted by the stock price movements of seven companies known as the "Magnificent Seven"[23]. These seven companies disproportionally impact the value of the S&P 500 index because these companies are very large[24] and this index is market-cap weighted. Therefore,

[22] Using the yield curve to measure investors' interest rate expectations is a common technique in finance. However, it is only an approximation because other factors can impact the current shape of the yield curve. For example, investors often require an extra yield to purchase bonds with longer-maturity dates. This is known as a term-premium. It is possible that the current term-premium is impacting my calculations and investors expect the yield on the 10-year U.S. Treasury bond to remain flat in the near term or even decrease.

[23] Apple, Alphabet, Meta Platforms, Microsoft, NVIDIA, Amazon and Tesla.

[24] As of February 2, 2024, the combined market capitalization of the Magnificent Seven is about $12.5 while the market capitalization of all the companies in the S&P 500 is $42 trillion.

the underperformance of gas utility stocks is not as large as compared when compared to the average stock in the S&P 500 index.

3. **Stock price volatility, expected return on the overall market, and market risk premium**. As shown on Chart 9 on page 36, investors' volatility expectations for the overall market decreased considerably between October 2022 and December 2023, nearing historical lows in June 2023. Despite a spike in late September and early October 2023, market volatility expectations remain significantly lower than the highs of October 2022. This lower market volatility translates into lower expectations for overall market returns, and therefore a significantly lower market risk premium – considerably beyond the low levels that may have been expected due to the increasing risk-free rate. In fact, this decrease in the market risk premium more than offsets the effect of the first two factors listed above and has led to a lower cost of equity today than in late 2022. The volatility expectations for the companies in the RFC Gas Proxy Group have not declined with the overall market in over the past year and remain significantly higher than for the overall market.

4. **Probability of a large stock price drop (Option Implied Skewness).**[25] As shown in Chart 11 on page 39, despite relatively high volatility expectations for the companies in the RFC Gas Proxy Group, investors' expectations regarding the chance of a large drop in utility stock prices remain below those for the overall market, which indicates that the relative cost of equity for gas utility companies remains below the overall market.

[25] Option-implied skewness represents investors' expectations regarding the asymmetry of the probability distribution for stock price movements. Option-implied skewness is further discussed in Section IV. D. Investor-Perceived Downside Risk (Option-Implied Skewness).

5. Term Structure of COE. Consistent with easing concerns regarding inflation and increasing interest rates, market data indicates that investors expect the COE for the broader market and utility companies to remain fairly stable in the future. A stable term structure of COE is a good sign that gas utility companies, including Peoples, will be able to raise the capital they need to fund assets with long useful lives at a reasonably low cost of equity.

I elaborate on each of the points above in the following sections.

A. Inflation and Interest Rates

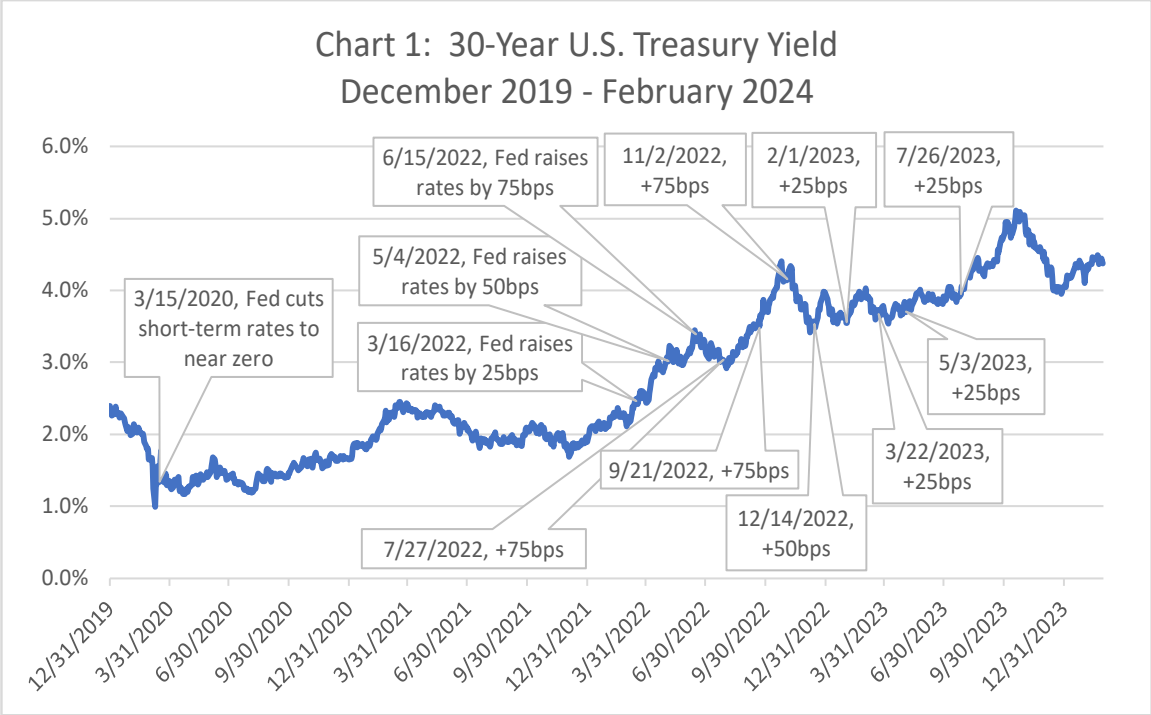
Q. PLEASE DISCUSS THE CURRENT INFLATION AND INTEREST RATE ENVIRONMENT AND WHAT IT INDICATES REGARDING THE COST OF EQUITY.

A. Starting in March 2022, the Fed has increased the benchmark federal-funds rate by a cumulative 5 percentage points (i.e., 25 basis points) to a 22-year high. As of December 31, 2023, the benchmark rate is 5.25% to 5.50%. In its last meeting in January 2024, the Federal Reserve decided to leave the federal funds target rate unchanged for the fourth consecutive meeting. Fed Chairman Jerome Powell stated that "Inflation has eased notably over the past year but remains above our longer-run goal of 2 percent."[26] As shown in Chart 2 on page 26, market data shows that investors expect the Fed to start cutting the Federal Funds rate in 2024.

The Federal Funds rate is important because it can impact the cost of long-term borrowing and the cost of equity. As shown in Chart 1 on page 24, the yield on the 30-year U.S. Treasury bond has increased along with the Federal Funds rate, increasing from

[26] Transcript: Fed Chief Jerome Powell's Post Meeting Press Conference, January 31, 2024. https://www.wsj.com/articles/transcript-fed-chief-powells-postmeeting-press-conference-29ce7b9f

2% at the start of 2022 to 4.38% as of February 29, 2024. The cost of equity has increased along with the Federal Funds Rate and the yield on Treasury Bonds, but not one for one. As discussed above, the market-based COE for gas utility stocks is below authorized ROEs because the market-to-book ratios of these stocks is above one. As elaborated upon starting on page 39, market data indicate that investors expect the cost of equity to remain relatively low over the coming years.



Higher inflation can impact the cost of equity because it can impact interest rates. Higher interest rates, all else equal, generally indicate a higher cost of equity for gas utility companies because fixed income investments become relatively more attractive when they start paying a higher rate (e.g., a bond with an interest rate of 3% is more attractive to investors, all else equal, than when they are paying a 2% rate). However, as discussed above, the cost of equity for utility companies has likely been decreasing because the cost of equity for the overall market has been declining. Additionally, the Commission can be

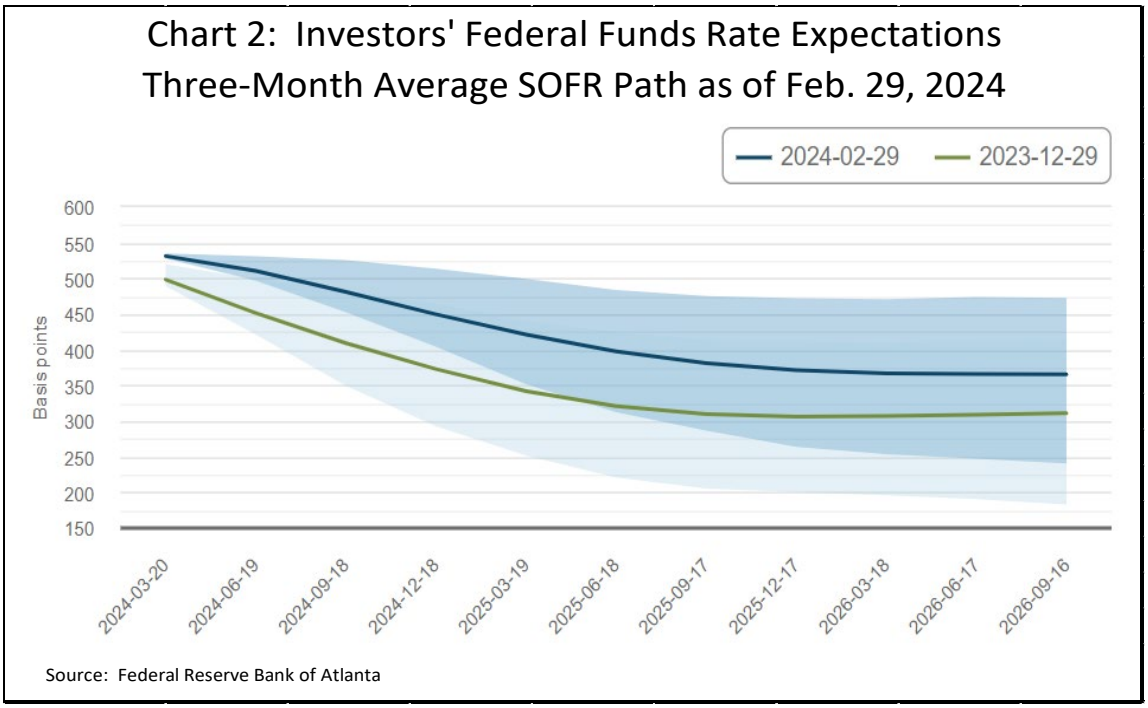
confident that the 8.02% COE I calculated reflects interest rate changes because it is based on market data, including the changing market yields on government bonds.

Q. WHAT DOES MARKET DATA INDICATE REGARDING INVESTORS' CURRENT INFLATION AND INTEREST RATE EXPECTATIONS?

A. As shown in Chart 2 on page 26, the Federal Reserve Bank of Atlanta estimated that as of February 29, 2023, investors expect the three-month average Federal Funds rate[27] will most likely decrease from its current range of 5.25%-5.50% to an expected value of under 4.0% in 2026. The same chart shows that about two months prior (December 29, 2023), investors expected the Federal Funds rate would decrease to a little over 3% in 2026.

I use the Federal Reserve Bank of Atlanta market-implied probabilities because it is based on investors' expectations as indicated by option prices, future prices, and swap spreads. As discussed considerably above, market-based expectations like those provided by the Federal Reserve Bank are more appropriate to consider when calculating the cost of equity than economist/analyst projects for many reasons.

[27] The Federal Funds rate guides overnight lending among U.S. banks, but this short-term rate impacts the interest rates on debt with longer maturities.



Q. YOU STATED THAT THE FEDERAL RESERVE BANK OF ATLANTA USES MARKET DATA TO CALCULATE INVESTORS' EXPECTATIONS REGARDING THE FEDERAL FUNDS RATE. IS THERE A WAY TO MEASURE INVESTORS' INFLATION AND LONG-TERM INTEREST RATE EXPECTATIONS AS WELL?

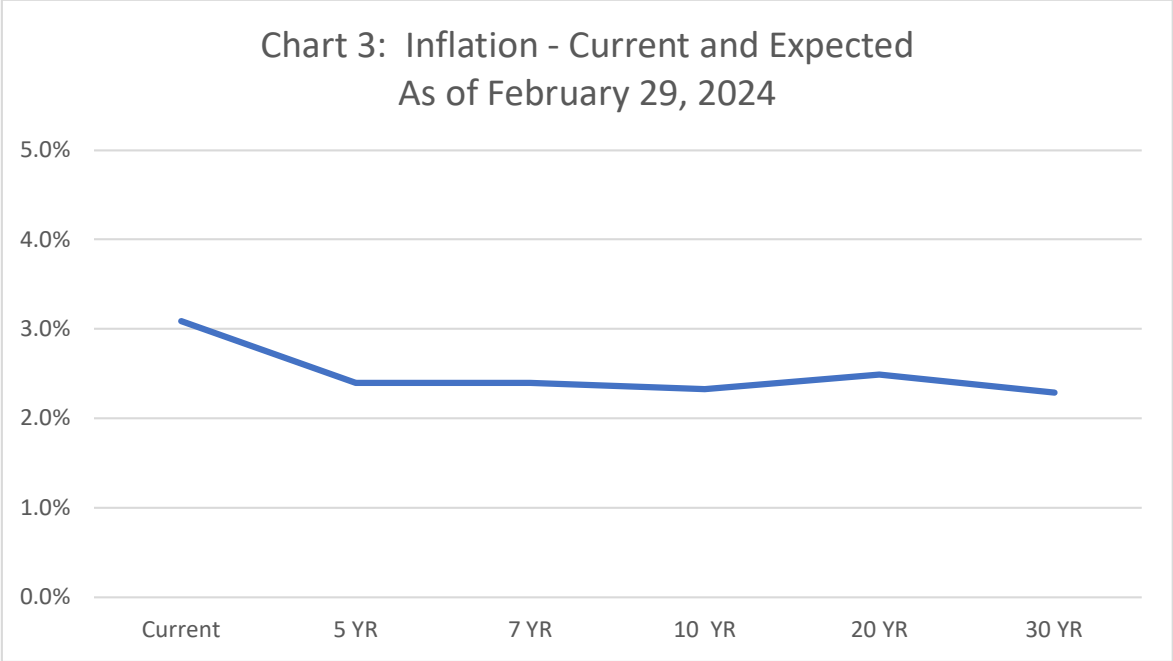
A. Yes. Regarding inflation, it is possible to measure investors' expectations directly simply by subtracting the interest rate of nominal Treasuries and TIPS (Treasury Inflation - Protected Securities) of comparable maturities. This difference is referred to as the "breakeven inflation rate" because it represents what inflation would have to be for an investor to "break even" or make the same return on both nominal Treasuries and TIPS. For example, if the yield on a nominal 10-year Treasury is 2.5% and TIPS of the same duration are 1.5%, an investor would make the same real return on both bonds if the inflation rate is 1% over the next 10 years.

Nominal yield – real yield = breakeven inflation rate

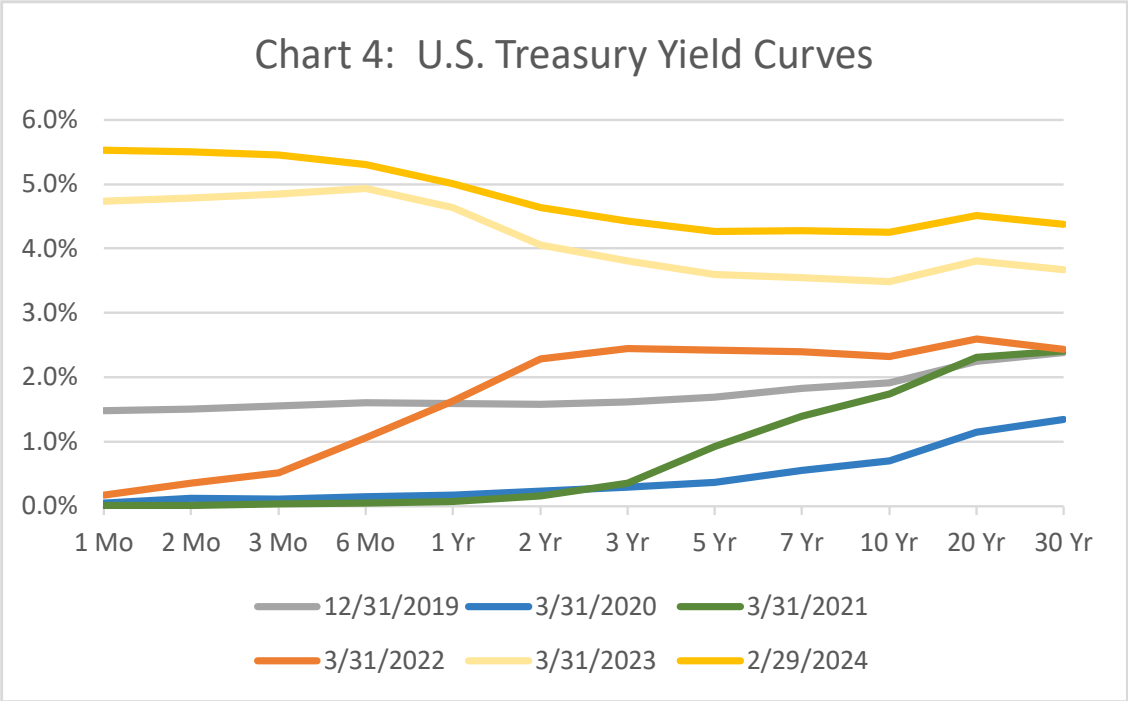
In this case, investors' breakeven inflation rate is 1% (2.5% - 1.5% = 1%).

It makes sense that investors' inflation expectation is equal to the breakeven inflation rate because if investors, on average, believed that inflation was going to be 10%, in the example above, they would buy TIPS and expect to make exceptional profits. The investor who purchases TIPS would earn 1.5% + 10% inflation = 11.5%. The investor who purchased the nominal Treasury would lose 7.5% (2.5% yield — 10% inflation rate). With such large relative returns to be made buying TIPS in this hypothetical example, investors would bid up the price of TIPS and drive down the yield until investors expect the same real return on nominal Treasuries and TIPS. And in this way, the relationship between the market yields on TIPS vs. nominal Treasury bonds is a self-balancing safe measurement of investors' expectation of inflation.

As indicated by the difference between nominal-treasuries and TIPS, Investors expect the Fed's actions will reduce the inflation rate substantially in the coming years. As shown on Chart 3 on page 28, the relative market price of inflation-protected bonds as compared to regular Treasury bonds as of February 29, 2024, indicates that investors expected the inflation rate to decline from the current 3.09% to only 2.40% over the next 5 years and to about 2.29% over the 30-year horizon.



Regarding interest rates, it is possible to use the yield curve to calculate investors' expectations regarding future interest rates. An upward sloping yield curve indicates investors expect higher interest rates and a downward sloping yield curve indicates investors expect lower interest rates in the future. As shown in Chart 4 on page 29, the yield curve went from being significantly upward sloping on March 31, 2021 to mostly downward sloping as of February 29, 2024.



Consistent with a declining yield curve, Chart 5 on page 30 shows that as of February 29, 2024, investors expected long-term interest rates (10-year U.S. Treasury Bond) to decline slightly over the next 20 years, increasing from 4.25% as of February 29, 2024 to 4.77% over the next ten years and then falling to 4.12% over the 20-year time frame. As discussed above, using the yield curve to measure investors' interest rate expectations is a common technique in finance. However, it is only an approximation because other

factors can impact the current shape of the yield curve.

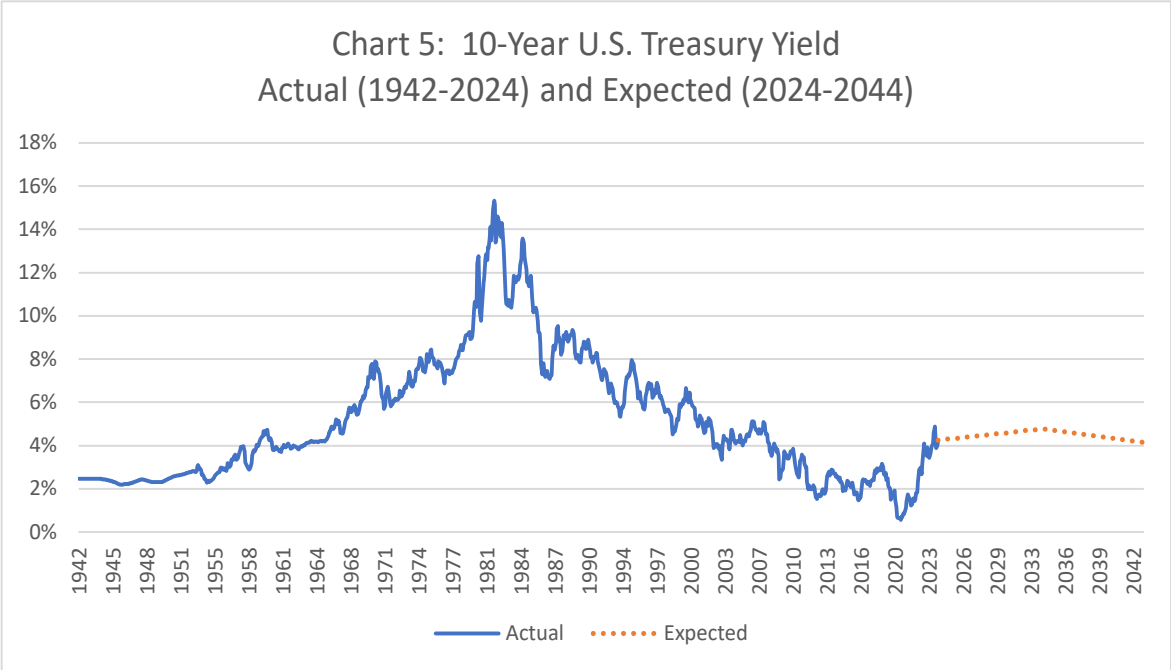


Chart 5 above also shows that although long-term interest rates have increased since reaching historical lows in 2020 and 2021, they remain below interest rates from the 1970s and 1980s when the yield on the 10-year U.S. Treasury bond climbed over 14%.

Q. HOW DO YOU RESPOND TO PEOPLE WHO CLAIM TO KNOW WHAT INTEREST RATES WILL BE IN THE FUTURE?

A. It is important to recognize that current long-term Treasury bond yields represent a direct observation of investor expectations and there is no need to use "experts" to determine market-based cost of equity.

Many economists and forecasters will continue to be quoted in the press prognosticating on possible developments that are truly unpredictable. Fed Chairman

Jerome Powel really stated "the economy has surprised forecasters in many ways since the pandemic and…the economic outlook is uncertain…"[28]

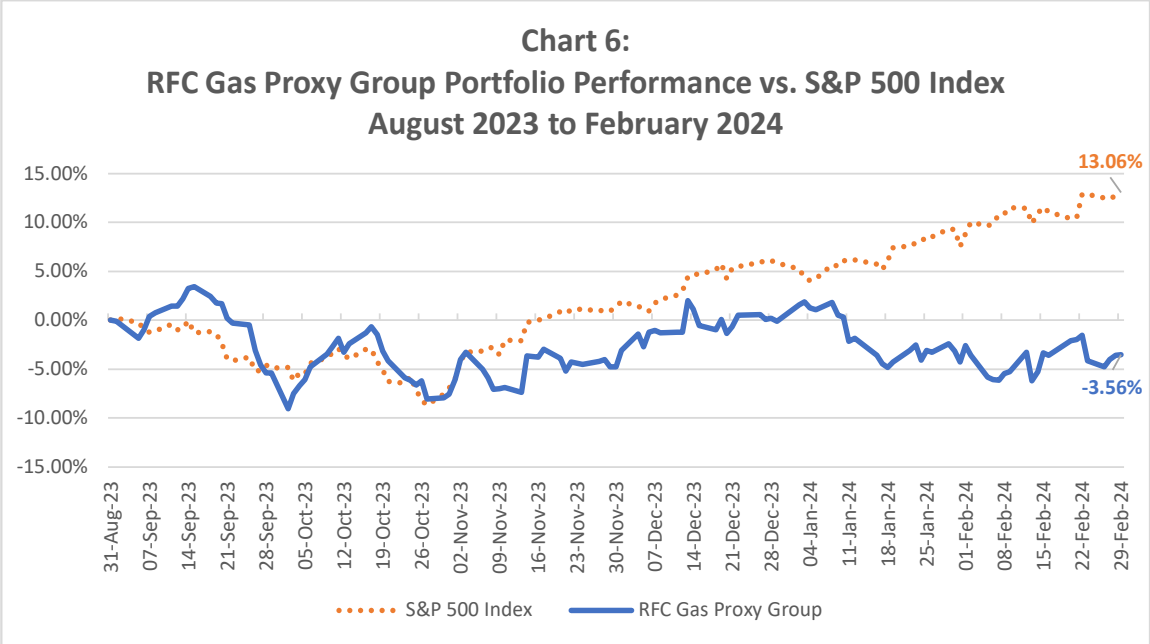
I recommend that the Commission consider that capital markets are highly unpredictable, and it is possible that interest rates will increase, remain the same, or decrease in the future. Consumers' rates should be based predominantly on investors' expectations as indicated by capital market data. While incorporating economists' opinions can be valuable to an extent, it is crucial to recognize our fallibility regarding predicting capital market behavior, including what interest rates will be next year.

[28] Transcript: Fed Chief Jerome Powell's Postmeeting Press Conference, January 31, 2024. https://www.wsj.com/articles/transcript-fed-chief-powells-postmeeting-press-conference-29ce7b9f

B. Stock Price Performance

Q. HOW HAVE UTILITY STOCKS PERFORMED DURING THIS TIME OF HIGH INFLATION AND INCREASING INTEREST RATES?

A. As shown in Chart 6 below, as of February 29, 2024, the S&P 500 is up 13.06% for the last six months while the Utility Proxy Group is down 3.56%.



Q. DO DECREASING GAS UTILITY STOCKS MEAN A HIGHER COST OF EQUITY?

A. All else equal, declining utility stocks can indicate an increasing cost of equity. In this case market data indicates that the cost of equity for utility stocks increased somewhat along with raising interest rates, but not nearly as much as the increase in the yields on U.S. Treasury Bonds. Additionally, market data indicates that the COE for utility companies mostly declined in 2023 despite the relative underperformance of utility stocks.

C. Volatility Expectations

Q. PLEASE DISCUSS CURRENT STOCK PRICE VOLATILITY EXPECTATIONS AND WHAT THEY INDICATE REGARDING THE COST OF EQUITY.

A. Volatility, uncertainty, and risk are synonymous. There are two primary types of volatility: "realized volatility" and "implied volatility." The former is based on historical returns, which may or may not represent future volatility. On the other hand, implied volatility is calculated from options data, which indicates investors' future expectations for volatility. As discussed below, the "term structure" of volatility indicates investors' volatility expectations over different forward-looking time periods (i.e., 1 month, 1 year, etc.).

Q. PLEASE EXPLAIN THE "TERM STRUCTURE OF VOLATILITY."

A. Investors can expect volatility to increase or decrease over time. In general (i.e., in "normal" financial markets), investors expect higher volatility for longer time horizons. For example, investors generally expect the chance stock prices will increase or decrease by 10% in 1 year to be greater than the chance of a 10% (annualized) move over the next 30 days. This makes sense because there is more uncertainty regarding economic and stock market changes the further in the future you look out.

However, during the height of a crisis, when volatility generally tends to rise in the short-term, investors often expect volatility to decrease in coming months or years. In other words, investors expect the current capital market hurricane to pass and the winds to die down. During the peak of implied volatility in mid-March 2020, shortly after the World Health Organization declared COVID-19 a pandemic, the data indicated that investors expected stock price volatility to decrease over time. This implies that investors expected the riskiness of equity investments to decrease over time. As shown in Chart 7 on page 34,

before the COVID-19 outbreak, investors expected volatility to increase from less than 15% annually at the 1-month time frame to about 20% annually at the 24-month time frame. Investors' volatility expectations peaked in March 2020. At that time, investors expected stock price volatility would decrease from over 70% at the 1-month time frame to about 38% at the 24-month time frame. Chart 7 also shows that investors' volatility expectations were higher for all time frames when Russia invaded Ukraine as compared to 2021, but as of February 29, 2024 volatility expectations have dropped back to 2019 levels over the 11-month time-frame and only slightly higher than the 2019 out to 24 months.

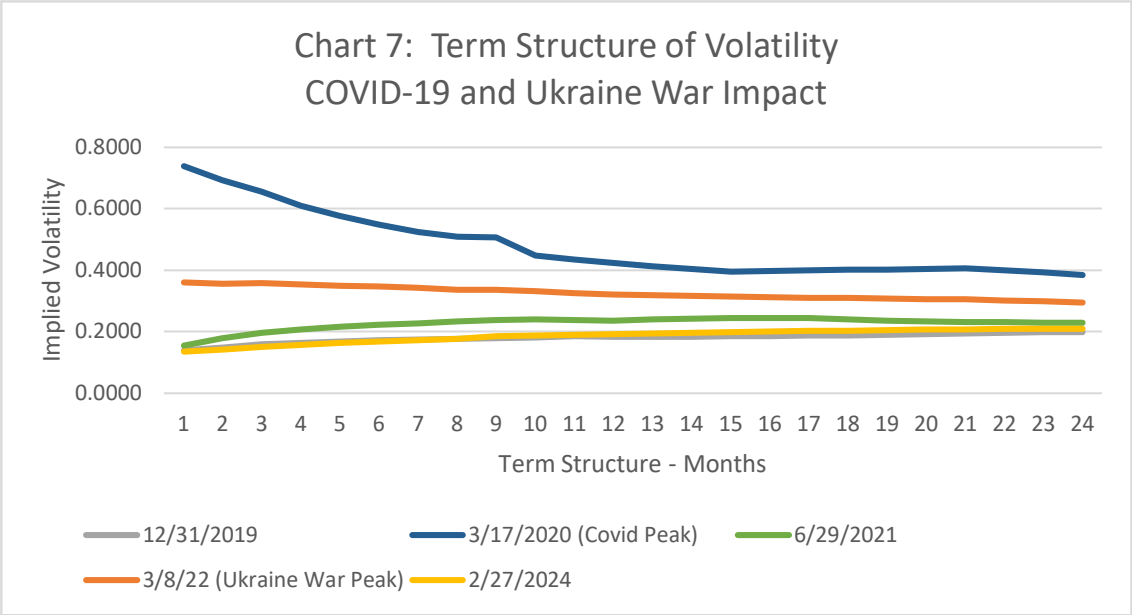
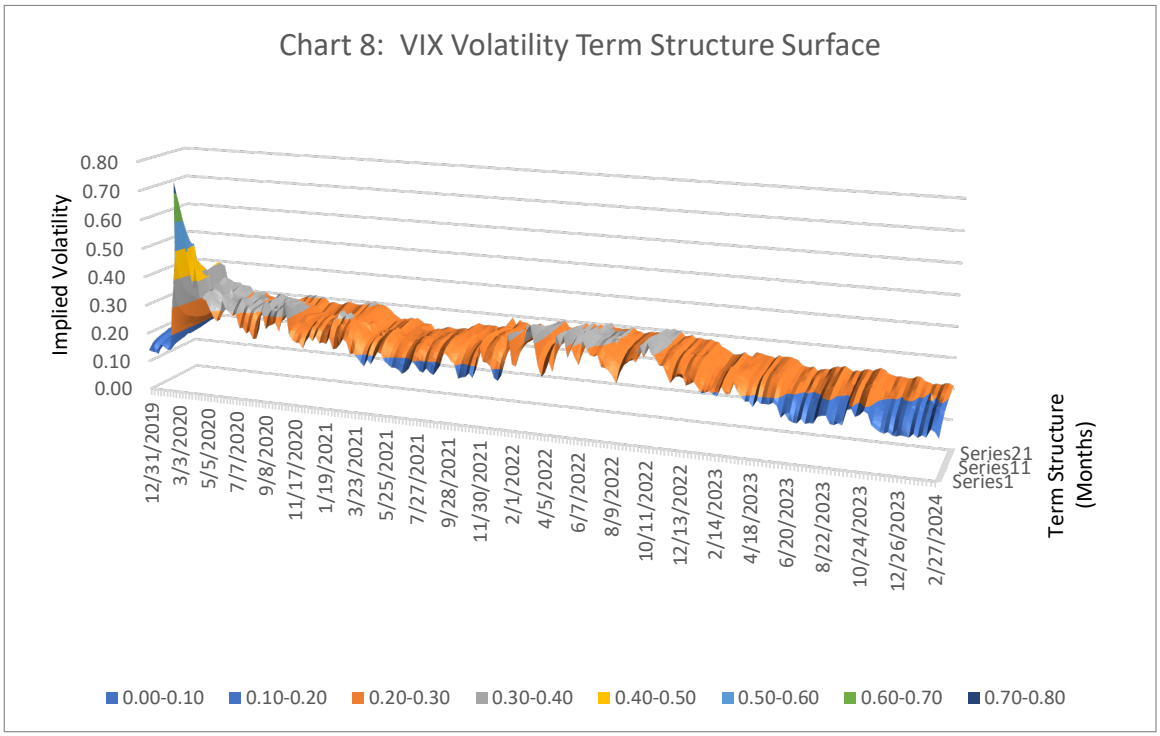


Chart 8 on page 35 provides a 3-dimensional surface[29] to show how the term structure of volatility has evolved since before the COVID-19 outbreak and how it has changed during and since the outbreak. Chart 7 above is simply five selected cross sections of the same data in the surface in Chart 8. In the surface chart, one can see that December 31, 2019, the term structure of volatility is almost flat, increasing slightly from the 1-month

[29] The X axis shows the implied volatility. The Y axis shows the data. The Z axis shows market expectation of future implied volatility of different time frames. Series1 = 1 month and Series24 = 24 months.

to the 24-month time frame. In mid-March 2020, the implied volatility increased over every time period in comparison to December 31, 2019, but one can see that investors expected a declining term structure of volatility. By the end of July 2020, the implied volatility for all time periods had decreased, and the declining term structure moved to a more typical structure in which investors expected higher volatility over longer time periods. As of the end of February 2024, the term structure of volatility has reached historical lows and is now slightly increasing over the 24-month time frame.

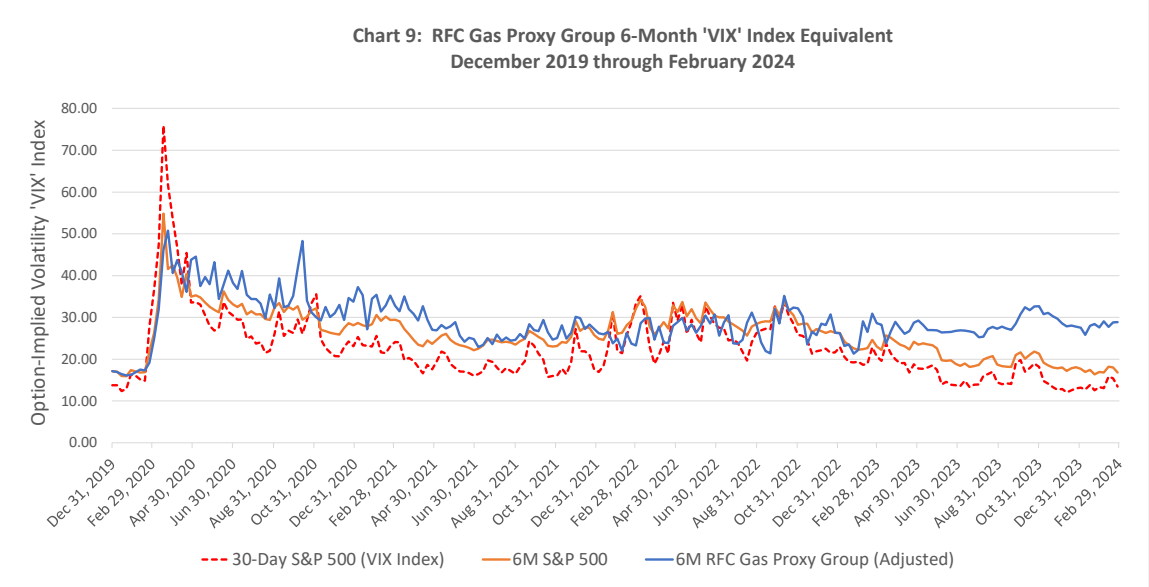


Q. HOW HAVE VOLATILITY EXPECTATIONS FOR GAS UTILITY COMPANIES COMPARED TO VOLATILITY EXPECTATIONS FOR THE S&P 500?

A. The solid orange line in Chart 9 on page 36 shows investors' stock price volatility expectations for the overall market (S&P 500) increased significantly as COVID-19 infections spread to the U.S. and continued to grow exponentially around the world. The solid orange line shows volatility expectations over the next 6 months. On December 31,

2019, investors expected an annualized change of 13.78% over the next 30 days. In mid-March 2020, investors' volatility expectations peaked at over 80% (on March 16, 2020, a point not actually shown on the chart, which has weekly data on Tuesdays). As of the end of February 27, 2024, investors expect an annualized change of 13.43%.

The blue line in Chart 9 shows that investors' adjusted[30] 6-month volatility expectations for my RFC Gas Proxy Group, as indicated by their stock option prices, increased along with the market in mid-March 2020, but to a significantly lesser degree. Investors' 6-month adjusted volatility expectations for gas utility companies were for the most part higher than for the S&P 500 from May through August 2020, remained very comparable through March 2020, and have increased above the expectations for the market since then through the end of 2/27/2024.



[30] The implied volatility for individual stocks and small groups of stocks is almost always higher than the overall market because of the effects of diversification, even when the underlying stocks in the smaller portfolio are less risky, as is the case with gas utility companies. As a result, Chart 9 adjusts the 6-month expected volatility for the RFC Gas Proxy Group by the difference with the 6-month expected volatility for the S&P 500 Index on December 31, 2019 to facilitate the comparison throughout the chart.

As discussed above, changes in implied volatility do not paint the full cost of equity picture. We must consider implied covariance, or how much investors expect the volatility of returns for gas utility companies to correlate with the overall market (e.g., S&P 500 Index).

D. Investor-Perceived Downside Risk (Option-Implied Skewness)

Q. YOU EXPLAINED EARLIER THAT GAS UTILITY STOCKS HAVE UNDERPERFORMRED THE OVERALL MARKET RECENTLY. WHAT DOES STOCK OPTION DATA SHOW REGARDING INVESTORS' CONCERN THAT GAS UTILITY STOCKS WILL HAVE A LARGE DROP COMPARED TO THAT OF THE OVERALL MARKET?

A. Stock option prices provide considerable information regarding investors' expectations. The most well-known measure of investors' expectations as measured by stock option prices is the VIX Index (or Volatility Index). The VIX Index is a measure of investors' volatility expectations and is referred to as the "fear index" because, all else equal, higher volatility expectations indicate higher uncertainty, risk, and scared investors.[31] However, volatility expectations are only one piece of a multi-dimensional puzzle that reveals the market-based cost of equity. After volatility expectations, the next dimension to explore (referred to as the "third moment" in statistics) is skewness. Option-Implied skewness reflects investors' expectations regarding the asymmetry of the probability distribution.

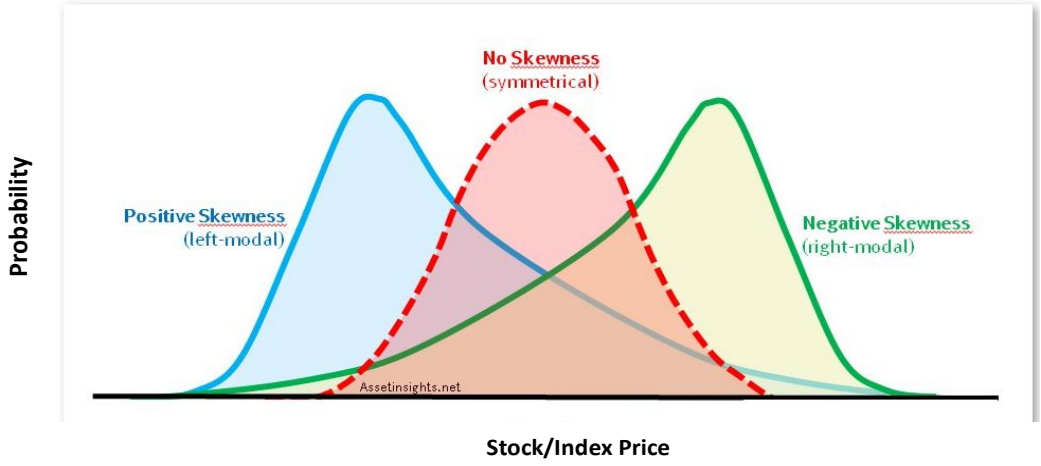
Option-implied probability distributions are almost always negatively skewed for stock market indexes (e.g., S&P 500) and individual stocks, which means that investors

[31] Some investors like high volatility because it provides the opportunity to earn a lot of money quickly if the market moves in their favor. For example, an investor that shorts Microsoft, will make a lot of money if the stock drops by a large amount. However, investors who buy utility stocks generally prefer low volatility and low risk.

almost always think there is a greater chance of a large decrease in stock prices than large increases. The Chicago Board of Options Exchange ("CBOE") also publishes an index based on option-implied skewness referred to as the SKEW Index.

As shown in Chart 10 below, the probability distribution that is negatively skewed has a tail that is longer on the left. A probability distribution with positive skewness has a longer tail on the right. The right and left tails of a probability distribution with no skewness are symmetrical. If the option-implied skewness looked like the red probability distribution in Chart 10 below it would mean that investors believed there was an equal chance that stock prices would move up or down by a certain amount.

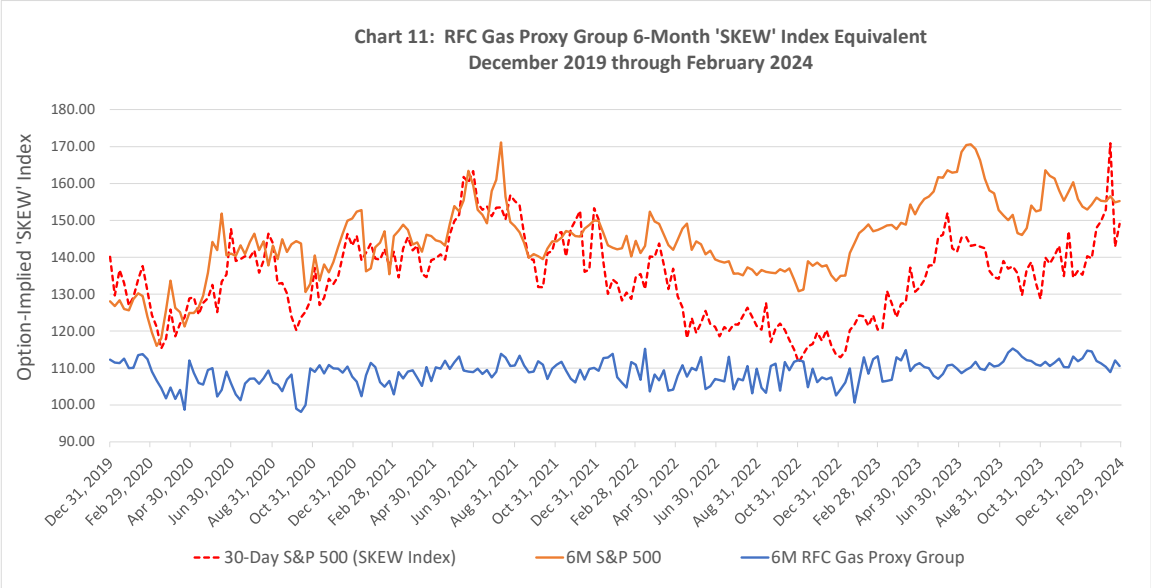
Chart 10: Probability Distributions with and without Skewness



Q. WHAT DOES THE SKEW INDEX REVEAL REGARDING THE IMPACT OF THE COVID PANDEMIC AND THE WAR IN UKRAINE ON PEOPLES' COST OF EQUITY?

As shown in Chart 11 on page 39, comparing the SKEW Index to an equivalent metric based on gas utility company stock options indicates that as 2023 comes to a close, investors have expected the chance of gas utility stocks suffering from a large drop in

investment is much lower than their expectations the overall market will experience a large drop. This indicates the cost of equity for gas utility companies has likely remained lower relative to the overall market as interest rates have increased.



E. Term Structure of Beta Coefficients and COE

Q. DO UTILITY INVESTORS EXPECT THE COST OF EQUITY TO INCREASE IN THE FUTURE?

A. No. As discussed above, I would agree that the COE for gas utility companies has increased since lows reached in 2021. However, capital market data show that their COE has been declining in recent months and investors expect the COE to remain relatively stable when considering time frames past about 16 months.

Q. PLEASE EXPLAIN HOW YOU DETERMINED THAT INVESTORS EXPECT THE COE FOR GAS UTILITY COMPANIES TO REMAIN RELATIVELY FLAT IN THE FUTURE.

A. Investors can expect the cost of capital (both debt and equity) to increase or decrease over time. How the cost of capital changes based on different investment horizons is referred to as its "term structure." This fundamental concept is easy to understand by thinking about mortgage interest rates. Any homeowner knows that the interest rate on a 30-year mortgage will almost always be higher than that of a 10-year mortgage. Along the same lines, rate of return witnesses sometimes make two cost of debt recommendations, one for short-term debt and one for long-term debt.

The same logic applies to the cost of equity. However, in regulatory proceedings, rate of return witnesses generally calculate a single COE to make a single ROE recommendation, rarely if ever addressing the term structure of the COE. The COE for gas utility stocks has increased since 2021, the term-structure of COE analysis indicates that investors expect the COE for gas utility stocks to remain relatively stable in the future.

Standard COE models used in utility proceedings do not have the capacity to measure the COE over different time periods. However, stock options do allow us to measure the COE over different time periods because there are many stock option contracts that expire over different time periods. Option contracts for each expiration period allow us to calculate option-implied beta coefficients[32], market risk premia, and thus the resulting COE for each investment horizon. Unfortunately, option contracts for gas utility companies

[32] As described in more details below, a historical beta is a measure of the covariation of the return on an individual security with the return on the market portfolio. Most published betas are based exclusively on historical return data. However, I also calculate option-implied betas based on investors' expectations of the probability distribution of future returns.

only go out five to nine months into the future, but there are a number of electric utility stocks that trade options that often go out to almost two years or beyond. In addition, investors trade options on the S&P 500 with expirations approaching or sometimes beyond five years. Using these data, we can construct the term structure of beta, the market risk premium, and the COE for these electric utilities, which are indicative of the term structure of these parameters for gas utility companies.

The resulting term structures for the beta coefficients and the COE of the eight electric utility companies currently trading options with expirations over 12 months[33] are presented in Chart 12 and Chart 13 on page 42. Chart 12 shows that option-implied betas for these electric utilities are roughly 1 at the 7 month investment horizon, dropping to about 0.52 at the 7 month horizon and settling at settling under 0.70 after the 10 month horizon, which means that investors expect the risk of investing in these electric utilities to be stable or decrease over longer investment horizons. Chart 13 shows that the COE for these electric utilities also reaches a high of 7.2% at the 17-month horizon and is about 7.0% at the 5-year horizon.

[33] The eight electric utility companies AEP, D, DUK, EXC, FE, NEE, PPL, and SO are defined as the RFC Electric LEAPS Proxy Group, which I use in this testimony to calculate the term structure of COE. HE also trades options with expirations over 12 months but was excluded from this group because of the recent fires in Hawaii. SRE trades options with expirations barely above 12 months and has been excluded to allow consistency in this proxy group if this analysis is updated in subsequent months.

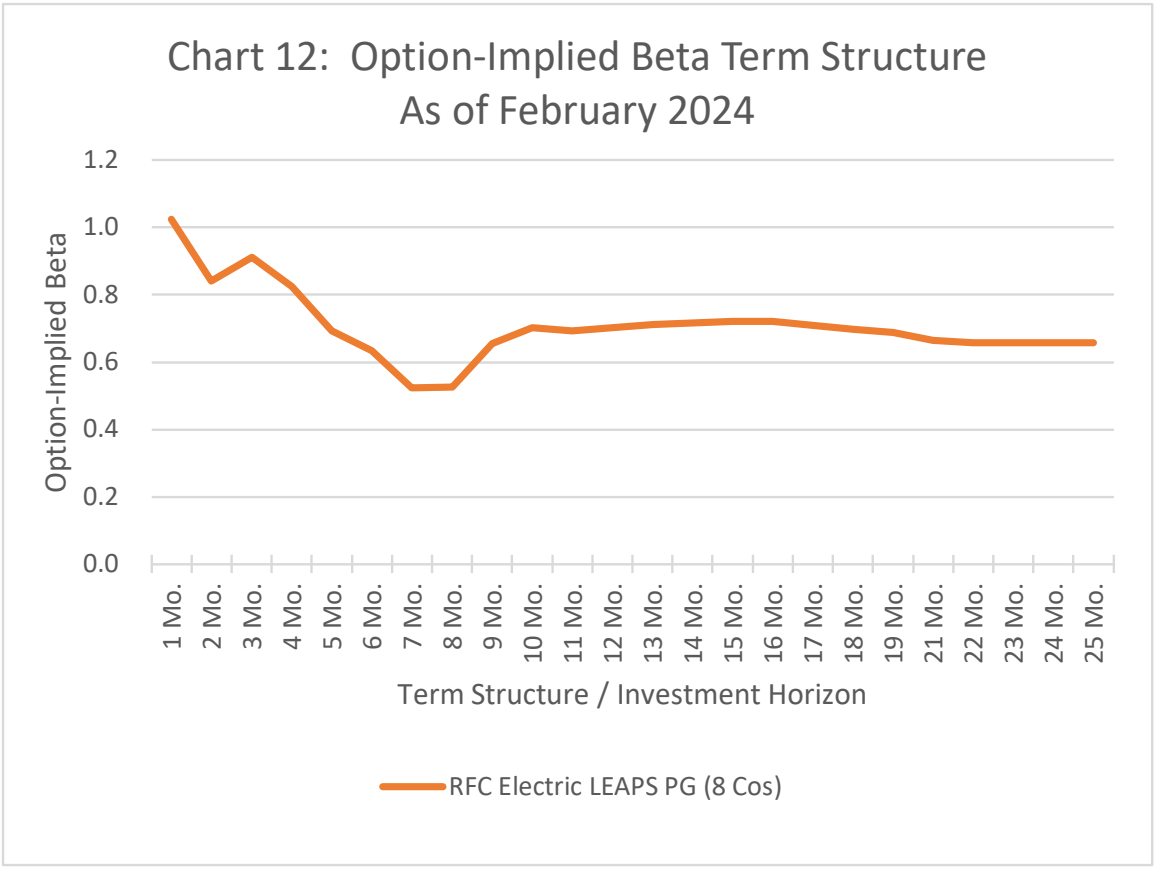


Chart 12: Option-Implied Beta Term Structure
As of February 2024
Option-Implied Beta
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1 Mo.
2 Mo.
3 Mo.
4 Mo.
5 Mo.
6 Mo.
7 Mo.
8 Mo.
9 Mo.
10 Mo.
11 Mo.
12 Mo.
13 Mo.
14 Mo.
15 Mo.
16 Mo.
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Term Structure / Investment Horizon
RFC Electric LEAPS PG (8 Cos)

1

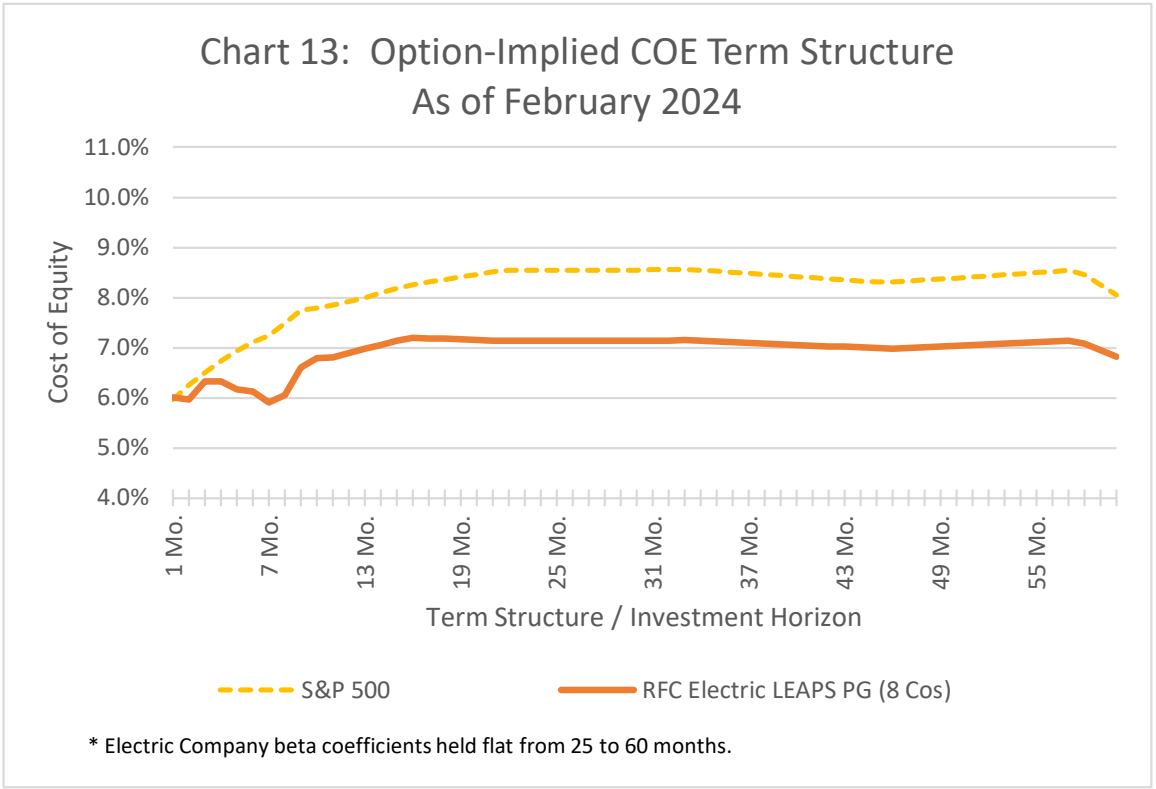


Chart 13: Option-Implied COE Term Structure
As of February 2024
Cost of Equity
11.0%
10.0%
9.0%
8.0%
7.0%
6.0%
5.0%
4.0%
1 Mo.
7 Mo.
13 Mo.
19 Mo.
25 Mo.
31 Mo.
37 Mo.
43 Mo.
49 Mo.
55 Mo.
Term Structure / Investment Horizon
S&P 500
RFC Electric LEAPS PG (8 Cos)
* Electric Company beta coefficients held flat from 25 to 60 months.

2

Despite Mr. Moul's assertion that "high interest rates clearly point to high capital costs prospectively"[34], an examination of capital market data suggests otherwise. While the cost of equity for gas utility companies did increase from lows reached in 2021, market data indicate a mostly declining cost of equity in 2023 and that investors anticipate that it will be flat to decreasing over the next five years.

V. COST OF EQUITY CALCULATION

A. Overview

Q. PLEASE PROVIDE AN OVERVIEW OF YOUR PERSPECTIVE REGARDING HOW CAPITAL MARKETS RELATE TO THE COE AND THE OVERALL COST OF CAPITAL.

A. The cost of capital is the return investors require to provide capital to Peoples based on current capital markets. To measure the cost of equity accurately, it is critical to use current market data because it increases the chance that the authorized ROE will match Peoples' market-based COE when it needs to raise equity capital. My analysis is built upon a measure of investor's forward-looking expectations using current market data. The use of such data and my forward-looking models becomes even more important in this case, where Peoples is projecting what its cost of equity should be for a fully projected future test year ending on September 30, 2025.

As discussed above, my COE recommendation is my opinion of the return investors require to provide equity capital to Peoples based on current capital markets. My

[34] Mr. Moul's Direct Testimony, Page 45, lines 11-12.

recommendation is consistent with the following legal standards set by the United States Supreme Court for a fair rate of return: "[t]he return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks"[35] and "sufficient to… support its credit and… raise the money necessary for the proper discharge of its public duties."[36]

Because the cost of equity is not a published figure like a bond yield, some interpretation is required to determine the appropriate market price. My cost of equity recommendation is based on my computation of what the market indicates investors require (return on investment) to provide capital to companies with comparable risk to Peoples.

As explained below, I use current market prices (e.g., stocks, bonds, options), which measure investors' expectations directly, instead of relying solely on historical data and analyst forecasts.

A COE based on current market prices (market-based) is superior to a COE based on historical data (non-market-based) for two reasons:

1. The COE that Peoples has to pay investors is based on capital markets. Inflation and interest rate developments are not a secret and therefore market-based COE models will reflect investors' changing expectations.
2. Capital markets are unpredictable. Regarding capital markets' unpredictability, investment guru Warren Buffet gave the following advice to investors: "[t]hey should not listen to a lot of the jabbering about what

[35] *Fed. Power Comm'n v. Hope Nat. Gas Co.* v. Hope Nat. Gas Co., 320 U.S. 591, 603 (1944).
[36] Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm'n of the State of W. Va, 262 U.S. 679, 692-693 (1923).

the market is going to do tomorrow, or next week or next month because nobody knows."[37]

Current capital markets are our best source of investors' expectations regarding future capital markets. Current market prices of stocks and bonds reflect investors' forecasts for long-term interest rates and capital markets in general.

Q. HOW DID YOU ARRIVE AT YOUR COE RECOMMENDATION?

A. To arrive at my recommendation, I applied the DCF, including a Constant Growth and a Non-Constant Growth method, and a CAPM analysis to a group of similar companies ("RFC Gas Proxy Group") using data available through February 29, 2024, as discussed below. In all of my models, I use both historical averages and the most recently available spot data for the inputs wherever it is possible and applicable.

Q. CONSIDERING THAT STOCK AND OPTION PRICES AND BOND YIELDS CHANGE DAILY, WOULD IT NOT BE BETTER TO USE HISTORICAL AVERAGES EXCLUSIVELY FOR THE INPUTS IN YOUR MODELS?

A. Not necessarily. Most people would agree that the use of spot market data, the value of a particular input on a particular day, can lead to COE results that can vary over short periods of time. It may therefore be tempting to find a more stable value based on historical averages that are not overly influenced by short-term fluctuations in capital markets. When doing a forward-looking analysis, however, it is equally important to look at the most recent market data as an indication of trends and where a given value is more likely to be

[37] PBS News Hour, June 26, 2017, Part 1 – America should stand for more than just wealth, says Warren Buffett available at www.pbs.org/newshour/show/pbs-newshour-full-episode-june-26-2017.

in the future. This is a broad and generally accepted principle, as made clear in the following example.

Using historical stock prices to make the point clear, if Company A's stock price were to go up linearly over the course of one year from $50 to $100, its average stock price over that year would be $75. If Company B's stock price declined linearly from $100 to $50 over the same year, it would have the same exact average stock price of $75. But most people would agree that predicting both stock prices at $75 over the near future would be overly simplistic and leave readily accessible data unused. Without relying on any additional data, at the very least, it would stand to reason that in the near future, Company A's stock price is more likely to be between $75 and $100 than Company B's stock price, and that Company B's stock price is more likely to be between $50 and $75 than Company A's stock price. These observations cannot be made by looking at the yearly averages alone and must take the most recent data into special consideration.

This does not eliminate concerns regarding the effect of daily fluctuations in market data, especially during periods of volatility. As a result, it is important to consider both averages and recent spot values when using market data for forward-looking analyses. That is precisely my approach when using market data that are expected to continue to fluctuate, such as stock prices, dividend yields, betas, and market risk premia.

Q. CAN A DIFFERENCE OF ONE DAY IN THE SELECTION OF SPOT DATA HAVE A SIGNIFICANT POSITIVE OR NEGATIVE EFFECT ON ROE

RESULTS? IF SO, HOW DO YOU GO ABOUT CHOOSING WHICH DAY TO USE FOR MARKET-BASED SPOT DATA?

A. Daily fluctuations in stock prices, resulting dividend yields, betas, etc., all have an impact on resulting ROE calculations, especially when using recent spot values for market data. Such is the nature of market data, which change from day to day. This is rightfully noted as a potential risk of using spot data, but given the stated benefits of using recent spot data for forward-looking analyses, there are ways to address such potential pitfalls.

For this reason, it is very important to establish consistent methodologies that eliminate the possibility of personal bias, especially when using spot market data. I consistently use the last trading day of the last full calendar month before my schedule preparations for all market-based spot data and as the last day for all historical market-data averages.

It is important to keep in mind that even averages fluctuate over time, and all responsible data analysts must find a consistent and reproducible way to "freeze time" to work with such fluctuations while eliminating bias.

It is also important to point out once again that I use recent spot market data to establish one benchmark for market-based inputs, which are balanced by the use of historical averages, as stated previously.

B. Proxy Group Selection

Q. WHAT PROXY GROUPS DID YOU USE TO CALCULATE PEOPLES' COE?

A. My comparable proxy group, shown on Table 6 below and referred to as the RFC Gas Proxy Group, consists of the following 5 publicly traded gas utility companies covered by Value Line:

TABLE 6: RFC GAS PROXY GROUP COMPOSITION

	Company Name	Ticker
1	ATMOS ENERGY CORP.	ATO
2	NI SOURCE INC.	NI
3	N.W. NATURAL	NWN
4	ONE GAS, INC.	OGS
5	SPIRE INC.	SR

My proxy group includes five of the eight companies that are in Mr. Moul's Gas Group. I chose to exclude the following three companies from Mr. Moul's proxy group because I believe they are not in the same risk category as Peoples: (1) Chesapeake Utilities Corp., (2) New Jersey Resources Corp, (3) Southwest Gas Corp.

Q. DID YOU CONSIDER ADDING CHESAPEAKE UTILITIES CORP, NEW JERSEY RESOURCES CORP, AND SOUTHWEST GAS CORP. TO YOUR PROXY GROUP?

A. Yes. I considered adding them to my proxy group by submitting an interrogatory to Mr. Moul regarding percentage of operating income of each of the eight (8) companies in Mr. Moul's proxy group derived from (a) regulated gas distribution operations and (b) total regulated distribution operations, including water, gas, and electricity. His response

confirmed my understanding that these companies are not in the same risk category as Peoples because each of these companies have significant unregulated operations. In response to OCA-XII-006 Mr. Moul reported the following data regarding the percentage of revenues and earnings from regulated operations and assets dedicated to regulated operations. As can be seen below, Chesapeake Utilities Corp, New Jersey Resources Corp, and Southwest Gas Corp receive only 62%, 39% and 39% of their revenues from regulated operations respectively. On the other hand, the percentage of revenues from regulated operations for the five companies in my proxy group range between 88% and 100% with an average over 95%.

OCA-XII-006 Attachment

	Regulated and total Revenues		
Company	Percent	Regulated	Total
		($000)	
Atmos Energy Corp.	96%	$ 4,031,936	$ 4,201,662
Chesapeake Utilities Corp.	62%	422,894	680,704
New Jersey Resources Corp.	39%	1,127,417	2,905,979
NiSource, Inc.	100%	5,838,100	5,850,600
Northwest Natural Gas	95%	989,752	1,037,353
One Gas, Inc.	100%	2,578,005	2,578,005
Southwest Gas Corp.	39%	1,935,069	4,960,009
Spire, Inc.	88%	1,945,600	2,198,500
Average	77%		

Q. WHEN SELECTING HIS PROXY GROUP DID MR. MOUL CONSIDER THE IMPACT OF DECOUPLING MECHANISMS LIKE THE WEATHER NORMALIZATION ADJUSTMENT (WNA) PEOPLES IS PROPOSING IN THIS

CASE OR PEOPLES' EXISTING DISTRIBUTION SYSTEM IMPROVEMENT CHARGE (DSIC)?

A. Although Mr. Moul claims he considered these mechanisms, his claims do not bear out. On page 9 of his testimony, Mr. Moul claims that a "common characteristic" of most of his Gas Group companies is that they have "rate stabilization mechanisms" like weather normalization, decoupling, and infrastructure riders. However, a deeper dive into Mr. Moul's claim revealed that Mr. Moul's analysis of WNAs for Gas Group companies was limited to the Forms 10-K reported by each company online. Importantly, Mr. Moul's analysis did not include any underlying comparative risk analysis into how each "WNA" or DSIC-type mechanism was calculated or the specific details of how those mechanisms compare to Peoples existing DSIC or WNA. Therefore, Mr. Moul has not demonstrated that his analysis reflects the impacts or potential impacts of their proposed WNA or existing DSIC on investor expectations.

C. Discounted Cash Flow

Q. PLEASE SUMMARIZE THE RESULTS OF YOUR DCF MODELS.

A. I used both the constant growth form of the DCF method, which determines growth based on the sustainable retention growth procedure, and a non-constant growth DCF method. The results of my constant growth DCF model range between 8.06% and 8.09% when using a sustainable growth rate and between 9.42% and 9.43% when using an option-

implied growth rate.[38] The results of my non-constant growth DCF method indicate a COE of between 8.40% and 8.74% for the RFC Gas Proxy Group.[39]

Q. WHAT IS THE DISCOUNTED CASH FLOW METHOD?

A. The DCF method is an approach to determine the COE. The method recognizes that investors purchase common stock to receive future cash payments. These payments come from: (a) current and future dividends, and (b) proceeds from selling stock. A rational investor will buy stock to receive dividends and ultimately to sell the stock to another investor at a gain. The price the new owner is willing to pay for stock is related to that buyer's expectation of future flow of dividends and the future expected selling price. The value of the stock is the discounted value of all future dividends until the stock is sold plus the value of proceeds from the sale of the stock.

D. Constant Growth Form of the DCF Model

Q. YOU STATE YOU USED THE CONSTANT GROWTH FORM OF THE DCF MODEL. WHAT IS THE CONSTANT GROWTH FORM OF THE DCF MODEL?

A. The constant growth form of the DCF model is a form of the DCF method that can be used in determining the COE when investors can reasonably expect that the growth of retained earnings and dividends will be constant.

Retained earnings are funds that a company keeps in its treasury, so that they are available for future needs, such as capital expenditures, debt payments, and new investments. These retained earnings show investors whether the company is growing,

[38] Exhibit ALR-3, page 1.
[39] Exhibit ALR-3, page 3 and Exhibit ALR-3, page 4.

which, in turn, is a measure of the future indicator of dividends and the value of a company's stock.

Q. DESCRIBE HOW THE CONSTANT GROWTH MODEL WORKS.

A. The constant growth model is described by this equation k= D/P + g, where: [40]

k= cost of equity (COE);
D=Dividend; and
P=Market price of stock at time of the analysis

and where:

g=the growth rate, where g= br + sv;
b=the earnings retention rate;
r=return on common equity investment (referred to below as "book equity");
v=the fraction of funds raised by the sale of stock that increases the book value of the existing shareholders' common equity; and
s=the rate of continuous new stock financing

The constant growth model is therefore correctly recognized to be:

k=D/P + (br +sv)

The COE demanded by investors is the sum of two factors. The first factor is the dividend yield. The second factor is growth (dividends and stock price). The logical relationship among these factors is as follows: the dividend yield is calculated based on current dividend payments while growth indicates what dividends and stock price will be in the future.

Q. WHAT OTHER FACTORS IMPACT HOW ONE USES THE CONSTANT GROWTH FORM OF THE DCF MODEL?

A. Sufficient care must be taken to be sure that the growth rate "g" is representative of the constant sustainable growth. To obtain an accurate constant growth DCF result, the

[40] M. GORDON, *Cost of Capital to a Public Utility*, p. 32-33 (MSU Public Utility Studies 1974).

mathematical relationship between earnings, dividends, book value and stock price must be respected.

The basic difference between the use of an analysts' earnings per share growth rate in the constant growth DCF formula and using the "br" (b (the earnings retention rate) X r (rate of return on common equity investment)) approach is that the "br" form, if properly applied, eliminates the mathematical error caused by an inconsistency between the expectations for earnings per share growth and dividends per share growth. Because it eliminates that error, the results of a properly applied "br" approach will be superior to the answer obtained from other approaches to the constant growth form of the DCF model. This is not to say that even a properly applied "br" approach will be perfect. The self-correcting nature of a properly applied "br" to forecasted differences in earnings per share and dividends per share growth rates helps to mitigate the resultant error but should not be viewed as the perfect way to quantify the impact of expected non-constant growth rates.

Q. HOW HAVE YOU IMPLEMENTED THE CONSTANT GROWTH FORM OF THE DCF MODEL IN THIS CASE?

A. I have applied the constant growth form of the DCF model by staying true to the mathematically derived "k=D/P + (br + sv)" form of the DCF model. I have also taken care to fully allocate all future expected earnings to either future cash flow in the form of dividends ("D") or to retained earnings (the retention rate, "b"). This extra accuracy is obtained only when the retention rate "b" is derived from the values used for "D" and "r," rather than independently.

Q. PLEASE EXPLAIN HOW YOU OBTAINED THE VALUES YOU USED IN THE CONSTANT GROWTH FORM OF THE DCF METHOD.

A. The DCF model generally calls for the use of the dividend expected over the next year. A reasonable way to estimate next year's dividend rate is to increase the quarterly dividend rate by half of the current actual quarterly dividend rate. This is a good approximation of the rate that would be obtained if the full prior year's dividend were escalated by the entire growth rate.[41]

I obtained the stock price—"P"—used in my DCF analysis from the closing prices of the stocks on February 29, 2024. I also obtained an average stock price for the 12 months ending February 29, 2024 by averaging the high and low stock prices for the year.

I based the value of the future expected return on equity— "r" —on the average return on book equity expected by Value Line, adjusted in consideration of recent returns. I also made a computation that was based on a review of both the earned return on equity consistent with analysts' consensus earnings growth rate expectations and on the actual earned returns on equity. For a stable industry such as utility companies, investors will typically look at actual earned returns on equity as one meaningful input into what can be expected for future earned returns on book equity. See Exhibit ALR-3, page 1.

[41] For example, assume a company paid a dividend of $0.50 in the first quarter a year ago, and has a dividend growth rate of 4 % per year. This dividend growth rate equals (1.04)^4-1=0.00985 % per quarter. Thus, the dividend is $0.5049 in the second quarter, $0.5099 in the third quarter, and $0.5149 in the fourth quarter. If that 4 % per annum growth continues into the following year, then the dividend would be $0.5199 in the 1st quarter, $0.5251 in the 2nd quarter, $0.5303 in the 3rd quarter, and $0.5355 in the 4th quarter. Thus, the total dividends for the following year equal $2.111 (0.5199 + 0.5251 + 0.5303 + 0.5355). I computed the dividend yield by taking the current quarter (the $0.5149 in the 4th quarter in this example) and multiplying it by 4 to get an annual rate of $2.06. I then escalated this $2.06 by half the 4 % growth rate, which means it is increased by 2 %. $2.06 x 1.02= $2.101, which is within one cent of the $2.111 obtained in the example.

This return on book equity expectation used in the DCF method to compute growth must *not* be confused with the COE. Since the stock prices for the comparative companies are substantially higher than their book value, the return investors expect to receive on their market price investment is considerably less than the anticipated return on book value. If the market price is low relative to book value, the COE will be higher than the future expected return on book equity, and if the market price is high, then the return on book equity will be less than the COE.

In addition to growing through the retention of earnings, utility companies also grow by selling new common stock. Selling new common stock increases a company's growth. I quantified this growth caused by the sale of new common stock by multiplying the amount that the actual market-to-book ratio exceeds 1.0, by the compound annual growth rate of stock that Value Line forecasts. The results of that computation are shown on line 4 of Exhibit ALR-3, page 1.

Pure financial theory prefers concentrating on the results from the most current price because investors cannot purchase stock at historical prices. There is a legitimate concern, however, about the potential distortion of using just a single price. I present DCF results based on the most recent stock pricing data (February 29, 2024) as well as the average of the high and low stock price over the past 12 months to obtain a range of reasonable values. As shown in Exhibit ALR-3, page 1, the DCF result based on the average of the high and low stock price for the year ending February 29, 2024 is 8.06%. The DCF result based on the stock price as of February 29, 2024 is 8.09%. Exhibit ALR-3, page 1, shows more of the specifics of how I implemented the constant growth form of the DCF model for the RFC Gas Proxy Group.

Q. PLEASE EXPLAIN HOW YOU DETERMINED WHAT VALUE TO USE FOR "r" WHEN COMPUTING GROWTH IN YOUR CONSTANT GROWTH FORM OF THE DCF MODEL.

A. The inputs I considered are shown in Footnote [C] of Exhibit ALR-3, page 1. The value of "r" that is appropriate to use in the DCF formula is the value anticipated by investors to be maintained on average in the future. This Exhibit shows that the average future return on equity forecasted by Value Line for the RFC Gas Proxy Group between 2024 and 2027-29 is 9.00%. The same footnote also shows that the future expected return on equity derived from the Zacks consensus forecast is 8.62%, and that the actual returns on equity earned by the RFC Gas Proxy Group on average were 7.93% in 2021, 9.64% in 2022, and 9.05% in 2023. Based on the combination of the forecasted return on equity derived from the Zacks consensus, the recent historical actual earned returns, and Value Line's forecast, I made the DCF growth computation using a 8.60%[42] value of "r".

Q. WHAT COE IS INDICATED BY THE CONSTANT GROWTH FORM OF THE DCF METHOD THAT YOU RELY ON FOR YOUR RECOMMENDATION?

A. The result of my DCF analysis using the Constant Growth form of the DCF indicates a COE range of between 8.06% and 8.09% for the RFC Gas Proxy Group.[43] Since these DCF findings use analysts' forecasts to derive sustainable growth (in part) and on analysts' forecasts of dividend growth and book value growth in the non-constant form of the DCF method, the results should be considered as conservatively high. This is because, as

[42] I used 8.60% in consideration of historical returns, Zacks's projections, and Value Line projected returns for the RFC Gas Proxy Group.
[43] Exhibit ALR-3, page 1.

previously mentioned above, analysts' forecasts of such growth have been notoriously overstated.

My results are not as influenced by overly-optimistic analysts' forecasts as would have been the case had I merely used analysts' five-year earnings growth rate forecasts as a proxy for long-term growth. This is because the DCF methods I use compute sustainable growth rates, rather than growth rates that can exaggerate the growth rate due to assuming that a relatively short-term forecast (5 years) will remain indefinitely.

E. Non-Constant Growth Form of the DCF Model

Q. PLEASE EXPLAIN HOW YOU IMPLEMENTED THE NON-CONSTANT GROWTH FORM OF THE DCF MODEL.

A. The non-constant growth form of the DCF model determines the return on investment expected by investors based on an estimate of each separate annual cash flow the investor expects to receive. For the purpose of this computation, I have incorporated Value Line's detailed annual forecasts to arrive at the specific non-constant growth expectations that an investor who trusts Value Line would expect. This implementation is shown on Exhibit ALR-3, page 3 and Exhibit ALR-3, page 4. In the first stage, cash flow entry is the cash outflow an investor would experience when buying a share of stock at the market price. The subsequent years of cash flow are equal to the dividends per share that Value Line forecasts. For the intermediate years of the forecast period in which Value Line does not provide a specific dividend, the annual dividends were obtained by estimating that dividend growth would persist at a compound annual rate. The cash flow at the conclusion of the forecast period includes both the final year's dividend as projected by Value Line and the

proceeds from selling the stock. The stock price used to determine the proceeds from selling the stock was obtained by estimating that the stock price would grow at the same rate at which Value Line forecasts book value to grow.

Q. WHY DID YOU USE BOOK VALUE GROWTH TO PROVIDE THE ESTIMATE OF THE FUTURE STOCK PRICE?

A. For any given earned return on book equity, earnings are directly proportional to the book value. Furthermore, book value growth is the net result after the company produces earnings, pays a dividend and also, perhaps, either sells new common stock at market price or repurchases its own common stock at market price.

Once these cash flows are entered into an Excel spreadsheet, the compound annual return an investor would achieve as a result of making this investment was obtained by using the Internal Rate of Return (IRR) function built into the spreadsheet. As shown on Exhibit ALR-3, page 3 and Exhibit ALR-3, page 4, this multi-stage DCF model produced an average indicated COE of 8.74% based on the year-end stock price, and 8.40% based on average prices for the year ending February 29, 2024 for the RFC Gas Proxy Group.

Q. WHAT COST OF EQUITY DOES YOUR NON-CONSTANT GROWTH DCF METHOD INDICATE?

A. My non-constant growth DCF method indicates a cost of equity of between 8.40% and 8.74%.[44]

[44] Exhibit ALR-3, page 3 and Exhibit ALR-3, page 4.

F. Capital Asset Pricing Model

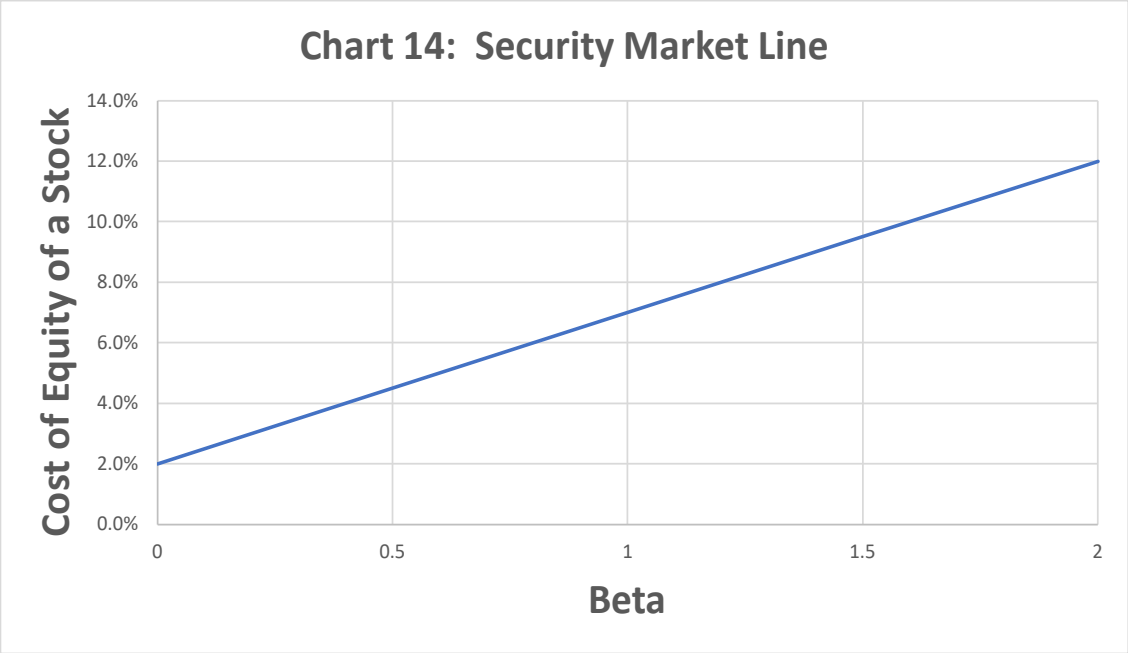
Q. PLEASE DESCRIBE THE CAPM.

A. CAPM stands for "Capital Asset Pricing Model." The CAPM relates return to risk; specifically, it relates the expected return on an investment in a security to the risk of investing in that security. The riskier the investment, the greater the expected return (i.e., the cost of equity) investors require to make that investment.

Investors in a firm's equity face two types of risks: (1) firm-specific risk and (2) market risk (financial analysts refer to this market risk as systematic risk). Firm-specific risk refers to risks unique to the firm, such as management performance and losing market share to a new competitor. Investors can reduce firm-specific risk by purchasing stocks as part of a diverse portfolio of companies if they construct the portfolio to cause the firm-specific risk of individual companies to balance out. Market-related risk refers to potential impacts from the overall market, such as a recession or interest rate changes. This risk cannot be removed by diversification, so the investor must bear it no matter what. Because the investor has no option but to bear market risk, the investor's cost of equity will reflect that risk.

The price of a stock with a beta of 1 tends to move with the market. If the market increases by 1%, the stock is also expected to increase by about 1%, and vice versa. The price of a stock with a beta greater than 1 tends to be more volatile than the market. For example, a stock with a beta of 1.5 will on average be 50% more volatile than the market. If the market rises by 1%, the price of a stock with a beta of 1.5 is expected to rise by 1.5%, and if the market falls by 1%, the stock price is expected to decrease by 1.5%. The price of a stock with a beta less than 1 tends to be less volatile than the market.

The CAPM predicts that for a given equity security, the cost of equity has a positive linear relationship to how sensitive the stock's returns are to movements in the overall market (e.g., S&P 500). A security's market sensitivity is measured by its beta.[45] As shown in Chart 14 below, the higher the beta of a stock, the higher the company's cost of equity—the return required by the investor to invest in the stock.



Here is the standard CAPM formula:

$$K = Rf + \beta i * (Rm - Rf)$$

Where:

K is the cost of equity;
Rf is the risk-free interest rate;
Rm is the expected return on the overall market (e.g., S&P 500);
[Rm – Rf] is the premium investors expect to earn above the risk-free rate for investing in the overall market ("equity risk premium" or "market risk premium"); and
βi (Beta) is a measure of non-diversifiable, or systematic, risk.

[45] The covariation of the return on an individual security with the return on the market portfolio.

Q. PLEASE EXPLAIN HOW YOU IMPLEMENTED THE CAPM.

A. First, I determined appropriate values or ranges for each of the three model inputs: (a) Risk-Free Rate, (b) Beta, and (c) Equity Risk Premium. Second, I used the equation above to calculate the cost of equity implied by the model. Below I will explain how I calculated the three model inputs and summarize the CAPM cost of equity numbers resulting from those inputs. Table 7 and Table 8 on page 77 show the results of my CAPM.

Risk-Free Rate

Q. WHAT RISK-FREE RATE DID YOU USE IN YOUR CAPM?

A. It is generally preferable to use the market yield on short-term U.S. Treasury yields as the risk-free rate because these bonds have a beta close to zero. *Principles of Corporate Finance* states: "The CAPM… calls for a short-term interest rate."[46] However, I chose to use a risk-free rate based on both long- and short-term Treasury yields because it is reasonable to consider a risk-free rate that would apply to both long- and short-term investors. My short-term risk-free rate is based on the yield of 3-month U.S. Treasury bills and my long-term risk-free rate is based on the yield of 30-year U.S. Treasury bonds. In line with my Spot and Weighted Average CAPM approaches, I use both spot values as of February 29, 2024 and weighted averages over the 3 months ending on that date for these two yields.

As outlined in Exhibit ALR-4, page 2, my spot and weighted average short-term risk-free rates are 5.45% and 5.43%, respectively. My spot and weighted average long-term risk-free rates are 4.38% and 4.24%, respectively.

[46] BREALEY, MYERS, AND ALLEN, *Principles of Corporate Finance*, p. 228, (McGraw-Hill Irwin, New York, 12th ed. 2017).

U.S. government bonds are reasonable to use as a risk-free rate because they have a negligible risk of default. The value of short-term U.S. Treasury bills has a relatively low exposure to swings in the overall market. The value of long-term U.S. Treasury bonds is relatively more exposed to the market and therefore must be used with caution.

Q. WHAT IS YOUR RESPONSE TO ANALYSTS WHO CLAIM THAT THE CAPM SHOULD BE IMPLEMENTED WITH A RISK-FREE RATE BASED ON A LONG-TERM INTEREST RATE (E.G., YIELD ON 30-YEAR TREASURY BOND) AND/OR BASED ON INTEREST RATE FORECASTS INSTEAD OF MARKET YIELDS.

A. As discussed in Appendix D, a CAPM analysis that uses a risk-free rate based only on long-term interest rates may overstate the COE because these bonds do not have a zero beta. It is not appropriate to use a risk-free rate based on interest rate forecasts because it often does not represent investors' expectations.

Q. CURRENTLY YOUR RISK-FREE RATE BASED ON SHORT-TERM INTEREST RATES IS HIGHER THAN YOUR RISK-FREE RATE BASED ON LONG-TERM INTEREST RATES. HOW DOES THIS IMPACT YOUR CAPM RESULTS?

A. It is rare for short-term interest rates to be higher than long-term interest rates because, as stated above, they are less risky than long-term bonds. At first, it seems nonsensical for an investor to accept an interest rate that is over 1% less (4.38% vs. 5.45% as of February 29, 2024). However, as shown in Chart 2 on page 26, the Federal Reserve Bank of Atlanta estimated that as of February 29, 2024, investors expect short-term interest rates to decrease in 2024 and 2025. This means that it is rational for investors to lock in a 4.38% interest rate on long-term bonds now if they expect short-term interest rates to decline below 4.38%

in the near future. It is like a homeowner deciding to lock in a 30-year mortgage at a higher rate (e.g., 5%) than to take an adjustable-rate mortgage rate with a lower interest rate (e.g., 4%) because if short-term rates increase above 5% in the future, they could end up paying more over the life of the mortgage.

As this relates to CAPM results, this is one of the rate circumstances when a short-term risk-free rate likely overstates the COE because investors expect the relatively higher short-term interest rate to be temporary. Another way to put it is the following: investors expect that the interest income from short-term treasuries (3-months) will be lower than the interest income from long-term treasuries (30-years) over the long-term.

Beta

Q. WHAT BETA DID YOU USE IN YOUR CAPM?

A. Since the cost of equity should be based on investor expectations, I chose to use two betas. My "forward beta" is based on forward-looking investor expectations of non-diversifiable risk. My "historical blended" is based on historical return data over 6-month, 2-year, and 5-year periods.

Most published betas are based exclusively on historical return data. For example, Value Line publishes a 5-year historical beta for each of the companies it covers. However, it is also possible to calculate betas based on investors' expectations of the probability distribution of future returns. This probability distribution of future returns expected by investors can be calculated based on the market prices of stock options.

Q. WHAT IS A STOCK OPTION?

A. A stock option is the right to buy or sell a stock at a specific price for a specified amount of time. A call option is the right to buy a stock at a specified exercise or strike price on or before a maturity date. A put option is the right to sell a stock at a specified exercise or strike price on or before a maturity date. For example, a call option to purchase 100 shares of Apple Computer stock for $230 on January 17, 2020, allows the owner the option (not the obligation) to buy Apple stock for $230 on that date. At the end of July 2019, Apple stock was trading at about $215 per share. Why would anyone pay for the right to buy a stock higher than the current price? Investors who purchased those call options thought there was a chance Apple stock would be trading higher than $230 on January 17, 2020, and those options gave those investors the right to buy Apple stock for $230 and profit by selling it at the market price on that date, if it was higher. The price of Apple's stock was $317.98 at the close of trading on January 17, 2020. Therefore, the investor who purchased this call option for $635 on July 31, 2019, earned a profit of $8,163[47] at expiry on January 17, 2020. On the other hand, the investor who purchased an Apple put option with the same expiration date and strike price on July 31, 2019, would have lost the price of the option ($2,248) and gained nothing on the expiration date because the right to sell Apple stock for $230 when the price is over $300 is worthless.

The market prices of put options and call options provide information regarding the probability distribution of future stock prices expected by investors. Using established techniques, I am able to use price data for stock options of my RFC Gas Proxy Group companies and the S&P 500 Index to determine investors' return expectations, including

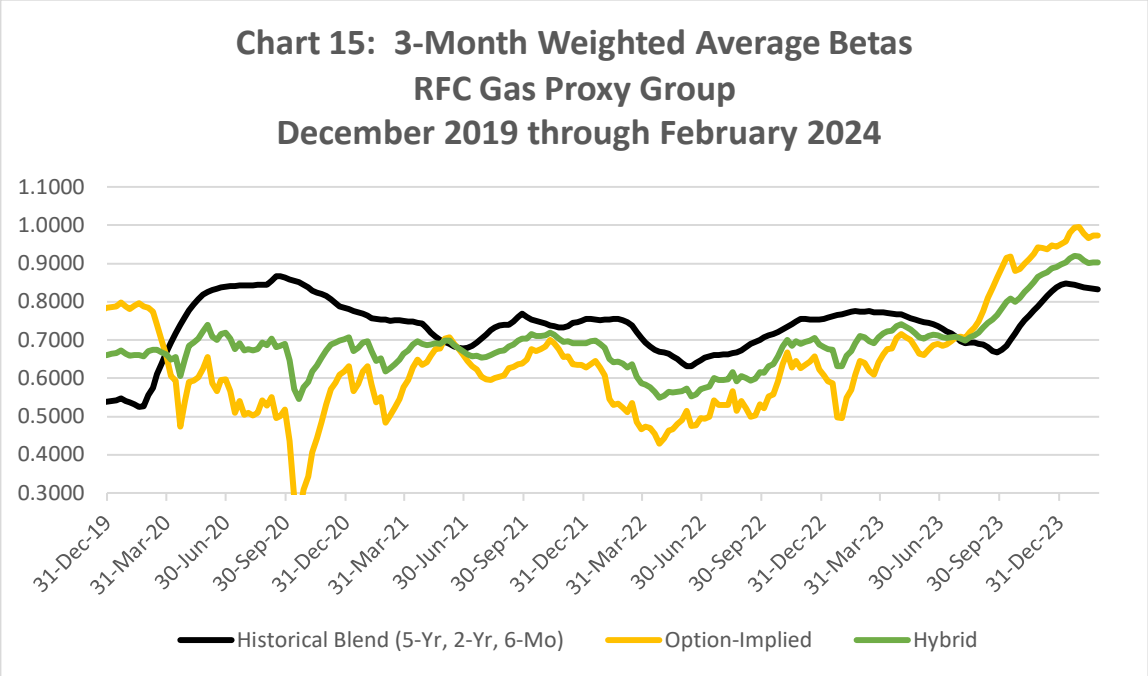
[47] $8,163 profit from exercising call option ($31,798 from selling at $317.98 market price - $23,000 cost to purchase at $230) - $635 ($6.35 X 100) option purchase price. Note: Each call option is the right to purchase 100 shares.

the relationship (covariance) between the return expectations for individual RFC Gas Proxy Group companies and those for the overall market (S&P 500). This covariance between the expected returns for my RFC Gas Proxy Group and for the S&P 500 indicates what investors expect betas will be in the future. I refer to betas based on option price calculations as "option-implied betas."

Q. PLEASE EXPLAIN HOW YOU CALCULATED THE BETAS USED IN YOUR CAPM.

A. Traditionally, the betas used in CAPM calculations are calculated from historical returns. This approach has strengths and weaknesses. An alternative way to calculate betas is to incorporate investors' return expectations by calculating option-implied betas as explained in the previous paragraph. As discussed below, I have chosen to use both historical and option-implied betas in my CAPM analysis. I chose to use option-implied betas in my CAPM analysis because, among other reasons, studies have found that betas calculated based on investor expectations (option-implied) provide information regarding future perceived risks and expectations.[48]

[48] Bo-Young Chang & Peter Christoffersen & Kris Jacobs & Gregory Vainberg. Option-Implied Measures of Equity Risk, *Review of Finance*, Vol. 16, Issue 2, pp. 385-428 (April 2012) available at https://academic.oup.com/rof/article/16/2/385/1584560.



As shown in Chart 15 above, stock option prices indicate that investors likely expect higher historical betas for the RFC Gas Proxy Group in the future.

Exhibit ALR-4, page 3 contains the last three months of data used in creating Chart 15 above, which is what I use in my CAPM analysis. Specifically, I use the following two betas in my CAPM analysis:

1. **Historical Blend:** 50% (6 months) + 30% (2 years) + 20% (5 years).
2. **Forward Beta:** 100% Option-Implied Beta (6 months).

Q. WHY DO YOU USE PERIODS OF 6 MONTHS, 2 YEARS, AND 5 YEARS FOR YOUR HISTORICAL BETA CALCULATIONS, AS OPPOSED TO RELYING EXCLUSIVELY ON THE 5-YEAR PERIOD USED BY VALUE LINE?

A. Using shorter periods for the return regression analysis portion of the historical beta calculation allows me to see if the correlation between the returns of each of the companies in my RFC Gas Proxy Group and those of the S&P 500 Index has changed in the last 2

years or 6 months. Using a 5-year period exclusively tends to make recent changes in the correlation more difficult to identify because of the weight of 5 years of data.

Q. WOULD YOU AGREE THAT CHANGES IN MARKET DYNAMICS WILL HAVE A LARGER EFFECT ON 6-MONTH HISTORICAL BETAS THAN THEY WILL ON 2-YEAR OR 5-YEAR HISTORICAL BETAS?

A. Yes. As with other historical metrics based on a given time period, say, average stock prices, the longer the time horizon under consideration, the more data points are considered, and the smaller the effect of any one given change in the data set.

Q. IS THIS LARGER EFFECT ON 6-MONTH HISTORICAL BETAS FROM CHANGES IN MARKET DYNAMICS A GOOD OR A BAD THING?

A. The answer depends on what the beta will be used for. I would argue that in any attempt to forecast the beta coefficient of a company for any forward-looking analysis such as the cost of capital calculations in this proceeding, more recent historical data should be given more relevance than data from 5 or 10 years ago. The weight of 10 years of data can make a beta coefficient react extremely slowly to market developments. Even pronounced permanent market changes can take more than 6 months to have a detectable effect on a 10-year beta.

As with using spot values and averages of historical market data, I believe the right answer is not to use *either* 6-month historical betas or historical betas with longer horizons, but to consider *both*. For this reason, I have created my historical blended betas, which take into consideration 6-month, 2-year, and 5-year historical betas.

Q. DO YOU THINK IT IS A GOOD IDEA TO RELY ON 6-MONTH HISTORICAL BETAS DESPITE MARKET DEVELOPMENTS IN THE PAST YEAR THAT SOME WOULD CALL "MARKET DISLOCATIONS?"

A. Financial markets are constantly in flux due to the influence of countless factors. So-called "market dislocations," are just some of the numerous factors that are constantly affecting markets. To attempt to separate any one specific factor from "real" underlying market dynamics would be an exercise in futility.

Furthermore, predicting the duration and impact of any single influencing factor on financial markets is extremely challenging, if not impossible. In 2008, when interest rates plummeted to unprecedented lows, numerous analysts deemed this a temporary anomaly. Contrary to these expectations, rates not only persisted at these low levels for more than ten years but dropped even further in response to the unforeseen COVID-19 pandemic, which significantly affected the global economy and financial markets.

So, in response, yes, I think it is a good idea to use 6-month historical betas to measure recent and current market dynamics regardless of recent developments. I use them as part of my historical blended betas in conjunction with longer-term historical betas and forward-looking, option-implied betas to achieve the most reasonable result.

Q. GIVEN THE SHORTER PERIOD COVERED BY 6-MONTH HISTORICAL BETAS, CAN THEY STILL BE CONSIDERED STATISTICALLY SIGNIFICANT? HOW MANY DATA POINT PAIRS ARE USED IN THE CALCULATION OF YOUR 6-MONTH HISTORICAL BETA COEFFICIENTS?

A. A 6-month historical beta based on weekly returns calculated weekly is calculated using 26 closing price points for a company and for its corresponding market index, in this case

the S&P 500 Index. This translates into 25 pairs of return data that are then used in the regression analysis. This is most certainly enough data to achieve statistical significance as addressed further below.

Furthermore, as stated above, the recent improvement in my calculation of historical betas of using weekly returns on every day of the week as opposed to using only one day of the week, as Value Line does, has the added benefit of providing significantly more data pairs to be used in the regression analysis used to calculate beta. For 6-month historical betas, instead of relying on 25 return pairs, the regression is performed on 117 return pairs.

Q. PLEASE EXPLAIN HOW YOU CALCULATED OPTION-IMPLIED BETAS.

A. Calculating option-implied betas of a company requires (1) obtaining stock option data for that company and a market index, (2) filtering the stock option data, (3) calculating the option-implied volatility for the company and for the index, (4) calculating the option-implied skewness for the company and for the index, and (5) calculating option-implied betas for the company based on implied volatility and skewness for the company and for the index. There are various ways one could choose to perform the steps above, but I chose to filter stock option data and calculate option-implied volatility[49] and skewness[50] following the same methodology used by the Chicago Board of Options Exchange (CBOE)

[49] CBOE Volatility Index White Paper (2018) available at https://cdn.cboe.com/resources/indices/srvix-white-paper.pdf. Please note that the cover page says, "proprietary information." However, this document has been in the public domain for over 3 years.

[50] The CBOE SKEW Index (2010) available at: https://cdn.cboe.com/resources/indices/documents/SKEWwhitepaperjan2011.pdf. Please note that the cover page says, "proprietary information." However, this document has been in the public domain for over 3 years.

in the calculation of their widely-used VIX (or Volatility Index) and SKEW Index, respectively.

I start my process with publicly available trading information for all the options for a given security (company or index) for a complete trading day. I then filter the option data as described by the CBOE using the following guidelines:

1. Use the mid-quote or mark (average of bid and ask) as the option price.
2. Use only out-of-the-money call and put options.
    - Determine the "moneyness" threshold where absolute difference between call and put prices is smallest (using CBOE "Forward Index Price" formula).
    - Include "at-the-money" call and put options and use average of call and put prices as price for "blended" option.
3. Exclude all zero bids.
4. Exclude remaining (more out-of-the-money) options when two sequential zero bids are found.

I then apply the series of formulas clearly described in both of the CBOE's white papers to the remaining options to calculate Option-Implied Volatility and Option-Implied Skewness. In the words of the CBOE, each of its two indices is "an amalgam of the information reflected in the prices of all of the selected options." To be clear, Implied Volatility is not exactly the same as the VIX Index, and Implied Skewness is not exactly the same as the SKEW Index, but both indices are directly based on their corresponding statistical value.

After calculating the daily option-implied values as discussed above, I calculate the weekly average of these daily values.[51] This approach results in stable weekly data points due to the weekly averaging. Even the most recent "spot" option-implied beta value represents an average of a full week of option-implied beta values.

Option-Implied Volatility reflects investors' expectations regarding future stock price movements. Option-Implied Skewness reflects investors' expectations regarding how implied volatility changes for strike prices that are closer and further to the current value of the underlying stock price.

The CBOE calculates Times to Expiration by the minute—as do I. The Time to Expiration of traded options cannot be changed and varies from day to day. For the sake of consistency, the CBOE calculates the VIX and SKEW indices on a "30-day" basis by interpolating for two sets of options with Times to Expiration closest to the 30-day mark. I prefer to focus on as long of a time horizon as possible for forecasting purposes. Option Times to Expiration vary significantly for various stocks but can consistently be found to go out to 6 months (180 days) for utility companies. Therefore, for the sake of consistency, I have chosen to calculate 6-month volatility and skewness where possible. Occasionally, Times to Expiration for a given stock do not go out to 180 days. If the greatest Time to Expiration available is 171 days (95%) or greater, I use the volatility and skewness for that group of options as a proxy for the 180-day volatility and skewness, respectively.

Finally, once I have calculated the option-implied volatility and skewness for each company and index using the methodology described above, I calculate option-implied

[51] I interpolate option-implied beta values for a given company in the rare instances where all daily values for a given company are not available for a given week. This has the effect of maintaining a constant representation of all companies in the proxy group across all periods, thus further improving the stability of proxy group option-implied betas over time.

betas using the following formula developed by Christoffersen, Chang, Jacobs and Vainberg (2011): [52]

$$\beta_i = \left(\frac{SKEW_i}{SKEW_m}\right)^{1/3} \left(\frac{VAR_i}{VAR_m}\right)^{1/2}$$

Where:

β_i: $option-implied\ beta\ of\ security\ (e.g. stock, fund)$;
$SKEW_i$: $skewness\ of\ security$;
$SKEW_m$: $skewness\ of\ overall\ market\ (S\&P\ 500)$;
VAR_i: $variance\ of\ company$;
VAR_m: $variance\ of\ overall\ market\ (S\&P\ 500)$.

Q. YOU CALCULATE YOUR OPTION-IMPLIED BETAS BASED ON A 6-MONTH HORIZON. WOULD IT NOT BE BETTER TO USE A LONGER FORECASTING HORIZON?

A. The methodology I use to calculate my option-implied betas "allows for the computation of a complete term structure of beta for each company so long as the options data are available,"[53] so there is nothing inherent in the methodology that limits it to a certain time horizon.

For many applications, including cost of capital, one could argue that the longer the time horizon for the option-implied betas, the better. However, the limitation on the forecasting horizon is always set by the longest expiration period of the options currently traded in the market. Some companies trade options with expiration periods up to 2 or 3 years into the future. As evidenced by the exhaustive option data in my working papers,

[52] Bo-Young Chang & Peter Christoffersen & Kris Jacobs & Gregory Vainberg, Option-Implied Measures of Equity Risk, *Review of Finance* Volume 16, Issue 2, pp. 385-428 (April 2012) available at https://academic.oup.com/rof/article/16/2/385/1584560.
[53] Peter Christoffersen, Kris Jacobs, and Gregory Vainberg, *Forward-Looking Betas*, p. 24 (April 25, 2008) available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=891467.

the maximum expiration period for the options of the companies in my RFC Gas Proxy Group is approximately 8 months. None of the 5 companies ever trade options with expiration periods of more than 8 months. New options are issued roughly every 3 months for all of these companies, so the maximum expiration period on any given trading day is somewhere between 5 and 8 months. For consistency across companies in my proxy group and across dates within the 3-month period on which my analysis is focused (December 2023 through February 2024), I chose to use 6 months for the time horizon of my option-implied betas. If the maximum expiration period for the options of a given company on a given day is less than 6 months, I use the maximum expiration period as an approximation for the target 6-month horizon.

Simply because some may argue that it may be preferable to use longer time horizons in place of or in addition to a 6-month horizon, it does not mean that a 6-month option-implied beta is of no relevance or cannot be used. That would be tantamount to saying you cannot use a 1-year Value Line Earnings Per Share estimate, or that the minimum relevant forecast is 2 or 3 years. In fact, for purposes of option-implied betas, it would be difficult to say if a time horizon of 1 year, for instance, is necessarily always better than a time horizon of 6 months. An option-implied forward-looking beta, even with a time horizon of less than 6 months, is still a useful tool in interpreting the current expectations of investors at any given time.

A final strong argument in support of using 6-month option-implied betas in a cost of capital calculation looking years into the future is that, as expanded upon starting on page 124, the authors of the paper on which I based my option-implied betas concluded that their predictive powers are not limited to 6 months into the future. In fact, they

conclude that 6-month option-implied betas have stronger predictive power than 6-month, 1-year, or 5-year historical betas when attempting to forecast betas 1 or 2 years into the future.

Market Risk Premium

Q. PLEASE EXPLAIN HOW YOU CALCULATED THE EQUITY RISK PREMIUM USED IN YOUR CAPM.

A. Traditionally, the risk premium used in CAPM calculations is derived from historical returns and/or equity analyst projections. The former approach is historically accurate but does not take into account investors' expectations for future market risks and returns. The latter approach is based on analyst projections, which are not appropriate since they do not reflect current investor expectations. A superior market-based way to calculate the equity risk premium is to use option-implied return expectations, which is the approach I have used.

My equity risk premium is the expected return on the S&P 500 minus the risk-free rate. I calculate an expected return on the S&P 500 by using stock options traded on this index. To begin with, I use exactly the same methodology used by the Chicago Board of Options Exchange to filter stock option data and calculate option-implied volatility and skewness,[54] as described in detail in the Beta section on page 69. The volatility and skewness calculated in this way describe a probability function representing the possible trajectories for the S&P 500 implied by the options market. The resulting skewed probability function can be closely approximated by a log-normal function using

[54] As used in the calculation of their widely-used VIX (or Volatility Index) and SKEW Index, respectively.

established statistical formulas, which then make it straightforward to calculate the expected growth for the S&P 500 for any given cumulative probability. A cumulative probability of 50% represents the median of the probability distribution, or the option-implied market consensus, which is how I arrive at my calculation of expected market growth.

Once the option-implied growth rate of the S&P 500 has been estimated as described above, I add the dividend yield and subtract the risk-free rate to arrive at the market risk premium, as laid out in Exhibit ALR-4, page 4 and Exhibit ALR-4, page 6. In line with my Spot and Weighted Average CAPM approaches, I use both spot values as of February 29, 2024 and weighted averages over the 3 months ending on that date for option-implied growth, dividend yields, and short- and long-term risk-free rates in these calculations to arrive at a total of 4 estimated values for the market risk premium. The market risk premia I use in my Weighted Average CAPM analysis with short- and long-term risk-free rates are 2.87% and 4.06%, respectively. The market risk premia I use in my Spot CAPM analysis with short- and long-term risk-free rates are 2.70% and 3.77%, respectively.[55]

Q. DID YOU TAKE INTO CONSIDERATION THE DIFFERENCE IN VOLATILITIES ACROSS EXPIRATION PERIODS IN THE OPTIONS TRADED ON THE S&P 500?

A. Yes. The volatility implied by the options market changes over time as investors' perception of risk changes. For example, during a crisis, implied volatility generally

[55] Both market risk premia happen to be the same because short- and long-term risk free rates happen to be the same as of February 29, 2024.

increases as investors expect that stock market prices have a greater chance of large swings compared to times when there is no crisis. As discussed earlier, investors also often have different volatility expectations over different time periods. For example, on any given day, investors might expect volatility to be relatively high over the next 30 days and to decrease over the next year or longer. The same holds true for skewness, even though it is less intuitive to understand changes in skewness than in volatility. Because of these changes across option expiration periods, I take a weighted average of the entire term structure of the option-implied volatility and skewness, which for the S&P 500 typically goes out to 54 to 61 months[56], interpolating where necessary, and giving the most weight to the option expiration period of 12 months.

CAPM Results

Q. PLEASE SUMMARIZE THE RESULTS OF YOUR CAPM.

A. Table 7 and Table 8 on page 77 show the results of my Weighted Average CAPM and Spot CAPM Analyses, respectively.

[56] Prior to November 2021, the longest expiration period for stock options traded on the S&P 500 was 36 months.

Weighted Average CAPM

TABLE 7: CAPITAL ASSET PRICING MODEL (CAPM) - INDICATED COST OF EQUITY
WEIGHTED - All Inputs Weighted From December 2023 to February 2024

	3-Month Treasury Bill		30-Year Treasury Bond	
	Historical Blended Bet	Forward Beta	Historical Blended Bet	Forward Beta
Risk-Free Rate	5.43%	5.43%	4.24%	4.24%
Beta	0.83	0.97	0.83	0.97
Risk Premium	2.87%	2.87%	4.06%	4.06%
CAPM	7.82%	8.22%	7.62%	8.18%

Source: Exhibit ALR-4, page 1

Spot CAPM

TABLE 8: CAPITAL ASSET PRICING MODEL (CAPM) - INDICATED COST OF EQUITY (SPOT)
SPOT - All Inputs Based on Last Available Data as of February 29, 2024

	3-Month Treasury Bill		30-Year Treasury Bond	
	Historical Blended Bet	Forward Beta	Historical Blended Bet	Forward Beta
Risk-Free Rate	5.45%	5.45%	4.38%	4.38%
Beta	0.83	0.98	0.83	0.98
Risk Premium	2.70%	2.70%	3.77%	3.77%
CAPM	7.69%	8.09%	7.50%	8.07%

Source: Exhibit ALR-4, page 5

Please see Appendix E for a chart showing how the results of my CAPM analysis applied to the RFC Gas Proxy Group have changed over time since the onset of the Covid pandemic.

VI. CAPITAL STRUCTURE AND COST OF DEBT

Q. IS PEOPLES REQUESTED CAPITAL STRUCTURE OF 54.67% COMMON EQUITY AND 45.33% DEBT APPROPRIATE?

A. No. Peoples' requested capital structures are not appropriate for setting rates in this proceeding since it has a significantly higher common equity ratios (54.67%) than the average common equity ratio used by other gas utility companies in the country (47.2%)[57] and the consolidated capital structure being used by its parent Peoples' parent Essential Utilities, Inc. (about 47.5%).[58]

Q. WHAT CAPITAL STRUCTURE DO YOU RECOMMEND BE USED FOR PEOPLES' OVERALL COST OF CAPITAL?

A. I recommend using a capital structure consisting of 50.00% equity and 50.00% debt, based on the average common equity ratios of the companies in my proxy group. A common equity ratio of 50.00% is on the high side of reasonableness because it is above the mean 47.2% and median (48.5%) common equity ratio of the 5 gas distribution companies in the RFC Gas Proxy Group. I believe absent evidence from Peoples in support of the need for a different capital structure, using the capital structure that more closely aligns with that of the proxy group is consistent the Commission's duty to set just and reasonable rates that consider both the utility and its investor's needs as well as the needs of ratepayers.

Additionally, Peoples' parent (Essential Utilities, Inc.) has common equity ratio of about 48.50%.[59] There is no reason I am aware of for Peoples to have a significantly higher

[57] Exhibit ALR-5, page 5.
[58] Essential Utilities Value Line Report, January 5, 2024.
[59] Essential Utilities, Inc., Value Line Company Report, October 6, 2023.

common equity ratio than Essential Utilities, Inc., which includes non-utility operations.[60] Authorizing a regulatory capital structure for Peoples with a common equity ratio higher than other comparable utility companies without justification will result in unreasonably high rates. As shown in Table 3 on page 13, my recommendations, including my capital structure recommendation, result in an overall rate of return of 6.20%. Mr. Moul's recommendations result in an overall rate of return of 8.40%. Capital structure has a major impact on revenue requirement. If the Commission adopts an equity component of the capital structure ratio that is higher than I've recommended, there should be an additional reduction to the authorized ROE.

It can't be overlooked that the authorized capital structure can have a large impact on the utility company's revenue requirement. If my cost of equity recommendation is applied to Mr. Moul's recommended capital structure it will require a revenue requirement of approximately $7 million more.

If Mr. Moul's capital structure recommendations are adopted it is important to make an adjustment the overall ROR to account for the financial risk difference between her capital structure recommendation and that of the companies in the RFC Gas Proxy Group which have a significantly lower average common equity ratio (47.2%) than the common equity ratios recommend by Mr. Moul. A higher common equity ratio means less debt, a lower chance of financial stress (financial risk), and therefore a lower COE. On the other hand, a lower common equity ratio means more debt, a higher chance of financial stress

[60] Aqua Resources is a non-utility subsidiary of Essential Utilities, Inc., providing operations and maintenance contracts, and system maintenance. You would expect a company with un-regulated operations to have a higher common equity ratio (lower percentage of debt) than a regulated subsidiary like Peoples because they are riskier. Riskier companies have less predictable earnings so they must keep their interest payments low so they can make sure they can cover their interest payments.

(financial risk), and therefore a higher COE. Based on a regression analysis of dozens of utility companies, I found a 0.04% reduction in the cost of equity results for every 1% increase in the common equity ratio. Therefore, if the Commission authorizes a capital structure with a higher common equity ratio for a specific applicant, then the authorized ROE for that applicant should be reduced by 0.04% for every 1% its authorized common equity ratio exceeds that of the proxy group.[61]

Q. IN AQUA'S ACQUSITION OF PEOPLES[62], THE COMMISSION APPROVED A NON-UNANIMOUS SETTLEMENT THAT CONTAINED CERTAIN PROVISIONS ABOUT PEOPLES' DEBT LEVEL. PARAGRAPH 51 OF THE SETTLEMENT INDICATES THAT "THE PEOPLES COMPANIES[63]" WILL MAINTAIN A DEBT RATIO AT AN ANNUAL LEVEL OF NO MORE THAN 50% (INCLUSIVE OF SHORT TERM DEBT, BUT EXCLUSIVE OF GOODWILL) FOR AT LEAST FIVE-YEAR POSTING CLOSING. DOES THAT COMMITMENT IMPACT YOUR RECOMMENDED CAPITAL STRUCTURE?

A. No. The debt ratio commitments should not be operative here because of timing and also because of the adverse and inequitable rate impact that they would impact on ratepayers, which are inconsistent with the representations that peoples made in the acquisition proceeding.

[61] Earlier in testimony I provide the specific adjustments required if Mr. Moul's capital structure recommendation is used to set rates.
[62] Joint Application of Aqua America et al. to Approve a Change in Control of Peoples Natural Gas Company LLC et al, Docket Nos. A-2018-3006061, Opinion and Order, January 16, 2020 ("Acquisition Settlement").
[63] Peoples Companies" includes Peoples Natural Gas and Peoples Gas (Acquisition Settlement, p. 1)

Q. PEOPLES' DEBT RATIO SETTLEMENT COMMITMENT WAS INTENDED TO BE IN PLACE FOR AT LEAST FIVE YEARS POST-CLOSING OF THE ACQUISTION. WHAT DOES THAT MEAN FOR PURPOSES OF THIS CASE?

A. For purposes of this case, it means that the term of Peoples' fully projected future test year, which ends on September 30, 2025, extends beyond the five-year year time period outlined in the acquisition settlement. I note that the acquisition transaction closed on March 16, 202064, meaning that the five-year debt ratio commitment would end in March 2025, which is six months earlier than the end of the test period Peoples' built its rate case upon. It would be inequitable and incongruent to permit Peoples to use a test period that projects well-into the future, but to artificially constrain its debt ratio levels to an expired commitment. In totality, for this case it means that Peoples' debt ratio levels should not be constrained basing the acquisition closing date.

Q. (BEGIN CONFIDENTIAL [redacted]

[64] See Joint Applicants' Letter of June 30, 2002 at Docket No. A-2018-3006061 advising of closing date.
[65] Peoples Confidential Volume 12, Exhibit 18, ROR-4, pp. 56-65 of 71.
[66] As Peoples witness Moul recognized in Peoples Statement No. 13, p. 3, Peoples is a wholly-owned subsidiary of PNG Companies, LLC, which is ultimately owned by Essential Utilities, Inc. As Mr. Moul acknowledges on page 15 of his testimony, Peoples itself has no rating on its debt; therefore, Mr. Moul's analysis included a review of PNG Companies' credit quality ratings.

[redacted] (END CONFIDENTIAL)

Q. WHAT COST OF DEBT DO YOU RECOMMEND?

A. I recommend adopting Peoples' requested cost of debt of 4.37%.

[67] Peoples Confidential Volume 12, Exhibit 18, ROR-4, pp. 56-59.

VII. EVALUATION OF PEOPLES' RATE OF RETURN TESTIMONY

Q. PLEASE SUMMARIZE THE TESTIMONY OF MR. MOUL.

A. Mr. Moul concluded that a reasonable ROE for Peoples is 11.75%, which includes 25 basis points in recognition of the Company's strong management performance.[68] He claims that his ROE recommendation should be "considered in the context of the Company's higher risk characteristics" compared to the companies in his proxy group.[69] Mr. Moul arrived at his recommendation based upon his own versions of the Discounted Cash Flow ("DCF") model, Risk Premium analysis, Capital Asset Pricing Model ("CAPM") and the Comparable Earnings approach. Mr. Moul testified that, "At any point in time, a single method can provide an incomplete measure of the cost of equity depending upon extraneous factors that may influence market sentiment."[70] Mr. Moul adds a leverage adjustment to his DCF result and the size adjustment to his CAPM method. Mr. Moul applied his four cost of equity methods to his "Gas Group" of 8 gas utility companies. The results of Mr. Moul's four cost of equity methods are shown on Table 9 below.

TABLE 9: MR. MOUL'S COST OF EQUITY RESULTS

METHOD	Model Results
Discounted Cash Flow (DCF)	11.88%
Risk Premium (RP)	11.50%
Capital Asset Pricing Model (CAPM)	15.42%
Comparable Earnings (CE)	12.70%

[1] Mr. Moul's Direct Testimony, Exhibit PRM-1, Page 2 of 29.

[68] Mr. Moul's Direct Testimony, Peoples Statement No. 13, Page 51, lines 4-8.
[69] Mr. Moul's Direct Testimony, Peoples Statement No. 13, Page 51, lines 8-11.
[70] Mr. Moul's Direct Testimony, Peoples Statement No. 13, page 6, lines 4-6.

Q. WHAT IS YOUR OVERALL REACTION TO MR. MOUL'S TESTIMONY?

A. Mr. Moul's DCF result is 10.47% before adding 1.41% for a "leverage adjustment."[71] Mr. Moul's DCF result is unreasonably above the market-based cost of equity before including his inappropriate adjustments. Below I will explain why Mr. Moul's adjustments are inappropriate and the flaws in Mr. Moul's DCF method.

B. DCF Method

Q. DOES MR. MOUL CONSIDER THE DCF METHOD HIS PRIMARY METHOD FOR DETERMINING THE COST OF EQUITY?

A. No. He claims that the DCF method has limitations.[72]

Q. WHAT FORMULA DOES MR. MOUL USE IN HIS DCF ANALYSIS?

A. Dividend Yield (D/P) + Growth Rate (g) + leverage Adjustment (lev).[73]

Q. DOES MR. MOUL PROPERLY APPLY THE SIMPLIFIED OR CONSTANT DCF METHOD?

A. No. Mr. Moul adds a growth component to a dividend yield even though his growth analysis gives earnings per share growth forecasts by analysts the greatest emphasis.[74] It is only a DCF method if the dividend yield is computed properly, and the growth rate used is derived from a careful study of what future sustainable growth in cash flow is anticipated by investors.

[71] Mr. Moul's Direct Testimony, Peoples Statement No. 13, page 29, lines 13-14.
[72] Mr. Moul's Direct Testimony, Peoples Statement No. 13, page 25, lines 3-12.
[73] Mr. Moul's Direct Testimony, Peoples Statement No. 13, page 38, line 2.
[74] Mr. Moul's Direct Testimony, Peoples Statement No. 13, Schedule 9.

Q. HOW DID MR. MOUL CALCULATE HIS GROWTH RATE FOR HIS DCF METHOD?

A. On page 22, lines 13-14 of Mr. Moul's testimony he says "…IBES/First Call, Zacks, and Value Line provide the best indication of investor expectations."[75] Mr. Moul states, "DCF growth rates should not be established by a mathematical formulation" and believe that a growth rate of 6.75% is a "reasonable estimate of investor-expected growth of the Gas Group."[76] Below are the five-year projected earnings per share rates by the four investment research firms he chose:

IBES/First Call: 5.57%

Zacks: 5.46%

Value Line: 7.31%

Mr. Moul's 6.75% growth rate is higher than the average of I/B/ES and Zacks' growth forecasts. The average of Value Line's earnings forecasts for the 8 companies in Mr. Moul's Gas Group is 7.31%, but this includes a 10% growth rate for Southern Gas Holdings Inc. If investors consider Southern Gas' growth rates to be an outlier and not representative of Gas Group's growth prospects, Mr. Moul's DCF result of 10.47% significantly overstates People's cost of equity. Additionally, Value Line's average projected growth in divides per share (5.25%), book value per share (5.69%), and cash flow per share (6.38%) for his Gas Group are all lower than Mr. Moul's 6.75% growth rate.[77]

[75] Mr. Moul's Direct Testimony, Peoples Statement No. 13, page 32, lines 9-10 (emphasis in original).
[76] Mr. Moul's Direct Testimony, Peoples Statement No. 13, page 32, lines 13-16.
[77] Mr. Moul's Direct Testimony, Peoples Statement No. 13, Exhibit PRM-1, page 17 of 29.

Q. IS MR. MOUL'S METHODOLOGY TO DETERMINE THE GROWTH RATE TO USE IN HIS DCF MODEL APPROPRIATE?

A. No. Mr. Moul mentions the "b x r" method on pages 26-28 of his direct testimony but he does not use it. As stated above, Mr. Moul uses analyst five-year earnings per share growth without attempting to reconcile the retention rate used for computing growth with the retention rate he used to compute the dividend yield. This is analogous to failing to reconcile the money you are taking out of your checking account with your future balance, i.e., the basic balancing of a checkbook.

Q. CAN YOU PLEASE SUMMARIZE WHY A FUTURE ORIENTED "B X R" METHOD IS SUPERIOR TO A FIVE-YEAR EARNINGS PER SHARE GROWTH RATE FORECAST IN PROVIDING A LONG-TERM SUSTAINABLE GROWTH RATE?

A. Yes. The primary cause of sustainable earnings growth is the retention of earnings. A company can create higher future earnings by retaining a portion of the prior year's earnings in the business and purchasing new business assets with those retained earnings. There are many factors that can cause short-term swings in earnings growth rates, but the long-term sustainable growth is caused by retaining earnings and reinvesting those earnings. Factors that cause short-term swings include anything that causes a company to earn a return on book equity at a rate different from the long-term sustainable rate. Assume, for example, that a particular utility company is regulated so that it is provided with a reasonable opportunity to earn 9.0% on its equity. If the company should experience an event such as the loss of several key customers, or unfavorable weather conditions which cause it to earn only 6.0% on equity in a given year, the drop of 9% earned return on equity

to a 6% earned return on equity would be concurrent with a very large drop in earnings per share. In fact, if a company did not issue any new shares of stock during the year, a drop from a 9% earned return on book equity to a 6% earned return on book equity would result in a 33.3% decline in earnings per share over the period.[78] However, such a drop in earnings would not be any indication of what is a long-term sustainable earnings per share growth rate. If the drop were caused by weather conditions, the drop in earnings would be immediately offset once normal weather conditions return. If the drop were from the loss of some key customers, the company would replace the lost earnings by filing for a rate increase to bring revenues up to the level required for the company to be given a reasonable opportunity to recover its cost of equity.

For the above reasons, changes in earnings per share growth rates that are caused by non-recurring changes in the earned return on book equity are inconsistent with long term sustainable growth, but changes in earnings per share because of the reinvestment of additional assets is a cause of sustainable earnings growth. The "b x r" term in the DCF equation computes sustainable growth because it measures only the growth which a company can expect to achieve when its earned return on book equity "r" remains in equilibrium. If analysts have sufficient data to be able to forecast varying values of "r" in future years, then a complex, or multi-stage DCF method must be used to accurately quantify the effect. Averaging growth rates over sub-periods, such as averaging growth over the first five years with a growth rate expected over the subsequent period, will not provide an appropriate representation of the cash flows expected by investors in the future

[78] By definition, earned return on equity is earnings divided by book value. Therefore, whatever level of earnings is required to produce earnings of 6% of book would have to be 33.3% lower than the level of earnings required to produce a return on book equity of 9%.

and, therefore, will not provide an acceptable method of quantifying the cost of equity using the DCF method. The choices are either a constant growth DCF, in which one "b x r" derived growth rate should be used, or a complex DCF method in which the cash flow anticipated in each future year is separately estimated. Mr. Moul has done neither.

Q. WHY ARE ANALYSTS' FIVE-YEAR CONSENSUS GROWTH RATES NOT INDICATIVE OF LONG-TERM SUSTAINABLE GROWTH RATES?

A. Analysts' five-year earnings per share growth rates are earnings per share growth rates that measure earnings growth from the most currently completed fiscal year to projected earnings five years into the future. These growth rates are not indicative of future sustainable growth rates in part because the sources of cash flow to an investor are dividends and stock price appreciation. While both stock price and dividends are impacted in the long-run by the level of earnings a company is capable of achieving, earnings growth over a period as short as five years is rarely in synchronization with the cash flow growth from increases in dividends and stock prices. For example, if a company experiences a year in which investors perceive that earnings temporarily dipped below normal trend levels, stock prices generally do not decline at the same percentage that earnings decline, and dividends are usually not cut just because of a temporary decline in a company's earnings. Unless both the stock price and dividends mirror every down swing in earnings, they cannot be expected to recover at the same growth rate that earnings recover. Therefore, growth rates such as five-year projected growth in earnings per share are not indicative of long-term sustainable growth rates in cash flow. As a result, they are inapplicable for direct use in the simplified DCF method.

Q. IS THE USE OF FIVE-YEAR EARNINGS PER SHARE GROWTH RATES IN THE DCF MODEL ALSO IMPROPER?

A. A raw, unadjusted, five-year earnings per share growth rate is usually a poor proxy for either short-term or long-term cash flow that an investor expects to receive. When implementing the DCF method, the time value of money is considered by equating the current stock price of a company to present value of the future cash flows that an investor expects to receive over the entire time that he or she owns the stock. The discount rate required to make the future cash flow stream, on a net present value basis, equal to the current stock price is the cost of equity. The only two sources of cash flow to an investor are dividends and the net proceeds from the sale of stock at whatever time in the future the investor finally sells. Therefore, the DCF method is discounting future cash follows that investors expect to receive from dividends and from the eventual sale of the stock. Five-year earnings growth rate forecasts are especially poor indicators of cash flow growth even over the five years being measured by the five-year earnings per share growth rate number.

Q. WHY IS A FIVE-YEAR EARNINGS PER SHARE GROWTH RATE A POOR INDICATOR OF THE FIVE-YEAR CASH FLOW EXPECTATIONS FROM DIVIDENDS?

A. The board of directors changes dividend rates based upon long-term earnings expectations combined with the capital needs of a company. Most companies do not cut the dividend simply because a company has a year in which earnings were below sustainable trends, and similarly they do not increase dividends simply because earnings for one year happened to be above long-term sustainable trends. Therefore, over any given five-year period, earnings growth is frequently very different from dividend growth. In order for earnings

growth to equal dividend growth, at a minimum, earnings per share in the first year of the five-year earnings growth rate period would have to be exactly on the long-term earnings trend line expected by investors. Since earnings in most years are above or below the trend line, the earnings per share growth rate over most five-year periods is different from what is expected for earnings growth.

Q. WHY IS THE FIVE-YEAR EARNINGS PER SHARE GROWTH RATE A POOR INDICATION OF FUTURE STOCK PRICE GROWTH?

A. If a company happens to experience a year in which earnings decline below what investors believe are consistent with the long-term trend, then the stock price does not drop anywhere near as much as earnings drop. Similarly, if a company happens to experience a year in which earnings are higher than the investor-perceived long-term sustainable trend, then the stock price will not increase as much as earnings. In other words, the P/E (price/earnings) ratio of a company will increase after a year in which investors believe earnings are below sustainable levels, and the P/E ratio will decline in a year in which investors believe earnings are higher than expected. Since it is stock price that is one of the important cash flow sources to an investor, a five-year earnings growth rate is a poor indicator of cash flow both because it is a poor indicator of stock price growth over the five years being examined and is equally a poor predictor of dividend growth over the period.

Q. ARE YOU SAYING THAT ANALYSTS' CONSENSUS EARNINGS PER SHARE GROWTH RATES ARE USELESS AS AN AID TO PROJECTING THE FUTURE?

A. No. Analysts' EPS growth rates are, however, very dangerous if used in a simplified DCF without proper interpretation. While they are not useful if used in their "raw" form, they can be useful in computing estimates of what earned return on equity investors expect will

be sustained in the future, and as such, are useful in developing long-term sustainable growth rates.

Q. BESIDES GROWTH RATE, ARE THERE ANY OTHER DCF ANALYSIS INPUTS THAT MR. MOUL HAS ESTIMATED INCORRECTLY?

A. Yes. Mr. Moul made an unjustifiable "leverage adjustment."

Q. PLEASE DESCRIBE THE LEVERAGE ADJUSTMENT PROPOSED BY MR. MOUL IN THIS PROCEEDING.

A. Mr. Moul has proposed a leverage adjustment addition to his DCF derived cost of equity, stating "In order to make the DCF results relevant to the capitalization measured at book value (as is done for rate setting purposes), the market-derived cost rate must be adjusted to account for the difference in financial risk."[79] He then goes on to say: "Because the ratemaking process uses ratios calculated from a firm's book value capitalization, further analysis is required to synchronize the financial risk of the book capitalization with the required return on the book value of the firm's equity."[80] Because of this alleged higher financial risk, Mr. Moul recommends adding 1.41%[81] to the DCF derived cost of equity.

Q. JUST BECAUSE THE MARKET VALUE CAPITAL STRUCTURE CONTAINS A HIGHER PERCENTAGE OF COMMON EQUITY THAN BOOK VALUE CAPITAL STRUCTURE, DOES THIS MEAN THE MARKET VALUE CAPITAL

[79] Mr. Moul's Direct Testimony, Peoples Statement No. 13, page 33, lines 20-21.
[80] Mr. Moul's Direct Testimony, Peoples Statement No. 13, page 34, lines 10-13.
[81] Mr. Moul's Direct Testimony, Peoples Statement No. 13, page 38, line 3.

STRUCTURE HAS LOWER FINANCIAL RISK THAN THE BOOK VALUE CAPITAL STRUCTURE?

A. No. Market value capital structure and book value capital structure are two completely different ways of measuring the same thing. Concluding that a market value capital structure is lower in risk because it contains more equity than the book value based capital structure for the same company is as inconsistent and illogical as claiming that a person who weighs 150 pounds could lose weight simply by stepping on a scale that measures weight in kilos instead of pounds. Financial risk is determined by a company's ability to meet its cash flow obligations. The most common and perhaps most important single measure of financial risk is the pretax interest coverage ratio. The interest coverage ratio is computed by dividing the sum of interest expense and pre-tax income by interest expense. This number is useful because it gives bondholders a sense of how far earnings would have to decline before a company would not be able to meet its interest payments. For example, if a company has an interest coverage ratio of 3.0, this means that at its current earnings rate, its earnings available for both payment of interest and pre-tax earnings, is three times as much as is needed to make its interest payments.

Q. DOES A DECLINE IN MARKET PRICE LOWER THE COVERAGE RATIO?

A. Lowering the market value does not directly cause a change in the coverage ratio computation. Therefore, changing from a market value orientation to a book value orientation does no more to change a company's financial risk than the weight of a person was influenced by switching to a scale calibrated in kilos instead of pounds.

Q. DO INVESTORS UNDERSTAND THAT AS PART OF THE REGULATORY PROCESS ALLOWED RETURNS ARE APPLIED TO BOOK VALUE?

A. Yes, they do. This is a process that has been going on for decades and it is hard to argue that investors are not aware of this. By recommending this leverage adjustment, Mr. Moul is implying that investors forget this after each rate case. Evaluating the cost of equity based on a comparative group is like taking a snapshot of their expectations. After this snapshot is taken, it is then applied to the individual company so even if the allowed return affected the expectation of the investors in the comparative group it would be after the snapshot was taken.

Q. DOES MR. MOUL'S LEVERAGE ADJUSTMENT GO AGAINST ORIGNAL COST RATEMAKING?

A. Yes. Mr. Moul claims, "The need for the leverage adjustment arises when the results of the DCF model (k) are to be applied to a capital structure that is different from the capital structure indicated by the market price (P)."[82] In other words, Mr. Moul is saying that as a consequence of original cost ratemaking, an upward adjustment is needed. When a company has a market to book value above 1, and is thus over earning, applying the correct rate of return to the book value could have downward pressure on the stock price. No matter what logic is applied to the reason for adding a value to the rate of return, the leverage adjustment distorts the natural market dynamic between a regulated utility's stock price and its allowed rate of return.

[82] Mr. Moul's Direct Testimony, Peoples Statement No. 13, page 34, lines 2-4.

C. Risk Premium Method

Q. PLEASE SUMMARIZE MR. MOUL'S RISK PREMIUM ANALYSIS.

A. Mr. Moul explains that, "With the Risk Premium approach, the cost of equity capital is determined by corporate bond yields plus a premium to account for the fact that common equity is exposed to greater investment risk than debt capital."[83] In this approach, he computes a 11.50% cost of equity by summing a prospective yield for long-term public utility debt (5.00%) and his estimate of an equity risk premium (6.50%).[84] His prospective yield for long-term public utility debt of 5.00% is based on adding a 1.25% spread to Blue Chip Financials projected yields on U.S. Treasury bonds. Mr. Moul calculates the equity risk premium (6.50%) of this approach by measuring large company stock returns over long-term corporate bonds based between 1926-2022 and presents the results in the following three categories based on the relative level of interest rates.

- Low Interest Rate: 7.13%
- Average Across All Interest Rates: 5.96%
- High Interest Rates: 4.76%[85]

From these data, he has "utilized" a 6.50% equity risk premium, which is between the premiums during low interest rates (7.13%) and an average of the premiums during the entire historical period (5.96%).[86]

[83] Mr. Moul's Direct Testimony, Peoples Statement No. 13, Page 38, lines 16-18.
[84] Mr. Moul's Direct Testimony, Peoples Statement No. 13, Page 42, lines 11-15.
[85] Mr. Moul's Direct Testimony, Peoples Statement No. 13, Exhibit PRM-1, Page 22 of 29.
[86] Mr. Moul's Direct Testimony, Peoples Statement No. 13, Page 42, lines 1-10.

Q. DOES MR. MOUL'S RISK PREMIUM METHOD PRODUCE A REASONABLE RESULT?

A. No. Mr. Moul's equity risk premium method result of 11.50% is excessive primarily because the equity risk premium component of 6.50%[87] is unreasonably high. A 6.50% equity risk premium is out of line with market data, academic studies and the results of his own sources.

Mr. Moul uses historical data from Kroll's SBBI Yearbook to support his claim that "the equity risk premium increases as interest rates decline, and it declines as interest rates increase."[88] He claims that this historical data supports his 6.50% equity risk premium component.[89] However, his analysis based on historical data is flawed because he failed to consider if investors expect future returns to be different than past returns. His own source, the Kroll SBBI Yearbook, considered if investors might consider future equity returns to be different than the past. The authors of this book looked beyond historical data and concluded that "the current [price-to-earnings] ratio is the market's best guess for the future of corporate earnings."[90] Based on this current market data, the Kroll 2023 SBBI Yearbook calculated a…geometric supply-side equity risk premium of 4.39%."[91] In September 2023, Kroll found an equity risk premium of 5.5%, which is 1% lower than his estimate. It should be further noted that Kroll's 4.39% and 5.50% equity risk premium calculations are in comparison to U.S. Treasury bonds, not the corporate bond yields used in Mr. Moul's analysis. Since corporate bond yields are higher than U.S. Treasury bonds,

[87] Mr. Moul's Direct Testimony, Peoples Statement No. 13, Page 42, lines 8-10.
[88] Mr. Moul's Direct Testimony, Peoples Statement No. 13, Page 41, lines 9-14.
[89] Mr. Moul's Direct Testimony, Peoples Statement No. 13, Page 42, lines 1-10.
[90] Kroll 2023 SBBI Yearbook, Page 199.
[91] Kroll 2023 SBBI Yearbook, Page 197-199.

Mr. Moul's equity risk premium would be expected to be lower than those calculated by Kroll. Instead, his 6.50% is significantly higher. Therefore, the results of his own source indicate that his 11.50% COE result is excessive.

Consistent with Kroll's supply-side equity risk premium analysis I found an equity risk premium to be considerably lower than claimed by Mr. Moul. As shown in Table 7 and Table 8 on page 77, I found an equity risk premium of between 2.70% and 4.06%, which provides additional evidence that his 11.50% COE result is excessive.

D. CAPM Method

Q. PLEASE SUMMARIZE MR. MOUL'S CAPM METHOD.

A. Mr. Moul explains that, "To compute the cost of equity with the CAPM, three components are necessary: a risk-free rate of return ("Rf"), the beta measure of systematic risk ("β"), and the market risk premium ("Rm-Rf") derived from the total return on the market of equities reduced by the risk-free rate of return."[92] He uses a risk free rate of 3.75% based on interest rate forecasts and recent trends in long term Treasury yields.[93] His market premium portion of his CAPM analysis (9.68%) is based on the forecasted S&P 500 returns.[94] He adds a "small size adjustment" of 1.02% to account for the relatively small size of Peoples relative to the companies in the Gas Group.[95]

[92] Mr. Moul's Direct Testimony, Peoples Statement No. 13, Page 43, lines 3-7.
[93] Mr. Moul's Direct Testimony, Peoples Statement No. 13, Page 46, lines 1-2.
[94] Mr. Moul's Direct Testimony, Peoples Statement No. 13, Page 46, lines 15-17.
[95] Mr. Moul's Direct Testimony, Peoples Statement No. 13, Page 46, lines 18-23 and Page 47, lines 1-11.

Q. DO YOU AGREE WITH THE RESULTS OF MR. MOUL'S CAPM ANALYSIS?

A. No, I do not agree with results of Mr. Moul's CAPM analysis because I believe that they significantly and inaccurately overstate the Company's cost of equity.

The arithmetic average return that Mr. Moul uses overstates the historical risk premium by over 200 basis points. The 2023 SBBI Yearbook shows that investors actually earned a compounded annual return of 10.1%[96] between 1926 and 2022. The arithmetic mean return of 12.21%[97] is possibly valuable to stockbrokers and fund managers attempting to predict future bonuses, but not for calculating the cost of equity. A Dow Jones Newswire article stated, "Some financial advisers rely too heavily on a formula known as the arithmetic average, which can be misleading when investing for the long term. Financial advisors who use this formula may be overstating your potential profit and leading you to take risks you might otherwise avoid…"[98] Mr. Moul's prospective risk premium calculation is based on a DCF analysis that is not based on sustainable growth. His DCF analysis for the S&P 500 has a growth component of an astounding 12.47%.[99]

Q. IS MR. MOUL'S ADDER FOR A SMALL SIZE EFFECT AN APPROPRIATE PART OF A CAPM ANALYSIS?

A. No. Mr. Moul's premium adder for the relatively small size of Peoples is unjustifiable. A proper analysis of the data from Ibbotson SBBI/Morningstar shows that size is a diversifiable risk and therefore does not impact the cost of equity. Professor Aswath Damodaran said the following regarding the supposed "small cap premium." Even if you

[96] Kroll 2023 SBBI Yearbook, page 2-23.
[97] Mr. Moul's Direct Testimony, Peoples Statement No. 13, Exhibit PRM-1, Page 25 of 29.
[98] Kaja Whitehouse, To Financial Advisors and Fuzzy Math, Dow Jones Newswires October 8, 2003.
[99] Mr. Moul's Direct Testimony, Peoples Statement No. 13, Schedule 13, page 2 of 3.

believe that small cap companies are more exposed to market risk than large cap ones, this is an extremely sloppy and lazy way of dealing with that risk, since risk ultimately has to come from something fundamental (and size is not a fundamental factor).[100]

Q. DO THE RESULTS OF RECENT STUDIES PROVIDE ADDITIONAL EVIDENCE THAT SMALLER FIRMS DO NOT HAVE A HIGHER COST OF EQUITY THAN LARGE FIRMS?

A. Yes. A 2018 study conducted by scholars at AQR Capital Management and Yale University found that "the size effect diminished shortly after its discovery and publication."[101] The authors of this research found that data errors plagued the early studies regarding the relationship between firm size and return. They found that the data in the earlier studies did not include delisted companies and since smaller firms are delisted more often than larger stocks, the biased data (referred as a "delisting bias") made the returns of smaller stocks look higher than reality.[102]

Mr. Moul's CAPM is inflated because he takes steps to increase his results for a so-called small firm effect that has been put into serious question by recent research. Therefore, his CAPM overstates Peoples' cost of equity because the risk premium potion of this method is impacted by these exaggerated returns.

[100] Aswath Damodaran, Equity Risk Premiums (ERP): Determinates, Estimation and Implications – The 2014 Edition (paper updated, March 2015) page 42.
[101] Ron Alquist, Ronen Israel, and Tobias Moskowitz, Fact, Fiction, and the Size Effect, *The Journal of Portfolio Management*, Fall 2018, page 3.
[102] Ron Alquist, Ronen Israel, and Tobias Moskowitz, Fact, Fiction, and the Size Effect, *The Journal of Portfolio Management*, Fall 2018, page 5.

E. Comparable Earnings Method

Q. PLEASE EXPLAIN THE COMPARABLE EARNINGS METHOD PRESENTED BY MR. MOUL.

A. Mr. Moul selected a group of non-regulated companies that he believes to be of comparable risk to the Electric Group. After selecting the companies, he presents the historic and Value Line expected return on book equity. See Schedule 14 [2 of 3], of Mr. Moul's direct testimony. The final column of numbers on this table is the "Projected 2026-28." However, what he labels as the projected 2026-28 return is actually the return on book equity that Value Line forecasts, not the return that Value Line projects investors will receive on their investment as a result of purchasing the common stock at current prices. According to Mr. Moul's Schedule 14, the total return expected by Value Line on the book equity of these industrial companies is between a 7.00% and a high of 55.0%, for an average of 20.6% (13.3% excluding companies with values > 20%).

Q. IS THIS METHOD VALID?

A. No. Mr. Moul has attempted to determine the cost of equity that would be demanded by investors on the market price of a company comparable to Peoples by comparing it to the historic and projected returns on book equity of a selection of industrial companies. Leaving aside the problems with actually being able to select companies that are comparable, the overriding problem with Mr. Moul's comparable earnings analysis is that it did not address the cost of equity at all. It simply considered the returns on book equity that were achieved and are expected to be achieved by Value Line in the next 3 to 5 years. The earned return on book equity is an entirely different concept from the cost of equity.

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE ROE INCREMENT OF 25-BASIS POINTS REQUESTED BY PEOPLES BASED ON CLAIMED EXEMPLARY MANAGEMENT PERFORMANCE?

A. As explained above, The appropriate authorized ROE is based on the Commission's determination of the COE at the time of the proceeding. The COE is the market-based return investors expect to earn on the market value of any given stock. If the Commission decides to authorize Peoples an ROE that is higher than Peoples' market-based COE for its claimed superior management performance, I strongly encourage the Commission use my ROE recommendation of 8.02% (7.67% - 8.37%) without any adjustment for management performance. Mr. Moul's 11.50% ROE recommendation, before his recommended 25-basis point recognition for management performance, is significantly above Peoples' market-based COE and should not be the starting point for any increase to Peoples' ROE to recognize management performance. I also note that OCA witnesses Evrard, Mugrace, Alexander and Colton have each provided rationale for rejecting Peoples' request for 25-basis points, and I will defer to those witnesses individually to explain their positions, for my purposes. It is important to recognize that my analysis here demonstrates that Peoples' requested ROE should be rejected because it is higher than its market-based COE.

Q. PLEASE SUMMARIZE YOUR ANALYSIS OF MR. MOUL'S TESTIMONY.

A. Mr. Moul recommends that the Company be allowed a return on equity of 11.75%. Mr. Moul's DCF result of 11.88% is above the market-based COE because (1) it has an unsustainable growth rate component (6.75%) and (2) he adds a leverage adjustment that misrepresents the basics of evaluating a company's cost of equity. Without his leverage

adjustment his DCF result is 10.47% which is still unreasonably high. Mr. Moul's Risk Premium method was developed based upon an improper mathematical approach to quantifying historic actual returns. Mr. Moul's CAPM approach relies on an excessive market risk premium, an improper inflation of the "beta" because of a high market-to-book ratio, and an invalid "size premium." The incorrect claim that investors demand a higher cost of equity to invest in a small company (referred to as "size premium") is manufactured by an incorrect use of data. Mr. Moul's Comparable Earnings method is not really an equity costing method at all, as no consideration was given to investor's reactions to the earned returns on book equity.

VIII. CONCLUSION

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS IN THIS CASE.

A. Based on the evidence presented in my testimony, I conclude that the cost of equity allowed for Peoples should be between 7.67% to 8.37% (recommended at 8.02%). Based on my recommended common equity ratio of 50.00%, that results in an overall cost of capital of between 6.02% and 6.37% (recommended at 6.20%).

If the Commission decides to use Peoples' requested capital structure of 54.67% common equity and 45.33% debt instead of my recommended capital structure, I recommend a reduced authorized ROE of 7.84% (7.49% - 8.19%) to account for the lower financial risk of a capital structure with more equity. Consistent with the testimony of other OCA witnesses, the Company has not demonstrated that it is entitled to a management performance adder.

My recommendations satisfy the requirements of *Hope* and *Bluefield* that regulated utility companies should have the opportunity to earn a return commensurate with returns on investments in other enterprises having corresponding risks. My recommendations are consistent with legal standards set by the United States Supreme Court and market data and will allow Peoples to raise capital on reasonable terms while fulfilling its obligation to provide safe and reliable service.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

APPENDIX A. MARKET TO BOOK RATIOS AND THE MARKET-BASED COE

Q. PLEASE EXPLAIN WHY A MARKET TO BOOK RATIO OF SIGNIFICANTLY ABOVE ONE INDICATES THAT THE COST OF EQUITY FOR GAS UTILITY COMPANIES IS LOWER THAN THE EXPECTED RETURN ON BOOK EQUITY?

A. Calculating the cost of equity (investors' equity return expectations) is more complicated than calculating the return on a rental property, but the same concept applies regarding the relationship between market returns and book returns. If an investor purchases an apartment for $100,000 and expects to receive $500 per month ($500 X 12 = $6,000 per year) in rent, he or she will expect an annual return of 6% ($6,000/$100,000) on their investment. When the investor purchases the apartment, he would record the book value as $100,000 and the market value as $100,000 unless he determined that the purchase price was higher or lower than the market value. If the value of the apartment increases to $350,000, for example, the market to book ratio would increase to approximately 3.5, and therefore, his return on book value would remain at about 6% while his return on the market value of the apartment would decrease to about 1.7%.

In this rental property example, an increasing market value results in a lower expected return on market (1.7%) compared to expected return on book (6%) if the rent price remains constant. Rent prices do not increase to maintain an expected 6% return on book value; they are set by what the rental market reasonably can bear. The same is true of utility stocks. You do not establish an ROE based on a constant return on book (accounting) returns, it is set based on what investors in the market expect that market to return. In the case of a utility stock, an increasing market value results in a lower return on

market for the same expected return on book. As this rental property example demonstrates, there is nothing inconsistent about investors expecting a lower return on the market price of an investment than on the book value of an investment. In fact, with market to book ratios of gas utility companies significantly above one it would be surprising if investors expected a return on market equal, or anywhere close, to return on book.

APPENDIX B. FUTURE-ORIENTED "B X R" METHOD

Q. ARE YOU AWARE OF CLAIMS ALLEGING THAT THE "BR" APPROACH TO THE CONSTANT GROWTH DCF MODEL IS FLAWED BECAUSE IT RELIES ON THE VALUE OF THE FUTURE EXPECTED RETURN ON BOOK EQUITY "R" TO ESTIMATE WHAT THE EARNED RETURN ON EQUITY SHOULD BE?

A. Yes. One common criticism is that it is not reasonable for the DCF to indicate a COE (market return) that is different (lower or higher) than the expected return on book equity (accounting). There are multiple reasons why this concern is unfounded:

1. The constant growth form of the equation using "br" is:

$$k = D/P + (br + sv)$$

In this equation, "k" is the variable for the COE, and "r" is the future expected return on equity. The COE, "k," is not the same variable as the future expected earned return on equity, "r." In fact, there often is a large difference between the two.

2. The correct value to use for "r" is the return on book equity expected by investors as of the time the stock price and dividend data are used to quantify the D/P term in the equation. Therefore, even if future events occur that may change what investors expect for "r," the computation of the COE "k" remains correct as of the time the computation was made.

3. The ability of a commission's ROE decision to influence future cash flow expectations is not unique to the retention growth DCF approach. The five-year analysts' earnings per share growth rate is a computation that is directly influenced by what earnings per share will be in 5 years. Allowed ROEs

impact earning – higher allowed returns lead to higher earnings growth because the higher allowed returns the more earnings are available for reinvestment.

Q. CAN CHANGES IN THE ACTUAL EARNED RETURNS IMPACT GROWTH ABOVE AND BEYOND WHATEVER GROWTH RESULTS FROM EARNINGS RETENTION?

A. Yes, but large short-term changes in earnings per share caused by a perceived change in the future expected earned returns are unsustainable. The new perceived earned return on book equity should be part of the computation, but the one-time growth spurt to get there is no more indicative of the sustainable growth required in the constant growth DCF formula than the temporary negative growth that occurs when a company has a bad year.

Q. CAN YOU PLEASE SUMMARIZE WHY A FUTURE-ORIENTED "B X R" METHOD IS SUPERIOR TO A FIVE-YEAR EARNINGS PER SHARE GROWTH RATE FORECAST IN PROVIDING A LONG-TERM SUSTAINABLE GROWTH RATE?

A. The primary cause of sustainable earnings growth is the retention of earnings. A company is able to create higher future earnings by retaining a portion of the prior year's earnings in the business and purchasing new business assets with those retained earnings. There are many factors that can cause short-term swings in earnings growth rates, but the long-term sustainable growth is caused by retaining earnings and reinvesting those earnings. Factors that cause short-term swings include anything that causes a company to earn a return on book equity at a rate different from the long-term sustainable rate. Assume, for example, that a particular utility company is regulated so that it is provided with a reasonable

opportunity to earn 9% on its equity. Should the company experience an event such as the loss of several key customers, or unfavorable weather conditions, which cause it to earn only 6% on equity in a given year, the drop from a 9% earned return on equity to a 6% earned return on equity would be concurrent with a very large drop in earnings per share. In fact, if a company did not issue any new shares of stock during the year, a drop from a 9% earned return on book equity to a 6% earned return on book equity would result in a 33.3% decline in earnings per share over the period.[103] However, such a drop in earnings would not be an indication of what is a long-term sustainable earnings per share growth rate. If the drop were caused by weather conditions, the drop in earnings would be immediately offset once normal weather conditions return. If the drop were from the loss of some key customers, the company would replace the lost earnings by filing for a rate increase to bring revenues up to the level required for the company to be given a reasonable opportunity to recover its cost of equity.

For the reasons above, changes in earnings per share growth rates that are caused by non-recurring changes in the earned return on book equity are inconsistent with long-term sustainable growth, but changes in earnings per share because of the reinvestment of additional assets is a cause of sustainable earnings growth. The "b x r" term in the DCF equation computes sustainable growth because it measures only the growth which a company can expect to achieve when its earned return on book equity "r" remains in equilibrium. If analysts have sufficient data to be able to forecast varying values of "r" in future years, then a complex, or multi-stage DCF method must be used to accurately

[103] By definition, earned return on equity is earnings divided by book value. Therefore, whatever level of earnings is required to produce earnings of 6% of book would have to be 33.3% lower than the level of earnings required to produce a return on book equity of 9%.

quantify the effect. Averaging growth rates over sub-periods, such as averaging growth over the first five years with a growth rate expected over the subsequent period, will not provide an appropriate representation of the cash flows expected by investors in the future and, therefore, will not provide an acceptable method of quantifying the cost of equity using the DCF method. The choices are either a constant growth DCF, in which one growth rate derived using "b x r" should be used, or a complex DCF method in which the cash flow anticipated in each future year is separately estimated. Mr. Moul have done neither. Instead, he mechanically adds analysts' five-year earnings per share growth rate to the dividend yield.

Q. WHY ARE ANALYSTS' FIVE-YEAR CONSENSUS GROWTH RATES NOT INDICATIVE OF LONG-TERM SUSTAINABLE GROWTH RATES?

A. Analysts' five-year earnings per share growth rates are earnings per share growth rates that measure earnings growth from the most currently completed fiscal year to projected earnings five years into the future. These growth rates are not indicative of future sustainable growth rates in part because the sources of cash flow to an investor are dividends and stock price appreciation. While both stock price and dividends are impacted in the long run by the level of earnings a company is capable of achieving, earnings growth over a period as short as five years is rarely in synchronization with the cash flow growth from increases in dividends and stock prices. For example, if a company experiences a year in which investors perceive that earnings temporarily dipped below normal trend levels, stock prices generally do not decline at the same percentage that earnings decline, and dividends are usually not cut just because of a temporary decline in a company's earnings. Unless both the stock price and dividends mirror every down swing in earnings,

they cannot be expected to recover at the same growth rate that earnings recover. Therefore, growth rates such as five-year projected growth in earnings per share are not indicative of long-term sustainable growth rates in cash flow. As a result, they are not applicable for direct use in the simplified DCF method.

Q. IS THE USE OF FIVE-YEAR EARNINGS PER SHARE GROWTH RATES IN THE DCF MODEL ALSO IMPROPER?

A. Yes. A raw, unadjusted, five-year earnings per share growth rate is usually a poor proxy for either short-term or long-term cash flow growth that an investor expects to receive. When implementing the DCF method, the time value of money is considered by equating the current stock price of a company to the present value of the future cash flows that an investor expects to receive over the entire time that he or he owns the stock. The discount rate required to make the future cash flow stream, on a net present value basis, equal to the current stock price is the cost of equity. The only two sources of cash flow to an investor are dividends and the net proceeds from the sale of stock at whatever time in the future the investor finally sells. Therefore, the DCF method is discounting future cash flows that investors expect to receive from dividends and from the eventual sale of the stock. Five-year earnings growth rate forecasts are especially poor indicators of cash flow growth, even over the five years being measured by the five-year earnings per share growth rate number.

Q. WHY IS A FIVE-YEAR EARNINGS PER SHARE GROWTH RATE A POOR INDICATOR OF THE FIVE-YEAR CASH DIVIDEND GROWTH EXPECTATIONS?

A. The board of directors of a company changes dividend rates based upon long-term earnings expectations combined with the capital needs of a company. Most companies do not

decrease dividends simply because a company has a year in which earnings were below sustainable trends, and similarly they do not increase dividends simply because earnings for one year happened to be above long-term sustainable trends. Therefore, over any given five-year period, earnings growth is frequently very different from dividend growth. In order for earnings growth to equal dividend growth, at a minimum, earnings per share in the first year of the five-year earnings growth rate period would have to be exactly on the long-term earnings trend line expected by investors. Since earnings in most years are above or below the trend line, the earnings per share growth rate over most five-year periods is different from what is expected for dividend growth.

Q. WHY IS THE FIVE-YEAR EARNINGS PER SHARE GROWTH RATE A POOR INDICATION OF FUTURE STOCK PRICE GROWTH?

A. If a company happens to experience a year in which earnings decline below what investors believe is consistent with the long-term trend, then the stock price does not drop anywhere near as much as earnings drop. Similarly, if a company happens to experience a year in which earnings are higher than the investor-perceived long-term sustainable trend, the stock price will not increase as much as the earnings. In other words, the P/E ratio of a company will increase after a year in which investors believe earnings are below sustainable levels, and the P/E ratio will decline in a year in which investors believe earnings are higher than expected. Since stock price is one of the important cash flow sources to an investor, a five-year earnings growth rate is a poor indicator of cash flow, both because it is a poor indicator of stock price growth over the five years being examined, and because it is equally a poor predictor of dividend growth over the period.

Q. ARE YOU SAYING THAT ANALYSTS' CONSENSUS EARNINGS PER SHARE GROWTH RATES ARE USELESS AS AN AID TO PROJECTING THE FUTURE?

A. No. Analysts' EPS growth rates are, however, very dangerous if used in a simplified DCF without proper interpretation. While they are not useful if used in their "raw" form, they can be very useful in computing estimates of what earned return on equity investors expect will be sustained in the future, and as such, are useful in developing long-term sustainable growth rates. This is exactly what I do in the application of my Constant Growth DCF Analysis.

APPENDIX C. NON-CONSTANT GROWTH FORM OF THE DCF MODEL

Q. YOUR NON-CONSTANT GROWTH DCF MODEL USES ANNUAL EXPECTED CASH FLOWS. SINCE DIVIDENDS ARE PAID QUARTERLY RATHER THAN ANNUALLY, HOW DOES THIS SIMPLIFICATION IMPACT YOUR RESULTS?

A. I used the annual model because it is easier for observers to visualize what is happening. Modeling cash flows to be annual rather than when they are actually expected to occur causes a small overstatement of the COE.

Q. WHY IS IT A SMALL OVERSTATEMENT OF THE COE IF YOU HAVE MODELED DIVIDENDS TO BE RECEIVED SOME MONTHS AFTER INVESTORS ACTUALLY EXPECT TO RECEIVE THEM?

A. The process of changing from an annual model to a quarterly model would require two changes, not just one. A quarterly model would show dividends being paid sooner and would also show earnings being available sooner. A company that receives its earnings sooner, rather than at the end of the year, has the opportunity to compound them. Since revenues, and therefore earnings, are essentially received every day, a company that is supposed to earn an annual rate of 9.00% on equity would have to earn only 8.62% if the return were compounded daily.[104] This reduction from 9.00% to 8.62% would then be partially offset by the impact of the quarterly dividend payment to bring the result of switching from the simplifying annual model closer to, but still a bit below 9.00%.

[104] $(1+.0862/365)^{365}=1.09 = 9.00\%$.

Q. BY USING CASH FLOW EXPECTATIONS AS THE VALUATION PARAMETER, DOES THE NON-CONSTANT DCF MODEL STILL RELY ON EARNINGS?

A. Yes. It relies on an expectation of future cash flows. Future cash flows come from dividends during the time the stock is owned and capital gains from the sale of the stock once it is sold. Since earnings impact both dividends and stock price, the non-constant DCF model still relies on earnings.

Every dollar of earnings is used for the benefit of stockholders, either in the form of a dividend payment, or earnings reinvested for future growth in earnings and/or dividends. Earnings paid out as a dividend have a different value to investors than earnings retained in the business. Recognizing this difference and properly considering it in the quantification process is a major strength of the DCF model and is why the non-constant DCF model as I have set forth is an improvement over either the price-to-earnings ratio (P/E ratio) or dividend/price (D/P) methods. Comparing the P/E ratios and the dividend yield (D/P) are helpful as a rule of thumb, but they must be used with caution because, among other reasons, two companies with the same dividend yield can have a different COE if they have different retention rates. A DCF model is more reliable than these rules of thumb because it can account for different retention rates, among other factors.

Q. WHY IS THERE A DIFFERENCE TO INVESTORS IN THE VALUE OF EARNINGS PAID OUT AS A DIVIDEND COMPARED TO THE VALUE OF EARNINGS RETAINED IN THE BUSINESS?

A. The return on earnings retained in the business depends upon the opportunities available to that company. If a regulated utility reinvests earnings in needed "used and useful" utility assets, then those reinvested earnings have the potential to earn at whatever return is

consistent with ratemaking procedures allowed and the skill of management in prudently operating the system.

When an investor receives a dividend, he can either reinvest it in the same or another company or use it for other things, such as paying down debt or paying living expenses. Although an investor could theoretically use the proceeds from any dividend payments to simply buy more stock in the same company, when an investor increases his investment in a company by purchasing more stock, the transaction occurs at market price. However, when the same investor sees his investment in a company increase because earnings are retained rather than paid as a dividend, the reinvestment occurs at book value. Stated within the context of the DCF terminology: earnings retained in the business earn at the future expected return on book equity "r," and dividends used to purchase new stock earn at the rate "k." When the market price exceeds book value (that is, the market-to-book ratio exceeds 1.0), retained earnings are worth more than earnings paid out as a dividend because "r" will be higher than "k." Conversely, when the market price is below book value, "k" will be higher than "r," meaning that earnings paid out as a dividend earn a higher rate than retained earnings.

Q. IF RETAINED EARNINGS WERE MORE VALUABLE WHEN THE MARKET-TO-BOOK RATIO IS ABOVE 1.0, WHY WOULD A COMPANY WITH A MARKET-TO-BOOK RATIO ABOVE 1.0 PAY A DIVIDEND RATHER THAN RETAIN ALL OF THE EARNINGS?

A. Retained earnings are more valuable than dividends only if there are sufficient opportunities to profitably reinvest those earnings. Regulated utility companies are allowed to earn the cost of capital only on assets that are used and useful in providing utility

service. Investing in assets that are not needed may not produce any return at all. For unregulated companies, opportunities to reinvest funds are limited by the demands of the business. For example, how many new computer chips can Intel profitably develop at the same time?

Q. UNDER THE NON-CONSTANT DCF MODEL, IS IT NECESSARY FOR EARNINGS AND DIVIDENDS TO GROW AT A CONSTANT RATE FOR THE MODEL TO BE ABLE TO ACCURATELY DETERMINE THE COST OF EQUITY?

A. No. Because the non-constant form of the DCF model separately discounts each and every future expected cash flow, it does *not* rely on any assumptions of constant growth. The dividend yield can be different from period to period, and growth can bounce around in any imaginable pattern without harming the accuracy of the answer obtained from quantifying those expectations. When the non-constant DCF model is correctly used, the answer obtained is as accurate as the estimates of future cash flow.

APPENDIX D. CAPITAL ASSET PRICING MODEL

Risk Free Rate

Q. WHAT IS YOUR RESPONSE TO ANALYSTS WHO CLAIM THAT THE CAPM MUST BE IMPLEMENTED WITH A LONG-TERM INTEREST RATE (E.G., YIELD ON 30-YEAR TREASURY BOND) AS AN ESTIMATE OF THE RISK-FREE RATE COMPONENT OF THE CAPM?

A. When looking for a security to calculate an estimate of the risk-free rate, it could be argued that it is appropriate to find one with a term or maturity that best matches the life of the asset being financed. In that sense, the 30-year Treasury bond yield can be argued to be ideal for this specific application. However, it is equally important to find a security that has a beta coefficient with the overall market as close to zero as possible, because by the very definition of the risk-free rate in the CAPM model, its movements should have no correlation to the movements of the market. And this is where the problem with the 30-year Treasury bond yield arises, as it has an established non-zero beta. The 3-month Treasury bill yield has a considerably lower beta, and therefore is superior in that respect to the 30-year Treasury bond yield. Neither one is a perfect fit on both fronts, which is why I have chosen to consider both as proxies for the risk-free rate to establish a range for my CAPM results.

Q. HOW DO YOU RESPOND TO ANALYSTS WHO CLAIM THAT THE RISK-FREE RATE SHOULD BE BASED ON INTEREST RATE FORECASTS FROM FIRMS SUCH AS BLUE CHIP FINANCIAL?

A. It is important to recognize that current long-term Treasury bond yields represent a direct observation of investor expectations and there is no need to use "expert" forecasts such as

Blue Chip to determine the appropriate risk-free rate to use in a CAPM analysis or any other cost of equity calculations.

Many economists and forecasters will continue to be quoted in the press prognosticating on possible developments that are truly unpredictable. The Nobel Laureate Economist Daniel Kahneman stated the following regarding forecasting:

> It is wise to take admissions of uncertainty seriously, but declarations of high confidence mainly tell you that an individual has constructed a coherent story in his mind, not necessarily that the story is true.[105]

Historical Beta

Q. PLEASE EXPLAIN HOW YOU CALCULATE HISTORICAL BETAS.

A. I calculate historical betas following the methodology used by Value Line, with some modifications. Specifically, Value Line adheres to the following guidelines:

1. Returns for each security are regressed against returns for the overall market in the following form:

$$\ln (p^{I}_{t} / p^{I}_{t-1}) = a_{I} + B_{I} * \ln (p^{m}_{t} / p^{m}_{t-1})$$

Where:

- p^{I}_{t} is the price of the security I at time t
- p^{I}_{t-1} is the price of the security I one week before time t
- p^{m}_{t} and p^{m}_{t-1} are the corresponding values of the market index
- B_I is the regression estimate of Beta for the security against the market index

2. The natural log of the price ratio is used as an approximation of each return and no adjustment is made for dividends paid during the week.

[105] DANIEL KAHNEMAN, *Thinking Fast and Slow*, p. 212 (New York: Farrar, Straus, and Giroux, 2011).

3. Weekly returns are calculated on one day of the week, with a stated preference for Tuesdays to minimize the effect of holidays as much as possible.
4. Betas calculated using the regression method above are adjusted as per Blume (1971)[106] using the following formula:

$$\text{Adjusted } B_I = 0.35 + 0.67 * \text{Calculated } B_I$$

There are four differences between my historical beta calculations and Value Line's calculations:

1. The first significant difference is that whereas Value Line uses the New York Stock Exchange Composite Index as the market index, I use the S&P 500 Index.
2. Another important difference is that whereas Value Line calculates weekly returns on one day of the week, with a stated preference for Tuesdays, I calculate weekly returns on all days of the week.
3. Value Line only calculates betas every 3 months in their quarterly company reports, whereas I use the same consistent methodology to calculate betas every week during the most recent 3 complete months (December 2023 through February 2024).
4. Value Line always uses a 5-year period for the return regression,[107] whereas I calculate historical betas for periods of 6 months, 2 years, and 5 years, as shown in Chart 15 on page 66.

[106] M. Blume, On the Assessment of Risk, *The Journal of Finance*, Vol. XXVI (March 1971) available at www.stat.ucla.edu/~nchristo/Fiatlux/blume2.pdf.
[107] They offer betas calculated over different time periods on their website, including 3 years and 10 years.

In the following pages, I explain my rationale for making the four modifications above to Value Line's beta calculation methodology.

Q. WHY DO YOU CALCULATE YOUR HISTORICAL BETAS VS. THE S&P 500 INDEX INSTEAD OF THE NEW YORK STOCK EXCHANGE (NYSE) COMPOSITE INDEX, AS VALUE LINE DOES?

A. A critical factor in the calculation of a beta coefficient is the choice of index to represent the overall market. Using exactly the same beta calculation methodology with a different market index will result in different values of beta for a given company or portfolio – sometimes drastically different values. It is easy to jump to the conclusion that this points to a flaw in CAPM theory, as different values of beta would result in a different implied cost of equity. However, another key component of the CAPM, the market risk premium, also depends on the choice of the market index, which in theory would have an offsetting effect on the cost of equity calculation. This points to the most important aspect of selecting a market index for a CAPM analysis, which is to be consistent and use the same index for the calculation of beta as for the calculation of the market risk premium. This is a fundamental concept of the CAPM and using betas based on one index with a market risk premium based on a different index yields invalid results.

As stated above, Value Line calculates its published betas based on the NYSE Composite Index. Most methodologies used to calculate the market risk premium, including those I rely on, are based on the S&P 500 Index, so using them in the CAPM together with Value Line betas exactly as published would yield invalid results.

For this reason, I calculate my historical betas versus the S&P 500 Index, making my CAPM approach entirely consistent.

As an aside related to my option-implied betas, using the S&P 500 Index consistently throughout my CAPM has the added benefit that this index has a much larger number of options traded, which makes the calculation of option-implied betas more reliable.

Q. WHY DO YOU CALCULATE YOUR HISTORICAL BETAS USING WEEKLY RETURNS ON EVERY DAY OF THE WEEK AS OPPOSED TO USING ONLY ONE DAY OF THE WEEK, AS VALUE LINE DOES?

A. Using one day of the week to calculate weekly returns for use in the regression analysis used to calculate historical betas has the unintended effect of generating different values of betas depending on the day of the week that is used. To clarify, if one were to use Value Line's precise methodology for calculating a 5-year historical beta for a given company using weekly returns calculated on Tuesdays, the resulting beta value would be different than the resulting value if one were to use the same exact methodology, but using weekly returns calculated on Wednesdays, or any other day of the week. Even though 5-year historical betas should in theory be quite stable and should not change very much from one day to the next, calculating returns on only one day of the week results in differences that can be significant and make no sense conceptually.

I only became aware of this side-effect recently, but it is easy to understand why it happens. Even though there is some correlation due to some overlap, the set of weekly returns calculated on Mondays is a completely different set of numbers than the set of weekly returns calculated on Tuesdays. As a result, there are five 5-year betas that can result from Value Line's methodology, and even though the Monday beta for a given

company will change slowly from week to week, the change between the Monday beta and the Tuesday beta, calculated just one trading day apart, can be quite significant.

Since I became aware of this undesirable effect, I began calculating my historical betas based on an all-encompassing set of weekly returns calculated on every trading day in the beta calculation period. This methodology has the effect of averaging out the five possible betas that could result from using only one day of the week for the return calculations,[108] as Value Line does. In this way, a 5-year beta calculated on any two consecutive trading days would only change minimally, as it should.

Using a daily calculation of weekly returns could be criticized for the resulting overlap in a weekly return from Monday to Monday with that from Tuesday to Tuesday. However, given that the overlap is consistent and equal for the net effect of every trading day, no trading day is given undue weight in the regression. Even though the effect of each trading day appears 5 times in the weekly return data, there are also 5 times the total number of weekly returns in the overall set used in the regression, so any individual trading day has the same relative weight than in Value Line's methodology. The fact that the resulting beta value of this aggregate approach turns out to be a sort of average of the five possible values that would result from Value Line's methodology on different days of the week is the final confirmation that this is the superior approach for calculating a historical beta based on weekly returns.

Using a daily calculation of weekly returns has the added marginal benefit of providing more data pairs to be used in historical beta calculations for shorter periods, such

[108] The resulting beta is not a direct arithmetic or geometric average of the other five betas, but rather a regression based on the union of all five possible sets of weekly returns.

as for 6-month historical betas, where instead of 25 return pairs, the regression is performed on 117 return pairs.

Q. ARE THERE ADDITIONAL BENEFITS TO DOING YOUR OWN HISTORICAL BETA CALCULATIONS?

A. Doing my own historical beta calculations using Value Line's established methodology allows me to see how beta values change from week to week and to use the most up-to-date beta calculations instead of relying on stale beta values that can be more than 3 months old.

Q. HOW MANY DATA POINT PAIRS ARE NECESSARY TO ESTABLISH A STATISTICALLY SIGNIFICANT CORRELATION BETWEEN TWO VARIABLES IN A REGRESSION ANALYSIS, SUCH AS THE ONE USED TO ESTABLISH BETA COEFFICIENTS?

A. Establishing a minimum number is somewhat subjective, though various authorities on statistics argue the number is between 3 and 8 data pairs. While one can broadly correctly generalize that the more data point pairs one uses, the more certain one can be about the significance of the results of any correlation analysis, this is very different from stating that one cannot achieve statistical significance with a relatively low number of data pairs. In fact, it is important to realize that one can achieve statistical significance with less than 10 data pairs, and that even hundreds of data pairs do not guarantee statistical significance. For precisely this reason, statisticians have developed a tool that helps determine statistical significance based on the number of data pairs in a regression analysis.

A "table of critical values" of Pearson's correlation, which can be readily found online[109] or in most statistics books, tells a statistician that for 25 data point pairs (implying N-2=23 "degrees of freedom"), a correlation, or beta, coefficient of 0.505 or higher will occur *by chance* with a probability of only 0.01.[110] As explained in more detail in the text regarding how to use the table of critical values,[111] any beta coefficient above this level, and certainly above the 0.910 3-month average for the recent 6-month betas for my RFC Gas Proxy Group, by definition are considered statistically significant. The threshold for statistical significance for 117 data point pairs (implying 115 "degrees of freedom"), is so low that it is not even included in the table of critical values. The maximum "degrees of freedom" listed is 100, with an already very low threshold of 0.254.

Historical Blended Beta

Q. HOW DID YOU DECIDE ON THE RELATIVE WEIGHTS YOU ALLOCATE TO EACH COMPONENT OF YOUR HISTORICAL BLENDED BETAS? IS THERE ANY ACADEMIC SUPPORT FOR YOUR APPROACH?

A. I am not aware of any academic study specifically focused on the optimal relative weight of historical betas to predict future betas. However, the authors of the paper I relied upon for guidance on the calculation of my option-implied betas did attempt to quantify the predictive power of 6-month option-implied ("forward-looking") betas as well as that of 6-month ("180-day"), 1-year, and 5-year historical betas by back-testing historical predictions with actual *expost* results, or "realized" betas, for the 30 companies in the Dow

[109] University of Connecticut, *r Critical Value Table*, available at: https://researchbasics.education.uconn.edu/r_critical_value_table/#
[110] In fact, many researchers use a more lenient "alpha level" of 0.05 for determinations of statistical significance.
[111] University of Connecticut, *Statistical Significance: Is there a relationship (difference) or isn't there a relationship (difference)?* available at https://researchbasics.education.uconn.edu/statistical_significance

Jones Index. In addition to using each of the betas above independently, they also measured the predictive power of a "mixed" beta consisting of a simple average of the six-month option-implied beta and the 6-month historical beta.

Their conclusions for predicting 6-month future betas are as follows:

> The forward-looking beta outperforms the other methods ten times, and the same is true for the 180-day historical beta. The mixed beta is the best performer in seven cases, and the 1-year historical beta in three cases. The 5-year historical beta is always outperformed by at least one other method, and it often ranks last. The 180-day historical beta clearly dominates the two other historical methods.[112]

Their conclusions for predicting 1-year and 2-year future betas are as follows:

> Somewhat unexpectedly, the performance of the forward-looking beta compared to that of the 180-day historical beta is much better [for the one-year prediction] than [for the six-month prediction], and this conclusion carries over to [the two-year prediction]. The mixed beta also perform [sic] well. It is perhaps not surprising that the performance of the 180-day historical beta [for the one- and two-year predictions] is poorer than [for the six-month prediction], because the horizons used in the construction of realized betas are no longer equal to 180 days. What is harder to explain is why the correlation between realized beta and forward-looking beta is in many cases higher [for the one- and two-year predictions] than [for the six-month prediction]. Finally, it is also interesting that the 1-year and 5-year historical betas do not perform well [for the one-and two-year predictions]. In summary, [for the one-year prediction] either the forward-looking beta or the mixed beta is the best performer in nineteen out of thirty cases. [For the two-year prediction], this the case twenty-two times out of thirty.[113]

Their conclusions strongly support the use of 6-month historical betas, 6-month option-implied betas, and/or an average of the two as predictors of future betas 6 months, 1 year, or 2 years into the future. Therefore, considering a historical blended beta in conjunction with option-implied betas to calculate the cost of equity is consistent with

[112] Peter Christoffersen, Kris Jacobs, and Gregory Vainberg, *Forward-Looking Betas*, p. 16 (April 25, 2008) available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=891467.
[113] Id. at 17.

research findings that coming historical and option-implied betas is the best predictor of future betas.

I decided on the composition of my historical blended betas primarily based on the conclusions of the authors above. Though the predictive power of longer-term historical betas seems to be quite reduced, it is not zero, so in an effort to preserve the effect of longer-term market trends in my historical blended betas, I chose to incorporate 5-year historical betas.

Market Risk Premium

Q. WHICH CUMULATIVE PROBABILITY DID YOU USE TO ESTIMATE THE OPTION-IMPLIED GROWTH OF THE S&P 500 IN THE CALCULATION OF YOUR MARKET RISK PREMIUM AND WHY?

A. I used a cumulative probability of 50.0% in the calculation of my option-implied growth for the S&P 500, which results in a value of 6.69% as of February 29, 2024 and a value of 6.81% for the weighted average of the 3 months ending on that date. As stated above, a cumulative probability of 50% represents the median of the probability distribution, or in this case the option-implied market consensus, which is why I have chosen to use this level.

As a matter of fact, using the same probability distribution derived from the options market described above, one can also calculate the cumulative probability implied by a given cost of capital. For instance, using the same risk-free rates and betas for the RFC Gas Proxy Group in my CAPM analysis, Mr. Moul's recommended ROE of 11.75% implies an average market risk premium of 7.7%, an average overall market return of 12.5%, average growth for the S&P 500 of 11.0%, and a cumulative probability of 66.0%. In other words, to achieve the required market growth of 11.0%, reality would have to

exceed 66.0% of the scenarios investors currently see as plausible for the market in aggregate, considerably more than the median market consensus at 50%. To put this into perspective, it is important to note that values on the tails of the probability function get increasingly separated, requiring an ever-increasing growth rate for every additional percentage in the cumulative probability, and making it impossible to ever arrive at 100%.

Using exactly the same methodology using the betas of the RFC Gas Proxy Group, my recommended 8.02% ROE implies an average market risk premium of 3.5%, an average overall market return of 8.4%, average growth for the S&P 500 of 6.9%, and a cumulative probability of 50.3%.

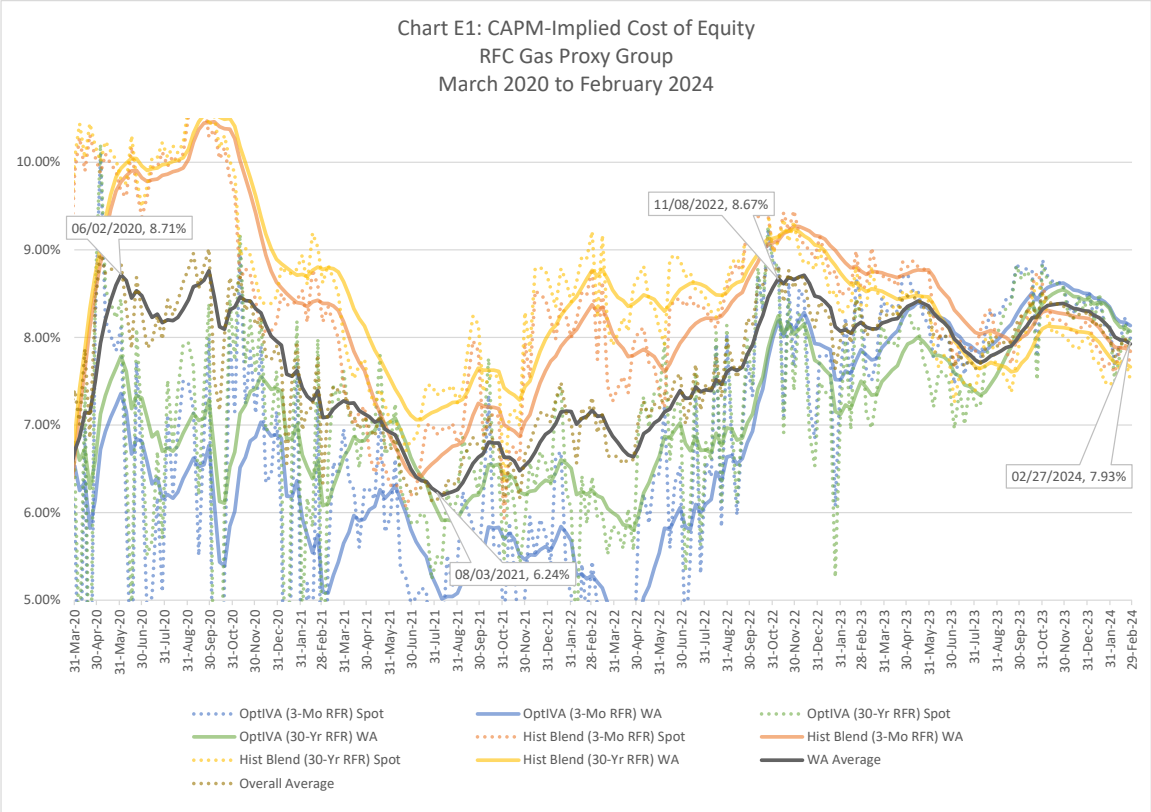
Q. ARE THE CUMULATIVE PROBABILITIES YOU REFER TO IN THIS CASE DIRECTLY COMPARABLE TO THE CUMULATIVE PROBABILITIES YOU HAVE USED OR REFERRED TO IN PRIOR TESTIMONIES YOU HAVE FILED?

A. In late 2020, after significant efforts related to the complexities in processing extremely large volumes of option data, I was finally able to use option-implied volatility and option-implied skewness to come up with a log-normal function that approximates the probability distribution of the possible trajectories for the S&P 500 implied by the options market as of any given day, as explained above. All of the testimonies I have filed since then, starting in 2021, have used this complete and superior approach along with a cumulative probability of 50%, representing the median of the probability distribution, or the option-implied market consensus, to estimate expected market growth. Any references to cumulative probability in these testimonies are directly comparable.

Prior to incorporating skewness into the approximation, I used a normal function to estimate the same probability distribution referred to above. Using a normal distribution

as an approximation is a simplification used commonly in economics, including in the Black-Scholes formula for a single option. However, unlike a skewed log-normal function, a normal function has the same median and mean, meaning that when applied in this case, the option-implied market consensus of this simplified approximation implies market growth of 0%. As a result, before using log-normal functions, I had to resort to finding an adequate level of cumulative probability above 50% to estimate market growth, which is admittedly somewhat subjective. To be conservative, I often used a cumulative probability of 68.3%, which is the probability found within one standard deviation of the mean of a normal distribution, which I understood would lead to a conservatively high estimate for market growth. It is important to point out that the cumulative probabilities of the simplified normal function approximation I used in cases before 2021 cannot be directly compared to the cumulative probabilities of the superior log-normal function approximation, which takes skewness into account. The considerably improved approximation based on a log-normal function eliminates all subjectivity in arriving at the implied market consensus and allows a much better measure of implied cumulative probabilities of deviations from that market consensus.

APPENDIX E. CAPM-IMPLIED COST OF EQUITY FOR RFC GAS PROXY GROUP OVER TIME SINCE ONSET OF COVID PANDEMIC



Notes regarding the content of this chart:

- *The information in this chart is the property of Rothschild Financial Consulting ("RFC") and may not be used for any purpose without the express written consent of RFC. Even when the underlying data are publicly available from another source, the results of analyses performed by RFC and the way of presenting the data are and remain the property of RFC.*

- *The data presented herein may not agree 100% with past recommendations by RFC for numerous reasons, including differences in the underlying proxy group and the fact that this chart represents only results based on the CAPM, whereas RFC usually bases recommendations on the CAPM and other models, such as various forms of the DCF.*

APPENDIX F. RESUME OF AARON L. ROTHSCHILD

SUMMARY

Financial professional providing U.S. public utility commissions financial tools and expert testimony to assist in rate setting for regulated utility companies (e.g., regulated electric distribution providers, natural gas pipelines). Relevant experience includes developing and applying methodologies that directly measure investors' equity return expectations based on stock option prices, applied mathematics research for utility industry as an affiliate of the New England Complex Systems Institute, and serving as Head of Business Analysis for a major U.S. telecom firm in Asia Pacific.

EXPERIENCE

Rothschild Financial Consulting, Ridgefield, CT **November 2001- present**
Independent consulting firm specializing in utility sector
President

- Provide financial expert testimony (e.g., rate of return and M&A) to regulators, policy makers, foundations, and consumer groups in utility rate case proceedings, including representing the California Public Advocates Office and the Wild Tree Foundation in the ongoing California water and energy cost of capital proceedings
- Developed cost of equity models that have been adopted by the Public Service Commission of South Carolina in 2020 (decision upheld by the South Carolina Supreme Court in September 2021) and the Connecticut Public Utilities Regulatory Authority in September 2021
- Developing market-based cost of equity methodology in ongoing regulated natural gas pipeline case before the Federal Energy Regulatory Commission (FERC), including proposing replacing equity analyst earnings per-share forecasts (IBES, Value Line) with options-implied growth expectations to determine authorized return on equity (ROE)
- Present at utility regulation conferences (NARUC/NASUCA and MARC) regarding rate of return, power purchase agreements, complex systems science, and subsidy auctions

360 Networks, Hong Kong **January 2001 - October 2001**
Pioneer of the fiber optic telecommunications industry
Senior Manager

- Business development and investment evaluation
- Negotiated landing rights and formed local partnerships in Korea, Japan, Singapore, and Hong Kong for $1 billion undersea cable project
- Structured fiber optic bandwidth swapping agreement with Enron and Global Crossing
- Established relationships with Hong Kong based Investment Bankers to communicate Asia Pacific objectives and accomplishments to Wall Street

Dantis, Chicago, IL **July 2000- December 2000**
Start-up managed data-hosting services provider
Director

- Built capital raise valuation models and negotiated with potential investors
- Team raised $100M from venture capital firm through valuation negotiations and internal strategic analysis

MFS, MCI-WorldCom, Chicago, Hong Kong, Tokyo September 1996- July 2000
American Telecommunications Company
Head of Business Analysis for Japan operations

- Managed staff of 5 business development analysts
- Raised $80M internally for Japanese national fiber network expansion plan by conducting an investment evaluation and presenting findings to CEO of international operations in London, UK
- Built financial model for local fiber optic investment evaluation that was used by business development offices in Oak Brook, IL and Sydney, Australia

EDUCATION

Vanderbilt University, Nashville, TN 1994-1996
MBA, Finance

- Completed business plan for Nextlink Communications in support of their national fiber optic network expansion, including identifying opportunities from passage of Telecom Act of 1996
- Developed analytical framework to evaluate predictability of rare events
- Provided financial and accounting analysis to Chicago's consumer advocate, the Citizens Utility Board (CUB) as a summer intern

Clark University, Worchester, MA 1990 - 1994
BA, Mathematics

APPENDIX G. TESTIFYING EXPERIENCE OF AARON L. ROTHSCHILD

Filed Rate of Return Testimonies:

California

- Pacific Gas and Electric, Application 22-04-008 et al, Rate of Return/Cost of Capital Mechanism, January 2024
- Liberty Utilities, Application A.23-05-004, Rate of Return, August 2023
- San Gabriel Water Company, Application 23-05-001, Rate of Return, August 2023
- Suburban Water Company, Application 23-05-003, Rate of Return, August 2023
- Great Oaks Water Company, Application 23-05-002, Rate of Return, August 2023
- Incumbent Local Exchange Carriers (ILECs), Application 22-09-003, Rate of Return, May 2023
- Pacific Gas and Electric Company, Application 22-04-008, Rate of Return, August 2022
- Southern California Edison, Application 22-04-009, Rate of Return, August 2022
- San Diego Gas & Electric Company, Application 22-04-012, Rate of Return, August 2022
- California American Water Company, Application 21-05-001, Rate of Return, January 2022
- California Water Service Company, Application 21-05-002, Rate of Return, January 2022
- Golden State Water Company, Application 21-05-003, Rate of Return, January 2022
- San Jose Water Company, Application 21-05-004, Rate of Return, January 2022
- Southern California Edison, Application 21-08-013, Rate of Return/Cost of Capital Mechanism, January 2022
- San Diego Gas & Electric Company, Application 21-08-014, Rate of Return/Cost of Capital Mechanism, January 2022
- Pacific Gas and Electric Company, Application 21-08-015, Rate of Return/Cost of Capital Mechanism, January 2022
- Pacific Gas and Electric Company, Application 21-01-004, Securitization, February 2021
- Pacific Gas and Electric Company, Application 20-04-023, Securitization, October 2020
- Southern California Edison, Application 20-07-008, Securitization, September 2020
- San Diego Gas & Electric Company, Application 19-04-017, Rate of Return, August 2019
- Southern California Gas Company, Application 19-04-016, Rate of Return, August 2019
- Pacific Gas and Electric Company, Application 19-04-015, Rate of Return, August 2019
- Southern California Edison, Application 19-04-014, Rate of Return, August 2019
- Liberty Utilities, Application A.18-05-006, Rate of Return, August 2018
- San Gabriel Water Company, Application 18-05-005, Rate of Return, August 2018
- Suburban Water Company, Application 18-05-004, Rate of Return, August 2018
- Great Oaks Water Company, Application 18-05-001, Rate of Return, August 2018
- California Water Service Company, Application 17-04-006, Rate of Return, August 2017
- California American Water Company, Application 17-04-003, Rate of Return, August 2017
- Golden State Water Company, Application 17-04-002, Rate of Return, August 2017
- San Jose Water Company, Application 17-04-001, Rate of Return, August 2017

Colorado
- Public Service Company of Colorado, Docket No. 11AL-947E, Rate of Return, March 2012

Connecticut
- Connecticut Natural Gas Corporation Docket No. 23-11-02, February 2024
- The Southern Connecticut Gas Company, Docket No. 23-11-02, February 2024
- Connecticut Water Company, Docket No. 23-08-32, Rate of Return, December 2023
- United Illuminating Company, Docket No. 22-08-08, Rate of Return, December 2022
- Aquarion Water Company of Connecticut, Docket No. 22-07-01, Rate of Return, October 2022
- Eversource and United Illuminating, Docket No. 17-12-03RE11, Rate of Return / Interim Rate Reduction, April 2021
- United Water Connecticut, Docket No. 07-05-44, Rate of Return, November 2008
- Valley Water Systems, Docket No. 06-10-07, Rate of Return, May 2007

Delaware
- Tidewater Utilities, Inc., PSC Docket No. 11-397, Rate of Return, April 2012

District of Columbia
- Washington Gas Light Company, Formal Case No. 1169, Rate of Return, May 2023

Florida
- Florida Power & Light (FPL), Docket No. 070001-EI, October 2007
- Florida Power Corp., Docket No. 060001 Fuel Clause, September 2007

New Hampshire
- Liberty Utilities (EnergyNorth Natural Gas) Corp., Docket No. DG-23-23-067, Rate of Return, February 2024
- Liberty Utilities (Granite State Electric) Corp., Docket No. DE-23-05-039, Rate of Return, December 2023

New Jersey
- Aqua New Jersey, Inc., BPU Docket No. WR11120859, Rate of Return, April 2012

Maryland
- Delmarva Power & Light, Case No. 9317, Rate of Return, June 2013
- Columbia Gas of Maryland, Case No. 9316, Rate of Return, May 2013
- Potomac Electric Power Company, Case No. 9286, Rate of Return, March 2012
- Delmarva Power & Light, Case No. 9285, Rate of Return, March 2012

North Dakota
- Montana-Dakota Utilities Co., Case No. PU-20-379, Rate of Return, January 2021
- Otter Tail Power Company, Case No. PU-17-398, Rate of Return, May 2018
- Montana-Dakota Utilities Co., Case No. PU-15-90, Rate of Return, August 2015
- Northern States Power, Case No. PU-400-04-578, Rate of Return, March 2005

Pennsylvania
- UGI Utilities, Inc. – Electric Division, Docket No. R-2022-3037368, Rate of Return, April 2023

- Pennsylvania American Water Company, Docket No. R-2022-3031672 and R-2022-3031673, Rate of Return, July 2022
- UGI Utilities, Inc. – Electric Division, Docket No. R-2021-3023618, Rate of Return, May 2021
- Pennsylvania American Water Company, Docket No. P-2021-3022426, Rate of Return, February 2021
- Audubon Water Company, Docket No. R-2020-3020919, Rate of Return, November 2020
- Pennsylvania American Water Company, Docket No. R-2020-3019369 and R-2020-3019371, Rate of Return, September 2020
- Twin Lakes Utilities, Inc., Docket No. R-2019-3010958, Rate of Return, October 2019
- City of Lancaster Sewer Fund, Docket No. R-2019-3010955, Rate of Return, October 2019
- Community Utilities of Pennsylvania Inc. Wastewater Division, Docket No. R-2019-3008948, Rate of Return, July 2019
- Community Utilities of Pennsylvania Inc. Water Division, Docket No. R-2019-3008947, Rate of Return, July 2019
- Newtown Artesian Water Company, Docket No. R-20019-3006904, Rate of Return, May 2019
- Hidden Valley Utility Services, L.P. – Wastewater Division, Docket No. R-2018-3001307, Rate of Return, September 2018
- Hidden Valley Utility Services, L.P. – Water Division, Docket No. R-2018-3001306, Rate of Return, September 2018
- The York Water Company, Docket No. R-2018-3000019, Rate of Return, August 2018
- SUEZ PA Pennsylvania, Inc., Docket No. R-2018-000834, Rate of Return, July 2018
- UGI Utilities, Inc. – Electric Division, Docket No. R-2017-2640058, Rate of Return, April 2018
- Wellsboro Electric Company, Docket No. R-2016-2531551, Rate of Return, December 2016
- Citizens' Electric Company of Lewisburg, PA, Docket No. R-2016-2531550, Rate of Return, December 2016
- Columbia Gas of Pennsylvania, Inc., Docket No. R-2016-2529660, Rate of Return, June 2016
- Columbia Gas of Pennsylvania, Inc., Docket No. R-2015-2468056, Rate of Return, June 2015
- Pike County Light & Power Company, Docket No. R-2013-2397353 (gas), Rate of Return, April 2014
- Pike County Light & Power Company, Docket No. R-2013-2397237 (electric), Rate of Return, April 2014
- Columbia Water Company, Docket No. R-2013-2360798, Rate of Return, August 2013
- Peoples TWP LLC, Docket No. R-2013-2355886, Rate of Return, July 2013
- City of Dubois – Bureau of Water, Docket No. R-2013-2350509, Rate of Return, July 2013
- City of Lancaster – Sewer Fund, Docket No. R-2012-2310366, Rate of Return, December 2012
- Wellsboro Electric Company, Docket No. R-2010-2172665, Rate of Return, September 2010
- Citizens' Electric Company of Lewisburg, PA, Docket No. R-2010-2172662, Rate of Return, September 2010
- T.W. Phillips Gas and Oil Company, Docket No. R-2010-2167797, Rate of Return, August 2010
- York Water Company, Docket No. R-2010-2157140, Rate of Return, August 2010
- Joint Application of The Peoples Natural Gas Company, Dominion Resources, Inc. and Peoples Hope Gas Company LLC, Docket No. A-2008-2063737, Financial Analysis, December 2008
- York Water Company, Docket No. R-2008-2023067, Rate of Return, August 2008

South Carolina

- Duke Energy Progress, LLC., Docket No. 2023-89-E, Securitization, September 2023
- Dominion Energy South Carolina, Inc., Docket No. 2023-170-G, Rate of Return, July 2023
- Duke Energy Progress, LLC., Docket No. 2022-254-E, Rate of Return, December 2022
- Daufuskie Island Utility Company, Inc., Docket No. 22-142-WS, Rate of Return, September 2022
- Piedmont Natural Gas Company, Inc., Docket No. 22-89-G, Rate of Return, July 2022
- Kiawah Island Utility, Inc., Docket No. 2021-324-WS, Rate of Return, February 2022
- Palmetto Wastewater Reclamation, Inc., Docket No. 2021-153-S, Rate of Return, September 2021
- Dominion Energy South Carolina, Inc., Docket No. 2020-125-E, Rate of Return, November 2020
- Palmetto Utilities, Inc., Docket No. 2019-281-S, Rate of Return, May 2020
- Palmetto Utilities, Inc., Docket No. 2019-281-S, Accounting, May 2020
- Blue Granite Water Company, Docket No. 2019-290-WS, Rate of Return, January 2020

Tennessee

- Kingsport Power Company D/B/A AEP Appalachian Power, Docket No. 21-00107, Rate of Return, March 2022

Vermont

- Central Vermont Public Service Corp., Docket No. 7321, Rate of Return, September 2007

Wisconsin

- American Transmission Company, LLC, ITC, Midwest, LLC, Case No. 19-CV-3418, financial and regulatory analysis regarding requested temporary injunction to halt the construction in Wisconsin of the proposed Cardinal-Hickory Creek transmission line, October 2021

OVERALL COST OF CAPITAL
Peoples Natural Gas Company LLC

	Ratios		Cost Rate		Weighted Cost Rate
					[D]
Long-Term Debt	50.00%	[A]	4.37%	[B]	2.19%
Short-Term Debt	0.00%	[B]	0.00%	[B]	0.00%
Preferred Equity	0.00%	[B]	0.00%	[B]	0.00%
Common Equity	50.00%	[A]	8.02%	[C]	4.01%
	100.00%				**6.20%**

RECOMMENDED RANGES

	Low		High
Proxy Group Cost of Equity Range	7.78%		8.48%
Proxy Group Cost of Equity		8.13%	
Based on RFC Capital Structure Recommendation			
Capital Structure Risk Adjustment [E]		-0.11%	
Adjusted Recommended Cost of Equity Range	**7.67%**		**8.37%**
Company Specific Cost of Equity Recommendation		**8.02%**	
Cost of Capital Range	6.02%		6.37%
Based on Mr. Moul's Capital Structure Recommendation			
Capital Structure Risk Adjustment [F]		-0.30%	
Adjusted Recommended Cost of Equity Range	**7.49%**		**8.19%**
Company Specific Cost of Equity Recommendation		**7.84%**	
Cost of Capital Range	6.07%		6.46%
Comprehensive Cost of Capital Range			
Cost of Debt Range	4.37%		3.64%
Common Equity Ratio Range	50.00%		41.65%
Comprehensive Cost of Capital Range	6.02%		5.61%

Sources:
[A] Recommendation based on Proxy Group capital structures
[B] Mr. Moul's Direct Testimony, Exhibit PRM-1, page 1 of 29
[C] Company Specific Cost of Equity Recommendation based on RFC Capital Structure Recommendation
[D] Ratios times Cost Rate
[E] Not applicable because of recommended Capital Structure within Proxy Group range.
[F] Based on estimate of 0.04% change in Cost of Equity for each 1% difference in Common Equity Ratio compared to the Proxy Group (Exhibit ALR-1 vs. Exhibit ALR-5, page 4).

COST OF EQUITY SUMMARY

RFC Gas Proxy Group (5 Companies)

		Low		High
DCF				
Constant Growth - Sustainable Growth	[A]	8.06%		8.09%
Constant Growth - Option-Implied Growth	[B]	9.42%		9.43%
Non-Constant Growth	[C]	8.40%		8.74%
CAPM				
3-Mo. Weighted Average (Dec. 2023 to Feb. 2024)				
3-Month Treasury Bill Risk-Free Rate	[D]	7.82%		8.22%
30-Year Treasury Bond Risk-Free Rate	[D]	7.62%		8.18%
Spot (Feb. 29, 2024)				
3-Month Treasury Bill Risk-Free Rate	[E]	7.69%		8.09%
30-Year Treasury Bond Risk-Free Rate	[E]	7.50%		8.07%
Average		**8.07%**		**8.40%**
Outer Quartile Range		**7.78%**		**8.48%**
Proxy Group Cost of Equity			**8.13%**	

Sources:
[A] Exhibit ALR-3, page 1
[B] Exhibit ALR-3, page 2
[C] Exhibit ALR-3, page 3 and Exhibit ALR-3, page 4
[D] Exhibit ALR-4, page 1
[E] Exhibit ALR-4, page 5

CONSTANT GROWTH DISCOUNTED CASH FLOW (DCF) - INDICATED COST OF EQUITY
RFC Gas Proxy Group (5 Companies)

			Based on Average Market Price For Year Ending 2/29/2024	Based On Market Price As Of 2/29/2024
1	Dividend Yield On Market Price	[A]	4.03%	4.35%
2	Retention Rate:			
	a) Market-to-Book Ratio	[A]	1.56	1.42
	b) Dividend Yield on Book	[B]	6.30%	6.18%
	c) Expected Return on Equity	[C]	8.60%	8.60%
	d) Retention Rate	[D]	26.74%	28.14%
3	Reinvestment Growth	[E]	2.30%	2.42%
4	New Financing Growth	[F]	1.65%	1.24%
5	Total Estimate of Investor Anticipated Growth	[G]	3.95%	3.66%
6	Increment to Dividend Yield for Growth to Next Year	[H]	0.08%	0.08%
7	**Indicated Cost of Equity**	**[I]**	**8.06%**	**8.09%**

Sources:

[A] Exhibit ALR-5, page 1

[B] Line 1 x Line 2a

[C] Some of the considerations for determining Future Expected Return on Equity:

	Median	Mean	From
Value Line Expectation	**8.50%**	**9.00%**	Exhibit ALR-5, page 2
Return on Equity to Achieve Zacks Growth	7.81%	8.62%	Exhibit ALR-5, page 3
Average Historical Growth	8.93%	8.87%	
Earned Return on Equity in 2023	8.85%	9.05%	Exhibit ALR-5, page 2
Earned Return on Equity in 2022	9.01%	9.64%	Exhibit ALR-5, page 2
Earned Return on Equity in 2021	8.94%	7.93%	Exhibit ALR-5, page 2

[D] 1 - Line 2b / Line 2c

[E] Line 2c x Line 2d

[F] S x V = (Ext. Fin Rate) x (Line 2a - 1) Ext. Fin. Rate = 2.94% From Exhibit ALR-3, page 5

S = rate of continuous new stock financing

V = fraction of funds raised by sale of stock that increases the book value of existing shareholders' common equity

[G] Line 3 + Line 4

[H] Line 1 x one-half of Line 5

[I] Line 1 + Line 5 + Line 6

CONSTANT GROWTH DISCOUNTED CASH FLOW (DCF) - INDICATED COST OF EQUITY
RFC Gas Proxy Group (5 Companies)

			Based On Weighted Averages As Of 2/29/2024	Based On Spot Market Values As Of 2/29/2024
1	Dividend Yield On Market Price	[A]	4.03%	4.35%
2	Total Estimate of Investor Anticipated Growth	[B]	5.28%	4.97%
3	Increment to Dividend Yield for Growth to Next Year	[C]	0.11%	0.11%
4	**Indicated Cost of Equity**	**[D]**	**9.42%**	**9.43%**

Sources:
[A] Exhibit ALR-5, page 1
[B] 6-Month Option-Implied Growth
[C] Line 1 x one-half of Line 2
[D] Line 1 + Line 2 + Line 3

NON-CONSTANT GROWTH DISCOUNTED CASH FLOW (DCF) - INDICATED COST OF EQUITY
(BASED ON VALUE LINE FORECASTS AND CLOSING STOCK PRICE)
RFC Gas Proxy Group

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]
		Forecasted Dividends per Share					Growth	Book Value		Closing Stock Price		Cash Flow From Buying and Selling Stock (At Closing Price)					
		2024	2025	2026	2027	2028	2025-28	2/29/24	2/29/28	2/29/2024	2/29/2028	2024	2025	2026	2027	2028	IRR / DCF
		[A]	[A]	[B]	[B]	[A]	[B]	[C]	[C]	[D]	[E]	[F]	[F]	[F]	[F]	[F]	[G]
ATMOS ENERGY CORP.	ATO	$2.96	$3.22	$3.53	$3.87	$4.25	9.69%	$67.87	$77.42	$112.91	$128.80	($109.95)	$3.22	$3.53	$3.87	$128.80	6.38%
NI SOURCE INC.	NI	$1.00	$1.06	$1.10	$1.15	$1.20	4.22%	$14.15	$13.64	$26.06	$25.12	($25.06)	$1.06	$1.10	$1.15	$25.12	3.42%
N.W. NATURAL	NWN	$1.94	$1.95	$1.96	$1.97	$1.98	0.51%	$32.86	$40.12	$36.74	$44.85	($34.80)	$1.95	$1.96	$1.97	$44.85	10.60%
ONE GAS, INC.	OGS	$2.60	$2.64	$2.71	$2.78	$2.85	2.58%	$46.75	$59.81	$59.60	$76.26	($57.00)	$2.64	$2.71	$2.78	$76.26	10.92%
SPIRE INC.	SR	$2.88	$3.02	$3.20	$3.40	$3.60	6.03%	$49.27	$64.72	$59.32	$77.91	($56.44)	$3.02	$3.20	$3.40	$77.91	12.39%
Maximum		$2.96	$3.22	$3.53	$3.87	$4.25	9.69%	$67.87	$77.42	$112.91	$128.80	($25.06)	$3.22	$3.53	$3.87	$128.80	12.39%
Minimum		$1.00	$1.06	$1.10	$1.15	$1.20	0.51%	$14.15	$13.64	$26.06	$25.12	($109.95)	$1.06	$1.10	$1.15	$25.12	3.42%
Median		$2.60	$2.64	$2.71	$2.78	$2.85	4.22%	$46.75	$59.81	$59.32	$76.26	($56.44)	$2.64	$2.71	$2.78	$76.26	10.60%
Average		$2.28	$2.38	$2.50	$2.63	$2.78	4.61%	$42.18	$51.14	$58.93	$70.59	($56.65)	$2.38	$2.50	$2.63	$70.59	**8.74%**

Sources:

[A] Value Line: Most current data available at time of schedule preparation. 2028 data is VL forecast for 2027-29.

[B] Straight line interpolation based on Value Line data, assuming constant dividend growth for 2025-28.

[C] Straight line interpolation based on Value Line data, assuming constant book value growth for 2025-28.

[D] EOD Data: Market Data as of February 29, 2024.

[E] Stock Price projected assuming constant Market to Book Ratio (Exhibit ALR-5, page 1) and using VL projected Book Value.

[F] Cash Flow from purchasing stock on March 1, 2024, receiving dividends through 2028, and selling on February 29, 2028.
Negative number in 2024 reflects cash outflow required to purchase stock.
Cash flow sources are 1) dividends and 2) proceeds of stock sale.
4 of 4 dividends assumed received in 2024 and 0 of 4 in 2028 based on purchase and sale date.

[G] Total return on equity to investor who purchased, held, and sold stock as described above,
assuming Value Line projections of Dividends and Book Value are correct and
assuming Stock Price grows at same rate as Book Value.
DCF result is an Internal Rate of Return computation made using the "IRR" function built into Microsoft Excel
based on projected cash flows from 2024 to 2028.

NON-CONSTANT GROWTH DISCOUNTED CASH FLOW (DCF) - INDICATED COST OF EQUITY
(BASED ON VALUE LINE FORECASTS AND LTM AVERAGE STOCK PRICE)
RFC Gas Proxy Group

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]
		Forecasted Dividends per Share					Growth	LTM Avg. Book Value		LTM Avg. Stock Price		Cash Flow From Buying and Selling Stock (At LTM Average Price)					
		2024	2025	2026	2027	2028	2025-28	2024	2028	2/29/24	2/29/28	2024	2025	2026	2027	2028	IRR / DCF
		[A]	[A]	[B]	[B]	[A]	[B]	[C]	[C]	[D]	[E]	[F]	[F]	[F]	[F]	[F]	[G]
ATMOS ENERGY CORP.	ATO	$2.96	$3.22	$3.53	$3.87	$4.25	9.69%	$64.36	$73.42	$113.14	$129.06	($110.18)	$3.22	$3.53	$3.87	$129.06	6.37%
NI SOURCE INC.	NI	$1.00	$1.06	$1.10	$1.15	$1.20	4.22%	$13.72	$13.23	$25.91	$24.97	($24.91)	$1.06	$1.10	$1.15	$24.97	3.45%
N.W. NATURAL	NWN	$1.94	$1.95	$1.96	$1.97	$1.98	0.51%	$31.69	$38.69	$42.02	$51.30	($40.08)	$1.95	$1.96	$1.97	$51.30	9.88%
ONE GAS, INC.	OGS	$2.60	$2.64	$2.71	$2.78	$2.85	2.58%	$45.51	$58.23	$69.70	$89.17	($67.10)	$2.64	$2.71	$2.78	$89.17	10.23%
SPIRE INC.	SR	$2.88	$3.02	$3.20	$3.40	$3.60	6.03%	$48.19	$63.30	$62.92	$82.63	($60.04)	$3.02	$3.20	$3.40	$82.63	12.07%
Maximum		$2.96	$3.22	$3.53	$3.87	$4.25	9.69%	$64.36	$73.42	$113.14	$129.06	($24.91)	$3.22	$3.53	$3.87	$129.06	12.07%
Minimum		$1.00	$1.06	$1.10	$1.15	$1.20	0.51%	$13.72	$13.23	$25.91	$24.97	($110.18)	$1.06	$1.10	$1.15	$24.97	3.45%
Median		$2.60	$2.64	$2.71	$2.78	$2.85	4.22%	$45.51	$58.23	$62.92	$82.63	($60.04)	$2.64	$2.71	$2.78	$82.63	9.88%
Average		$2.28	$2.38	$2.50	$2.63	$2.78	4.61%	$40.70	$49.37	$62.74	$75.43	($60.46)	$2.38	$2.50	$2.63	$75.43	**8.40%**

Sources:

[A] Value Line: Most current data available at time of schedule preparation. 2028 data is VL forecast for 2027-29.

[B] Straight line interpolation based on Value Line data, assuming constant dividend growth for 2025-28.

[C] Straight line interpolation based on Value Line data, assuming constant book value growth for 2025-28.

[D] EOD Data: Market Data as of February 29, 2024.

[E] Stock Price projected assuming constant Market to Book Ratio (Exhibit ALR-5, page 1) and using VL projected Book Value.

[F] Cash Flow from purchasing stock on March 1, 2024, receiving dividends through 2028, and selling on February 29, 2028.
Negative number in 2024 reflects cash outflow required to purchase stock.
Cash flow sources are 1) dividends and 2) proceeds of stock sale.
4 of 4 dividends assumed received in 2024 and 0 of 4 in 2028 based on purchase and sale date.

[G] Total return on equity to investor who purchased, held, and sold stock as described above,
assuming Value Line projections of Dividends and Book Value are correct and
assuming Stock Price grows at same rate as Book Value.
DCF result is an Internal Rate of Return computation made using the "IRR" function built into Microsoft Excel
based on projected cash flows from 2024 to 2028.

COMMON SHARES OUTSTANDING AND EXTERNAL FINANCING RATE
RFC Gas Proxy Group

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
		Common Stock Outstanding (Millions of Shares)								Annual Growth Rate		
		2019	2020	2021	2022	2023	2024	2025	2028	2019-23	2023-28	2019-28
		[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[B]	[B]	[B]
ATMOS ENERGY CORP.	ATO	111.3	119.3	125.9	132.4	140.9	148.5	155.0	175.0	6.08%	4.43%	5.16%
NI SOURCE INC.	NI	372.4	382.1	391.8	404.3	411.1	415.0	425.0	450.0	2.51%	1.82%	2.13%
N.W. NATURAL	NWN	28.9	30.5	30.6	31.1	35.5	37.0	38.0	42.0	5.32%	3.40%	4.25%
ONE GAS, INC.	OGS	52.6	52.8	53.2	53.6	55.4	55.5	55.5	57.0	1.30%	0.59%	0.90%
SPIRE INC.	SR	50.7	51.0	51.6	51.7	52.5	53.2	55.5	62.0	0.89%	3.38%	2.27%
Maximum		372.4	382.1	391.8	404.3	411.1	415.0	425.0	450.0	6.08%	4.43%	5.16%
Minimum		28.9	30.5	30.6	31.1	35.5	37.0	38.0	42.0	0.89%	0.59%	0.90%
Median		52.6	52.8	53.2	53.6	55.4	55.5	55.5	62.0	2.51%	3.38%	2.27%
Average		123.2	127.1	130.6	134.6	139.1	141.8	145.8	157.2	3.22%	2.73%	2.94%
								Sustainable Growth	**[C]**			**2.94%**

Sources:
[A] Value Line: Most current data available at time of schedule preparation.
[B] Annualized Growth Rate calculation.
[C] Estimated Sustainable Growth in Common Stock based on analysis of historical and projected growth rates.

CAPITAL ASSET PRICING MODEL (CAPM) - INDICATED COST OF EQUITY

WEIGHTED - All Inputs Weighted From December 2023 to February 2024

RFC Gas Proxy Group

	3-Month Treasury Bill		30-Year Treasury Bond	
	Historical Blended Beta	Forward Beta	Historical Blended Beta	Forward Beta
Risk-Free Rate	5.43%	5.43%	4.24%	4.24%
Beta	0.83	0.97	0.83	0.97
Risk Premium	2.87%	2.87%	4.06%	4.06%
CAPM (Weighted)	7.82%	8.22%	7.62%	8.18%

CAPITAL ASSET PRICING MODEL (CAPM) - RISK-FREE RATE

Spot (Feb. 29, 2024)	
3-Month Treasury Bill	5.45%
30-Year Treasury Bond	4.38%
3-Mo. Weighted Average (Dec. 2023 to Feb. 2024)	
3-Month Treasury Bill	5.43%
30-Year Treasury Bond	4.24%

Source: www.treasury.gov

CAPITAL ASSET PRICING MODEL (CAPM) - BETAS

(BASED ON HISTORICAL AND OPTION-IMPLIED RETURNS)
RFC Gas Proxy Group

Betas	11/28/2023	12/05/2023	12/12/2023	12/19/2023	12/26/2023	01/02/2024	01/09/2024	01/16/2024	01/23/2024	01/30/2024	02/06/2024	02/13/2024	02/20/2024	02/27/2024	Average	Time Avg.
Forward (6 months)	1.02	0.93	0.92	1.01	0.94	0.99	1.01	1.08	1.02	0.98	0.87	0.90	1.01	0.98	0.976	0.972
Historical (6 months)	0.91	0.96	0.97	0.97	0.97	0.97	0.94	0.91	0.90	0.88	0.89	0.88	0.89	0.89	0.925	0.910
Historical (2 yrs)	0.73	0.73	0.73	0.73	0.74	0.74	0.74	0.73	0.73	0.73	0.73	0.74	0.73	0.74	0.734	0.736
Historical (5 yrs)	0.79	0.79	0.78	0.79	0.79	0.79	0.79	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.785	0.784
Weighting																
Forward (6 months)	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%		
Historical (6 months)	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%		
Historical (2 yrs)	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%		
Historical (5 yrs)	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%		
Historical Blended Beta	**0.83**	**0.86**	**0.86**	**0.86**	**0.86**	**0.86**	**0.85**	**0.83**	**0.83**	**0.82**	**0.82**	**0.82**	**0.82**	**0.83**	0.840	0.832
Slope	15%															
Points	0.00	1.00	1.15	1.32	1.52	1.75	2.01	2.31	2.66	3.06	3.52	4.05	4.65	5.35		
Time Weight	0.0%	2.9%	3.3%	3.8%	4.4%	5.1%	5.9%	6.7%	7.7%	8.9%	10.2%	11.8%	13.5%	15.6%		

CAPM Betas	Spot (Feb 27, 2024)	Weighted (Dec 2023 - Feb 2024)
Forward	0.98	0.97
Historical Blended	0.83	0.83

Note: Historical betas are calculated on Tuesdays, following Value Line's methodology. Forward (option-implied) betas are also calculated on Tuesdays for the sake of compatibility.

CAPITAL ASSET PRICING MODEL (CAPM) - MARKET RISK PREMIUM

WEIGHTED - All Inputs Weighted From December 2023 to February 2024

Cumulative Probability	50.00%	
S&P 500 Option-Implied Growth Rate	6.81%	
S&P 500 Dividend Yield	1.49%	
S&P 500 Market Return	8.30%	
	3-Month Treasury Bill	**30-Year Treasury Bond**
Risk-Free Rate	5.43%	4.24%
Option-Implied Market Risk Premium (Weighted)	2.87%	4.06%

CAPITAL ASSET PRICING MODEL (CAPM) - INDICATED COST OF EQUITY

SPOT - All Inputs Based on Last Available Data as of February 29, 2024

RFC Gas Proxy Group

	3-Month Treasury Bill		30-Year Treasury Bond	
	Historical Blended Beta	Forward Beta	Historical Blended Beta	Forward Beta
Risk-Free Rate	5.45%	5.45%	4.38%	4.38%
Beta	0.83	0.98	0.83	0.98
Risk Premium	2.70%	2.70%	3.77%	3.77%
CAPM (Spot)	7.69%	8.09%	7.50%	8.07%

CAPITAL ASSET PRICING MODEL (CAPM) - MARKET RISK PREMIUM

SPOT - All Inputs Based on Last Available Data as of February 29, 2024

Cumulative Probability	50.00%	
S&P 500 Option-Implied Growth Rate	6.69%	
S&P 500 Dividend Yield	1.46%	
S&P 500 Market Return	8.15%	
	3-Month Treasury Bill	**30-Year Treasury Bond**
Risk-Free Rate	5.45%	4.38%
Option-Implied Market Risk Premium (Spot)	2.70%	3.77%

MARKET TO BOOK RATIO AND DIVIDEND YIELD

RFC Gas Proxy Group

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]
		Book Value per Share															
		Actual				**Estimated**			**Market Price**			**Mkt. to Book Ratio**		**Dividend Rate**		**Dividend Yield**	
		12/31/20	**12/31/21**	**12/31/22**	**12/31/23**	**3/1/23**	**2/29/24**	**12/31/24**	**2/29/24**	**LTM High**	**LTM Low**	**2/29/24**	**LTM Avg.**	**MRQ**	**Annual**	**2/29/24**	**LTM Avg.**
		[A]	[A]	[A]	[A]	[B]	[B]	[A]	[C]	[C]	[C]	[D]	[D]	[A]	[E]	[F]	[F]
ATMOS ENERGY CORP.	ATO	$48.18	$53.95	$59.71	$66.85	$60.85	$67.87	$73.20	$112.91	$125.28	$101.00	1.66	1.76	$0.805	$3.220	2.85%	2.85%
NI SOURCE INC.	NI	$13.36	$12.44	$13.33	$13.14	$13.30	$14.15	$19.45	$26.06	$28.95	$22.86	1.84	1.89	$0.265	$1.060	4.07%	4.09%
N.W. NATURAL	NWN	$28.42	$29.05	$30.04	$33.08	$30.53	$32.86	$31.70	$36.74	$49.09	$34.95	1.12	1.33	$0.488	$1.952	5.31%	4.65%
ONE GAS, INC.	OGS	$40.35	$42.01	$43.81	$46.69	$44.27	$46.75	$47.05	$59.60	$83.89	$55.50	1.27	1.53	$0.660	$2.640	4.43%	3.79%
SPIRE INC.	SR	$45.14	$44.19	$46.74	$49.08	$47.11	$49.27	$50.29	$59.32	$72.07	$53.77	1.20	1.31	$0.755	$3.020	5.09%	4.80%
Maximum		$48.18	$53.95	$59.71	$66.85	$60.85	$67.87	$73.20	$112.91	$125.28	$101.00	1.84	1.89	$0.805	$3.220	5.31%	4.80%
Minimum		$13.36	$12.44	$13.33	$13.14	$13.30	$14.15	$19.45	$26.06	$28.95	$22.86	1.12	1.31	$0.265	$1.060	2.85%	2.85%
Median		$40.35	$42.01	$43.81	$46.69	$44.27	$46.75	$47.05	$59.32	$72.07	$53.77	1.27	1.53	$0.660	$2.640	4.43%	4.09%
Average		$35.09	$36.33	$38.73	$41.77	$39.21	$42.18	$44.34	$58.93	$71.85	$53.62	1.42	1.56	$0.595	$2.378	4.35%	4.03%

Sources:
[A] Value Line: Most current data available at time of schedule preparation.
[B] Straight-line interpolation of Actual and Estimated VL year-end values.
[C] EOD Data: Market Data as of February 29, 2024.
[D] Market Price divided by Book Value per Share.
[E] Most Recent Quarterly Dividend multiplied by 4.
[F] Dividend Rate divided by Market Price.

EARNINGS PER SHARE AND RETURN ON EQUITY
RFC Gas Proxy Group

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
		Earnings per Share				**Return on Equity**			
		2020	**2021**	**2022**	**2023**	**2021**	**2022**	**2023**	**VL Future Exp.**
		[A]	[A]	[A]	[A]	[B]	[B]	[B]	[A]
ATMOS ENERGY CORP.	ATO	$4.35	$4.72	$5.12	$5.60	9.24%	9.01%	8.85%	10.00%
NI SOURCE INC.	NI	$1.31	$1.32	$1.37	$1.47	10.23%	10.63%	11.11%	9.50%
N.W. NATURAL	NWN	$2.19	$2.30	$2.56	$2.54	8.00%	8.66%	8.05%	8.50%
ONE GAS, INC.	OGS	$3.51	$3.68	$3.85	$4.08	8.94%	8.97%	9.02%	8.50%
SPIRE INC.	SR	$3.52	$1.44	$4.96	$3.95	3.22%	10.91%	8.24%	8.50%
Maximum		$4.35	$4.72	$5.12	$5.60	10.23%	10.91%	11.11%	10.00%
Minimum		$1.31	$1.32	$1.37	$1.47	3.22%	8.66%	8.05%	8.50%
Median		$3.51	$2.30	$3.85	$3.95	8.94%	9.01%	8.85%	8.50%
Average		$2.98	$2.69	$3.57	$3.53	7.93%	9.64%	9.05%	9.00%

Sources:
[A] Value Line: Most current data available at time of schedule preparation.
[B] Earnings per Share divded by average Book Value. Book Values shown on Exhibit ALR-5, page 1.

RETURN ON EQUITY IMPLIED BY ZACKS GROWTH RATES
RFC Gas Proxy Group

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
				Annual	Analyst	Analyst-Implied		Analyst-Implied		Implied	Analyst-
		Book Value	EPS	Dividend	5 Year	Book Value before SV		Book Value Incl. SV		EPS	Implied
		12/31/23	2023	Rate	Growth Rate	12/31/2027	12/31/2028	12/31/2027	12/31/2028	2028	ROE
		[A]	[A]	[A]	[B]	[C]	[C]	[C]	[C]	[C]	[C]
ATMOS ENERGY CORP.	ATO	$66.85	$5.60	$3.220	7.30%	$78.24	$81.62	$102.46	$114.35	$7.97	7.35%
NI SOURCE INC.	NI	$13.14	$1.47	$1.060	7.20%	$15.10	$15.68	$17.50	$18.86	$2.08	11.45%
N.W. NATURAL	NWN	$33.08	$2.54	$1.952	3.70%	$35.66	$36.36	$41.08	$43.40	$3.05	7.21%
ONE GAS, INC.	OGS	$46.69	$4.08	$2.640	5.00%	$53.21	$55.04	$55.05	$57.43	$5.21	9.26%
SPIRE INC.	SR	$49.08	$3.95	$3.020	5.60%	$53.35	$54.57	$64.10	$68.65	$5.19	7.81%
Maximum		$66.85	$5.60	$3.220	7.30%	$78.24	$81.62	$102.46	$114.35	$7.97	11.45%
Minimum		$13.14	$1.47	$1.060	3.70%	$15.10	$15.68	$17.50	$18.86	$2.08	7.21%
Median		$46.69	$3.95	$2.640	5.60%	$53.21	$54.57	$55.05	$57.43	$5.19	7.81%
Average		$41.77	$3.53	$2.378	5.76%	$47.11	$48.66	$56.04	$60.54	$4.70	8.62%

Sources:
[A] Value Line: Most current data available at time of schedule preparation.
[B] Zacks: Data as of March 01, 2024.
[C] Analyst-Implied Book Value and Return on Equity is obtained by escalating both Dividends and Earnings per Share by the stated Analyst Growth Rate and adding Earnings and subtracting Dividends for each projected year.
"SV" = S X V, where S = rate of continuous new stock financing and V = rate of return on common equity investment.

CAPITAL STRUCTURE WITH SHORT TERM DEBT
RFC Gas Proxy Group

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]
		% Common Equity					($ millions)						Percentage			
		2019	2020	2021	2022	2023	Total Debt	LT Debt	ST Debt	Pfd Stock	Equity	Total Capital	LT Debt	ST Debt	Pfd Stock	Equity Ratio
		[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[B]	[B]	[B]	[B]
ATMOS ENERGY CORP.	ATO	65.7%	62.0%	60.0%	61.6%	62.1%	$ 7,540.8	$ 7,529.3	$ 11.5	$ -	$ 12,336.9	$ 19,877.7	37.9%	0.1%	0.0%	62.1%
NI SOURCE INC.	NI	37.9%	36.9%	32.5%	33.5%	31.6%	$ 13,258.0	$ 11,011.3	$ 2,246.7	$ 1,547.0	$ 5,801.8	$ 20,606.8	53.4%	10.9%	7.5%	28.2%
N.W. NATURAL	NWN	51.9%	51.8%	50.8%	47.2%	48.5%	$ 1,686.3	$ 1,424.6	$ 261.7	$ -	$ 1,341.6	$ 3,027.9	47.0%	8.6%	0.0%	44.3%
ONE GAS, INC.	OGS	61.4%	62.3%	58.5%	38.9%	49.3%	$ 2,990.0	$ 1,862.6	$ 1,127.4	$ -	$ 1,811.2	$ 4,801.2	38.8%	23.5%	0.0%	37.7%
SPIRE INC.	SR	54.3%	49.7%	46.1%	43.2%	44.6%	$ 4,752.3	$ 3,247.8	$ 1,504.5	$ 242.0	$ 2,809.5	$ 7,803.8	41.6%	19.3%	3.1%	36.0%
Maximum		65.7%	62.3%	60.0%	61.6%	62.1%	$ 13,258.0	$ 11,011.3	$ 2,246.7	$ 1,547.0	$ 12,336.9	$ 20,606.8	53.4%	23.5%	7.5%	62.1%
Minimum		37.9%	36.9%	32.5%	33.5%	31.6%	$ 1,686.3	$ 1,424.6	$ 11.5	$ -	$ 1,341.6	$ 3,027.9	37.9%	0.1%	0.0%	28.2%
Median		54.3%	51.8%	50.8%	43.2%	48.5%	$ 4,752.3	$ 3,247.8	$ 1,127.4	$ -	$ 2,809.5	$ 7,803.8	41.6%	10.9%	0.0%	37.7%
Average		54.2%	52.5%	49.6%	44.9%	47.2%	$ 6,045.5	$ 5,015.1	$ 1,030.4	$ 357.8	$ 4,820.2	$ 11,223.5	43.8%	12.5%	2.1%	**41.7%**

Sources:

[A] Value Line: Most current data available at time of schedule preparation.

[B] Percentage calculated on Total Capital including Short Term Debt.

CAPITAL STRUCTURE WITHOUT SHORT TERM DEBT
RFC Gas Proxy Group

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]
		% Common Equity					($ millions)						Percentage			
		2019	2020	2021	2022	2023	Total Debt	LT Debt	ST Debt	Pfd Stock	Equity	Total Capital	LT Debt	ST Debt	Pfd Stock	Equity Ratio
		[A]	[A]	[A]	[A]	[A]	[A]	[A]	[B]	[A]	[A]	[A]	[B]	[B]	[B]	[B]
ATMOS ENERGY CORP.	ATO	65.7%	62.0%	60.0%	61.6%	62.1%	$ 7,540.8	$ 7,529.3		$ -	$ 12,336.9	$ 19,866.2	37.9%	0.0%	0.0%	62.1%
NI SOURCE INC.	NI	37.9%	36.9%	32.5%	33.5%	31.6%	$ 13,258.0	$ 11,011.3		$ 1,547.0	$ 5,801.8	$ 18,360.1	60.0%	0.0%	8.4%	31.6%
N.W. NATURAL	NWN	51.9%	51.8%	50.8%	47.2%	48.5%	$ 1,686.3	$ 1,424.6		$ -	$ 1,341.6	$ 2,766.2	51.5%	0.0%	0.0%	48.5%
ONE GAS, INC.	OGS	61.4%	62.3%	58.5%	38.9%	49.3%	$ 2,990.0	$ 1,862.6		$ -	$ 1,811.2	$ 3,673.8	50.7%	0.0%	0.0%	49.3%
SPIRE INC.	SR	54.3%	49.7%	46.1%	43.2%	44.6%	$ 4,752.3	$ 3,247.8		$ 242.0	$ 2,809.5	$ 6,299.3	51.6%	0.0%	3.8%	44.6%
Maximum		65.7%	62.3%	60.0%	61.6%	62.1%	$ 13,258.0	$ 11,011.3		$ 1,547.0	$ 12,336.9	$ 19,866.2	60.0%	0.0%	8.4%	62.1%
Minimum		37.9%	36.9%	32.5%	33.5%	31.6%	$ 1,686.3	$ 1,424.6		$ -	$ 1,341.6	$ 2,766.2	37.9%	0.0%	0.0%	31.6%
Median		54.3%	51.8%	50.8%	43.2%	48.5%	$ 4,752.3	$ 3,247.8		$ -	$ 2,809.5	$ 6,299.3	51.5%	0.0%	0.0%	48.5%
Average		54.2%	52.5%	49.6%	44.9%	47.2%	$ 6,045.5	$ 5,015.1		$ 357.8	$ 4,820.2	$ 10,193.1	50.3%	0.0%	2.5%	**47.2%**

Sources:
[A] Value Line: Most current data available at time of schedule preparation.
[B] Percentage calculated on Total Capital excluding Short Term Debt.

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XII-006

Witness: Moul, Paul Title: Managing Consultant, P. Moul & Associates

Question: Reference Schedule 3 [2 of 2] of Mr. Moul's direct testimony, Peoples Statement No. 12. Please provide the percentage of operating income of each of the eight (8) companies in Mr. Moul's proxy group derived from (a) regulated gas distribution operations and (b) total regulated distribution operations, including water, gas, and electricity.

Answer: a. Please refer to the attachment.

b. There are only two companies in the group that provide electric utility service. For Chesapeake, gas distribution represents 91% of regulated revenues. NiSource obtains 69% of its regulated revenue from gas distribution, 71% of its regulated earnings from gas distribution, and 68% of its regulated assets from gas distribution.

Submit Date: 2/26/2024

OCA-XII-006 Attachment

Company	Regulated and total Revenues Percent	Regulated ($000)	Total ($000)
Atmos Energy Corp.	96%	$ 4,031,936	$ 4,201,662
Chesapeake Utilities Corp.	62%	422,894	680,704
New Jersey Resources Corp.	39%	1,127,417	2,905,979
NiSource, Inc.	100%	5,838,100	5,850,600
Northwest Natural Gas	95%	989,752	1,037,353
One Gas, Inc.	100%	2,578,005	2,578,005
Southwest Gas Corp.	39%	1,935,069	4,960,009
Spire, Inc.	88%	1,945,600	2,198,500
Average	77%		

Company	Regulated and total Earnings Percent	Regulated ($000)	Total ($000)
Atmos Energy Corp.	67%	$ 521,977	$ 774,398
Chesapeake Utilities Corp.	81%	115,317	142,933
New Jersey Resources Corp.	58%	140,124	240,321
NiSource, Inc.	101%	1,278,200	1,265,800
Northwest Natural Gas	92%	79,690	86,303
One Gas, Inc.	100%	221,742	221,742
Southwest Gas Corp.[(1)]	99%	154,380	156,445
Spire, Inc.	83%	339,900	408,200
Average	85%		

[(1)] Excluding Segment losses

Company	Regulated and total Assets Percent	Regulated ($000)	Total ($000)
Atmos Energy Corp.	97%	$ 21,424,586	$ 22,192,989
Chesapeake Utilities Corp.	77%	1,716,255	2,215,037
New Jersey Resources Corp.	64%	4,030,686	6,261,416
NiSource, Inc.	93%	24,979,100	26,736,600
Northwest Natural Gas	93%	4,392,699	4,748,326
One Gas, Inc.	100%	7,776,396	7,776,396
Southwest Gas Corp.	67%	8,803,681	13,196,614
Spire, Inc.	80%	8,042,800	10,083,700
Average	84%		

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission,	:
	:
v.	: Docket No. R- 2023-3044549
	:
Peoples Natural Gas Company LLC	:
	:

VERIFICATION

I, Aaron L. Rothschild, hereby state that the facts above set forth in my Direct Testimony, OCA Statement 3, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: March 22, 2024

Signature: Aaron Rothschild

Aaron L. Rothschild

Address: Rothschild Financial Consulting
15 Lake Road,
Ridgefield, CT

OCA STATEMENT 4

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No. R-2023-3044549
	:	
	:	
Peoples Natural Gas Company LLC	:	

DIRECT TESTIMONY
OF
CLARENCE L. JOHNSON

ON BEHALF OF
OFFICE OF CONSUMER ADVOCATE

March 22, 2024

DIRECT TESTIMONY OF CLARENCE JOHNSON

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Clarence L. Johnson. My business address is 3707 Robinson Ave, Austin, Texas 78722.

Q. ON WHOSE BEHALF ARE YOU PRESENTING TESTIMONY IN THIS PROCEEDING?

A. I am presenting testimony on behalf of the Pennsylvania Office of Consumer Advocate ("OCA").

Q. WHAT IS YOUR CURRENT EMPLOYMENT?

A. I am self-employed as a consultant providing technical analysis, advice, and testimony regarding energy and utility regulatory issues.

Q. DO YOU HAVE PREVIOUS EXPERIENCE AS AN EXPERT ON REGULATED UTILITY MATTERS?

A. Yes. I have 40 years of experience as a utility regulatory expert, including 25 years as director of regulatory analysis for the Texas Office of Public Utility Counsel ("OPC"). As a consultant, I have provided expert advice, assistance, and testimony on utility-related issues to a number of parties. My clients have included state consumer advocate offices, customer groups, and various coalitions of municipalities in Texas. Municipalities in Texas act as original jurisdiction regulators over electric utility and gas utility rates within city boundaries. I have previously filed testimony in PECO, First Energy, and Duquesne rate cases in Pennsylvania.

Q. HAVE YOU PROVIDED AN ATTACHMENT WHICH DETAILS YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE?

A. Yes. Please see Appendix A. This includes a list of testimony over my career.

Q. PLEASE OUTLINE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.

A. I have a B.S. in Political Science and a M.A. in Urban Studies from the University of Houston. My graduate degree is in an interdisciplinary program offered by the University of Houston's College of Social Science, which incorporated substantial training in economics, including course work in the application of cost-benefit analysis to public policy. During my previous tenure at OPC, I gained experience in virtually all phases of economic review required for the ratemaking process. I was chairman of the Economics and Finance Committee of the National Association of State Utility Consumer Advocates ("NASUCA") and served as a presenter for NASUCA's workshops and panels on cost allocation and rate design, demand-side management incentives, market power, load retention rates and electric utility competition.

I have previously filed testimony in approximately 170 proceedings at the Public Utility Commission of Texas, Texas Railroad Commission, Pennsylvania Public Utility Commission, Maryland Public Service Commission and Connecticut Public Utility Regulatory Authority.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?

A. My testimony will address cost allocation and rate design issues pertaining to the Peoples Natural Gas Company LLC ("Peoples" or "Company") base rate increase requested in this

docket. For purposes of comparability only, my analysis generally utilizes the revenue requirements and schedules filed by the Company. My use of Peoples' filed costs and revenues is not agreement or acceptance of the Company's requested revenues. OCA witnesses Dante Mugrace and Aaron Rothschild will address the Company's proposed revenue requirement and authorized rate of return.

Q. WHAT DOCUMENTS HAVE YOU REVIEWED IN PREPARING THIS TESTIMONY?

A. I reviewed relevant testimony and exhibits in Peoples' rate case filing. I also propounded interrogatories to the Company and reviewed the responses and accompanying attachments.

II. SUMMARY

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS.

A. My recommendations are as follows:

- My testimony opposes the customer classification of distribution mains. The minimum system concept, which Peoples utilizes for classifying 48% of mains on a customer basis, is flawed, inconsistent with cost causation, and contrary to Commission precedent.
- My testimony recommends adoption of the Peak & Average method as the demand allocation for mains.
- The Company identified $1.3 million of costs associated with six account executives who assist large commercial and industrial customers. My testimony recommends assigning these costs to the MGS, MLS, and LGS classes in the CCOS study.

- My principal recommendation is to adopt the Peak & Average CCOS study, as adjusted for the account executive cost above, as the method of allocating the system base revenue increase to customer classes.
- The Company proposes an increase up to 48% in the residential customer charge. This is an excessive and unreasonable increase which adversely affects low usage customers, reduces customers' control over their gas bill, and discourages customers from undertaking energy efficiency measures. My analysis indicates that a customer charge of $9.00 would recover costs which vary directly with the number of customers. My recommendation is to adopt a $14.50 residential customer charge, which is the current customer charge for most Peoples' residential customers.
- The Company proposes the Weather Normalization Adjustment tariff, which would automatically charge or credit customers for weather which is above or below the Company's calculation of normal historic weather patterns as calculated based in heating degree days. My recommendation is to reject this proposal.
- The Company proposes to expand the negotiated rate contract tariff by including electricity as a competitive alternative that justifies negotiated rate treatment. My recommendation is to reject this proposal.

III. CLASS COST OF SERVICE STUDY

A. Overview

Q. WHAT IS A CLASS COST OF SERVICE STUDY (CCOSS)?

A. The CCOSS is a fully allocated cost study that distributes the Company's costs to customer classes. The intent of the study is to allocate costs based on cost causation, generally resulting in a portion of costs allocated on causal measures and the remainder of indirect costs following those costs. The CCOSS is at best a general benchmark for evaluating customer class cost responsibility. The CCOSS can provide guidance to the regulator, but considerations other than the CCOSS also are appropriate in determining the ultimate allocation of costs among customer classes. The CCOSS provides rates of return for each customer class at current and proposed class rates. Sometimes the class rates of return are divided by the total retail rate of return to arrive at a relative rate of return (RROR). The relative rate of return (or unitized return) at present rates may be used as a benchmark for guiding the direction of revenue changes at the class level. The CCOSS also provides class required revenues based upon equalized rates of return (all classes' revenue produce the proposed overall retail rate of return). The class revenues at equalized rates of return can be used as a rough target for apportioning class revenue increases, but the results at equalized rates of return do not necessarily dictate the exact levels of class revenue requirement . The class revenues may depart from equalized rates of return in order to recognize rate gradualism, relative risks associated with serving each class, or other non-cost considerations. However, the resulting revenues indicated by the CCOSS may provide

useful information regarding the equitable distribution of a system revenue increase among customer classes.

Q. HOW IS THE COST CAUSATION CRITERION APPLIED IN THE CCOSS?

A. Some costs are incurred directly to serve only an individual customer or set of customers. But these instances are relatively rare. Many of a utility's costs are indivisible.

The provision of gas utility services is predominated by common and joint costs, which either support the overall enterprise or produce shared benefits for all or most customers. These costs often are assigned based upon indirect, and often weak, measures of causation. For example, overhead costs, such as Board of Director fees, might be allocated based upon measures as diverse as revenues, labor costs, energy sales, plant or demand. No single objective economic basis supports the allocation of these costs; therefore, the allocation decisions are subjective or based on ratemaking conventions. Ideally, the analyst selects a method that best recognizes the manner in which customer classes' characteristics contributed to the incurrence of utility investments and expenses. The manner in which a utility plans and installs an investment often informs the analyst's evaluation of causal factors related to classification or allocation of the investment.

The three major steps of the embedded cost of service study are functionalization, classification, and allocation. Functionalization is the procedure for separating costs into functional segments, such as production, transmission, and distribution. The next two accounting steps, classification and allocation, facilitate the recognition of causation. The classification procedure, which pools costs into general categories of causation (i.e., demand, customer, commodity), is an intermediate step in determining the allocation

factors that are used to divide costs among jurisdictions and customer classes. The allocation step determines the appropriate percentage of a particular FERC account which is attributed to each customer class.

Q. CAN YOU PROVIDE MORE DETAIL REGARDING THE DEVELOPMENT OF ALLOCATION FACTORS FOR DISTRIBUTION COST OF SERVICE STUDIES?

A. Yes. The principal external allocation factors in the CCOSS are customer, demand, and energy use allocators. Customer allocators are based on class customer count as a percentage of total retail customer count. Sometimes weighting factors are applied to the customer count in order to reflect differences in cost per customer. For instance, customer allocators applied to service drops may be weighted to reflect the differences in the cost of average service drops for each customer class.

The predominant demand allocation factor for the distribution system is non-coincident peak demand (NCP). NCP is based on the maximum demand for the class. Since classes may incur peak demand in different time periods, the NCP method is said to reflect demand diversity on the system. Each class's demand allocator is the ratio of the class peak demand relative to the sum of all classes' maximum demands. Commodity or throughput allocation factors, based on annual usage, are used to represent Average Demand in the CCOSS. Peak Demand and Average Demand reflect distinct dimensions of causality and the manner in which customers benefit from the system.

Indirect costs in the CCOSS usually are allocated on the basis of internal allocation factors which "follow" the allocation of direct costs. An example is the labor allocator, which may be used to allocate administrative & general expenses; the labor allocator will

be driven by the labor portion of accounts which are classified as customer, demand, or both. A substantial portion of the customer and demand costs in the CCOSS will consist of indirect costs which are not inherently customer or demand related, but which follow the customer/demand classification of other accounts. This explains in part why the results of a CCOSS frequently are sensitive to small changes in the customer/demand classification for certain accounts.

Q. PLEASE DESCRIBE YOUR REVIEW OF THE CCOSS PRESENTED BY THE COMPANY.

A. My analysis focused on the CCOSS for Peoples combined divisions. I evaluated the studies for consistency and accuracy in the allocation of costs among classes. Based on my review, the allocation or classification of several CCOSS elements were identified as insufficiently justified or warranting improvement. My testimony proposes modifications to the treatment of those costs in the CCOSS, discussed in subsections III.(B) through III.(C) below. These changes affect my recommendations with respect to class revenue distribution. My recommendations focus on a limited number of CCOSS issues; omission of other issues should not be construed as agreement with all other aspects of the Company's cost studies. The OCA does not agree with the proposed revenue requirements in the CCOSS and OCA witnesses Mugrace and Rothchild make alternative recommendations concerning the overall revenue requirement that should be approved in this case. Thus, the revised versions of the CCOSS should be used only to examine class cost relationships rather than absolute revenue levels.

B. Distribution Mains

Q. WHAT PORTION OF THE DISTRIBUTION PLANT ALLOCATION WILL YOU ADDRESS?

A. This section of my testimony will address Peoples' classification and allocation of distribution mains. The gas utility's cost structure is dominated by mains that deliver consumable gas from the transmission or production source to the network of end users. The CCOSS classification of mains plant investment indirectly dictates the allocation of related O&M expenses, as well as much of the utility's administrative expense and general plant. Therefore, the decisions with respect to allocation of mains cost are an overwhelming factor in determining class results.

Q. HOW DOES PEOPLES CLASSIFY DISTRIBUTION MAINS?

A. Peoples proposes a CCOSS for the combined system which classifies Mains 48% to Customer and 52% to Demand, with Demand based solely on the basis of Design Day Demand.[1] Peoples utilizes the minimum system method to support the customer component of its proposal. The Company also presents an alternative CCOSS which classifies Mains only to Demand, with Demand based on a Peak & Average methodology. The Company's preferred CCOSS study, which allocates almost half of Mains cost on a customer basis, is detrimental to residential customer interests because a customer allocation assigns 92% of the cost to the residential class. By contrast, the Design Day

[1] Design Day Demand is based on a Max Day requirement for meeting typically 1 in 15 year Heating Degree Day (HDD) conditions. Mains customer percentages are from Response to OCA V-5 (attachment omitted) and OCA V-7, which are jointly attached as CJ Exhibit 4.

allocation factor assigns 61% and Peak & Average assigns 57% of cost to the residential class. [2]

Q. WHAT IS YOUR POSITION REGARDING THE CLASSIFICATION AND ALLOCATION OF DISTRIBUTION MAINS?

A. I disagree with the Company's proposal to classify part of distribution mains as customer-related. In my view, Peak & Average is more appropriate. My testimony will first address my objection to classifying mains as customer-related, and subsequently explain my support for Peak & Average as the best approach to classifying and allocating mains.

Q. PLEASE ELABORATE ON THE APPROPRIATE METHOD FOR DETERMINING CLASSIFICATION OF DELIVERY INFRASTRUCTURE.

A. My principal recommendation is to classify 100% of mains as demand-related (Max Demand and Average Demand) and classify 100% of services and meters as customer-related. By establishing a clear demarcation for facilities classified as either 100% demand-related or 100% customer-related, the regulatory authorities avoid the complications associated with relying upon minimum system studies. A 2020 manual on regulatory practices refers to this classification as the basic customer method and concluded that the method is "the most equitable solution for the vast majority of utilities."[3] Similarly, the National Association of Regulatory Commissioners (NARUC) Gas Utilities Rate Design Manual refers to the "basic system theory" as classifying only those facilities

[2] Tab "Factors" in Attachment to Response to OCA V-1(a).

[3] Electric Utility Cost Allocation for a New Era, A Manual" (p. 145) Regulatory Assistance Project, Lazar, Chernick, and Marcus (Jan. 2020). "The basic customer method counts only customer specific plant as customer-related and the entire shared distribution network as demand or energy related."

which vary directly with the number of customers, such meters, regulators, and taps, as customer related.[4]

1. Minimum System Method Is Flawed

Q. HOW DOES THE COMPANY DETERMINE THAT 48% OF MAINS SHOULD BE CLASSIFIED AS CUSTOMER?

A. Peoples relies on the minimum system methodology to quantify the customer classification ratio.[5] This requires the development of a minimum system study that produces the 48% classification input to the CCOSS.

Q. WHAT IS A MINIMUM DISTRIBUTION SYSTEM STUDY?

A. The minimum system study attempts to develop the cost of a hypothetical distribution system with no gas load carrying capability. Because the minimum system, in theory, does not reflect the cost of sizing the main to carry any volume of gas, the analyst assumes that the costs are not demand-related and should be allocated on a customer basis. Most such studies either identify minimum size plant components or perform a statistical regression analysis to determine the hypothetical cost of a system which has zero load carrying capability. The nature of a minimum system study—developing a theoretical cost structure for a distribution system which is uninfluenced by demand—can produce a wide range of results, depending on the assumptions made by the analyst. The minimum system concept is an abstraction. In this case, the Companies did not perform a zero intercept study, but

[4] NARUC Gas Utility Rate Design Manual at 23, 1968.
[5] Peoples Statement No. 15 at page 15.

instead used the minimum size mains (defined as 2 inch diameter) with an adjustment to remove any load carrying capability associated with that size.[6]

Q. GIVEN THAT THE MINIMUM SYSTEM IS AN ABSTRACTION, SHOULD THE COMMISSION RELY UPON IT TO ALLOCATE COSTS?

A. In my opinion, no. The two inch main, which is used as the minimum size main, is adjusted to remove the cost of gas carrying capability—essentially adjusting the cost to zero or no-load size. Zero inch mains do not exist because no one would ever manufacture or purchase distribution mains which are incapable of delivering gas. Therefore, estimating the cost is speculative. Given this lack of realism, we can only hypothesize whether such a phantom system would be required to meet safety standards, to be buried, or to incur indirect costs such as stores and construction overhead. These are factors included in the two inch main cost which are caused by external requirements other than the number of customers. I am unconvinced that the cost produced by this method will vary with changes in the number of customers on the system.

Q. DO ANY REGULATORY TREATISES SUPPORT YOUR SKEPTICISM THAT THE MINIMUM SYSTEM IDENTIFIES COSTS WHICH VARY WITH THE NUMBER OF CUSTOMERS?

A. The foundational *Principles of Public Utility Rates* addresses this question. Although the example is related to electric distribution lines, the conclusion is also applicable to gas

[6] The zero intercept method uses a statistical equation to project the price of a main if the size is extrapolated to zero load. Although the method is supposed to predict a zero size main cost, the statistical method raises other concerns about the reliability of the result.

mains. Dr. James Bonbright's critique of the minimum distribution system concept is frequently cited by cost analysts:

> [T]he annual costs of this phantom, minimum sized distribution system are treated as customer costs and are deducted from the annual costs of the existing system, only the balance being included among those demand-related costs…. Their inclusion among the customer costs is defended on the ground that, since they vary directly with area of the distribution system (or else with the lengths of the distribution lines, depending on the type of distribution system), they therefore vary indirectly with the number of customers.
>
> What this last-named cost imputation overlooks, of course is the very weak correlation between the area (or the mileage) of a distribution system and the number of customers served by this system. For it makes no allowance for the density factor (customers per linear mile or per square mile). Indeed, if the company's entire service area stays fixed, an increase in number of customers does not necessarily betoken any increase whatever in the costs of a minimum-sized distribution system.[7]

The implication of Dr. Bonbright's conclusion is that this "residual" cost of the distribution system (i.e. the cost ascribed to the customer classification) is not closely related to either demand or customer factors, but instead varies on the basis of less easily discerned geographic variables such as customer density.

Q. EVEN IF THE MINIMUM PLANT STUDY IDENTIFIES COSTS WHICH ARE NEITHER CUSTOMER NOR DEMAND-RELATED, DOES IT FOLLOW THAT SUCH COSTS SHOULD BE ALLOCATED ON CUSTOMER COUNT?

A. No, consistent with Dr. Bonbright's conclusion that the hypothetical minimum costs should be regarded as inherently unallocable:

[7] James C. Bonbright, *Principles of Public Utility Rates*, Columbia University Press, 347-349 (1961).

> If the cost is neither demand nor customer related…to which cost function does it then belong? The only defensible answer, in my opinion, is that it belongs to none of them. Instead, it should be recognized as a strictly unallocable portion of total costs.[8]

As noted in the previous passage, the accuracy of a customer allocator is distorted by variations in spatial density among customers. A number of other factors, which are not clearly related to either customers or demand, such as economies of scale in facility costs, safety requirements, and minimizing gas losses influence distribution costs. Dr. Bonbright's conclusion that the minimum system investment should be treated as "unallocable" is consistent with allocating those costs in proportion to the remaining allocable costs, a typical method for allocating costs without a clear causal basis. Because distribution investment is overwhelmingly allocable on a demand basis, classifying the residual minimum plant amount as demand-related achieves basically the same result.

Q. IN STATEMENT 15, PEOPLES WITNESS ZARUMBA JUSTIFIES A CUSTOMER CLASSIFICATION BECAUSE "THE TOTAL INSTALLED FOOTAGE OF DISTRIBUTION MAINS IS INFLUENCED BY THE NEED TO EXPAND THE DISTRIBUTION SYSTEM GRID TO CONNECT NEW CUSTOMERS TO THE SYSTEM." (PAGE 22) DO YOU AGREE?

A. No. The assumption that the footage of "the distribution system grid" varies with number of customers is unrealistic. Adding customers to the system without increasing peak demand does not necessarily lead to more footage of mains. The previously cited RAP

[8] Bonbright at 347-349.

Manual [9] provides several examples: (1) dividing a home into two dwellings adds new customers likely without any additional utility investment other than perhaps a new meter; (2) the shared distribution investment on a block with four large customers can be the same as a block with 20 smaller customers who have the same aggregate load characteristics; and (3) the prospect of adding revenues from a few new commercial customers may induce the utility to spend considerably more to extend the distribution system than it would invest for adding dozens of residential customers.

Q. YOU MENTIONED THAT THE COMPANY'S MINIMUM SYSTEM STUDY INCLUDED AN ADIUSTMENT TO REMOVE CAPACITY COST FROM THE 2 INCH MINIMUM SIZE MAINS. DO YOU VIEW THE ADJUSTMENT AS ADEQUATE?

A. No. The 5.6% reduction to the minimum system cost is likely insufficient.[10] The ability to perform such an adjustment is almost intractable, since speculative assumptions are necessary to develop the cost of a delivery system which cannot carry load. The Company's calculation essentially assumes that 2-inch main plant cost can be adjusted by a percentage equal to the ratio of 2-inch pipe capacity per mile to system design day capacity per mile. The adjustment does not apply a unit dollar cost to the 2-inch main capacity per foot, and therefore sheds little light on the more difficult question of the cost or value of the main's load carrying capability. The demand adjustment is intended to correct the double-

[9] Electric Utility Cost Allocation for a New Era, A Manual" (p. 147) Regulatory Assistance Project, Lazar, Chernick, and Marcus (Jan. 2020). Although the Manual refers to electric utilities, distribution mains are directly analogous to distribution conductors.

[10] For the combined system, the minimum system share of total mains is reduced from 51% to 48%.

counting of demand costs inherent in the minimum system, which overcharges low use and residential class customers.[11] However, the Company's adjustment cannot tell us whether the adjustment or credit to those customers is adequate or accurate.

Q. DO YOU HAVE ANY EVIDENCE THAT THE COMPANY'S ADJUSTMENT TO THE MINIMUM SYSTEM STUDY IS INSUFFICIENT?

A. Yes. Other methodologies have been used to estimate the cost of mains with no load carrying capacity. Limiting the minimum cost component to labor installation without materials and equipment is sometimes utilized by utilities to estimate zero load cost without the complexity of a zero intercept model.[12] Labor installation costs are assumed to be the component cost that is required to install a main regardless of load. The labor installation ratio for 2-inch mains is 3.8% - 30%, depending on whether indirect and restoration costs are included in the total cost.[13] This suggests that the adjusted minimum system classification percentage should be no more than 15.3% instead of 48%.[14] This illustrates that an adjustment to remove demand can produce varying results, depending on method.

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[11] "The Customer Charge and Problems of Double Allocation of Costs," Sterzinger, Public Utilities Fortnightly, July, 1989.

[12] Electric Utility Cost Allocation for a New Era, A Manual" (p. 148) Regulatory Assistance Project, Lazar, Chernick, and Marcus (Jan. 2020). The installed labor cost method was developed by National Economic Research Associates (NERA) to estimate a zero load minimum system.

[13] Peoples Response to OCA V-15, which is attached as Exhibit CJ-5 and OCA V-7, which is attached as Exhibit CJ-4, p. 2 of 2. The responses include ranges based on soil hardness, and I have reflected the mid-points of the ranges.

[14] 30% X 51% = 15.3%

Q. IS THE COMPANY'S MINIMUM SYSTEM CLASSIFICATION OF MAINS SYMMETRIC WITH THE TREATMENT OF SERVICE LINES?

A. No. The Company classifies 100% of service lines as customer related, even though a symmetric treatment would classify a portion of services as demand. The same logic for applying a minimum system method to mains would also apply to services. Services vary to a significant extent with the number of customers. However, the size of a service line ultimately must be large enough to meet the customer's maximum demand. For that reason, varying sizes of service lines are available for different types of customers. If a minimum system study had been prepared for service lines, a percentage of that account would be classified as demand.[15] As stated previously, my view is that Mains should be classified 100% to demand and services as 100% customer based on the predominant cost causation criteria. However, the Company's approach to mains and services is inconsistent because a similar rationale for utilizing a minimum system could be applied to both components of the distribution delivery system. Doing so would have reduced the net customer classification for the distribution system. Unlike most utilities' CCOSS, Peoples does not weight the service line customer allocator by the average size and length of the lines for each class, which may increase the concern about the proper classification of services. The incomplete application of the minimum system method provides an additional reason for rejecting the Company's proposed classification of mains.

[15] The installed labor cost percent for 2 inch services is 37% of project cost, suggesting that the demand percentage could be in excess of 50%.

Q. IS YOUR REJECTION OF THE MINIMUM DISTRIBUTION METHOD CONSISTENT WITH COMMISSION PRECEDENT APPLICABLE TO NATURAL GAS DISTRIBUTION UTILITIES?

A. Yes. In a 2021 order in the Columbia Gas base rate case,[16] the Commission rejected the utility's proposed minimum system analysis and customer allocation of mains. Moreover, the Commission confirmed that the decision is consistent with previous precedent in Pennsylvania.

> [W]e remain of the opinion that although mains serve customers, it is the throughput that determines the type of main investment because it is the load that determines the main investment, not the number of customers served. The existence of one customer, five customers, or ten customers does not determine the amount of mains investment. Mains investment is driven by the loads placed on it, not by the number of customers served.[17]

The Commission cited the description of the Columbia minimum system study "where the entire distribution mains system is hypothetically comprised of only 2-inch pipe," and agreed with OCA that the goal of the Company's study is to assign mains investment "based on merely connecting customers to the system, as opposed to supplying gas to customers – which is how the distribution system actually works on a day-to-day basis."[18]

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16 *PA. PUC v*. Columbia Gas of Pennsylvania, Inc., R-2020-3018835, Order and Opinion, (February 19, 2021).

17 Ibid. Order and Opinion at 217.

18 Ibid. Order and Opinion at 215.

Q. PLEASE SUMMARIZE YOUR CONCLUSION.

A. The Company's classification of a portion of Mains as customer-related should be rejected. The customer classification dictated by the minimum system study is unreasonable because the study is unreliable and based upon speculative assumptions and the results are contrary to Commission precedent.

2. Peak & Average Is Most Appropriate Method For Mains

Q. IS IT REASONABLE TO CLASSIFY MAINS AS 100% DEMAND CLASSIFICATION?

A. Yes. The next question, though, is how demand should be measured; namely, what is the preferred allocator for mains demand? My recommendation is Peak & Average. In this case, Peak & Average is comprised of 50% Design Day Demand (Max Demand) and 50% Average Demand. Average Demand is equivalent to average annual usage or throughput.

Q. IS THE PEAK & AVERAGE METHOD CONSISTENT WITH COMMISSION PRECEDENT APPLICABLE TO NATURAL GAS DISTRIBUTION UTILITIES?

A. Yes. In the previously-mentioned 2021 order in the Columbia Gas case,[19] the Commission reiterated its support for the Peak & Average method to allocate mains cost.

> Furthermore, distribution mains exist and are related to both annual demands and peak demand. Both annual and peak demands must be recognized in the allocation of distribution mains cost if the allocation is to be in accord with the principle of cost-causality. It is not reasonable to allocate distribution mains investment based solely on design peak day demands…The basic reason Columbia

[19] *PA. PUC v*. Columbia *Gas of Pennsylvania, Inc*., R-2020-3018835, Order and Opinion, (February 19, 2021).

invests in its distribution system is to meet the annual demands for gas by customers.[20]

The opinion and order cited several previous Commission gas utility orders adopting the Peak & Average method.[21] The Commission confirmed its support for the reasoning in the 1994 National Fuel Gas Distribution decision that Peak & Average is appropriate because integrated systems are designed to serve accumulated loads over time and not just current engineering criteria.[22]

Q. CAN 100% PEAK DEMAND BE USED TO ALLOCATE DEMAND COSTS?

A. That would be an improvement on the Design Day/Customer method used by the Company's CCOSS. However, as noted in the *Columbia Gas* decision, the Commission does not view a pure Design Day allocation as reasonable. Demand has multiple dimensions, and a method based solely on Design Day demand is incomplete. design day demand is an important factor in sizing mains, but average demand recognizes the integrated nature of the gas distribution system. The integrated distribution system is not static and evolves over time with the changing patterns of small and large customers' accumulated consumption and revenues. Therefore, a more comprehensive measure of demand includes both peak demand and average demand.

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20 Ibid. Order and Opinion at 217.

21 Pa. PUC v. National Fuel Gas Distribution Co., 83 Pa. P.U.C. 262 (1994); See also Pa. PUC v. National Fuel Gas Distribution Co., 73 Pa. P.U.C. 552 (1990); and Pa. PUC v. Columbia Gas of Pa., 69 Pa. P.U.C. 138 (1989); and Pa. PUC v. Philadelphia Gas Works, Docket No. R-00061931 (Order entered September 28, 2007)

22 Ibid. 2021 Columbia Gas Order and Opinion at 216.

Q. IS THE PEAK & AVERAGE METHOD JUSTIFIED BY A HIGH LEVEL VIEW OF CAUSATION?

A. Yes. The gas distribution business is established to deliver gas to customers through mains. The business objective is to deliver gas in all months of the year, and commensurately collect revenues from the full 12 months of the year. The business would not exist without annual usage and revenues. Annual usage is equivalent to the average demand component of Peak and Average. The Peak & Average method recognizes that the Company must serve both average monthly demand plus an incremental cost for sizing mains sufficient to cover extreme weather conditions. If a gas utility was built to serve only one day per year, the business would not be practicable, because the price per billing unit would be excessive. Load diversity[23] is one of the important characteristics which makes public utility service economical.

Q. DOES THE PROCESS OF EXTENDING MAINS TO SERVE NEW CUSTOMERS PROVIDE ANOTHER EXAMPLE OF THIS VIEW?

A. Yes. The gas distribution utility evaluates the feasibility of extending mains to new customers and may determine a contribution in aid of construction (CIAC) for the customer. In evaluating the CIAC amount, the utility will consider the expected demand for sizing the new segment, plus the expected annual revenues generated by the

[23] Economies of load diversity is based on serving different types of customer loads with varying load profiles.

investment.[24] By considering revenues, the gas utility takes into account annual usage. Average demand is a measure of annual usage.

Q. PLEASE EXPLAIN HOW ECONOMIES OF SCALE PROVIDES THE RATIONALE FOR INCLUDING BOTH PEAK DEMAND AND AVERAGE DEMAND IN THE ALLOCATION METHODOLOGY.

A. Economies of scale provide one of the justifications for regulated monopoly service, and the network of gas mains is a key example of this principle. Holding all else constant, doubling the diameter of a pipe results in a four-fold increase in capacity or volume. However, the increase in cost necessary to achieve the increase in volume is substantially smaller. In simplest terms, this is a classic case in which the incremental cost of adding extra capacity to meet more severe weather conditions will be less, in real terms, than the average cost. The Company's minimum system study provides evidence of economies of scale in the real cost of mains. The capacity per foot for larger mains in the aggregate (more than 2 inches) is more than 22 times the equivalent capacity per foot of 2 inch mains. However, the real cost of the higher capacity mains is only about twice the cost per foot of 2 inch mains.[25] As a result, the relationship between peak demand and incremental main cost is not even reasonably close to a one-to-one ratio. Due to economies of scale, the

[24] The Peoples Service Expansion Tariff (Appendix C, Tariff No. 8) states that the CIAC will be "calculated for each service extension project based on the projected revenue and costs for each extension."

[25] According to the minimum system study, the 2 inch main's capacity is 68 therms per mile, and, by inference, the average capacity of above-2 inch mains is 1,507 therms per mile. The real cost of 2 inch mains is $65 per mile and, for above 2 inch mains, $125 per mile. Attachment to Response to OCA V-1(h).

relationship between peak demand and main cost is not linear. Therefore, peak demand is not a direct measure of cost causation and should not be the sole allocator of demand.

Q. GIVEN THE ECONOMIES IN INCREASING THE SIZE OF MAINS, WHY IS THE AVERAGE & PEAK METHOD SUPERIOR TO PEAK DEMAND-ONLY?

A. Average demand recognizes that a constant annual level of demand can be served at average cost. However, the incremental cost of serving peak demand above base demand is less than average cost due to economies of scale. Consequently, the inclusion of average demand in the method effectively reduces the weight given to peak demand. As peak demand increases, main costs increase at a decreasing rate; therefore, tempering the peak demand signal in the method is appropriate. Peak & Average is composed of 50% peak demand and 50% average demand. Assigning equal ratios to design day demand and average demand provides a more balanced recognition of cost causation than peak day demand alone.

Q. WHAT OTHER ADVANTAGES ARISE FROM COMBINING AVERAGE DEMAND WITH THE PEAK RESPONSIBILITY MEASURE?

A. Peoples utilizes design day demand as the measure of peak responsibility, and it is a relatively narrow version of max day demand. Design day demand is developed based on extreme weather conditions and typically can be expressed as 1 day in 15 or 20 years. Rather than relying upon one day in a 15 or 20 year period to measure peak demand, some utilities use multiple peak days during an annual period to measure peak demand. Consumption in near peak days is probabilistically related to the annual max day, and consumption on those days may be relevant and informative. Furthermore, utilities may use multiple peak days (such as 12 monthly peaks) to avoid a free rider situation, whereby off-peak seasonal loads pay nothing for using the network of mains. The inclusion of average demand in the allocation process can correct this limitation by supplementing the narrow design day allocation with usage during all 365 days of the year.

Q. IS THE COMPANY'S CURRENT INFRASTRUCTURE SPENDING DRIVEN PRIMARILY BY GROWTH IN DESIGN DAY DEMAND?

A. No. Peoples is undertaking the replacement of 871 miles of mains at a cost of $1.512 billion.[26] The driving force for this investment is safety improvement and reduction in gas leakage.[27] A commodity classification is appropriate for activities aimed at reducing gas losses, and the average demand component of Peak & Average is equivalent to a commodity allocation factor.

Q. CAN YOU SUMMARIZE THE RETURNS PRODUCED BY THE PEAK & AVERGE METHOD TO THE COMPANY'S CCOSS?

A. The Company's proposed CCOSS classifies and allocates mains as 48% Customer and 52% Design Day Demand. My recommendation is to classify and allocate mains on a Peak & Average basis, which is comprised of 50% Design Day Demand and 50% Average Demand. As shown below, the Residential current rate of return improves from below average to above average. The Residential relative rate of return is 72% under the Company's CCOSS and 112% if Peak & Average is used to classify/allocate mains.

Method	Total	RES	SGS	MGS	LGS
Return @ Cur. Rates - Demand/Peak and Avg	5.51%	6.24%	3.18%	2.72%	7.13%
Return @ Cur. Rates - Min System/Design Day	5.51%	3.99%	5.06%	10.79%	17.08%

[26] Peoples Statement No. 1 at page 12.

[27] Peoples Statement No. 1 at page 13. "The Company will systematically replace older and more vulnerable sections of its pipeline made of leak-prone materials in order to reduce its overall scope of greenhouse gas emissions."

Q. PLEASE SUMMARIZE YOUR RECOMMENDATION.

A. My recommendation is to adopt the Peak & Average method as the measure of demand. This approach is consistent with Commission precedent, recognizes the gas utility's business objectives of delivering gas both on the max day and throughout the year, and addresses the impact of economies of scale on the installation of mains to serve both average daily load and additional capacity to meet extreme weather conditions.

C. Customer Account Representatives

Q. DOES PEOPLES HAVE CUSTOMER ACCOUNT REPRESENTATIVES WHO PRIMARILY ASSIST LARGE CUSTOMERS?

A. Yes. Peoples identified the costs of six major customer account executives who assist large industrial/commercial customers.[28] The cost of these employees is $1.339 million, and the Company states that the personnel support and assist Medium General Service (MGS) and Large General Service (LGS) customers. My recommendation is to assign these costs only to the MGS , LGS, and Mainline classes. These costs are currently allocated primarily based on customers or account payroll, which allocates most of the costs of these personnel to classes with small customers, such as residential and small general service. Assigning these costs to classes with large customers is consistent with cost causation.

Q. WHY DO UTILITIES EMPLOY ACCOUNT EXECUTIVES SPECIFICALLY TO ASSIST LARGE COMMERCIAL AND INDUSTRIAL CUSTOMERS?

A. Large customer accounts tend to be more complex than other accounts and require specialized knowledge and more intensive assistance. Furthermore, given the amount of revenues per customer generated by large accounts, utilities are motivated to provide individualized customer service in order to retain the customers in the service territory. Peoples states that these personnel act as the primary point of contact for industrial/large

[28] Peoples' Response to OCA Interrogatory V-17 is attached as Exhibit CJ-6

commercial customers; work with new service requests from large customers to obtain internal information and determine if the Company can serve the customers; evaluate new technologies; and negotiate and renew discounted rate contracts.[29]

Q. HOW DID YOU REALLOCATE THE MAJOR CUSTOMER ACCOUNT REPRESENTATIVE COST?

A. My recommendation is to assign these expenses to the LGS, MLS, and MGS classes. Because the activities are not specifically tracked to the specific rate class level, I have allocated the $1.3 million cost between those three classes based on revenues. Based on revenues, the expenses are allocated 51% to MGS, 43% to LGS, and 6% to MLS. An offsetting reduction is made to the Customer Assistance line of the CCOSS.

D. Results of Revised CCOSS

Q. HOW DID YOU EVALUATE THE IMPACT OF THE RECOMMENDED CLASS COST OF SERVICE MODIFICATIONS?

A. I revised the Company's CCOSS model in accordance with III. (A) – (B). A summary of the results for the OCA class cost of service are shown on the Schedule I include as Exhibit CJ-1. The revenue requirements reflect the Company's request. My use of the class cost of service results does not imply agreement with the Company's proposed revenue requirement. Instead, the Company's revenue requirements is utilized in order to provide an apples-to-apples comparison.

[29] Ibid.

Q. PLEASE SHOW THE DIFFERENCES IN RELATIVE RATES OF RETURN AT PRESENT RATES.

A. The table below is based on the distribution CCOSS filed by the Company and the CCOSS revised by OCA. The relative rate of return ("RROR") shows the extent that classes' present revenues produce rates of return, which are higher or lower than the system earned rate of return. A RROR above 1.0 indicates a class that is above average, in terms of compensatory rates, and a RROR below 1.0 indicates a class that is below average. The RROR, below, reflects present rates. The increase at equalized rate of return is shown on Exhibit CJ-1. The table below provides the class differences in Company proposed base revenue requirement based on the OCA CCOSS vs. the Peoples CCOSS.

OCA Recommended CCOSS		(Company Request)				
(000's)	**Total**	**RES**	**SGS**	**MGS**	**LGS**	**MLS**
Total Base Revenues	$678,599	450,261	$67,294	91,419	52,951	16,675
Relative ROR-curr. Rates	1	1.145	0.583	0.463	1.819	-0.979
Company CCOSS	678,599	508,816	60,325	60,135	32,726	16,597
Relative ROR-Curr. Rates	1	0.72	0.92	1.96	4.96	-0.95
Base Rev Difference		$(58,555)	6,969	31,284	20,225	77

Q. PLEASE SUMMARIZE THE COMPARISON OF THE RESULTS OF THE CLASS COST OF SERVICE STUDIES.

A. The OCA CCOSS moves the position of the residential class from below cost in the Company study to well above cost after OCA's modifications. At the Company's requested revenue requirement, OCA's study indicates that the Residential base revenues should be $58.5 million less than the Company's CCOSS.

IV. CLASS REVENUE DISTRIBUTION

Q. PLEASE DISCUSS SOME GENERAL LIMITATIONS OF THE CCOSS AS IT APPLIES TO CLASS REVENUE DISTRIBUTION.

A. If major changes in class relationships occur in the CCOSS, gradualism can be considered in the revenue distribution process. Depending on context, the cost of service study results should be tempered by gradualism considerations. In addition, the class cost of service results should be viewed as a snapshot of cost conditions that can change over time. Moreover, because the CCOSS may be quite sensitive to changes in allocation or classification choices, "cost based rates" are best viewed as representing a reasonable band around the CCOS results, rather than exact price points.

Q. HOW DID YOU DEVELOP YOUR RECOMMENDED REVENUE DISTRIBUTION?

A. My primary recommendation is to utilize the Peak & Average CCOSS, as adjusted previously in my testimony, to determine the distribution of the class revenue increases. In my view, this is consistent with Commission precedent and establishes a reasonable framework for a fair and equitable division of the system revenue requirement. Exhibit CJ-1 reflects the revenue increase (at Peoples requested revenue increase) based on OCA's recommended revenue requirement and thus shows my proposed allocation of the distribution revenue increase to customer classes. A comparison of the proposed distribution revenue increase, based on the Company's proposed distribution system base revenue increase is shown in the table above.

	RES	SGS	MGS	LGS	MLS
Current Base Revs	347,867	$ 43,991	57,024	48,982	6,997
Company Increase	132,254	19,861	$ 18,436	3,187	0
Company Base Revs	480,121	63,852	75,460	52,169	$ 6,997
Company Pct. Increase	38.0%	45.1%	32.3%	6.5%	0.0%
OCA CCOS Rev Increase	102,395	23,302	34,395	$ 3,968	9,678
OCA CCOS Rev Distr.	450,261	$ 67,294	91,419	52,951	16,675
OCA CCOS Pct. Increase	29.4%	53.0%	60.3%	8.1%	138.3%

Q. DID YOU PREPARE AN ALTERNATIVE RECOMMENDED SPREAD OF THE REVENUE INCREASE IN THE EVENT THAT THE COMMISSION FAVORS A GRADUALISM APPROACH?

A. My secondary revenue spread recommendation provides a standard approach to gradualism constraints applicable to class base revenue increases. My primary recommendation uses only my proposed Peak & Average CCOSS result because it is consistent with the Commission's revenue distribution approach in the aforementioned 2021 Columbia Gas case. Gradualism is a subjective consideration, and I realize that the Commission could favor moderating the impact on SGS and MGS classes. If the Commission substantially reduces the overall revenue increase, as proposed by other OCA witnesses, the appeal of gradualism should diminish for the spread across customer classes. This alternate proposal applies 150% as the percent of system average constraint applied to SGS and MGS classes. Furthermore, for the LGS class, 50% of system average is applied as the floor for percent increase. The schedule included as Exhibit CJ-2 sets out the alternative revenue distribution proposal.

Q. DID YOU APPLY RATE MODERATION TO THE MAINLINE REVENUE INCREASE?

A. No. The newly created Mainline class is different and is like a sub-class within LGS. Mainline customers are paying negotiated contract rates and their bills will be unaffected by gradualism constraints. The revenue increase allocation to Mainline is a construct which is supposed to prevent inter-class cross subsidies. Therefore, the Mainline revenue

increase should reflect full cost of service. The Company asserts that the MLS class should pay accurate allocated embedded costs.[30] The alternate revenue spread is summarized below. The system ratio represents the class percentage increase relative to the system average increase.

Alternative Gradualism Revenue Distribution (000s)

	Total	RES	SGS	MGS	LGS	LGS-MLS
Current Rev	$504,861	347,867	43,991	57,024	$48,982	6,997
Increase	173,738	103,511	22,700	$29,424	8,425	9,678
Base Rev	678,599	451,378	66,691	86,448	57,407	16,675
% Incr.	34.4%	29.8%	51.6%	51.6%	17.2%	138.3%
Incr Ratio		86.5%	149.9%	149.9%	50.0%	401.9%

Q. DO YOU EXPECT THE OVERALL PROPOSED DISTRIBUTION REVENUE INCREASE TO BE LESS THAN THE COMPANY'S FILED REQUEST?

A. Yes. OCA presents revenue requirement testimony which proposes downward adjustments to the system revenue requirement. I recommend the proportionate scale back of the class revenue distribution recommendation in order to reflect the adopted revenue requirement.

[30] Peoples Statement No. 15 at 50.

V. RESIDENTIAL CUSTOMER CHARGE

Q. WHAT IS THE COMPANY'S PROPOSAL REGARDING THE RESIDENTIAL CUSTOMER CHARGE?

A. The Company proposes to increase the residential customer charge from the current level of $14.50 (PNGD) and $15.75 (PGD) to a single month fixed charge of $21.50.[31] This is a 48% and a 37% increase in the monthly charge, respectively.

Q. DO YOU AGREE WITH PEOPLES' RECOMMENDED INCREASE IN THE RESIDENTIAL CUSTOME CHARGE?

A. No. As a matter of regulatory principles and policy, the absolute level of the fixed customer charge should be limited so that it provides the customer more control over the size of the monthly bill. The customer charge is the least informative part of a utility's rate design, and an excessive customer charge is inconsistent with energy conservation objectives because it diminishes the price signal provided by usage rates.

Q. WHAT ARE THE POLICY REASONS FOR ENSURING THE RESIDENTIAL CUSTOMER CHARGE IS NOT EXCESSIVE?

A. An excessive customer charge can distort appropriate price signals for residential customers. The dominant economic function of a customer charge is to ration access to the utility system. That objective conflicts with the policy basis for regulating monopolies and is counter to the concept of the essential service character of gas for home heating and

[31] Peoples Exh. RNZ-6 at page 4 of 4; Peoples Exh. RNZ-6, page 2 of 4.

cooking. Public policy encourages universal service, rather than limiting public access to regulated monopoly service. Except for its role in rationing access to the system, the customer charge provides no meaningful price signal that is relevant to resource allocation. This contrasts with volumetric charges which are controlled by the consumer's usage decisions. A tenet of rate design is that lowering the customer charge will increase the proportion of costs recovered through a usage-sensitive rate (i.e., price per mcf). That result is more consistent with energy conservation goals and provides pricing policies appropriate for consumption of finite natural resources. By allowing customers to control their utility bill with conservation, minimizing the customer charge is aligned with the Company's stated goal of reducing greenhouse gases and limiting emissions.[32] In addition, a policy that minimizes the customer charge is more equitable to low usage and low income residential customers.[33]

Q. WHAT IS THE APPROPRIATE BENCHMARK FOR SETTING THE CUSTOMER CHARGE?

A. In my view, the customer charge should only recover costs which *directly* vary with the number of customers. This perspective is consistent with the NARUC Gas Distribution Utility Rate Design Manual, which states that customer costs should vary directly with the number of customers.[34] When new residential customers initiate service or existing customers leave the system, the primary increase or decrease in cost pertains to billing,

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32 Peoples Statement No. 1 at page 13.

33 See also, OCA St. No 6, OCA witness Colton.

34 NARUC Gas Distribution Rate Design Manual (1968) at 22 lists customer charge "expenses of metering, reading, billing, collecting, and accounting, as well as those costs associated with capital investment in metering equipment and in customers' service connections."

collection, and metering. In some cases, a service line may have to be extended to a new customer. Therefore, a compensatory customer charge can be based on the following *direct* cost components: O&M expense for meters, services, meter reading, and customer accounting, and return and depreciation on meter, regulator, and service investment, minus credits for customer-related late fee and connection charges. In my view, general overhead, such as administrative and general expense[35] and general plant should be excluded from the customer charge computation, because these costs do not vary directly with number of customers. This approach has been termed the "direct cost method" or "basic customer charge." A computation of this customer charge benchmark is shown on the schedule attached as Exhibit CJ-3. The basic customer charge is **$9.00**, which is the minimum benchmark. So long as the customer charge covers the direct costs of becoming a customer and provides a contribution to recovery of shared indirect costs, the charge does not produce a cross-subsidy within the residential class. Therefore, the current PNGD and PGD customer charges produce an approximate 62% "contribution" to shared indirect costs and continue to be more than adequate.[36]

[35] The Company's (no minimum system) CCOS study classifies and allocates to the residential class $25.9 of A&G expense as customer-related, even though A&G expense, by definition, consists of costs which cannot be associated with particular functions of the utility. [Combined CCOSS, Tab "Min Cust Cost" N381]

[36] $14.65 (weighted average of divisional customer charges) divided by $9.00 basic customer charge.

Q. PLEASE EXPLAIN HOW THE DIRECT COST CALCULATION GUIDES YOUR EVALUATION OF THE RESIDENTIAL CUSTOMER CHARGE.

A. The avoidable customer costs are those costs which would be eliminated when a customer leaves the system. As stated by the Company, if a customer terminates service and is not replaced by another customer at the same premises, "the only costs that cease when a meter is removed are O&M associated with customer inquiries, and customer billing processing of meter reads."[37] Thus, the direct costs included in my computation of a $9.00 basic customer charge exceed the avoidable cost, confirming the reasonableness of my method. I have included customer accounting expenses except for uncollectible Account 904. The customer allocator assigns $13.3 million of uncollectible expense (write-offs) to the residential class. This is an example of an expense classified as customer-related in the CCOS study which is not appropriately collected in the customer charge. There is no evidence that bad debt expense is directly caused by the number of customers, as opposed to the size of customers' bills. High bills are likely a causal reason for consumers' inability to pay utility bills, leading to the conclusion that most if not all bad debt expense should be collected through the usage rate. Furthermore, the customer charge comprises less than 20% of the average monthly residential bill. [38] Therefore, most of the cost underlying the bad debt is derived from usage rates. The direct cost calculation confirms that the current divisional customer charges are more than compensatory. My understanding is that the Commission historically favored a "basic customer cost" composed of costs for

[37] Peoples Response to OCA-V-27, which is attached as Exhibit CJ-7.
[38] For example, the PNGD average bill is $74, and the customer charge is $14.24.

meter/service drops, meter reading, and billing.[39] I recommend that the Commission continue the basic customer charge method.

Q. DOES THE BASIC CUSTOMER COST INCLUDE PLANT COSTS ASSOCIATED WITH NETWORK DISTRIBUTION, SUCH AS MAINS?

A. No. Sec. III.B. of my testimony explains why mains should be classified as demand. To the extent that any relationship exists between network distribution costs and customer count, it is indirect, because intervening variables such as geography, population density, and soil conditions obscure causation. Only distribution plant associated with the customer premises, such as service lines and meters, are includable in the customer charge. Mr. Zarumba states that he believes that the appropriate calculation of the residential customer charge includes mains, thereby resulting in a $41 monthly charge[40]; however, he recommends the lower $21.50 customer charge because Commission precedent does not support inclusion of main cost in the customer charge.

Q. PLEASE RESPOND TO THE COMPANY'S ARGUMENTS SUPPORTING ITS RATE DESIGN.

A. In weighing the appropriateness of a limited or broadly composed customer charge, the Commission should consider the effect on energy efficiency goals. Even though Mr. Zarumba lists "energy conservation and energy efficiency" among his rate design principles, high customer charges tend to inhibit energy conservation. His proposed 37% -

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[39] *See e.g. Re: West Pennsylvania Power Co.*, 69 PUR4th 470 (1985); *Re: West Pennsylvania Power Co.*, 119 PUR4th 110 (1990); In addition, the direct cost method is also supported by *PPL Gas Utilities Corporation* (2007) Docket No. R-00061398 and *Columbia Gas of Pennsylvania* (2011) Docket No. R-2010-2201974.

[40] Peoples Statement No. 15 at pages 31- 34

48% increase in the residential customer charge is not consistent with his stated objective of energy conservation. Minimizing the customer charge provides the ratepayer with a greater ability to control his/her bill on the basis of usage. For that reason, an excessive customer charge can promote wasteful energy consumption. Mr. Zarumba identifies "revenue stability" as an attribute of the proposed rate design. Public utilities like Peoples have an incentive to propose higher monthly fixed charges because they contend the fixed charges produce less financial risk; however, they do not propose to compensate customers for the lower risk through a reduction in the allowable return on equity. Without such explicit compensation to ratepayers, the utilities' frequent argument in favor of the "revenue stability" aspect of fixed charges is not a reasonable policy basis for substantial percentage increases in the customer charge.

Q. CAN YOU PROVIDE AN ILLUSTRATION OF THE IMPACT OF CUSTOMER CHARGE METHODS ON ENERGY CONSERVATION?

A. Yes. If the customer charge is maintained at an interval between PGD's and PNGD's current customer charge, for instance, and the residential class proposed revenue requirement stayed the same, the Company's proposed delivery usage rate at the Company's proposed revenues would increase 17%.[41] This also would have the effect of increasing the bill savings for customers who undertake energy saving activities. As an example, many newer appliances do not have pilot lights, and this design change reduces wasted energy. For instance, for a residential customer who replaced all of a hypothetical

[41] For demonstrative purposes, my illustration uses a $14.75 customer charge and the Company's proposed residential base revenue requirement, to show that the residential delivery rate has to increase from $5.63 to $6.58 per mcf if the customer charge is 30% lower than the Company's proposal. As noted below, my recommendation is a $14.50 customer charge.

home's gas pilot lights (range, fireplace, water heater, furnace) with new appliances without pilot lights, the annual bill savings from the eliminated pilot alone would increase from $125 to $147 in a scenario with a $6.75 reduction in the $21.50 proposed customer charge.[42] The potential bill savings can be much higher with the purchase of high efficiency (high AFUE rating) furnaces.

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE RESIDENTIAL CUSTOMER CHARGE?

A. In my opinion, a reasonable approach would generally maintain the current pricing of the residential customer charge. However, since PNGD and PGD currently have separate customer charges which will be merged into a uniform rate, my proposal sets the customer charge at the current charge paid by the vast majority of Peoples' customers. Consequently, I recommend fixing the residential customer charge at the PNGD residential charge, $14.50. Setting the customer charge at $14.50 will exceed my estimate of basic customer costs, and it will continue the customer charge level applicable to most residential customers.[43]

[42] The pilot lights usage and costs were calculated on Peoples' appliance energy calculator, https://www.peoplesgasdelivery.com/savings/gas-calculator comparing scenarios using Peoples' proposed delivery rate/customer charge and the delivery rate which accompanies an illustrative lower customer charge at the same proposed revenues.

[43] Approximately 90% of residential customers are in the PNGD.

VI. WEATHER NORMALIZATION ADJUSTMENT

Q. PLEASE DESCRIBE PEOPLES' WEATHER NORMALIZATION ADJUSTMENT PROPOSAL.

A. The Company proposes a weather normalization adjustment (WNA) that it claims will adjust the customer delivery charges based on normal historic weather patterns. The WNA would be imposed during heating season months of October 1 through May 31, and it would be assessed only to the classes of customers that Peoples deems to be weather-sensitive customer classes: residential customers including CAP, commercial SGS and commercial MGS customers.[44] The adjustment is intended to reflect a normalization of individual customers' billing units, implementing a credit during colder than normal weather and an additional charge if weather is warmer than normal. For purposes of the adjustment, Peoples assumes that normal winter weather is based on the mean of 20 year average heating degree days (HDD)[45] and a lower HDD estimate derived from a linear trend over the past 65 years. The Company defines normal weather as 5,341 HDD, which is the average of 20 years HDD (5,443) and the 65 year regression trend (5,240).[46]. The Company's tariff attempts to separate individual customers' base load usage from weather

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44 Peoples Statement No. 4 at page 17.

45 A Heating Degree Day (HDD) is a measure of how cold the temperature is on a given day by comparing the mean outdoor temperature recorded for a location to the standard temperature of 65 degrees Fahrenheit. Thus, a day with a mean temperature of 40 has 25 HDDs. https://www.eia.gov/energyexplained/units-and-calculators/degree-days.php

46 Peoples Statement No. 4 at pages 16-17.

sensitive usage by assuming that July and August consumption represents base load monthly use.

Q. ARE YOU CONCERNED THAT THE NET IMPACT WILL NOT BENEFIT RATEPAYERS?

A. Yes. Mr. Zarumba states that "it is generally agreed that weather is becoming milder (i.e., warmer) over time" and that the "average number of HDD for each year are decreasing.[47] If Mr. Zarumba is correct, then the implication is that customers are likely to see more WNA charges than credits.

Q. HAS THE COMPANY PROVIDED HISTORICAL INFORMATION WHICH CONFIRMS THAT THE NET IMPACT IS LIKELY TO BE DETRIMENTAL TO WEATHER SENSITIVE CUSTOMERS?

A. Yes. The Company was asked to provide historical revenue information regarding the impact of normalizing weather fluctuations. In response the Company's attachment showed that weather was abnormally warm in five of the last six years.[48] In response to OCA Interrogatory XI-17, the Company confirmed that the "cumulative revenue over that period was a decrease compared to normal weather, so theoretically if the WNA was in place there would have been a net charge to weather sensitive customers." According to the Attachment to V-26, the warmer weather in 2023 alone produced a revenue impact of $8.45 million. The Company asserts that the revenue impact is not based on the WNA proposed in this case, because it does not use 5,341 HDD currently proposed for the WNA.

[47] Peoples Statement No 15 at 53.
[48] People's Responses to OCA V-26 and XI-17, which are jointly attached as Exhibit CJ-8.

Despite this reservation, the recent historical impact appears to confirm that the cumulative impact of a weather adjustment will result in net charges to customers.

Q. DO YOU RECOMMEND THE ADOPTION OF PEOPLES' WNA PROPOSAL?

A. No. Automatic rate adjustments between rate cases should be avoided because they weaken traditional regulatory principles and unreasonably shift risk to customers. I realize that regulatory authorities have at times made exceptions to traditional ratemaking and adopted trackers or riders that operate between rate cases. At a minimum, to qualify for such treatment, the utility should be required to demonstrate that the automatic tariff is necessary to avoid significant financial damage to the Company or that the subject of the rider poses a threat to the utility's financial stability. The Company has not presented evidence that the lack of a WNA poses that type of financial threat. Indeed, Mr. Zarumba seems to take the position that the revenue impact of the WNA is not substantial.[49]

Q. WHY ARE AUTOMATIC ADJUSTMENTS SUCH AS THE WNA INCONSISTENT WITH RATE MAKING PRINCIPLES?

A. First, allowing tracker type tariffs shifts business risk from the utility's shareholders to its customers and diminishes the incentive for the utility to control costs. The regulatory lag inherent in fixing rates through periodic base rate cases is a powerful incentive for utilities to manage and minimize costs.[50] A National Regulatory Research Institute (NRRI) report

[49] For example, Peoples says that that the WNA will not affect the frequency of rate cases, which implies that the revenue impact will not significantly affect the Company's financial position, Company's Responses to OCA Interrogatories X - 18 (a) and OCA I-1(d).

[50] Economists have posited that the AJ-Effect (referring to authors Averch and Johnson) demonstrates an incentive for utilities to overbuild and gold-plate investments. But subsequent literature concluded that regulatory lag is a constraint on excessive utility spending because it provides a countervailing incentive to manage costs.

states that the utility has "a strong incentive to control costs between rate cases" because the "mechanics of traditional rate making" fixes the price and not the earnings of the utility.[51] The WNA undermines this regulatory framework by eliminating the impact of weather on earnings. Weather is an expected business risk of the public utility industry, especially a public utility that has weather sensitive usage, and protecting the utility from that risk will decrease pressure to minimize costs between rate proceedings. Second, the WNA involves single issue ratemaking, sometimes referred to as "piecemeal ratemaking." Changing rates for only one component of the ratemaking process—in this case, normalizing weather—is unfair because other cost components recovered in rates may have declined or even ceased to exist--which may surmount the impact of a revenue decrease due to weather.

Q. ARE THESE TWO REASONS RELATED?

A. Yes. As NRRI states, "Commissions rely on regulatory lag as an important tool in motivating utilities to act efficiently and prudently…"[52] Productivity improvements flow to the utility's bottom line between rate cases, and the benefit to the utility can offset the deterioration of revenues caused by weather conditions. It's also possible that the WNA will ignore cost impacts which are related to weather in a systematic way. Warming

[51] "Alternative Rate Mechanisms and Their Compatibility with State Utility Commission Objectives," (page 8) Costello, NRRI, 2014.

[52] Ibid. NRRI at 10.

weather may decrease facility maintenance expense, thereby offsetting the revenue reduction to some extent.

Q. DO YOU HAVE ANY CONCERNS THAT THE WNA MAY LEAD TO UNEXPECTED CUSTOMER IMPACTS AND CONSUMER COMPLAINTS?

A. Yes. The recent experience with PGW gas utility's weather adjustment mechanism provides an illustration of unexpected impacts. Two years ago customers received "puzzlingly" high charges in the month of May when customers ordinarily reduced their heating use.[53] PGW found that temperatures for the month of May over the past 10 years have become "unusually divergent from the current normal."[54] PGW implemented $12 million in refunds and amended the weather normalization tariff to exclude May. The shoulder months may be a particular cause for concern since at times they can seem more similar to summer than winter. Attributes of "simplicity, understandability, and public acceptability" are among the criteria for a sound rate structure.[55] The WNA is a complicated formula, which is not well understood by the public and could lead to customer confusion or complaint. Furthermore, from the customer's perspective, the WNA produces a charge without a concomitant increase in delivered gas. The WNA is normalizing the billing units rather than imposing a charge or credit for providing an increase or decrease

53 "PGW Ordered to Stop Adjusting Customers' Bills to Account for May Weather Fluctuations" WHYY News, Sept, 25, 2023. https://whyy.org/articles/pgw-bill-adjustments-may-normalization-weather-fluctuations/

54 Ibid.

55 *Principles of Public Utility Rates* at 291 (1962), James Bonbright.

in service. This is analogous to take or pay tariffs that are generally disfavored by consumers.

Q. IS THERE ANY EVIDENCE IN THIS CASE THAT PEOPLES' CUSTOMERS ARE CONCERNED BY THE COMPLEXITY OF THE WNA CHARGE?

A. Yes. During a public input hearing held in this case on March 5, 2024, in Monroeville, PA, Peoples customer Nick Hoffman testified that the calculation of the WNA is complex and that customers would have a hard time verifying the accuracy of the charge or credit. Mr. Hoffman also testified that given warming weather trends, the WNA could be a large amount, making any potential error to also be large. Additionally, Mr. Hoffman rightly acknowledged that the WNA relies upon a complex equation, with many variables and input which could be more open to errors and abuse. Peoples PIH-Ex NH-1.

Q. IS THE CALCULATION OF BASELOAD CONSUMPTION IMPORTANT TO CALCULATING WNA CREDITS OR CHARGES?

A. Yes. The WNA tariff assumes that the customer's July and August consumption constitutes the baseload consumption occurring in each month and deducts that from the winter month usage to arrive at weather sensitive load. However, that assumption may turn out to be incorrect if the customer is on vacation in those months or appliances were out of service for part of July or August. This would result in an overstatement of the customer's weather sensitive demand during the winter months. The Company asserts that

its personnel would attempt to flag apparent anomalies in customer bills.[56] However, the effectiveness and precision of this process is unknown.

Q. WILL THE WNA RESULT IN DISINCENTIVES FOR ENERGY EFFICIENCY?

A. That could be an indirect result for customers whose energy efficiency initiative takes place during periods of lower than normal weather. Peoples asserts that the WNA "would not address reductions in usage associated with adopting more efficient end-use equipment."[57] However, the WNA potentially mutes the bill impact of energy efficiency actions. No matter how much the customer reduces consumption, ultimately their bill will be adjusted for a normalized level of service. I used the Company's WNA calculator in Attachment 1 to OCA Interrogatory 1-1 to illustrate a hypothetical energy efficiency scenario. In this example, the monthly HDDs are 40% below normal and the customer energy efficiency actions reduce usage of both baseline and weather sensitive load by 50%. The customer's expected energy efficiency bill savings of $44 are partially offset by the $23 weather normalization adjustment. From the customer's standpoint, more than one-half the energy efficiency bill savings must be returned to the Company because the efficiency actions

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56 Peoples Response to OSBA Interrogatory 1-12 (attachment omitted), which is attached as Exhibit CJ-9.

57 Peoples Statement 15 at 56. Peoples recognizes that "whether the mechanism eliminates or limits disincentives for promotion of energy efficiency" is a criteria for evaluating rates such as the WNA. Peoples Response to OCA Interrogatory I-1.

occurred when weather was extremely mild. In this somewhat extreme example, the customer may perceive the WNA as a disincentive for deploying more efficient appliances.

Q. IN ESTABLISHING A NORMAL WEATHER LEVEL, THE COMPANY INCLUDES A LINEAR ANALYSIS TO REDUCE THE 20 YEAR AVERAGE NORMAL WEATHER TO REFLECT A WARMING TREND. DO YOU AGREE?

A. No. While a warming trend may exist, that doesn't mean the Company can reasonably predict future normal HDDs. The linear regression analysis is statistically weak.[58] The R^2 statistic indicates that the analysis explains only 37% of the variation in HDDs. This may suggest that additional variables are necessary for a better prediction. The disadvantage associated with the regression aspect of the WNA is compounded by the decision not to include a dead band in the tariff. My recommendation is to reject both the WNA in its entirety and the complexity added by the linear regression analysis to estimate HDDs.

VII. TARIFF REVISIONS FOR FLEX RATES

Q. DOES PEOPLES PROPOSE A TARIFF REVISION FOR RATE 20 PERTAINING TO FLEXIBLE RATES?

A. Yes. Peoples is proposing revisions to Rule 20 of its tariff to permit electricity to be considered a competitive alternative for purposes of negotiating discounted rates for commercial and industrial customers.[59] The proposed tariff revisions permit Peoples to provide negotiated discount rates in response to competition from alternative fuel sources. The tariff revision states that electricity offered by an electric distribution utility is a

[58] Statistics provided in the Attachment to Peoples Response to OCA Interrogatory I-9 (b). In addition to R^2 discussed above, the Omnibus (prob) indicates that the normal distribution condition may not be met.

[59] Peoples Statement No. 7 at pages 2-6.

competitive alternative.[60] The current tariff language is more limited. The current language states: "Electricity delivered by an electric distribution company shall not constitute a competitive alternative for purposes of natural gas flex rate eligibility or amount, unless the electric distribution company offers an electric distribution flexed rate to the customer.[61]"

Q. DO YOU AGREE WITH THE TARIFF REVISION RELATED TO GAS DISTRIBUTION FLEX RATES AND ELECTRIC COMPETITION?

A. No. The previous language is more reasonable inasmuch as it precludes the offering of flex rates in response to electric utility competition unless the electric distribution company offered a flexed rate to the customer. In my view, the Commission should avoid an expansion of the negotiated rate authority. Negotiated discounted rates should be allowed only in a careful and limited manner because they pose a significant risk of undue price discrimination within Peoples' rate classes. It would be unreasonable to offer a flex rate to customers where the electric utility has not offered the customer a flex rate to that customer. The mere possibility that an electric utility *might* offer a flexed rate at some point is an insufficient basis for Peoples to discount its rates to that customer.

60 Peoples Exh. DF-2, Gas-PA PUC No. 48, Original Page No. 33.
61 Ibid.

Q. THE COMPANY CLAIMS THAT THE EVALUATION PROCESS WILL ENSURE THAT THE FLEX RATES RELATED TO ELECTRIC COMPETITION ARE BENEFICIAL TO PEOPLES' OTHER RATEPAYERS. SHOULD THE COMMISSION HAVE A BROADER PERSPECTIVE?

A. Yes. The Commission regulates both electric distribution and gas distribution utilities and should be concerned about the impact on the customer base of both utilities. The full cost tariffs of both utilities represent the Commission's determination of just and reasonable rates. When the gas utility and electric utility compete based on their full cost tariff offering, regulation should encourage customers to choose the rate that is most cost-effective for the customer. This form of competition benefits ratepayers of both utilities because it reflects long run costs, prevents intra-class price discrimination, and limits competitive revenue losses to situations in which the utility is not cost-effective. Peoples claims that natural gas is cheaper than electricity for many end uses, and if that is true, Peoples should prevail in its competition with the electric distribution company without the need to offer a flexed rate. Moreover, if the competing electric distribution company knows that Peoples can offer a flex rate only in response to an electric utility flex rate, this may discourage the electric distribution company from seeking authority to offer flex rates. However, if the gas utility is allowed to offer a discounted rate in order to undercut the electric utility's full cost tariff, the electric utility may believe it has no other option than to seek authorization for its own flex rates. That type of discounted rate price war is not in

the interest of captive customers of either utility, and it would force the Commission to weigh into competition between the Pennsylvania electric and gas industries.

Q. ARE THERE ANY ADDITIONAL POLICY REASONS WHY PERMITTING PEOPLES TO REVISE RULE 20 TO PERMIT ACCESS TO ELECTRICITY TO ESTABLISH A COMPETITIVE ALTERNATIVE IS INEQUITABLE?

A. Yes. Virtually any type of customer that Peoples services, including residential customers, could elect to convert to electricity if they determined to do so. Peoples' does not propose discounted rate treatment to customers served by the residential tariff simply on the basis that they may convert to electricity, and this exemplifies not only the disparity of Peoples' proposal, but also of the fallacy of extending competitive alternative criteria to include access to electricity. [62] Access to electricity is far too extensive for it to be used a qualifying basis for commercial and industrial customers to access discounted rates, and more must be required to ensure that Peoples' rates are just, reasonable, and non-discriminatory.

Q. WHAT IS YOUR RECOMMENDATION?

A. I recommend rejection of the Rule 20 tariff revision which includes electric distribution utilities as competitors for purposes of authorizing flex rates.

Q. DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?

A. Yes.

[62] Potentially, the tariff may enable Peoples to extend a rate discount to residences in large multi-unit complexes which are served by commercial tariffs.

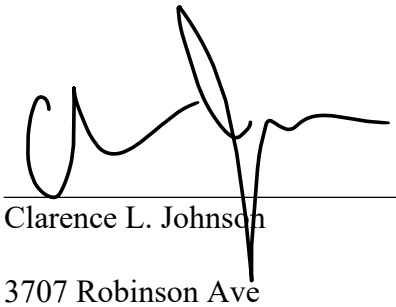
BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission,	:	
	:	
v.	:	Docket No. R- 2023-3044549
	:	
Peoples Natural Gas Company LLC	:	
	:	

VERIFICATION

I, Clarence L. Johnson, hereby state that the facts above set forth in my Direct Testimony, OCA Statement 4, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: March 22, 2024

Signature: 

Clarence L. Johnson

Address: 3707 Robinson Ave
Austin, Texas 78722

SUMMARY OF QUALIFICATIONS

CLARENCE JOHNSON

EDUCATION

Bachelor of Science, Political Science, University of Houston.

Master of Arts, College of Social Science (Interdisciplinary/Urban Studies), University of Houston.

EXPERIENCE

Mr. Johnson has more than 35 years' experience as an expert witness and analyst related to electric and telecommunications utility issues.

CURRENT EMPLOYMENT

Mr. Johnson currently provides professional consulting and analytical analyses regarding regulatory and public policies related to public utilities and the energy industry.

PREVIOUS EMPLOYMENT 1983-2008

From September 1983 to June 2008, Mr. Johnson was a Regulatory Analyst for the Office of Public Utility Counsel. He was the professional staff person with primary responsibility for advising the Public Counsel on economic and regulatory policy issues. His responsibilities included: presenting expert testimony on regulatory matters; research related to rate filings of regulated public utilities; acting as a non-testifying expert and advising attorneys in cross-examination of witnesses and development of trial exhibits for utility regulatory proceedings; analyzing policies and practices for regulating public utilities; and preparing comments on proposed Public Utility Commission rules; assisting financial and economic staff in the development and preparation of testimony; providing expert testimony on selected issues; preparation of reports to the Legislature regarding the utility regulatory process.

EMPLOYMENT BEFORE 1983

During the period 1977 to 1983, Mr. Johnson extensively engaged in analysis and supervision of public interest advocacy programs. He directed two non-profit corporations involved in public policy research from 1978 to 1980 and 1982 to 1983, respectively; responsibilities included overall management of the corporations, negotiation and management of grants and contracts, supervision of research activities, and presentations of research findings to legislative and administrative governmental entities. From 1980 to 1982, he also performed policy analysis and substantive research on the impact of governmental policies for two publicly-funded entities. His responsibilities for the statewide support center for legal services programs in Texas assessed the effect of federal and state regulatory changes upon indigent clients. As an analyst for the Texas State Senate's Natural Resources

Committee, Mr. Johnson was responsible for research related to low-level radioactive waste disposal and low-head hydropower, and the committee's staff's interim report on energy conservation.

AWARDS Mr. Johnson was the recipient of the first annual Texas Outstanding Public Service Award in 1988.

MEMBERSHIP American Economic Association.

TESTIMONY ON BEHALF OF TEXAS OFFICE OF PUBLIC UTILITY COUNSEL

Docket No. 6588, Re Southwestern Bell Telephone Company,
Subject: Declassification of Documents.

Docket Nos. 7195 and 6755, Re Gulf States Utilities Company,
Subject: Rate Design/Cost Allocation.

Docket No. 7510, Re West Texas Utilities Company,
Subject: Rate Design/Cost Allocation.

Docket No. 8095, Re Texas-New Mexico Power Company,
Subject: Rate Design/Cost Allocation.

Docket No. 8363, Re El Paso Electric Company,
Subject: Rate Design/Cost Allocation.

Docket No. 8425, Re Houston Lighting & Power Company,
Subject: Revenue Requirements.

Docket No. 8425, Re Houston Lighting & Power Company,
Subject: Rate Design/Cost Allocation.

Docket No. 8646, Re Central Power and Light Company,
Subject: Revenue Requirements.

Docket No. 8646, Re Central Power and Light Company,
Subject: Rate Design/Cost Allocation.

Docket No. 8646, Re Central Power and Light Company,
Subject: Interim Rate Relief.

Docket No. 8555, Proceedings Concerning Houston Lighting & Power Company on Remand From Cause No. C-5705 and Cause No. 352,044,
Subject: Determination of Remand Amount.

Docket No. 8928, Re Texas-New Mexico Power Company,
Subject: Rate Design/Cost Allocation.

Docket No. 8585, Re Southwestern Bell Telephone Company,
Subject: Revenue Requirements/Affiliates.

Docket No. 8585, Re Southwestern Bell Telephone Company,
Subject: Reply, Revenue Requirements/Affiliates.

Docket No. 8585, Subject:	Re Southwestern Bell Telephone Company, Reply, Rate Design.
Docket No. 8585, Subject:	Southwestern Bell Telephone Company, Proposed Non-Unanimous Stipulation.
Docket No. 9300, Subject:	Texas Utilities Electric Company, Revenue Requirement.
Docket No. 9300, Subject:	Texas Utilities Electric Company, Cost Allocation and Rate Design.
Docket No. 9300, Subject:	Texas Utilities Electric Company, Prudence of Plant Acquisition.
Docket No. 9561, Subject:	Central Power and Light Company, Revenue Requirement.
Docket No. 9561, Subject:	Central Power and Light Company, Cost Allocation and Rate Design.
Docket No. 9578, Subject:	Sugar Land Telephone Company, Inquiry into Sale.
Docket No. 9850, Subject:	Houston Lighting & Power Company, Revenue Requirement.
Docket No. 9850, Subject:	Houston Lighting & Power Company, Cost Allocation and Rate Design.
Docket No. 9850, Subject:	Houston Lighting & Power Company, Settlement Testimony: Revenue Requirement and Rate Design.
Docket No. 9981, Subject:	Central Telephone Company, Revenue Requirement/Affiliates.
Docket No. 10894, Subject:	Gulf States Utilities Company, Affiliate Transactions/Power Purchases.
Docket No. 11735, Subject:	Texas Utilities Electric Company, Revenue Requirement and Rate Design.

Docket No. 11892, General Counsel's Original Petition for Generic Proceeding Regarding Purchased Power,
Subject: Impact of Purchased Power on Cost of Capital.

Docket No. 12700, El Paso Electric Company,
Subject: Acquisition, Revenue Requirement and Rate Design.

Docket No. 12957, Houston Lighting & Power Company,
Subject: Contract Pricing Tariff.

Docket No. 13100, Texas Utilities Electric Company,
Subject: Competitive Pricing Tariffs.

Docket No. 13575, Texas Utilities Electric Company,
Subject: Demand Side Management and Purchase Power Recovery.

Docket No. 12065, Houston Lighting & Power Company,
Subject: Revenue Requirement/Plant Cancellation/Prudence.

Docket No. 12065, Houston Lighting & Power Company,
Subject: Cost Allocation and Rate Design.

Docket No. 13943, Gulf Coast Power Connect,
Subject: Transmission Line CCN.

Docket No. 13575, TUEC Application for Relief Regarding Recovery Solicitations,
Subject: DSM and Purchase Power Cost Recovery.

Docket No. 13369, West Texas Utilities Company,
Subject: Cost Allocation and Rate Design.

Docket No. 14435, Southwestern Electric Power Co.,
Subject: Rate Design.

Docket No. 14716, Texas Utilities Electric Company,
Subject: Wholesale Competitive Rate.

Docket No. 14965, Central Power and Light Company,
Subject: Cost Allocation, Rate Design and Competitive Issues.

Docket No. 14965, Central Power and Light Company,
Subject: Reply, Cost Allocation, Rate Design and Competitive Issues.

Docket No. 15560, Texas-New Mexico Power Company,
Subject: Competitive Issues.

Docket No. 16705, Entergy Gulf States, Inc.,
Subject: Cost Allocation, Rate Design and Competitive Issues.

Docket No. 16705, Entergy Gulf States, Inc.,
Subject: Reply, Cost Allocation, Rate Design and Competitive Issues.

Docket No. 16995, Central Southwest Corp.,
Subject: Integrated Resource Planning.

Docket No. 17751, Texas-New Mexico Power Company,
Subject: Rate Design and Competitive Issues.

Docket No. 18845, CPL, WTU, and SWEPCO,
Subject: Integrated Resource Planning.

Docket No. 21527, TXU Financing Order,
Subject: Cost Allocation.

Docket No. 21528, CPL Financing Order,
Subject: Cost Allocation.

Docket No. 21591, Sharyland Utilities Initial Rates & Tariffs,
Subject: Deferrals.

Docket No. 21956, Reliant Business Separation Plan,
Subject: Price to Beat and Capacity Auction.

Docket No. 22344, Generic Rate Design and Customer Classification for TDUs,
Subject: Rate Design.

Docket No. 22349, TNMP Unbundling,
Subject: Competitive Transition Charge and Revenue Requirements/Cost Allocation/Rate Design.

Docket No. 22350, TXU Unbundling,
Subject: Competitive Transition Charge.

Docket No. 22351, Southwestern Public Service Company Unbundling,
Subject: Cost Allocation/Rate Design.

Docket No. 22352, Central Power & Light Company,
Subject: Competitive Transition Charge.

Docket No. 22355, Reliant Unbundling,
Subject: Non-Bypassable Charges and Competitive Transition Charge/Cost Allocation/Rate Design.

Docket No.22356, Entergy Gulf States Utilities Unbundling,
Subject: Revenue Requirements/Cost Allocation/Competitive Transition Charge/Settlement Rate Design.

Docket No. 24194, Application of TNMP to Establish Price to Beat Fuel Factor,
Subject: Fuel and purchased power costs.

Docket No. 25230, Joint Application for Approval of Stipulation Regarding TXU Electric Company Transition to Competition Issues,
Subject: Retail Clawback Provisions of Non-Unanimous Agreement.

Docket No. 25314, Application of West Texas Utilities Company and Mutual Energy WTU to Establish a Fuel Reconciliation Methodology for Southwest Power Pool (SPP) Customers,
Subject: Fuel Cost Method.

Docket No. 24336, Application of Entergy Gulf States, Inc. for Approval of Price to Beat Factor,
Subject: Unaccounted for Energy.

Docket No. 23320, Petition of ERCOT for Approval of the ERCOT Administrative Fee,
Subject: ERCOT Fee Structure.

Docket No. 26194, El Paso Electric Company Fuel Reconciliation,
Subject: Purchased Power and Off-System Sales.

Docket No. 27576,	Application of Texas-New Mexico Power Company for Reconciliation of Fuel Costs,
Subject:	Fuel Reconciliation.
Docket No. 28813,	Inquiry Into Rates of Cap Rock Energy,
Subject:	Revenue Requirements/Cost Allocation/Rate Design.
Docket No. 28840,	Application of AEP Texas Central Company for Change in Rates,
Subject:	Cost Allocation/Rate Design/Affiliate Transactions.
Docket No. 30485,	Application of CenterPoint Energy Houston Electric, LLC For A Financing Order,
Subject:	Transition Charge Recovery.
Docket No. 30143,	Petition of El Paso Electric Company to Reconcile Fuel Costs (Initial and Rebuttal Testimonies),
Subject:	Fuel Reconciliation.
Docket No. 30706,	Application of CenterPoint Energy Houston Electric, LLC for A Competition Transition Charge,
Subject:	Competitive Transition Charge Structure.
Docket No. 31315,	Application of Entergy Gulf States, Inc. for Approval of Incremental Purchased Capacity Recovery Rider,
Subject:	Purchase Power Capacity Rates.
Docket No. 31544,	Application of Entergy Gulf States, Inc. for Recovery of Transition to Competition Costs,
Subject:	Allocation of Transition Costs.
Docket No. 31994,	Application of Texas-New Mexico Power Company's to Establish a Competition Transition Charge Pursuant to P.U.C. Subst. R. 25.263(N),
Subject:	Competition Transition Charge.
Docket No. 32475,	Application of AEP Texas Central Company for a Financing Order,
Subject:	Securitization of Stranded Costs.

Docket No. 32758, Application of AEP Texas Central Company for a Competition Transition Charge Pursuant to P.U.C. Subst. R. 25.263(n),
Subject: Competitive Transition Charge.

Docket No. 32795, Staff's Petition to Initiate Generic Proceeding to Re-Allocate Stranded Costs Pursuant to PURA § 39.253(f),
Subject: Stranded Costs Allocation.

Docket No. 32907, Application of Entergy Gulf States, Inc. for Determination of Hurricane Reconstruction Costs,
Subject: Cost Allocation.

Docket No. 32766, Application of Southwestern Public Service Company for: (1) Authority to Change Rates; (2) Reconciliation of its Fuel Costs for 2004 and 2005; (3) Authority to Revise the Semi-Annual Formulae Originally Approved in Docket No. 27751 Used to Adjust its Fuel Factors; and (4) Related Relief,
Subject: Cost Allocation/Rate Design.

Docket No. 33586, Application of Entergy Gulf States, Inc. for a Financing Order,
Subject: Financing Order Allocation.

Docket No. 32710, Application of Entergy Gulf States, Inc. for Authority to Reconcile Fuel and Purchased Power Costs,
Subject: Capacity Rider Allocation.

Docket No. 31461, Application of AEP Texas North Company for a Competition Transition Charge Under to Subst. R. §25.263(N),
Subject: Competition Transition Charge.

Docket No. 32795, Staff's Petition to Initiate a Generic Proceeding to Re-Allocate Stranded Costs Pursuant to PURA § 39.253(f),
Subject: Stranded Cost Allocation.

Docket No. 33309, Application of AEP Texas Central Company for Authority to Change Rates,
Subject: Rate Design and Energy Efficiency Costs.

Docket No. 33310,	Application of AEP Texas North Company for Authority to Change Rates,
Subject	Energy Efficiency Costs and Riders.
Docket No. 32902,	CenterPoint Energy Houston Electric, LLC Compliance Tariff,
Subject:	Allocation of Stranded Costs.
Docket No. 34077,	Joint Report and Application of Oncor and EFH Pursuant to § 14.101,
Subject:	Leveraged buyout of utility.
Docket No. 35105,	Compliance Tariff Filing of AEP Texas,
Subject:	Allocation of Stranded Costs.
Docket No. 35038,	Texas-New Mexico Power Company Tariff Filing in Compliance with the Final Order in Docket No. 33106,
Subject:	Allocation of Stranded Costs.
Docket No. 34800,	Application of Entergy Gulf States, Inc. for Authority to Change Rates and to Reconcile Fuel Costs,
Subject:	Cost Allocation & Rate Design.
*Docket No. 37482,	Application of Entergy Texas for a PCRF,
Subject:	Purchase Power.
*Docket No. 37744,	Application of Entergy Texas, Inc. for Authority to Change Rates,
Subject:	Cost allocation, rate design, proposed riders, & storm damage expense.
*Docket No. 38951,	Application of Entergy Texas, Inc. for Approval of CGS Tariff,
Subject:	Rate Design, Competitive Tariffs.
*Docket No. 46454,	Application of SPS for Revision of EECRF[1],
Subject:	Recovery of energy efficiency costs.

[1] Asterick (*) denotes testimony for Texas OPC as a consultant.

TESTIMONY ON BEHALF OF STEERING COMMITTEE OF ONCOR CITIES	Docket No. 35634,	Re Oncor Electric Delivery's Request for an Energy Efficiency Cost Recovery Factor,
	Subject:	Energy Efficiency Cost Recovery.
	Docket No. 36958,	Application of Oncor Electric Delivery Company LLC for 2010 Energy Efficiency Cost Recovery Factor,
	Subject:	Energy Efficiency Cost Recovery.
	Docket No. 39375,	Application of Oncor Electric Delivery Company LLC for 2012 EECRF,
	Subject:	Energy Efficiency Cost Recovery.
TESTIMONY ON BEHALF OF ALLIANCE OF XCEL MUNICI-PALITIES	Docket No. 35664,	Application of SPS to Revise Interruptible Credit Option Tariff,
	Subject:	Interruptible Rate Avoided Costs.
	Docket No. 35763,	Application of SPS to Change Rates and Reconcile Fuel and Purchased Power Costs,
	Subject:	Energy Efficiency, Renewable Energy Credits, Power Cost Credits, and Interruptible Credits.
	Docket No. 37173,	Petition for Declaratory Order of Southwestern Public Service Company Regarding the Generation Demand Charge as a Cap on Compensation for Interruptible Resources
	Subject:	Interruptible Curtailable Option ("ICO").
	Docket No. 43695,	Application of SPS to Change Base Rates,
	Subject:	Cost Allocation / Rate Design/ Jurisdictional.
	Docket No. 47527,	Application of SPS to Change Base Rates,
	Subject:	Cost Allocation / Rate Design/ Jurisdictional
TESTIMONY ON BEHALF OF CERTAIN TNMP CITIES	Docket No. 36025,	Application of TNMP for Authority to Change Rates,
	Subject:	Cost Allocation and Rate Design.
	Docket No. 39362,	Application of TNMP for 2012 EECRF,
	Subject:	Energy Efficiency Cost Recovery.

TESTIMONY ON BEHALF OF ST.LAWRENCE COTTON GROWERS	Docket No. 41474, Subject:	Application of Sharyland Utilities for Unbundled Delivery Rates, Cost Allocation, Rate Design, Unbundling.
TESTIMONY ON BEHALF OF LIVE OAK TENANTS	Docket No.41987, Subject:	Complaint Against Live Oak Resort, Sub Metering Complaint Case.
TESTIMONY ON BEHALF OF GULF COAST COALITION OF CITIES	Docket No. 38339, Subject:	Application of CenterPoint Energy Houston Electric, LLC for Authority to Change Rates, Cost Allocation, Rate Design, Riders.
TESTIMONY ON BEHALF OF PENNYSLVANIA OFFICE OF CONSUMER ADVOCATE	Docket No. R-2010-2161575, et. al., Subject:	PECO Energy Co.-Electric Division Base Rate Case, Cost Allocation and Rate Design.
	Docket No. R-2010-2179522, Subject:	Duquesne Light Company Base Rate Case, Cost Allocation and Rate Design.
	Docket No. R-2014-248745, Subject:	Met Edison General Base Rate Case, Cost Allocation and Rate Design.
	Docket No. R-2014-2478743, Subject:	Penelec Power General Base Rate Case, Cost Allocation and Rate Design.
	Docket No. R-2014-2478744, Subject:	Penn Power General Base Rate Case, Cost Allocation and Rate Design.
	Docket No. R-2014-248752,	West Penn Power General Base Rate Case,

	Subject:	Cost Allocation and Rate Design.
	Docket No. R-2016-2537349	Met Edison General Base Rate Case,
	Subject:	Cost Allocation and Rate Design.
	Docket No. R-2016-2537352	Penelec Power General Base Rate Case,
	Subject:	Cost Allocation and Rate Design.
	Docket No. R-2016-2537355,	Penn Power General Base Rates,
	Subject:	Cost Allocation and Rate Design.
	Docket No. R-2016-2537359	West Penn Power General Base Rate Case,
	Subject:	Cost Allocation and Rate Design.
	Docket No. R-2018-3000164	PECO General Rate Case
	Subject:	Cost Allocation and Rate Design
	Docket No. R-2021-3024601	PECO General Rate Case
	Subject:	Cost Allocation and Rate Design

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TESTIMONY ON BEHALF OF SWEPCO CITIES	Docket No. 40443, Subject:	Application of SWEPCO for Rate Change, Cost Allocation, Rate Design, Fuel Rule, Revs.
TESTIMONY ON BEHALF OF SWEPCO CITIES (CARD)	Docket No. 46449, Subject:	Application of SWEPCO for Rate Change, Cost Allocation, Rate Design, Transmission.

*Gas Utility (*Railroad *Commission):*

TESTIMONY FOR CITY OF EL PASO	Docket No.10506 Subject:	Texas Gas Services Co.-West Texas Cost Allocation, Rate Design

TESTIMONY FOR CITY OF EL PASO	Case No OS22-9896 Subject:	Texas Gas Services Co.-Gas One Cost Allocation, Rate Design

Additional Electric Cases

TESTIMONY FOR CONNECTICUT CONSUMER COUNSEL	Docket No.14-05-06, Subject:	CL&P Rate Increase Application, Cost Allocation, Rate Design, Decoupling.
TESTIMONY FOR TEXAS COAST UTILITIES COALITION	Docket No.44572, Subject: Docket No. 47320, Subject:	CenterPoint Application for DCRF, Distribution Cost Recovery Factor. CenterPoint Application for DCRF, Distribution Cost Recovery Factor.
TESTIMONY FOR CITY OF EL PASO	Docket No.44941, Subject: Docket No. 46831 Subject: Docket No. 48181 Subject: Docket No. 52195 Subject:	El Paso Electric Co. Rate Request, Cost Allocation, Rate Design. EPEC Rate Case Cost Allocation/Rate Design EPEC Community Solar Waiver Regulatory Policy EPEC Rate Case Cost Allocation/Rate Design
TESTIMONY FOR TEXAS OPUC (2014 or later)	Docket No.44620, Subject: Docket No. 45414, (base rate) Subject: Docket No. 46025, (fuel) Subject:	Sharyland Utilities Good Cause Request, Transmission Cost Recovery. Sharyland Utilities Rate Inquiry, Rev Req/Allocation/Rate Design. Southwestern Public Service Co., Fuel and Purchased Power.

Docket No. 48371, Entergy Texas Rate Application

Class Allocation/Rate Design/Riders

Docket No. 49616, Southwestern Public Service Co.
Subject: Fuel Factor Methodology

Docket No. 50058, El Paso Electric Co. Fuel Reconciliation
Subject: Off System Sales Margin in Fuel

Docket No. 51625, Southwestern Public Service Co.
Subject: Fuel Factor Methodology; Gas Prices

TESTIMONY FOR CITIES SERVED BY AEP Docket No.49494, Application of AEP Texas to Adjust Rates
Subject: Cost Allocation/Rate Design

TESTIMONY FOR MD. OFFICE OF PEOPLE COUNSEL Case No.9610, Application of Baltimore Gas & Electric Co.
Subject: Gas/Electric Cost Allocation/Rate Design

Recommended Class Cost of Service Per OCA
Assumes Peoples' Requested Revenue Requirement

RETURN AT CURRENT RATES

	Total	RES	SGS	MGS	LGS	LGS-Mainline
Total Oper. Rev. @ Current Rates	$ 833,215,508	$ 591,717,562	$ 81,729,812	$ 85,861,952	$ 58,801,838	$ 15,104,344
Other Income	$ -	$ -	$ -	$ -	$ -	$ -
O&M	$ 440,673,789	$ 310,408,080	$ 49,952,676	$ 46,903,913	$ 20,881,058	$ 12,528,063
Cust. Accts, Services, Sales Expense	$ 38,351,539	$ 31,868,413	$ 1,968,301	$ 2,157,773	$ 2,198,773	$ 158,279
A&G	$ 62,261,991	$ 41,658,947	$ 6,240,276	$ 7,866,971	$ 4,845,977	$ 1,649,819
Depreciation	$ 134,219,598	$ 90,561,447	$ 13,503,120	$ 17,781,631	$ 9,671,247	$ 2,702,152
Taxes Other Than Income	$ 15,353,167	$ 9,920,567	$ 1,504,728	$ 1,743,843	$ 1,400,742	$ 783,287
Income Before Income Taxes	$ 142,355,425	$ 107,300,108	$ 8,560,711	$ 9,407,821	$ 19,804,040	$ (2,717,256)
Income Taxes @ Current Rates	$ (91,344,434)	$ (68,850,679)	$ (5,493,105)	$ (6,036,666)	$ (12,707,551)	$ 1,743,567
Income For Return	$ 233,699,859	$ 176,150,786	$ 14,053,817	$ 15,444,487	$ 32,511,592	$ (4,460,822)
Rate Base @ Current Rates	$ 4,244,704,201	$ 2,793,658,714	$ 437,507,942	$ 606,102,239	$ 324,704,268	$ 82,731,038
Return @ Current Rates	**5.51%**	**6.31%**	**3.21%**	**2.55%**	**10.01%**	**-5.39%**
Relative Rate of Return	**100.0%**	**114.5%**	**58.3%**	**46.3%**	**181.9%**	**-97.9%**

REVENUE REQUIRMENT AND REVENUES AT PROPOSED EQUALIZED RETURN

	Total	RES	SGS	MGS	LGS	LGS-Mainline
Base Rates Revenues @ Current Rates	$ 504,861,227	$ 347,866,631	$ 43,991,391	$ 57,024,004	$ 48,982,267	$ 6,996,935
Base Rate Revenue Increase	**$ 173,737,629**	**$ 102,394,761**	**$ 23,302,329**	**$ 34,394,676**	**$ 3,968,267**	**$ 9,677,596**
Total Base Rate Revenue @ Proposed Rates	$ 678,598,857	$ 450,261,392	$ 67,293,720	$ 91,418,680	$ 52,950,533	$ 16,674,531
Rider Revenue @ Proposed Rates	$ (24,553,786)	$ (13,140,760)	$ (1,999,383)	$ (3,179,570)	$ (3,287,029)	$ (2,947,045)
Gas Revenues @ Proposed Rates	$ 317,688,724	$ 236,156,094	$ 37,306,901	$ 28,525,812	$ 8,705,460	$ 6,994,456
Gathering Revenues @ Proposed Rates	$ 9,373,519	$ 1,399,493	$ 485,052	$ 1,571,947	$ 3,083,557	$ 2,833,470
Forfited Discount/Late Fees @ Proposed Rates	$ 6,365,885	$ 5,703,590	$ 312,878	$ 231,627	$ 117,789	$ -
Other Revenues @ Current/Proposed Rates	$ 1,768,640	$ 1,403,276	$ 245,883	$ 83,121	$ 20,333	$ 16,028
Total Revenues @ Proposed Rates	$ 989,241,838	$ 681,783,086	$ 103,645,051	$ 118,651,617	$ 61,590,644	$ 23,571,439

Alternative Class Revenue Distribution

(thousands of dollars)

	Total	RES	SGS	MGS	LGS	LGS- MLS
Current Revenues	$ 504,861	$ 347,867	$ 43,991	$ 57,024	$ 48,982	$ 6,997
Increase Per OCA CCOSS	$ 173,738	$ 102,395	$ 23,302	$ 34,395	$ 3,968	$ 9,678
Gradualism Adjustment		$ 1,116	$ (603)	$ (4,970)	$ 4,457	$ -
Revenue Increase	$ 173,738	$ 103,511	$ 22,700	$ 29,424	$ 8,425	$ 9,678
Total Base Revenues	$ 678,599	$ 451,378	$ 66,691	$ 86,448	$ 57,407	$ 16,675
Percent Increase	**34.41%**	**29.76%**	**51.60%**	**51.60%**	**17.20%**	**138.31%**
Times System Average		**86.5%**	**149.9%**	**149.9%**	**50.0%**	**401.9%**

Gradualism Constraints:

(1) No Class Increase Less Than 50% Average Increase.

(2) SGS and MGS Increase Capped at 50% Average Increase.

DEVELOPMENT OF BASIC CUSTOMER CHARGE

EXPENSE	
Meter & House Reg. O&M	$7,125,064
Services	$2,644,087
Customer Installation	$3,169,272
Customer Records & Collection	$19,041,062
Meter Reading	$223,444
Customer Service	($3,322,350)
Services Depreciation	$20,492,693
Meters Depreciation	$4,241,210
Meter Installation Depreciation	$1,305,620
Late Fees and Connection Charges	($5,731,962)
Total Expenses	$49,188,140

PLANT	
Service Plant	$936,415,021
Meter Plant 381-382	$201,319,885
Other Customer Premises	$11,493,656
Accumulated Depreciation	$ 408,000,197
Adjust to Net Plant	$ 741,228,365
Cust Deposits & Advances	$ (4,060,459)
Sub-Total	$ 737,167,906
Requested ROR, Income Tax	9.8%
ROR X Sub Total	$ 21,208,576

Annual Customers		7,817,933
Expense Per Billing Unit	$	6.29
Net Return Per Billing Unit	$	2.71
Customer Charge Per Mo.	$	9.00

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-V-005

Witness: Zarumba, Ralph **Title:** Consultant, Black & Veatch Management Consulting, LLC

Question: Please provide the percentage of distribution Mains investment which is classified as minimum size or minimum system.

Answer: The Mains minimum system cost as a percentage of all Main pipe sizes for the Combined entity is as 51.27% (unadjusted). When adjusting for the capacity related portion of the minimum system the percentage is 48.37%. Please see excel row 13, columns G in the “Min System Results” tab in response OCA-V-1, Attachment OCA-5-1h. For adjusted minimum system please refer to rows 15-51, columns B-E in the same tab.

Submit Date: 2/13/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-V-007

Witness: Becker, Paul **Title:** Vice President of Construction & Engineering

Question: What is the smallest size main installed on the Company's distribution system? What is the unit cost of this sized Main? What percentage of the cost of this sized Main is installation cost?

Answer: The smallest size Main is 2 inches. Cost per foot using 2022 book cost is shown in the table attached. Labor cost is 24-36% of installing 2" distribution mainline only. This percentage is not based on comparing labor cost to the total project cost.

Submit Date: 2/13/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-V-015

Witness: Becker, Paul **Title:** Vice President of Construction & Engineering

Question: For each size of Main on the Peoples distribution system, provide labor installation cost as a percentage of total cost.

Answer: See the attachment.

Submit Date: 2/13/2024

OCA-V-015 Attachment

Main Line Size	Labor Installation Cost as percentage of Total Project Cost
2”	3.9% - 7.5%; cost varies due to length installed and surface type encountered (soft or hard).
3”	4.6% - 8.3%; cost varies due to length installed and surface type encountered (soft or hard).
4”	4.0% - 7.4%; cost varies due to length installed and surface type encountered (soft or hard).
6”	3.7% - 5.1%; cost varies due to length installed and surface type encountered (soft or hard).
8”	5.2% - 8.7%; cost varies due to length installed and surface type encountered (soft or hard).
12"	11.5% - 17.4%; cost varies due to length installed and surface type encountered (soft or hard).
16”	Information not readily available
20”	Information not readily available
24"	Information not readily available

Total Project Cost includes equipment, material, labor, overhead to install and restore mainline and services.

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-V-017

Witness: Zarumba, Ralph **Title:** Consultant, Black & Veatch Management Consulting, LLC

Question: Identify the number of executives, marketing personnel, and customer assistance staff, including customer service representatives, who are involved primarily in contacts with the Company's current or prospective large commercial or industrial customers. This includes Staff involved in economic development and negotiating non-tariff customer contracts. Provide the following information as well:

a. Provide the annual cost for these Company personnel and identify the FERC accounts in which the amounts are recorded;

b. Identify the particular rate classes supported by the personnel. Indicate the class allocation methods used on these costs in the Class Cost of Service Study; and

c. Describe the types of services performed by the staff listed in 'a.'

Answer: A. Company Personnel:

- Luke Ravenstahl, Vice President Sales & Marketing

- Doug Bush, Director, Strategy & Corporate Development

- Sean Coughlan, Manager, Large Volume Sales

- Roselle Hamlett, Senior Sales Specialist

- Ronald Bondo, Senior Sales Specialist

- Jason Greenblatt, Senior Sales Specialist

The total fully loaded costs (salary plus benefits) are $1,338,516. The FERC Accounts used are 417.1, 911, 912, 920.

B. The rate classes supported for this personnel are as follows:

PNG Rates

- Rate MGS (Medium General Service)
- Rate LGS (Large General Service)
- Rate GS-T (General Service – Transportation) MGS and LGS

PG Rates

- Rate Schedule MGS – Medium General Service
- Rate Schedule LGS – Large General Service
- Rate MGS – T (Medium General Service Transportation Service)
- Rate LGS – T (Large General Service Transportation Service)

C. This team serves as the primary point of contact and account managers for our large commercial and industrial customers. Examples of this type of work include routine account maintenance with issues such as billing and operational questions or concerns. They also take the lead on new large commercial and industrial requests for service. They partner with the potential customer and various internal departments to obtain the necessary information to evaluate the request and determine our ability to serve. In addition, the team is responsible for identifying new economic development projects and technologies that will enhance and grow the usage of natural gas in our operating system. In addition, this team negotiates or renews discounted rate contracts. The steps involved in the process include but are not limited to: obtaining a signed affidavit from the customer confirming they have a competitive alternative, validating and confirming that the alternative is a viable option, assisting in the company's fixed cost analysis, sharing and negotiating the proposed discounted rate with the customer, partnering with the legal team to develop a fully executable agreement, executing the agreement.

Submit Date: 2/13/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-V-027

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: If a customer terminates service and is not replaced by a new customer at the same premises, please identify any customer classified costs which would cease to be incurred or any resulting savings in customer classified costs.

Answer: The only costs that cease when a meter is removed are O&M associated with customer inquiries, and customer billing processing of meter reads.

Submit Date: 2/13/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-V-026

Witness: Scanlon, Carol **Title:** Rates Manager

Question: Please provide the following information regarding the Company's weather normalization adjustment proposal:

a. Please explain and quantify the estimated annual impact on Company revenues caused by the lack of a weather normalization adjustment tariff; and

b. Has the Company determined the net annual change in revenues over each of the last five years if the weather normalization tariff had been in place? If so, provide the year by year impact.

Answer: a. Peoples' projected revenues in this proceeding are determined using normalized weather of 5,341 HDDs. Without a weather normalization adjustment, weather sensitive revenues will fluctuate, higher or lower, depending on the difference in HDDs as compared to 5,341. With a weather normalization adjustment in place, the Company's weather sensitive revenues would be consistent with the revenue projections based upon 5,341 HDDs annually. As stated in the direct testimony of Ralph Zarumba at Peoples Statement No. 15, page 56, the WNA mechanism provides symmetric protection to customers (emphasis added) and the Company for revenue variations in usage associated with non-normal weather.

Refer to the response in part (b) for recent historical fluctuations in revenue related to weather sensitive customers during the calendar year periods of 2019 – 2023.

b. Refer to the attachment. The Company notes the attached table is not an analysis based upon the Company's WNA proposal in this case but does represent the fluctuations in revenue related to weather sensitive customers during the calendar year periods of 2019 – 2023. The Company also notes that over a length time the total weather related cumulative impact of the WNA mechanism is expected to be zero or near zero.

Submit Date: 2/13/2024

Peoples Natural Gas Company LLC - 2023 Base Rate Case
Docket No. R-2023-3044549
OCA Data Request Set 5, Question #26-b

Weather Related Net Revenue Impacts

Calendar Year	PNG	PG	Total
2018	$9,578,684	$1,637,853	$11,218,555
2019	($1,010,687)	($135,231)	($1,145,918)
2020	($13,828,322)	($1,904,668)	($15,732,990)
2021	($12,602,026)	($1,762,358)	($14,364,385)
2022	$7,272,385	$1,165,659	$8,438,044
2023	($37,055,423)	($5,914,886)	($42,970,309)
Total Weather Related Impact	**($47,645,388)**	**($6,913,633)**	**($54,557,003)**

**Total impact shows Inc/(Dec) vs Normal Weather*

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XI-017

Witness: Scanlon, Carol **Title:** Rates Manager

Question: Reference the attachment that Peoples provided as part of its answer to OCA Set 5, Question 26. Assuming that a WNA had been in place, please explain whether the negative sign for total weather related impact indicates that weather sensitive customers would have incurred a net charge or net credit for the cumulative years shown.

Answer: The attachment to OCA-5-26 shows historical fluctuations in revenue related to weather sensitive customers. The cumulative revenue over that period was a decrease compared to normal weather, so theoretically if the WNA was in place, there would have been a net charge to weather sensitive customers.

However, as noted in the response to OCA-5-26, the Company respectfully points out that the data provided in the response to OCA-5-26 is not an analysis based upon the Company's WNA proposal in this case.

Refer to the response to CAUSE-I-16 which is an analysis of the impact for a typical customer from 2019 – 2022 if the WNA proposed in this case was in place. The main difference is the number of HDDs used in the calculation as normal. The response to CAUSE-I-16 compares the impact of actual HDDs during 2019 – 2022 versus 5,341 HDD's, the normal HDD's the Company is proposing in this case. The response to OCA-5-26 does not factor 5,341 HDDs as normal weather, but rather the respective normal HDDs in each of those years. Therefore, OCA-V-26 is not as indicative of what the WNA impact would be based on the WNA proposal in this proceeding.

Submit Date: 2/26/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OSBA-I-012

Witness: Scanlon, Carol **Title:** Rates Manager

Question: Reference Peoples Statement No. 3, Weather Normalization Mechanism

a. Please provide the proposed normal heating degree days for each billing cycle that applies to Residential, SGS and MGS customers in the FPFTY, with supporting calculations for the derivation of the normal value in MS Excel electronic format.

b. Please indicate how the Company proposes to address the circumstances that arose in the PGW WNA debacle (see Docket Nos. R-2022-3034229, P-2022-3034264), namely a billing period with unusually low actual HDDs and heating load adjustment multiples that result in extreme billing adjustments, particularly for customers with unusually high non-heating loads.

c. Please explain why July/August is used to derive non-heating base loads rather than a statistical approach. Please also indicate whether cooking and hot water loads in July and August are affected by vacations.

d. Please explain how non-heating base loads will be derived for customers without billing information for the previous summer months.

e. Please identify any automatic checks proposed by the Company to flag unusual billing events that may be magnified by the WNA, such as a billing period with an unusually high heating load per degree day compared to historic norms.

f. Please confirm that the Company's proposed mechanism relies on the assumption that heating load is linearly related to HDDs. If you cannot confirm, please explain your response.

Answer: a. Refer to the attachment. On the "Daily AHDD and NHDD Calc" tab, refer to the tables in columns BT through CF, rows 15-91 for the tables of NHDD by month and day for Leap Years versus Non-Leap Years. These are the NHDD that will be used for the WNA mechanism. Peoples would add the HDD's from these tables that coincide with the billing days in the customer's bill cycle to calculate the NHHD.

In order to derive the daily NHDD's as displayed in the two tables, Peoples calculated the average degree days per day using the last 10 years of AHDD data as the basis. Next, Peoples applied this average to the monthly amount of HDDs as proposed in this case, and then took that result times the annual HDDs proposed as normal in this case. For example, January 1 of a

non leap year = (Jan monthly spread x Daily % of 10yr avg of Jan 1st % of all January) x Annual NHDD. Refer to the attachment labeled (a)-2 for an illustrative example of this.

b. Peoples anticipates that the automatic checks identified in subpart (e) of this response will capture outliers that could result in an extreme billing adjustment.

c. Refer to the attachment. Peoples analyzed monthly HDD data for the ten (10) year period of 2013-2022 to determine months with near zero HDDs. July and August have average HDD of 1.40 and 3.30, respectively. A normal probability was calculated each month, testing the probability that any month would have zero HDD and be included in the baseload calculation. July and August were determined to have a statistically significant normal probability (34.1% and 21.3%). The only other month with a positive value was September, with a probability of 4.9%. September was rejected because the normal probability was significantly lower than July and August. It should also be noted that September had a mean HDD of 58.30, which is 4,046% higher than July and 9,548% higher than August, which supports Peoples conclusion that September HDD behavior is significantly different than July and August.

d. Peoples proposes to use a “standard” base load per rate class for customers that do not have prior billing information for one or both of the non-heating months of July and August. Refer to the attachment for the proposed standard base load amounts. Consistent with Exhibit 19, RR-8, the standard base load amounts are established using the normalized use per customer (UPC) for PNGD & PGD combined based upon a three-year average UPC with conservation per rate class.

e. Peoples has several automatic checks in place that will flag unusual activity prior to billing:

(1) Meter reads are out of tolerance

(2) Billing and/or Invoicing (Dollars billed) are out of tolerance

(3) Each day the billing team also reviews bills with the highest and lowest Mcf and dollar amounts to confirm accuracy.

f. Yes, confirmed.

Submit Date: 3/4/2024

OCA STATEMENT 5

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No. R-2023-3044549
	:	
	:	
Peoples Natural Gas Company LLC	:	

DIRECT TESTIMONY OF

BARBARA R. ALEXANDER

Barbara Alexander Consulting LLC

ON BEHALF OF THE

OFFICE OF CONSUMER ADVOCATE

March 22, 2024

I. INTRODUCTION AND SUMMARY OF RECOMMENDATIONS

Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.

A. My name is Barbara R. Alexander. I am the sole member/owner of Barbara Alexander Consulting LLC. I am a consultant on consumer protection and customer service issues associated with utility regulation. My address is 44 Beech St., Hallowell, ME 04347. I appear in this case as a witness on behalf of the Office of Consumer Advocate (OCA).

Q. PLEASE DESCRIBE YOUR BACKGROUND AND QUALIFICATIONS.

A. I opened my consulting practice in March 1996, after nearly ten years as the Director of the Consumer Assistance Division of the Maine Public Utilities Commission. While there, I managed the resolution of informal customer complaints for electric, gas, telephone, and water utility service, and testified as an expert witness on consumer protection, customer service and low-income issues in rate cases and other investigations before the Commission. My current consulting practice is directed to consumer protection, customer service and low-income issues associated with both regulated utilities and retail competition markets. I have testified on behalf of national and state consumer and public advocate representatives in over 30 states and Canadian jurisdictions. I have published widely on consumer protection, service quality, universal service, and retail competition policies and programs. I have assisted the Pennsylvania OCA in its restructuring activities concerning electricity and natural gas since 1997, numerous rulemaking proceedings relating to customer service, reliability of service, and consumer protection regulations, and submitted testimony on behalf of the OCA in merger and sale proceedings and base rate cases involving Pennsylvania electric and natural gas distribution companies and

Pennsylvania water and sewer utilities. Most relevant to this proceeding, I submitted testimony on behalf of the OCA in the proposal by Aqua America, Inc. (Aqua) to purchase the Peoples Natural Gas LLC (Peoples) and its natural gas distribution companies in Pennsylvania (Docket Nos. A-2018-300606L A-2018-3006062 and A-2018-3006063).[1]

I attach my Resume as Exhibit BA-1.

Q. WHAT IS THE PURPOSE OF THIS TESTIMONY?

A. I am filing Direct Testimony in response to the application by Peoples to increase its base rates for natural gas distribution service filed on December 29, 2023. My testimony addresses the customer service and consumer protection implications for the increase in rates for residential customers if Peoples' request is approved. I will also opine on the Company's proposal for a Weatherization Normalization Adjustment tariff.

Q. PLEASE DESCRIBE THE PROPOSAL FOR RATE INCREASES FILED BY PEOPLES.

A. If approved, the Company's proposal would provide its Peoples Natural Gas Division (PNGD) with an annual revenue increase of increase of $148,558,437, or approximately 20%, and Peoples Gas Division (PGD) with an annual revenue increase of $7,466,250, or approximately 8.5%. Combined, the Company would receive an annual revenue increase of $156,024,687, or approximately 18.7%, on a total annual revenue basis. I will refer to "Peoples" to mean the Peoples Natural Gas Company LLC.

The Company also seeks Commission approval to consolidate the retail rates and tariffs of the PNGD and the PGD. Peoples also proposes Tariff revisions in its filing[2], including the following items: (1) the implementation of a Weather Normalization

[1] This transaction was approved with conditions in the Commission's Opinion and Order issued on October 3, 2019.
[2] Peoples Statement No. 11, pp. 13-15.

Adjustment (WNA); and (2) adjusting its Tax Repairs Surcredit, Tax Cuts and Jobs Act Surcharge, and Allegheny Valley Capacity Charge.

Peoples has proposed 25 basis points be added to Peoples' estimate of an 11.50% cost of equity[3], due to the Company's management performance

Peoples provides natural gas service to over 700,000 residential, commercial and industrial customers in southwestern and western Pennsylvania, including Allegheny, Armstrong, Beaver, Blair, Butler, Cambria, Clarion, Fayette, Greene, Indiana, Jefferson, Lawrence, Mercer, Somerset, Venango, Washington, and Westmoreland counties.

Q. WHAT IS THE CONNECTION BETWEEN YOUR DISCUSSION OF SERVICE QUALITY AND CUSTOMER SERVICE PERFORMANCE AND THE RATE INCREASE PROPOSED BY PEOPLES?

A. A public utility in Pennsylvania is statutorily obligated to provide adequate and reasonable service to its customers. A public utility must justify its rates based on, among other things, its ability to perform its essential quality of service and customer service functions at an adequate and reasonable performance level. Accordingly, where a public utility is seeking a rate increase – especially a significant one, and, where, as in this case, the utility is asking for a reward in the form of a higher rate of return based on its performance, it is appropriate to review the performance of that utility and to compare such performance to other Pennsylvania utilities. Therefore, my evaluation of Peoples' customer service and consumer protection policies is directly related to the Commission's consideration of Company's general rate increase.

[3] Peoples Statement No. 13, pp. 1-2.

Furthermore, Peoples seeks an incentive in this case under Section 523 of the Public Utility Code in the form of the Commission's adoption of the higher end of the Company's requested return on equity of based on its management performance. My evaluation of Peoples' customer service and consumer protection policies is directly related to the Commission's consideration of Company's request for the higher return on equity.

My analysis and findings should inform the Commission on the reasonableness of Peoples' significant rate increase request. Where I identify deficiencies in Peoples' customer service performance, I recommend that the Commission order improvements in specific areas as a condition of any rate increase and consider adopting any rate increase and rate of return that reflects the inadequate customer service I have documented. This approach is mandated by the statutory guidelines of Section 523 governing public utility rate cases in which the Commission must evaluate the "efficiency, effectiveness, and adequacy of service."[4]

Q. DO YOU HAVE EXHIBITS TO YOUR TESTIMONY?

A. Yes. I attach the following exhibits to my testimony:

- Exhibit BA-1: CV of Barbara R. Alexander
- Exhibit BA-2: Peoples Response to OCA-XIV-030
- Exhibit BA-3: Peoples Response to OCA-XIV-21 and OCA-VI-14 with attachments
- Exhibit BA-4: Peoples Response to OCA-VI-015 with attachments
- and OCA-XIV-018 with attachments
- Exhibit BA-5: Peoples Response to OCA-VI-21, 22, and 24

[4] 66 Pa. C.S. 523.

Q. Exhibit BA-6: Peoples Response to OCA-I-02 and attachments.

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS.

A. My recommendations as reflected in my testimony below are as follows:

- Customer Service Performance: I recommend that Peoples be required to maintain its current service quality and customer service performance as reflected in its test year 2023 results as a condition of any rate increase approved in this proceeding. In addition, I recommend that Peoples evaluate the potential for extending the hours of its call center to accommodate those customers who are employed during normal business hours and implement extended call center hours if justified and at a reasonable cost.
- Complaint analysis: Peoples' analysis of customer complaints, whether handled internally as disputes, or externally by BCS as informal complaints, needs to improve. I recommend that Peoples be required to conduct a regular and proper root cause analysis of its complaint trends, both for internal disputes and BCS informal complaints that document infractions and verified violations. This recommendation should require a professionally conducted root cause analysis and report on findings, including identification of trends, evaluation, steps to reform or avoid repeated trends, and internal steps taken to take proper internal enforcement action where needed within 3 months and quarterly updates to stakeholders.
- Termination Procedure: Peoples should be required to develop and implement detailed training programs to ensure compliance with the Commission's specific regulations relating to personal contact, particularly with respect to the obligation to attempt personal contact "immediately" prior to actual termination of service. This

compliance filing and detailed implementation plan should be filed within 3 months of a final order in this proceeding after consultation and review by stakeholders.

- Shared Service Premises: Peoples' policies and disclosures to tenants should conspicuously disclose the tenants' rights to remain with gas service under these conditions:

1) Peoples should allow tenants to affirmatively request that their personal information not be provided to the landlord/owner.
2) Peoples' policies and disclosures should reflect that landlords may not retaliate against their tenants for 1) the tenant exercising their right to pay the utility bill to continue service under the landlord's name, and 2) to recover this payment by deducting the payment from their rental payment.
3) Peoples should accept from tenants; medical certificates and protection from abuse orders, or court orders issued by a court of competent jurisdiction in the Commonwealth, which provide clear evidence of domestic abuse.
4) Peoples should not terminate a landlord/tenant account during the months of December through March for households with income at or below 250% of the federal poverty income guidelines.

- Weatherization Normalization Adjustment: I support the recommendation of the previously referenced OCA witnesses that this method by which Peoples can make rate adjustments outside of a base rate case should be rejected. Customers desiring bill stability to mitigate volatility can and should be encouraged to enroll in budget billing. This has far more consumer-friendly impact than a WNA.

- Bill Payment Fees: I agree with Peoples' proposal to eliminate the bill payment fees for Peoples Gas Division customers and include those costs in rates.

- Billing for Non-Basic Charges: My primary recommendation is that the Commission investigate this program, particularly with regard to whether regulated ratepayers are subsidizing the marketing, billing, and collection of unregulated non-basic services provided by Peoples' unregulated affiliate. Furthermore, there are issues relating to the marketing materials and disclosures that should be further reviewed and evaluated. I also note that the OCA has recently served discovery seeking additional information in an attempt to confirm whether ratepayers are subsidizing services as part of this case, and therefore I reserve the right to supplement my position on this matter if necessary.

- Supplier Charges in Excess of Default Service: First, I recommend that Peoples conduct consumer education to its customers to alert them when they are paying more for service than default service. The goal here is to ensure that these customers are aware of this fact so they can decide what action to take. They may be paying more because they want to do so, but more likely it is out of inattention to an expiring contract. This would allow customers the ability to choose whether to renegotiate their contract with their supplier, shop and choose another supplier, or return to default service. There is no preordained outcome that "should" result from this education other than ensuring that customers are aware of the price that they are paying. Second, Peoples' bills should more clearly reflect that the customer is paying for service and whether it is higher of lower than the default service price. This is another way to accomplish the goal of educating customers. Once way to do this is for Peoples to calculate what the bill would be under

default service. For customers with lower priced supply contracts this will ensure a positive reinforcement that they are saving money through their NGS. For customers with a higher priced supply contract, it will ensure that these customers are aware of this fact and allow them to make an informed decision about their options.

- Additional profits for management performance: Ratepayers should not pay additional profits to a public utility for maintaining a level of customer service quality and customer performance for the call center, billing, and meter reading that was promised as a result of commitments made in prior proceedings. There is no evidence of above average performance. Furthermore, I have identified a number of areas in which Peoples' current performance requires significant improvement and my recommendations have identified conditions for approval of any rate increase in this proceeding. As a result, there is no basis to support any reward in the form of higher profits due to "management efficiency" as requested by Peoples in this request to increase base rates.

II. SUMMARY OF PEOPLES' CUSTOMER SERVICE AND CONSUMER PROTECTION PERFORMANCE

Q. PLEASE IDENTIFY THE SPECIFIC CONDITIONS FOR PEOPLES' CUSTOMER SERVICE PERFORMANCE THAT WERE ADOPTED IN PRIOR PROCEEDINGS.

A. The Peoples natural gas distribution companies have been the subject of numerous mergers and acquisitions, all of which were resolved with customer service performance standards and reforms to expand and improve its low income universal service programs. In 2013

the Commission's Order approving the acquisition of Equitable Gas by Peoples[5] reflected the following agreed upon conditions:

- Peoples will maintain field offices in its service territory and staffing levels that are sufficient to provide safe and reliable service (Settlement ¶ 59).
- Services that are currently performed for Equitable outside of the Equitable service area in Pennsylvania, such as call center support, customer billing and payment and customer relations, will be returned to the Peoples service area within five years after Closing (Settlement ¶ 79).
- For a period of not less than five years, Peoples will provide corporate contributions and community support in southwestern Pennsylvania in a total amount that is at least equivalent to the amount provided by Peoples ($1.0 million) and Equitable ($400,000) in 2012 (Settlement ¶ 78).
- Peoples will commit to achieve and maintain specific quality of service metrics for its Peoples and Equitable Divisions:

  a. Call Center: 82% calls answered within 30 seconds;
  b. Call Center: Average Busy-out Rate less than 0.25%;
  c. Call Center: Average Call Abandonment Rate that is no higher than 3% for 2014-2016 and 2.5% for 2017-2018;
  d. Percent response within 60 minutes to emergency calls of at least 98.5% for 2014-2016 and 99% for 2017-2018; and,
  e. Peoples TWP agrees to extend the customer service metrics agreed to in the SteelRiver acquisition of Peoples TWP, at Docket No. A-2010-2210326, for an additional two years commencing January 1, 2014. (Settlement ¶ 66, Appendix D).

[5] Opinion and Order, Docket Nos. A-2013-2353647 et al., (Order entered Nov. 14, 2013); Initial Decision at 35-62, Docket No. A-2013-2353647 et al., (Nov. 1, 2013).

- Peoples will provide a report to the statutory parties each calendar year following assumption of customer service functions by the staff of Peoples or its affiliates regarding its achievement of the service quality metrics. Such reports shall continue for three calendar years after assumption of such functions by the staff of Peoples or its affiliates. If the Company has not achieved an identified metric, the report will explain the reasons for the failure and the Company's detailed plan to reach the service quality metric. Peoples will then convene a collaborative with OCA, I&E and the OSBA to discuss such report (Settlement ¶ 67).
- Peoples will establish a Universal Service Advisory Group that will include community based organizations ("CBOs"), Low-Income Advocates, the OCA and other interested stakeholders and will meet quarterly to discuss all universal service issues, including recommendations concerning: Low Income Usage Reduction Program ("LIURP"), LIURP eligibility, Earned Income Tax Credit ("EITC") concerns, and landlord issues that may present a barrier to customer participation (Settlement ¶ 73).
- Peoples will develop and employ best practices from the experience of Peoples and Equitable under their universal service programs and those of other companies identified by the Universal Service Advisory Group (Joint Applicants Statement No. 4-R, p. 28).
- After Closing, Peoples will continue to fund Equitable's Customer Assistance Program ("CAP") consistent with its needs analysis approved in conjunction with Equitable's currently approved Universal Services Plan (Settlement ¶ 72).

- Peoples will manage Equitable's CAP program similar to that of Peoples in that it will partner with an agency that: (a) can substantially increase the number of intake sites; (b) is an administrator of utility CAP programs for the electric distribution companies or natural gas distribution companies in their territory; (c) recruits and partners with multi-service agencies; and, (d) uses a case management system to track and monitor referrals and enrollments into utility programs (Settlement ¶ 74).
- The shareholders of Peoples and Peoples TWP commit to increase their total donation (administrative and matching) to the Dollar Energy Fund by 10% for the next five years following Closing. Peoples will review possible ways to increase outreach to customers to attempt to increase customer contributions and will provide a report to the Commission and OCA (Settlement ¶ 76).
- Peoples will increase expenditures for the Peoples (by $150,000 per year) and Equitable Divisions (by $100,000 per year) on LIURP in the first four years after Closing. Peoples TWP also will increase expenditures (by $25,000 per year) on LIURP for a period of four years, 2014 through 2017. These increases will be funded by shareholders for the four-year period. Any funds not used in one year will roll-over into the next calendar year. Funding on this basis will continue until the effective date of rates set in the next base rate proceeding (Settlement ¶ 77).

Q. DID PEOPLES PRESENT INTERNAL CUSTOMER SERVICE GOALS IN THE AQUA-PEOPLES MERGER PROCEEDING?

A. Yes. In 2018, Aqua America Inc., Aqua Pennsylvania Inc., Aqua Pennsylvania Wastewater Inc. and Peoples filed a Joint Application that eventually led to the acquisition of Peoples by Aqua. The Commission approved Aqua's acquisition of Peoples, subject to the terms of a settlement that obligated Peoples to honor

commitments that included customer service goals[6]. Specifically, Peoples adopted Customer Service Commitments in the following areas, which it agreed to honor for a five-year period[7]:

- Call Center Service Level 82%
- % of Calls Abandoned 2.0%
- Busy-Out Rate 0%
- % of Bills Not Rendered Each Billing Period .008%
- % of Meters Not Read w/in 6 Months .15%
- % of Meters Not Read w/in 12 Months .015%
- % of Company Disputes Not Answered w/in 30 Days 1%

Q. HOW DO THESE PRIOR INTERNAL PERFORMANCE STANDARDS COMPARE TO PEOPLES' RECENT AND CURRENT PERFORMANCE?

A. Peoples' 2022 performance as reported to the Commission[8] was as follows:

- Call Center Service Level (% calls answered in 30 seconds) 85%
- % of Calls Abandoned 3.0%
- Busy-Out Rate 0%
- % of Bills Not Rendered Each Billing Period .0%
- % of Meters Not Read w/in 6 Months 0%
- % of Meters Not Read w/in 12 Months .0%
- % of Company Disputes Not Answered w/in 30 Days 0%

[6] Opinion and Order (Public Version), Docket Nos. A-2018-3006061 et al., (Order entered January 24, 2020)
[77] Id. at 153.
[8] 2022 Customer Service Performance Report (September 2023). https://www.puc.pa.gov/filing-resources/reports/customer-service-performance-reports/

When comparing the performance goals required to be implemented in 2020 for five years with the actual performance in 2022 (reflecting the merger and unification of the Peoples natural gas distribution service districts), Peoples has maintained its previous required goals for the most part.

Q. HAS THERE BEEN ANY SIGNIFICANT CHANGE IN PERFORMANCE IN 2023?

A. Peoples reports that in 2023, 85.9% of PNGD customer calls were answered within 30 seconds and 85% of PGD customer calls answered within 30 seconds, performance typical of 2022. The 2023 abandonment rate, however, varied at 3% for PNGD customers and 1.8% for PGD customers.[9] Again, there is no significant improvement compared to the 2019 goals.

Q. ARE THERE OTHER INDICATORS OF COMPLIANCE AND COMPLAINT HANDLING THAT YOU HAVE REVIEWED AND THAT SHOULD BE CONSIDERED IN YOUR EVALUATION?

A. Yes. There are three areas. First, Peoples has maintained a response time for emergency calls of 24 to 25 minutes in the first six months of 2023 but this response time increases in the second half of the year to 26 to 27 minutes.[10] The Commission's Terminations and Reconnections data for 2022 and 2023 indicates a 40% increase in terminations by Peoples, the highest of any natural gas distribution company except Philadelphia Gas Works, but accompanied by an 49% increase in reconnections.[11] In addition, I have reviewed the Company's performance in handling customer complaints and the performance in

[9] Peoples Response to OCA-VI-004, Part A and Part B.
[10] Peoples Response to OCA-VI-004, Part E.
[11] https://www.puc.pa.gov/filing-resources/reports/terminations-for-electric-gas-water-companies/

compliance as reported by the Commission's Bureau Consumer Services in the UCARE Report.[12] The 2022 and 2023 Reports shows the 2022 and 2023 results for major natural gas distribution companies, including Peoples:

BCS Categories	2022	2023	Comments
Residential Customer Complaints	344	348	1% increase
Residential Payment Arrangement Requests (PARs)	1018	1145	12% increase
Inquiries	272	297	9% increase
% Justified[13] Residential Customer Complaints	3.8%	3%	Slightly down
% Justified[14] PARs	1.5%	3%	Increase
Response Time to Complaints and PARs (Days)	4.7/1.9	5.6/1.8	Increase/No change
Verified Infractions[15] (Chapter 56)	13	33	Significant Increase

Q. WHAT TRENDS ARE APPARENT FROM THIS HISTORICAL AND MOST RECENT INFORMATION?

A. The call center performance remains at a reasonable level and other indicators that compare 2019 objectives with 2022-2023 performance indicate results that remain within the zone

[12] https://www.puc.pa.gov/filing-resources/reports/consumer-activities-report-evaluation/
[13] The BCS defines a Justified Consumer Complaint as "A consumer complaint where, prior to BCS intervention, the company did not comply with Commission Orders, policies, regulations, reports, Secretarial Letters, tariffs or guidelines when the consumer brought the complaint to the company's attention. The justified consumer complaint rate equals the number of justified consumer complaints for each 1,000 residential customers."
[14] The BCS defines a Justified PAR as, "A Payment Arrangement Request where, prior to BCS intervention, the company did not comply with Commission regulations, reports, Secretarial Letters, tariffs or guidelines. The justified payment arrangement request rate equals the number of justified payment arrangement requests for each 1,000 residential customers."
[15] The BCS defines an Infraction as "A misapplication or infringement of a Commission regulation, particularly the standards and billing practices for residential utility service."

of reasonableness. However, there is a steady decline in performance when reflected in the BCS reports in terms of customer complaints and compliance. The increase in Infractions in 2023 is particularly concerning, particularly when accompanied by the evidence I present below concerning the lack of any complaint analysis or root cause evaluation of customer complaints, complaint trends or compliance issues.

Q. DO YOU HAVE ANY RECOMMENDATIONS AS A RESULT OF THIS PRESENTATION OF HISTORICAL AND CURRENT CUSTOMER SERVICE INDICATORS?

A. I recommend that Peoples be required to maintain its current service quality and customer service performance as reflected in its test year 2023 results as a condition of any rate increase approved in this proceeding. There are other issues that I will discuss below that do require improvement.

III. PEOPLES DOES NOT PROPERLY EVALUATE CUSTOMER COMPLAINTS TRENDS AND BCS FINDINGS

Q. PLEASE DESCRIBE HOW PEOPLES TRACKS AND EVALUATES CUSTOMER COMPLAINTS.

A. Peoples creates spreadsheets to list complaints by topic.[16] I attach Peoples' response to OCA-XIV-030 and attachment as Exhibit BA-2. There is no evidence of management's investigation of root causes and identification of reforms and internal actions to respond to routine root cause analysis. Peoples does document and review any BCS identification of infractions and justified complaints. A review of the documentation of how Peoples

[16] Peoples Response to OCA-XIV-030. This response provided a document that listed counts of complaints by category.

responds shows that management investigates the noted non-compliance (or alleged non-compliance) and takes action based on that evaluation of the specific incident.[17] I attach Peoples Response to OCA-XIV-21 and OCA-VI-14 with attachments as Exhibit BA-3.

Q. DOES THE DOCUMENTATION PROVIDED BY PEOPLES CONSTITUTE A PROPER ROOT CAUSE ANALYSIS?

A. No. Peoples' response is not a root cause analysis because there is no attempt to find similar instances that did not result in a customer complaint or BCS finding. Furthermore, Peoples' alleged "root cause analysis" typically results in a "coaching" of the employee who handled the complaint without investigating whether there is a defect in the manner or content of the internal training that led to repeated instances of the same failure noted in BCS complaints. While I note that some situations did involve an internal system change, which is no doubt a proper response, the lack of any attempt to investigate similar instances, the lack of internal audits and attempt to find complaints that could be avoided by evaluating internal disputes (in addition to waiting for the BCS to find the failures), and the lack of any management evaluation of why these instances of non-compliance occurred or how they might be prevented result in a continuing concern about the lack of proper evaluation of complaint data. A proper analysis would require an investigation into complaint trends and identification of underlying causes that may contribute to an increase in volume of complaints in a certain area, a pattern or practice of complaint findings (whether due to internal review or based on a review of BCS complaints in specific areas of compliance), and the documentation of how reforms or changes in policies or training

[17] Peoples Response to OCA XIV-21 and attachments; Peoples Response to OCA-VI-14 and attachment.

result in improvement.

Q. HAS PEOPLES CONDUCTED AN AUDIT OR REVIEW OF ITS CALL CENTER TO EVALUATE COMPLIANCE WITH CHAPTER 56 AND RELATED REQUIREMENTS?

A. No. Rather, the Company relies on the individual review of complaints as they occur.[18]

Q. PLEASE DESCRIBE A PROPER ROOT CAUSE ANALYSIS.

A. A root cause analysis is a fact-based exercise in which the underlying cause or causes of an undesirable outcome are identified and specific remedial steps are identified and determined to result in correcting or improving the previously identified undesirable result. A list of customer complaints by category is not a root cause analysis.

> A root cause is defined as a factor that caused a nonconformance and should be permanently eliminated through process improvement. The root cause is the core issue—the highest-level cause—that sets in motion the entire cause-and-effect reaction that ultimately leads to the problem(s).
>
> Root cause analysis (RCA) is defined as a collective term that describes a wide range of approaches, tools, and techniques used to uncover causes of problems. Some RCA approaches are geared more toward identifying true root causes than others, some are more general problem-solving techniques, and others simply offer support for the core activity of root cause analysis.
>
> There are many methodologies, approaches, and techniques for conducting root cause analysis, including:
>
> 1. **Events and causal factor analysis:** Widely used for major, single-event problems, such as a refinery explosion, this process uses evidence gathered quickly and methodically to establish a timeline for the activities leading up to the accident. Once the timeline has been established, the causal and contributing factors can be identified.
> 2. **Change analysis:** This approach is applicable to situations where a system's performance has shifted significantly. It explores changes made in people,

[18] Peoples Response to OCA-XIV-005.

equipment, information, and more that may have contributed to the change in performance.

3. **Barrier analysis:** This technique focuses on what controls are in place in the process to either prevent or detect a problem, and which might have failed.
4. **Management oversight and risk tree analysis:** One aspect of this approach is the use of a tree diagram to look at what occurred and why it might have occurred.
5. **Kepner-Tregoe Problem Solving and Decision Making:** This model provides four distinct phases for resolving problems:
    1. Situation analysis
    2. Problem analysis
    3. Solution analysis
    4. Potential problem analysis[19]

According to the publications developed by the American Society for Quality, and other comparable publications[20], a proper analysis of any "root cause" requires the identification of "symptoms," which are not actual causes but signs of existing problems, and "first level causes," which are the causes that directly lead to a problem; and "higher level causes," which are links in the chain of cause-and-effect relationships that ultimately create the problem. Peoples' compilation of individual customer complaints and their identification of the individual complaint resolution reflects "symptoms" and not the actual underlying cause of that reflects identification of patterns and the underlying facts that contributed to the complaint and complaint patterns.

Q. WHAT IS YOUR RECOMMENDATION IN LIGHT OF THIS CONCERN?

A. Peoples' analysis of customer complaints, whether handled internally as disputes, or externally by BCS as informal complaints, needs to improve. I recommend that Peoples be required to conduct a regular and proper root cause analysis of its complaint trends, both

[19] https://asq.org/quality-resources/root-cause-analysis

[20] There is an extensive body of literature used in the medical community to conduct root cause analysis and develop plans to prevent adverse events. See, e.g., https://www.cms.gov/medicare/provider-enrollment-and-certification/qapi/downloads/guidanceforrca.pdf

for internal disputes and BCS informal complaints that document infractions and verified violations. This recommendation should require a professionally conducted root cause analysis and report on findings, including identification of trends, evaluation, steps to reform or avoid repeated trends, and internal steps taken to take proper internal enforcement action where needed within 3 months and quarterly updates to stakeholders.

IV. PEOPLES' TERMINATION PROCEDURES DO NOT REFLECT COMPLIANCE WITH THE OBLIGATION TO ATTEMPT PERSONAL CONTACT IMMEDIATELY PRIOR TO TERMINATION.

Q. PLEASE IDENTIFY THE REQUIREMENTS THAT PEOPLES MUST FOLLOW TO TERMINATE SERVICE FOR A RESIDENTIAL CUSTOMER.

A. The Commission's regulations require public utilities to attempt contact with the customer immediately prior to termination of service. This "knock on the door" obligation is intended to attempt personal contact to determine whether the termination should go forward and to identify specific consumer rights and remedies. Chapter 56 of the Commission's regulations address the personal contact requirements associated with involuntary disconnection of service:

> *§ 56.93. Personal contact.*
>
> (a) Except when authorized under § 56.71, § 56.72 or § 56.98 (relating to interruption of service; discontinuance of service; and immediate termination for unauthorized use, fraud, tampering or tariff violations), a public utility may not interrupt, discontinue or terminate service without attempting to contact the customer or responsible adult occupant, either in person, by telephone or electronically with the customer's consent, to provide notice of the proposed termination at least 3 days prior to the scheduled termination using one of the methods in this section. If personal contact by one method is not possible, the public utility is obligated to attempt another method.
>
> (1) Phone contact shall be deemed complete upon attempted calls on 2 separate days to the residence between the hours of 8 a.m. and 9 p.m. if the calls were made at various times each day,

with the various times of the day being daytime before 5 p.m. and evening after 5 p.m. and at least 2 hours apart. Calls made to contact telephone numbers provided by the customer shall be deemed to be calls to the residence.

(2) If contact is attempted in person by a home visit, only one attempt is required. The public utility shall conspicuously post a written termination notice at the residence if it is unsuccessful in attempting to personally contact a responsible adult occupant during the home visit.

(3) Contact by e-mail, text message or other electronic messaging format consistent with the Commission's privacy guidelines and approved by Commission order. The electronic notification option is voluntary and shall only be used if the customer has given prior consent approving the use of a specific electronic message format for the purpose of notification of a pending termination. Electronic contact shall be deemed complete if, after attempted transmittal, no message is received indicating that the transmittal was undeliverable or otherwise not received. If the public utility receives notification that the transmittal was undeliverable or otherwise not received, the public utility shall attempt to contact the customer either in person or by telephone, consistent with the requirements of this section.

(b) The content of the 3-day personal contact notice must include the earliest date at which termination may occur and the following information:

(1) The date and grounds of the termination.

(2) What is needed to avoid the termination of service.

(3) How to contact the public utility and the Commission.

(4) The availability of the emergency medical procedures.

(c) The public utility shall ask the customer or occupant if he or she has questions about the 10-day written notice the public utility previously sent.

§ 56.94. Procedures immediately prior to termination.

Immediately preceding the termination of service, a public utility employee, who may be the public utility employee designated to perform the termination, shall attempt to make personal contact with a responsible adult occupant at the residence of the customer.

(1) *Termination prohibited in certain cases.* If evidence is presented which indicates that payment has been made, a serious illness or medical condition exists, or a dispute or complaint is properly pending or if the employee is authorized to receive payment and payment in full is tendered in any reasonable manner, then termination may not occur. However, if the disputing party does not pay all undisputed portions of the bill, termination may occur.

(2) *Methods of payment.* Payment in any reasonable manner includes payment by personal check unless the customer within the past year has tendered a check which has been returned for insufficient funds or for which payment has been stopped.

(3) *Dishonorable tender of payment after receiving termination notice*. After a public utility has provided a written termination notice under § 56.91 (relating to general notice provisions and

contents of termination notice) and attempted contact as provided in § 56.93 (relating to personal contact), termination of service may proceed without additional notice when:

(i) A customer tenders payment which is subsequently dishonored under 13 Pa.C.S. § 3502 (relating to dishonor).

(ii) A customer tenders payment with an access device, as defined in 18 Pa.C.S. § 4106(d) (relating to access device fraud), which is unauthorized, revoked or canceled.

(iii) A customer tenders payment electronically that is subsequently dishonored, revoked, canceled or is otherwise not authorized and which has not been cured or otherwise paid in full within 3 business days of the public utility's dishonored payment notice to the customer under § 56.93(a).

§ 56.97. Procedures upon customer or occupant contact prior to termination.

(a) If, after the issuance of the initial termination notice and prior to the actual termination of service, a customer or occupant contacts the public utility concerning a proposed termination, a public utility shall fully explain:

(1) The reasons for the proposed termination.

(2) All available methods for avoiding a termination, including the following:

(i) Tendering payment in full or otherwise eliminating the grounds for termination.

(ii) Entering a payment arrangement.

(iii) Paying what is past-due on the most recent previous company negotiated or Commission payment arrangement.

(3) Information about the public utility's universal service programs, including the customer assistance program. Refer the customer or applicant to the universal service program of the public utility to determine eligibility for a program and to apply for enrollment in a program.

(4) The medical emergency procedures.

(b) The public utility shall exercise good faith and fair judgment in attempting to enter a reasonable payment arrangement or otherwise equitably resolve the matter. Factors to be taken into account when attempting to enter into a reasonable payment arrangement include the size of the unpaid balance, the ability of the customer to pay, the payment history of the customer and the length of time over which the bill accumulated. Payment arrangements for heating customers shall be based upon budget billing as determined under § 56.12(8) (relating to meter reading; estimated billing; customer readings). If a payment arrangement is not established, the company shall further explain the following:

(1) The right of the customer to file a dispute with the public utility and, thereafter, an informal complaint with the Commission.

> (2) The procedures for resolving disputes and informal complaints, including the address and telephone number of the Commission: Public Utility Commission, Box 3265, Harrisburg, Pennsylvania 17105-3265, (800) 692-7380.
>
> (3) The duty of the customer to pay any portion of a bill which the customer does not dispute.
>
> *§ 56.112. Postponement of termination pending receipt of certificate.*
>
> If, prior to termination of service, the public utility employee is informed that an occupant is seriously ill or is affected with a medical condition which will be aggravated by a cessation of service and that a medical certification will be procured, termination may not occur for at least 3 days. If a certification is not produced within that 3-day period, the public utility may resume the termination process at the point where it was suspended.

In addition, Chapter 14 of the Public Utility Code added requirements to halt disconnection and offer additional payment options to customers who are the subject of a protective order to prevent domestic violence. These rights are also applicable to the interaction between Peoples employees and customers "immediately prior" to disconnection.

Q. HAS PEOPLES PROVIDED ANY TRAINING MATERIALS FOR ITS FIELD PERSONNEL TO DOCUMENT TRAINING AND COMPLIANCE WITH THESE POLICIES?

A. No. When asked to provide such information, the training materials provided by Peoples do not instruct the field personnel on these specific requirements or train the field personnel on the obligation to obtain personal contact and how to handle the various situations in which personal contact is achieved. I attach Peoples Response to OCA-VI-015 with attachments and OCA-XIV-018 with attachments as Exhibit BA-4. There is no documentation that field personnel understand these obligations or that Peoples properly

implements these rights and remedies.[21] Peoples stated, "Peoples does not formally document management's oversight of field compliance with this specific procedural requirement; however overall compliance to Company standard procedures is conducted and documented by management through field observations in conjunction with the Company's Job Site Safety Observation Program." No evidence of training or "observation" on the personal contact requirements was provided.

Q. WHAT IS YOUR RECOMMENDATION IN LIGHT OF THIS CONCERN?

A. Peoples should be required to develop and implement detailed training programs to ensure compliance with the Commission's specific regulations relating to personal contact, particularly with respect to the obligation to attempt personal contact "immediately" prior to actual termination of service. This compliance filing and detailed implementation plan should be filed within 3 months of a final order in this proceeding after consultation and review by stakeholders.

V. PEOPLES' IMPLEMENTATION OF APPLICABLE LANDLORD/TENANT LAW REQUIRES REFORM

Q. PLEASE IDENTIFY YOUR CONCERN WITH PEOPLES' POLICIES WHEN THERE IS A SHARED PREMISE, THAT IS, MULTIPLE TENANTS WITH ONLY ONE METER.

A. According to Peoples' policy, when there is a shared premise, only the owner can obtain service. Peoples defines a "shared premise account" as where one meter serves multiple

[21] Peoples Response to OCA-VI-015 requested the field service training materials to implement these provisions of Chapter 56. The responsive materials did not include any information on these specific obligations or how to implement these requirements. See, also, Peoples Response to OCA-XIV-018 where a further attempt was made to obtain relevant materials.

units. An applicant for service at such a location must present proof of ownership and gas service must be in the owner's name.[22] This policy is consistent with the Commission's rules that protect tenants from foreign load, i.e., paying for load that is not theirs or that is for common spaces, but it raises serious concerns with respect to the implementation of the Discontinuance of Service to Leased Premises Act (DSLPA). I am informed that in situations where a landlord is behind on his payment of the gas bill and facing disconnection of service to the premises, a tenant can obtain service in his/her own name if the property is individually metered even if the owner of the property is not in residence. I understand that if a property has multiple tenants and only one meter, that tenants can retain service by paying the current and future monthly bills. Under DSLPA tenants are protected from a landlord's retaliation for deducting the gas bill from the landlord's rent.

Q. IN LIGHT OF THIS CONCERN, WHAT IS YOUR RECOMMENDATION?

A. Peoples' policies and disclosures to tenants should conspicuously disclose the tenants' rights to remain with gas service under these conditions:

- Peoples should allow tenants to affirmatively request that their personal information not be provided to the landlord/owner.
- Peoples' policies and disclosures should reflect that landlords may not retaliate against their tenants for 1) the tenant exercising their right to pay the utility bill to continue service under the landlord's name, and 2) to recover this payment by deducting the payment from their rental payment.
- Peoples should accept from tenants; medical certificates and protection from abuse

[22] Peoples Response to OCA-VI-015, page 40 of 62. This material is included in Exhibit BA-4.

orders, or court orders issued by a court of competent jurisdiction in the Commonwealth, which provide clear evidence of domestic abuse.

- Peoples should not terminate a landlord/tenant account during the months of December through March for households with income at or below 250% of the federal poverty income guidelines.

VI. PEOPLES PROPOSAL FOR A WEATHERIZATION NORMALIZATION ADJUSTMENT SHOULD BE REJECTED

Q. WHAT ASPECT OF THIS PROPOSAL DO YOUADDRESS?

Q. My testimony is supplemental to that of OCA Witnesses Evard, Mugrace, Johnson, and Colton. The intent of this proposed rate adjustment mechanism is to allow Peoples to change its rates based on a formula that reflects the comparison of its own calculation of the most recent weather to a predetermined baseline. There is no action by the customer that will impact the calculation. The rate adjustment protects Peoples' revenues and provides no obvious benefit to customers. This type of rate adjustment is opaque to customers and likely to be correctly viewed as a benefit to the utility's shareholders outside of a normal rate case. Furthermore, Peoples proposes to not even list this rate adjustment on its bills but rather include it in a change in the customer's "delivery charge."[23] In light of the obvious volatility of weather and ongoing impacts of climate change as well as customer choices about heating systems, it is incumbent on Peoples to engage in purchasing of natural gas supply and implementing its investments in its distribution

[23] Peoples Response to OCA-I-006.

system to ameliorate the impact of more volatile weather on customer bills and rates.

Q. WAS THERE TESTIMONY AT THE PUBLIC INPUT HEARING THAT SUPPORTS YOUR CONCERNS ABOUT THE CUSTOMER ACCEPTANCE OF THIS PROPOSED WEATHERIZATION NORMALIZATION ADJUSTMENT?

A. Yes. Mr. Nick Hoffman testified in opposition to the WNA, suggesting that he did not view this rate adjustment as "neutral," stating, "It seems doubtful that WNA would be revenue neutral because a warmer month does not guarantee a colder month is inevitable. We have been in a warming trend. So it seems we will be paying a new charge for the majority of months it applies, October through May, or 7 of the 12 months in a year."[24]

Q. WHAT IS YOUR RECOMMENDATION CONCERNING THE WNA?

A. I support the recommendation of the previously referenced OCA witnesses that this method by which Peoples can make rate adjustments outside of a base rate case should be rejected. Customers desiring bill stability to mitigate volatility can and should be encouraged to enroll in budget billing. This has far more consumer-friendly impact than a WNA.

VII. PEOPLES' BILL PAYMENT FEES SHOULD BE ELIMINATED FOR PEOPLES GAS CUSTOMERS

Q. DOES PEOPLES CHARGE ADDITIONAL FEES FOR CERTAIN BILL PAYMENT METHODS USED BY ITS CUSTOMERS?

A. Peoples has eliminated additional fees for most payment methods for Peoples Natural Gas Division customers. However, Peoples Gas Division customers are charged $1.95 for credit card payment, $1.95 for "eAccount" payment, and $1.95 for payment via the

[24] Public Input Transcript, March 5, 2024, page 49.

phone/IVR.[25]

Q. WHAT IS YOUR RECOMMENDATION?

A. I agree with Peoples' proposal to eliminate the bill payment fees for Peoples Gas Division customers and include those costs in rates.

VIII. PEOPLES PROGRAM TO INCLUDE NON-BASIC CHARGES FOR AFFILIATED AND UNAFFILIATED PROVIDER PROGRAMS SHOULD BE INVESTIGATED

Q. DOES PEOPLES INCLUDE NON-BASIC CHARGES ON ITS RESIDENTIAL CUSTOMER BILLS?

A. Yes. Peoples bills for "Peoples Protection Program" charges.[26] These programs offer to protect the customer's water and sewer service, gas service line, heating and cooling appliances, and in-house and exterior electric lines. The programs are marketed to Peoples customers with bill inserts.[27] They appear on the Peoples bill under the heading "Non-Basic Service Charges" and are labeled "Peoples Protection Program."[28] While Peoples does not include unpaid "protection program" charges on termination notices, these charges are included in negotiated payment plans with customers.[29]

Q. WHO PROVIDES THESE SERVICES TO PEOPLES' CUSTOMERS?

A. An unregulated affiliate Reliable HomeWorks provides the protection program services.[30] This entity is listed as an unregulated affiliate of Essential Utilities.[31] The website for this

[25] Peoples Response to OCA-VI-010.
[26] Peoples Response to OCA-VI-020.
[27] Peoples Response to OCA-XIV-009 and 010.
[28] Peoples Response to OCA-VI-020, Attachment (3 pages)
[29] Peoples Response to OCA-XIV-013
[30] Peoples Response to OCA-XIV-006.
[31] Peoples Response to OCA-VII-006 and attachment.

entity does not identify its affiliation with Peoples or Essential Utilities.

Q. HOW MANY CUSTOMERS ARE ENROLLED IN THESE PROGRAMS AND DOES THE REVENUE REQUIREMENT IN THIS PROCEEDING INCLUDE ANY REVENUES FOR BILLING AND COLLECTING THESE UNREGULATED CHARGES?

A. As of January 1, 2024, Peoples had 65,787 residential customers enrolled in one or more services and Reliable HomeWorks had 16,098 residential customers enrolled in one or more services. There are no revenues related to providing access to Peoples' customer lists or the billing and collection of the services fees for these programs included in the revenue requirement in this base rate case for the test year.[32]

Q. DO YOU HAVE ANY CONCERNS ABOUT THE MARKETING MATERIALS FOR THESE SERVICES?

A. Peoples provided marketing materials that has been sent to its customers.[33] These materials are included in Peoples' customer bills as inserts. The call center also has scripts that market the program to Peoples' customers. The marketing materials emphasize that the customer is "not protected," can incur costs of up to $7,500 or $1,500, depending on the service promoted, and do not inform customers that the prices charges for these services are not regulated by the Commission or that these services are available by other unaffiliated providers. The Reliable HomeWorks materials do not inform the customer of its relationship to Peoples. Customers are enrolled without any signature and are sent the detailed terms and conditions after agreeing to subscribe. Finally, I am concerned that the

[32] Peoples Response to OCA-XIV-008.
[33] Peoples Response to OCA-XIV-009.

program operates with a negative option renewal[34] if the price changes or the initial term is completed.

Q. WHAT IS YOUR RECOMMENDATION?

A. My primary recommendation is that the Commission investigate this program, particularly with regard to whether regulated ratepayers are subsidizing the marketing, billing, and collection of unregulated non-basic services provided by Peoples' unregulated affiliate. Furthermore, there are issues relating to the marketing materials and disclosures that should be further reviewed and evaluated. I also note that the OCA has recently served discovery seeking additional information in an attempt to confirm whether ratepayers are subsidizing services as part of this case. I have not received a reply to the discovery in the time necessary to review it and to incorporate it into my testimony , and therefore I reserve the right to supplement my position on this matter if necessary.

IX. PEOPLES CUSTOMERS SERVED BY NATURAL GAS SUPPLIERS ARE CONTRIBUTING TO OVERDUE BILLS AND BAD DEBT CHARGES.

Q. PLEASE DESCRIBE THE DATA PROVIDED BY PEOPLES CONCERNING THE BILL IMPACTS OF ITS CHOICE PROGRAM FOR NATURAL GAS SUPPLY SERVICE.

A. As of December 2023, 80,325 residential customers were served by a Natural Gas Supplier (NGS). Those customers typically pay more than default service and in May 2023 and

[34] The term "negative option renewal" refers broadly to a category of transactions where the subscription or service contract will automatically continue or renew unless the consumer takes an affirmative action to prevent it from continuing or renewing.

December 2023, 99% of the shopping customers were paying more than default service with 86% paying twice as much for gas supply compared to default service. I am concerned that these shopping customers are contributing to overdue bills that result in credit and collection costs, such as customer call center activity, negotiation and collection of payment arrangements, and termination of service. I attach the Peoples Response to OCA-VI-21, VI-22, and VI-24 as Exhibit BA-5.

Q. WHY IS THE IMPACT OF NATURAL GAS SUPPLIER CHARGES IMPORTANT TO ADDRESS IN THIS RATE CASE?

A. The impact should be addressed in this case because it has a clear and demonstrable impact on customers' bills by making them more expensive. The impact is explained more thoroughly by witness Roger Colton in OCA Statement 6, as he explains that unaffordable bills result in collection costs and uncollectible expenses that are ultimately passed on to other ratepayers. These prices above default service price contribute to unaffordability for residential customers generally and lower income customers specifically due to increased collection costs and potential write offs. Thus, I believe that Peoples has an obligation to mitigate such costs, and my recommendations here are targeted to ensuring that Peoples begin to take steps towards mitigation.

Q. WHAT IS YOUR RECOMMENDATION?

A. First, I recommend that Peoples conduct consumer education to its customers to alert them when they are paying more for service than default service. The goal here is to ensure that these customers are aware of this fact so they can decide what action to take. They may be paying more because they want to do so, but more likely it is out of inattention to an

expiring contract. This would allow customers the ability to choose whether to renegotiate their contract with their supplier, shop and choose another supplier, or return to default service. There is no preordained outcome that "should" result from this education other than ensuring that customers are aware of the price that they are paying. Second, Peoples' bills should more clearly reflect that the customer is paying for service and whether it is higher of lower than the default service price. This is another way to accomplish the goal of educating customers. Once way to do this is for Peoples to calculate what the bill would be under default service. For customers with lower priced supply contracts this will ensure a positive reinforcement that they are saving money through their NGS. For customers with a higher priced supply contract, it will ensure that these customers are aware of this fact and allow them to make an informed decision about their options.

X. PEOPLES' PROPOSAL FOR ADDITIONAL PROFITS IN ITS RATE OF RETURN SHOULD BE REJECTED.

Q. DOES ANY PERFORMANCE AS YOU HAVE PRESENTED ABOVE JUSTIFY ADDITIONAL PROFITS IN THE FORM OF A MANAGEMENT PERFORMANCE ADDER TO THE RATE OF EQUITY?

A. No. Ratepayers should not pay additional profits to a public utility for maintaining a level of customer service quality and customer performance for the call center, billing, and meter reading that was promised as a result of commitments made in prior proceedings. There is no evidence of above average performance. Furthermore, I have identified a number of areas in which Peoples' current performance requires significant improvement and my recommendations have identified conditions for approval of any rate increase in this

proceeding. As a result, there is no basis to support any reward in the form of higher profits due to "management efficiency" as requested by Peoples in this request to increase base rates.

Q. IS THERE ADDITIONAL EVIDENCE THAT SUPPORTS YOUR RECOMMENDATION RELATING TO HOW PEOPLES NOTIFIED ITS CUSTOMERS OF THIS RATE INCREASE?

A. Yes. Peoples sent the same public notice of this rate case to all its customers without separating the notices to its two divisions even though the bill impacts differ between those two divisions. I am attaching Peoples notices, as provided in response to OCA I-002, as Exhibit BA-6. I found this particularly concerning since customers would have to call the Company to figure out which of the bill impact notices applied to their service. While in the future the Company's' proposal to unify tariffs for its two districts, assuming that is approved, will not require anything other than a single public notice, I bring this to the Commission's attention in light of Peoples' request for an additional profit in this case for management performance.

Q. ASIDE FROM THE NOTICE ISSUE YOU IDENTIFIED, IS THERE OTHER EVIDENCE IN THIS CASE THAT DEMONSTRATES THAT CUSTOMERS' ACCESS TO IMPORTANT INFORMATION IS LIMITED?

A. Yes. During the March 6 public input hearing held in this case at 6 p.m., Peoples' customer Mark Krenitsky testified that Peoples' customer service access by phone ends at 5:00 p.m., making it hard for customers who work to have time to call due to the limited hours. Mr.

Krenitsky also testified that having customer service access by phone until 7:00 p.m. would make calling more accessible for those who work and be consistent with the customer service hours that his other utility provider maintains.[35] I reviewed Peoples' website and it confirmed that customer service center hours were limited to Monday through Friday, from 7 a.m. through 5 p.m.[36] In my opinion, limiting the live customer service hours for customers to traditional "business hours" imposes a barrier upon access to customer service. The time limitations that Peoples imposes upon live customer service access are inconsistent with the any type of customer service performance that warrants ratepayers paying a premium for "management performance."

Q. DO YOU HAVE A RECOMMENDATION CONCERNING THE CALL CENTER HOURS?

A. Yes. I recommend that Peoples conduct an evaluation of the potential for extending the call center hours to accommodate customers who are employed during normal business hours. This evaluation should consider changes in staffing levels to reflect the volume of calls during the call center hours and implement expended business hours when the Company determines that this can be done with reasonable costs.

Q. DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?

A. Yes. However, I reserve the right to supplement this testimony for pending discovery responses.

[35] Public Input Hearing Transcript at 226.
[36] https://www.peoples-gas.com/my-account/understand/

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission,	:	
	:	
v.	:	Docket No. R- 2023-3044549
	:	
Peoples Natural Gas Company LLC	:	
	:	

VERIFICATION

I, Barbara R. Alexander, hereby state that the facts above set forth in my Direct Testimony, OCA Statement 5, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: March 22, 2024

Signature: Barbara Alexander
Barbara R. Alexander

Address: Barbara Alexander Consulting LLC
44 Beech St.
Hallowell, ME 04347

EXHIBIT BA-1

BARBARA R. ALEXANDER
BARBARA ALEXANDER CONSULTING LLC

44 Beech St.
Hallowell, ME 04347

Telephone: (207) 458-1049
E-mail: barbalexand@gmail.com

Recent Clients:

AARP
The Utility Reform Network (TURN) (California)
Pennsylvania Office of Consumer Advocate
Public Counsel Unit, Attorney General, Washington
Arkansas Attorney General
The Public Utility Project of New York
Ohio Office of Consumer Counsel
District of Columbia Office of People's Counsel
Delaware Division of Public Advocate
Maryland Office of People's Counsel

Areas of Expertise:

- Default Service, Consumer Protection, Service Quality, and Universal Service policies and programs associated with the alternative rate plans and mergers;
- Consumer Protection and Service Quality policies and programs associated with the regulation of competitive energy and telecommunications providers;
- The regulatory policies associated with the regulation of Credit, Collection, Consumer Protection, Low Income, and Service Quality programs and policies for public utilities;
- Customer Education and Rate design and pricing policies applicable to residential customers; and
- Advanced Metering Infrastructure and Grid Modernization costs and benefits, time-based pricing proposals, and performance standards.

Prior Employment

DIRECTOR

1986-96

Consumer Assistance Division

Maine Public Utilities Commission *Augusta, Maine*

One of five division directors appointed by a three-member regulatory commission and part of commission management team. Direct supervision of 10 employees, oversight of public utility consumer complaint function, appearance as an expert witness on customer services, consumer protection, service quality and low income policy issues before the PUC. Chair, NARUC Staff Subcommittee on Consumer Affairs.

SUPERINTENDENT

1979-83

Bureau of Consumer Credit Protection
Department of Professional and Financial Regulation *Augusta, Maine*

Director of an independent regulatory agency charged with the implementation of Maine Consumer Credit Code and Truth in Lending Act. Investigations and audits of financial institutions and retail creditors, enforcement activities, testimony before Maine Legislature and U.S. Congress.

Education

JURIS DOCTOR

1973-76

University of Maine School of Law *Portland, Maine*

Admitted to the Bar of the State of Maine, September 1976. Currently registered as "inactive."

B.A. (WITH DISTINCTION) IN POLITICAL SCIENCE 1964-68
University of Michigan *Ann Arbor, Michigan*

Boards and Commissions

Councilor, Winthrop (ME) City Council 2020-2022

Member, Board of Trustees, University of Maine System May 2022

Publications and Testimony

"How to Construct a Service Quality Index in Performance-Based Ratemaking", The Electricity Journal, April, 1996

"The Consumer Protection Agenda in the Electric Restructuring Debate", William A. Spratley & Associates, May, 1996

Direct Testimony on behalf of the Telecommunications Workers Union, Telecom Public Notice 96-8, Price Cap Regulation and Related Issues, Canadian Radio-Television and Telecommunications Commission, September, 1996. [Analysis of and recommendations concerning the need to regulate service quality in move to price cap regulation]

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Transportation Commission, September, 1996 [Need for and design of a Service Quality Index for both electric and gas business units as part of a multi-year rate plan]

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Direct and Surrebuttal Testimony on behalf of the New Jersey Division of Ratepayer Advocate, Restructuring Proceedings before the New Jersey Board of Public Utilities: Public Service Electric and Gas, Jersey Central (GPU), Rockland Electric Co., Atlantic Electric Co., March-April, 1998. [Phase-in and customer enrollment, Code of Conduct, consumer protections associated with the provision of Provider of Last Resort service]

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Direct Testimony on behalf of the Maryland Office of People's Counsel, Universal Service Issues, Case No. 8745, before the Maryland Public Service Commission, November 20, 1998.

"Cramming is the Last Straw: A Proposal to Prevent and Discourage the Use of the Local Telephone Bill to Commit Fraud," NRRI Quarterly Bulletin, Fall. 1998.

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Alexander, Barbara, "Consumer Protection Issues in Electric Restructuring for Colorado: A Report to the Colorado Electricity Advisory Panel," on behalf of the Colorado Office of Consumer Counsel, February 1999.

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Direct Testimony on behalf of AARP, West Virginia PUC Investigation into Retail Electric Competition (consumer protection, universal service, Code of Conduct), June 15, 1999.

Direct and Surrebuttal Testimony on behalf of the Pennsylvania OCA, Natural Gas Restructuring proceedings (8 natural gas utilities): consumer protection; consumer education; code of conduct, before the Pennsylvania PUC, October 1999-April 2000.

Comments on Draft Rules addressing Slamming and Cramming (Docket No. RMU-99-7) on behalf of the Iowa Office of Consumer Advocate, before the Iowa Utilities Board, October 1999.

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Direct Testimony on behalf of the Maine Office of Public Advocate, Central Maine Power Company Alternative Regulation Plan [Docket 99-666] on service quality issues, before the Maine PUC, May 2000.

Direct Testimony on behalf of AARP, Universal Service Programs and Funding of low-income programs for electric and natural gas service, before the New Jersey Board of Public Utilities, Docket No. EX000200091, July, 2000.

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Direct Testimony on behalf of the Pennsylvania OCA, Verizon-Pennsylvania Structural Separation Plan on service quality, customer service and consumer protection issues [Docket No. M-00001353] before the Pennsylvania PUC, October 2000.

Direct and Rebuttal Testimony on behalf of the Maine Office of Public Advocate, Verizon-Maine Alternative Form of Regulation on service quality issues [Docket No. 99-851] before the Maine PUC, January and February 2001.

Direct and Rebuttal Testimony on behalf of the Citizens Utility Board, Nicor Gas Customer Select Pilot Program, on consumer protection and regulation of competitive natural gas suppliers [Docket Nos. 00-0620 and 00-0621] before the Illinois Commerce Commission, December 2000 and February 2001.

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Direct and Surrebuttal Testimony on behalf of the New Jersey Division of Ratepayer Advocate on consumer protection, service quality, and universal service issues associated with the pending merger between GPU Energy and FirstEnergy, before the New Jersey Board of Public Utilities, Docket No. EM00110870 (April 2001).

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Responsive Testimony on behalf of the New Jersey Division of Ratepayer Advocate on service quality issues associated with a Plan for Alternative Regulation by Verizon-New Jersey, before the New Jersey Board of Public Utilities, Docket No. To01020095 (May 2001).

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Direct Testimony on behalf of Consumer Groups before the Texas PUC on Notice and Request of Mutual Energy CPL and Mutual Energy WTU for Approval of Changes in Ownership and Affiliation, Docket No. 25957, October 15, 2002.

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Comments and Reply Comments on behalf of AARP before the Maine PUC, Inquiry into Standard Offer Supply Procurement for Residential and Small Commercial Customers, Docket No. 2004-147 (April 2004).

Comments on behalf of Wisconsin Citizens' Utility Board before the Wisconsin Public Service Commission's Gas Service Standards, Docket No. 1-AC-210 (July 2004).

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Direct Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania PUC, In Re Application of UGI Utilities, Inc., UGI Utilities Newco, Inc., and Southern Union Co., Docket Nos. A-120011F2000, A-125146, A-125146F5000 (June 2006). [Customer Service, Service Quality, and Universal Services]

Direct and Rebuttal Testimony on behalf of the Maryland Office of People's Counsel before the Maryland PSC, In The Competitive Selection of Electricity Supplier/Standard Offer or Default Service for Investor-Owned Utility Small Commercial Customers and, Delmarva Power and Light and Potomac Electric Power Residential Customers, Case No. 9064 (August and September 2006). [Default Service policies]

Direct and Rebuttal Testimony on behalf of the Maryland Office of People's Counsel before the Maryland PSC, In The Matter of the Optimal Structure of the Electric Industry of Maryland, Case No. 9063 (October and November 2006). [Default service policies]

Comments on behalf of AARP Maine before the Maine PUC on various dockets and notices concerning the implementation of Standard Offer Service for residential customers, Docket Nos. 2006-314, 2006-557, and 2006-411 (July-November 2006). [Default service policies]

Comments on behalf of AARP District of Columbia before the District of Columbia PSC, In the Matter of the Development and Designation of Standard Offer Service in the District of Columbia, Case No. 1017 (2006). [Default service policies]

Comments on behalf of AARP New Jersey before the New Jersey Board of Public Utilities, In the Matter of the Establishment of a Universal Service Fund Pursuant to Section 12 of the Electric Discount and Energy Competition Act of 1999, Docket No. EX00020091 (August 2006) [Recommendations for USF program changes]

Direct and Rebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania PUC, Joint Application of Equitable Resources, Inc. and the People's Natural Gas Co., d/b/a Dominion Peoples, for Approval of the Transfer of All Stock Rights of the Latter to the Former and for the Approval of the Transfer of All Stock of Hope Gas, Inc., d/b/a/ Dominion Hope to Equitable Resources, Inc., Docket No. A-122250F5000 (September and October 2006). [Customer Service, Service Quality, and Universal Service issues)

Direct Testimony on behalf of Pennsylvania Office of Consumer Advocate before the Pennsylvania PUC, Pennsylvania PUC v. Natural Fuel Gas Distribution Corp., Docket No. R-00061493 (September 2006) [Supplier Purchase of Receivables Program]

Direct Testimony on behalf of AARP Montana before the Montana Public Service Commission, Joint Application of NorthWestern Energy and BBI to purchase NorthWestern Energy, Docket No. 2006.6.82 [December 2006] [Conditions for approval of merger; low income and customer service programs]

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Direct and Reply Testimony on behalf of the District of Columbia Government through its Department of Environment before the Public Service Commission of the District of Columbia, In the Matter into the Investigation into the Issues Regarding the Implementation of Dynamic Pricing in the District of Columbia, Formal Case No. 1114 (April and May 2014) [Dynamic pricing policies and programs for residential customers]

Comments on behalf of AARP before the Delaware Public Service Commission, Rulemaking for Retail Electric Competition, PSC Regulation Docket No. 49 (Revised) (June 2, 2014) [consumer protection regulations for retail electric competition]

Direct and Rebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of Duquesne Light Company for Approval of Default Service Plan For the Period June 1, 2015 through May 31, 2017, Docket No. P-2014-2418242 (July and August 2014) [retail market enhancement programs, referral program]

Direct and Rebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of PECO Energy Co. for Approval of its Default Service Plan for the Period June 1, 2015 through May 31, 2017, Docket No. P-2014-2409362 (June 2014) [retail market enhancement programs, referral program]

Alexander, Barbara, "An Analysis of State Renewable Energy and Distributed Generation Mandates on Low Income Consumers: Recommendations for Reform" (Oak Ridge National Laboratory, DOE, September 2014)

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania PUC v. West Penn Power, Metropolitan Edison, Penn Power, and Penelec, Dockets Nos. R-2014-2428742-24287245 (November 2014 and January 2015) [FirstEnergy rate cases: customer service; reliability of service; estimated billing protocols; proposed Storm Damage Expense Rider; tariff revisions]

Comments on behalf of Delaware Division of the Public Advocate before the Delaware Public Service Commission, Rulemaking for Retail Electric Competition, PSC Regulation Docket No. 49 (Revised) (January 2015) [consumer protection regulations for retail electric competition]

Reply Testimony of Barbara Alexander before the Public Service Commission of Maryland, In the Matter of the Investigation into the Marketing, Advertising and Trade Practices of Major Energy Electric Services, LLC and Major Energy Services, LLC, Case No. 9346(b) (March 2015) [unfair and deceptive practices; compliance with MD statutes and regulations for electric generation supplier]

Reply Testimony of Barbara Alexander before the Public Service Commission of Maryland, In the Matter of the Investigation into the Marketing, Advertising and Trade Practices of XOOM Energy Maryland LLC, Case No. 9346(a) (March 2015) [unfair and deceptive practices; compliance with MD statutes and regulations for electric generation supplier]

Direct, Surrebuttal and Supplemental Surrebutal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Commonwealth of Pennsylvania by Attorney General Kathleen Kate, through the Bureau of Consumer Protection and Tanya McCloskey, Acting Consumer Advocate v. Respond Power, Docket No. C-2014-2427659 (May-October 2015) [unfair and deceptive practices; compliance with PA statutes and regulations for electric generation supplier]

Direct Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission, on behalf of the Pennsylvania Office of Consumer Advocate and Bureau of Consumer Protection, Attorney General, Commonwealth of Pennsylvania by Attorney General Kathleen Kate, through the Bureau of Consumer Protection and Tanya McCloskey, Acting Consumer Advocate v. IDT Energy, Inc., Docket No. C-2014-2427657 (April 2015) [unfair and deceptive practices; compliance with PA statutes and regulations for electric generation supplier]

Affidavit of Barbara Alexander before the Pennsylvania Public Utility Commission, on behalf of the Pennsylvania Office of Consumer Advocate and Bureau of Consumer Protection, Attorney General, Commonwealth of Pennsylvania by Attorney General Kathleen Kate, through the Bureau of Consumer Protection and Tanya McCloskey, Acting Consumer Advocate v. Blue Pilot Energy, LLC, Docket No. C-2014- 2427655 (June 2015) [unfair and deceptive practices; compliance with PA statutes and regulations for electric generation supplier]

Direct Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission, on behalf of the Pennsylvania Office of Consumer Advocate and Bureau of Consumer Protection, Attorney General, Commonwealth of Pennsylvania by Attorney General Kathleen Kate, through the Bureau of Consumer Protection and Tanya McCloskey, Acting Consumer Advocate v. Blue Pilot Energy, LLC, Docket No. C-2014- 2427655 (September 2015) [unfair and deceptive practices; compliance with PA statutes and regulations for electric generation supplier]

Reply Testimony of Barbara Alexander before the Public Service Commission of Maryland, In the Matter of the Investigation into the Marketing, Advertising and Trade Practices of Blue Pilot Energy, Case No. 9346(c) (July 31, 2015) [unfair and deceptive practices; compliance with MD statutes and regulations for electric generation supplier]

Direct Testimony of Barbara Alexander before the Washington Utilities and Transportation Commission, on behalf of Public Counsel and the Energy Project, WUTC v. Avista Utilities, Dockets UE-150204 and UG-150205, (July 2015) [Analysis of request for smart meter (AMI) deployment and business case.]

Direct, Rebuttal, and Surrebuttal Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission on behalf of the Office of Consumer Advocate, Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Co., Pennsylvania Power Co., and West Penn Power Co. [FirstEnergy] for Approval of their Default Service Program and Procurement Plan for the Period June 1,2017 through May 31, 2019, Docket Nos. P-2015-2511333, et. al. (January-February 2016) [Retail Market Enhancement Programs: standard offer program and shopping for low income customers]

Alexander, Barbara and Briesemeister, Janee, Solar Power on the Roof and in the Neighborhood: Recommendations for Consumer Protection Policies (March 2016).

Direct, Rebuttal, and Surrebuttal Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission on behalf of the Office of Consumer Advocate, Petition of PPL Electric Utilities Corp. for Approval of a Default Service

Program and Procurement Plan for the Period June 1, 2017 through May 31, 2021, Docket No. P-2015-2526627 (April-May 2016) [Retail Market Enhancement Programs: standard offer program and shopping for low income customers]

Direct, Rebuttal, and Surrebuttal Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission on behalf of the Office of Consumer Advocate, Petition of PECO Energy Co. for Approval of its Default Service Program for the Period from June 1, 2017 through May 31, 2019, Docket No. P-2016-2534980 (June-July 2016) [Retail Market Enhancement Programs: standard offer program and shopping for low income customers]

Direct, Rebuttal Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission on behalf of the Office of Consumer Advocate, Petition of Duquesne Light Co. for Approval of Default Service Plan for the Period June 1, 2017 through May 31, 2021, Docket No. P-2016-2543140 (July-August 2016) [Retail Market Enhancement Programs: standard offer program and shopping for low income customers]

Briesemeister, Janee and Alexander, Barbara, Residential Consumers and the Electric Utility of the Future, American Public Power Association (June 2016)

Direct Testimony of Barbara Alexander before the Washington Utilities and Transportation Commission on behalf of the Public Counsel and The Energy Project, Washington UTC v. Avista Corp. d/b/a Avista Utilities, Dockets UE-160228 and UG-160229 (August 2016) [Base Rate Case and AMI Project analysis of costs and benefits]

Alexander, Barbara, *Analysis of Public Service Co. of Colorado's "Our Energy Future" Initiative: Consumer Concerns and Recommendations,* AARP White Paper (December 2016), attached to the Direct Testimony of Corey Skluzak on behalf of the Colorado Office of Consumer Counsel, Docket No. 16A-0588E (Exhibit CWS-35).

Direct Testimony of Barbara Alexander before the Public Utilities Commission of Ohio on behalf of the Office of Consumer Counsel, In the Matter of the Application of Ohio Power Co. for Authority to Establish a Standard Service Offer Pursuant to R.C. 4928.143, in the Form of an Electric Security Plan, Case No. 16-1852-EL-SSO (May 2017) [Response to proposal for new surcharge for certain distribution grid investments]

Alexander, Barbara, Analysis and Evaluation of PEPCO's Root-Cause Analysis Report: District of Columbia Customer Satisfaction, prepared for the District of Columbia Office of People's Counsel and submitted to the D.C. Public Service Commission in Formal Case No. 1119 (May 2017)

Direct Testimony of Barbara Alexander before the Arkansas Public Service Commission on behalf of the Attorney General of Arkansas, Application of Entergy Arkansas, Inc. for an Order to find Advanced Metering Infrastructure to be in the Public Interest, Docket No. 16-06-U (June 2017) [Analysis of AMI business case; consumer protection policies]

Rebuttal Testimony of Barbara Alexander before the Pennsylvania Public Utilities Commission on behalf of the Office of Consumer Advocate, Pennsylvania PUC, et al., v. Philadelphia Gas Works, Docket No. R-2017-2586783 (June 2017) [Purchase of Receivables Program, customer shopping issues]

Direct and Surrebuttal Testimony of Barbara Alexander before the Maryland Public Service Commission on behalf of the Office of People's Counsel, In the Matter of the Application of Potomac Electric Power Co. for Adjustments to its Retail Rates for the Distribution of Electric Energy, Case No. 9443 (June and August 2017) [Service Quality and Reliability of Service]

Direct Testimony of Barbara Alexander before the Washington Utilities and Transportation Commission, on behalf of the Washington State Office of Attorney General, Public Counsel Unit, W.U.T.C. v. Puget Sound Energy, Dockets UE-170033 and UG_170034 (June 2017) [Base Rate Case: Service Quality Index; customer services]

Direct and Surrebuttal Testimony of Barbara Alexander before the Maryland Public Service Commission on behalf of the Office of Peoples Counsel, In the Matter of the Merger of AltaGas Ltd. And WGL Holdings, Inc., Case No. 9449 (August and September 2017) [Merger: conditions for service quality and reliability of service]

Supplemental Testimony in Opposition to Joint Stipulation and Recommendations of Barbara Alexander before the Public Utilities Commission of Ohio on behalf of the Office of Consumer Counsel, In the Matter of the Application of Ohio Power Co. for Authority to Establish a Standard Service Offer Pursuant to R.C. 4928.143, in the Form of an Electric Security Plan, Case No. 16-1852-EL-SSO (October 11, 2017) [Response to Stipulation approving new surcharge for certain distribution grid investments]

Direct and Rebuttal Testimony of Barbara Alexander on behalf of The Public Utility Project of New York, before the New York Public Service Commission, Case 15-M-0127 In the Matter of Eligibility Criteria for Energy Service Companies, Case 12-M-0476 Proceeding on Motion of the Commission to Assess Certain Aspects of the Residential and Small Non-residential Retail Energy Markets in New York State, and Case 98-M-1343 In the Matter of Retail Access Business Rules (November and December 2017) [Analysis of New York retail energy market for residential customers; recommendations for reform]

Comments of Barbara Alexander before the Delaware Public Service Commission, on behalf of the Delaware Division f the Public Advocate, In the Matter of the Review of Customer Choice in the State of Delaware, Docket No. 15-1693 (December 22, 2017) [Proposals for retail market enhancement programs]

Alexander, Barbara, Analysis and Evaluation of PEPCO's Supplemental Root-Cause Analysis Report: District of Columbia Customer Satisfaction prepared for the District of Columbia Office of People's Counsel and submitted to the D.C. Public Service Commission in Formal Case No. 1119 (January 2018)

Direct, Rebuttal, and Surrebuttal Testimony of Barbara Alexander on behalf of the Office of Consumer Advocate, before the Pennsylvania Utility Commission, Joint Petition of Metropolitan Edison Company Pennsylvania Electric Company, Pennsylvania Power Company, and West Penn Power Company For Approval of their Default Service Program and Procurement Plan for the Period June 1, 2019 Through May 31, 2023, Docket Nos. P-2017-2637855, et seq. (February, March, and April 2018) [Retail Market Enhancement Programs in a default service proceeding]

Direct Testimony of Barbara Alexander on behalf of the Arizona Corporation Commission Staff, before the Arizona Corporation Commission, In the Matter of the Application of Brooke Water, LCC for increase in water rates, Docket No. W-03039A-17-0295 (May 15, 2018) [Analysis of customer service, call center performance, and compliance with prior Commission orders]

Alexander, Barbara, "Residential Demand Charges: A Consumer Perspective," EUCI Conference, Nashville, TN (May 2018)

Direct Testimony of Barbara Alexander in Opposition to the Joint Stipulation and Recommendation on behalf of the Office of the Ohio Consumers' Counsel, before the Public Utility Commission of Ohio, Case No. 17-0032-EL-AIR et seq. (June 15, 2018) [Analysis of the prudence of Duke Energy Ohio's Advanced Metering Infrastructure Deployment and request for inclusion of costs in rate base]

Alexander, Barbara, "Time to End the Retail Energy Market Experiment for Residential Customers," Harvard Electricity Policy Group (June 2018)

Rebuttal Testimony of Barbara Alexander on behalf of the Office of Consumer Advocate, before the Pennsylvania Public Utility Commission, PUC v. Columbia Gas of Pennsylvania, Inc., Docket No. R-2018-2647577 (July 3, 2018) [Analysis of gas utility billing policies for non-commodity services and retail natural gas suppliers]

Direct Testimony of Barbara Alexander on behalf of TURN and Center for Accessible Technology before the California Public Utility Commission, 2018 Rate Design Window, Docket No. A.17-12-011, et al. (October 26, 2018) [Consumer Protections to Accompany the Transition to Default Time of Use Rates for residential customers; analysis of customer education and messaging]

Direct and Surrebuttal Testimony of Barbara Alexander on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Utility Commission, PUC vs. Pittsburgh Water and Sewer Authority, Docket Nos. R-2018-3002645, R-2018-3002647 (September and October 2018) [Analysis of compliance with Pennsylvania consumer protection and service quality performance of a large water and sewer utility; base rate case]

Direct Testimony of Barbara Alexander on behalf of TURN before the California Public Utility Commission, Southern California Edison Charge Ready 2 Infrastructure and Market Education Programs, Docket No. A.18-06-015 (November 30, 2018) [Analysis of proposed mass market customer education proposal]

Direct, Surrebuttal and Supplemental Surrebuttal Testimony of Barbara Alexander on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Implementation of Chapter 32 of The Public Utility Code Regarding Pittsburgh Water and Sewer Authority – Stage 1, Docket Nos. M-2018-2640802 and M-2018-2640803 (April, May and August 2019) [Analysis of consumer protection, customer service, and customer education programs of large water and wastewater utility]

Direct, Rebuttal, and Surrebuttal Testimony of Barbara Alexander on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Application of Aqua America, Inc., Aqua Pennsylvania, Inc., Aqua Pennsylvania Wastewater, Inc., Peoples Natural Gas Company, LLC and Peoples Gas Company, LLC for all of the Authority and the Necessary Certificates of Public Convenience to Approve a Change in Control of Peoples Natural Gas Company, LLC and Peoples Gas Company LLC by Way of the Purchase of All of LDC Funding, LLC's Membership Interests by Aqua America, Inc., Docket Nos. A-2018-3006061, A-2018-3006062, and A-2018-3006063 (April and May 2019) [Customer Service, Consumer Protection, and Universal Service conditions for merger]

Testimony in Opposition to Settlement on behalf of The Office of the Ohio Consumers' Council, before the Ohio Public Utilities Commission, In the Matter of the Commission's Investigation of PALMco Power OH, LLC dba Indra Energy and PALMco Energy OH, LLC dba Indra Energy, Case No. 19-957-GE-COI (September 4, 2019) [Analysis of proposed settlement for consumer protections and customer remedies]

Testimony in Opposition to Settlement on behalf of The Office of the Ohio Consumers' Council, before the Ohio Public Utilities Commission, In the Matter of the Commission's Investigation of Verde Energy USA Ohio LLC, Case No. 19-0958-GE-COI (October 2, 2019) [Analysis of proposed settlement for consumer protections and customer remedies]

Direct Testimony and Supplemental Direct Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Joint Petition of Metropolitan Edison Co., Pennsylvania Electric Co., Pennsylvania Power Co. and West Penn Power Co. for Approval of Their Involuntary Remote Disconnect Procedures, Docket No. P-2019-3013979 et al. (March 20, 2020 and July 15, 2022) [Criteria for remote disconnection of service with AMI]

Rebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Interstate Gas Supply, Inc., Direct Energy Services LLC and Shipley Choice LLC v. Metropolitan Edison Co., Pennsylvania Electric Col, Pennsylvania Power Col, West Penn Power Co., Docket Nos. C-2019-30138-5 et al. (May 2020) [Complaint by retail suppliers seeking to bill non-basic services on utility bill]

Alexander, Barbara, "An Evaluation of Arizona Public Service Company's Customer Education Plan and its Implementation," prepared on behalf of the Staff of the Arizona Corporation Commission, Docket Nos. E-01345A-19-0236 and E-01345A-19-0003 (May 15, 2020)

Direct and Supplemental Testimony, Rebuttal Testimony, and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of PPL Electric Utilities Corporation for Approval of a Default Service Program for the Period of June 1, 2021 through May 31, 2025, Docket No. P-2020-3019356 (June-August 2020) [Standard Offer Program and low income shopping program for retail market programs]

Direct, Rebuttal, and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of PECO Energy for Approval of Default Service Program for the Period June 1, 2021 through May 31, 2025, Docket No. P-2020-3019290 (June-July 2020),) [Standard Offer Program and low income shopping program for retail market programs]

Direct, Rebuttal, and Surrebuttal Testimony, on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of Duquesne Light Co. for Approval of Default Service Program for the Period June 1, 2021 through May 31, 2025, Docket No. P-2020-3019522 (July-September 2020), [Standard Offer Program and low income shopping program for retail market programs]

Direct and Surrebuttal Testimony, on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania Public Utility Commission v. Pittsburgh Water and Sewer Authority, Docket Nos. R-2020-3017951 (water), C-2020-3019348, R-2020-3017970 (wastewater), C-2020-3019349 (July-September 2020) [Base rate case; analysis of customer service and consumer protection programs and policies]

Affidavit of Barbara R. Alexander, Analysis of Washington Gas Light Co. Root Cause Analysis Report, on behalf of the Office of the People's Counsel of the District of Columbia, submitted to the Public Service Commission in Formal Case No. 1142 (October 2020).

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania Public Utility Commission v. Pennsylvania American Water Co, Docket R-2020-3019369, et al., (September-October 2020) [Base rate case; analysis of customer service and consumer protection programs and policies]

Direct and Surrebuttal Testimony, on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania Public Utility Commission v. Pittsburgh Water and Sewer Authority, Docket Nos. R-2021-3024773, et al. (July-September 2021) [Base rate case; analysis of customer service and consumer protection programs and policies]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania Public Utility Commission v. Aqua Pennsylvania, Inc, Docket Nos. R-2021-3027385 et al. (November-December 2021) [Base rate case; analysis of customer service and consumer protection programs and policies]

Direct, Rebuttal, and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Joint Petition of Metropolitan Edison Co., Pennsylvania Electric Co., Pennsylvania Power Co. and West Penn Power Co. for Approval of their Default Service Programs, Docket Nos. P-2021-3030012 et al. (February, March, and April 2022) [Standard Offer program; retail market policies; Time of Use rate option; low income consumer protections]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania American Water Co., Docket Nos. R-2022-3031672, et al (July and September 2022) [Base rate case: analysis of customer service and consumer protection performance]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, York Water Company base rate increase, Docket Nos. R-2022-3031340, R-2022-3032806 (August and September 2022) [Base rate case: analysis of customer service and consumer protection performance]

Direct, Rebuttal and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Columbia Gas of Pennsylvania Proposal for Green Path Tariff, Docket Nos. R-2022-3032167 and C-2022-3032404 (December 2022 and January and February 2023) [Proposal to offer an optional "green" product to residential customers with Renewable Natural Gas and Carbon Offsets]

Direct, Rebuttal, and Surrebuttal Testimony on behalf of AARP Maine before the Maine Public Utilities Commission, Central Maine Power Company Request for Distribution Rate Increase and Rate Design Changes, Docket No. 2022-00152 (December 2022, March and April 2023) [Rate impacts; multi-year rate plan; rate design]

Direct and Surrebuttal Testimony on behalf of AARP Maine before the Maine Public Utilities Commission, Versant Power Request for Approval of Rate Change, Docket No. 2022-00255 (January and April 2023) [Rate impacts, AMI costs and benefits]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, Application of Manwalamink Water and Sewer and NextEra Water Pennsylvania, Docket Nos. A-2022-3035298, et al. (January and March 2023) [consumer protection; service quality; acquisition of small water and sewer utility]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, National Fuel Gas Distribution Corp. Base Rate Case, Docket No. R-2022-3035730 (January and March 2023) [analysis of consumer protection and service quality performance in base rate case]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, Philadelphia Gas Works Base Rate Case, Docket No.R-2023-3037933 (May and July 2023) [analysis of consumer protection and service quality performance in base rate case]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, FirstEnergy Pennsylvania Electric Distribution Companies Application for Merger, Docket No. A-2023-3038771 et.al (June and August 2023) [analysis of implication of proposed merger for customer service performance and low income programs]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, Pittsburgh Water and Sewer Authority Base Rate Case, Docket No. R-2023-3039920, et al., (August and September 2023) [customer service performance; compliance with statutory and regulatory rules; multi-year rate plan conditions]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, Application of Pennsylvania-American Water Co. to Acquire Wastewater Assets of Borough of Brentwood, Docket No. A-2021-3024058 (October and November 2023) [analysis of public benefits of acquisition]

Presentations and Training Programs:

- Presentation on Consumer Protection Policies for Solar Providers, New Mexico Public Regulatory Commission, Santa Fe, NM, January 2017
- Presentation on Residential Rate Design Policies, National Energy Affordability and Energy Conference, Denver, CO., June 2016
- Presentation on "Regulatory-Market Arbitrage: From Rate Base to Market and Back Again," before the Harvard Electricity Policy Group, Washington, D.C., March 2016.
- Presentation on Residential Rate Design and Demand Charges, NASUCA, November 2015.
- Alexander, Barbara, "Residential Demand Charges: A Consumer Perspective," presentation for Harvard Electricity Policy Group, Washington, D.C., June 2015.
- Presentation on "Future Utility Models: A Consumer Perspective," for Kleinman Center for Energy Policy, U. of Pennsylvania, August 2015.
- Presentation, EUCI Workshop on Demand Rates for Residential Customers, Denver, CO [May 2015]
- Presentation, Smart Grid Future, Brookings Institute, Washington, DC [July 2010]
- Participant, Fair Pricing Conference, Rutgers Business School, New Jersey [April 2010]
- Presentation on Smart Metering, National Regulatory Conference, Williamsburg, VA [May 2010]
- Presentation on Smart Metering, Energy Bar Association Annual Meeting, Washington, DC [November 2009]
- Presentation at Workshop on Smart Grid policies, California PUC [July 2009]
- National Energy Affordability and Energy Conference (NEAUC) Annual Conference
- NARUC annual and regional meetings
- NASUCA annual and regional meetings
- National Community Action Foundation's Annual Energy and Community Economic Development Partnerships Conference
- Testimony and Presentations to State Legislatures: Virginia, New Jersey, Texas, Kentucky, Illinois, and Maine
- Training Programs for State Regulatory Commissions: Pennsylvania, Georgia, Kentucky, Illinois, New Jersey
- DOE-NARUC National Electricity Forum
- AIC Conference on Reliability of Electric Service
- Institute of Public Utilities, MSU (Camp NARUC) [Instructor 1996-2006]
- Training Programs on customer service and service quality regulation for international regulators (India and Brazil) on behalf of Regulatory Assistance Project
- Georgia Natural Gas Deregulation Task Force [December 2001]
- Mid Atlantic Assoc. of Regulatory Utility Commissioners [July 2003]
- Illinois Commerce Commission's Post 2006 Initiative [April 2004]
- Delaware Public Service Commission's Workshop on Standard Offer Service [August 2004]

EXHIBIT BA-2

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XIV-030

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: Does Peoples track customer disputes by type, result, or other criteria? If so, provide this documentation. If not, why not?

Answer: Customer disputes are tracked by category. Please find attached counts of each category.

Submit Date: 3/4/2024

OCA-XIV-30

2023	**1035**
Account Balance	492
Authorization/ Identity Theft	38
Budget	7
CAP	2
Contract Management	129
Foreign Load	14
High Bill Complaint	313
Meter Accuracy/ DR Meter	20
Meter Switch/ Twist	5
Other	4
Portal Payment Issues	5
Rates	6
2024	**44**
Account Balance	18
Contract Management	4
Foreign Load	1
High Bill Complaint	18
Meter Accuracy/ DR Meter	3

EXHIBIT BA-3

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XIV-021-(U)

Witness: Black, Rita **Title:** Community Assistance Programs Director

Question: The materials provided in response to OCA-VI-013 reflected non-compliance matters relating to the safety and operation of the natural gas distribution service. Please provide the notices and communications with the results implemented by Peoples that were received from the Commission with regard to BCS complaint investigations, notices of justified complaints, complaint infractions, or decisions on formal complaints since January 1, 2021.

Answer: Please note this is a supplemental response to the originally submitted response to OCA-XIV-21. The original question was interpreted as only being related to the NC letters referenced.

Bureau of Consumer Services activities and citations are provided in response to a number of interrogatories including:

• Response to OCA III Question 9 includes all citations received from BCS in 2023, along with the Company’s actions taken as a result of the infraction.

• Response to OCA VI Question 4, part 'k' provides a monthly count of informal BCS complaints for the period January 1, 2022 through December 31, 2022.

• Response to OCA VI Question 4 part 'n' provides a monthly count of infractions as determined by BCS.

• Response to OCA VI Question 14 includes description of Company’s root cause analysis process along with historical examples of each type of action.

Refer to the attachment for 2022 citations, which similarly to 2023, includes the actual citation notification from BCS, followed by the Company's action taken as a result of the citation.

Submit Date: 3/13/2024

Bureau of Consumer Services

Notification of Informally Verified Infraction

Faxing/Mailing Date: 12/5/2022

BCS CASE NUMBER: 3879021	CASE OPEN DATE: 11/22/2022
UTILITY: Peoples Natural Gas (NGDC) FKA Dominion Peoples	COMPLAINANT: [redacted]
UTILITY CONTACT/ADDRESS: Rita Urbaniak Peoples Natural Gas 375 North Shore Drive Pittsburgh PA 15212	COMPLAINANT ADDRESS: [redacted]
ACCOUNT NUMBER: [redacted]	

Based on the informal investigation, BCS is recording the following informally verified infractions.

INFRACTION: 56.36(b)(1)
DATE OF OCCURRENCE: 11/29/2022
DESCRIPTION: 56.36(B)(1): THE COMPANY DENIED CREDIT TO AN APPLICANT BUT FAILED TO INFORM THE APPLICANT IN WRITING OF THE REASON(S) FOR THE DENIAL. Application on 11/21, denial sent 11/29.

COMPANY ACTION 56.36(b)(1) Coaching provided via the compliance department coaching opportunity tracker. The supervisor of the representative involved then provides direct training.

Bureau of Consumer Services

Notification of Informally Verified Infraction

Faxing/Mailing Date: 11/29/2022

BCS CASE NUMBER: 3877375	CASE OPEN DATE: 11/14/2022
UTILITY: Peoples Natural Gas (NGDC) FKA Dominion Peoples	COMPLAINANT: [redacted]
UTILITY CONTACT/ADDRESS: Rita Urbaniak Peoples Natural Gas 375 North Shore Drive Pittsburgh PA 15212	COMPLAINANT ADDRESS: [redacted]
ACCOUNT NUMBER: [redacted]	

Based on the informal investigation, BCS is recording the following informally verified infractions.

INFRACTION: 56.163(1)
DATE OF OCCURRENCE: 11/15/2022
DESCRIPTION: 56.163(1): THE REPORT SUBMITTED TO THE BUREAU OF CONSUMER SERVICES WAS NOT PROVIDED IN A TIMELY MANNER OR DID NOT INCLUDE ALL RELEVANT MATERIAL REQUIRED BY STAFF AS THE REPORT DID NOT INCLUDE INFORMATION REGARDING. The company did not provide a copy of the denial letter issued after the 9/27 call for service.

COMPANY ACTION: 56.163(1) Reviewed with representative that responded to complaint.

Bureau of Consumer Services

Notification of Informally Verified Infraction

Faxing/Mailing Date: 10/26/2022

BCS CASE NUMBER: 3871398	CASE OPEN DATE: 10/13/2022
UTILITY: Peoples Natural Gas (NGDC) FKA Dominion Peoples	COMPLAINANT: [redacted]
UTILITY CONTACT/ADDRESS: Rita Urbaniak Peoples Natural Gas 375 North Shore Drive Pittsburgh PA 15212	COMPLAINANT ADDRESS: [redacted]
ACCOUNT NUMBER: [redacted]	

Based on the informal investigation, BCS is recording the following informally verified infractions.

INFRACTION: 56.35(a)
DATE OF OCCURRENCE: 10/17/2022
DESCRIPTION: 56.35(A): THE COMPANY REQUIRED PAYMENT OF A BALANCE THAT ACCRUED MORE THAN 4 YEARS AGO AS A CONDITION OF FURNISHING RESIDENTIAL SERVICE.

COMPANY ACTION: 56.35(a) Began internal review of regulation and company processes to develop potential plan to assist Rep in ensuring proper balances quoted.

Bureau of Consumer Services

Notification of Informally Verified Infraction

Faxing/Mailing Date: 9/19/2022

BCS CASE NUMBER: 3853342	CASE OPEN DATE: 7/27/2022
UTILITY: Peoples Natural Gas (NGDC) FKA Dominion Peoples	COMPLAINANT: [redacted]
UTILITY CONTACT/ADDRESS: Rita Urbaniak Peoples Natural Gas 375 North Shore Drive Pittsburgh PA 15212	COMPLAINANT ADDRESS: [redacted]
ACCOUNT NUMBER: [redacted]	

Based on the informal investigation, BCS is recording the following informally verified infractions.

INFRACTION: 56.151(4)
DATE OF OCCURRENCE: 7/22/2022
DESCRIPTION: 56.151(4) : THE COMPANY RECEIVED A BILLING DISPUTE FROM A RESIDENTIAL RATEPAYER AND FAILED TO PROVIDE THE RATEPAYER WITH THE INFORMATION NECESSARY TO MAKE AN INFORMED JUDGMENT ABOUT THE DISPUTED MATTER.

COMPANY ACTION: 56.151(4) Coaching provided via the compliance department coaching opportunity tracker. The supervisor of the representative involved then provides direct training.

Bureau of Consumer Services

Notification of Informally Verified Infraction

Faxing/Mailing Date: 2/17/2022

BCS CASE NUMBER: 3819602	CASE OPEN DATE: 2/1/2022
UTILITY: Peoples Natural Gas (NGDC) FKA Dominion Peoples	COMPLAINANT: [redacted]
UTILITY CONTACT/ADDRESS: Rita Urbaniak Peoples Natural Gas 375 North Shore Drive Pittsburgh PA 15212	COMPLAINANT ADDRESS: [redacted]
ACCOUNT NUMBER: [redacted]	

Based on the informal investigation, BCS is recording the following informally verified infractions.

INFRACTION: 56.11
DATE OF OCCURRENCE: 2/4/2022
DESCRIPTION: 56.11: Per the Company's report, both the initial, and final bills were mailed to the service address (instead of the mailing address that the customer/landlord/property's owner had requested for the Company to send to the mailing address).

COMPANY ACTION: 56.11 Email sent to billing/credit manager for correction and review of mailing address updates.

Bureau of Consumer Services

Notification of Informally Verified Infraction

Faxing/Mailing Date: 9/14/2022

BCS CASE NUMBER: 3838450	CASE OPEN DATE: 5/13/2022
UTILITY: Peoples Natural Gas (NGDC) FKA Dominion Peoples	COMPLAINANT: [redacted]
UTILITY CONTACT/ADDRESS: Rita Urbaniak Peoples Natural Gas 375 North Shore Drive Pittsburgh PA 15212	COMPLAINANT ADDRESS: [redacted]
ACCOUNT NUMBER: [redacted]	

Based on the informal investigation, BCS is recording the following informally verified infractions.

INFRACTION: 56.191(c)(2)(i)
DATE OF OCCURRENCE: 5/13/2022
DESCRIPTION: 56.191(C)(2)(I): THE UTILITY DEMANDED FULL PAYMENT OF ALL OUTSTANDING CHARGES AS A CONDITION OF RESTORATION WITHOUT THE CUSTOMER HAVING HAD DEFAULTED ON TWO OR MORE PAYMENT AGREEMENTS.

COMPANY ACTION: 56.191(C)(2)(iv) Coaching provided via the compliance department coaching opportunity tracker. The supervisor of the representative involved then provides direct training.

Bureau of Consumer Services

Notification of Informally Verified Infraction

Faxing/Mailing Date: 8/8/2022

BCS CASE NUMBER: 3841134	CASE OPEN DATE: 5/26/2022
UTILITY: Peoples Natural Gas (NGDC) FKA Dominion Peoples	COMPLAINANT: [redacted]
UTILITY CONTACT/ADDRESS: Rita Urbaniak Peoples Natural Gas 375 North Shore Drive Pittsburgh PA 15212	COMPLAINANT ADDRESS: [redacted]
ACCOUNT NUMBER: [redacted]	

Based on the informal investigation, BCS is recording the following informally verified infractions.

INFRACTION: 56.163(1)
DATE OF OCCURRENCE: 5/26/2022
DESCRIPTION: 56.163(1): THE REPORT SUBMITTED TO THE BUREAU OF CONSUMER SERVICES WAS NOT PROVIDED IN A TIMELY MANNER OR DID NOT INCLUDE ALL RELEVANT MATERIAL REQUIRED BY STAFF.

COMPANY ACTION: 56.163(1) Reviewed response with representative that responded to complaint.

Bureau of Consumer Services

Notification of Informally Verified Infraction

Faxing/Mailing Date: 8/30/2022

BCS CASE NUMBER: 3846400	CASE OPEN DATE: 6/23/2022
UTILITY: Peoples Natural Gas (NGDC) FKA Dominion Peoples	COMPLAINANT: [redacted]
UTILITY CONTACT/ADDRESS: Rita Urbaniak Peoples Natural Gas 375 North Shore Drive Pittsburgh PA 15212	COMPLAINANT ADDRESS: [redacted]
ACCOUNT NUMBER: [redacted]	

Based on the informal investigation, BCS is recording the following informally verified infractions.

INFRACTION: TITLE66.1501
DATE OF OCCURRENCE: 6/23/2022
DESCRIPTION: 66.1501 THE COMPANY FAILED TO MAINTAIN ADEQUATE, EFFICIENT, SAFE AND REASONABLE SERVICE AND FACILITIES AND/OR MAKE REPAIRS NECESSARY FOR THE ACCOMMODATION, CONVENIENCE AND SAFETY OF THE CUSTOMER. IN THIS CASE, THE NEED FOR A CALCIUM TANK TWO YEARS PRIOR THOUGH INDICATES UNRESOLVED COMPLAINT INITATED 9/29/2019.

COMPANY ACTION: Title66.1501 Operations made aware of complaint for review. Calcium tank was installed in August 2020 and no additional issues reported until PUC complaint filed.

Bureau of Consumer Services

Notification of Informally Verified Infraction

Faxing/Mailing Date: 9/14/2022

BCS CASE NUMBER: 3855703	CASE OPEN DATE: 8/8/2022
UTILITY: Peoples Natural Gas (NGDC) FKA Dominion Peoples	COMPLAINANT: [redacted]
UTILITY CONTACT/ADDRESS: Rita Urbaniak Peoples Natural Gas 375 North Shore Drive Pittsburgh PA 15212	COMPLAINANT ADDRESS: [redacted]
ACCOUNT NUMBER: [redacted]	

Based on the informal investigation, BCS is recording the following informally verified infractions.

INFRACTION: 56.1
DATE OF OCCURRENCE: 7/19/2022
DESCRIPTION: 56.1: THE COMPANY FAILED TO MEET ITS OBLIGATION OF GOOD FAITH, HONESTY AND FAIR DEALING IN ITS PERFORMANCE AND TO MANAGE CUSTOMER ACCOUNTS TO PREVENT THE ACCUMULATION OF LARGE, UNMANAGEABLE ARREARAGES BY mailing the refund check to the incorrect (old) address after the customer had provided the correct (new) mailing address.

COMPANY ACTION: 56.1 Reinforcement of process on address updates completed.

Bureau of Consumer Services

Notification of Informally Verified Infraction

Faxing/Mailing Date: 6/8/2022

BCS CASE NUMBER: 3840517	CASE OPEN DATE: 5/23/2022
UTILITY: Peoples Natural Gas (NGDC) FKA Dominion Peoples	COMPLAINANT: [redacted]
UTILITY CONTACT/ADDRESS: Rita Urbaniak Peoples Natural Gas 375 North Shore Drive Pittsburgh PA 15212	COMPLAINANT ADDRESS: [redacted]
ACCOUNT NUMBER: [redacted]	

Based on the informal investigation, BCS is recording the following informally verified infractions.

INFRACTION: 56.191(c)(2)(iv)
DATE OF OCCURRENCE: 5/24/2022
DESCRIPTION: 56.191(C)(2)(IV): THE UTILITY FAILED TO PROPERLY AMORTIZE OVER 24 MONTHS RECONNECTION AMOUNTS FOR A CUSTOMER OR APPLICANT AT OR BELOW 150% OF POVERTY.

COMPANY ACTION: 56.191 (c)(2)(iv) Completed individual coaching and sent reminder to call center of process.

Bureau of Consumer Services

Notification of Informally Verified Infraction

Faxing/Mailing Date: 5/12/2022

BCS CASE NUMBER: 3827202	CASE OPEN DATE: 4/4/2022
UTILITY: Peoples Natural Gas (NGDC) FKA Dominion Peoples	COMPLAINANT: [redacted]
UTILITY CONTACT/ADDRESS: Rita Urbaniak Peoples Natural Gas 375 North Shore Drive Pittsburgh PA 15212	COMPLAINANT ADDRESS: [redacted]
ACCOUNT NUMBER: [redacted]	

Based on the informal investigation, BCS is recording the following informally verified infractions.

INFRACTION: 56.81
DATE OF OCCURRENCE: 4/4/2022
DESCRIPTION: 56.81: THE UTILITY THREATENED TO TERMINATE SERVICE, OR TERMINATED SERVICE, WITHOUT FIRST ESTABLISHING GROUNDS FOR TERMINATION FOUND IN THIS SECTION. Customer was provided an extension to 4/13 but the CSR did not notate the account.

COMPANY ACTION: 56.81 Reviewed account for coaching. Representative that made error was no longer employed by Peoples.

Bureau of Consumer Services

Notification of Informally Verified Infraction

Faxing/Mailing Date: 4/21/2022

BCS CASE NUMBER: 3823658	CASE OPEN DATE: 3/17/2022
UTILITY: Peoples Natural Gas (NGDC) FKA Dominion Peoples	COMPLAINANT: [redacted]
UTILITY CONTACT/ADDRESS: Rita Urbaniak Peoples Natural Gas 375 North Shore Drive Pittsburgh PA 15212	COMPLAINANT ADDRESS: [redacted]
ACCOUNT NUMBER: [redacted]	

Based on the informal investigation, BCS is recording the following informally verified infractions.

INFRACTION: 56.163(1)
DATE OF OCCURRENCE: 3/21/2022
DESCRIPTION: 56.163(1): THE REPORT SUBMITTED TO THE BUREAU OF CONSUMER SERVICES WAS NOT PROVIDED IN A TIMELY MANNER OR DID NOT INCLUDE ALL RELEVANT MATERIAL REQUIRED BY STAFF AS THE REPORT DID NOT INCLUDE INFORMATION as to when the service was re-established into the customer's name, after it went from Dion Peoples to the Landlord William Fabina's names. Also, the Company did not include copy of the rebill/make-up bill sent to the customer, i.e. for service from 12/6/2021 - 2/4/2022 when the service finalized from Dion Peoples' name, or until (((unknown date))) when it was taken out of LL's name, and put back again into the customer's name, respectively.

CORRECTIVE ACTION: 56.163(1) Reviewed with agent and sent to credit manager for review/correction.

Bureau of Consumer Services

Notification of Informally Verified Infraction

Faxing/Mailing Date: 1/20/2022

BCS CASE NUMBER: 3815127	CASE OPEN DATE: 11/29/2021
UTILITY: Peoples Natural Gas (NGDC) FKA Dominion Peoples	COMPLAINANT: [redacted]
UTILITY CONTACT/ADDRESS: Rita Urbaniak Peoples Natural Gas 375 North Shore Drive Pittsburgh PA 15212	COMPLAINANT ADDRESS: [redacted]
ACCOUNT NUMBER: [redacted]	

Based on the informal investigation, BCS is recording the following informally verified infractions.

INFRACTION: 56.191(c)(2)(iv)
DATE OF OCCURRENCE: 11/19/2021
DESCRIPTION: 56.191(C)(2)(IV): THE UTILITY FAILED TO PROPERLY AMORTIZE OVER 24 MONTHS RECONNECTION AMOUNTS FOR A CUSTOMER OR APPLICANT AT OR BELOW 150% OF POVERTY.

CORRECTIVE ACTION: 56.191 (c) (2) (iv) Reviewed and provided training on business process.

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA PUBLIC UTILITY COMMISSION
P.O. BOX 3265, HARRISBURG, PA 17105-3265

8/3/2022

BCS CASE NUMBER: 3841168	CASE OPEN DATE: 5/26/2022
UTILITY: Peoples Natural Gas (NGDC) FKA Dominion Peoples	COMPLAINANT: [redacted]
UTILITY CONTACT/ADDRESS: Rita Urbaniak Peoples Natural Gas 375 North Shore Drive Pittsburgh PA 15212	COMPLAINANT ADDRESS: [redacted]
ACCOUNT NUMBER: [redacted]	

INFRACTION: TITLE66.1501
DATE OF OCCURRENCE: 5/26/2022
DESCRIPTION: 66.1501 THE COMPANY FAILED TO MAINTAIN ADEQUATE, EFFICIENT, SAFE AND REASONABLE SERVICE AND FACILITIES AND/OR MAKE REPAIRS NECESSARY FOR THE ACCOMMODATION, CONVENIENCE AND SAFETY OF THE CUSTOMER.

INFRACTION: 56.163(1)
DATE OF OCCURRENCE: 6/7/2022
DESCRIPTION: 56.163(1): THE REPORT SUBMITTED TO THE BUREAU OF CONSUMER SERVICES DID NOT INCLUDE ALL RELEVANT MATERIAL REQUIRED BY STAFF AS THE REPORT DID NOT INCLUDE INFORMATION REGARDING THE NUMBER OF NO GAS COMPLAINTS FILED BY THIS CUSTOMER FOR THE LAST TWO YEARS, THE LENGTH OF TIME HE WAS WITHOUT SERVICE EACH TIME, AND THE CAUSE FOR THE LOSS OF SERVICE.

Action: Title66.1501 Operations made aware of this complaint. The Gas Operations Supervisor worked with the customer throughout winter regarding service interruptions. Peoples did take steps in attempt to alleviate the situation for the customer – such as installing a drip. The permanent fix was a main line replacement.

56.163(1) Complaint reviewed verbally with the Customer Relations Department regarding responses to these types of complaints.

Bureau of Consumer Services

Notification of Informally Verified Infraction

Faxing/Mailing Date: 9/16/2022

BCS CASE NUMBER: 3859717	CASE OPEN DATE: 8/24/2022
UTILITY: Peoples Gas Company (fka Peoples TWP)	COMPLAINANT: [redacted]
UTILITY CONTACT/ADDRESS: K. Englert Peoples TWP 375 North Shore Drive Pittsburgh PA 15212	COMPLAINANT ADDRESS: [redacted]
ACCOUNT NUMBER: [redacted]	

Based on the informal investigation, BCS is recording the following informally verified infractions.

INFRACTION: 56.36(b)(1) DATE OF OCCURRENCE: 8/24/2022 DESCRIPTION: 56.36(B)(1) : THE COMPANY DENIED CREDIT TO AN APPLICANT BUT FAILED TO INFORM THE APPLICANT IN WRITING OF THE REASON(S) FOR THE DENIAL.

COMPANY ACTION: 56.36(b)(1) Verbal review with representative completed. Rules surrounding denial letters are reinforced throughout the year.

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VI-014

Witness: Black, Rita **Title:** Community Assistance Programs Director

Question: Provide documents that reflect a root cause analysis of customer complaints undertaken since January 1, 2021.

Answer: Peoples thoroughly reviews every BCS informal complaint to determine the root cause of the complaint. The compliance specialists are expected to not only prepare a response to the specific complaint, but to also determine the root cause of the complaint. This root cause analysis may require action in a number of ways: 1) individual coaching for a Customer Operations employee; 2) mass reinforcement training to Customer Operations team members; 3) company process change needed; 4) system enhancement needed.

Coaching opportunities for individual agents are provided every Monday to the Customer Operations leadership team. The weekly spreadsheet includes details such as the date the error occurred, the representative/application/process involved in the error, and a summary of the issue. An example is provided in the attachment.

The attachment also provides an example of a system enhancement need that was identified through root cause analysis of a BCS citation regarding denial letters which took place in early 2023.

In some cases, the Company collaborates directly with BCS on root cause analysis. In the example provided in the attachment under the heading 'Collaboration and Process Changes' Peoples responded to an infraction received regarding mailing address changes by meeting with members of BCS staff (Matt Hrivnak and Bobbi Anderson) to discuss best practices of other utilities, resulting in an updated procedure with Customer Operations. The attachment contains more details on this situation, including the citations.

Because root cause analysis is an informal process for all incoming BCS complaints, the Company does not have a root cause analysis tracker or report identifying historical actions taken as a result of these findings.

Submit Date: 2/12/2024

Attachment to OCA-VI-14

Examples of root cause analysis actions, as described in response to OCA-VI-14.

- **Weekly Coaching Opportunities**
  Each week the compliance department distributes a weekly coaching opportunity document to outside departments. This document includes details such as the date the error occurred; the representative/application/procedure involved in the error and a summary of what occurred.

Compa	Date Added to Tracke	Date of Error	Person reportin g Erro	Discovered via	Business Agreement No. and Customer Name	Employee or System/App /Procedure involved	Supervisor Last Nar	Category	Comments
PNG	10/24/2023	10/17/2023		PAR				Credit - Denial Letter	DOS letter not sent
PNG	10/24/2023	10/20/2023		PAR				Credit - Denial Letter	DOS letter not sent
PNG	10/24/2023	10/20/2023		PAR				Credit - Denial Letter	DOS letter not sent
PNG	10/24/2023	10/20/2023		PAR				Credit - Reconnection	Reconnection quote not recorded/Customer was referred to LC, LX, and DEF with Level 2 Income
PNG	10/25/2023	10/9/2023		PAR				Credit - Reconnection	Referred Level 2D to LIHEAP
PNG	10/25/2023	10/9/2023		PAR				Credit - Medical	Advised of medical option past final bill due date
PNG	10/25/2023	10/9/2023		PAR				Credit - Denial Letter	DOS is missing address/meter information, and contains incorrect information for reconnecting service (not eligible for LIHEAP or medical)
PNG	10/25/2023	10/10/2023		PAR				Credit - Denial Letter	Corrected DOS not sent as noted in IR.
PNG	10/26/2023	10/23/2023		PAR				Credit - Denial Letter	DOS letter not sent

- **System Enhancement**
  On 01/26/23 a citation was received as the issued denial letter did not specify the customer's name under which the balance accrued. In February an update to our denial letter format was completed to include this information on the credit denial letter when applicable

- **Collaboration and Process Changes**
  Peoples received infraction below 56.91(a) for failure to provide a 10 day notice to customer. Peoples attempted to defend this citation. A prior 10 day termination which was sent to the service address had been returned to Peoples from the postal office with a return sticker with updated mailing address. Peoples used this mailing address to send future correspondence. No additional correspondence was returned however customer stated not receiving mail.

  July 2023 Peoples compliance supervisor and director met with PUC to discuss how best to better process and avoid issue in the future.

  In August 2023 a procedure change was created.

INFRACTION: 56.81
DATE OF OCCURRENCE: 4/19/2023
DESCRIPTION: 56.81: THE UTILITY THREATENED TO TERMINATE SERVICE, OR TERMINATED SERVICE, WITHOUT FIRST ESTABLISHING GROUNDS FOR TERMINATION FOUND IN THIS SECTION.

INFRACTION: 56.91(a)
DATE OF OCCURRENCE: 4/19/2023
DESCRIPTION: 56.91(A): THE UTILITY FAILED TO PROVIDE A 10-DAY NOTICE OF TERMINATION.

The 4/19/2023 infraction of 56.91(a) has been removed from the informal record.

The 4/19/2023 infraction of 56.81 will remain verified in the informal record, as even though the utility followed their own procedure for changing an address, this customer did not request the address change. The notice was mailed to an address other than the customer's service address, which prevented this customer from receiving the written notification prior to the termination of service.

EXHIBIT BA-4

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VI-015

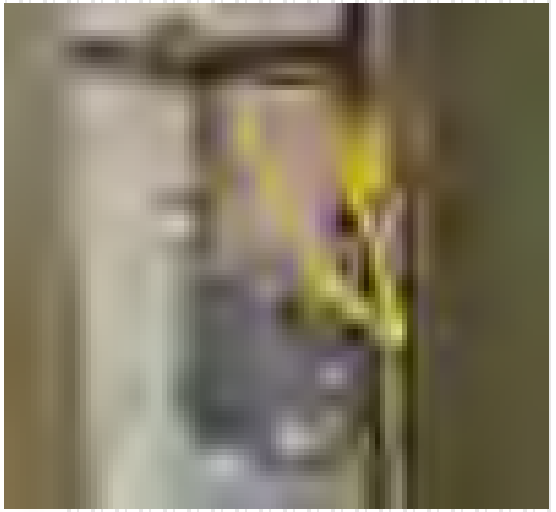
Witness: Thomas, Robert **Title:** Field Customer Service Director

Question: Provide the field service training associated with collections and termination of service.

Answer: All Peoples Field Customer Service Technicians are required to complete a four-hour training course focusing on collections and the associated termination of service as part of the basic Field Customer Service Operator Qualification program. This course entails an introduction to the credit-related programs and literature that are available to customers. This course also emphasizes the Company standard procedures related to terminating services. Please refer to the training materials attached.

Submit Date: 2/12/2024

THEFT OF SERVICE



PEOPLES℠

Restoring Service (Outside/Inside Meter Set)

Service is Found On at Meter and Customer is Home

- Obtain Actual Meter Reading
- Contact Operations Center to Verify Gas should be Off
- Take Picture of Lock Stop in On Position (Lock Stop Not Damaged)
- Contact Theft Department and Report Findings while on site.
- Follow Job Procedure 508 – Meter Turn On

If Lock Stop is Damaged, follow same sequence and replace the damaged Lock Stop.

Restoring Service (Outside Meter Set)

Service is Found On at Meter and Customer is Not Home

- Obtain Actual Meter Reading
- Contact the Operations Center to Verify Gas should be Off.
- Take Picture of Lock Stop in On Position (Lock Stop Not Damaged)
- Contact Theft Department and Report Findings while on site.
- Turn Off Gas and Complete an Outside Safety Check.
- Post Door Card

If Lock Stop is Damaged, follow same sequence and replace the damaged Lock Stop.

Meter of Record Not at Location

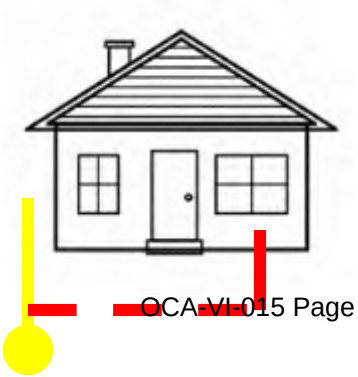
- Record Meter Number and Obtain Actual Meter Reading.
- Contact the Operations Center to Verify Meter Number.
- Contact Theft Department and Report Findings while on site.
- Reclaim Meter Found.
- Install New Meter Job Procedure 520
- Restore Service Job Procedure 508

Meter Found Off and Pinlocked (Single Meter) Gas Appliance Operating

- Turn Off all Appliance Valves
- Turn Off Gas at Curb Stop
- Drop Meter and Verify Lock Stop has Not been Drilled Out.

If Lock Stop has **Not been Drilled Out.**

- Cap Off Service Line Riser
- Turn Gas On at Curb Valve
- Verify if there is Gas at the Appliances
- If Gas is Verified at the Appliances, Possible Underground By-Pass
- Contact Theft Department while on Site and Report Findings.



Meter Found Off and Pinlocked (Multiple Meter Set) Gas Appliance Operating

- Check for Inter-Connect between House Line Piping
- If Inter-Connect is found, take Picture
- Contact Operations Center and Theft Department and report findings.

Meter Index Tampering

- Ensure Red Index Caps are Installed.
- Check for Damaged Meter Index Dials
- Check for Magnets on ERT'ed Meters (this could effect electronic reading).

Meter Change
(Gas Found Coming Out of Outlet Piping)

- Possible Inter-Connect with House Line
  (Multiple Meter Sets)
- Free Gas Customer?
- Possible Underground By-Pass.

Commercial Meters

- If the customer's meter is obstructed and a visual assessment of the meter can't be made for an extended period, suspect gas theft.

- Numerous account name changes to avoid a usage history and detection

Commercial Meter Set
(Company By-Pass Installed)

- Ensure Company By-Pass is Off and Locked.
- Visually Inspect By-Pass for Possible Tampering
- Verify Lock is properly Engaged

Production/Producer Meters

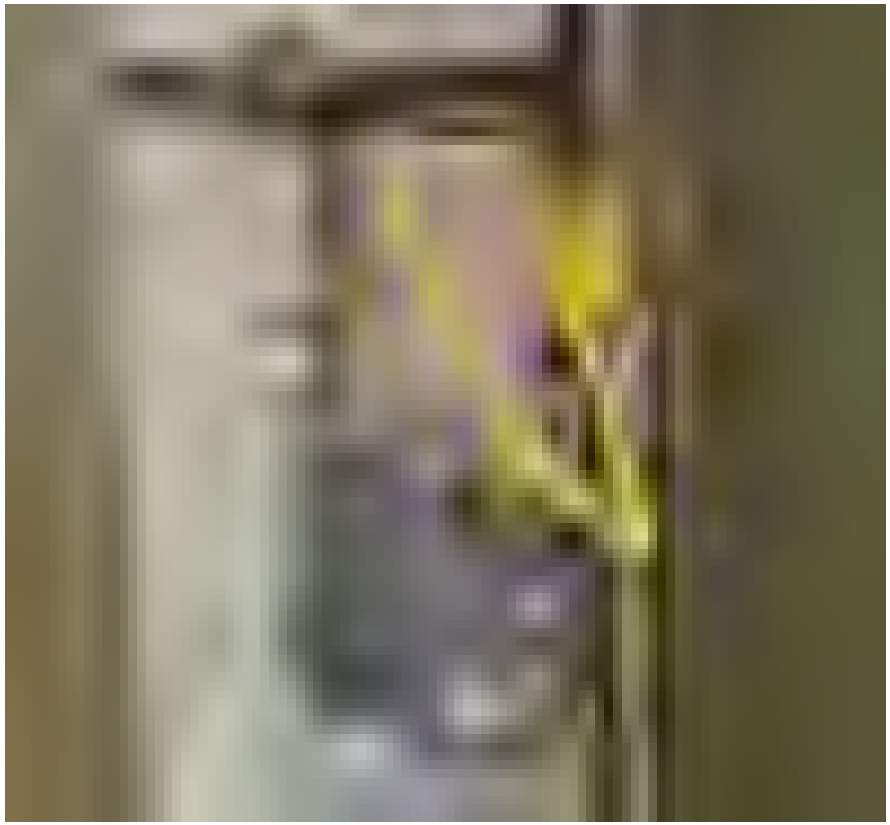
- Electronic corrector tampering. Verify parameters are set correctly for the corrector. 10 cf vs 100 cf., pressure are examples.
- Watch for a pattern of missing correctors in and area.
- Underground by-pass installed.
- Increase random visits to all PO's
- Chart integration; Ensure the correct chart is installed. Volume measurement is correctly set, 10 cf. vs. 100 cf.
- Volume of gas passing through meter increases unexpectedly.
- Excessive changing of producer's name on account.

Production/Producer Meters

- Action Items
  - Increase random visits to all PO sites thought to be involved with theft
  - Zero tolerance for gas theft involving producers
  - Focus on producers caught with repeated guideline violations.

THEFT OF SERVICE

THEFT OF SERVICE



OBVIOUS THEFT OF SERVICE

THEFT OF SERVICE

THEFT OF SERVICE

THEFT OF SERVICE

LOCKING DEVICES

Understanding Poverty

PEOPLES

Agenda

- Introduction – What is Poverty?
- Poverty By the Numbers
- Myths and Stereotypes
- Working with Limited Income Customers
- Summary

PEOPLES

INTRODUCTION – WHAT IS POVERTY?

Persons in family	100%	125%	130%	135%	140%	150%	175%	185%	200%
1	$14,580	$18,225	$18,954	$19,683	$20,412	$21,870	$25,515	$26,973	$29,160
2	$19,720	$24,650	$25,636	$26,622	$27,608	$29,580	$34,510	$36,482	$39,440
3	$24,860	$31,075	$32,318	$33,561	$34,804	$37,290	$43,505	$45,991	$49,720
4	$30,000	$37,500	$39,000	$40,500	$42,000	$45,000	$52,500	$55,500	$60,000
5	$35,140	$43,925	$45,682	$47,439	$49,196	$52,710	$61,495	$65,009	$70,280
6	$40,280	$50,350	$52,364	$54,378	$56,392	$60,420	$70,490	$74,518	$80,560
7	$45,420	$56,775	$59,046	$61,317	$63,588	$68,130	$79,485	$84,027	$90,840
8	$50,560	$63,200	$65,728	$68,256	$70,784	$75,840	$88,480	$93,536	$101,120

For families/households with more than 8 persons, add $5,140 for each additional person.

- The state or condition of having little or no money, goods, or means of support
- Lack of sufficient resources to provide the necessities of life

Source: www.dictionary.com; www.worldvision.ca

PEOPLES

POVERTY BY THE NUMBERS

- 12.4% of the Pennsylvania population is below the poverty line

Special Populations:

- 31% of single-parent families
- 20.4% of adults with disabilities
- 17.6% of children

Sources: www.povertyusa.org; www.spotlightonpoverty.org

PEOPLES

POVERTY BY THE NUMBERS

- Between the ages of 20 and 75, 59% of Americans will experience at least one year below the poverty line

- Over the same period, 75% of Americans will be poor or nearly poor, with income at or near 150% of the poverty level

Source: www.confrontingpoverty.org

PEOPLES

MYTHS AND STEREOTYPES

- People on limited and fixed incomes have to make difficult decisions regarding money and face judgement from others.
- Many people who do not live in poverty blame the poor for their circumstances.
- Myths and stereotypes negatively impact those living in poverty.

PEOPLES

MYTHS AND STEREOTYPES

- Myths: True or False?

The poor are unmotivated and have weak work ethics.

Social mobility is possible by working hard.

People on welfare stay on welfare.

Poor people have more children to get more welfare.

Poverty is a minority issue.

Poor people tend to abuse drugs and alcohol.

MYTHS AND STEREOTYPES

- The Reality
  - Two thirds of people living in poverty work an average of 1.7 jobs and 83% of children from low income families have at least one employed parent.
  - The current economy requires workers to be more skilled than in the past and jobs for unskilled workers don't pay enough. Also, many can't afford the cost of a secondary education.
  - More than half of those receiving assistance stop receiving assistance after a year.
  - Poverty is not solely a minority issue. Poverty affects people of all races.
  - Poor people are no more likely to abuse alcohol or drugs.

WORKING WITH LIMITED INCOME CUSTOMERS

- Sensitivity
- Understanding
- Avoid assumptions and labeling
- Avoid labeling
  - Our customers call because there is a need.
  - What is their need?
  - How can we help?

PEOPLES

Summary

- A great number of people live in poverty and many are the customers we serve.
- Myths about poverty create barriers.
- Understanding poverty helps us to provide assistance to the limited income customers we serve.
- Our programs provide a safety net and give us the tools to help customers.

Questions and Answers

Thank you!

PEOPLES

Credit Overview

Collections Supervisor, Arlee Ando

User Without a Contract (UWO)

- Initiated by the company
- Purpose of posting is to determine if an occupant is using gas service without establishing an account
- 72 hour posting (business days)
- Reasons why we might post UWO:
  - The company is made aware that the customer is deceased
  - The company receives return mail
  - The company is made aware, through a third party (for example, a neighbor) that the customer of record no longer resides at the premise

10 Day Discontinuance

- Initiated by the current customer
- Purpose of the posting is to give an occupant the opportunity to open an account to avoid interruption of service
- "Will anyone be affected when we shut off the service at this property?
- Reasons why we might post a 10 Day Discontinuance:
  - Landlord of a single family premise (not a shared premise) has a new tenant that has not applied for service
  - Customer is moving out and a roommate of theirs will be staying
  - Customer is moving out and their ex-significant other is staying
- Posted for 10 calendar days

30 Day Discontinuance

- Initiated by the current customer
- Purpose of the posting is to give new owner time to transfer the gas service to their name
  - Can also be used when property is vacant and owner wants to shut off service
  - Tenants must be notified 30 days prior to gas being shut off
- Shared Premise only
  - One meter services multiple units
  - Shared premise requires gas service be in the **owner's name** only
- Reasons why we might post a 30 Day discontinuance
  - Property is switching ownership
  - Property is vacant
  - Property is being demolished
- Posted for 30 calendar days

Termination Process

Residential Term Process (DNP)

- Account must be at least 10 days in arrears and bal >= $120
  - CAP customers must be at least 5 days in arrears and 2 CAP payments behind
- 10 Day Termination Notice is issued
- 2 attempts at personal contact by phone are made 4 business days after term notice is sent
  - If invalid phone number/no contact made a 72 hour posting w/o is dropped
- 72 hours after personal contact is completed a DNP w/o is dropped

Comm/Industrial Term Process (DNP)

- Account must be at least 10 days in arrears and balance >=$120
- 5 Day Termination Notice is issued
- 2 attempts at personal contact are made 2 business days after term notice is sent
  - If invalid phone number/no contact made the a 72 hour posting w/o is dropped
- 72 hours after personal contact is completed a DNP order will drop

Landlord Term Process (37 Day)

- Shared Premise accounts only
  - One meter serves multiple units
  - Ex: apartment building, duplex with one meter, comm space with apartment above and only one meter
  - service at a shared premise is required by law to be in the name of the property owner
- Must be 10 days in arrears and balance >=$300
- Sent to collections group for review through a manual work item
- 37 Termination notice issued and work item completed in SAP
  - Sent first class and certified mail
- 6 calendar days after term- LL1 and LL2 posting w/o drop
  - Notices will be posted in common areas to notify tenants of pending termination
  - One of the notices must be posted after 6 pm or on a weekend
- 30 calendar days after LL1/LL2 completed a DNP w/o drops

Landlord Term Process (37 Day)

- Shared Premise accounts only
  - One meter serves multiple units
  - Ex: apartment building, duplex with one meter, comm space with apartment above and only one meter
  - service at a shared premise is required by law to be in the name of the property owner
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  - Notices will be posted in common areas to notify tenants of pending termination
  - One of the notices must be posted after 6 pm or on a weekend
- 30 calendar days after LL1/LL2 completed a DNP w/o drops

Medical Certificates

- If a customer has a medical necessity for gas service we will send a Medical Certification Form to their doctor so that the doctor can certify the need for gas service
- If gas is on we provide the customer 5 days to have the form signed and returned by their doctor
- If doctor certifies gas service is medically necessary a 30 day hold will be added to the customer account
  - Customer still has obligation to pay bill during this time as account will go back into termination once hold expires if it is not brought current

Medical Certificates

- If a customer has a medical necessity for gas service we will send a Medical Certification Form to their doctor so that the doctor can certify the need for gas service
- If gas is on we provide the customer 5 days to have the form signed and returned by their doctor
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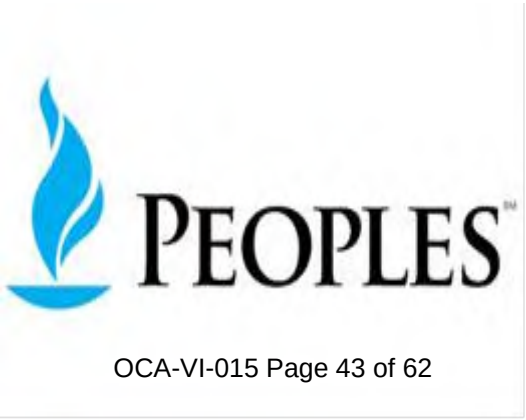
Questions?

Questions?

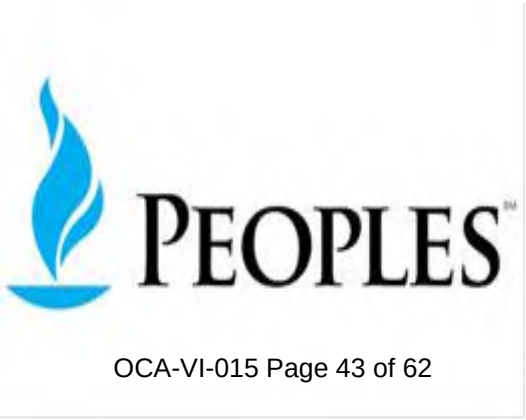
Peoples Programs to Help Customers

Presentation For FCS 3/22/2023



Peoples Programs to Help Customers

Presentation For FCS 3/22/2023



Safe Comfort Programs

- Peoples offers a number of programs for its limited income, special needs customers
  - Customer Assistance Program (CAP)
  - Low Income Usage Reduction Program (LIURP)
  - Customer Assistance Referral and Evaluation Services (CARES)
  - Gatekeeper Program
  - Low Income Home Energy Assistance Program (LIHEAP)
  - LIHEAP/Crisis (Emergency Assistance)
  - Dollar Energy Fund grant (DEF)
  - Helps At Peoples Now (HAPN) 412.208.6850

Customer Assistance Program (CAP)

- CAP is a special payment plan for low-income, payment troubled customers at or below 150% of the federal poverty level. (E-CAP at or below 200% with account balance, termination notice or broken payment agreement)
- The program is funded by ratepayers and administered by the Company
- Ratepayers who qualify pay 4%, 5%, 6% or 11% of their monthly gross income for natural gas service or their budget amount if lower than payment based on income
- Customers receive monthly CAP credits when the usage bill is higher than the CAP payment
- CAP customers are exempt from late payment fees and security deposits
- Administered by Dollar Energy Fund

CAP Payment Plan

- The CAP payment is based on household size and monthly income
- The monthly income times 4,5,6 or 11 percent equals the minimum monthly payment

Federal Poverty Status	Percent of Income
0-50%	4%
51-100%	5%
101-150%	6%
151-200%	11%

- **In addition to meeting income guidelines, 2D customers must also have a balance of $800 or more**
- If the calculated CAP amount exceeds the monthly budget amount, the budget amount will be accepted as the CAP payment

CAP Agreements

Customers enrolled in CAP agree to:

- Pay the monthly CAP payment on time
- Enroll, if eligible, in the Company's weatherization program
- Apply for LIHEAP, Crisis and DEF.
- Report changes in income &/or family size within 30 days
- Provide meter reading access at least quarterly
- Recertify annually/LIHEAP recipients recertify every 2 years

CAP Enrollment

- CAP enrollment is currently open and not limited to a specific number of participants.
- Arrearage Forgiveness
  - Pre-program CAP arrears are forgiven monthly (1/36 of their pre-CAP balance is credited each month when they make their CAP payment.

CAP Benefits

- Customer CAP benefits-True/False
  - Affordable monthly payments, based on ability to pay
  - Monthly CAP credits
  - Monthly arrearage forgiveness
  - Exemption from late payment char
  - Security deposit exemption

Low Income Usage Reduction Program (LIURP)

Low Income Usage Reduction Program (LIURP)

- LIURP

  A PUC mandated program designed to help limited income customers with high gas usage to reduce consumption

  The free program offers installation of weatherization measures and repairs to existing housing for limited-income families, provided that the home is in satisfactory condition. The program offers consumer education programs in conjunction with weatherization efforts, to educate customers on how to conserve energy

  Peoples implements the program through a contract with CLEAResult

LIURP

- Who qualifies:
  - Single family homes with residential heat
  - 12 consecutive months of gas service
  - Annual household income must be at or below 150 % of the FPL
    - some exceptions for special needs will be made, up to 200% of the FPL
  - Must be home owner or have landlord permission
  - CAP customers are prioritized
  - Customer usage must be 140 MCF/YR (Peoples and PEGC) and 120 MCF/YR (PTWP) or greater per year

LIURP

The most common weatherization measures are:

- *Home Energy Audit*

  Detailed walk through of the house to help understand the home's deficiency and directs to improve so that it will give the home owner the most savings, comfort and safety. The audit can help save a homeowner 20-30% or more on their heating and cooling cost
- *Heating system improvements and replacement*

  Tune up, minor repairs and retrofits when necessary, the company installs 92 % plus efficiency furnaces
- *Insulation*

  The program offers attic insulation, sidewall, knee –wall, sill plate and other types of insulation

LIURP

- *Infiltration (areas where cold leaks in)*

  Caulking, weather stripping, door sweeps, switch & outlets gaskets, sealing unused fire places, construct doors or repairs.
- *Hot Water Treatment*

  Includes tank wraps, pipe insulation.
- *Conservation education*

  Once the installment of the measures is performed, the educational contractor visits the customer to provide education and conservation tips

Emergency Furnace/Line Repair Assistance

- Peoples provides emergency furnace and line repair assistance to homeowners experiencing issues with the heating system or gas line leak failure

Requirements:

- ✓Home owner
- ✓Income within 200 for the FPL

Customer Assistance Referral and Evaluation Services (CARES)

Customer Assistance Referral and Evaluation Services (CARES)

The CARES program provides comprehensive services for customers who have a true inability to pay their gas bills and have special needs such as:

- Serious medical condition
- Mental health condition
- Learning disability
- Recent unemployment
- Single parent issues
- Recent change in marital status
- A protection for abuse order (PFA)

CARES

The program offers:

- Comprehensive assessment, referrals and assistance.
- Enrollment and assistance to apply for available energy assistance programs
- Partnering with social agencies to provide joint services to solve customer issues
- Assistance to customers in applying for community resources
- Home visit assessments in severe situations i.e. homebound customer unable to communicate by phone, unable to read etc
- Account monitoring to prevent termination of service

Gatekeeper Program

- The Gatekeeper program is a part of the CARES program and is designed to aid older adults who need help, but may not be able to access it themselves
  - Employees are trained to recognize certain danger signals in the elderly such as: change in behavior, signs of confusion or disability
  - Older adults and those with special needs can receive additional help
- Gatekeepers are:
  - Customer Service personnel
  - Meter Readers
  - Any other Customer Contact Personnel
  - Social Agency Case Worker

Gatekeeper Program

The program offers:

- The program offers the same benefits as the CARES program
- The Customer Relations Specialists will work closely with the referral source to obtain information regarding the case
- In severe cases, a termination hold will be placed on the account

LIHEAP, LIHEAP Crisis, Dollar Energy Fund and Third Party Payments

- Extensive LIHEAP Outreach Campaign
- Referrals to LIHEAP
- Referrals to LIHEAP Crisis
- Referrals to Dollar Energy Fund
- Social Service Agency Referrals and Third Party Payments

LIHEAP, LIHEAP Crisis, Dollar Energy Fund and Third Party Payments

- Extensive LIHEAP Outreach Campaign
- Referrals to LIHEAP
- Referrals to LIHEAP Crisis
- Referrals to Dollar Energy Fund
- Social Service Agency Referrals and Third Party Payments

Thank you!

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XIV-018

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Provide the field training materials that instruct the field personnel on the implementation of 52 Pa. Code Sec. 56.334 and identify and provide documents that reflect management’s oversight of field personnel compliance with this and related provisions if the field agent obtains contact with a responsible adult at the premises prior to termination of service.

Answer: Attached are the field training materials that instruct the field personnel on the implementation of 52 Pa. Code Sec. 56.334. Peoples does not formally document management's oversight of field compliance with this specific procedural requirement; however, overall compliance to Company standard procedures is conducted and documented by management through field observations in conjunction with the Company's Job Site Safety Observation program.

Submit Date: 3/5/2024

Credit Overview

Collections Supervisor, Arlee Ando

Postings

- User Without a Contract
  10 Day Discontinuance
  30 Day Discontinuance

User Without a Contract (UWO)

- Initiated by the company
- Purpose of posting is to determine if an occupant is using gas service without establishing an account
- 72 hour posting (business days)
- Reasons why we might post UWO:
  - The company is made aware that the customer is deceased
  - The company receives return mail
  - The company is made aware, through a third party (for example, a neighbor) that the customer of record no longer resides at the premise

10 Day Discontinuance

- Initiated by the current customer
- Purpose of the posting is to give an occupant the opportunity to open an account to avoid interruption of service
- “Will anyone be affected when we shut off the service at this property?
- Reasons why we might post a 10 Day Discontinuance:
  - Landlord of a single family premise (not a shared premise) has a new tenant that has not applied for service
  - Customer is moving out and a roommate of theirs will be staying
  - Customer is moving out and their ex-significant other is staying
- Posted for 10 calendar days

30 Day Discontinuance

- Initiated by the current customer
- Purpose of the posting is to give new owner time to transfer the gas service to their name
  - Can also be used when property is vacant and owner wants to shut off service
  - Tenants must be notified 30 days prior to gas being shut off
- Shared Premise only
  - One meter services multiple units
  - Shared premise requires gas service be in the **owner's name** only
- Reasons why we might post a 30 Day discontinuance
  - Property is switching ownership
  - Property is vacant
  - Property is being demolished
- Posted for 30 calendar days

Termination Process

- Residential
  Commercial/Industrial
  Landlord/37 Day

Residential Term Process (DNP)

- Account must be at least 10 days in arrears and bal >= $120
  - CAP customers must be at least 5 days in arrears and 2 CAP payments behind
- 10 Day Termination Notice is issued
- 2 attempts at personal contact by phone are made 4 business days after term notice is sent
  - If invalid phone number/no contact made a 72 hour posting w/o is dropped
- 72 hours after personal contact is completed a DNP w/o is dropped

Comm/Industrial Term Process (DNP)

- Account must be at least 10 days in arrears and balance >=$120
- 5 Day Termination Notice is issued
- 2 attempts at personal contact are made 2 business days after term notice is sent
  - If invalid phone number/no contact made the a 72 hour posting w/o is dropped
- 72 hours after personal contact is completed a DNP order will drop

Landlord Term Process (37 Day)

- Shared Premise accounts only
  - One meter serves multiple units
  - Ex: apartment building, duplex with one meter, comm space with apartment above and only one meter
  - service at a shared premise is required by law to be in the name of the property owner
- Must be 10 days in arrears and balance >=$300
- Sent to collections group for review through a manual work item
- 37 Termination notice issued and work item completed in SAP
  - Sent first class and certified mail
- 6 calendar days after term- LL1 and LL2 posting w/o drop
  - Notices will be posted in common areas to notify tenants of pending termination
  - One of the notices must be posted after 6 pm or on a weekend
- 30 calendar days after LL1/LL2 completed a DNP w/o drops

Medical Certificates

- If a customer has a medical necessity for gas service we will send a Medical Certification Form to their doctor so that the doctor can certify the need for gas service
- If gas is on we provide the customer 5 days to have the form signed and returned by their doctor
- If doctor certifies gas service is medically necessary a 30 day hold will be added to the customer account
  - Customer still has obligation to pay bill during this time as account will go back into termination once hold expires if it is not brought current

Questions?

EXHIBIT BA-5

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VI-021

Witness: Kolich, Steven **Title:** Gas Supply Director

Question: Identify how many residential customers have selected a Natural Gas Supplier (NGS) for each month since January 2021

Answer: See attachment.

Submit Date: 2/12/2024

Peoples Natural Gas Company LLC
2023 Base Rate Case
Docket No. R-2023-3044549

OCA-6-21

Number of Residential Customers with an NGS

	No. of PNG Customers	No. of PG Customers	Total
Jan-21	94,054	477	94,531
Feb-21	92,792	464	93,256
Mar-21	91,236	451	91,687
Apr-21	90,541	432	90,973
May-21	91,034	415	91,449
Jun-21	90,815	402	91,217
Jul-21	94,129	394	94,523
Aug-21	90,077	402	90,479
Sep-21	89,489	434	89,923
Oct-21	90,697	397	91,094
Nov-21	92,048	399	92,447
Dec-21	92,092	410	92,502
Jan-22	91,977	419	92,396
Feb-22	91,682	399	92,081
Mar-22	90,943	385	91,328
Apr-22	90,433	379	90,812
May-22	89,760	395	90,155
Jun-22	89,138	395	89,533
Jul-22	87,380	392	87,772
Aug-22	86,560	390	86,950
Sep-22	84,426	386	84,812
Oct-22	83,808	384	84,192
Nov-22	83,602	382	83,984
Dec-22	84,037	365	84,402
Jan-23	83,845	355	84,200
Feb-23	83,375	343	83,718
Mar-23	83,086	338	83,424
Apr-23	82,522	342	82,864
May-23	81,529	357	81,886
Jun-23	81,486	370	81,856
Jul-23	81,168	368	81,536
Aug-23	80,523	360	80,883
Sep-23	80,344	364	80,708
Oct-23	80,047	354	80,401
Nov-23	79,956	348	80,304
Dec-23	79,978	347	80,325

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VI-022

Witness: Kolich, Steven **Title:** Gas Supply Director

Question: Has Peoples Natural Gas Company LLC done any evaluation of the bill impacts of Natural Gas Supplier (NGS) charges compared to the gas supply default service in the period January 2022 -December 2023? If so, please provide such evaluation and data.

Answer: Peoples periodically compares the bill effect of customers who select an NGS for their supply to the default gas supply service. The attached report depicts what P1 customers who have selected a NGS pays compared to the default gas supply services in a snap shot in time. The data represents only the transportation customers that Peoples bills for on behalf of the NGS. This report is not generated on a regular basis and is only compiled per management's request.

Submit Date: 2/12/2024

Peoples Natural Gas Company LLC
OCA-6-22

	P1 Customers - Supplier Statistics							
	PTC	Wtd Avg NGS Price	% Price is Above/(Below) PTC	No. of Customer Participating	% of Customers Paying > PTC	Highest Price Charged	No. of Customer Paying > 2 X PTC	No. of Customer Paying > 3 X PTC
Apr-19	$ 3.32	$ 5.22	57%	103,218	87.5%	$ 19.57		
Oct-19	$ 2.79	$ 5.34	91%	107,685	99.0%	$ 17.27		
Mar-20	$ 2.48	$ 5.02	102%	101,788	98.8%	$ 14.30		
May-20	$ 1.92	$ 5.07	164%	105,986	99.9%	$ 15.91		
Feb-21	$ 1.88	$ 5.37	185%	89,763	99.99%	$ 16.36	68,887	63,291
Aug-21	$ 2.99	$ 5.58	87%	92,594	83.2%	$ 17.99	34,593	556
Nov-21	$ 4.81	$ 6.16	28%	88,967	72.8%	$ 19.93	21,127	465
Jan-22	$ 4.44	$ 5.95	34%	88,847	74.8%	$ 20.88	5,138	421
Dec-22	$ 6.73	$ 9.35	39%	84,828	79.0%	$ 25.06	2,791	328
May-23	$ 2.51	$ 6.97	177%	83,338	99.4%	$ 18.37	69,838	15,022
Dec-23	$ 2.52	$ 6.63	163%	79,830	97.8%	$ 20.08	61,035	11,803

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-VI-024

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: Can Natural Gas Supplier (NGS) distinguish the overdue amounts and termination of service for customers served by a Natural Gas Supplier (NGS) compared to default service customers? If so, provide the data showing those differences for 2022 and 2023.

Answer: Please see attached data showing the difference between default service customers and those served by a NGS for 2022 and 2023.

Submit Date: 2/12/2024

Peoples Natural Gas Company				
Year	Avg. Monthly Overdue		Annual Termination of Service	
	Default Customers	NGS Customers	Default Customers	NGS Customers
2022	$26,646,645.70	$1,108,008.83	14,877	1,340
2023	$34,535,751.86	$2,460,274.49	20,348	1,971

Peopels Gas Company				
Year	Avg. Monthly Overdue		Annual Termination of Service	
	Default Customers	NGS Customers	Default Customers	NGS Customers
2022	$3,141,423.24	$46,176.90	1,672	35
2023	$3,485,357.16	$50,454.77	2,640	50

EXHIBIT BA-6

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-I-002

Witness: Scanlon, Carol **Title:** Rates Manager

Question: Provide a copy of the notices of proposed rate changes that Peoples issued to customers in the Peoples Natural Gas Division and to customers in the Peoples Gas Division. For each notice, provide the following information:

a. Does the notice identify which Peoples' Division serves the customer (i.e. Peoples Natural Gas or Peoples Gas)?

b. If the answer to subsection a is "no" indicate why not.

c. If the answer to subsection a is "no" indicate what steps, including step-by-step identification of telephone prompts and average wait times, that a customers would have to undertake to determine which Peoples' Division provides their service.

Answer: Refer to Attachment A for a copy of the bill insert included with the customer's bill.

Refer to Attachment B for a copy of the newspaper notice.

a. No.

b. The Company's proposal in this proceeding is to unify the distribution rates of the two divisions. As a result, the Company's approach was to notice customers on the proposed rate changes for all customers. This is consistent with Peoples' approach in the 2018 base rate case proceeding when the Company proposed to unify the former Peoples Division with the former Equitable Division. Further, specific to the newspaper notice, due to overlapping service territories in certain areas, the Company believed having the information together would cause less confusion for customers.

c. There are two ways a customer can determine which division serves them from their bill as outlined below. The Company's website includes this information in the FAQs.

- General information phone number listed at the top of the bill

  - 1-800-764-0111 – Peoples Natural Gas Division
  - 1-800-222-5101 - Peoples Gas Division

- Address shown on the portion of the bill that is detached and sent in with their payment

  - PO Box 644760 – Peoples Natural Gas Division
  - PO Box 747105 – Peoples Gas Division

The customer can also call the Customer Service Center to confirm which division serves them.

Submit Date: 2/2/2024

NOTICE OF PROPOSED RATE CHANGES

To Our Customers:

Peoples Natural Gas Company ("Peoples" or the "Company") *is filing a request with the Pennsylvania Public Utility Commission ("PUC") to increase your natural gas distribution rates as of February 27, 2024. This notice describes the Company's rate request, the PUC's role, and what actions you can take.*

Peoples, which includes the Peoples Natural Gas Division and the Peoples Gas Division, has collectively requested an overall net distribution rate increase of $156.0 million per year. In this filing, Peoples is proposing to unify the distribution rates of the two divisions. This filing also includes a request for the approval of a Weather Normalization Adjustment (WNA) as an alternative rate mechanism in accordance with 66 Pa. C.S. § 1330. The WNA would adjust certain customers' bills to reflect normalized weather conditions. In addition, Peoples is proposing revisions to existing Riders, including the Tax Repairs Surcredit ("TRS"), the Tax Cuts and Jobs Act Surcharge ("TCJA") and the Allegheny Valley Capacity Charge ("AVC"). Changes to these existing Riders and application thereof may apply to one or both divisions. Under the Company's proposal, the WNA, AVC and TRS will apply to both divisions. The TCJA will only apply to Peoples Gas Division customers.

If you are a **Peoples Natural Gas Division** customer and if the Company's entire request is approved:

- The total bill for a Peoples Natural Gas Division residential customer using 80 Mcf per year would increase from $73.16* to $88.79 per month or by 21.4%.
- The total bill for a Peoples Natural Gas Division commercial customer using 250 Mcf per year would increase from $174.25* to $212.76 per month or by 22.1%.
- Rates for a Peoples Natural Gas Division industrial customer using 1,750 Mcf per year would increase from $1,126.15* to $1,282.10 per month or by 13.8%.

If you are a **Peoples Gas Division** customer and if the Company's entire request is approved:

- The total bill for a Peoples Gas Division residential customer using 80 Mcf per year would increase from $84.00* to $90.35 per month or by 7.6%.
- The total bill for a Peoples Gas Division commercial customer using 250 Mcf per year would increase from $214.03* to $214.83 per month or by 0.4%.
- Rates for a Peoples Gas Division industrial customer using 1,750 Mcf per year would decrease from $1,310.04* to $1,297.34 per month or by 1.0%.

To find out which division you are in, your customer class or how the requested increase may affect your natural gas bill, contact Peoples at **1-800-764-0111**. The rates requested by the Company may be found in

Continued on other side…

PNGC 2024 Rate Change Notice Insert.indd 1 12/27/23 10:17 AM

Continued from other side…

the Company's Proposed Tariff, PA PUC No. 48. You may examine the material filed with the PUC which explains the requested increase and the reasons for it. A copy of this material is kept at Peoples' office. Upon request, the Company will send you the Statement of Reasons for Tariff No. 48, explaining why the rate increase has been requested.

The state agency which approves rates for public utilities is the PUC. The PUC will examine the requested rate increase and can prevent existing rates from changing until it investigates and/or holds hearings on the request. The Company must prove that the requested rates are reasonable. After examining the evidence, the PUC may grant all, some or none of the request or may reduce existing rates.

The PUC may change the amount of the rate increase or decrease requested by the utility for each division and customer class. As a result, the rate charged to you may be different than the rate requested by the Company and shown above.

There are three ways to challenge a Company's request to change its rates:

1. You can file a formal complaint. If you want a hearing before a judge, you must file a formal complaint. By filing a formal complaint, you assure yourself the opportunity to take part in hearings about the rate increase request. All complaints should be filed with the PUC before February 27, 2024. If no formal complaints are filed, the Commission may grant all, some or none of the request without holding a hearing before a judge.

2. You can send us a letter telling why you object to the requested rate increase. Sometimes there is information in these letters that makes us aware of problems with the Company's service or management. This information can be helpful when the PUC investigates the rate request.

Send your letter or request for a formal complaint form to the Pennsylvania Public Utility Commission, Post Office Box 3265, Harrisburg, PA 17105-3265.

3. You can be a witness at a public input hearing. Public input hearings are held if the Commission opens an investigation of the Company's rate increase request and if there is a large number of customers interested in the case. At these hearings you have the opportunity to present your views in person to the PUC judge hearing the case and the Company representatives. All testimony given "under oath" becomes part of the official rate case record. The hearings are held in the service area of the Company.

For more information, call the PUC at 1-800-692-7380. You may leave your name and address so you can be notified of any public input hearings that may be scheduled in this case.

* Please note that this amount excludes the one-time GCA Refund Credit in effect from Oct–Dec 2023.

PEOPLES™

PNGC 2024 Rate Change Notice Insert.indd 2 12/27/23 10:17 AM

NOTICE OF PROPOSED RATE CHANGES

To Our Customers:

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If you are a **Peoples Natural Gas Division** customer and if the Company's entire request is approved:

- The total bill for a Peoples Natural Gas Division residential customer using 80 Mcf per year would increase from $73.16* to $88.79 per month or by 21.4%.
- The total bill for a Peoples Natural Gas Division commercial customer using 250 Mcf per year would increase from $174.25* to $212.76 per month or by 22.1%.
- Rates for a Peoples Natural Gas Division industrial customer using 1,750 Mcf per year would increase from $1,126.15* to $1,282.10 per month or by 13.8%.

If you are a **Peoples Gas Division** customer and if the Company's entire request is approved:

- The total bill for a Peoples Gas Division residential customer using 80 Mcf per year would increase from $84.00* to $90.35 per month or by 7.6%.
- The total bill for a Peoples Gas Division commercial customer using 250 Mcf per year would increase from $214.03* to $214.83 per month or by 0.4%.
- Rates for a Peoples Gas Division industrial customer using 1,750 Mcf per year would decrease from $1,310.04* to $1,297.34 per month or by 1.0%.

To find out which division you are in, your customer class or how the requested increase may affect your natural gas bill, contact Peoples at **1-800-764-0111**. The rates requested by the Company may be found in the Company's Proposed Tariff, PA PUC No. 48. You may examine the material filed with the PUC which explains the requested increase and the reasons for it. A copy of this material is kept at Peoples' office. Upon request, the Company will send you the Statement of Reasons for Tariff No. 48, explaining why the rate increase has been requested.

The state agency which approves rates for public utilities is the PUC. The PUC will examine the requested rate increase and can prevent existing rates from changing until it investigates and/or holds hearings on the request. The Company must prove that the requested rates are reasonable. After examining the evidence, the PUC may grant all, some or none of the request or may reduce existing rates.

The PUC may change the amount of the rate increase or decrease requested by the utility for each division and customer class. As a result, the rate charged to you may be different than the rate requested by the Company and shown above.

There are three ways to challenge a Company's request to change its rates:

1. You can file a formal complaint. If you want a hearing before a judge, you must file a formal complaint. By filing a formal complaint, you assure yourself the opportunity to take part in hearings about the rate increase request. All complaints should be filed with the PUC before February 27, 2024. If no formal complaints are filed, the Commission may grant all, some or none of the request without holding a hearing before a judge.

2. You can send us a letter telling why you object to the requested rate increase. Sometimes there is information in these letters that makes us aware of problems with the Company's service or management. This information can be helpful when the PUC investigates the rate request.

Send your letter or request for a formal complaint form to the Pennsylvania Public Utility Commission, Post Office Box 3265, Harrisburg, PA 17105-3265.

3. You can be a witness at a public input hearing. Public input hearings are held if the Commission opens an investigation of the Company's rate increase request and if there is a large number of customers interested in the case. At these hearings you have the opportunity to present your views in person to the PUC judge hearing the case and the Company representatives. All testimony given "under oath" becomes part of the official rate case record. The hearings are held in the service area of the Company.

For more information, call the PUC at 1-800-692-7380. You may leave your name and address so you can be notified of any public input hearings that may be scheduled in this case.

* Please note that this amount excludes the one-time GCA Refund Credit in effect from Oct–Dec 2023.

PEOPLES™

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No. R- 2023-3044549
	:	
Peoples Natural Gas Company LLC	:	

Direct Testimony of Roger Colton

on behalf of

Pennsylvania Office of Consumer Advocate

OCA Statement 6

March 22, 2024

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Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Roger D. Colton. My business address is 34 Warwick Road, Belmont, MA.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?

A. I am owner of the firm of Fisher Sheehan & Colton, Public Finance and General Economics of Belmont, Massachusetts. In that capacity, I provide technical assistance to a variety of federal and state agencies, consumer organizations and public utilities on rate and customer service issues involving water/sewer, natural gas and electric utilities.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying on behalf of the Office of Consumer Advocate.

Q. PLEASE DESCRIBE YOUR PROFESSIONAL BACKGROUND.

A. I work primarily on low-income utility issues. This involves regulatory work on rate and customer service issues, as well as research into low-income usage, payment patterns, and affordability programs. At present, I am working on various projects in the states of New Hampshire, Massachusetts, Connecticut, Maryland, Pennsylvania, Ohio, Michigan, and Wisconsin. My clients include state agencies (e.g., Pennsylvania Office of Consumer Advocate, Maryland Office of People's Counsel, Connecticut Office of Consumers Counsel), federal agencies (e.g., the U.S. Department of Health and Human Services), community-based organizations (e.g., Cleveland Legal Aid Society, Legal Action of Chicago, Sierra Club), and private utilities (e.g., Toledo Water, Entergy Services). Examples of my work include my current projects to assist the Connecticut Office of Consumers Counsel (OCC) in the annual generic review of the low-income affordability initiatives of that state's utilities by the Public Utilities Regulatory Authority. I am also

assisting the Massachusetts Attorney General's Office (AGO) in the generic investigation by the Department of Public Utilities (DPU) into the design of low-income affordability programs. I am currently under contract to develop a universal service plan for Nova Scotia. In addition to state-specific and utility-specific work, I engage in national work throughout the United States. For example, I have recently completed a project with the Natural Resources Defense Council to develop a tool by which to assess the financial impact of differing types of low-income bill assistance. A brief description of my professional background is provided in Exhibit RDC-1, which is attached to my testimony.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

A. After receiving my undergraduate degree in 1975 (Iowa State University), I obtained further training in both law and economics. I received my law degree in 1981 (University of Florida). I received my Master's Degree (Regulatory Economics) from the MacGregor School at Antioch University in 1993.

Q. HAVE YOU EVER PUBLISHED ON PUBLIC UTILITY REGULATORY ISSUES?

A. Yes. I have published three books and more than 80 articles in scholarly and trade journals, primarily on low-income utility and housing issues. I have published an equal number of technical reports for various clients on energy, water, telecommunications and other associated low-income utility issues. A summary of my publications is included in Exhibit RDC-1.

Q. HAVE YOU EVER TESTIFIED BEFORE THIS OR OTHER UTILITY COMMISSIONS?

A. Yes. I have testified before the Pennsylvania Public Utility Commission ("PUC" or "Commission") on numerous occasions regarding utility issues affecting low-income customers and customer service. My testimony has specifically included testimony in various proceedings involving low-income program design and operation, along with various rate design issues as they affect low-income customers. I have also testified in regulatory proceedings in 42 states (other than Pennsylvania) and various Canadian provinces on a wide range of utility issues. A list of the jurisdictions in which I have testified is listed in Exhibit RDC-1.

Q. PLEASE EXPLAIN THE PURPOSE OF YOUR DIRECT TESTIMONY.

A. The purpose of my Direct Testimony is to review the impact of Peoples rates on low-income customers. I will further review the reasonableness of the design and implementation of the low-income bill payment assistance programs offered by the Company. More specifically, I will examine:

- The overall affordability of Peoples Natural Gas rates;
- The impact that the unaffordability of Peoples bills has on collections by the Company;
- A series of recommendations regarding the appropriate Peoples response to the unaffordability of its bills to low-income customers;
- The adverse impact that the proposed increases in the residential customer charges will have on low-income customers;
- The reasonableness of the Company's proposed Weather Normalization Adjustment (WNA) given its impacts on low-income customers;

- The reasonableness of the Company's request for a 0.25% adder to its return on equity due to claims of "strong management";
- The disproportionate impact of inflation on low-income households;
- The reasonableness of proposed changes in the Peoples tariff; and
- The reasonableness of proposed changes in the bad debt offset to the Peoples universal service rider.

Q. DOES YOUR TESTIMONY INCLUDE RECOMMENDATIONS OF ACTIONS THAT PEOPLES SHOULD TAKE?

A. Yes. I address each recommendation topically in specific sections of my testimony below. I also include a summary of recommendations at the end of my testimony for ease of reference.

Part 1. The Affordability of Peoples Rates.

Q. PLEASE DESCRIBE THE FIRST PART OF YOUR AFFORDABILITY ANALYSIS.

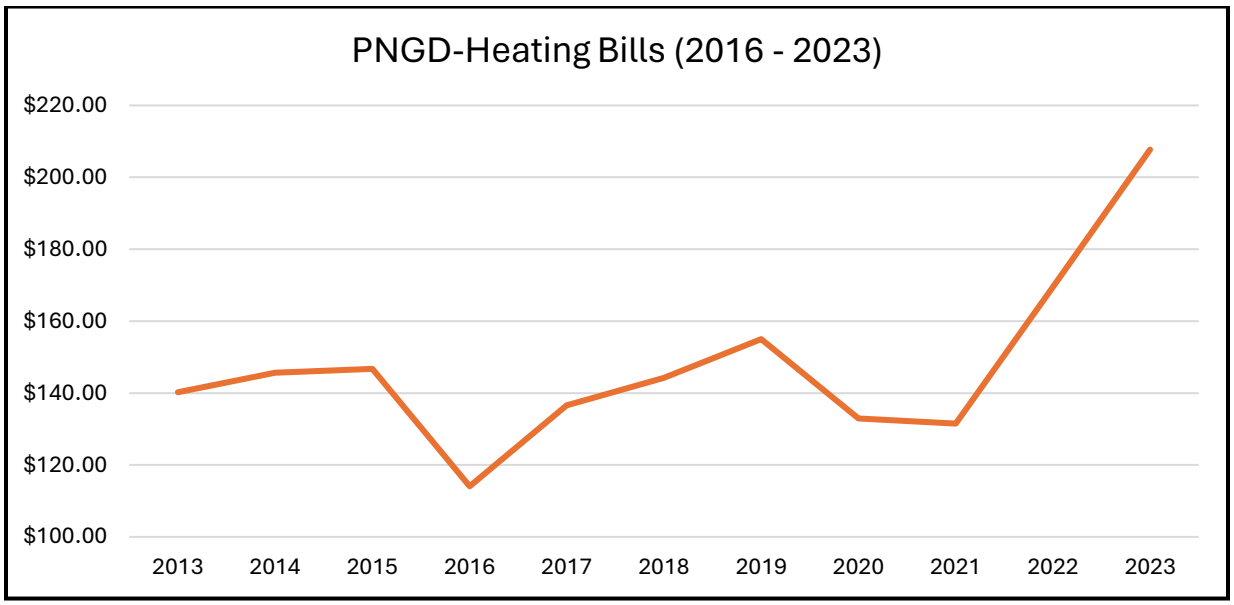
A. In the first part of my affordability analysis, I examine typical residential heating bills at PNGD rates[1] as reported each year by the Pennsylvania Public Utility Commission.[2] The Chart below presents PNGD[3] monthly heating bills (15 MCF) for the years 2016 through 2023. The data shows that while there was a dip in rates for PNGD in 2020 and 2021, there

[1] I did not examine PGD rates. That operating division was Equitable Gas in 2016 through 2019, only becoming Peoples Gas in 2020.

[2] Pennsylvania Public Utility Commission Rate Comparison Report (annual), available at https://www.puc.pa.gov/filing-resources/reports/rate-comparison-reports/

[3] Throughout my testimony, I will use the following nomenclature. When I refer to the Peoples Natural Gas Company LLC, I will use "Peoples" Or "PNG"). When I refer to the Peoples Natural Gas Division operating company, I will refer to "PNGD." When I refer to the Peoples Gas Division operating company, I will refer to "PGD." In the limited number of instances where I use data from years before the Company began to report consolidated data, I will refer to the company as PNGD.

has been a sharp increase in PNGD rates over the period I examined. A PNGD bill (at 15 MCF) of $114.07 in 2016 had increased to $207.71 by 2023.



This increase in bills helps to demonstrate the increasing unaffordability of natural gas to low-income customers in the utility's service territory. I compare the growth in PNGD bills to the growth in the mean and median First Quintile (Q1) incomes for PNGD's service territory over the same time period.[4] Table 1 below shows the growth in PNGD bills by indexing each year's bill to the 2016 bill.[5] This index is then used to compare changes in

[4] I begin with the Zip Codes that comprise the Company's service territory. (OCA-09-01). I matched those zip codes to Census data reported through the American Community Survey (5-year data). The Census Bureau rank orders all households in a geographic area by the level of their annual income. It then divides that ranking into five equal parts (each part which is called a "quintile"). The "First Quintile" (sometimes known as the "lowest quintile") is the one-fifth of households with the lowest incomes. U.S. Census Bureau, Table B19081 (with Pennsylvania zip codes available at https://data.census.gov/table?q=B19081:%20Mean%20Household%20Income%20of%20Quintiles&g=040XX00US42$8600000).

[5] The 2016 index is set equal to 100. If bills increase relative to 2016, the index becomes greater than 100. If bills decrease relative to 2016, the index becomes less than 100. This indexing is not uncommon. For example, it is how the U.S. Department of Labor reports changes in the Consumer Price Index. See e.g., Consumer Price Index for All Urban Consumers (1982 – 1984 = 100 unless otherwise noted), available at https://www.bls.gov/news.release/cpi.t01.htm

PNG bills to changes: (1) the average Q1 mean income; and (2) the median Q1 mean income for the study period.[6]

The Table shows that while the PNGD heating bill index increased to 148.52 from 2016 to 2022, the index of the Q1 income for PNG's service territory increased to only 1.26. PNGD's heating bill index then sharply increased further to 182.09 in 2023; 2023 Census data has not yet been made publicly available. In this rate case, Peoples proposes to increase its rates even further.

In addition to comparing the heating bill index to the index of Q1 incomes, Table 1 also shows what the Q1 incomes would have needed to be in order to keep up with the increases in PNGD's natural gas bills. By 2022, for example, rather than the *actual* average Q1 mean income of $17,360 in the PNG service territory, the average Q1 mean income would have needed to grow to $20,429 (more than $3,000 more) in order to keep up with PNGD bills. The average Q1 mean income would need to have grown to more than $25,000 in 2023 in order to keep up with the growth in PNGD heating bills. Similar results are seen for how the need for growth in the median Q1 mean income to keep up with PNGD heating bills far outstrips the actual growth in such incomes.

[6] The same indexing process was used for Q1 incomes, with 2016 being set equal to 100. The Census reports the mean income for each quintile for each geographic area (in this instance, zip codes). The "average Q1 mean income" is thus the average of the Q1 mean incomes reported for PNG zip codes. The "median Q1 income" is the median of the Q1 mean incomes reported for PNG zip codes.

Table 1. Indexed Change in PNGD Bills (2016 – 2023)
(2016 = 100) (PA PUC Annual Bill Comparison Report)

	Htg Bill / Htg Bill Index		Avg Q1 Mean Income			Median Q1 Mean Income		
	Heating Bill ($s)	Heating Bill Index	Actual	Index	At PNGD Htg Index	Actual	Index	At PNGD Htg Index
2016	$114.07	100	$13,755	100	---	$13,134	100	---
2017	$136.61	119.76	$14,347	1.04	$16,472	$13,665	1.04	$15,729
2018	$144.22	126.43	$14,742	1.07	$17,390	$14,016	1.07	$16,605
2019	$154.99	135.87	$15,258	1.11	$18,689	$14,665	1.12	$17,846
2020	$132.89	116.50	$15,959	1.16	$16,024	$15,224	1.16	$15,301
2021	$131.49	115.27	$16,378	1.19	$15,855	$15,526	1.18	$15,140
2022	$169.42	148.52	$17,360	1.26	$20,429	$16,509	1.26	$19,507
2023	$207.71	182.09	---	----	$25,046	---	100	$23,916

Q. HAVE YOU EXAMINED THE AFFORDABILITY OF PNGD BILLS RELATIVE TO THE Q1 INCOME?

A. Yes. I begin by noting that the PUC has determined that natural gas heating bills (i.e., bills as a percentage of income) should not exceed 4% of income for households with income at or below 50% of Federal Poverty Level (FPL), and it should not exceed 6% of income for households with income between 50% and 150% of FPL.[7] I then proceed by examining the natural gas Bill-to-Income Ratio for Q1 incomes in the Company service

[7] 52 Pa. Code § 69.265(2)(i)(B).

territory at existing and proposed rates.[8] I find that the average Bill-to-Income Ratio for households with Q1 incomes is 7.8% for bills at existing rates, increasing to 9.4% for bills at proposed rates. The mismatch between the growth in natural gas heating bills and Q1 incomes leaves customers with Q1 income markedly in excess of the maximum affordable natural gas burdens as defined by the Commission.

Q. DID YOU EXAMINE AFFORDABILITY USING ANY OTHER INDICIA OF LOW-INCOME STATUS?

A. Yes. In addition to examining Q1 incomes, I considered affordability at different ranges of the Federal Poverty Level (FPL). I examined the following ranges of FPL: (1) at or below 50% FPL; (2) 50% to 100% FPL; (3) 100% to 125% FPL; AND (4) 125% to 150% FPL. At each FPL range, I consider not only the average bill burden, but I examine both the ***breadth*** of unaffordability and the ***depth*** of unaffordability. The breadth of unaffordability examines how frequently unaffordable burdens occur (i.e., if there are 1,000 customers with unaffordable burdens, that is a broader unaffordability than if there are 800 customers with unaffordable burdens). The depth of unaffordability examines the degree of unaffordability (i.e., a bill burden of 12% of income is a deeper degree of unaffordability than a bill burden of 9% of income). Table 2 presents the data on average bill burdens at different ranges of FPL.

The data shows that at existing rates, PNGD customers with income at or below 50% of FPL have bill burdens that exceed the PUC's maximum affordable burden by more than

[8] For "existing" rates, I use the sum of the monthly median low-income bills (without CAP) for the most recent twelve months including a complete heating season (October 2022 – September 2023). (OCA-09-05). For "proposed" rates, I increase that bill resulting given the 21.2% rate increase proposed in this proceeding. (RNZ-6).

three-fold. At proposed rates, on average, the Company's bill burdens at this range of FPL exceed the affordable burden by four times (16% vs. 4%). While bill burdens are more affordable in the higher FPL ranges examined, the data shows the increase in burdens resulting from the rates being proposed by the Company in this proceeding.

Table 2. Average Bill Burdens by Range of Federal Poverty Level (FPL) at Existing and Proposed Rates (Peoples Natural Gas)

	Existing Rates	Proposed Rates
At or below 50% FPL	13.2%	16.0%
50% to 100% FPL	7.0%	8.5%
100% to 125% FPL	4.7%	5.7%
125% to 150% FPL	3.8%	4.7%

The ultimate conclusions from the data above, however, are limited by the fact that they present data on average. The discussion below turns to a more disaggregated examination of affordability.

Q. PLEASE EXPLAIN YOUR FINDINGS ON UNAFFORDABILITY AT EXISTING RATES.

A. Table 3 shows the data on the distribution of PNGD burdens by FPL range at existing rates. At existing rates, fewer than 150 customers with income less than 50% of FPL would have natural gas burdens of less than 12% of income. Nearly 30,000 (29,951) customers in this FPL range have burdens (at existing rates) of between 12% and 15% of income. In addition, more than 34,500 customers with income between 50% and 100% FPL have bill burdens (at existing rates) of between 6% and 8% of income. While bills at higher ranges of FPL are more affordable, the Table shows how sensitive to income the affordability of PNGD bills are. While 14,410 customers with income at 125% to 150% of income have

natural gas burdens of between 3% and 4% of income, only 37 customers at the next lower FPL range (100% to 125%) do. In that FPL range, 16,835 customers have natural gas burdens of between 4% and 5% of income.

Table 3. The Breadth and Depth of Unaffordability by FPL Range
At Existing Rates

0 – 50% FPL		50 – 100% FPL		100 – 125% FPL		125 – 150% FPL	
Bill Burden	# Customers with Burden	Bill Burden	# Customers with Burden	Bill Burden	# Customers with Burden	Bill Burden	# Customers with Burden
<6%	0	<2%	0	<2%	0	<2%	0
6% - 9%	7	2% - 4%	0	2% - 3%	5	2% - 3%	15
9% - 12%	139	4% - 6%	120	3% - 4%	37	3% - 4%	14,410
12% - 15%	29,951	6% - 8%	34,505	4% - 5%	16,835	4% - 5%	6,943
15% - 18%	1,181	8% - 10%	672	5% - 6%	4,424	5% - 6%	16
18% - 21%	0			6% - 7%	4		
Total	31,278	Total	35,297	Total	21,305	Total	21,384

The data clearly shows that PNGD bills, particularly at the lowest ranges of FPL, are unaffordable even at existing rates.

Q. DID YOU DO THE SAME ANALYSIS FOR PROPOSED RATES?

A. Yes. Table 4 presents the same data except using bills at the Company's proposed rates as the basis for assessment. The data shows that, at the Company's proposed rates, unaffordability is noticeably broader and deeper. In the FPL tier with income at or below 50% of FPL, for example, at proposed rates, more than 30,700 customers would have bill burdens of between 15% and 21% of income. Customers with income in the tier of 50% to 100% FPL overwhelmingly (n=34,386) have burdens of 8% to 10% of income (rather

than 6% to 8%). In the tier of 100% to 125% of FPL, a substantial number of customers exceed the PUC's 6% affordable burden at the Company's proposed rates.

Table 4. The Breadth and Depth of Unaffordability by FPL Range
At Proposed Rates

0 – 50% FPL		50 – 100% FPL		100 – 125% FPL		125 – 150% FPL	
Bill Burden	# Customers with Burden	Bill Burden	# Customers with Burden	Bill Burden	# Customers with Burden	Bill Burden	# Customers with Burden
<6%	0	<4%	0	<2%	0	<2%	0
6% - 9%	1	4% - 6%	12	2% - 3%	0	2% - 3%	11
9% - 12%	31	6% - 8%	869	3% - 4%	5	3% - 4%	24
12% - 15%	902	8% - 10%	34,386	4% - 5%	80	4% - 5%	17,944
15% - 18%	28,937	10% - 12%	30	5% - 6%	16,185	5% - 6%	3,389
18% - 21%	1,391			6% - 7%	5,020	6% - 7%	16
>21%	16			7% - 8%	15		
Total:	31,278	Total:	35,297	Total:	21,305	Total:	21,384

As is clear, the depth of unaffordability, particularly for the Company's lowest income customers, substantially increases given the rates which Peoples proposes in this proceeding. When using the PUC's demarcation of an affordable burden as the guide at each FPL tier, PNGD's low-income customers will be substantially worse off given the Company's proposed rates than they would be if those proposed rates were denied or scaled back.

Q. WHY IS YOUR DISCUSSION OF UNAFFORDABLE BURDENS IMPORTANT OR RELEVANT GIVEN THE COMPANY'S CONVERSION OF ITS CUSTOMER ASSISTANCE PROGRAM (CAP) TO A PERCENTAGE OF INCOME PLAN (PIP)?

A. While Peoples conversion of its Customer Assistance Program (CAP) to a Percentage of Income Plan (PIP) will largely protect CAP participants from the harms of increasing rates, CAP is only helpful for those low-income customers who, indeed, are program participants. The data, however, shows that the Company serves a relatively small proportion of its low-income customer base. While I make specific recommendations below with respect to how the Company might increase that participation, my observation here is limited to the fact that even given the Company's CAP, there is a significant low-income customer population that is *not* participating in CAP that will be adversely affected by the Company's proposed rate increase. According to the Company, for example, it has identified 51,072 Confirmed Low-Income customers on its system. (OCA-09-02).[9] Of those Confirmed Low-Income customers, however, only 29,091 (57%) are CAP participants. In absolute terms, in other words, Peoples has nearly 22,000 customers from whom the Company has received information to reasonably identify them as "low-income" but who do not participate in CAP.

Even this number, however, understates the problems facing low-income customers on the Company's system. According to the PUC's Bureau of Consumer Services (BCS) 2022 annual report on universal service and collections performance (published September

[9] Unless I explicitly note to the contrary, data provided in response to discovery refers to data for Peoples as a whole, not separately to PNGD or PGD.

2023) (hereafter "BCS 2022 Report"),[10] Peoples has an estimated 146,971 low-income customers.[11] Peoples, in other words, has confirmed the low-income status of only 35% of its estimated low-income customer base (51,072 / 146,971 = 0.347). The Company has then enrolled only 57% of that sub-population of Confirmed Low-Income customers into CAP. Overall, Peoples has enrolled less than 20% of its estimated low-income customer population into CAP (29,091 / 146,971 = 0.198).

Q. IS YOUR OBSERVATION THAT PEOPLES ENROLLS FEWER THAN ONE-IN-FIVE OF ITS LOW-INCOME CUSTOMERS IN CAP A CRITIQUE OF THE COMPANY'S CAP OUTREACH?

A. While I will make specific recommendations regarding CAP enrollment later in my testimony, my purpose here is ***not*** to critique or criticize Peoples CAP outreach. Instead, my purpose here is to observe that when CAP misses 80% of the low-income population, the existence of CAP cannot be used as a reason to ignore the broader harms of Peoples' proposed rates to the low-income population as a whole.

Q. WHAT DO YOU CONCLUDE?

A. A consideration of affordability is a critical task to undertake within the structure of any utility rate case. As bills become increasingly unaffordable, the payment difficulties of those customers who face unaffordability become increasingly substantial as well. As I will demonstrate later in this testimony, this conclusion can be well-documented for

[10] BCS (Sept. 2023). Universal Service Programs and Collections Performance, 2022 Report, available at https://www.puc.pa.gov/media/2573/2022-universal-service-report-final.pdf

[11] Beginning in 2020, the 2020 annual report, Peoples began reporting its data to BCS on a consolidated basis. Accordingly, all BCS data after 2019 which I cite is for Peoples as a whole, not for PNGD or PGD separately.

Peoples. One impact of the unaffordability I discuss, in other words, is its impact on the operating costs (e.g., collection costs, working capital, uncollectible expenses) that are then normalized and passed on to other ratepayers. Also, Peoples proposals such as increasing the residential customer charge, have disproportionate adverse effects on low-income customers who already are facing substantial unaffordability.

Moreover, establishing a return on equity is fundamentally predicated on balancing customer and investor interests. It is necessary for the Pennsylvania PUC to understand the customer interests in order to appropriately balance them against the competing investor interests. The obligation of the Commission in deciding on the appropriate return on equity (ROE) and the reasonable mix of debt and equity securities should balance consumer and investor interests. (*FPC v. Natural Gas Pipeline Co.*, 315 U.S. 575, 606-607 - 608). Indeed, of the consumer issues that are important drivers of the just and reasonable ROE determination, one of the most significant is the concern about affordability. If a sizable portion of customers cannot afford to pay the rates approved by the PUC, the PUC can hardly be said to have approved just and reasonable rates. Such concerns should bear directly on the determination of the fair ROE. In addition, as a utility such as Peoples adds more and more expensive plant, this increases rates, which may in turn put downward pressure on the just and reasonable ROE not for financial reasons, but because of affordability concerns.

In sum, the concerns I identify with respect to the unaffordability of Peoples rates can (and should) be considered even outside the consideration of the specific proposals I advance with respect to specific low-income initiatives.

Part 2. Affordability and Peoples Credit and Collections.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I expand upon my discussion of the impact which an increase in Peoples' rates would have on low-income customers. In particular, I examine the collections performance of Peoples with respect to the Company's Confirmed Low-Income customers.

Q. PLEASE EXPLAIN THE FIRST COLLECTIONS METRIC YOU EXAMINE.

A. The first metric I examine involves the average arrears. Table 5 presents data for the average arrears of residential customers and the average arrears of Confirmed Low-Income customers by year for the three years 2020 through 2022.[12] As can be seen, in 2020, the average arrearage for a Confirmed Low-Income customer was nearly 40% larger than for a residential customer generally. By 2021 and 2022, the average arrears for a Confirmed Low-Income customer was more than 50% higher. Accompanying the unaffordability of Peoples bills to its low-income population, in other words, is the increased nonpayment of those bills.

[12] 2022 is the last year of data reported. 2020 is the first year that Peoples reported combined data for what, in previous years, had been separately reported for Peoples and for Peoples (Equitable).

Table 5. Average Arrears: Residential vs. Confirmed Low-Income (2020 – 2022)
(BCS 2022 Report on Universal Service Programs and Collections Performance)

	Residential	Confirmed Low-Income	Ratio (Conf'd LI to Residential)
2020*	$449.90	$617.26	1.37
2021	$466.51	$718.87	1.54
2022	$394.22	$599.51	1.52

* Beginning in 2020, Peoples began reporting combined data for what, in prior years, had been separate reporting for Peoples and for Peoples (Equitable)

A higher arrears imposes costs on the utility, which costs must be paid by remaining ratepayers. Even setting aside any collection efforts that Peoples would direct toward customers in arrears, the higher arrears would impose a higher working capital cost. For each week/month that a bill remains unpaid, Peoples would incur either an out-of-pocket expense for borrowing replacement money, or would incur the corresponding opportunity cost for not having those funds to invest.

The second metric I examine involves not the size of the arrearage that is being carried, but rather the percentage of customers who are in arrears. Data from the annual BCS report documents that Confirmed Low-Income customers are not only deeper in arrears, but a higher percentage of Confirmed Low-Income customers are in arrears as well. The BCS data shows that the percentage of Confirmed Low-Income customers in arrears reaches nearly two times higher than the percentage of residential customers as a whole that are in arrears. In 2022, for example, while 7.4% of all residential customers were in arrears 14.0% of Confirmed Low-Income customers were.

Table 6.Percent of Customers in Arrears: Residential vs. Confirmed Low-Income (2020 – 2022) (BCS 2022 Report)

	Residential	Confirmed Low-Income	Ratio (Conf'd LI to Residential)
2020*	8.4%	15.8%	1.88
2021	6.0%	10.9%	1.82
2022	7.4%	14.0%	1.89

* Beginning in 2020, Peoples began reporting combined data for what, in prior years, had been separate reporting for Peoples and for Peoples (Equitable)

What the data shows is that the higher average arrears of Confirmed Low-Income customers is not offset by a lower total percentage of accounts in arrears. Instead, exactly the opposite occurs. Not only are more Confirmed Low-Income customers in arrears, but they are, on average, further in arrears.

The third metric I examine involves service disconnections for non-payment (DNPs). According to the BCS 2022 Report on universal service programs and collections performance, "Termination of public utility service is the most serious consequence of customer nonpayment and is viewed as a last resort when customers fail to meet their payment obligations."[13] As with the level of arrears, the unaffordability of Company bills has a particularly adverse impact on the Company's low-income customers. In the past two years, Confirmed Low-Income customers of Peoples have had service disconnected for nonpayment at a rate 40% to 50% higher than the rate of service disconnections for residential customers as a whole.

Table 7. Termination Rate: Residential vs. Confirmed Low-Income (2020 – 2022)

[13] According to the BCS 2022 Report: "The termination rate is calculated by dividing the number of service terminations by the number of residential customers, allowing for a comparison of termination activities regardless of the number of residential consumers. Any significant increase in a termination rate could indicate a trend or pattern that the Commission may need to investigate."

(BCS 2022 Report)			
	Residential	Confirmed Low-Income	Ratio (Conf'd LI to Residential)
2020*	0.1%**	0.0%	---
2021	4.0%	5.5%	1.38
2022	2.6%	3.9%	1.50

* Beginning in 2020, Peoples began reporting combined data for what, in prior years, had been separate reporting for Peoples and for Peoples (Equitable)
** Disconnection rates were nearly non-existent due to COVID-related disconnection restrictions imposed by the PUC.

As with carrying arrears, nonpayment service disconnections have a rate impact on remaining customers. Not only is there an out-of-pocket cost associated with the process of disconnection, but there is the likelihood of lost future revenue as well. Peoples provided, for each of its operating divisions, for 2021 through 2023 (YTD), the number of disconnected accounts that were not reconnected; it further provided a distribution of the length of time accounts remained without service even when they were reconnected. (OCA-09-21). The Company's data shows that in nearly every year, for each of its operating divisions, Confirmed Low-Income customers were not only less likely to have service reconnected, but in addition, when service was reconnected, Confirmed Low-Income customers remained off-system for a longer period of time.

Table 8. Percent Accounts Disconnected Not Reconnected (2021 – 2023) (OCA-09-020)[14]

	PNGD		PGD	
	Confirmed Low-Income	Residential	Confirmed Low-Income	Residential
2021	16.1%	8.9%	17.8%	8.7%
2022	4.9%	7.5%	10.7%	7.3%
2023	9.0%	4.5%	8.0%	3.9%

Finally, the data demonstrates that only in 2022 (for the PNGD) was the percentage of disconnected accounts that were not reconnected higher for residential customers as a whole than for Confirmed Low-Income customers. More typically, nearly two times more Confirmed Low-Income customers with disconnected service did not have that service reconnected.

Even when reconnected, however, Confirmed Low-Income customers tend to experience a longer time off-system prior to that reconnection of service. The data in Table 9 below shows the percentage of Confirmed Low-Income customers who remained without service for seven or more days prior to having their service reconnected after a nonpayment disconnection. Nearly one-in-three Confirmed Low-Income customers who are disconnected, and then reconnected, nonetheless remain without service for seven or more days. More than one-in-five of reconnected Confirmed Low-Income customers are without service for 14 days or more.

[14] This is an instance where the Company provided data for the Company as a whole (Peoples Natural Gas Company LLC), as well as for each of its operating divisions (PNGD, PGD). Each of those sets of data are presented.

Table 9. Percent of Customers Who were Reconnected by Days Off-System Prior to Reconnection (Confirmed Low-Income vs. Residential) (2023) (OCA-09-20)

Days Prior to Reconnection	Peoples Natural Gas Company LLC	Peoples Natural Gas Company	Peoples Gas Company
7 - -14 days	9.2%	9.2%	9.0%
>14 days	22.1%	22.0%	23.5%
7 or more days	31.3%	31.2%	32.4%

Each day without service represents lost revenue to the utility. To the extent that Peoples loses that revenue, those dollars must be made up through increased rates to other customers. Adequately addressing the issues of low-income unaffordability, therefore, has direct impacts on the rates charged to other customers even outside the specific low-income initiatives Peoples undertakes.

Q. IN YOUR ANALYSIS OF THE COMPANY'S DISCONNECTION DATA, DOES THERE APPEAR TO BE ANY RELATIONSHIP BETWEEN THE INCREASED DISCONNECTION OF SERVICE FOR NON-PAYMENT AND ZIP CODES WITH THE HIGHEST PERCENTAGE OF BLACK HOUSEHOLDERS?

A. Yes. I begin by noting that based on the information I have reviewed, I have seen no indication of intentional discrimination on the part of the Company; however the data does appear to show a correlation or relationship between the increased disconnection of service for non-payment and zip codes with the highest percentage of black householders. In reaching this conclusion, I began by identifying the 40 zip codes with the highest percentage of Black householders in the Company's service territory. I calculated the percentage of total Peoples customers living in those zip codes. I then examined the number of nonpayment disconnections that occurred in those zip codes and calculated the percentage of total Peoples disconnections occurring in those zip codes. The data is set

forth in Table 10 below. The data shows that 29% of the Company's total customer base resides in the 40 zip codes with the greatest percentage of Black householders. In contrast, between 38% and 47% of the total number of the Company's nonpayment service disconnections occur in those 40 zip codes.

Table 10. Percent Population in Peoples Service Territory versus Percent Disconnections in Peoples Service Territory with High Penetration of Black Population/Householders

	2021	2022[15]	2023
% total customers in 40 zip codes with greatest % of Black householders	---	29%	---
% of total customers with income <150 % FPL in 40 zip codes with greatest % of Black householders	---	23%	---
% disconnections for nonpayment in 40 zip codes with greatest % of Black householders	45%	47%	40%

Table 10 further shows that this disproportionate number of disconnections does not occur in these zip codes with a high penetration of Black householders because of a higher penetration of low-income households in those zip codes. Indeed, the percentage of total Black householders with income at or below 150% FPL is lower than the percentage of total Black householders overall in the 40 study zip codes. While 29% of the total Black householders live in these 40 zip codes, only 23% of the total population with income at or below 150% of Poverty does so.

Equivalent results can be reached through a corresponding analysis beginning with the number of disconnections per zip code. I identified all zip codes with 500 or more disconnections in the most recent 36 months. The number of disconnections in those 44 zip codes represented 60.8% of all disconnections which Peoples performed in that time

[15] Census data available only for 2022.

period. Those 44 zip codes, however, represented 66.2% of all Black householders in the Company's service territory. The disproportionate percentage of disconnections cannot be attributed to low-income status. Within these 44 zip codes with high numbers of disconnections, only 20.5% of the population lives with income at or below 150% FPL. Thus, the result does not appear to be a function of lower income of households in those 40 zip codes.

Q: PLEASE EXPLAIN WHY THIS DATA AND INFORMATION IS RELEVANT IN THIS CASE?

A: This information is relevant to quality-of-service concerns and the provision of service on fair and equitable terms within Peoples' service territory. Peoples is likely not even aware of this correlation, and I think it is important to shed light onto it to ensure that it can be remedied in the near term.

Q. WHAT DO YOU RECOMMEND?

A. I recommend that Peoples conduct a root cause analysis to determine what is driving this disproportionate level of utility disconnections within the 40 zip codes with the highest penetration of Black households. Once this root cause analysis is conducted, Peoples should commit to taking steps to address the cause with the commitment of reducing disproportionate disconnections within these zip codes. My recommended root cause analysis is intended to be consistent with the definition of and standard for the root cause analysis that OCA witness Alexander outlines in OCA Statement 5. The extent to which Peoples mitigates the disproportionate disconnection of service for nonpayment in zip codes with high penetrations of Black households should be reviewed in Peoples next base rate case.

Part 3. Specific Recommendations to Respond to Low-Income Unaffordability.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I consider a series of recommendations that Peoples should adopt to respond to the unaffordability of natural gas bills that I have identified above. In my discussion below, I do not recommend changes to the structure or operation of the Peoples universal service program as filed in its most recent Universal Service and Energy Conservation Plan (USECP). Instead, I have reviewed Peoples procedures and operations outside of its USECP to assess the ways in which such procedures and operations can be improved to integrate total Company operations more fully with the Peoples USECP.

Q. PLEASE EXPLAIN THE ROLE WHICH SUCH RECOMMENDATIONS PLAY IN A BASE RATE PROCEEDING.

A. The role of providing affordable service in a base rate proceeding has been identified throughout my discussion above. When rates are unaffordable to low-income customers, that unaffordability affects the rates charged to other customers. I have documented, for example, how the unaffordability of bills leads to higher levels of arrears by low-income customers. Those higher levels of arrears not only lead to Peoples incurring out-of-pocket expenses devoted to the collection of those arrears, they lead to higher levels of expenses such as the higher levels of working capital associated with the revenue that has been billed but not collected. Since working capital is a capital expense, there is also an equity return associated with it, with a corresponding additional tax impact. The rate impact, in other words, is greater than the impact on the initial level of working capital expense. I have also documented above how the unaffordability of Peoples rates leads to a stream of lost revenue. This lost revenue occurs as low-income customers have service disconnected

with no reconnection. This process not only causes Peoples to lose the revenue that is comprised of the unpaid bills at the time of disconnection, but also causes the Company to lose any revenue associated with the bills that would have been associated with future bills. Moreover, as I documented above, even when service is reconnected, low-income customers remain off-system for long-periods of time prior to the reconnection, each day of which represents a lost sale (and thus lost revenue).

My recommendations below recognize these impacts which low-income unaffordability have on rates. Without needing to propose modifications to the structure of Peoples USECP, the recommendations explain how Peoples can improve the service it offers to low-income customers to mitigate the adverse rate impacts of unaffordable bills.

A. Identifying Confirmed Low-Income Customers.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I identify how the Company fails to comply with PUC regulations regarding the identification of "confirmed low-income" customers. I recommend changes that would bring Peoples into compliance with the PUC's regulations.

Q. HOW DOES PEOPLES CURRENTLY IDENTIFY "CONFIRMED LOW-INCOME" CUSTOMERS?

A. When asked to "please identify all categories or identifiers that Peoples include when calculating its 'confirmed low income customer' count," the Company responded:

> Peoples counts all CAP participants, as income documentation or the zero income form are submitted to confirm low income status. In addition to CAP

> participation, Peoples also considers receipt of LIHEAP cash or crisis grants within the past 24 months as indicative of confirmed low income.

(CAUSE-PA-II-003).[16] This procedure by Peoples is too narrow. It fails to comply with the PUC's regulations regarding how to define a "confirmed low-income" customer. The PUC's regulations explicitly define a "confirmed low-income" customer for Natural Gas Distribution Companies. The PUC regulation states:

> *Confirmed low-income residential account*—Accounts where the NGDC has obtained information that would reasonably place the customer in a low-income designation. This information may include receipt of LIHEAP funds (Low-Income Home Energy Assistance Program), self-certification by the customer, income source or information obtained in § 56.97(b) (relating to procedures upon rate-payer or occupant contact prior to termination).[17]

As can be seen, "confirmed low-income" status is ***not*** limited to CAP participants and LIHEAP recipients. It would include ***any*** information that "would reasonably place the customer in a low-income designation." The regulation explicitly provides that such information can be provided through "self-certification by the customer." It can also include information obtained when seeking to establish a payment plan or otherwise to resolve a pending disconnection (56 Pa. Code § 56.97(b)). "Self-certification" may include not merely self-certification of the level of income, but, pursuant to the PUC regulation, certification of the ***source*** of income. For example, customers who receive SNAP (Supplemental Nutrition Assistance Program, formerly known as Food Stamps) assistance, Medicaid, Temporary Aid to Needy Families (TANF), free School Lunch, and other similar

[16] The referenced Peoples' discovery response is attached to my testimony as Exhibit RDC-2.

[17] 52 Pa. Code § 62.2.

benefits will, by the vary receipt of those benefits, be "reasonably place[d]. . .in a low-income designation."

Appropriately and accurately identifying the Company's "confirmed low-income" customers is not only important from the perspective of CAP outreach (e.g., Peoples agreed in the Settlement of its 2018 rate case to provide a stand-alone notice to Confirmed Low-Income" customers prior to a nonpayment disconnections), but also qualifies such customers for various fee waivers. Moreover, the PUC's regulations provide that a customer is exempt from a cash security deposit "when the customer provides *income documents or other information* that he or she is eligible for state benefits based upon household income eligibility requirements that are consistent with those of the public utility's customer assistance program."[18] (emphasis added).

Q. WHAT DO YOU RECOMMEND?

A. Peoples should modify its policies and procedures regarding the identification of "confirmed low-income" customers to conform with the PUC's regulations, including self-certification of low-income status ("This information may include receipt of LIHEAP funds (Low-Income Home Energy Assistance Program), self-certification by the customer"). Peoples should include these modified policies and procedures in its residential tariff.

[18] 56 Pa. Code § 56.41(4).

B. Nonpayment Disconnections of Confirmed Low-Income Customers.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I address the need of Peoples to take more effective actions to use its universal service program to prevent the disconnection of service for nonpayment to Confirmed Low-Income customers. This discussion addresses not the structure of the Peoples USECP, but rather addresses how Peoples interacts with customers who do *not* participate in the programs.

Q. WHY DO YOU ADDRESS THE DISCONNECTION OF SERVICE IN PARTICULAR?

A. There are three reasons why the disconnection of service should be considered in particular. First, in all the ways I have discussed in detail above, the disconnection of service has rate implications to all customers. Minimizing disconnections would minimize these adverse rate impacts. Second, as BCS notes in its most recent annual report on universal service programs and collection performance, "Termination of public utility service is the most serious consequence of customer nonpayment and is viewed as a last resort when customers fail to meet their payment obligations."[19] It is thus appropriate to assess whether service terminations are, in fact, being used by Peoples as a "last resort." Third, as BCS states: "Universal Service is a collective name applied to the policies, protections and services that *help low-income customers maintain electric and natural gas service*. . ." (emphasis added).[20] Given that "universal service" is intended to "help low-income customers

[19] BCS 2022 Report, at 15.

[20] Id., at 3, citing Electricity Generation Customer Choice and Competition Act, 66 Pa. C.S. § 2803 and Natural Gas Choice Competition Act, 66 Pa. C.S. § 2202.

maintain. . .natural gas service," it is appropriate to assess whether that objective is being achieved. Finally, the Settlement of the 2019 Peoples rate case acknowledged the need to improve Company efforts to enroll customers in CAP as an alternative to the disconnection of service. The 2019 Settlement provided in relevant part:

> Within 6 months, Peoples Natural will adopt a procedure under which it will not disconnect service to a confirmed low-income customer for nonpayment without first providing a stand-alone Plain English notice to that customer of the customer's right to enter into CAP and an explanation of CAP's arrearage forgiveness benefits. Peoples Natural will develop the Plain English notice in collaboration with its Universal Service Advisory Group.

(Petition for Settlement, para. 59, page 14, Docket No. R-2018-3006818). It is appropriate to determine in this proceeding, therefore, whether that agreement achieved the results it was intended to achieve. If not, further effort would be appropriate.

Q. IS THE PEOPLES UNIVERSAL SERVICE PROGRAM SUCCESSFUL IN "HELPING LOW-INCOME CUSTOMERS MAINTAIN NATURAL GAS SERVICE"?

A. Not entirely. There is significant information documenting the extent to which the Company's universal service program is not helping low-income customers to maintain natural gas service. I consider the extent to which Peoples is disconnecting service to Confirmed Low-Income customers. Peoples' data shows not only that the Company is continuing to disconnect service to a substantial number of Confirmed Low-Income customers, but also that the average arrears at the time of disconnection remains substantial as well. The data is set forth in Table 11 below.

To assume that Peoples has effectively communicated the possibility of enrolling in CAP, and making pre-program arrears subject to forgiveness, to Confirmed Low-Income customers, one would need to assume that nearly 4,200 Confirmed Low-Income customers –remember a "Confirmed Low-Income" customer is a customer from whom Peoples has already received information that would reasonably identify that customer as "low-income"—would *choose* to have their service disconnected rather than to enroll in the Company's CAP. One would further need to assume that these nearly 4,200 customers would choose to pay all or part of their arrears in order to reconnect their service, and to retain those pre-disconnection arrears on their accounts to be paid in the future rather than subjecting those arrears to forgiveness.

Table 11. Confirmed Low-Income Disconnections and Average Arrears at Time of Disconnection (OCA-09-19)

	Nonpayment Disconnections: Confirmed Low-Income	Average Arrears at Time of Disconnection
2021	5,177	$893
2022	4,506	$636
2023	4,179	$642

This data is consistent with the data presented in Table 7 above. That Table shows that the termination rate (i.e., number of nonpayment disconnections divided by the number of customers) remains 50% higher for Confirmed Low-Income customers than it is for residential customers in general. Other data provided by Peoples reveal an even higher number of nonpayment disconnections for Confirmed Low-Income customers: (1) 8,063 (2021); (2) 6,508 (2022); and (3) 5,781 (2023). (OCA-09-21).

The data shows that most, but not all, Confirmed Low-Income customers are reconnected.

Peoples reports the following Confirmed Low-Income customers that were disconnected by not reconnected: (1) 1,306 not reconnected of 8,063 disconnected (2021); (2) 354 not reconnected of 6,508 disconnected (2022); and (3) 512 not reconnected of 5,781 disconnected (2023). (OCA-09-21). These reconnections demonstrate that the Company can and does make contact with these Confirmed Low-Income customers.

Q. WHAT DO YOU FIND?

A. The data above clearly shows that the written communications agreed to in the Settlement of the 2019 Peoples rate case are not effectively working to help low-income customers (defined to be Confirmed Low-Income customers) to retain utility service. Notwithstanding these written communications, thousands of Confirmed Low-Income customers are having their service disconnected for nonpayment, and a portion of those disconnected customers do not have their service reconnected.

Q. WHAT DO YOU RECOMMEND?

A. I recommend that, in addition to Peoples providing a stand-alone written communication with Confirmed Low-Income customers as agreed to in the 2019 rate case settlement, prior to the disconnection of a Confirmed Low-Income customer, Peoples adopt a procedure, developed in collaboration with its Universal Service Advisory Group (USAG), under which it will seek to make personal contact with the customer subject to disconnection. In that personal contact, the Company shall offer the Confirmed Low-Income customer the opportunity to apply for the Company's CAP and arrearage forgiveness program. If the customer expresses a desire to make such application, Peoples will postpone the disconnection for a reasonable period of time to allow the application process to be completed. In short, I recommend that the procedure agreed to in the 2019 Settlement be

expanded to include an effort to make personal contact in addition to the written contact contemplated by that Settlement.

C. Deferred Payment Agreements for Confirmed Low-Income Customers.

Q. PLEASE EXPLAIN YOUR THIRD RECOMMENDATION.

A. My third recommendation is that Confirmed Low-Income customers who are negotiating a deferred payment agreement (DPA) with the Company, as well as customers from whom the Company receives information placing them in an income tier of 0% to 150% FPL, should be provided a stand-alone written Plain English notice informing those customers of their right, in the alternative, to enroll in the Company's CAP (along with an explanation of the advantages of CAP's arrearage forgiveness provisions). Through that opportunity, rather than needing to agree to retire their arrears over an extended period of time, the Confirmed Low-Income customer would be allowed to enroll in CAP and, upon making appropriate payments, receive a forgiveness of their underlying arrearages. This written communication would be provided to Confirmed Low-Income customers, those customers from whom Peoples had already previously received sufficient information to reasonably establish their low-income status.

Q. PLEASE EXPLAIN THE NEED FOR SUCH COMMUNICATION.

A. Peoples reports that it enrolls significant numbers of Confirmed Low-Income customers in deferred payment arrangements through which customers agree to retire arrearages over an extended period of time. The data shows that Peoples entered into 2,223 new payment arrangements with Confirmed Low-Income customers in 2021 (February – December); 2,487 new payment arrangements with Confirmed Low-Income customers in 2022, and 3,027 new payment arrangements with Confirmed Low-Income customers in 2023. (OCA-09-16).

These payment arrangements, however, are largely unsuccessful. The Company states that it cannot provide data on the number of DPAs that are defaulted since customers are not removed from their DPA due to a failure to pay. (OCA-09-16(f)). However, insights can be gained into the number of Confirmed Low-Income customers that default on their payment plans by examining the number of "payment-troubled customers." According to BCS, "A payment troubled customer is a customer who has failed to maintain one or more payment arrangements in a 1-year period."[21] The Peoples data reported by BCS on payment arrangements for Confirmed Low-Income customers and payment-troubled Confirmed Low-Income customers is set forth in Table 12 below.

[21] BCS 2022 Report (2022), at 11, citing 52 Pa. Code § 54.72 or § 62.2 .

Table 12. Number of Deferred Payment Arrangements and Number of Payment-Troubled Customers (Confirmed Low-Income Customers) (Peoples) (2021 – 2023) (BCS 2022 Report)			
	2020	2021	2022
Number of Payment Arrangements	5,603	8,926	7,015
Number of Payment-Troubled Customers	9,514	9,430	9,219

As can be seen, for the most recent three years reported by BCS (2020 – 2022), the number of Confirmed Low-Income customers who are "payment-troubled" (i.e., had defaulted on one or more payment plans in a 12-month period) far exceeds the number of Confirmed Low-Income customers who are on payment plans.

Moreover, it is possible to gain additional insights into the success of DPAs for low-income customers. Company data is presented in the Table below. The ratio of successful DPAs (for customers with income at or below 150% FPL) is, however, relatively low. In 2022 and 2023, the ratio of successful plans to total existing plans was somewhat over 0.60, while in 2021, the ratio was much lower.[22]

[22] The 2021 ratio was likely affected by the economic crisis associated with the COVID-19 pandemic.

Table 13. Number of Existing and Successful DPAs by Lowest Income Range (defined by Chapter 14, section 1405(b), 66 Pa. C.S. § 1405(b)) (at or below 150% FPL) (OCA-09-18)			
	Avg No. of Existing Plans	Number of Successful Plans	Ratio Successful Plans to Existing Plans[23]
2021	13,691	6,206	0.453
2022	12,314	7,910	0.642
2023	15,994	9,879	0.618

Company customer service representatives would generate information through the DPA process that would demonstrate whether a customer would be eligible for CAP. When asked how customer service representatives determined household income in order to place customers in the correct DPA as governed by Chapter 14, Section 1405(b), Peoples responded:

> Customer Service Representatives at Peoples Natural Gas request income and occupancy information from customers when establishing a payment arrangement. The customer's gross monthly income and household size are used to determine the length of the payment arrangement.

(OCA-09-18)[24]. If those customer service representatives know that a household's income and household size would place the customer in Income Tier 1 (at or below 150% FPL) for purposes of negotiating a DPA, they would also know that the customer's income and household size would qualify that customer for CAP (and the corresponding arrearage forgiveness).

Q. WHAT DO YOU FIND?

[23] This is not a percentage. The plans which are not listed as "successful" are not necessarily "unsuccessful." They could instead continue to be active.

[24] The referenced Peoples' discovery response is attached to my testimony as Exhibit RDC-3

A. Offering a low-income customer a deferred payment arrangement, even a long-term deferred payment arrangement, is not a recipe for success if the reason the customer is in arrears in the first instance is that bills for current service are unaffordable. In those situations, all a deferred payment arrangement does is to begin with the unaffordable bill and *add* an additional installment payment through which to retire the arrears. In those instances, it should not be surprising that substantially more than half of Confirmed Low-Income payment arrangements default in any given year (i.e., yielding a "payment-troubled customer"). The remedy for unpaid bills by low-income customers is not to place those customers on a deferred payment arrangement, but rather to enroll those customers in CAP (with its arrearage forgiveness provisions). Through that remedy, Peoples would not merely address the unpaid bill, but would also address the underlying cause of the unpaid bill. Doing so would not only benefit the low-income customer, but it would also benefit the Company and its remaining customers as well.

Q. WHAT DO YOU RECOMMEND?

A. I recommend that before Peoples enters into a DPA with a customer which the Company either: (1) knows to be a Confirmed Low-Income customer; or (2) has generated information through the DPA process documenting that the customer is in the Tier 1 income range (at or below 150% FPL), it should be required to provide the customer a stand-alone Plain English notice to that customer of the customer's right to enter into CAP and an explanation of the advantages of CAP's arrearage forgiveness benefits. As it agreed to do with the pre-termination stand-alone written notice, Peoples should develop this Plain English notice in collaboration with its Universal Services Advisory Group.

D. Cold Weather Survey CAP Enrollment.

Q. PLEASE EXPLAIN YOUR FOURTH RECOMMENDATION.

A. My fourth recommendation is that customers who have had service disconnected for nonpayment, and who remain disconnected at the time of the Company's Cold Weather Survey (CWS) undertaken for the PUC, should be provided a written, stand-alone, Plain English notice of their right to enroll in the Company's CAP (along with an explanation of the advantages of CAP's arrearage forgiveness provisions).

Q. UPON WHAT DO YOU BASE THIS RECOMMENDATION?

A. I have reviewed the results of the PUC's Cold Weather Survey performed at the beginning of the winter heating season each year.[25] I examined data from the three years 2021 through 2023. The data in Table 14 below shows the extent to which residential customers which the Company has disconnected during the non-cold weather months remain without service at the beginning of the next cold weather heating season. Over the past three years, between 1,700 and 2,000 customers who have had service terminated for nonpayment remain without heating service. While the number of customers remaining without heating service declined in 2022 and 2023, the percentage of customers that had service disconnected, and who remained disconnected, has increased. In 2021, 22.8% of the 8,872 customers surveyed remained without heating at the start of the cold weather months, while by 2023, the percentage increased to 27.3%.

[25] Electric, Gas and Water Cold Weather Survey Results, available at https://www.puc.pa.gov/filing-resources/reports/electric-gas-water-cold-weather-survey-results/

Table 14. Cold Weather Survey Results (2021 – 2023)
(Peoples Natural Gas)

	2021	2022	2023
Number surveyed	8,872	6,476	6,278
Vacant	1,019	887	790
Reconnected (DPA or other)	5,833	3,890	3,774
Not contacted	1,697	1,440	1,227
Occupied with service off	323	250	487
Using alternative source of heating	98	26	101
No heating	2,020	1,698	1,714
Percent without heat	22.8%	26.2%	27.3%

It would seem unreasonable to assume that, if given a meaningful choice either to enter the cold weather season without heating service or to enroll in a program that would not only limit their future bills to an affordable percentage of income, but would also provide a forgiveness of their pre-existing arrears, customers would choose to enter the winter months without heating service while, at the same time, retaining the arrears that led to their service being disconnected for nonpayment in the first instance.

Q. WHY SHOULD PEOPLES FIND IT IMPORTANT TO OFFER CAP ENROLLMENT AS AN OPTION TO CUSTOMERS WHO WOULD OTHERWISE ENTER THE COLD WINTER MONTHS WITHOUT HEATING SERVICE?

A. As I note above, the statutory purpose of Pennsylvania's universal service programs is to "help low-income customers maintain electric and natural gas service. . ."[26] This purpose would be furthered by helping to identify customers who have had their heating service disconnected by Peoples, and who remain without heat, as low-income and then facilitating their enrollment in CAP (along with its arrearage forgiveness).

Q. WHAT DO YOU RECOMMEND?

A. I recommend that Peoples adopt a procedure under which it will provide a stand-alone Plain English notice to customers found to be without heating service at the time of the Company's Cold Weather Survey of the customer's right to enter into CAP and an explanation of CAP's arrearage forgiveness benefits. Peoples should develop the Plain English notice in collaboration with its Universal Service Advisory Group.

E. Confirmed Low-Income Customers with Substantial Arrears.

Q. PLEASE EXPLAIN YOUR FIFTH RECOMMENDATION.

A. My fifth recommendation is that Confirmed Low-Income customers achieving a minimum arrears should receive a stand-alone written Plain English notice of their right to enter into CAP along with an explanation of CAP's arrearage forgiveness benefits. There is no question that Peoples has substantial numbers of Confirmed Low-Income customers that

[26] BCS 2022 Report, at 3, citing Electricity Generation Customer Choice and Competition Act, 66 Pa. C.S. § 2803 and Natural Gas Choice Competition Act, 66 Pa. C.S. § 2202.

have high arrears. According to the Company's own data, in 2023 as set forth in Table 15 below, Peoples had between 2,500 and more than 5,000 Confirmed Low-Income customers with arrears exceeding $300 in any given month.

Table 15. Number of Confirmed Low-Income (non-CAP) Accounts with Arrears $300+ (by month) (OCA-09-14) (February 2021 – December 2023)

202101	202102	202103	202104	202105	202106	202107	202108	202109	202110	202111	202112
xxx	3,153	3,255	3,291	2,829	2,428	2,245	2,012	1,833	1,742	1,737	1,662
202201	202202	202203	202204	202205	202206	202207	202208	202209	202210	202211	202212
1,814	2,063	2,476	2,948	3,187	3,456	3,254	2,594	2,377	2,419	2,573	2,888
202301	202302	202303	202304	202305	202306	202307	202308	202309	202310	202311	202312
3,452	3,889	4,522	4,881	5,045	4,340	3,520	3,206	2,783	2,530	2,685	2,733

I choose $300 as the lower threshold to examine because $300 is roughly equal to the median Confirmed Low-Income arrears (excluding CAP participants) of $291 over the last 36 months. (OCA-09-09).[27]

As I noted above, the PUC has previously observed how enrollment of low-income customers into CAP can be expected to help low-income customers improve their payment patterns. I cited above where the Commission reasoned that "enrolling low-income customers into CAPs as early as possible generally puts them in the best position to maintain good payment habits and avoid accruing utility debt."

Peoples' own evaluation of its CAP in 2017[28] supports this conclusion. The Peoples evaluation examined the percentage of bills paid by low-income customers prior to entering

[27] The referenced Peoples' discovery response is attached to my testimony as Exhibit RDC-4.

[28] APPRISE, Inc. (August 2017). Peoples Natural Gas 2017 Universal Service Program, Evaluation, Final Report, at 77, available at https://www.puc.pa.gov/General/pdf/USP_Evaluation-Peoples.pdf

CAP compared to the percentage of bills paid by those customers during their CAP participation. That comparison results in a metric referred to as the "bill payment coverage ratio" (i.e., the percentage of billed dollars actually paid). The bill payment coverage ratio places dollars of payments in the numerator and dollars of bills in the denominator to determine the percentage of bills that have been paid.

The Peoples data is set forth in Table 16 below. The Table makes two comparisons. First, the Table shows the bill payment coverage ratio for the year before participants enrolled in CAP and the bill payment coverage ratio for the first full year of CAP participation. Second, the Table shows the percentage change for CAP participants (pre-CAP vs. in-CAP) compared to the "net change" relative to a low-income comparison group. The net change subtracts the change within the comparison group from the change in the CAP participant group. If the bill payment coverage ratio for the CAP participants improved by 15%, for example, and the payment coverage ratio for the comparison group improved by 3%, the net change for CAP participants is 12%. In contrast, if the payment coverage ratio for CAP participants improved by 15%, and the payment coverage ratio for the comparison group declined by 3%, the net change for the CAP participants is 18%. The "net change," in other words, is the change for CAP participants relative to what their change would have been had they been in the comparison group.

Table 16. Total Bill Payment Coverage Ratios Peoples Gas Customer Assistance Program (CAP) Participants				
	Test Year Enrollees			Net Change Relative to Comparison Group
	Pre-CAP	In CAP	Change	
Peoples Gas (2017)[29]	85%	123%	39%	36%

The Peoples evaluation found that the Company's CAP yielded a net improvement of 36% in the bill payment coverage ratio for CAP participants. This improvement is precisely what the PUC was referencing when it observed that CAP "would generally put [low-income customers] in the best position to maintain good payment habits and avoid accruing utility debt." My recommendation below is designed to place Peoples Confirmed Low-Income customers in the best position to maintain good payment habits and avoid accruing *additional* utility debt.

Q. WHAT DO YOU RECOMMEND?

A. I recommend that when Confirmed Low-Income customers accrue an unpaid balance of $300, Peoples provide a stand-alone written Plain English notice informing those customers of their right to enroll in the Company's CAP (along with an explanation of the advantages of CAP's arrearage forgiveness provisions).

[29] APPRISE, Inc. (August 2017). Peoples Natural Gas 2017 Universal Service Program, Evaluation, Final Report, at 77, available at https://www.puc.pa.gov/General/pdf/USP_Evaluation-Peoples.pdf

F. Request for Deposits from Existing Customers.

Q. PLEASE EXPLAIN YOUR SIXTH RECOMMENDATION.

A. My sixth recommendation is tied to the Company's Tariff setting forth provisions regarding "Rules for Deposits – Residential Customers." In particular, Rule 3.D provides in relevant part:

> The Company may require an existing or terminated Customer to post a security deposit in order to reestablish credit under any of the following circumstances, after giving the Customer due notice of its intention to require a security deposit in accordance with prevailing Commission regulations:
>
> 1) The existing Customer has been delinquent on any two (2) consecutive bills or three (3) or more bills within the preceding twelve (12) month period.
>
> 2) The existing Customer has failed to comply with a material term or condition of a settlement or payment agreement, as defined in applicable Commission regulations.
>
> 3) The Customer's utility service has been terminated and the Customer desires reconnection.

My testimony above establishes, in detail, that Peoples has thousands of Confirmed Low-Income customers who are substantially in arrears (having missed two consecutive bills or three or more bills within the preceding 12 months); who have negotiated, but defaulted on, a deferred payment arrangement (i.e., are "payment-troubled"); or who have had service terminated and seek reconnection. Having been identified as a "Confirmed Low-Income customer" means that, by definition, the customer has provided Peoples with sufficient information to reasonably lead Peoples to conclude that the customer is low-income. By PUC regulation, these customers should be exempt from having a cash security deposit imposed. (52 Pa. Code § 56.41(B)(4)). Peoples should take the opportunity to solicit the enrollment of such Confirmed Low-Income customers into CAP.

Q,. WHAT DO YOU RECOMMEND?

A. I recommend that, in those instances where Peoples would otherwise request a cash security deposit pursuant to its Rule 3.D, the Company should, as an alternative to that deposit demand, provide a stand-alone written Plain English notice informing these customers of their right to enroll in the Company's CAP (along with an explanation of the advantages of CAP's arrearage forgiveness provisions). In addition, Peoples should explain that customers who are income-eligible for CAP are also exempt from security deposits.

Q. PLEASE EXPLAIN WHY YOUR RECOMMENDATIONS, DESPITE BEING DUPLICATIVE OF EACH OTHER, SHOULD NEVERTHELESS BE ADOPTED.

A. My recommendations above are intentionally duplicative. Experience in multiple programs documents that more effective program outreach is associated with making multiple "touches" with the potential participant population. Through adoption of the recommendations I advance above, Peoples increases the number of touches with its Confirmed Low-Income customers, and does so in different, yet interdependent, circumstances. The recommendations involve not only Peoples better identifying their Confirmed Low-Income customers, but also Peoples telling their Confirmed Low-Income customers that: (1) enrollment in CAP is an alternative to having your service disconnected for nonpayment; (2) enrollment in CAP is an alternative to entering into an unaffordable deferred payment arrangement; (3) enrollment in CAP is an alternative to entering the winter heating season without heating service; (4) enrollment in CAP is an alternative to posting a cash security deposit; and (5) enrollment in CAP is an alternative to continuing to carry arrears (with the costs and stresses that those arrears impose). The multiple touches

through adoption of these recommendations can reasonably be expected to increase CAP enrollment without need to adopt modifications to Peoples underlying universal service program. As I have discussed throughout my testimony, this improved enrollment not only benefits the low-income customers who choose to enroll in CAP, but will also benefit the Company and all remaining ratepayers by reducing costs and enhancing revenues.

G. Utilizing Speech Analytics in Identifying Potential CAP Enrollees.

Q. PLEASE EXPLAIN YOUR FINAL RECOMMENDATION.

A. My final recommendation in this section of my testimony involves the use of linguistic analytics by Peoples to help the Company's customer service representatives to identify low-income customers who might be eligible for enrollment in CAP. In particular, this software, which Peoples already uses for other purposes, could also be used to help identify customers who are low-income and facing payment difficulties.

Q. PLEASE EXPLAIN YOUR FOCUS ON IDENTIFYING LOW-INCOME CUSTOMERS HAVING PAYMENT DIFFICULTIES.

A. In its 2019 Order revising the CAP Policy Statement, the PUC discussed the role of payment-troubled status in enrolling low-income customers in CAP.[30] While the general consensus of the parties providing comments to the PUC was that payment-troubled status should not be an *eligibility* requirement for CAP,[31] the Commission was encouraged to use payment-troubled status as a *targeting* criteria. Peoples was one of the commenters

[30] 2019 Amendments to Policy Statement on Customer Assistance Program, 52 Pa. Code § 69.261–69.267, M-2019-3012599 , Final Policy Statement and Order, Docket M-2019-3012599 (September 19, 2019).

[31] Id., at 42, 43 – 45 (Most EDCs and NGDCs do not currently require income-eligible households to be payment-troubled to qualify for their CAPs.)

indicating that payment-troubled status should not be an eligibility criterion for CAP enrollment.[32] Ultimately, the PUC reasoned:

> We note that enrolling low-income customers into CAPs as early as possible generally puts them in the best position to maintain good payment habits and avoid accruing utility debt. Waiting until a customer has broken a payment agreement or otherwise fallen into arrears could make it harder for a household to succeed in a CAP.[33]

Available technology can assist Peoples in fulfilling the goal of CAP to "maintain good payment habits" by identifying customers potentially eligible for CAP early in the process of responding to payment difficulties. By identifying these customers early in the process, not only will Peoples best serve its low-income customer base, but it will also maximize the use of CAP to help control the costs of nonpayment that I have discussed throughout my testimony (e.g., collection costs, uncollectibles, working capital, and the like).

Q. WHAT "TECHNOLOGY" WOULD ASSIST PEOPLES TO IDENTIFY LOW-INCOME CUSTOMERS HAVING PAYMENT DIFFICULTIES?

A. Peoples uses Verint Automated Call Monitoring and Speech Analytics (hereafter "Verint") as a software package through which it engages in speech pattern analytics or linguistic analytics, used to review call center conversations. (OCA-10-009).[34] Peoples describes its use of Verint in the call center context when it stated in relevant part:

> The Company utilizes Speech Analytics in order to assist with the Quality Monitoring of emergency phone calls. The Emergency Call Terms below are detected by the system in order to confirm that the phone call is properly categorized as an emergency call. The phrases, beginning with "Greeting" and ending with "Closing", below are what the system listens for in order to

[32] Id., at 46.

[33] Id., at 46.

[34] The referenced Peoples' discovery response is attached to my testimony as Exhibit RDC-5.

> confirm the call was handled properly. Company representatives are required to communicate all of these points over the course of the emergency phone call. A Quality Monitoring Associate will then review the results and listen to the phone call to ensure the system captured all results accurately.

(OCA-10-010).[35] The software, in other words, "listens" for particular phrases in a call center conversation "in order to confirm the call was handled properly." In using Vivent to review calls to assess whether "emergency calls" are properly handled, Peoples uses the software to search for key terms. Peoples states that its "emergency call terms" include: "Smell Gas, Smell, power NEAR equipment, Hit NEAR Line, Leak, Odor, Evacuate, Vacate, Headache, NEAR Shortness, Carbon NEAR Alarm, Carbon NEAR Detector, Symptoms NEAR headache, Understand NEAR precautions, Hissing, Hit NEAR line AND smell, May or may not, unable to vacate, Smell NEAR inside, Smell NEAR outside, Overheating appliance." (OCA-10-10).

Q. HOW COULD SPEECH ANALYTICS SOFTWARE BE USED TO FACILITATE CAP ENROLLMENT AND THE IDENTIFICATION OF CONFIRMED LOW-INCOME CUSTOMERS?

A. While Peoples currently uses Vivent only to "confirm that the phone call is properly categorized as an emergency call," using the terms that Peoples deems to be associated with "emergency calls," that need not be the case. When OCA asked Peoples to "identify and provide a detailed description of the internal processes, procedures, or practices employed to determine what terms, phrases, or other speech patterns will be employed in the application of the speech pattern analytics or linguistic analytics software to the review

[35] The referenced Peoples' discovery response is attached to my testimony as Exhibit RDC-6.

of call center calls. . .'" Peoples simply referred back to its use of the Vivent software. (OCA-10-12).[36]

Speech pattern analytics can also be used to determine whether calls to the Peoples call center are "handled properly" for purposes of identifying Confirmed Low-Income customers and customers who would benefit from enrollment in the Company's universal service programs. Terms, phrases and speech patterns associated with low-income status, payment difficulties, unaffordability, or seeking low-income assistance for energy or other life necessities (e.g., food, housing, medical care) could be identified such that Vivent would search for them to identify universal service calls. "Proper handling" would include approving delays in collection activities pending applications for and approval of program enrollment; identification in the Company's information system of Confirmed Low-Income customer status; and extending available low-income protections.

Q. DOES THE IMPORTANCE OF IDENTIFYING LOW-INCOME CUSTOMERS END WITH CONSIDERATIONS OF WHETHER THOSE CUSTOMERS ARE ENROLLED IN CAP?

A. No. The importance of confirming the low-income status of Peoples customers extends far beyond whether those customers are enrolled in CAP. For example, PUC regulations require that:

> Notwithstanding subsection (a), a public utility may not require a cash deposit from an applicant who is, based upon household income, confirmed to be eligible for a customer assistance program. An applicant is confirmed to be eligible for a customer assistance program by the public utility if the applicant provides income documents or other information attesting to his or her

[36] The referenced Peoples' discovery response is attached to my testimony as Exhibit RDC-7.

> eligibility for state benefits based on household income eligibility requirement that are consistent with those of the public utility's Customer Assistance Program.[37]

In addition, aside from being applicable to "applicants," the Commission has further extended this prohibition to existing customers as well.[38] Moreover, aside from deposits, Peoples customers with income at or below 150% of the FPL are protected from the involuntary disconnection of service for nonpayment during cold weather months.[39] Finally, Peoples waives certain fees for low-income customers, including turn-on fees (for turn-ons after nonpayment disconnections) and high bill investigations. While the implication of identifying low-income customers having perhaps the greatest financial benefit to low-income customers is enrollment in CAP, such enrollment is not the exclusive impact of appropriately identifying low-income customers.

Q. WHAT DO YOU RECOMMEND?

A. I recommend that Peoples be directed to extend the use of its Vivent Speech Analytics software to assist with the Quality Monitoring of phone calls involving, or potentially involving, universal service programs and other low-income customers. Peoples should be directed to involve its USAG in the identification and selection of Low-Income and Universal Service Terms to be detected by the system in order to confirm that phone calls are properly being identified and handled. Regular six-month reports on the results of the Speech Analytics reviews should be provided to the USAG.

[37] 52 Pa. Code § 56.32(e).

[38] 52 Pa. Code § 56.41(B)(4).

[39] 66 Pa. C.S. § 1406(e).

Part 4. The Proposed Increase to the Residential Customer Charge.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I address how the 48% increase in the residential customer charge, from $14.50 per month to $21.50 per month for customers of the PNGD, and from $15.75 to $21.50 for PGD, as proposed by Peoples,[40] will have a disproportionate adverse impact on low-income customers.[41] Particularly given the affordability issues I have discussed in detail above relating to Peoples' low-income customers, this additional burden on these customers should not be approved.

As I discuss above with respect to the overall increase in rates, the adoption of a percentage of income-based CAP by Peoples does not adequately protect low-income customers. Only a small fraction of Peoples' low-income customers participate in the Company's CAP. More than 80% of Peoples' estimated number of low-income customers, and more than half of Peoples' Confirmed Low-Income customers, are not enrolled in CAP.

[40] Peoples Exh. RNZ-6 at page 4 of 4.

[41] For purposes of my analysis, I reviewed only the proposed customer charge increase for residential customers of the PNGD because those customers faced the steepest increase. I do acknowledge that Peoples is also proposing to raise the customer charge of the residential customers of its PGD from $15.75 to $21.50, and while I oppose it because it imposes a similar burden and it objectionable for the same reasons set forth in my analysis, for purposes of illustrating the most critical impact of the proposal, unless I explicitly note otherwise, I address the PNGD customer charge in crease.

Q. DOES THE IMPACT ON CAP CUSTOMERS AFFECT LOW-INCOME CUSTOMERS NOT PARTICIPATING IN CAP?

A. Yes. Even though the percentage of low-income customers participating in CAP is small, increasing the customer charge to these customers has an adverse impact on other low-income customers. When the residential customer charge is increased, the total cost of the CAP program increases as well. This occurs because the increased bills to the CAP customers participating in the percentage of income program component of CAP will be passed through to other ratepayers on a dollar-for-dollar basis. While the individual (percentage of income) CAP participants are protected from the increased fixed customer charge, in other words, the CAP program as a whole is not. Other ratepayers, including non-participating low-income ratepayers, will pay this increase. Even with LIURP and other conservation activities by CAP customers, these increased costs will remain.

Q. DOES THE PEOPLES' PROPOSAL TO INCREASE ITS RESIDENTIAL CUSTOMER CHARGE IMPOSE PARTICULAR HARMS ON LOW-INCOME CUSTOMERS?

A. Yes. The proposed 48% increase in its fixed monthly charge will have serious implications for low-income customers. Increasing the fixed monthly customer charge increases the portion of a bill that a low-income customer cannot avoid by adjusting the customer's usage. This increase in the part of the total bill that is comprised of fixed charges impedes the ability of low-income customers to control their bills through a reduction in their usage.

Q. WHAT DO YOU MEAN WHEN YOU DISCUSS LOW-INCOME EFFORTS TO "REDUCE CONSUMPTION"?

A. "Reducing consumption" is not merely associated with energy efficiency improvements. Low-income households, especially vulnerable low-income households (e.g., elderly, disabled, families with children), will take actions to try to reduce their bills to more affordable levels, frequently involving substantial household deprivation or the undertaking of substantial risks. Available research documents that low-income households also seek to reduce bills by reducing consumption through actions such as closing parts of their home; reducing heating temperatures (even if to unsafe or unhealthy levels); or substituting the use of ovens or stoves to heat limited areas of their homes rather than using their heating systems to heat the entire home. The National Energy Assistance Directors Association (NEADA) performs a periodic Congressionally-funded survey of the impacts of unaffordable home energy bills. The most recent survey, known as the National Energy Assistance (NEA) Survey, was performed in 2018 (published in December 2018).[42] Data on three actions which low-income households take to reduce their energy consumption when they do not have sufficient money to pay their utility bills is presented in the Table below.

Two observations are readily apparent from this data. First, taking dramatic actions to reduce home energy consumption is not at all uncommon within the low-income population when those customers do not have sufficient money to pay their home energy bills. From one-in-five (21%: 100 – 150% of Poverty) to one-in-three (34%: 0 – 50% of

[42] Apprise, Inc., 2018 National Energy Assistance Survey, Final Report, available at RESOURCE LIBRARY – Selected Reports – Energy Survey Research and Policy Analysis – APPRISE – Applied Public Policy Research Institute for Study and Evaluation

Poverty) customers close off parts of their home in almost every month, or in "some months," when they cannot afford to heat their homes. From one-in-four customers (26%: 0 – 50% of Poverty) reduce the temperature in their homes to unsafe or unhealthy levels in almost every month or in some months. One-in-ten (or more) low-income customers use their kitchen stove or oven to heat their homes when they have insufficient money to pay their utility bills. Second, the extent to which these actions occur increases as incomes decrease in nearly every instance. Households with incomes less than 50% of the FPL more frequently take these actions in almost every month or some months than do households with income at 100% to 150% of FPL.

Table 17. Energy Reduction Actions in Response to Inability-to-Pay by Range of Federal Poverty Level[43] (each attributed to "not having enough money to pay energy bill")

	Closed Off Part of Home			Kept Temp at Unsafe or Unhealthy Level			Used Kitchen Stove or Oven to Heat		
	0-50%	51-100%	100-150%	0-50%	51-100%	100-150%	0-50%	51-100%	100-150%
Almost every month	10%	14%	7%	8%	3%	3%	1%	1%	1%
Some months	24%	13%	14%	18%	12%	10%	14%	11%	8%
1 – 2 months	12%	10%	11%	7%	8%	9%	22%	19%	14%
Never / No	54%	63%	67%	67%	76%	76%	63%	69%	77%
Don't know/refused	0%	0%	<1%	0%	1%	2%	0%	0%	1%

As the Table above documents, because of the very fact of their poverty, low-income customers make considerable sacrifices in their homes to reduce their consumption in order

[43] Apprise, Inc., 2018 National Energy Assistance Survey, Final Report, available at RESOURCE LIBRARY – Selected Reports – Energy Survey Research and Policy Analysis – APPRISE – Applied Public Policy Research Institute for Study and Evaluation

to pay their home energy bills. Not all efforts to reduce consumption involve efforts to make energy efficiency investments.

The households who are forced into engaging in these unsafe and unhealthy activities in their struggle to keep their home energy bills affordable are impeded in their efforts by Peoples' proposal to increase its fixed monthly customer charge by 48% (from $14.50/month to $21.50/month). Peoples' proposal makes a higher part of the customer's monthly bill unavoidable through reduced consumption. Accordingly, those low-income customers taking such actions will face a smaller bill reduction as a result of their action should the Peoples' proposed increase in the fixed monthly customer charge be approved, potentially incentivizing more dangerous usage-reduction measures.

Q. TO WHAT EXTENT DO LOW-INCOME CUSTOMERS FACE AN INABILITY-TO-PAY?

A. In addition to my examination of energy burdens discussed above, I have also considered inability-to-pay by reference to Pennsylvania data reported in the Census Bureau's most recent PULSE Household Survey. As of the time I write this testimony, the most recent PULSE Household Survey was for the two-week time period ending February 5, 2024.[44] While the Census Bureau does not report data for specific utility service territories, it does provide state-specific information for Pennsylvania.

The Pennsylvania PULSE Survey data shows that nearly four-of-ten households (37.3%) with annual income less than $25,000 had a "very difficult" time paying for their usual

[44] Available at https://www.census.gov/data/tables/2024/demo/hhp/cycle01.html

household expenses "in the past seven days" (as of the time of the Survey). More than three-of-five households (62.9%) at that income level had either a "very difficult" time or a "somewhat difficult" time paying their usual household expenses. As incomes increased, the difficulty in paying usual household expenses decreased, but nonetheless remained high. For households with annual income between $25,000 and $35,000, 15% had a "very difficult" time, but more than 44% (44.5%) had either a "very difficult" or a "somewhat difficult" time in paying their usual household expenses. It was not until annual incomes exceeded $50,000 that the percentage of households finding it "not at all difficult" or just "a little difficult" exceeded the percentage of households finding it "somewhat difficult" or "very difficult" to pay their usual household expenses.

Table 18. Difficulty Paying for Usual Household Expenses in Last 7 Days (Pennsylvania) (January 9, 2024 – February 5, 2024) (Household PULSE Survey)

	Difficulty paying for usual household expenses in the last 7 days				
	Not at all difficult	A little difficult	Somewhat difficult	Very difficult	Total
Less than $25,000	11.8%	25.3%	25.6%	37.3%	100.0%
$25,000 - $34,999	18.5%	37.1%	29.5%	15.0%	100.0%
$35,000 - $49,999	29.7%	22.0%	18.8%	29.5%	100.0%
$50,000 - $74,999	36.8%	30.8%	16.5%	16.0%	100.0%
$75,000 - $99,999	37.8%	35.2%	15.8%	11.1%	100.0%
$100,000 - $149,999	41.7%	41.4%	9.7%	7.2%	100.0%
$150,000 - $199,999	45.8%	40.1%	8.4%	5.7%	100.0%
$200,000 and above	74.1%	16.0%	5.2%	4.6%	100.0%

Given this PULSE Household Survey data, it is unreasonable to make it even more difficult for Peoples residential customers to be able to reduce their monthly utility bills by reducing their consumption.

Q. CAN YOU PLACE THE PROPOSED INCREASE IN THE PNGD AND PGD RESIDENTIAL CUSTOMER CHARGE INTO SOME CONTEXT RELATING TO ITS IMPACT ON LOW-INCOME CUSTOMERS?

A. Yes. According to the Company, as of January 31, 2024, Peoples serves an estimated 135,425 estimated low-income customers in its PNGD customer base and an estimated 13,048 low-income customers in its PGD customer base. (CAUSE-PA-II-012). An increase in the residential monthly customer charge from $14.50 to $21.50 ($7.00 per month), therefore, imposes an increased financial burden on PNGD customers of $84 per year, while the increase in the PGD residential customer charge from $15.75 to $21.50 ($5.75) imposes an increased burden of $69 per year. Even after subtracting 26,842 CAP participants from the PNGD estimated low-income customers, and 2,249 CAP participants from the PGD estimated low-income customers, the remaining low-income customer base, therefore would be charged an additional $9.9 million each year in unavoidable charges.[45] Remember, this is *not* the total customer charge, but rather is *only* the *increase* in the customer charge. To place this dollar figure in context, Peoples' customers have received $7,714,523 in LIHEAP cash grants in the 2023 – 2024 program year to date. (OCA-09-33).[46] The increase in the unavoidable charges that would be imposed on low-income

[45] PNGD: $84/year x (135,425 estimated low-income – 26,842 CAP participants) = $9,120,972. PGD: $69/year x (13,048 estimated low-income – 2,249 CAP participants) = $745,131.

[46] The referenced Peoples' discovery response is attached to my testimony as Exhibit RDC-8. Comparisons are not made to the 2022 – 2023 or 2021 – 2022 LIHEAP program years. In those years, federal LIHEAP appropriations were significantly increased in response to the economic crisis associated with the COVID-19 health pandemic. For example, one White House announcement stated:

> Pennsylvania has received a record $480.5 million for the Low Income Home Energy Assistance Program (LIHEAP) available this fiscal year (October 2021 to September 2022). As part of a state-by-state breakdown of funding, the Administration reported that in addition to an annual appropriation of $182.8 million for Pennsylvania, the state received an additional $297.7 million in funds from the American Rescue Plan – *more than double the state's typical annual funding*. The total of $480.5 million *is the*

Peoples customers due to the proposed increase in the residential customer charge, in other words, is nearly 30% higher than the *total* LIHEAP funding for basic cash grants received by Peoples customers thus far in Program Year 2024 (starting in October 2023).[47] For every $1 in LIHEAP funding that is being provided to Peoples' low-income customers, Peoples proposes to take $1.30 away from those low-income customers in the form of an increased unavoidable fixed monthly customer charge.

Q. WHY ISN'T THIS PROBLEM ASSOCIATED WITH THE RATE INCREASE AS A WHOLE RATHER THAN ASSOCIATED WITH THE INCREASED CUSTOMER CHARGE IN PARTICULAR?

A. In part, the problem *is* associated with the rate increase when viewed as a whole. In large part, however, the problem is associated with the increased customer charge because there is nothing that a household can do to avoid this monthly fee. Even if low-income customers could reduce their usage, they would not be able to avoid any part of the proposed increase associated with the fixed monthly customer charge.

Q. DOES THE PEOPLES' PROPOSED INCREASE TO THE FIXED MONTHLY CUSTOMER CHARGE ALSO IMPEDE USING LOW-INCOME ENERGY EFFICIENCY TO REDUCE OVERALL BILL INCREASES?

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highest amount Pennsylvania has ever received in LIHEAP to help families struggling with the costs of home heating.

(emphasis added), available at LIHEAP-pennsylvania.pdf (whitehouse.gov) According to a White House announcement, the American Rescue Plan more than doubled LIHEAP funding nationally. It noted that "This is the largest appropriation in a single year since the program was established in 1981." (Id.)

[47] Peoples customers received additional LIHEAP Crisis funding. This funding, however, is not used to pay bills for current service, but rather used to help retire arrears which lead to the loss, or threatened loss, of service due to nonpayment disconnections.

A. Yes. The types of barriers to low-income investments in energy efficiency are precisely the types of barriers that are made even more problematic by an increase in the fixed monthly customer charge. In assessing these barriers to low-income energy efficiency investments, I matched the zip codes which Peoples listed as comprising its service territory (OCA-9-01) to Census data for the same zip codes. This data analysis demonstrates that:

- Peoples' zip codes have high penetrations of low-income and very low-income households.[48] At these income levels, Peoples customers have insufficient discretionary funds to invest in energy efficiency, even if such investments would be cost-effective in the short- or medium-term. The extent of low-income households in Peoples' service territory was discussed in detail above. The increase in fixed monthly customer charges makes it more difficult for investments to be cost-effective, making the lack of discretionary investment income an even greater impediment.
- Peoples' zip codes reveal high mobility within the low-income population. Mobility is primarily measured by the percentage of households that have changed residences within the past year.[49] Frequent mobility makes it more difficult for low-income households to invest in energy efficiency. A low-income household will not make an energy efficiency investment that has a three-year payback if that household does not expect to live in its home for three years.
- Peoples' zip codes have an extremely high prevalence of low-income households with high and extremely high shelter burdens.[50] High burdens are

[48] The number of households by income are provided in Table B19001 of the American Community Survey (5-year data), available at https://data.census.gov/table/ACSDT5Y2022.B19001?q=B19001:%20Household%20Income%20in%20the%20Past%2012%20Months%20(in%202022%20Inflation-Adjusted%20Dollars)&g=040XX00US42$8600000. The population by Poverty Level is provided in ACS Table C17002 (5-year), available at https://data.census.gov/table/ACSDT5Y2022.C17002?q=C17002:%20Ratio%20of%20Income%20to%20Poverty%20Level%20in%20the%20Past%2012%20Months&g=040XX00US42$8600000

[49] American Community Survey, 5-year, 2020, Table B07010, available at https://data.census.gov/table/ACSDT5Y2022.B07010?q=b07010&g=040XX00US42$8600000

[50] American Community Survey, 5-year, 2020, Table B25074, available at https://data.census.gov/table?q=B25074:%20Household%20Income%20by%20Gross%20Rent%20as%20a%20Percentage%20of%20Household%20Income%20in%20the%20Past%2012%20Months&g=040XX00US42$8600000

shelter burdens that exceed 30% of income. Extremely high burdens are shelter burdens that exceed 50% of income. Data for the Peoples service territory demonstrates that as household incomes decrease, the prevalence of high shelter burdens, and extremely high shelter burdens, dramatically increase. High shelter burdens make it difficult for low-income households to invest in energy efficiency. A low-income household that is struggling to pay its underlying housing costs does not have the discretionary income to invest in usage reduction measures, even if that investment might be cost-effective. Since, by definition, fixed monthly customer charges cannot be reduced by reducing consumption, increasing the fixed monthly customer charge by 50% (as Peoples proposes to do) makes it less likely that energy efficiency investments would be cost-effective in a time period that would allow low-income households to recover their investment in a resource-constrained environment.

Q. HAVE YOU BEEN ABLE TO REVIEW THE HARMS THAT ARISE FOR LOW-INCOME CUSTOMERS AS A RESULT OF THEIR INABILITY TO RESPOND TO BILL UNAFFORDABILITY BY REDUCING BILLS THROUGH REDUCED USAGE?

A. Yes. I have examined various indicators of bill payment difficulties for low-income customers as compared to residential customers as a whole. The data is presented in the Table below. Overall, the payment patterns of Peoples' Confirmed Low-Income customers are consistently worse than the payment patterns of the Company's residential customers as a whole. The percentage of accounts in arrears is consistently two or more times higher for Confirmed Low-Income customers than for residential customers. The average arrearage level for Confirmed Low-Income customers is consistently substantially higher than the average arrearage level for residential customers as a whole. The fact that the Company disconnects service to Confirmed Low-Income customers at a rate 50% higher than the overall residential disconnection rate was demonstrated in Table 7 above. The gross write-off rate for Confirmed Low-Income customers is consistently three to four times higher than it is for residential customers as a whole. As can be seen, the very

customers for whom the Company is making it more difficult to respond to an inability-to-pay are those customers that have the greatest payment difficulties.

Table 19. Peoples Collections: Residential vs. Confirmed Low-Income (2020 – 2022)[51]

	Residential			Confirmed Low-Income		
	2020	2021	2022	2020	2021	2022
Pct accounts in debt	8.4%	6.0%	6.8%	15.8%	10.9%	14.0%
Pct billings in debt	4.7%	3.3%	2.7%	24.8%	10.4%	7.8%
Average arrears	$449.90	$466.51	$394.22	$617.26	$718.87	$599.51
Gross write-off	2.5%	1.9%	1.6%	9.0%	7.0%	4.7%

Q. DO THESE PAYMENT DIFFICULTIES COST LOW-INCOME CUSTOMERS ADDITIONAL MONEY IN INCREASED BILLS?

A. Yes. When low-income customers have an inability to pay their bills in a full and timely fashion, as is documented above, the Company's response is to increase those unpaid bills even further. PNGD imposes a late payment charge of 1.5% a month on the full, unpaid balance.[52] This monthly fee is an annualized fee of 19.56% per year. PGD imposes a late payment charge of 1.25% a month on the full, unpaid balance.[53] This monthly fee is an annualized fee of 16.08% per year.

Q. WHAT DO YOU RECOMMEND?

A. I recommend that the residential customer charge determined by OCA witness Clarence Johnson should be approved.

[51] BCS 2022 Report.

[52] PNGD tariff: Gas – PA PUC No. 48, Original Page No. 26.

[53] PGD Tariff: Gas – PA PUC N. 8, Original Page No. 26.

Part 5. The Proposed Weatherization Normalization Adjustment.

Q. PLEASE DESCRIBE THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I respond to the Peoples' proposal to adopt a Weather Normalization Adjustment (WNA). (Peoples Statement 3, at pp. 15, et seq.; see also, Peoples St. 15, at 54-57). According to Peoples witness Zarumba (Peoples St. 15), "non-normal weather" has impacts on both customers and the Company. "The impact on customers triggered by non-normal weather is variation in the level of bills. The variation can be especially problematic when severe weather occurs, and customers' bills increase." (Peoples St. 15, at 55). He continues to assert that when there is a variation in weather, "the Company's revenues fluctuate. However, the majority of the Company's cost structure related to delivery base rates is fixed. Therefore, under- and over-earning occurs." (Id.) He concludes by asserting that "the Weather Normalization Mechanism provides systematic protection to customers and the Company for revenue variations in usage associated with non-normal weather." (Id., at 56).

Company witness Scanlon finally asserts that "the WNA program will not impact the amount a CAP customer is expected to pay but rather only impact the 'full tariff' charges that costs of the program will be calculated on." (Peoples St. 3, at 18).

Q. IS THE PROTECTION OF CAP CUSTOMERS SUFFICIENT TO PROTECT LOW-INCOME CUSTOMERS GENERALLY?

A. No. As I have testified above, Peoples has identified a fraction of its estimated number of low-income customers as Confirmed Low-Income customers. Peoples has then enrolled a small fraction of its Confirmed Low-Income customers into

CAP. More than 80% of the low-income customer base of Peoples is not enrolled in CAP. Even to the extent that what Ms. Scanlon asserts is accurate, it is not applicable to the vast majority of Peoples' low-income customers.

Q. IN WHAT WAY DOES PEOPLES' PROPOSED WNA DISPROPORTIONATELY ADVERSELY AFFECT LOW-INCOME CUSTOMERS?

A. Low-income customers have a lesser ability than residential customers as a whole to adjust their usage in response to changes in winter heating month temperatures. As a result, Peoples' WNA bill adjustments will be imposed more frequently on low-income customers than they will be on residential customers generally. In my discussion below, I consider three different actions to reduce natural gas space heating usage: (1) insulating one's home; (2) air-sealing one's home (as measured by the how "drafty" the home is); and (3) installing a programmable thermostat. The data is taken from the 2020 Residential Energy Consumption Survey (RECS) undertaken by the Energy Information Administration of the U.S. Department of Energy (EIA/DOE). 2020 is the most recent RECS data for which data has been published.[54]

Table 20 below shows the distribution of how well insulated homes are by household income in Pennsylvania. The Table shows the percentage of households at the different income levels in the entire population. For example, 23.3% of all households have income below $30,000. Households at that income level are under-represented in those homes that are well-insulated (23.3% in total population vs. 19.7% in households with well insulated

[54] Table 20 through Table 22 are based on 2020 RECS microdata, available at https://www.eia.gov/consumption/residential/data/2020/index.php?view=microdata

homes) and over-represented in both those households that are poorly insulated (33.6% with income below $30,000) and those completely lacking insulation (61.2% with income below $30,000).

Table 20. Insulation by Income for Households Heating with Natural Gas (Pennsylvania) (2020)

Income	Well-Insulated	Adequately Insulated	Poorly Insulated	Not Insulated	Total
$0 - $29,999	19.7%	18.6%	33.6%	61.2%	23.3%
$30,000 - $49,999	12.3%	16.9%	18.5%	15.9%	15.9%
$50,000 - $59,999	3.7%	11.5%	9.8%	6.3%	8.8%
$60,000 - $74,999	13.2%	13.6%	11.0%	0.0%	12.5%
$75,000 - $99,999	13.9%	13.6%	9.1%	10.7%	12.7%
$100,000 - $149,999	17.8%	13.5%	8.0%	5.9%	13.3%
$150,000+	19.4%	12.3%	10.1%	0.0%	13.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Table 21 below reveals the same pattern with the extent to which homes have been air-sealed. The Table presents data on how frequently a home feels drafty, disaggregated by income ranges. Low-income households are substantially over-represented in those populations of households whose homes are drafty "all the time" (23.3% of total population with income below $30,000 vs. 44.2% of the population with homes that are drafty "all the time") and of households whose homes are drafty "most of the time" (23.3% of total population vs. 38.4% of the population with homes that are drafty "most of the time"). In contrast, households with the highest incomes are substantially under-represented in households reporting that their homes are drafty "all" or "most" of the time.

Table 21. Homes by How Often Home is Drafty by Income for Households Heating with Natural Gas (Pennsylvania) (2020)

Income	All the time	Most of the Time	Some of the Time	Never	Total
$0 - $29,999	44.2%	38.4%	20.8%	18.6%	23.3%
$30,000 - $49,999	11.5%	16.4%	15.2%	17.3%	15.9%
$50,000 - $59,999	12.7%	11.4%	11.0%	5.2%	8.8%
$60,000 - $74,999	12.7%	10.7%	9.8%	16.1%	12.5%
$75,000 - $99,999	5.8%	7.5%	15.3%	12.3%	12.7%
$100,000 - $149,999	0.0%	10.9%	13.3%	15.9%	13.3%
$150,000+	13.1%	4.7%	14.6%	14.7%	13.4%
Total					

Finally, Table 22, also based on 2020 RECS microdata as cited above, documents that low-income households are over-represented in those populations lacking a programmable thermostat while being under-represented in those populations having a programmable thermostat. While 23.3% of the total population has income below $30,000, 33.7% of the population with no thermostat, and 29.8% of the population with a manual thermostat, do so. In contrast to the 23.3% of the population with income less than $30,000, only 16.8% of the population have programmable thermostats, and only 7.2% of the population with "smart" (internet connected) thermostats, do so.

Table 22. Gas Heated Homes with Programmable Thermostats by Income (Pennsylvania) (2020)

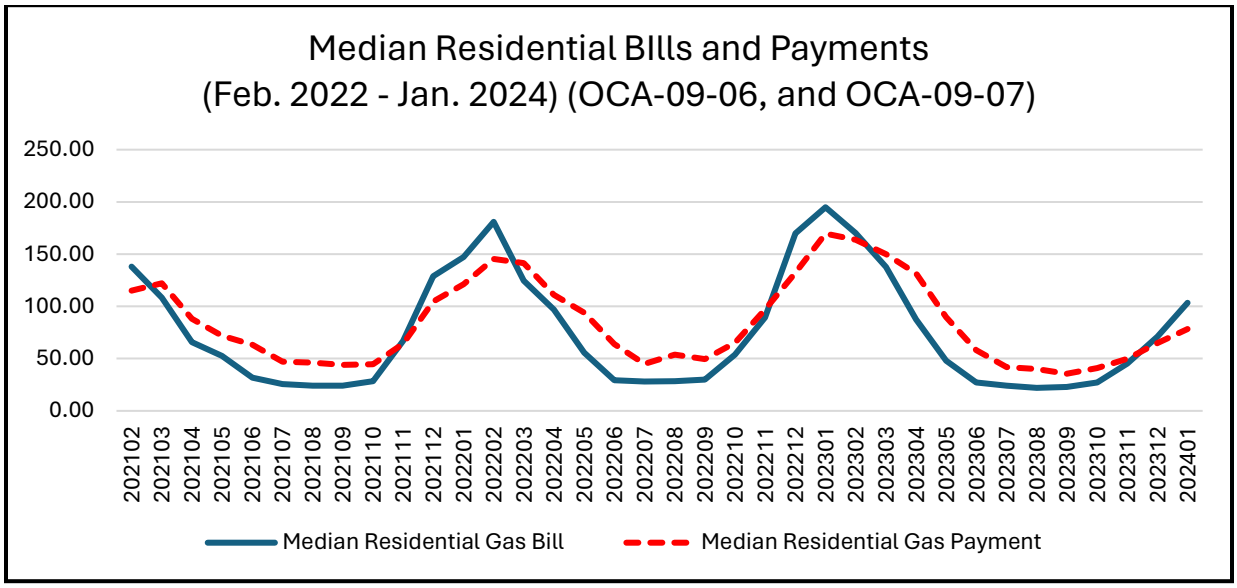
Income	No therm	Manual Therm	Programmable Therm	Smart / Internet Therm	Total
$0 - $29,999	33.7%	29.8%	16.8%	7.2%	23.3%
$30,000 - $49,999	13.1%	18.5%	14.6%	9.6%	15.9%
$50,000 - $59,999	9.6%	10.0%	7.7%	7.0%	8.8%
$60,000 - $74,999	14.8%	12.5%	13.6%	5.0%	12.5%
$75,000 - $99,999	7.3%	12.9%	14.3%	7.6%	12.7%
$100,000 - $149,999	15.8%	9.2%	14.6%	29.0%	13.3%
$150,000+	5.8%	7.1%	18.3%	34.6%	13.4%
Total	100.0%	100%	100.0%	100.0%	100.0%

Together, the data in Table 20 through Table 22 setting forth the most recent Pennsylvania data from the RECS (2020), it is clear that lower-income households have a far more difficult time in being able to control their weather-sensitive natural gas heating load.

Q. IS THERE A BETTER WAY THAN ADOPTION OF THE PROPOSED WNA TO PROTECT LOW-INCOME CUSTOMERS FROM BILL FLUCTUATIONS CAUSED BY FLUCTUATIONS IN WEATHER?

A. Yes. Enrolling residential customers on budget billing would provide more transparent and consistent protections to residential customers from the volatility in home heating bills. Budget billing allows a customer to spread annual bills in equal installments over the course of the year. By enrolling in budget billing, a customer will know from month-to-month what their natural gas bill will be. The Chart below shows the impact of fluctuations in monthly heating bills on residential customers. The Chart tracks median monthly residential bills for Peoples customers (the solid line) compared to median residential payments (the dashed line). As the Chart demonstrates, at the median (i.e., the mid-point),

residential customers pay less than their bills during the cold weather months while paying more than their median bills during the shoulder and warmer weather months.



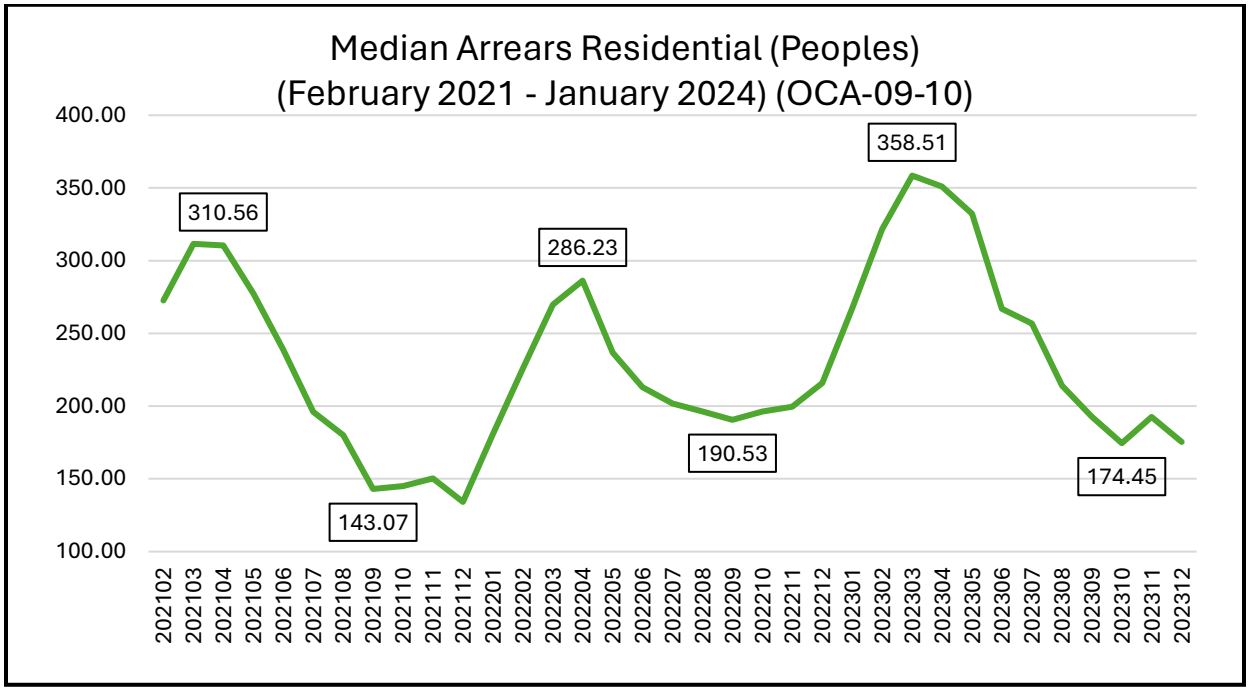
In addition, contrary to Peoples argument about the impact of year-over-year bills, it is evident from the data above that the somewhat higher bills in 2022 did not change the residential payment patterns[55].

Q. IS THERE AN IMPACT OF THESE SEASONAL PAYMENT PATTERNS ON THE COMPANY?

A. Yes. The seasonal payment patterns that I have identified below creates instability in the receipt of revenue by the Company. As bills increase in excess of the payments which residential customers make on a monthly basis, the arrears carried by those customers increase as well. The Chart below presents the median residential arrears, by month, for the past 36 months (February 2021 – January 2024). (OCA-09-10). The data shows that the median residential arrears more than doubled from September 2021 through April 2022

[55] Peoples discovery response to OCA-09-6 is attached to my testimony as Exhibit RDC-9. Comparisons

(from $143 to $286), and nearly doubled from September 2022 through April 2023 (from $191 to $359). By September 2023, median residential arrears had again fallen to their seasonal low ($174).



The seasonal variation in bills and payments, leading to the substantial seasonal variation in arrearage balances, not only has an adverse impact on the residential customers carrying such arrears (whether it is increased bills due to the imposition of late charges or the household impacts of having unpaid bills), but has an adverse impact on the utility as well.

Q. WHAT DO YOU CONCLUDE?

A. If Peoples truly wants to provide "systematic protection to customers. . .for revenue variations in usage associated with non-normal weather," increasing enrollment in its Budget billing program is a better tool to use than adoption of the proposed WNA. Budget billing spreads annual bills in levelized payments over the course of a year. In so doing, it will accomplish three objectives: (1) it will make bills more predictable for residential

customers (which is most important for low-income residential customers); (2) it will stabilize the receipt of revenues over the course of the year; and (3) it will allow residential customers the opportunity to make payments that more closely align with their bills, to the benefit of both the customers and the Company.

Q. WHAT DO YOU RECOMMEND?

A. I recommend that the recommendations of OCA witnesses Evrard, Mugrace and Johnson be adopted with respect to the Company's proposed Weather Normalization Adjustment and that the proposed Weather Normalization Adjustment should be denied.

Part 6. The Requested Equity Adder to Reflect Claims of Superior Management.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I respond to the request by Peoples to have an addition of 0.25% be added to the "determination of the return on common equity proposed by Mr. Moul to bring it to the high end of the range of returns being considered.' (People St. 1, at 25 – 26). Peoples witness Huwar reasoned that "Peoples has become a critically valuable business to the region and to the state. Its impact has made a positive difference in the lives of people and the prosperity of its customers in many ways. We believe our importance will continue to grow into the future." (Id., at 26). Mr. Moul proposes the 0.25% adder in light of "strong management performance." (People St. 13, at 52). In this section of my testimony, I will review Peoples' "management performance" to assess whether the requested 0.25% adder is merited. I note that my testimony on this issue is supplemental to that offered by OCA witnesses David Evrard (OCA St. 1), Dante Musgrace (OCA St. 2), Aaron Rothschild (OCA St. 3), and Barbara Alexander (OCA St. 5). I address the issue from a perspective that is in addition to that of these other OCA witnesses.

Q. IS THERE A SPECIFIC ASPECT OF MANAGEMENT PERFORMANCE THAT YOU WILL DISCUSS?

A. Yes. I will examine whether the Company has developed and implemented an integrated approach to managing its credit and collections. While this discussion may consider low-income issues at some points, it is not focused on low-income issues. The management control of collectibles is an issue that goes beyond exclusively responding to low-income inability-to-pay.

Q. DOES PEOPLES ENGAGE IN "STRONG MANAGEMENT PERFORMANCE" WITH RESPECT TO ITS CREDIT AND COLLECTIONS?

A. No. While credit and collections performance may well implicate low-income customers on occasion, it also includes a broader inquiry into the Company's performance relative to all residential customers. When my discussion below is limited to the treatment of low-income customers, I will explicitly note so.

I first note that Peoples not only has a substantial number of residential customers in debt, but also that that number is increasing. While at the height of the COVID crisis in 2020, Peoples had 49,461 residential customers in debt, that number dipped to 35,565 in 2021. By 2022, that number had increased by nearly 25% (to 43,869).[56] This was independent of the payment patterns of low-income customers which I have discussed throughout my testimony. The residential customers in debt as a percentage of all residential customers increased from 6.0% in 2021 to 7.4% in 2022.[57]

[56] BCS 2022 Report, at 21.

[57] Id., at 21.

Peoples is not responding to this increase in the number of residential accounts in debt by increasing the percentage of accounts in debt being placed on payment arrangements. In 2020, when customers were not being removed from agreements due to COVID, the percentage of customers in debt on agreement reached 26.4%. In 2021, that percentage fell to 22.5%, while in 2022, the percentage fell even further.

Table 23. Residential Accounts in Debt On Agreement and Not On Agreement

	# On Agreement	# NOT On Agreement	Total In Debt	Pct on Agreement
2020	13,040	36,421	49,461	26.4%
2021	7,988	27,577	35,565	22.5%
2022	9,813	34,056	43,869	22.4%

Similarly, the percentage of Peoples residential *dollars* in debt that Peoples had on agreement has consistently declined, from 52.6% in 2020, to 51.2% in 2021, and then to 50.8% in 2022.[58]

Even those residential customers that are entering payment arrangements for their past-due balances demonstrate a declining performance by Peoples. The PUC tracks the average "Bills Behind" (number of bills past-due) for customers on arrangements for Pennsylvania utilities. The number of Bills Behind for its accounts on arrangement is getting bigger and bigger for Peoples customers. While in 2020, residential accounts on arrangements were 7.35 Bills Behind, by 2022, that Bills Behind figure had increased by nearly 50%, to 10.93.[59] The Company, in other words, is leaving its residential arrears longer and longer

[58] Id., at 28.

[59] Pennsylvania PUC, Collections Data for the Major Electric, Gas and Water Companies, annual reports available at https://www.puc.pa.gov/filing-resources/reports/quinquennial-report-pursuant-to-section-1415/

before it succeeds in placing those arrears on a payment arrangement through which the unpaid balances can be retired.

Simply getting customers on agreement, however, does not mean that those customers successfully retire their underlying arrears. The PUC tracks the number of what it calls "payment-troubled" customers. An account that is "payment-troubled" refers to an account that has defaulted on one or more payment agreements within the preceding twelve months. According to the BCS 2022 Report, Peoples has experienced between 17,910 (2022) and 19,732 (2020) payment-troubled customers per year.[60] The number of payment-troubled customers (i.e., defaulted payment plans) on the Peoples system, in other words, has consistently remained roughly two times higher than the number of active payment arrangements (2022 ratio = 1.83-to-1).

Table 24. Number of Residential Customers in Debt on Payment Arrangements vs. Payment-Troubled Customers (2020 – 2022)[61]

	In Debt on Arrangement	Payment Troubled	Ratio: Payment-Troubled to On Arrangement
2020	13,040	19,732	1.51
2021	7,988	18,647	2.33
2022	9,813	17,910	1.83

As can be seen, even when Peoples enters into a payment arrangement with its residential customers, more often than not that arrangement results in a default, leading the customer to be categorized as "payment-troubled."

[60] Universal Service Program & Collections Report, BCS 2022 Report, at 12. Available at https://www.puc.pa.gov/media/2573/2022-universal-service-report-final.pdf

[61] Id., at 12, 20.

Q. DO YOU HAVE ANY FINAL OBSERVATION ABOUT PEOPLES MANAGEMENT PERFORMANCE REGARDING COLLECTIONS?

A. Yes. Peoples appears to have an unreasonable reliance on the use of nonpayment disconnections as a collection device. The Table below, for example, compares the number of residential nonpayment disconnections to the number of residential accounts in arrears on payment arrangements. The low number of disconnections in 2020 reflects restrictions imposed on Pennsylvania utilities by the PUC. In 2021, for every customer Peoples had on an active payment arrangement, it had disconnected 3.0 residential accounts for nonpayment. In 2022, the ratio declined, but nonetheless, Peoples disconnected 1.6 residential accounts for nonpayment for every account in debt that was on a payment arrangement.

Table 25. Number of Residential Customers in Debt on Payment Arrangements vs. Payment-Troubled Customers (2020 – 2022)[62]

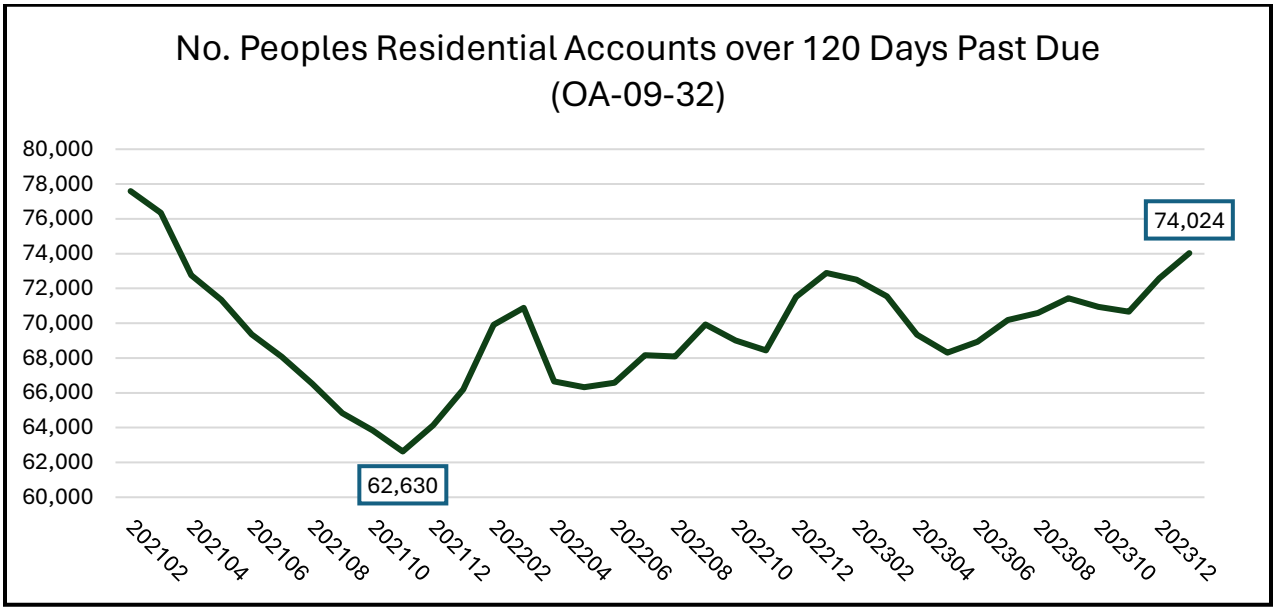
	In Debt on Arrangement	Nonpayment Disconnections	Ratio: Nonpayment Disconnections to Pyt Arrangements
2020	13,040	823	0.1
2021	7,988	23,754	3.0
2022	9,813	15,335	1.6

As I had observed above, BCS states that "termination of public utility service is the most serious consequence of customer nonpayment and is viewed *as a last resort* when customers fail to meet their payment obligations." (emphasis added). It is of concern when a utility such as Peoples is pursuing nonpayment disconnections far more often than it is enrolling residential customers in payment arrangements.

[62] Id., at 16, 20.

Q. DO YOU HAVE ANY FINAL OBSERVATIONS ABOUT THE COLLECTIONS BY PEOPLES?

A. Yes. The Chart below shows the number of residential Peoples accounts that have arrears that are 120 days or more past due. (OCA-09-32). The Chart includes data from February 2022 through January 2024 (i.e., the most recent 36 months available). The improvement in collections once COVID-related collections restrictions imposed by the PUC were lifted is evident. The number of accounts with arrears 120 or more days in arrears dropped from nearly 78,000 in February 2021 to just over 62,000 in October 2010.



The Chart above, however, presents concerns with respect to management performance by Peoples in more recent months. Since October 2021, the number of Peoples accounts with arrears over 120 days in age has been consistently increasing. The 74,024 accounts that are 120+ days in arrears in January 2024 was nearly 20% higher than the 62,630 accounts with 120+ day arrears in October 2020. The consistent month-to-month deterioration in Peoples collections performance over that time period is evident.

Q. WHAT DO YOU CONCLUDE?

A. Based on the data and discussion I review above, I find that Peoples does not have a "strong management performance" to justify the Company's requested increase in its return on equity. A comprehensive review of the Company's credit and collection management performance reveals numerous shortcomings that indicate a less than stellar management performance. Accordingly, I recommend that the Commission adopt the return on equity found to be reasonable by OCA witness Rothschild.

Part 7. Peoples Requested Equity Return and the Impact of Inflation.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I respond to the testimony of Peoples witness Paul Moul regarding his consideration of the impacts of inflation on his proposed return on equity. Mr. Moul testified that his "cost of equity analysis reflects the impact of high levels of inflation, which have not been seen for four decades. Indeed, the rate of inflation spiked upward to 9.1% in June 2022, and as of October 2023, it was 3.2%." (Peoples St. 13, at 5).

As I testified above, the process of setting a reasonable return on equity does not exclusively consider the interests of investors. Instead, as I noted, the courts have held that setting a reasonable return on equity must involve a balancing of the interests of investors and ratepayers. To the extent that the impacts of inflation on investor interests are considered, therefore, the impacts of inflation on ratepayer interests must be considered as well.

Q. DOES INFLATION HAVE A PARTICULARLY ADVERSE IMPACT ON LOWER INCOME HOUSEHOLDS?

A. The impact of inflation is felt most severely by low-income households. Research by the U.S. Department of Labor's Bureau of Labor Statistics, the agency that calculates and reports the "rate of inflation" (i.e., the Consumer Price Index [CPI]) each month, reports that "consumers with different incomes experience inflation quite differently."[63] According to this research, households earning lower incomes spend a higher share of their household budget on household necessities such as rent, food and medical care.

Table 26. Household budget shares of expenditure items for lowest and highest income quartiles, 2017–2018[64]

Expenditure	Lowest Income Quartile	Highest Income Quartile
Rent (including owner's equivalent rent	34.93%	27.93%
Food at home	9.44%	6.58%
Medical care	8.36%	8.09%
Household utilities	4.36%	2.73%
Motor fuels	3.46%	3.42%
Motor vehicle operation	3.44%	3.40%
Telephone service	2.32%	2.00%

This difference in the consumption basket of lower and higher income households is significant in that the prices of goods and services that had larger budget shares for lower income households have risen faster than all other items. In particular, the BLS researchers found, "prices for motor fuel, medical care, fuel and utilities, and shelter rose faster than the overall average. . ."[65] "Because the lowest income households dedicate

[63] Klick and Stockburger (December 2022). Spotlight on Statistics: Inflation Experiences for Lower and Higher Income Households, U.S. Department of Labor, Bureau of Labor Statistics, available at https://www.bls.gov/spotlight/2022/inflation-experiences-for-lower-and-higher-income-households/home.htm

[64] Id.

[65] Id.

more of their spending on these categories," the BLS researchers found, "their overall inflation rates grew faster than highest income households."

Table 27. Average price change by item, 2005–2020
(starred items defined by BLS to be household necessities)[66]

Item	2005–2020 average 12-month change
Tuition, other school fees, and childcare	4.03%
Motor Fuel*	3.45
Medical Care*	3.28
Rent*	3.06
Food away from home	2.86
Fuel and utilities*	2.71
All items	2.00
Food at home*	1.89
Lodging away from home	1.16
Recreation	0.74
New and used motor vehicles	0.43
Apparel	-0.10
Telephone services*	-0.20

Similar findings were reached by researchers at the Federal Reserve Bank of Dallas.[67] These researchers found that:

[66] Id.

[67] Jayashankar and Murphy (January 2023). High inflation disproportionately hurts low-income households, Federal Reserve Bank of Dallas, available at https://www.dallasfed.org/research/economics/2023/0110

> Families have grappled with surging prices over the past 18 months, as the cost of meeting basic needs rose. Consumer prices were 7.1 percent higher in November 2022 than a year earlier.
>
> Although inflation may have peaked, prices remain elevated, with food costs up 10.6 percent, gasoline rising 10.1 percent, rent increasing 7.9 percent and medical care services up 4.4 percent.
>
> Drawing upon recent household survey data, we show that high inflation is disproportionately hurting low-income households, including Black and Hispanic households and renters.[68]

The Federal Reserve researchers found that the "stress" being placed on households by high inflation is much greater than for low-income households., They explained:

> Prior research suggests that inflation hits low-income households hardest for several reasons. They spend more of their income on necessities such as food, gas and rent—categories with greater-than-average inflation rates—leaving few ways to reduce spending. When prices rise, middle-income households may react by consuming cheaper goods and buying more generic brands. Low-income households do not have the same flexibility; in many cases, they are already consuming the cheapest products.
>
> Additionally, many low-income households lack the ability of higher-income households to stock up when prices are discounted, buy in bulk and save, delay purchases if there is an opportunity to save in the future or buy more cheaply online. Low-income households are also likely to have smaller cash buffers to tide them over a period of high inflation.
>
> The recent Household Pulse Survey data confirm these tendencies. Households with incomes ranging from $25,000 to $35,000 in 2021 were about 19.3 percentage points more likely to be very stressed by inflation than households with incomes in the $75,000 to $100,000 range.

The data is clear and it is consistent. Lower income families expend a greater share of their income on necessities (which tend to have higher inflation rates); have smaller financial cushions; and may have less of an ability to switch to lower-priced alternatives. As Lael

[68] Id.

Brainard, a member of the Board of Governors of the Federal Reserve System, concluded, "All Americans are confronting higher prices, but the burden is particularly great for households with more limited resources."[69]

Q. WHAT DO YOU CONCLUDE?

A. The testimony of Peoples witness Moul does not present a complete story about the stress which inflation has placed on utility stakeholders. Just as inflation may have placed stress on the utility, it has also placed stress on utility ratepayers. Indeed, the inflation experienced in recent years has placed far more stress on lower income ratepayers than it has placed on others. Increasing energy prices, which would be exacerbated by the higher return on equity sought by Peoples in this proceeding, is one of the major drivers of the inflation affecting lower-income households. Given its obligation to balance the interests of investors and ratepayers in setting a reasonable return on equity, the greater adverse impacts that inflation has imposed on low-income ratepayers should be considered by the PUC in establishing a return of return.

Q. WHAT DO YOU RECOMMEND?

A. I recommend that the return on equity and capital structure found to be reasonable by OCA witness Rothschild should be adopted.

[69] Brainard (April 2022). Variations in the inflation experiences of households, available at https://www.federalreserve.gov/newsevents/speech/brainard20220405a.htm

Part 8. Peoples Proposed Tariff Changes.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my Testimony, I respond to the Tariff changes which Peoples proposes for its residential "rules." One of those changes involves Rule 3.C (Gas-PA PUC No. 48, Original Page 19), which reads in relevant part:

> If an Applicant is required to post a security deposit, the Applicant may, in the alternative:
>
> (1) Furnish a written guaranty from a third party, which can, to the Company's satisfaction, establish credit in Applicant's favor sufficient to assure payment to the Company upon demand of an amount equal to that which would otherwise be required in a security deposit.

In addition to "furnishing a written guaranty" as referenced in the Company's tariff, the Company should add a sub-section (2) which would read in relevant part:

> (2) Provide income documents or other information attesting to his or her eligibility for state benefits based on household income eligibility requirements that are consistent with those of the public utility's Customer Assistance Program.

This language mirrors the language of 52 Pa. Code § 56.32(e). In addition, a similar change should be made to Rule 3.D (Original Page 20). This modification should add an unnumbered paragraph immediately after Rule 3.D(2), which unnumbered paragraph would read:

> Notwithstanding subsection (D), the Company may not require a cash deposit from a customer who is, based upon household income, confirmed to be eligible for a customer assistance program. A customer is confirmed to be eligible for a customer assistance program by the public utility if the customer provides income documents or other information attesting to his or her eligibility for state benefits based on household income eligibility requirement that are consistent with those of the public utility's Customer Assistance Program.

This language mirrors 52 Pa. Code § 56.41(B)(4) extending the exemption from deposits to customers as well as to applicants. Note that the regulation does not require a customer to be a CAP participant. Rather, a customer need only be "*eligible for* a customer assistance program." (emphasis added).

Q. IS THERE A SECOND MODIFICATION THAT YOU RECOMMEND TO THE PROPOSED CHANGE IN PEOPLES "RULE 3' ("RULES FOR DEPOSIT – RESIDENTIAL CUSTOMERS")?

A. Yes. Peoples Rule 3 provides that the Company may require a deposit if, among other things, "the Applicant is unable to establish creditworthiness to the satisfaction of the Company through the use of a generally accepted credit scoring methodology which employs standards for using the methodology that fall within the range of general industry practice." (Rule 3.E(2), Gas-PA PUC No. 48, Original Page No. 19).

This provision, standing alone, carries with it an elevated risk of discrimination, even if unintentionally. Under federal equal credit opportunity law, for example, it is unlawful to discriminate against a person in a credit transaction --the ECOA makes clear a utility transaction is a "credit transaction" under the statute—based on the consumer's receipt of public assistance. To the extent that a Peoples "credit scoring methodology" considers whether a consumer is employed and, if so, for how long, that reliance on the lack of employment (or the lack of long-term employment) may have the effect of discriminating against consumers who lack employment because they receive public assistance (one of the protected classes under ECOA). In addition, any consideration of whether a consumer is a homeowner, as well as about whether a consumer is banked or unbanked, has a high probability of having racially disparate impacts. It will come as no surprise, for example,

that the National Association of Realtors found that the homeownership gap for Blacks and Hispanics has grown even bigger in recent years.[70] So does the question of whether a consumer has a bank account (credit card, loan or other credit reference) have distinct racial implications.[71] Accordingly, I recommend that Rule 3.E(2) be modified to add the following language: ". . .that fall within the scope of general industry practice, *provided that the methodology does not directly, or have the effect of, discriminating based on a protected class as set forth in the federal Equal Credit Opportunity Act.*" (new language emphasized).

Part 9. Bad Debt Offset for Universal Service Rider.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I respond to the Company's proposal to combine the "bad debt offset" applied to the universal service rider. The offset is applied to the incremental number of CAP participants which exceeds the base number of participants. The offset reflects the extent to which low-income customers who do not participate in CAP cause the utility to incur bad debt expense. That bad debt expense is incorporated into rates in the base rate case. Having already incorporated those uncollected dollars into rates, to the extent that these low-income customers move into CAP, it would then be inappropriate to *again* collect those same dollars in the form of CAP credits that are granted to CAP

[70] Meredith Dunn, et al. (2023). 2023 Snapshot of Race and Home Buying in America, National Association of Realtors, available at https://www.nar.realtor/research-and-statistics/research-reports/snapshot-of-race-and-home-buying-in-america

[71] Testimony of Lisa Rice, President and CEO of National Fair Housing Alliance,(December 1, 2022), Fairness in Financial Service: Racism and Discrimination in Banking, Before the Committee on Banking, Housing and Urban Affairs, U.S. Senate available at https://www.banking.senate.gov/imo/media/doc/Rice%20Testimony%2012-1-222.pdf

participants. To do that would be to double-collect the same dollars. Neither the question of whether to impose an offset, nor the question of what percentage that offset should be, is at issue in this proceeding. I accept the Company's proposal regarding the percentage offset to be applied and regarding how to combine the offsets for the two operating divisions. The only issue involves what number should be set as the base CAP participation over which the CAP offset is applied.

Q. DOES THE PEOPLES PROPOSED BASE NUMBER OF CAP PARTICIPANTS OVER WHICH THE BAD DEBT OFFSET IS APPLIED NEED TO BE ADJUSTED?

A. Yes. Peoples proposes to maintain its base CAP participation at 33,800 over which it will apply the proposed bad debt offset. That base CAP participation combines a base CAP enrollment of 32,300 for Peoples Natural Gas Division with a base CAP enrollment of 2,500 for Peoples Gas Division. (Peoples St. 3, at 29).

Q. IS THAT BASE NUMBER A REASONABLE NUMBER?

A. No. When OCA asked Peoples for the number of CAP participants disaggregated by zip code, the sum of the participants reached only 29,091. (OCA-09-02). Peoples proposes, in other words, to use a base figure that is more than 16% higher than its current participation rate. It would not be reasonable to project a growth in CAP participation to the 33,800 figure proposed to be used by Peoples. According to the annual BCS report on universal service programs and collections performance, Peoples had a CAP participation of: (1) 28,892 in 2020; (2) 32,126 in 2021; and (3) 29,761 in 2022.[72] As can be seen, CAP

[72] BCS 2022 Report, at 60.

participation has actually *declined* somewhat for Peoples since the most recent data published by BCS.

I note that not even Peoples believes that it will achieve a base participation rate of 33,800. The Company's "revenue at proposed rates based on forecasted bills and volumes for the 12 months ended September 30, 2025" projects that Peoples Gas Division will have 28,143 CAP bills while the Peoples Natural Gas Division will have 341,779 CAP bills. (Peoples Exh. 3, Schedule No. 15, Attachment E, at page 1 of 6). The combined total (369,922) implies an average CAP participation rate for the 12 months ending September 30, 2025 (i.e., October 2024 – September 2025) of 30,827 (369,922 / 12 = 30,827).

Q. WHAT DO YOU RECOMMEND?

A. I recommend that Peoples be directed to use a CAP base participation of 30,800. This reflects the combined projected CAP participation for the year starting October 2024, as presented in the Company's own filing in this proceeding, rounded to the nearest 100.

Summary of Recommendations

Q. PLEASE SUMMARIZE THE RECOMMENDATIONS YOU HAVE MADE THROUGHOUT YOUR TESTIMONY ABOVE.

A. I recommend that:

1. The concerns I identify with respect to the unaffordability of Peoples rates can (and should) be considered even outside the consideration of the specific proposals I advance with respect to specific low-income initiatives. These concerns should be incorporated into PUC decision making regarding issues ranging from the proposed rate design to the appropriate return on equity.

2. Peoples conduct a root cause analysis to determine what is driving this disproportionate level of utility disconnections within the 40 zip codes with the highest penetration of Black households. Once this root cause analysis is conducted,

Peoples should commit to taking steps to address the cause with the commitment of reducing disproportionate disconnections within these zip codes. This root cause analysis is intended to be consistent with the definition of and standard for the root cause analysis that OCA witness Alexander outlines in OCA Statement 5. The extent to which Peoples mitigates the disproportionate disconnection of service for nonpayment in zip codes with high penetrations of Black households should be reviewed in Peoples next base rate case.

3. Peoples should modify its policies and procedures regarding the identification of "confirmed low-income" customers to conform with the PUC's regulations, including self-certification of low-income status ("This information may include receipt of LIHEAP funds (Low-Income Home Energy Assistance Program), *self-certification by the customer*. . ."). Peoples should include these modified policies and procedures in its residential tariff.

4. In addition to Peoples providing a stand-alone written communication with Confirmed Low-Income customers as agreed to in the 2019 rate case settlement, prior to the disconnection of a Confirmed Low-Income customer, Peoples adopt a procedure, developed in collaboration with its Universal Service Advisory Group (USAG), under which it will seek to make personal contact with the customer subject to disconnection. In that personal contact, the Company shall offer the Confirmed Low-Income customer the opportunity to apply for the Company's CAP and arrearage forgiveness program. If the customer expresses a desire to make such application, Peoples will postpone the disconnection for a reasonable period of time to allow the application process to be completed. In short, I recommend that the procedure agreed to in the 2019 Settlement be expanded to include an effort to make personal contact in addition to the written contact contemplated by that Settlement.

5. Before Peoples enters into a DPA with a customer which the Company either: (1) knows to be a Confirmed Low-Income customer; or (2) has generated information through the DPA process documenting that the customer is in the Tier 1 income range (at or below 150% FPL), it should be required to provide the customer a stand-alone Plain English notice to that customer of the customer's right to enter into CAP and an explanation of the advantages of CAP's arrearage forgiveness benefits. As it agreed to do with the pre-termination stand-alone written notice, Peoples should develop this Plain English notice in collaboration with its Universal Services Advisory Group.

6. Peoples adopt a procedure under which it will provide a stand-alone Plain English notice to customers found to be without heating service at the time of the Company's Cold Weather Survey of the customer's right to enter into CAP and an

explanation of CAP's arrearage forgiveness benefits. Peoples should develop the Plain English notice in collaboration with its Universal Service Advisory Group.

7. When Confirmed Low-Income customers accrue an unpaid balance of $300, Peoples provide a stand-alone written Plain English notice informing those customers of their right to enroll in the Company's CAP (along with an explanation of the advantages of CAP's arrearage forgiveness provisions).

8. In those instances where Peoples would otherwise request a cash security deposit pursuant to its Rule 3.D, the Company should, as an alternative to that deposit demand, provide a stand-alone written Plain English notice informing these customers of their right to enroll in the Company's CAP (along with an explanation of the advantages of CAP's arrearage forgiveness provisions).

9. Peoples be directed to extend the use of its Vivent Speech Analytics software to assist with the Quality Monitoring of phone calls involving, or potentially involving, universal service programs and other low-income customers. Peoples should be directed to involve its USAG in the identification and selection of Low-Income and Universal Service Terms to be detected by the system in order to confirm that phone calls are properly being identified and handled. Regular six-month reports on the results of the Speech Analytics reviews should be provided to the USAG.

10. The residential customer charge determined by OCA witness Clarence Johnson should be approved.

11. The recommendations of OCA witnesses Evrard, Mugrace and Johnson be adopted with respect to the Company's proposed Weather Normalization Adjustment and that the proposed Weather Normalization Adjustment should be denied.

12. The Commission adopt the return on equity and capital structure found to be reasonable by OCA witness Rothschild.

13. Given its obligation to balance the interests of investors and ratepayers in setting a reasonable return on equity, the greater adverse impacts that inflation has imposed on low-income ratepayers should be considered by the PUC in establishing a return on equity.

14. In addition to "furnishing a written guaranty" as referenced in the Company's tariff, the Company should add a sub-section (2) which would read in relevant part:

> Provide income documents or other information attesting to his or her eligibility for state benefits based on household income eligibility requirement that are consistent with those of the public utility's Customer Assistance Program.

This language mirrors the language of 52 Pa. Code § 56.32(e).

15. In addition, a similar change should be made to Rule 3.D (Original Page 20). This modification should add an unnumbered paragraph immediately after Rule 3.D(2), which unnumbered paragraph would read:

> Notwithstanding subsection (D), the Company may not require a cash deposit from a customer who is, based upon household income, confirmed to be eligible for a customer assistance program. A customer is confirmed to be eligible for a customer assistance program by the public utility if the customer provides income documents or other information attesting to his or her eligibility for state benefits based on household income eligibility requirement that are consistent with those of the public utility's Customer Assistance Program.

This language mirrors 52 Pa. Code § 56.41(B)(4) extending the exemption from deposits to customers as well as to applicants.

16. Rule 3.E(2) be modified to add the following language: "that fall within the scope of general industry practice, *provided that the methodology does not directly, or have the effect of, discriminating based on a protected class as set forth in the federal Equal Credit Opportunity Act.*" (new language emphasized).

17. Peoples be directed to use a CAP base participation of 30,800. This reflects the combined projected CAP participation for the year starting October 2024 rounded to the nearest 100.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

Exhibit RDC-1: Summary Vitae
Roger Colton
Fisher, Sheehan & Colton
Public Finance and General Economics
Belmont, MA

* *

EDUCATION:

J.D. (Order of the Coif), University of Florida (1981)

M.A. (Regulatory Economics), McGregor School, Antioch University (1993)

B.A. Iowa State University (1975) (journalism, political science, speech)

PROFESSIONAL EXPERIENCE:

Fisher, Sheehan and Colton, Public Finance and General Economics: 1985 – present.

As a co-founder of this economics consulting partnership, Colton provides services in a variety of areas, including regulatory economics, poverty law and economics, public benefits, fair housing, community development, energy efficiency, utility law and economics (energy, telecommunications, water/sewer), government budgeting, and planning and zoning.

Colton has testified in state and federal courts in the United States and Canada, as well as before regulatory and legislative bodies in more than forty (40) states. He is particularly noted for creative program design and implementation within tight budget constraints.

PROFESSIONAL AFFILIATIONS:

Past Chair:	Belmont Zoning By-law Review Working Committee (climate change)
Member:	Board of Directors, Massachusetts Rivers Alliance
Columnist:	Belmont Citizen-Herald
Producer:	Belmont Media Center: BMC Podcast Network
Host:	Belmont Media Center: Belmont Journal
Member:	Belmont Town Meeting
Vice-chair:	Belmont Light General Manager Screening Committee
Past Chair:	Belmont Goes Solar
Coordinator:	BelmontBudget.org (Belmont's Community Budget Forum)
Coordinator:	Belmont Affordable Shelter Fund (BASF)

Past Chair: Belmont Solar Initiative Oversight Committee
Past Member: City of Detroit Blue Ribbon Panel on Water Affordability
Past Chair: Belmont Energy Committee
Member: Massachusetts Municipal Energy Group (Mass Municipal Association)
Past Chair: Housing Work Group, Belmont (MA) Comprehensive Planning Process
Past Chair: Board of Directors, Belmont Housing Trust, Inc.
Past Chair: Waverley Square Fire Station Re-use Study Committee (Belmont MA)
Past Member: Belmont (MA) Energy and Facilities Work Group
Past Member: Belmont (MA) Uplands Advisory Committee
Past Member: Advisory Board: Fair Housing Center of Greater Boston.
Past Chair: Fair Housing Committee, Town of Belmont (MA)
Past Member: Aggregation Advisory Committee, New York State Energy Research and Development Authority.
Past Member: Board of Directors, Vermont Energy Investment Corporation.
Past Member: Board of Directors, National Fuel Funds Network
Past Member: Board of Directors, Affordable Comfort, Inc.
Past Member: National Advisory Committee, U.S. Department of Health and Human Services, Administration for Children and Families, Performance Goals for Low-Income Home Energy Assistance.
Past Member: Editorial Advisory Board, International Library, *Public Utility Law Anthology*.
Past Member: ASHRAE Guidelines Committee, GPC-8, *Energy Cost Allocation of Comfort HVAC Systems for Multiple Occupancy Buildings*
Past Member: National Advisory Committee, U.S. Department of Housing and Urban Development, Calculation of Utility Allowances for Public Housing.
Past Member: National Advisory Board: Energy Financing Alternatives for Subsidized Housing, New York State Energy Research and Development Authority.

PROFESSIONAL ASSOCIATIONS:

National Association of Housing and Redevelopment Officials (NAHRO)
National Society of Newspaper Columnists (NSNC)
Association for Enterprise Opportunity (AEO)
Iowa State Bar Association
Energy Bar Association
Association for Institutional Thought (AFIT)
Association for Evolutionary Economics (AEE)
Society for the Study of Social Problems (SSSO)
Association for Social Economics

BOOKS

Colton, *et al.,* ***Access to Utility Service***, National Consumer Law Center: Boston (4th edition 2008).

Colton, *et al.*, ***Tenants' Rights to Utility Service***, National Consumer Law Center: Boston (1994).

Colton, ***The Regulation of Rural Electric Cooperatives***, National Consumer Law Center: Boston (1992).

BOOK CHAPTERS

Colton (2018). The equities of efficiency: distributing energy usage reduction dollars, Chapter in Energy Justice: US and International Perspectives (Edited by Raya Salter, Carmen Gonzalez and Elizabeth Ann Kronk Warner), Edward Elgar Publishing (London, England).

JOURNAL PUBLICATIONS

65 publications in industry and academic journals, primarily involving utility regulation and affordable housing. (list available upon request)

TECHNICAL REPORTS

200 technical reports for public-sector and private-sector clients (list available upon request)

JURISDICTIONS IN WHICH EXPERT WITNESS PROVIDED

1. Maine
2. New Hampshire
3. Vermont
4. Massachusetts
5. Rhode Island
6. Connecticut
7. New Jersey
8. Maryland
9. Pennsylvania
10. Washington D.C.
11. Virginia
12. North Carolina
13. South Carolina
14. Florida (Federal Court)
15. Alabama
16. Mississippi
17. Tennessee
18. Kentucky
19. Ohio
20. Indiana
21. Michigan
22. Wisconsin
23. Illinois
24. Minnesota
25. Iowa
26. Missouri
27. Kansas
28. Louisiana
29. Arkansas
30. Texas (Federal Court)
31. South Dakota
32. North Dakota
33. Montana
34. Colorado
35. New Mexico
36. Arizona
37. Utah
38. Idaho
39. Nevada
40. Washington
41. Oregon
42. California
43. Hawaii

Canadian Provinces

1. Nova Scotia
2. Ontario
3. Manitoba
4. British Columbia

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission,	:	
	:	
v.	:	Docket No. R- 2023-3044549
	:	
Peoples Natural Gas Company LLC	:	
	:	

VERIFICATION

I, Roger D. Colton, hereby state that the facts above set forth in my Direct Testimony, OCA Statement 6, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: March 22, 2024

Signature: _____

Roger D. Colton

Address: Fisher Sheehan & Colton
34 Warwick Road,
Belmont, MA

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: CAUSE-II-003

Witness: Black, Rita **Title:** Community Assistance Programs Director

Question: Please identify all categories or identifiers that Peoples includes when calculating its "confirmed low income customer" count.

Answer: Peoples counts all CAP participants, as income documentation or the zero income form are submitted to confirm low income status. In addition to CAP participation, Peoples also considers receipt of LIHEAP cash or crisis grants within the past 24 months as indicative of confirmed low income.

Submit Date: 2/26/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-IX-018

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: By year for the most recently completed three Fiscal Years, and the current year to date, provide:

a) The number of deferred payment arrangements entered into by residential customers disaggregated by the income tiers set forth in Chapter 14, section 1405(b), 66 Pa. C.S. § 1405(b);

b) The number of deferred payment arrangements which defaulted disaggregated by the income tiers set forth in Chapter 14, section 1405(b), 66 Pa. C.S. § 1405(b); and

c) The number of deferred payment arrangements successfully completed disaggregated by the income tiers set forth in Chapter 14, section 1405(b), 66 Pa. C.S. § 1405(b).

Answer: Please see attached Excel file.

The Company is unable to provide stats on defaulted agreements since customers are not removed from their payment arrangements for failure to pay.

Submit Date: 2/23/2024

#18A			#18C		
Year	**Inc Level**	**Plans**	**Year**	**Inc Level**	**Plans**
2021	1	13,691	2021	1	6,206
2021	2	7,420	2021	2	6,480
2021	3	1,520	2021	3	682
2021	4	2,159	2021	4	1,517
2022	1	12,314	2022	1	7,910
2022	2	7,711	2022	2	6,630
2022	3	1,611	2022	3	1,041
2022	4	2,423	2022	4	2,067
2023	1	15,994	2023	1	9,879
2023	2	10,580	2023	2	7,366
2023	3	1,726	2023	3	1,377
2023	4	3,328	2023	4	2,441
2024	1	322	2024	1	5,761
2024	2	152	2024	2	4,945
2024	3	22	2024	3	449
2024	4	62	2024	4	436

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-IX-009

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: In Excel format, for each month for the most recent 36 months available, please provide the mean natural gas arrears (in dollars) for:

a) Residential customers as a whole;

b) Confirmed low-income customers (without CAP participants);

c) Confirmed low-income customers (with CAP participants);

d) CAP participants.

Answer: Please see attached Excel file.

Submit Date: 2/23/2024

Month	#9 - Mean Arrears				#10 - Median Arrears			
	A	B	C	D	A	B	C	D
202102	606.78	663.51	644.96	820.00	272.66	316.98	369.37	480.33
202103	644.53	702.71	634.48	798.85	311.48	343.13	359.31	456.97
202104	649.37	742.03	615.59	770.19	310.56	371.28	340.99	434.22
202105	612.04	693.52	589.85	745.05	277.44	339.69	314.53	408.90
202106	584.80	652.94	565.98	728.81	238.91	301.22	294.74	390.08
202107	549.56	632.48	576.49	741.21	196.18	272.07	292.02	388.44
202108	529.28	582.11	573.00	735.30	179.99	241.68	281.78	382.30
202109	478.76	604.71	577.63	745.00	143.07	261.29	286.53	386.91
202110	487.52	627.96	595.85	777.36	145.13	271.74	296.42	405.91
202111	490.67	630.96	605.33	776.75	150.23	279.01	302.81	403.16
202112	462.37	618.49	601.64	755.50	134.15	248.66	298.51	377.31
202201	492.07	613.82	599.55	746.01	180.51	252.31	299.66	369.39
202202	518.76	598.02	591.54	735.79	225.86	256.87	316.62	375.80
202203	549.85	606.81	591.75	726.62	269.71	279.27	317.33	380.63
202204	577.18	642.11	576.12	694.72	286.23	310.62	303.96	362.84
202205	520.14	606.68	557.14	659.91	236.87	288.36	283.95	340.67
202206	483.16	582.37	529.57	634.84	213.03	270.43	254.33	314.01
202207	459.26	534.44	529.53	632.81	201.70	262.86	253.40	311.19
202208	451.06	523.71	561.47	658.88	196.40	245.78	275.78	327.82
202209	448.42	560.47	623.94	714.52	190.53	279.12	290.31	348.65
202210	461.23	552.30	620.80	732.46	196.31	288.28	285.15	361.35
202211	468.03	550.78	628.06	734.14	199.53	275.64	285.64	346.55
202212	483.89	562.37	592.67	705.54	215.83	274.39	272.66	326.02
202301	533.87	571.10	591.70	713.19	267.60	300.03	282.05	333.65
202302	580.20	596.05	594.18	722.86	321.73	331.53	293.59	357.10
202303	627.89	668.46	615.33	743.55	358.51	405.74	310.93	384.18
202304	643.44	696.16	626.48	752.14	351.06	420.33	320.78	394.04
202305	637.77	675.35	634.59	761.61	332.27	393.29	329.76	401.40
202306	586.59	618.37	616.07	742.47	266.85	305.42	317.82	388.29
202307	562.29	604.38	831.26	1,190.12	256.75	313.73	459.38	783.45
202308	533.36	542.25	636.13	786.49	214.03	259.31	319.75	414.74
202309	513.27	523.45	651.21	816.08	192.82	247.47	337.70	434.26
202310	493.11	540.29	535.00	1,122.36	174.45	287.59	183.12	936.54
202311	514.49	505.46	694.56	858.04	192.67	238.31	358.53	473.74
202312	497.93	489.71	677.88	855.09	175.34	220.43	348.53	466.29
202401	522.24	492.24	675.89	854.48	200.15	222.86	339.38	462.74

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-X-009

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: Please identify and provide a detailed description of any software used within the immediately preceding 36 months, or intended to be used in the coming 36 months, by the Company which engages in speech pattern analytics or linguistic analytics, used to review call center conversations:

a. For in-house call center staff;

b. For third party contractor call center staff

Answer: a. The Company has Verint Automated Call Monitoring and Speech Analytics

b. The Company doe not use third party contractors.

Submit Date: 2/23/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-X-010

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: Please identify and provide a detailed description of all terms, phrases, or other speech patterns searched for or otherwise utilized within the immediately preceding 36 months in the application of the speech pattern analytics or linguistic analytics software to the review of call center calls.

Answer: The Company utilizes Speech Analytics in order to assist with the Quality Monitoring of emergency phone calls. The Emergency Call Terms below are detected by the system in order to confirm that the phone call is properly categorized as an emergency call. The phrases, beginning with "Greeting" and ending with "Closing", below are what the system listens for in order to confirm the call was handled properly. Company representatives are required to communicate all of these points over the course of the emergency phone call. A Quality Monitoring Associate will then review the results and listen to the phone call to ensure the system captured all results accurately.

Emergency Call Terms

- Smell Gas, Smell, power NEAR equipment, Hit NEAR Line, Leak, Odor, Evacuate, Vacate, Headache, NEAR Shortness, Carbon NEAR Alarm, Carbon NEAR Detector, Symptoms NEAR headache, Understand NEAR precautions, Hissing, Hit NEAR line AND smell, May or may not, unable to vacate, Smell NEAR inside, Smell NEAR outside, Overheating appliance.

Greeting

- “Thank you for calling Peoples Gas, Please state the nature of your emergency.”

Willingness statement

- “I would be happy to help you with that.”
- “ I will be able help to help or assist you”

Safety precautions are to be read to the customer.

- Do not turn on or off any electrical switches (ex. lights, TV) or plug/unplug any appliances • Do not use any phones, including cell phones • Do not start a car, operate an automatic garage door, or use power equipment • Do not smoke, use lighters, matches or other open flames • Do not attempt to locate a leak • Evacuate the building where the gas odor exists

• From a safe distance, be ready to provide access to the property so our technician can investigate Ask, “Do you understand these precautions?” Ask, “Will an adult be available to provide access to premises?” or “Will you remain in the area?” If inside gas odor, Ask, “Is anyone unable to vacate the premises?” • “Our technician will be there within an hour”

Hold terms (are not to be used for and emergency call)

- “May I place you on hold” “Bear with me” “Brief Hold” “one moment” “on hold” “hold" "put you NEAR hold” “one minute” “hold for just” “thanks for holding” “thanks for waiting”

Closing

- “Thank you for calling Peoples Gas”

Submit Date: 2/23/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-X-012

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: Please identify and provide a detailed description of the internal processes, procedures, or practices employed to determine what terms, phrases, or other speech patterns will be employed in the application of the speech pattern analytics or linguistic analytics software to the review of call center calls within the immediately preceding 36 months.

Answer: Please refer to OCA-X-10

Submit Date: 2/23/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-IX-033

Witness: Black, Rita **Title:** Community Assistance Programs Director

Question: In Excel format, by year for the most recent three completed years, as well as the current year to date. please provide for residential customers:

a) The number of accounts receiving a LIHEAP grant disaggregated by basic cash grant and LIHEAP crisis grant;

b) The total dollars of LIHEAP grants received, disaggregated by basic cash grant and LIHEAP crisis grant;

c) The average LIHEAP grant received, disaggregated by basic cash grant and LIHEAP crisis grant.

Answer: Please refer to the attached Excel file.

Submit Date: 2/23/2024

OCA IX Number 33

Please note: Data provided by LIHEAP program year. Households figures are reflective of the number of grants received. Individual households may receive more than one grant due to supplemental payments or multiple Crisis grants received in the program year.

LIHEAP Cash	Households	LIHEAP Received	Average Grant
2020-2021	45,412	$ 11,610,630	$ 256
2021-2022	57,516	$ 24,107,165	$ 419
2022-2023	60,636	$ 15,699,748	$ 259
2023-2024 YTD	20,769	$ 7,714,523	$ 371

LIHEAP Crisis	Households	LIHEAP Received	Average Grant
2020-2021	5,809	$ 2,947,322	$ 507
2021-2022	4,798	$ 2,628,327	$ 548
2022-2023	6,099	$ 3,877,595	$ 636
2023-2024 YTD	655	$ 385,272	$ 588

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-IX-006

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: In Excel format, for each month for the most recent 36 months available, please provide the median natural gas bill (in dollars) for:

a) Residential customers as a whole;

b) Confirmed low-income customers (without CAP participants);

c) Confirmed low-income customers (with CAP participants);

d) CAP participants.

Answer: Please refer to OCA Set 9, Question 3.

Submit Date: 2/23/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-IX-003

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: In Excel format, for each month for the most recent 36 months available, please provide the mean natural gas usage for:

a) Residential customers as a whole;

b) Confirmed low-income customers (without CAP participants);

c) Confirmed low-income customers (with CAP participants);

d) CAP participants.

Answer: Please see attached Excel file.

Submit Date: 2/23/2024

Month	#3 - Mean MCF				#4 - Median MCF				#5 - Mean Gas Bill				#6 - Median Gas Bill				#7 - Median Payments			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
202102	17.4	16.5	22.0	22.1	16.0	15.4	20.5	20.6	149.40	144.32	185.51	185.94	137.94	135.07	174.10	174.86	114.94	121.02	92.00	91.00
202103	13.4	13.0	17.5	17.6	12.1	11.7	16.0	16.1	118.23	116.61	150.57	150.78	108.24	106.70	139.13	139.13	122.00	134.81	99.00	100.00
202104	7.0	7.0	9.7	9.6	6.3	6.2	8.7	8.7	71.33	71.47	92.42	91.85	65.74	65.61	85.18	84.71	88.00	97.46	95.00	97.00
202105	5.1	4.9	7.0	7.0	4.5	4.4	6.3	6.3	57.46	56.41	73.17	72.94	52.71	51.88	67.63	67.63	72.00	76.20	90.75	92.00
202106	2.5	2.3	3.2	3.2	2.0	1.9	2.6	2.6	36.21	34.09	41.42	41.35	31.88	30.63	36.56	36.56	63.37	64.24	88.00	91.00
202107	1.5	1.2	1.6	1.6	1.2	1.0	1.4	1.4	28.24	25.60	28.78	29.03	25.50	24.28	27.27	27.37	47.13	50.00	86.00	90.00
202108	1.3	1.1	1.4	1.5	1.1	0.9	1.3	1.3	26.84	24.36	27.25	27.38	24.24	22.91	25.70	25.79	46.26	48.08	87.00	92.00
202109	1.4	1.2	1.6	1.6	1.1	1.0	1.4	1.4	26.97	24.59	27.74	27.82	24.15	23.27	26.18	26.18	43.98	250.00	250.00	162.00
202110	1.9	1.8	2.6	2.6	1.5	1.5	2.1	2.1	32.48	31.72	39.10	38.91	28.48	28.45	34.65	34.32	44.75	500.00	500.00	119.00
202111	6.3	6.1	8.8	8.7	5.2	5.1	7.5	7.4	78.53	77.94	104.47	104.00	66.90	66.86	91.83	90.11	64.24	115.00	112.00	100.00
202112	12.4	11.9	16.1	16.1	11.3	11.0	14.9	14.9	140.40	138.94	180.70	180.23	128.91	128.91	168.79	168.79	104.75	220.07	140.45	100.75
202201	14.8	14.2	19.0	19.0	13.3	13.0	17.5	17.4	163.15	160.52	207.46	206.95	147.24	146.80	192.75	191.65	121.25	125.02	95.88	96.00
202202	18.5	18.0	23.9	24.0	16.9	16.6	22.4	22.4	197.44	197.07	253.03	253.08	180.85	180.85	237.26	237.26	145.52	153.36	100.00	100.00
202203	12.3	12.1	16.2	16.1	11.3	11.1	14.9	14.8	136.54	137.61	175.36	174.58	124.70	125.76	163.32	162.35	141.36	163.00	120.00	105.00
202204	9.1	9.1	12.4	12.3	8.3	8.3	11.4	11.3	105.73	107.75	138.46	137.55	97.04	98.83	129.31	128.22	111.19	134.10	119.00	111.00
202205	4.8	5.0	6.8	6.8	4.2	4.2	5.9	5.8	63.33	65.93	83.23	82.59	55.63	57.75	73.40	73.40	93.98	109.10	110.00	102.00
202206	1.9	1.7	2.3	2.3	1.5	1.4	1.9	2.0	33.44	31.85	37.45	37.40	29.29	29.29	34.44	33.86	64.06	81.22	105.00	100.00
202207	1.4	1.2	1.6	1.6	1.1	1.0	1.4	1.4	31.61	29.08	33.07	33.26	28.05	27.02	30.95	31.01	45.08	50.55	98.00	98.00
202208	1.3	1.1	1.4	1.4	1.0	0.9	1.2	1.2	32.79	30.04	34.11	34.40	28.55	27.26	31.83	31.83	53.77	250.00	250.00	250.00
202209	1.4	1.2	1.6	1.6	1.1	1.0	1.4	1.4	34.77	32.03	37.03	37.09	30.06	28.91	34.68	34.68	49.43	50.00	86.00	95.00
202210	3.6	3.6	5.1	5.1	2.9	2.9	4.3	4.2	63.90	65.08	85.96	84.94	53.70	55.09	74.40	73.15	65.00	145.00	131.00	98.00
202211	6.5	6.6	9.1	9.0	5.6	5.8	8.2	8.1	101.77	106.25	139.31	137.91	89.28	94.50	127.51	124.83	97.00	300.00	300.00	107.00
202212	12.7	12.4	16.6	16.6	11.5	11.4	15.5	15.4	185.92	187.28	242.50	241.50	169.76	172.67	226.64	225.28	132.16	179.88	100.00	86.00
202301	15.3	14.9	20.1	20.0	14.0	13.8	18.8	18.7	211.94	213.72	278.45	277.07	194.89	198.49	261.39	260.19	169.63	161.84	85.00	83.58
202302	13.9	13.6	18.4	18.3	12.8	12.6	17.1	17.0	184.47	185.47	241.20	240.03	170.25	171.71	226.65	225.46	163.68	150.00	150.00	150.00
202303	11.0	10.8	14.8	14.7	10.1	10.0	13.7	13.6	148.78	150.53	196.77	195.25	137.72	139.08	184.01	182.80	150.00	150.00	100.00	95.50
202304	8.2	8.3	11.5	11.4	7.3	7.4	10.3	10.2	100.62	104.60	136.99	135.75	87.65	90.57	120.83	119.48	131.75	150.00	96.00	91.00
202305	4.7	4.8	6.7	6.6	4.2	4.2	6.0	5.9	52.76	53.49	68.66	67.96	48.11	48.92	63.35	62.60	89.75	122.00	94.00	89.00
202306	2.0	1.9	2.6	2.6	1.5	1.5	2.2	2.2	30.97	29.85	35.54	35.13	27.07	26.70	31.85	31.85	58.00	80.00	79.00	80.00
202307	1.5	1.3	1.7	1.7	1.2	1.1	1.5	1.5	27.09	24.88	28.33	28.29	24.09	23.26	26.43	26.38	42.00	55.00	73.00	73.00
202308	1.3	1.1	1.4	1.4	1.0	0.9	1.2	1.3	24.64	22.59	24.99	25.02	22.02	21.30	23.19	23.49	39.91	51.00	72.00	71.00
202309	1.4	1.2	1.6	1.6	1.1	1.0	1.4	1.4	25.65	23.53	26.41	26.30	22.83	22.02	24.58	24.58	35.54	43.69	68.00	68.00
202310	2.5	2.4	3.6	3.5	1.9	1.9	2.9	2.8	30.43	29.66	36.22	35.55	27.22	26.92	32.54	31.81	41.07	275.00	300.00	92.00
202311	6.5	6.4	9.0	8.9	5.7	5.7	8.1	8.0	49.53	48.72	61.16	60.30	45.31	44.79	56.72	55.70	49.87	100.00	94.00	74.00
202312	11.5	11.4	15.7	15.6	10.5	10.4	14.5	14.4	76.15	74.88	95.71	94.69	70.85	70.15	89.93	88.70	64.80	99.74	70.73	58.00
202401	14.6	14.3	19.2	19.1	13.3	13.1	17.7	17.6	115.05	112.10	143.76	142.61	103.36	101.09	130.55	129.10	78.35	97.57	60.00	56.00

OCA STATEMENT 3R

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No. R- 2023-3044549
	:	
Peoples Natural Gas Company LLC	:	

REBUTTAL TESTIMONY
OF
AARON L. ROTHSCHILD

ON BEHALF OF THE
PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

April 18, 2024

Q. ARE YOU THE SAME AARON L. ROTHSCHILD WHO SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING ON MARCH 22, 2024?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. My rebuttal testimony addresses the direct testimony of the Anthony Spadaccio, who submitted testimony on behalf of the Pennsylvania Public Utility Commission's Bureau of Investigation & Enforcement ("I&E").[1]

Q. PLEASE SUMMARIZE THE RECOMMENDATIONS IN MR. SPADACCIO'S DIRECT TESTIMONY THAT YOU ARE ADDRESSING IN YOUR REBUTTAL TESTIMONY.

A. In his direct testimony, Mr. Spadaccio recommended an authorized return on equity ("ROE") of 9.96% and a capital structure of 54.67% common equity and 45.33% long-term debt.[2] I oppose each of those recommendations, and I will explain why in this rebuttal testimony

Q. DOES THE ANALYSIS PROVIDED IN YOUR DIRECT TESTIMONY DEMONSTRATE THAT PEOPLES' AUTHORIZED ROE SHOULD BE LOWER THAN 9.96% AND ITS AUTHORIZED CAPITAL STRUCTURE SHOULD HAVE A LOWER COMMON EQUTIY RATIO THAN 54.67%?

A. Yes. My direct testimony provided an analysis that demonstrated that Peoples' authorized ROE should be 8.02%, which is within the appropriate range of 7.67% and 8.37%, and that

[1] Mr. Spadaccio's Direct Testimony, I&E Statement No. 2.
[2] Mr. Spadaccio's Direct Testimony, I&E Statement No. 2, p. 6.

its appropriate capital structure would contain 50.00% common equity and 50.00% long-term debt.[3]

Q. WHAT IS YOUR OVERARCHING CRITICISM OF MR. SPADACCIO'S ROE RECOMMENDATION OF 9.96%?

A. Mr. Spadaccio's recommended 9.96% ROE for Peoples is higher than warranted given the market based data and proxy group applicable to this case. I provided significant evidence in my direct testimony (OCA Statement 3) that Peoples' cost of equity is significantly lower than 9.96%.[4] As indicated above, my market-based cost of equity model results show that Peoples' cost of equity is between 7.67% to 8.37%, with a midpoint of 8.02%. Mr. Spadaccio's recommendation is based exclusively on his Discounted Cash Flow ("DCF") result of 9.96%. He provides a Capital Asset Pricing Model ("CAPM") analysis for comparative purposes, but not as a check on his DCF results. Below I explain why Mr. Spadaccio's DCF is flawed and produces unreasonably high cost of equity results.

Q. BEFORE YOU DISCUSS THE FLAWS WITH MR. SPADACCIO'S DCF MODEL, CAN YOU PROVIDE SOME ADDITIONAL EVIDENCE THAT HIS 9.96% DCF RESULT IS EXCESSIVE?

A. Yes. In my direct testimony, I showed that the equity return expectations of major financial institutions are between 6.2% to 7.9% for the overall stock market,[5] [6] which includes most *unregulated* companies that operate in highly competitive markets as opposed to Peoples which operates in a rate regulated market with a captive customer base. I encourage the

[3] OCA Statement 3, p. 8.
[4] OCA Statement 3, pp. 43-77.
[5] OCA Statement 3, p. 14, Table 4.
[6] Duff & Phelps / Kroll, as mentioned in Table 4, is not mentioned here as they are a financial risk and advisory firm, not a major financial institution like J.P. Morgan Asset Management or Charles Schwab.

Commission to consider why Mr. Spadaccio's 9.96% ROE is significantly higher than the expectations of investors in the financial mainstream. If there is a good reason for Peoples' cost of equity to be over a hundred basis points higher than the equity return expectations of major financial institutions, I have not seen it and Mr. Spaddacio has not explained it. Peoples is a regulated monopoly with relatively low investment risks, and therefore it is implausible that its cost of equity is so much higher than the equity return expectations of major financial institutional for companies that face significantly more investment risk than Peoples.

Q. DID MR. SPADACCIO'S DCF MODEL PRODUCE A RELIABLE COST OF EQUITY ESTIMATE FOR PEOPLES?

A. No. Mr. Spadaccio's DCF result of 9.96% is excessive because his growth rate of 5.91%[7] is unreasonably high. His growth rate component is excessive because it is based on analysts' five-year earnings per share growth rate forecasts for the companies in his proxy group without accounting for how much of these earnings investors expect will be retained in the business and how much they will pay out as dividends. As explained in my direct testimony, these analyst growth rate forecasts are not indicative of future sustainable growth rates in part because the sources of cash flow to an investor are dividends and stock price appreciation. While both stock price and dividends are impacted in the long-run by the level of earnings a company is capable of achieving, earnings growth over a period as short as five years is rarely in synchronization with the cash flow growth from increases in dividends and stock prices.

[7] Mr. Spadaccio's Direct Testimony, I&E Statement No. 2, p. 27, ln 14.

Q. CAN YOU PROVIDE AN EXAMPLE THAT EXPLAINS WHY USING ONLY ANALYST EARNINGS PER SHARE GROWTH RATES CAN PRODUCE AN EXCESSIVE DCF RESULT?

A. Yes. Mechanically using analyst earnings per share growth rates as a growth rate in a DCF model is like calculating how much money someone will have in the bank at retirement by counting only income and ignoring expenses. The estimate will not be accurate unless you also account for how much money is taken out along the way. A DCF model that does not account for the percentage of earnings that will be paid out to investors as a dividend is not a reliable way to calculate the cost of equity. In this case, Mr. Spadaccio's 9.96% DCF result should not be the basis for Peoples' authorized ROE because it is higher than Peoples' cost of equity. Should Mr. Spadaccio's ROE recommendation be adopted it would result in Peoples' consumers paying inappropriate (i.e., beyond what is necessary for Peoples to raise equity capital on reasonable terms) and unreasonable profits to investors that would be unnecessarily and unfairly burdensome to those consumers by making essential utility service more expensive and less accessible. Regulated monopolies like Peoples "have no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures." Rather "[t]he return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties."[8] The analysis presented in my direct testimony demonstrates that a 9.96% return is in line

[8] *Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm'n of the State of W. Va.* 262 U.S. 679, 692-693 (1923).

with anticipated returns on investments in highly profitable unregulated companies. In the context of a regulated monopoly like Peoples, a 9.96% return would go against regulatory principles, and could unnecessarily jeopardize ratepayers' access to service.

Q. DO MAJOR FINANCIAL INSTITUTIONS IMPLEMENT A DCF MODEL WITH A GROWTH RATE BASED ON ANALYSTS' PROJECTED GROWTH RATE IN EARINGS PER SHARE, AS MR. SPADACCIO HAS DONE?

A. As far as I am aware, major financial institutions understand that it is not appropriate to mechanically add analyst earnings per share (EPS) growth rates to a dividend yield to calculate the cost of equity. J.P. Morgan Chase uses the sustainable growth form of the DCF method, as I do, in its 2019 Long-Term Capital Market Assumptions publication.[9]

Q. YOUR SUSTAINABLE GROWTH DCF MODEL PRODUCED A COST OF EQUITY RESULT OF BETWEEN 8.06% AND 8.09%. WHY IS THIS RANGE OF RESULTS A BETTER MEASURE OF PEOPLES' COST OF EQUITY THAN THE DCF METHOD USED BY MR. SPADACCIO?

A. As discussed in my direct testimony, my results[10] are not as influenced by overly-optimistic analysts' forecasts as would have been the case had I merely used analysts' five-year earnings growth rate forecasts, as Mr. Spadaccio did,[11] as a proxy for long-term growth. This is because the DCF methods I use compute sustainable growth rates, rather than growth rates that can exaggerate the growth rate due to assuming that a relatively short-term forecast (5 years) will remain indefinitely.

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[9] OCA Statement 3, p. 11, lines 6-8.
[10] OCA Statement 3, exhibit ALR-3, p. 1.
[11] Mr. Spadaccio's Direct Testimony I&E Statement No. 2, p. 27, lines 6-9.

CAPM

Q. MR. SPADACCIO CHOSE TO USE THE CAPM AS A COMPARISON TO HIS DCF ANASLYIS. PLEASE RESPOND.

A. Mr. Spadaccio's CAPM result of 10.91% does not provide a useful comparison to his DCF model because the market risk premium component he selected (8.17%) is excessive. As discussed in my direct testimony, I determined that investors are currently demanding a market risk premium of between 2.7% and 4.06% which results in a CAPM indicated cost of equity of between 7.50% and 8.22%.[12] My market risk premium of 2.70% to 4.06% is more reliable than that used by Mr. Spadaccio's because it is based on a direct measure of investors' expectations as indicated by stock option prices.

Q. WHY IS THE MARKET RISK PREMIUM COMPONENT IMPORTANT IN THE CAPM ANALYSIS?

A. The market risk premium is a measure of the additional return investors require to invest in equity as compared to lower risk debt (generally U.S. Treasury bonds). Miscalculating this number can result in an inaccurate estimate of the cost of equity. The market risk premium is an important component of the CAPM model. This model estimates that cost of equity by adding a market risk premium to a risk free rate[13], including making adjustments for the relative risk of utility companies (adjustment is referred as the beta coefficient). Therefore, should one be wrong in their calculation of the market risk premium, the rest of their calculations would be skewed accordingly.

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[12] Exhibit ALR-4, page 1 and page 5.

[13] Generally, the yield on a U.S. Treasury security is considered a risk free rate because the chance of default is very low and much lower than for debt issued by corporations.

Q. WHAT IS THE DOWNSIDE OF HAVING AN EXCESSIVE MARKET RISK PREMIUM COMPONENT IN THE CAPM ANALYSIS?

A. As described above, because the market risk premium is used in CAPM analysis, the downside of having an excessive market risk premium component in the CAPM analysis is that it would result in an excessive cost of equity that does not accurately reflect a return that is "reasonably sufficient to assure confidence in the financial soundness of the utility, and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties."[14] The market risk premium component of the CAPM is the like the foundation of a house. If you get this wrong, the house will not pass a building inspection no matter how perfect the other components (e.g., plumbing, electrical).

Q. ARE THERE ANY SOURCES THAT DEMONSTRATE THAT MR. SPADACCIO'S 8.17% MARKET RISK PREMIUM COMPONENT IS EXCESSIVE?

A. Yes. Duff & Phelps / Kroll, a source relied upon by Mr. Moul in his CAPM analysis, calculated a "geometric supply-side equity risk premium of 4.39%" based on their own analysis of historical market returns over the past 98 years.[15] If Mr. Spadaccio had used a market risk premium component of 4.39%, his CAPM analysis he would have obtained an 8.27% cost of equity, which is very close to my recommended range. Instead, Mr. Spadaccio has employed a market risk premium component that veers far above what is an accurate representation of investors' equity return expectations (which is equal to or greater

[14] *Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm'n of the State of W. Va.* 262 U.S. 679, 692-693 (1923).
[15] Kroll 2023 SBBI Yearbook, pp. 197-199.

than the cost of equity); therefore, the Commission should disregard Mr. Spadaccio's resulting flawed CAPM analysis.[16]

CAPITAL STRUCTURE

Q. WHAT IS YOUR OVERARCHING CRITICISIM OF MR. SPADACCIO'S CAPITAL STRUCTURE WITH A RECOMMENDED 54.67% COMMON EQUITY RATIO?

I disagree with Mr. Spadaccio that it is appropriate to use Peoples' claimed capital structure with a 54.67% common equity, and Mr. Spadaccio analysis is both flawed and contradictory. As explained in my direct testimony, the Commission should authorize a capital structure with 50% common equity and 50% debt.[17] Spadaccio' recommended capital structure that, by his own admission, is "suboptimal."[18] However, he justified this recommended suboptimal capital structure simply because it falls within the range of capital structure ratios of the companies in his proxy group in 2022.[19] As I explain below, Mr. Spadaccio's claim is made with not only the recognition that a 50/50 capital structure is "optimal" but also with the admission that Peoples' equity ratio is "well above the average and near the highest end of the proxy group's equity ratios."[20]

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[16] The equity return expectations of investors and the cost of equity are not necessarily the same. For example, if an investor had a cost of equity of 7% and equity return expectations of 10%, they would be happy to invest. However, investors, by definition, would not make an investment when the cost of equity is higher than the expected return on equity. The equity return expectations of investors are useful to know because they can provide a ceiling for the cost of equity.

[17] OCA Statement 3, p. 8.

[18] On page 12 of his Direct Testimony Mr. Spadaccio said, "Although I believe a capital structure of 50% long-term debt and 50% common equity is optimal when trying to balance the financial integrity of a utility as well as trying to control costs to ratepayers, in this proceeding,"

[19] Mr. Spadaccio's Direct Testimony I&E Statement No. 2, p. 12, lines 5-7.

[20] Mr. Spadaccio's Direct Testimony I&E Statement No. 2, p. 12, lines 15-16.

Q. WHAT IS THE BASIS OF MR. SPADACCIO'S CAPITAL STRUCTURE RECOMMENDATON OF 54.67% EQUITY AND 45.33% DEBT?

A. Mr. Spadaccio explained that he supports Peoples' requested capital structure of 54.67% equity and 45.33% debt because it falls with the range of capital structure ratios of the companies in his proxy group.[21]

Q. ARE THERE FLAWS THAT EXIST WITH MR. SPADACCIO'S ADOPTION OF PEOPLES' REQUESTED CAPITAL STRUCTURE?

A. Yes. It is important to recognize that Mr. Spadaccio's adoption of Peoples' claimed capital structure is at odds with his recommendation. As discussed above, Mr. Spadaccio adopted Peoples' requested capital structure despite his belief that a capital structure of 50% common equity and 50% long-term debt "is optimal when trying to balance the financial integrity of a utility as well as trying to control costs to ratepayers, in this proceeding."[22] In fact, Mr. Spadaccio quantifies the impact ratepayers would face if Peoples' capital structure prevails and he calculates that ratepayers would pay approximately an additional $17.9 million if Peoples' claimed capital structure is approved than they would under a 50/50 "optimal" capital structure.[23]

[21] Mr. Spadaccio's Direct Testimony, I&E Statement No. 2, pp. 11-12.
[22] Mr. Spadaccio's Direct Testimony, I&E Statement No. 2, p. 12, lines 3-5.
[23] Mr. Spadaccio's Direct Testimony, I&E Statement No. 2, p. 13.

Q. ASIDE FROM MR. SPADACCIO'S RECOGNITION OF SAVINGS UNDER THE "OPTIMAL" 50/50 CAPITAL STRUCTURE FOR PEOPLES, IS HIS ADOPTION PEOPLES' CLAIMED CAPITAL STRUCTURE CONTRADICTED IN ANOTHER RESPECT?

A. Yes. Mr. Spadaccio's justification to use a suboptimal capital structure to set rates for Peoples does not support his position. Only one outlier company in his proxy group (Atmos Energy) has a capital structure with a common equity ratio that is higher than 54.67% in 2022.[24] In fact, Mr. Spadaccio admits that six of seven companies in his proxy group have a capital structure with an equity ratio less than 50% for the most recent five-year average, and that five of those seven are below the 50% mark for the most recently available year of data, 2022. Significantly, the common equity ratio range of the other six companies in his proxy group range between 34.67% and 51.23% with an average common ratio of 41.53%.[25] These facts demonstrate that Mr. Spadaccio's adoption of Peoples' capital structure is inconsistent with the actual capital structures used by the gas utilities that he claims to have relied upon in his analysis. Further, these facts are so far at odds with Mr. Spadaccio's analysis that they directly contradict his recommendation.

[24] Atmos had a 60.58% common equity in 2022 (Mr. Spadaccio's Direct Testimony I&E Statement No. 2, Schedule 2).

[25] This was calculated by averaging the common equity ratio of all the companies in his proxy group, except Atmos. The common equity ratios averaged are 51.23%, 34.76%, 37.35%, 42.61%, 44.44%, and 38.77%. (Mr. Spadaccio's Direct Testimony I&E Statement No. 2, Schedule 2.)

Q. DO YOU CONTINUE TO RECOMMEND THAT PEOPLES' CAPITAL STRUCTURE BE SET AT 50.00% COMMON EQUITY AND 50.00% LONG-TERM DEBT?

A. Yes. Closer scrutiny of Mr. Spadaccio's analysis lends additional support for my position that an authorized capital structure of 50% common equity and 50% debt would be more than sufficient for Peoples.[26] I continue to strongly encourage the Commission to authorize a capital structure with a 50% common equity and 50% debt for Peoples.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

[26] My own analysis, as indicated on page 78 in my direct testimony, also demonstrates that a common equity ratio of 50% is on the high side of reasonableness because it is above the mean (47.2% and median (48.5%) common equity ratio of the natural gas distribution companies in my RFC Gas Proxy Group.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission,	:	
	:	
v.	:	Docket No. R- 2023-3044549
	:	
Peoples Natural Gas Company LLC	:	
	:	

VERIFICATION

I, Aaron L. Rothschild, hereby state that the facts above set forth in my Rebuttal Testimony, OCA Statement 3R, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this mater. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: April 18, 2024

Signature: Aaron Rothschild

Aaron L. Rothschild

Address: Rothschild Financial Consulting
15 Lake Road,
Ridgefield, CT

OCA STATEMENT 4R

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No. R-2023-3044549
	:	
	:	
Peoples Natural Gas Company LLC	:	

REBUTTAL TESTIMONY
OF
CLARENCE L. JOHNSON

ON BEHALF OF
OFFICE OF CONSUMER ADVOCATE

April 18, 2024

REBUTTAL TESTIMONY OF CLARENCE L. JOHNSON

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Clarence L. Johnson. My business address is 3707 Robinson Ave, Austin, Texas 78722.

Q. ON WHOSE BEHALF ARE YOU PRESENTING TESTIMONY IN THIS PROCEEDING?

A. I am presenting testimony on behalf of the Pennsylvania Office of Consumer Advocate ("OCA").

Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony was submitted as OCA Statement 4 on March 22, 2024.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS CASE?

A. I will rebut the testimony of Mr. Richard Baudino on behalf of Peoples Industrial Intervenors (PII) in PII Statement No. 1, the Bureau of Investigation and Enforcement's (I&E) witness Mr. Ethan Cline in I&E Statement No. 3, and Mr. Robert Knecht on behalf of the Office of Small Business Advocate (OSBA) in OSBA Statement No. 1.[1] I have focused on certain areas of disagreement, and the scope of this testimony does not indicate agreement with other statements by the witnesses which I did not rebut.

[1] For purposes of clarity, my reference to OSBA Statement No. 1 is intended to identify the testimony labeled as "OSBA Statement No. 1 REVISED as served by the OSBA on March 28, 2024.

II. SUMMARY

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS.

A. My conclusions are as follows:

- PII witness Mr. Baudino's advocacy for classifying mains as customer-related is contrary to the principle of cost causation and should be rejected.
- I&E witness Mr. Cline's revenue allocation proposal includes an error which affects his recommended gradualism constraint. Furthermore, he relies too much on the residential class to finance gradualism.
- OSBA witness Mr. Knecht's revenue allocation recommendation is reliant on the customer classification of mains and decreases the weight given to Peak & Average. As a result, I recommend denial of his class revenue recommendation.
- Mr. Cline's proposed residential customer charge is excessive and should be rejected.
- Mr. Baudino's proposal to reallocate revenue shortfalls from discounted rates to other classes is inconsistent with the principle of cost causation and it should be rejected.
- Both Mr. Knecht and Mr. Cline criticize the Company's proposed weather normalization adjustment (WNA) but accept the adoption of a WNA mechanism. However, issues raised in their testimony support my recommendation that the WNA should be rejected and should reasonably lead the Commission to conclude that the WNA is neither just nor reasonable and that it should **not** be adopted.

CUSTOMER CLASSIFICATION OF MAINS

Q. DO ANY WITNESSES ARGUE THAT CLASS REVENUE ALLOCATION SHOULD BE BASED EXCLUSIVELY ON A CLASS COST OF SERVICE STUDY (CCOS) THAT CLASSIFIES A SUBSTANTIAL PART OF MAINS AS CUSTOMER-RELATED?

A. Yes. Mr. Baudino contends that cost causation of mains is driven in large part by the number of customers in a class. His testimony suggests a hypothetical in which one main serves an industrial customer and another main serves 750 residential customers, with the industrial customer's peak usage equaling the 750 residential customers' aggregate peak usage.[2] He concludes that it is "obvious" that the utility will have to install far more footage to serve the residential customers than the industrial customer, and that this extra investment is caused by the number of customers.[3] Mr. Knecht's testimony for OSBA makes a similar argument that "it requires more footage of mains to connect many smaller customers than one larger customer, even if the total demand is not the same"[4]

Q. DO YOU AGREE WITH MR. BAUDINO THAT THE CUSTOMER CLASSIFICATION OF MAINS REFLECTS COST CAUSATION?

A. No. Mr. Baudino's hypothetical does not prove that there is a direct relationship between the number of Peoples' customers and its investment in mains. James Bonbright's foundational textbook points out the major flaw in his argument. The length of the common facilities do not vary directly with the number of customers. The customer classification

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2 PII Statement No. 1 at 9.
3 Ibid.
4 OSBA Statement 1 at 23.

"makes no allowance for the density factor (customers per linear mile or per square mile)" and "if the company's entire service area stays fixed, an increase in number of customers does not necessarily betoken any increase whatever in the costs."[5] In this case, the service area for residential customers in Peoples' urban service areas is likely quite dense. On the other hand, Peoples' large industrial customers' facilities are more likely to be located in areas with less customer density. In addition, Mr. Baudino's example is overly simplistic because it does not recognize that the Company's system of mains is a network with looping facilities and varied pressurization aimed at serving all customers in the aggregate.

Q. CAN YOU PROVIDE AN EXAMPLE OF THE INFLUENCE OF DENSITY ON INDUSTRIAL CUSTOMERS' MAINS?

A. Yes. Table 1, below, shows the main extensions for the five largest industrial customers over the last five years in the Peoples' service area.[6]

Table 1

Main Extension to Largest Industrial Customers (a)		
	Mcf Usage	**Length of Extension (ft.)**
Customer A	100,000	2,700
Customer B	85,519	2,270
Customer C	60,000	1,137
Customer D	14,875	6,821
Customer E	5,460	3,015
Average	**53,171**	**3,189**
(a) Last Five Years		

[5] James Bonbright, *Principles of Public Utility Rates*, Columbia University Press, 347-349 (1961).
[6] Company's Response to OCA XVII-9, which I am attaching as Exhibit CJ-R-1.

For these five industrial customers, the average main length is 3,189 feet. However, on average in Peoples' service area, 28 customers are served by that length of mains.[7] The average customers per foot would likely be higher in urban areas. The allocation of main costs on a per customer basis would result in a miniscule percentage assignment to these industrial customers. However, because density is ignored, the allocation is distorted by the 2,800% difference in average customers for that length of main. In addition, the average annual use for these five industrials is many times greater than the aggregate usage of 28 residential customers.

Q. DISCUSS THE RELEVANCE OF TABLE 1 ABOVE TO THE CLASSIFICATION OF MAINS.

A. First, as mentioned above, Table 1 provides an example of how an intervening variable like density can distort a customer allocation. Second, it demonstrates the causal connection between average annual use and the decision to extend a main. The Company is unlikely to extend a main for a half mile in order to serve a single customer—unless the customer is likely to produce sufficient annual revenues to justify the investment. As discussed in my direct testimony, the Company takes into account annual revenues in requiring a customer contribution for main extensions,[8] and annual usage is a determinant of annual revenues. This contradicts Mr. Baudino's assertion that average annual use is not related to cost causation.

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[7] Calculation based on Company's Response to OCA XVIII-3. This response indicates a system average 47 customers per mile. The average main length in Table 1 is approximately 60% of a mile, which was multiplied times 47 customers to arrive at 27 customers.

[8] OCA Statement 4, pp. 21-22.

Q. WHAT IS YOUR CONCLUSION WITH RESPECT TO MAINS CLASSIFICATION?

A. I continue to urge the Commission to adopt the Peak & Average CCOSS and reject a customer classification of mains. As stated by I&E witness Mr. Cline, the P&A method is consistent with Commission precedent, and further the Commission's orders do not accept the notion that the number of customers causes the cost of mains.[9]

III. I&E CCOS AND REVENUE DISTRIBUTION

Q. DO YOU AGREE WITH I&E WITNESS CLINE'S CCOSS AND CLASS REVENUE DISTRIBUTION RECOMMENDATIONS?

A. Although I agree with much of his recommendation, his ultimate class revenue distribution is not well founded. Before discussing my area of disagreement, I would point out that his recommendation prior to developing the base revenue increase spread is largely consistent with my testimony.

- Mr. Cline states that the Peak & Average (P&A) allocation of mains previously has been accepted by the Commission and should be adopted in this case.
- I agree with his position that the CCOSS based on P&A should be the foundation for the class revenue distribution, rather than an "averaging" of methods as proposed by the Company.
- Mr. Cline proposes a gradualism constraint by proposing a class percentage increases of no more than 150% of the system average increase. My proposed alternative gradualism recommendation also utilizes a 150% gradualism target..

[9] I&E Statement No. 3, pp. 26-27.

- Similar to my testimony, Mr. Cline applies his revenue distribution method to the Company's base rate revenue requirement.

Q. WHY IS THE I&E RECOMMENDED CLASS REVENUE INCREASE INCONSISTENT WITH THE PRECEDING RECOMMENDATIONS?

A. Mr. Cline appears to have made a mathematical error in determining the appropriate gradualism constraint. He states that the 53.2% and 59.2% increase for the small general service (SGS) and medium general service (MGS) classes based on the CCOSS result is not reasonable because both increases exceed the "generally accepted rule" that class increases should be within 1.5X of the system average increase.[10] Mr. Cline then goes on to describe the gradualism threshold as 35.8% which is 1.5 times a system average base increase of 23.9%. However, this calculation is incorrect, as shown by the system revenue increase numbers on both the table at page 38 of his testimony as well as his I&E Statement 3, Exhibit No. 7, Schedule 7. As shown on his table, the proposed base revenue increase is $173,737, 538 and current base rate revenue is $504,861,227. Dividing the former into the latter produces the correct system base revenue increase percentage of **34.4%.** 1.5 times that system increase is **51.6%**, not 35.8%. Thus, the error produces a discrepancy in the gradualism percentage increase for the SGS and MGS classes. The system percentage increase of 34.4% and the 1.5x target of 51.6% is confirmed by Exhibit CJ-2 of my direct testimony.

[10] On page 37 of I&E Statement 3, Mr. Cline's testimony inadvertently transposes the Large General Service class,"LGS", for the MGS class.

Q. HOW DOES MR. CLINE'S INCORRECT PERCENTAGE INCREASE AFFECT HIS DEVELOPMENT OF THE CLASS REVENUE RECOMMENDATION?

A. Mr. Cline's error required him to reallocate $20.8 million of required revenues from the SGS and MGS classes to the Residential and LGS classes. [11] However, the "revenue deficiency" created by the gradualism constraint should be much smaller. My testimony utilized the correct 1.5X percentage target and, as a result, only $5.57 million is reallocated from the SGS and MGS classes in order to limit the SGS and MGS percentage increases to 51.6%.

Q. DO YOU HAVE ADDITIONAL DISAGREEMENT WITH MR. CLINE'S GRADUALISM ADJUSTMENT?

A. Yes. Mr. Cline allocates 85.6% of the revenue deficiency created by gradualism to the Residential class and only 14.3% to the LGS/ MLS class.[12] Mr. Cline's proposal requires the residential class to finance an excessive percentage of the gradualism cost. As a result of his proposed allocation, the Residential class, which has a rate of return well above system average, would also bear a base revenue percentage increase (34.9%) above system average (34.6%).[13] Consequently, the I&E revenue distribution proposal is inequitable. On the other hand, his recommendation requires the LGS to pay a percentage increase which is only 38% of system average. [14]This is not a balanced treatment of the Residential and LGS classes.

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11 Cline direct testimony, I&E Statement No. 3 at 37; $7.595 million + $13.292 million. Again, because of his mathematical error, these amounts are incorrect, but I present them here because that is what he uses.

12 $17.887 million reallocated to Residential and $3.0 million reallocated to LGS.

13 I&E Statement 3 at 38.

14 Ibid., 13.1% /divided by 34.6%.

Q. WHAT IS AN ALTERNATIVE APPROACH TO BALANCING THE COST OF GRADUALISM BETWEEN THE RESIDENTIAL AND LGS CLASS?

A. The LGS class increase should represent a more reasonable proportion of the system average percentage increase. My testimony proposes that the LGS class should pay at least 50% of the system average percentage increase. The upper end target of 1.5X (SGS and MGS) and lower end target of 0.5X (LGS) is a reasonable and symmetric band for class revenue increases. Based on this approach and considering the correct calculation of $5.57 million is reallocated from the SGS and MGS classes, the Residential class increase is 29.8%, which is 86.5% of system average, and the LGS increase is 17.2%, which is 50% of system average.[15] Therefore, my proposal assigns a below system average increase to both classes which currently produce a relative rate of return above 100%.

IV. OSBA CCOSS AND PROPOSED CLASS REVENUES

Q. DOES OSBA WITNESS MR. KNECHT DISCUSS CCOSS CONCEPTS AND PRESENT A MODIFICATION TO THE CCOSS?

A. Yes. Mr. Knecht explains that considerable disagreement surrounds the classification of mains on a customer basis.[16] He opines that the methodologies for quantifying the customer classification of mains are "theoretically and conceptually weak."[17] However, despite this weakness, Mr. Knecht produces a CCOSS which incorporates a modified version of the customer classification percentage used by the Company. In addition, Mr. Knecht discusses the Average & Excess (AE) methodology as a replacement for the P&A

15 OCA Statement 3, Exhibit CJ-2.
16 OSBA Statement No. 1, p. 23.
17 Ibid.

method, but since he does not recommend or prepare a CCOSS based on that methodology, I will not respond to his comments regarding AE.[18]

Q. PLEASE DESCRIBE THE MODIFIED VERSION OF THE COMPANY'S DESIGN DAY-MINIMUM SYSTEM CCOSS UTILIZED BY MR. KNECHT.

A. Peoples proposed a CCOSS which classifies mains as 52% Design Day Demand and 48% Customer. Mr. Knecht prepares a variant of that study which classifies mains as 71% Design Day Demand and 29% Customer. In order to quantify its proposed customer percentage, the Company offers a minimum system study based on 2-inch mains and makes an adjustment to remove the demand-carrying capability of 2-inch mains. Mr. Knecht develops a zero-intercept study to replace the Company's minimum system study, which supposedly represents the cost of a system of mains with zero demand capability.[19]

Q. DO YOU AGREE WITH MR. KNECHT'S ZERO INTERCEPT STUDY WHICH HE USES TO QUANTIFY CUSTOMER CLASSIFICATION PERCENTAGES?

A. No. Although Mr. Knecht's customer classification percentage is an improvement on the Company's minimum system study, the zero intercept method does nothing to address the overarching lack of cost causality between the number of customers and mains, as discussed in Sec. II of this testimony and in my direct testimony. The zero-intercept method is intended to resolve potential double counting of demand capability in the minimum system. The Company's approach applies an adjustment which supposedly removes demand costs from the minimum system. The zero intercept study results appear to confirm

[18] I do not recommend the traditional AE method, because it is simply a circuitous route to a peak demand allocation.

[19] OSBA Statement 1 at 26, 34.

that the Company's adjustment method is inadequate and is consistent with my direct testimony that "an adjustment to remove demand can produce varying results, depending on method."[20] However, in my view, the zero intercept study performed by Mr. Knecht raises more questions than it answers and should not be adopted in this proceeding.

Q. IS THE ZERO-INTERCEPT METHOD SUBJECT TO CONCEPTUAL AND STATISTICAL FLAWS?

A. Yes. Based on the Company's records of installed costs per foot for different main diameters, the method uses linear trend analysis to "predict" the cost per foot of a zero-inch main.[21] The validity of this approach is dubious because the concept of zero-inch mains is based on fictitious distribution components. Zero inch mains do not exist because no one would ever manufacture or purchase distribution mains which are incapable of delivering gas. Given this lack of realism, we can only hypothesize whether such a phantom system would be required to meet safety standards, to be buried, or to incur indirect costs such as stores and construction overhead. The zero intercept study fits a line or curve to data regarding existing main sizes and costs, producing a predicted cost at the point that the line is equal to zero inches diameter. However, the technique raises inherent questions of statistical validity. Statistics tenets advise caution in extrapolating beyond the limits of the available data[22]—in this case, the prices of hypothetical zero inch mains. The assumptions necessary to make this extrapolation cannot be tested or verified. The

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[20] OCA Statement. 4 at 16. My direct testimony suggested that an alternate method for removing demand capability from the minimum system would result in a customer classification percentage of 15.3%.

[21] Mr. Knecht used the LINEST function of Excel.

[22] "Regression analysis is limited only to the range of actual observations. It is these observations, not qualitative reasoning, that are used to quantify the relationship between *x* and *y*." Statistics for Modern Business Decisions at 495. Lawrence Lapin, Hardcourt, Brace, Inc. 1973.

instructions for the LINEST Excel function used by Mr. Knecht states, "the y-values predicted by the regression equation may not be valid if they are outside the range of y-values you used to determine the equation."[23]

Q. ARE YOU SKEPTICAL OF MR. KNECHT'S ZERO-INTERCEPT STUDY?

A. Yes. His workpapers reveal that he performed eight linear analyses (steel and plastic linear and quadratic equations for the Peoples Natural Gas Division (PNGD) and Peoples Gas Division (PGD), with separate underlying mains data for each division.[24] The differences between predicted zero inch main cost is often quite large depending on the linear or quadratic form of the analysis. The variations of the method produce such disparate results that one can question the accuracy of the method or at least the subjective judgements necessary to apply the method:

- The predicted linear value for the PGD steel mains is negative. Mr. Knecht chose the quadratic form for the PGD instead, but the predicted zero inch main cost/foot derived from the four steel main equations for PGD and the PNGD are in a range of -$4, $30, $32, and $142. This wide range justifies some degree of skepticism. Arguably, the negative predicted cost per foot could have been truncated at zero.
- The predicted zero-inch cost per foot for PNGD steel mains is 15% higher than the actual cost per foot of PNG's 2-inch mains. 2-inch mains should not be more costly than the theoretical zero-inch mains.

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[23] "LINEST Function," Microsoft Support, https://support.microsoft.com/en-us/office/linest-function-84d7d0d9-6e50-4101-977a-fa7abf772b6d

[24] The information referenced was provided by the OSBA to all parties, Judge Long, and designated Commission Staff from the Bureau of Technical Utility Services via email on March 28, 2024, and it was labeled "IEc-WP3MinSysZ-0328, tab "Detail 376-Mains ZI RDK," columns AA – AJ." The worksheet is too voluminous to append to my testimony.

- Mr. Knecht's study predicts that zero-inch plastic mains would cost $9 per foot in the PGD service area and $26 per foot in the PNGD service area. His analysis raises two important questions: (1) Why wouldn't the theoretical costs of zero-inch mains be nearly the same for the two divisions? (2) Is this just a distortion created by the differing vintage and diameter of mains installed in the two divisions?

Q. IS MR. KNECHT'S ANALYSIS TYPICAL OF THE ISSUES THAT ARISE WITH THE ZERO INTERCEPT METHOD?

A. Yes. The Regulatory Assistance Project's Cost Allocation Manual criticizes the zero intercept methodology, concluding that the "zero-intercept regression analysis is so abstract that it can produce a wide range of results, which vary depending on arcane statistical methods and the choice of types of equipment to include or exclude from an equation."[25]

Q. EVEN IF THE ZERO-INTERCEPT ANALYSIS CURES THE DOUBLE COUNTING OF DEMAND PROBLEM ASSOCIATED WITH THE COMPANY'S STUDY, DOES IT JUSTIFY CLASSIFYING MAINS ON A CUSTOMER BASIS?

A. No. The 2021 order in the Columbia Gas case states: "Mains investment is driven by the loads placed on it, not by the number of customers served."[26] Mr. Knecht's analysis does not demonstrate that cost causation links customers and mains investment. Therefore, Mr. Knecht's CCOSS should be rejected.

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[25] *Electric Cost Allocation For A New Era*, A Manual at 148, Lazar, Chernick, and Marcus, available at chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.raponline.org/wp-content/uploads/2023/09/rap-lazar-chernick-marcus-lebel-electric-cost-allocation-new-era-2020-january.pdf

[26] *PA. PUC v. Columbia Gas of Pennsylvania, Inc.*, R-2020-3018835, Order and Opinion at 217 (February 19,2021).

Q. DO YOU AGREE WITH OSBA'S PROPOSED REVENUE DISTRIBUTION?

A. No. Mr. Knecht bases his proposed revenue allocation, in part, on his CCOSS which includes the zero-intercept study's 29% customer classification. Since I oppose the use of this method, I also oppose his proposed class revenue allocation.

Q. WHAT IS THE FRAMEWORK OF MR. KNECHT'S CLASS REVENUE ALLOCATION?

A. The Company's revenue increase is based on averaging the results of its Design Day/MinSys CCOSS with the results of the Peak & Average CCOSS. Mr. Knecht proposes to average the Company's proposal--which itself is an average--with OSBA's Design Day/ZI CCOSS. Effectively, the Company's proposed revenue allocation is 51% Design Day Demand, 24% Customer, and 25% Average Demand.[27] Similarly, Mr. Knecht's proposed revenue allocation is 61% Design Day Demand, 27% Customer, and 13% Average Demand. Compared to the Company's proposed revenue distribution, Mr. Knecht's proposed average of averages has the effect of increasing the reliance upon Design Day Demand, increasing the weight given to customer count, and decreasing the weight given to Average Demand. My direct testimony opposes classifying mains on a customer basis, and it follows that giving greater weight to the customer classification is moving in the wrong direction. Although Mr. Knecht's zero-intercept study implies that the Company's CCOSS places too much weight on the customer classification, Mr. Knecht's revenue recommendation is a roundabout approach to *increasing* the weight

[27] The Company's recommended CCOSS is 52% Design Day and 48% Customer. The Peak & Average CCOS is 50% Design Day and 50% Average Demand. The revenue allocation, in effect, averages those percentages.

given to the customer classification in the Company's revenue allocation. In my view, Mr. Knecht's "averaging of averages" is an unreasonable and arbitrary method for calculating the class revenue increases.

Q. DO YOU HAVE ANY ADDITIONAL COMMENTS ON MR. KNECHT'S REVENUE ALLOCATION RECOMMENDATION?

A. Yes. I have difficulty understanding the sources and basis for the revenue increase numbers in his recommendation. Mr. Knecht's revenue recommendation is based on a People's combined base revenue increase which is $21.021 million less than the Company's claimed base revenue increase.[28] His revenue recommendation is based upon a 30.5% base revenue increase rather than 34.4% reflected in the Company's request. I cannot determine the reason for this difference, and obviously the variance will affect Mr. Knecht's application of 1.5X gradualism constraints. Furthermore, the CCOSS sources for the Company's proposed revenue distribution do not match the class base revenue requirements used by Mr. Knecht to develop his revenue allocation.[29] Since I object to the method and framework for Mr. Knecht's revenue allocation, any further effort to resolve or respond to these more detailed discrepancies is unnecessary.

Q. PLEASE SUMMARIZE YOUR CONCLUSION.

A. The Commission should reject Mr. Knecht's CCOSS, because it is simply another variant

[28] As noted in Sec.III, the Company's claimed base revenue increase is $173.7 million. Instead, $152.7 million is reflected on Table IEc--6 on page 45 of Mr. Knecht's testimony, OSBA Statement No. 1.

[29] For example, through the discovery process, OSBA submitted a series of workpapers followed by a series of corrections of those workpapers. IEc-WP-Revenue Allocation Rate Design (Corrected 4-4-24) Tab "RevAlloc Corrected", which was circulated by OSBA to parties but is too voluminous to include here, does not match data from Exhibit 11Ec-CD simulation (Confidential) Tab "COS Summary" or Exhibit 11Ec-P&A simulation (Confidential) Tab "COS Summary." Note that a version of the latter file was submitted through the discovery process and mis-labeled as "A&E simulation."

of classifying mains on a customer basis. Furthermore, I recommend denial of OSBA's proposed revenue spread because it is based on two CCOS studies (Demand/Min Sys and Demand/Zero Intercept) which classify mains on a customer basis.

V. I&E CUSTOMER CHARGE RECOMMENDATION

Q. WHAT IS I&E WITNESS CLINE'S RECOMMENDED RESIDENTIAL CUSTOMER CHARGE?

A. Mr. Cline recommends setting the residential customer charge at $20.00, instead of the $21.50 requested by the Company[30] . He also recommends applying a scale-back to the customer charge to the extent that the Commission grants a lower base rate increase.

Q. DO YOU AGREE WITH MR. CLINE'S RECOMMENDED CUSTOMER CHARGE?

A. No. Mr. Cline presents no discussion or analysis of the appropriate accounts to include in the customer charge. His recommendation is based on the $19.96 residential customer unit cost that falls out of the Company's Peak & Average CCOSS.[31] He has accepted the Company's choice of accounts to include in the customer charge, without any consideration as to whether they vary with the number of customers. As stated in the NARUC Gas Utility Rate Design Manual, customer costs are those costs found to "vary *directly* with the number of customers served rather than the amount of utility service supplied," including

30 I&E Statement No. 3, pp. 33-34.
31 I&E Statement No. 3 at 32.

"metering, reading, billing, collecting and accounting," as well as "metering equipment and in customers' service connections."[32] (emphasis added)

Q. WHY IS MR. CLINE'S $20.00 CUSTOMER CHARGE RECOMMENDATION FLAWED?

A. Mr. Cline just accepts the customer unit cost computed by the Company's CCOSS without determining whether the components vary with the number of customers. A large portion of the $20.00 unit cost consists of indirect costs which are unaffected by the addition or departure of customers. In my direct testimony, I calculated a customer charge of $9.00 based solely on costs which are directly caused by the number of customers.[33] Mr. Cline's recommended $20.00 customer charge is 222% of direct customer costs.[34] In other words, his recommended customer charge is comprised of indirect costs which are 1.2 times greater than direct costs.

Q. CAN YOU PROVIDE EXAMPLES OF THE INDIRECT COSTS WHICH ARE INCLUDED IN MR. CLINE'S CUSTOMER CHARGE RECOMMENDATION?

A. Yes. Administrative & General (A&G) expenses are a major part of the indirect costs included in I&E's $20.00 customer charge. A&G expense is by definition "not chargeable directly to a particular utility operating function."[35] Examples of the A&G expenditures included in the customer charge: $11.4 million for executive and officer salaries (A920) and associated office supplies and equipment (A921); $11.4 million for outside services, including fees for attorneys, accountants, actuaries, consultants, and other professionals

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32 *NARUC Gas Distribution Rate Design Manual* (1989) at 22.
33 OCA Statement 4 at 34.
34 20 divided by 9.
35 18 CFR Part 201, FERC Uniform System of Accounts.

(A923); $3.6 million for injuries and damages, including insurance premiums or reserves for injuries and damages suffered by employees or the public (A925); and $1.08 million for miscellaneous general expenses, including general advertising primarily designed to improve the image of the utility or the industry, and other general expenses such as industry association dues and stockholder meetings (A930). These are costs which do not vary directly with the number of customers and are not appropriate for recovery through a fixed customer charge, which has as its sole function restricting access to the system. A more reasonable rate design will recover such indirect costs through a usage charge which provides customers with pricing information that can influence their decisions.

Q. WHAT IS YOUR RECOMMENDATION?

A. The Commission should reject Mr. Cline's proposed $20.00 customer charge as excessive. As I demonstrated in my direct testimony, the current $14.50 customer charge paid by the majority of residential customers recovers direct customer costs and provides a reasonable contribution to common cost, thereby satisfying economic criteria for avoidance of cross subsidies. This approach is also consistent with policy objectives such as energy conservation, protecting the environment, and equitable prices for low income customers. Mr. Cline's scale-back recommendation is not unreasonable, but it would be unnecessary if the proposed customer charge was set closer to the current fixed charge.

VI. TREATMENT OF MLS DISCOUNT RATE SHORTFALLS

Q. PLEASE DESCRIBE MR. BAUDINO'S TREATMENT OF REVENUE SHORTFALLS IN THE MLS CLASS.

A. Essentially, Mr. Baudino is claiming that the Company's favorable CCOSS changes for Mainline customers is not good enough. The Company proposes that the LGS customers who qualify should be included in a new MLS class. However, these customers take discounted rate service which does not produce revenues equal to allocated cost. The Company assigns the shortfall from discounted rates to the customer's underlying class (LGS, in the case of MLS), and states that other classes do not bear the shortfall associated with discounted flex rates.[36] As part of his revenue allocation recommendation, Mr. Baudino proposes to spread the $9.6 million revenue shortfall caused by MLS discounted rates across all customer classes.[37]

Q. DO YOU AGREE WITH MR. BAUDINO'S PROPOSED REALLOCATION OF THE $9.5 MILLION SHORTFALL?

A. No. Mr. Baudino's proposal is not consistent with cost causation. The revenue shortfall from discounted rates is caused by the competitive circumstances and negotiated rates paid by the specific customers within the class. Customers' commercial decisions within each class are ultimately the cause of the revenue shortfall. Furthermore, standard regulatory practice directly assigns revenues to each customer class. Allocating customers' revenue

[36] Peoples Statement No. 15 at 37.
[37] PII Statement No. 1 at 16.

responsibility to other classes is a significant departure from this practice and interferes with the cost of service process.

Q. PLEASE DISCUSS THE IMPLICATIONS OF COMPETITIVE DISCOUNT RATES FOR RATE SETTING.

A. Customer classes with competitive options, such as LGS and MLS, impose significant business risk on the gas utility. The business risk involves the potential loss of industrial load or lost revenue caused by responding with negotiated rates. In theory, this risk is reflected in the gas utility's cost of equity. The CCOSS targets class revenue requirements based on the system average rate of return. But if the CCOSS reflected the class specific business risk associated with competitive pressure, the LGS and MLS base revenue requirement would be based on rate of return targets higher than the system average. [38] Mr. Baudino's proposal is inequitable because classes with high risk of load loss can export their revenue losses from negotiated contracts to other classes, while simultaneously targeting a revenue requirement based on an average rate of return instead of the higher return associated with the class's business risk. Therefore, the direct assignment of the revenue shortfall to the industrial class may compensate, in part, for the omission of an adjustment for class business risk. As Dr. Bonbright stated, in his discussion of large industrial customers who impose the risk of revenue shortfalls: "If based on advance estimates of 'cost of service' these rates should therefore incorporate an appropriate

[38] Higher than system average rate of return targets for industrial and commercial classes also implies below system average rate of return targets for residential and SGS classes.

allowance for the risk factor—for a risk factor well in excess of that which would be appropriate in an estimate of the cost of supplying the more stable, residential service."[39]

Q. IS MR. BAUDINO'S PROPOSAL FOR ALLOCATING THE COST OF INDUSTRIAL DISCOUNT RATES CONSISTENT WITH HIS TREATMENT OF THE COST OF CUSTOMER ASSISTANCE PROGRAMS AND THE LOW INCOME USAGE REDUCTION PROGRAM?

A. No. Mr. Baudino assigns the costs of low income assistance programs directly to the residential class because the customers who benefit from the programs are residential. The allocation of these low income program costs to all ratepayers could be justified more easily than Mr. Baudino's proposal because they are a social cost favored by governmental and public policy. However, in my experience, industrial and commercial intervenors generally oppose the system wide allocation of CAP and LIURP costs on grounds of cost causation.

Q. WHAT IS YOUR CONCLUSION?

A. The Commission should reject Mr. Baudino's proposal to allocate revenue shortfalls in the MLS class to residential and other classes. LGS customers benefit from the flex rate program and should bear the cost of the program. The Company already has provided an allocation benefit to the LGS class by implementing favorable treatment of MLS customers in the class cost of service study. Mr. Baudino's proposal favors the LGS class in a more expansive way by transferring revenue shortfalls caused by LGS customers to other classes.

[39] Bonbright, *Principles of Public Utility Rates* (1961) at 365.

VII. WEATHER NORMALIZATION ADJUSTMENT

Q. PLEASE SUMMARIZE THE RECOMMENDATIONS OF I&E WITNESS MR. CLINE AND OSBA WITNESS MR. KNECHT REGARDING THE COMPANY'S PROPOSED WEATHER NORMALIZATION ADJUSTMENT (WNA).

A. Mr. Cline accepts the WNA but recommends that the normal weather period should be based fully on the 20 year average heating degree days (HDD) without the partial inclusion of HDDs predicted by the 65 year regression analysis.[40] Mr. Cline also recommends the inclusion of a 3% deadband be imposed as a condition of approving the WNA.[41] For his part, Mr. Knecht also accepts the WNA, including the Company's proposal to define normal annual HDDs based on both the 20 year average HDD and the HDDs predicted by the 65 year regression analysis.[42] Mr. Knecht also describes several flaws in the WNA and suggests that the WNA should be conditioned on the Company addressing those issues.

Q. DO YOU AGREE WITH THEIR RECOMMENDATIONS?

A. While I do not disagree with Mr. Cline's recommended use of the 20 year average HDDs (without the 65 year regression) to normalize test year weather, even if Peoples were to accept the 20 year average, the WNA is flawed in other respect that warrant its rejection. As I explain below, I disagree with both witnesses' acceptance of the WNA because the conditions for approval that they recommend are insufficient to convert the WNA into a

40 I&E Statement No 3, pp. 19-20.
41 I&E Statement No. 3, p. 16.
42 OSBA Statement No, 1 at 51

just and reasonable rate. In fact, both witnesses' critique of the Company's WNA would support denial of the proposal and I continue to recommend that it be denied.

Q. DOES MR. CLINE ADDRESS THE POLICY REASONS THAT SUPPORT HIS RECOMMENDATION TO IMPLEMENT A WNA IN THE PEOPLES' SERVICE AREA?

A. No. He focuses on comparing the Peoples' proposed WNA with the WNA mechanisms adopted for several other regulated gas utilities in Pennsylvania. The fact that WNA mechanisms have been adopted in other gas utility rate cases, is not sufficient to demonstrate that the WNA mechanism should be adopted in Peoples' current rate case. The faulty logic of such a position is akin to arguing that a revenue requirement determination made in a Columbia Gas rate case ought to automatically entitle Peoples to the same level of revenue that Columbia Gas received. Mr. Cline absolves Peoples of much of its burden to support the WNA. In particular, aside from also lacking any meaningful comparison of how Peoples' WNA proposal would be calculated and applied as compared to other utilities WNAs, there are clear distinctions that Mr. Cline ignores. Specifically, as noted in Mr. Cline's exhibits, at least two of the four gas utilities with WNA tariffs adopted the WNA as a pilot program.[43] Generally, pilot programs are intended to gather information on rate making mechanisms in order to evaluate problems in the program and determine the need for improvements or discontinuation. The Company could have presented a

[43] I&E Exhibit No. 3, Schedule 5, OCA-I-004. Note that the Company's response also indicates that it is unaware whether the remaining two gas utilities also implemented the WNA as a pilot program.

detailed evaluation of the impact of these WNA programs implemented by other gas utilities in order to support its proposal—but it did not do so.

Q. WHAT IS MR. CLINE'S REASONING FOR RECOMMENDING A DEADBAND?

A. Mr. Cline cites a commission order in the 2021 Columbia Gas case, stating that "without an extraordinary set of circumstances" there is no reason reconcile revenues for day-to-day business risk.[44] Mr. Cline opines that the WNA is a departure from traditional ratemaking that "should only occur due to circumstances that are an extraordinary departure from normal operating conditions…"[45] However, Mr. Cline does not address why abnormal weather conditions now constitute an extraordinary departure from normal business operations, given that Peoples has operated a gas utility business for decades without a WNA. Historically abnormal weather conditions were considered a normal business risk for the gas utility.

Q. HAS MR. CLINE SUPPORTED HIS POSITION WITH ANY CALCULATION OR ANALYSIS OF HOW APPLYING A 3% DEADBAND WOULD PROTECT PEOPLES' CUSTOMERS FROM THE VOLATILITY OF A WNA?

A. No. Mr. Cline provides no calculation or analysis, as he simply asserts that "a 3% deadband is a reasonable provision to add to a WNA mechanism because it allows for a range of what is considered "normal" weather in which the Company's Commission-approved rates would be applied without adjustment." [46] It remains unclear what range Mr. Cline relies upon, how he calculated it, and why it is reasonable.

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44 I&E Statement 3 at 14.
45 I&E Statement 3 at 15.
46 I&E Statement no. 3 at 15-16.

Q. IS IT REASONABLE TO REQUIRE PEOPLES TO DEMONSTRATE EXTRAORDINARY CIRCUMSTANCES IN ORDER TO JUSTIFY IMPLEMENTING A WNA?

A. Yes. However, this test should not be limited to the context of whether a deadband should be imposed but it should also be a threshold for determining whether an automatic weather adjustment is justified at all. As I suggested in my direct testimony, the Company should be required to show, at a minimum, that a WNA is required to avoid a significant and extraordinary financial threat to the utility. The utility has not made such a showing, and the Company's testimony and discovery responses imply that the financial impact of the weather risk over time is not significant.[47]

Q. EVEN IF THE COMPANY COULD DEMONSTRATE THAT ABNORMAL WEATHER POSES A SIGNIFICANT FINANCIAL RISK FOR THE UTILITY, DOES THAT INDICATE OTHER ADJUSTMENTS ARE NECESSARY IN ORDER TO IMPLEMENT THE WNA?

A. Yes. If the WNA largely attenuates the normal business risk arising from abnormal weather, the recommended cost of equity should be adjusted to recognize the reduction in risk. While I defer to OCA witness Rothschild to address Peoples' business risk, I am not aware that such an adjustment has been proposed by I&E or the Company.

Q. DOES MR. KNECHT CRITICIZE FEATURES OF THE COMPANY'S WNA?

A. Yes. However, he ultimately accepts the WNA, provided that his concerns are "resolved." But Mr. Knecht is not clear on what actions the Company must take to resolve those

[47] For instance, in response to OCA V-26(b), the Company says it expects the future cumulative impact of the WNA on revenues to be zero or near zero over a length of time.

concerns.[48] In my view, many of Mr. Knecht's observations and criticisms are sufficient to find that the WNA should be denied.

Q. DOES MR. KNECHT CRITICIZE THE WNA'S LACK OF TRANSPARENCY FROM THE STANDPOINT OF ORDINARY CONSUMERS?

A. Yes. For instance, in footnote 89 (page 53) his testimony notes: "Peoples indicates that it will not use a separate WNA charge but will simply hide the effect of the WNA in the volumetric charges." In my opinion, this is a serious issue which will confuse and frustrate customers. For instance, customers may be frustrated when their reduced gas usage during moderate weather results in a surcharge, but their bill provides no information as to why that occurs. Furthermore, he states that the WNA "weakens price signals for energy conservation during extreme periods" and that traditional ratemaking treatment for extreme weather is "more consistent with cost causation." [49] In a discovery response, Mr. Knecht stated that his concerns about WNA are "related to inaccurate and unreasonably large bill adjustments due either to low actual heating degree day billing periods, or due to the default assumption that the difference between actual usage and average prior summer usage is necessarily and entirely due to space heating."[50] All of these issues are difficult, if not impossible, to correct, and in my view warrant rejection of the proposed WNA.

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48 On pages 54-55 of OSBA Statement No. 1, Mr. Knecht describes actions the Company should consider, but the described actions are either vague are inadequate to fully correct the issues. These conditions appear to include placing limits to application of WNA triggered by HDD criteria, not applying WNA to new customers until summer usage is established, and a few other conditions that are surrounding HDDs. None of these conditions include imposing a deadband.

49 OSBA Direct Testimony (Revised) at 53.

50 OCA-OSBA-1-5. I note that I am attaching this response as OCA Exhibit CJ-R-2.

Q. WHAT IS YOUR CONCLUSION?

A. My position remains the same as it was in my direct testimony. The Company's proposed WNA Tariff should be denied, because: (1) the Company has failed to demonstrate that extraordinary circumstances justify departure from important principles of traditional regulatory practice; (2) single issue rate making unreasonably allows the Company to reflect changes in a single component of rates without recognizing potential off-setting changes in other components; (3) The WNA is likely to produce more increases in gas bills than credits, given the long term warming trends; (4) The WNA may be perceived by customers as a disincentive to energy conservation; and (5) the tariff will likely cause customer confusion regarding billing changes resulting from the weather adjustments.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY AT THIS TIME?

A. Yes.

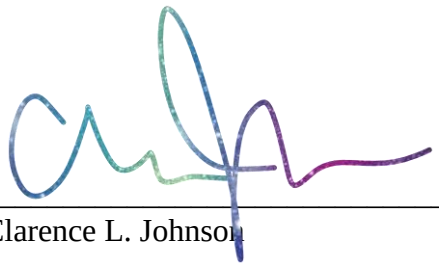
BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission,	:	
	:	
v.	:	Docket No. R- 2023-3044549
	:	
Peoples Natural Gas Company LLC	:	
	:	

VERIFICATION

I, Clarence L. Johnson, hereby state that the facts above set forth in my Rebuttal Testimony, OCA Statement 4R, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: April 18, 2024

Signature: 

Clarence L. Johnson

Address: 3707 Robinson Ave
Austin, Texas 78722

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XVII-009

Witness: Ravenstahl, Luke **Title:** Vice President Sales & Marketing

Question: Within the last five years, has the Company extended distribution mains by more than 1,000 feet to serve a new industrial customer? Without identifying the customer, for each of the five largest such customers, provide the customer's Annual Throughput and the distance of the main extension.

Answer: Yes.

Customer 1- Estimated annual usage: 100,000 Mcf; Mainline extension distance: 2,700 feet

Customer 2 - Estimated annual usage: 86,519 Mcf; Mainline extension distance: 2,270 feet

Customer 3 - Estimated annual usage: 60,000 Mcf; Mainline extension distance: 1,137 feet

Customer 4 - Estimated annual usage: 14,875 Mcf; Mainline extension distance: 6,821 feet

Customer 5 - Estimated annual usage: 5,460 Mcf; Mainline extension distance: 3,015 feet

Submit Date: 3/7/2024

Peoples Natural Gas Company LLC 2023 Base Rate Case
Docket No. R- 2023-3044549

OSBA Responses to OCA Set I

OCA-OSBA-I-5

5. Please clarify whether Mr. Knecht recommends a deadband as a condition for approving the WNA proposal.

Response:

In my testimony, I did not recommend a deadband as a necessary condition for approval of the Company's WNA proposal. However, I would not object to the adoption of a reasonable deadband. My concerns with WNA mechanisms, however, are more related to inaccurate and unreasonably large bill adjustments due either to low actual heating degree day billing periods, or due to the default assumption that the difference between actual usage and average prior summer usage is necessarily and entirely due to space heating.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket No.: R-2023-3044549
v.	:	
	:	
Peoples Natural Gas Company LLC	:	

SURREBUTTAL TESTIMONY

OF

DAVID T. EVRARD

On behalf of the

PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

Date Served: May 3, 2024

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Introduction

Q. Please state your name and business address.

A. My name is David Evrard and my business address is 555 Walnut Street, 5th Floor, Harrisburg, PA.

Q. By whom are you employed and in what capacity?

A. I am employed by the Office of Consumer Advocate (OCA) as an Assistant Consumer Advocate.

Q. Have you previously submitted testimony in this case?

A. Yes. My direct testimony was submitted as OCA Statement 1 on March 22, 2024.

Q. What is the purpose of your surrebuttal testimony in this case?

A. I am responding to the rebuttal testimony of the following witnesses who testified on behalf of Peoples Natural Gas Company LLC (Peoples): Andrew Wachter,[1] Carol Scanlon,[2] Paul Becker,[3] and Paul R. Moul.[4]

Q. Before you respond to the identified Peoples' witnesses, do you have any introductory comments?

A. Yes. As I previously indicated in my direct testimony, I am not acting as an OCA attorney in this proceeding. Therefore, it is important to recognize that my testimony should not be interpreted as offering a legal opinion on any topic I discuss. Instead, my testimony is offered on the basis of policy. This distinction is important, because anywhere that I may refer to decisions by regulatory agencies or courts, or refer to statutes and regulations, should not be considered as me offering a legal opinion, but as supporting my position on

[1] Peoples Statement No. 2-R
[2] Peoples Statement No. 3-R
[3] Peoples Statement No. 5-R
[4] Peoples Statement No. 13-R.

the basis of policy. Finally, I wish to note that the fact that I have not offered surrebuttal testimony on any given issue should not be construed as my agreement with that particular issue.

Q. Have you prepared Exhibits to accompany your surrebuttal testimony?

A. No; however, for purposes of this testimony, I refer to both Exhibit DE-1 and to Exhibit DE-2, which were attached to my direct testimony. Exhibit DE-1 outlined the factors under Section 1330 of the Public Utility Code concerning Peoples' proposed Weather Normalization Adjustment (WNA). Additionally, Exhibit DE-2 contained a summary of the public input testimony offered by consumers during the course of the six public input hearings held in this case from March 5 through March 7, 2024.

Response to Peoples Witness Wachter

Q. In your direct testimony, you testified that as part of its claim for a management efficiency premium, Peoples sought to indirectly have customers pay for Peoples' corporate citizenship activity. Did Peoples witness Wachter attempt to support corporate citizenship costs?

A. Yes. While Mr. Wachter addresses Peoples' "partnerships" with Pittsburgh-based sports teams such as the Pittsburgh Steelers, Pittsburgh Penguins, Pittsburgh Pirates, and Altoona Curve under the umbrella of advertising expenses, he extends his argument beyond that scope. Specifically, Mr. Wachter argues that Peoples' partnerships with major and minor league sports franchises "are catalysts for economic development in the City of Pittsburgh and the Western Pennsylvania region" and that it creates "a positive community brand" which he claims provides customers with direct benefits.[5]

[5] Peoples Statement No. 2-R, pp. 40-42.

Q. Do Mr. Wachter's claims about purported benefits of Peoples' partnerships with professional sports teams change your position that Peoples is seeking customer funding for corporate citizenship goals?

A. No. If anything, Mr. Wachter doubled-down on the notion that Peoples is entitled to spend customers' money to sponsor major league sports teams that it elects to sponsor, and that heightens my original concerns. While OCA witness Mugrace will address Peoples' expense claims related to sports advertising and sponsorships in OCA Statement 2SR, from a policy perspective, it is unjust and unreasonable to require customers to fund Peoples' sports advertising and sponsorship costs by embedding those costs in rates charged to consumers for essential utility service. To the extent that Mr. Wachter alleges that Peoples uses its partnerships to share information about "key customer services and vital safety messages" with "concentrated groups of customers and with the public" those general claims are not demonstrated[6]. It may be reasonable for Peoples to utilize venues such as sporting events as a part of its outreach activities for their programing, but those costs are discrete and insular from their advertising and sponsorship costs and the two concepts – outreach about program offerings versus pursuing corporate good will through advertising and sponsorship – should not be conflated.

Q. Please outline your concerns about Peoples' decision to spend customer money to fund sports partnerships.

A. Peoples has not offered any evidence that there is a nexus between its business decision to spend money sponsoring Pittsburgh-based sports teams and providing natural gas utility service to customers who it now seeks to charge for those sponsorships. From a policy

[6] Peoples Statement No. 2-R, p. 41.

perspective, requiring customers to pay to sponsor sports teams at Peoples' discretion, resulting in increased costs for essential utility service, inappropriately links regulated utility rates and corporate sponsorship activity in a way that undermines the purpose of utility regulation.

Q. Did Mr. Wachter also respond to your assertion that Peoples did not clearly identify any costs savings or operational efficiencies resulting from the acquisition by Essential?

A. Yes. Mr. Wachter claims that any costs savings benefits that were achieved have been reflected in the filing through adjustments made to the Company's historic test year. Mr. Wachter also commented that no requirement was established in the Essential Acquisition that required the company to demonstrate or report cost savings. Despite his disclaimer, Mr. Wachter identified tax savings benefits that he indicates were "passed onto customers since the Essential Acquisition [were] the adoption of the IRS Unit of Property rules" and he also quantified several types of credits and donations that resulted from commitments that Peoples made in its Tax Repairs Petition filed at Docket No. P-2020-3021191.[7]

Q. Are you disputing Mr. Wachter's claims about Peoples' fulfillment of the obligations made in its Tax Repairs Petition?

A. No. I do not dispute Mr. Wachter's claims; however, pointing to an intervening Tax Repairs proceeding does not cause me to change my position that Peoples previously expressed a commitment to pass along any future costs savings or rate benefits from *operational efficiencies* in future rate proceedings.[8] In this case, it remains unclear whether and to what extent any operational efficiencies have conveyed benefits to customers. The lack of clarity

[7] Peoples Statement No. 2R, pp. 59-60.
[8] OCA Statement 1, p. 10.

remains an issue, and it is underscored by many unsubstantiated cost increases that OCA witness Mugrace identifies in OCA Statement 2SR.

Q. Did Mr. Wachter also respond to your comments in direct testimony regarding Peoples' excessive rate of return request in this case despite claimed affirmative public benefits that would result from the acquisition by Essential?

A. In part, but he appears to misconstrue my position. Mr. Wachter appears to understand my direct testimony as a claim that Peoples' capital structure and return on equity are directly tied to the ownership of Essential Utilities, which he says is baseless.[9] However, it is important to understand that I have not addressed Essential's capital structure and return on equity, as I leave those matters to the expertise of OCA witness Rothschild. My point in mentioning Essential in any discussion of Peoples' capital structure and return on equity was limited to the context that, in terms of equity and risk, these metrics will prove to be very expensive for customers and thus, it did not appear that the acquisition conferred risk reduction benefits to customers. On the contrary, it appears that Peoples' anticipates greater investment risk after the acquisition, and that rate detriment is worthy of recognition.

Q. Why is Peoples' purported increase in investment risk worthy of recognition in this rate case?

A. As I mentioned in my direct testimony, Peoples is seeking a management performance adder of 25 basis points in this case. and therefore, as the decision to complete the acquisition was a business decision that Peoples' management made, the rate consequences of that decision certainly matter in the context of any discussion of exemplary management. I discuss this in more detail in my response to Peoples' witness Paul Moul, below.

[9] Peoples Statement No. 2-R, p. 60.

Q. Is Mr. Wachter correct that your discussion of Essential's acquisition of Peoples is baseless?

A. Not at all. While it may be an inconvenient topic for this case, among other things, Peoples included a management performance claim in this case. By doing so, in my opinion, all aspects of management, including the prudency of business decisions and acquisition consequences to customers, should be part of the analysis of whether customers should be compelled to pay a premium for what Peoples characterizes as exemplary management. As I indicated in my direct testimony, OCA witness Mugrace calculated the dollar impact of the management performance adder to be approximately $7.46 million in additional annual revenue for Peoples; therefore, evaluating the prudency and impact of Peoples' business decisions and their impact upon customers is not baseless when it could cost customers in excess of $7 million annually.

Response to Peoples Witness Moul

Q. In a similar vein to Mr. Wachter, witness Moul criticizes your direct testimony by claiming that your discussion of Essential's acquisition of Peoples is at odds with the standards for a fair rate of return. How do you respond?

A. Like Mr. Wachter, Mr. Moul appears to both misconstrue my testimony and ignore that Peoples' claimed rate of return includes a request for an additional 25 basis points for exemplary management performance. While I will defer to OCA witness Rothschild's expertise in any analysis of Essential Utilities as it may relate to Peoples' rate of return claim, Mr. Moul's statement that "there is no need to consider the Essential affiliation" is at odds with his simultaneous claim that Peoples' exemplary management performance

should be recognized through a higher return on equity.[10] As I explained in my response to Mr. Wachter, Peoples' decision to consummate the acquisition and to flow the consequences of it through to customers is a management decision that warrants consideration in any determination that would require customers to pay a premium for exemplary management.

Response to Peoples Witness Scanlon

Q. As part of her rebuttal testimony, did Peoples' witness Scanlon discuss portions of the public input testimony you addressed in your direct testimony?

A. Yes. Ms. Scanlon indicated that while she did not attend the March 5 public input hearing where he testified, she read the transcript of Peoples' customer, Mr. Hoffman, regarding his criticisms of Peoples' WNA proposal. Ms. Scanlon identified his criticisms as including that the WNA is complex and difficult to understand, his focus on the impact that warmer weather will have on WNA charges, and his complaint about DSIC-related billing errors.[11]

Q. What response did Ms. Scanlon offer regarding Mr. Hoffman's public input testimony?

A. Ms. Scanlon appears to claim that any of Mr. Hoffman's concerns about WNA complexity should be assuaged by the fact that other Pennsylvania natural gas distribution companies already have WNAs in place, and that Peoples will eventually develop education materials and customer service training to explain the WNA charge. Additionally, Ms. Scanlon claims that Mr. Hoffman's focus on warmer weather impacts upon the WNA miss the "other side of the coin" which she alleges is that Peoples will not recover additional distribution revenues due to colder weather that results in relatively higher usage by

[10] Peoples Statement No. 13-R, pp. 46-47.
[11] Peoples Statement No. 3-R, pp. 10-11.

customers. Finally, Ms. Scanlon concludes by claiming that Mr. Hoffman's bill did not contain any errors.[12]

Q. Do you agree that Ms. Scanlon's rebuttal testimony adequately addresses the concerns that Mr. Hoffman raised?

A. No. Although I am unable to comment upon whether Mr. Hoffman's bill contained any errors, I note that Ms. Scanlon's testimony omits the portion of Mr. Hoffman's public input testimony on the bill error issue. Specifically, Mr. Hoffman testified that he contacted Peoples three times by telephone to get the DSIC portion of his bill explained by a customer service agent. On the first occasion, regardless of whether there was an error, he testified that he was issued a credit. On the third billing issue call, Mr. Hoffman indicated that Peoples' representatives transferred his call to accounting, but that no one could explain how the DSIC was calculated and he was ultimately told, incorrectly, that the PUC calculates the DSIC.[13] Ms. Scanlon omitted those portions of Mr. Hoffman's testimony in her conclusion that Mr. Hoffman's bill did not contain any errors, but I think the full context is important because it provides a foundation for Mr. Hoffman's concerns about the WNA charge's complexity. If Peoples currently has difficulty answering questions about the DSIC surcharge – one that is relatively less complicated than the WNA – then it is legitimate for Mr. Hoffman and the public to be skeptical of the Company's ability to plainly, concisely, or clearly explain the WNA. Additionally, identifying that other utilities have WNAs in place and that Peoples will eventually develop educational materials does nothing to address Mr. Hoffman's concerns about how Peoples' WNA will be calculated on his bill. Finally, it does not appear that Mr. Hoffman misses the other side of the coin

[12] Peoples Statement No. 3-R, pp. 10-12.
[13] Peoples PIH-Ex NH 1.

by not acknowledging that the WNA will not recover costs during colder weather. On the contrary, Mr. Hoffman expressly acknowledged that Peoples is "offering a credit if the weather is colder" but he testified that it "seems doubtful that the WNA would be revenue neutral because a warmer month does not guarantee a colder month is inevitable."[14]

Q. Did Ms. Scanlon address OCA's criticism of Peoples' WNA proposal?

A. Yes. Throughout her rebuttal testimony, Ms. Scanlon responds to OCA's opposition to Peoples' WNA proposal. I note that OCA witnesses Mugrace, Johnson, and Alexander will also respond to Ms. Scanlon's various claims in OCA Statements 2SR, 4SR, and 5SR, respectively; however, I am confining my response to the Commission's alternative ratemaking policy factors that Ms. Scanlon addresses on pages 24 through 34 of her Rebuttal Testimony.

Q. Before you begin your response to Ms. Scanlon, have you already addressed the Commission's distribution rate considerations for evaluating the justness and reasonableness of alternative ratemaking proposals?

A. Yes. I previously addressed each of the factors in depth in my direct testimony in DE Exhibit 1, pp. 1-8. Because I have not changed my position on any of these factors, and for the purposes of brevity, I will not reiterate my analysis again here. Instead, I note that while I disagree with Ms. Scanlon's analysis in totality, I will address only the points that are not already included in Exhibit DE-1.

[14] Id. at 1.

Q. Do you dispute Ms. Scanlon's claim that revenue and cost causation are not misaligned in the WNA because the WNA does not alter the cost of service model?

A. Yes. The fact that the WNA does not alter Peoples' cost of service model is not determinative. Instead, in my opinion, what is determinative is that the WNA seeks to recover revenue for costs that Peoples is not incurring to provide service. Put differently, the WNA provides Peoples with revenue that is not at all tied to the cost of service, but which instead is tied to *not providing* service because the WNA charge is assessed when warmer weather results in less gas service being provided. In this sense, there is a clear disconnect between the WNA and cost-causation.

Q. Does Ms. Scanlon claim that the WNA mechanism does not disincentivize energy efficiency programs?

A. Yes. Ms. Scanlon argues that the WNA applies only to the distribution portion of a customer's bill and claims that customers will still realize savings on the commodity portion of their bill.[15]

Q. Does the fact that the WNA will only apply to the distribution component of customers' bills mean that it will not disincentivize energy efficiency programs?

A. No. While Ms. Scanlon is technically correct, customers react to price signals and are unlikely to make the distinction that Ms. Scanlon relies upon here. Regardless of the characterization of the type of costs that the WNA recovers, the end result is still the same: the WNA would cause customers to have a higher bill when using less gas, sending the signal that using less gas does not always translate to a lower bill.

[15] Peoples Statement No. 3-R, p. 26.

Q. Have any of the claims that Ms. Scanlon raises in her response to your analysis of all distribution rate consideration factors included in Exhibit DE-1 cause you to change your position on any of the fourteen factors you analyzed?

A. No. I stand by my analysis that each factor weighs against the WNA, but in combination, all fourteen failed factors make it clear that Peoples has failed to establish that the WNA is a just and reasonable rate.

Q. Did Ms. Scanlon respond to your testimony regarding Peoples' rate case notices?

A. Yes. In my direct testimony, I expressed concerns regarding the fact that Peoples' rate notices were issued on a combined basis to customers of both the Peoples Natural Gas division (PNGD) and the Peoples Gas division (PGD) without advising the customer of which division provided their service. As I explained, the service division distinction was critically important here where the total bill for a PNGD residential customer using 80 Mcf per year was projected to increase from $73.16 to $88.79 per month or by 21.4%., but the total bill for a Peoples Gas Division residential customer using 80 Mcf per year was only projected to increase from $84.00 to $90.35 per month or by 7.6%. I also indicated that the public input hearing testimony yielded questions about the 80Mcf metric used to calculate the increases set forth on Peoples notices to customers.[16] Ms. Scanlon responded to my comments on the notices and the 80Mcf usage metric[17].

Q. How did Ms. Scanlon respond to the concerns you identified about Peoples notices?

A. Ms. Scanlon claims that Peoples' notice complied with the Commission's requirements and that she agreed with me that the consolidated notice will likely not be an issue in the future because Peoples' proposal in this case would unify division rates. Additionally, she

[16] OCA Statement 1, pp. 14-15.
[17] Peoples Statement No. 1, pp. 35-37.

claimed that the 80Mcf usage factor that Peoples' identified in its notices is based on an "average" customer's usage, but that Peoples would re-evaluate it for the next notice requirement.

Q. Did Ms. Scanlon's response assuage your concern about Peoples' notices?

A. Only in part. I do agree that if Peoples' request to merge division rates is approved as requested in this case, that the confusion about operating divisions should not occur in the future. However, if Peoples' request to merge division rates is not approved, I recommend that Peoples be required to provide customers with future notices that designate their service division. Additionally, I acknowledge Peoples' commitment to re-evaluate its Mcf usage for future noticing. Yet, I think it is important to recognize that Peoples had control over when and how the instant rate filing would be submitted. This is evident in that Peoples knew it would be required to submit a rate filing by the end of 2023. The filing consists of thousands of pages including fifteen pieces of supporting testimony, and there is no doubt that planning for and compiling the case was a major undertaking for the Company. Nevertheless, despite that careful planning, the notice Peoples provided to customers put the onus on them to figure out which rate increase would apply to them. I submit that Peoples could have used the lead time and customer-funded resources to design a notice that did not place that burden on customers. I recommend that the Commission consider Peoples' decision to issue such a notice in this case when it considers Peoples' request for an exemplary management performance award of 25 basis points.

Response to Peoples Witness Becker

Q. As part of your direct testimony, you summarized some of the testimony provided by Peoples' customers during the public input hearings held in this case. Did Peoples witness Becker respond to any of the information that you summarized?

A. Yes. On pages 9-10 of my direct testimony, I referenced the testimony of a customer who stated that his meter was installed in front of a window and that it posed a safety concern. Additionally, I referenced the testimony of another customer who indicated that he had been waiting for Peoples to test his meter for weeks, but that Company field technicians did not keep appointments to perform the testing. In response, Mr. Becker testified that the customer who testified that his meter posed a safety issue was incorrect because the meter placement did not obstruct an emergency fire exit. Additionally, Mr. Becker claimed that it reviewed the issues regarding the customer who was awaiting meter testing and that it did not identify records of any missed appointments. Mr. Becker also indicated that Peoples has been in contact with the customer and that it is waiting for him to submit paperwork so that the work he is awaiting can be performed[18].

Q. What is your response to the information that Mr. Becker provided regarding the customers' service concerns?

A. My response is that I appreciate Mr. Becker's update, although it is unclear whether the customers agree with his assessment of the issues they described. I appreciate that Peoples responded to these customers and believe that the customers' ability to bring these important concerns to in-person public input hearings is an important part of the rate case process. While I will defer to OCA witness Alexander on her recommendation for Peoples

[18] Peoples Statement No. 5-R, pp. 4-6

to evaluate an extension of its call center hours to make live customer service hours more accessible outside of traditional business hours[19], I believe that public policy goals are best served when Peoples' employees make time to hear and respond to customer concerns.

Conclusion

Q. Has any of the rebuttal testimony positions you addressed above caused you to alter your overall recommendation made in direct testimony?

A. No. I continue to recommend that the Commission adopt, in totality, the adjustments and recommendations of all OCA witnesses in this case. While I will not summarize all OCA recommendations, they include the following: that Peoples receive an increase in annual operating revenue of no more than $13,018,740 (which is $143,007,382 lower than Peoples' request), that Peoples' WNA proposal be rejected, and that Peoples' capital structure, overall rate of return, including its allowed return on equity, be set at the levels recommended by OCA witness Rothschild

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

[19] OCA Statement 5, pp. 33-34.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission,	:	
	:	
v.	:	Docket No. R- 2023-3044549
	:	
Peoples Natural Gas Company LLC	:	
	:	

VERIFICATION

I, David T. Evrard, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement 1SR, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: May 3, 2024

Signature: David T. Evrard

David T. Evrard
Assistant Consumer Advocate

Address: Office of Consumer Advocate
555 Walnut St.
5th Floor
Harrisburg, PA 17101

OCA Statement No. 2SR

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	**)**	
v.	**)**	**Docket No. R-2023-3044549**
Peoples Natural Gas Company, LLC	**)**	

SURREBUTTAL TESTIMONY OF

DANTE MUGRACE

ON BEHALF OF THE

COMMONWEALTH OF PENNSYLVANIA

OFFICE OF CONSUMER ADVOCATE

May 3, 2024

PUBLIC VERSION

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I. PURPOSE OF SURREBUTTAL TESTIMONY

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Dante Mugrace. My business address is 22 Brooks Avenue, Gaithersburg, MD 20877.

Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN THIS DOCKET?

A. Yes. I submitted Direct Testimony on March 22, 2024, which was marked as OCA Statement No. 2. My qualifications and experience are attached to my Direct Testimony.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my Surrebuttal Testimony is to address the Rebuttal Testimonies of Company witnesses Wachter, Scanlon, Becker, Saball, Hanechak, Folks, Snyder, and Spanos. I am also making certain adjustments to proposals in my testimony and a revised calculation of the Company's revenue requirement that incorporates the effects of my adjustments. To the extent that I do not respond to or address a particular issue or argument, I defer to my Direct Testimony on those issues. I also note that I incorporated the adjustments that the rebuttal witnesses addressed in their testimonies regarding several Rate Base and O&M Expense adjustments.

Q. HAS THE COMPANY UPDATED OR ADJUSTED THE COST OF SERVICE AS FILED?

A. As stated by Company witness Mr. Wachter, the Company identified three adjustments during the discovery process. Mr. Wachter stated that the Company is not proposing an increase greater than the amount filed. (Statement No. 2-R at 5). Mr. Wachter stated that to the extent the Commission disallows other expenses or reduces the Company's proposed rate of return, the Company requests that the full adjustment be adopted. These are an increase in labor expense of $538,590; an increase in PBOP expense of $476,452; and a reduction in Licenses and Permits expense of $18,697. (Statement No. 2-R at 5). The impact on these changes would have increased the overall claim increase in revenue by $996,345, excluding cash working capital. (Statement No. 2-R at 6).

Q. DO YOU HAVE ANY CORRECTIONS WITH RESPECT TO YOUR DIRECT TESTIMONY RECOMMENDATIONS ON THE OVERALL REVENUE REQUIREMENT?

A. Yes. In reviewing my direct testimony exhibits, I noted a miscalculation with respect to Rate Base (Exhibit DM-3), and specifically with the total deductions of $11,142,035 that related to deferred income taxes, customer advances and customer deposits. In my direct testimony, I inadvertently added these deductions rather than subtracting these deductions to calculate my total Rate Base balance. By correcting the error my adjusted Rate Base balance should have been $4,185,135,391. With my revised adjustments to correct the Rate Base balance, I have calculated a revised recommended revenue requirement increase of $5,912,391, instead of my as-filed revenue requirement increase of $7,701,077.

Q WHAT ARE YOU RECOMMENDING IN YOUR SURREBUTTAL TESTIMONY THAT INCORPORATE YOUR ADJUSTMENTS TO THE REVISED DIRECT REVENUE REQUIREMENT POSITION?

A. I am recommending the following. This includes and incorporates my adjustments to my revenue requirement that I have addressed above related to my direct testimony:

- My recommended Rate Base balance is $4,184,352,477, which is $30,772,687 lower than the Company's proposed Rate Base balance of $4,215,125,164. It is also $782,914 lower than my revised direct position.
- My overall Rate of Return is 6.20% based upon OCA witness Mr. Rothschild's recommendation which includes a common equity component of 8.02%.
- My recommended Operating Revenue at Present Rates is computed at $833,215,510, which is the same as the Company's Present Rate Revenue of $833,215,510
- My recommended Operation and Maintenance Expenses are $206,331,194, which is $20,679,612 lower than the Company's proposed Operation and Maintenance Expenses of $227,010,806.
- My recommended Income Taxes are ($89,541,785) which is ($30,246,393) lower than the Company's proposed Income Taxes of ($59,295,392).
- Overall, based upon each of these components, I recommend a revenue requirement increase of $13,018,740 which is $143,007,382 lower than the Company's proposed revenue requirement of $156,026,122. This recommendation includes my revised

recommendation on direct of $5,912,391, in addition to $7,106,349 in revenue requirement increases identified as permissible in my surrebuttal testimony, following the clarification presented by Peoples in rebuttal.

Q. DO YOUR SURREBUTTAL RECOMMENDATIONS INCLUDE ANY ADJUSTMENTS TO MR. WACHTER'S UPDATED COST OF SERVICE REFLECTING AN INCREASE OF $996,345?

No. My adjusted my revenue requirement increase does not include the updated claims that Mr. Wachter identified as adjustments to the expense components in the amount of $996,345. In my view, the Company should not be able to receive a greater increase in revenue requirement for specific expenses than the amount requested in the initial filing. However, to the extent that the Commission believes that the Company should be able to recover these additional costs, Mr. Wachter's cost of service update does not include costs which are prudent and reasonable. His updates should be ignored for the purposes of determining Peoples' overall revenue requirement increase, for the reasons provided below in the sections regarding labor and post-retirement benefits other than pension (PBOP) expense.

II. REVENUE REQUIREMENT ISSUES

A. Utility Plant in Service- Working Capital Components - Accumulated Depreciation - Deferred Income Taxes - Other Rate Base Components.

Q. WHAT DID MR. BECKER STATE REGARDING YOUR OMISSION OF INFLATION ADJUSTMENTS TO CAPITAL EXPENDITURES?

A. Company witness Mr. Becker claimed that actual costs of pipeline construction have increased over time. (Statement No. 5-R at 7). He opined that the pattern is well established, and the trend is clearly increasing. Mr. Becker provided information on the Employment Cost Index (ECI) as of December 2023, which he claims reflect that post-COVID inflation is "absolutely real and spiked to 9.1% in June 2022." He opined that to omit inflation in its entirety on future investments or expenses seems to ignore the real world and what Pennsylvanians and a company doing business in Pennsylvania know to be true. (Statement No. 5-R at 8). Mr. Becker stated that rather than ignoring inflation, the debate should be about the reasonableness of the inflation factor. He further stated that

the inflation factors used by Peoples fall in line with the ranges of both the ECI and the known contractor increases and thus should be considered reasonable. Mr. Becker stated that if these projected costs do not increase as projected, the Company will use those funds for additional projects. (Statement No. 5-R at 8).

Q. WHY ARE YOU RECOMMENDING REMOVAL OF THESE INFLATION ADJUSTMENTS TO CALCULATE AND ADJUST THE COMPANY'S CAPITAL EXPENDITURES?

A. As I stated in more detail in my direct testimony, I am continuing to recommend disallowance of inflation adjustments because these inflation related adjustments are not known and measurable or prudent in nature in setting rates for utility service, particularly when one factors in that Peoples is projecting rates one-full year into the future when it uses a Fully Projected Future Test Year. These types of inflation increases do not provide a good index or pattern of increased costs over time. Inflation type adjustments do not address or provide any particular increase or individual expense category but rather they are simply forecasts and predictions of future costs estimates which may or may not be realized. Goods and services fluctuate over time, but not proportionately. While such types of inflation factors or adjustments are useful to develop economic data, they should not be used to develop and set rates for services under a ratemaking methodology. Rates, once set, are collected until they change in another rate case and, thus, have to be set reasonably, prudently, and foreseeably.

Q. WHAT ELSE DO YOU WANT TO ADD?

A. Inflation related adjustments, whether they are in the range of reasonableness or used to set utility rates for services prospectively, are not the type of expenditure adjustments that should be used in the development of rates for utility service. They cannot be predicted with certainty or accuracy. The Company has not provided any additional information or evidence showing that these cost increases will be realized or present in its FPFTY period. Inflation related adjustments are characterized as overall blanket increases applied to economic data related to consumer goods and services which fluctuate over time. When setting rates for services, if inflation adjustments were utilized, and if those increased costs did not materialize when rates are set by the Commission, the Company will have

recovered costs greater than its costs of service and over-recovered costs which ratepayers will not be able to get back.

Q. IF THE COMMISSION AUTHORIZES THE COMPANY TO RECOVER COSTS IN EXCESS OF THE COST OF SERVICE, WILL RATEPAYERS RECOVER THE AMOUNT THEY WERE OVER-CHARGED?

A. It would be difficult for the Commission to claw back the over-recovery once final rates are set. While Mr. Becker noted that if the projected costs of planned projects do not increase as projected, the Company will use those funds available for additional projects, he did not identify whether those additional projects will occur during the FPFTY period or beyond the FPFTY period. If beyond the FPFTY period, then it is beyond the test year time period, and the scope that the Commission can use to set rates for service. Moreover, basic ratemaking principles require that costs should be prudently incurred and documented and known and measurable. Inflationary costs cannot be precisely determined because there is no way to pinpoint a particular cost and determine whether that particular cost has been affected by the use of an inflation factor. Costs must be valid and reliable with appropriate data to measure the expenditures adjustments.

Q. HOW DID COMPANY WITNESS MS. FOLKS RESPOND TO YOUR ADJUSTMENTS TO PEOPLES' PLANT IN SERVICE?

A. Ms. Folks stated that she did not agree with my recommendation to remove inflation adjustments and that removing inflation adjustments ignores the reality of costs increasing over time. (Statement No. 11-R at 2).

Q. WHAT IS YOUR RESPONSE TO MS. FOLKS?

A. While she may characterize automatic cost increases as "real world reality" it is important to note that Peoples is a regulated public utility that carries a burden of proving that it will incur the costs claimed in this case. Simply claiming that costs increases are "reality" is not enough to warrant charging ratepayers millions more in rates as a course of business. More is required. Moreover, even in the competitive environment, companies do not always simply pass cost increases onto consumers, they have to weigh whether doing so will lead to consumers seeking alternatives. As a provider of monopoly utility service, Peoples' customers cannot seek alternatives and, therefore, it is incumbent upon the

Commission to impose the kind of restraint that would be exercised by competition. Thus, I do not believe this issue is as straightforward as Ms. Folks suggests.

Q. HOW DID MR. BECKER RESPOND TO YOUR ADJUSTMENT THAT DISALLOWS THE COST OF REPLACING THE BARE STEEL PIPE IN THE ROBINSON INCIDENT?

A. Mr. Becker stated that he did not agree with my adjustment, as he claimed that the steel pipelines in Robinson were not damaged as a result of the incident. (Statement No. 5-R at 8-9). Mr. Becker stated that pipeline did not rupture and that they "could have safely remained in service despite the incident." Despite Mr. Becker's claim that the pipelines were not damaged and that they were safe, he claims that Peoples replaced them at the direction of the Commission's Gas Safety Division. (Statement No. 5-R at 9).

Q. WHAT IS YOUR RESPONSE?

A. Mr. Becker provided no further reasoning for requiring these costs to remain in rate base, but his claim that the pipeline could have safely remained in the ground adds an additional basis for my denial of the replacement costs. (OCA-XXVII-002, which is attached as Exhibit DM-SR-38). However, even though replacement of the bare steel pipe was required by the Commission, but-for Peoples' underlying over pressurization event, there is no evidence that ratepayers would be paying to replace the impacted pipeline in the FPFTY, and Peoples confirmed that, but-for the Robinson incident, the pipeline replacement would not have been accelerated (OCA-XXVII-002). Mr. Becker stated that this incident was not covered by insurance (OCA-XXI-001) nor through shareholder funding. Importantly, Peoples provided correspondence that demonstrated that the Commission's Pipeline Safety Division directed it to accelerate replacement of assets that were affected by the overpressure incident (OCA-XXVII-001 and attachment, included in Exhibit DM-SR-38). Therefore, Peoples' replacement appears to have been made with the determination that the pipeline was impacted by the over pressurization incident As I stated in my direct testimony, ratepayers should not be responsible to pay for costs to replace plant, whether the plant is replaced through an accelerated process or through other means, if the Company would have replaced the plant at a future time beyond the FPFTY. The Company decided to replace this pipe through an accelerated process and stated that it would have been

replaced in the future under the Company's LTIIP, but this is wholly at odds with its claim that the pipeline could have safely remained in the ground, depriving ratepayers of the use of it earlier than necessary. Mr. Becker's claim that the Robinson bare steel pipes could have safely remained in service and not been replaced shows that the Company did not contemplate replacing the plant by the end of the FPFTY. (Statement 4-R at 9). Peoples has not overcome the fact that, but-for the Robinson incident, the pipeline replacement costs would not be part of this case.

Q. WHAT DID MS. SNYDER STATE REGARDING YOUR CASH WORKING CAPITAL (CWC) BALANCE?

A. Ms. Snyder did not agree with my adjustments to the Company's CWC. (Statement No. 12-R at 3). Ms. Snyder stated that I made different expense adjustments that impact the CWC claim and which the Company does not accept, so the associated cash working capital adjustments should not be accepted. Ms. Snyder stated that my cash working capital is not correct because I did not include or mention adjustments to short-term debt and the total adjustments should only include long-term debt. (Statement No. 12-R at 4).

Q. WHAT IS YOUR RESPONSE?

A. My adjustments reflect the flow-through of my recommended adjustments to various rate base and operating expense adjustments using the Company's methodology and format. With respect to short-term debt as an inclusion to determine interest expense, I did not include this to compute my recommended interest expense. (Exhibit DM-SR-3 and 7). My adjustments are solely related to the Long-Term Debt interest expense as shown on my Exhibit DM-SR-2.

Q. DID MS. SNYDER MAKE ANY ADJUSTMENTS TO THE COMPANY'S CWC?

A. Yes. She adjusted the CWC by a decrease of $195,165 and arrived at an updated CWC balance of $35,661,101. (Statement No. 12-R at 4). The Company's as filed CWC was $36,256,917.

Q. WHAT ADJUSTMENTS DO YOU HAVE RELATED TO THE COMPANY'S CWC?

A. With my updated revenue requirement proposal, my recommended CWC is $35,117,204 as shown on my Exhibit DM-SR-3.

B. OPERATING INCOME

1. Operating Revenues

Q. HOW HAS THE COMPANY RESPONDED TO YOUR OPPOSITION TO THE COMPANY'S PROPOSED WEATHER NORMALIZATION ADJUSTMENT (WNA)?

A. Company witness Ms. Scanlon claimed that the issue of complexity of the programs that were raised by me and by other OCA witnesses, should not be viewed as a reason for rejection. (Statement No. 3-R at 9). Ms. Scanlon stated that there are other Pennsylvania natural gas distribution companies that have Commission approved WNAs in place, which supports the notion that, while the WNA contains multiple steps, customers are able to understand the nature of the mechanism. Ms. Scanlon stated that other mechanisms such as the universal service charge rider are included in the distribution charge rate and displayed on the customer's bill as the delivery item for presentation purposes. (Statement No. 3-R at 9). Ms. Scanlon stated that the Company is anticipating customer education and awareness of the WNA and will ensure training for customer service center representatives to be able to walk a customer through what the WNA is and how it is calculated. (Statement No. 3-R at 10). Ms. Scanlon stated that the Company is taking necessary steps towards alleviating customer concerns. (Statement No. 3-R at 10). Ms. Scanlon stated the Company anticipates that over a length of time the total weather-related cumulative impact is expected to be zero or near zero. (Statement No. 3-R at 10).

Q. WHAT IS YOUR RESPONSE TO MS. SCANLON'S CLAIMS THAT CUSTOMERS WILL UNDERSTAND THE WNA?

A. First, Mr. Scanlon's continued reliance on other utilities to support Peoples' WNA proposal is both telling and concerning. This case is about Peoples' WNA proposal and relying on the experience of other utilities to support it is insufficient, particularly here where there is no evidence that customers understand WNA proposals. The existence of other WNAs in

Pennsylvania also does not mean that the WNA is easy to calculate or understand for consumers, who should be able to determine how their bill is calculated or how it changes from month to month, especially for customers who have only ever received service from Peoples. Finally, I note that for customers to understand the WNA charge, they need to be able to identify the charge and basis for it. This will not be possible because under Peoples' proposal, the charge will not be listed as a separate line item on customers' bills. If customers cannot see their WNA charge, it is unclear how they are supposed to understand the charge.

Q. HOW DO YOU RESPOND TO MS. SCANLON'S CLAIMS THAT THE CUMULATIVE WNA IMPACT WILL BE ZERO?

A. This is a strange claim for them to make as it undercuts their need to impose the charge. If over time, the effect is zero then why charge it? If the answer is that they need revenue in the interim and it is only in the long term that the effect is zero, then this clearly demonstrates that they are shifting all risk of weather-related uncertainty and load to captive consumers – who are likely far less positioned to bear that risk – as opposed to retaining it themselves as a rate-regulated provider of monopoly service.

That said, I do not think that the Company can determine with certainty that total weather-related cumulated impact will be zero or near zero if the WNA is implemented. Climate change is real and will impact people in some way, shape, or form. The mere fact that the Company is using climate change to adjust its revenues during days when weather fluctuates in the opposite direction in the winter season will have the effect of placing additional burdens and all the risks on ratepayers for uncontrolled weather and weather patterns. Ratepayers should not be put in a position to pay for or absorb costs related to climate change while the Company bears little or minimal risks. Climate change affects not only customers but the Company as well, and the Company's WNA adjustments provide no guard rails to protect the customers while the Company is able to collect additional revenues when weather patterns become abnormal. I believe there are too many variables in implementing the WNA. In addition, the fact that other natural gas distribution companies have a WNA in place, does not support the fact that Peoples should also have one also. Ms. Scanlon raises the Philadelphia Gas Works WNA mechanism that has

experienced unusually large and unanticipated charges to customers but states that Peoples will not experience the same situation (Statement No. 3-R at 12-13). Ms. Scanlon provides no further information to justify the Company's position on its WNA, but for the use of different weather, different Heating Degree Days, and different delivery rate. I am still recommending that Peoples not implement a WNA in this proceeding. Other OCA witnesses provide additional reasons why the WNA should be rejected.

2. OPERATION AND MAINTENANCE EXPENSES

a. Labor/Vacancy Adjustments

Q. WHAT DID COMPANY WITNESS MR. WACHTER STATE WITH RESPECT TO YOUR ADJUSTMENTS TO LABOR AND LABOR RELATED EXPENSES?

A. Mr. Wachter stated that he did not agree with my labor vacancy adjustment of 2.7% (Statement No. 2-R at 16). Mr. Wachter stated that the Company's proposed vacancy level represents more normalized and expected vacancy levels going forward. Mr. Wachter stated that the Company has seen increased levels of vacancy but is expected that levels will revert to pre-COVID vacancies. Mr. Wachter stated that there is an expectation that the recent spike in turnover as part of the post-COVID "Great Resignation" was an anomaly and does not represent the future. (Statement No. 2-R at 17).

Q. WHAT IS YOUR RESPONSE REGARDING LABOR ADJUSTMENT TO VACANCIES?

A. In all organizations, there is always a level of vacancies that will not be filled at any given point of time. This is due to employees retiring, leaving the company, getting fired, being laid off, etc. My 2.7% vacancy ratio does not incorporate COVID impacts that have occurred in 2020 and, in part, 2021. My vacancy rate ratio applies to Peoples' expected 2024 levels of full-time employment. (OCA-Set 7-20). In that response, 2% is related to terminations and 4% is related to retirements. Mr. Wachter claimed that 52 of the open positions as of August 31, 2023 have been filled, but he has not identified whether any employees have left the Company or updated whether this is net of termination or retirements. The Company has not identified any dates as to when the remaining additional

vacancies will be filled, or whether they would be filled at all. Allowing the Company to recover additional expenses for all of its proposed vacancies will cause the Company to over-earn from day one once new rates become effective.

Q. WHAT DID MR. WACHTER STATE REGARDING THE COMPANY'S UPDATED VACANCIES?

A. Mr. Wachter stated that if my vacancy ratio adjustment is accepted the amount should be reduced by $247,205 as I did not remove the Company's as-filed vacancy adjustment prior to my calculation. (Statement No. 2-R at 18).

Q. WHAT IS YOUR RESPONSE?

A. I am unsure how the Company calculated the $247,205 adjustment, as Mr. Wachter did not provide a calculation as to how he arrived at that adjustment. Given this, I am still recommending my vacancy rate ratio of 2.7% with an adjustment of ($1,742,925) as shown on my Exhibit DM-SR-11.

Q. DO YOU AGREE WITH MR. WACHTER THAT, IN THE EVENT OF A RATE SCALE BACK, THE COMPANY SHOULD RECEIVE AN ADDITIONAL $538,590 IN LABOR EXPENSE?

A. No. As I stated above, the Commission should not authorize a utility to be able to recover expenses in excess of the amount requested in an initial filing. Further, Mr. Wachter did not substantiate his claim that the Company should receive an additional $538,590 for its labor expenses. The discovery response cited by Mr. Wachter indicated that the Company underestimated its labor expense by $411,976 (not $538,590) because "the original filing included an estimated average salary whereas the revised schedule was prepared by position." (APW-R-1 at 39). The Company elected not to submit its filing using a more accurate schedule of the O&M cost of labor; Peoples should not be able correct its use of a less accurate number during the course of litigation merely because it is higher than the amount requested in the initial filing. Peoples had access to identical information at the time of its filing and upon issuing its response to this discovery request and, if it wished to recover labor expense by position, then it should have done so, instead of recovering through an estimated average salary. In addition, Mr. Wachter did not describe how he

arrived upon the final adjustment of $538,590 when the discovery response upon which his update is based evidences an adjustment of $411,976.

Q. DOES MR. WACHTER'S UPDATE CHANGE YOUR RECOMMENDATION OF THE USE OF A VACANCY RATE RATIO?

A. No. I still recommend the usage of vacancy rate ratio. It is a more accurate method to determine the number of full-time employees the Company will retain during the test year periods than the method used by the Company either in its initial filing or updated recommendation.

b. 5-Year Average Annual Increases / Inflation Adjustments

Q. WHAT HAS MR. WACHTER STATED WITH RESPECT TO HOW THE COMPANY USED 5-YEAR AVERAGE ANNUAL INCREASES TO MAKE ADJUSTMENTS TO CERTAIN HTY EXPENSES?

A. Mr. Wachter stated that the Company used a five-year historical percentage experienced change for each expense type individually and applied it to the HTY balances to determine the amount of change in balance to expect. (Statement No. 2-R at 10). Mr. Wachter stated that using a five-year average increase methodology utilizes known and recently incurred activity for each specific expense amount. Mr. Wachter further stated that a standard inflation adjustment is often based upon broad inflation indicators or even one over-riding inflation metric applied to different expense categories, and an inflation adjustment is an approach that weighs various categories into one, such as CPI – the Consumer Price Index. (Statement No. 2-R at 10-11).

Q. WHAT DID MR. WACHTER STATE REGARDING YOUR DISALLOWANCE OF INFLATION?

A. Mr. Wachter stated that I am proposing to disallow any sort of percentage increase referred to as inflationary adjustments that are not actually known and measurable as they do not reflect the true cost of expenses. Mr. Wachter stated that he does not agree with my adjustments related to inflation. He stated that the Company's utilization of historic trends is sufficient evidence of the proposed increase, and it is unreasonable to believe that these costs are not going to increase over the 25-month projected period in this proceeding especially considering the wide-spread inflation being experienced across the world. Mr.

Wachter stated that by not allowing a reasonable methodology to project increases, such as Company-experienced increases by specific categories, I am effectively reverting to utilization of historic test year balances which is contrary to the methodology widely accepted in Pennsylvania base rate cases. (Statement No. 2-R at 13).

Q. WHAT IS YOUR RESPONSE?

A. Costs change over time, but not proportionately or evenly across the board. While historical trends are a good indicator of past costs, applying this method to set expenses to be recovered prospectively may not be representative of what the Company is expected to incur. The Company cannot predict with certainty or assurance what level of inflation will occur throughout 2024 and throughout the FPFTY 2025 period. Mr. Wachter's claim that wide-spread inflation is being experienced across the world is an inappropriate characterization of costs adjustments when setting rates for service in the United States, or, specifically, in Pennsylvania. That cost increases are being experienced in other parts of the county or the world is not a suitable argument to claim in this proceeding and in the Commonwealth of Pennsylvania. The Company has not provided any further information except for the utilization of five-year averages of cost adjustments. While the Company has characterized the five-year average as actual costs incurred between 2017-2021, this period covers the COVID-19 pandemic in which costs fluctuated greatly, abnormally and extraordinarily. Costs began to stabilize in 2022. Basic ratemaking principles require costs to be known and measurable and not simply determined by applying any sort of index to calculate future costs. While cost increases are likely over time, simply generally claiming that costs are anticipated to increase by X% is insufficient to substantiate the claimed increases, and more should be required before ratepayers must pay for projected increased costs.

Q. WHAT DID MR. WACHTER CLAIM REGARDING HIS INFLATIONARY ADJUSTMENTS?

A. Mr. Wachter stated that the Company did apply a standard inflationary adjustment to its Injury and Damages and Advertising costs by the use of the CPI. Mr. Wachter stated that due to the fluctuating nature of these categories and types of expenses, it was more reasonable to use an index-based approach. (Statement No. 2-R at 14).

Q. WHAT DID MR. WACHTER STATE REGARDING YOUR DISALLOWANCE?

A. Mr. Wachter did not agree with my disallowance of these expenses stating that inflation is a real thing and is expected in all expense categories over time. He argued that utilizing an actual experienced inflation factor to project these costs is a reasonable approach. (Statement No. 2-R at 15). He stated that during 2022 and 2023 monthly inflation was an average of 5.49%. (Statement No. 2-R at 15).

Q. WHAT IS YOUR RESPONSE?

A. As the Company indicated on page 11 of Statement No. 2-R, these Inflation Adjustments represent $6.755 million of expenses that the Company proposes to pass onto ratepayers. These types of adjustments are not the sort of cost adjustments that should be used to set rates for service. I note that the Company identified that during 2022-2023 inflation was averaging at 5.49%, monthly. Costs of service should be set prospectively. Inflationary costs cannot be predicted with certainty because there is no way to pinpoint a particular cost and determine whether that particular cost has been affected by inflation, or if it has been affected to the same extent as other costs within the same account. I believe that inflation adjustments are not a known and measurable adjustment in computing rates for service, and do not provide a good index of cost increases, but rather are overall blanket-type adjustments that are applied to all goods and services, that may not directly relate to costs incurred by the Company. It is simply a forecast or prediction of cost adjustments which may or may not occur or be realized. While inflation adjustments are used to develop economic data, they should not be used for ratemaking purposes. The costs of goods and services fluctuate, the costs increase and decrease over time. The Company has not provided any evidence that all of its costs that it applied an inflation factor to have actually increased. The Company has not provided any proof from its vendors, third party suppliers, or updated services agreements that specifically address annual increases or annual adjustments to the products and services supplied to the Company. Basic ratemaking principles require that, in order for costs to be included in the revenue requirement, these costs must be just and reasonable, prudently incurred, and known and measurable. The Company has the opportunity to recover all of its costs in rates, but is not guaranteed to do so. My recommendation is the same as under my Direct Testimony. All

Inflation Adjustments should be removed from the Company's revenue requirement equation.

c. Short-Term Incentive Program (STIP)

Q. WHAT DID MR. WACHTER STATE REGARDING YOUR ADJUSTMENT TO THE COMPANY'S STIP?

A. Mr. Wachter stated that I did not provide any support for my position regarding the disallowance of the Company STIP in the amount of $2,562,451 related to financial performance and also included in other O&M expenses of $885,507 (Statement No. 2-R at 19).

Q. WHAT WAS MR. WACHTER'S EXPLANATION ON WHY HE DISAGREED WITH YOUR ADJUSTMENTS TO INCENTIVE COMPENSATION?

A. Mr. Wachter stated that my proposal should be rejected for three reasons: 1) the overall level of incentive compensation claimed is part of a fair, market-based level of total compensation; 2) there are no regulations that prohibit utilities from recovery of incentive compensation that is tied to financial metrics and: 3) financial metrics provide customers a direct benefit by incentivizing employees to be good financial stewards of company and ultimately customer funds. (Statement No. 2-R at 19-20). Mr. Wachter's argument is that Peoples must offer benefits comparable to other companies in order to retain talent by offering market-based compensation and incentive programs, and eliminating or reducing these programs would have a significant impact on the Company's ability to attract and retain competent employees. Mr. Wachter stated that he is not aware of any regulations that prohibit utilities from recovery of incentive compensation tied to financial metrics. Mr. Wachter addressed a Commission Order that rejected the argument that was made to disallow recovery of certain employee compensation costs because they contained certain financial metrics beyond metrics related to duties directly related to the provision of service, and that the fact the program included a financial metric does not disqualify it from allowance as an expense for inclusion in the rate base. (Statement No. 2-R at 22). Mr. Wachter stated that financial metrics incentivize employees to be good financial stewards of the company and, ultimately, customer resources, thus they provide customers a direct benefit. He argues that financial incentives drive employees to be efficient with the costs

they incur while still achieving the mission to make customers' lives better. Mr. Wachter claims such savings delay the need for future rate cases and this compensation is also tied to and aimed at improving operational effectiveness. (Statement No. 2-R at 22).

Q. WHAT IS YOUR RESPONSE?

A. The Company has the right and the opportunity to provide its employees with market-based and comparable compensation as other companies offer. While the Company assumes that such compensation may be at a fair and reasonable level to include in rates, there should be no assumption that all of these costs should be recovered. The Company has the opportunity to recover these costs for ratemaking purposes only if they are prudent and reasonable and to the benefit of ratepayers. It is not the responsibility of ratepayers to be required to recover the costs, as it is clearly the responsibility of the Company to share in the burden of absorbing these costs. The Company should not have unfettered access to ratepayers' money when it does not benefit ratepayers. I am also not arguing for eliminating these incentive programs, but rather the costs related to financial metrics and performance should be the risk that the Company bears. While I understand the importance of providing incentive compensation to employees, I do not believe that certain incentive compensation should be recoverable from ratepayers, when the incentive compensation does not provide any specific benefits in the form of customer services, satisfaction, safety and reliability to ratepayers. I believe that certain types of incentive compensation should only be recovered from ratepayers if it provides such benefits as described above. I do not believe that benefits related to the Company's financial performance, such as **(BEGIN CONFIDENTIAL)** [redacted] **(END CONFIDENTIAL)** should be recovered from ratepayers, as these types of performance incentives provide no benefit to ratepayers, but rather provide benefits to shareholders. In my opinion, part of the Company's argument is that, in order to provide safe and reliable service to its customers, it has to incent employees. This appears to be an all-or-nothing approach to compensation in that, without appropriate incentive compensation, employees

[1] The source for this information is Confidential Volume 12, Ex. 19, RR-27, Attachment B, p. 8 of 12.

would not be able to perform their duties or be good financial stewards. I note that the Company's incentive compensation related to financial performance is comprised of **(BEGIN CONFIDENTIAL)** [redacted] **(END CONFIDENTIAL)** of the total compensation requested in this proceeding.

Q. WHAT OTHER OPPOSITION DID MR. WACHTER RAISE REGARDING YOUR DISALLOWANCE TO CERTAIN OF THE COMPANY'S STIP?

A. Mr. Wachter did not agree with my disallowance of incentive compensation related to Diversity, Equity and Inclusion (DEI) of $512,615. (Statement No. 2-R at 23). He stated that my arguments are contradictory in that these types of compensation do not provide ratepayer benefits and that if Peoples believe these incentive costs do provide customer benefits then Peoples should be burdened with providing the dollars and not the ratepayers. (Statement No. 2-R at 23). Mr. Wachter stated that he was aware of comments made by the OCA on the Commission's Diversity at major jurisdictional utilities Policy Statement and that he was not aware that an argument was made that any costs associated with the amended policy would not be recoverable. (Statement No. 2-R at 23-24 and Exhibit No. APW-R-6).

Q. WHAT IS YOUR RESPONSE?

A. The Company has provided no evidence to support this initiative or whether the DEI actually produced benefits it was originally proposed to do because no DEI goals and evaluating metrics are established to demonstrate ratepayer value. While Mr. Wachter is correct that the OCA submitted a comments recognizing the value of workplace diversity, those comments do not somehow translate into a basis for approving claimed DEI incentive costs that Peoples has not supported. This is particularly true where there are no positive ratepayer benefits that have been demonstrated to accrue for payment of these incentives. While the Company touts the benefits of DEI, as shown on Company Exhibit APW-R-5, it has not provided or proven that these benefits were present and have actually resulted in superior customer experiences. I did not see any information included in the Company's filing that reflects DEI initiatives and the benefits accrued to ratepayers. (Company Exhibit No. 19, RR-27). While DEI initiatives may benefit the Company and its customers, Peoples still bears the burden of demonstrating that this is true in the context of their

particular programs and offerings. My rejection of these expenses is specific to this case where Peoples has not demonstrated those benefits, it is not because of the nature of the expenses.

Q. DID MR. WACHTER PROVIDE ADDITIONAL SUPPORT FOR THE COMPANY'S CLAIM THAT DEI INCENTIVE COMPENSATION DIRECTLY BENEFITS RATEPAYERS COMPARED TO THE COMPANY'S INITIAL FILING?

A. No. Mr. Wachter provided no indication that the Company's DEI incentive compensation is tied specifically to providing ratepayers with improved quality of service, customer service, safety, or reliability. **(BEGIN CONFIDENTIAL)** [redacted] **(END CONFIDENTIAL)** (Company Exhibit No. 19, RR-27). Therefore, Mr. Wachter's claim that DEI incentives provide benefits to ratepayers, specifically and based on the facts of this case, instead of the Company, generally, is not supported by his rebuttal testimony, attached exhibits, or the Company's initial filing. My recommendation is to disallow these costs from the Company's incentive compensation.

Q. HAS MR. WACHTER'S EXPLANATION CHANGED YOUR MIND WITH RESPECT TO THE COMPANY STIP CLAIM?

A. No. As I stated previously above, ratepayers should not be burdened by costs that do not specifically benefit them. Just as Mr. Wachter stated there are no regulations that prohibit a utility from recovering incentive compensation tied to financial performance, there are no specific regulations that allow or require recovery. Costs are and should be based upon prudent use of ratepayer money, as well as reasonable and appropriate uses. Mr. Wachter's statement that eliminating or reducing these programs would have a significant impact on the Company's ability to attract and retain competent employees is without merit, as the

Company's shareholders would absorb the difference between what the Company can recover from ratepayers. The Commission is not required to allow the Company to recover all of its proposed expenses in rates, but rather expenses that are reasonable and prudent in nature.

d. Corporate Insurance

Q. WHAT DID COMPANY WITNESS MR. WACHTER STATE REGARDING YOUR ADJUSTMENT TO CORPORATE INSURANCE?

A. Mr. Wachter disagrees with my removal of the Company's adjustments related to Corporate Insurance which adjusted the expense by 13.10% in the FTY and in the FPFTY periods. He stated that the insurance expense increase represents the average total premium increase experienced from the 2023 invoices as compared to the 2022 premiums and the premium increase experienced from the 2022 invoice as compared to the 2021 premiums. (Statement No. 2-R at 26). Mr. Wachter stated that the Company further affirmed the reasonableness of this increase by its third-party insurance brokers. (Statement No. 2-R at 26).

Q. WHAT IS YOUR RESPONSE?

A. My recommendation has not changed from my Direct Testimony. The Company has not provided any updated evidence or documentation in support of its proposed 12.91% increase, nor does it appear that it received any updates from its insurance provider that costs are expected to increase. The Company is utilizing its past cost increases to justify future costs increases with no concrete information received from a third-party insurance broker to determine any increases, but for industry data forecasts which state that these "forecasts beyond this horizon is scarce." (Statement No. 2-R at 26 line 7). The Company has provided no evidence to support this adjustment.

e. Employee Expenses

Q. WHAT HAS COMPANY WITNESS MR. WACHTER STATED WITH REGARD TO YOUR ADJUSTMENT TO EMPLOYEE EXPENSES?

A. Mr. Wachter opposes the removal of $221,500 for Employee Service and Safety awards, and the removal of $32,937 for Employee events. Mr. Wachter stated that these awards

are an important component of the Company's recognition programs and as part of the workplace culture survey completed in mid-2018, the results revealed that employees felt the Company could improve both recognition and reward program objectives and frequency. (Statement No. 2-R at 28). The Company approved the reinstatement of service awards to reward employees' on-going commitment of their careers to Peoples. This was intended to encourage a more frequent and broader recognition of the behaviors and achievements that reflect excellent performance and contributions to Peoples' values, mission and vision. (Statement No. 2-R at 28).

Q. WHAT IS YOUR RESPONSE?

A. If the Company believes that these costs incentivize employees to perform their duties and provide a comradery among the employees, then the Company's shareholders should pay for these awards. These costs reflect achievements for employees' ongoing commitment to their careers at the Company and are essentially anniversary awards. While I commend the Company recognizing employees for staying at the Company, recognizing their performance and contributions to the Company to achieve Peoples' values, mission and vision, I do not believe that ratepayers should be paying for costs based upon these criteria or how long an employee is employed at the Company. Employees are already receiving incentive compensation, which I am recommending an allowance for in rates, related to customer service, performance and other customer related issues. To ask for ratepayers to pay for other types of employee or service awards that reflect longevity is not reasonable and should not be allowed for recovery.

Q. WHAT DID MR. WACHTER STATE ABOUT THE OTHER DISALLOWED EXPENSES YOU RECOMMENDED IN YOUR DIRECT TESTIMONY?

A. Mr. Wachter opposes the removal of $32,937 related to events, as he argues that the Company has demonstrated that these programs are prudent costs that reflect reasonable and important costs aimed at retaining and attracting employees. (Statement No. 2-R at 29). These events reflect employee gatherings (not related to utility regulation or operations) such as the Lernerville Raceway event, Special Olympics polar plunge event, team lunches and other similar costs. (Statement No. 2-R at 30).

Q. WHAT IS YOUR RESPONSE?

A. Ratepayers should not be paying for costs, through their utility bills, to allow employees to partake in this type of entertainment. The Company is in the regulated business of providing gas service to customers, at reasonable rates, in a safe and proper manner. Employees are hired by the Company to perform their duties and responsibilities in a proper manner, and in turn, receive compensation, which includes non-salary benefits, such as admission to events outside of work hours. The Company should not ask for costs and expenses to be recovered from ratepayers, over and above the employee's compensation not related to their duties and performance, particularly where the costs are so far outside of the spectrum of utility service that they extend to employees attending events at a raceway. These costs do not provide safe, proper and reliable service to customers, and the Company has not specifically identified how attending sporting events, tailgating and going to entertainment venues benefits customers. These are not the sort of expenses a public utility under the purview of the Commission should include in the day to day costs of operating a natural gas company.

f. Travel and Entertainment Expenses

Q. WHAT DID MR. WACHTER STATE REGARDING YOUR ADJUSTMENT TO TRAVEL AND ENTERTAINMENT EXPENSES?

A. Mr. Wachter has an issue with my removal of $829,093 of travel and entertainment expense (Statement No. 2-R at 31). He stated that these expenses benefit customers and represent valid travel costs, employee events, sports sponsorships, and other such as meals, overtime, business related and working meals. (Statement No. 2-R at 32).

Q. WHAT IS YOUR RESPONSE?

A. In reviewing the further breakdown of the Company's travel and entertainment expenses, shown on Statement No. 2-R, at 32, I note that these costs are mainly for attending employee events, sporting events and other non-related utility operations expenses. Such costs are clearly beyond the scope of reasonableness for inclusion in the Company's revenue requirement, as ratepayers will see no direct benefit from Peoples' employees attending sporting events, tailgating, or leadership training events. In response to OCA-

Set 8-6, which refers to I&E RE-028, I did not remove the costs related to Travel Expenses of $158,284. I continue to argue against allowing ratepayers to pay for these travel and entertainment expenses when the detail on such travel is still unidentified or lack of description for such costs.

g. Company Memberships

Q. WHAT HAS MR. WACHTER STATED WITH REGARD TO YOUR ADJUSTMENTS TO COMPANY MEMBERSHIPS?

A. Mr. Wachter stated that my adjustments to the Company's Memberships costs are not merely social organizations. Mr. Wachter stated that these costs clearly provide benefits to customers. (Statement No. 2-R at 35). He provides no further argument for inclusion of these costs but for an explanation and identification of certain organizations.

Q. WHAT IS YOUR RESPONSE?

A. My argument as stated in my Direct Testimony has not changed. These costs do not comport to costs associated with Company Memberships, but rather to organizations in the form of membership fees, such as Chamber of Commerce dues, convention and vacation visitors' bureaus and lobbying related expenses, that make the Company a good corporate citizen. Organizations which provide economic development to areas where the Company services and policy analysis on regulatory issues provide no demonstrable benefit to ratepayers. The notion that "a strong economy in the state provides a clear benefit to customers" is too far removed from utility service to justify inclusion in the revenue requirement, as there is no direct connection to providing customers with adequate service, customer service, safety, or reliability. (Statement No. 2-R at 34 lines 4-5). In 66 Pa. C.S. Section 1316.1, regarding the recovery of club dues, it states that "no public utility may charge to its customers as a permissible operating expense for ratemaking purposes membership fees, dues or charges to fraternal, social or sports clubs or organizations." As such, ratepayers cannot be charged for costs associated with these types of expenses.

h. Advertising

Q. WHAT HAS MR. WACHTER STATED WITH REGARD TO YOUR PROPOSED ADVERTISING EXPENSE ADJUSTMENT?

A. While Mr. Wachter did not specifically address my adjustments to the Company's Advertising expenses, he did address my previous disallowance of my inflation adjustments.

Q. WHAT IS YOUR RESPONSE?

A. Again, these types of adjustments are not the sort of cost adjustments that should be used to set rates for service. Costs of service should be set prospectively. Inflationary costs cannot be predicted with certainty because there is no way to pinpoint a particular cost and determine whether that particular cost has been affected by inflation. I believe that inflation adjustments are not a known and measurable adjustment in computing rates for service, and do not provide a good index of cost increases, but rather are overall blanket-type adjustments that are applied to all goods and services, that may not directly relate to costs incurred by the Company. The Company has not provided any evidence that all of its costs that it applied an inflation factor to have actually increased. My recommendation is the same as under my Direct Testimony. All Inflation Adjustments should be removed from the Company's revenue requirement equation. Peoples can always seek additional rate relief if inflation-based increases materialize; however, ratepayers cannot do so. Absent additional support demonstrating that the increases that Peoples projects will materialize, ratepayers may overpay for essential utility service without recourse.

i. Fleet Maintenance and Fuel, License and Permits, Injury and Damages, and Utilities and Fuels

Q. WHAT HAS MR. WACHTER STATED IN RESPONSE TO YOUR ADJUSTMENT REGARDING FLEET MAINTENANCE AND FUEL AND OTHER RELATED COSTS THAT ARE IMPACTED BY INFLATION?

A. As stated previously, Mr. Wachter opposes my adjustment to the Company's inflation related adjustments in the FTY and in the FPFTY periods.

Q. WHAT IS YOUR RESPONSE?

A. As previously stated above, I am recommending that all inflation adjustments be removed from the Company's revenue requirement equation.

j. Materials and Supplies

Q. WHAT DID MR. WACHTER STATE WITH REGARD TO YOUR MATERIALS AND SUPPLIES ADJUSTMENT?

A. Mr. Wachter stated that my adjustment to remove 2.94% of inflation costs in the FTY and in the FPFTY periods totaling $646,373, and 5% of inflation related to expected increases resulting from increased costs per fault or $49,932. He did not agree with my adjustment to remove additional costs related to planned increase within the Damage Prevention and Leak Survey Departments. (Statement No. 2-R at 43).

Q. WHAT IS YOUR RESPONSE?

A. Mr. Wachter's expectation that the "average cost per fault, higher number of faults expected and the higher cost of anodes recently experienced" will increase or continue to increase is not sufficient to change my opinion, as it is still an inflationary adjustment. (Statement No. 2-R at 43). As previously stated above, I am recommending that all inflation adjustments be removed from the Company's revenue requirement equation.

k. Other O&M

Q. WHAT DID MR. WACHTER STATE REGARDING YOUR ADJUSTMENT TO THE COMPANY'S PROPOSED O&M EXPENSE?

A. Mr. Wachter stated that I made an adjustment related to incentive compensation of **$**885,507.

Q. WHAT IS YOUR RESPONSE?

A. As I stated previously in my argument related to incentive compensation, I am recommending disallowance of these costs that relate to **(BEGIN CONFIDENTIAL)** [redacted] **(END CONFIDENTIAL)** While Mr. Wachter addressed my adjustments in other O&M expense

of $885,507, I did not see Mr. Wachter's Other O&M section in Statement No. 2-R (page 19), that discusses this adjustment.

l. Payment Process Fee

Q. WHAT DID MR. WACHTER CLAIM REGARDING YOUR ADJUSTMENTS TO THE COMPANY'S PROPOSED PAYMENT PROCESSING FEES?

A. Mr. Wachter alleged that I was comfortable with the recovery of these costs including the recovery of such costs related to the Peoples Gas Division customers but did not recommend full recovery of the Company's proposal. (Statement No 2-R at 53).

Q. WHAT IS YOUR RESPONSE?

A. As I previously testified to in my direct testimony, I believe these adjustments are too speculative and uncertain to be included in the Company's revenue requirement. While I understand that the Payment Processing Fee initiative will improve customer experience and customer satisfaction, the increase to be expected prospectively is not 100% certain. While some households may take advantage of this payment method, there is no additional information provided by the Company to show the full proposed increase to be recovered through the FPFTY period. While it is reasonable to predict an increase in these costs, there is no evidence to support the full increase requested. I am continuing to recommend 50% of the Company's proposed Payment Processing Fee adjustment, to provide latitude due to an anticipated increase in customer participation, though it was not substantiated sufficiently to justify allowing 100% of the requested increase.

m. Uncollectible Accounts Expense

Q. WHAT DID MR. WACHTER STATE REGARDING YOUR UNCOLLECTIBLE ACCOUNTS EXPENSE ADJUSTMENT?

A. Mr. Wachter stated that, although I accepted the Company's methodology to calculate the uncollectible accounts expenses, my overall adjustment should be rejected as the ultimate recovery of uncollectible accounts expense should be calculated based upon the rate increase approved in this proceeding. (Statement No. 2-R at 55-56).

Q. WHAT IS YOUR RESPONSE?

A. My recommended uncollectible accounts expenses reflects the flowthrough of adjustments that relate to my overall recommended revenue requirement. Mr. Wachter believes that the Commission should approve the full revenue requirement proposal and therefore rejects my recommended uncollectible accounts expenses based upon my recommended revenue requirement as they are unreasonable. The Company cannot have it both ways. Whatever the Commission determines to be the revenue requirement in this proceeding, the uncollectible accounts expense balance should reflect that revenue requirement and not the full proposed revenue requirement of $155.095 million.

n. Rate Case Expenses

Q. WHAT HAS COMPANY WITNESS WACHTER STATED WITH REGARD TO YOUR ADJUSTMENT TO RATE CASE EXPENSES?

A. Mr. Wachter did not agree with my 3-year amortization period of rate case expenses. (Statement No. 2-R at 44). Mr. Wachter stated that Peoples had seven years elapse between the 2012 and 2019 periods as a result of the stay out period committed to in the Company's acquisition of the Equitable Gas Company, and as a result of the Company receiving accounting and regulatory approval with respect to the treatment of the tax repair election in Docket No. P-2020-3021191. (Statement No. 2-R at 44).

Q. WHAT IS THE REASON THE COMPANY HAS SELECTED A TWO-YEAR AMORTIZATION PERIOD?

A. Mr. Wachter stated that the Company projected two years to be the approximate length of time between the filing of this proceeding and the filing of the Company's next base rate proceeding given the Company's LTIIP commitment for infrastructure replacement. (Statement No. 2-R at 45).

Q. WHAT IS YOUR RESPONSE?

A. Instead of amortizing rate case expenses, the Commission normalizes these costs for ratemaking purposes. The use of a three-year normalizing period is based on the history of past rate filings, and typically acts a guide to rate case frequency. Since the Company filed its past rate cases in years 2008, 2010, 2012, 2019 and in 2023, a 15-year span, this

computes to an approximate 3.00 years, on average, between rate case filings. My recommended 3-year period is more than reasonable given the Company's history and frequency of rate case filings. The Company's projected 2-year period to file its next base rate case is just a projection, which can change. If Peoples begins to file rate cases every 2 years then the normalization period will eventually catch up with this projection, but until or unless that occurs, I continue to recommend a 3-year normalization period for rate case expenses at the levels indicated on my Exhibit DM-SR-32 which is based on their actual average time between rate cases.

o. Pension Expense

Q. WHAT HAS MR. WACHTER STATED REGARDING YOUR ADJUSTMENT TO PENSION EXPENSE?

A. Mr. Wachter did not agree with my 5-year average of pension contributions. He stated that the pension funding approach has changed since the acquisition of the Company by Essential Utilities on March 16, 2020, and thus recent history is a better indicator of future costs than past practice especially prior to the Essential acquisition. Mr. Wachter argued that the most recent two years are the best indicator. (Statement No. 2-R at 47-48).

Q. WHAT IS YOUR RESPONSE?

A. The fact that Peoples was acquired by Essential and that the funding approach has changed since the acquisitions does not change the fact that these costs fluctuate from year to year. The Commission can consider the Company's process of calculating the amount of pension costs to be included in a pension plan, but it does not have to accept the Company's argument that its funding approach has changed. The actual costs in prior years have not

changed, under management oversight of either Essential or its predecessor. A breakdown of the Company's 5-years of Pension funding is as follows (OCA Set 7-31):

- 2018 $735,802
- 2019 $2,290,746
- 2020 $560,190
- 2021 $5,343,118
- 2022 $5,408,063

The Company has proposed to adjustment its Pension Expense to $5,670,000 in the FPFPY period. Given these yearly fluctuations and variability, I am continuing to recommend a 5-year average of pension contributions.

p. PBOP Expense

Q. WHAT HAS MR. WACHTER STATED REGARDING YOUR ADJUSTMENT TO PBOP EXPENSE?

A. Mr. Wachter did agree with my 5-year average of PBOP expenses. He did not agree with my adjustment related to the PBOP with respect to the use of a vacancy credit adjustment. (Statement No. 2-R at 48).

Q. WHAT IS YOUR RESPONSE?

A. As discussed above under Pension Expense, these costs have fluctuated from year to year and the fact that Peoples was acquired by Essential does not change the level of costs paid in prior years. This adjustment provides the Company with an additional $148,251 of expenses.

Q. DO YOU AGREE WITH MR. WACHTER THAT, IN THE EVENT OF A RATE SCALE BACK, THE COMPANY SHOULD RECEIVE AN ADDITIONAL $476,452 IN PBOP EXPENSE?

A. No. As I stated above, the Commission should not authorize a utility to be able to recover expenses in excess of the amount requested in an initial filing. Further, Mr. Wachter did not substantiate his claim that the Company should receive an additional $476,452 for its labor expenses. Similarly to the labor expense update described above, the Company merely indicated in the discovery response forming the basis of the update that their use of

an estimate in the initial filing would lead to recovering a lesser amount than a more specific number identified in response to a discovery request. (APW-R-1 at 43). The Company's use of an estimate at the outset does not justify a later attempt during the course of litigation to receive a higher recovery at a more specific amount. Further, as with the labor expense, Mr. Wachter does not provide evidence or calculations to support the ultimate figure of $1,256,374, as neither the cited discovery response or the source of information cited by the discovery response, include the numbers which would support the Company's update, if they existed. (APW-R-1 at 43[2]).

Q. DOES MR. WACHTER'S UPDATE CHANGE YOUR RECOMMENDATION OF THE USE OF A VACANCY RATE RATIO?

A. No. I still recommend the usage of vacancy rate ratio to determine PBOP adjustments. It is a more accurate method to determine the number of full-time employees the Company will retain during the test year periods than the method used by the Company either in its initial filing or updated recommendation, and PBOP flows from the number of employees retained.

q. Outside Services – Contracted and IT

Q. WHAT HAS MR. WACHTER STATE RELATED TO MY ADJUSTMENTS TO OUTSIDE SERVICES CONTRACTED, IT AND A&G EXPENSES?

A. Mr. Wachter did not agree with my removal of the inflation factors in the FTY and in the FPFTY periods related to the Company's Outside Services – Contracted, IT and A&G. (Statement No. 2-R at 50, 51 and 53). With respect to Outside Services – Contracted, Mr. Wachter stated that the remainder of the adjustment of $1,728,595 is related to an incorrect proposal to normalize the expenses for Pig Runs, Pipeline Maintenance and Corrosion costs and Right of Ways costs. Mr. Wachter stated that these costs represent incremental costs in the claim (Statement No. 2-R at 50). With respect to Outside Services – IT, Mr. Wachter stated that the balance of $1,117,550 represents recurring annual costs that should be

[2] This page states that "The revised claim amount is $1,256,374 net of capitalization ($1,815,569 - $559,195) based upon the final response to Exhibit 19, RR-39 for additional details. However, Exhibit No. 19, RR-39 Page 2 of 2 does not evidence the calculation of the number $1,815,569 or the number $559,195.

included in the revenue requirement and should not be normalized. (Statement No. 2-R at 51-52).

Q. WHAT IS YOUR RESPONSE?

A. After reviewing and evaluating Mr. Wachter's argument on these costs, I am accepting the Company's annual adjustment related to Outside Services – Contracted with respect to the annual costs for the Bridge Work, Pressure Tests, Additional Pig Runs, Additional Pipeline Maintenance/Corrosion and Additional Right of Way Maintenance totaling $2,592,893. I am also accepting the Company's Outside Services – IT with respect to the annual costs related to various tax software maintenance, financial software maintenance, document storage, safety, Security Information and Event Management (SEIM) and HR Information System for employee management totaling $1,117,500. These are reflected on my Exhibit DM-SR-16 and 17.

3. DEPRECIATION AND AMORTIZATION EXPENSE

Q. WHAT DID COMPANY WITNESS SPANOS STATE WITH REGARD TO YOUR ADJUSTMENTS TO DEPRECIATION AND AMORTIZATION EXPENSE?

A. Mr. Spanos stated that my basis to adjust my depreciation expenses was the result of my proposal to eliminate the application of inflation factors to some of the capital additions proposed in the rate case. (Statement No. 14-R at 2). Mr. Spanos also stated that my recommended accumulated depreciation balance was the result of my changes in plant. (Statement No. 14-R at 2). Mr. Spanos stated that the specific amounts that is changed by account is required in order to properly adjust the development of the book reserve and forecasted expense at the account level because each account is individually developed based on the remaining life calculation. (Statement No. 14-R at 4). Mr. Spanos stated that I took a high level, functional rate which is not only inaccurate for the future test year but then is magnified for the fully forecasted future test year. Depreciation requires account by account development of plant balances and book reserve development each year. (Statement No. 14-R at 4).

Q. WHAT IS YOUR RESPONSE?

A. I disagree with Mr. Spanos' claim that I essentially oversimplified the entire development of the depreciation components. My understanding for ratemaking purposes is that it is appropriate and reasonable to use a composite rate of depreciation to calculate adjustments. My use of depreciation rates was based upon Mr. Spanos's Exhibit 5B and 5C. It is reasonable to use composite rates of depreciation to calculate adjustments to plant in service and for the related accumulated depreciation and accumulated deferred income taxes. For other adjustments related to Company witness Ms. Saball on the adjustments to book depreciation, I address this aspect under my Income Tax portion of my surrebuttal testimony below.

4. TAXES OTHER THAN INCOME

Q. WHAT HAS COMPANY WITNESS MR. HANECHAK CLAIMED REGARDING YOUR ADJUSTMENT TO TAXES OTHER THAN INCOME?

A. Mr. Hanechak stated that he did not agree with my adjustments to payroll taxes related to my vacancy rate ratio credit and incentive compensation adjustments. (Statement No. 10-R at 2). Mr. Hanechak stated that if my position was accepted then the adjustment of my vacancy credit and incentive compensation are accurate. (Statement No. 10-R at 2-3). Mr. Hanechak did not agree with my adjustment to Property Taxes, citing to the rebuttal testimony of Mr. Becker and Ms. Folks. (Statement No. 10-R at 3). Mr. Hanechak stated that I erred in my calculation of the property tax ratio of 0.00032 and that I should have used a property tax ratio of 0.0001906. (Statement No. 10-R at 4).

Q. WHAT IS YOUR RESPONSE?

A. Since I made adjustments to the Company's Labor Expense, I made corresponding adjustments to the Company's Payroll Taxes, which are flow-through adjustments to properly account for the reduction of Labor Expense. Mr. Hanechak did not address any inconsistencies in my methodology to compute Payroll Taxes; he just argued that my adjustments to the Company's Payrolls Taxes, as a result to my adjustments to Labor Expense, should be denied. With respect to the property tax adjustment, I am accepting Mr. Hanechak's property tax ratio of 0.0001906 which produces an adjustment of ($5,581) instead of ($9,370).

5. INCOME TAXES

Q. WHAT DID MS. SABALL STATE IN REGARD TO YOUR ADJUSTMENT TO THE COMPANY'S INCOME TAXES?

A. Ms. Saball stated that my adjustment to the accumulated deferred income tax balance was incorrect because I did not account for the impact on tax depreciation. She stated that my disallowance of the inflation adjustments in the plant balance, all the components of the taxpayer's tax expense, depreciation expense or reserve for deferred taxes would need to be adjusted under the IRS normalization rules. (Statement No. 6-R at 2-3). Ms. Saball has calculated the impact of my proposed adjustment to the deferred tax balance under the normalization requirements by including the tax impact of reduced tax depreciation. The net result is a decrease in the deferred tax liability of $85,995. (Statement No. 6-R at 3). Ms. Saball also recalculated my federal income taxes to show the change on the PA NOL adjustment which resulted in a total tax expense of ($88,776,727). (Statement No. 6-R at 4).

Q. WHAT IS YOUR RESPONSE?

A. I reviewed Ms. Saball's adjustment calculation as shown on Ms. Saball's Exhibit CLS-1, 2 and 3, and based upon my understanding of Ms. Saball's explanation, calculated my updated adjustments into my revenue requirement schedules. My updated adjustment is ($89,541,785). The difference is due to my updated revenue requirement adjustments, as I testified to previously, to correct an error in my direct testimony. I also updated the adjustments to depreciation expense, accumulated depreciation and accumulated deferred income taxes, accordingly.

D. Act-40 Requirements (Act 40 of 2016)

Q. WHAT DID MR. SABALL STATE REGARDING YOUR ADJUSTMENTS TO THE COMPANY'S CONSOLIDATED TAX ADJUSTMENT AND ACT 40 OF 2016?

A. Ms. Saball stated that I did not challenge the Company's spending of $36.7 million on infrastructure replacement. Ms. Saball stated that the Company addressed the requirements of Act 40 have been satisfied. (Statement No. 6-R at 5). She stated that the Company's position is that because far more that 100% of the funds will be used on infrastructure

replacement no adjustment to non-investor supplied funds for utility working capital is appropriate and therefore there should be no consolidated tax adjustment applied in this case. (Statement No. 6-R at 5).

Q. WHAT IS YOUR RESPONSE?

A. The Company should not benefit from the use of and compliance with Act 40 without any specific uses related to reliability and infrastructure projects and for general corporate purposes. Ms. Saball stated that the Company addressed the requirements of Act 40 as being satisfied. With respect to the 50% of the differential to be used for general corporate purposes, the Company has not identified or specifically demonstrated how the differential is to be used. Act 40 requires that 50% be spent on reliability or infrastructure and 50% be spent on general corporate purposes; it does not permit that less be spent on a general corporate purpose if the total amount spent on reliability or infrastructure exceeds 50% of the NOL. (66 Pa. C.S. § 1301.1(b)). When ratepayers are already supporting the Company's infrastructure and reliability investments and general corporate purpose expenses through rates, more information and support is needed to show that the additional revenue now being provided by ratepayers is actually being used and not simply going to shareholders. The Company should provide evidence of actual applications of its differential to reliability or infrastructure related investments and its general corporate purposes in a manner that reduces ratepayer obligations.

Q DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes, it does.

APPENDIX A

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SURREBUTTAL SCHEDULES OF DANTE MUGRACE

EXHIBITS DM-SR-1 THROUGH DM-SR-37

PUBLIC

REVENUE REQUIREMENT

		(1) Company Proposed	Adjustments	OCA	References
1	**Rate Base**	**$ 4,215,125,164**	**$ (30,772,687)**	**$ 4,184,352,477**	
2	Rate of Return	8.405%		6.20%	
3	**Operating Income**	**$ 354,264,935**	**$ (95,044,299)**	**$ 259,220,636**	
4	Operating Income Present Rates	$ 233,699,859	$ 15,472,660	$ 249,172,519	
5	**Operating Deficit**	**$ 120,565,076**	**$ (110,517,278)**	**$ 10,047,798**	
6	Revenue Conversion Factor	1.28640527		1.28640527	
7	Additional Revenues	$ 155,095,549	$ (142,170,009)	$ 12,925,540	
8	Additional Late Fees	$ 930,573	$ (837,374)	$ 93,199	
9	**Additional Revenue Requirement**	**$ 156,026,122**	**$ (143,007,382)**	**$ 13,018,740**	

(1) Company Exhibit 2 Schedule 4 p 6

COST OF CAPITAL

		(1)			
	Company Proposed	**Ratios**	**Cost Rate**	**Weighted Cost**	**References**
1	Debt	45.330%	4.370%	1.98%	
2	Equity	54.670%	11.750%	6.42%	
3	**Total**	**100.000%**		**8.405%**	
	OCA Recommendation				
4	Debt	50.000%	4.370%	2.185%	
5	Equity	50.000%	8.020%	4.010%	
6	**Total**	**100.000%**		**6.195%**	

(1) Exhibit PRM-1 Schedule 1

RATE BASE - MEASURES OF VALUE

		(1) Company FTY Period	(1) Company FPFTY Period	Adjustments	OCA	References
1	Gas Plant In Service	$ 4,995,881,393	$ 5,587,906,895	$ (29,282,008)	$ 5,558,624,887	
2	Gas Plant CWIP	$ -	$ -	$ -	$ -	
3	**Total Gas Plant**	**$ 4,995,881,393**	**$ 5,587,906,895**	**$ (29,282,008)**	**$ 5,558,624,887**	
4	Accumulated Depreciation Reserve	$ 1,374,311,491	$ 1,456,324,499	$ 409,497	$ 1,456,733,996	
5	Net Gas Plant In Service	$ 3,621,569,902	$ 4,131,582,396	$ (29,691,505)	$ 4,101,890,891	
6	Gas Stored Underground - Non-Current	$ 51,833	$ 51,833	$ -	$ 51,833	
7	**Total Net Gas Plant In Service**	**$ 3,621,621,735**	**$ 4,131,634,229**	**$ (29,691,505)**	**$ 4,101,942,724**	
	Working Capital					
8	Gas Stored Underground - Current	$ 48,395,110	$ 46,876,831	$ -	$ 46,876,831	
9	Materials and Supplies	$ 5,569,985	$ 5,569,985	$ -	$ 5,569,985	
10	Prepayments	$ 5,776,406	$ 5,776,406	$ -	$ 5,776,406	
11	Cash Working Capital	$ 35,577,097	$ 36,256,917	$ (1,139,713)	$ 35,117,204	
12	**Total Working Capital**	**$ 95,318,598**	**$ 94,480,139**	**$ -**	**$ 93,340,426**	
	Deductions					
13	Deferred Income Taxes & EADIT	$ 50,773,165	$ 3,232,844	$ (85,995)	$ 3,146,849	
14	Customer Advances	$ 3,690,614	$ 3,690,614	$ -	$ 3,690,614	
16	Customer Deposits	$ 4,065,751	$ 4,065,751	$ -	$ 4,065,751	
16	**Total Deductions**	**$ 58,529,530**	**$ 10,989,209**	**$ (85,995)**	**$ 10,903,214**	
17	**Act 40 - Reliability and Infrastructure**			**$ -**	**$ -**	Exh 7 Sch 3 p 2
18	**Act 40 - General Corporate Purposes**			**$ (27,460)**	**$ (27,460)**	Exh 7 Sch 3 p 2 OCA-8-28
19	**Total Rate Base - Measures of Value**	**$ 3,658,410,803**	**$ 4,215,125,159**	**$ (7,705,698)**	**$ 4,207,419,461**	

(1) Company Exhibit 8 Schedule 2 p 3
(2) UPDATED CORRECTED

$ 4,184,352,477

STATEMENT OF INCOME

		(1) Company Present Rates	Adjustments	Company Proposed Rates	Adjustments	Present Rates OCA	References
1	Operating Revenues	**$ 833,215,508**	**$ 156,026,122**	**$ 989,241,630**	**$ -**	**$ 833,215,510**	DM-4
2	Gas Supply Expense	$ 317,688,615	$ -	$ 317,688,615	$ -	$ 317,688,615	DM-5
3	O & M Expenses	$ 223,598,704	$ 3,412,102	$ 227,010,806	$ (20,679,612)	$ 206,331,194	DM-10/29
4	Depreciation / Amortization	$ 129,015,598	$ -	$ 129,015,598	$ 409,501	$ 129,425,099	DM-28
5	Net Salvage Amortized	$ 5,204,000	$ -	$ 5,204,000	$ -	$ 5,204,001	DM-28
6	Taxes Other Than Income	$ 15,353,167	$ -	$ 15,353,167	$ (417,300)	$ 14,935,867	DM-29
7	**Total Operating Expenses**	**$ 690,860,084**	**$ 3,412,102**	**$ 694,272,186**	**$ (20,687,410)**	**$ 673,584,776**	
8	Net Operating Income Before FIT	$ 142,355,424	$ 152,614,020	$ 294,969,444	$ (135,338,710)	$ 159,630,734	
9	Income Taxes	$ (91,344,434)	$ 32,049,042	$ (59,295,392)	$ (30,246,393)	$ (89,541,785)	DM-30
10	**Operating Income**	**$ 233,699,858**	**$ 120,564,978**	**$ 354,264,836**	**$ (105,092,317)**	**$ 249,172,519**	
11	Interest Charges	$ 84,085,080	$ -	$ 84,085,080	$ 7,847,035	$ 91,932,115	DM-30
12	Net Income	**$ 149,614,778**	**$ 120,564,978**	**$ 270,179,756**	**$ (112,939,352)**	**$ 157,240,404**	
13	Rate Base	**$ 4,244,704,201**	**$ -**	**$ 4,215,125,159**	**$ -**	**$ 4,184,352,477**	DM-3
14	Rate of Return	**5.506%**		**8.405%**		**6.195%**	
				$ 354,264,836		**$ 259,220,636**	
	Revenue Conversion Factor		1.28640527		1.28640527	1.28640527	DM-3
			$ 155,095,423		$ 12,925,540	$ 10,048,117	
(2)	Additional Late Fees		$ 930,699		$ 93,199		
			$ 156,026,122	**$ (143,007,382)**	**$ 13,018,740**		

(1) Company Exhibit 2 Schedule 4 p 2
(2) Company Exhibit 2 Schedule 4 p 6

GAS PLANT IN SERVICE

	Acct. No.		(1) Company FPFTYP	Adjustments	OCA	References
		Intangible Plant				
1		Organization	$ 177,885	$ -	$ 177,885	
2		Miscellaneous Intangible Plant	$ 91,100,269	$ -	$ 91,100,269	
3		Gas Production and Gathering Plant	$ 151,670,191	$ (254,301)	$ 151,415,890	
4		Non-Depreciable Plant	$ -	$ -	$ -	
5		Underground Storage Plant	$ 33,115,956	$ -	$ 33,115,956	
6		Non-Depreciable Plant	$ -	$ -	$ -	
7		Transmission Plant	$ 556,478,218	$ (5,376,933)	$ 551,101,285	
8		Non-Depreciable Plant	$ -	$ -	$ -	
9		Distribution Plant	$ 4,109,887,200	$ (18,892,437)	$ 4,090,994,763	
10		Non-Depreciable Plant	$ -	$ -	$ -	
a		Private Property Damage Incidents	$ -	$ (1,462,407)	$ (1,462,407)	OCA-XXI-001
11		General Plant	$ 246,325,381	$ (3,295,831)	$ 243,029,550	
12		Non-Depreciable Plant	$ -	$ -	$ -	
13		Total Depreciable Plant	$ 5,188,755,100	$ (29,281,910)	$ 5,159,473,190	
14		Total Non-Depreciable Plant	$ -	$ -	$ -	
15		CCNC Account 106	$ 399,151,697	$ -	$ 399,151,697	§53.52 (c) (3)
16		**Total Gas Plant In Service**	**$ 5,587,906,797**	**$ (29,281,910)**	**$ 5,558,624,887**	
17		Difference	$ (98)			OCA-8-23
						OCA-8-33

(1) Company Exhibit No. DF-1

		Additions HTY-FTY	Additions FTY-STUB	Additions FPFTY	
	Gas Production Plant - PNGD				
332.00	Mainline Extension Program (MLX)				
	FPFTY Additions			$ 7,265,751	OCA-VII-2
	Inflation Rate			3.50%	
	Inflation Adjustment			**$ 254,301**	
	Transmission Plant - PNGD				OCA-VII-7-2
367.00	Mains Transmission Plant	$ 80,639,319	$ 11,107,893	$ 123,520,256	OCA-VIII-23
369.00	Measuring & Reg. Equipment	$ 1,382,850	$ 350,000	$ 2,840,000	OCA-VIII-8
	Transmission Plant - PGD				
367.00	Mains Transmission Plant	$ 3,298,055	$ 321,401	$ 3,274,759	
369.00	Measuring & Reg. Equipment	$ 412,945	$ 50,000	$ 500,000	
	Total	$ 85,733,169	$ 11,829,294	$ 130,135,015	
	Inflation Rate	2.31%	2.31%	2.40%	
	Inflation Adjustment	$ 1,980,436	$ 273,257	$ 3,123,240	
	Total Inflation Adjustment			**$ 5,376,933**	
	Distribution Plant - PNGD				
376.10	Mains- Distribution Low Pressure	$ 113,638,696	$ 11,596,294	$ 118,183,270	
376.20	Mains- Distribution Reg. Pressure	$ 128,444,177	$ 13,107,124	$ 133,580,843	
378.00	Meas. & Reg. Equipment	$ 5,663,123	$ 1,008,432	$ 11,400,448	
380.00	Service-Distribution Plant	$ 85,623,277	$ 10,112,778	$ 94,286,328	
381.00	Meters- Distribution Plant	$ 5,383,138	$ 1,372,971	$ 5,679,100	
381.10	Meters - ERT-Distribution Plant	$ 5,872,014	$ 282,038	$ 5,202,828	
	Distribution Plant - PGD				
376.10	Mains- Distribution Low Pressure	$ 8,804,457	$ 774,269	$ 7,909,211	
376.20	Mains- Distribution Reg. Pressure	$ 4,435,329	$ 390,045	$ 3,984,340	
378.00	Meas. & Reg. Equipment	$ 2,517,181	$ 270,108	$ 2,856,912	
380.00	Service-Distribution Plant	$ 9,652,400	$ 706,212	$ 6,583,023	
381.00	Meters- Distribution Plant	$ 531,755	$ 206,076	$ 949,588	
381.10	Meters - ERT-Distribution Plant	$ 657,012	$ 114,667	$ 824,060	
	Total	$ 371,222,559	$ 39,941,014	$ 391,439,951	
	Inflation Rate	2.31%	2.31%	2.40%	
	Inflation Adjustment	$ 8,575,241	$ 922,637	$ 9,394,559	
	Total Inflation Adjustment			**$ 18,892,437**	
	General Plant - PNGD	$ 46,967,208	$ 2,607,242	$ 30,040,719	
	General Plant - PGD	$ 5,133,623	$ 113,666	$ 1,472,455	
	Total	$ 52,100,831	$ 2,720,908	$ 31,513,174	
	Inflation Rate	4.00%	4.00%	3.50%	
	Inflation Adjustment	$ 2,084,033	$ 108,836	$ 1,102,961	
	Total Inflation Adjustment			**$ 3,295,831**	

ACCUMULATED DEPRECIATION

		(1) Company FPFTY Period	Adjustments	OCA	References
1	Miscellaneous Intangible Plant	$ 29,670,157	$ -	$ 29,670,157	
2	Production Plant	$ 59,493,782	$ (5,679)	$ 59,488,103	
3	Underground Storage Plant	$ 11,838,198	$ -	$ 11,838,198	
4	Transmission Plant	$ 135,824,172	$ (83,104)	$ 135,741,068	
5	Distribution Plant	$ 1,128,641,622	$ (389,630)	$ 1,128,251,992	
6	General Plant	$ 90,824,303	$ (249,331)	$ 90,574,972	
7	**Total Depreciable Plant**	**$ 1,456,292,234**	**$ (727,743)**	**$ 1,455,564,491**	
8	Non-Depreciable Gas Plant	$ 32,259	$ -	$ 32,259	
9	**Total Depreciable Gas Plant**	**$ 1,456,324,493**	**$ 409,503**	**$ 1,456,733,996**	
			$ 1,137,246		
			$ 1,546,749		

(1) Spanos Exhibit 5B 5C

CASH WORKING CAPITAL

			(1) Company FPFTY Period	Adjustments	OCA	References
	Gas Purchased Costs					
1	FPFTY Expenses	$ 317,688,615			$ 317,688,615	
2	CWC Factor	0.0656029	$ 20,841,288	$ -	**$ 20,841,288**	
	Payroll					
3	FPFTY Expenses	$ 75,087,605			$ 70,270,416	
4	CWC Factor	0.1202407	$ 9,028,584	$ (579,222)	**$ 8,449,362**	OCA-8-34
	Pension and Benefits					
5	FPFTY Expenses	$ 29,066,537			$ 25,633,917	
6	CWC Factor	0.0789238	$ 2,294,043	$ (270,916)	**$ 2,023,127**	
	Taxes Other Than Income					
7	FPFTY Expenses	$ 15,353,167			$ 14,935,867	
8	CWC Factor	0.0207697	$ 318,881	$ (8,667)	**$ 310,213**	
	Other O&M Expenses					
9	FPFTY Expenses	$ 119,444,563			$ 110,142,498	
10	CWC Factor	0.0466650	$ 5,573,876	$ (434,080)	**$ 5,139,795**	OCA-8-35
	Income Taxes					
11	FPFTY State Income Taxes	$ -				
12	FPFTY Federal Income Taxes	$ -				
13	CWC Factor State Income Taxes	0.0128000	$ -			
14	CWC Factor Federal Income Taxes	0.0615000	$ -	$ -	**$ -**	
	Interest Expense					
15	FPFTY Long Term Debt	$ 83,973,864			$ 91,932,115	
16	FPFTY Short Term Debt	$ -				
17	CWC Factor Long Term Debt	(0.0214323)	$ (1,799,756)		$ (1,970,319)	
18	CWC Factor Short Term Debt	0.1628000	$ -		$ 323,738	
19	**Total**		**$ 36,256,916**	**$ (1,139,711)**	**$ 35,117,204**	

(1) Exhibit KMS-1 page 1 of 26

DEFERRED INCOME TAXES

		(1) Company FPFTY Period	Adjustments	OCA	References
1	Net Deferred Tax Liability- Federal	$ 77,238,662	$ -	$ 77,238,662	
2	Net Deferred Tax Liability - State	$ 159,546,665	$ -	$ 159,546,665	
3	Excess Deferred Income Taxes	$ (90,495,350)	$ -	$ (90,495,350)	
4	Historical Test Year Normalization Adj.	$ (18,247,276)	$ -	$ (18,247,276)	
5	Regulatory Asset FAS 109	$ -		$ -	
6	Regulatory Liability PA NOL	$ (43,238,598)		$ (43,238,598)	OCA-8-24
7	Regulatory Liability FAS 109 PA Rate Change	$ (58,778,003)		$ (58,778,003)	OCA-8-25
8	Regulatory Asset 481a Tax Repairs	$ (29,258,944)		$ (29,258,944)	OCA-8-27
	Disallowable GPIS	$ -	$ 85,995	$ 85,995	
9	**Total**	**$ (3,232,844)**	$ 85,995	**$ (3,146,849)**	

(1) Company Exhibit 7 Schedule 8
Attachment 2

OPERATING REVENUES

		(1) Company Present Rates	Adjustments	Company Proposed Rates	Adjustments	Present Rates OCA	References
1	**Tariff Sales**						
2	Residential	$ 530,033,881	$ 102,761,420	$ 632,795,301			
3	SGS	$ 65,723,147	$ 12,712,539	$ 78,435,686			
4	MGS	$ 29,870,969	$ 3,309,415	$ 33,180,384			
5	LGS	$ 1,238,122	$ (42,903)	$ 1,195,219			
6	**Total Tariff Sales**	**$ 626,866,119**	**$ 118,740,471**	**$ 745,606,590**	**$ -**	**$ -**	
7	**Transportation Sales**						
8	Residential	$ 54,365,910	$ 15,972,180	$ 70,338,090			
9	SGS	$ 15,131,722	$ 5,592,783	$ 20,724,505			
10	MGS	$ 54,536,981	$ 13,088,676	$ 67,625,657			
11	LGS	$ 68,115,152	$ (677,841)	$ 67,437,311			
12	**Total Transportation Sales**	**$ 192,149,765**	**$ 33,975,798**	**$ 226,125,563**	**$ -**	**$ -**	
13	**Other Operating Revenues**						
14	Sales for Resale	$ 18,054	$ -	$ 18,054			
15	Forfeited Discounts	$ 5,435,311	$ 930,573	$ 6,365,884			
16	Miscellaneous Service Revenue	$ 1,040,665	$ -	$ 1,040,665			
17	Rent from Gas Property	$ -	$ -	$ -			
18	Other Gas Revenues	$ 7,705,596	$ 2,377,844	$ 10,083,440			
19	**Total Other Operating Revenues**	**$ 14,199,626**	**$ 3,308,417**	**$ 17,508,043**	**$ -**	**$ -**	
20	**Total Operating Revenues**	**$ 833,215,510**	**$ 156,024,686**	**$ 989,240,196**	**$ -**	**$ 833,215,510**	OCA-8-22 OCA-8-36/37

(1) Company Exhibit 3 Schedule 15
Attachment A page 3

OCA-7-9/10

OPERATION AND MAINTENANCE EXPENSES

		(1) Company Proposed	Adjustments	OCA	References
1	**Gas Supply Expenses**	**$ 317,688,615**	**$ -**	**$ 317,688,615**	
	Operation and Maintenance				
2	Labor	$ 69,463,580	$ (1,742,697)	$ 67,720,883	DM-11
3	STI/Incentive Compensation	$ 5,624,024	$ (3,074,490)	$ 2,549,534	DM-12
4	Pension	$ 5,670,000	$ (2,802,416)	$ 2,867,584	DM-13
5	PBOP	$ 2,414,041	$ 148,250	$ 2,562,291	DM-14
6	Other Employee Benefits	$ 20,982,496	$ (778,454)	$ 20,204,042	DM-15
7	Outside Services - Contracted	$ 28,657,932	$ (1,940,335)	$ 26,717,597	DM-16
8	Outside Services - IT	$ 10,223,964	$ (442,315)	$ 9,781,649	DM=17
9	Outside Services - A&G	$ 3,383,833	$ (428,262)	$ 2,955,571	DM-18
10	Building Leases	$ 4,584,081	$ 0	$ 4,584,081	DM-19
11	Corporate Insurance	$ 9,080,331	$ (1,648,544)	$ 7,431,787	DM-20
12	Injuries and Damages	$ 2,460,710	$ (150,237)	$ 2,310,473	DM-21
13	Travel	$ 1,014,712	$ (912,788)	$ 101,924	DM-22
14	Company Memberships	$ 832,200	$ (247,270)	$ 584,930	DM-23
15	Licenses & Permits	$ 746,068	$ (68,644)	$ 677,424	DM-24
16	Utilities & Fuels - Company Operations	$ 2,949,856	$ (172,240)	$ 2,777,616	DM-25
17	Advertising	$ 1,423,934	$ (86,938)	$ 1,336,996	DM-26
18	Fleet	$ 1,170,486	$ (71,376)	$ 1,099,110	DM-27
19	Materials & Supplies	$ 11,848,248	$ (794,687)	$ 11,053,561	DM-28
20	Other O&M	$ 23,696,895	$ (1,775,041)	$ 21,921,854	DM-29
21	Debt Issuance Costs	$ 404,371	$ -	$ 404,371	DM-30
22	Payment Processing	$ 2,015,819	$ (219,720)	$ 1,796,099	DM-31
23	Rate Case Expenses	$ 1,031,000	$ (343,667)	$ 687,333	DM-32
24	Uncollectible Accounts	$ 13,635,521	$ (1)	$ 13,635,520	DM-33
25	Total USP/SCR Rider	$ -		$ -	
26	Interest on Customer Deposits	$ 284,603	$ -	$ 284,603	DM-34
27	**Total Operation and Maintenance**	**$ 223,598,705**	**$ (17,551,873)**	**$ 206,046,832**	
					OCA-7-2/3
(1)	Company Exhibit 4 Schedule 1 2				OCA-7-33

LABOR

		(1) Company Proposed	Adjustments	OCA	References
1	**Per Books 9/30/2023**	**$ 55,181,109**	$ -	**$ 55,181,109**	Exh 4 Sch 3 p 5 OCA-7-16
2	Annualized Gross Payroll	$ 7,422,979	$ -	$ 7,422,979	Exh 4 Sch 1
3	**HTY Period - Normalized**	**$ 62,604,088**	**$ -**	**$ 62,604,088**	
4	Non-Union Merit Increase 3.25%	$ 1,415,980	$ -	$ 1,415,980	
5	Clerical Union Labor Increase 3.25%	$ 197,694	$ -	$ 197,694	
6	Manual Union Increase 4.00%	$ 3,264,616	$ -	$ 3,264,616	
8	Total	$ 4,878,290	$ -	$ 4,878,290	
9	**O&M Labor Percentage 46.34%**	**$ 2,260,373**	**$ -**	**$ 2,260,599**	
10	Clerical Union Progression/Promotion	$ 12,060	$ -	$ 12,060	Exh 4 Sch 1 p 5
11	Manual Union Progression/Promotion	$ 607,160	$ -	$ 607,160	
12	Total	$ 619,220	$ -	$ 619,220	
13	**O&M Labor Percentage 46.61%**	**$ 288,628**	**$ -**	**$ 288,628**	
14	Non-Union FTY Adjustments 3.25%	$ 1,738,000	$ -	$ 1,738,000	
15	Clerical FTY Adjustments 3.25%	$ 237,000	$ -	$ 237,000	
16	Manual Union FTY Adjustments 4.00%	$ 553,000	$ -	$ 553,000	
18	Total	$ 2,528,000	$ -	$ 2,528,000	
19	**O&M Labor Percentage 46.68%**	**$ 1,180,173**		**$ 1,180,173**	
20	**FTY Period**	**$ 3,729,173**	**$ -**	**$ 3,729,400**	
21	Non-Union Merit Increase 3.25%	$ 1,518,484		$ 1,518,484	
22	Total Clerical - Union Increase 3.25%	$ 212,213		$ 212,213	
24	Manual Union Increase 3.25%	$ 2,796,305		$ 2,796,305	
25	Total	$ 4,527,003		$ 4,527,003	
26	**O&M Labor Percentage 46.34%**	**$ 2,097,966**		**$ 2,097,966**	
27	Non-Union Progression/Promotion	$ -	$ -	$ -	Exh 4 Sch 1 p 5
28	Clerical Union Progression/Promotion	$ 12,060	$ -	$ 12,060	
	Manual - Union Progression/Promotion	$ 607,160		$ 607,160	
29	Total	$ 619,220	$ -	$ 619,220	
30	**O&M Labor Percentage 46.61%**	**$ 288,628**	**$ -**	**$ 288,628**	
31	Non-Union 3.25%	$ 1,343,000	$ -	$ 1,343,000	
33	Manual - Union 3.25%	$ 237,000	$ -	$ 237,000	
34	Total	$ 1,580,000	$ -	$ 1,580,000	Exh 4 Sch 1 p 28
35	**O&M Labor Percentage 47.07%**	**$ 743,726**	**$ -**	**$ 743,726**	
36	**FPFTY Period**	**$ 3,130,320**	**$ -**	**$ 3,130,320**	
	Vacancy Adjustment		$ (1,742,925)	$ (1,742,925)	OCA-7-20
	Employee Adjustments	$ -	$ -	$ -	OCA-7-21
37	**Total Labor** (Lines 3, 20 51)	**$ 69,463,581**	**$ (1,742,699)**	**$ 67,720,883**	

(1) Company Exhibit 4 Schedule 1 p 5

SHORT-TERM INCENTIVE PROGRAM - STI

		(1) Company Proposed	Adjustments	OCA	References
1	**Per Books 9/30/2023**	**$ 6,823,130**	**$ -**	**$ -**	OCA-7-27
2	HTY Adjustments	$ (1,609,771)			
3	FTY Adjustment	$ 280,149			
4	FPFTY Adjustment	$ 130,516			
5	FPFTY Balance	**$ 5,624,024**	**$ (3,074,490)**	**$ 2,549,534**	

4	**CONFIDENTIAL - I&E RE-011a**				OCA-7-28
			Ratio to Total	OCA Allowed	
5	Financial	$ 2,562,451	[redacted]	$ -	
	[redacted]	[redacted]	[redacted]	[redacted]	
	Diversity, Equity and Inclusion	$ 512,615	[redacted]	$ -	
	[redacted]	[redacted]	[redacted]	[redacted]	
	Total	**$ 5,624,600**	[redacted]	**$ 2,549,534**	

15 OCA-7-28/29
OCA-7-30

(1) Company Exhibit 4 Schedule 1 p 6

PENSION

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Book Balance**	**$ 4,497,434**	**$ -**	**$ 4,497,434**	
2	2022 Net Contributions	$ 5,670,000	$ -	$ 5,670,000	
3	2023 Net Contributions	$ 5,670,000	$ -	$ 5,670,000	
4	2 Year Average	$ 5,670,000	$ -	$ 5,670,000	
5	HTY Adjustment (Line 4 - Line 1)	$ 1,172,566	$ -	$ 1,172,566	
6	**FTY Balance (Line 4)**	**$ 5,670,000**	**$ (2,802,416)**	**$ 2,867,584**	
7	FPFTY Adjustment	$ -	$ -	$ -	
8	**FPFTY Balance**	**$ 5,670,000**	**$ (2,802,416)**	**$ 2,867,584**	OCA-7-31

(1) Company Exhibit 4 Schedule 1 p 10

POST RETIREMENT BENEFITS OTHER THAN PENSION (PBOP)

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Book Balance**	**$ 1,229,997**	**$ 208,991**	**$ 1,438,988**	
2	Prior PBOP Expense Amortization	$ 1,634,119	$ -	$ 1,634,119	
3	**HTY Adjusted Balance 2018**	**$ 2,864,116**	**$ 208,991**	**$ 3,073,107**	
4	FTY Adjustment (Net Expense)	$ 779,921	$ -	$ 779,921	
5	FTY Adjustment	$ (450,076)		$ (450,076)	
6	**FTY Balance**	**$ 2,414,040**	**$ 208,991**	**$ 2,623,031**	
7	FPFTY Adjustment	$ 779,921	$ -	$ 779,921	
8	FPFTY Adjustment	$ -			
9	**FPFTY Balance**	**$ 2,414,040**	**$ 148,251**	**$ 2,562,291**	OCA-7-31
10	Amount to be Tracked	$ 779,921			

(1) Company Exhibit 4 Schedule 1 p 11
Used ratio of Company Labor to OCA
(2) Labor - Schedule DM-6, Line 37

BENEFITS COMPENSATION ADJUSTMENT

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Net Benefits**	**$ 16,409,732**	**$ -**	**$ 16,409,732**	
2	Annualized Benefits	$ 17,283,769	$ -	$ 17,283,769	
3	**HTY Adjusted Benefits**	**$ 874,037**		**$ 874,037**	
4	FTY Benefit Adjustments	$ 19,561,719	$ -	$ 19,561,719	
5	FTY Adjustment	$ 2,277,950	$ -	$ 2,277,950	
6	**FTY Benefits**	**$ 20,985,623**	**$ -**	**$ 20,985,623**	
(3)	Employee Activity / Events		**$ (254,437)**	**$ (254,437)**	OCA-7-25
	xx% of proposed vacancies		$ -	$ -	OCA-7-21
7	Vacancy Rate Adjustment		$ (527,144)	$ (527,144)	
8	FPFTY Benefit Adjustments	$ 1,423,904	$ (527,144)	$ 896,760	
9	**FPFTY Benefits**	**$ 20,985,623**	**$ (781,581)**	**$ 20,204,042**	OCA-7-32
	difference to Income Statement	$ (3,127)			

(1) Company Exhibit 4 Schedule 1 p 12

Used ratio of Company Labor to OCA
(2) Labor Schedule DM-6 Line 37
(3) Company Exhibit No. 19-RR-30

OUTSIDE SERVICES CONTRACTED

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Per Books Balance**	**$ 24,124,704**	**$ -**	**$ 24,124,704**	
2	HTY Adjustments	$ -	$ -	$ -	
3	**HTY Adjusted**	**$ 24,124,704**	**$ -**	**$ 24,124,704**	
4	FTY Inflation Adjustment 3.75%	$ 904,595	$ (904,595)	$ -	
5	FTY Adjustment (2)	$ 2,592,893	$ -	$ 2,592,893	
6	**FTY Adjusted**	**$ 27,622,192**	**$ (904,595)**	**$ 26,717,597**	
7	FPFTY Inflation Adjustment 3.75%	$ 1,035,740	$ (1,035,740)	$ -	
8	FPFTY Adjustment	$ -	$ -	$ -	
9	**FPFTY Adjusted**	**$ 28,657,932**	**$ (1,940,335)**	**$ 26,717,597**	OCA-7-34

(1) Company Exhibit 4 Schedule 1 p 13
(2) Statement No. 2 page 17
Bridge Work
Pressure Tests
Pig Run
Pipeline Maintenance/Corrosion
Right of Way

OUTSIDE SERVICES - IT

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Per Books Balance**	**$ 8,596,499**	**$ -**	**$ 8,596,499**	
2	HTY Adjustments	$ -	$ -	$ -	
3	**HTY Adjusted**	**$ 8,596,499**	**$ -**	**$ 8,596,499**	
4	FTY Inflation Adjustment 2.39%	$ 205,356	$ (205,356)	$ -	
5	FTY Adjustment (2)	$ 1,117,550	$ -	$ 1,117,550	
6	**FTY Adjusted**	**$ 9,919,405**	**$ (205,356)**	**$ 9,714,049**	
7	FPFTY Inflation Adjustment 2.39%	$ 236,958	$ (236,958)	$ -	
8	FPFTY Adjustment (2)	$ 67,600	$ -	$ 67,600	
9	**FPFTY Adjusted**	**$ 10,223,963**	**$ (442,314)**	**$ 9,781,649**	OCA-7-35

(1) Company Exhibit 4 Schedule 1 p 14
(2) Peoples Statement No. 2 p 17
Maintenance Contracts / Software

OUTSIDE SERVICES - A&G

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Per Books**	**$ 2,955,571**	**$ -**	**$ 2,955,571**	
2	FTY Inflation Adjustment 7.00%	$ 206,890	$ (206,890)	$ -	
3	FTY Adjustment	$ -	$ -	$ -	
4	**FTY Adjusted**	**$ 3,162,461**	**$ (206,890)**	**$ 2,955,571**	
5	FPFTY Inflation Adjustment 7.00%	$ 221,372	$ (221,372)	$ -	
6	FPFTY Adjustment	$ -	$ -	$ -	
7	**FPFTY Adjusted**	**$ 3,383,833**	**$ (428,262)**	**$ 2,955,571**	OCA-7-36

(1) Company Exhibit 4 Schedule 1 p 15

BUILDING LEASES

		(1) Company Proposed	Adjustments	OCA	References
1	**Gross Lease Expense**	**$ 6,184,363**	**$ -**	**$ 6,184,363**	
2	Capitalization Adjustments	$ (1,600,282)	$ -	$ (1,600,282)	
3	**Annualized Lease Expense**	**$ 4,584,081**	**$ -**	**$ 4,584,081**	
4	HTY Per Books Balance	$ 3,902,706	$ -	$ 3,902,706	
5	FPFTY Adjustments	$ -	$ -	$ -	
6	**HTY Adjusted Lease Expense**	**$ 681,375**	**$ -**	**$ 681,375**	OCA-8-1 OCA-8-2

(1) Company Exhibit 4 Schedule 1 p 16

CORPORATE INSURANCE

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Per Books - Property Insurance**	**$ 5,213,687**	**$ -**	**$ 5,213,687**	
	HTY Per Books - Property Insurance	$ 339,066		**$ 339,066**	
2	Premiums 2022/2023 Adjustments	$ (16,604)	$ -	$ (16,604)	
3	**HTY Adjusted - Property Insurance**	**$ 322,462**	**$ -**	**$ 322,462**	
4	HTY Per Books - Other Misc Insurance	$ 4,790,265	$ -	$ 4,790,265	
5	Premiums 2022/2023 Adjustments	$ 2,372,847	$ -	$ 2,372,847	
6	**HTY Adjusted - Other Misc Insurance**	**$ 7,163,112**	**$ -**	**$ 7,163,112**	
6	HTY Per Books - Workers Comp	$ 776,019	$ -	$ 776,019	
7	Premiums 2022/2023 Adjustments	$ 588,925	$ -	$ 588,925	
8	**HTY Adjusted - Workers Comp**	**$ 1,364,944**	**$ -**	**$ 1,364,944**	
9	**Total Corporate Insurance**	**$ 5,905,350**	**$ -**	**$ 5,905,350**	
	Less Capitalization	24.57%		24.57%	
	Adjusted Balance	1,450,730		1,450,944	
	Net Balance	**$ 4,454,620**	**$ -**	**$ 4,454,406**	
10	FTY Premium Increase 13.1%	$ 773,601	$ (773,601)	$ (0)	
11	FPFTY Premium Increase 13.1%	$ 874,943	$ (874,943)	$ (0)	
12	**FPFTY Adjusted**	**$ 7,553,893**	**$ (1,648,544)**	**$ 5,905,349**	OCA-8-3
	Total Proposed Corporate Insurance	**$ 9,080,331**	**$ (1,648,544)**	**$ 7,431,787**	

(1) Company Exhibit 4 Schedule 1 p 17
check for calculation

INJURIES AND DAMAGES

		(1) Company Proposed	Adjustments	OCA	References
1	TME 8/2023 (HTY Per Books)	$ 1,173,800	$ -	$ 1,173,800	
2	TME 8/2022	$ 3,510,553	$ -	$ 3,510,553	
3	TME 8/2021	$ 2,247,067	$ -	$ 2,247,067	
4	**Three-Year Average**	**$ 2,310,473**	**$ -**	**$ 2,310,473**	
5	Difference	1,136,673	-	1,136,673	
6	FTY Inflation Adjustment 3.20%	$ 73,935	$ (73,935)	$ -	
7	FPFTY Inflation Adjustment 3.20%	$ 76,301	$ (76,301)	$ -	
8	**FPFTY Adjusted**	**$ 2,460,710**	**$ (150,236)**	**$ 2,310,473**	OCA-8-5

(1) Company Exhibit 4 Schedule 1 p 18

TRAVEL ADJUSTMENTS

		(1) Company Proposed	Adjustments	OCA	References
1	HTY Per Books	$ 931,017	$ -	$ 931,017	
2	HTY Adjustments	$ -	$ -	$ -	
3	**HTY Adjusted**	**$ 931,017**	**$ -**	**$ 931,017**	
4	FTY Inflation Adjustment 4.40%	$ 40,947	$ (40,947)	$ -	
5	FTY Adjustments	$ -	$ -	$ -	
6	**FTY Adjusted**	**$ 971,964**	**$ (40,947)**	**$ 931,017**	
7	FPFTY Inflation Adjustment 4.40%	$ 42,748	$ (42,748)	$ -	
8	FPFTY Adjustments	$ -	$ (829,093)	$ (829,093)	
9	**FPFTY Adjusted**	**$ 1,014,712**	**$ (912,788)**	**$ 101,924**	OCA-8-6

(1) Company Exhibit 4 Schedule 1 p 19

COMPANY MEMBERSHIPS

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Per Books**	**$ 797,132**	$ (212,202)	$ 584,930	
2	HTY Adjustments	$ -	$ -	$ -	
3	**HTY Adjusted**	**$ 797,132**	**$ (212,202)**	**$ 584,930**	
4	FTY Inflation Adjustment 2.18%	$ 17,345	$ (17,345)	$ -	
5	**FTY Adjusted**	**$ 814,477**	**$ (229,547)**	**$ 584,930**	
6	FPFTY Inflation Adjustment 2.18%	$ 17,722	$ (17,722)	$ -	
7	**FPFTY Adjusted**	**$ 832,199**	**$ (247,269)**	**$ 584,930**	OCA-8-7

(1) Company Exhibit 4 Schedule 1 p 20

LICENSES & PERMITS

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Per Books**	**$ 677,424**	$ -	$ 677,424	
2	HTY Adjustments	$ -	$ -	$ -	
3	**HTY Adjusted**	**$ 677,424**	**$ -**	**$ 677,424**	
4	FTY Inflation Adjustment 4.97%	$ 33,712	$ (33,712)	$ -	
5	**FTY Adjusted**	**$ 711,136**	**$ (33,712)**	**$ 677,424**	
6	FPFTY Inflation Adjustment 4.97%	$ 34,931	$ (34,931)	$ -	
7	**FPFTY Adjusted**	**$ 746,067**	**$ (68,643)**	**$ 677,424**	OCA-8-8

(1) Company Exhibit 4 Schedule 1 p 21

UTILITIES AND FUEL

		(1) Company Proposed	Adjustments	OCA	References
1	HTY Per Books	$ 2,938,901	$ -	$ 2,938,901	
2	HTY Adjustments (Recovered as Gas Costs)	$ (161,285)	$ -	$ (161,285)	
3	**HTY Adjusted**	**$ 2,777,616**	**$ -**	**$ 2,777,616**	
4	FTY Inflation Adjustment 3.05%	$ 84,825	$ (84,825)	$ -	
5	FTY Adjustment	$ -	$ -	$ -	
6	**FTY Adjusted**	**$ 2,862,441**	**$ (84,825)**	**$ 2,777,616**	
7	FPFTY Inflation Adjustment 3.05%	$ 87,415	$ (87,415)	$ -	
8	FTY Adjustment	$ -			
9	**FPFTY Adjusted**	**$ 2,949,856**	**$ (172,240)**	**$ 2,777,616**	OCA-8-9

(1) Company Exhibit 4 Schedule 1 p 22

ADVERTISING

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Per Books** (Public Relations)	**$ 1,516,137**	**$ -**	**$ 1,516,137**	
2	HTY Adjustments	$ (179,141)	$ -	$ (179,141)	
3	**HTY Adjusted**	**$ 1,336,996**	**$ -**	**$ 1,336,996**	
4	FTY Inflation Adjustment 3.20%	$ 42,784	$ (42,784)	$ -	
5	**FTY Adjusted**	**$ 1,379,780**	**$ (42,784)**	**$ 1,336,996**	
6	FPFTY Inflation Adjustment 3.20%	$ 44,153	$ (44,153)	**$ -**	
7	**FPFTY Adjusted**	**$ 1,423,933**	**$ (86,937)**	**$ 1,336,996**	OCA-8-10

(1) Company Exhibit 4 Schedule 1 p 23

FLEET MAINTENANCE & FUEL

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Per Books**	**$ 1,099,110**	$ -	**$ 1,099,110**	
2	FTY Inflation Adjustment 3.20%	$ 35,128	$ (35,128)	$ -	
3	FPFTY Inflation Adjustment 3.20%	$ 36,250	$ (36,250)	$ -	
4	**FPFTY Adjusted**	**$ 1,170,488**	**$ (71,378)**	**$ 1,099,110**	OCA-8-11

(1) Company Exhibit 4 Schedule 1 p 24

MATERIALS AND SUPPLIES

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Per Books**	**$ 10,459,149**	$ (98,381)	**$ 10,360,768**	
2	FTY Inflation Adjustment 2.94%	$ 307,733	$ (307,733)	$ -	
	FTY Adjustments - Inflation 5.00%	$ 742,725	$ (49,932)	$ 692,793	OCA Set 8-12
	FTY Adjusted	**$ 11,509,607**	**$ (456,046)**	**$ 11,053,561**	
3	FPFTY Inflation Adjustment 2.94%	$ 338,640	$ (338,640)	$ -	
4	**FPFTY Adjusted**	**$ 11,848,247**	**$ (794,686)**	**$ 11,053,561**	

(1) Company Exhibit 4 Schedule 1 p 25

OTHER O & M

		(1) Company Proposed	Adjustments	OCA	References
1	**HTY Per Books**	**$ 14,965,499**	**$ -**	**$ 14,965,499**	
2	HTY Adjustments	$ -	$ -	$ -	
3	HTY Other	$ -	**$ -**	**$ -**	
4	**HTY Adjusted**	**$ 14,965,499**	**$ -**	**$ 14,965,499**	
5	FTY Inflation Adjustment 2.94%	$ 440,321	$ (440,321)	$ -	
	FTY Adjustments	$ (138,125)	$ -	$ (138,125)	
6	**FTY Adjusted**	**$ 15,267,695**	**$ (440,321)**	**$ 14,827,374**	
7	FPFTY Inflation Adjustment 2.94%	$ 449,212	$ (449,212)	$ -	
8	FPFTY Adjustments (Essential)	$ 7,979,987	$ (885,507)	$ 7,094,480	
9	**FPFTY Adjusted**	**$ 23,696,894**	**$ (1,775,040)**	**$ 21,921,854**	OCA-7-30 OCA-8-13 I&E RE-37

(1) Company Exhibit 4 Schedule 1 p 26

CONFIDENTIAL

Incentive Compensation - Allocated from Essential [redacted]	[redacted]		I&E RE-11 OCA-VII-4
Disallowance	$ 885,507		
Travel	$ 874,646	40% $ 349,858	I&E RE-37
Advertising	$ 21,930	40% $ 8,772	
Dues & Subscription	$ 512,935	40% $ 205,174	

DEBT ISSUANCE COSTS

		(1) Company Proposed	Adjustments	OCA	References
1	Revolver Debt Issuance Costs	$ 404,371	$ -	$ 404,371	
2	Proportion Recoverable in O&M	100%		100.00%	
3	Total Revolver Debt Issuance Costs	$ 404,371	$ -	$ 404,371	
4	Unamortized Balance of Prior Revolver	$ -	$ -	$ -	
5	**Total Amortizable Debt Issuance Costs**	**$ 404,371**	**$ -**	**$ 404,371**	OCA-8-14

(1) Company Exhibit 4 Schedule 1 p 27
check for other information to include

PAYMENT PROCESSING FEE

		(1) Company Proposed	Adjustments	OCA	References
1	**Current Payment Processing**	$ 1,451,959	$ -	$ 1,451,959	
2	Peoples Gas Adoption	$ 124,419		$ 124,419	
3	**HTY Adjusted Payment Process Exp.**	**$ 1,576,378**		**$ 1,576,378**	
4	FTY Percentage	7.82%			
5	FTY Adjustment for Payment Process	$ 123,273	$ (61,637)	$ 61,636	
6	FTY Adjustment	$ -	$ -	$ -	
7	**FTY Adjusted for Payment Process**	**$ 1,699,651**	**$ (61,637)**	**$ 1,638,014**	
8	FPFTY Percentage	7.82%			
9	FPFTY Adjustment for Payment Process	$ 132,913	$ (66,456)	$ 66,456	
10	FPFTY Adjustment	$ 183,256	$ (91,628)	$ 91,628	
11	**FPFTY Adjusted for Payment Process**	**$ 2,015,819**	**$ (219,721)**	**$ 1,796,099**	OCA-8-15

(1) Company Exhibit 4 Schedule 1 p 28

RATE CASE EXPENSES

		(1) Company Proposed	Adjustments	OCA	References
1	Consulting Services	$ 744,000			
2	Legal Fees	$ 1,200,000			
3	Advertising - Rate Case	$ 81,000			
4	Miscellaneous, Supplies, Courier, etc.	$ 25,000			
5	Travel	$ 12,000			
6	Total	**$ 2,062,000**		**$ 2,062,000**	
7	Amortization Period - 2 years	2		3	
8	Rate Case Expenses	**$ 1,031,000**	**$ (343,667)**	**$ 687,333**	OCA-8-17

(1) Company Exhibit 4 Schedule 1 p 29

UNCOLLECTIBLE EXPENSE

		(1) Company Proposed	Adjustments	PresentRates OCA	References
	HTY Per Books	**$ 14,518,575**		**$ 14,518,575**	
	Residential				
1	**FPFTY Normalized Revenues**	**$ 584,399,791**		**$ 584,399,791**	(1)
	3 Year Average Uncollectible rate	2.20%		2.20%	
	Annualized Balance	**$ 12,856,795**		**$ 12,856,795**	
	Commercial				
	FPFTY Normalized Revenues	**$ 181,217,924**		**$ 181,217,924**	
	3 Year Average Uncollectible rate	.35% / 1.05%		.35% / 1.05%	
	Annualized Balance	**$ 771,417**		**$ 771,417**	
	Industrial				
	FPFTY Normalized Revenues	**$ 47,452,045**		**$ 47,452,045**	
	3 year Uncollectible rate	0.02%		0.02%	
	Annualized Balance	**$ 7,307**		**$ 7,307**	
	Uncollectible - Normalized Balance	**$ 13,635,520**		**$ 13,635,520**	OCA-7-14
	Additional Uncollectible Accounts				
	Additional Revenues			$ 12,925,540	
	2.20% Uncollectible Rate			2.20%	
	Additional Uncollectibles			$ 284,362	

(1) Company Exhibit No. 4 Schedule 1 page 30

CUSTOMER DEPOSITS

		(1) Company Proposed	Adjustments	OCA	References
1	**Average Customer Balance**	**$ 4,065,751**	**$ -**	**$ 4,065,751**	
2	Interest Rate	7.00%		7.00%	
3	**Interest on Customer Deposits**	**$ 284,603**	**$ -**	**$ 284,603**	

(1) Company Exhibit 4 Schedule 1 p 32

DEPRECIATION / AMORTIZATION
NET SALVAGE ACCRUAL

		(1) Original Cost 30-Sep-25	(2) Depreciation Rate	Depreciation Expense	Adjustments	OCA	References
	Depreciation / Amortization						
1	Intangible Plant	$ 91,213,832	12.4939%	$ 11,396,147	$ -	$ 11,396,147	
2	Production Plant	$ 158,800,471	2.2331%	$ 3,546,242	$ (5,679)	$ 3,540,563	DM-5
3	Underground Storage Plant	$ 33,159,880	2.2027%	$ 730,422	$ -	$ 730,422	
4	Transmission Plant	$ 581,912,736	1.5456%	$ 8,993,791	$ (83,104)	$ 8,910,687	DM-5
5	Distribution Plant	$ 4,473,179,617	1.9142%	$ 85,624,996	$ (389,630)	$ 85,235,366	DM-5
6	General Plant	$ 247,506,976	7.5650%	$ 18,723,999	$ (249,331)	$ 18,474,668	DM-5
7	**Total Depreciable Plant**	**$ 5,585,773,512**		**$ 129,015,596**	**$ (727,743)**	**$ 128,287,853**	Spanos Exh 5B
8	Non-Depreciable Plant	$ 2,209,685		$ -	$ -	$ -	Spanos Exh 5C
9	**Total Gas Plant in Service**	**$ 5,587,983,197**		**$ 129,015,596**	**$ 409,503**	**$ 129,425,099**	
		(3)			$ 1,137,246		
	Net Salvage Accrual - COR minus Gross Salvage						
10	2020	$ 13,296,667				$ 13,296,667	
11	2021	$ 6,602,724				$ 6,602,724	
12	2022	$ 384,973				$ 384,973	
13	2023	$ 2,907,326				$ 2,907,326	
14	2024	$ 2,828,316				$ 2,828,316	
15	**Total**	**$ 26,020,006**				**$ 26,020,006**	Spanos Exh 5C
16	**5 Year Amortization**	**$ 5,204,001**				**$ 5,204,001**	

(1) Spanos Exhibit 5C - I-5
(2) Use of Company Composite Rates
(3) Spanos Exhibit 5C - I-7

TAXES OTHER THAN INCOME

		(1) Company Proposed	Adjustments	OCA	References
1	FICA	$ 6,211,692	$ (389,156)	$ 5,822,536	
2	Unemployment (FUTA / SUTA)	$ 359,931	$ (22,563)	$ 337,368	
3	Property Tax	$ 1,064,828	$ (5,581)	$ 1,059,247	
	PUC Assessment				
4	PUC Assessment	$ 3,435,715	$ -	$ 3,435,715	
5	OCA Assessment	$ -	$ -	$ -	
6	Total Assessment	$ 3,435,715	$ -	$ 3,435,715	
7	Sales and Use Tax	$ 2,602,000	$ -	$ 2,602,000	OCA-8-32
8	Other	$ 1,679,000	$ -	$ 1,679,000	
9	**Total**	**$ 15,353,107**	**$ (417,240)**	**$ 14,935,867**	

(1) Company Exhibit 6 Schedule 2

Differences due to rounding

FEDERAL INCOME TAX

		(1) Company Proposed	Adjustments	Present Rates OCA	References
1	**Operating Income Before Taxes/Interest**	**$ 294,969,444**	**$ (135,338,710)**	**$ 159,630,734**	
2	Less Interest Expense	$ (84,085,080)	$ (7,847,035)	$ (91,932,115)	
3	**Pre-Tax Operating Income (Loss)**	**$ 210,884,364**	**$ (143,185,745)**	**$ 67,698,619**	
	Schedule M Items				
4	Permanent - Meals and Entertainment	$ 839,000	$ -	$ 839,000	
	Tax Repairs - Gross Deduction	$ (430,000,000)		$ (430,000,000)	
	Tax Rapairs Bood Depr & AFUDC	$ 40,000,000		$ 40,000,000	
	Property Basis Difference	$ 843,264		$ -	
	Total Flow Through	**$ (388,317,736)**		**$ (389,161,000)**	
	Deferred Adjustments				
5	Depreciation	$ (46,359,020)	$ -	$ (46,359,020)	
6	Sec 163 Interest	$ 1,873,750	$ -	$ 1,873,750	
7	Contributions in Aid	$ (376,420)	$ -	$ (376,420)	
8	Cost of Removal	$ 4,175,589	$ -	$ 4,175,589	
	Property Basis Difference	$ (1,378,342)		$ (1,378,342)	
	Unicap 263A Inventory	$ 234,219		$ 234,219	
9	Other	$ -	$ -	$ -	
10	**Total Deferred Adjustments**	**$ (41,830,224)**	**$ -**	**$ (41,830,224)**	
	Total Flow Through and Deferred Adjustments	**$ (430,147,960)**		**$ (430,991,224)**	
11	PA Depreciation Adjustment	$ (2,007,814)	$ -	$ (2,007,814)	
12	**Taxable Income Before NOL**	**$ (221,271,410)**	**$ (144,029,009)**	**$ (365,300,419)**	
13	Prior Year PA NOL Utilization	$ -	$ -	$ -	
14	**PA Taxable Income**	**$ (221,271,410)**	**$ (144,029,009)**	**$ (365,300,419)**	
15	PA Income Tax - various	$ (17,956,175)	$ (12,688,914)	$ (30,645,089)	
	Current Year PA NOL Adjustment	$ 17,956,175		$ 30,645,089	
	Other	$ -			
	PA Deferred Tax on Inv.Adj/Line Pack Gas	$ (18,714)		$ (18,714)	
	PA Income Tax Expense	$ (18,714)		$ (18,714)	
16	Federal Taxable Income Before NOL	$ (219,263,596)	**$ (144,029,009)**	**$ (363,292,605)**	
	Prior Year Federal NOL	$ -		$ -	
	Federal Taxable Income	$ (219,263,596)		**$ (363,292,605)**	
17	**Federal Income Tax Expense (21%) Current**	**$ (46,041,425)**	**$ (30,246,092)**	**$ (76,287,517)**	OCA-8-31
	Current Year NOL Adjustment	$ 46,041,425		$ 76,287,517	
	Other	$ -		$ -	
	Federal Current Income Tax Expense	$ (0)		$ -	
18	Federal Income Tax Expense (21%) Deferred	$ 8,544,081	$ -	$ 8,544,081	
19	Amortization of EDIT	$ (831,898)	$ -	$ (831,898)	OCA-8-26
	Current Year Federal NOL	$ (46,041,425)		$ (76,287,517)	
	Amortization of 481 (a) Tax Repairs	$ (20,947,437)		$ (20,947,737)	OCA-8-19
	Other	$ -			OCA-8-20
20	**Federal Deferred Income Tax Expense**	**$ (59,276,679)**	**$ -**	**$ (89,523,071)**	OCA-8-21
					OCA-8-29
21	Total Current and Deferred FIT	**$ (59,276,680)**	**$ (30,246,391)**	**$ (89,523,071)**	OCA-8-30
22	**Total Income Tax Expense**	**$ (59,295,394)**	**$ (30,246,391)**	**$ (89,541,785)**	

(1) Company Exhibit No. 7 Schedule No. 8

APPENDIX B

–

COMPANY RESPONSES TO INTERROGATORIES

EXHIBIT DM-SR-38

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XXVII-001

Witness: Becker, Paul **Title:** Vice President Construction &Engineering

Question: Reference Peoples Statement No. 5R, pp. 8-9, where witness Paul Becker testifies that “the PUC Gas Safety Division directed Peoples to accelerate the replacement” of bare steel pipe in Robinson for which OCA witness Mugrace recommended exclusion of the replacement cost. Provide any and all documentation demonstrating that the PUC Gas Safety Division directed Peoples to accelerate the replacement.

Answer: Please see attached.

Submit Date: 4/29/2024

Becker, Paul

From: Horensky, Robert <rhorensky@pa.gov>
Sent: Tuesday, May 5, 2020 10:39 AM
To: Gregorini, Joseph
Cc: Palombo, Edward A; Thomas, Robert M; Kline, David; Matse, Matthew; Kanaskie, Richard
Subject: Peoples Gas Overpressure- NRC 1276429-Indiana County- Robinson, PA

[External email: Use caution with links and attachments]

Mr. Gregorini-

On April 29th, an overpressure incident occurred on Peoples Gas's distribution system in Robinson, PA in Indiana County. This was reported to the NRC at #1276429. Peoples Gas over-pressured the mains, services and customer piping while performing maintenance at a district regulator station. The system is a one way feed and supplied by a single regulator with a pressure relief and bypass. This event affected 227 homes and businesses.

Having reviewed the data provided to I&E Safety thus far for the Robinson overpressure incident, I&E Safety has the following safety related requirements of Peoples Gas. This email will be followed by a formal letter that will be sent via email:

1. Accelerate the replacement of the following gas assets:
    a. All bare steel piping affected by the overpressure .
    b. All metallic service lines that are not under Cathodic Protection and any leaking service.
    c. Any asset that has leaked as a result of the overpressure.
2. Repair and replace any customer owned service line that is leaking.
3. Provide I&E Safety with a timeframe of the scheduled replacement work.
4. Continue daily leak survey of all mains and services until all of the bare steel mains and services are replaced .
5. Perform a walking leak survey of all mains and services once weekly until all replacements are complete.
6. Provide Dave Kline and Matt Matse with daily leak survey results. The results should be tabulated and comprehensive.
7. Monitor any post incident appliance failures and develop a program to address.
8. Provide the public in Robinson with an update of the event and Peoples efforts to remediate. Notify this office of this awareness effort.
9. Access any and all structures immediately where piping, or appliances, downstream of the meter or curb valve was, or could have been, affected by overpressure on 4/29.
10. Consider immediate review of low pressure regulator station maintenance policy and procedures.
11. Consider immediate review of low pressure regulator station configurations.
12. Consider immediate review of Operator Qualification training for regulator technicians.
13. Consider immediate review of Quality Assurance/Quality Control for regulator station work involving low pressure systems.
14. Consider immediate review of Quality Assurance/Quality Control for regulator station work involving systems with one way feeds.
15. Continue to work with I&E Safety Engineers during the course of the investigation.

Sincerely,

Rob Horensky, Manager
Safety Division
Bureau of Investigation and Enforcement
Pennsylvania Public Utility Commission
717 497-4711

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XXVII-002

Witness: Becker, Paul **Title:** Vice President Construction &Engineering

Question: Reference Peoples Statement No. 5R, p. 9, where witness Paul Becker testifies that the bare steel pipelines were not damaged as a result of the Robisnon incident and that they would have been replaced in the future under the Company's LTIIP. Confirm or deny: but for the Robinson incident, the pipeline replacement would not have been accelerated. If anything other than a confirmation, explain the basis for Peoples' response.

Answer: Confirmed. The bare steel pipelines in Robinson would have been replaced in the future as part of the LTIIP.

Submit Date: 4/29/2024

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission,	:	
	:	
v.	:	Docket No. R- 2023-3044549
	:	
Peoples Natural Gas Company LLC	:	
	:	

VERIFICATION

I, Dante Mugrace, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement 2SR, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: May 3, 2024 Signature: Dante Mugrace

Dante Mugrace

Address: PCMG and Associates, LLC
22 Brooks Avenue
Gaithersburg, MD 20877

OCA Statement 3SR

BEFORE THE

Pennsylvania Public Utility Commission

Pennsylvania Public Utility Commission	:	Docket Numbers
v.	:	R-2023-3044549
Peoples Natural Gas Company, LLC	:	

Surrebuttal Testimony

of

Aaron L. Rothschild

on Behalf of

the Pennsylvania Office of Consumer Advocate

May 3, 2024

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I. INTRODUCTION AND SUMMARY OF MR. MOUL'S COMMENTS

Q. ARE YOU THE SAME AARON ROTHSCHILD WHO SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING ON MARCH 22, 2024 AND REBUTTAL TESTIMONY ON APRIL 18, 2024?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my Surrebuttal Testimony is to respond to the following issues addressed in Peoples Natural Gas Company LLC (Peoples or company) witness Mr. Paul Moul's Rebuttal Testimony, specifically, his inaccurate assertions that:

- I make inconsistent statements regarding the use of analyst forecasts, historical data, and forward-looking market data
- My cost of equity recommendation fails to reflect higher interest rates
- Application and reasonableness of my Constant Growth DCF Model
- My application of the CAPM is defective
- My conclusions regarding Mr. Moul's leverage adjustment are erroneous
- I have not shown that Peoples is not entitled to some form of management performance recognition by the Commission
- The appropriate capital structure for Peoples should be more equity-rich
- The companies in my proxy group should be expanded

As addressed below, Mr. Moul's criticisms are invalid and should be rejected. If I do not address an issue raised in the company's rebuttal, it does not mean I agree with the testimony.

Q. BEFORE YOU BEGIN YOUR RESPONSE TO MR. MOUL, DO YOU HAVE ANY CORRECTIONS TO YOUR DIRECT TESTIMONY THAT YOU WISH TO ACKNOWLEDGE HERE?

A. Yes. On page 14 of my direct testimony, OCA Statement 3, Table 14 contained a reference to Duff and Phelps (September 2023). The Duff Phelps reference should have been "Duff and Phelps (February 8, 2024)." It is important to note that my analysis in this case relied upon the February 8, 2024, source, and that I identified this correction to Peoples and all parties on April 8, 2024, when I submitted discovery responses. For purposes of clarity, I am submitting a corrected Table 4 below:

TABLE 4: U.S. EQUITY RETURN EXPECTATIONS AMONG MAJOR FINANCIAL INSTITUTIONS	
Duff & Phelps / Kroll (February 8, 2024 Report, as of March 31,2024) [1]	**9.0%**
Horizon Actuarial Services, LLC Survey - 20 Year Horizon (August 2023) [2]	
U.S. Equity - Large Cap (5.6-10.2%, 50% Percentile - 7.3%)	**7.3%**
U.S. Equity - Small / Mid Cap (5.1-10.9%, 50% Percentile - 7.6%)	**7.6%**
J.P. Morgan Asset Management - Equity Long-Term Returns (2023) [3]	**7.9%**
Charles Schwab - 10-year U.S. Large Cap Returns (January 2024) [4]	**6.2%**

Sources:

[1] Kroll Recommended U.S. ERP and Corresponding RFR to be Used in Computing Cost of Capital: January 2008 - Present, https://www.kroll.com/en/insights/publications/cost-of-capital/recommended-us-equity-risk-premium-and-corresponding-risk-free-rates
Note: Duff & Phelps acquired Kroll in 2021 and rebranded itself as Kroll.

[2] Horizon Actuarial Services, LLC, Survey of Capital Market Assumptions Survey, August 2023, page 18.
Survey participants Include: Bank of New York Mellon, BlackRock, Goldman Sachs Asset Management, J.P. Morgan Asset Management, Merrill, Morgan Stanley Wealth Management, Royal Bank of Canada, UBS.

[3] J.P. Morgan Asset Management - 2024 Long-Term Capital Market Assumptions, 2023, page 12.

[4] Schwab's 2024 Long-Term Capital Market Expectations, January 2, 2024.
https://www.schwab.com/learn/story/schwabs-long-term-capital-market-expectations

Q. TURNING NOW TO YOUR RESPONSE TO MR. MOUL, ON PAGE 23 OF HIS REBUTTAL TESTIMONY, MR. MOUL CLAIMS THAT YOU MAKE INCONSISTENT CLAIMS REGARDING THE USE OF ANALYST FORECASTS, HISTORICAL DATA, AND FORWARD-LOOKING MARKET DATA. PLEASE RESPOND.

A. Below I respond to the following 6 claims made my Mr. Moul:

1. On page 23, lines 4-6 of Mr. Moul's rebuttal testimony, he claims that my recommendation that the return on equity (ROE) should be "market-based" and "forward-looking contradicts my criticisms of using forecasts.

My response: Mr. Moul misconstrues my testimony. The main point I make throughout my direct testimony, is that there is a difference between expert forecasts (e.g., analyst 5-year EPS growth rate forecasts) and investors' expectations (e.g., option-implied growth). Expert forecasts are based on the opinions of a relatively small group of people and publications. On the other hand, investor expectations are based on the market behavior of millions of people around the world. When faced with the choice between these two, investors' expectations should be given priority over expert forecasts because they are based on more extensive data and, after all, investors are the ones providing the capital to utility companies.

2. On page 23, lines 7-15 of Mr. Moul's rebuttal testimony, he states that I use historical data despite simultaneously claiming that I use primarily forward-looking market data.

My response: I do use historical data, as does every rate of return witness that I know of; however, it is preferable to measure a utility's cost of equity (COE) by measuring investors' expectations directly using current capital market data (e.g., stock prices, stock option prices). My COE calculations also incorporated historical data, which is something that all rate of return witnesses/financial modelers have to do to some degree, including me, because of inevitable limitations of capital market data.

3. On page 23, lines 16-20 of Mr. Moul's rebuttal testimony, he implies that my stated preference for forward-looking data contradicts my conclusion that using analyst's forecasts would be speculative. Additionally, he implies that I am contradicting myself by claiming that my market-based method is forward-looking on the one hand, and on the other hand I believe capital markets are unpredictable.

My response: As discussed in response to claim 1 above, my forward-looking market-based COE is based on investors' expectations. Measuring investor expectations directly using capital market data is different than using analyst forecasts. To what degree investors are influenced by analyst forecasts is difficult to determine and likely continually changes. After all, not all analyst forecasts are the same. Leaving aside the appropriateness of using analyst forecasts in cost of

equity calculations, calculating the cost of equity should be an interpretive approach (e.g., using market data to measure investors' expectations as Mr. Moul did in some parts of his testimony) rather than a speculative one (e.g., trying to predict what the market will do in the future better than other investors to make a profit as a trader would do). Also, investors have forward-looking expectations that we can investigate despite the unpredictable nature of capital markets. There is nothing inconsistent or contradictory in my statements.

4. On page 23, lines 21-22 of Mr. Moul's rebuttal testimony, he claims that I contradict myself by relying on historic data in my DCF model, yet I criticize his use of historical data.

My response: Please see my response to Mr. Moul's claim 2 above.

5. On page 24, lines 1-4 of Mr. Moul's rebuttal testimony, he claims that I contradict myself by criticizing his use of non-market data when I use non-market data (i.e., book value data in my analysis and historical data for my CAPM risk-free rate).

My response: First, regarding the risk-free rate components of my CAPM, Mr. Moul's claim that I use historical data is misleading. As explained on page 61, lines 19-21 of my direct testimony, I use both the spot market yields of U.S. treasury bond/bills as of February 29, 2024, and a weighted average over the 3-month ending on that date. The spot data that I use, by any standard, is not historical. I also use

3 month "historical" averages because the value of a particular input on a specific day can lead to COE results that can vary over short periods of time. Therefore, using data over a recent period, such as 3 months, is a process of smoothing capital market data, which is often turbulent. I also use historical book value returns in my DCF analysis for "smoothing" purposes to make sure current future expected returns on book equity are sustainable.

6. On page 24, lines 5-8 of Mr. Moul's rebuttal testimony, he claims that I use analyst forecasts despite criticizing him for using them.

My response: Please see my response to claim 1 above.

7. On page 23, lines 4-6 of Mr. Moul's rebuttal testimony, he states that my claim that "forecasts as being unreliable" contradicts my recommendation that Peoples authorized ROE should be based on current market data and not on historical authorized ROEs in other proceeding.

My response: Please see my response to claim 1 and 2 above.

II. APPLICATION OF CONSTANT GROWTH DCF

Q. PLEASE SUMMARIZE MR. MOUL'S CRITICISM OF YOUR APPLICATION OF THE DCF METHOD.

A. Mr. Moul makes the following criticisms of my constant growth DCF method:

1. My constant growth DCF model produces unreliable results;
2. Growth rate component should be based on analyst Earnings Per Share (EPS) growth rates;
3. My approach is inferior to his because it relies on non market-based data.

Q. MR. MOUL CLAIMS THE RESULTS OF YOUR CONSTANT GROWTH DCF MODEL ARE NOT REASONABLE. DO YOU AGREE?

A. No. Mr. Moul claims that the results of my Constant Growth DCF Model are not reasonable because, among reasons, they are not higher than the cost of debt by a reasonable margin.[1] He does not explain how much higher the cost of equity should be than the cost of debt or what metrics his criticism is based on. The cost of equity expectations of major financial institutions indicate that the margin between my 8.02% cost of equity recommendation and the cost of debt is reasonable.

My 8.02% cost of equity recommendation is 364 basis points[2] higher than the market yield on the 30-year U.S. Treasury bond. The margin between my 8.02% recommendation and the cost of debt (e.g., market yield on U.S. Treasury bonds) is about the same as the cost of equity recommendations of major financial institutions and published research, including publications relied on extensively by Mr. Moul. He uses data from the SBBI Yearbook (owned by Kroll) to determine the appropriate equity risk premium for public utilities starting on page 41 of his direct testimony. As shown on page 14, Table 4 of my direct testimony, Kroll determined the cost of equity for the overall

[1] Mr. Moul's rebuttal testimony, page 3, line 1-5.

[2] 8.02% - 4.38% (yield on 30-year U.S. Treasury bond as of February 29, 2024).

market is 9.0%, which is 462 basis points higher than the market yield on the 30-year U.S. Treasury bond. However, as explained on pages 14-15 of my direct testimony, Kroll's 9.0% cost of equity is for the overall stock market (e.g., US Large Cap, S&P 500),[3] which should be higher than the return expectations for buying utility stocks because regulated monopoly utilities are lower risk than most, if not all, unregulated companies in the S&P 500, like Tesla and Amazon.

Q. STARTING ON PAGE 25 OF HIS REBUTTAL TESTIMONY, MR. MOUL CLAIMS THAT IT IS MORE APPROPRIATE TO USE EPS GROWTH RATES AS THE GROWTH COMPONENT OF A DCF MODEL THAN RETENTION GROWTH RATES. HOW DO YOU RESPOND?

A. I disagree. It does not make mathematical sense to use analyst five-year EPS growth rate forecasts without attempting to investigate what percentage of earnings companies are likely to pay out as dividends and what percentage they are likely to retain in the business (i.e., the retention rate). This is analogous to failing to reconcile the money you are taking out of your checking account with your future balance, i.e., the basic balancing of a checkbook.

J.P. Morgan explained that its equity assumptions methodology considers five return drivers (including earnings growth and dividends). Pertinently, J.P. Morgan explained that its equity return assumptions methodology:

> ties together complex interrelationships among these factors to ensure that retained earnings and gross dilution imply a future book value that is

[3] The S&P 500 is a stock market index that includes 500 of the largest U.S. companies, including 11 sectors to show the health of the U.S. stock market and broader economy. The Dow Jones Industrial Average, 30 of the largest U.S. companies, is another commonly used measure of equity markets in general.

> consistent with projected return on equity and future earnings. This framework – analogous to Robert Higgins' sustainable growth rate (SGR) concept – ensures that higher shareholder payouts, for instance, would come at the expense of slower earnings growth, all else the same. Our methodology uses trailing, not forward, earnings, which tend to be more stable.[4]

Thus, exclusive reliance on analysts' 5-year EPS growth rates, as Mr. Moul has done, without considering multiple factors that ensure sustainable growth, is inappropriate. As reflected in my Exhibit ALR-3, page 1, consistent with the multi-factor approach relied upon by J.P. Morgan in its 2019 Long-Term Capital Market report, I have also used a sustainable growth rate method to compute my DCF results.

Q. ON PAGE 27, LINES 15-23 AND PAGE 28, LINES 1-3 OF HIS REBUTTAL TESITMONY, MR. MOUL CLAIMS THAT YOU SHOULD HAVE DIRECTLY USED THE EARNINGS PER SHARE GROWTH RATE FORECAST OF 5.76% BY ZACKS IN YOUR DCF APPROACH. PLEASE RESPOND.

A. I strongly disagree. As discussed above, it is not appropriate to mechanically use analyst EPS growth rate forecasts in a constant growth DCF model because it does not ensure that the mathematical relationship between earnings, dividends, book value and stock price are respected. If a utility company is experiencing a short-term period of high earnings growth because they are recovering from a period of low earnings, for example, using analyst 5-year EPS growth rate forecasts in a DCF model will overstate the COE because these growth rates are not sustainable. In other words, the company's relatively high growth rate

[4] J.P. Morgan contributes to the Blue Chip Economic Forecasts relied on by Mr. Moul in his rebuttal and direct testimonies.

will not continue indefinitely. Investors know that short-term growth rates that result from a recovery will eventually slow.

Q. ON PAGE 27, LINES 2-4 OF HIS REBUTTAL TESITMONY, MR. MOUL CLAIMS THAT THE COMMISSION HAS NOT PREVIOUSLY ADOPTED A RETENTION GROWTH APPROACH IN THE DCF ANALYSIS. PLEASE RESPOND.

A. If Mr. Moul is correct that the Commission has never adopted a retention growth approach, I urge the Commission to consider the evidence that I present in my direct testimony that shows that my DCF approach is a more reasonable approach than mechanically using analyst EPS growth rates as a proxy for growth, as Mr. Moul has done. Simply claiming that an approach has not previously been adopted is an insufficient basis of dispute, because under that rationale, the Commission would be constrained in establishing just and reasonable rates and only stagnant decisions would be possible.

Q. ON PAGE 5, LINES 14-16 OF HIS REBUTTAL TESTIMONY, MR. MOUL STATES THAT ANALYSTS' PROJECTIONS OF FUTURE GROWTH ARE THE ONLY REASONABLE EVIDENCE OF THE DCF GROWTH RATE AND THE RETENTION GROWTH RATE THAT HE USED IS ENTIRELY INAPPROPRIATE AND HAS NEVER BEEN ADOPTED IN PENNSYLVANIA. PLEASE RESPOND.

A. I disagree. As discussed above there are numerous mathematical issues with relying solely on analysts' projections of future growth as the growth component of a DCF model. It is unlikely that investors consider the basic mathematical relationship between dividends, retaining earnings and capital available to a company to grow future earnings.

Additionally, as discussed above, J.P. Morgan understands that relying only on analysts' projections is not reasonable as they have considered retention rates as I have done. Regarding this Commission's past decisions, my job is to provide an independent cost of capital analysis that it can use to determine the appropriate ROE and capital structure for Peoples. It is not appropriate to confine my independent analysis to only that which Mr. Moul claims has previously been adopted,

Q. ARE THERE ADDITIONAL REASONS WHY IT IS NOT APPROPRIATE TO USE ANALYST 5-YEAR EPS GROWTH RATE FORECASTS AS THE GROWTH COMPONENT IN A DCF MODEL?

A. Yes. A study conducted by McKinsey & Company in 2010 found that "analysts have been persistently over optimistic for the past 25 years with estimates ranging from 10 to 12 percent a year, compared with actual earnings growth."[5]

On average, analysts' forecasts have been almost 100 percent too high.[6] Additionally, the further a projection predicts into the future, the likelihood of the projection being correct decreases. Capital markets, on the other hand, are notably less giddy in their predictions. Except during the market bubble of 1999-2001, actual price-to-earnings ratios have been 25 percent lower than implied P/E ratios based on analyst forecasts.

To my knowledge, financial publications do not recommend using EPS growth rates to calculate the cost of equity in a DCF model. McKinsey & Company continues to

[5] Marc H. Goedhart, Rishi Raj and Abhishek Saxena, *Equity Analysts: Still too bullish*, Spring 2010.

[6] Ibid.

advise its clients to be cautious about the reliability of analysts' forecasts. On May 16, 2022, McKinsey stated that "analysts' near-term forecasts are often overly optimistic and don't always correctly reflect operating performance."[7]

Even if equity analysts' forecasts were not upwardly biased, as discussed in my Direct Testimony, adding earnings per share growth forecasts to a dividend yield without considering the retention rate produces a flawed result. Using an earnings per share growth forecast as the growth component in a DCF model is like measuring how much money you will have in your bank account by simply adding up your paychecks. If you do not consider what percentage of your paycheck you will retain in your account and what percentage you will spend, your calculations will not be accurate.

Q. ARE YOU SAYING THAT ANALYSTS' CONSENSUS EARNINGS PER SHARE GROWTH RATES ARE USELESS AS AN AID TO PROJECTING THE FUTURE?

A. No. Analysts' EPS growth rates are, however, very dangerous if used in a simplified DCF which does not consider factors such as dividend per-share growth and book value per share growth as it could result in unsustainable growth rates. For example, if a company has a slow earnings year followed by a strong recovery, this potentially high earnings growth rate is unlikely to be maintained in the long-term, and therefore result in an unrealistic and/or unsustainable projection. Analysts' five-year earnings-per-share growth rates forecasts are not useful if used without considering other sensitivities. However, if used as part of a holistic analysis that considers other factors, the analysts' five-year

[7] David Kohn, Vartika Gupta, Tim Koller, Werner Rehm, *Do consensus estimates accurately reflect operating performance?*, May 16, 2022.

earnings-per-share growth rates forecasts can be useful in computing estimates of what earned return on equity investors expect will be sustained in the future, and as such, are useful in developing long-term sustainable growth rates.

Q. MR. MOUL CLAIMS ON PAGE 21, LINES 8-10 OF HIS REBUTTAL TESTIMOY THAT A FUNDAMENTAL TENET OF FINANCE IS THAT THE COST OF EQUITY MUST BE HIGHER THAN THE COST OF DEBT BY A MEANINGFUL MARGIN TO COMPENSATE FOR THE HIGHER RISK ASSOCIATED WITH A COMMON EQUITY INVESTMENT. PLEASE RESPOND.

A. I agree with Mr. Moul that equity is riskier than debt and therefore it is reasonable for investors to demand a higher turn to invest in equity than debt. However, I disagree with Mr. Moul regarding how much of a premium investors require to invest in equity. My COE recommendation for Peoples is 365 basis points higher than the Company's cost of debt (8.02% - 4.37%), which is based on a careful analysis of equity market data. Mr. Moul's criticism is a straw man argument as my COE recommendation for Peoples is, in fact, higher than Peoples' cost of debt. If investors required a greater premium my COE models would have produced a higher COE result.

Q. MR. MOUL STATES ON PAGE 27, LINES 5-7 OF HIS REBUTTAL TESTIMONY THAT YOU DO NOT AND CANNOT EXPLAIN WHY AN INVESTOR EXPECTED RETURN OF 8.60% SHOULD BE REDUCED TO 8.06% OR 8.09%

IN THIS CASE, PARTICULARLY SINCE RATES ARE SET ON BOOK VALUE (NET ORIGINAL COST). PLEASE RESPOND.

A. Mr. Moul is conflating accounting returns and market-based returns. The 8.60% Mr. Moul is referring to is the future expected return on book equity published by Value Line and implied by Zack's forecasts. In other words, this 8.60% is an accounting figure (based on expected return on the book value of equity), not investors' expected returns (based on expected return on the market value of equity). I provided an explanation of the difference between expected return on book equity (accounting returns) and expected return on the market price of a stock on page 103, and page 104, lines 1-5 of my direct testimony. If Pennsylvania consumers' rates are set based on expected accounting returns instead of market returns, they will be significantly overcharged. An authorized ROE should be commensurate with the returns the investors expect to earn when investing in other enterprises having corresponding risks. This investment is made at the market price of a utility's stock, not the accounting value.[8] The average market price of the gas utility stocks in my proxy group is between 1.42- and 1.56-times book value. If investors are willing to pay about 1.5 times the book value for an expected 8.60% return on book value for gas utilities, they are expecting to earn a return significantly less than 8.60% on market value. Therefore, it makes sense that my Constant Growth DCF indicates a market-based cost of equity of between 8.06% and 8.09%.[9]

[8] For example, if you were to log in to your brokerage account you would not be able to purchase American States Water's stock for $19.45 (it's current book value according to Value Line). Instead, you would have to pay $87.76 (the closing price of its on August 1, 2022, according to Yahoo Finance).

[9] Mr. Rothschild's direct testimony, Exhibit ALR-3, page 1.

If Mr. Moul were correct that we should use investors' expected *accounting* returns to determine Peoples' authorized ROE, there would be no purpose in producing rate of return testimonies and conducting hearings. Using Mr. Moul's logic, setting Peoples' authorized ROE would be a mechanical exercise of looking up published accounting returns. In other words, stock prices, interest rates, and other capital market data would be irrelevant.

Q. MR. MOUL STATES ON PAGE 27, LINES 9-10 OF HIS REBUTTAL TESTIMONY THAT YOU HAVE NOT DEMONSTRATED THAT RETENTION GROWTH DETERMINES INVESTOR EXPECTRED RETURN RATES. PLEASE RESPOND.

A. I disagree. As discussed earlier in this testimony, it does not make mathematical sense to use analyst five-year EPS growth rate forecasts without attempting to investigate what percentage of earnings companies are likely to pay out as dividends and what percentage they are likely to retain in the business (i.e., the retention rate). Mr. Moul's use of analysts' 5-year EPS growth rate as a proxy for growth is like a money manager telling you that you will have enough money to retire in 20 years by only estimating your income for the next 5 years. In order to determine if you will have enough money to retire in 30 years you must consider how much money you are saving (retaining) and how much money you are spending (paying out as dividends). Also, you must consider if your current income is sustainable over the next 30 years, not just the next 5 years, as Mr. Moul has done in his DCF method. The growth rate component of my sustainable growth DCF method appropriately accounts for the retention rate, which makes mathematical/logical sense because it recognizes the mathematical interrelationship between book value, dividends,

and earnings. However, the validity of my DCF method does not hinge on investors and or utility executives being logical about calculating growth rates. For example, if investors expected utility executives to persistently waste retained earnings on unprofitable projects, we would see a discrepancy between the results of DCF model and the results of other COE models that are not being distorted by the effects of wasted retained earnings. The results of sustainable growth DCF model are between 8.06% and 8.09%, which is within the range of my CAPM, a method that is not impacted by my DCF growth rate, result of between 7.50% and 8.22%.[10]

Q. PLEASE EXPLAIN WHY A MARKET TO BOOK RATIO OF BETWEEN 1.42 AND 1.56 INDICATES THAT THE COST OF EQUITY FOR GAS UTILITY COMPANIES IS LOWER THAN THE EXPECTED RETURN ON BOOK EQUITY.

A. Calculating the cost of equity (investors' equity return expectations) is more complicated than calculating the return on a rental property, but the same concept applies regarding the relationship between market returns and book returns. If an investor purchases an apartment for $100,000 and expects to receive $500 per month ($500 X 12 = $6,000 per year) in rent, he or she will expect an annual return of 6% ($6,000/$100,000) on their investment. When the investor purchases the apartment, he would record the book value as $100,000 and the market value as $100,000 unless he determined that the purchase price was higher or lower than the market value. If the value of the apartment increases to $150,000, for example, the market to book ratio would increase to 1.5, and therefore, his

[10] Exhibit ALR-2.

return on book value would remain at about 6% while his return on the market value of the apartment would decrease to about 4.0%.

In this rental property example, an increasing market value results in a lower expected return on market (4.0%) compared to expected return on book (6%) if the rent price remains constant. Rent prices do not increase to maintain an expected 6% return on book value; they are set by what the rental market reasonably can bear. The same is true of utility stocks. You do not establish an ROE based on a constant return on book (accounting) returns, it is set based on what investors in the market expect that market to return. In the case of a utility stock, an increasing market value results in a lower return on market for the same expected return on book. As this rental property example demonstrates, there is nothing inconsistent about investors expecting a lower return on the market price of an investment than on the book value of an investment. In fact, with market to book ratios of gas utility companies significantly above one it would be surprising if investors expected a return on market equal, or anywhere close, to return on book.

Q. ON PAGE 28, LINES 5-21 AND PAGE 29, LINES 1-5 OF HIS REBUTTAL TESTIMONY, MR. MOUL CLAIMS THAT YOU ARE MISTAKEN THAT MARKET-TO-BOOK RATIOS ABOVE 1 INDICATES THAT THE COE FOR GAS UTILITY COMPANIES IS LOWER THAN THE EXPECTED RETURN ON BOOK EQUITY. PLEASE RESPOND.

A. I strongly disagree. Mr. Moul tries to demonstrate that my position on the relationship between market-to-book ratios, authorized ROEs, and the market-based COE is false by pointing to historical data. He claims that if investors expected to receive a lower market return than book return then utility stock prices would have reverted to their book value

over time. I would agree with Mr. Moul that the market-to-book ratios of gas utility stocks have not reverted to their book value. However, the fact that market-to-book ratios for utility companies have remained above 1 persistently for many decades indicates that authorized ROEs for gas utility companies have been higher than their market-based COE and therefore, consumers have been overpaying for a long time. The average market to book ratios of the 5 companies in the RFC Gas Proxy group is about is about 1.5.[11] Please see Appendix A of my direct testimony regarding why market-to-book ratios for gas utility companies indicates that their COE is lower than their authorized ROEs.

Q. MR. MOUL CLAIMS THAT THE DCF IS SLOW TO REACT TO CHANGES IN BOND YIELDS, NECESSITATING THE NEED FOR CAPM/RISK PREMIUM. PLEASE RESPOND.

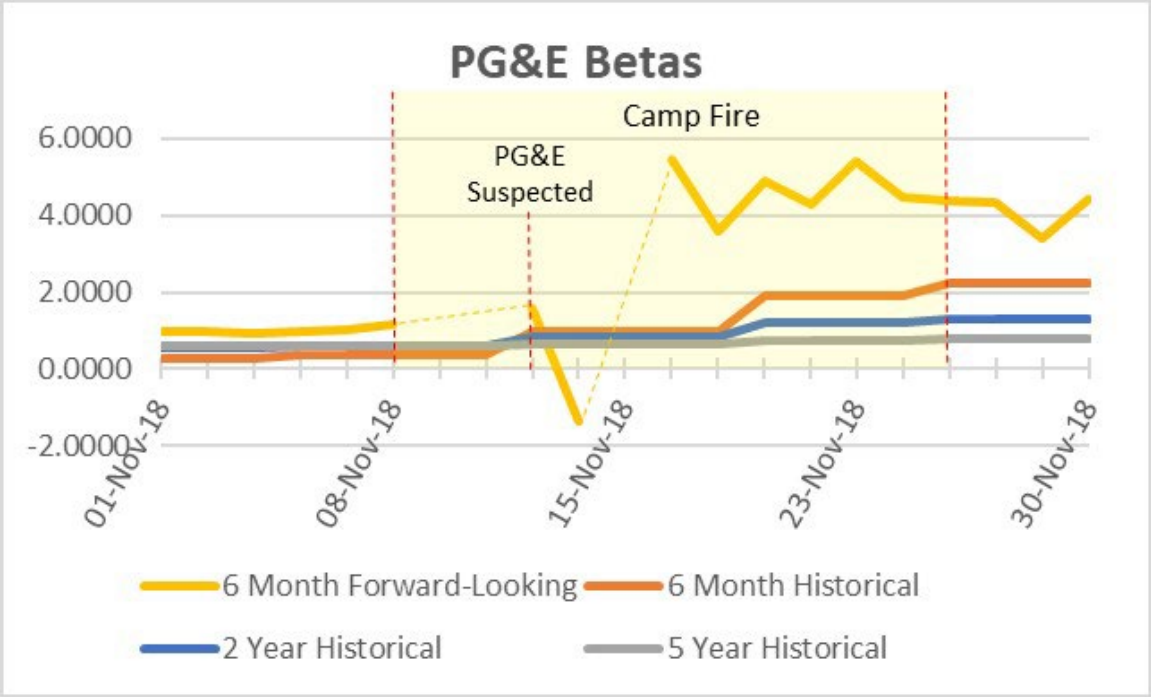
A. I believe that both the DCF and CAPM models can take time to react to changes in bond yields and capital markets in general if the analyst uses only historical data and or analyst forecasts. Analyst forecasts, even if they reflect investors' expectations, can take time to change if for no other reason that many publications do not publish their projections every day. For example, Value Line publishes their company reports every 3 months. A COE model that uses only historical data can take time to adjust because it takes time for changes in bond yields to impact model inputs, such as 5-year historical betas used in the CAPM, because the influence of the most recent capital market data on these betas will be overwhelmed by the influence of the hundreds of thousands of capital market data points

[11] Exhibit ALR-3, page 1. The market to book ratio for the year ending 2/29/2024 and as of 2/29/2024 is 1.56 and 1.42 respectively.

that stretch back many years. In summary, I do not believe that the DCF model is any more or less able to reflect changes in capital market conditions compared to the CAPM and Risk Premium analyses. It depends on the way the model is implemented. I use stock option prices in my CAPM and DCF methodologies, so they are better able to measure changes in the cost of equity. Although I do not use a risk premium method myself, I would also say that there are appropriate ways to implement such a methodology and inappropriate ways.

Q. CAN YOU GIVE AN EXAMPLE THAT DEMONSTRATES YOUR COE METHODS THAT USE STOCK OPTION PRICES CAN MEASURE WHEN INVESTORS'S EXPECTATIONS CHANGE?

A. Yes. As shown in the chart below, shortly after investors started to understand that PG&E was exposed to potential wildfire liabilities as a result of the 2018 forecast fire referred to as the Camp Fire, option-implied betas immediately reflected investors' changing expectations and PG&E's higher cost of equity. After initially falling negative for a day during the initial market turmoil caused by the fire, option-implied betas jumped up from near 1.0 to mostly over 4.0. On the other hand, 5-year historical betas hardly reacted.



This chart shows that my COE models are able to measure when the cost of equity changes, whether it is because of changing bond yields or potential wildfire liabilities. On the other hand, Mr. Moul's CAPM, which is based on 5-year historical betas can take months or even years to adjust to capital market changes.

Q. ON PAGE 9 OF HIS REBUTTAL TESTIMONY MR. MOUL CLAIMS THAT THE COMMISSION SHOULD CONSIDER THE HIGH LEVEL OF CAPITAL BORROWING COSTS WHEN DECIDING THE RETURN ON EQUITY IN THIS CASE. PLEASE RESPOND.

A. I agree that the Commission should consider the level of capital borrowing costs in this proceeding. However, it is important to recognize that a 1% increase in interest rates/cost of debt does not necessarily mean that the cost of equity will also increase by 1% increase. In fact, capital market data shows that the cost of equity for most gas utility companies

declined in 2023 as interest rates increased. As shown on page 128 of my direct testimony, the CAPM indicated cost of equity for gas utility companies peaked at 8.67% in November 2022 and has fallen to under 8% as of February 2024. Over that period, the yield on the 30-year U.S. Treasury bond has increased from about 4.25% to 4.5%[12] which demonstrates that the cost of equity and interest rates do not always move in the same direction, as Mr. Moul implies.

III. CAPM ANALYSIS

Q. PLEASE SUMMARIZE MR. MOUL'S CRITICISMS OF YOUR CAPM METHODOLOGY.

A. Regarding my CAPM results (7.50% - 8.22%), Mr. Moul states "[by] any reasonable standard, such low returns are simply not credible."[13] The only evidence he provides for this conclusion is by referring to the results of his and Mr. Spadaccio's CAPM, of 12.07% and 10.91% respectively.

Mr. Moul spends considerable time claiming that my CAPM is not reliable because it is "unconventional."[14] He criticizes many of the specific components of my CAPM, including using stock options to calculate forward betas.

[12] See Chart 1 on page 24 of my direct testimony. This chart shows that the yield on the 30-year U.S. Treasury Bond was about 4.25% in November 2022 and about 4.5% by February 2024.

[13] Mr. Moul's rebuttal testimony, page 42, line 2-3.

[14] Mr. Moul's Rebuttal Testimony, Page 43, lines 1-3.

Q. WHAT IS YOUR GENERAL RESPONSE TO MR. MOUL'S CRTICISMS OF YOUR CAPM METHODOLOGY?

A. Throughout his testimony, Mr. Moul changes his criteria for determining the appropriate ROE for Peoples, continues to use COE models that have been proven to be flawed, and criticizes my approach in ways that are illogical and inconsistent with the facts (e.g., he falsely claims that my methods have not been supported in other cases, but my testimony clearly describes that it was adopted by the South Carolina Public Service Commission). As stated on page 12, lines 5-9 of my direct testimony, on April 9, 2020, the South Carolina Public Service Commission stated the following regarding my CAPM methodology:

> Amongst the three witnesses, Consumer Affairs Rothschild's approach was unique in that he included the use of both historical and forward-looking, market-based data in his analysis. Based on the testimony and facts presented, the Commission therefore adopts the recommended ROE of 7.46% proposed by witness Rothschild.

Mr. Moul claims that my CAPM should not be relied upon because it is "unconventional" among other reasons.[15] According to Mr. Moul, the Commission should only rely on common models that he claims are used by Rate of Return witnesses and investors, despite their obvious flaws (e.g., Value Line's 5-year historical betas that vary based on arbitrary data choice). On the other hand, I have been testing models for years and continually eliminate the ones that prove to be flawed. My work to continually improve the accuracy of COE models led to the development of my CAPM methodology, which includes measuring investors' expectations directly using stock option prices. My improved methods have been empirically tested using capital market data, applied for many

[15] Mr. Moul's Rebuttal Testimony, Page 43, lines 1-3

years, and as stated above, have been adopted in previous cases. Continuous improvement of COE models is required to ensure that regulated utility companies have access to the capital they need while also protecting consumers.

Mr. Moul's criticisms of my CAPM are based on his outright protest against the possibility of progress in COE modeling. This is at the expense of not adjusting to changing capital market conditions, including the massive, expanded use of stock options by investors[16] and the continuing results of research focusing on improving statistical techniques to best measure complex systems with power law distributions, including stock markets.

The Federal Energy Regulatory Commission (FERC) has recognized that it is important to evaluate and revise COE models. FERC concluded that it may not be appropriate to use Value Line betas in a CAPM analysis because the beta component should be based on the same exchange as the risk premium component of the model. Value Line is based on the New York Stock exchange.[17] According to FERC, Mr. Moul's CAPM is not appropriate because it is not based on the S&P 500.

Q. ON PAGE 42, LINES 17-19, OF HIS REBUTTAL TESTIMONY MR. MOUL SAYS THAT HER DOES NOT KNOW OF ANY OTHER WITNESS IN PUBLIC UTILITY RATE CASES THAT USES 'HISTORICAL BLENDED' BETAS AND YOU HAVE

[16] https://www.investors.com/research/options/options-trading-today-after-50-years-of-growth/

[17] 174 FERC ¶ 63,024 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION, Docket Nos EL17-41-001 at 196

NOT SHOWN, NOR COULD SHOW, THAT INVESTORS USE YOUR BETAS. PLEASE RESPOND.

A. As discussed below, it is not possible to determine what models investors use. It is also not possible to determine what data they use. Therefore, I must evaluate and decide on the appropriate models and data to use based on their merits. Starting on page 66 of my direct testimony I explain why I use a historical blended beta in my CAPM analysis that includes periods of 6 months, 2 years, and 5 years, as opposed to relying exclusively on the 5-year period used by value line. Using shorter periods for the return regression analysis portion of the historical beta calculation allows me to see if the correlation between the returns of each of the companies in my RFC Gas Proxy Group and those of the S&P 500 Index has changed in the last 2 years or 6 months. Using a 5-year period exclusively tends to make recent changes in the correlation more difficult to identify because of the weight of 5 years of data.

Financial markets are constantly in flux due to the influence of countless factors. So-called "market dislocations," are just some of the numerous factors that are constantly affecting markets. To attempt to separate any one specific factor from "real" underlying market dynamics would be an exercise in futility.

Furthermore, predicting the duration and impact of any single influencing factor on financial markets is extremely challenging, if not impossible. In 2008, when interest rates plummeted to unprecedented lows, numerous analysts deemed this a temporary anomaly. Contrary to these expectations, rates not only persisted at these low levels for more than ten years but dropped even further in response to the unforeseen COVID-19 pandemic, which significantly affected the global economy and financial markets.

The use of historical blended betas, including 6-month historical betas, is logical because historical blended betas can better measure recent and current market dynamics than just using the 5-year historical betas used exclusively by Mr. Moul. I believe my historical blended betas in conjunction with forward-looking, option-implied betas are logical and appropriate.

Q. ON PAGE 42, LINES 4-6, MR. MOUL CLAIMS THAT YOU USE DATA THAT IS NOT AVAILABLE TO INVESTORS. PLEASE RESPOND.

A. This is simply false. The data I have used is available to any investor that has access to the internet. This means the data I use is more widely available than the data Mr. Moul has used. The betas used by Mr. Moul (Value Line's published 5-year historical betas) are based on the past and therefore it is unlikely they measure current investors' expectations regarding utility betas in particular, and risk and return in general. It is inappropriate to use backward looking measures when data regarding current investor expectations is not available. The purpose of this proceeding is to determine the current, market-based cost of equity. Not only is using historical betas inconsistent with the purpose of this proceeding, research discussed below shows that CAPM results based on historical betas are not consistent with CAPM theory. In other words, Mr. Moul is criticizing me for not implementing the CAPM in a way that has been falsified.

Q. MR. MOUL CLAIMS THAT IT IS UNUSUAL FOR A RATE OF RETURN WITNESS TO CONSIDER THE YIELD ON THE 3-MONTH TREASURY BILL

AS A PROXY FOR THE RISK FREE RATE COMPONENT OF A CAPM ANALYSIS IN RATE CASES. PLEASE RESPOND.

A. I would agree that most rate of return witnesses use the yields on long-term bonds (e.g., 30-year U.S. Treasuries) as a proxy for the risk-free rate, as I do. However, just because this is the practice used by most rate of return witnesses does not mean it is appropriate. Decisions made by rate of return witnesses should be based on the merits or we risk being dogmatic. The problem with using the yield on long-term U.S. Treasury bonds as a proxy for a risk-free rate is that they are not risk free due to opportunity cost. On the other hand, short-term U.S. Treasury bonds are basically risk free. For example, the yield on 3-month U.S. Treasury bills increased from 0.08% to 4.53% between January 3, 2022, and January 3, 2023. The owner of a 3-month U.S. Treasury bill with a $1 million face value would have lost only $11,000 if this change in yield happened on a single day. In comparison, the value for a zero coupon 30-year U.S. Treasury bond would fallen by over $700,000. Clearly 30-year U.S. Treasury bonds are not risk free and 3-month U.S. Treasury bills are nearly risk free. Silicon Valley Bank's collapse in 2023 was possible because of billions of dollars of losses associated with their holding of "risk free" long-term U.S. Treasury bonds that lost their value as interest rates increased.

Q. PLEASE RESPOND TO MR. MOUL'S CLAIM THAT YOUR METHOD IS UNUSUAL AND NON-STANDARD.

A. As explained in my direct testimony, my CAPM is based on methodologies used by Value Line, the Chicago Board of Options Exchange (CBOE), and published in peer-reviewed academic journals (e.g., The Review of Financial Studies). Additionally, it is far from unusual to use stock options to measure investor expectations. For example, the Federal

Reserve Bank of Minneapolis uses stock options to measure implied probability distributions on the S&P 500. The Federal Reserve Bank of Atlanta uses options and futures contracts to measure investors' expectations regarding the federal funds rate.

There are thousands of papers published every year regarding the use of stock options. In 2023 alone, Google scholar reports over 12 thousand papers related to the following search term "using stock options to measure investors' expectations regarding stock returns."[18] Additionally, Microsoft recently released an analytical tool called Projection that shows the expected change in equity prices based on stock option prices. Regarding Projection, Microsoft states the following:

> Projection democratizes advanced methods for visualizing the sentiment of options market participants that were formerly restricted to academics and institutional investors and makes them free for anyone to use. This type of tool is commonly used by professionals to:
>
> - Assess the market implied risk involved in owning an asset
> - Estimate the market implied range of possible outcomes for an asset's future performance.
> - Compare against other sources of market opinion, such as Wall Street analysts' ratings.[19]

Q. PLEASE RESPOND TO MR. MOUL'S CLAIM ON PAGE 42, LINES 2-3 OF HIS REBUTTAL TESTIMONY THAT YOUR CAPM RESULTS ARE UNREASONABLE BY ANY STANDARD MEASURE.

A. My CAPM results (7.50% - 8.22%) are in the middle to upper part of the range of the expectations published by major banks and brokerage houses (6.20% to 9.0%). These

[18] https://scholar.google.com/scholar?hl=en&as_sdt=0%2C7&as_ylo=2023&q=using+stock+options+to+measure+investors%27+expectations+regarding+stock+returns&btnG=

[19] https://www.msn.com/en-us/money/chart?id=a1nwgh&timeFrame=Max&chartType=line&projection=true

equity return expectations are for the overall stock market (e.g., US Large Cap, S&P 500), which should be higher than the return expectations for buying utility stocks because regulated monopoly utilities are lower risk than most, if not all, unregulated companies in the S&P 500, like Tesla and Amazon.

Q. ON PAGE 42 LINE 3 OF HIS REBUTTAL TESTIMONY, MR. MOUL CLAIMS THAT ALL OF YOUR CAPM RESULTS ARE BELOW YOUR DCF RETURN. PLEASE RESPOND.

A. This is false. As show on Table 2, page 11, of my direct testimony, two of my CAPM results are above my sustainable growth DCF results.

Q. ON PAGE 42 OF HIS REBUTTAL TESTIMONY, MR. MOUL CLAIMS THAT YOU SHOULD HAVE USED BETAS THAT ARE WIDELY USED BY INVESTORS INSTEAD OF MANUFACUTRING YOUR OWN "PHANTOM" BETAS. PLEASE RESPOND.

A. Implementing a COE model, including the CAPM, does not require an analyst to know what model(s) or beta coefficients investors use. Some investors buy stocks because of a friend's recommendation, a comment made on cable news or a late-night tweet. The number of models used by investors is unknowable and arguably as numerous as individual investors and constantly changing over time. Mr. Moul's claim that a CAPM methodology should be implemented mechanically with Value Line's published 5-year historical betas because "it is well known" that investors use Value Line betas ignores the complexity of how billions of human beings make decisions. There is a distinction that Mr. Moul ignores between Value Line's approach to calculate betas and Value Line's published betas.

Simply because a beta is published by Value Line does not mean that investors use, or are even aware of, the ever-changing Value Line beta. Additionally, Value Line publishes many different betas for the same company, not just the 5-year historical betas used by Mr. Moul. Regardless of what models investors use, or how they make their investment decisions, their return expectations, and the appropriate cost of equity for Peoples, are represented in the prices investors are willing to pay for stocks, bonds, and options. As such, Mr. Moul's criticisms are without merit.

Q. PLEASE RESPOND TO MR. MOUL'S CLAIM THAT IT IS "WELL KNOWN" THAT INVESTORS RELY ON VALUE LINE DATA AND I SHOULD HAVE USED VALUE LINE BETAS IN MY CAPM.

A. Mr. Moul provides no source of his assertion that it is well known that investors rely on value line data to measure the cost of equity. In my experience, this is not the case and I am highly skeptical of the assertion that the average investor uses Value Line betas to determine the cost of equity or determine what stock to purchase.

Q. ARE YOU AWARE OF RESEARCH THAT PUTS INTO QUESTION THE USEFULNESS OF VALUE LINE'S PROJECTIONS?

A. Yes. A research report published by the Journal of Banking & Finance found that "Value Line's long-term stock return projects are extremely overoptimistic and have no predictive power…"[20] The results of this report provide additional evidence that investors are unlikely to blindly rely on Value Line's data as Mr. Moul suggests.

[20] Andrew C. Szakmary, C. Mitchell Conover & Carol Lancaster. An examination of Value Line's long-term projections. Journal of Banking & Finance, August 2007.

IV. LEVERAGE ADJUSTMENT

A. DO YOU HAVE ANY ADDITIONAL COMMENTS REGARDING MR. MOUL'S LEVERAGE ADJUSTMENT?

A. No. As stated on page 93 of my Direct Testimony, Mr. Moul's leverage adjustment goes against original cost rate making and should be rejected. Further, the Commission has denied Mr. Moul's leverage adjustment in past cases.[21] I think it is also important to acknowledge that Mr. Moul has, seemingly in a course of business, consistently recommended leverage adjustments for every Pennsylvania public utility company for which he has served as an expert witness since 2018. I am including Mr. Moul's responses to OCA's discovery as Exhibit ALR-1-SR, and they demonstrate that in the 21 cases that Mr. Moul has identified, he has recommended a leverage adjustment in every single one of them.

Q. STARTING ON PAGE 34 OF MR. MOUL'S REBUTTAL TESTIMONY HE CONTINUES TO DEFEND HIS LEVERAGE ADJUSTMENT BY CLAIMING THAT FOR DCF RESULTS TO BE RELEVANT IN THE RATE-SETTING CONTEXT, THE MARKET-DERIVED COST RATE CANNOT BE USED WITHOUT MODIFICATION. PLEASE RESPOND.

A. As stated in my direct testimony, I do not agree with Mr. Moul's use of a leverage adjustment. Mr. Moul explains that the "the leverage adjustment is necessary to make the market-derived DCF results applicable in the rate-setting [context]."[22] Investors

[21] Docket No. R-2017-2640058, Opinion and Order, Page 93.

[22] Mr. Moul's Rebuttal Testimony, Page 34, lines 2-4.

understand that authorized ROEs are applied to book value and almost certainly take this into account when making investment decisions. Additionally, as explained in Appendix A of my direct testimony, market-to-book ratio ratios above one indicates that the cost of equity for gas utility companies is lower than the expected return on book equity. The way Mr. Moul's leverage adjustment works, the higher the market-to—book ratio the greater the adjustment. Therefore, the more authorized ROEs out of line actual market-based cost of equity the higher the leverage adjustment. In does not make sense to charge consumer more because they are already overpaying.

V. SMALL SIZE EFFECT

Q. ON PAGE 43, LINES 12-14 OF HIS REBUTTAL TESTIOMNY, MR. MOUL STATES THAT THE SBBI/MORNINGSTAR YEARBOOK CLEARLY DEMONSTRATES THAT THE SIMPLE CAPM DOES NOT REFLECT THE RETURN THAT IS ASSOCIATED WITH SMALL SIZE. PLEASE RESPOND.

A. As discussed in my direct testimony, Mr. Moul's premium adder for the relatively small size of Peoples is unjustifiable. First, with a requested rate base of over $ 4 billion[23], Peoples is not a small company by any standard. Nevertheless, a proper analysis of the data from Ibbotson SBBI/Morningstar shows that size is a diversifiable risk and therefore does not impact the cost of equity. Professor Aswath Damodaran said the following regarding the supposed "small cap premium." Even if you believe that small cap companies

[23] Volume 4, Exhibit 11 Schedule No. 1

are more exposed to market risk than large cap ones, this is an extremely sloppy and lazy way of dealing with that risk, since risk ultimately has to come from something fundamental (and size is not a fundamental factor).[24]

Additionally, a 2018 study conducted by scholars at AQR Capital Management and Yale University found that "the size effect diminished shortly after its discovery and publication."[25] The authors of this research found that data errors plagued the early studies regarding the relationship between firm size and return. They found that the data in the earlier studies did not include delisted companies and since smaller firms are delisted more often than larger stocks, the biased data (referred as a "delisting bias") made the returns of smaller stocks look higher than reality.[26]

Mr. Moul's CAPM is inflated because he takes additional steps to increase his results for a so-called small firm effect that has been put into serious question by recent research. Therefore, his CAPM overstates Peoples' cost of equity because the risk premium potion of this method is impacted by these exaggerated returns.

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[24] Aswath Damodaran, Equity Risk Premiums (ERP): Determinates, Estimation and Implications – The 2014 Edition (paper updated, March 2015) page 42.

[25] Ron Alquist, Ronen Israel, and Tobias Moskowitz, Fact, Fiction, and the Size Effect, *The Journal of Portfolio Management*, Fall 2018, page 3.

[26] Ron Alquist, Ronen Israel, and Tobias Moskowitz, Fact, Fiction, and the Size Effect, *The Journal of Portfolio Management*, Fall 2018, page 5.

VI. RISK PREMIUM METHOD

Q. ON PAGE 45, LINES 9-16, MR. MOUL CLAIMS THAT YOUR RISK PREMIUM, BASED ON THE KROLL SUPPLY-SIDE RISK PREMIUM (4.39%), IS LOWER THAN THE RISK PREMIUM PORITON OF HIS MARKET RISK PREMIUM APPROACH (6.5%) IS UNSUPPORTED BECAUSE IT IS NOT BASED ON ACTUAL MEASURABLE RETURNS. PLEASE RESPOND.

A. First, I do not use the Kroll supply-side equity risk premium analysis in any of my COE models as claimed by Mr. Moul. Nevertheless, I continue to believe that Kroll's equity risk premium analyses, including a resent finding that the equity risk premium is 5.5% shows that Mr. Moul's 6.5% equity risk premium portion of his Market Risk Premium Method is excessive. It should be further noted that Kroll's 4.39% and 5.50% equity risk premium calculations are in comparison to U.S. Treasury bonds, not the corporate bond yields used in Mr. Moul's analysis. Since corporate bond yields are higher than U.S. Treasury bonds, Mr. Moul's equity risk premium would be expected to be lower than those calculated by Kroll. Instead, his 6.50% is significantly higher. Therefore, the results of his own source indicate that his 11.50% COE result is excessive.

Finally, his claim that Kroll's equity risk premium analysis does not rely on "actual measurable returns" revealed by historical data is incorrect. Kroll's supply-side equity risk premium analysis is based on capital market data between 1926 and 2022.[27]

[27] Kroll 2023 SBBI Yearbook, Page 198.

VII. COMPARABALE EARNINGS APPROACH

Q. ON PAGES 45-46 OF HIS REBUTTAL TESTIMONY, MR. MOUL CONTINUES TO DEFEND HIS COMPARABLE EARINGS APPROACH BY CLAIMING THAT IT SATISFIES THE COMPARABILITY STANDARD ESTABLISHED IN THE HOPE CASE. DO YOU AGREE WITH MR. MOUL?

A. No. Mr. Moul's comparable earnings approach does not satisfy the comparability standard established in Hope Nat. Gas Co., 320 U.S. 591,603(1944) as he claims, because investors are not able to earn the return on book equity figures used in this method. As discussed on page 5 of my direct testimony, the legal standards set by the United State Supreme Court require that "The return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks."[28] Investors are not able to earn the return on book equity unless the market-to-book ratios of these companies are the same. Mr. Moul has not demonstrated that the market-to-book rations of the companies that he uses in his analysis are anywhere near 1. Therefore, I continue to support my recommendation that the results of Mr. Moul's Comparable Earnings Approach should be disregarded.

VIII. MANAGEMENT PERFORMANCE RECOGNITION

Q. DID MR. MOUL PROVIDE ANY ADDITIONAL EVIDENCE IN HIS REBUTTAL TESTIMONY THAT LEADS YOU TO CHANGE YOUR RECOMMENDATION

[28] Fed. Power Comm'n v. Hope Nat. Gas Co., 320 U.S. 591, 603 (1944).

THAT PEOPLES' ROE SHOULD NOT RECEIVE AN ADDER FOR MANAGEMENT PERFORMANCE?

A. No. As stated on page 100 of my direct testimony, if the Commission decides to authorize Peoples an ROE that is higher than Peoples' market-based COE for its claimed superior management performance, I strongly encourage the Commission use my ROE recommendation of 8.02% (7.67% - 8.37%) without any adjustment for management performance. In addition to the reasons that I identified in my direct testimony, and which other OCA witnesses have indicated in their testimonies, it is also important to note that Mr. Moul consistently recommends adjustments for management performance seemingly as a course of business, noting that since 2018, he recommended management performance adders for 18 of the 21 Pennsylvania public utility cases in which he provided expert testimony. Exhibit ALR-1-SR. Thus, Mr. Moul's recommendation should be considered in the context that, in his opinion, over 85% of Pennsylvania public utilities had exemplary management performance.

IX. CAPITAL STRUCTURE

Q. ON PAGE 4 OF HIS REBUTTAL TESIMONY, MR. MOUL CLAIMS THAT YOUR RECOMMENDED CAPITAL STRUCTURE IS FACTUALLY WRONG AND CONTRARY TO LONG-STANDING COMMISSION PRACTICE AND PRECEDENT. PLEASE RESPOND.

A. I disagree with Mr. Moul that my capital structure recommendation is contrary to Commission practice and precedent. On page 11 of his rebuttal testimony, Mr. Moul explains that "The Company's actual capital structure ratios are entirely reasonable and

acceptable." I don't disagree that that the Commission should authorize a reasonable capital structure, but the problem in this case is that Peoples' capital structure, as proposed by Mr. Moul, is unreasonable and unfairly prejudices ratepayers. As shown on Exhibit ALR-5, page 5 of my direct testimony, the average common equity ratio used by the 5 companies in my proxy group is 47.2%, significantly less than the 54.67% common equity ratio recommended by Mr. Moul. Mr. Moul's recommended capital structure is not reasonable because it is fundamentally inconsistent with the capital structure ratios used by gas utility companies to raise capital. Therefore, I continue to recommend that Peoples' regulatory capital structure should have a common equity ratio of 50.0%.

X. COMPANIES IN MY PROXY GROUP

Q. ON PAGES 13 AND 14 OF HIS REBUTTAL TESTIMONY MR. MOUL ARGUES THAT HIS PROXY GROUP OF 7 GAS UTILTIY COMPANIES IS MORE APPROPRIATE THAN YOUR PROXY GROUP OF 5 GAS UTILITY COMPANIES. PLEASE RESPOND.

A. My RFC Gas Proxy Group includes 5 of the 8 companies in Mr. Moul's proxy group. I stand by my choice to not include 3 of the companies in my proxy group (Chesapeake Utilities Corp., New Jersey Resources Corp, and Southwest Gas Corp) because I believe they are not in the same risk category as Peoples. Mr. Moul claims that it is appropriate to include these 3 companies in a COE analysis because all of them have greater than 64% of

their assets dedicated to utility operations.[29] The five companies in my proxy group have between 80% and 100% of assets dedicated to utility operations, which indicates they are a better fit than 3 of the 8 companies in Mr. Moul's proxy group which all have less than 80% of assets dedicated to utility operations.[30] Peoples is a regulated public utility and the companies I excluded from my group are not fairly comparable to Peoples' level of risk as a regulated public utility. On the facts of this case, I do not believe that reliance upon these excluded entities provides a fair comparison that should be used as any basis for establishing rates for Peoples' customers. Reliance upon the excluded companies would require the Commission to consider unregulated risk that Peoples' investors are not facing, and it would transfer that artificial risk onto Peoples' ratepayers.

XI. CONCLUSION

Q. PLEASE SUMMARIZE YOUR REACTION TO MR. MOUL'S REBUTTAL TESTIMONY.

A. Mr. Moul's criticisms of my Direct Testimony should be rejected. If adopted, my cost recommendations would allow Peoples to raise the capital it needs to provide safe and reliable service because my recommendations are consistent with investors' return expectations.

[29] Mr. Moul's Rebuttal Testimony, Page 14, lines 3-5.

[30] Mr. Moul's Rebuttal Testimony, Page 14, lines 2-3.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-II-010

Witness: Moul, Paul **Title:** Managing Consultant, P. Moul & Associates

Question: Please provide a chronological list of utility cost of capital testimonies submitted by Paul R. Moul in Pennsylvania since 2018 and include the following information:

a. Identify the company for whom Mr. Moul testified;

b. Identify the case docket number; and

c. Identify the cost of equity that Mr. Moul recommended;

d. Identify the method(s) used to calculate a recommended cost of equity in each case;

Answer: Please refer to the Microsoft Excel spreadsheet that is attached.

Submit Date: 1/30/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-II-011

Witness: Moul, Paul **Title:** Managing Consultant, P. Moul & Associates

Question: For each of the cases identified in response to OCA Set II, Question 10, provide the following information:

a. Indicate whether Mr. Moul recommended that a leverage adjustment be made to account for claimed differences in market value and book value differences; and

b. For each case, indicate whether Mr. Moul recommended a risk adjustment to account for the size of the company.

Answer:
a. Mr. Moul has proposed a leverage adjustment in all of the cases listed on the attachment to the response to interrogatory OCA-II-10. Many of these cases have been resolved by settlements that do not address the rate of return issue. In the three cases where the Commission set the equity return on non-settled cases, there was no recognition provided for the leverage adjustment. The Commission included a leverage adjustment in the list of cases provided below.

- January 10, 2002 for Pennsylvania-American Water Company in Docket No. R-00016339 -- 60 basis points adjustment.
- August 1, 2002 for Philadelphia Suburban Water Company in Docket No. R-00016750 --80 basis points adjustment.
- January 29, 2004 for Pennsylvania-American Water Company in Docket No. R-00038304 (affirmed by the Commonwealth Court on November 8, 2004) -- 60 basis points adjustment.
- August 5, 2004 for Aqua Pennsylvania, Inc. in Docket No. R-00038805 -- 60 basis points adjustment.
- December 22, 2004 for PPL Electric Utilities Corporation in Docket No. R-00049255 --45 basis points.
- February 8, 2007 for PPL Gas Utilities Corporation in Docket No. R-00061398 -- 70 basis points adjustment

b. Please refer to the attachment provided in response to interrogatory OCA-II-10.

Submit Date: 1/30/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-II-012

Witness: Moul, Paul **Title:** Managing Consultant, P. Moul & Associates

Question: For each of the cases identified in response to OCA Set II, Question 10, provide the following information:

a. If Mr. Moul recommended an upward adjustment to return on equity to account for management performance, identify the recommendation

b. For each of Mr. Moul's identified recommendations in subsection (a), indicate whether the case concluded with adoption of Mr. Moul's recommendation.

Answer:

a. Please refer to the attachment provided in response to interrogatory OCA-II-10.

b. The Commission has adopted a return on equity above the midpoint of the range of reasonable returns to recognize the exemplary performance of a utility's management in numerous cases. This process has resulted an additional increment to the equity return where the Commission added 25 basis points to the return in the case of West Penn Power Company, 22 basis points to the return in the case of Aqua Pennsylvania, 12 basis points to the return in the case of PPL Electric Utilities, 5 basis points in UGIU – Electric Division, and 25 basis points in the most recent Aqua Pennsylvania rate case. The range for management performance has been 5 to 25 basis points.

Submit Date: 1/30/2024

PEOPLES NATURAL GAS COMPANY LLC

Paul R. Moul List of Testimonies Submitted in Pennsylvania Since 2018

Case name	Docket number	Date	Return on Equity Recommended	Methods Used	Leverage Adjustment	Size Adjustment	Management Performance	Management Performance Adj. Amount
UGI Utilities, Inc. – Electric Division	R-2022-3037368	January 27, 2023	11.30%	DCF, RP, CAPM, CE	Y	Y	Y	0.20%
National Fuel Gas Distribution Corporation	R-2022-3035730	October 28, 2022	11.20%	DCF, RP, CAPM, CE	Y	Y	Y	0.25%
York Water	R-2022-3031340	May 30, 2022	11.25%	DCF, RP, CAPM, CE	Y	Y	Y	0.25%
PECO Energy Company - Gas Division	R-2022-3031113	March 30, 2022	10.95%	DCF, RP, CAPM, CE	Y	Y	Y	0.10%
Columbia Gas of Pennsylvania, Inc.	R-2022-3031211	March 18, 2022	11.20%	DCF, RP, CAPM, CE	Y	Y	Y	0.25%
UGI Utilities, Inc. – Gas Division	R-2021-3030218	January 28, 2022	11.20%	DCF, RP, CAPM, CE	Y	Y	Y	0.20%
Aqua Pennsylvania, Inc.	R-2021-3027385	August 20, 2021	10.75%	DCF, RP, CAPM, CE	Y	Y	Y	not defined
Duquesne Light Company	R-2021-3024750	April 16, 2021	10.95%	DCF, RP, CAPM, CE	Y	Y	Y	not defined
PECO Energy Company - Electric Division	R-2021-3024601	March 31, 2021	10.95%	DCF, RP, CAPM, CE	Y	Y	Y	0.25%
Columbia Gas of Pennsylvania, Inc.	R-2021-3024296	March 20, 2021	10.95%	DCF, RP, CAPM, CE	Y	Y	N	0.00%
UGI Utilities, Inc. – Electric Division	R-2021-3023618	February 8, 2021	10.75%	DCF, RP, CAPM, CE	Y	Y	N	0.00%
PECO Energy Company - Gas Division	R-2020-3018929	September 30, 2020	10.95%	DCF, RP, CAPM, CE	Y	Y	Y	0.25%
UGI Utilities, Inc. – Gas Division	R-2019-3015162	January 28, 2020	10.95%	DCF, RP, CAPM, CE	Y	Y	Y	0.20%
UGI Utilities, Inc. – Gas Division	R-2018-3006814	January 28, 2019	11.25%	DCF, RP, CAPM, CE	Y	Y	Y	0.25%
Peoples Natural Gas Company LLC	R-2018-3006818	January 28, 2019	11.25%	DCF, RP, CAPM, CE	Y	Y	Y	0.25%
Aqua Pennsylvania, Inc.	R-2018-3003558, et al.	August 17, 2018	10.75%	DCF, RP, CAPM, CE	Y	Y	Y	not defined
York Water	R-2018-3000019	May 30, 2018	11.00%	DCF, RP, CAPM, CE	Y	Y	Y	0.12%
PECO Energy Company - Electric Division	R-2018-3000164	March 29, 2018	10.95%	DCF, RP, CAPM, CE	Y	Y	Y	0.25%
Duquesne Light Company	R-2018-3000019	March 28, 2018	10.95%	DCF, RP, CAPM, CE	Y	Y	Y	not defined
Columbia Gas of Pennsylvania, Inc.	R-2018-2647577	March 16, 2018	10.95%	DCF, RP, CAPM, CE	Y	Y	N	0.00%
UGI Utilities, Inc. – Electric Division	R-2017-2640058	January 26, 2018	10.95%	DCF, RP, CAPM, CE	Y	Y	Y	0.20%

Key:

DCF = Discounted Cash Flow
RP = Risk Premium
CAPM = Capital Asset Pricing Model
CE = Comparable Earnings
Y = Yes
N = No

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission,	:	
	:	
v.	:	Docket No. R- 2023-3044549
	:	
Peoples Natural Gas Company LLC	:	
	:	

VERIFICATION

I, Aaron L. Rothschild, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement 3SR, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: May 3, 2024 Signature: Aaron Rothschild

Aaron L. Rothschild

Address: Rothschild Financial Consulting
15 Lake Road,
Ridgefield, CT

OCA STATEMENT 4SR

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No. R-2023-3044549
	:	
	:	
Peoples Natural Gas Company LLC	:	

SURREBUTTAL TESTIMONY
OF
CLARENCE L. JOHNSON

ON BEHALF OF
OFFICE OF CONSUMER ADVOCATE

May 3, 2024

SURREBUTTAL TESTIMONY OF CLARENCE JOHNSON

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Clarence L. Johnson. My business address is 3707 Robinson Ave, Austin, Texas 78722.

Q. ON WHOSE BEHALF ARE YOU PRESENTING SURREBUTTAL TESTIMONY IN THIS PROCEEDING?

A. I am presenting surrebuttal testimony on behalf of the Pennsylvania Office of Consumer Advocate ("OCA"). I note that I previously submitted direct testimony, OCA Statement 4, and rebuttal testimony, OCA Statement 4R, in this case on March 22, 2024 and April 18, 2024, respectively.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?

A. My surrebuttal testimony will address the following rebuttal testimony of Peoples Industrial Intervenors (PII) witness Mr. Richard Baudino , Peoples witnesses Ms. Carol Scanlon, Mr. Luke Ravenstahl, Mr. Ralph Zarumba, and Office of Small Business Advocate (OSBA) witness Mr. Robert Knecht.

II. SUMMARY

Q. PLEASE SUMMARIZE THE ISSUES DISCUSSED IN YOUR SURREBUTTAL TESTIMONY.

A. My conclusions are as follows:

- Contrary to the rebuttal testimony of Mr. Baudino, Mr. Zarumba, and Mr. Knecht, distribution mains should be classified and allocated based on the Peak & Average method. I disagree with their recommendation that a portion of main costs is customer-

related.

- Mr. Baudino, Mr. Zarumba, and Mr. Knecht propose class revenue allocations that rely too heavily on cost of service studies which classify the costs of mains as customer-related, which in turn allocates an excessive amount of the revenue increase to the residential class. For that reason, their rebuttal of OCA's revenue allocation should be rejected.
- The costs associated with personnel dedicated to serving current and prospective large commercial and industrial customers should be assigned to the MGS, LGS, and MLS classes. Mr. Zarumba's rebuttal testimony accepting this adjustment to the allocation of customer service costs is reasonable. The rebuttal testimony of Mr. Baudino and Mr. Knecht opposing or curbing this allocation change is contrary to cost causation and should be rejected.
- The residential customer charge should be limited to recovery of costs which vary directly with the number of customers. Mr. Zarumba's rebuttal testimony incorrectly claims that my "basic customer charge" calculation is an inappropriate marginal cost analysis. His rebuttal testimony erroneously characterizes my customer charge recommendation and should be rejected.
- The Company's Weather Normalization Adjustment (WNA) is an unsupported and unjustified proposal which shifts the risk of weather impact to customers. The WNA is also inconsistent with giving ratepayers price signals for energy efficient actions. The rebuttal testimonies of Mr. Zarumba and Ms. Scanlon fail in their attempt to justify the

proposed WNA, relying heavily upon the existence of other utilities' mechanisms instead of supporting Peoples' proposal.

- The Company's proposal to revised Tariff Rule 20 to establish electricity as a competitive option which justifies discounted rates should be denied. Mr. Ravenstahl's rebuttal testimony defending the request relies upon reasons which are not consistent with the public interest. I stand by my position in direct testimony that the Commission should avoid this unjustified expansion of negotiated rate authority because of the significant risk of price discrimination within Peoples' rate classes where mere claims of electric competition is an insufficient basis for discounted rates.

III. CLASSIFICATION OF MAINS IN THE CCOSS

A. PII WITNESS BAUDINO

Q. MR. BAUDINO ASSERTS THAT A 50% WEIGHTING OF AVERAGE DEMAND AND PEAK DEMAND IN THE PEAK & AVERAGE METHOD (P&A) HAS "NO ANALYTICAL BASIS OR SUPPORT.[1]" DO YOU AGREE WITH HIS ASSERTION?

A. No. The 50% weighting of average demand and peak demand is based on the Commission's traditional application of Peak & Average in gas utility cases. However, as noted in my direct testimony, economies of scale provide an analytic basis for P&A results. System average demand represents the size of mains that would be required to serve a constant rate of daily usage. The pipes required to serve this constant rate of usage would be considerably smaller than pipes sized to meet max day usage. The incremental cost of

[1] PII St. No. 1 at 5.

sizing mains to meet maximum daily demand is represented by the peak demand ("design day demand") component of P&A. The system load factor is the ratio of system max day demand to system average day demand. However, this ratio does not reflect economies of scale that affect the incremental cost of serving peak demand. Increasing the size of pipes is subject to a decreasing rate of higher cost. A reasonable rule of thumb for the economy of scale factor is 0.5.[2] The Peoples' combined system load factor is approximately 26%.[3] Adjusting the load factor for economies of scale, the appropriate ratio between average day demand and max day demand is 50.9% average demand and 49.1% peak demand.[4] Therefore, the traditional use of 50% as the weighting factor for average demand and peak demand is a reasonable approximation to recognize the impact of economies of scale. As stated in my direct testimony, the incremental cost for increasing the diameter of mains to serve peak demand is less than average cost, due to economies of scale.[5] Therefore, a reasonable approach tempers the emphasis on peak demand by also recognizing average demand.

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2 Scale Economies and The 0.6 Rule," (M. Tribe and R. Alpine) *Engineering Costs and Production Economics*, 10 (1986) 271-272. The scale factor based on the relationship between surface area and volume for tanks and pipelines is 0.667 and 0.50, respectively.

3 The information referenced was provided by the OSBA to all parties, Judge Long, and designated Commission Staff from the Bureau of Technical Utility Services via email on March 28, 2024, and it was labeled "IEcWP4 Allocation Factors0328," Tab "Ext Factor Summary" Cell d14 The worksheet is too voluminous to append to my testimony

4 Scale factors are applied as an exponent. Therefore, $26^{.50}\% = 50.9\%$. The weighting factor peak demand is 49.1% (1 minus the adjusted load factor).

5 OCA Statement 4 at 23.

Q. DO YOU AGREE WITH MR. BAUDINO'S CLAIM THAT ECONOMIES OF SCALE RELATED TO INCREASINGLY LARGER PIPE SIZES "HAS NO RELEVANCE[6]" TO THE CLASSIFYING AND ALLOCATION OF TOTAL MAIN COSTS?

A. No. Cost causality for installing mains has more than a single dimension. The relationship between main size and main cost is not linear, due to economies of scale. Allocating the total cost based on max day demand assumes a linear relationship exists between main cost and higher usage on peak days. This assumption is inappropriate and can be corrected by using the P&A method, as I have just described.

Q. MR. BAUDINO CLAIMS THAT THE COMPANY'S ONGOING INVESTMENT IN REPLACEMENT AND REPAIR OF LEAK-PRONE MAINS DOES NOT JUSTIFY ALLOCATING 50% OF MAINS COST ON AVERAGE DEMAND.[7] IS HE CORRECT?

A. No. As discussed in my direct testimony, leak prone mains cause commodity losses, and therefore efforts to repair the leaks should be allocated on an average demand basis. Mr. Baudino apparently views this as a minor contributor to cost causation. However, as stated in my direct testimony, the investment program is $1.512 billion, which constitutes a substantial increase to total current mains investment.[8] Mr. Baudino also claims that leak repair is part of the Company's responsibility to deliver gas during the system peak. But his argument ignores the fact that gas leakage occurs throughout the year. The system peak

6 PII Statement No. 1 at 5.
7 PII Statement No. 1 at 6-7.
8 OCA Statement 4 at 24.

day is one out of 365 days, and leaks occurring on any of the 365 days are a concern both for safety and minimizing gas losses.

Q. ON PAGE 8 OF HIS REBUTTAL TESTIMONY, MR. BAUDINO DISAGREES WITH YOUR DISCUSSION OF DR. BONBRIGHT'S *PRINICIPLES OF PUBLIC UTILITY RATES* BECAUSE THE TEXTBOOK'S CRITICISM OF THE MINIMUM SYSTEM METHOD IS BASED ON AN ELECTRIC UTILITY. WHY IS MR. BAUDINO'S OBJECTION MISGUIDED?

A. Dr. Bonbright's critique of the minimum system method is based on the lack of causal connection between the number of customers and the mileage of distribution facilities, and that critique is valid beyond the electric industry. Dr. Bonbright points out that customer density distorts any relationship between customers and delivery facility costs. This criticism applies whether the delivery facility costs are based on mileage of conductors or mileage of mains. Mr. Baudino omits critical content from Dr. Bonbright, who actually stated that "in order to simplify the exposition of a typical fully apportioned cost analysis," he would refer to a hypothetical electric utility company. Importantly, Dr. Bonbright also indicated that the classification of utility plant into customer, energy/volumetric, and demand components applies to both gas and electric rates.[9] Aside from omitting critical context, Mr. Baudino's rebuttal testimony appears to be contradictory on this point, because he then proceeds to rely upon a 2004 PPL Electric case to validate the use of the minimum system concept.[10]

[9] *Principles of Public Utility Rates* at 346 (Bonbright) 1961.
[10] PII Statement No. 1-R at 8.

B. PEOPLES WITNESS ZARUMBA

Q. MR. ZARUMBA CRITICIZES YOUR QUOTATION OF DR. BONBRIGHT'S *PRINCIPLES OF PUBLIC UTILITY RATES,* ASSERTING THAT RELYING UPON A MORE RECENT 1988 EDITION OF THE BOOK WOULD BE A BETTER SOURCE OF INFORMATION.[11] DO YOU AGREE?

A. No. I intentionally chose to quote the original 1961 textbook[12] because it is recognized as foundational to the study of utility regulation and it is the version which has influenced so many experts and scholars in the field.[13] This is the only version solely authored by Dr. Bonbright: the 1988 edition was published five years after Dr. Bonbright's death, with additions and edits made by two other authors. [14] Moreover, Mr. Zarumba never addresses or focuses upon the insight provided by Dr. Bonbright's analysis of the minimum system concept. The only causal connection between customer count and distribution investment is the linear feet of installed lines or pipes. But the relative density of customer locations distorts the usefulness of this relationship. As stated by Dr. Bonbright, "if the company's entire service area stays fixed, an increase in number of customers does not necessarily betoken any increase whatever in the costs..."[15] As discussed in my rebuttal testimony of Mr. Baudino, large commercial and industrial customers tend to have lower spatial density,

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11 Peoples Statement No. 15-R at 28.

12 The referenced quotations discuss the minimum system concept and are excerpted at OCA Statement 4 at 13.

13 The index to Alfred E. Kahn's *The Economics of Regulation* (1988) references 25 citations to Bonbright's 1961 *Principles of Public Utility Rates*.

14 Mr. Johnson provided the Company with a web link for downloading the 1961 edition of Bonbright's *Principles of Public Utility Rates*, PNG-OCA-I-004.

15 James C. Bonbright, *Principles of Public Utility Rates*, Columbia University Press, 347-349 (1961).

given the nature of their industrial processes and large structures. Urbanized residential customers tend to be more densely populated, frequently located in multi-family dwellings.

Q. MR. ZARUMBA GOES ON TO DISCUSS THE DESIGN EFFORT AND LABOR COSTS REQUIRED TO DIG A TRENCH FOR A MAIN, STATING THAT A LARGE PERCENTAGE OF THE MAIN COST IS INCURRED BEFORE THE CUSTOMER EVER USES ONE UNIT OF GAS.[16] DOES THIS JUSTIFY ALLOCATING THE COSTS ON THE BASIS OF THE CUSTOMER COUNT?

A. No. After describing the construction and engineering activities causing these indirect costs, he makes a conclusory statement that "as a result the costs…are fundamentally customer-related in nature." The existence of engineering overhead and construction labor expense does not create a customer-related cost.[17] The design, engineering, and trench activities are required regardless of the number of customers. The main could be serving one large industrial customer or dozens of residential customers—in either case, similar non-pipe related costs are required. Mr. Zarumba tries to argue that a portion of main cost is not caused by demand—but this does not prove that the cost is caused by the number of customers. To some extent, a portion of main costs may be influenced by terrain, locations of population centers, and the geographic configuration of the service area. I would describe those factors as franchise costs which are more justifiably allocated based on the customers' usage of the utility system. In my opinion, the Peak & Average method reasonably reflects the general allocation appropriate for franchise costs.

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16 Peoples Statement No. 15-R at 28-29.

17 If this were true, then electric utilities would allocate power generation plants as a customer cost, since much of the plant cost is comprised of engineering, design effort, and construction labor cost.

Q. MR. ZARUMBA DISAGREES WITH DR. BONBRIGHT'S QUOTATION THAT SOME PORTION OF MINIMUM SYSTEM COST SHOULD BE TREATED AS UNALLOCABLE, CALLING THAT VIEW "QUESTIONABLE FROM A POLICY PERSPECTIVE.[18]" IS THIS A REASONABLE VIEW OF DR. BONBRIGHT'S CAUTIONARY STATEMENT?

A. No. I think he misses the point that some costs may not fit clearly into demand or customer costs, leading cost analysts to force them into the customer category where the costs do not belong. Dr. Bonbright states:

> [The cost analyst] is the prisoner of his own assumption that "the sum of the parts equals the whole." He is therefore under impelling pressure to "fudge" his cost apportionments by using the category of customer costs as a dumping ground for costs that he cannot plausibly impute to any of his other cost categories.[19]

Mr. Zarumba's conclusion that some construction costs are fundamentally customer-related treats the customer category as a default classification. This approach inappropriately uses the customer classification as a "dumping ground" for costs which do not fit into clear categories.

[18] Peoples Statement No. 15-R at 28.
[19] Bonbright at 349.

Q. MR. ZARUMBA CRITICIZES YOUR POSITION THAT THE COMPANY'S MINIMUM SYSTEM MODEL CONTINUES TO INCLUDE CAPACITY COSTS. HIS CRITICISM CLAIMS THAT YOUR TESTIMONY ERRONEOUSLY CONTENDS THAT LABOR INSTALLATION COSTS ARE RELATED TO CAPACITY.[20] IS THIS A CORRECT INTERPRETATION OF YOUR TESTIMONY?

A. No. Mr. Zarumba misunderstands the labor installation ratio methodology. My direct testimony states that the Company's small 5.6% reduction to the minimum system is insufficient to remove capacity costs.[21] My testimony suggested that alternative methodologies for achieving a no capacity cost minimum system demonstrate that the adjustment should have been larger. As an example, an alternative methodology includes only labor installation cost, with no material cost, because the labor cost tends to vary less with the size of main. This analysis showed that a "no capacity" minimum system should be no higher than 15.3% of total main cost, compared to the Company's 48%.[22] Contrary to Mr. Zarumba's claim, the installed labor cost method assumes that construction labor costs do *not* vary with the size of the pipeline. Therefore, his subsequent discussion of the impact of rock or soil on labor cost is irrelevant. More importantly, his rebuttal does not demonstrate that all capacity costs were removed from the Company's minimum system. If one accepts Mr. Knecht's zero intercept methodology, as another example, that result

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20 Peoples Statement No. 15-R at 30-31.

21 If capacity costs are not completely removed from the minimum system, the resulting customer classification will overcharge low use customer classes (primarily the residential class), due to double counting the allocation of demand costs. OCA Statement 4 at 14-15.

22 OCA Statement 4 at 16.

would suggest that the Company's 5.6% adjustment should be four times larger, thus implying that significant demand-related costs continue to be double counted by the Company's minimum system method.

Q. AT PAGE 25, MR. ZARUMBA CITES THE NARUC GAS DISTRIBUTION RATE DESIGN MANUAL AS SUPPORT FOR A DEMAND/CUSTOMER METHOD OVER THE PEAK & AVERAGE METHOD.[23] DOES THAT SOURCE SUPPORT ONLY USING THAT METHOD FOR CLASSIFYING MAINS?

A. No. The manual describes various methods used by rate experts and regulatory authorities. After describing the minimum system method, the manual explains that the "basic system method" is an alternative methodology:

> The contra argument to the inclusion of certain distribution costs as customer costs is that mains and services are installed to serve the demands of consumers and should be allocated to that function. Under this basic system theory, only those facilities, such as meters, regulators, and service taps, are considered to be customer-related, as they *vary directly with the number of customers* on the system. (emphasis added) [24]

The Manual also recognizes the Peak & Average method as a valid allocation for mains, stating that the method is a "compromise between coincident and non-coincident peak demand methods" and after allocating a portion of main cost based on average use, "the remaining costs are considered to have been incurred to meet the individual peak demands of classes of service…"[25]

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[23] I note that PII witness Baudino made the same claim on page 8 of his rebuttal testimony, and therefore my response here applies to his claim as well.

[24] NARUC Gas Distribution Rate Design Manual at 23.

[25] Ibid. at 27-28.

IV. LARGE CUSTOMER SERVICE PERSONNEL

Q. DO OTHER PARTIES COMMENT ON YOUR PROPOSED ASSIGNMENT OF LARGE CUSTOMER SERVICE PERSONNEL TO THE MGS, LGS, AND MLS CLASSES?

A. Yes. The OCA CCOSS assigned the cost of customer service representatives who are dedicated to serving large commercial and industrial customers to the MGS, LGS, and MLS classes. On behalf of the Company, Mr. Zarumba agreed that an adjustment should be made, and accepted a direct assignment of these costs to those three classes but reduced the size of the adjustment.[26] Mr. Baudino opposed the adjustment, arguing that the cost amount came from an interrogatory response which was not clear.[27] Mr. Knecht said that the adjustment may be conceptually justified but contends that it allocates too much cost to the MGS class.[28]

Q. CAN YOU RESPOND TO MR. BAUDINO'S AND MR. KNECHT'S COMMENTS?

A. Yes. Mr. Baudino focuses on the wording of the OCA interrogatory which requested the costs of staff involved primarily in contacts with current and proposed large commercial and industrial customers. He says that the Company's response does not clarify whether the identified staff persons are involved in solely serving those customers. He asserts that the adjustment cannot be accepted without more information regarding those individuals' duties.[29] The primary response to Mr. Baudino's concern is that the Company witness largely agreed with the adjustment and accepted the direct assignment of service costs to

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26 Peoples Statement No. 15-R at 34.
27 PII Statement No. 1-R at 10.
28 OSBA Statement No. 1-R at 5.
29 PII Statement No. !-R at 10.

MGS, LGS, and MLS classes. The Company is the only party which knows these individuals' duties and responsibilities and the Company accepted the allocation revision. Furthermore, the Company interrogatory response, which I previously included in my direct testimony as Exhibit CJ-6, characterizes the identified personnel as the "team[that] serves as the primary point of contact and account managers for our large commercial and industrial customers," and it contains a detailed description of their duties.

Mr. Knecht opines that the personnel probably devote more time to LGS customers than MGS customers, because of the greater complexity of the meters and billing issues. He disagrees with an allocation between these two classes that is based on revenues. In his view, an allocation in excess of 50% to MGS is excessive.[30] He suggests that he may propose an alternative volumetric allocation of the large customer service costs as part of his surrebuttal testimony.[31] I do not necessarily object to Mr. Knecht's impression that the personnel spend more time on LGS customers than MGS, nor would I necessarily oppose a volumetric allocation between MGS and LGS/MLS. However, I would note that his justification for a different allocation to the MGS class is based solely on his opinion as opposed to any data or evidence supplied by the Company. But I do oppose his suggestion that he might prefer no adjustment because the size of the issue is small. The relatively minor issue he raises regarding the allocation to the MGS class does not justify allocating 98% of the expense to residential and small commercial classes who receive no benefit from these service personnel.

[30] My adjustment assigned 50.5% of the cost to MGS.
[31] OSBA Statement No. 1-R at 5.

Q. WHAT IS YOUR RESPONSE TO MR. ZARUMBA'S RECOMMENDATION ON THIS ISSUE?

A. Mr. Zarumba agrees in concept with my recommended allocation adjustment for large customer service personnel. However, "after further detailed review" he determined that a portion of the identified cost was not included in revenue requirements and another fraction of the cost was included in capital costs which are difficult to track. Therefore, he proposed reducing the large commercial/industrial customer service costs to $728,049 instead of $1.3 million.[32] Given the administrative difficulty of adjusting capital costs at this point in the proceeding, I am agreeable to reducing the direct assignment to $728,048, provided that the Company presents a more complete identification of this cost in its next rate case. I recommend that the Company directly assign the large customer service allocation for both capital and expense components related to the large customer personnel in the CCOSS filed in its next rate case. In addition, Mr. Zarumba revised the large customer allocator by using the allocation factors for the underlying accounts excluding the residential and small commercial classes. I do not object, because it appears that the allocation among the MGS, LGS, and MLS classes (50% MGS, 45% LGS, 5% MLS) is virtually the same as my proposal.[33]

[32] Peoples Statement No. 15-R at 34.

[33] Peoples Exhibit RNZ-R-4;RNZ-R-2B-Rebuttal CCOSS Average & Peak. Sheet: "Rebuttal Adjustment Incr."

V. CLASS REVENUE DISTRIBUTION

Q. PLEASE DISCUSS THE PARTIES' REVENUE ALLOCATION METHODS AS SET OUT IN THEIR REBUTTAL TESTIMONY.

A. Three parties (Peoples, PII, and OSBA) attempt to average CCOSS methods as the framework for their revenue increase allocation recommendations. Two parties (OCA and I&E) prepare revenue allocations based on applying gradualism constraints to the Peak & Average (P&A) CCOSS. The former group opposes the OCA and I&E revenue allocation proposals because they do not agree with selecting the P&A as the appropriate cost of service methodology. My direct testimony addresses the reasons for adopting P&A and this surrebuttal testimony addresses rebuttal arguments presented by Mr. Baudino and Mr. Zarumba regarding the appropriate CCOSS method.

Q. DOES OSBA PRESENT A DIFFERENT APPROACH TO AVERAGING CCOSS METHODS?

A. Yes. Mr. Zarumba and Mr. Baudino favor averaging the results of the P&A and Demand/Customer CCOSS, albeit with a more favorable result for LGS and MLS in Mr. Baudino's revenue allocation. Mr. Knecht, on behalf of OSBA, proposes averaging the OSBA recommended Demand/Customer CCOSS with the results of the Company's revenue allocation proposal, which is, itself, and averaging of methods.[34] The revenue allocation proposed in Mr. Knecht's direct testimony was based on a different total revenue increase percentage (30.5%) than the revenue increase used by all of the other parties (34.4%). Therefore, my rebuttal testimony was unable to fully evaluate and compare his

[34] OSBA Statement 1 at 45.

revenue allocation proposal with the proposals of other parties. In his rebuttal testimony, Mr. Knecht restates and compares his revenue allocation at the 34.4% total increase, as well as the 30.5% stated in his direct testimony. For that reason, my surrebuttal testimony will briefly focus on Mr. Knecht's revenue allocation proposal.

Q. DO YOU AGREE WITH MR. KNECHT'S APPROACH TO REVENUE ALLOCATION?

A. No, even if one accepts the notion that revenue allocation recommendations should be based on averaging CCOSS methods, Mr. Knecht's proposal is illogical. Mr. Knecht's proposed Demand/Customer CCOSS is based on revising the customer percentage in the Company's Demand/Customer CCOSS. According to Mr. Knecht, the zero intercept study he implemented produces a more accurate customer percentage because it excludes capacity costs from the minimum system.[35] Therefore, assuming he is correct, the more logical approach to his revenue allocation would *substitute* the OSBA Customer/Demand CCOSS for the Company's Customer/Demand CCOSS before averaging the results with the Peak & Average CCOSS.

Q. HAVE YOU COMPARED THIS MORE LOGICAL AVERAGING APPROACH TO THE OSBA AND COMPANY REVENUE ALLOCATION PROPOSALS SHOWN ON MR. KNECHT'S REBUTTAL TABLE R-3?

A. Yes. For purpose of the comparison, I averaged the results of Mr. Zarumba's Rebuttal P&A CCOSS with Mr. Knecht's Customer/Demand (CD) CCOSS. If one accepts Mr. Knecht's claim that his CD CCOSS is an improvement over the Company's CD CCOSS,

[35] OSBA Statement No. 1-R at 3-4.

this is the more reasonable method of deriving a revenue allocation, because it simply substitutes his CD CCOSS for the Company's CD CCOSS. Then I compared the results of the average of his CCOSS and Mr. Zarumba's P&A CCOSS with the proposed revenue allocation displayed in Mr. Knecht's Rebuttal Table 3-R. As shown in the table below, using a 50-50 average of Mr. Knecht's CD CCOSS and Mr. Zarumba's Rebuttal P&A CCOSS produces more favorable results for the residential class than either the Company's or OSBA's revenue allocation recommendations. I do not support this average approach to revenue allocation because I oppose utilizing a customer/demand CCOSS for revenue allocation. However, the comparison demonstrates that a more reasonable approach to using the customer/demand CCOSS would have reduced the revenue allocation to the residential class. Both the OSBA and Peoples' revenue allocation proposals assign an excessive part of the revenue increase to the residential class.

	Company Total Rev Increase					
	Total	**RES**	**SGS**	**MGS**	**LGS**	**MLS**
Zarumba Rebuttal P&A	$173,738	$105,836	$23,237	$32,893	$2,225	$9,547
Knecht CD CCOS	$173,738	$131,627	$16,873	$9,347	$6,362	$9,530
Average	**$173,738**	**$118,731**	**$20,055**	**$21,120**	**$4,293**	**$9,538**
OSBA Rev Allocation	173,738	121,442	15,793	20,472	6,429	9,602
Difference from Avg.		**$2,711**	**($4,262)**	**($648)**	**$2,136**	**$64**
Peoples Rev Allocation	173,739	132,254	19,862	18,436	3,187	0
Difference from Avg.		**$10,812**	**$4,069**	**($2,036)**	**($3,242)**	**($9,602)**

Sources:
Table IEcR-3; RNZ-R-2B
P&A
IEcWP7Ec PNC CCOS

Q. MR. ZARUMBA DISCUSSES GRADUALISM LIMITS APPLIED TO THE PARTIES' REVENUE ALLOCATION PROPOSALS. DO YOU GENERALLY AGREE?

A. Yes. He asserts that a maximum increase of 1.5 times the system average increase is reasonable[36]. In his rebuttal of Mr. Baudino's position, Mr. Zarumba states that a floor to the minimum class increase should also be adopted. My direct testimony presents an alternative gradualism revenue allocation (OCA Statement 3, Exhibit CJ-2) which applies a 1.5 times system average maximum limit to SGS and MGS revenue increases and a floor of 0.5 times system average minimum increase to the LGS class. Adoption of my recommended alternative revenue allocation is reasonable and consistent with gradualism policy.

Q. MR. KNECHT, ON PAGE 13 OF HIS REBUTTAL TESTIMONY, SUGGESTS THAT THE SHORTFALL ASSOCIATED WITH THE MLS DISCOUNTED RATES SHOULD BE ALLOCATED TO ALL CUSTOMERS AND NOT JUST THE LGS CLASS. DO YOU AGREE?

A. No. My rebuttal testimony[37] opposed Mr. Baudino's recommendation on this issue, and the reasoning set forth therein is equally applicable to Mr. Knecht's support of Mr. Baudino's position. General allocation of the revenue shortfall is contrary to cost causation, because the customers who benefit from the negotiated rates originated in the LGS class. Furthermore, it results in an allocation of the discounted rate program cost to the residential

[36] Peoples Statement No. 15-R at 37.
[37] OCA Statement 4R at 19-22.

class, which is particularly inequitable given the direct assignment of CAP and LIURP program costs to the residential class.

Q. MR. BAUDINO ARGUES THAT YOUR REVENUE ALLOCATION INCREASES LGS RATES BY AN EXCESSIVE PERCENTAGE. DO YOU AGREE?

A. No. Exhibit CJ-3, which was included with my direct testimony, OCA Statement 4, sets forth my proposed distribution of the class revenue increases as limited by gradualism constraints. Based on the Peak & Average CCOSS, two classes produce excessive relative rates of return at present rates: Residential and LGS. My gradualism proposal placed a floor (minimum increase) for the LGS class equal to 50% of the system average increase. The residential class receives an increase which is 87% of the system average increase. Therefore, the class producing the highest relative rate of return bears a minimum increase equal to 50% of system average. The residential class, which also produces an above average relative rate of return, bears an increase 13% below the system average. This is reasonable and consistent with the traditional application of gradualism. In addition, the 50% floor applied to the LGS class is symmetric with the 150% of system average cap placed on the MGS and SGS increases.

Q. MR. KNECHT CONTENDS THAT OCA'S CLASS REVENUE ALLOCATION, EVEN AS LIMITED FOR GRADUALISM, PRODUCES EXCESSIVE INCREASES TO THE COMMERCIAL CLASSES ON A DIVISIONAL BASIS. CAN YOU RESPOND TO THAT CRITICISM?

A. Yes. My recommendation is based on the assumption that the Company is moving toward uniform rates in this proceeding. Therefore, the gradualism limits are properly based on

system, rather than division, revenues. Mr. Knecht's reference to "eye popping" increases is in part caused by the magnitude of the system revenue increase, which will likely decline substantially if the Commission reduces the requested revenue requirement. The classes' relative increase percentages on a divisional basis reflect the disparity in current rate levels between the two divisions. If Mr. Knecht believes the revenue increase assigned to SGS or MGS on a system basis is too high on a percentage basis in the Peoples Natural Gas Division (PNGD), the appropriate remedy is to request transitional rates for those two classes which reduce the disparity in the magnitude of revenue increase applied to each division. To my knowledge, Mr. Knecht did not make sure a request.

VI. RESIDENTIAL CUSTOMER CHARGE

Q. MR. ZARUMBA CLAIMS THAT YOUR CUSTOMER CHARGE TESTIMONY EMBRACES THE CONCEPT OF MARGINAL COST PRICING.[38] HE OPPOSES YOUR APPROACH BECAUSE HE CLAIMS IT IS INCONSISTENT WITH ALLOCATED CLASS COST OF SERVICE. IS THIS OBJECTION WELL-FOUNDED?

A. No. Mr. Zarumba says that my objective of limiting the customer charge to costs which vary with the number of customers is contrary to the theory of the CCOSS which allocates embedded costs among customer classes. However, his testimony confuses class cost allocation --which allocates total costs to customer classes--with rate design, which develops rates to recover costs within each customer class. Marginal and incremental cost principles are frequently considered in the rate design process because price efficiency is

[38] Peoples Statement No. 15-R at 39.

an important criterion for evaluating rates. Cost allocation is concerned with fairly apportioning total costs among customer classes. Rate design focuses on the component rates charged to end use consumers and should consider several pricing objectives, including public policy, economic efficiency, and the manner in which the customers respond to prices. From an economic perspective, residential rates should convey usable pricing information to the end user so that they can respond by controlling their usage of utility service. In a two part tariff (fixed charge and usage charge), the monthly fixed customer charge conveys no useful pricing information to customers other than rationing access to the utility system. For this reason, my testimony quantified a basic customer cost composed of only those accounts which vary directly with the number of customers. So long as the customer charge recovers this basic cost, plus a reasonable contribution to common cost, the resulting fixed monthly charge is consistent with economic principles and is subsidy-free. Therefore, I concluded that the current PNGD customer charge ($14.50) satisfies this criterion and should not be changed. The residential revenue increase is instead collected through the usage rate which conveys the most useful price signal to customers.

Q. MR. ZARUMBA STATES THAT YOUR CUSTOMER CHARGE ANALYSIS IS NOT SUFFICIENT AS A MARGINAL COST STUDY. PLEASE RESPOND TO HIS REBUTTAL AT PAGE 39.

A. He raises a straw man argument. I did not represent my basic customer charge analysis to be marginal costs. However, my evaluation considered marginal cost principles because that concept is fundamental to efficient pricing. Mr. Zarumba states that an appropriate

marginal cost study would include the costs of meters, regulators, service lines, associated O&M expenses, and customer support.[39] As shown on OCA Statement 4, Exhibit CJ-3, my calculation of basic customer costs included the direct costs of those specific accounts. Therefore, his rebuttal argument that my customer charge analysis is deficient in some way should be rejected.

VII. WEATHER NORMALIZATION ADJUSTMENT (WNA)

Q. MR. ZARUMBA SAYS THAT YOUR REFERENCE TO MR. COSTELLO'S NRRI REPORT REGARDING ALTERNATIVE RATE MECHANISMS IS NOT APPLICABLE TO PEOPLES' PROPOSED WNA BECAUSE THE NRRI REPORT DOES NOT ADDRESS THAT SPECIFIC RATE MECHANISM.[40] WHAT IS YOUR RESPONSE TO THIS POINT?

A. My direct testimony quoted the NRRI Report to support the well-known principle that regulatory lag is one of the most important tools for incentivizing utility cost efficiency. This is not a new concept and has been accepted by regulatory economists for decades. Although Mr. Zarumba contends that the WNA is not intended to avoid regulatory lag, he states at page 18 that the WNA is "designed to provide a revenue level closer to that which the Commission approves in this rate request." This statement is a perfect description of a rate mechanism which has the aim of reducing the impact of regulatory lag on utility revenues. The "incentive" related to regulatory lag does not depend on whether the name of the alternative rate mechanism references "performance based ratemaking." Instead the pertinent issue is the way that regulatory lag imposes revenue risks on the utility, rather

[39] Peoples Statement No. 15-R at 39.
[40] Ibid. at 17-18.

than customers, thereby creating an incentive to control costs between rate cases. To the extent that alternate rate mechanisms such as WNA chip away at suppressing the revenue risks associated with regulatory lag, the greater is the utility's sense of "guaranteed revenues" which in turn leads to less incentive for controlling costs. I note that Mr. Zarumba cites with seeming approval the NRRI report's discussion of the rationale for revenue decoupling mechanisms.[41] However, the NRRI report's discussion [42]of revenue decoupling also states: "The major concern with revenue decoupling is that, while ostensibly beneficial to the utility, the gains to customers are less transparent.[43]"

Q. MR. ZARUMBA PERFORMED A SEVEN YEAR STUDY OF CUSTOMER BILLS AND CONCLUDED THAT IT PROVES THE WNA PROVIDES SYMMETRIC IMPACTS ON CUSTOMERS AND THE COMPANY.[44] DO YOU AGREE WITH HIS CONCLUSION?

A. No. The bottom line of his analysis is that the cumulative impact of the WNA during the seven-year time period he analyzed, extending from 2016 through 2022, would have been $9.9 million in higher revenue charges.[45] This supports my direct testimony that recent historical net weather impact confirms that the cumulative impact of the WNA will be net charges to customers. [46] Since climatic changes are associated with a declining trend in

41 Ibid. at 18-19.
42 Alternative Rate Mechanisms and Their Compatibility with State Utility Commission Objectives," (page 40) Costello, NRRI, 2014.
43 Ibid.
44 Peoples Statement No. 15-R at 12-14.
45 Ibid. at 14.
46 OCA Statement 4 at 40-41.

heating degree days, over the long term the WNA is likely to produce higher charges than credits.

Q. MR. ZARUMBA SAYS THAT HIS REVIEW OF CUSTOMER BILLS OVER A SEVEN YEAR PERIOD SHOWED THAT THE WNA CAUSES FEW UNUSUAL BILL IMPACTS. DOES THIS DEMONSTRATE THAT THE COMMISSION SHOULD NOT BE CONCERNED ABOUT LARGE BILL INCREASES CAUSED BY THE WNA?

A. No. Mr. Zarumba concedes that the shoulder months (October and May) are more vulnerable to bill abnormalities caused by the WNA. These extreme bill events may be infrequent, but when they do occur, the impact on affected residential customers is extreme. The average base rate bill increase caused by the WNA among the "unusual" bills he flagged is 238%.[47] The frequency of these bills may seem exceedingly small at .07% over seven years, but the frequency is more noticeable during the month when the problem arises (approximately 2.6% of May 2018 bills[48]). In addition, Mr. Zarumba's review assumed that a customer bill is abnormal only if it increased 100% or more due to WNA. In my experience, most customers would view increases in levels of less than 100% as problematic. For instance, if the WNA produces 50% bill increases, I would expect many affected customers will complain. Mr. Zarumba states that his review did not determine how many bills incurred a 50% increase.[49] Mr. Zarumba does not propose any revisions to

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47 PNG-OCA Interrogatory XXVI-7, with is attached to this document as Exhibit CJ-1-SR.

48 12,700 excessive bills in May 2018 is divided into 482,435 residential customers for Peoples in 2018. The residential customer count was provided on page 26 of the Commission's Pennsylvania Natural Gas Outlook Report dated January 2020, and it is available at https://www.puc.pa.gov/NaturalGas/pdf/Gas_Outlook_Report-2019.pdf

49 PNG-OCA Interrogatory XXV1-8, which is attached to this document as Exhibit CJ-2-SR.

the tariff to ameliorate high bills during the shoulder months. Moreover he does not explain how the Company intends to identify excessive bills caused by WNA and how the Company would "rectify" such excessive bills.

Q. MR. ZARUMBA DISAGREES WITH YOUR CONCLUSION THAT THE WNA MAY REDUCE CUSTOMERS' INCENTIVE TO ENGAGE IN ENERGY EFFICIENT ACTIONS.[50] IS HIS RESPONSE CONVINCING?

A. No. First, he does not address the hypothetical I presented, which showed that customers engaging in energy efficient actions could perceive that the WNA transfers a large portion of the customers' expected energy savings to the Company. Second, he argues that decoupling revenues and sales improves the Company's incentive to support energy efficiency programs.[51] The Company already has energy efficiency programs to assist customers that are paid for by customer rates, it is not at all clear what sort of incentive Mr. Zarumba is referring to other than a generality. Moreover, in this proceeding the Company proclaims its support for programs targeted at reducing its carbon emissions which would presumably be met, at least in part, through conservation. Third, Mr. Zarumba's contention at page 19 is that the WNA "lessens the impact on the relationship between consumption and revenues.[52]" This statement essentially means that it reduces the customer's incentive to engage in energy efficiency. As a matter of economic theory, prices are the driving force

50 I note that Peoples' witness Scanlon makes virtually identical claims on pages 24 through 27 of Peoples statement No. 3-R; therefore, my response here applies to her claims as well.

51 Peoples Statement No. 15-R at 19.

52 Peoples Statement No. 15-R at 8-9.

for consumption decisions. If the relationship between prices and consumption is severed, then the customers' incentive to engage in conservation activities will also be reduced.

Q. MR. ZARUMBA DISCUSSES THE 65 YEAR REGRESSION EQUATION WHICH THE COMPANY PARTIALLY USES TO MODEL ANNUAL HEATING DEGREE DAYS. HE STATES THAT YOUR CONCERN REGARDING A LOW R-SQUARE STATISTIC IS UNFOUNDED. WHAT IS YOUR RESPONSE?

A. Mr. Zarumba states that the model was tested for autocorrelation; however, that is not the concern I raised. The model's adjusted R-squared is 0.37 which indicates that 63% of the variation in the model is unexplained. Explaining only 37% of the variation in the dependent variable is typically considered to be a weak predictive model. Given the variability in HDDs from year to year, the model is not particularly useful for predicting the future annual HDDs. Given the low explanation provided by the Company's model, the question arises whether the complexity added to the rate making process by regression analysis is worth the value of the limited improvement it makes in predicting future HDDs.

Q. PEOPLES' WITNESS SCANLON ATTEMPTS TO DISTINGUISH PEOPLES' PROPOSED WNA FROM THE "UNANTICIPATED" WNA CHARGES THAT PGW CUSTOMERS EXPERIENCED . HOW DO YOU RESPOND?

A. While it is understandable that Peoples wishes to distinguish its WNA proposal from PGW's experience with the WNA,[53] Ms. Scanlon's comments do not alleviate my concerns. First, although Ms. Scanlon claims that, "in her opinion" the chances are

[53] On pages 43-44 of my direct testimony, OCA Statement No. 4, I provided more detail about PGW's WNA producing a scenario that resulted in PGW's WNA producing am unexpected impact that resulted in PGW implementing $12 million in refunds and excluding the month of May from its WNA calculation.

"extremely low" that Peoples' WNA would produce the same WNA results that PGW experienced in 2022[54], the basis for her opinion involves too many disclaimers to be meaningful. Specifically, Ms. Scanlon indicates that her "general understanding of PGW's situation" is based upon the public record at Docket No. R-2022-3034229 and that she does not have customer -specific information as to what happened nor "in-depth knowledge of the issue.[55]" Ms. Scanlon also admits that she is "not aware of the triggering event(s)" that caused PGW's WNA charge issues, but that, in the "extremely rare circumstance that an unusual WNA situation occurs," Peoples will address it "reasonably.[56]" From my perspective, given all of the disclaimers about lack of detailed knowledge of PGW's experience, and her acknowledgment that an unusual WNA situation could occur, Ms. Scanlon's attempt to assuage concerns about the WNA is not persuasive.

Q. HAS ANY WITNESSES' TESTIMONY IN SUPPORT OF PEOPLES' WNA PROPOSAL CAUSED YOU TO CHANGE YOUR RECOMMENDATION THAT THE WNA BE REJECTED IN THIS CASE?

A. No. Instead, Peoples' attempt to defend the WNA reveals that the underlying basis for implementing the WNA appears to be that other utilities have done so, and therefore it ought to be entitled to do so as well. Beyond this, Peoples' complex proposal would unnecessarily transfer weather-related revenue risk on to customers. Peoples' representations about PGW's experience being unlikely here provide no guarantees to customers when coupled with the reality that Peoples' understanding of PGW's experience

54 Peoples Statement No. 3-R at 12-13.
55 Ibid. at 13.
56 Ibid.

is limited. Furthermore, as explained by other OCA witnesses, including David Evrard, Dante Mugrace, Barbara Alexander, and Roger Colton, there are several other defects in Peoples' WNA proposal, such as a lack of consumer protections for customers. Therefore, I stand by my recommendation that the WNA should be rejected.

VIII. DISCOUNT RATES TARGETED AS ELECTRICITY COMPETITION

Q. DOES PEOPLES' WITNESS MR. RAVENSTAHL ATTEMPT TO REBUT YOUR TESTIMONY OBJECTING TO ELECTRICITY AS A COMPETITIVE ALTERNATIVE?

A. Yes. The Company requested that Rule 20 tariff be revised to provide for electricity to be a competitive alternative for purposes of negotiating discounted rates for commercial and industrial customers. The existence of electric utilities as competitors would permit Peoples to engage in negotiated commercial/industrial discounted gas distribution contracts. The current tariff does not allow flex rates in response to electricity competition unless the electric utility competitor offers flex rates.[57] My direct testimony recommended that the requested tariff change should be denied. Mr. Ravenstahl opposes my position.

[57] The current tariff language states: "Electricity delivered by an electric distribution company shall not constitute a competitive alternative for purposes of natural gas flex rate eligibility or amount, unless the electric distribution company offers an electric distribution flexed rate to the customer."

Q. MR. RAVENSTAHL SAYS THAT PEOPLES WANTS TO COMPETE AGAINST ELECTRICITY SIMILAR TO OTHER PENNSYLVANIA GAS UTILITIES. HE MENTIONS THAT THE OTHER GAS UTILITIES HAVE WEBSITES WHICH PROVIDE A GAS SAVINGS CALCULATOR VS. ELECTRICITY AND PROPANE.[58] DOES THIS REFUTE YOUR TESTIMONY?

A. No. Mr. Ravenstahl provides no explanation or details regarding the way that Columbia Gas, PGW, UGI, or National Fuels use flex rates to compete with electric providers. The savings calculators for gas versus electricity appear to be aimed at residential customers and home appliances.[59] Mr. Ravenstahl states that Peoples does not intend or anticipate the offering of discounted rate options for residential customers.[60] Moreover, my recommendation in no way prevents Peoples from providing a residential home appliance savings calculator on its website.[61] I think it is entirely reasonable for Peoples to encourage customers to compare gas tariffs to electric tariffs. But the issue in this case pertains to negotiated discounted rates and not full cost standard tariffs.

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58 Peoples Statement 7-R at 6.

59 For example: https://www.ugi.com/gas-for-homes/growth-extension-tariff/calculator/ and https://www.columbiagaspa.com/services/add-or-convert-to-gas/calculate-your-savings . UGI also has a business calculator for savings, but there is no indication that the savings calculation goes beyond standard tariff rates and energy efficient appliance rebates. https://www.ugi.com/gas-for-business/

60 Peoples Statement 7R, page 8.

61 In fact, my testimony used the Peoples gas appliance usage calculator as indicated at OCA Statement 4 page 38 (footnote 42).

Q. DOES MR. RAVENSTAHL'S ASSERTION THAT THE COMPANY HAS NO INTENT TO OFFER DISCOUNTED RATES TO RESIDENTIAL CUSTOMERS RAISE QUESTIONS ABOUT THE COMPANY'S REQUEST IN THIS CASE?

A. Yes. Access to electricity is ubiquitous for all customer classes and the availability of electricity should not be used as a qualifying basis for commercial and industrial customers to receive discounted rates. Active competition exists between electric and gas appliances within the residential class, yet Mr. Ravenstahl states that the residential consumers are the only customer class which will not be eligible for discounted rates pursuant to proposed tariff Rule 20. Given this limitation, the Company's proposal may be both inequitable and discriminatory.

Q. MR. RAVENSTAHL DISAGREES WITH YOUR CONCERN THAT A DISCOUNT RATE PRICE WAR COULD ARISE BETWEEN ELECTRIC AND GAS UTILITIES BECAUSE "RESIDENTIAL CUSTOMERS WILL NOT BE OFFERED DISCOUNTS.[62]" DOES HIS STATEMENT ADDRESS YOUR CONCERN?

A. No. He does not address the potential for a price war over serving commercial and industrial end users. My testimony pointed out that the Commission should be concerned about the impact of discounted rates on the captive customers of both the electric utility and the gas distribution utility. Captive customers of both entities can be adversely impacted by loss of load or, alternatively, negotiated rates which permit large customers to avoid paying a fair share of utility common costs. Given these negative consequences, the Commission should not encourage electric and gas utilities to compete with each other on

[62] Peoples Statement No. 7-R at 8.

the basis of discounted rates instead of full cost tariffs. A price war may occur when both utilities engage in negotiated flex rates. When the competing electric utility knows that the tariff only allows Peoples to offer a flex rate in response to an electric utility flex rate, this may discourage the electric distribution company from seeking authority to offer flex rates. However, if the gas utility is allowed to offer a discounted rate in order to undercut the electric utility's full cost tariff, at this point the electric utility may believe it has no other option than to seek authorization for its own flex rates. The public interest is served by allowing gas utility discounted rates only if the electric utility has offered the customer a flex rate proposal, as provided by the current tariff language.

Q. MR. RAVENSTAHL SAYS THAT YOU FAIL TO ACKNOWLEDGE THE POLITICAL LANDSCAPE IN WHICH THE INFLATION REDUCTION ACT OFFERS REBATES OR GRANTS FOR CONSUMERS TO MOVE FROM NATURAL GAS TO ELECTRICITY.[63] DOES HIS CLAIM SUPPORT THE COMPANY'S REQUESTED TARIFF PROVISION?

A. No. The relevance of this argument is unclear. If the Company contends that the tariff revision is necessary in order to undermine enacted public policy objectives, this is hardly a persuasive argument. Furthermore, the federal law's rebates and grants to the states are largely aimed at residential dwellings and appliances.[64] As noted previously, Mr. Ravenstahl makes clear that Peoples has no intention of offering discounted rates to residential customers.

63 Peoples Statement No. 7-R at 8-9.

64 https://www.energy.gov/scep/home-electrification-and-appliance-rebates

Q. WHAT IS YOUR RECOMMENDATION?

A. The current tariff language for tariff Rule 20 should remain unchanged. The Company's request to deem electricity as a competitive option as proposed should be denied.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY AT THIS TIME?

A. Yes.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission,	:	
	:	
v.	:	Docket No. R- 2023-3044549
	:	
Peoples Natural Gas Company LLC	:	
	:	

VERIFICATION

I, Clarence L. Johnson, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement 4SR, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: May 3, 2024 Signature:

Clarence L. Johnson

Address: 3707 Robinson Ave
Austin, Texas 78722

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XXVI-007

Witness: Zarumba, Ralph **Title:** Consultant, Black & Veatch Management Consulting, LLC

Question: Reference Mr. Zarumba's Rebuttal Testimony, Peoples St. No. 15-R at page 20. Confining the review to only May 2018, what is the percentage of "unusual bills?" What is the average discrepancy (percent above normal May bill) for bills which were higher than expected?

Answer: May 2018 accounted for 70% of the total unusual bills. The second question is ambiguous, however we are interpreting this question as a request for the average increase for customers with 100%+ increases to the base rate portion of their bill. For May 2018 bills that had a 100%+ increase to the base rate portion of their bills, the average percentage increase was 238%. The Company is continuing to evaluate additional customer protections to put in place.

Submit Date: 4/30/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XXVI-008

Witness: Zarumba, Ralph **Title:** Consultant, Black & Veatch Management Consulting, LLC

Question: Reference Mr. Zarumba's Rebuttal Testimony, Peoples St. No. 15-R at page 20. Mr. Zarumba indicates that the analysis defined "unusual bills" as bills which were 100% higher than the base bill. Please define with more specificity what this description means. Does Mr. Zarumba know the equivalent percentage for bills which were 50% higher than the base bill?

Answer: Unusual bill increases were based on the increase to the base rate portion of a customer's bill. The base rate portion of the bill refers to the sum of the base monthly customer charge ($14.50 PNG rate) and the base MCF delivery charges. The analysis used $3.9608 (PNG rate) for the base MCF delivery rate. Since the percentage increases were based on the base rate portion of the bill, the effective increases on the total bill would be less since the cost-of-gas is not included. An analysis was not performed for a 50% increase to the base portion of the bill.

Submit Date: 4/30/2024

OCA STATEMENT 5SR

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No. R-2023-3044549
	:	
	:	
Peoples Natural Gas Company LLC	:	

SURREBUTTAL TESTIMONY OF

BARBARA R. ALEXANDER

Barbara Alexander Consulting LLC

ON BEHALF OF THE

OFFICE OF CONSUMER ADVOCATE

May 3, 2024

Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.

A. My name is Barbara R. Alexander. I am the sole member/owner of Barbara Alexander Consulting LLC. I am a consultant on consumer protection and customer service issues associated with utility regulation. My address is 44 Beech St., Hallowell, ME 04347. I appear in this case as a witness on behalf of the Office of Consumer Advocate (OCA).

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS PROCEEDING?

A. Yes. I filed Direct Testimony identified as OCA Statement 5 on behalf of the OCA on March 22, 2024.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. I am filing Surrebuttal Testimony in response to the Rebuttal testimony filed by various witnesses for Peoples. Specifically, I will file Surrebuttal in response to the following witnesses for Peoples: Michael Huwar, Peoples St. No. 1-R; Andrew Wachter, Peoples St. No. 2-R; Carol Scanlon, Peoples St. No. 3-R; Edward Palombo, Peoples St. No. 4-R; Rita Black, Peoples St. No. 9-R, and Heather Doyle-Conley, Peoples St. No. 16-R.

Q. AS A RESULT OF YOUR CONSIDERATION OF THE RESPONSE TO YOUR RECOMMENDATIONS BY PEOPLES, DO YOU HAVE ANY SUBSTANTIVE CHANGES?

A. No. I maintain my initial and recommendations as reflected in my testimony below, which are as follows:

- **Customer Service Performance**: I recommend that Peoples be required to maintain its current service quality and customer service performance as reflected in its test year 2023 results as a condition of any rate increase approved in this proceeding. In

addition, I recommend that Peoples evaluate the potential for extending the hours of its call center to accommodate those customers who are employed during normal business hours and implement extended call center hours if justified and at a reasonable cost.

- **Complaint analysis**: Peoples' analysis of customer complaints, whether handled internally as disputes, or externally by BCS as informal complaints, needs to improve. I recommend that Peoples be required to conduct a regular and proper root cause analysis of its complaint trends, both for internal disputes and BCS informal complaints that document infractions and verified violations. This recommendation should require a professionally conducted root cause analysis and report on findings, including identification of trends, evaluation, steps to reform or avoid repeated trends, and internal steps taken to take proper internal enforcement action where needed within 3 months and quarterly updates to stakeholders.
- **Termination Procedure**: Peoples should be required to develop and implement detailed training programs to ensure compliance with the Commission's specific regulations relating to personal contact, particularly with respect to the obligation to attempt personal contact "immediately" prior to actual termination of service. This compliance filing and detailed implementation plan should be filed within 3 months of a final order in this proceeding after consultation and review by stakeholders.

- **Shared Service Premises**: Peoples' policies and disclosures to tenants should conspicuously disclose the tenants' rights to remain with gas service under these conditions:
  1) Peoples should allow tenants to affirmatively request that their personal information not be provided to the landlord/owner.
  2) Peoples' policies and disclosures should reflect that landlords may not retaliate against their tenants for 1) the tenant exercising their right to pay the utility bill to continue service under the landlord's name, and 2) to recover this payment by deducting the payment from their rental payment.
  3) Peoples should accept from tenants; medical certificates and protection from abuse orders, or court orders issued by a court of competent jurisdiction in the Commonwealth, which provide clear evidence of domestic abuse.
  4) Peoples should not terminate a landlord/tenant account during the months of December through March for households with income at or below 250% of the federal poverty income guidelines.
- **Weatherization Normalization Adjustment**: I support the recommendation of OCA's other witnesses that this method by which Peoples can make rate adjustments outside of a base rate case should be rejected. Customers desiring bill stability to mitigate volatility can and should be encouraged to enroll in budget billing. This has far more consumer-friendly impact than a WNA.
- **Bill Payment Fees**: I agree with Peoples' proposal to eliminate the bill payment fees for Peoples Gas Division customers and include those costs in rates.

- **Billing for Non-Basic Charges**: My primary recommendation is that the Commission investigate this program, particularly with regard to whether regulated ratepayers are subsidizing the marketing, billing, and collection of unregulated non-basic services provided by Peoples' unregulated affiliate. Furthermore, there are issues relating to the marketing materials and disclosures that should be further reviewed and evaluated.
- **Supplier Charges in Excess of Default Service**: First, I recommend that Peoples conduct consumer education to its customers to alert them when they are paying more for service than default service. The goal here is to ensure that these customers are aware of this fact so they can decide what action to take. They may be paying more because they want to do so, but more likely it is out of inattention to an expiring contract. This would allow customers the ability to choose whether to renegotiate their contract with their supplier, shop and choose another supplier, or return to default service. There is no preordained outcome that "should" result from this education other than ensuring that customers are aware of the price that they are paying. Second, Peoples' bills should more clearly reflect that the customer is paying for service and whether it is higher of lower than the default service price. This is another way to accomplish the goal of educating customers. Once way to do this is for Peoples to calculate what the bill would be under default service. For customers with lower priced supply contracts, this will ensure a positive reinforcement that they are saving money through their NGS. For customers with a higher priced supply contract, it will ensure that these customers are aware of this fact and allow them to make an informed decision about their options.

- **Additional profits for management performance**: Ratepayers should not pay additional profits to a public utility for maintaining a level of customer service quality and customer performance for the call center, billing, and meter reading that was promised as a result of commitments made in prior proceedings. There is no evidence of above average performance. Peoples' customers should not pay higher rates for achieving its promised commitments in prior proceedings or meeting "average" performance or compared to other Pennsylvania utilities. Furthermore, I have identified a number of areas in which Peoples' current performance requires significant improvement and my recommendations have identified conditions for approval of any rate increase in this proceeding. As a result, there is no basis to support any reward in the form of higher profits due to "management efficiency" as requested by Peoples in this request to increase base rates.

Q. HOW IS YOUR SURREBUTTAL TESTIMONY ORGANIZED?

A. I will respond to each of the Peoples' witnesses that addressed the evidence and recommendations in my Direct Testimony.

I. RESPONSE TO PEOPLES WITNESS MICHAEL HUWAR CONCERNING "EXEMPLARY MANAGEMENT PERFORMANCE"

Q. HOW DOES MR. HUWAR RESPOND TO YOUR REJECTION OF THE COMPANY'S REQUEST FOR INCREASED PROFITS TO REWARD ITS MANAGEMENT PERFORMANCE.

A. Mr. Huwar does not provide any new evidence to support Peoples' request for an increase

in its return on equity for "exemplary management performance." Rather, he states that I and other witnesses have ignored the "exemplary" performance by only pointing out where performance is below average.[1] He also generally claims that "in many categories, the Company is exceeding the Commission's goals.[2]"

Q. HOW DO YOU RESPOND?

A. First, Mr. Huwar's claim of "exemplary" is not defined except insofar as he points to recent improvements in selected categories or comparing Peoples' performance compared to other Pennsylvania Natural Gas Distribution Companies (NGDC) in published Commission customer service reports. At no point does Mr. Huwar define his reference to Commission "goals" since there are no such "goals," merely reported information on an annual basis. Nor does he defend the "average" or "above average" performance in selected categories as "exemplary." Peoples' performance is adequate in many areas, below average in others, and above average in several categories measured by the Commission for all NGDCs as I pointed out in my Direct testimony. However, there is no basis for concluding that Peoples' performance overall merits higher profits and higher rates from its customers. Peoples' performance that is within the bounds of acceptable performance is not "exemplary." Ratepayers should not have to pay more to obtain adequate service or service that complies with prior commitments as I described in my Direct that were derived from the settlement of the acquisition of Equitable Gas by Peoples[3]

[1] Peoples St. No. 1-R, at 2-3.
[2] Ibid., page 3.
[3] Opinion and Order, Docket Nos. A-2013-2353647 et al., (Order entered Nov. 14, 2013); Initial Decision at 35-62, Docket No. A-2013-2353647 et al., (Nov. 1, 2013).

or the settlement that approved the acquisition of Peoples by Aqua Pennsylvania.[4] Finally, Peoples should not be rewarded with higher profits for achieving its internal performance standards. As I documented, Peoples has maintained or achieved most of its promised goals and performance. That performance does not constitute the basis for a reward, particularly in light of the higher incidence of infractions for customer complaints that I documented.

II. RESPONSE TO PEOPLES WITNESS RITA BLACK CONCERNING CUSTOMER SERVICE PERFORMANCE AND COMPLAINT ANALYSIS

Q. HOW DOES PEOPLES WITNESS BLACK RESPOND TO YOUR PRESENTATION OF CUSTOMER SERVICE PERFORMANCE AND COMPLAINT ANALYSIS?

A. Ms. Black does not provide any additional evidence on People's customer service performance. Rather she argues that Peoples' performance in some customer service performance areas measured in Commission reports have deteriorated less than other NGDCs,[5] a point that I fail to understand would support their claim to "exemplary" performance. With regard to complaint analysis, her response to my evidence and conclusion that Peoples does not properly conduct root cause analysis or properly audit its customer call center(s) to determine compliance is also unreasonable.

[4] Opinion and Order (Public Version), Docket Nos. A-2018-3006061 et al., (Order entered January 24, 2020)
[5] Peoples St. No. 9-R, pages 23-24.

Q. MS. BLACK CLAIMS THAT PEOPLES EVALUATES EVERY COMPLAINT FILED WITH THE BCS TO DETERMINE ITS ROOT CAUSE. PLEASE RESPOND.

A. Ms. Black states, "As noted in the Company's responses to discovery, Peoples does evaluate every case received to determine the root cause of the complaint. Our team of specialists evaluate every aspect of the customer's concern to determine if anything is amiss. If we find something was not handled properly, the next step is to determine whether this was due to human error, system error or process error."[6] However, at no point does she describe the proper root cause analysis I documented in my Direct testimony. Glaringly, there is no description of how any individual complaint is evaluated to find additional instances that gave rise to the complaint or determine why any pattern or practice exists and what gave rise to such pattern or practice. Looking at individual complaints is the problem here, not the solution.

Q. MS. BLACK STATES THAT SYSTEM AND PROCESS CHANGES ARE IDENTIFIED AND THAT ALL AFFECTED CUSTOMERS ARE IDENTIFIED FOR CORRECTION[7]. PLEASE RESPOND.

A. Ms. Black's description is what should occur. However, her description of what happens regarding the spreadsheets I reviewed and cited in my Direct is not reflected in any internal summary or report that demonstrates the identification of patterns or underlying causes by going beyond individual complaints or when system or internal training defects are identified and what steps are taken in response. Ms. Black does not provide any documents or materials to her Rebuttal testimony with regard to this assertion. Furthermore, as I

[6] Ibid., page 25.
[7] Ibid., pages 25-26.

documented, the typical result of "coaching" the individual representative is also not a reasonable response to an analysis of patterns and practices that a proper root cause analysis would explore.

III. RESPONSE TO PEOPLES WITNESS EDWARD PALOMBO CONCERNING FIELD TERMINATION PROCEDURES

Q. MR. PALOMBO RESPONDS TO YOUR TESTIMONY CONCERNING THE LACK OF EVIDENCE REGARDING PROPER FIELD TERMINATION PROCEDURES. DO YOU AGREE?

A. No. Mr. Palombo does not provide any evidence to counter my conclusion that Peoples' field termination procedures do not comply with the personal contact requirements of Chapter 56 of the Commission's rules, but states that, "Peoples is willing to further evaluate its training program to determine if it can enhance the documentation of compliance to this section of the Code."[8] I interpret this response to agree with my recommendation that Peoples should develop internal training and compliance procedures as a condition of the approval of any rate increase in this proceeding. Whether Peoples complies with the required personal contact requirements has yet to be documented. Those training materials must reflect the specific disclosures and customer rights I identified in my Direct testimony. The fact that Peoples was unable to document any training materials relating to these personal contact requirements is a major concern that contributes to my overall recommendation to reject additional profits based on "exemplary" management performance.

[8] Peoples St. No. 4-R, page 14.

IV. RESPONSE TO PEOPLES WITNESS EDWARD PALOMBO ON CUSTOMER EDUCATION CONCERNING RETAIL CHOICE

Q. MR. PALOMBO STATES HE IS "OPEN" TO DISCUSSIONS ABOUT ADDITIONAL CUSTOMER EDUCATION ON RETAIL CHOICE AND BUT THAT COMMISSION APPROVAL WOULD BE REQUIRED.[9] PLEASE RESPOND.

A. There is no obligation of which I am aware that requires Peoples to seek Commission approval to educate its customers about retail choice, how their supplier price compares to default service, or provide alerts to customers about when their supplier price changes. Peoples bills and collects supplier charges and threatens termination of service for nonpayment of those unregulated charges pursuant to its Purchase of Receivables policy. As documented in my Direct testimony, Peoples' customers served by suppliers pay more and incur significant collection and bad debt costs. Data provided by Peoples demonstrated that in May 2023 and December 2023, 99% of the shopping customers were paying more than default service customers, with 86% of shopping customers paying twice as much for gas supply compared to default service customers. Well-designed and factual information provided to customers who shop in a timely manner could allow those customers to take action to make their bills more affordable should they choose to do so. The information could also help customers make informed decisions that may result in decreased collections costs for Peoples. I continue to recommend that Peoples take the initiative to provide timely information on comparing default supply service with the customer's supplier rate and

[9] Ibid., page 15.

dollar amount on the customer bill and consider conducting consumer education in ways that could include communicating with customers via text messaging and sending bill alerts when supplier prices increase.

V. RESPONSE TO PEOPLES WITNESS HEATHER DOYLE-CONLEY CONCERNING TENANT PROTECTIONS

Q. MS. DOYLE-CONLEY REJECTS YOUR RECOMMENDATIONS TO ENSURE CERTAIN RIGHTS TO TENANTS IN SHARED PREMISES. PLEASE RESPOND.

A. For purposes of context, his issue arises when the landlord/owner fails to make timely payments to Peoples. Peoples provides standard notices to tenants that allows the tenants to make payments on current bills to avoid termination of service. However, Peoples explicitly rejects my recommendation that Peoples provide certain rights to tenants with respect to Protection from Abuse orders (PFAs), arguing that the landlord should not receive those protections, stating:

> Lastly, I disagree with Ms. Alexander's proposal regarding Protection from Abuse Orders ("PFAs"). PFAs protect the victim of domestic abuse from bills accrued by their abuser and provide other protections, such as an additional notice prior to termination. However, since we are discussing tenants' rights, and the tenant is not responsible for the utility bill, it would not be appropriate for the landlord to receive those protections.[10]
>
> PFAs protect the victim of domestic abuse from bills accrued in the name of their abuser and provide additional notice, such as the 48-hour notice prior to termination. It is not appropriate to provide PFA protections to a landlord because their tenant has a PFA. Peoples already has a process for accepting medicals provided by tenants but does not agree to accept a PFA from a tenant.[11]

[10] Peoples St. No. 16-R, page 8.
[11] Ibid., page 12.

I disagree with this policy.

Q. PLEASE EXPLAIN WHY PEOPLES' POLICY TO DENY PFA RIGHTS TO TENANTS IS UNREASONABLE.

A. First, there is no lawful or regulatory basis for this policy distinction that I am aware of. Second, if Peoples is willing to provide medical emergency rights to a tenant, there is no basis for refusing to provide the PFA rights. Third, while there are some practical implementation steps that would need to be considered, the flat out refusal to provide these protections to tenants when they would be available to these same individuals as customers is not defensible. I continue to recommend that Peoples must reform its policies in this regard as a condition of any rate increase in this proceeding.

VI. RESPONSE TO PEOPLES WITNESS CAROL SCANLON CONCERNING THE WEATHERIZATION NORMALIZATION ADJUSTMENT PROPOSAL

Q. MS. SCANLON ATTEMPTS TO DISMISS YOUR CONCERN ABOUT THE LACK OF BILL DISCLOSURE FOR THE WNA. PLEASE RESPOND.

A. First, my testimony is supplemental to that of OCA Witnesses Evard, Mugrace, Johnson, and Colton, all of whom continue to reject the implementation of the WNA mechanism. My input on this proposal is to identify the lack of customer understanding of and acceptance of this rate adjustment that Peoples proposes not to identify on the customer bill but to include in an opaque adjustment to its "delivery charge." Second, Ms. Scanlon's statement that because other Pennsylvania gas utilities have implemented an WNA, that "…this supports the notion that while WNA calculation contains multiple steps, customers

are able to understand the nature of the mechanism"[12] is without any evidentiary basis. Nor does she support such an allegation in her testimony. In my over 40 years' experience in representing customers in utility proceedings, I can attest that customers rarely understand how their bills are calculated and they certainly don't understand the mechanisms of changing rates outside of publicly announced and transparent base rate cases. However calculated, this mechanism is designed to protect Peoples and its earnings and not customers who will not have any opportunity to take action to avoid the results of this calculation. Peoples' refusal to identify the WNA as a line item on customers' bills is telling in that it is squarely at odds with any claims that customers will understand the charge. On the contrary, because Peoples' proposes to embed the WNA charge into its delivery charge, it appears that customers will not even be able to identify whether and when they are paying WNA charges.

VII. RESPONSE TO PEOPLES WITNESS ANDREW WACHTER CONCERNING THE BILLING OF NON-BASIC CHARGES

Q. PLEASE SUMMARIZE MR. WACHTER'S RESPONSE TO YOUR TESTIMONY ON THIS ISSUE.

A. Mr. Wachter states that since the prior Management Audit did not raise any issue regarding the Company's affiliated transaction, there is no basis for further concern. However, he does also state that Peoples will cooperate in any Commission review if it is deemed necessary.[13]

[12] Peoples St. No. 3-R, page 9.
[13] Peoples St. No. 2-R (Public), page 58.

Q. PLEASE RESPOND TO MR. WACHTER'S TESTIMONY ON THIS ISSUE.

A. Mr. Wachter failed to address any of the concerns I raised in my testimony concerning the use of customer information by the third-party contractors to market these services to Peoples customers, the disclosures in the marketing materials, or the concerns about whether regulated rates properly reflect the costs and revenues to Peoples for this program. My concerns are heightened by the recent discovery responses on this issue. While Peoples states that the Company does not provide customer lists to their partners in selling non-basic services[14] and that the Company does not issue market these services to its customers at its call center,[15] the bills issued to customers label these services as "Peoples Protection Services" as I documented in my Direct testimony.[16] Furthermore, Peoples' website promotes these "Peoples Protection Programs" to its customers and includes unpaid "protection" program fees in negotiated payment plans.[17] It is clear to me that Peoples promotes these non-basic services to its customers such that there is an intent to market these programs on behalf of these providers.[18] However, the actual revenues that Peoples has included in this rate case appear very small in comparison to the billing and marketing services provided by Peoples. Specifically, Company shows the amount for HomeServe revenues of $734 and for the IGS Energy Home Service revenues of $10,045.[19] Peoples also stated that it did not include any revenues in this case for "protection services" offered by its affiliated entity, Reliable HomeWorks.[20] Given that Peoples bills over 65,000

[14] Peoples Response to OCA-XXIV-004, attached as Exhibit BA-1-SR.
[15] Peoples Response to OCA-XXIV-005, attached as Exhibit BA-2-SR
[16] OCA Statement No. 5, page 28.
[17] https://www.peoples-gas.com/get-gas/energy/protect/#
[18] Peoples Response to OCA-XIV-009, attached as Exhibit BA-3-SR.
[19] Peoples Response to OCA-XXII-003 and XXII-004, attached as Exhibit BA-4-SR.
[20] Peoples Response to OCA-XIV-008, attached as Exhibit BA-5-SR.

customers for one or more of these programs, these revenues appear to be insufficient. All of these issues need further Commission investigation and consideration of additional consumer protections. As an immediate matter, I recommend that Peoples not include any non-basic charges in negotiated payment plans and take steps to educate customers who are experiencing payment difficulty on how to reduce unpaid charges by eliminating optional and non-basic services.

VIII. RESPONSE TO PEOPLES WITNESS ANDREW WACHTER CONCERNING INCREMENTAL COSTS FOR IMPLENTING OCA RECOMMENDATIONS

Q. MR. WACHTER LISTS OCA RECOMMENDATIONS THAT HE CLAIMS WILL RESULT IN HIGHER COSTS AND ASKS FOR APPROVAL TO INCLUDE INCREMENTAL COSTS FOR FUTURE RECOVERY. PLEASE RESPOND.

A. Mr. Wachter's claim that these recommendations to either comply with current commitments, meet otherwise required standards, or comply with reasonable policies will result in incremental costs is without evidence.[21] Peoples has not properly evaluated whether its current expense in these areas could be allocated more efficiently or whether any of these recommendations could be implemented instead of other and perhaps less effective or unnecessary expenses. It is Peoples' obligation to allocate its internal expenditure priorities to meet regulatory obligations and customer service expectations. Not every change requires "incremental" costs.

[21] Ibid., page 62.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY AT THIS TIME?

A. Yes.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission,	:
	:
v.	: Docket No. R- 2023-3044549
	:
Peoples Natural Gas Company LLC	:
	:

VERIFICATION

I, Barbara R. Alexander, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement 5SR are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: May 3, 2024 Signature: Barbara Alexander
_____
Barbara R. Alexander

Address: Barbara Alexander Consulting LLC
44 Beech St.
Hallowell, ME 04347

EXHIBIT BA-1-SR

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XXIV-004

Witness: Ravenstahl, Luke **Title:** Vice President Sales & Marketing

Question: Based on the responses to OCA-XXIII-1 and XXIII-2, is it correct that Peoples does not provide any information to HomeServe or IGS Home Energy Services that enables these entities to target their non-basic services to Peoples' customers? If this is not correct, identify specifically how these entities obtain the information that would allow them to target or offer non-basic services to Peoples' customers.

Answer: That is correct. The Company does not provide any customer information to HomeServe or IGS Home Energy Services.

Submit Date: 4/29/2024

EXHIBIT BA-2-SR

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XXIV-005

Witness: Ravenstahl, Luke **Title:** Vice President Sales & Marketing

Question: Does Peoples offer to transfer or refer its customers to either HomeServe or IGS Home Energy Services during its communications initiated by a Peoples customer or applicant for service? If so, identify the script used and the criteria used by Peoples to offer such a transfer option.

Answer: The Company only offers to transfer if the customer or applicant asks for that specific warranty provider information. We do not solicit their services.

Submit Date: 4/29/2024

EXHIBIT BA-3-SR

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XIV-009

Witness: Ravenstahl, Luke **Title:** Vice President Sales & Marketing

Question: Provide the marketing, promotional, and customer call center scripts that identify the "warranty programs" billed by Peoples.

Answer: See the attached documents (redacted to remove customer information) for both Peoples' Protection Program and Reliable HomeWorks Program for 2023 marketing and promotions and call center materials. Also refer to the following websites: www.peoples-gas.com/protect and www.reliablehomeworks.com.

Submit Date: 3/8/2024

PROTECT YOURSELF FROM COSTLY REPAIRS TO YOUR GAS LINES

Your outside natural gas service line is your responsibility. **Give yourself peace of mind for as little as $3.75 a month.**

PEOPLES

TO ENROLL, CALL 1-888-215-1610

PEOPLES LINE PROTECTION PROGRAMS CAN SAVE YOU THOUSANDS OF DOLLARS IN REPAIRS AND GIVE YOU PEACE OF MIND.

INDIVIDUAL PROGRAMS

GAS SERVICE LINE PROTECTION $3.75/MO.

GAS IN-HOUSE LINE PROTECTION $2.95/MO.

WATER SERVICE LINE PROTECTION $3.75/MO.

PACKAGES

GAS SERVICE/IN-HOUSE & WATER SERVICE LINES $7.50/MO.

	Monthly Price	Special Offer
Gas Service Line	$3.75	$3.75
Water Service Line	$3.75	$3.75
Gas In-House Line	$2.95	**FREE**
Total	$10.45	$7.50
Savings		**$2.95**

GAS SERVICE/IN-HOUSE & SEWER SERVICE LINES $8.50/MO.

	Monthly Price	Special Offer
Gas Service Line	$3.75	$3.75
Gas In-House Line	$2.95	**FREE**
Sewer Service Line	$4.75	$4.75
Total	$11.45	$8.50
Savings		**$2.95**

The free program included in the bundled packages is good for a minimum of one year. If a program in the package is canceled or terminated, the free program amount becomes due. Complete Terms and Conditions available upon request or online at www.peoples-gas.com/protect. All offers subject to change or cancellation without notice.

ADDITIONAL PACKAGES ARE ALSO AVAILABLE. CALL US AT 1-866-215-1610 FOR MORE INFORMATION.

LEARN MORE ABOUT PEOPLES LINE PROTECTION PROGRAMS AT Peoples-Gas.com/Protect

Reliable HomeWorks

[redacted]

Dear Customer:

As you know, you don't have to worry if you have a problem with your **Gas or Water Service Line** since you are currently enrolled in Reliable HomeWorks® Gas Service and Water Service Line Protection Programs.

But what will you do if your **Gas In-House Line** fails? Will you look in the phone book, pick a plumber, leave a message and hope you receive a call back? Worry about the cost? Pay hundreds or even thousands of dollars for repairs and wonder if you received quality workmanship?

Not if you enroll <u>now</u> in Reliable HomeWorks® Gas In-House Line Protection Program! Once your gas company confirms your line issue, call to notify us day or night. Then you can sit back, relax, and our contractor will call **YOU** to arrange for covered repairs*.

We can add the **<u>Gas In-House Line</u>** program for just $4.05 a month. Please enroll today by completing the form below or calling **1.888.742.5427.** Why wait? Act now and rest assured knowing Reliable HomeWorks® is just a phone call away.

YES, HELP ME CONTINUE PROTECTING MY HOME.

[redacted]

☑ $4.05/month— I want to protect my interior gas lines with **Reliable HomeWorks Gas In-House Line Protection Program.**

Signature:_____ Date:_____

Phone: _____ Email: _____

Charges will appear on your monthly Peoples gas bill.

[redacted]

s mailed upon enrollment.

GHL0223

Reliable HomeWorks

[redacted]

Dear Customer:

As you know, you don't have to worry if you have a problem with your **Water Service Line** since you are currently enrolled in Reliable HomeWorks® Water Service Line Protection Program.

But what will you do if your **Sewer Service Line** fails? Will you look in the phone book, pick a plumber, leave a message and hope you receive a call back? Worry about the cost? Pay hundreds or even thousands of dollars for repairs and wonder if you received quality workmanship?

Not if you enroll <u>now</u> in Reliable HomeWorks® Sewer Service Line Protection Program! If you have an external sewer line back-up, call to notify us day or night. Then you can sit back, relax, and our contractor will call **YOU** to arrange for covered repairs*.

We can add the **<u>Sewer Service Line</u>** program for just $6.75 a month. Please enroll today by completing the form below or calling **1.888.742.5427.** Why wait? Act now and rest assured knowing Reliable HomeWorks® is just a phone call away.

YES, HELP ME CONTINUE PROTECTING MY HOME.

[redacted]

☑ $6.75/month— I want to protect my external sewer line with **Sewer Service Line Protection Program.**

Signature:_____Date:_____

Phone: _____Email: _____

Charges will appear on your monthly Peoples gas bill.

[redacted]

conditions mailed upon enrollment.

SS0223

Reliable HomeWorks

[redacted]

Dear Customer:

As you know, you don't have to worry if you have a problem with your **Gas Service Line** since you are currently enrolled in Reliable HomeWorks® Gas Service Line Protection Program.

But what will you do if your **Water Service Line** fails? Will you look in the phone book, pick a plumber, leave a message and hope you receive a call back? Worry about the cost? Pay hundreds or even thousands of dollars for repairs and wonder if you received quality workmanship?

Not if you enroll <u>now</u> in Reliable HomeWorks® Water Service Line Protection Program! Once your water company verifies your water service line is leaking, call to notify us day or night. Then you can sit back, relax, and our contractor will call **YOU** to arrange for covered repairs*.

We can add the **<u>Water Service Line</u>** program for just $4.05 a month. Please enroll today by completing the form below or calling **1.888.742.5427.** Why wait? Act now and rest assured knowing Reliable HomeWorks® is just a phone call away.

YES, HELP ME CONTINUE PROTECTING MY HOME.

[redacted]

☑ $4.05/month— I want to protect my water line with **Water Service Line Protection Program.**

Signature:_____ Date:_____

Phone: _____ Email: _____

Charges will appear on your monthly Peoples gas bill.

[redacted]

nditions mailed upon enrollment.

WL0223

IMPORTANT REMINDER

For Property at

PEOPLES
An Essential Utilities Company

Status: Not Covered
Offer: Sewer Service Line Protection Coverage for $4.75/month
Offer Expires in 30 days
Contact us: **1-866-215-1610**

Thank you for enrolling in Peoples Gas Service Line Protection Program. We would like to offer you additional protection for your home.

Our records show your sewer service line is not currently protected by **Peoples Sewer Service Line Protection Program**†. Your exterior sewer service line can unexpectedly back-up and possibly result in a complicated repair costing up to $7,500 or more. Peoples can protect your sewer service line for just $4.75 per month. Once active, if you experience a covered back-up in your sewer service line, Peoples *will make the arrangements* for a contractor to do the repair work and *we will pay the bill*†† when the work is finished.

Enjoy added peace of mind! With this limited time offer if you enroll in the next 30 days, we will send you a complimentary water LeakAlertor 6000†††, an automatic water leak detection device for toilets. This is an easy-to-install device that is placed on your toilet and detects and alerts you to problems each time that toilet is flushed. The LeakAlertor 6000 offers audible and visual alerts when a problem is detected and can save you the stress and expense of a leaking or running toilet.

Please enroll today by returning the form below, calling our professional representatives at **1-866-215-1610** or visiting **peoples-gas.com/protect.**

Sincerely,

Vivian Sabatini
Director, Marketing

P.S. Learn about our other protection programs by calling 1-866-215-1610.

† Complete terms and conditions mailed upon enrollment and available online at www.peoples-gas.com/protect or by calling 1-866-215-1610.
†† Program coverage is capped at $7,500.00.
††† Please allow 2-4 weeks for shipping. Subject to change or cancellation without notice, does not cover repairs or water bill costs.

YES, HELP ME AVOID EXPENSIVE REPAIRS.

I want to protect my sewer service line with **Peoples Sewer Service Line Protection Program.**

☑ $4.75/month—**Sewer Service Line Protection**

Signature:_____ Date: _____

Phone: _____ Email: _____

Charges will appear on your monthly Peoples gas bill.

By providing my email, I understand that Peoples may, from time-to-time, send me information by email related to utility services.

SSLA0423

TO OUR VALUED CUSTOMER

At Property

PEOPLES
An Essential Utilities Company

Status: Exterior Water Service Line NOT COVERED

Offer: Exterior Water Service Line Protection Program for $3.75/month

Contact us: **1-866-215-1610**

Visit us: **peoples-gas.com/protectwater**

Thank you for enrolling in Peoples Gas Service Line Protection Program. We would like to provide further protection for your exterior water service line connected to your home.

Our records show your water service line is not currently protected by **Peoples Water Service Line Protection Program**†. Your exterior water service line can unexpectedly fail and complicated repairs can cost $2,000 or more. Peoples can protect your water service line for just $3.75 per month. Once active, if you experience a covered water service line failure, Peoples *will make the arrangements* for a contractor to do the repair work and we *will pay the bill* when the work is finished.

Enjoy added peace of mind! With this limited time offer if you enroll in the next 30 days, we will send you a complimentary water LeakAlertor 6000††, an automatic water leak detection device for toilets. This is an easy-to-install device that is placed on your toilet and detects and alerts you to problems each time that toilet is flushed. The LeakAlertor 6000 offers audible and visual alerts when a problem is detected and can save you the stress and expense of a leaking or running toilet.

Please enroll today by returning the form below, calling our professional representatives at **1-866-215-1610** or visiting **peoples-gas.com/protectwater**.

Sincerely,

Vivian Sabatini
Director, Marketing

P.S. Learn about our other protection programs by calling 1-866-215-1610.

†Complete terms and conditions mailed upon enrollment and available online at www.peoples-gas.com/protectwater or by calling 1-866-215-1610.
†† Please allow 2-4 weeks for shipping. Subject to change or cancellation without notice, does not cover repairs or water bill costs.

YES, HELP ME CONTINUE PROTECTING MY HOME.

I want to protect my water service line with **Peoples Water Service Line Protection Program.**

☑ $3.75/month—**Water Service Line Protection**

Signature:_____ Date: _____

Phone: _____ Email: _____

Charges will appear on your monthly Peoples gas bill.

By providing my email, I understand that Peoples may, from time-to-time, send me information by email related to utility services.

WSLA0223

IMPORTANT REMINDER

To a Valued Customer

PEOPLES™
An Essential Utilities Company

Status: Not Covered
Offer: Gas Service Line Protection Coverage for $3.75/Month
Contact Us: 1-866-215-1610
Visit Us: peoples-gas.com/gasline

Our records show your underground gas service line is **not** currently protected by **Peoples Gas Service Line Protection Program**.

Your gas service line can unexpectedly fail and repairs can cost anywhere from $1,000 to $1,500 or more.

For only $3.75/month added to your gas bill, Peoples will take responsibility to protect your gas service line if it fails*. Once active, if you experience a gas service line failure, Peoples will make the arrangements for an approved contractor to perform the repair work and we'll cover all of the repair expenses.

Please enroll today by returning the form below, calling our sales team at 1-866-215-1610 or visiting peoples-gas.com/gasline.

Thank you for being a valued Peoples customer.

Vivian Sabatini
Director, Marketing

**Complete terms & conditions will be mailed to you upon enrollment.*

YES, I'D LIKE TO START PROTECTING MY HOME.

I want to protect my gas service line with **Peoples Gas Service Line Protection Program.**

☑ $3.75/month—**Gas Service Line Protection**. My house is 125 feet or less from the street.

Signature: _____ Date: _____

Phone: _____ Email: _____

Charges will appear on your monthly Peoples gas bill.

By providing my email, I understand that Peoples may, from time to time, send me information by email related to utility services.

GS062023

IMPORTANT REMINDER

To a Valued Customer

PEOPLES

Status: Not Covered
Offer: Gas Service Line Protection Coverage for $3.75/Month
Contact Us: 1-866-215-1610
Visit Us: peoples-gas.com/gasline

Our records show your underground gas service line is **not** currently protected by **Peoples Gas Service Line Protection Program**.

Your gas service line can unexpectedly fail and repairs can cost anywhere from $1,000 to $1,500 or more.

For only $3.75/month added to your gas bill, Peoples will take responsibility to protect your gas service line if it fails*. Once active, if you experience a gas service line failure, Peoples will make the arrangements for an approved contractor to perform the repair work and we'll cover all of the repair expenses.

Please enroll today by returning the form below, calling our sales team at 1-866-215-1610 or visiting peoples-gas.com/gasline.

Thank you for being a valued Peoples customer.

Vivian Sabatini
Director, Marketing

**Complete terms & conditions will be mailed to you upon enrollment.*

YES, I'D LIKE TO START PROTECTING MY HOME.

I want to protect my gas service line with **Peoples Gas Service Line Protection Program.**

☑ $3.75/month—**Gas Service Line Protection**. My house is 125 feet or less from the street.

Signature: _____ Date: _____

Phone: _____ Email: _____

Charges will appear on your monthly Peoples gas bill.

By providing my email, I understand that Peoples may, from time-to-time, send me information by email related to utility services.

GS032023

IMPORTANT REMINDER

To a Valued Customer

PEOPLES™
An Essential Utilities Company

Status: Not Covered
Offer: Gas Service Line Protection Coverage for $3.75/Month
Contact Us: 1-866-215-1610
Visit Us: peoples-gas.com/gasline

Our records show your underground gas service line is **not** currently protected by **Peoples Gas Service Line Protection Program**.

Your gas service line can unexpectedly fail and repairs can cost anywhere from $1,000 to $1,500 or more.

For only $3.75/month added to your gas bill, Peoples will take responsibility to protect your gas service line if it fails*. Once active, if you experience a gas service line failure, Peoples will make the arrangements for an approved contractor to perform the repair work and we'll cover all of the repair expenses.

Please enroll today by returning the form below, calling our sales team at 1-866-215-1610 or visiting peoples-gas.com/gasline.

Thank you for being a valued Peoples customer.

Vivian Sabatini
Director, Marketing

**Complete terms & conditions will be mailed to you upon enrollment.*

YES, I'D LIKE TO START PROTECTING MY HOME.

I want to protect my gas service line with **Peoples Gas Service Line Protection Program.**

☑ $3.75/month—**Gas Service Line Protection**. My house is 125 feet or less from the street.

Signature: _____ Date: _____

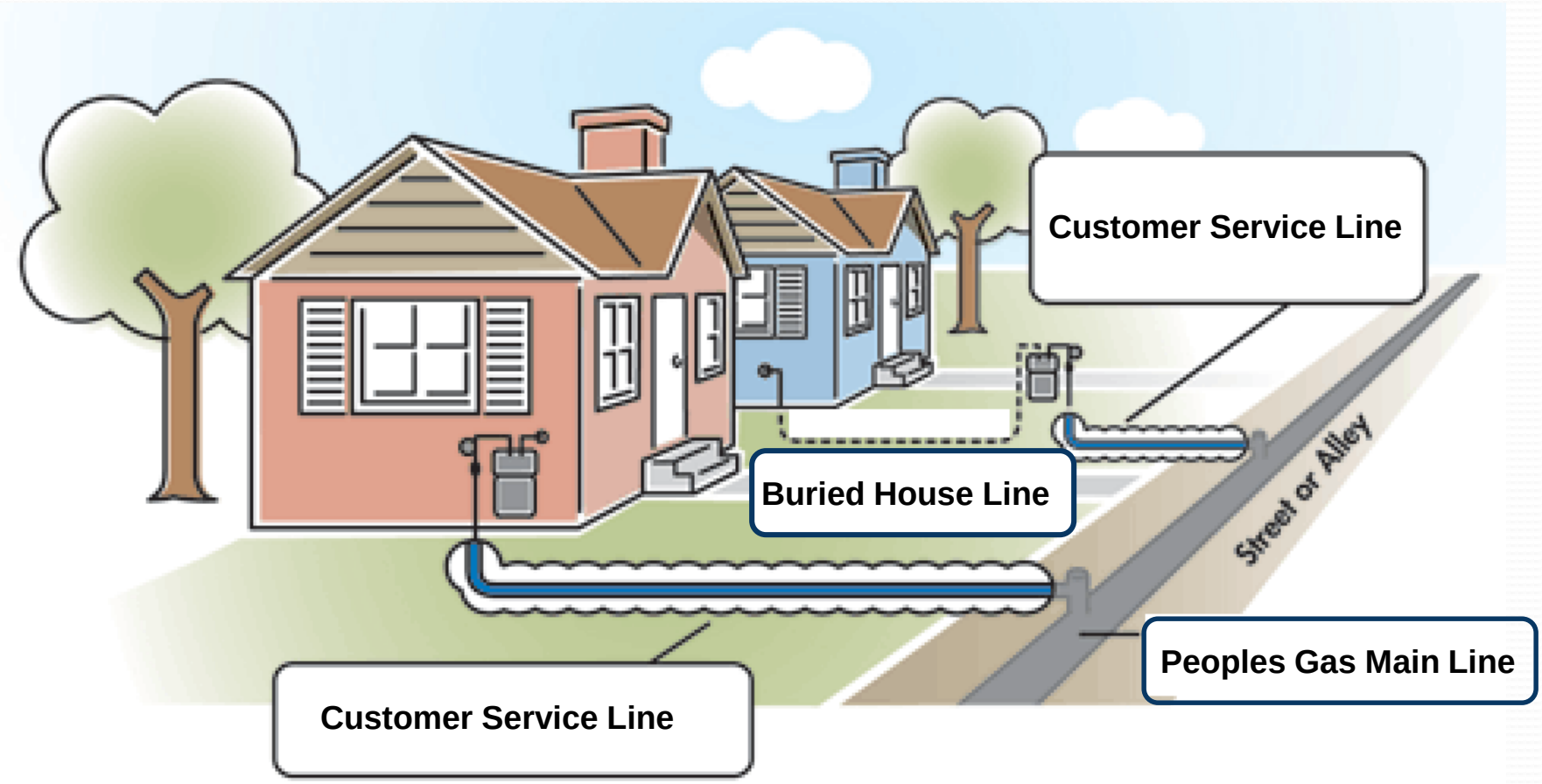
Phone: _____ Email: _____

Charges will appear on your monthly Peoples gas bill.

By providing my email, I understand that Peoples may, from time-to-time, send me information by email related to utility services.

GS112023

House Connection



Customer Service Line is the Customer's responsibility to maintain.

Buried House Line is also the Customer's responsibility to maintain.

The Gas Meter is owned and maintained by Peoples Gas.

Revision Date: 1/24/2011

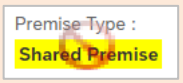
PEOPLES NATURAL GAS

Peoples Protection Program (PPP)

Who is interested in Peoples Protection Programs?

- **Homeowners**! *Simply ask*: **Are you the Homeowner?**
- **Homeowners** with **older homes** will see the value of our repair programs. *Say*: **May I ask, how old is your home?**
- **First-time Homeowners** may not have considered the **risk of costly repairs** to gas, water, or sewer lines. *Ask*: **Do you know you are responsible for utility lines that run to your home?**

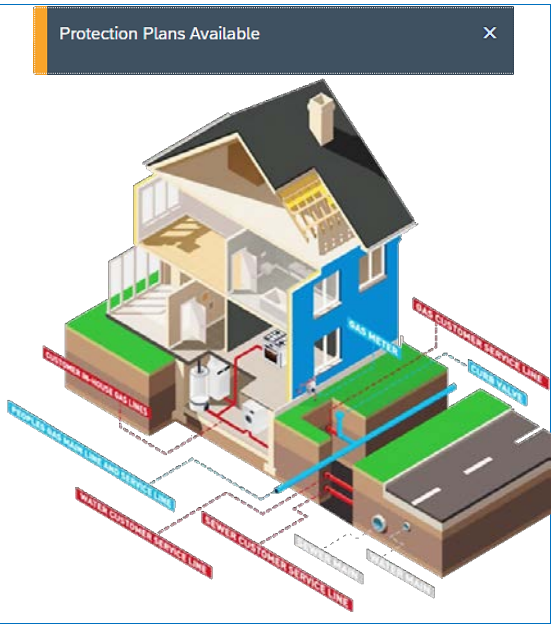
Ineligible Premises:



Shared Premise

Multiple Meters

Landlord Reversion



Make Lives Better for Homeowners in 3 Easy Steps

1. **Inquire**: Have you heard about our line protection programs that can save you money?
   An ***affordable*** **way** to protect you from a costly repair or replacement of a gas, water, or sewer line.
2. **Offer Solution**: "You may want to consider our popular Gas Service Line Protection program. An introductory package that covers the **Gas Service Line, Water Service Line** and the **Gas In-House Line** (011) is available right now. This limited time offer is priced to include the **Gas In-House Line** program completely **FREE** for a minimum of one year - **a savings of $35**! The entire package is available for just **$7.50** a month!"
   (See additional introductory Combination Packages below.)

   "Before I take you further: Is this a **single-family home** and is the **gas service line under 125 feet long**?
   Visualize the **length of two bowling lanes**."

3. **Confirm Enrollment**: It's reassuring to know unexpected repairs will be paid and quickly resolved with our professional contractors. This program will cover your <Gas Service/In-House & Water Service Lines> at <$ **Prg Price**> and will be itemized on your monthly gas bill. With full payment of your next bill, your coverage will begin <**Cover Date**>. Please review all program **Terms & Conditions** you'll receive by mail.

Warranty Services

Active (1) | Inactive

Name of Service Provider	Service	Long Text	Prg Price	Balance	Enroll Date	Drop Date	Cover Date
Peoples Protection Program - PEGD	011	Gas Service/In-House&Water Service Line	$7.50	$0.00	11/15/2023	12/31/9999	01/01/2024

IMPORTANT: Note Interaction Record - Enrolled on <*Plan Name*>. **Adv T&C will be mailed.**

Combination Packages

Gas Service/In-House & Water Service Line (011)	Gas, Water & Sewer Service Lines (012)	Gas In-House Line, Gas & Sewer Service Lines (013)	Gas In-House Line, Water & Sewer Service Lines (014)
$7.50/mo (Saves **$2.95**/mo)	**$8.50**/mo (Saves **$3.75**/mo)	**$8.50**/mo (Saves **$2.95**/mo)	**$8.50**/mo (Saves **$2.95**/mo)
Gas In-House Line program **FREE** for minimum of 1 year	Water Service Line program **FREE** for minimum of 1 year	Gas In-House Line program **FREE** for minimum of 1 year	Gas In-House Line program **FREE** for minimum of 1 year

NOTE: For follow up requests, please copy/paste EzServ customer details & e-mail **ccEscalated** with the caller's name, contact number and Protection Program(s) interest details.

Peoples Protection Program (PPP)

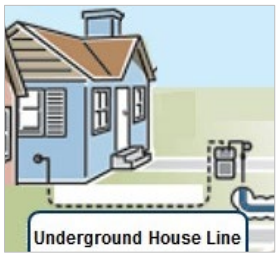
Gas Service Line (001)

- A **gas service line** runs **from our curb box** to the meter.
- For just **$3.75**/month, customers can protect against gas service line leak repairs that can cost hundreds or thousands.
- With the **Gas Service Line Protection Restoration (008)** upgrade (**$2.00**/month), we'll restore existing concrete or asphalt and lawn after the underground line is repaired.

Gas Service Line

Gas Underground House Line (002)

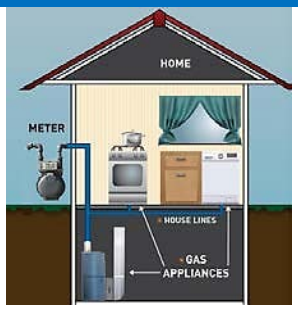
- A **gas underground house line** is the outside line that **runs from our meter** to the customer's house.
- For just **$3.75**/month, customers can protect against costly gas underground house line leaks and repairs.
- With the **Gas Underground House Line Protection Restoration (010)** upgrade ($2 month), we'll restore existing concrete, asphalt and lawn after line repair.



Gas Underground House Line

Gas In-House Line (003)

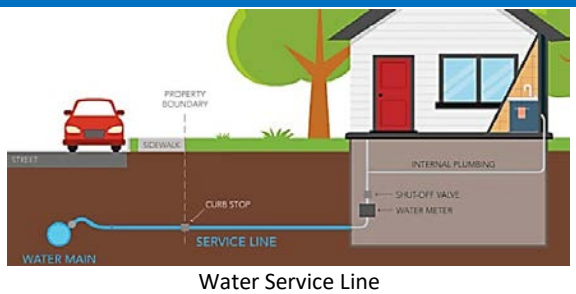
- A **gas in-house line runs from our meter** to the customer's natural gas appliance connectors.
- For just **$2.95**/month, customers can protect against costly gas in-house line leaks and repairs.



Gas In-House Line

Water Service Line (004)

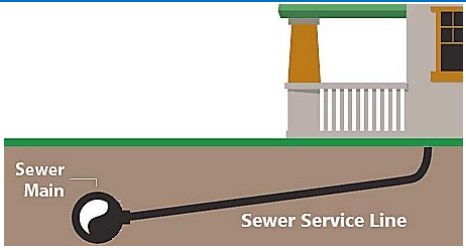
- A **water service line** runs from the curb box to the meter.
- For just **$3.75**/month, customers can protect against water line leaks & repairs that can cost thousands.
- With the **Water Service Line Protection Restoration (009)** upgrade (**$2.00** per month), we'll restore existing asphalt, concrete and lawn after the underground line repair.



Water Service Line

Sewer Service Line (005)

- A **sewer service line** is the outside line that runs from the building foundation to the sewer main line.
- For just **$4.75**/month, customers can protect against sewer service line repairs that can cost thousands.



Sewer Service Line

Peoples Protection Program (PPP)

Heating Protection Program (006)

- For just **$5.95**/month, customers can protect against costly repairs to a primary **natural gas-fueled heating unit** (furnace or hot water boiler) that is less than 20 years old.
- Maximum Coverage is **$500** annually.

Natural Gas Furnace

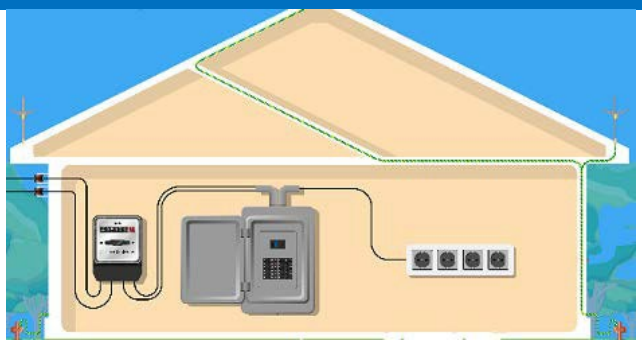
Cooling Protection Program (007)

- For just **$5.95**/month, customers can protect against costly repairs to an **electric-powered central air conditioning unit** that is less than 20 years old.
- Maximum Coverage is **$500** annually.

Central Air

In-House Electric Line (017)

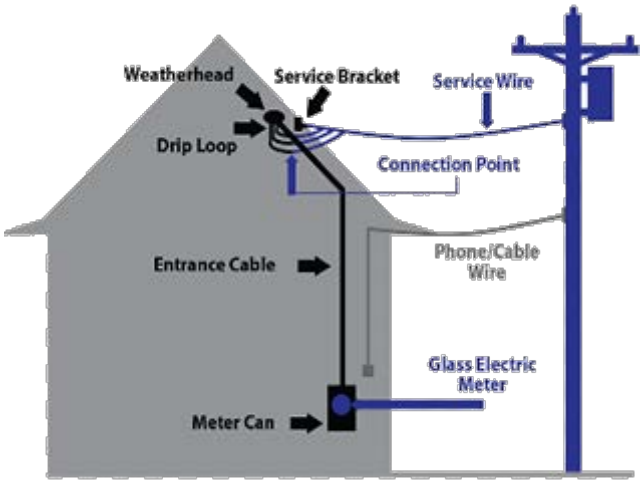
- An **electric in-house line** includes inside wiring within the dwelling, from the point of entry into the breaker panel or fuse box, including breakers, boxes, fuses, receptacles, switches and wiring.
- Paying just **$3.95** per month, customers can avoid costly repairs if an electrical problem or failure with the wiring or with these components is encountered.
- Maximum Coverage is **$2,000**/annually.



Electric in-house line covers inside electrical wiring

Exterior Electric Line (018)

- An **electric service line** involves exterior wiring which can have problems and cause a power failure (*illustrated in* **black**)
- Electric company is responsible for **Service Wire** from pole to weatherhead and electric meter (*illustrated in* **blue**)
- For just **$3.95**/month, customers can protect against costly repairs and get their power up and running as quickly as possible.
- Maximum Coverage is **$2,000** annually.



Electric Service Line runs down from the **Service Wire** entrance

Peoples Protection Program (PPP)

Combo Upgrade

When a customer wants to cancel a single program enroll to in a Bundled Plan:

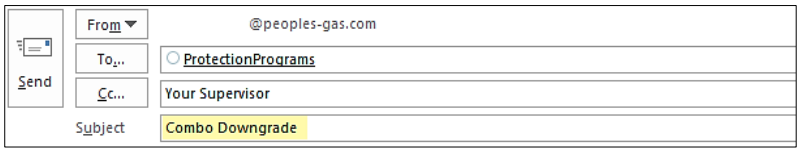
1. Do **not** **Unenroll** the Single Plan because coverage will END immediately!
2. **Enroll** the new Bundled Plan & provide the **Cover Date**
3. **Explain**: "To prevent a gap in coverage, your current plan will be canceled when your new plan is effective. Please carefully review the program **Terms & Conditions** you'll receive by mail."
4. **Email** ProtectionPrograms@peoples-gas.com & CC: **Your Supervisor** with details

Example:
Account 1000123456 | 123 Maple St, Pittsburgh PA 15555 | Phone 412-867-5309.
Enrolled Jane Jones on new <*Gas Service Line*> Bundled plan effective mm/dd/yy.
Please cancel the current on the new Bundled Plan effective date.

Combo Downgrade

When a customer wants to cancel a program in a Bundled Plan:

1. Do **not** **Unenroll** the Bundled Plan because coverage will END immediately!
2. **Enroll** the new Single Plan
3. **Explain**: "To prevent a gap in coverage, your current plan will be canceled when your new plan is effective. Please carefully review the program **Terms & Conditions** you'll receive by mail."
4. **Email** ProtectionPrograms@peoples-gas.com & CC: Your Supervisor with details



Example:
Account 1000123456 | 123 Maple St, Pittsburgh PA 15555 | Phone 412-867-5309.
Enrolled Jane Jones on single <*Gas Service Line*> plan effective mm/dd/yy.
Please cancel the Bundled Plan on new plan effective date.

See the **EzServ Warranty Program Job Aids**:

- View Warranty Program Details
- Enroll Warranty Programs
- Unenroll Warranty Programs

PEOPLES LINE PROTECTION PROGRAMS CAN SAVE YOU THOUSANDS OF DOLLARS IN REPAIRS AND GIVE YOU PEACE OF MIND.

INDIVIDUAL PROGRAMS

GAS SERVICE LINE PROTECTION $3.75/MO.

GAS IN-HOUSE LINE PROTECTION $2.95/MO.

WATER SERVICE LINE PROTECTION $3.75/MO.

PACKAGES

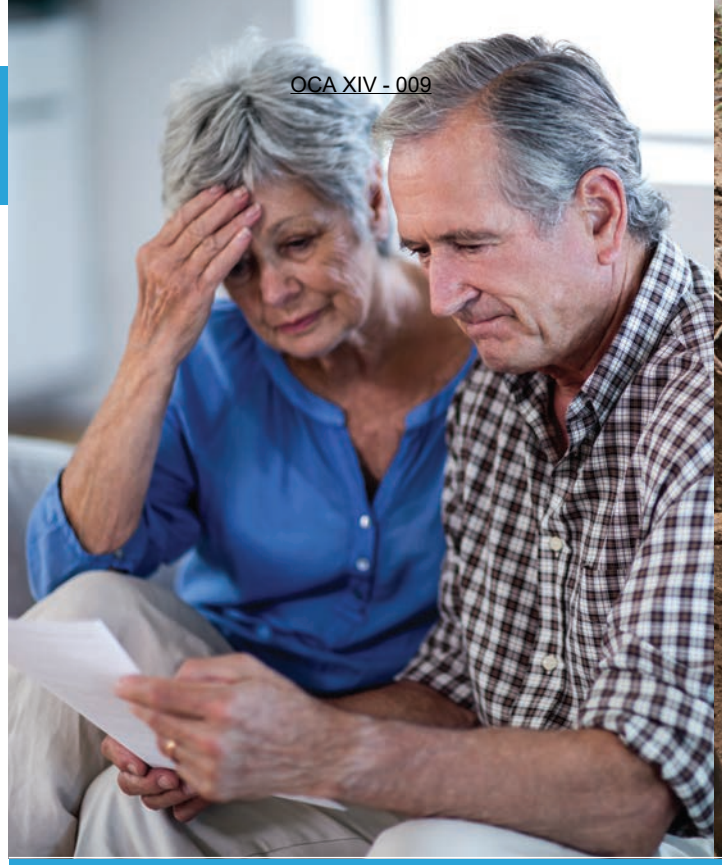
GAS SERVICE/IN-HOUSE & WATER SERVICE LINES $7.50/MO.

	Monthly Price	Special Offer
Gas Service Line	$3.75	$3.75
Water Service Line	$3.75	$3.75
Gas In-House Line	$2.95	**FREE**
Total	$10.45	$7.50
Savings		**$2.95**

GAS SERVICE/IN-HOUSE & SEWER SERVICE LINES $8.50/MO.

	Monthly Price	Special Offer
Gas Service Line	$3.75	$3.75
Gas In-House Line	$2.95	**FREE**
Sewer Service Line	$4.75	$4.75
Total	$11.45	$8.50
Savings		**$2.95**

The free program included in the bundled packages is good for a minimum of one year. If a program in the package is canceled or terminated, the free program amount becomes due. Complete Terms and Conditions available upon request or online at www.peoples-gas.com/protect. All offers subject to change or cancellation without notice.



TO ENROLL, CALL 1-866-215-1610

PROTECT YOURSELF FROM COSTLY REPAIRS TO YOUR GAS LINES

LEARN MORE ABOUT PEOPLES LINE PROTECTION PROGRAMS AT **Peoples-Gas.com/Protect**

Follow Us: **@peoplesnatgas**

TO ENROLL, CALL 1-866-215-1610

Your outside natural gas service line is your responsibility. **Give yourself peace of mind for as little as $3.75 a month.**

PEOPLES™

You use natural gas to heat your home and cook your food. It is probably even responsible for the hot water you use to bathe and wash your dishes.

Your natural gas service and in-house lines are your responsibility.

They can unexpectedly fail. Peoples can help.

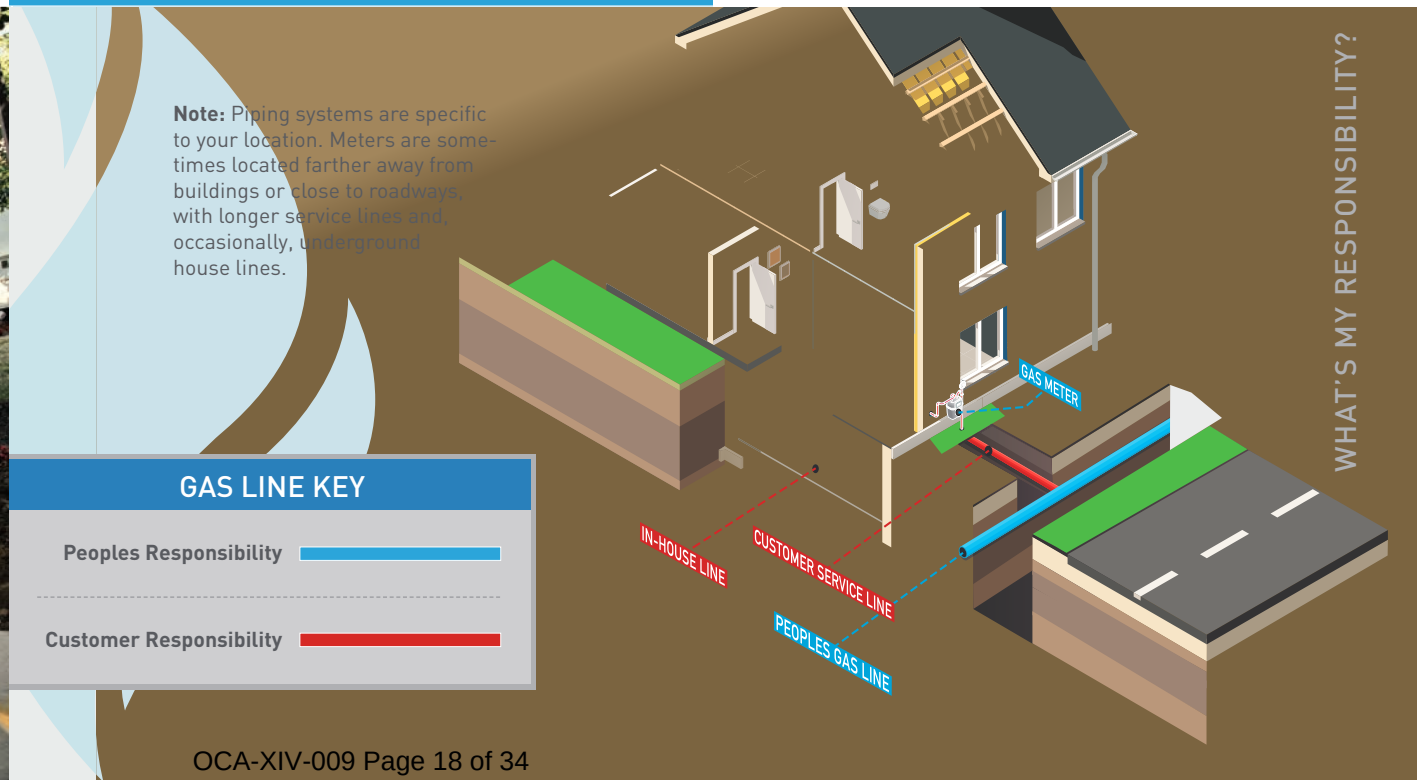
Repairs to natural gas service lines and in-house lines can be costly and inconvenient. Gain peace of mind with Peoples Line Protection Program.
For as little as $3.75 per month, **Peoples Gas Service Line Protection Program** will give you the peace of mind of knowing:

- costly repairs or replacements to your natural gas service line are covered.
- you will receive 24 hour claim response with a single phone call to Peoples.
- you don't have to find your own contractor you can trust. All work will be completed by a qualified professional from the Peoples network.
- your monthly charge for Peoples Line Protection Programs will appear on your gas bill.

To enroll, call 1-866-215-1610

See reverse for details about Programs and Package Offers.

Note: Piping systems are specific to your location. Meters are sometimes located farther away from buildings or close to roadways, with longer service lines and, occasionally, underground house lines.



GAS LINE KEY

Peoples Responsibility

Customer Responsibility

WHAT'S MY RESPONSIBILITY?

Peoples Protection Program

Terms and Conditions and Frequently Asked Questions

Commercial accounts are not eligible for the Program and will not be provided coverage.

BASICS FOR ALL PROGRAMS

- **When would coverage start?** Coverage starts the first day of the month FOLLOWING the due date of the Peoples utility bill and confirmation of payment recent. So, as long as the customer makes the payment by the due date of their NEXT bill, the coverage will begin on the first of the next month.

  TIP: The enrollment screen calculates the anticipated coverage start date.

- **Are customers locked into a contract?** Customers may cancel anytime; however, protection programs may not be cancelled within 12 months of a covered line/equipment replacement or repair under the program. Participation is automatically canceled if the customer ends their service with Peoples.
- **How are customer payments applied to protection plans?** Customer payments will be applied to the current and outstanding natural gas charges FIRST. Any remaining funds will be applied in the following order if the customer has more than one program: Gas Service Line Protection Program (first priority), the Gas Underground House Line Protection Program, the Gas In-House Line Protection Program, the Water Service Line Protection Program, the Line Protection Restoration Program(s), the Sewer Service Line Protection Program and the Heating/Cooling Protection Program (last priority).
- **What steps does a customer take when they have a claim?** Make one toll-free call to our Claims area at 1-866-215-1610. Work will be performed by Peoples' network of authorized service providers. Services will be dispatched based upon available times during normal business hours (8:00 am – 5:00 pm), Monday through Friday, except holidays. The Contractor will contact the customer within eighteen (18) hours to schedule the work.
  NOTE: Peoples assumes no liability for, and will not reimburse the customer for any services completed by an unauthorized third party contractor.
- **Condition of gas service line, gas house line, water service line, sewer service line**
  The line must be in good working order at the time of the Customer's enrollment. Peoples reserves the right to inspect the line for this purpose within sixty (60) days of Customer's enrollment.

Enrollment

- **Is the customer required to sign anything?** No, with the enrollment, customers will receive the Terms and Conditions, a helpful reference with specific details of the protection we provide as well as all of the information they need for submitting claims, contact information, and other requests.
- **What if a customer wants to enroll but is not in the targeted pilot area?**
  Because we only have contractors ready to do the work in the target area, we are not currently able to go outside of that area. Obtain contact information for Inside Sales to follow up with the customer.
- What if I miss a payment and come to find I have a problem with the unit, can I still file a claim?
  You pay your coverage a month in advance. If you miss a payment, you risk suspension of your coverage.
  NOTE: Contract goes into suspended status after missing a payment. If three payments are missed the contract is terminated. Contracts are also terminated if the customer moves out.

Continued on other side

RESTORATION

Additional coverage ($2 month) is available to customers enrolled in **Gas Service Line**, **Underground House Line** and/or **Water Service Line** Protection Programs.

- **What is covered?**

  Grass Restoration: Restoration of the existing grass or mulch bed located over the area disturbed by any excavation completed with the associated line repair. Includes tamping, adding topsoil and either reseeding and covering the reseeded area with straw OR laying sod.

  Concrete or Asphalt Restoration: Covers the repair or replacement of existing concrete or patching of asphalt for items such as driveway sections, sidewalk pads, curbs or walkways that were disturbed by any excavation made in conjunction with a line protection program.

- **Coverage is limited to $1,000 per restoration.** If the cost of a restoration will exceed $1,000, the customer will be allowed to choose where to allocate the restoration allowance. (e.g., the entire $1,000 allowance may be applied to concrete replacement instead of grass restoration).

Sewer Service Line Protection Program does NOT have additional restoration coverage available. When a line is repaired or replaced, site restoration is limited to backfilling. The Program does not cover restoration of lawns, gardens, trees, shrubbery, walls, fences, paved or concrete surfaces, gravel, and structures.

HEATING/COOLING COVERAGE

Covered Parts Air Conditioners	Covered Parts Furnaces/Boilers	Covered Parts Furnaces Only	Covered Parts Boilers Only
Belts	Circuit Board	Belts	Aquastat
Blower Motor	Flue Connector Box	Blower Shaft & Bearings	Circulator
Blower Shaft	Fuses	Blower Motor	Coupler
Blower Wheel	Gas Valve	Blower Wheel	Gas Regulator
Capacitor	Igniter	Fan Control	Low Water Cut-Off
Circuit Board	Induced Draft Fan Motor	Pulleys	Pressure Gauge
Condenser Cleaning	Limit Control		Relief Valve
Condenser Fan Motor	Main Burner		Sight Glass
Contactor	Manifold		
External Circuit Board	Pilot Burner		
Fan Blade	Pressure Control		
Fan Control	Regulator		
Fuse	Relay		
Hard Start Kit	Sensors		
Heater Element	Thermocouple		
Pulleys	Thermostat (Standard)		
Relay	Transformer		
Schraeder Caps Schraeder Valves	Vent		
Thermostat (Standard)			
Time Delay Relay/Timer			
Transformer			

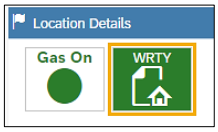
- If I lose heat in the middle of the night, when can I expect someone to be at my home?

  Contact us 24/7 at 1-866-215-1610 as soon as you realize there is a problem with your unit. A heating/cooling professional will contact you within 18 hours to make arrangements. In extreme weather conditions, we will work to be there as soon as possible.

EzServ Foundations

View Warranty Programs

The **WRTY** tile appears on the *Landing* page, *Location Details* (top right panel) to indicate that a customer participates in the Peoples Protection Program



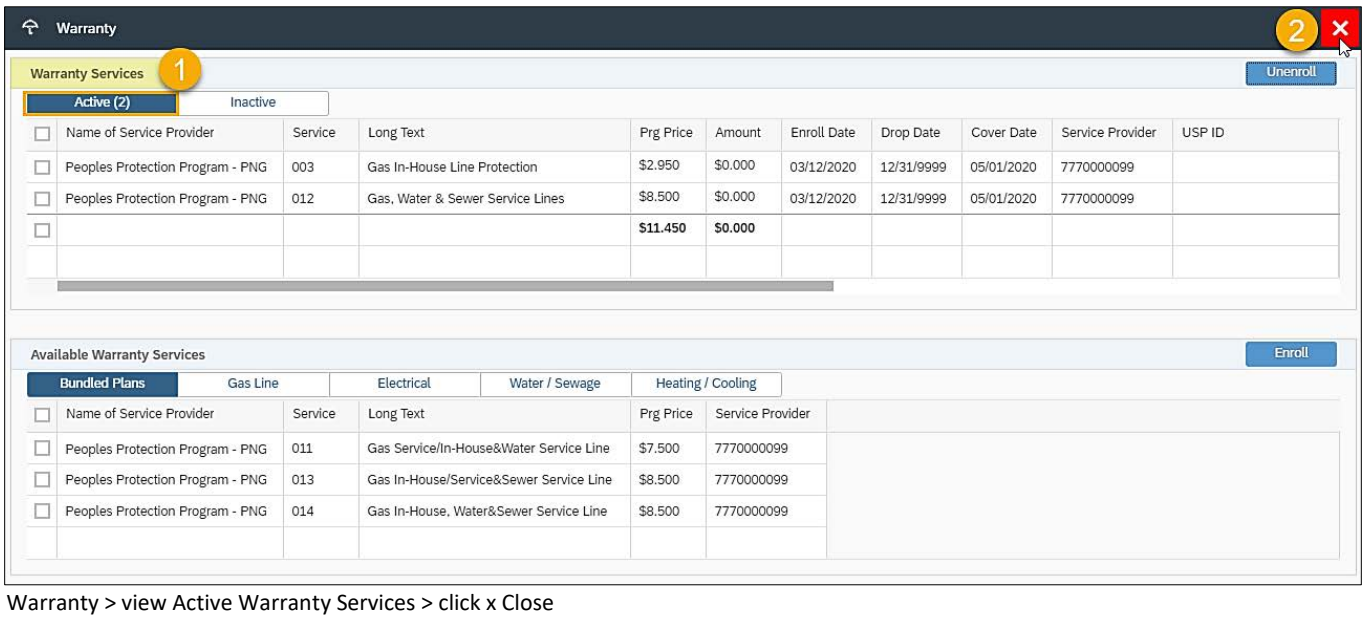
Location Details > WRTY

Follow these steps to view Warranty program details:

- At the *Search* screen, search for and select the appropriate account
- At the *Landing* page, enter *Speaking with* **Name/Phone** details
- At the Tool *Bar*, click **Tools** and select **Warranty**

Tools > Warranty

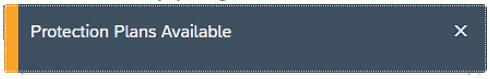
1. At the *Warranty* window, at the top left ***Warranty Services*** section, review the **Active (#)** program(s)
2. When you have finished, click **x Close**



Warranty > view Active Warranty Services > click x Close

Enroll Warranty Program(s)

If the **Protection Plans Available** alert appears, PPP offers warranty programs at the Service Address



Monthly PPP rates vary by program

Bundled Plans

$7.50 - Gas Service/In-House & Water Service Line
$8.50 - Gas, Water & Sewer Service Lines
$8.50 - Gas In-House/Service & Sewer Service Line
$8.50 - Gas In-House, Water & Sewer Service Line

Gas Line

$3.75 - Gas Service Line Protection
$3.75 - Gas Underground House Line Protection
$2.95 - Gas In-House Line Protection
$2.00 - Gas Service Line Restoration

Electrical

$3.95 - In-House Electric Line Protection
$3.95 - Exterior Electric Line Protection

Water / Sewage

$3.75 - Water Service Line Protection
$4.75 - Sewer Service Line Protection
$2.00 - Water Service Line Protection
$2.00 - Underground House Line Restoration

Heating / Cooling

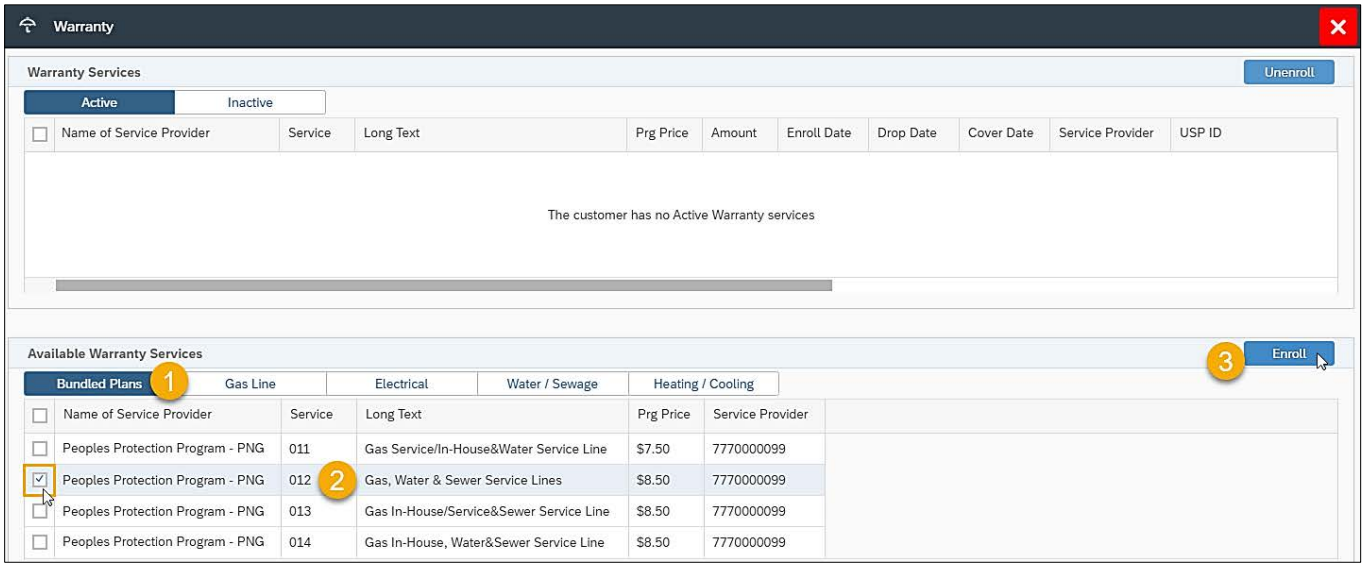
$5.95 - Heating Protection
$5.95 - Cooling Protection
$19.95 - Peoples Home Comfort-Furnace
$39.90 - Peoples Home Comfort-All Seasons

Follow these steps to enroll a customer on a Warranty program:

- At the *Search* screen, search for and select the appropriate account
- At the *Landing* page, enter *Speaking with* **Name/Phone** details
- At the Tool *Bar*, click **Tools** and select **Warranty**

1. At the *Warranty* window, in the ***Available Warranty Services*** section (lower half of window), click the appropriate category **Tab** (Bundled Plans, Gas Line, Electrical, Water / Sewage or Heating / Cooling)
2. Select ☑ the desired Program(s)
3. Click **Enroll**

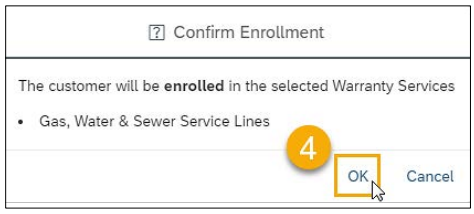
Tools > Warranty



Available Warranty Services > click Tab > select Program(s) > click Enroll

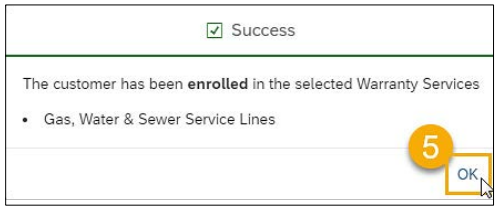
EzServ Foundations

4. At the *Confirm Enrollment* pop-up, verify the selected Warranty Services selection(s) and click **OK**



Confirm Enrollment > verify & click OK
or click Cancel to correct selected program

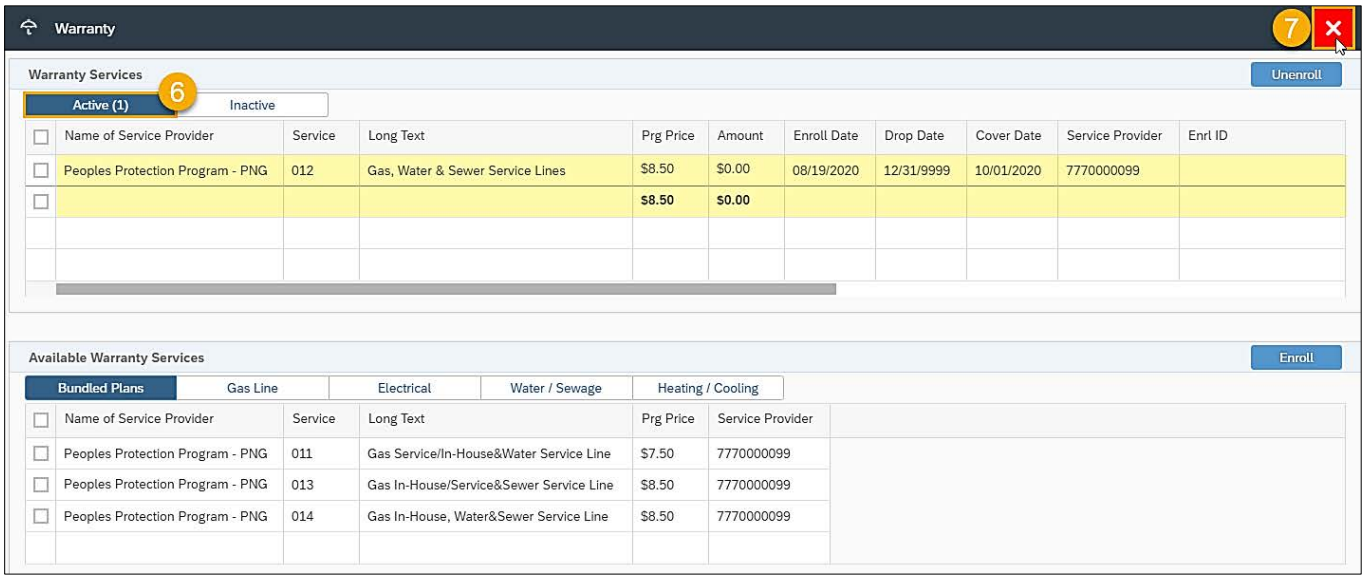
5. At the ☑ *Success* pop-up, click **OK**



Success > click OK

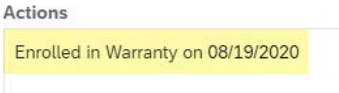
6. Verify that the new program(s) appear under *Warranty Services* – **Active** tab (top half of screen)

7. Click **x Close**



Active Warranty Services > click x Close

TIME SAVER EzServ adds **Enrolled in Warranty** details to the Interaction Records **Actions** box



Unenroll Warranty Program(s)

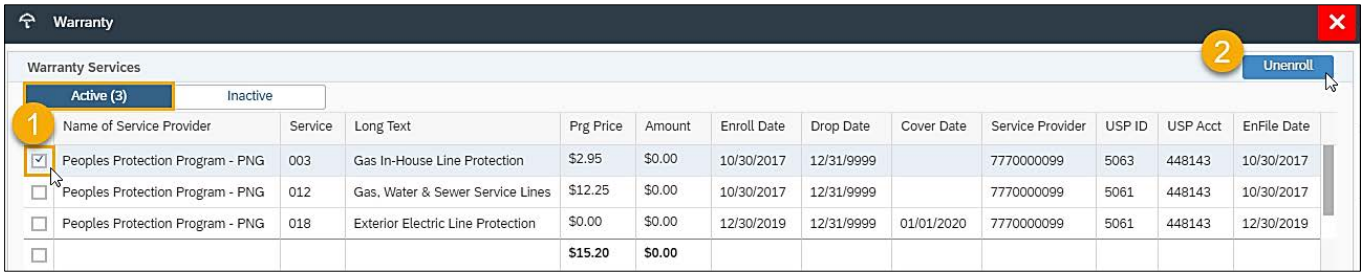
Follow these steps to Unenroll a customer from Warranty program(s):

- At the *Search* screen, search for and select the appropriate account
- At the *Landing* page, enter *Speaking with* **Name/Phone** details
- At the Tool *Bar*, click **Tools** and select **Warranty**

Tools > Warranty

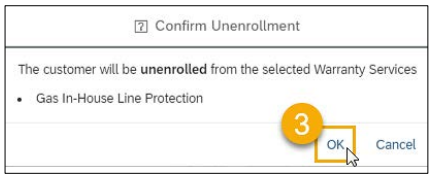
At the *Warranty* window, follow these steps:

1. In the ***Warranty Services*** section, under the **Active** tab, ☑ select the *Active* program(s) the customer wants to cancel
2. Click **Unenroll**



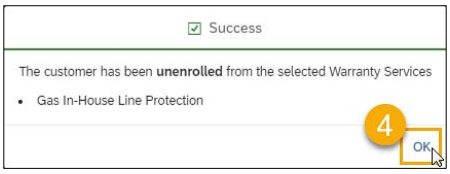
Warranty > select Active program > click Unenroll

3. At the *Confirm Unenrollment* pop-up, verify your selection; then click **OK**



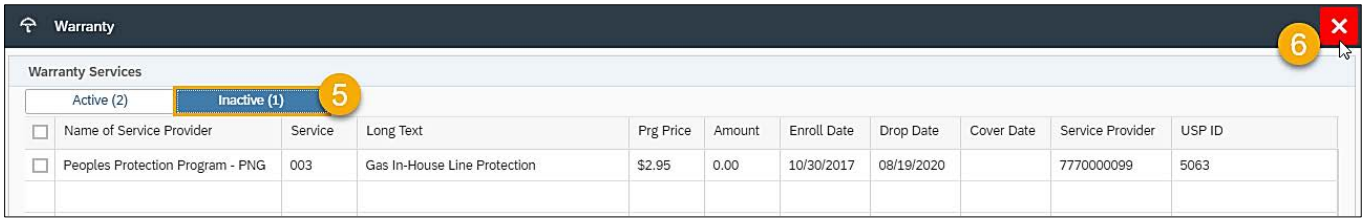
Confirm Unenrollment > click OK

4. At the ☑ Success pop-up, click **OK**



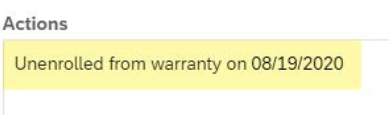
Success > click OK

5. Click the **Inactive (#)** tab and verify that the **Drop Date** = current date
6. Click **Close x**

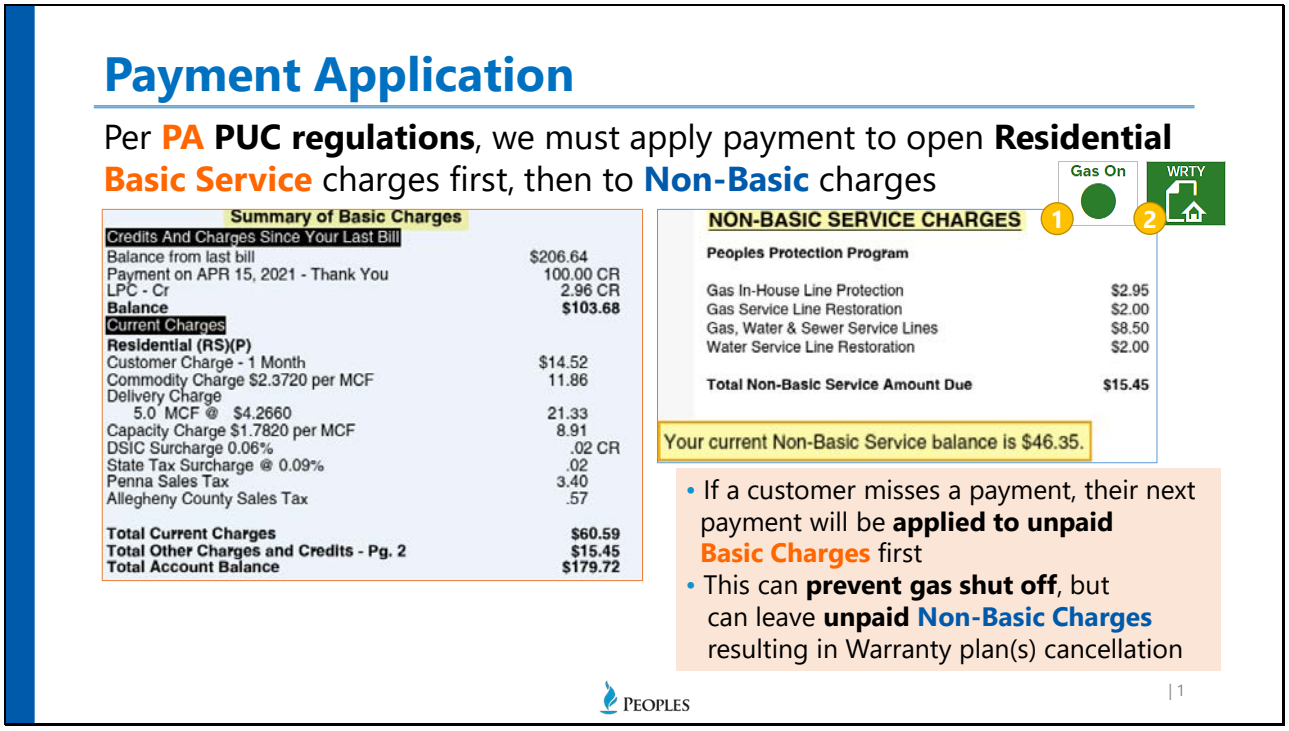


Inactive tab > verify Drop Date > click Close

TIME SAVER EzServ adds **Unenrolled from Warranty** details to the Interaction Records **Actions** box



PPP Plans & Payment Application Rules



52 Pa. Code § 56.273.
Application of partial payments between public utility and other service.

Payments received by a public utility *without written instructions* that they be applied to merchandise, appliances, special services, meter testing fees or other **non-basic charges**
and which are insufficient to pay the balance due for the items plus amounts billed for basic public utility service shall **first be applied to the basic charges** for residential public utility service.

If a customer misses a payment, the next payment must be **applied to unpaid Basic Charges** first:
- this can **prevent gas shut off**
- this might **result in Warranty plan(s) cancellation**

Revised: 09/13/2021

375 North Shore Drive
Pittsburgh, PA 15212

MM-DD-YYYY

Customer Name
Street Address
City, PA 12345-1234

Dear Customer:

Thank you for choosing Peoples Protection Programs. Your free enrollment period for the <Type> Line Protection Program will end MM-DD-YYYY. You will continue to have protection under the program for the low monthly cost of <$#.##> starting with your <Month> gas bill. **No action is needed to continue enrollment**.

Thank you again for your participation in the Peoples Protection Programs.
For additional information or to enroll in other Programs, please call **1-866-215-1610**.

Sincerely,

Peoples Protection Programs

SAMPLE

PEOPLES LINE PROTECTION PROGRAMS CAN SAVE YOU THOUSANDS OF DOLLARS IN REPAIRS AND GIVE YOU PEACE OF MIND.

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GAS IN-HOUSE LINE PROTECTION $2.95/MO.

WATER SERVICE LINE PROTECTION $3.75/MO.

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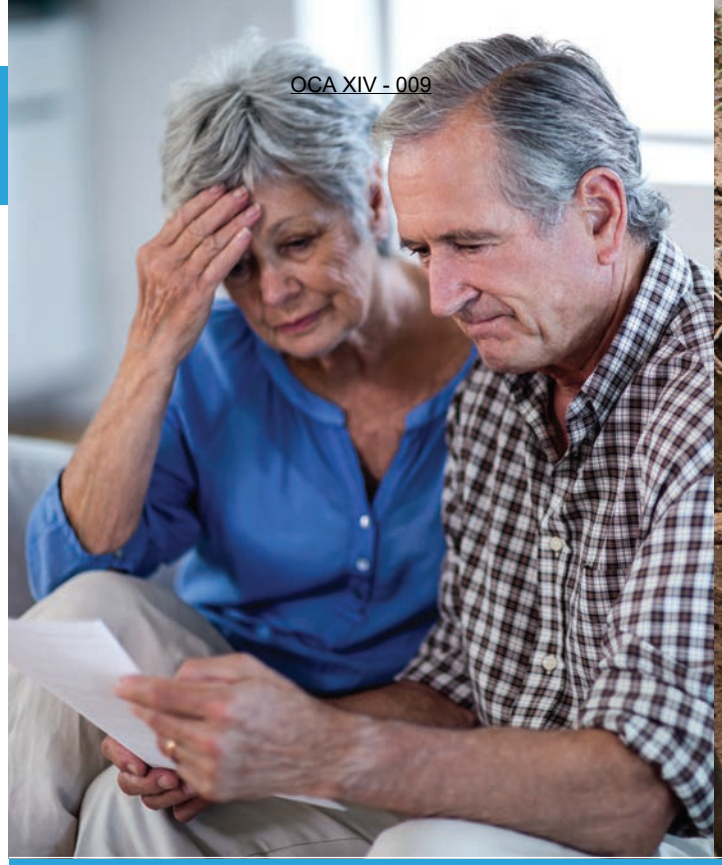
Gas Service Line	$3.75	$3.75
Water Service Line	$3.75	$3.75
Gas In-House Line	$2.95	**FREE**
Total	$10.45	$7.50
Savings		**$2.95**

GAS SERVICE/IN-HOUSE & SEWER SERVICE LINES $8.50/MO.

	Monthly Price	Special Offer
Gas Service Line	$3.75	$3.75
Gas In-House Line	$2.95	**FREE**
Sewer Service Line	$4.75	$4.75
Total	$11.45	$8.50
Savings		**$2.95**

The free program included in the bundled packages is good for a minimum of one year. If a program in the package is canceled or terminated, the free program amount becomes due. Complete Terms and Conditions available upon request or online at www.peoples-gas.com/protect. All offers subject to change or cancellation without notice.



TO ENROLL, CALL 1-866-215-1610

PROTECT YOURSELF FROM COSTLY REPAIRS TO YOUR GAS LINES

LEARN MORE ABOUT PEOPLES LINE PROTECTION PROGRAMS AT **Peoples-Gas.com/Protect**

Follow Us: **@peoplesnatgas**

TO ENROLL, CALL 1-866-215-1610

Your outside natural gas service line is your responsibility. **Give yourself peace of mind for as little as $3.75 a month.**

PEOPLES™

You use natural gas to heat your home and cook your food. It is probably even responsible for the hot water you use to bathe and wash your dishes.

Your natural gas service and in-house lines are your responsibility.

They can unexpectedly fail. Peoples can help.

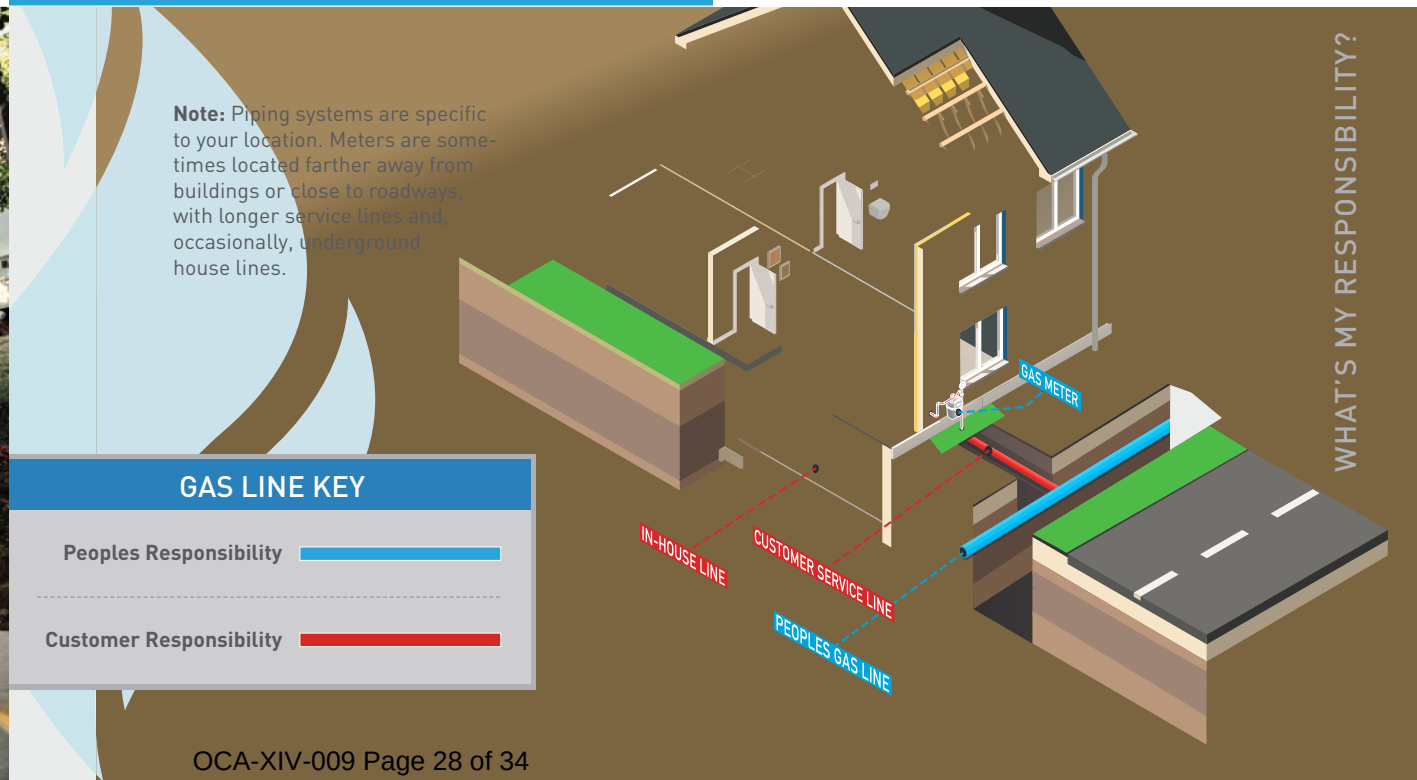
Repairs to natural gas service lines and in-house lines can be costly and inconvenient. Gain peace of mind with Peoples Line Protection Program.
For as little as $3.75 per month, **Peoples Gas Service Line Protection Program** will give you the peace of mind of knowing:

- costly repairs or replacements to your natural gas service line are covered.
- you will receive 24 hour claim response with a single phone call to Peoples.
- you don't have to find your own contractor you can trust. All work will be completed by a qualified professional from the Peoples network.
- your monthly charge for Peoples Line Protection Programs will appear on your gas bill.

To enroll, call 1-866-215-1610

See reverse for details about Programs and Package Offers.

Note: Piping systems are specific to your location. Meters are sometimes located farther away from buildings or close to roadways, with longer service lines and, occasionally, underground house lines.



GAS LINE KEY

Peoples Responsibility

Customer Responsibility

WHAT'S MY RESPONSIBILITY?

IMPORTANT REMINDER

To a Valued Customer

PEOPLES™
An Essential Utilities Company

Status: Not Covered
Offer: Gas Service Line Protection Coverage for $3.75/Month
Contact Us: 1-866-215-1610
Visit Us: peoples-gas.com/gasline

Our records show your underground gas service line is **not** currently protected by **Peoples Gas Service Line Protection Program**.

Your gas service line can unexpectedly fail and repairs can cost anywhere from $1,000 to $1,500 or more.

For only $3.75/month added to your gas bill, Peoples will take responsibility to protect your gas service line if it fails*. Once active, if you experience a gas service line failure, Peoples will make the arrangements for an approved contractor to perform the repair work and we'll cover all of the repair expenses.

Please enroll today by returning the form below, calling our sales team at 1-866-215-1610 or visiting peoples-gas.com/gasline.

Thank you for being a valued Peoples customer.

Vivian Sabatini
Director, Marketing

**Complete terms & conditions will be mailed to you upon enrollment.*

YES, I'D LIKE TO START PROTECTING MY HOME.

I want to protect my gas service line with **Peoples Gas Service Line Protection Program.**

☑ $3.75/month—**Gas Service Line Protection**. My house is 125 feet or less from the street.

Signature: _____ Date: _____

Phone: _____ Email: _____

Charges will appear on your monthly Peoples gas bill.

By providing my email, I understand that Peoples may, from time-to-time, send me information by email related to utility services.

GS112023

IMPORTANT REMINDER

To a Valued Customer

PEOPLES™
An Essential Utilities Company

Status: Not Covered
Offer: Gas Service Line Protection Coverage for $3.75/Month
Contact Us: 1-866-215-1610
Visit Us: peoples-gas.com/gasline

Our records show your underground gas service line is **not** currently protected by **Peoples Gas Service Line Protection Program**.

Your gas service line can unexpectedly fail and repairs can cost anywhere from $1,000 to $1,500 or more.

For only $3.75/month added to your gas bill, Peoples will take responsibility to protect your gas service line if it fails*. Once active, if you experience a gas service line failure, Peoples will make the arrangements for an approved contractor to perform the repair work and we'll cover all of the repair expenses.

Please enroll today by returning the form below, calling our sales team at 1-866-215-1610 or visiting peoples-gas.com/gasline.

Thank you for being a valued Peoples customer.

Vivian Sabatini
Director, Marketing

**Complete terms & conditions will be mailed to you upon enrollment.*

YES, I'D LIKE TO START PROTECTING MY HOME.

I want to protect my gas service line with **Peoples Gas Service Line Protection Program.**

☑ $3.75/month—**Gas Service Line Protection**. My house is 125 feet or less from the street.

Signature: _____ Date: _____

Phone: _____ Email: _____

Charges will appear on your monthly Peoples gas bill.

By providing my email, I understand that Peoples may, from time-to-time, send me information by email related to utility services.

GS062023

TO OUR VALUED CUSTOMER

At Property

PEOPLES
An Essential Utilities Company

Status: Exterior Water Service Line NOT COVERED

Offer: Exterior Water Service Line Protection Program for $3.75/month

Contact us: **1-866-215-1610**

Visit us: **peoples-gas.com/protectwater**

Thank you for enrolling in Peoples Gas Service Line Protection Program. We would like to provide further protection for your exterior water service line connected to your home.

Our records show your water service line is not currently protected by **Peoples Water Service Line Protection Program**†. Your exterior water service line can unexpectedly fail and complicated repairs can cost $2,000 or more. Peoples can protect your water service line for just $3.75 per month. Once active, if you experience a covered water service line failure, Peoples *will make the arrangements* for a contractor to do the repair work and we *will pay the bill* when the work is finished.

Enjoy added peace of mind! With this limited time offer if you enroll in the next 30 days, we will send you a complimentary water LeakAlertor 6000††, an automatic water leak detection device for toilets. This is an easy-to-install device that is placed on your toilet and detects and alerts you to problems each time that toilet is flushed. The LeakAlertor 6000 offers audible and visual alerts when a problem is detected and can save you the stress and expense of a leaking or running toilet.

Please enroll today by returning the form below, calling our professional representatives at **1-866-215-1610** or visiting **peoples-gas.com/protectwater**.

Sincerely,

Vivian Sabatini
Director, Marketing

P.S. Learn about our other protection programs by calling 1-866-215-1610.

†Complete terms and conditions mailed upon enrollment and available online at www.peoples-gas.com/protectwater or by calling 1-866-215-1610.
†† Please allow 2-4 weeks for shipping. Subject to change or cancellation without notice, does not cover repairs or water bill costs.

YES, HELP ME CONTINUE PROTECTING MY HOME.

I want to protect my water service line with **Peoples Water Service Line Protection Program.**

☑ $3.75/month—**Water Service Line Protection**

Signature:_____ Date: _____

Phone: _____ Email: _____

Charges will appear on your monthly Peoples gas bill.

By providing my email, I understand that Peoples may, from time-to-time, send me information by email related to utility services.

WSLA0223

IMPORTANT REMINDER

For Property at

PEOPLES
An Essential Utilities Company

Status: Not Covered
Offer: Sewer Service Line Protection Coverage for $4.75/month
Offer Expires in 30 days
Contact us: **1-866-215-1610**

Thank you for enrolling in Peoples Gas Service Line Protection Program. We would like to offer you additional protection for your home.

Our records show your sewer service line is not currently protected by **Peoples Sewer Service Line Protection Program**†. Your exterior sewer service line can unexpectedly back-up and possibly result in a complicated repair costing up to $7,500 or more. Peoples can protect your sewer service line for just $4.75 per month. Once active, if you experience a covered back-up in your sewer service line, Peoples *will make the arrangements* for a contractor to do the repair work and *we will pay the bill*†† when the work is finished.

Enjoy added peace of mind! With this limited time offer if you enroll in the next 30 days, we will send you a complimentary water LeakAlertor 6000†††, an automatic water leak detection device for toilets. This is an easy-to-install device that is placed on your toilet and detects and alerts you to problems each time that toilet is flushed. The LeakAlertor 6000 offers audible and visual alerts when a problem is detected and can save you the stress and expense of a leaking or running toilet.

Please enroll today by returning the form below, calling our professional representatives at **1-866-215-1610** or visiting **peoples-gas.com/protect.**

Sincerely,

Vivian Sabatini
Director, Marketing

P.S. Learn about our other protection programs by calling 1-866-215-1610.

† Complete terms and conditions mailed upon enrollment and available online at www.peoples-gas.com/protect or by calling 1-866-215-1610.
†† Program coverage is capped at $7,500.00.
††† Please allow 2-4 weeks for shipping. Subject to change or cancellation without notice, does not cover repairs or water bill costs.

YES, HELP ME AVOID EXPENSIVE REPAIRS.

I want to protect my sewer service line with **Peoples Sewer Service Line Protection Program.**

☑ $4.75/month—**Sewer Service Line Protection**

Signature:_____ Date: _____

Phone: _____ Email: _____

Charges will appear on your monthly Peoples gas bill.

By providing my email, I understand that Peoples may, from time-to-time, send me information by email related to utility services.

SSLA0423

PROTECT YOURSELF FROM COSTLY REPAIRS TO YOUR GAS LINES

Your outside natural gas service line is your responsibility. **Give yourself peace of mind for as little as $3.75 a month.**

PEOPLES

TO ENROLL, CALL 1-888-215-1610

PEOPLES LINE PROTECTION PROGRAMS CAN SAVE YOU THOUSANDS OF DOLLARS IN REPAIRS AND GIVE YOU PEACE OF MIND.

INDIVIDUAL PROGRAMS

GAS SERVICE LINE PROTECTION $3.75/MO.

GAS IN-HOUSE LINE PROTECTION $2.95/MO.

WATER SERVICE LINE PROTECTION $3.75/MO.

PACKAGES

GAS SERVICE/IN-HOUSE & WATER SERVICE LINES $7.50/MO.

	Monthly Price	Special Offer
Gas Service Line	$3.75	$3.75
Water Service Line	$3.75	$3.75
Gas In-House Line	$2.95	**FREE**
Total	$10.45	$7.50
Savings		**$2.95**

GAS SERVICE/IN-HOUSE & SEWER SERVICE LINES $8.50/MO.

	Monthly Price	Special Offer
Gas Service Line	$3.75	$3.75
Gas In-House Line	$2.95	**FREE**
Sewer Service Line	$4.75	$4.75
Total	$11.45	$8.50
Savings		**$2.95**

The free program included in the bundled packages is good for a minimum of one year. If a program in the package is canceled or terminated, the free program amount becomes due. Complete Terms and Conditions available upon request or online at www.peoples-gas.com/protect. All offers subject to change or cancellation without notice.

ADDITIONAL PACKAGES ARE ALSO AVAILABLE. CALL US AT 1-866-215-1610 FOR MORE INFORMATION.

LEARN MORE ABOUT PEOPLES LINE PROTECTION PROGRAMS AT Peoples-Gas.com/Protect

EXHIBIT BA-4-SR

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XXII-003

Witness: Scanlon, Carol **Title:** Rates Manager

Question: Reference Peoples' Response to OCA Set 20, Question 11 whereby Peoples identified HomeServe and the Manchester Group LLC, d/b/a IGS Energy Home Services as third-party providers of non-basic services that bill and collect their products on the bills of Peoples' customers. With respect to HomeServe, please identify any revenues paid by HomeServe that are reflected and recorded in Peoples' rate filing. As part of this responses, provide citations to the filing for the reflection of the revenue.

Answer: Please see attached. The billing fee revenue for HomeServe is included in Exhibit 3, Schedule 15, Attachment C under FERC Acct 495 (other gas revenues).

Submit Date: 4/9/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XXII-004

Witness: Scanlon, Carol **Title:** Rates Manager

Question: Reference Peoples' Response to OCA Set 20, Question 11 whereby Peoples identified HomeServe and the Manchester Group LLC, d/b/a IGS Energy Home Services as third-party providers of non-basic services that bill and collect their products on the bills of Peoples' customers. With respect to Manchester Group LLC, d/b/a IGS Energy Home Services, please identify any revenues paid by Manchester Group LLC, d/b/a IGS Energy Home Services that are reflected and recorded in Peoples' rate filing. As part of this responses, provide citations to the filing for the reflection of the revenue.

Answer: Please see attached. The billing fee revenue for IGS Energy Home Services is included in Exhibit 3, Schedule 15, Attachment C under FERC Acct 495 (other gas revenues).

Submit Date: 4/9/2024

EXHIBIT BA-5-SR

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XIV-008

Witness: Ravenstahl, Luke **Title:** Vice President Sales & Marketing

Question: Identify the number of Peoples customers (by customer class) who have enrolled in one or more “warranty” services, the amount billed, the amount collected, and the revenues included in Peoples revenue requirement in this base rate case filing for the test year.

Answer: As of January 1, 2024, the Peoples’ Protection Program had 65,787 active residential customers enrolled in one or more protection services and Reliable HomeWorks had 16,098 active residential customers enrolled in one or more protection services. There are no revenues related to these programs included in the Peoples’ revenue requirement in this base rate case filing for the test year.

Submit Date: 3/8/2024

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No. R- 2023-3044549
	:	
Peoples Natural Gas Company LLC	:	

Surrebuttal Testimony of Roger Colton

on behalf of

Pennsylvania Office of Consumer Advocate

OCA Statement 6SR

May 3, 2024

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Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Roger D. Colton. My business address is 34 Warwick Road, Belmont, MA.

Q. ARE YOU THE SAME ROGER COLTON WHO PREVIOUSLY PREPARED DIRECT TESTIMONY ON BEHALF OF THE OFFICE OF CONSUMER ADVOCATE IN THIS PROCEEDING?

A. Yes, I am. I submitted OCA Statement 6 on March 22, 2024.

Q. PLEASE EXPLAIN THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY.

A. The purpose of my Surrebuttal Testimony is to respond to the testimonies of the following Peoples Natural Gas (PNG or Peoples) rebuttal witnesses:

- Dawn Folks (Peoples Statement 11-R).
- Andrew Wachter (Peoples Statement 2-R).
- Heather Doyle-Conley (Peoples Statement 16-R).
- Carol Scanlon (Peoples Statement 3-R). and
- Rita Black (Peoples Statement 9-R).

Part 1. Response to Peoples Rebuttal Witness Folks.

Q. DID MS. FOLKS RESPOND TO ANY OF THE PROPOSED TARIFF CHANGES YOU RECOMMENDED IN YOUR DIRECT TESTIMONY?

A. Yes. I recommended three specific additions or modifications to Peoples tariff language, each of which Ms. Folks said that Peoples accepts. (Peoples St. 11-R, at 4 – 5). Ms. Folks incorporated these additions and/or modifications into a redline version of the Company's proposed tariff. (Exh. DMF-1R). Accordingly, these three recommendations are not further discussed.

Part 2. Response to Peoples Rebuttal Witness Wachter.

Q. TO WHAT ASPECT OF MR WACHTER'S REBUTTAL TESTIMONY DO YOU WISH TO RESPOND?

A. Mr. Wachter responds to three recommendations I advanced in my Direct Testimony. He does not explicitly *oppose* these recommendations, but rather states that "the Company appreciates Mr. Colton's further feedback and continues to assess the implications." (Peoples St. 2-R, at 61).[1] The three recommendations are for Peoples to adopt a procedure under which:

1. Before the Company enters into a DPA with a customer which the Company either: (1) knows to be a Confirmed Low-Income customer; or (2) has generated information through the DPA process documenting that the customer is in the Tier 1 income range (at or below 150% FPL), it will provide the customer a stand-alone Plain English notice to that customer of the customer's right to enter into CAP and an explanation of the advantages of CAP's arrearage forgiveness benefits. As it agreed to do with the pre-termination stand-alone written notice, Peoples should develop this Plain English notice in collaboration with its Universal Services Advisory Group.

2. It will provide a stand-alone Plain English notice to customers found to be without heating service at the time of the Company's Cold Weather Survey of the customer's right to enter into CAP and an explanation of CAP's arrearage forgiveness benefits. Peoples should develop the Plain English notice in collaboration with its Universal Service Advisory Group.

3. When Confirmed Low-Income customers accrue an unpaid balance of $300, the Company will provide a stand-alone written Plain English notice informing those customers of their right to enroll in the Company's CAP (along with an explanation of the advantages of CAP's arrearage forgiveness provisions).

(OCA St. 6, at 83 – 84).

[1] My response to Mr. Wachter's Rebuttal Testimony is limited to the "Public Version" of his Rebuttal.

Q. WHAT RESPONSE DO YOU HAVE TO MR. WACHTER'S REBUTTAL TESTIMONY?

A. Mr. Wachter asserts that the recommendations I make "could have cost implications" to the Company. (Peoples St. 2-R, at 61). He quotes a response I provided to Company discovery as "admitting" that I did not complete a specific "assessment of the costs," (Id.), although he concedes that I did provide my assumptions about the cost implications (which he did not repeat and did not dispute). (Id.). Mr. Wachter did not further respond to the information presented in that discovery response (OCA response to Peoples Set 4, Question 1). A copy of that discovery response is attached to this Surrebuttal Testimony as Exhibit RDC-1-SR. The cost discussion in that Exhibit relate to the following recommendations addressed by Mr. Wachter:

- Regarding providing notice to low-income customers entering into payment plans was provided in response to sub-section 5 of this discovery response;
- Regarding providing notice to customers contacted through the PUC's Cold Weather Survey was provided in response to sub-section 6 of this discovery response; and
- Regarding providing notice to low-income customers with a minimum arrears of $300 was provided in response to sub-section 7 of this discovery response.

To summarize the discovery response for these three specific recommendations, I note that I did not ignore the costs. I instead found that in the unlikely event that any costs Peoples may incur would not be subsumed by other savings, or offset by increased revenues, that may result from implementing the recommendations, such costs cannot be determined.

Q. HOW DID MR. WACHTER CONCLUDE HIS DISCUSSION OF YOUR RECOMMENDATIONS?

A. Mr. Wachter concludes by stating that "the Company is proposing that certain accommodations be made for future recovery of incremental costs incurred as a result of recommendations made by the other parties in this proceeding."

Q. DO YOU AGREE WITH MR. WACHTER?

A. No. First, it is unclear whether Peoples is accepting my recommendation and even less clear whether any costs to implement them would materialize in the future. Importantly, when Mr. Wachter states that my recommendations "could have cost implications," based on the information presented in Exhibit RDC-1-SR, it is clear that those "cost implications" are more likely to involve reduced expenditures and increased revenues. His proposal for "certain accommodations" is therefore speculative, unclear and unsupported. Accordingly, it should be denied. The cost of implementing my recommendations would be minimal. Peoples current annual cost of using the Verint software was $61,589 in 2022 and $108,847 in 2023. (OCA-XXV-001) (attached as Exhibit RDC-2-SR). The annual cost of providing notice to Confirmed Low-Income customers of the availability and advantages of CAP has ranged from less than $15,000 to less than $25,000 in 2022 and 2023. (OCA-XXXV-003) (attached as Exhibit RDC-3-SR). The cost of serving additional CAP customers is not a factor that Peoples considers in reviewing possible CAP enrollment. (OCA-XXV-005) (attached as Exhibit RDC-4-SR).

Part 3. Response to Peoples Rebuttal Witness Doyle-Conley.

Q. PLEASE RESPOND TO MS. DOYLE-CONLEY'S REBUTTAL TESTIMONY REGARDING YOUR RECOMMENDATION THAT PEOPLES PROVIDE NOTICE OF THE AVAILABILITY OF CAP TO CUSTOMERS FROM WHOM PEOPLES SEEKS A NEW OR INCREASED DEPOSIT.

A. I recommended that when Peoples seeks a new or increased deposit from a residential customer, the Company be required to provide a stand-alone written notice to that customer of the availability of CAP and the advantages of CAP's arrearage forgiveness provisions. As I noted in my Direct Testimony, Peoples' tariff allows it to require an existing customer to post a new or increased deposit if: (1) the customer has been delinquent on any two consecutive bills or three or more bills within the preceding twelve month period; (2) the customer has failed to comply with a "material term or condition" of a settlement or payment agreement; or (3) the customer has had utility service disconnected. (OCA St. 6, at 42).

I further provided extensive testimony establishing that it was disproportionately likely that a customer meeting any one or more of these three conditions would be a low-income customer. Ms. Doyle-Conley's rebuttal testimony did not dispute this factual documentation.

Ms. Doyle-Conley did, however, oppose my recommendation on providing notice on the grounds that "a notice is not required since the Company already does not charge a deposit when customer (sic) reports low income and customers are educated about CAP upon reporting low income." (Peoples St. 16-R at 5). Her rebuttal testimony, however, illustrates the problem, not the solution. Peoples' relief from deposits extends *only* to customers who

have already "report[ed] low-income." According to the Public Utility Commission's Bureau of Consumer Services (BCS), however, while Peoples had 108,055 Confirmed Low-Income customers (i.e., those who have "reported low-income"), the Company has nearly 150,000 estimated low-income customers. More than one-quarter of Peoples's low-income customers, in other words, have not already reported low-income.[2]

Moreover, Ms. Doyle-Conley's rebuttal testimony states that customers "are educated about CAP *upon reporting low income*." (Peoples St. 16-R, at 5) (emphasis added). Again, however, as the BCS 2022 annual data cited above shows, more than one-quarter of Peoples's low-income customers have *not* reported their low-income status to the Company.[3] Before imposing a substantial financial obligation on their customers, who may be entitled to an exemption from that obligation, the least Peoples could do is to provide notice to those customers of their right to enroll in CAP, or to be exempt from the deposit that would otherwise be "required" by Peoples, by establishing their low-income status even if not enrolling in CAP.

Q. PLEASE RESPOND TO MS. DOYLE-CONLEY'S REBUTTAL TESTIMONY REGARDING THE ARREARS OF CONFIRMED LOW-INCOME CUSTOMERS.

A. Ms. Doyle-Conley responded to my Direct Testimony regarding the high level of arrears by low-income customers by asserting that these high levels could be attributed to the shutoff moratorium in place during COVID. She asserted that "balances for residential

[2] Bureau of Consumer Services (September 2023). 2022 Report on Universal Service Programs and Collections Performance, at 8, 9 (108,095 Confirmed Low-Income / 146,971 Estimated Low-Income = 0.74).

[3] As noted immediately above, while Peoples had nearly 150,000 estimated low-income customers, it had identified only 108,055 Confirmed Low-Income customers.

consumers, both generally and confirmed low income, climbed during 2020 and 2021 while these special provisions were in place and began heading downwards again in 2022." (Peoples St. 16-R, at 6). Without dismissing the impact of COVID on residential arrears, and with no need to address whether the shutoff moratorium was the cause of any increase in arrears, Ms. Doyle-Conley's rebuttal testimony simply does not reflect the historical record. The data is set forth Table 1 below. As is demonstrated, in every year since at least 2013, the average arrears of Confirmed Low-Income customers were substantially higher than the average arrears of residential customers generally. Since Confirmed Low-Income is a subset of the broader residential category, the difference, of course, would be even greater than indicated here if the comparison were made between Confirmed Low-Income customers and residential customers without those low-income customers.

Table 1. Average Arrears Residential vs. Confirmed Low-Income (2014 – 2022)
(BCS Annual Reports on Universal Service Programs and collection Performance)

	Residential	Confirmed Low-Income	Ratio (Conf'd LI to Residential)
2013	$391.62	N/R	---
2014	$380.25	$557.11	1.47
2015	$359.44	$460.32	1.28
2016	$198.86	$257.69	1.30
2017	$203.16	$261.83	1.29
2018	$222.25	$280.54	1.26
2019	$243.45	$301.90	1.24
2020	$449.90	$617.26	1.37
2021	$466.51	$718.87	1.54
2022	$394.22	$599.51	1.53

*Beginning in 2020, Peoples began reporting combined data for what, in prior years, had been separate reporting for Peoples and Peoples (Equitable).

As can be seen, while the level of arrears certainly increased in 2020 relative to 2016 through 2019, the unpaid balances in recent years closely reflect the unpaid balances from earlier years. More importantly, as I testified to, in *every* year, the arrears of Confirmed Low-Income customers are greater than the arrears of residential customers in general.

Finally, Ms. Doyle-Conley asserts that Confirmed Low-Income customer arrears would be higher because Confirmed Low-Income customers include customers who receive LIHEAP crisis grants, whose unpaid balances are higher. However, she overstates the impact of Crisis grants on Confirmed Low-Income averages.

Table 2. LIHEAP Cash Recipients vs. LIHEAP Crisis Recipients (OCA-IX-33)		
LIHEAP Program Year	LIHEAP Cash Households	LIHEAP Crisis Households
2020-2021	45,412	5,809
2021-2022	57,516	4,798
2022-2023	60,636	6,099
2023-2024 YTD	20,769	655

As Table 2 shows, using People' own data, the number of LIHEAP Crisis recipients is relatively minor relative to all LIHEAP recipients.

Q. DOES THE REBUTTAL TESTIMONY OF MS. DOYLE-CONLEY PROVIDE ANY SUPPORT FOR THE RECOMMENDATIONS YOU MADE IN YOUR DIRECT TESTIMONY?

A. Yes. Ms. Doyle-Conley makes the unqualified statement that "customers often enroll in CAP *as a result of collections activities*. . ." (Peoples St. 16-R, at 7) (emphasis added). Despite this recognition of "collections activities" being one of the key points of contact where low-income customers will enroll in CAP, as I noted in my Direct Testimony:

- Data provided by Peoples reports a high number of nonpayment disconnections for Confirmed Low-Income customers: (1) 8,063 (2021); (2) 6,508 (2022); and (3) 5,781 (2023). (OCA-09-21).

- Data provided by Peoples reports that more than half of all payment arrangements which the Company enters into with Confirmed Low-Income customers default. The number of Confirmed Low-Income customers reported to be "payment-troubled" (defined to be an account that has defaulted on one or more payment arrangements in the previous twelve months) has been: (1) 9,514 in 2020; (2) 9,430 in 2021; and (3) 9,219 in 2022. (2022 BCS Report).

Overall, from 2021 through 2023, Peoples implemented from two to nearly four times more disconnections of Confirmed Low-Income customers than it entered into new payment arrangements. Peoples disconnected service to: (1) 8,063 Confirmed Low-Income accounts

in 2021; (2) 6,508 Confirmed Low-Income accounts in 2022; and (3) 5,781 Confirmed Low-Income accounts in 2023 (OCA-09-19), while entering into (1) 2,223 new payment arrangements with Confirmed Low-Income customers in 2021; (2) 2,487 new payment arrangements with Confirmed Low-Income customers in 2022; and (3) 3,027 new payment arrangements with Confirmed Low-Income customers in 2023. (OCA-09-16).

The data above is limited to those low-income customers who Peoples *knows* to be low-income. As I noted above, in fact, Peoples has confirmed the low-income status of but a fraction of its total estimated low-income customer base.

Despite these failures, Peoples witness Doyle-Conley testified that Peoples opposed providing further personal notice to customers of the right of low-income customers to enter into CAP, with its attendant arrearage forgiveness provisions, asserting that the Company was already doing a perfectly adequate job.

Q. PLEASE RESPOND TO MS. DOYLE-CONLEY'S REBUTTAL TESTIMONY REGARDING THE RACIALLY DISPARATE IMPACTS OF PEOPLES NONPAYMENT SERVICE DISCONNECTIONS.

A. Ms. Doyle-Conley opposes having Peoples perform a root cause analysis to determine why Peoples disproportionately disconnects service for nonpayment to Black households holding incomes constant. The only basis for her opposition is her blanket assertion that "The Company does not disconnect service based on demographics and does not discriminate." (Peoples St. 16-R, at 10).

Ms. Doyle-Conley does not dispute this fact (Peoples St. 16-R, at 10 – 11), that Peoples's "data does appear to show a correlation or relationship between the increased disconnection

of service for non-payment and zip codes with the highest percentage of Black householders." (OCA St. 6, at 20). Based on the information that is currently available, the relationship cannot be explained by reference to factors other than race. (Id., at 20 – 22). I concluded in my Direct Testimony that "Peoples is likely not even aware of this correlation, and I think it is important to shed light onto it to ensure that it can be remedied in the near term." (Id., at 22). No reason was given for refusing to conduct a root cause analysis into why the data shows a correlation between the increased disconnection of service for non-payment and zip codes with the highest percentage of Black householders.

All Ms. Doyle-Conley argues is that Peoples does not *intentionally* discriminate, a conclusion that I explicitly reported I found no evidence of in the first instance. That lack of intentionality, however, neither addresses nor remedies the fact that Peoples the data demonstrates that fact that Peoples service disconnection practices disproportionately disconnect service to Black households for nonpayment independent of other factors.

Q. DOES PEOPLES ACKNOWLEDGE IN ANY WAY THAT IT MAY ENGAGE IN DISCRIMINATORY CONDUCT EVEN IF THAT CONDUCT LACKS INTENTIONALITY?

A. Yes. Even in this rate case, Peoples explicitly acknowledges that conduct could be discriminatory, even if there is a lack of any intentional discrimination and that such discrimination would be inappropriate. The Company agreed to include in its tariff language regarding the imposition of cash security deposits that it may use a "generally accepted credit scoring methodology" only "provided that the methodology does not directly, *or have the effect of*, discriminating based on a protected class as set forth in the federal Equal Credit Opportunity Act." (Exh. DMF-1R) (emphasis added). Having

recognized that its actions would be objectionable if they "have the effect of discriminating," even if no "direct" or "intentional" discrimination exists, it is not clear *why* Peoples opposes undertaking a root cause analysis to understand why its disconnection policies "have the effect of discriminating" against zip codes disproportionately comprised of Black households. This willful blindness policy toward the potential disparate impact of its disconnections should be rejected. The root cause analysis I recommend, along with the need to take remedial action when the root cause is determined, should be adopted.

Q. PLEASE RESPOND TO MS. DOYLE-CONLEY'S REBUTTAL TESTIMONY REGARDING THE USE OF PEOPLES' LINGUISTIC ANALYTICS SOFTWARE FOR PURPOSES OF IDENTIFYING CONFIRMED LOW-INCOME CUSTOMERS AND ENROLLING CUSTOMERS IN CAP.

A. Ms. Doyle-Conley opposes the use of the Company's existing speech analytics software to identify low-income customers. (Peoples St. 16-R, at 11). She asserts that is not "needed" given that "Peoples Customer Service Representatives are trained and skilled in identifying low income customers and as normal course of business refer customer (sic) to CAP." (Id.) Despite this "training" and "normal course of business," over the three years 2021 through 2023, Peoples disconnected service for nonpayment to 20,352 customers that the Company *knew* to be low-income rather than enrolling those customers in CAP. (OCA-09-21).[4]

[4] To the extent that some customers may have had service disconnected for nonpayment more than once, this number have some double-counting of the number of Confirmed Low-Income accounts disconnected for nonpayment.

The "training" and "skill" of Customer Service Representatives is not placed at issue by my recommendation to expand the use of Peoples's speech analytics software to identify customers who should be placed in CAP. The software I recommend that Peoples use is not new, but is *existing* software used by the Company. Moreover, that existing Verint software is now used to support actions which the Company's Customer Service Representatives are "trained and skilled in doing in" handling "emergency" calls.

As I noted in my Direct Testimony, the value-added that would be gained by expanding the use of the Verint software to support CAP enrollment is to identify those words and phrases not involved with an explicit customer statement of low-income status that would help the Customer Service Representative identify potential low-income customers. As I explained, in addition, "terms, phrases and speech patterns associated with low-income status, payment difficulties, unaffordability, or seeking low-income assistance for energy or other life necessities (e.g., food, housing, medical care) could be identified such that Vivent would search for them to identify universal service calls." (OCA St. 6, at 47).

Moreover, the identification of low-income customers, while used to identify customers who should be enrolled in CAP, would be used for other purposes as well. "Proper handling" would include approving delays in collection activities pending applications for and approval of program enrollment; identification in the Company's information system of Confirmed Low-Income customer status; and extending available low-income protections." (Id.) I noted that "While the implication of identifying low-income customers having perhaps the greatest financial benefit to low-income customers is enrollment in CAP, such enrollment is not the *exclusive* impact of appropriately identifying low-income customers." (Id., at 48) (emphasis added).

Part 4. Response to Peoples Rebuttal Witness Scanlon.

Q. WHAT IS YOUR FIRST RESPONSE TO THE REBUTTAL TESTIMONY OF PEOPLES WITNESS CAROL SCANLON?

A. Ms. Scanlon addresses my recommended modification to the CAP offset included in the Peoples tariff. She states that "the Company accepts Mr. Colton's recommendation of a combined base participation rate of 30,800." (Peoples St. 3-R, at 38). Accordingly, I offer no further discussion of this issue.

Q. WHAT IS YOUR SECOND RESPONSE TO THE REBUTTAL TESTIMONY OF PEOPLES WITNESS SCANLON?

A. Ms. Scanlon dismisses my concerns about the impact of the Company's proposed Weather Normalization Adjustment (WNA) by stating that I am "primarily concerned with low income customers that are not enrolled in CAP." (Peoples St. 3-R, at 17). What she fails to note is that this "primary concern" extends to ***most*** of Peoples low-income customers. According to the most recent (2022) BCS Report on Universal Service Programs and Collections Performance, while Peoples had an estimated 146,971 low-income customers, it has enrolled only 28,367 of those low-income customers (19%) into CAP. Peoples reported that for the most recent month available, it had 29,091 CAP participants. (OCA-9-2). This participation was ***lower*** than the CAP participation in 2017 (30,486), 2018 (30,619), 2020 (31,202), and 2021 (32,421), and only 2.5% higher than 2022 (28,367).[5] Despite Ms. Scanlon's statement that enrollment of low-income customers in CAP being

[5] Participation in 2017, 2018 and 2019 is the sum of participation for Peoples and for Peoples (Equitable). Beginning in 2020, data for the two utilities was reported together.

the "first goal," in this proceeding, Peoples has opposed each recommendation made on how to improve that enrollment.

Q. PLEASE RESPOND TO MS. SCANLON'S DISCUSSION OF BUDGET BILLING.

A. Ms. Scanlon asserts that I recommend that the Company's proposed WNA and the Company's Budget Billing are "interchangeable." (Peoples St. 3-R, at 18). That misstates my testimony. It was the direct testimony of Peoples witness Zarumba that asserted that one purpose of the Company's proposed WNA was to "provide[…] systematic protection to customers. . .for revenue variations in usage associated with non-normal weather." (Peoples St. 15, at 56). Witness Zaruma asserted that "The impact on customers triggered by non-normal weather is variation in the level of bills. The variation can be especially problematic when severe weather occurs, and customers' bills increase." (Peoples St. 15, at 55).

My testimony is simply that, to the extent that one objective of a WNA is to provide "systematic protection to customers for variations in usage associated with non-normal weather," a far ***better*** way to accomplish that objective would be to increase participation in budget billing. The data simply does not support the argument by Company witness Zarumba and Company witness Scanlon that year-over-year changes in bills due to changes in weather have an impact on customer payment patterns. (OCA St. 6, at 65) ("contrary to Peoples argument about the impact of year-over-year bills, it is evident from the data above that the somewhat higher bills in 2022 did not change the residential payment patterns"). The impact on customer payments (and thus the way to provide "systematic protection to customers") is not to adopt to focus on year-over-year bills, but rather to focus on month-over-month bills. Peoples' data on median arrears (February 2021 – January 2024) shows

that the median residential arrears more than doubled from September 2021 through April 2022 (from $143 to $286), and nearly doubled from September 2022 through April 2023 (from $191 to $359). By September 2023, median residential arrears had again fallen to their seasonal low ($174). (OCA St. 6, at 65 – 66). The WNA proposed by Peoples would not change this pattern. If the Company's objective is truly to "provide systematic protection to customers," focusing on expanding the use of budget billing would offer a better protection while avoiding the wide range of adverse impacts that the WNA would impose on low-income customers.

Q. DOES MS. SCANLON DISPUTE THE ADVERSE IMPACTS THAT THE PROPOSED WNA WILL HAVE ON THE COMPANY'S LOW-INCOME CUSTOMERS?

A. No. I provided data that is both recent and state-specific documenting that low-income customers have a lesser ability than residential customers as a whole to adjust their usage in response to changes in winter heating month temperatures. I found that as a result, "Peoples' WNA bill adjustments will be imposed more frequently on low-income customers than they will be on residential customers generally." (OCA St. 6, at 61). Ms. Scanlon's response was that CAP enrollment would protect such low-income customers, ignoring the fact that more than eight out of every ten of the Company's low-income customers are not enrolled in CAP.

Part 5. Response to Peoples Rebuttal Witness Black.

Q. PLEASE IDENTIFY HOW MS. BLACK'S REBUTTAL TESTIMONY RESPONDS TO THE CONCERNS YOU HAD EXPRESSED REGARDING THE IDENTIFICATION OF "CONFIRMED LOW-INCOME" CUSTOMERS ON THE COMPANY'S SYSTEM.

A. Ms. Black seems to assert that there is a discrepancy between how the Company identifies Confirmed Low-Income customers in the data it provides to the Commission through its universal service reporting requirements and how the Company *actually* identifies such customers. What there is *no* discrepancy about is that when Peoples was explicitly asked to "please identify all categories or identifiers that Peoples includes when calculating its 'confirmed low income customer' count," the Company responded:

> Peoples counts all CAP participants, as income documentation or the zero income form are submitted to confirm low income status. In addition to CAP participation, Peoples also considers receipt of LIHEAP cash or crisis grants within the past 24 months as indicative of confirmed low income.

(CAUSE-PA-II-003).[6] There is also no dispute that this limited definition of "Confirmed Low-Income" is in non-compliance with the PUC's regulations. (52 Pa. Code § 62.2.).

Ms. Black states that the issue involves Peoples definitions, not Peoples practices. She asserts that the limited definition of "Confirmed Low-Income" customers was used *only* for purposes of reporting data to the PUC's Bureau of Consumer Services. She states further that "verbal attestation is used across the board to allow for the waiver of fees and deposits and protections related to collections and terminations." (Peoples St. 9-R, at 5).

[6] This discovery question, and the response thereto, were attached to OCA St. 6 as Exhibit 2.

She asserts that "it is important to clarify that the Company uses self-attestation for all manner of eligibility consideration including, but not limited to waiver of fees, waiver of deposits, establishing payment arrangements and restoration requirements." (Peoples St. 9-R, at 4).

Ms. Black proposes to "resolve" the reporting of Confirmed Low-Income customers by having the Company "modify our reporting for confirmed low income for 2024 activity to include self-attestation data in the annual Universal Service Report." (Peoples St. 9-R, at 6).

Q. DOES MS. BLACK'S PROPOSED "RESOLUTION" ADDRESS YOUR CONCERNS?

A. No. There continue to be problems that have been created by the failure of Peoples to abide by the clear definition of "confirmed low-income" in the PUC's regulations for natural gas utilities. These problems are only partially related to reporting. They are also substantive. From a reporting perspective, the implication of Ms. Black's testimony is that Peoples decision to vary its reporting from the PUC's regulatory definition, as well as from its own recordkeeping, means that the BCS annual reporting of data on Confirmed Low-Income customers for Peoples is wrong. While it is not possible to have BCS redo it annual reports to include corrected data for Peoples, neither should it be necessary for BCS to wait until Peoples reports its 2024 data to make corrections. BCS's publication of 2024 data will not be released until the Fall of 2025 at the earliest. Peoples should be directed to file corrected 2023 data with BCS for BCS to be able to incorporate this corrected data into its 2023 annual report on Universal Service Programs and Collections Performance to be published in the Fall or Winter of 2024.

The substantive problem associated with Ms. Black's Rebuttal Testimony is even deeper. Ms. Black refers twice to Peoples use of "verbal attestation" and "self-attestation" as a basis upon which Peoples determines whether or not a customer is "low income." She does not, however, explain what information Peoples will require customers to provide through this "verbal attestation" or "self-attestation." Pursuant to the Commission's regulation, a customer is not required to provide Peoples, even through a "self-attestation" or "verbal attestation," what their exact income is. All that is required is that the customer provide Peoples with information that would "reasonably place the customer in a low-income designation." A customer's self-attestation of the receipt of public assistance (e.g., Supplemental Nutrition Assistance Program [SNAP], welfare, Supplemental Security Income [SSI], Medicaid), for example, would all place a customer in a "low-income designation." For purposes of establishing the customer's "Confirmed Low-Income" status, it would not matter what specific dollar level of income allows the customer to receive such assistance. The mere fact of receiving such assistance would be sufficient to meet the PUC's definition.

This problem with Ms. Black's references to "self-attestation" and "verbal attestation" is not theoretical. The Company states with respect to the waiver of reconnect fees, for example, that "All customers are *asked to provide household size and monthly income* during the reconnection process. If a customer's *self-reported income* places them at or below 150% FPL the reconnection fee is automatically waived by the billing system." (CAUSE-PA-1-010) (emphasis added). So, too, did People say that "Customer service representatives are *trained to update income and occupancy information* from all customers during the reconnection process. If *the income and occupancy information*

provided by the customer places them at or below 150% Federal Poverty Level, the reconnection fee is automatically waived by the billing system." (CAUSE-PA-I-11). (emphasis added). As can be seen, even if self-attested, Peoples requires customers to disclose their actual dollar levels of income and household composition to be identified as "low-income." That requirement goes beyond what the PUC's regulation allows.

The PUC's regulation does not require a customer to provide "household size and monthly income" (CAUSE-PA-I-10), or to provide "income and occupancy information" (CAUSE-PA-I-11) in order to provide information that would "reasonably place the customer in a low-income designation." Ms. Black's references to "self-attestation" and "verbal attestation" does not resolve the problem of the Company's non-compliance with the PUC regulation regarding the identification of Confirmed Low-Income customers.

Q. WHAT DO YOU RECOMMEND?

A. I reiterate the recommendation in my Direct Testimony (OCA St. 6, at 83, Recommendation #3). Peoples should modify its policies and procedures regarding the identification of "confirmed low-income" customers to conform with the PUC's regulations, including self-certification of low-income status. Peoples should include these modified policies and procedures in its residential tariff. Within this modified tariff language should be included a list of public assistance programs, mutually agreed to by the Company and its Universal Service Advisory Group, (USAG) participation in which would reasonably place the customer in a low-income designation. The Company should explicitly acknowledge that a customer *may* provide, but is *not required* to provide, either the household's actual dollar level of income or the household composition in order to provide sufficient information to reasonably place them in a low-income designation.

Q. DO YOU HAVE ANY FINAL RESPONSE TO THE REBUTTAL TESTIMONY OF COMPANY WITNESS BLACK?

A. Yes. Ms. Black makes two related statements relating to "the general concern of affordability for low income households." First, she asserts that the Company's "call center does an exceptional job of identifying CAP eligible customers and explaining the program." (Peoples St. 9-R, at 9). Second, in a related vein, she asserts that "[a]s the leader of the Community Assistance Programs department at Peoples, affordability and availability of resources are always top of mind." (Peoples St. 9-R, at 19). It is simply not necessary to conclude that Peoples is "unconcerned" or that the Company is doing a "bad job" in order to conclude further that the Company can do better. The data quite clearly shows that Peoples can do better. As I noted above, for example,

- The enrollment in Peoples's CAP program in 2023 was *lower* in the most recent month for which data was available (29,091) than the CAP participation in 2017 (30,486), 2018 (30,619), 2020 (31,202), and 2021 (32,421), and only 2.5% higher than it was in 2022 (28,367).

- Over the three years 2021 through 2023, Peoples disconnected service for nonpayment to 20,352 customers that the Company *knew* to be low-income rather than enrolling those customers in CAP. (OCA-09-21).[7]

- Over the three years 2020 through 2022, Peoples's low-income customers defaulted on 28,163 payment arrangements.

Thus, I continue to make the outreach recommendations I included in my Direct Testimony.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes, it does.

[7] To the extent that some customers had service disconnected for nonpayment more than once, this number may be somewhat overstated.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission,	:	
	:	
v.	:	Docket No. R- 2023-3044549
	:	
Peoples Natural Gas Company LLC	:	
	:	

VERIFICATION

I, Roger D. Colton, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement 6SR, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: May 3, 2024 Signature: _____

Roger D. Colton

Address: Fisher Sheehan & Colton
34 Warwick Road,
Belmont, MA

Pa. P.U.C. v. Peoples Natural Gas Company, LLC
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PNG-OCA-IV-001:

Reference OCA St. No. 6 – Direct Testimony of Roger Colton. Please provide an assessment of the costs of all recommendations made by Mr. Colton. If such assessments are unavailable, please explain why the cost implications were ignored and how Mr. Colton reconciles the costs associated with his recommendations with affordability for Peoples' customers.

Response Date: April 8th, 2024

Responding Witness: Roger D. Colton

Response: This question mischaracterizes Mr. Colton's position by stating that he "ignored" cost implications. Mr. Colton did not ignore cost implications, but as he is not employed by Peoples or with sufficient access to the information necessary to determine whether, when, and how Peoples would prudently incur costs to implement his recommendations, he could not quantify costs at the time of his testimony. The response below further considers each of the recommendations as summarized in Mr. Colton's direct Testimony (OCA St. 6, at 82 – 85) in the order that they were summarized:

1. The concerns I identify with respect to the unaffordability of Peoples rates can (and should) be considered even outside the consideration of the specific proposals I advance with respect to specific low-income initiatives. These concerns should be incorporated into PUC decision making regarding issues ranging from the proposed rate design to the appropriate return on equity.

   - **Cost assessment:** While there was no specific "assessment of the costs" of this recommendation, the recommendation should yield net savings to ratepayers in the alternative to considering investor interests on a stand-alone basis.

2. Peoples conduct a root cause analysis to determine what is driving this disproportionate level of utility disconnections within the 40 zip codes with the highest penetration of Black households. Once this root cause analysis is conducted, Peoples should commit to taking steps to address the cause with the commitment of reducing disproportionate disconnections within these zip codes. This root cause analysis is intended to be consistent with the definition of and standard for the root cause analysis that OCA witness Alexander outlines in OCA Statement 5. The extent to which Peoples mitigates the disproportionate disconnection of service for

nonpayment in zip codes with high penetrations of Black households should be reviewed in Peoples next base rate case.

- **Cost assessment:** There was no specific "assessment of the costs" associated with this recommendation. Given the fundamental regulatory (and other legal) requirement that Peoples Gas not engage in discrimination in its rates and services, it seemed unreasonable to consider the possibility that Peoples might decide *not* to engage in a root cause analysis of why Peoples disproportionately disconnects services in Black zip codes (controlling for income), and then adopt remediation of those root causes, on the grounds that it might "cost too much" to do so.

3. Peoples should modify its policies and procedures regarding the identification of "confirmed low-income" customers to conform with the PUC's regulations, including self-certification of low-income status ("This information may include receipt of LIHEAP funds (Low-Income Home Energy Assistance Program), *self-certification by the customer*. . ."). Peoples should include these modified policies and procedures in its residential tariff.

   - **Cost assessment:** There was no specific "assessment of the costs" associated with this recommendation in that the recommendation imposes no obligation other than compliance with the unambiguous terms of PUC regulations. It seemed unreasonable to consider the possibility that Peoples might decide *not* to comply with the PUC's regulations on the grounds that it might "cost too much" to comply with the regulation. No cost would be incurred by adding language to the tariff in compliance with the PUC's regulation.

4. In addition to Peoples providing a stand-alone written communication with Confirmed Low-Income customers as agreed to in the 2019 rate case settlement, prior to the disconnection of a Confirmed Low-Income customer, Peoples adopt a procedure, developed in collaboration with its Universal Service Advisory Group (USAG), under which it will seek to make personal contact with the customer subject to disconnection. In that personal contact, the Company shall offer the Confirmed Low-Income customer the opportunity to apply for the Company's CAP and arrearage forgiveness program. If the customer expresses a desire to make such application, Peoples will postpone the disconnection for a reasonable period of time to allow the application process to be completed. In short, I recommend that the procedure agreed to in the 2019 Settlement be expanded to include an effort to make personal contact in addition to the written contact contemplated by that Settlement.

- **Cost assessment:** There was no specific "assessment of the costs" associated with this recommendation. No such overall cost assessment was deemed necessary. According to the independent evaluation of the Peoples universal service programs (APPRISE, Inc. (August 2017). Peoples Natural Gas 2017 Universal Service Program Evaluation, Final Report, available at https://www.puc.pa.gov/General/pdf/USP_Evaluation-Peoples.pdf), the "cost" of "collection actions" was $5.46 for a service termination with an additional cost of $0.27 for a "termination processing step," while the cost of a "call" was only $0.01. (Peoples Natural Gas 2017 Universal Service Program Evaluation, at 84). Irrespective of the number of calls made, therefore, it would be cost-effective for Peoples to attempt to avoid the cost of a service termination standing alone, or the combined cost of a service termination plus the termination processing step ($0.01 for a call versus $0.27 plus $5.46 for the termination processing step plus the termination: $5.73 total). There is no cost associated with submitting the language to the Low-Income Advisory Group as recommended.

  Finally, as BCS notes, the purpose of Peoples universal service programs, which purpose is established by statute, is to "help low-income customers maintain electric and natural gas service. . ." (OCA St. 6, at 38, citing BCS 2022 Report, at 3). BCS further notes that "The Acts also require the PUC to ensure that universal service and energy conservation policies are appropriately funded and available in each electric and natural gas distribution territory." (BCS 2022 Report, at 3, citing 66 Pa. C.S. §§ 2203(8), 2804(9)). The statute does *not* provide or allow for Peoples to refuse to make its programs available on the grounds that the Company believes that so doing "costs too much."

5. Before Peoples enters into a DPA with a customer which the Company either: (1) knows to be a Confirmed Low-Income customer; or (2) has generated information through the DPA process documenting that the customer is in the Tier 1 income range (at or below 150% FPL), it should be required to provide the customer a stand-alone Plain English notice to that customer of the customer's right to enter into CAP and an explanation of the advantages of CAP's arrearage forgiveness benefits. As it agreed to do with the pre-termination stand-alone written notice, Peoples should develop this Plain English notice in collaboration with its Universal Services Advisory Group.

   - **Cost assessment:** There was no specific "assessment of the costs" associated with this recommendation. According to the independent

evaluation of the Peoples universal service programs (APPRISE, Inc. (August 2017). Peoples Natural Gas 2017 Universal Service Program Evaluation, Final Report, available at https://www.puc.pa.gov/General/pdf/USP_Evaluation-Peoples.pdf), the cost of a "letter" in Peoples' collection actions was between $0.04 and $0.13 per letter. (2017 Universal Service Program Evaluation, at 83).

In total, it would be reasonable to expect the overall cost of collection to decline through an enrollment of Confirmed Low-Income customers in CAP. The Peoples program evaluation reported that "there was a significant decline in the cost of collections of $6.52 for the treatment group as compared to the comparison groups." 2017 Universal Service Program Evaluation, at 84. For Equitable, the Peoples Natural Gas Universal Service Program Evaluation reported that "there was a statistically significant increase in the cost of collections. . .of $3.15." Given the disproportionate share of Confirmed Low-Income customers served by the Peoples Division, as compared to the Equitable Division, it was deemed reasonable to conclude that the cost savings from Peoples customers would exceed the cost increases from Equitable customers.

Moreover, the evaluation of the Peoples Natural Gas universal service program reported that participants in the Peoples Natural Gas CAP (which at the time was not a percentage of income program) resulted in a 36% net increase in the percentage of bill paid. (OCA St. 6, at Table 16). Accordingly, according to Peoples own program evaluation, not only would enrollment in CAP reduce the cost of collections, but it would ***also*** increase the percentage of bill being paid.

The findings of the 2017 Evaluation are corroborated by the most recent Bureau of Consumer Services (BCS) annual report on Universal Service Programs and Collections Performance (2022) (available at https://www.puc.pa.gov/media/2573/2022-universal-service-report-final.pdf). According to the BCS report, the average arrears of a Confirmed Low-Income customer on an arrangement was $1,046.70 (2022 BCS Report, at 30), remembering that this recommendation is directed toward Confirmed Low-Income customers who would otherwise be on a payment agreement ("before Peoples enters into a DPA [Deferred Payment Agreement]. . ."). Moreover, this most recent BCS data reported that while Peoples had 7,015 Confirmed Low-Income customers on agreement (2022 BCS Report, at 15), it ***also*** had 9,219 Confirmed Low-Income customers

who were "payment-troubled," defined by the PUC to be a customer who had defaulted on one or more payment arrangements in the past twelve months. (2022 BCS Report, at 11, 12). There were, in other words, more Confirmed Low-Income customers who had defaulted on one or more payment arrangements in a one-year period than there were Confirmed Low-Income customers on payment arrangements.

In contrast, BCS reported that Peoples CAP participants paid 84.1% of their CAP bill in 2020; 91.5% of their CAP bill in 2021; and 75.7% of their CAP bill in 2022. (2022 BCS Report, at 66).

Through Mr. Colton's recommendation, therefore, Peoples would be encouraging customers who owe more than $1,000 in arrears each to enroll in a program in which participants have made between 76% and 92% of their annual payments,

Given that the Company's own data indicates that a letter costing $0.10 would both reduce the cost of collection and increase the percentage of bill paid (likely even more than the 2017 Evaluation indicated given that the Evaluation results were relative to ***all*** low-income customers while the recommendation was limited to those who were already in arrears by more than $1,000), and that the BCS data confirms that the recommended action would avoid enrolling a Confirmed Low-Income customer in a payment plan, more than half of which end in default each year, and instead enroll those customers in CAP yielding payment rates of between 75% and 92% of their total bill each year, it did not seem reasonable to expect Mr. Colton's recommendation to impose substantial costs, if any. There is no cost associated with submitting the language to the Low-Income Advisory Group as recommended.

Finally, as BCS notes, the purpose of Peoples universal service programs, which purpose is established by statute, is to "help low-income customers maintain electric and natural gas service. . ." (OCA St. 6, at 38, citing BCS 2022 Report, at 3). BCS further notes that "The Acts also require the PUC to ensure that universal service and energy conservation policies are appropriately funded and available in each electric and natural gas distribution territory." (BCS 2022 Report, at 3, citing 66 Pa. C.S. §§ 2203(8), 2804(9)). The statute does ***not*** provide or allow for Peoples to refuse to make its programs available on the grounds that the Company believes that so doing "costs too much."

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6. Peoples adopt a procedure under which it will provide a stand-alone Plain English notice to customers found to be without heating service at the time of the Company's Cold Weather Survey of the customer's right to enter into CAP and an explanation of CAP's arrearage forgiveness benefits. Peoples should develop the Plain English notice in collaboration with its Universal Service Advisory Group.

- **Cost assessment:** While Mr. Colton undertook no specific "assessment of the costs" associated with this recommendation, he considered the following as to costs. This recommendation is directed toward customers whose Peoples service has been disconnected for nonpayment within the past year. The statutory section cited in the testimony states that it applies to "premises where heat related service has been terminated within the past year for any of the grounds in § 56.81 (relating to authorized termination of service) or § 56.98. . ." The statute provides that a natural gas utility such as Peoples "shall, within 90 days prior to December 1, survey and attempt to make post-termination personal contact with the occupant or a responsible adult at the premises. . ." There is, therefore, no necessary incremental cost associated with making, or attempting to make, personal contact with the occupant "or a responsible adult" at the service premises being surveyed. Doing so is already mandated by statute.

  The question thus involves a reasonable consideration of the cost of preparing "a stand-alone Plain English notice" as recommended. The fact that that stand-alone notice informs the customer of their "right to enter into CAP and an explanation of CAP's arrearage forgiveness benefits" would impose no costs. The *content* of a "stand-alone Plain English notice" would not affect the cost of a notice one way or the other.

  According to the independent evaluation of the Peoples universal service programs (APPRISE, Inc. (August 2017). Peoples Natural Gas 2017 Universal Service Program Evaluation, Final Report, available at https://www.puc.pa.gov/General/pdf/USP_Evaluation-Peoples.pdf), the cost of a "letter" in Peoples' collection actions was between $0.04 and $0.13 per letter. (2017 Universal Service Program Evaluation, at 83). The cost of a "letter" is a reasonable surrogate for the cost of a "stand-alone Plain English notice."

  Recognizing that this recommendation is directed toward customers whose service has already been disconnected for nonpayment, as Mr. Colton noted in his Direct Testimony, a failure to reconnect the customer "not only causes Peoples to lose the revenue that is comprised of the unpaid bills at the time of disconnection, but also causes the Company to lose any revenue associated with

the bills that would have been associated with future bills." (OCA St. 6, at 24). According to Peoples, Confirmed Low-Income customers had an average arrears at the time of disconnection of $893 in 2021, $636 in 2022, and $642 in 2023. (OCA St. 10, at Table 11).

Even if Peoples could successfully enroll a customer in a payment arrangement at a premise which had been disconnected within the past year, and neither reconnected before the Cold Weather Survey nor reconnected at the time of the Cold Weather Survey through negotiation of a payment arrangement (either of which reconnections would place the customer outside the scope of this recommendation) (the recommendation is limited to "customers found to be without heating service at the time of the Company's Cold Weather Survey"), it is unlikely that such a payment arrangement for a Confirmed Low-Income customer would yield long-term success. The most recent BCS data reported that while Peoples had 7,015 Confirmed Low-Income customers on agreement (2022 BCS Report, at 15), the Company ***also*** had 9,219 Confirmed Low-Income customers who were "payment-troubled," defined by the PUC to be a customer who had defaulted on one or more payment arrangements in the past twelve months. (2022 BCS Report, at 11, 12). There were, in other words, more Confirmed Low-Income customers who had defaulted on one or more payment arrangements in a one-year period than there were Confirmed Low-Income customers on payment arrangements.

In contrast to this failure to enroll a Confirmed Low-Income customer in CAP, successfully enrolling a Confirmed Low-Income customer in CAP would involve the customer participating in a program which, BCS reported that Peoples CAP participants paid 84.1% of their CAP bill in 2020; 91.5% of their CAP bill in 2021; and 75.7% of their CAP bill in 2022. (2022 BCS Report, at 66).

In short, rather than either losing the revenue from the arrears at the time of disconnection (along with all future revenue) if a Confirmed Low-Income Cold Weather Survey participant was not reconnected, or enrolling that Confirmed Low-Income Cold Weather survey participant in a payment arrangement which has a greater than 50% likelihood of defaulting, enrolling the Confirmed Low-Income Cold Weather survey participant in CAP would place the customer on a rate under which Peoples will receive between 76% and 92% of future bill payments.

There is no cost associated with submitting the language of the written notice to the Low-Income Advisory Group as recommended.

Finally, as BCS notes, the purpose of Peoples universal service programs, which purpose is established by statute, is to "help low-income customers maintain electric and natural gas service. . ." (OCA St. 6, at 38, citing BCS 2022 Report, at 3). BCS further notes that "The Acts also require the PUC to ensure that universal service and energy conservation policies are appropriately funded and available in each electric and natural gas distribution territory." (BCS 2022 Report, at 3, citing 66 Pa. C.S. §§ 2203(8), 2804(9)). The statute does *not* provide or allow for Peoples to refuse to make its programs available on the grounds that the Company believes that so doing "costs too much."

7. When Confirmed Low-Income customers accrue an unpaid balance of $300, Peoples provide a stand-alone written Plain English notice informing those customers of their right to enroll in the Company's CAP (along with an explanation of the advantages of CAP's arrearage forgiveness provisions).

   - **Cost assessment:** See response to Question 5, Question 6, and Question 8.

8. In those instances where Peoples would otherwise request a cash security deposit pursuant to its Rule 3.D, the Company should, as an alternative to that deposit demand, provide a stand-alone written Plain English notice informing these customers of their right to enroll in the Company's CAP (along with an explanation of the advantages of CAP's arrearage forgiveness provisions).

   - **Cost assessment:** The Company's Rule 3.D set forth in its tariff provides for the demand for a deposit from an "existing customer" under any one of three circumstances: (1) the existing Customer has been delinquent on any two (2) consecutive bills or three (3) or more bills within the preceding twelve (12) month period, (2) the existing Customer has failed to comply with a material term or condition of a settlement or payment agreement, as defined in applicable Commission regulations, or (3) the Customer's utility service has been terminated and the Customer desires reconnection. Each of these circumstances demonstrates that the customer has had difficulty in paying their bills to Peoples.

     In contrast to responding to these payment difficulties by increasing the bill further through the imposition of a cash security deposit, or a higher cash security deposit, it would be reasonable to expect the overall cost of collection to decline through an enrollment of Confirmed Low-Income

customers in CAP. The Peoples program evaluation reported that "there was a significant decline in the cost of collections of $6.52 for the treatment group as compared to the comparison groups." 2017 Universal Service Program Evaluation, supra, at 84. For Equitable, the Peoples Natural Gas Universal Service Program Evaluation reported that "there was a statistically significant increase in the cost of collections. . .of $3.15." Given the disproportionate share of Confirmed Low-Income customers served by the Peoples Division, as compared to the Equitable Division, it was deemed reasonable to conclude that the cost savings from Peoples customers would exceed the cost increases from Equitable customers.

Moreover, the evaluation of the Peoples Natural Gas universal service program reported that participants in the Peoples Natural Gas CAP (which at the time was not a percentage of income program) resulted in a 36% net increase in the percentage of bill paid. (OCA St. 6, at Table 16). Accordingly, according to Peoples own program evaluation, not only would enrollment in CAP reduce the cost of collections, but it would ***also*** increase the percentage of bill being paid. The increase would likely be even greater than the increase documented in the Peoples evaluation since the Evaluation considered ***all*** customers whereas the recommendation applies to customers who have a demonstrated past difficulty in paying.

The findings of the 2017 Evaluation are corroborated by the most recent Bureau of Consumer Services (BCS) annual report on Universal Service Programs and Collections Performance (2022) (available at https://www.puc.pa.gov/media/2573/2022-universal-service-report-final.pdf). Remember that this recommendation is directed toward Confirmed Low-Income customers who would otherwise have met one of three criteria. The first criterion set forth in Rule 3.D is that the customer was delinquent on any two (2) consecutive bills or three (3) or more bills within the preceding twelve (12) month period. According to BCS, Peoples Confirmed Low-Income customers had an average arears of $617.26 in 2020, $718.37 in 2021, and $599.51 in 2022.

Mr. Colton's recommendation is consistent with the PUC's prior findings with respect to CAP. As Mr. Colton noted in his direct testimony, the PUC has held that "enrolling low-income customers into CAPs as early as possible generally puts them in the best position to maintain good payment habits and avoid accruing utility debt. Waiting until a customer has broken

a payment agreement or otherwise fallen into arrears could make it harder for a household to succeed in a CAP." (OCA St. 6, at 45).

The second criterion is that a customer had failed to comply with a material term or condition of a settlement or payment agreement. The average arrears of a Confirmed Low-Income customer on an arrangement was $1,046.70 (2022 BCS Report, at 30). The third criterion is that a customer has had service terminated. Confirmed Low-Income customers had an average arrears at the time of disconnection of $893 in 2021, $636 in 2022, and $642 in 2023. (OCA St. 10, at Table 11). Under each circumstance, Peoples has substantial arrears at risk and prior collection efforts have not been successful.

In contrast to each of the three indicators of payment difficulty in the Peoples Rule 3.D (i.e., non-payment of bills; default on a payment arrangement; disconnection of service for nonpayment), BCS reported that Peoples CAP participants paid 84.1% of their CAP bill in 2020; 91.5% of their CAP bill in 2021 and 75.7% of their CAP bill in 2022. (2022 BCS Report, at 66). It is thus reasonable to conclude that, given that the recommendation applies only to customers with these three indicators of payment difficulty, that Peoples would not collect a greater percentage of its past-due and future billings through continued collection actions than it would by enrolling the customer in CAP.

Given that the Company's own data indicates that a letter costing $0.10 would both reduce the cost of collection and increase the percentage of bill paid (likely even more than the 2017 Evaluation indicated given that the Evaluation results were relative to ***all*** low-income customers while the recommendation was limited to those who were already demonstrably having bill payment difficulties, it did not seem reasonable to expect Mr. Colton's recommendation to impose substantial costs, if any.

Finally, as BCS notes, the purpose of Peoples universal service programs, which purpose is established by statute, is to "help low-income customers maintain electric and natural gas service. . ." (OCA St. 6, at 38, citing BCS 2022 Report, at 3). BCS further notes that "The Acts also require the PUC to ensure that universal service and energy conservation policies are appropriately funded and available in each electric and natural gas distribution territory." (BCS 2022 Report, at 3, citing 66 Pa. C.S. §§ 2203(8), 2804(9)). The statute does ***not*** provide or allow for Peoples to

refuse to make its programs available on the grounds that the Company believes that so doing "costs too much."

There is no cost associated with submitting the language of the written notice to the Low-Income Advisory Group as recommended.

9. Peoples be directed to extend the use of its Vivent Speech Analytics software to assist with the Quality Monitoring of phone calls involving, or potentially involving, universal service programs and other low-income customers. Peoples should be directed to involve its USAG in the identification and selection of Low-Income and Universal Service Terms to be detected by the system in order to confirm that phone calls are properly being identified and handled. Regular six-month reports on the results of the Speech Analytics reviews should be provided to the USAG.

   - **Cost assessment:** There was no specific "assessment of the costs" associated with this recommendation set forth in Mr. Colton's testimony. No new software or technology is required by this recommendation. Instead, the recommendation involves extending the use of software that Peoples Gas already has already installed and is already using. No specific process is used to determine what terms, phrases or speech patterns will be searched for through the Vivent software. When OCA requested that Peoples "identify and provide a detailed description of the internal processes, procedures, or practices employed to determine what terms, phrases, or other speech patterns will be employed in the application of the speech pattern analytics or linguistic analytics software to the review," Peoples simply referred back to its use of the Vivent software. (OCA St. 6, at 46 – 47, citing OCA-10-12, attached as OCA Exh. RDC-6 and OCA Exh. RDC-7).

10. The residential customer charge determined by OCA witness Clarence Johnson should be approved.

   - **Cost assessment:** There was no specific "assessment of the costs" associated with this recommendation set forth in Mr. Colton's Direct Testimony. A fuller discussion of the rate ramifications of adoption of this recommendation can be found in the Direct Testimony of OCA Witness Clarence Johnson.

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Set IV to OCA

11. The recommendations of OCA witnesses Evrard, Mugrace and Johnson be adopted with respect to the Company's proposed Weather Normalization Adjustment and that the proposed Weather Normalization Adjustment should be denied.

    - **Cost assessment:** There was no specific "assessment of the costs" associated with this recommendation set forth in Mr. Colton's Direct Testimony. For all the reasons set forth in Mr. Colton's Direct Testimony, however, adoption of this recommendation would result in reduced rates to low-income customers.

12. The Commission adopt the return on equity and capital structure found to be reasonable by OCA witness Rothschild.

    - **Cost assessment:** There was no specific "assessment of the costs" associated with this recommendation set forth in Mr. Colton's Direct Testimony. All discussion of costs of Mr. Rothschild's return on equity and capital structure, compared to the return on equity and capital structure recommended by Peoples, was included in the Direct Testimony of Mr. Rothschild.

13. Given its obligation to balance the interests of investors and ratepayers in setting a reasonable return on equity, the greater adverse impacts that inflation has imposed on low-income ratepayers should be considered by the PUC in establishing a return on equity.

    - **Cost assessment:** While there was no specific "assessment of the costs" associated with this recommendation, it was expected that there would be financial savings to ratepayers to the extent that the Commission balanced the interests of residential customers, including low-income customers, with investors in setting a reasonable return on equity rather than exclusively considering investor interests in setting that equity return.

14. In addition to "furnishing a written guaranty" as referenced in the Company's tariff, the Company should add a sub-section (2) which would read in relevant part:

    > Provide income documents or other information attesting to his or her eligibility for state benefits based on household income eligibility requirement that are consistent with those of the public utility's Customer Assistance Program.

This language mirrors the language of 52 Pa. Code § 56.32(e).

- **Cost assessment:** There was no specific "assessment of the costs" associated with this recommendation in that the recommendation imposes no obligation other than compliance with the unambiguous terms of 52 Pa. Code § 56.32(e). It seemed unreasonable to consider the possibility that Peoples might decide *not* to comply with the Pennsylvania statute on the grounds that it might "cost too much" to comply with the statute. No cost would be incurred by adding the recommended language to the Company's tariff.

15. In addition, a similar change should be made to Rule 3.D (Original Page 20). This modification should add an unnumbered paragraph immediately after Rule 3.D(2), which unnumbered paragraph would read:

> Notwithstanding subsection (D), the Company may not require a cash deposit from a customer who is, based upon household income, confirmed to be eligible for a customer assistance program. A customer is confirmed to be eligible for a customer assistance program by the public utility if the customer provides income documents or other information attesting to his or her eligibility for state benefits based on household income eligibility requirement that are consistent with those of the public utility's Customer Assistance Program.

This language mirrors 52 Pa. Code § 56.41(B)(4) extending the exemption from deposits to customers as well as to applicants.

- **Cost assessment:** There was no specific "assessment of the costs" associated with this recommendation in that the recommendation imposes no obligation other than compliance with the unambiguous terms of 52 Pa. Code § 56.41(B)(4). It seemed unreasonable to consider the possibility that Peoples might decide *not* to comply with the Pennsylvania statute on the grounds that it might "cost too much" to comply with the statute. No cost would be incurred by adding the recommended language to the Company's tariff.

16. Rule 3.E(2) be modified to add the following language: "that fall within the scope of general industry practice, *provided that the methodology does not directly, or have the effect of, discriminating based on a protected class as set forth in the federal Equal Credit Opportunity Act.*" (new language emphasized).

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Set IV to OCA

- **Cost assessment:** There was no specific "assessment of the costs" associated with this recommendation in that the recommendation imposes no obligation other than compliance with the unambiguous terms of the federal Equal Credit Opportunity Act (ECOA). It seemed unreasonable to consider the possibility that Peoples might decide *not* to comply with the ECOA on the grounds that it might "cost too much" to avoid discrimination against protected classes of customers. No cost would be incurred by adding the recommended language to the Company's tariff.

17. Peoples be directed to use a CAP base participation of 30,800. This reflects the combined projected CAP participation for the year starting October 2024 rounded to the nearest 100.

- **Cost assessment:** While there was no specific "assessment of the costs" of this recommendation, the recommendation is expected to result in a decrease in costs to the residential customers of Peoples. The recommendation lowers the base projected CAP participation threshold at which the bad debt offset established by the Tariff becomes effective, thus increasing the offset and decreasing rates.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission,	:	
	:	
v.	:	Docket No. R- 2023-3044549
	:	
Peoples Natural Gas Company LLC	:	
	:	

VERIFICATION

I, Roger D. Colton, hereby state that the facts set forth in my response to Peoples Natural Gas Company LLC's Interrogatories, Set IV, Question 1, are true and correct to the best of my knowledge, information, and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: April 8, 2024

Signature:

Roger D. Colton

Consultant Address: Fisher, Sheehan, & Colton
34 Warwick Road
Belmont, MA 02478

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XXV-001

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Please provide the cost per year, for the three most recent years, of using the Vivent software.

Answer: The Company assumed that OCA is referring to Verint. As such, the the annual cost for using Verint are:

2021 $299,387

2022 $61,589

2023 $108,847

Submit Date: 4/29/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XXV-003

Witness: Doyle-Conley, Heather **Title:** Vice President Customer Operations

Question: Please provide the cost by year, for the three most recent years, of implementing paragraph 59 of the 2018 rate case settlement.

Answer:

Year	Cost
2021	$19,921
2022	$14,570
2023	$24,363

Submit Date: 4/29/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XXV-005

Witness: Black, Rita **Title:** Community Assistance Programs Director

Question: Confirm or deny. It is Peoples policy that the Company will not place limits on its CAP enrollment because the cost of enrolling additional low-income customers is too high. If anything other than an unqualified "confirmed," please describe in detail the level of CAP cost which, if reached, is the maximum CAP cost that Peoples is willing to spend on CAP.

Answer: Confirm. Peoples' CAP does not have an enrollment ceiling and all income eligible customers who meet the application and recertification requirements are eligible to participate.

Submit Date: 4/29/2024

PII Statement No. 1

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	**:**	
	:	
V.	**:**	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	**:**	

DIRECT TESTIMONY

AND EXHIBITS

OF

RICHARD A. BAUDINO

ON BEHALF OF

PEOPLES INDUSTRIAL INTERVENORS

J. KENNEDY AND ASSOCIATES, INC.

MARCH 22, 2024

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
V.	:	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

DIRECT TESTIMONY OF RICHARD A. BAUDINO

Q. Please state your name and business address.

A. My name is Richard A. Baudino. My business address is J. Kennedy and Associates, Inc. ("Kennedy and Associates"), 570 Colonial Park Drive, Suite 305, Roswell, Georgia 30075.

Q. What is your occupation and by whom are you employed?

A. I am a consultant to Kennedy and Associates.

Q. Please describe your education and professional experience.

A. I received my Master of Arts degree with a major in Economics and a minor in Statistics from New Mexico State University in 1982. I also received my Bachelor of Arts Degree with majors in Economics and English from New Mexico State in 1979. In October 1989, I joined the utility consulting firm of Kennedy and Associates as a Senior Consultant where my duties and responsibilities covered substantially the same areas as those during my tenure with the New Mexico Public Service Commission Staff. I became Manager in July 1992 and was named Director of Consulting in January 1995. Currently, I am a consultant with Kennedy and Associates. Exhibit ____(RAB-1) summarizes my expert testimony experience.

Q. On whose behalf are you testifying?

A. I am testifying on behalf of Peoples Industrial Intervenors ("PII").

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to address the following issues in Peoples Natural Gas Company's ("Peoples" or "Company") current rate proceeding:

1. Cost allocation and the Company's class cost of service studies ("CCOSS").
2. Peoples' proposed allocation of its proposed revenue increase to customer classes.
3. Rate design for the LGS class.

In addressing these issues, I will respond to the Direct Testimony of Peoples witness Ralph Zarumba.

Q. Please summarize your conclusions and recommendations for the Pennsylvania Public Utility Commission ("Commission").

A. My conclusions are recommendations are as follows:

1. Mr. Zarumba performed two CCOSS to analyze customer class responsibility for the Company's claimed costs to serve each class.
2. The two CCOSS were: (1) the Demand/Peak and Average CCOSS; and (2) the Minimum System/ Design Day CCOSS.
3. The Company's Minimum System/Design Day CCOSS is the appropriate study to guide the Commission in its assessment of customer class cost responsibility and for the allocation of any revenue increase the Commission may allow in this case.
4. Based on the range of CCOSS results presented by the Company, the combined system LGS tariff class should receive a revenue reduction in this proceeding. The customers in this class are paying far more than their fair share of Peoples' cost to serve them.

5. If the Commission decides not to reduce revenues for the combined LGS tariff class in this case, then this class should receive no increase.

Customer Class Cost Allocation

Q. What is the purpose of a class cost of service study?

A. A CCOSS allocates and assigns the total cost of providing utility service to the classes of customers receiving that service.

Q. How is a class cost of service study developed?

A. The development of a class cost of service study consists of three steps: functionalization, classification, and allocation. Functionalization refers to the process by which the Company's investments and expenses are identified and segregated into different cost categories. For Peoples, these functional categories include transmission, distribution, metering and billing, and various customer accounts and service expenses.

Second, once functionalization is complete, the utility's costs are classified into categories of demand-related, commodity-related, and customer-related costs in order to facilitate their allocation to customers by applying cost causation principles. In general, all non-gas distribution costs are either responsive to changes in natural gas peak demand or to the number of customers.

Demand-related costs are those that are needed to serve the winter peak demands of distribution customers. They are fixed and do not vary with the monthly and annual commodity consumption of the utility's customers. On pages 23 and 24 of the National Association of Regulatory Utility Commissioners ("NARUC") Gas Distribution Rate Design Manual dated June 1989 ("1989 NARUC Manual"), demand- or capacity-related costs are described as follows:

> "Demand or capacity costs vary with the quantity or size of plant and equipment. They are related to maximum system requirements which the system is designed to serve during short intervals and do not directly vary with the number of customers or their annual usage. Included in these costs are: the capital costs associated with production, transmission and storage plant and their related expenses; the demand cost of gas; and most of the capital costs and expenses associated with that part of distribution plant not allocated to customer costs, such as the costs associated with distribution mains in excess of the minimum size."

Customer-related costs are associated with the number of customers and are incurred to connect customers to the system. They are independent of the customer's demand and throughput requirements. Primary examples of customer-related costs are investments in meters, services, and a portion of main investment incurred to extend the distribution system to the customer's premises and conform to local and national codes and standards. In addition, such accounting functions as meter reading, bill preparation and revenue accounting are generally considered customer-related costs.

Commodity-related costs are costs that vary with the amount of gas consumed by customers. The vast majority of Peoples' non-gas costs are demand-related (fixed) or related to the customer function. Consequently, only a very small amount of the Company's non-gas costs are considered to be related to the commodity function.

Third, the functionalized and classified costs are allocated to the various customer classes based on each class' contribution to the respective cost classifications. In general, demand-related costs are allocated based on each class' contribution to the maximum, or peak, demand placed on the system by the classes or by the customers within the classes. Customer-related costs are allocated based upon the number of customers in each class, weighted to account for the complexity of servicing the needs

of the different classes of customers. Commodity-related costs are generally allocated based upon throughput.

Q. Why is a CCOSS important?

A. A CCOSS illustrates the costs a utility incurs to serve each customer class. It is widely accepted that costs should be allocated among customer classes on the basis of cost causation. That principle is perhaps the most universally accepted tenet of allocating costs that cannot be directly assigned to a particular customer class. As such, costs should be allocated to those classes on the basis of how or why those costs are incurred by the utility. The results of such studies are normally used in assigning cost and revenue responsibilities to various customer classes.

Q. Do you support the premise that cost causation principles should guide the allocation of costs to the various customer classes?

A. Yes. Rates that are based on consistently applied cost causation principles are just and reasonable and further the cause of stability, conservation, and economic efficiency. Other factors such as simplicity, gradualism, economic development, and ease of administration may also be taken into consideration when determining the final allocation of the revenue requirement among classes, but the fundamental starting point and guideline should be the cost of serving each customer class produced by the CCOSS.

Q. Please summarize Mr. Zarumba's approach to the development of the two CCOSS he presented in this proceeding.

A. Mr. Zarumba began a detailed discussion of his CCOSS approaches on page 7 of his Direct Testimony. Mr. Zarumba presented three sets of CCOSS for:

- Peoples' combined system.

- The Peoples Natural Gas Division ("PNGD")
- The Peoples Gas Division ("PGD")

On page 8 of his Direct Testimony, Mr. Zarumba presented three major rate design changes proposed by the Company:

1. Combine PNGD and PGD rates into a single rate design.
2. Eliminate the PNGD transition rates for LGS customers on PNGD.
3. Institute a new LGS-Mainline class of customers that is based on the use of the transmission and distribution system.

In constructing his CCOSSs, Mr. Zarumba generally followed the functionalization, classification, and allocation steps I discussed previously. Regarding the classification of distribution mains, Mr. Zarumba employed the Minimum System approach, which he described beginning on page 14 of his Direct Testimony. This study separated the costs of the Company's distribution mains into demand and customer related cost components. These costs are then allocated to customer classes based on design day peak demand and number of customers. Mr. Zarumba pointed out the following in his Direct Testimony:

> "It is widely accepted that distribution mains (Account No. 376) are installed to meet both system peak period load requirements and to connect customers to the gas utility's system. Therefore, to ensure that the rate classes that cause the incurrence of this plant investment or expense are charged with its cost, distribution mains should be allocated to the rate classes in proportion to their peak period load requirements and numbers of customers.
>
> There are two cost factors that influence the level of distribution mains facilities installed by a gas utility in expanding its gas distribution system. First, the size of the distribution main (i.e., the diameter of the main) is directly influenced by the sum of the peak period gas demands placed on the gas utility's system by its customers. Secondly, the total installed footage of distribution mains is influenced by the need to expand the distribution system grid to connect new customers to the

> system. Therefore, to recognize that these two cost factors influence the level of investment in distribution mains, it is appropriate to allocate such investment based on both peak period demands, and the number of customers served by the gas utility."[1]

On page 28, lines 3 through 8 of his Direct Testimony Mr. Zarumba noted that he used two different demand allocation methods: the peak method and the peak-and-average method. He also performed CCOSSs with and without a customer component for the classification and allocation of distribution mains. He testified that he used this approach "to minimize the potential controversy associated with selecting particular cost allocation methods …"

On page 30 of his Direct Testimony Mr. Zarumba summarized the results of his two CCOSS approaches as applied to Peoples' combined system. The "Demand/Peak and Avg" results refer to his CCOSS that employed the peak and average method to classify and allocate demand costs and which did not employ the minimum size system to classify and allocate the costs of distribution mains. The "Min System/Design Day" results refer to the CCOSS that allocated demand costs based on class peak demands and which used the minimum size system study to classify and allocate the costs of distribution mains.

Q. Did Mr. Zarumba recommend using either of the two CCOSS approaches to guide revenue allocation to the customer classes?

A. No. My understanding of Mr. Zarumba's testimony is that he presented both CCOSS approaches to form a range of outcomes for customer class cost responsibility.

[1] Zarumba Direct Testimony, page 21, line 17 through page 22, line 9.

Q. Do you have any concerns with Mr. Zarumba's CCOSS approaches?

A. Yes. I have concerns with his Demand/Peak and Avg CCOSS. For ease of reference throughout the remainder of my testimony, I will refer to this CCOSS as the "Peak and Average" CCOSS. I will also refer to the "Min System/Design Day" CCOSS as "Demand/Customer."

Q. Please explain your concerns with the Peak and Average CCOSS.

A. The fixed costs of the Company's transmission and distribution mains should be classified as either demand or customer related. Mr. Zarumba and I agree on this principle. Peak winter demand is the primary driver of Peoples' investment in gas distribution facilities, particularly mains. The Company must have sufficient capacity available on its system to satisfy the peak winter heating demand. If the peak winter demand increases, the Company may need to invest in additional mains to serve the load.

During non-winter months, the situation is very different because substantial excess capacity exists on the system. As such, use of the Company's distribution system during these months does not cause additional fixed costs to be incurred by the Company. In fact, high load factor customers provide valuable margins to the Company during off-peak months when the demands of residential heating customers are very low. Consequently, throughput, which varies substantially during the year, is not what causes Peoples' investment in the *fixed costs* of transmission and distribution mains.

In a similar manner to peak winter demand, if the number of customers increases, the Company may need to expand its distribution system investment. Thus, the number

of customers connected to the distribution system is another important causative factor in distribution main investment.

This point can be illustrated with a simple example. Assume that there is a single industrial customer on Peoples' system with a peak demand of 300 dekatherms ("Dth"). Further assume that elsewhere on the system, there is a neighborhood of 750 residential customers with a peak demand of 300 Dth. It is obvious that in order to connect all of those residential customers to its system, the Company will have to invest in far more footage of smaller distribution mains to serve 750 customers than it would have to invest to serve the one industrial customer. That extra investment in distribution mains is due solely to the number of customers on the system and is unrelated to the peak demands or volume usage of those customers.

To conclude this discussion, fixed costs that do not vary with consumption should not be classified as variable, or commodity-related, costs. This points to the fatal flaw in the peak-and-average approach to demand allocation. Mr. Zarumba explained on page 17 of his Direct Testimony that the peak-and-average method gives equivalent weight to both peak demand and average demand. Average demand is simply total throughput divided by 365 and effectively allocates one-half of demand-related costs by throughput. This method causes the allocation of costs to customer classes to be inaccurate and inequitable. For example, high load factor customers in the LGS class who use gas more evenly throughout the year are economically harmed by a costing method that classifies fixed costs as commodity-related. This is because their high yearly throughput causes them to be allocated more fixed costs that are mistakenly classified as variable, or commodity-related, even though throughput does not drive fixed costs. This is especially the case with off-peak usage in the summer.

Alternatively, a low load factor residential customer who uses gas mostly in the winter for heating is unduly benefitted by this approach. In this instance, the residential customer's relatively low load factor results in an allocation of fixed costs that are too low relative to the fixed costs actually caused by this customer class. Of course, this situation would also apply to low load factor commercial and industrial customers.

Q. What is your CCOSS recommendation?

A. For the reasons stated above, I recommend that the Commission adopt the Demand/Customer CCOSS. Approval of the Demand/Customer CCOSS will appropriately align the CCOSS with cost causation for a winter peaking system with excess capacity in the non-winter months.

Q. Please describe Mr. Zarumba's proposed new LGS-Mainline customer class.

A. On page 48 of his Direct Testimony, Mr. Zarumba explained that he added two new tariff classes to the CCOSS: Mainline LGS Transmission customers and Mainline LGS Non-Transmission customers. Mainline LGS Transmission customers do not use the Company's high pressure distribution system, the costs of which are included in Account 376 – Regulated Mains. Thus, Mainline LGS Transmission customers are not allocated any of the costs in Account 376. Mainline LGS Non-Transmission customers use neither regulated mains nor the Company's transmission system because they are connected directly to interstate pipelines. Thus, these customers are not allocated any costs from Account 376 or the transmission mains account.

It is my understanding that these two categories of Mainline LGS customers are included in the LGS-Mainline customer class in Mr. Zarumba's alternative CCOSSs.

Q. Do you support the inclusion of the LGS-Mainline class for purposes of Peoples' CCOSS evaluation?

A. Yes. The customers included in the LGS-Mainline class are uniquely situated in terms of where they take service on the Company's system. In addition, these customers are all taking service under special contracts that are not based on the cost to serve them. Mr. Zarumba explained that use of these special contracts "captures pricing equal to that of their competitive alternatives which is below the proposed LGS Mainline tariff"[2]. However, the tariff does not establish a clear formula for determination of the minimum charge paid by customers, noting only that customers will pay a customer charge based on throughput. By separating the LGS-Mainline customers into their own rate class in the CCOSS, their contribution toward the Company's cost of service may be measured by their class rate of return on allocated rate base and compared to the system average rate of return.

Even more importantly, the LGS-Mainline customers must be separated from the other LGS customers (i.e., the LGS customers receiving service under Peoples' tariff rates) so that the LGS tariff customers' contribution toward the allocated cost to serve them may be accurately measured and assessed.[3] Since the special contract rates are much lower than the LGS tariff rates, combining the LGS-Mainline customers into the LGS class as a whole will distort the CCOSS results for the LGS tariff customers.

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2 Zarumba Direct Testimony, page 50, lines 4 through 6.

3 For ease of reference, I will refer to the LGS customer group that is not LGS-Mainline as the "LGS tariff" class.

Q. Do the summary CCOSS results presented on page 30 of Mr. Zarumba's Direct Testimony show the LGS and LGS-Mainline class results separately?

A. No. The summary CCOSS results presented by Mr. Zarumba only show the combined LGS class without the LGS-Mainline results shown separately. Please refer to Table 1 below for the class rates of return from the two CCOSS for the combined system with LGS and LGS-Mainline shown separately.

TABLE 1
CCOSS Class Rates of Return and Relative Rates of Return

	Total	RES	SGS	MGS	LGS	LGS Mainline
Demand/Customer CCOSS						
Rate of return @current rates	5.51%	3.99%	5.06%	10.79%	27.33%	-5.24%
Relative Rate of Return		0.72	0.92	1.96	4.96	(0.95)
Peak and Average CCOSS						
Rate of return @current rates	5.51%	6.24%	3.18%	2.72%	10.29%	-5.24%
Relative Rate of Return		1.13	0.58	0.49	1.87	(0.95)

Table 1 demonstrates the importance of evaluating CCOSS results for the LGS class with the LGS-Mainline customers in a separate rate class. The Demand/Customer and Peak and Average CCOSS both clearly show that LGS-Mainline customers' special contract rates are not only below the allocated cost to serve, but they are also generating negative rates of return. Alternatively, the LGS tariff class has by far the highest rates of return of any customer class for both CCOSSs.

Table 1 also presents the relative rate of return ("RROR"), which measures each class rate of return relative to the system rate of return at current rates. A RROR greater than 1.0 means that a customer class rate of return is greater than the system average. Such a class should receive a revenue increase less than the system average increase. For example, assume that the system average revenue increase is 10%. A class RROR greater than 1.0 indicates that class should receive an increase lower than 10%,

assuming any rate increase at all is even appropriate. An RROR less than 1.0 indicates a class return that is below the system average rate of return and that the class should receive an increase greater than the system average increase.

Table 1 shows an RROR for the LGS class that ranges from 1.87 to 4.96. Another way to view these results is that the current return on rate base for the LGS tariff customers is about 2 to 5 times greater than Peoples' current rate of return depending on the CCOSS.

Q. What is the overall conclusion regarding the CCOSS results for the LGS class?

A. The striking conclusion is that *both* CCOSSs show LGS tariff customers are paying current rates that are grossly in excess of the cost to serve them. These CCOSS results provide clear guidance to the Commission in its decision on revenue allocation in this proceeding. I will provide further analysis and recommendations for revenue allocation in the next section of my Direct Testimony.

Class Revenue Allocation

Q. Summarize Mr. Zarumba's recommended revenue allocation in this proceeding.

A. Mr. Zarumba's recommended revenue allocation is summarized in a table on page 39 of his Direct Testimony. His proposed revenues by class are based on the mean CCOSS results for each class at the Company's proposed rate of return on rate base. This table shows full CCOSS revenue requirements at Peoples' requested rate of return for the LGS class ranging from $49.3 million to $69.0 million. Mr. Zarumba's proposed revenue for LGS is $59.2 million, representing the midpoint of this range.

Q. Does Mr. Zarumba's table show the CCOSS revenue requirement results for LGS tariff and LGS-Mainline separately?

A. No. In order to assess the reasonableness of Mr. Zarumba's proposed class revenue, LGS tariff and LGS-Mainline CCOSS revenue should be shown separately. Please refer to Table 2, which shows CCOSS revenue from the two CCOSSs for LGS tariff and LGS-Mainline.[4]

TABLE 2
Peoples Gas Customer Class CCOSS Revenue Requirement @ Cost of Service Return

Rate Class	Revenues @ Current Rates	Customer/Dmd CCOSS	Peak & Avg CCOSS	Mean	Peoples Proposed Revenue
RES-Base Rates	$347,866,631	$508,820,648	$451,420,813	$480,120,731	$480,120,731
SGS-Base Rates	$43,991,391	$60,323,814	$67,379,366	$63,851,590	$63,851,590
MGS-Base Rates	$57,024,004	$60,132,252	$90,788,231	$75,460,242	$75,460,242
LGS-Base Rates	$48,982,267	$32,724,719	$52,411,209	$42,567,964	$52,169,360
LGS-MAINLINE-Base Rates	$6,996,935	$16,597,423	$16,599,237	$16,598,330	$6,996,935
Total	$504,861,227	$678,598,857	$678,598,857	$678,598,857	$678,598,857

Table 2 shows the following with respect to the LGS tariff and LGS-Mainline customer classes:

1. The mean of the CCOSS range for LGS tariff customers is $42.6 million while revenue at current rates is $49.0 million. If Mr. Zarumba had applied the same approach to the LGS tariff class that he did for Residential, SGS, and MGS then LGS tariff customers should have received a revenue *decrease* of -$6.4 million.
2. The difference between revenue at current rates and the mean CCOSS revenue requirement for LGS-Mainline is about $9.6 million.

[4] Table 2 was taken from the Demand/Customer CCOSS for the combined system provided by Peoples in response to OCA-5-001, Revenue Summary tab. It is also shown on Peoples Exhibit RNZ-4, page 3 of 3.

3. Mr. Zarumba essentially added the LGS-Mainline revenue shortfall of about $9.6 million to the mean CCOSS revenue for LGS tariff customers, resulting in proposed revenues of $52.2 million.

4. The total increase for the combined LGS classes, $3.2 million, will be borne entirely by LGS tariff customers. This results in a percentage increase of 6.5%.

Q. Is it correct to keep the entire $9.6 million revenue shortfall from LGS-Mainline within the LGS tariff class?

A. No, it is incorrect to do so and, in my opinion, violates basic ratemaking principles of cost causation and fairness.

To put this into a broader perspective, it is useful to review the Direct Testimony of Peoples witness Luke Ravenstahl on the subject of competitive customers. Mr. Ravenstahl testified as follows:

> "Some of our commercial customers, and most industrial customers, have more than one energy service option available to them. These competitive customers support the operational needs of the Company's system and also offset the cost of service for other non-competitive customers as for example, they generate additional revenue that offsets the rates of non-competitive customers. In order to ensure we maintain these accounts, it is necessary to flex our maximum delivery rates to remain competitive."[5]
>
> "Moreover, Peoples has a legal duty to its customers to maintain just and reasonable rates. One way of doing so is to maintain a reasonable customer load. If discounted customers were to reduce or eliminate production at facilities on Peoples' system or to switch to alternative sources of fuel, this would have a substantial negative impact on the Company's non-discounted customer rates. This is because the incremental cost to serve these customers is less than the discounted revenue generated as natural gas customers of Peoples. *That is, although the discounted customers do not pay full tariffed rates, they still generate millions of dollars in annual revenue for Peoples and contribute to the Company's fixed costs*. However, if those competitive customers leave the Company's system, the Company's non-discounted customer rates

[5] Ravenstahl Direct Testimony, page 2, lines 14 through 19.

could be increased to offset the lost revenue in future base rate cases." (italics added)[6]

Mr. Ravenstahl's testimony clearly demonstrates that the negotiated rates and revenues from Peoples' competitive customers provide a benefit to *all tariff customers on its system.* It is both incorrect and unfair to burden the LGS tariff customers with the entire CCOSS revenue shortfall from LGS-Mainline customers. I strongly recommend the Commission reject this approach to revenue allocation.

Q. Please present your recommended revenue allocation for Peoples' combined system.

A. I recommend that the Commission adopt the following principles regarding the $9.6 million difference between the LGS-Mainline special contract revenues and the allocated cost to serve these customers:

1. None of Peoples' rate classes is directly responsible for the $9.6 million shortfall based on cost causation principles.
2. To the extent there is a benefit from having LGS-Mainline customers with negotiated contracts on Peoples' system, all other rate classes share in that benefit.
3. Since all other rate classes benefit from the existence of LGS-Mainline customers on Peoples' system, all other rate classes should share fairly and equitably in the $9.6 million cost of service shortfall from that class.

These three principles form the basis for my recommended revenue allocation to the Commission, which consists of the following steps:

[6] Ravenstahl Direct Testimony, page 3, lines 9 through 19.

1. For purposes of this case only, I recommend that the Commission adopt the midpoint CCOSS revenue requirement for Residential, SGS, MGS, and LGS tariff (without LGS-Mainline) customer classes. This midpoint is shown in the "Mean" column of Table 2 above. Although I recommend the Commission adopt the Demand/Customer CCOSS, using the midpoint CCOSS revenue requirement for each class is a reasonable first step in aligning customer class revenues and cost responsibility and is consistent with Mr. Zarumba's approach.

2. The $9.6 million mean CCOSS shortfall from the LGS-Mainline class should be allocated to the other customer classes based on each class's percentage share of the midpoint CCOSS revenues excluding the LGS-Mainline class.

Please refer to my Exhibit ___(RAB-2), which presents the detailed calculations for these two steps. Table 3 presents a summary of current and PII proposed class revenues based on my recommended approach. I also included my recommended Demand/Customer CCOSS revenues as a comparison to PII's proposed revenues.

TABLE 3
PII Proposed Revenue Allocation

Rate Class	Revenues @ Current Rates	Demand/Customer CCOSS Revenues	PII Proposed Revenue	Dollar Increase	Percentage Increase/ (Decrease)	Peoples Proposed Increase Pct.
RES-Base Rates	$347,866,631	$508,820,648	$487,084,213	$139,217,582	40.0%	38.0%
SGS-Base Rates	$43,991,391	$60,323,814	$64,777,668	$20,786,278	47.3%	45.1%
MGS-Base Rates	$57,024,004	$60,132,252	$76,554,687	$19,530,683	34.2%	32.3%
LGS-Base Rates	$48,982,267	$32,724,719	$43,185,353	($5,796,914)	-11.8%	6.5%
LGS-MAINLINE-Base Rates	$6,996,935	$16,597,423	$6,996,935	$0	0.0%	0.0%
Total	$504,861,227	$678,598,857	$678,598,857	$173,737,629	34.4%	34.4%

Table 3 and Exhibit ___(RAB-2) show that an equitable allocation of the LGS-Mainline CCOSS shortfall produces increases to Residential, SGS, and MGS that are moderately higher than the Company's recommendation. PII recommended

Residential increase is only 1.16 times the system average increase. This is a very reasonable multiple of the system average increase. The SGS increase of 1.38 times the system average increase is higher but is not unreasonable. The MGS increase is near the system average.

The recommended decrease in revenues to the LGS tariff class recognizes the fact that LGS customers' rates are far too high based on the full range of CCOSS results and that customers in this rate class deserve relief. This decrease comes without an unduly large rate impact on other classes. I recommend that the Commission adopt my recommended revenue allocation to Peoples' combined rate classes in this proceeding.

Q. If the Commission decides not to give any class a revenue decrease while increasing revenues to other customer classes, then what is your revenue allocation recommendation?

A. If the Commission declines to order a reduction in LGS tariff revenues in this case, then I recommend that the LGS combined system tariff class (excluding LGS-Mainline customers) receive no increase in revenues in this case.

Q. Does your recommended revenue allocation imply support for Peoples' requested revenue increase in this case?

A. No. I am using the Company's proposed revenue requirement only for the illustrative purpose of showing the results of my proposed revenue allocation.

Q. How should your revenue allocation recommendation change if the Commission orders a lower revenue increase in this case?

A. I recommend a proportional percentage decrease in the dollar increase shown in my Table 3 above. For example, if the Commission reduces the Company's increase by 20%, then the class increases and the LGS tariff decrease should be reduced by 20%.

LGS Rate Design

Q. Do you accept Peoples' proposed consolidation of LGS tariffs in this case?

A. PII does not oppose Peoples' proposed consolidation of its LGS tariffs for the PNGD and PGD systems.

Q. Do you accept Mr. Zarumba's recommended elimination of transition rates for the LGS class?

A. Yes.

Q. What is your recommendation to the Commission for the consolidated rate design for Peoples' LGS tariff class?

A. First, I recommend that the Commission order the Company to continue its current customer charges for the PNGD LGS customer class for the combined system LGS tariff class. The current customer charges for LGS tariff customers are:

25,000 – 49,999 MCF/Year	$ 575
50,000 – 99,999 MCF/Year	$ 750
100,000 – 199,999 MCF/Year	$1,400
Over 200,000 MCF/Year	$1,600

Second, I recommend that the Commission order Peoples to scale back Mr. Zarumba's proposed delivery charges for its combined system LGS tariff customers in order to implement the proposed revenue reduction of -$5.8 million shown in my Table 3.

Q. Does this conclude your Direct Testimony?

A. Yes.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	**:**	
	:	
V.	**:**	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	**:**	

EXHIBITS

OF

RICHARD A. BAUDINO

ON BEHALF OF

PEOPLES INDUSTRIAL INTERVENORS

J. KENNEDY AND ASSOCIATES, INC.

MARCH 22, 2024

RESUME OF RICHARD A. BAUDINO

EDUCATION

New Mexico State University, M.A.
Major in Economics
Minor in Statistics

New Mexico State University, B.A.
Economics
English

Thirty-nine years of experience in utility ratemaking and the application of principles of economics to the regulation of electric, gas, and water utilities. Broad based experience in revenue requirement analysis, cost of capital, rate of return, cost and revenue allocation, and rate design.

REGULATORY TESTIMONY

Preparation and presentation of expert testimony in the areas of:

Cost of Capital for Electric, Gas and Water Companies
Electric, Gas, and Water Utility Cost Allocation and Rate Design
Revenue Requirements
Gas and Electric industry restructuring and competition
Fuel cost auditing
Ratemaking Treatment of Generating Plant Sale/Leasebacks

RESUME OF RICHARD A. BAUDINO

EXPERIENCE

1989 to Present: **Kennedy and Associates: Director of Consulting, Consultant** - Responsible for consulting assignments in revenue requirements, rate design, cost of capital, economic analysis of generation alternatives, electric and gas industry restructuring/competition and water utility issues.

1982 to 1989: **New Mexico Public Service Commission Staff: Utility Economist** - Responsible for preparation of analysis and expert testimony in the areas of rate of return, cost allocation, rate design, finance, phase-in of electric generating plants, and sale/leaseback transactions.

CLIENTS SERVED

Regulatory Commissions

Louisiana Public Service Commission
Georgia Public Service Commission
New Mexico Public Service Commission

Other Clients and Client Groups

Ad Hoc Committee for a Competitive Electric Supply System
Air Products and Chemicals, Inc.
Arkansas Electric Energy Consumers
Arkansas Gas Consumers
AK Steel
Armco Steel Company, L.P.
Aqua Large Users Group
Assn. of Business Advocating Tariff Equity
Atmos Cities Steering Committee
Canadian Federation of Independent Businesses
CF&I Steel, L.P.
Cities of Midland, McAllen, and Colorado City
Cities Served by Texas-New Mexico Power Co.
Cities Served by AEP Texas
City of New York
Climax Molybdenum Company
Connecticut Industrial Energy Consumers
Crescent City Power Users Group
Cripple Creek & Victor Gold Mining Co.
Dearborn Industrial Generation, LLC
General Electric Company
Holcim (U.S.) Inc.
IBM Corporation
Industrial Energy Consumers
Kentucky Industrial Utility Consumers
Kentucky Office of the Attorney General
Lexington-Fayette Urban County Government
Large Electric Consumers Organization
Newport Steel
North Carolina Attorney General's Office
Northwest Arkansas Gas Consumers
Maryland Energy Group
Occidental Chemical
Peoples Industrial Intervenors
PSI Industrial Group
Large Power Intervenors (Minnesota)
Tyson Foods
West Virginia Energy Users Group
The Commercial Group
Wisconsin Industrial Energy Group
South Florida Hospital and Health Care Assn.
PP&L Industrial Customer Alliance
Philadelphia Area Industrial Energy Users Gp.
Philadelphia Large Users Group
West Penn Power Intervenors
Duquesne Industrial Intervenors
Met-Ed Industrial Users Gp.
Penelec Industrial Customer Alliance
Penn Power Users Group
Columbia Industrial Intervenors
U.S. Steel & Univ. of Pittsburg Medical Ctr.
Multiple Intervenors
Maine Office of Public Advocate
Missouri Office of Public Counsel
University of Massachusetts - Amherst
WCF Hospital Utility Alliance
West Travis County Public Utility Agency
Steering Committee of Cities Served by Oncor
Steering Committee of Cities Served by CoServ Gas, Ltd.
Utah Office of Consumer Services
Healthcare Council of the National Capital Area
Vermont Department of Public Service
South Carolina Office of Regulatory Staff
Texas Industrial Energy Consumers

Expert Testimony Appearances
of
Richard A. Baudino
As of March 2024

Date	Case	Jurisdict.	Party	Utility	Subject
10/83	1803, 1817	NM	New Mexico Public Service Commission	Southwestern Electric Coop.	Rate design.
11/84	1833	NM	New Mexico Public Service Commission Palo Verde	El Paso Electric Co.	Service contract approval, rate design, performance standards for nuclear generating system
1983	1835	NM	New Mexico Public Service Commission	Public Service Co. of NM	Rate design.
1984	1848	NM	New Mexico Public Service Commission	Sangre de Cristo Water Co.	Rate design.
02/85	1906	NM	New Mexico Public Service Commission	Southwestern Public Service Co.	Rate of return.
09/85	1907	NM	New Mexico Public Service Commission	Jornada Water Co.	Rate of return.
11/85	1957	NM	New Mexico Public Service Commission	Southwestern Public Service Co.	Rate of return.
04/86	2009	NM	New Mexico Public Service Commission	El Paso Electric Co.	Phase-in plan, treatment of sale/leaseback expense.
06/86	2032	NM	New Mexico Public Service Commission	El Paso Electric Co.	Sale/leaseback approval.
09/86	2033	NM	New Mexico Public Service Commission	El Paso Electric Co.	Order to show cause, PVNGS audit.
02/87	2074	NM	New Mexico Public Service Commission	El Paso Electric Co.	Diversification.
05/87	2089	NM	New Mexico Public Service Commission	El Paso Electric Co.	Fuel factor adjustment.
08/87	2092	NM	New Mexico Public Service Commission	El Paso Electric Co.	Rate design.
10/87	2146	NM	New Mexico Public Service Commission	Public Service Co. of New Mexico	Financial effects of restructuring, reorganization.
07/88	2162	NM	New Mexico Public Service Commission	El Paso Electric Co.	Revenue requirements, rate design, rate of return.

Expert Testimony Appearances
of
Richard A. Baudino
As of March 2024

Date	Case	Jurisdict.	Party	Utility	Subject
01/89	2194	NM	New Mexico Public Service Commission	Plains Electric G&T Cooperative	Economic development.
1/89	2253	NM	New Mexico Public Service Commission	Plains Electric G&T Cooperative	Financing.
08/89	2259	NM	New Mexico Public Service Commission	Homestead Water Co.	Rate of return, rate design.
10/89	2262	NM	New Mexico Public Service Commission	Public Service Co. of New Mexico	Rate of return.
09/89	2269	NM	New Mexico Public Service Commission	Ruidoso Natural Gas Co.	Rate of return, expense from affiliated interest.
12/89	89-208-TF	AR	Arkansas Electric Energy Consumers	Arkansas Power & Light Co.	Rider M-33.
01/90	U-17282	LA	Louisiana Public Service Commission	Gulf States Utilities	Cost of equity.
09/90	90-158	KY	Kentucky Industrial Utility Consumers	Louisville Gas & Electric Co.	Cost of equity.
09/90	90-004-U	AR	Northwest Arkansas Gas Consumers	Arkansas Western Gas Co.	Cost of equity, transportation rate.
12/90	U-17282 Phase IV	LA	Louisiana Public Service Commission	Gulf States Utilities	Cost of equity.
04/91	91-037-U	AR	Northwest Arkansas Gas Consumers	Arkansas Western Gas Co.	Transportation rates.
12/91	91-410-EL-AIR	OH	Air Products & Chemicals, Inc., Armco Steel Co., General Electric Co., Industrial Energy Consumers	Cincinnati Gas & Electric Co.	Cost of equity.
05/92	910890-EI	FL	Occidental Chemical Corp.	Florida Power Corp.	Cost of equity, rate of return.
09/92	92-032-U	AR	Arkansas Gas Consumers	Arkansas Louisiana Gas Co.	Cost of equity, rate of return, cost-of-service.
09/92	39314	ID	Industrial Consumers for Fair Utility Rates	Indiana Michigan Power Co.	Cost of equity, rate of return.

Expert Testimony Appearances
of
Richard A. Baudino
As of March 2024

Date	Case	Jurisdict.	Party	Utility	Subject
09/92	92-009-U	AR	Tyson Foods	General Waterworks	Cost allocation, rate design.
01/93	92-346	KY	Newport Steel Co.	Union Light, Heat & Power Co.	Cost allocation.
01/93	39498	IN	PSI Industrial Group	PSI Energy	Refund allocation.
01/93	U-10105	MI	Association of Businesses Advocating Tariff Equality (ABATE)	Michigan Consolidated Gas Co.	Return on equity.
04/93	92-1464-EL-AIR	OH	Air Products and Chemicals, Inc., Armco Steel Co., Industrial Energy Consumers	Cincinnati Gas & Electric Co.	Return on equity.
09/93	93-189-U	AR	Arkansas Gas Consumers	Arkansas Louisiana Gas Co.	Transportation service terms and conditions.
09/93	93-081-U	AR	Arkansas Gas Consumers	Arkansas Louisiana Gas Co.	Cost-of-service, transportation rates, rate supplements; return on equity; revenue requirements.
12/93	U-17735	LA	Louisiana Public Service Commission Staff	Cajun Electric Power Cooperative	Historical reviews; evaluation of economic studies.
03/94	10320	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric Co.	Trimble County CWIP revenue refund.
4/94	E-015/ GR-94-001	MN	Large Power Intervenors	Minnesota Power Co.	Evaluation of the cost of equity, capital structure, and rate of return.
5/94	R-00942993	PA	PG&W Industrial Intervenors	Pennsylvania Gas & Water Co.	Analysis of recovery of transition costs.
5/94	R-00943001	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania charge proposals.	Evaluation of cost allocation, rate design, rate plan, and carrying
7/94	R-00942986	PA	Armco, Inc., West Penn Power Industrial Intervenors	West Penn Power Co.	Return on equity and rate of return.
7/94	94-0035-E-42T	WV	West Virginia Energy Users' Group	Monongahela Power Co.	Return on equity and rate of return.

Expert Testimony Appearances
of
Richard A. Baudino
As of March 2024

Date	Case	Jurisdict.	Party	Utility	Subject
8/94	8652	MD	Westvaco Corp. Co.	Potomac Edison	Return on equity and rate of return.
9/94	930357-C	AR	West Central Arkansas Gas Consumers	Arkansas Oklahoma Gas Corp.	Evaluation of transportation service.
9/94	U-19904	LA	Louisiana Public Service Commission	Gulf States Utilities	Return on equity.
9/94	8629	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.	Transition costs.
11/94	94-175-U	AR	Arkansas Gas Consumers	Arkla, Inc.	Cost-of-service, rate design, rate of return.
3/95	RP94-343-000	FERC	Arkansas Gas Consumers	NorAm Gas Transmission	Rate of return.
4/95	R-00943271	PA	PP&L Industrial Customer Alliance	Pennsylvania Power & Light Co.	Return on equity.
6/95	U-10755	MI	Association of Businesses Advocating Tariff Equity	Consumers Power Co.	Revenue requirements.
7/95	8697	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.	Cost allocation and rate design.
8/95	95-254-TF U-2811	AR	Tyson Foods, Inc.	Southwest Arkansas Electric Cooperative	Refund allocation.
10/95	ER95-1042 -000	FERC	Louisiana Public Service Commission	Systems Energy Resources, Inc.	Return on Equity.
11/95	I-940032	PA	Industrial Energy Consumers of Pennsylvania	State-wide - all utilities	Investigation into Electric Power Competition.
5/96	96-030-U	AR	Northwest Arkansas Gas Consumers	Arkansas Western Gas Co.	Revenue requirements, rate of return and cost of service.
7/96	8725	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.,Potomac Electric Power Co. and Constellation Energy Corp.	Return on Equity.
7/96	U-21496	LA	Louisiana Public Service Commission	Central Louisiana Electric Co.	Return on equity, rate of return.
9/96	U-22092	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity.

Expert Testimony Appearances
of
Richard A. Baudino
As of March 2024

Date	Case	Jurisdict.	Party	Utility	Subject
1/97	RP96-199-000	FERC	The Industrial Gas Users Conference	Mississippi River Transmission Corp.	Revenue requirements, rate of return and cost of service.
3/97	96-420-U	AR	West Central Arkansas Gas Corp.	Arkansas Oklahoma Gas Corp.	Revenue requirements, rate of return, cost of service and rate design.
7/97	U-11220	MI	Association of Business Advocating Tariff Equity	Michigan Gas Co. and Southeastern Michigan Gas Co.	Transportation Balancing Provisions.
7/97	R-00973944	PA	Pennsylvania American Water Large Users Group	Pennsylvania-American Water Co.	Rate of return, cost of service, revenue requirements.
3/98	8390-U	GA	Georgia Natural Gas Group and the Georgia Textile Manufacturers Assoc.	Atlanta Gas Light	Rate of return, restructuring issues, unbundling, rate design issues.
7/98	R-00984280	PA	PG Energy, Inc. Intervenors	PGE Industrial	Cost allocation.
8/98	U-17735	LA	Louisiana Public Service Commission	Cajun Electric Power Cooperative	Revenue requirements.
10/98	97-596	ME	Maine Office of the Public Advocate	Bangor Hydro-Electric Co.	Return on equity, rate of return.
10/98	U-23327	LA	Louisiana Public Service Commission	SWEPCO, CSW and AEP	Analysis of proposed merger.
12/98	98-577	ME	Maine Office of the Public Advocate	Maine Public Service Co.	Return on equity, rate of return.
12/98	U-23358	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity, rate of return.
3/99	98-426	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas and Electric Co	Return on equity.
3/99	99-082	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Utilities Co.	Return on equity.
4/99	R-984554	PA	T. W. Phillips Users Group	T. W. Phillips Gas and Oil Co.	Allocation of purchased gas costs.
6/99	R-0099462	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania	Balancing charges.
10/99	U-24182	LA	Louisiana Public Service Commission	Entergy Gulf States,Inc.	Cost of debt.

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10/99	R-00994782	PA	Peoples Industrial Intervenors	Peoples Natural Gas Co.	Restructuring issues.
10/99	R-00994781	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania	Restructuring, balancing charges, rate flexing, alternate fuel.
01/00	R-00994786	PA	UGI Industrial Intervenors	UGI Utilities, Inc.	Universal service costs, balancing, penalty charges, capacity Assignment.
01/00	8829	MD	Maryland Industrial Gr.	Baltimore Gas & Electric Co.	Revenue requirements, cost allocation, rate design.
02/00	R-00994788	PA	Penn Fuel Transportation	PFG Gas, Inc., and	Tariff charges, balancing provisions.
05/00	U-17735	LA	Louisiana Public Service Comm.	Louisiana Electric Cooperative	Rate restructuring.
07/00	2000-080	KY	Kentucky Industrial Utility Consumers	Louisville Gas and Electric Co.	Cost allocation.
07/00	U-21453 U-20925 (SC), U-22092 (SC) (Subdocket E)	LA	Louisiana Public Service Commission	Southwestern Electric Power Co.	Stranded cost analysis.
09/00	R-00005654	PA	Philadelphia Industrial And Commercial Gas Users Group.	Philadelphia Gas Works	Interim relief analysis.
10/00	U-21453 U-20925 (SC), U-22092 (SC) (Subdocket B)	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Restructuring, Business Separation Plan.
11/00	R-00005277 (Rebuttal)	PA	Penn Fuel Transportation Customers	PFG Gas, Inc. and North Penn Gas Co.	Cost allocation issues.
12/00	U-24993	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity.
03/01	U-22092	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Stranded cost analysis.
04/01	U-21453 U-20925 (SC), U-22092 (SC) (Subdocket B) (Addressing Contested Issues)	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Restructuring issues.

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04/01	R-00006042	PA	Philadelphia Industrial and Commercial Gas Users Group	Philadelphia Gas Works	Revenue requirements, cost allocation and tariff issues.
11/01	U-25687	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity.
03/02	14311-U	GA	Georgia Public Service Commission	Atlanta Gas Light	Capital structure.
08/02	2002-00145	KY	Kentucky Industrial Utility Customers	Columbia Gas of Kentucky	Revenue requirements.
09/02	M-00021612	PA	Philadelphia Industrial And Commercial Gas Users Group	Philadelphia Gas Works	Transportation rates, terms, and conditions.
01/03	2002-00169	KY	Kentucky Industrial Utility Customers	Kentucky Power	Return on equity.
02/03	02S-594E	CO	Cripple Creek & Victor Gold Mining Company	Aquila Networks – WPC	Return on equity.
04/03	U-26527	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity.
10/03	CV020495AB	GA	The Landings Assn., Inc.	Utilities Inc. of GA	Revenue requirement & overcharge refund
03/04	2003-00433	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric	Return on equity, Cost allocation & rate design
03/04	2003-00434	KY	Kentucky Industrial Utility Customers	Kentucky Utilities	Return on equity
4/04	04S-035E	CO	Cripple Creek & Victor Gold Mining Company, Goodrich Corp., Holcim (U.S.) Inc., and The Trane Co.	Aquila Networks – WPC	Return on equity.
9/04	U-23327, Subdocket B	LA	Louisiana Public Service Commission	Southwestern Electric Power Company	Fuel cost review
10/04	U-23327 Subdocket A	LA	Louisiana Public Service Commission	Southwestern Electric Power Company	Return on Equity
06/05	050045-EI	FL	South Florida Hospital and Health Care Assoc.	Florida Power & Light Co.	Return on equity
08/05	9036	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.	Revenue requirement, cost allocation, rate design, Tariff issues.
01/06	2005-0034	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Co.	Return on equity.

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03/06	05-1278-E-PC-PW-42T	WV	West Virginia Energy Users Group	Appalachian Power Company	Return on equity.
04/06	U-25116 Commission	LA	Louisiana Public Service	Entergy Louisiana, LLC	Transmission Issues
07/06	U-23327 Commission	LA	Louisiana Public Service	Southwestern Electric Power Company	Return on equity, Service quality
08/06	ER-2006-0314	MO	Missouri Office of the Public Counsel	Kansas City Power & Light Co.	Return on equity, Weighted cost of capital
08/06	06S-234EG	CO	CF&I Steel, L.P. & Climax Molybdenum	Public Service Company of Colorado	Return on equity, Weighted cost of capital
01/07	06-0960-E-42T	WV	West Virginia Energy Users Group	Monongahela Power & Potomac Edison	Return on Equity
01/07	43112	AK	AK Steel, Inc.	Vectren South, Inc.	Cost allocation, rate design
05/07	2006-661	ME	Maine Office of the Public Advocate	Bangor Hydro-Electric	Return on equity, weighted cost of capital.
09/07	07-07-01	CT	Connecticut Industrial Energy Consumers	Connecticut Light & Power	Return on equity, weighted cost of capital
10/07	05-UR-103	WI	Wisconsin Industrial Energy Group, Inc.	Wisconsin Electric Power Co.	Return on equity
11/07	29797	LA	Louisiana Public Service Commission	Cleco Power :LLC & Southwestern Electric Power	Lignite Pricing, support of settlement
01/08	07-551-EL-AIR	OH	Ohio Energy Group	Ohio Edison, Cleveland Electric, Toledo Edison	Return on equity
03/08	07-0585, 07-0585, 07-0587, 07-0588, 07-0589, 07-0590, (consol.)	IL	The Commercial Group	Ameren	Cost allocation, rate design
04/08	07-0566	IL	The Commercial Group	Commonwealth Edison	Cost allocation, rate design
06/08	R-2008-2011621	PA	Columbia Industrial Intervenors	Columbia Gas of PA	Cost and revenue allocation, Tariff issues

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07/08	R-2008-2028394	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy	Cost and revenue allocation, Tariff issues
07/08	R-2008-2039634	PA	PPL Gas Large Users Group	PPL Gas	Retainage, LUFG Pct.
08/08	6680-UR-116	WI	Wisconsin Industrial Energy Group	Wisconsin P&L	Cost of Equity
08/08	6690-UR-119	WI	Wisconsin Industrial Energy Group	Wisconsin PS	Cost of Equity
09/08	ER-2008-0318	MO	The Commercial Group	AmerenUE	Cost and revenue allocation
10/08	R-2008-2029325	PA	U.S. Steel & Univ. of Pittsburgh Med. Ctr.	Equitable Gas Co.	Cost and revenue allocation
10/08	08-G-0609	NY	Multiple Intervenors	Niagara Mohawk Power	Cost and Revenue allocation
12/08	27800-U	GA	Georgia Public Service Commission	Georgia Power Company	CWIP/AFUDC issues, Review financial projections
03/09	ER08-1056	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Capital Structure
04/09	E002/GR-08-1065	MN	The Commercial Group	Northern States Power	Cost and revenue allocation and rate design
05/09	08-0532	IL	The Commercial Group	Commonwealth Edison	Cost and revenue allocation
07/09	080677-EI	FL	South Florida Hospital and Health Care Association	Florida Power & Light	Cost of equity, capital structure, Cost of short-term debt
07/09	U-30975	LA	Louisiana Public Service Commission	Cleco LLC, Southwestern Public Service Co.	Lignite mine purchase
10/09	4220-UR-116	WI	Wisconsin Industrial Energy Group	Northern States Power	Class cost of service, rate design
10/09	M-2009-2123945	PA	PP&L Industrial Customer Alliance	PPL Electric Utilities	Smart Meter Plan cost allocation
10/09	M-2009-2123944	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy Company	Smart Meter Plan cost allocation
10/09	M-2009-2123951	PA	West Penn Power Industrial Intervenors	West Penn Power	Smart Meter Plan cost allocation
11/09	M-2009-2123948	PA	Duquesne Industrial Intervenors	Duquesne Light Company	Smart Meter Plan cost allocation

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11/09	M-2009-2123950	PA	Met-Ed Industrial Users Group Penelec Industrial Customer Alliance, Penn Power Users Group	Metropolitan Edison, Pennsylvania Electric Co., Pennsylvania Power Co.	Smart Meter Plan cost allocation
03/10	09-1352-E-42T	WV	West Virginia Energy Users Group	Monongahela Power	Return on equity, rate of return Potomac Edison
03/10	E015/GR-09-1151	MN	Large Power Intervenors	Minnesota Power	Return on equity, rate of return
04/10	2009-00459	KY	Kentucky Industrial Utility Consumers	Kentucky Power	Return on equity
04/10	2009-00548 2009-00549	KY	Kentucky Industrial Utility Consumers	Louisville Gas and Electric, Kentucky Utilities	Return on equity.
05/10	10-0261-E-GI	WV	West Virginia Energy Users Group	Appalachian Power Co./ Wheeling Power Co.	EE/DR Cost Recovery, Allocation, & Rate Design
05/10	R-2009-2149262	PA	Columbia Industrial Intervenors	Columbia Gas of PA	Class cost of service & cost allocation
06/10	2010-00036	KY	Lexington-Fayette Urban County Government	Kentucky American Water Company	Return on equity, rate of return, revenue requirements
06/10	R-2010-2161694	PA	PP&L Industrial Customer Alliance	PPL Electric Utilities	Rate design, cost allocation
07/10	R-2010-2161575	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy Co.	Return on equity
07/10	R-2010-2161592	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy Co.	Cost and revenue allocation
07/10	9230	MD	Maryland Energy Group	Baltimore Gas and Electric	Electric and gas cost and revenue allocation; return on equity
09/10	10-70	MA	University of Massachusetts-Amherst	Western Massachusetts Electric Co.	Cost allocation and rate design
10/10	R-2010-2179522	PA	Duquesne Industrial Intervenors	Duquesne Light Company	Cost and revenue allocation, rate design
11/10	P-2010-2158084	PA	West Penn Power Industrial Intervenors	West Penn Power Co.	Transmission rate design
11/10	10-0699-E-42T	WV	West Virginia Energy Users Group	Appalachian Power Co. & Wheeling Power Co.	Return on equity, rate of Return
11/10	10-0467	IL	The Commercial Group	Commonwealth Edison	Cost and revenue allocation and rate design

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04/11	R-2010-2214415	PA	Central Pen Gas Large Users Group	UGI Central Penn Gas, Inc.	Tariff issues, revenue allocation
07/11	R-2011-2239263	PA	Philadelphia Area Energy Users Group	PECO Energy	Retainage rate
08/11	R-2011-2232243	PA	AK Steel	Pennsylvania-American Water Company	Rate Design
08/11	11AL-151G	CO	Climax Molybdenum	PS of Colorado	Cost allocation
09/11	11-G-0280	NY	Multiple Intervenors	Corning Natural Gas Co.	Cost and revenue allocation
10/11	4220-UR-117	WI	Wisconsin Industrial Energy Group	Northern States Power	Cost and revenue allocation, rate design
02/12	11AL-947E	CO	Climax Molybdenum, CF&I Steel	Public Service Company of Colorado	Return on equity, weighted cost of capital
07/12	120015-EI	FL	South Florida Hospitals and Health Care Association	Florida Power and Light Co,	Return on equity, weighted cost of capital
07/12	12-0613-E-PC	WV	West Virginia Energy Users Group	American Electric Power/APCo	Special rate proposal for Century Aluminum
07/12	R-2012-2290597	PA	PP&L Industrial Customer Alliance	PPL Electric Utilities Corp.	Cost allocation
09/12	05-UR-106	WI	Wisconsin Industrial Energy Group	Wisconsin Electric Power Co.	Class cost of service, cost and revenue allocation, rate design
09/12	2012-00221 2012-00222	KY	Kentucky Industrial Utility Consumers	Louisville Gas and Electric, Kentucky Utilities	Return on equity.
10/12	9299	MD	Maryland Energy Group	Baltimore Gas & Electric	Cost and revenue allocation, rate design Cost of equity, weighted cost of capital
10/12	4220-UR-118	WI	Wisconsin Industrial Energy Group	Northern States Power Company	Class cost of service, cost and revenue allocation, rate design
10/12	473-13-0199	TX	Steering Committee of Cities Served by Oncor	Cross Texas Transmission, LLC	Return on equity, capital structure
01/13	R-2012-2321748 et al.	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania	Cost and revenue allocation
02/13	12AL-1052E	CO	Cripple Creek & Victor Gold Mining, Holcim (US) Inc.	Black Hills/Colorado Electric Utility Company	Cost and revenue allocations
06/13	8009	VT	IBM Corporation	Vermont Gas Systems	Cost and revenue allocation, rate design
07/13	130040-EI	FL	WCF Hospital Utility Alliance	Tampa Electric Co.	Return on equity, rate of return

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08/13	9326	MD	Maryland Energy Group	Baltimore Gas and Electric	Cost and revenue allocation, rate design, special rider
08/13	P-2012-2325034	PA	PP&L Industrial Customer Alliance	PPL Electric Utilities, Corp.	Distribution System Improvement Charge
09/13	4220-UR-119	WI	Wisconsin Industrial Energy Group	Northern States Power Co.	Class cost of service, cost and revenue allocation, rate design
11/13	13-1325-E-PC	WV	West Virginia Energy Users Group	American Electric Power/APCo	Special rate proposal, Felman Production
06/14	R-2014-2406274	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania	Cost and revenue allocation, rate design
08/14	05-UR-107	WI	Wisconsin Industrial Energy Group	Wisconsin Electric Power Co.	Cost and revenue allocation, rate design
10/14	ER13-1508 et al.	FERC	Louisiana Public Service Comm.	Entergy Services, Inc.	Return on equity
11/14	14AL-0660E	CO	Climax Molybdenum Co. and CFI Steel, LP	Public Service Co. of Colorado	Return on equity, weighted cost of capital
11/14	R-2014-2428742	PA	AK Steel	West Penn Power Company	Cost and revenue allocation
12/14	42866	TX	West Travis Co. Public Utility Agency	Travis County Municipal Utility District No. 12	Response to complain of monopoly power
3/15	2014-00371 2014-00372	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric, Kentucky Utilities	Return on equity, cost of debt, weighted cost of capital
3/15	2014-00396	KY	Kentucky Industrial Utility Customers	Kentucky Power Co.	Return on equity, weighted cost of capital
6/15	15-0003-G-42T	WV	West Virginia Energy Users Gp.	Mountaineer Gas Co.	Cost and revenue allocation, Infrastructure Replacement Program
9/15	15-0676-W-42T	WV	West Virginia Energy Users Gp.	West Virginia-American Water Company	Appropriate test year, Historical vs. Future
9/15	15-1256-G-390P	WV	West Virginia Energy Users Gp.	Mountaineer Gas Co.	Rate design for Infrastructure Replacement and Expansion Program
10/15	4220-UR-121	WI	Wisconsin Industrial Energy Gp.	Northern States Power Co.	Class cost of service, cost and revenue allocation, rate design
12/15	15-1600-G-390P	WV	West Virginia Energy Users Gp.	Dominion Hope	Rate design and allocation for Pipeline Replacement & Expansion Prog.

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12/15	45188	TX	Steering Committee of Cities Served by Oncor	Oncor Electric Delivery Co.	Ring-fence protections for cost of capital
2/16	9406	MD	Maryland Energy Group	Baltimore Gas & Electric	Cost and revenue allocation, rate design, proposed Rider 5
3/16	39971	GA	GA Public Service Comm. Staff	Southern Company / AGL Resources	Credit quality and service quality issues
04/16	2015-00343	KY	Kentucky Office of the Attorney General	Atmos Energy	Cost of equity, cost of short-term debt, capital structure
05/16	16-G-0058 16-G-0059	NY	City of New York	Brooklyn Union Gas Co., KeySpan Gas East Corp.	Cost and revenue allocation, rate design, service quality issues
06/16	16-0073-E-C	WV	Constellium Rolled Products Ravenswood, LLC	Appalachian Power Co.	Complaint; security deposit
07/16	9418	MD	Healthcare Council of the National Capital Area	Potomac Electric Power Co.	Cost of equity, cost of service, Cost and revenue allocation
07/16	160021-EI	FL	South Florida Hospital and Health Care Association	Florida Power and Light Co.	Return on equity, cost of debt, capital structure
07/16	16-057-01	UT	Utah Office of Consumer Svcs.	Dominion Resources, Questar Gas Co.	Credit quality and service quality issues
08/16	8710	VT	Vermont Dept. of Public Service	Vermont Gas Systems	Return on equity, cost of debt, cost of capital
08/16	R-2016-2537359	PA	AK Steel Corp.	West Penn Power Co.	Cost and revenue allocation
09/16	2016-00162	KY	Kentucky Office of the Attorney General	Columbia Gas of Ky.	Return on equity, cost of short-term debt
09/16	16-0550-W-P	WV	West Va. Energy Users Gp.	West Va. American Water Co.	Infrastructure Replacement Program Surcharge
01/17	46238	TX	Steering Committee of Cities Served by Oncor	Oncor Electric Delivery Co.	Ring fencing and other conditions for acquisition, service quality and reliability
02/17	45414	TX	Cities of Midland, McAllen, and Colorado City	Sharyland Utilities, LP and Sharyland Dist. and Transmission Services, LLC	Return on equity
02/17	2016-00370 2016-00371	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric, Kentucky Utilities	Return on equity, cost of debt, weighted cost of capital
03/17	10580	TX	Atmos Cities Steering Committee	Atmos Pipeline Texas	Return on equity, capital structure, weighted cost of capital

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03/17	R-3867-2013	Quebec, Canada	Canadian Federation of Independent Businesses	Gaz Metro	Marginal Cost of Service Study
05/17	R-2017-2586783	PA	Philadelphia Industrial and Commercial Gas Users Gp.	Philadelphia Gas Works	Cost and revenue allocation, rate design, Interruptible tariffs
08/17	R-2017-2595853	PA	AK Steel	Pennsylvania American Water Co.	Cost and revenue allocation, rate design
8/17	17-3112-INV	VT	Vt. Dept. of Pubic Service	Green Mountain Power	Return on equity, cost of debt, weighted cost of capital
9/17	4220-UR-123	WI	Wisconsin Industrial Energy Group	Northern States Power	Cost and revenue allocation, rate design
10/17	2017-00179	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Co.	Return on equity, cost of short-term debt
12/17	2017-00321	KY	Office of the Attorney General	Duke Energy Kentucky, Inc.	Return on equity
1/18	2017-00349	KY	Office of the Attorney General	Atmos Energy	Return on equity, cost of debt, weighted cost of capital
5/18	Fiscal Years 2019-2021 Rates	PA	Philadelphia Large Users Group	Philadelphia Water Department	Cost and revenue allocation
8/18	18-0974-TF	VT	Vt. Dept. of Public Service	Green Mountain Power	Return on equity, cost of debt, weighted cost of capital
8/18	48401	TX	Cities Served by Texas-New Mexico Power Company	Texas-New Mexico Power Co.	Return on equity, capital structure
8/18	18-05-16	CT	Connecticut Industrial Energy Consumers	Connecticut Natural Gas Co.	Cost and revenue allocation
9/18	9484	MD	Maryland Energy Group	Baltimore Gas & Electric	Cost and revenue allocation, rate design
9/18	2017-370-E	SC	South Carolina Office of Regulatory Staff	South Carolina Electric & Gas, Dominion Resources, SCANA	Return on equity, service quality standards, credit quality conditions
10/18	18-1115-G-390P	WV	West Va. Energy Users Group	Mountaineer Gas Company	Customer protections for Infrastructure Replacement and Expansion Program
12/18	R-2018-3003558, R-2018-3003561	PA	Aqua Large Users Group	Aqua Pennsylvania, Inc.	Cost and revenue allocation
02/19	UD-18-07	CCNO	Crescent City Power Users' Gp.	Entergy New Orleans, LLC	Return on equity, Reliability Incentive Mechanism, other proposed riders
03/19	2018-00358	KY	Office of the Attorney General	Kentucky American Water Co.	Return on equity, Qualified Infrastructure Program rider

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05/19	19-E-0065 19-G-0066	NY	City of New York	Consolidated Edison Co.	Cost and revenue allocation, rate design, tariff issues, fast-charging station incentives
05/2019	19-0513-TF	VT	Vt. Dept. of Public Service	Vermont Gas Systems	Return on equity, capital structure
06/2019	5-TG-100	WI	Wisconsin Industrial Energy Group	WEPCO, Wisconsin Gas, Wisconsin PS	Transportation and balancing issues
07/2019	49494	TX	Cities Served by AEP Texas	AEP Texas, Inc.	Return on equity, capital structure
08/2019	19-G-0309 19-G-0310	NY	City of New York	Brooklyn Union Gas Co.., KeySpan Gas East Corp.	Cost and revenue allocation, rate design, tariff issues and modifications
08/2019	19-0316-G-42T	WV	West Virginia Energy Users Gp.	Mountaineer Gas Company	Cost and revenue allocation
8/2019	5-UR-109	WI	Wisconsin Industrial Energy Gp.	Wisconsin Electric Power Co., Wisconsin Gas, LLC	Cost Allocation, Class cost of service study
8/2019	6690-UR-126	WI	Wisconsin Industrial Energy Gp.	Wisconsin Public Service Corp.	Cost Allocation, Class cost of service study
9/2019	9610	MD	Maryland Energy Group	Baltimore Gas and Electric Co.	Cost and revenue allocation, rate design
12/2019	2019-00271	KY	Office of the Attorney General	Duke Energy Kentucky, Inc.	Return on equity
2/2020	49831	TX	Texas Industrial Energy Consumers	Southwestern Public Service Co.	Return on equity, capital structure, rate of return
2/2020	E-7. Sub 1214	NC	NC Attorney General's Office	Duke Energy Carolinas	Return on equity, capital structure, rate of return, economic conditions
2/2020	E-2. Sub 1219	NC	NC Attorney General's Office	Duke Energy Progress	Return on equity, capital structure, rate of return, economic conditions
5/2020	R-2019- 3015162	PA	Industrial Energy Consumers of Pennsylvania	UGI Utilities, Inc.	Return on equity, cost of debt, revenue allocation, rate design
6/2020	20-G-0101	NY	Multiple Intervenors	Corning Natural Gas Corp.	Cost and revenue allocation
9/2020	R-2020- 2019369	PA	AK Steel	Pennsylvania-American Water Company	Cost and revenue allocation, rate design
9/2020	20-035-04	UT	The Kroger Co.	Rocky Mountain Power	Cost and revenue allocation, rate design
10/2020	2020-00174	KY	Ky. Office of the Attorney General, Ky. Industrial Utility Customers	Kentucky Power Co.	Return on equity
3/2021	2020-00349	KY	Ky. Office of the Attorney General, Ky. Industrial Utility Customers	Kentucky Utilities Co.	Return on equity

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3/2021	2020-00350	KY	Ky. Office of the Attorney General, Ky. Industrial Utility Customers	Louisville Gas and Electric Co.	Return on equity
3/2021	20-0746-G-42T	WV	West Va. Energy Users Group	Dominion Energy West Va.	Cost and revenue allocation, cost of equity
4/2021	17-12-03RE11	CT	Connecticut Industrial Energy Consumers	PURA Investigation Into Distribution System Planning	Economic development rates
6/2021	U-20940	MI	Dearborn Industrial Generation, LLC	DTE Gas Company	Cost and revenue allocation, rate design
7/2021	21-0043-G-PC	WV	West Va. Energy Users Group	Mountaineer Gas Co., UGI Corporation	Hold harmless conditions for utility acquisition
07/2021	U-35441	LA	Louisiana Public Service Commission	Southwestern Electric Power Company	Return on equity, cost of capital, service quality
08/2021	51802	TX	Texas Industrial Energy Consumers	Southwestern Public Service Company	Return on equity
09/21	2021-00190	KY	Kentucky Office of the Attorney General	Duke Energy Kentucky, Inc.	Return on equity, cost of debt
09/21	2021-00183	KY	Kentucky Office of the Attorney General	Columbia Gas of Kentucky, Inc.	Return on equity, cost of debt, capital structure
09/21	21-0369-W-42T	WV	West Va. Energy Users Group	West Virginia-American Water Company	Revenue stabilization mechanism
09/21	2021-00185	KY	Kentucky Office of the Attorney General	Delta Natural Gas Company, Inc.	Return on equity, cost of debt, capital structure
09/21	2021-00214	KY	Kentucky Office of the Attorney General	Atmos Energy Corporation	Return on equity, common equity ratio
11/21	R-2021-3027385, R-2021-3027386	PA	Aqua Large Users Group	Aqua Pennsylvania, Inc.	Cost and revenue allocation, Rate design
11/21	21-G-0394	NY	Multiple Intervenors	Corning Natural Gas Corp.	Cost and revenue allocation
06/22	21-G-0577	NY	Multiple Intervenors	Liberty Utilities (St. Lawrence Gas) Corp.	Cost of revenue allocation, rate design
07/22	2022-89-G	SC	South Carolina Office of Regulatory Staff	Piedmont Natural Gas Co.	Return on equity, capital structure cost of capital
07/22	R-2022-3031672, R-2022-3031673	PA	Cleveland-Cliffs Steel	Pennsylvania American Water Company	Cost and revenue allocation, rate design

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10/22	2022-00147	KY	Kentucky Office of the Attorney General and the City of Clinton	Water Service Corporation of Kentucky	Cost of equity
12/22	2022-254-E	SC	South Carolina Office of Regulatory Staff	Duke Energy Progress	Cost of equity
12/22	22-08-08	CT	Connecticut Industrial Energy Consumers	United Illuminating Co.	Cost and revenue allocation, rate design, economic development rates
03/23	2022-00372	KY	Kentucky Office of the Attorney General	Duke Energy Kentucky, Inc.	Cost of equity, capital structure, weighted cost of capital
08/23	23-0280-G-42-T	WV	West Va. Energy Users Group	Mountaineer Gas Co.	Cost and revenue allocation, Rate design
09/23	6680-UR-124	WI	Wisconsin Industrial Energy Group	Wisconsin Power and Light Co.	Cost and revenue allocation, rate design
09/23	6690-UR-127	WI	Wisconsin Industrial Energy Group	Wisconsin Public Service Corp.	Revenue allocation, rate design
09/23	5-UR-110	WI	Wisconsin Industrial Energy Group	Wisconsin Electric Power Co.	Cost and revenue allocation, rate design
09/23	2023-00191	KY	Kentucky Office of the Attorney General	Kentucky-American Water Co.	Return on equity, capital structure, and weighted cost of capital
10/23	2023-00159	KY	Ky. Office of the Attorney General, Kentucky Industrial Utility Customers	Kentucky Power Co.	Return on equity
11/23	23-0460-E-42T	WV	West Virginia Energy Users Group	Monongahela Power Co. and The Potomac Edison Company	Return on equity, cost of capital
02/24	R-2023-3043189 C-2023-3044289 C-2023-3044375	PA	Cleveland-Cliffs Steel	Pennsylvania American Water Co.	Cost and revenue allocation, rate design, revenue decoupling rider
03/24	R-2023-3044549	PA	Peoples Industrial Intervenors	Peoples Natural Gas Company	Cost and revenue allocation, rate design

PII Recommended Allocation of LGS-Mainline CCOSS Shortfall and Proposed Revenues

Rate Class	Revenues @ Current Rates	Mean CCOSS Rev. Req.	Pct. Of CCOSS Excluding LGS-Mainline	Allocation of LGS-Mainline Shortfall	PII Proposed Revenue
RES-Base Rates	$347,866,631	$480,120,731	72.5%	$6,963,482	$487,084,213
SGS-Base Rates	$43,991,391	$63,851,590	9.6%	$926,078	$64,777,668
MGS-Base Rates	$57,024,004	$75,460,242	11.4%	$1,094,446	$76,554,687
LGS-Base Rates	$48,982,267	$42,567,964	6.4%	$617,389	$43,185,353
LGS-MAINLINE-Base Rates	$6,996,935	$16,598,330			$6,996,935
Total	$504,861,227	$678,598,857	100.0%	$9,601,395	$678,598,857

Peoples Industrial Intervenors Statement No. 1-R
Witness: Richard A. Baudino

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	**:**	
	:	
V.	**:**	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	**:**	

REBUTTAL TESTIMONY

OF

RICHARD A. BAUDINO

ON BEHALF OF

PEOPLES INDUSTRIAL INTERVENORS

J. KENNEDY AND ASSOCIATES, INC.

APRIL 18, 2024

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
V.	:	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

REBUTTAL TESTIMONY OF RICHARD A. BAUDINO

Q. Please state your name and business address.

A. My name is Richard A. Baudino. My business address is J. Kennedy and Associates, Inc. ("Kennedy and Associates"), 570 Colonial Park Drive, Suite 305, Roswell, Georgia 30075.

Q. What is your occupation and by whom are you employed?

A. I am a consultant to Kennedy and Associates.

Q. Did you present Direct Testimony in this proceeding?

A. Yes. I presented Direct Testimony on behalf of Peoples Industrial Intervenors ("PII").

Q. What this the purpose of your Rebuttal Testimony?

A. The purpose of my Rebuttal Testimony is to respond to the Direct Testimony submitted by Mr. Clarence Johnson, witness for the Office of Consumer Advocate ("OCA"), Mr. Robert Knecht, witness for the Office of Small Business Advocate ("OSBA"), and Mr. Ethan Cline, witness for the Bureau of Investigation and Enforcement ("I&E"). The subjects I will address include cost and revenue allocation.

Response to Mr. Johnson

Q. Does Mr. Johnson recommend the Peak and Average approach to the classification and allocation of distribution mains for Peoples Natural Gas Company's ("Peoples" or "Company") Class Cost of Service Study?

A. Yes. Beginning on page 19 of his Direct Testimony Mr. Johnson explains why he recommends the Peak and Average method for classifying and allocating the cost of the Company's distribution mains in the Class Cost of Service Study ("CCOSS"). The main reasons he presented are as follows:

1. It is consistent with Pennsylvania Public Utility Commission ("Commission") precedent.
2. Peak demand and average demand together are a more comprehensive measure of demand than peak demand alone.
3. Due to economies of scale, the relationship between peak demand and main cost is not linear. Therefore, peak demand is not a direct measure of cost causation.
4. Peoples' current infrastructure spending is not driven by growth in peak demand, but by safety improvements and reduction in gas leakage.

Q. Regarding the first reason you listed, Mr. Johnson cited the Commission Order in R-2020-3018835 dated February 19, 2021. Please address whether this Order establishes a precedent for Peoples in this case.

A. On the advice of counsel, it is PII's position that the Order cited by Mr. Johnson, as well as by I&E witness Mr. Cline, does not necessarily establish a precedent for Peoples. In PII's view, the parties in this case may present arguments and evidence to the Commission regarding the appropriate CCOSS methodology, including the

Customer/Demand CCOSS upon which Mr. Zarumba and I rely. Notably, OSBA witness Mr. Knecht presented a thoughtful discussion of past Commission cases regarding gas distribution CCOSS methodologies and presented his own Customer/Demand CCOSS for the Commission's consideration. I will address Mr. Knecht's CCOSS later in my Rebuttal Testimony. However, I believe that the preponderance of evidence in this case, including operational characteristics specific to Peoples' system, supports the Commission giving at least partial weight to the Customer/Demand CCOSS for Peoples.

Regarding the issue of Commission precedent, PII will address this subject in greater detail in its briefs.

Q. Please respond to the second point regarding Mr. Johnson's claim that peak demand and average demand together are a more comprehensive measure of demand.

A. The use of peak system demands, not average demands, is supported by the National Association of Regulatory Utility Commissioners Gas Distribution Rate Design Manual dated June 1989 ("NARUC Manual"). On pages 23 and 24, the NARUC Manual describes demand, or capacity costs as follows:

> "Demand or capacity costs vary with the quantity or size of plant and equipment. *They are related to maximum system requirements which the system is designed to serve during short intervals and do not directly vary with the number of customers or their annual usage.* Included in these costs are: the capital costs associated with production, transmission and storage plant and their related expenses; the demand cost of gas*; and most of the capital costs and expenses associated with that part of distribution plant not allocated to customer costs*, such as the costs associated with distribution mains in excess of the minimum size." (italics added)

Note that the description of demand costs stated that these costs do not vary with annual usage. In my opinion, this further supports using design day peak demands for the allocation of the demand-related portion of mains to customers. It does not support a 50% weighting of annual usage or throughput to allocate demand-related distribution costs.

Q. Please clarify what you mean when you refer to "design day peak demands." Are design day peak demands used in both the "Demand/Customer" and "Peak and Average" CCOSSs?

A. Yes. Design day peak demands are used to allocate demand-related main costs in both the Demand/Customer and Peak and Average CCOSSs that were presented by the Company in Mr. Zarumba's Direct Testimony and Exhibits. Mr. Zarumba explained that design day peak demand "directly measures the gas demand requirements of the Company's firm service customers, which create the need for the Company to acquire resources, build facilities, and incur millions of dollars in fixed costs on an ongoing basis."[1] Effectively, Demand/Customer CCOSS focuses on the design day peak demand used by the natural gas system, while the Peak and Average CCOSS contains the added component of the utility's average demand for purposes of allocating demand-related costs. I wanted to clarify this point for the Commission since the Demand/Customer nomenclature did not specifically state that it employed a design day peak demand allocation of demand-related main costs.

[1] Direct Testimony of Ralph Zarumba, page 20, lines 4 through 6.

Q. Does weighting average usage, or throughput, by 50% in the Peak and Average method have any analytical foundation?

A. No. The 50% weighting of peak and average demands has no analytical basis or support. It is an arbitrary weighting that incorrectly assumes that peak and average demand play an equal role in cost causation with respect to distribution mains. With substantial excess capacity in the non-winter months, it is obvious that gas distribution companies must invest in distribution mains to deliver gas to customers during peak winter periods. From the Company's perspective, Mr. Zarumba made it abundantly clear that average demands do not play a role in gas system design and planning. Mr. Zarumba stated the following on page 18, lines 13 through 16:

> "From a gas engineering perspective, a peak demand design criterion is always utilized when designing a gas distribution system to accommodate the gas demand requirements of the customers served by that system. As such, cost causation with respect to demand related costs is unrelated to average demand characteristics."

There is no evidence that gas distribution utilities size and build their systems to meet average demand and Mr. Zarumba made this clear on behalf of Peoples. If cost causation is unrelated to average demand from a utility company's perspective, then the Peak and Average approach to the CCOSS must be rejected because of the 50% weighting of average demand.

Q. Please respond to the third point regarding economies of scale.

A. Mr. Johnson merely demonstrated that economies of scale exist in the cost of distribution mains on page 22 of his Direct Testimony. However, economies of scale related to increasingly larger pipe sizes have no relevance with respect to how the *total cost* of distribution mains should be classified and allocated. Rather, it is the overarching importance of meeting peak winter demands of Peoples' customers and

connecting those customers to the distribution system that should be reflected in the Company's CCOSS, not average demands and/or throughput.

On page 23, lines 5 through 7 Mr. Johnson testified as follows:

> Average demand recognizes that a constant annual level of demand can be served at average cost. However, the incremental cost of serving peak demand above base demand is less than average cost due to economies of scale. Consequently, the inclusion of average demand in the method effectively reduces the weight given to peak demand.

Mr. Johnson accurately stated that including average demand in the Peak and Average method reduces the weight given to peak demand, and inappropriately so in my view. However, there is no basis for his statement that average demand recognizes that a constant level of demand can be served at average cost. Mr. Johnson presented no evidence that the Company plans and costs out its distribution system to serve "average demand" or that "average cost" has any relevance at all. Moreover, Mr. Johnson has not presented any calculations as to what the average cost is. As Mr. Zarumba stated, peak demand is always used to design Peoples' system, not average demand. It is for this reason that the Demand/Customer CCOSS Mr. Zarumba and I recommend is the superior measure of cost responsibility for Peoples' system. It does not use average demand, but it incorporates design day peak demand to allocate demand-related costs of mains to customers.

Q. Please respond to the fourth point you presented.

A. Peoples' ongoing investments in reducing system leaks and improving system safety do not justify allocating 50% of distribution mains on the basis of average demand or throughput. These types of investments are part of operating the gas system in a prudent manner. In fact, they are a part of Peoples' responsibility to deliver gas to its

customers during the system peak and are consistent with allocating the demand portion of the cost of mains on the basis of class contribution to system peak.

Q. Beginning on page 11, Mr. Johnson explains his views as to why the minimum system method is "flawed". Is the allocation of distribution main costs on a customer and demand basis consistent with the NARUC Manual?

A. Yes. The NARUC Manual discusses a number of methodologies and approaches to cost allocation. With respect to the allocation of distribution main costs, the NARUC Manual states that "[a] portion of the costs associated with the distribution system may be included as customer cost." (NARUC Manual at 22.) The NARUC Manual states further that, "[o]ne argument for inclusion of distribution related items in the customer cost classification is the zero or minimum size theory." (*Id.*) In the interest of completeness, the NARUC Manual also stated that the inclusion of such costs as customer costs "can be controversial." However, the minimum system and zero-intercept methods of classifying distribution main costs are included in the NARUC Manual, along with the Average and Peak method.

The Demand/Customer CCOSS employs a minimum size system method to classify the total costs of distribution mains into demand-related and customer-related costs. Mr. Zarumba provided a detailed explanation of this approach on pages 14 through 15 of his Direct Testimony and provided work papers supporting his minimum system analysis. He noted that the minimum system approach is supported by the NARUC Electric Utility Cost Allocation Manual and Gas Rate Fundamentals published by the American Gas Association. In conclusion, the minimum system approach is well supported in the regulatory literature as well as by the operational characteristics of Peoples' system.

Q. On page 13 of his Direct Testimony, Mr. Johnson cited Dr. Bonbright's critique of the minimum distribution system in support of his arguments against the Minimum System approach to allocate customer-based costs for the Demand/Customer CCOSS in this case. Please respond to this portion of Mr. Johnson's Direct Testimony.

A. First, the quote from Dr. Bonbright applies to electric distribution systems, not gas distribution mains. Second, the Commission has relied on the minimum system concept for certain electric distribution facilities contrary to Dr. Bonbright's opinion on the subject.

In his Direct Testimony in this case, Mr. Knecht cited to the Commission's Order in R-00049255 as an example of the Commission's reliance on a minimum size system study for certain electric system accounts for PPL Electric. I reviewed that Order as well as the Recommended Decision of the Administrative Law Judge in that docket. Pages 142 through 143 of Recommended Decision described PPL Electric's approach to its CCOSS and noted:

> "Secondary distribution system plant was separated into demand and customer components using a "minimum size system study," which determined the current cost of the "minimum size" distribution system necessary to provide reliable distribution service to customers. PPL Electric St. 5-R, p. 6; Ex. JMK3, p. 10. The cost of the minimum system is classified as customer-related, the remainder of secondary distribution costs is classified as demand related."

On page 144, the Administrative Law Judge concluded that "the Commission rely primarily on the Company's study for guidance."

Q. On page 17 of his Direct Testimony, Mr. Johnson stated that the Company classified 100% of service lines as customer related where a "symmetric treatment" to the Company's classification of mains would classify a portion of services as demand. Does this argument have merit?

A. No. Services are considered customer-related costs, not demand related regardless of the CCOSS approach for classifying mains. As Mr. Zarumba pointed out on pages 28 and 29 of his Direct Testimony, the Company conducted a special study for allocating the cost of services to customer classes based on the size of the customers. This study was provided by the Company in response to OCA-5-001g. Given that services costs are considered customer-related costs, it would not be appropriate to apply a minimum size study to service costs.

Q. What are your conclusions regarding Mr. Johnson's critique of the minimum size system approach and the Demand/Customer CCOSS?

A. Mr. Johnson's critique does not affect my support for the Demand/Customer CCOSS approach. My testimony supporting the Demand/Customer CCOSS, Mr. Zarumba's support for a Demand/Customer CCOSS in his Direct Testimony, and my responses to Mr. Johnson's critique provide ample support for the Commission's consideration of the Demand/Customer CCOSS in this case, even if it does not fully rely upon it for cost and revenue allocation. A Demand/Customer CCOSS approach and the minimum size system study are well supported by the NARUC Manual as acceptable approaches to cost allocations studies for gas distribution utilities.

Q. On page 25 of his Direct Testimony, Mr. Johnson recommended direct assignment of $1.339 million of customer service costs to customers in the MGS, LGS, and Mainline classes. Do you agree with this direct assignment?

A. No. OCA Interrogatory V-17 requested cost information for Company personnel who are "involved primarily in contacts with the Company's current or prospective large commercial or industrial customers." However, OCA has drawn inappropriate conclusions from the interrogatory response as it does not confirm whether the personnel identified in the response are solely committed to customers in the MGS, LGS, and Mainline classes or if they have other responsibilities as well. Without more detailed information about all of the duties of these personnel, I would not recommend direct assignment of the associated $1.339 million at this time.

Q. On page 27 of his Direct Testimony, Mr. Johnson provided a comparison of his proposed Peak and Average CCOSS with the one sponsored by Mr. Zarumba. Please comment on the results of Mr. Johnson's CCOSS.

A. The LGS tariff class still has the highest relative rate of return ("RROR") at current rates of 1.819. Even if the Commission adopted Mr. Johnson's CCOSS, which I do not support, the LGS tariff class should receive an increase significantly below the system average. The table on page 29 of Mr. Johnson's Direct Testimony shows full progress to cost-of-service would result in a rate increase of 8.1% for LGS tariff customers compared to the system average of 34.4%.

Q. Please address Mr. Johnson's proposed alternative revenue allocation that he presented on page 31 of his Direct Testimony.

A. Mr. Johnson's proposed alternative revenue allocation capped the increases for the SGS and MGS classes at 150% of the system average increase while applying a floor

percentage increase to LGS that is 50% of the system average increase (17.2%). I disagree with this proposed level of increase for LGS customers, as it is far too high based on the midpoint of results for the Demand/Customer and Peak and Average CCOSSs. It is far higher than even the Peak and Average CCOSS results indicate for Mr. Johnson's flawed study.

Q. Finally, should the Commission combine the increase for Mainline into the increase for LGS tariff customers?

A. No, definitely not. I addressed the unreasonableness of this proposal on page 15 of my Direct Testimony. If the Commission finds that it cannot assign Mr. Johnson's proposed increase to the Mainline customer class, it should allocate that increase to all other customers based on each class's proportionate share of the total cost of service as I recommended in my Direct Testimony.

Response to Mr. Knecht

Q. How did Mr. Knecht allocate the cost of mains in his alternative CCOSS?

A. Mr. Knecht used a modified Customer/Demand ("CD")[2] method that (a) did not segregate regulated pressure and low-pressure mains and (b) used a zero-intercept approach to classifying distribution mains as demand-related and customer-related.

Q. Should Mr. Knecht have segregated distribution mains into regulated and low-pressure mains as Peoples' CD CCOSS did?

A. Yes, most definitely. Mr. Knecht erroneously combined regulated and low-pressure distribution mains in his alternative CCOSS and allocated the total cost of mains to all classes. However, Peoples clearly stated in its response to OSBA-1-16 that it does not

[2] While I refer to the Company's first CCOSS as a "Demand/Customer" method, Mr. Knecht refers to the same model as the "Customer/Demand" method.

serve LGS customers by the low-pressure system. Mr. Zarumba made this very clear in his Direct Testimony as well.[3] What Mr. Knecht has done is allocate distribution mains costs to LGS customers for which they are not responsible and for which they should not pay in their rates.

Mr. Knecht questioned the Company's response to OSBA-1-16(e) and the number of customers taking service on the low-pressure system. However, this is no basis for allocating any of the low-pressure system to the LGS rate class, which has no customers on the low-pressure system. I strongly recommend that the Commission reject Mr. Knecht's unreasonable allocation of distribution mains. Mr. Knecht's erroneous allocation of distribution mains renders his recommended CD CCOSS unusable by the Commission for cost and revenue allocation.

Q. Did Mr. Knecht accept Mr. Zarumba's recommended demand allocator based on design day demands?

A. It is my understanding that Mr. Knecht agreed in concept with using design day demands. However, he disagreed with the design day demand for the LGS class and substituted his own demand numbers that are based on recent actual peak demands for LGS. Mr. Knecht explained his concerns with the LGS peak demand on page 36, lines 1 through 14 of his Direct Testimony. On page 39, line 21 of his Direct Testimony Mr. Knecht mentioned that he adjusted the Rate LGS design day demand level in his alternative CD CCOSS, which I will address below.

[3] Zarumba Direct Testimony, page 26, lines 5 through 23.

Q. Did Mr. Knecht provide an adequate explanation of how he adjusted the LGS design day demand?

A. No. My review of Mr. Knecht's testimony indicates that he presented no explanation of how he conducted his proposed LGS design day demand adjustment, the numbers he used to make the adjustment, and why the number he used more reasonably represents design day demand for the LGS class than the number used by Mr. Zarumba.

A detailed explanation of his LGS design day demand adjustment should have been included in Mr. Knecht's Direct Testimony so it could be properly examined and responded to by the parties in this case. In my view, it would be highly inappropriate for Mr. Knecht to offer a more detailed explanation of this adjustment in his Rebuttal or Surrebuttal Testimony, as the time would be very limited for other parties to analyze and respond to this adjustment. Moreover, Mr. Knecht did not give the Commission the requisite ground to adopt his adjustment. Given the lack of support for his adjustment, the Commission should reject his recommended LGS design day demand number.

Q. Did you examine Mr. Knecht's work papers in an attempt to ascertain the basis for his LGS design day demand number?

A. Yes. I examined Mr. Knecht's cost allocation workpapers. Based on my review, it appears that Mr. Knecht followed these steps in revising the LGS rate class design day demand:

1. Using annual peak data supplied by the Company in Exhibit No. 17, COS-10, Mr. Knecht averaged the two highest peak day requirements for LGS

customers shown on pages 2 through 4. The dates for these peak days were 12/23/2022 and 1/26/2022.

2. Mr. Knecht did not use LGS peak day data for 2/16/2021, which showed much lower volumes for LGS customers for the combined systems.

3. In calculating his alternative design day allocator, Mr. Knecht kept the overall total Company design day number of 1,386 MMcf.

4. Mr. Knecht then scaled up the LGS design day MMcf number based on his average of the two peak day requirements in 2022.

5. Mr. Knecht then scaled back the MMcf design day demand requirements for Residential, SGS, and MGS customers in order to maintain the total Company design day demand of 1,386 MMcf.

My review of Mr. Knecht's allocation factor work paper revealed that he actually *adjusted all of the design day demands for all of the classes*, not just the LGS class. His LGS design day demand did indeed increase, but all of the other class design day demands decreased in order to maintain the originally filed total Company design day demand. Rebuttal Table 1 provides a comparison of design day demands as filed by the Company and by Mr. Knecht.

Rebuttal Table 1
Design Day Comparison (MMcf)

	Peoples Design Day	Knecht Design Day
Residential	790	771
SGS	149	145
MGS	212	207
LGS	235	262
Total Combined System	1,386	1,386

Rebuttal Table 1 shows how Mr. Knecht adjusted all of the customer class design day demand in order to increase the LGS demand based on the two peak day requirement readings from Exhibit 17, COS 10. Mr. Knecht did not explain this in his Direct Testimony. The effect of this adjustment is to shift cost responsibility to the LGS class and away from the other rate classes.

Q. Did Mr. Knecht provide any analysis that supports reducing design day demands for the Residential, SGS, and MGS classes from the Company's calculations?

A. No. Mr. Knecht did not challenge the Company's design day demands for other rate classes in his Direct Testimony. In fact, Mr. Knecht testified:

> "The Company's method may serve to understate the contribution of more temperature-sensitive loads to design day demands, as the non-linear effects within January are not reflected in the method. However, I see no obvious way to recognize those effects without daily metered data by class. As such, I take no exception to the Company's analysis, pending clarification for the details of the averaging calculations." (underline added)

If I understand Mr. Knecht's testimony correctly, he stated that the Company's design day method may understate the contribution of temperature-sensitive loads. Such loads would include the Residential class, for example. However, Mr. Knecht's adjusted design day demands reduced the contribution of temperature-sensitive classes even more, with design day demand reductions to Residential, SGS, and MGS.

Mr. Knecht's adjusted class design day demand calculations are seriously flawed and without foundation or merit. The Commission should reject Mr. Knecht's proposed design day demand allocators for all customer classes.

Q. On page 33, lines 20 through 22 Mr. Knecht stated that he developed a zero-intercept classification approach for his recommended CCOSS. Please respond to Mr. Knecht's zero-intercept study.

A. The zero-intercept method is one of two methods commonly used to classify distribution mains into demand-related and customer-related portions of total costs. The minimum size method was used by Mr. Zarumba in his Demand/Customer CCOSS. In theory and in practice, I have no objection to a properly performed zero-intercept study. However, Mr. Knecht failed to provide a detailed description of how he performed his zero-intercept study. He merely referenced the work paper containing the data and calculations he employed. Without further explanation of how he performed his study, including framework for his analysis, the assumptions regarding his use of linear and quadratic calculations, his regression analysis, and the development of the distribution main data in the referenced work paper, the Commission should not rely on his study for this case.

Q. On page 46 of his Direct Testimony, Mr. Knecht presented his proposed class revenue allocation. Please comment on his proposal.

A. Mr. Knecht's proposed CCOSS is fatally flawed and cannot be relied upon by the Commission for revenue allocation. Thus, I recommend that the Commission reject his proposed revenue allocation as presented in Table IEc-7.

Mr. Knecht's table also does not provide an accurate representation of the percentage revenue increase to LGS tariff customers. For purposes of Table IEc-7, Mr. Knecht combined the LGS tariff and LGS Mainline classes into a single LGS class. However, his proposed revenue increase of $5.6 million would only be collected from the LGS tariff customers. Based on Mr. Knecht's calculations, the current revenues for LGS

tariff customers less negotiated rate customers are $45.5 million. The $5.6 million increase would be 12.3% for the rest of the LGS class.

Response to I&E Witness Cline

Q. Which CCOSS approach did Mr. Cline support in his Direct Testimony?

A. Mr. Cline supported the Company's Peak and Average CCOSS. My disagreements with this CCOSS method were addressed in detail in my Direct Testimony and in my above response to Mr. Johnson, so I will not repeat them here.

Q. How did Mr. Cline approach class revenue allocation?

A. Mr. Cline began with revenue allocation based on the results of the Peak and Average CCOSS as shown on page 36 of his Direct Testimony. Mr. Cline then tempered the rate impact on the SGS and LGS classes using the rule of 1.5 times the system average increase. He presented the I&E recommended revenue allocation on page 38 of his Direct Testimony.

Q. Please comment on Mr. Cline's proposed revenue allocation.

A. First, I do not agree with relying solely on the results of the Peak and Average CCOSS to allocate the Company's revenue increase. Both Mr. Zarumba and I recommended the midpoint of the CCOSS results of the Demand/Customer and Peak and Average CCOSS in our Direct Testimonies and I maintain this recommendation in my Rebuttal Testimony.

Second, Mr. Cline miscalculated the system average increase in his tables on pages 36 and 38. The total system increase is 34.4%, not 23.9% as calculated by Mr. Cline. A 1.5 times system average increase of 34.4% would be 51.6%, not the 35.9% shown in Mr. Cline's table on page 38. This would substantially reduce the amount of revenue to be reallocated to Residential and LGS classes. If the Commission adopts the 1.5

times rule proposed by Mr. Cline, then revenues from SGS and MGS should be reallocated to the Residential and LGS classes based on each class's proportionate share of the total allocated cost of service.

Q. Please provide a comparison that shows each party's recommended revenue allocation at Peoples' requested base revenue increase.

A. I compiled such a comparison in Rebuttal Table 2 below. Since Mr. Knecht used a different number for the Company's base revenue increase, his numbers were not directly comparable to those presented by Mr. Zarumba, Mr. Johnson, Mr. Cline, and me. Thus, I did not include Mr. Knecht's recommended revenue allocation in this table. Note also that I corrected Mr. Cline's erroneous total system average percentage increase consistent with my testimony above. Finally, the numbers for Mr. Johnson's recommendation in the OCA column reflect his primary revenue allocation recommendation at the Company's requested revenue increase as presented on page 29 of his Direct Testimony. Mr. Johnson also presented a secondary revenue spread proposal on page 31.

Rebuttal Table 2
Comparison of Parties' Revenue Allocation Proposals
Peoples Requested Base Revenue Increase

	Peoples		PII		OCA		I&E	
	Dollars	Percentage	Dollars	Percentage	Dollars	Percentage	Dollars	Percentage
Residential	$132,254,100	38.0%	$139,217,582	40.0%	$102,395,000	29.4%	$121,441,858	34.9%
SGS	$19,860,199	45.1%	$20,786,278	47.3%	$23,302,000	53.0%	$15,792,910	35.9%
MGS	$18,436,238	32.3%	$19,530,683	34.2%	$34,395,000	60.3%	$20,471,617	35.9%
LGS-Tariff	$3,187,093	6.5%	($5,796,914)	-11.8%	$3,968,000	8.1%	$6,428,942	13.1%
LGS-Mainline	$0	0.0%	$0	0.0%	$9,678,000	138.3%	$9,602,303	137.2%
Total	$173,737,629	34.4%	$173,737,629	34.4%	$173,738,000	34.4%	$173,737,630	34.4%

Q. Does this conclude your Rebuttal Testimony?

A. Yes.

Peoples Industrial Intervenors Statement No. 1-S
Witness: Richard A. Baudino

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	**:**	
	:	
V.	**:**	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	**:**	

SURREBUTTAL TESTIMONY

OF

RICHARD A. BAUDINO

ON BEHALF OF

PEOPLES INDUSTRIAL INTERVENORS

J. KENNEDY AND ASSOCIATES, INC.

MAY 3, 2024

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
V.	:	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

SURREBUTTAL TESTIMONY OF RICHARD A. BAUDINO

Q. Please state your name and business address.

A. My name is Richard A. Baudino. My business address is J. Kennedy and Associates, Inc. ("Kennedy and Associates"), 570 Colonial Park Drive, Suite 305, Roswell, Georgia 30075.

Q. What is your occupation and by whom are you employed?

A. I am a consultant to Kennedy and Associates.

Q. Did you present Direct and Rebuttal Testimony in this proceeding?

A. Yes. I presented Direct and Rebuttal Testimony on behalf of Peoples Industrial Intervenors ("PII").

Q. What this the purpose of your Surrebuttal Testimony?

A. The purpose of my Surrebuttal Testimony is to respond to certain portions of the Rebuttal Testimony submitted by Mr. Ralph Zarumba, witness for Peoples Natural Gas Company ("Peoples" or "Company") and Mr. Clarence Johnson, witness for the Office of Consumer Advocate ("OCA").

Response to Mr. Zarumba

Q. Beginning on page 32 of his Rebuttal Testimony Mr. Zarumba listed four corrections and refinements to the class cost of service studies ("CCOSS") he presented in his Direct Testimony. Please summarize these corrections and refinements.

A. The CCOSS corrections and refinements accepted by Mr. Zarumba are as follows:

1. Correction to the CUST-902 allocator recommended by Mr. Knecht. Mr. Zarumba accepted this correction in principle but modified Mr. Knecht's calculation as explained on pages 32 and 33 of his Rebuttal Testimony.
2. Correction to the CUST-908 allocator recommended by Mr. Knecht. Mr. Zarumba accepted this correction in principle but modified Mr. Knecht's calculation as explained on page 33 of his Rebuttal Testimony.
3. Collections allocator revision based on Mr. Knecht's recommendation. Mr. Zarumba accepted this revision in principle, but revised Mr. Knecht's calculation as explained on page 33 of his Rebuttal Testimony. Mr. Zarumba added Mr. Knecht's recommended approach to the PGD component of the calculation.[1]
4. Agreed in concept with Mr. Johnson's reallocation of large industrial customer support costs but revised the calculation advocated by Mr. Johnson.

With respect to the first three items above, in summary, while Mr. Zarumba accepts Mr. Knecht's corrections in principle, it is his further modifications to the calculations that render these corrections appropriate. Regarding the reallocation of large industrial

[1] In his testimony, Mr. Zarumba refers to Peoples Gas Division and Peoples Natural Gas Division as "PG" and "PNG" respectively, where I refer to the divisions as "PGD" and "PNGD".

customer support costs, Mr. Zarumba testified that only $728,048 of the $1,338,516 identified by Mr. Johnson is included in the Company's revenue requirement in Federal Energy Regulatory Commission ("FERC") accounts 912, 920, 926, and 408.1. Mr. Zarumba created line items for these costs and allocated them directly to the MGS, LGS, and LGS-Mainline classes in his two CCOSS.

Q. Do you accept the corrections and revisions included in the revised CCOSS presented by Mr. Zarumba in his Rebuttal Testimony?

A. Yes. The revisions described by Mr. Zarumba are reasonable and I accept them in his revised CCOSSs.

Q. What is your revised revenue allocation proposal based on the revised CCOSSs presented by Mr. Zarumba in his Rebuttal Testimony?

A. Surrebuttal Table 1 below presents my revised class revenue allocation proposal based on the revised CCOSS. As noted below, because the resulting revisions do not significantly change my CCOSS, my recommended cost allocation has not changed. Specifically, the approach is the same as in my Direct Testimony, which includes:

1. The mean, or average class cost of service revenue requirement for the Demand/Customer CCOSS and the Peak and Average CCOSS.[2] I used the mean CCOSS revenue requirement for the Residential, SGS, MGS, and LGS tariff customer classes.
2. LGS-Mainline revenues remained unchanged from current revenues. In other words, no increase was applied to the LGS-Mainline class consistent with the Company's recommendation.

[2] The Demand/Customer CCOSS is identified by Mr. Zarumba as the Minimum System/Design Day CCOSS in his Direct and Rebuttal Testimonies. I use the Demand/Customer designation consistent with my Direct and Rebuttal Testimonies.

3. The difference between LGS-Mainline current revenues and mean CCOSS revenues, $9,546,999, is spread to all tariff classes based on each class's percentage of total cost of service revenues less LGS-Mainline.

Surrebuttal Table 1
PII Recommended Allocation of LGS-Mainline CCOSS Shortfall and Proposed Revenues

Rate Class	Revenues @ Current Rates	Mean CCOSS Rev. Req.	Pct. Of CCOSS Excluding LGS-Mainline	Allocation of LGS-Mainline Shortfall	PII Proposed Revenue	$ Increase	Percentage Increase
RES-Base Rates	$347,866,631	$482,391,301	72.9%	$6,956,204	$489,347,505	$141,480,875	40.7%
SGS-Base Rates	$43,991,391	$63,702,169	9.6%	$918,601	$64,620,770	$20,629,380	46.9%
MGS-Base Rates	$57,024,004	$74,603,276	11.3%	$1,075,798	$75,679,074	$18,655,070	32.7%
LGS-Base Rates	$48,982,267	$41,358,177	6.2%	$596,395	$41,954,572	($7,027,694)	-14.3%
LGS-MAINLINE-Base Rates	$6,996,935	$16,543,934			$6,996,935	$0	0.0%
Total	$504,861,227	$678,598,857	100.0%	$9,546,999	$678,598,857	$173,737,630	34.4%

Compared to my Direct Testimony, the CCOSS responsibility for the LGS tariff class declined such that the recommended revenue reduction increased to (14.3)%. The Residential class increase rose slightly to 40.7%. The SGS increase rose to 46.9% but is still a reasonable multiple of 1.36 times the system average increase. I continue to recommend this approach to revenue allocation be adopted by the Pennsylvania Public Utility Commission ("Commission") in this proceeding. If the Commission decides that no class should receive a decrease in this case, then I recommend that the LGS tariff class receives no increase and that the $7.028 million revenue reduction be used to reduce the increases for the other tariff classes based on their proportionate share of the mean CCOSS revenue requirement excluding the LGS classes.

Please note that the numbers presented in Surrebuttal Table 1 present class revenue allocation at the Company's requested revenue increase. Neither I nor PII supports Peoples' increase in this case. If the Commission authorizes a lower increase, then the class revenue increases shown in Surrebuttal Table 1 should be proportionately scaled back as I recommended in my Direct Testimony.

Q. On page 37, line 9 of his Rebuttal Testimony Mr. Zarumba showed that your testimony recommended that the rates for PG and PNG should not be harmonized in this case. Is this correct?

A. No. This is a misunderstanding of my Direct Testimony. I did not advocate that the rates for PGD and PNGD should not be harmonized in this case. Rather, I do not oppose the Company's proposed rate harmonization for its PGD and PNGD systems.

Response to Mr. Johnson

Q. On page 19, lines 4 through 5 of his Rebuttal Testimony Mr. Johnson testified that you claimed "that the Company's favorable CCOSS changes for Mainline customers is not good enough." Please respond to Mr. Johnson's testimony on this point.

A. Mr. Johnson's testimony is patently erroneous. I never claimed, either in my Direct or Rebuttal Testimonies, that the Company's CCOSS treatment of Mainline customers was "not good enough." Mr. Zarumba's proposed separation of LGS tariff and LGS Mainline customers into separate classes is a welcome change to Peoples' CCOSS approach and enables a much clearer picture of LGS tariff customers' cost of service responsibility. The picture that emerged in both of the Company's CCOSSs is that LGS tariff customers are paying rates that resulted in the highest rate of return of all classes of customers on the system. My revenue allocation recommendation moves all classes reasonably toward their respective cost responsibilities as measured by the Demand/Customer CCOSS. Moreover, my revenue allocation recommendation represents a balance between the Demand/Customer and Peak and Average CCOSS in recognition of the Company's CCOSS approach in this proceeding.

Q. On page 19, line 15 Mr. Johnson stated that your proposed reallocation of the LGS Mainline revenue shortfall "is not consistent with cost causation." Is this statement correct?

A. No. I explained in my Direct Testimony that none of the tariff classes are responsible for the cost of service shortfall from the LGS Mainline class, as this shortfall results directly from the special contracts provided to customers within this class. Simply because this class's title contains the words "LGS" does not mean that there is any specific tie to those LGS customers not on a special contract. In this respect, the LGS tariff customers are no different from any of the other full tariff service classes, such as the Residential class. The LGS tariff customers do not have competitive alternatives and do not qualify for special contracts. It would be unfair to saddle these customers with the full LGS Mainline cost of service shortfall, as they are no more responsible for that shortfall than the SGS, MGS, and Residential classes. All tariff classes benefit from the LGS Mainline customers being connected to Peoples' system and contributing to fixed costs that would otherwise have to be paid by the rest of the customers. Therefore, all customer classes should share in the cost of service shortfall from the LGS Mainline class.

Q. On page 20, line 5 through page 21, line 2 Mr. Johnson discussed business risk that involves "the potential loss of industrial load or lost revenue caused by responding with negotiated rates." Please address Mr. Johnson's arguments.

A. Mr. Johnson asserted that if the CCOSS targeted class specific business risk associated with competitive pressure, the MGS and LGS base revenue requirement would be based on rate of return targets higher than the system average. This assertion lacks proper foundation and support. Mr. Johnson failed to present any analytical basis for

his claim that the MGS and LGS tariff classes are riskier than the SGS and Residential classes. The LGS tariff class does not have the risk of lost revenue that the LGS Mainline class does since the LGS tariff customers presumably do not have competitive options and take service at full tariff rates, not on negotiated rates. This is also the case for the MGS tariff customers. Thus, there is no good reason to assume that full tariff MGS and LGS customers should be assigned a higher rate of return than full tariff SGS or Residential customers. Moreover, no party in this case, including Mr. Johnson, proposed any rate of return differential for the LGS and MGS classes in their Direct Testimonies. Mr. Johnson's assertion should be rejected.

Q. On page 21, lines 7 through 15 Mr. Johnson testified as to why he believes your proposal for allocating the cost of industrial discount rates is inconsistent with your treatment of the costs of Residential customer assistance programs and the low income usage reduction program. Is this correct?

A. No. The costs associated with Residential class programs such as customer assistance and low income usage reduction programs directly benefit Residential customers only and so the costs of those programs should be confined to the Residential class. In fact, the treatment of these costs is similar to the treatment of large industrial customer support costs that Mr. Johnson proposed in his Direct Testimony, wherein such costs are directly assigned to the MGS and LGS classes. Mr. Zarumba accepted Mr. Johnson's proposed direct assignment of these costs in his Rebuttal Testimony with modifications that I previously discussed. Based on Mr. Zarumba's Rebuttal, I accepted this direct assignment to the MGS and LGS classes here in my Surrebuttal Testimony.

The reallocation of the cost-of-service shortfall from the LGS-Mainline class is completely different from the direct assignment of costs I just discussed. The negotiated contracts that serve LGS-Mainline customers are a benefit to all customer classes because they enable Peoples to retain load that would otherwise be lost to competitive alternatives. To the contrary, all of the customers benefitting from Peoples' customer assistance program are captive customers without competitive alternatives. It is important to understand that if the LGS Mainline customers had not been retained on Peoples' system, all of the tariff customers would have had to pick up the entirety of the fixed cost contribution from Mainline customers. Obviously, these lost fixed costs would not be directly assigned in totality to the LGS tariff customers. Accordingly, LGS tariff customers are no more responsible for the LGS Mainline revenue shortfall than any other service class. Therefore, the Commission should allocate this shortfall based on the method I described in my Direct Testimony and as modified here in my Surrebuttal Testimony. Mr. Johnson's flawed argument should be rejected.

Q. Does this conclude your Surrebuttal Testimony?

A. Yes.

I&E Exhibit No. 1
Witness: Christopher Keller

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PEOPLES NATURAL GAS COMPANY LLC

Docket Nos. R-2023-3044549

Exhibit to Accompany

the

Direct Testimony

of

Christopher Keller

Bureau of Investigation and Enforcement

Concerning:

Operating and Maintenance Expenses
Taxes Other Than Income
Cash Working Capital

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: I&E-RE-009

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Reference Peoples Volume 8, Exhibit 19, RR-26 concerning labor. Provide the following:

A. Employee counts, total and broken down by company by union and non-union categories for the TME August 31, 2021, 2022, HTY 2023, 2024 YTD actual, FTY 2024, and FPFTY ending September 30, 2025;

B. Number of employee positions that have been eliminated, by company, by month broken down by union and non-union since the commencement of the HTY and that are expected to be eliminated during the FTY and the FPFTY; and

C. Number of vacant positions, by company, by month, by union and non-union for the following years: TME August 31, 2021, 2022, and HTY 2023, and 2024 YTD broken down by union and non-union.

Answer: A. Please see Attachment A. 2024 YTD is not yet available.

B. On January 1, 2023 there were 40 non union positions transferred to Essential Utilities. No further eliminations are planned during the FTY and FPFTY.

C. Please see Attachment B. The data is not readily available by company or union and non-union but we are able to provide total vacancies by quarter for all of PNG Companies (Q1 2021 through Q3 2023). 2024 YTD is not yet available.

Submit Date: 2/7/2024

I&E RE-9

Attachment A	PNG		PGC		Combined	
	Union	Non-Union	Union	Non-Union	Union	Non-Union
TME August 31, 2021	828	454	102	56	930	510
TME August 31, 2022	815	457	101	56	916	513
TME August 31, 2023	843	409	114	46	957	455
FTY August 31,2024	851	429	116	48	967	477
FPFTY September 30, 2025	854	444	117	50	971	494

	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023
Vacancies	99	98	89	49	41	53	68	54	57	62	60

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: I&E-RE-048

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Reference Peoples' response to I&E-RE-15 and Peoples Volume 8, Exhibit 19, RR-38 concerning pension expense. Provide the funding status of Peoples' pension plan as of December 31, 2021, 2022, and 2023.

Answer: The funded status of the Peoples' pension plan was 92.2%, 101.9%, and 107.7%, as of December 31, 2021, 2022, and 2023, respectively.

Submit Date: 3/4/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: I&E-RE-015

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Reference Peoples Volume 1, Exhibit 4, Schedule 1, p. 10, regarding pension expense:

A. Provide copies of the most recent three years of actuarial report(s) by company;

B. Provide a breakdown of pension costs capitalized and expensed amounts by company for 2022 and 2023; and

C. Provide historic cash contributions by year by company for the TME August 2021, 2022, and 2023, along with cash contributions made to date for 2024.

Answer: A. Please see CONFIDENTIAL attachments A, B, and C for copies of the actuarial reports.

B & C. Please see attachment D. Cash contribution YTD 2024 are not yet available.

Submit Date: 2/7/2024

I&E RE-15 Attachment D

Peoples Natural Gas Division

Pension Cost	TME August 31, 2022	TME August 31, 2023
O&M Expense	$ 4,497,434	$ 6,640,392
Capx	$ 2,028,515	$ 2,348,742
Total Pension	$ 6,525,949	$ 8,989,134

Peoples Natural Gas Division

Pension Cash Contributions	TME August 31, 2021	TME August 31, 2022	TME August 31, 2023
	$ 2,871,998	$ 9,000,000	$ 9,000,000

Post & Schell P.C.
ATTORNEYS AT LAW

17 North Second Street
12th Floor
Harrisburg, PA 17101-1601
215-587-1000 Main
717-731-1985 Main Fax
www.postschell.com

Nicholas A. Stobbe
Associate

nstobbe@postschell.com
717-612-6033 Direct
717-731-1985 Direct Fax
File #: 199787

February 16, 2024

VIA EMAIL

Honorable Mary D. Long
Administrative Law Judge
PA Public Utility Commission
Suite 220, Piatt Place
301 Fifth Avenue
Pittsburgh, PA 15222

Re: PA Public Utility Commission, *et al*. v. Peoples Natural Gas Company LLC
Docket Nos. R-2023-3044549, *et al.*

Dear Judge Long:

On December 29, 2023, Peoples Natural Gas Company LLC, which includes Peoples Natural Gas Division ("PNGD") and Peoples Gas Division ("PGD") (collectively, "Peoples" or "the Company") filed Original Tariff GAS – PA PUC No. 48 ("PA PUC No. 48"), along with supporting exhibits, standard data responses and testimony required to be submitted in conjunction with a tariff change seeking a general rate increase.

Peoples has since discovered that there were two errors and one omission with respect to its December 29, 2023 base rate filing. Specifically, Peoples discovered that Exhibit 1, Schedule 6 – *Gas Stored Underground* – was inadvertently excluded from the December 29, 2023 filing. Additionally, Peoples has discovered errors in Exhibit 4, Schedule 22, and Exhibit 4, Schedule 1, page 11.

Attached is Exhibit 1, Schedule 6, which was omitted from the original filing. Also attached is Exhibit 4, Schedule 22, and Exhibit 4, Schedule 1, page 11, which contained errors reflected in the original filing. Those errors have since been corrected and are reflected in the enclosed. Clean and redline versions of the corrections to Exhibit No. 4, Schedules 22 and 1 (page 11) are being provided. Peoples intends to submit the enclosed clean versions of Exhibit 4, Schedules 22 and 1 (page 11) for the record in this proceeding, as well as the previously omitted Exhibit 1, Schedule 6 – *Gas Stored Underground*.

Copies will be provided as indicated on the Certificate of Service.

Respectfully submitted,

Nicholas A. Stobbe

NAS/kls
Attachments

cc: Rosemary Chiavetta, Secretary (*Letter and Certificate of Service only*)
Certificate of Service

EXHIBIT NO. 4
Sch. 22, Pages 1-4
(Revised)

Peoples Natural Gas Company LLC
§ 53.53 III.E

34. Prepare a 3-column schedule of expenses, as described below for the following periods (supply sub-accounts, if significant, to clarify basic accounts):

    a. Column 1—Test Year

    b. Column 2 and 3—The two previous years

    Provide the annual recorded expense by accounts. (Identify all accounts used but not specifically listed below.)

* * * * * * * * * * * * * * * * * *

Refer to Attachment A for Combined
Refer to Attachment B for PNG
Refer to Attachment C for PGC

I&E Exhibit No. 1
Schedule 4
Page 5 of 7

Peoples Natural Gas Company LLC
Combined
Attachment A

Cost Element Description	Twelve Months Ended August 31, 2023 (1)	August 31, 2022 (2)	August 31, 2021 (3)
Labor	$ 55,181,109	$ 59,716,376	$ 62,215,680
APIP/Incentive Compensation	6,823,130	6,246,352	8,674,441
Pension	4,497,434	6,640,392	2,516,547
Post Retirement Benefits Other Than Pensions	1,229,997	1,390,793	2,431,486
Other Employee Benefits	16,406,605	16,923,896	19,091,664
Outside Services - Contracted	24,124,704	21,607,671	21,437,907
Outside Services - IT	8,596,499	8,688,036	8,587,260
Outside Services - A&G	4,407,530	5,316,396	4,787,184
Building Leases	3,902,706	4,118,802	3,415,734
Corporate Insurance	5,213,687	4,710,028	5,035,015
Injuries and Damages	1,173,800	2,841,375	2,361,748
Travel	931,017	697,498	481,494
Licenses & Permits	677,424	(553,209)	3,066,056
Utilities & Fuel Used in Company Operations	2,938,901	2,923,474	3,029,402
Public Relations	1,516,137	2,185,568	2,264,248
Fleet	1,099,110	461,400	1,833,132
Materials & Supplies	10,459,149	10,183,753	10,651,564
Other O&M	15,762,631	8,571,642	4,333,655
Uncollectible Accounts	14,518,575	14,711,145	21,022,912
Subtotal	**179,460,145**	**177,381,391**	**187,237,128**
Total USP Rider	12,891,002	14,597,937	2,330,064
Total Operation and Maintenance Expense	**$ 192,351,147**	**$ 191,979,328**	**$ 189,567,192**

EXHIBIT NO. 4
Schedule 1
(Revised)

Peoples Natural Gas Company LLC
Post Retirement Benefits Other Than Pensions

Line No.	Description	PNG (1)	PGC (2)	Combined (3)
1	HTY Net Post Retirement Benefits Other Than Pensions	$ 1,229,997	$ (0)	$ 1,229,997
2	Prior PBOPS Expense Amortization	$ (1,016,131)	$ 2,650,250	$ 1,634,119
3	HTY Adjusted PBOPS Net Expense (Ln 1 + Ln 2)	$ 213,866	$ 2,650,250	$ 2,864,116
4	FTY Net Expense	$ 1,256,374	$ -	$ 1,256,374
5	FTY Adjustment (Ln 4 - Ln 1)	$ 26,377	$ 0	$ 26,377
6	FTY Adjusted PBOPS Net Expense (Ln 3 + Ln 5)	$ 240,243	$ 2,650,250	$ 2,890,493
7	FPFTY Net Expense	$ 1,256,374	$ -	$ 1,256,374
8	FPFTY Adjustment (Ln 7 - Ln 4)	$ -	$ -	$ -
9	FPFTY Adjusted PBOPS Net Expense (Ln 6 + Ln 8)	$ 240,243	$ 2,650,250	$ 2,890,493
10	Amount To Be Tracked (Ln 9 - Ln 2)			$ 1,256,374

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: I&E-RE-018

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Reference Peoples Volume 1, Exhibit 4, Schedule 1, p. 11 concerning Post Retirement Benefits Other than Pensions. Provide the following:

A. Supporting documentation for the FPFTY Net Expense of $779,921 for PNG (line 7);

B. For Peoples' last three base rate cases, state the dollar amount of each Post Retirement Benefits Other than Pensions expense claim and the method used to determine the claim (i.e. accrual, cash-basis, or some other method);

C. If the claims as detailed in response to Part B above were based on something other than accrual or cash contributions in any of the last three base rate cases, provide a detailed explanation for each; and

D. Provide the post-retirement benefits other than pensions on a pay-as-you-go basis by year for the TME August 31, 2021, 2022, HTY 2023, FTY 2024, and FPFTY 2025.

Answer: A. The Original FPFTY Net Expense of $779,921 was based on an estimate. The revised claim amount is $1,256,374 net of capitalization ($1,815,569 - $559,195) based upon the final response to Exhibit 19, RR-39 for additional details. A revised Exhibit 4, Schedule 1 will be filed.

B. See Attachment A Table 1 for the PBOPs included in the three prior Peoples Natural Gas Division rate cases.

C. N/A

D. Please see Attachment A Table 2 for the pay-as-you-go basis for TME August 31, 2021, 2022, and 2023. For the future periods the company anticipates making contributions consistent with the expense claim amount of $1,256,374.

Submit Date: 2/7/2024

I&E RE-18 Attachment A
Table 1

Peoples Natural Gas Division prior three rate cases - PBOP's

Rate Case	PBOPs Claim	Method
2010 (Peoples Natural Gas Division)	$1,975,509	Accrual basis, consistent with FAS 106 and PUC order at R-00953318.
2012 (Peoples Natural Gas Division)	$1,860,719	Accrual basis, consistent with FAS 106 and PUC order at R-00953318.
2018 (Peoples Natural Gas Division)	$2,320,140	Accrual basis, consistent with FAS 106 and PUC order at R-00953318.

Table 2

Post-retirement benefits other than pensions on a pay-as-you-go basis

	TME 8/31/21	TME 8/31/22	TME 8/31/23
PNG	$ 2,320,498	$ 2,390,206	$ 2,629,355
PGC	$ 109,783	$ 54,349	$ 61,815

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: I&E-RE-049

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Reference Peoples Volume 1, Exhibit 4, Schedule 1, p. 11 and Peoples Statement No. 2, pp. 14-15 concerning Post Retirement Benefits Other than Pensions (PBOPs). Provide the following:

A. Funding status of Peoples' PBOPs plan as of:

1. December 31, 2021;

2. December 31, 2022;

3. December 31, 2023.

B. Justification for the Peoples' claimed two-year amortization period for prior period undercollection of PBOPs costs; and

C. Breakdown of PBOPs costs capitalized and expensed by company by year for the TME August 31, 2021, 2022, 2023, 2024 YTD, 2024 FTY claim, and FPFTY ending September 30, 2025 claim.

Answer: A. The funding status was 126.1% as of 12/31/21, 132.94% as of 12/31/22, the funding status as of 12/31/23 is not yet available.

B. Based upon the Company's capital levels and the fact that the tax repairs benefit will be fully included in rates, the Company anticipates filing a rate case within two years.

C. Please see Attachment A. PGC included costs during the TME August 31, 2021 with all PBOP's cost incurred on PNG for the remaining periods.

Submit Date: 3/4/2024

Peoples Natural Gas Company LLC
Post Retirement Benefits Other Than Pensions

Line No.	Description	Company Revised Claim	I&E Recommended Allowance	
1	HTY Net Post Retirement Benefits Other Than Pensions	$ 1,229,997	$ 1,229,997	
2	Prior PBOPS Expense Amortization	$ 1,634,119	$ 739,978	(a)
3	HTY Adjusted PBOPS Net Expense (Ln 1 + Ln 2)	$ 2,864,116	$ 1,969,975	
4	FTY Net Expense	$ 1,256,374	$ 1,256,374	
5	FTY Adjustment (Ln 4 - Ln 1)	$ 26,377	$ 26,377	
6	FTY Adjusted PBOPS Net Expense (Ln 3 + Ln 5)	$ 2,890,493	$ 1,996,352	
7	FPFTY Net Expense	$ 1,256,374	$ 1,256,374	
8	FPFTY Adjustment (Ln 7 - Ln 4)	$ -	$ -	
9	FPFTY Adjusted PBOPS Net Expense (Ln 6 + Ln 8)	$ 2,890,493	$ 1,996,352	
10	Company Original Claim		$ 2,414,041	
11	I&E Recommended Adjustment to as-filed Claim		$ (417,689)	

(a) Ref: I&E Statement No. 2, p. 15

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: I&E-RE-052

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Reference Peoples' response to I&E-RE-23 and Peoples Statement No. 2, pp. 16-17 concerning Outside Services - Contracted. Provide the following:

A. Breakdown of Outside Services - Contracted expensed and capitalized by company by year for the TME August 31, 2021, 2022, 2023, 2024 YTD, 2024 FTY claim, and FPFTY ending September 30, 2025 claim;

B. State whether each of the FTY and FPFTY adjustments starting on p. 16, line 11 of Peoples Statement No. 2 will occur annually; and

C. If any of the FTY or FPFTY adjustments in Part B are not expected to occur on an annual basis, state how often each is expected to occur.

Answer: Please refer to attached for Part A to show the breakdown of Outside Services-Contracted expensed and capitalized by company, by year. For Parts B and C, please refer to OCA, Set 7 #34.

Submit Date: 3/4/2024

I&E-RE-52, Part A

1) TME August 31, 2021

	1000		3100		Total	
	Expense	Capital	Expense	Capital	Expense	Capital
Contractor Materials	309,836	(68,710)	4,884	(1,664)	314,720	(70,374)
Contractor Services	14,839,360	(3,290,813)	1,823,081	(620,986)	16,662,441	(3,911,799)
Contractr Svc - Restoration	7,880,085	(1,747,507)	411,353	(140,117)	8,291,437	(1,887,624)
Environment Services	871,070	(193,171)	89,525	(30,494)	960,595	(223,665)
Office Equip Maint	32,044	(7,106)	8,696	(2,962)	40,739	(10,068)
Comm Equip Maint	395	(88)	-	-	395	(88)
Misc Repairs/Maint	355,109	(78,750)	56,173	(19,134)	411,282	(97,884)
Consultant Services	2,201,865	(488,291)	1,415,424	(482,128)	3,617,289	(970,419)
Training Services	204,479	(45,346)	285	(97)	204,764	(45,443)
Misc. Outside Svcs	4,845,072	(1,074,455)	672,462	(229,057)	5,517,535	(1,303,512)
Restoration	(2,101,819)	466,105	(33,181)	11,302	(2,134,999)	477,407
RIDER Expense	(4,083,576)	-	(321,248)	-	(4,404,823)	-
Total	**25,353,920**	**(6,528,131)**	**4,127,455**	**(1,515,336)**	**29,481,375**	**(8,043,467)**

2) TME August 31, 2022

	1000		3100		Total	
	Expense	Capital	Expense	Capital	Expense	Capital
Contractor Labor-ST	1,200	(309)	5,436	(1,279)	6,636	(1,588)
Contractor Materials	109,174	(28,081)	1,487,733	(350,090)	1,596,906	(378,171)
Contractor Services	18,044,004	(4,641,175)	502,661	(118,285)	18,546,665	(4,759,460)
Contractr Svc - Rest	6,541,848	(1,682,657)	66,938	(15,752)	6,608,786	(1,698,408)
Environment Services	583,183	(150,003)	51	(12)	583,234	(150,015)
Office Equip Maint	56,857	(14,625)	52,968	(12,464)	109,825	(27,089)
Misc Repairs/Maint	357,022	(91,831)	74,205	(17,462)	431,227	(109,293)
Consultant Services	926,420	(238,288)	825	(194)	927,245	(238,482)
Training Services	75,335	(19,377)	639,321	(150,444)	714,657	(169,821)
Misc. Outside Svcs	4,325,671	(1,112,624)	114,784	(27,011)	4,440,455	(1,139,635)
Restoration	885,520	(227,768)	-	-	885,520	(227,768)
RIDER Expense	(4,126,490)	-	(217,264)	-	(4,343,754)	-
Total	**27,779,745**	**(8,206,738)**	**2,727,657**	**(692,993)**	**30,507,402**	**(8,899,731)**

3) TME August 31, 2023

	1000		3100		Total	
	Expense	Capital	Expense	Capital	Expense	Capital
Contractor Materials	199,434	(52,148)	19,027	(3,164)	218,462	(55,312)
Contractor Services	20,960,850	(5,480,828)	1,927,785	(320,587)	22,888,635	(5,801,415)
Contractr Svc - Restoration	7,926,381	(2,072,585)	586,701	(97,567)	8,513,083	(2,170,152)
Environment Services	1,179,690	(308,465)	188,139	(31,287)	1,367,829	(339,752)
Office Equip Maint	65,970	(17,250)	245	(41)	66,215	(17,290)
Misc Repairs/Maint	327,114	(85,533)	56,003	(9,313)	383,117	(94,847)
Consultant Services	912,717	(238,657)	116,428	(19,362)	1,029,144	(258,018)
Training Services	137,267	(35,892)	2,644	(440)	139,911	(36,332)
Misc. Outside Svcs	5,199,406	(1,359,537)	837,249	(139,233)	6,036,654	(1,498,770)
Conversion-Projects	36,243	(9,477)	-	-	36,243	(9,477)
Restoration	-	-	-	-	-	-
RIDER Expense	(5,716,800)	-	(556,423)	-	(6,273,223)	-
Total	**31,228,270**	**(9,660,371)**	**3,177,799**	**(620,995)**	**34,406,069**	**(10,281,365)**

4) TME August 31, 2024

	1000		3100		Total	
	Expense	Capital	Expense	Capital	Expense	Capital
Contractor Materials	210,013	(54,103)	19,949	(3,283)	229,962	(57,386)
Contractor Services	23,828,846	(5,686,341)	2,242,622	(332,608)	26,071,467	(6,018,949)
Contractr Svc - Restoration	8,346,843	(2,150,299)	615,120	(101,226)	8,961,963	(2,251,525)
Environment Services	1,242,268	(320,031)	197,252	(32,460)	1,439,520	(352,491)
Office Equip Maint	69,469	(17,896)	257	(42)	69,726	(17,939)
Misc Repairs/Maint	344,466	(88,741)	58,716	(9,662)	403,182	(98,403)
Consultant Services	961,133	(247,605)	122,067	(20,088)	1,083,200	(267,693)
Training Services	144,548	(37,238)	2,773	(456)	147,321	(37,694)
Misc. Outside Svcs	5,475,213	(1,410,515)	877,803	(144,454)	6,353,016	(1,554,969)
Conversion-Projects	38,165	(9,832)	-	-	38,165	(9,832)
Restoration	-	-	-	-	-	-
RIDER Expense	(5,931,161)	-	(577,287)	-	(6,508,448)	-
Total	**34,729,803**	**(10,022,602)**	**3,559,271**	**(644,280)**	**38,289,074**	**(10,666,882)**

5) TME August 31, 2025

	1000		3100		Total	
	Expense	Capital	Expense	Capital	Expense	Capital
Contractor Materials	217,888	(56,132)	20,697	(3,406)	238,585	(59,538)
Contractor Services	24,722,347	(5,899,560)	2,326,712	(345,080)	27,049,060	(6,244,639)
Contractr Svc - Restoration	8,659,822	(2,230,929)	638,185	(105,022)	9,298,007	(2,335,950)
Environment Services	1,288,849	(332,031)	204,648	(33,678)	1,493,497	(365,709)
Office Equip Maint	72,074	(18,568)	267	(44)	72,341	(18,611)
Misc Repairs/Maint	357,382	(92,068)	60,918	(10,025)	418,300	(102,093)
Consultant Services	997,172	(256,890)	126,644	(20,841)	1,123,816	(277,731)
Training Services	149,968	(38,635)	2,876	(473)	152,845	(39,108)
Misc. Outside Svcs	5,680,515	(1,463,405)	910,718	(149,870)	6,591,233	(1,613,275)
Conversion-Projects	39,596	(10,201)	-	-	39,596	(10,201)
Restoration	-	-	-	-	-	-
RIDER Expense	(6,153,560)	-	(598,933)	-	(6,752,493)	-
Total	**36,032,054**	**(10,398,416)**	**3,692,732**	**(668,438)**	**39,724,786**	**(11,066,854)**

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: I&E-RE-027

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Reference Peoples Volume 1, Exhibit 4, Schedule 22, Peoples Volume 1, Schedule 1, p. 17, and Peoples Statement No. 2, pp. 18-19 concerning corporate insurance:

A. Explain the decrease of $1,528,869 ($5,035,015 - $3,506,146) between the TME August 31, 2021 and 2022;

B. Explain the increase of $1,707,541 ($5,213,687 - $3,506,146) between the TME August 31, 2022 and 2023;

C. Provide a breakdown of corporate insurance expensed and capitalized by company by year for the TME August 31, 2021, 2022, 2023, 2024 YTD, 2024 FTY claim, and FPFTY ending September 30, 2025 claim;

D. Copies of 2021, 2022 and 2023 statements or invoices to support the 13.1% increase in total premiums;

E. Copy of the feedback received by the Company from its third-party brokers to support the Company's increase in insurance rates;

F. Copy of the two most recent invoices for Property Insurance and Workers Compensation insurance identifying the time period covered; and

G. Detailed breakdown of Other Misc. Insurance under Columns 2 and 5 by company.

Answer: Please refer to included attachments for responses to Parts A-G. The invoices provided support a total increase in premiums of 12.9%, as opposed to 13.1%.

Submit Date: 2/7/2024

Due to a restatement of Exhibit 4, Schedule 22 that is included as a Supplemental attachment under I&E-RE-1, the TME August 31, 2022 total is $4,710,028, which is a decrease of $324,987 from TME August 31, 2021. The main driver of this decrease is related to a reduction in General Property Insurance.

Due to a restatement of Exhibit 4, Schedule 22 that is included as a Supplemental attachment under I&E-RE-1, the TME August 31, 2022 total is $4,710,028, which is an increase of $503,659 to TME August 31, 2023. The main driver of this increase is related to a Excess Liability/Surty Insurance.

I&E-RE-27, Part C

1) August 31, 2021

	1000			3100		
	Expense	CAPEX	Total	Expense	CAPEX	Total
Directors & Officers Liability Insurance	318,994	(113,730)	205,264	73,851	(46,469)	27,382
Excess Liability/Surty Insurance	2,164,818	(884,490)	1,280,327	501,182	(337,479)	163,703
General Property Insurance	227,087	(299,798)	(72,711)	52,573	(84,689)	(32,115)
Workers' Compensation Insurance	707,866	(164,290)	543,576	145,210	(72,435)	72,775
Other Insurance	2,731,753	(277,653)	2,454,100	624,285	(231,571)	392,715
Total	**6,150,517**	**(1,739,962)**	**4,410,555**	**1,397,102**	**(772,642)**	**624,460**

2) August 31, 2022

	1000			3100		
	Expense	CAPEX	Total	Expense	CAPEX	Total
Directors & Officers Liability Insurance	290,980	(152,246)	138,735	73,857	(50,071)	23,785
Excess Liability/Surty Insurance	2,450,642	(1,198,326)	1,252,316	622,021	(403,284)	218,738
General Property Insurance	238,868	(190,601)	48,267	60,629	(51,305)	9,324
Workers' Compensation Insurance	654,251	(156,136)	498,115	147,144	(74,111)	73,033
Other Insurance	2,430,157	(319,603)	2,110,555	602,223	(265,061)	337,162
Total	**6,064,899**	**(2,016,912)**	**4,047,987**	**1,505,874**	**(843,833)**	**662,042**

3) August 31, 2023

	1000			3100		
	Expense	CAPEX	Total	Expense	CAPEX	Total
Directors & Officers Liability Insurance	609,753	(158,418)	451,335	100,741	(16,753)	83,988
Excess Liability/Surty Insurance	6,013,891	(1,562,452)	4,451,438	953,917	(158,635)	795,282
General Property Insurance	1,019,645	(264,911)	754,734	168,461	(28,015)	140,446
Workers' Compensation Insurance	546,239	(141,917)	404,322	79,966	(13,298)	66,668
Other Insurance	317,994	(82,617)	235,377	57,811	(9,614)	48,197
Total	**8,507,522**	**(2,210,316)**	**6,297,206**	**1,360,896**	**(226,315)**	**1,134,582**

4) August 31, 2024

	1000			3100		
	Expense	CAPEX	Total	Expense	CAPEX	Total
Directors & Officers Liability Insurance	627,881	(129,486)	498,394	108,057	(15,407)	92,649
Excess Liability/Surty Insurance	6,192,679	(1,277,103)	4,915,577	1,023,193	(145,893)	877,300
General Property Insurance	1,049,958	(216,531)	833,428	180,695	(25,765)	154,931
Workers' Compensation Insurance	562,479	(115,999)	446,480	85,774	(12,230)	73,543
Other Insurance	327,448	(67,529)	259,919	62,010	(8,842)	53,168
Total	**8,760,445**	**(1,806,647)**	**6,953,797**	**1,459,729**	**(208,137)**	**1,251,591**

6) August 31, 2025

	1000			3100		
	Expense	CAPEX	Total	Expense	CAPEX	Total
Directors & Officers Liability Insurance	694,933	(143,314)	551,618	119,482	(17,037)	102,446
Excess Liability/Surty Insurance	6,854,003	(1,413,486)	5,440,517	1,131,381	(161,320)	970,062
General Property Insurance	1,162,085	(239,654)	922,431	199,801	(28,489)	171,312
Workers' Compensation Insurance	622,547	(128,386)	494,160	94,843	(13,523)	81,320
Other Insurance	362,416	(74,740)	287,676	68,566	(9,777)	58,790
Total	**9,695,984**	**(1,999,581)**	**7,696,402**	**1,614,074**	**(230,145)**	**1,383,929**

2024 YTD information is not yet available, due to January 2024 period not yet closed. This information will be provided at a later date.

Figures above will tie to both Exhibit 4, Schedule 22 and Exhibit 4, Schedule 1 pp. 1-3. Exhibit 4, Schedule 1, p. 17 provides premium figures as opposed to figures per books.

I&E-RE-27, Part D

Line of Coverage	2021	2022	2023	Percent Change 21-22	Percent Change 22-23	Average yearly percent change
Auto	$332,067.00	$361,460.00	$509,835.00	8.85%	41.05%	24.95%
Auto - Chubb	$332,067.00	$361,460.00	$509,835.00			
Workers Compensation	$874,054.00	$926,832.00	$941,113.00	6.04%	1.54%	3.79%
Workers Comp - Chubb	$874,054.00	$926,832.00	$941,113.00			
Executive Risk	$1,316,820.00	$1,237,460.00	$1,186,859.00	-6.03%	-4.09%	-5.06%
EPLI - Zurich	$92,000.00	$101,200.00	$101,200.00			
Fiduciary - AEGIS	$178,795.00	$183,533.00	$185,490.00			
Crime - AIG	$24,275.00	$24,275.00	$24,275.00			
D&O- $90M limits including Side A DIC	$1,021,750.00	$928,452.00	$875,894.00			
Property	$2,492,391.40	$3,429,048.29	$3,826,954.66	37.58%	11.60%	24.59%
Property Aqua - FMG	$2,072,152.00	$2,905,422.00	$3,327,484.00			
Property LDC - AEGIS	$420,239.40	$523,626.29	$499,470.66			
Liability	$9,432,138.44	$10,977,602.57	$11,907,888.29	16.39%	8.47%	12.43%
GL Primary	$1,289,294.00	$1,442,311.00	$1,432,999.00			
Excess Tower	$8,142,844.44	$9,535,291.57	$10,474,889.29			
Cyber	$597,420.00	$796,417.00	$961,576.50	33.31%	20.74%	27.02%
Cyber - AEGIS	$597,420.00	$796,417.00	$961,576.50			
Other Insurance	$348,587.70	$365,471.17	$381,579.57	4.84%	4.41%	4.63%
Pollution	$318,543.70	$333,368.17	$352,872.57			
Kidnap and Ransom	$0.00	$4,915.00	$0.00			
International- AIG	$2,500.00	$2,500.00	$2,500.00			
Non-Owned Aviation-Allianz	$9,490.00	$9,490.00	$10,500.00			
Well Control - Lloyds	$11,698.00	$11,698.00	$12,207.00			
Railroad Protective	$5,300.00	$3,500.00	$3,500.00			
Event Liability	$1,056.00	$0.00	$0.00			
Broker	$427,197.65	$426,697.97	$424,919.22	-0.12%	-0.42%	-0.27%
Simkiss & Block	$427,197.65	$426,697.97	$424,919.22			
Total	$15,820,676.19	$18,516,074.00	$20,140,725.24	17.04%	8.77%	12.91%

Refer to invoices attached that are listed after Part E

The feedback received by the Company from its third-party broker to support the Company's increase in insurance rates is provided as an attachment to this response.

Ref: Peoples Volume 1, Exhibit No. 4, Schedule 1, p. 2 and p. 17

Peoples Natural Gas Company LLC
Corporate Insuarance Adjustment
For the Twelve Months Ended September 30, 2025

1	Per Books Expense	$ 5,213,687					
2	HTY Annaulization Adjustment	2,218,101					
3	Normalized HTY		$ 7,431,788				
4	FTY Exp Recommended Adjustment (I&E)		390,670	(a)			
5	FTY Recommendation		$ 7,822,458				
6	FPFTY Exp Adjustment (I&E)		424,932	(a)			
7	FPFTY Exp Recommendation Before Cap Adj.		$ 8,247,390				
8	FPFTY Capitalization Percentage Per Company		19.7%	(b)			
9	Total I&E Recommendation per Capitalization Percentage Per Company				$ 10,270,722		
10	I&E Recommended Capitalization Percentage				31.9%		(b)
11	I&E Recommended Expense based on 3-year Capitalization Percentage Average				$ 6,994,362		
12	Company Claim				9,080,331		
13	I&E Recommended Adjustment				$ (2,085,969)		

(a) Ref: I&E Exhibit No. 1, Schedule 9, p. 2
(b) Ref: I&E Exhibit No. 1, Schedule 9, p. 3

I&E Exhibit No. 1
Schedule 9
Page 1 of 3

Peoples Natural Gas Company LLC
Corporate Insurance Adjustment

Line No.	Description	Per Books PNG (1)	Premiums 2022/2023 Premiums PNG (2)	Adjustment PNG (3)=(2-1)	Per Books PGC (4)	Premiums 2022/2023 Premiums PGC (5)	Adjustment PGC (6)=(5-4)	Per Books Combined (7)	Premiums 2022/2023 Premiums Combined (8)	Adjustment Combined (9)=(8-7)	Cmpany Claim (10)	I&E Recommended Adjustment (11)=(8-10)
1	Total Account Property Insurance	$ 295,501	$ 286,335	$ (9,166)	$ 60,168	$ 52,731	$ (7,438)	$ 355,669	$ 339,065	$ (16,603)		
2	Total Account Other Misc Insurance	$ 2,020,510	$ 4,058,658	$ 2,038,148	$ 396,908	$ 731,607	$ 334,699	$ 2,417,418	$ 4,790,266	$ 2,372,848		
3	Total Account Workers Compensation	$ 158,498	$ 667,154	$ 508,656	$ 28,596	$ 108,865	$ 80,269	$ 187,094	$ 776,019	$ 588,925		
4	Total Corporate Insurance (Ln 1 + Ln 2 + Ln 3)	$ 2,474,509	$ 5,012,147	$ 2,537,639	$ 485,672	$ 893,203	$ 407,531	$ 2,960,181	$ 5,905,350	$ 2,945,169		
5	Less: Capitalization	$ (642,895)	$ (1,302,192)	$ (659,297)	$ (80,766)	$ (148,538)	$ (67,772)	$ (723,662)	$ (1,450,730)	$ (727,069)		
6	HTY Insurance - Net Capitalization (Ln 4 - Ln 5)	$ 1,831,613	$ 3,709,955	$ 1,878,342	$ 404,906	$ 744,665	$ 339,759	$ 2,236,519	$ 4,454,620	$ 2,218,101		
7	FTY Increase Estimate		8.77%	(a)		8.77%			8.77%			
8	FTY Adjustment for Insurance (Ln 6 x Ln 7)		$ 325,363	(b)		$ 65,307			$ 390,670		$ 773,601	$ (382,931)
9	FTY Adjusted Insurance Expense (Ln 6 + Ln 8)		$ 4,035,318			$ 809,972			$ 4,845,290			
10	FPFTY Increase Estimate		8.77%			8.77%			8.77%			
11	FPTFY Adjustment for Insurance (Ln 9 x Ln 10)		$ 353,897			$ 71,035			$ 424,932		$ 874,943	$ (450,011)
12	FPFTY Adjusted Insurance Expense (Ln 9 + Ln 11)		$ 4,389,216			$ 881,006			$ 5,270,222			
13	Total I&E Recommended Adjustment (Ln 7 + Ln 12)											$ (832,942)

(a) Reference I&E Exhibit No. 1, Schedule 8, p. 5.
(b) Reference I&E Statement No. 1, p. 22, lines 12-19

I&E Exhibit No. 1
Schedule 9
Page 2 of 3

Peoples Natural Gas Company LLC
Corporate Insuarance Capitalization Adjustment
For the Twelve Months Ended September 30, 2025

PNG

	8/31/2021	8/31/2022	8/31/2023	8/31/2024	8/31/2025
Expense	4,410,555	4,047,987	6,297,206	6,953,797	7,696,402
Capital	1,739,962	2,016,912	2,210,316	1,806,647	1,999,581
Total	6,150,517	6,064,899	8,507,522	8,760,444	9,695,983
Cap %	28.3%	33.3%	26.0%	20.6%	20.6%
3-Year Average			29.2%		

PG

	8/31/2021	8/31/2022	8/31/2023	8/31/2024	8/31/2025
Expense	624,460	662,042	1,134,582	1,251,591	1,383,929
Capital	772,624	843,833	226,315	208,137	230,145
Total	1,397,084	1,505,875	1,360,897	1,459,728	1,614,074
Cap %	55.3%	56.0%	16.6%	14.3%	14.3%
3-Year Average			42.7%		

Combined

	8/31/2021	8/31/2022	8/31/2023	8/31/2024	8/31/2025
Expense	5,035,015	4,710,029	7,431,788	8,205,388	9,080,331
Capital	2,512,586	2,860,745	2,436,631	2,014,784	2,229,726
Total	7,547,601	7,570,774	9,868,419	10,220,172	11,310,057
Cap %	33.3%	37.8%	24.7%	19.7%	19.7%
3-Year Average			31.9%		

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: I&E-RE-033

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Reference Peoples Volume 1, Exhibit 4, Schedule 4 concerning advertising expense. Provide the following:

A. Detailed breakdown of the following for the TME August 31, 2023:

1. Digital Media – Other advertising programs - $144,488;
2. Creative Production/Ad Creation – Other advertising programs $20,710;
3. Traditional Broadcast – Other advertising programs – Community - $4,400;
4. Print – Other advertising programs - $4,200; and
5. PR Firm – Other advertising programs - $1,370,197.

B. Detailed breakdown of the following under “Other” for the TME August 31, 2023:

1. Public health and safety - $150,808;
2. Conservation of energy - $3,500
3. Explanation of Billing Practices, Rates, etc. - $1,165,063; and
4. Other advertising programs - $50,826.

C. For Part A, state whether the above is included in Peoples’ claim for the FPFTY; and

D. Detailed breakdown of the HTY Adjustments by company of ($125,001) for the TME August 31, 2022 and $135,981 for the TME August 31, 2023.

Answer: Please refer to attachment for responses to Parts A-D.

Submit Date: 2/7/2024

I&E-RE-33, Part A

5. PR Firm – Other advertising programs - $1,370,197.

OTHER		**1,370,197.27**
A		**150,807.95**
	Project Hyde Park Safety Improvement	5,000.00
	Marcellus Shale Coalition	15,000.00
	Mark-IM.com	317.95
	Pennsylvania One Call System Inc	3,000.00
	Pittsburgh Downtown Partnership	125,000.00
	Tall Timber Group	2,490.00
B		**3,500.00**
	Allegheny Conference on Community	2,000.00
	Carnegie Mellon University	1,500.00
C		**1,165,062.96**
	Lozinak Professional Baseball LLC	205,520.84
	Pittsburgh Penguins LP	69,979.05
	Pittsburgh Pirates	37,370.03
	Pittsburgh Steelers LLC	852,193.04
E		**50,826.36**
	Brand Makers LLC	14,019.84
	Capital Analytics Associates	5,500.00
	First Choice Telephone An	225.00
	J Mac Cycling LLC	500.00
	Lakemont Park	1,000.00
	Local Government Academy	1,200.00
	Mark-IM.com	24,838.12
	PA Mobile AG Lab	2,000.00
	Rapps Packaging	1,543.40

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: I&E-RE-050

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Reference Peoples' response to I&E-RE-33 concerning advertising expense. Provide the following:

A. Detailed breakdown and description of each of the advertising programs listed in response to I&E-RE-33, Part A.5, PR Firm – Other advertising programs;

B. Samples for each of the advertising programs listed in response to I&E-RE-33, Part A.5, PR Firm – Other advertising programs, including, but not limited to brochures, notices, bill inserts, maintenance tips, and publications provided to customers under each of these advertising programs.

Answer: a & b. See the attachments.

Submit Date: 3/6/2024

Period: 9/1/22 - 8/31/23 (TME August 31, 2023)

Listing	Cost	Explanation	Sample
OTHER	$1,370,197		
A	$150,808		
Project Hyde Park Safety Improvement	$5,000	Peoples contributed to the Hyde Park Volunteer Fire Department located in Hyde Park, Pa. The donation was used to facilitate the improvement of the dock facility that Hyde Park VFD and other emergency service providers use to deploy personnel and equipment for river rescue efforts.	On-site activation, no samples available.
Marcellus Shale Coalition	$15,000	Peoples collaborated with other Marcellus Shale Coalition members on the development of the web site Natural Gas for the Next Generation (www.natgasnextgen.com).	Screenshots of web page - Marcellus Shale Coalition Sample
Mark-IM.com	$318	Mark-IM is the vendor that operates our online company store for employees to purchase clothing with the Peoples logo.	Screenshot - Mark-IM Sample
Pennsylvania One Call System Inc	$3,000	As a longtime partner with the Pennsylvania One Call System, Peoples was a sponsor of a local Safety Days event held for contractors in Western Pennsylvania, as well as the organization's annual golf outing. This support helps PA One Call in their mission to protect Pennsylvania residents from the dangers stemming from damage to underground utility lines, both in loss of utility service as well as risk of harm to persons or property.	Safety Days sample - Pennsylvania One Call System Inc Sample
Pittsburgh Downtown Partnership	$125,000	Peoples serves as the presenting sponsor of the annual Holiday Market organized by the Pittsburgh Downtown Partnership. This widely acclaimed community event is a major economic driver during the holiday season, supporting businesses of all sizes. Peoples utilizes the advertising elements that come with the sponsorship to drive awareness toward its Gift of Warmth program to help customers who are struggling to pay their bills, as well as other Customer Assistance Programs. The sponsorship also serves for general branding and awareness, conferring a level of credibility for the organization and generate more trust among our customer base that we are committed to support causes the improve quality of life for people in the region. https://downtownpittsburghholidays.com/holiday-market https://www.youtube.com/watch?v=XjUOzuYVIMU https://www.youtube.com/watch?v=IVNkCDKDFsk	Ad samples uploaded - Pittsburgh Downtown Partnership Sample
Tall Timber Group	$2,490	Advertising in regional business trade publication BreakingGround	Ad sample & Publication - Tall Timber Group Sample
B	$3,500		
Allegheny Conference on Community	$2,000	Sponsorship of Conference's Clean Clean Energy Action Forum.	Onsite activation - no samples to share. Invoice uploaded - Allegheny Conference Sample
Carnegie Mellon University	$1,500	Sponsorship of CMU Energy Week held by Wilton E. Scott Insitute for Energy Innovation at Carnegie Mellon University	Onsite activation - no samples to share. Invoice uploaded - Carnegie Mellon University Sample
C	$1,165,063		
Lozinak Professional Baseball LLC	$205,521	Peoples is the naming rights sponsor of the Altoona Curve minor league baseball team. This includes numerous avenues for advertising, including through the team's website, printed programs, and various signage and awareness opportunities at the ballpark. Peoples utilized this for important safety messages including Damage Prevention (Call 811 Before You Dig) and How to Detect a Natural Gas Leak. Peoples also leveraged the sponsorship for customer appreciation actions including tickets to a Curve game for Blair County residents, promoting the benefits of natural gas service to prospective new customers, and general awareness.	2023 Proof of Performance report - Lozinak Professional Baseball LLC sample
Pittsburgh Penguins LP	$69,979	During the 2022 and 2023 National Hockey League Seasons, Peoples was an in-game sponsor of the Pittsburgh Penguins. Through this partnership, Peoples communicated important natural gas safety messages to attendees of Penguins games, primarily around Carbon Monoxide safety and awareness. The sponsorship also served for general awareness, as being associated with a major professional sports team confers a level of credibility for the organization and generate more trust among our customer base.	Samples and 2023-24 deliverable report uploaded - Pittsburgh Penguins Samples

Listing	Cost	Explanation	Sample
Pittsburgh Pirates	$37,370	During the 2022 Major League Baseball Season, Peoples was an in-game sponsor of the Pittsburgh Pirates. Through this partnership, Peoples communicated important natural gas safety messages to attendees of Pirates games, primarily around Damage Prevention (Call 811 Before You Dig), as that is a prominent safety campaign during the baseball season. The sponsorship also served for general awareness, as being associated with a major professional sports team confers a level of credibility for the organization and generate more trust among our customer base.	Samples uploaded - Pittsburgh Pirates Samples
Pittsburgh Steelers LLC	$852,193	During the 2022 and 2023 National Football League Seasons, Peoples was an in-game sponsor of the Pittsburgh Steelers. Through this partnership, Peoples communicated important natural gas safety messages to attendees of Steelers games, primarily around overall Natural Gas Safety (How to Detect a Natural Gas Leak through Sight, Smell and Sound). The sponsorship also served for general awareness, as being associated with a major professional sports team confers a level of credibility for the organization and generate more trust among our customer base.	Samples uploaded - Pittsburgh Steelers Samples
E	$50,826		
Brand Makers LLC	$14,020	Promotional products used as giveaways at a variety of public, industry and internal events to increase engagement.	Samples not readily available.
Capital Analytics Associates	$5,500	Sponsorship of Invest Pittsburgh 2023 Conference	Sample uploaded - Capital Analytics Associates Sample
First Choice Telephone Answering Service	$225	First Choice is the operator of our media hotline, answering calls 24/7/365 that may come in from members of the media and contacting the company's on-call Media Relations representative, who then gathers information and responds to the media inquiry.	No samples available
J Mac Cycling LLC	$500	Peoples employee is part of a small cycling team, J Mac Cycling. We sponsored his team and in exchange, the Peoples logo is placed on the cycling team's uniforms.	Sample uploaded - J Mac Cycling sample
Lakemont Park	$1,000	Peoples served as a sponsor for Lakemont's Holiday Lights on the Lake event in both 2022 and 2023. Our logo was included in promotional materials for the event both online and on-site.	Sample uploaded - Lakemont Park Sample
Local Government Academy	$1,200	Peoples sponsored The Annual Promoting Excellence in Local Government Golf Outing, held by Local Government Academy. The organization provides municipal governments with education resources, and the outing specifically supports the Michael Lynch Scholarship Foundation.	On-site activation, no samples available.
Mark-IM.com	$24,838	For the purchase of clothing with the company logo on it, worn by staff while working in the field as well as during company volunteer events. Branded clothing, when paired with ID badges, helps ensure customers that our employees are who they claim to be, providing important peace of mind. Having employees wear apparel with the Peoples logo also brings visibility to the company, which is valuable whether in community service or professional functions.	Samples of shirts offered by Mark-IM and our online store page - Mark-IM sample
PA Mobile AG Lab	$2,000	Peoples sponsored the Pennsylvania Mobile Agriculture Lab at the Butler County Farm Show. Peoples logo featured on Lab signage and transportation at the show.	On-site activation, no samples available.
Rapps Packaging	$1,543	Labels for Peoples' Eat Drink Help (EDH) community program. Through EDH, Peoples partners with a small business and a local charity. Peoples provides 1,000 labels to create awareness for all 3 entitites, which are placed on the business' products. Once the supply of labels is exhausted, Peoples makes a $1,000 donation to the charity on behalf of the company and participating small business. In 2024, EDH will reach and exceed the milestone of $200,000 donated to local community causes since the program's start in 2016.	Samples uploaded - Rapps Packing Sample

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: I&E-RE-039

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Reference Peoples Volume 1, Exhibit 4, p. 29 concerning rate case expense. Provide the following information for the last three base rate cases filed with the Commission by company:

A. Docket number, date of filing, and method of resolution (i.e., settlement or litigation);

B. Requested rate case expense and the actual rate case expense incurred and a breakdown of actual expenses incurrent by category (e.g., consulting services, legal fees, miscellaneous costs) for each case listed in response to Part A above.

Answer: Please refer to attachment.

Submit Date: 2/7/2024

I&E-RE-39 - Part A

Docket	Date of Filing	Method of Resolution
R-2010-2201702 (Peoples)	28-Oct-10	Settlement
R-2012-2285985 (Peoples)	28-Feb-12	Settlement
R-2018-3006818 (Peoples)	29-Jan-19	Settlement

Docket	Requested Expense	Actual Rate Case Expense
R-2010-2201702	$1,591,800	$975,455
R-2012-2285985	$1,549,466	$775,929
R-2018-3006818	$2,389,000	$2,137,898

--I&E Modified--

Description	Revenue Lag	Expense Lead	Net Lag	CWC Factor	Fully Projected Future Test Year Expenses		Fully Projected Future Test Year Cash Working Capital Requirement
(A)	(B)	(C)	(D)	(E)			
Gas Purchase Costs	59.44	(35.49)	23.95	0.0656	317,688,615		20,841,289
Payroll	59.44	(15.55)	43.89	0.1202	72,811,685	(a)	8,754,925
Pensions and Benefits	59.44	(30.63)	28.81	0.0789	26,674,464	(b)	2,105,252
Taxes Other Than Income Taxes	59.44	(51.86)	7.58	0.0208	15,136,955	(c)	314,391
Other O&M Expenses	59.44	(42.40)	17.03	0.0467	114,613,408	(d)	5,348,430
Income Taxes							
State	59.44	(54.78)	4.66	0.0128	-		-
Federal	59.44	(37.00)	22.44	0.0615	-		-
Interest Expense							
Long Term Debt	59.44	(67.26)	(7.82)	(0.0214)	83,973,864		(1,799,756)
Short Term Debt	59.44	-	59.44	0.1628	-		-
Total					$ 630,898,989		$ 35,564,531

Ref: I&E Statement No. 1, Page 3 for Labor Expense Adjustment
Ref: I&E Exhibit No. 13, p. 2
Ref: I&E Statement No. 1, Page 3 for Payroll Taxes Adjustment
Ref: I&E Exhibit No. 13, p. 3

I&E Exhibit No. 1
Schedule 13
Page 1 of 3

Peoples Natural Gas Company LLC
Cash Working Capital Pensions and Benefits Adjustment
For the Twelve Months Ended September 30, 2025

		I&E Recommendded Adjustment
1	Pension Expense	$ (1,286,880)
2	Post Retirement Benefits Other than Incom	(417,689)
3	Other Employee Beneftis	(687,504)
4	Total	$ (2,392,073)

Ref: I&E Statement No. 1, p. 3

Peoples Natural Gas Company LLC
Cash Working Capital Other O&M Expenses Adjustment
For the Twelve Months Ended September 30, 2025

		I&E Recommendded Adjustment
1	Outside Services - Contracted	$ (810,857)
2	Corporate Insurance	(2,085,969)
3	Advertising Expense	(1,370,197)
4	Rate Case Expense	(564,132)
5	Total	$ (4,831,155)

Ref: I&E Statement No. 1, p. 3

COMMONWEALTH OF PENNSYLVANIA

PATRICK M. CICERO
Consumer Advocate

OFFICE OF CONSUMER ADVOCATE
555 Walnut Street, 5th Floor, Forum Place
Harrisburg, Pennsylvania 17101-1923
(717) 783-5048
(800) 684-6560

@pa_oca
/pennoca
FAX (717) 783-7152
consumer@paoca.org
www.oca.pa.gov

February 21, 2024

Via Electronic Mail Only
Michael W. Gang, Esquire
Anthony D. Kanagy, Esquire
Nicholas A. Stobbe, Esquire
Post & Schell, P.C.
17 North Second Street
12th Floor
Harrisburg, PA 17101-1601
mgang@postschell.com
akanagy@postschell.com
nstobbe@postschell.com

Re: Pennsylvania Public Utility Commission
v.
Peoples Natural Gas Company LLC
Docket Nos. R-2023-3044549

Dear Counsel:

Enclosed you will find Interrogatories of the Office of Consumer Advocate, Sets 13-15, in this matter.

In accordance with the discovery modifications adopted in Administrative Law Judge Long's Prehearing Conference Order issued on February 5, 2024, we request Peoples Natural Gas Company, LLC provide verified answers to these inquiries within ten (10) days of service. Also, please forward the verified answers as they are completed, rather than waiting until the responses to the full set are completed.

We would appreciate it if you would communicate any objections you may have to these interrogatories as soon as possible.

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XV-005

Witness: Wachter, Andrew **Title:** Finance and Regulation Director

Question: Reference the revised and omitted exhibits filing that Peoples submitted in this case on February 16, 2024. Please provide the following information:

a. Please confirm that Line 4 of Exhibit No. 4, Schedule No. 1, page 2 is not impacted by Peoples' revision to Exh. 4, Sch. 1, pg. 11. If Exhibit No. 4, Schedule No. 1, page 2 is impacted, please provide an updated version of this page.

b. Please confirm that Peoples' revision to Exh. 4, Sch. 22, pgs. 1-4 does not impact the revenue requirement of the History Test Year, Future Test Year, or Fully Projected Future Test Year provided by Peoples in this proceeding.

c. If any corrections are carried over to Exhibit 4, Schedule 1, Peoples should update that schedule as well.

d. Please update Exhibit No. 4 Schedule No. 1 page 2 of 33, to update its request for Post-Retirement Benefits other than Pension (Exhibit No. 4 Schedule No. 1 page 11).

e. Indicate whether any of the corrections and omissions have a revenue requirement impact in this case from the as-filed position. If so, identify the impact(s) and specify how each impact is calculated.

Answer: a. The revision to Exh. 4, Sch. 1, pg. 11 does impact Exhibit No. 1, page 2. Peoples will file the revised Exhibit No. 4, Schedule 1 under separate cover.

b. The revision to Exh. 4, Sch. 22, pgs. 1-4 does not impact the revenue requirement.

c. Peoples will file the revised Exhibit No. 4, Schedule 1 under separate cover.

d. Peoples will file the revised Exhibit No. 4, Schedule 1 under separate cover.

e. The revised Exhibit No. 4, Schedule 1 to be filed under separate cover will outline all changes to the revenue requirement.

Submit Date: 3/4/2024

I&E Exhibit No. 1
Schedule 14
Page 3 of 6

Peoples Natural Gas Company LLC
§ 53.53 III.E

17. State whether any adjustments have been made to expenses in order to present such expenses on a basis comparable to the manner in which revenues are presented in this proceeding (i.e.—accrued, billed or cash).

* * * * * * * * * * * * * * * * * *

Expenses have been adjusted to a basis comparable to the adjusted normal level of revenues. Refer to Exhibit No. 4, Schedule No. 1, pages 2-4 for a detail of all expense adjustments. Peoples Natural Gas Division is referred to as "PNG" and Peoples Gas Division is referred to as "PGC" in Exhibit 4.

REVISIONS:

Please note that this revised Exhibit 4, Schedule No. 1 increases the claim for O&M expense by $996,345 based upon adjustments determined during discovery. There were three adjustments: 1) increase in expense of $538,590 as referenced in the response to I&E-RE-6; 2) increase in expense of $476,452 as referenced in the response to I&E-RE-18; and 3)reduction in expense of $18,697 as referenced in the response to I&E-RE-30. Please note that this has a dollar-for-dollar impact on the revenue requirements (i.e. a $996,345 increase to revenue requirement).

The Company intends to make this update in its rebuttal case, along with other adjustments, if any, that the Company may agree to resulting from other parties' direct testimony.

Peoples Natural Gas Company LLC-Combined
Statement of Operations and Maintenance Expense at Present Rates

Line	Cost Element Description	Per Books Twelve Months Ended August 31, 2023 (1)	Adjustments (2)	Normalized Twelve Months Ended August 31, 2023 (3)=(1)+(2)	Adjustments (4)	Normalized FTY Twelve Months Ended August 31, 2024 (5)=(3)+(4)	Adjustments (6)	At Present Rates Normalized FPFTY Twelve Months Ended September 30, 2025 (7)=(5)+(6)	Reference (8)
1	Labor	$ 55,181,109	$ 7,422,979	$ 62,604,088	$ 4,188,736	$ 66,792,824	$ 3,097,669	$ 69,890,492	Exh. 4, Sch. 1, Pg. 5
2	STI/Incentive Compensation	6,823,130	(1,609,771)	5,213,359	321,203	5,534,562	82,026	5,616,588	Exh. 4, Sch. 1, Pg. 6
3	Pension	4,497,434	0	4,497,434	1,172,566	5,670,000	0	5,670,000	Exh. 4, Sch. 1, Pg. 10
4	Post Retirement Benefits Other Than Pensions	1,229,997	1,634,119	2,864,116	26,377	2,890,493	0	2,890,493	Exh. 4, Sch. 1, Pg. 11
5	Other Employee Benefits	16,406,605	874,037	17,280,642	2,418,135	19,698,778	1,402,832	21,101,610	Exh. 4, Sch. 1, Pg. 12
6	Outside Services - Contracted	24,124,704	0	24,124,704	3,497,488	27,622,192	1,035,740	28,657,932	Exh. 4, Sch. 1, Pg. 13
7	Outside Services - IT	8,596,499	0	8,596,499	1,322,906	9,919,406	304,558	10,223,964	Exh. 4, Sch. 1, Pg. 14
8	Outside Services - A&G	2,955,571	0	2,955,571	206,890	3,162,461	221,372	3,383,833	Exh. 4, Sch. 1, Pg. 15
9	Building Leases	3,902,706	681,375	4,584,081	0	4,584,081	0	4,584,081	Exh. 4, Sch. 1, Pg. 16
10	Corporate Insurance	5,213,687	2,218,101	7,431,788	773,601	8,205,389	874,943	9,080,331	Exh. 4, Sch. 1, Pg. 17
11	Injuries and Damages	1,173,800	1,136,673	2,310,473	73,935	2,384,409	76,301	2,460,710	Exh. 4, Sch. 1, Pg. 18
12	Travel	931,017	0	931,017	40,947	971,964	42,748	1,014,712	Exh. 4, Sch. 1, Pg. 19
13	Company Memberships	797,132	0	797,132	17,345	814,477	17,723	832,200	Exh. 4, Sch. 1, Pg. 20
14	Licenses and Permits	677,424	0	677,424	24,529	701,953	25,417	727,371	Exh. 4, Sch. 1, Pg. 21
15	Utilities & Fuel Used in Company Operations	2,938,901	(161,285)	2,777,616	84,825	2,862,441	87,415	2,949,856	Exh. 4, Sch. 1, Pg. 22
16	Advertising	1,516,137	(179,141)	1,336,997	42,784	1,379,781	44,153	1,423,934	Exh. 4, Sch. 1, Pg. 23
17	Fleet	1,099,110	0	1,099,110	35,127	1,134,237	36,250	1,170,486	Exh. 4, Sch. 1, Pg. 24
18	Materials & Supplies	10,459,149	0	10,459,149	1,050,458	11,509,608	338,640	11,848,248	Exh. 1, Sch. 1, Pg. 25
19	Other O&M	14,965,499	0	14,965,499	302,196	15,267,695	8,429,200	23,696,895	Exh. 4, Sch. 1, Pg. 26
20	Debt Issuance Costs	0	404,371	404,371	0	404,371	0	404,371	Exh. 4, Sch. 1, Pg. 27
21	Payment Processing	1,451,959	124,419	1,576,378	123,273	1,699,650	316,169	2,015,819	Exh. 4, Sch. 1, Pg. 28
22	Rate Case Expense	0	0	0	1,031,000	1,031,000	0	1,031,000	Exh. 4, Sch. 1, Pg. 29
23	Uncollectible Accounts	14,518,575	(1,388,542)	13,130,033	491,290	13,621,323	14,198	13,635,521	Exh. 4, Sch. 1, Pg. 30
24	Total USP/SCR Rider	12,891,002	322,405	13,213,408	(13,213,408)	0	0	0	Exh. 4, Sch. 1, Pg. 31
25	Interest on Customer Deposits	0	133,336	133,336	151,267	284,603	0	284,603	Exh. 4, Sch. 1, Pg. 32
26	**Total Operation and Maintenance Expense**	**$ 192,351,147**	**$ 11,613,078**	**$ 203,964,225**	**$ 4,183,470**	**$ 208,147,695**	**$ 16,447,354**	**$ 224,595,049**	
	Other Income Deductions								
27	Net Rent Expense - Nonutility Operations	$ 2,102,533	$ (2,102,533)	$ -	$ -	$ -	$ -	$ -	
28	Charitable and Civic Contributions	3,342,580	(3,342,580)	0	0	$ -	$ -	$ -	
29	Expense - Civic, Political & Rel. Act	311,032	(311,032)	0	0	0	0	0	
30	Other Expense Miscellaneous	13,310,021	(13,310,021)	0	0	0	0	0	
31	**Total Other Income Deductions**	**$ 19,066,166**	**$ (19,066,166)**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	
		$ 0							

Peoples Natural Gas Company LLC - Peoples Natural Gas Division
Statement of Operations and Maintenance Expense at Present Rates

Line	Cost Element Description	Per Books Twelve Months Ended August 31, 2023 (1)	Adjustments (2)	Normalized Twelve Months Ended August 31, 2023 (3)=(1)+(2)	Adjustments (4)	Normalized FTY Twelve Months Ended August 31, 2024 (5)=(3)+(4)	Adjustments (6)	At Present Rates Normalized FPFTY Twelve Months Ended September 30, 2025 (7)=(5)+(6)	Reference (8)
1	Labor	$ 45,572,427	$ 792,149	$ 46,364,576	$ 3,652,363	$ 50,016,938	$ 2,676,742	$ 52,693,680	Exh. 4, Sch. 1, Pg. 5
2	STI/Incentive Compensation	6,471,016	(2,040,970)	4,430,046	277,651	4,707,697	65,524	4,773,221	Exh. 4, Sch. 1, Pg. 6
3	Pension	4,497,434	0	4,497,434	1,172,566	5,670,000	0	5,670,000	Exh. 4, Sch. 1, Pg. 10
4	Post Retirement Benefits Other Than Pensions	1,229,997	(1,016,131)	213,866	26,377	240,243	0	240,243	Exh. 4, Sch. 1, Pg. 11
5	Other Employee Benefits	15,791,330	(1,730,763)	14,060,567	1,988,786	16,049,353	1,146,281	17,195,633	Exh. 4, Sch. 1, Pg. 12
6	Outside Services - Contracted	21,567,899	0	21,567,899	3,139,301	24,707,200	926,437	25,633,638	Exh. 4, Sch. 1, Pg. 13
7	Outside Services - IT	7,646,196	0	7,646,196	1,177,275	8,823,471	270,942	9,094,413	Exh. 4, Sch. 1, Pg. 14
8	Outside Services - A&G	2,283,645	0	2,283,645	159,855	2,443,500	171,045	2,614,545	Exh. 4, Sch. 1, Pg. 15
9	Building Leases	3,433,344	683,018	4,116,362	0	4,116,362	0	4,116,362	Exh. 4, Sch. 1, Pg. 16
10	Corporate Insurance	4,418,865	1,878,342	6,297,206	656,591	6,953,797	742,605	7,696,402	Exh. 4, Sch. 1, Pg. 17
11	Injuries and Damages	1,064,530	945,027	2,009,557	64,306	2,073,862	66,364	2,140,226	Exh. 4, Sch. 1, Pg. 18
12	Travel	852,692	0	852,692	37,502	890,194	39,152	929,346	Exh. 4, Sch. 1, Pg. 19
13	Company Memberships	580,726	0	580,726	12,636	593,363	12,911	606,274	Exh. 4, Sch. 1, Pg. 20
14	Licenses and Permits	649,395	0	649,395	23,514	672,909	24,366	697,275	Exh. 4, Sch. 1, Pg. 21
15	Utilities & Fuel Used in Company Operations	2,424,797	(145,160)	2,279,637	69,617	2,349,254	71,743	2,420,997	Exh. 4, Sch. 1, Pg. 22
16	Advertising	1,413,159	(166,973)	1,246,186	39,878	1,286,064	41,154	1,327,218	Exh. 4, Sch. 1, Pg. 23
17	Fleet	864,407	0	864,407	27,626	892,033	28,509	920,541	Exh. 4, Sch. 1, Pg. 24
18	Materials & Supplies	9,113,593	0	9,113,593	936,596	10,050,189	295,701	10,345,890	Exh. 1, Sch. 1, Pg. 25
19	Other O&M	13,594,781	0	13,594,781	399,991	13,994,772	7,671,453	21,666,225	Exh. 4, Sch. 1, Pg. 26
20	Debt Issuance Costs	0	376,260	376,260	0	376,260	0	376,260	Exh. 4, Sch. 1, Pg. 27
21	Payment Processing	1,451,959	0	1,451,959	113,543	1,565,502	291,215	1,856,717	Exh. 4, Sch. 1, Pg. 28
22	Rate Case Expense	0	0	0	515,500	515,500	0	515,500	Exh. 4, Sch. 1, Pg. 29
23	Uncollectible Accounts	13,030,674	(1,438,381)	11,592,293	454,102	12,046,395	11,001	12,057,396	Exh. 4, Sch. 1, Pg. 30
24	Total USP/SCR Rider	11,560,342	475,235	12,035,577	(12,035,577)	0	0	0	Exh. 4, Sch. 1, Pg. 31
25	Interest on Customer Deposits	0	116,991	116,991	124,730	241,721	0	241,721	Exh. 4, Sch. 1, Pg. 32
26	**Total Operation and Maintenance Expense**	**$ 169,513,207**	**$ (1,271,357)**	**$ 168,241,851**	**$ 3,034,730**	**$ 171,276,580**	**$ 14,553,143**	**$ 185,829,724**	
	Other Income Deductions								
27	Net Rent Expense - Nonutility Operations	$ 2,102,533	$ (2,102,533)	$ -	$ -	$ -	$ -	$ -	
28	Charitable and Civic Contributions	3,082,066	(3,082,066)	-	-	-	-	-	
29	Expense - Civic, Political & Rel. Act	307,348	(307,348)	-	-	-	-	-	
30	Other Expense Miscellaneous	13,188,541	(13,188,541)	-	-	-	-	-	
31	**Total Other Income Deductions**	**$ 18,680,488**	**$ (18,680,488)**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	

Peoples Natural Gas Company LLC - Peoples Gas Division
Statement of Operations and Maintenance Expense at Present Rates

Line	Cost Element Description	Per Books Twelve Months Ended August 31, 2023 (1)	Adjustments (2)	Normalized Twelve Months Ended August 31, 2023 (3)=(1)+(2)	Adjustments (4)	Normalized FTY Twelve Months Ended August 31, 2024 (5)=(3)+(4)	Adjustments (6)	At Present Rates Normalized FPFTY Twelve Months Ended September 30, 2025 (7)=(5)+(6)	Reference (8)
1	Labor	$ 9,608,682	$ 6,630,831	$ 16,239,512	$ 536,373	$ 16,775,885	$ 420,926	$ 17,196,812	Exh. 4, Sch. 1, Pg. 5
2	STI/Incentive Compensation	352,114	431,199	783,313	43,552	826,866	16,502	843,368	Exh. 4, Sch. 1, Pg. 6
3	Pension	0	0	0	0	0	0	0	Exh. 4, Sch. 1, Pg. 10
4	Post Retirement Benefits Other Than Pensions	(0)	2,650,250	2,650,250	0	2,650,250	0	2,650,250	Exh. 4, Sch. 1, Pg. 11
5	Other Employee Benefits	615,275	2,604,800	3,220,076	429,349	3,649,425	256,552	3,905,977	Exh. 4, Sch. 1, Pg. 12
6	Outside Services - Contracted	2,556,804	0	2,556,804	358,187	2,914,992	109,302	3,024,294	Exh. 4, Sch. 1, Pg. 13
7	Outside Services - IT	950,303	0	950,303	145,632	1,095,934	33,616	1,129,551	Exh. 4, Sch. 1, Pg. 14
8	Outside Services - A&G	671,926	0	671,926	47,035	718,961	50,327	769,288	Exh. 4, Sch. 1, Pg. 15
9	Building Leases	469,361	(1,643)	467,719	0	467,719	0	467,719	Exh. 4, Sch. 1, Pg. 16
10	Corporate Insurance	794,823	339,759	1,134,582	117,010	1,251,591	132,338	1,383,929	Exh. 4, Sch. 1, Pg. 17
11	Injuries and Damages	109,270	191,647	300,917	9,629	310,546	9,937	320,484	Exh. 4, Sch. 1, Pg. 18
12	Travel	78,325	0	78,325	3,445	81,769	3,596	85,366	Exh. 4, Sch. 1, Pg. 19
13	Company Memberships	216,405	0	216,405	4,709	221,114	4,811	225,925	Exh. 4, Sch. 1, Pg. 20
14	Licenses and Permits	28,029	0	28,029	1,015	29,044	1,052	30,096	Exh. 4, Sch. 1, Pg. 21
15	Utilities & Fuel Used in Company Operations	514,104	(16,125)	497,979	15,208	513,186	15,672	528,858	Exh. 4, Sch. 1, Pg. 22
16	Advertising	102,979	(12,168)	90,811	2,906	93,717	2,999	96,716	Exh. 4, Sch. 1, Pg. 23
17	Fleet	234,703	0	234,703	7,501	242,204	7,741	249,945	Exh. 4, Sch. 1, Pg. 24
18	Materials & Supplies	1,345,557	0	1,345,557	113,862	1,459,419	42,940	1,502,358	Exh. 1, Sch. 1, Pg. 25
19	Other O&M	1,370,718	0	1,370,718	(97,795)	1,272,923	757,747	2,030,669	Exh. 4, Sch. 1, Pg. 26
20	Debt Issuance Costs	0	28,111	28,111	0	28,111	0	28,111	Exh. 4, Sch. 1, Pg. 27
21	Payment Processing	0	124,419	124,419	9,730	134,148	24,954	159,102	Exh. 4, Sch. 1, Pg. 28
22	Rate Case Expense	0	0	0	515,500	515,500	0	515,500	Exh. 4, Sch. 1, Pg. 29
23	Uncollectible Accounts	1,487,901	49,839	1,537,740	37,187	1,574,928	3,198	1,578,125	Exh. 4, Sch. 1, Pg. 30
24	Total USP/SCR Rider	1,330,660	(152,829)	1,177,830	(1,177,830)	0	0	0	Exh. 4, Sch. 1, Pg. 31
25	Interest on Customer Deposits	0	16,345	16,345	26,537	42,882	0	42,882	Exh. 4, Sch. 1, Pg. 32
26	**Total Operation and Maintenance Expense**	**$ 22,837,940**	**$ 12,884,434**	**$ 35,722,374**	**$ 1,148,741**	**$ 36,871,115**	**$ 1,894,210**	**$ 38,765,325**	
	Other Income Deductions								
27	Net Rent Expense - Nonutility Operations	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
28	Charitable and Civic Contributions	260,514	(260,514)	-	-	-	-	-	
29	Expense - Civic, Political & Rel. Act	3,684	(3,684)	-	-	-	-	-	
30	Other Expense Miscellaneous	121,480	(121,480)	-	-	-	-	-	
31	**Total Other Income Deductions**	**$ 385,678**	**$ (385,678)**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	

I&E Exhibit No. 2
Witness: Anthony Spadaccio

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PEOPLES NATURAL GAS COMPANY LLC

Docket No. R-2023-3044549

Exhibit to Accompany

the

Direct Testimony

of

Anthony Spadaccio, CRRA

Bureau of Investigation & Enforcement

Concerning:

Rate of Return

I&E
Summary of Cost of Capital

Type of Capital	Ratio	Cost Rate	Weighted Cost
Peoples Natural Gas Company LLC			
Long-Term Debt	45.33%	4.37%	1.98%
Common Equity	54.67%	9.96%	5.45%
Total	100.00%		7.43%

Proxy Group Capital Structure

	2022		2021		2020		2019		2018		Average
Atmos Energy Corp.											
Long-term Debt	$ 5,944.945	38.23%	$ 5,124.950	39.33%	$ 4,732.850	41.07%	$ 3,529.452	36.22%	$ 2,493.665	31.81%	37.33%
Short-term Debt	184.967	1.19%	-	0.00%	-	0.00%	464.915	4.77%	575.780	7.34%	2.66%
Common Equity	9,419.091	60.58%	7,906.889	60.67%	6,791.203	58.93%	5,750.223	59.01%	4,769.950	60.85%	60.01%
	15,549.003	100.00%	13,031.839	100.00%	11,524.053	100.00%	9,744.590	100.00%	7,839.395	100.00%	100.00%
Chesapeake Utilities											
Long-term Debt	590.780	36.34%	558.474	35.93%	518.371	37.26%	450.064	35.75%	316.020	27.99%	34.66%
Short-term Debt	202.157	12.43%	221.634	14.26%	175.644	12.63%	247.371	19.65%	294.458	26.08%	17.01%
Common Equity	832.801	51.23%	774.130	49.81%	697.085	50.11%	561.577	44.60%	518.439	45.92%	48.33%
	1,625.738	100.00%	1,554.238	100.00%	1,391.100	100.00%	1,259.012	100.00%	1,128.917	100.00%	100.00%
NiSource Inc.											
Long-term Debt	9,555.500	55.09%	9,211.300	60.71%	9,249.700	63.25%	7,907.800	53.48%	7,105.400	50.92%	56.69%
Short-term Debt	1,761.900	10.16%	560.000	3.69%	503.000	3.44%	1,773.200	11.99%	1,977.200	14.17%	8.69%
Common Equity	6,028.900	34.76%	5,400.800	35.60%	4,872.200	33.31%	5,106.700	34.53%	4,870.900	34.91%	34.62%
	17,346.300	100.00%	15,172.100	100.00%	14,624.900	100.00%	14,787.700	100.00%	13,953.500	100.00%	100.00%
New Jersey Resources Corp.	-										
Long-term Debt	2,623.784	53.93%	2,303.527	53.43%	2,354.496	54.45%	1,537.177	49.36%	1,180.619	42.91%	50.81%
Short-term Debt	423.950	8.71%	377.300	8.75%	125.350	2.90%	25.450	0.82%	151.950	5.52%	5.34%
Common Equity	1,817.210	37.35%	1,630.862	37.82%	1,844.692	42.66%	1,551.717	49.82%	1,418.978	51.57%	43.85%
	4,864.944	100.00%	4,311.689	100.00%	4,324.538	100.00%	3,114.344	100.00%	2,751.547	100.00%	100.00%
Northwest Natural Gas Co.											
Long-term Debt	1,325.132	48.03%	1,124.055	45.90%	940.702	44.08%	806.796	44.28%	706.247	41.88%	44.84%
Short-term Debt	258.200	9.36%	389.500	15.91%	304.525	14.27%	149.100	8.18%	217.620	12.90%	12.12%
Common Equity	1,175.441	42.61%	935.146	38.19%	888.730	41.65%	865.999	47.53%	762.634	45.22%	43.04%
	2,758.773	100.00%	2,448.701	100.00%	2,133.957	100.00%	1,821.895	100.00%	1,686.501	100.00%	100.00%
One Gas Inc.											
Long-term Debt	2,679.143	46.07%	3,707.778	56.60%	1,613.228	37.83%	1,314.064	33.18%	1,285.483	35.44%	41.82%
Short-term Debt	552.000	9.49%	494.000	7.54%	418.225	9.81%	516.500	13.04%	299.500	8.26%	9.63%
Common Equity	2,584.426	44.44%	2,349.532	35.86%	2,233.311	52.37%	2,129.390	53.77%	2,042.656	56.31%	48.55%
	5,815.569	100.00%	6,551.310	100.00%	4,264.764	100.00%	3,959.954	100.00%	3,627.639	100.00%	100.00%
Spire Inc.											
Long-term Debt	3,032.200	45.62%	2,992.800	49.22%	2,482.100	45.88%	2,082.600	40.62%	1,900.100	40.35%	44.34%
Short-term Debt	1,037.500	15.61%	672.000	11.05%	648.000	11.98%	743.200	14.50%	553.600	11.76%	12.98%
Common Equity	2,576.500	38.77%	2,416.200	39.73%	2,280.300	42.15%	2,301.000	44.88%	2,255.400	47.89%	42.68%
	6,646.200	100.00%	6,081.000	100.00%	5,410.400	100.00%	5,126.800	100.00%	4,709.100	100.00%	100.00%

Five-Year Average Capital Structure					
Long-term Debt	44.35%	**Maximum**	56.69%	**Minimum**	34.66%
Short-term Debt	9.78%				
Common Equity	45.87%	**Minimum**	34.62%	**Maximum**	60.01%
	100.00%				

Source:
Compustat (S&P Global Market Intelligence - Data Management Solutions)
Yearly data updates typically provided late April of each year
(data in millions)

Company	2022 Interest Charges	2022 Long-Term Debt	2022 Debt Cost
Atmos Energy Corp.	$ 114.96	$ 5,944.95	1.93%
Chesapeake Utilities	24.46	590.78	4.14%
NiSource Inc.	368.30	9,555.50	3.85%
New Jersey Resources Corp.	87.48	2,623.78	3.33%
Northwest Natural Gas Co.	53.25	1,325.13	4.02%
One Gas Inc.	82.01	2,679.14	3.06%
Spire Inc.	124.30	3,032.20	4.10%
	Range:	**Low**	**1.93%**
		High	**4.14%**
		Average	**3.49%**

Source:
Compustat (S&P Global Market Intelligence - Data Management Solutions)
Yearly data updates typically provided late April of each year
(data in millions)

Mergent Bond Record
A-Rated Public Utility Bond Yields

Month	Yield
12/1/2022	5.28%
1/1/2023	5.20%
2/1/2023	5.29%
3/1/2023	5.39%
4/1/2023	5.13%
5/1/2023	5.36%
6/1/2023	5.38%
7/1/2023	5.41%
8/1/2023	5.71%
9/1/2023	5.86%
10/1/2023	6.34%
11/1/2023	5.96%
12/1/2023	5.42%
Average	**5.52%**

Source:
Mergent Bond Record
February 2024

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https://www.wsj.com/economy/central-banking/fed-holds-rates-steady-and-sees-cuts-next-year-4d554e9f

ECONOMY | CENTRAL BANKING

Fed Begins Pivot Toward Lowering Rates as Inflation Declines

Officials don't rule out further hikes while penciling in three rate cuts in 2024

By Nick Timiraos Follow

Updated Dec. 13, 2023 6:32 pm ET

WASHINGTON—Slowing inflation prompted Federal Reserve Chair Jerome Powell to pivot away from raising interest rates and toward considering when to cut them, igniting a rally on Wall Street.

The Fed held its benchmark federal-funds rate steady at a 22-year high on Wednesday and offered every reason to think that its most recent increase this past July probably marked the end of the most aggressive cycle of hikes in four decades.

At a press conference, Powell focused instead on the risk of causing unnecessary harm to the economy by leaving rates too high as inflation falls. "We're aware of the risk that we would hang on too long," he said. "We're very focused on not making that mistake."

All three major stock indexes climbed, with the Dow industrials up 512 points or 1.4% to 37090, a record close. Yields on the 10-year Treasury note declined 0.173 percentage point to 4.032%, the lowest level since August.

Officially, the Fed's policy statement indicated policy makers left the door open to raising rates again. "It is far too early to declare victory, and there are certainly risks," Powell said.

But Powell's comments made the carefully crafted policy communiqué feel stale less than an hour after it was released by suggesting officials had turned their attention to rate cuts. "There's a general expectation that this will be a topic for us, looking ahead. That's really what happened in today's meeting," he said.

Powell's remarks, along with new projections showing Fed officials anticipated three rate cuts next year, marked a notable U-turn. For more than a year, he had warned that they would raise rates as much as needed to lower inflation even if that triggered a recession.

The comment about rate cuts was surprising because just two weeks ago during an appearance at Spelman College in Atlanta, Powell said it was too soon to speculate about when lower rates might be appropriate.

The Federal Reserve, led by Chair Jerome Powell, has held its benchmark rate steady at three consecutive meetings. PHOTO: BRENDAN SMIALOWSKI/AGENCE FRANCE-PRESSE/GETTY IMAGES

"Powell played Santa Claus early," said Diane Swonk, chief economist at KPMG. "It was a 180-degree shift, right there."

Powell indicated officials were turning their attention to rate cuts because inflation has declined much faster than they expected. In their latest projections, they expected core prices, which exclude volatile food and energy items, to rise 3.2% this quarter from a year ago, down from their September projection of 3.7%. They see core inflation of 2.4% at the end of next year, down from their September expectation of 2.6%.

Government data released Wednesday morning suggest that core prices registered a very mild rise in November as measured by the

Fed's preferred inflation gauge, which will be released by the Commerce Department later this month. Wall Street forecasters said that could put core inflation on track to reach or even dip below 2% on a six-month annualized basis, and it could drop the 12-month rate to 3.1%. The Fed targets 2% annual inflation.

"I welcome the progress," Powell said. "We just need to see more."

Powell said it was too soon to say whether the last stretch of inflation reduction would prove harder than the ground covered so far. "We kind of assume that it will get harder from here, but so far, it hasn't," he said.

With Wednesday's decision, the Fed has held its fed-funds rate steady at three consecutive policy meetings in a range between 5.25% and 5.5%.

In September, officials had projected one more hike this year followed by two cuts next year, taking the fed-funds rate to around 5.1%. On Wednesday, officials projected they would lower it to around 4.6% by the end of 2024, the equivalent of three quarter-point reductions from the current level.

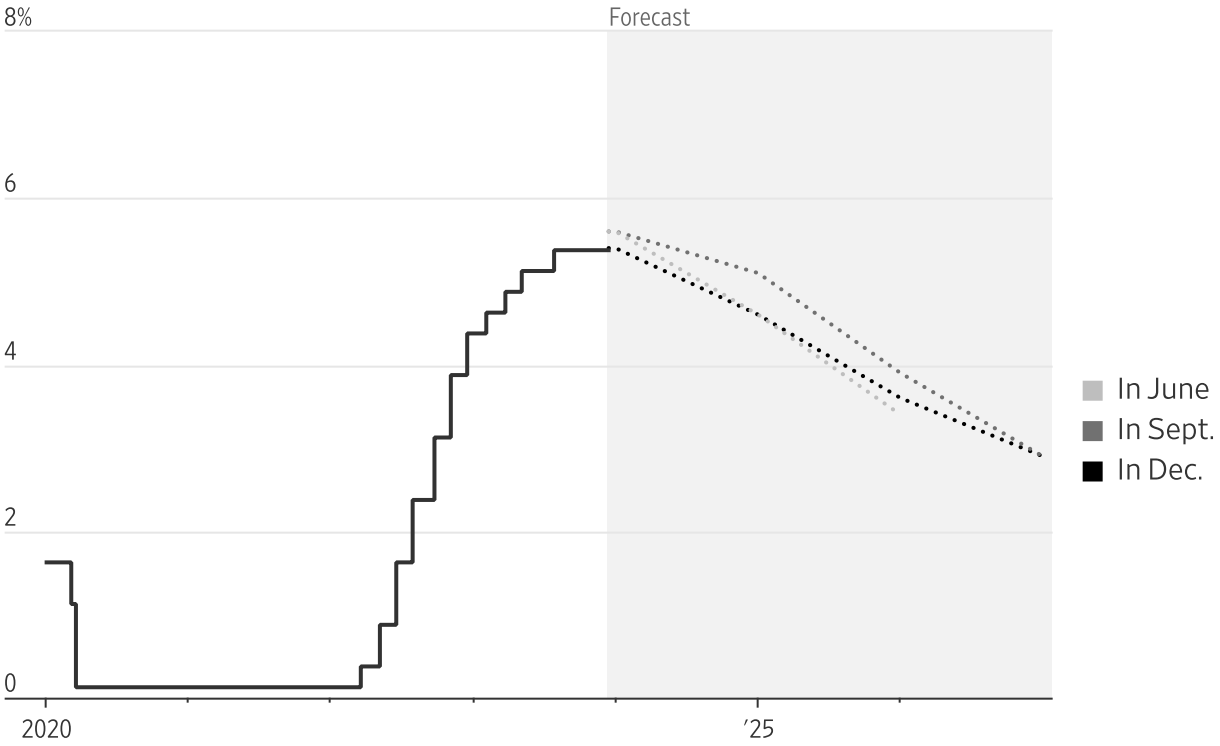
Investors in interest-rate futures markets dialed up bets that the Fed would begin cutting rates in March, placing a roughly 80% probability of lower rates, according to CME Group.

The U.S. economic outlook has brightened in recent months because inflation and wage growth are slowing. That would give the Fed more room to lower rates rapidly if the economy weakens more than officials expect, and it could open the door to cuts even if the expansion doesn't stall.

One year ago, many economists anticipated that Fed officials would have to raise rates to levels that would create enough slack—such as unemployed workers and idled factories—to significantly slow inflation. But healed supply chains and an influx of workers into the labor force are curbing wage and price increases without causing broad economic weakness.

"This has worked out beautifully. Things are going very well from their perspective," said William Dudley, a former president of the New York Fed.

Federal-funds rate target



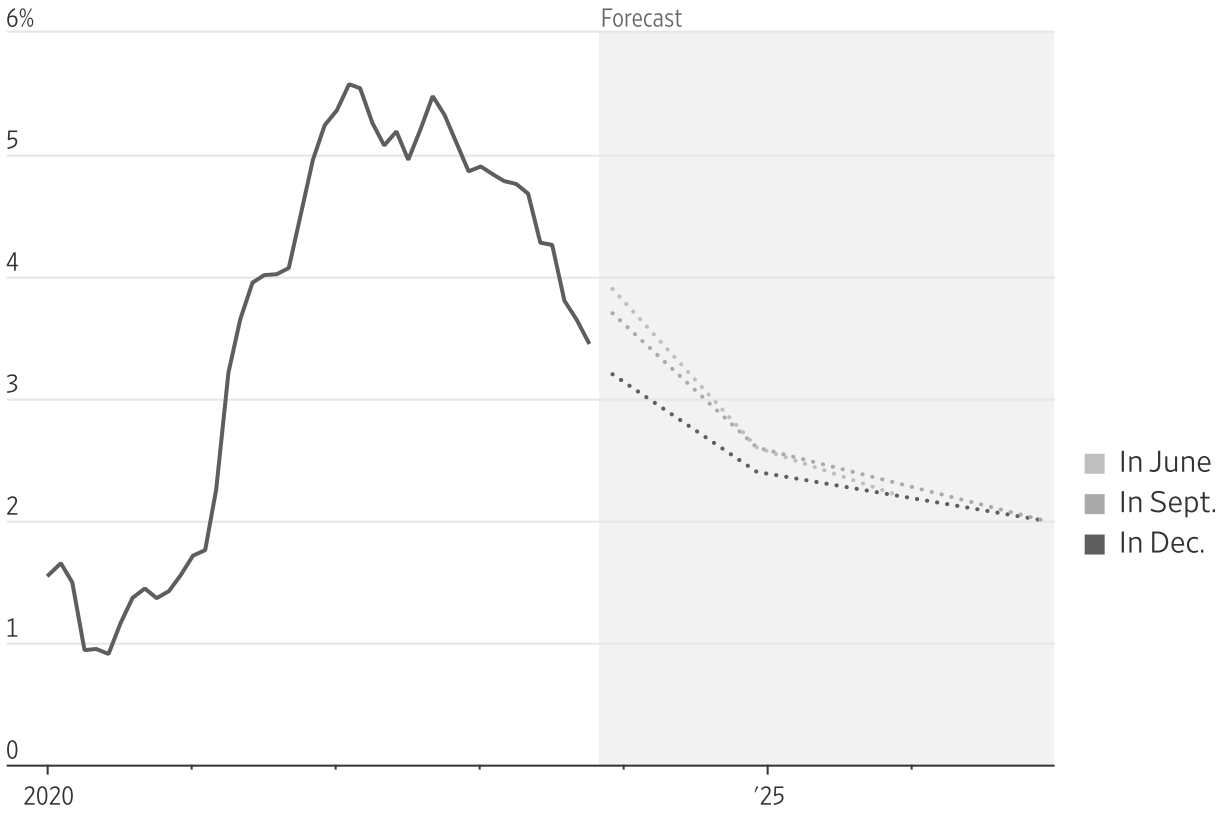
Notes: Midpoint of range; forecasts are the median value projected at the end of each year
Source: Federal Reserve

The labor market has been cooling but remains solid. The unemployment rate ticked down to 3.7% last month from 3.9% in October, and private-sector employers have added an average of 130,000 jobs a month over the past six months, down from 228,000 during the six months before that.

Powell repeated his view that officials could lower rates next year simply because inflation is well on its way to their 2% target. Holding rates steady as inflation falls would lead inflation-adjusted or "real" rates to rise, which the Fed doesn't want. Officials could lower nominal rates simply to prevent real interest rates from turning too tight.

"You wouldn't wait to get to 2% [inflation] to cut rates," Powell said. "It would be too late. You'd want to be reducing" the amount of "restriction on the economy well before you get to 2%."

Change in core prices from a year earlier



Notes: Seasonally adjusted personal consumption expenditure prices excluding food and energy costs; forecasts are the median value projected at the end of each year
Source: Commerce Department (actual), Federal Reserve (forecast)

Still, officials don't want a premature declaration of victory over inflation to cause market rallies that might make it harder to sustain the slower economic growth they believe necessary to conquer inflation.

Before cutting rates, "you'd want to be highly confident that you were going to be able to pull off" maintaining inflation around 2%, said Dudley. "Things are going to be very tricky this coming year. This is going to be more art than science."

Swonk said Powell's comments on Wednesday suggested officials were comfortable with some easing in financial conditions now after a bond-market selloff this fall had pushed up a range of borrowing costs for auto loans, mortgages and business debt.

"They clearly don't want to look like they are the enemy of growth with inflation coming down," she said. "Financial conditions easing are going to stimulate the economy enough to slow down the deceleration of inflation, and I think the Fed is comfortable with that."

Write to Nick Timiraos at Nick.Timiraos@wsj.com

Inflation and the Economy

Analysis from The Wall Street Journal, selected by the editors

Fed Holds Rates Steady and Sees Cuts Next Year

Inflation Eased in November

Yellen Says Economy on Path to Soft Landing

Here's Where Prices Are Actually Coming Down

The Economy Is Great. Why Are Americans in Such a Rotten Mood?

Household Net Worth Surged After the Pandemic Hit

Americans Finally Start to Feel the Rate-Hike Sting

What to Know About Inflation

Appeared in the December 14, 2023, print edition as 'Fed Starts The Pivot Toward Lowering Rates'.

Dividend Yields of the Proxy Group

Company	Atmos Energy Corp.	Chesapeake Utilities	NiSource Inc.	New Jersey Resources Corp.	Northwest Natural Gas Co.	One Gas Inc.	Spire Inc.
Symbol	*ATO*	*CPK*	*NI*	*NJR*	*NWN*	*OGS*	*SR*
Div	3.46	2.60	1.12	1.76	1.96	2.68	3.16
52-wk low	101.00	83.80	22.86	38.92	34.95	55.50	53.77
52-wk high	125.28	132.91	28.95	55.84	49.09	83.89	72.07
Spot Price	111.62	100.80	25.71	40.89	36.60	59.34	58.53
Spot Div Yield	3.10%	2.58%	4.36%	4.30%	5.36%	4.52%	5.40%
52-wk Div Yield	3.06%	2.40%	4.32%	3.71%	4.66%	3.85%	5.02%
Average	**3.08%**	**2.49%**	**4.34%**	**4.01%**	**5.01%**	**4.18%**	**5.21%**

	Average
Spot Div Yield	**4.23%**
52-wk Div Yield	**3.86%**
Average	**4.05%**

Source: Barrons 2/27/2024 & 2/23/2024
Value Line 02/23/24

Five-Year Growth Estimate Forecast for Proxy Group (Actual)

Company	Symbol	Source			
		Yahoo!	Zacks	Value Line	Average
Atmos Energy Corp.	ATO	7.50%	7.30%	7.00%	7.27%
Chesapeake Utilities	CPK	7.00%	NA	5.00%	6.00%
NiSource Inc.	NI	7.30%	7.20%	9.50%	8.00%
New Jersey Resources Corp.	NJR	6.00%	6.00%	5.00%	5.67%
Northwest Natural Gas Co.	NWN	2.80%	3.70%	6.50%	4.33%
One Gas Inc.	OGS	5.00%	5.00%	4.00%	4.67%
Spire Inc.	SR	6.36%	5.60%	4.50%	5.49%
Average					**5.91%**

Sources date:
2/27/2024 & 2/23/2024

Expected Market Cost Rate of Equity for the Proxy Group

5-Year Forecasted Growth Rates

	Time Period	Adjusted Dividend Yield (1)	Growth Rate (2)	Expected Return on Equity (3=1+2)
(1)	**52-Week Average** **Ending:** 2/27/2024 & 2/23/2024	3.86%	5.91%	9.77%
(2)	**Spot Price** **Ending:** 2/27/2024 & 2/23/2024	4.23%	5.91%	10.14%
(3)	**Average:**	**4.05%**	**5.91%**	**9.96%**

Sources: Value Line 02/23/24
Barrons 2/27/2024 & 2/23/2024

Company	**Beta**
Atmos Energy Corp.	0.85
Chesapeake Utilities	0.80
NiSource Inc.	0.90
New Jersey Resources Corp.	0.95
Northwest Natural Gas Co.	0.85
One Gas Inc.	0.85
Spire Inc.	0.85
Average beta for CAPM	**0.86**

Source:
Value Line
02/23/24

Risk-Free Rate

10-Year Treasury Note	Yield
2Q 2024	4.00
3Q 2024	3.90
4Q 2024	3.90
1Q 2025	3.80
2Q 2025	3.80
2025-2029	3.90
Average	**3.88**

Source:
Blue Chip
12/1/2023 & 2/1/2024

Year	% Return	Year	% Return
2023	26.29	1974	-26.47
2022	-18.11	1973	-14.66
2021	28.71	1972	18.98
2020	18.4	1971	14.31
2019	31.49	1970	4.01
2018	-4.38	1969	-8.5
2017	21.83	1968	11.06
2016	11.96	1967	23.98
2015	1.38	1966	-10.06
2014	13.69	1965	12.45
2013	32.39	1964	16.48
2012	16	1963	22.8
2011	2.11	1962	-8.73
2010	15.06	1961	26.89
2009	26.46	1960	0.47
2008	-37	1959	11.96
2007	5.49	1958	43.36
2006	15.79	1957	-10.78
2005	4.91	1956	6.56
2004	10.88	1955	31.56
2003	28.68	1954	52.62
2002	-22.1	1953	-0.99
2001	-11.89	1952	18.37
2000	-9.1	1951	24.02
1999	21.04	1950	31.71
1998	28.58	1949	18.79
1997	33.36	1948	5.5
1996	22.96	1947	5.71
1995	37.58	1946	-8.07
1994	1.32	1945	36.44
1993	10.08	1944	19.75
1992	7.62	1943	25.9
1991	30.47	1942	20.34
1990	-3.1	1941	-11.59
1989	31.69	1940	-9.78
1988	16.61	1939	-0.41
1987	5.25	1938	31.12
1986	18.67	1937	-35.03
1985	31.73	1936	33.92
1984	6.27	1935	47.67
1983	22.56	1934	-1.44
1982	21.55	1933	53.99
1981	-4.91	1932	-8.19
1980	32.42	1931	-43.34
1979	18.44	1930	-24.9
1978	6.56	1929	-8.42
1977	-7.18	1928	43.61
1976	23.84	1927	37.49
1975	37.2	1926	11.62
		Average	12.16

Source:
https://www.slickcharts.com/sp500/returns

Estimated Rate of Return on Market as a Whole

	Dividend Yield	+	Growth Rate	=	Market Return
Value Line Estimate	2.20%		9.73%	(a)	11.93%
S&P 500 Historical Return					12.16%
Average				=	**12.05%**

(a) Value Line forecast for the 3 to 5 year index appreciation is 70% ((1+70%)^.25)-1)

Sources:

Value Line Dividend Yield	2/23/2024	2.20%
Value Line Appreciation Potential	2/23/2024	45.00%

CAPM

Re		Required return on individual equity security
Rf		Risk-free rate
Rm		Required return on the market as a whole
Be		Beta on individual equity security
Re	**=**	Rf+Be(Rm-Rf)
Rf	**=**	3.88
Rm	**=**	12.05
Be	**=**	0.86
Re	**=**	**10.91**

Sources: Value Line 02/23/24
Blue Chip 12/1/2023 & 2/1/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: I&E-RR-004

Witness: Moul, Paul **Title:** Managing Consultant, P. Moul & Associates

Question: Reference Peoples Statement No. 13, p. 8, lines 17-19. Identify the companies in Mr. Moul's Gas Group that are not susceptible to bypass.

Answer: Mr. Moul did not study in detail the bypass threat of each company in his proxy group. However, he is aware that bypass is usually a threat to LDCs when there are a number of interstate pipelines in close proximity to large volume users served by an LDC or when customers of the LDC are in close proximity to gas producing wells. As to the issue of bypass by interstate pipelines, most LDCs, including companies in the Gas Group, are faced with this threat, which can be greater or less than the risk experienced by Peoples. Relevant here, Peoples has six interstate pipelines traversing its service territory at numerous locations. As to bypass that might be associated in proximity to producing wells, only Atmos Energy, NiSource and ONE Gas have extensive operations in gas producing regions. Companies such as Chesapeake, New Jersey Natural, Northwest, Southwest, and Spire are not similarly situated.

Submit Date: 1/19/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: I&E-RR-010

Witness: Moul, Paul **Title:** Managing Consultant, P. Moul & Associates

Question: Reference Peoples Statement No. 13, p. 51, lines 5-11:

A. State whether Mr. Moul is aware of any natural gas distribution utilities throughout the United States that have been granted a Commission authorized 11.75% or higher cost of common equity in the past two years.

B. If the answer to I&E-RR-13-D Part A is yes, identify which company/companies have been authorized such cost of common equity and in what jurisdiction.

Answer:

A. Mr. Moul has not researched this issue.

B. See the response to (A) above.

Submit Date: 1/19/2024

I&E Statement No. 4
Witness: Jason Harvey

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PEOPLES NATURAL GAS COMPANY LLC

Docket No. R-2023-3044549

Direct Testimony

of

Jason Harvey

Bureau of Investigation & Enforcement

Concerning:

DISTRIBUTION INTEGRITY MANAGEMENT PLAN
LONG TERM INFRASTRUCTURE IMPROVEMENT PLAN
PIPELINE REPLACEMENT
PIPELINE REPLACEMENT COSTS
LEAKS

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INTRODUCTION

Q. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.

A. My name is Jason Harvey. I am a Fixed Utility Valuation Engineer in the Pipeline Safety Section of the Pennsylvania Public Utility Commission's ("Commission") Bureau of Investigation and Enforcement's ("I&E") Safety Division. My business address is Pennsylvania Public Utility Commission, 400 North Street, Harrisburg, PA 17120.

Q. WHAT IS YOUR EDUCATIONAL AND EMPLOYMENT EXPERIENCE?

A. I attended the University of Pittsburgh at Johnstown and earned a Bachelor of Science Degree in Civil Engineering Technology in 1998. I joined the Pennsylvania Public Utility Commission's Safety Division in April 2021. Prior to 2021, I worked for the Pennsylvania Department of Transportation (PennDOT) from 2004 to 2021, where I worked in Construction, Roadway/Bridge Design, and Traffic. Prior to 2004, I worked for the Pennsylvania Department of Environmental Protection (PA DEP) from 1999 to 2004, where I worked in the Bureau of Waterways Engineering in the Stream Improvements Section.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my testimony is to address Peoples Natural Gas Company's ("Peoples" or "Company") pipeline replacement and leak management. More

specifically, I will address the following issues:

A. Federal and state regulations applicable to Peoples;

B. Peoples' Distribution Integrity Management Plan ("DIMP");

C. Peoples' Long Term Infrastructure Improvement Plan ("LTIIP").

D. Pipeline replacement and cost; and

E. Pipeline Leaks

Q. DOES YOUR DIRECT TESTIMONY INCLUDE AN EXHIBIT?

A. Yes. I&E Exhibit to Accompany Statement No. 4 contains schedules relating to my direct testimony.

Q. PLEASE DESCRIBE THE ROLE OF I&E IN RATE PROCEEDINGS?

A. I&E is responsible for protecting the public interest in proceedings before the Commission. The I&E analysis in a rate proceeding is based on its responsibility to represent the public interest. This responsibility requires the balancing of the interests of ratepayers, the regulated utility, and the regulated community as a whole.

Q. DID ANY COMPANY WITNESS PROVIDE TESTIMONY ON PEOPLES' PIPELINE REPLACEMENT?

A. Yes, Peoples witnesses Huwar[1], Palombo[2], and Becker[3], each discuss the Company's plans for pipeline replacement.

DIMP REGULATIONS

Q. WHAT FEDERAL AND STATE REGULATIONS ARE APPLICABLE TO PEOPLES' PIPELINE REPLACEMENTS?

A. Peoples is mandated to adhere to the Distribution Integrity Management Program under CFR 49 Part 192.1001-192.1015, Subpart P of the Code of Federal Regulations. Additionally, Peoples, which is seeking to continue a previously approved Distribution System Improvement Charge ("DSIC") mechanism, is required to submit an LTIIP pursuant to 52 Pa Code §121.1 and §121.3.

Q. WHAT ARE THE REQUIREMENTS OF DIMP?

A. DIMP requires a natural gas utility to perform the following risk management strategies:

1. Demonstrate knowledge of the gas distribution system;
2. Identify the threats to its facilities;
3. Evaluate and rank the risks of threats to the facilities;

[1] Peoples Statement No. 1, pp. 11-27.
[2] Peoples Statement No. 4, pp. 6-17.
[3] Peoples Statement No. 5, pp. 2-9.

4. Identify and implement measures to reduce risk;

5. Measure performance, monitor the results, and evaluate effectiveness;

6. Periodically evaluate and make improvements to the program; and

7. Report the results.[4]

Throughout the process, DIMP regulations require Peoples to develop a strategy to identify the risks to its pipeline facilities and to create a plan or plans to mitigate and reduce these risks. The Company determines its pipeline replacement plan by risk ranking the different pipeline types and then replacing the pipe based on the highest risk ranking.

Q. WHY MUST A NATURAL GAS DISTRIBUTION COMPANY COMPLY WITH DIMP REGULATIONS?

A. The Pipeline and Hazardous Materials Safety Administration ("PHMSA") created DIMP regulations in 2010 and operators were given until August 2, 2011, to write and implement their DIMP programs to reduce the number of US Department of Transportation ("US DOT") reportable incidents.[5] DIMP Plans are ever evolving

[4] CFR 49 Part 192.1007(a)-(g).

[5] A PHMSA reportable incident means any of the following events: (1) An event that involves a release of gas from a pipeline, or of liquefied natural gas, liquefied petroleum gas, refrigerant gas, or gas from an LNG facility, and that results in one or more of the following consequences: (i) A death, or personal injury necessitating in-patient hospitalization; (ii) Estimated property damage of $129,300 or more, including loss to the operator and others, or both, but excluding cost of gas lost; (iii) Unintentional estimated gas loss of three million cubic feet or more; (2) An event that results in an emergency shutdown of an LNG facility. Activation of an emergency shutdown system for reasons other than an actual emergency does not constitute an incident. (3) An event that is significant in the judgment of the operator, even though it did not meet the criteria of paragraphs (1) or (2) of this definition.

documents built with a purpose to address threats, reduce risk, and allow for safer operations of natural gas facilities.

LTIIP INTRODUCTION

Q. WHY MUST A NATURAL GAS DISTRIBUTION COMPANY FILE AN LTIIP?

A. A natural gas distribution company must submit an LTIIP for Commission approval to be eligible to recover the reasonable and prudently incurred costs regarding the repair, improvement, and replacement of eligible property through the use of a DSIC. The LTIIP must show the acceleration of the replacement of aging infrastructure by the utility and be sufficient to ensure and maintain adequate, efficient, safe, reliable, and reasonable service to customers.[6]

Q. WHAT ARE THE REQUIREMENTS OF AN LTIIP?

A. The LTIIP must include the following elements:

1. Identification of types and age of eligible property owned and operated by the utility for which it is seeking DSIC recovery;
2. An initial schedule for planned repair and replacement of eligible property;
3. A general description of location of eligible property;

[6] See 52 Pa. Code § 121.1.

4. A reasonable estimate of quantity of eligible property to be improved or repaired;

5. Projected annual expenditures and means to finance the expenditures;

6. A description of the manner in which infrastructure replacement will be accelerated and how repair, improvement, or replacement will ensure and maintain adequate, efficient, safe, reliable, and reasonable service to customers;

7. A workforce management and training program designed to ensure that the utility will have access to a qualified workforce to perform work in a cost-effective, safe, and reliable manner; and

8. A description of a utility's outreach and coordination activities with other utilities, Department of Transportation, and local governments regarding the planned maintenance/construction projects and roadways that may be impacted by the LTIIP. The LTIIP must address only the specific property eligible for DSIC recovery.[7]

RELATIONSHIP BETWEEN DIMP AND LTIIP

Q. WHY DOES I&E REVIEW THE COMPANY'S DIMP PLAN?

A. DIMP requirements are part of the Federal Pipeline Safety Code. As I noted

[7] See 52 Pa Code § 121.3.

above, distribution pipeline operators are required to comply with 49 CFR 192 Subpart P-Gas Distribution Pipeline Integrity Management. Included in this subpart are, among other requirements, the requirements to identify threats, evaluate and rank risk, identify, and implement measures to address risk and measure performance, monitor results, and evaluate effectiveness. Lastly, the process must include a periodic evaluation and demonstrate improvement in risk reduction. The I&E Safety Division evaluates compliance with these requirements. If risk scores are not being reduced, if risk indicators are flat or increasing, if mitigation measures or replacement numbers are lagging, safety concerns are raised. Assuming a company is adequately addressing the riskiest assets, the risk is expected to reduce over time. If risk is increasing, I&E Safety Division would be concerned whether:

- Risk is being calculated in an effective manner;
- The company is mitigating risk effectively for the proper asset; and
- The company is mitigating the asset aggressively enough to reverse the non-decreasing level of risk.

Q. WHAT IS THE CONNECTION BETWEEN PIPELINE SAFETY'S REVIEW OF DIMP AND LTIIP PROGRAMS?

A. The rate of replacement for risky pipelines (of which bare steel and wrought iron pipelines are historically the highest risk asset in most distribution systems) is monitored, measured, and recorded. This replacement data is reviewed during

DIMP inspections and during rate cases for those companies that claim a large capital expenditure for pipeline replacements. Another tool to monitor pipeline replacement is the LTIIP filed for those companies using DSIC to recover costs for eligible projects. The LTIIP is a forward-looking plan for main replacements that is not particular to specific mains or assets, but as asset groups system-wide. For the pipelines, the LTIIP lists the mileage to be replaced per year and usually an overall timeline goal when all that asset is to be removed from service. This LTIIP is created by the company based on the company's analysis and with the company's projections. If, for example, during a rate case, it is determined that system leaks are increasing on an asset, and, therefore, the risk is increasing since leaks are a major part of the risk calculation algorithm for most companies, then from a Safety Division standpoint, I&E has elevated concerns. This then turns attention to that company's LTIIP. If the risk is increasing, or relatively flat, and the company is not meeting the replacement goals established by the company in the LTIIP, I&E Safety Division concerns are further elevated in that more of this high-risk asset is remaining in service in any given year and will remain in service for a longer period of time if replacement rates are not improved. Furthermore, it indicates that the company is not meeting its own replacement goals stated in the LTIIP and filed with the Commission. If the company is meeting its LTIIP goals but risks are not improving, the LTIIP and any related replacement or mitigation efforts may need to be more aggressive.

Q. WHAT IS THE RELATIONSHIP BETWEEN LTIIP, DIMP, AND I&E PARTICIPATING IN RATE CASES?

A. I&E Safety Division's goal through intervention in base rate cases is to bring to light safety impacts with the interconnected relationships between risk calculations, asset replacement and mitigation, costs, LTIIPs, and risk factor indicators, such as incidents and leaks. I&E Safety also recognizes that increases in spending on risk mitigation and asset replacement also places an increased burden on rate payers to cover these increased expenditures.

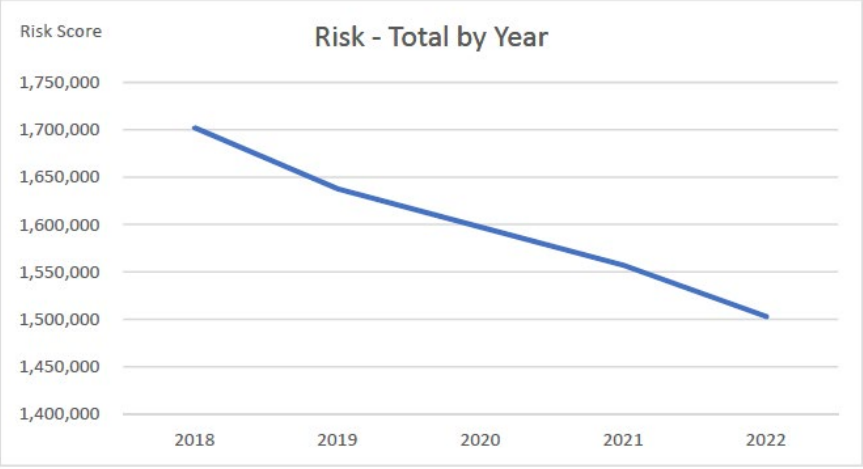
PEOPLES' RISK OVERVIEW

Q. HOW DOES THE COMPANY EVALUATE RISK?

A. The Company uses two risk models, the Leak Repair Risk Model (ICAM) and the Mainline Replacement Prioritization Risk Model (MRPRM). Risk is calculated by multiplying the likelihood of failure by the consequence of failure for mains and services, and then those values are added together. Other factors taken into consideration to evaluate and rank risk include such items as population density and Subject Matter Expert (SME) input. Peoples' primary method for reducing overall risk to the distribution and transmission systems is pipeline replacement.

Q. IN YOUR OPINION, IS MEASURED RISK REDUCTION DIRECTLY PROPORTIONAL TO THE AMOUNT OF INVESTMENT INTO RISK MITIGATION?

A. No, not necessarily. A decrease in DIMP calculated risks depends on the proper allocation and application of dollars and the appropriate implementation of preventative measurements to effectively mitigate risk. An effective DIMP will examine the benefits of the application of additional efforts to mitigate risk and where those efforts should be applied to maximize risk reduction. Peoples has demonstrated through the DIMP plan that to mitigate risk, Peoples must replace its risky pipe. Peoples' risky pipe is bare steel, cast iron, and wrought iron. Compliance with DIMP is not optional, and Peoples has chosen pipeline replacement as one of the methods of risk reduction. The graph below demonstrates how the Peoples' pipeline replacement program has reduced its system risk.[8]



[8] I&E Exhibit No. 4, Schedule 2.

Q. WHAT ARE THE COMPANY'S RISKIEST ASSETS THAT SHOULD BE PRIORITIZED FOR REPLACEMENT?

A. The riskiest assets in a pipeline system have historically been bare steel, cast iron and wrought iron pipe.[9] These materials are more susceptible to corrosion leaks over time and display a higher leak rate per mile than other materials in pipeline systems. As shown later in my testimony, the Company's bare steel, cast iron, and wrought iron leak rates on a per mile basis are higher than other facilities that Peoples proposes to replace in addition to the highest risk pipe material.

PEOPLES' PIPE REPLACEMENT

Q. HOW DOES PEOPLES' LTIIP ADDRESS PIPELINE REPLACEMENT?

A. The Company filed its modified LTIIP with the Commission in 2020 at Docket No. P-2020-3021942 and Docket No. P-2020-3022053. More recently, the Company filed a petition with the Commission on March, 15, 2024 for approval of a major modification to their existing LTIIP for 2021 to 2025 time frame. The Company's LTIIP is a multiyear program primarily focused on the replacement of distribution and transmission bare steel and cast/wrought iron pipelines, which are more susceptible to failure from corrosion, cracks, and leakage.

[9] I&E Exhibit No. 4, Schedule 6.

Q. CAN YOU DISCUSS HOW PEOPLES PRIORITIZES PIPELINE REPLACEMENTS?

A. The Company is engaged in four major capital pipeline work programs. The programs include the Company's LTIIP, the Gathering Pipeline Replacement Program ("GP"), the Goodwin Tombaugh Program ("GT"), and the Mainline Extension Program ("MLX"). As I previously stated, the Company's LTIIP is a multiyear program primarily focused on the replacement of distribution and transmission bare steel and cast/wrought iron pipelines, which are most susceptible to failure from corrosion, cracks, and leakage. The GP Replacement Program is annually targeting the replacement and/or abandonment of bare steel gathering pipelines. The GT Program focuses on the replacement and conversion of an aging legacy gathering system. The MLX Program includes the construction of mainlines, meters, and services associated with new customers and territories.[10]

Q. WHAT IS THE COMPANY'S STATED TIME FRAME IN THE LTIIP FOR PIPELINE REPLACEMENT?

A. Peoples' LTIIP states that the Company will replace all bare steel, cast iron, and wrought iron pipe in its system by 2034.[11]

[10] Peoples Statement No. 5, pp. 2-4.
[11] I&E Exhibit No. 4, Schedule 1.

Q. DESCRIBE PEOPLES' PAST REPLACEMENT SCHEDULE.

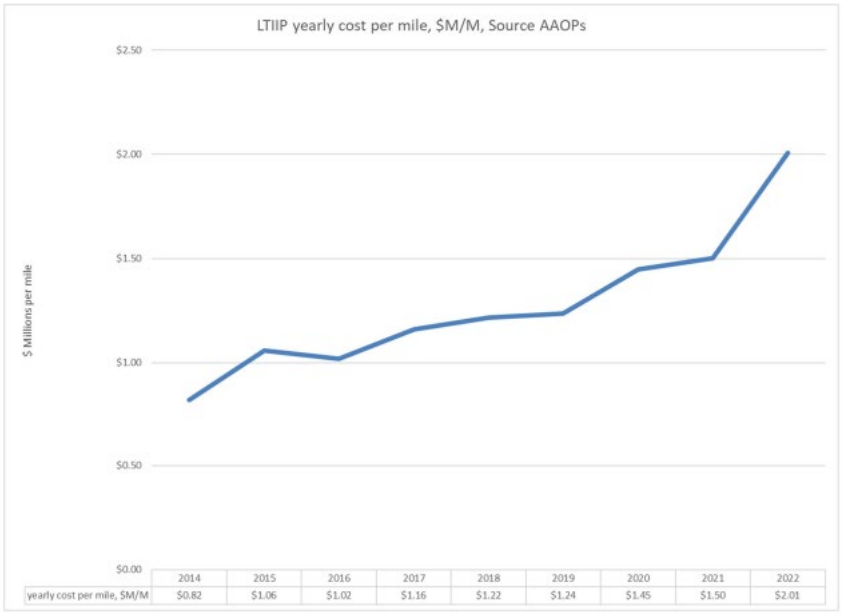
A. Peoples provided summaries of the Company's pipeline capital work accomplishment in each of the four major programs.[12] The LTIIP Program has replaced approximately 485 miles. The GP Program has replaced or abandoned over 200 miles of bare steel gathering pipeline, and the GT Program has replaced or abandoned 151 miles of the targeted GT pipe. The MLX Program has installed approximately 131 miles of new mainline pipe.[13]

Q. WILL PEOPLES MEET THE REPLACEMENT GOALS IN ITS LTIIP PLAN?

A. Conceivably. In my opinion, I am concerned that Peoples will not meet the target of replacing all cast/wrought iron and bare steel mains by 2034 due largely in part to the increasing cost per mile.[14] The graph and table on the next page demonstrate the yearly increases in cost per mile.[15] From 2020-2022, Peoples costs increased approximately 17% each year. In fact, the average cost per mile from 2019-2023 increased over 72%. The Company's investment costs have had to increase to meet the LTIIP commitments.[16] In its 2022 DOT Annual Report (Form PHMSA F7100.1-1),[17] Peoples shows that it has approximately 2,543.4

[12] Peoples Statement No. 5, pp. 4-7.
[13] Peoples Statement No. 5, pp. 2-4.
[14] I&E Exhibit No. 4, Schedule 3.
[15] I&E Exhibit No. 4, Schedule 4.
[16] I&E Exhibit No. 4, Schedule 4.
[17] I&E Exhibit No. 4, Schedule 5.

miles of bare steel, cast, and wrought iron mains remaining. The replacement rate of 211.95 miles of main per year is an achievable goal; however, the Company will have to allocate additional funding to meet the 2034 goal. Based on the anticipated average mileage replacement, Peoples remains on track to meet the 2034 goal. Additionally, if other materials such as pre-1982 plastic pipe and unprotected coated steel is added to the priority pipe category and prioritized for replacement over replacing additional bare steel, cast iron, and wrought iron, it will be even more challenging to meet the 2034 replacement goal.



PIPELINE REPLACEMENT COSTS

Q. HAVE YOU REVIEWED PEOPLES' PIPELINE REPLACEMENT COSTS?

A. Yes. The cost per mile includes the following costs: design/inspection, materials,

construction/labor, pavement restoration, and permits.[18] A summary break down of costs could not be provided by the Company.[19]

Q. ARE PEIPELINE REPLACEMENT COSTS INCREASING?

A. Yes. Peoples' pipeline replacement costs are increasing. The total pipeline replacement cost on a per mile basis from 2019 to 2023 increased from $1,240,000 per mile to $2,140,000 per mile, or a 72.5% increase during that time.[20]

Q. WHEN PIPELINE REPLACEMENT COSTS INCREASE, DOES THAT ADDITIONAL SPENDING REDUCE THE FUNDS AVAILABLE FOR PIPELINE REPLACEMENT?

A. Yes. Logically, the more money Peoples spends per mile on replacement costs, the fewer miles of pipeline can be replaced annually. This in turn reduces the number of miles of risky mains and services removed and slows the total pipeline risk reduction.

LEAK RATES

Q. DISCUSS PEOPLES' LEAK MANAGEMENT PROGRAM.

A. Peoples defines a "leak" as an unintentional escape of gas from the pipeline. Peoples has a leak management program that classifies leaks on its system as

[18] I&E Exhibit No. 4, Schedule 3.
[19] I&E Exhibit No. 4, Schedule 10.
[20] I&E Exhibit No. 4, Schedule 3.

Grade 1, Grade 2, and Grade 3.[21] A Grade 1 leak is the most hazardous and requires immediate repair. Grade 2 leaks are re-evaluated every three months and are required to be repaired within 12 months. The Grade 3 leaks are to be re-evaluated during the next required leakage survey or annually, whichever is less. Grade 3 leaks can remain active unless they are reclassified as Grade 1 or 2. If all leaks were repaired by the Company upon discovery, a leak management program would not be required.

Q. WHAT ARE PEOPLES' LEAK STATISTICS FROM 2019 TO 2023?

A. Over the last five years, the number of Grade 1, 2, and 3 leaks found on bare steel mains and services have generally been trending downward.[22] The number of leaks found on wrought iron mains have slightly increased; however, the leak rate per mile is comparable to bare steel. More specifically, from 2019 to 2023, Peoples reported a yearly average of 0.14 leaks per mile of bare steel main and a yearly average of 0.12 leaks per mile of wrought iron. During the same period, Peoples reported a yearly average of 0.05 leaks per mile of cast iron.[23] The number of open leaks at the end of the year on mains and services is also trending downward.[24] The graph on the next page outlines Peoples leak reduction over the

[21] Peoples Statement No. 4, pp. 7-8.
[22] I&E Exhibit No. 4, Schedule 6.
[23] I&E Exhibit No. 4, Schedule 7.
[24] I&E Exhibit No. 4, Schedule 8.

last five calendar years.[25]

Q. HOW COULD PEOPLES REDUCE ITS LEAKS PER MILE STATISTICS?

A. Obviously, Peoples can continue to reduce its leaks by continuing to eliminate and replace the risky pipeline assets from its system. Peoples provided data that shows their leak rate per mile of pipeline has been increasing slightly on bare steel, wrought iron, and cast iron.[26] With this slight increase in leakage rates, Peoples should continue to review pipeline replacements to insure they are removing the risky pipe and reversing the increasing leak trends.

RECOMMENDATIONS

Q. WHAT IS YOUR OPINION REGARDING PEOPLES' PIPELINE REPLACEMENT?

A. In my opinion, Peoples should increase or continue its pipeline replacement as proposed in the LTIIP, in an effort to continue to reduce risks to the Company's

[25] I&E Exhibit No. 4, Schedule 9.
[26] I&E Exhibit No. 4, Schedule 6.

systems, as required under DIMP regulations (CFR 49 Part 192.1001-192.1015 Subpart P). Although Peoples has established yearly replacement targets to ensure that it stays on track to meet the goal of having all bare steel, cast iron, and wrought iron pipe out of the system by 2034, I recommend that Peoples continues to focus on increasing its efforts to maintain its replacement rate to ensure that it meets the original commitment set in the LTIIP.

While the removal of bare steel, cast iron, and wrought iron pipe is beneficial for the safety and risk reduction of the system, in my opinion, Peoples should consider first generation plastic for future pipeline replacement projects. Therefore, I recommend that Peoples monitor and capture data on leaks for first generation plastic in their risk reduction data collection. I also recommend that the installation year of plastic pipe should be tracked when a leak is discovered. This will allow Peoples to determine an accurate leak rate on first generation plastic and identify which years or generations of plastic have a higher risk of failing. My recommendation is to track the installation year of plastic pipe, which will aid in a more accurate risk ranking and identification of materials that are the riskiest and need to be replaced.

In April 2021, Commission issued a Management and Operations Audit for Peoples with the recommendation that the Company continues its bare steel replacement efforts. This is a recommendation that I agree with and support.

Q. DO YOU HAVE ANY FURTHER RECOMMENDATIONS FOR PEOPLES?

A. Yes. When Peoples establishes a plan for pipeline replacement, the Company does not itemize the cost per mile to forecast spending levels to accomplish goals and complete known and anticipated work based on historical spending and anticipated price changes.[27] Peoples should continue to work on driving down all costs associated with pipeline replacement by analyzing itemized costs. Development of a plan that reduces replacement costs would allow completion of additional pipeline replacement projects. The Company includes design/inspection, materials, construction/labor, pavement restoration, and permits in their plan. To maximize budget, I recommend that Peoples consider breaking the cost per mile into at least the following categories: design/inspection, materials, construction/labor, restoration, and permits. Tracking expenses in smaller categories will allow Peoples to collect more detailed data, on how and where their funding is being utilized. This may aid in easing budget challenges for pipeline replacement projects.

Q. ARE YOUR RECOMMENDATIONS STATED ABOVE COMPLETE AS OF THE WRITING OF YOUR DIRECT TESTIMONY?

A. Yes. Based on the information provided by Peoples in discovery responses to

[27] I&E Exhibit No. 4, Schedule 3.

date, my recommendations are complete at this time. I reserve the right to supplement my discussion and recommendations based on any additional information received.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

I&E Statement No. 1-R
Witness: Christopher Keller

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PEOPLES NATURAL GAS COMPANY LLC

Docket No. R-2023-3044549

Rebuttal Testimony

of

Christopher Keller

Bureau of Investigation & Enforcement

Concerning:

Low-Income Usage Reduction Program
Hardship Fund

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INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Christopher Keller. My business address is Pennsylvania Public Utility Commission, Commonwealth Keystone Building, 400 North Street, Harrisburg, PA 17120.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Pennsylvania Public Utility Commission (Commission) in the Bureau of Investigation & Enforcement (I&E) as a Fixed Utility Financial Analyst.

Q. ARE YOU THE SAME CHRISTOPHER KELLER WHO SUBMITTED THE DIRECT TESTIMONY CONTAINED IN I&E STATEMENT NO. 1 AND I&E EXHIBIT NO. 1?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my rebuttal testimony is to respond to the direct testimony of the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania (CAUSE-PA) witness Harry Geller concerning his recommended increases to Peoples Natural Gas Company LLC's (Peoples or Company) Low-Income Usage

Reduction Program (LIURP) budget and the maximum Hardship Fund grant.[1] I will also respond to the direct testimony of Pennsylvania Weatherization Providers Task Force (PWPTF) witness Jennifer Warabak concerning her recommended increase to Peoples' LIURP and Hardship Fund budgets.[2]

Q. DOES YOUR REBUTTAL TESTIMONY INCLUDE AN EXHIBIT?

A. Yes. I&E Exhibit No. 1-R supports my rebuttal testimony.

RESPONSE TO CAUSE-PA WITNESS HARRY GELLER

Q. SUMMARIZE CAUSE-PA WITNESS HARRY GELLER'S DIRECT TESTIMONY REGARDING PEOPLES' LIURP BUDGET AND HARDSHIP FUND.

A. Mr. Geller recommends the Company increase its LIURP budget to 2023 levels and by the percentage increase in rates to residential customers as a result of this proceeding.[3] Mr. Geller also recommends the Company increase its maximum Hardship Fund grant to $600 and increase Peoples' Hardship Fund budget by the percentage increase in rates to residential customers resulting from this proceeding.[4]

[1] CAUSE-PA Statement No. 1.
[2] PWPTF Statement No. 1.
[3] CAUSE-PA Statement No. 1, pp. 29-33.
[4] CAUSE-PA Statement No. 1, pp. 33-36.

Q. WHAT IS THE BASIS FOR MR. GELLER'S RECOMMENDATION REGARDING LIURP FUNDING?

A. Mr. Geller states his recommendation is due to an unmet need for LIURP services based on Peoples' current and anticipated low-income customer base and for the potential increase in rates as a result of this proceeding.[5]

Q. DO YOU AGREE WITH MR. GELLER'S RECOMMENDATION TO INCREASE LIURP FUNDING?

A. No. I recommend that no increase to the budgeted LIURP amount be allowed. While Mr. Geller's recommendation is well-intentioned, it is inappropriate to consider an increase in the LIURP budget in this base rate case proceeding for the following reasons.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. In response to CAUSE-PA-I-4,[6] Peoples has demonstrated it was unable to exhaust its LIURP budget for the last five years on a total combined basis between the Peoples Natural Gas Division and the Peoples Gas Division. Furthermore, the rate increase resulting from this base rate proceeding will affect neither the income eligibility of customers nor the cost of completing LIURP services, so there is no

[5] CAUSE-PA Statement No. 1, pp. 29-33.
[6] I&E Exhibit No. 1-R, Schedule 1.

basis to align an increase to the LIURP budget with the percentage increase in rates resulting from this proceeding.

Q. ARE THERE ANY OTHER REASONS THE COMMISSION SHOULD REJECT MR. GELLER'S RECOMMENDATION TO INCREASE THE LIURP BUDGET IN THIS PROCEEDING?

A. Yes. The Commission recently issued orders associated with Peoples 2019-2024 Universal Service and Energy Conservation Plan[7] (USECP) and Peoples Gas Company LLC USECP,[8] where the parties had an opportunity to review and make recommended changes to these plans. It is inappropriate to grant an increase to the LIURP budget in this base rate proceeding as proposed by Mr. Geller without consideration and evaluation of all the program's performance indicators and provision of comments by all stakeholders and interested parties.

Q. WHAT IS THE BASIS FOR MR. GELLER'S RECOMMENDATION REGARDING INCREASED FUNDING FOR THE HARDSHIP FUND?

A. Mr. Geller states his recommendation is based on an unmet need for emergency assistance for low-income customers to maintain gas services and the potential increase in rates pending the outcome of this proceeding.[9]

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7 *Peoples Natural Gas Company LLC Universal Service and Energy Conservation Plan for 2019-2024*, Docket No. M-2018-3003177 (Order entered on May 12, 2022).

8 *Peoples Gas Company LLC Universal Service and Energy Conservation Plan for 2019-2024*, Docket No. M-2020-3021343 (Order entered on May 12, 2022).

9 CAUSE-PA Statement No. 1, pp. 33-36.

Q. DO YOU HAVE ANY CONCERNS ABOUT MR. GELLER'S RECOMMENDATIONS REGARDING THE HARDSHIP FUND?

A. Yes. Although I am not arguing against Mr. Geller's recommendation to increase funding for hardship grants, he does not explicitly state how his proposed increase is to be funded. As the current program for hardship grants is primarily funded by shareholders and not recovered from ratepayers, I recommend that this should continue and that this increase to funding of hardship grants be funded entirely by the Company and its shareholders.

RESPONSE TO PWPTF WITNESS JENNIFER WARABAK

Q. SUMMARIZE MS. WARABAK'S TESTIMONY CONCERNING PEOPLES' LIURP BUDGET AND HARDSHIP FUND.

A. Ms. Warabak recommends the Company increase its LIURP budget to provide 50 additional LIURP jobs per year with an estimated cost per job of $8,000 resulting in an increase in LIURP funding of $400,000 ($8,000 x 50 jobs) with any unused funds carried over to the following year.[10] Ms. Warabak also recommends the Company increase its Hardship Fund by the percentage increase in rates to residential customers as a result of this proceeding and for the funding to be distributed in accordance with the percentage of low-income customers in the counties serviced by the Company.[11]

[10] PWPTF Statement No. 1, pp. 6-8.
[11] PWPTF Statement No. 1, pp. 7-8.

Q. WHAT IS THE BASIS FOR MS. WARABAK'S RECOMMENDATION REGARDING LIURP FUNDING?

A. Ms. Warabak claims her recommendation is based on an unmet need for LIURP services based on the number of low-income customers relative to the number of low-income customers it anticipates will receive LIURP services in 2024. Ms. Warabak calculates her recommended addition to the Company's LIURP budget using a speculative 50 jobs and applying this to a typical LIURP job cost of $8,000 for an increase to the Company's current LIURP budget for jobs of $400,000 (50 jobs x $8,000).[12]

Q. DO YOU AGREE WITH MS. WARABAK'S RECOMMENDATION?

A. No. While Ms. Warabak's recommendation is well-intentioned, it is inappropriate to consider an increase in the LIURP budget in the instant proceeding. As mentioned above in response to Mr. Geller's recommended increase to LIURP, the Company has shown it has been unable to exhaust the existing budget,[13] and Ms. Warabak has not shown that Peoples would utilize the increased budgeted funds. Additionally, Ms. Warabak does not provide adequate support for how Peoples would complete the additional jobs and exhaust its existing LIURP budgeted funds. Ms. Warabak's argument is simply too speculative.

[12] PWPTF Statement No. 1, pp. 6-7.
[13] I&E Exhibit No. 1-R, Schedule 1.

Q. DO YOU HAVE ANY ADDITIONAL COMMENTS REGARDING YOUR RECOMMENDATION TO DENY THESE PROGRAM INCREASES IN THIS PROCEEDING?

A. Yes. While my responses to the witnesses' recommendations explained above specifically relate to the witnesses' failure to provide support for Peoples' ability to utilize the additional funding, it is important to note that these LIURP program costs are directly funded by ratepayers who do not receive assistance from low-income programs. It is unreasonable to implement an increase to LIURP when the Company's ability to utilize these additional funds is uncertain. Additionally, it is unreasonable for ratepayers who are not receiving assistance from LIURP to pay for the additional proposed costs to LIURP when it is not certain that the additional funds will be utilized.

Q. ARE THERE ANY RECENT COMMISSION DECISIONS THAT SUPPORT YOUR RECOMMENDATION TO DENY THE INCREASE TO LIURP FUNDING AS PROPOSED BY MR. GELLER AND MS. WARABAK?

A. Yes. In a recent PECO Energy Company – Gas Division proceeding the Commission did not consider CAUSE-PA's proposals relating to CAP and other universal service program issues within the context of the base rate proceeding

because they would be more properly considered in its USECP proceeding.[14] The Commission referenced a Columbia Gas of Pennsylvania, Inc. (Columbia Gas) proceeding[15] in which it concluded, "[t]hat energy burdens should not be considered separately from other parts of the Company's CAP and universal service programs but should be considered as part of the Company's entire universal service plan, including the need for changes and associated costs."[16] It should be noted that in the Columbia Gas proceeding the Commission rejected a similar proposal related to the Health and Safety Pilot Program from CAUSE-PA.[17] In that proceeding, the Commission agreed with the Administrative Law Judge's recommended decision denying any change to the pilot program until its effectiveness can be evaluated.[18]

Q. WHAT IS THE BASIS FOR MS. WARABAK'S RECOMMENDATION REGARDING THE INCREASE IN THE HARDSHIP FUND?

A. Ms. Warabak's assertion is that the increase will help customers deal with the increase in rates during difficult economic times.[19]

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[14] *PA PUC v. PECO Energy Company – Gas Division*, Docket No. R-2020-3018929, pp. 195-196 (Order Entered June 22, 2021).

[15] *PA PUC v. Columbia Gas of Pennsylvania, Inc.*, Docket No. R-2020-3018835 (Order Entered February 19, 2021).

[16] *PA PUC v. PECO Energy Company – Gas Division*, Docket No. R-2020-3018929, p. 195 (Order Entered June 22, 2021).

[17] *PA PUC v. Columbia Gas of Pennsylvania, Inc.*, Docket No. R-2020-3018835, pp. 160-161 and 173-174 (Order Entered February 19, 2021).

[18] *PA. PUC v. Columbia Gas of Pennsylvania, Inc.*, Docket No. R-2020-3018835, p. 174 (Order Entered February 19, 2021).

[19] PWPTF Statement No. 1, p. 7.

Q. DO YOU HAVE ANY CONCERNS ABOUT MS. WARABAK'S RECOMMENDATIONS REGARDING THE HARDSHIP FUND?

A. Yes. As mentioned above in response to Mr. Geller's recommended increase to the Hardship Fund, I am not arguing against Ms. Warabak's recommendation to increase funding for hardship grants. However, similar to Mr. Geller, she does not explicitly state how her increase is to be funded. As the current program for hardship grants is primarily funded by shareholders and not recovered from ratepayers, I recommend that this should continue and that this increase to funding of hardship grants be funded entirely by the Company and its shareholders.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

I&E Statement No. 1-SR
Witness: Christopher Keller

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PEOPLES NATURAL GAS COMPANY LLC

Docket No. R-2023-3044549

Surrebuttal Testimony

of

Christopher Keller

Bureau of Investigation & Enforcement

Concerning:

Operating and Maintenance Expenses
Taxes Other Than Income
Cash Working Capital

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INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Christopher Keller. My business address is Pennsylvania Public Utility Commission, Commonwealth Keystone Building, 400 North Street, Harrisburg, PA 17120.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Pennsylvania Public Utility Commission (Commission) in the Bureau of Investigation & Enforcement (I&E) as a Fixed Utility Financial Analyst.

Q. ARE YOU THE SAME CHRISTOPHER KELLER WHO SUBMITTED THE DIRECT TESTIMONY CONTAINED IN I&E STATEMENT NO. 1 AND I&E EXHIBIT NO. 1?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony of Peoples Natural Gas Company LLC (Peoples or Company) witnesses Andrew P. Wachter,[1] Rudolph Hanechak,[2] and Krista Snyder.[3]

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[1] Peoples Statement No. 2-R.
[2] Peoples Statement No. 10-R.
[3] Peoples Statement No. 12-R.

Q. DOES YOUR SURREBUTTAL TESTIMONY INCLUDE AN EXHIBIT?

A. Yes. I&E Exhibit No. 1-SR contains schedules that support my surrebuttal testimony. In this surrebuttal testimony, I will also make references to my direct testimony[4] and its accompanying exhibit.[5]

SUMMARY OF I&E OVERALL UPDATED POSITION

Q. PLEASE SUMMARIZE THE COMPANY'S UPDATED OVERALL CLAIMED REVENUE REQUIREMENT.

A. In rebuttal testimony, the Company updated its requested increase presenting an increase of $157,067,000 to present rate revenues of $833,216,000, resulting in a total overall revenue requirement of $990,283,000.[6]

Q. PLEASE SUMMARIZE YOUR ADJUSTMENTS AS CONTAINED IN THIS SURREBUTTAL TESTIMONY.

A. The following table summarizes my recommended adjustments to Peoples' updated position.

[4] I&E Statement No. 1.
[5] I&E Exhibit No. 1.
[6] I&E Exhibit No. 1-SR, Schedule 1.

	Company Claim	I&E Adjustment	I&E Recommended Allowance
O&M Expenses:			
Labor Expense	$69,890,492	($2,272,848)	$67,617,644
Payroll Taxes	$6,571,623	($213,648)	$6,357,975
Pension Expense	$5,670,000	($1,286,880)	$4,383,120
Post Retirement Benefits Other Pensions	$2,890,493	($894,141)	$1,996,352
Other Employee Benefits	$21,101,610	($686,208)	$20,415,402
Corporate Insurance	$9,080,331	($2,085,969)	$6,994,362
Advertising Expense	$1,423,934	($1,370,197)	$53,737
Rate Case Expense	$1,031,000	($564,132)	$466,868
Total O&M Expense Adjustments		($9,374,023)	
Rate Base Adjustments:			
Cash Working Capital	$35,661,101	($393,256)	$35,267,845
Total Rate Base Adjustments		($393,256)	

Q. WHAT IS I&E'S TOTAL UPDATED RECOMMENDED REVENUE REQUIREMENT?

A. I&E's updated total recommended revenue requirement is $932,394,000. This recommended revenue requirement represents an increase of $89,866,000 to the I&E-adjusted present rate revenues of $842,528,000. This total recommended increase incorporates adjustments made in this testimony and those made in the direct testimony of I&E witnesses Anthony Spadaccio[7] and Ethan Cline.[8]

[7] I&E Statement No. 2-SR.
[8] I&E Statement No. 3-SR.

The following table summarizes the I&E surrebuttal position:

Peoples Natural Gas Company LLC		TABLE I			
R-2023-3044549		INCOME SUMMARY			
$ in Thousands					
	9/30/25	INVESTIGATION & ENFORCEMENT			
	Proforma	[----------			----------]
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	$	$	$	$	$
Operating Revenue	833,216	9,312	842,528	89,866	932,394
Deductions:					
O&M Expenses	542,284	-4,612	537,672	1,977	539,649
Depreciation	134,220	0	134,220		134,220
Taxes, Other	15,353	-214	15,139	0	15,139
Income Taxes:					
Current State	0	0	0	0	0
Current Federal	0	3,103	3,103	18,457	21,560
Deferred Taxes	-91,345	0	-91,345		-91,345
ITC	0	0	0		0
Total Deductions	600,512	-1,723	598,789	20,434	619,223
Income Available	232,704	11,035	243,739	69,432	313,171
Rate Base	4,215,352	-393	4,214,959	0	4,214,959
Rate of Return	5.52%		5.78%		7.43%

LABOR EXPENSE

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR LABOR EXPENSE.

A. In direct testimony, I recommended an allowance of $67,187,660 for labor expense, or a reduction of $2,275,920 ($69,463,580 - $67,187,660) to Peoples' claim. My recommendation was based on an adjustment for average historic vacancy levels in order to reflect a more accurate employee complement in the

FPFTY.[9]

Q. DID THE COMPANY PROVIDE AN UPDATED LABOR EXPENSE CLAIM?

A. Yes. The Company provided an update to its labor expense claim. The Company's updated claim is $69,890,492 or an increase of $426,912 ($69,890,492 - $69,463,580) to the Company's initial claim.[10] The revision was made in response to I&E-RE-6 which included an additional 11 positions that were not included in the Company's original claim.[11]

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION FOR LABOR EXPENSE?

A. Yes. Company witnesses Andrew P. Wachter and Rudolph Hanechak disagrees with my labor expense recommendation.

Q. SUMMARIZE MR. WACHTER'S RESPONSE.

A. Mr. Wachter disagrees with my vacancy level adjustment and asserts that the Company's vacancy adjustment is the vacancy level to be expected going forward. Mr. Wachter references an article that he opines demonstrates the increased turnover during COVID-19 and the "Great Resignation" was an anomaly and does

[9] I&E Statement No. 1, pp. 4-8.
[10] Peoples Exhibit No. APW-R-1, p. 5.
[11] Peoples Exhibit No. APW-R-1, pp. 38-39.

not represent future vacancy levels. Finally, Mr. Wachter states that the Company's pre-COVID-19 vacancy levels for Peoples Natural Gas Division and Peoples Gas Division was 13 vacancies in 2018.[12]

Q. SUMMARIZE MR. HANECHAK'S RESPONSE.

A. Mr. Hanechak simply states that he does not agree with my vacancy adjustment.[13]

Q. WHAT IS YOUR RESPONSE TO MR. WACHTER'S ASSERTION THAT THE INCREASE IN TURNOVER WAS AN ANOMALY DUE TO COVID-19 AND THE "GREAT RESIGNATION" AND DOES NOT REPRESENT FUTURE VACANCY LEVELS?

A. My average vacancy level was calculated using the period from the fourth quarter of 2021 through the third quarter of 2023 which is the most recent data available. It is highly unlikely that the Company's vacancy level will return to the 2018 average of 13 positions by the FPFTY especially considering that the most recent quarter, the third quarter of 2023, shows 60 vacant positions which is more than four times the number of vacant positions in 2018. As stated in my direct testimony, applying a more recent average historic vacancy levels is needed to reflect a more accurate employee complement in the FPFTY. My recommendation more accurately represents labor expense for the FPFTY.[14]

[12] Peoples Statement No. 2-R, pp. 16-18.
[13] Peoples Statement No. 10-R, p. 2.
[14] I&E Statement No. 1, pp. 5-6.

Q. DO YOU AGREE WITH THE COMPANY'S UPDATED CLAIM?

A. No. I continue to recommend an adjustment for average historic vacancy levels in order to reflect a more accurate employee complement in the FPFTY.

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR LABOR EXPENSE?

A. Yes. Based on the Company's updated claim, I recommend an allowance of $67,617,644 for labor expense, or a reduction of $2,272,848 ($69,890,492 - $67,617,644) to Peoples' updated claim based on an adjustment for average historic vacancy levels in order to reflect a more accurate employee complement in the FPFTY.[15]

Q. PLEASE EXPLAIN HOW YOU CALCULATED YOUR UPDATED LABOR EXPENSE VACANCY ADJUSTMENT.

A. I calculated an estimated FPFTY average salary per employee of $47,351 ($69,890,492 ÷ 1,476) based on the Company's updated FPFTY claim for labor expense of $69,890,492 divided by the Company's updated FPFTY employee count 1,476 (1,465[16] + 11[17]).

I then multiplied the additional 48 vacancies as discussed in my direct testimony[18] by the updated average salary of $47,351 to arrive at my

[15] I&E Statement No. 1, pp. 4-8.
[16] I&E Exhibit No. 1, Schedule 1, p. 2.
[17] Peoples Exhibit No. APW-R-1, pp. 38-39.
[18] I&E Statement No. 1, p. 7.

recommended reduction of $2,272,848 ($47,351 x 48) to labor expense, or a recommended allowance for labor expense of $67,617,644 ($69,890,492 – $2,272,848).

PAYROLL TAXES

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR PAYROLL TAXES.

A. In direct testimony, I recommended an allowance of $6,355,411 for payroll taxes, or a reduction of $216,212 ($6,571,623 - $6,355,411) to the Company's claim. My recommendation was based on recognition of the labor expense reduction for my vacancy adjustment and on the percentage of total payroll taxes to total payroll.[19]

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION FOR PAYROLL TAXES?

A. Yes. Company witness Rudolph Hanechak disagrees with my payroll tax recommendation for the same reasons that he disagrees with my labor expense recommendation. Mr. Hanechak states that if my recommendation for labor expense is accepted by the Commission, he agrees with my adjustment to payroll taxes.[20]

[19] I&E Statement No. 1, pp. 8-10.
[20] Peoples Statement No. 10-R, pp. 2-3.

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR PAYROLL TAXES?

A. Yes. Based on the Company's updated claim for labor expense, I recommend an allowance of $6,357,975 for payroll taxes, or a reduction of $213,648 ($6,571,623 - $6,357,975) to Peoples' claim based on recognition of the labor expense reduction for my vacancy adjustment, and on the percentage of total payroll taxes to total payroll as discussed in my direct testimony.[21] My recommendation is calculated as follows:

FPFTY Payroll Tax Claim		$6,571,623
FPFTY Updated Labor Expense Claim	÷	$69,890,492
% Payroll Taxes to Labor Expense Claim		9.4%
I&E Labor Expense Adjustment from Above	x	$2,272,848
I&E Payroll Tax – Recommended Adjustment		$213,648

PENSION EXPENSE

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR PENSION EXPENSE.

A. In direct testimony, I recommended an allowance of $4,383,120 for pension expense, or a reduction of $1,286,880 ($5,670,000 - $4,383,120) to the Company's claim. My recommendation was based on a three-year average of cash contributions as opposed to the Company's use of the average of the two highest

[21] I&E Statement No. 1, pp. 8-10.

years of cash contributions which is inappropriate as the Company's pension plan has recently been shown to be overfunded. My recommendation of applying a three-year average provided a more reasonable amount given the recent overfunded status.[22]

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION FOR PENSION EXPENSE?

A. Yes. Company witness Andrew P. Wachter responded to my pension expense recommendation. Mr. Wachter states that the Company's pension funding approach has changed since the Company was acquired by Essential Utilities, Inc. (Essential) and the use of a two-year average is the best indicator. Mr. Wachter, however, does acknowledge that my use of a three-year average is not unreasonable as it represents the first three calendar years since the acquisition of the Company by Essential. Finally, Mr. Wachter states that ratepayers have benefited from the Company contributing more to its pension than the accrual amount over the past "_" years and that the Company's projected pension contributions in this proceeding is fair.[23]

Q. WHAT IS YOUR RESPONSE TO MR. WACHTER?

A. As stated in my direct testimony, the Company based its claim on the average of the two highest years of cash contributions, which I believe is inappropriate given

[22] I&E Statement No. 1, pp. 10-12.
[23] Peoples Statement No. 2-R, pp. 47-48.

the Company's pension plan has recently been shown to be overfunded. This indicates that the pension plan has been more than 100% fully funded for the last two years and therefore does not support the Company's requested claim. Therefore, applying a three-year average provides a more reasonable allowance given the recent overfunded status.[24] Finally, as I stated above, Mr. Wachter agrees that my recommendation is reasonable.

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR PENSION EXPENSE?

A. No. I continue to recommend an allowance of $4,383,120 for pension expense, or a reduction of $1,286,880 ($5,670,000 - $4,383,120) to the Company's claim. My recommendation based on a three-year average of cash contributions is reasonable given the recent overfunded status.[25]

POST RETIREMENT BENEFITS OTHER THAN PENSIONS

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR POST RETIREMENT BENEFITS OTHER THAN PENSIONS (PBOPs).

A. In direct testimony, I recommended an allowance of $1,996,352, or a reduction of $417,689 ($2,414,041 - $1,996,352) to Peoples' as-filed claim. My recommendation was based on a 53-month amortization period rather than the

[24] I&E Statement No. 1, pp. 10-12.
[25] I&E Statement No. 1, pp. 10-12.

Company's claimed two-year amortization of the prior period net under collection of PBOP costs. My recommendation was consistent with my rate case expense recommendation to normalize rate case expense over 53 months which would minimize any over or under recovery of this prior period PBOP expense.[26]

Q. DID THE COMPANY PROVIDE AN UPDATED CLAIM FOR PBOPs?

A. Yes. The Company provided an update to its PBOPs claim. The Company updated claim is $2,890,493 or an increase of $476,452 ($2,890,493 - $2,414,041) to the Company's initial claim.[27] The revision was made to provide an update to the FPFTY Net Expense of $779,921 as it was based on an estimate and has been updated to $1,256,373, or an increase of $476,452.[28] The Company continues to amortize the recovery of a prior period net under collection of PBOP costs over two years which is consistent with its rate case expense normalization claim of two years.[29]

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION FOR PBOPs?

A. Yes. Company witness Andrew P. Wachter responded to my PBOP recommendation. Mr. Wachter disagrees with my 53-month amortization period rather than the Company's claimed two-year amortization of the prior period net

[26] I&E Statement No. 1, pp. 12-14.
[27] Peoples Statement No. 2-R, p. 5.
[28] I&E Exhibit No. 1, Schedule 5.
[29] Peoples Statement No. 2-R, pp. 48-49.

under collection of PBOP costs for the same reasons he disagrees with my rate case expense normalization period.[30] Additionally, Mr. Wachter opines that I made an adjustment to PBOPs based on my vacancy adjustment for labor expense.[31]

Q. DO YOU ACCEPT THE COMPANY'S UPDATED CLAIM FOR PBOPs?

A. No. I accept the revision to update to the FPFTY Net Expense to $1,256,373. However, I continue to recommend a 53-month amortization period rather than the Company's claimed two-year amortization of the prior period net under collection of PBOP costs.

Q. DID YOU RECOMMEND AN ADJUSTMENT TO PBOPs BASED ON YOUR VACANCY LEVEL ADJUSTMENT FOR LABOR EXPENSE?

A. No. My recommendation in direct testimony was based on a 53-month amortization period rather than the Company's claimed two-year amortization of the prior period net under collection of PBOP costs.[32] I did not recommend an adjustment to PBOPs based on applying a vacancy adjustment.

[30] Peoples Statement No. 2-R, p. 48.
[31] Peoples Statement No. 2-R, p. 18.
[32] I&E Statement No. 1, p. 14.

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR PBOPs?

A. Yes. While I continue to recommend a 53-month amortization period for prior period net under collection of PBOP costs, I am updating my recommendation to reflect the Company's revision for FPFTY Net Expense to $1,256,373. This results in an updated recommended allowance of $1,996,352, or a reduction of $894,141 ($2,890,493 - $1,996,352) to Peoples' updated claim based on a 53-month amortization period rather than the Company's claimed two-year amortization of the prior period net under collection of PBOP costs.[33] My recommendation is consistent with my rate case expense recommendation to normalize rate case expense over 53-months which would minimize any over or under recovery of this prior period PBOP expense.[34]

OTHER EMPLOYEE BENEFITS

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR OTHER EMPLOYEE BENEFITS.

A. In direct testimony, I recommended an allowance of $20,294,992 for other employee benefits expense, or a reduction of $687,504 ($20,982,496 - $20,294,992) to the Company's claim. My recommendation was based on recognition of the labor expense reduction for my vacancy adjustment; and, on the

[33] I&E Exhibit No. 1-SR, Schedule 2.
[34] I&E Statement No. 1, pp. 12-14.

average health insurance expense per employee.[35]

Q. DID THE COMPANY UPDATE ITS CLAIM FOR OTHER EMPLOYEE BENEFITS?

A. Yes. The Company provided an update to its other employee benefits claim. The Company is now requesting a claim of $21,101,610 or an increase of $119,114 ($21,101,610 - $20,982,496) to the Company's initial claim.[36] The Company did not provide any specific reason for the revision to the Company's original claim.

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION FOR OTHER EMPLOYEE BENEFITS?

A. Yes. Company witness Andrew P. Wachter disagrees with my other employee benefits recommendation. Mr. Wachter simply states that he disagrees with my recommended adjustment to other employee benefits for the same reasons that he disagrees with the Office of Consumer Advocate (OCA) witness Dante Mugrace.[37] Mr. Wachter further states that he disagrees Mr. Mugrace's adjustments related to employee service and safety awards and employee events.[38]

[35] I&E Statement No. 1, pp. 15-16.
[36] Peoples Exhibit No. APW-R-1, p. 5.
[37] OCA Statement No. 2.
[38] Peoples Statement No. 2-R, pp. 28-31.

Q. DID YOU MAKE ANY ADJUSTMENTS TO OTHER EMPLOYEE BENEFITS RELATED TO EMPLOYEE SERVICE AND SAFETY AWARDS OR EMPLOYEE EVENTS?

A. No. As stated in my direct testimony, my recommendation was based on recognition of the labor expense reduction for my vacancy adjustment, and, on the average health insurance expense per employee.[39] It should be noted that Mr. Wachter did not address the basis for my recommended adjustment made in direct testimony.

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR OTHER EMPLOYEE BENEFITS?

A. Yes. Based on the Company's updated claim, I recommend an allowance of $20,415,402 for other employee benefits, or a reduction of $686,208 ($21,101,610 - $20,415,402) to Peoples' updated claim based on recognition of the labor expense reduction for my vacancy adjustment, and, on the average health insurance expense per employee.[40] My recommendation is calculated as follows:

FPFTY Other Employee Benefits Expense Claim	$21,101,610
FPFTY Employee Count	÷ 1,476
Average Other Employee Benefits Expense per Employee	$14,296
Average Vacancies from Salaries and Wages	x 48
I&E Other Emp. Ben. Exp – Total Recommended Adj.	$686,208

[39] I&E Statement No. 1, pp. 15-16.
[40] I&E Statement No. 1, pp. 15-16.

OUTSIDE SERVICES – CONTRACTED

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR OUTSIDE SERVICES – CONTRACTED.

A. In direct testimony, I recommended an allowance of $27,847,075 or a reduction of $810,857 ($28,657,932 - $27,847,075) to the Company's claim. My recommendation was based on applying the capitalization percentage from the historic test year (HTY), since the HTY better reflects the recent actual capitalization percentage for outside services – contracted.[41]

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION FOR OUTSIDE SERVICES – CONTRACTED?

A. Yes. Company witness Andrew P. Wachter disagrees with my outside services – contracted recommendation. Mr. Wachter states that the costs that are added in the FTY and FPFTY are 100% expensed, which resulted in the reduction in the capitalization ratio.[42]

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR OUTSIDE SERVICES – CONTRACTED?

A. Yes. I am withdrawing my recommendation after reviewing the information provided by the Company in rebuttal testimony explaining that 100% of this claim is properly expensed.

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41 I&E Statement No. 1, pp. 16-18.
42 Peoples Statement No. 2-R, pp. 49-50.

CORPORATE INSURANCE

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR CORPORATE INSURANCE.

A. In direct testimony, I recommended an allowance of $6,994,362 for corporate insurance, or a reduction of $2,085,969 ($9,080,331 - $6,994,362) to the Company's claim. My recommendation was based three adjustments. My first adjustment applied the increase from 2022 to 2023 of 8.77% in corporate insurance to the FTY and FPFTY. My second adjustment multiplied my recommended increase of 8.77% by corporate insurance expense rather than by the total corporate insurance (expensed and capitalized) as done by the Company. My third adjustment applied a three-year average of the capitalization percentage for corporate insurance.[43]

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION FOR CORPORATE INSURANCE?

A. Yes. Company witness Andrew P. Wachter responded to my corporate insurance recommendation. Mr. Wachter disagrees with my recommendation to increase corporate insurance by 8.77% for the FTY and FPFTY and states that an increase of 13.1% for both the FTY and FPFTY is reasonable as it represents the increase in premiums from 2021 premiums to the 2022 invoice. Mr. Wachter opines that the 13.1% increase is reasonable based on the Company's feedback from its third-

[43] I&E Statement No. 1, pp. 19-24.

party insurance brokers. He states that my adjustments for multiplying my recommended increase by corporate insurance expense rather than by the total corporate insurance (expensed and capitalized) and applying a three-year average of the capitalization percentage for corporate insurance are not unreasonable.[44]

Q. DO YOU AGREE WITH MR. WACHTER THAT USING THE PREMIUMS FROM 2021 AND THE INVOICE FROM 2022 IS REASONABLE?

A. No. As stated in my direct testimony, an increase of 13.1% is unreasonable considering corporate insurance has fluctuated with amounts of $5,035,015, $4,710,028, and $5,213,687 for the twelve months ended August 31, 2021, August 31, 2022, and the HTY ended August 31, 2023, respectively.[45] Additionally, the Company did not provide the requested feedback from its third-party brokers to support an increase in total premiums that is referenced by Mr. Wachter.[46] Therefore, my recommendation to use the increase of 8.77%, which is the increase from 2022 to 2023, for the FTY and FPFTY is reasonable and appropriate.[47]

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR CORPORATE INSURANCE?

A. No. I continue to recommend an allowance of $6,994,362 for corporate insurance, or a reduction of $2,085,969 ($9,080,331 - $6,994,362) to the Company's claim

[44] Peoples Statement No. 2-R, pp. 20-22.
[45] I&E Exhibit No. 1, Schedule 4, p. 5.
[46] I&E Exhibit No, 1, Schedule 8, p. 6.
[47] I&E Statement No. 1, pp. 19-24.

based on a applying the increase from 2022 to 2023 of 8.77% in corporate insurance to the FTY and FPFTY, multiplying my recommended increase of 8.77% by corporate insurance expense rather than by the total corporate insurance (expensed and capitalized), and applying a three-year average of the capitalization percentage for corporate insurance because corporate insurance has fluctuated significantly for the last three years and the Company failed to provide the requested feedback from its third-party brokers to support an increase of 13.1%.[48]

ADVERTISING EXPENSE

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR ADVERTISING EXPENSE.

A. In direct testimony, I recommended an allowance of $53,737 for advertising expense, or a reduction of $1,370,197 ($1,423,934 - $1,370,197) to Peoples' claim. My recommendation was based on the removal of advertising related to sponsorships and sports partnerships under the PR Firm – other advertising programs of $1,370,197 as these are more representative of goodwill advertising, or promotional advertising, that would provide little (if any) benefit to ratepayers. Additionally, not all customers who attend sporting events at these venues are Peoples ratepayers, and many Peoples ratepayers may never attend sporting events, therefore, not receiving exposure to these advertisements. So, even if the Company is holding out these payments as safety and e-billing promotions, there

[48] I&E Statement No. 1, pp. 19-24.

would be more effective and potentially less costly ways to reach the ratepaying community. Finally, if Peoples is spending money in an attempt to benefit the overall community in some way, this is inappropriate since it becomes more of a charitable contribution over which ratepayers have no say as to who receives the money but yet the Company requires that they pay for these activities**.** Therefore, ratepayers should not be required to finance Peoples' decision to pay for such advertising.[49]

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION FOR ADVERTISING EXPENSE?

A. Yes. Company witness Andrew P. Wachter responded to my advertising expense recommendation. Mr. Wachter disagrees with my recommendation for removal of advertising related to sports partnerships and other event partnerships. Mr. Wachter opines that the sports partnerships and other event partnerships meet at least one of the criteria in Section 1316(a) of the Public Utility Code. Mr. Wachter opines that these costs are an important part of the Company's outreach program and directly benefit customers. Finally, Mr. Wachter opines that these advertisements provide a direct benefit to the community and the Company's customers.[50]

[49] I&E Statement No. 1, pp. 24-27.
[50] Peoples Statement No. 2-R, pp. 35-43.

Q. DO YOU AGREE WITH MR. WACHTER'S RESPONSE THAT THE ADVERTISING COSTS ASSOCIATED WITH SPORTS AND EVENT PARTNERSHIPS ARE AN IMPORTANT PART OF THE COMPANY'S OUTREACH PROGRAM AND DIRECTLY BENEFIT CUSTOMERS?

A. No. Mr. Wachter states that the Company's partnerships with major sports teams directly benefit customers since the Company is able to share customer service and safety messages to a large group of customers and the public via various forms of advertising on topics such as e-billing, other safety information, to promote "Call 811", etc.[51]

While I agree with Mr. Wachter that this type of advertising would possibly benefit ratepayers in providing safe and reliable service, as stated in my direct testimony, not all attendees at sporting events are Peoples' ratepayers, and many Peoples ratepayers may never attend sporting events. Therefore, this advertising is not directly targeted to Peoples' ratepayers. So, even if the Company is holding out these payments as safety and e-billing promotions, there are more effective and likely less costly ways to more directly reach the ratepaying community.[52]

Additionally, the Company's advertising with major sports teams goes beyond the scope of providing information for safety and e-billing promotions. For example, the stadium for the Altoona Curve, a minor league baseball team, is named after the Company.[53] And for PPG Paints Arena, the stadium for the

[51] Company Statement 2-R, pp. 39-41.
[52] I&E Statement No. 1, p. 26, lines, 8-13.
[53] Around PNG Field | Curve (milb.com), Accessed on April 24, 2024.

Pittsburgh Penguins, one of the gate entrances is named after the Company with the Peoples logo at the Fifth Avenue and Washington Place entrance.[54] Neither of these advertisements offer any benefits in providing safe and reliable service to ratepayers and are not an important part of the Company's outreach program that directly benefits customers.

Q. DO YOU AGREE WITH MR. WACHTER'S RESPONSE THAT THE ADVERTISING COSTS ASSOCIATED WITH SPORTS AND EVENT PARTNERSHIPS PROVIDE A DIRECT BENEFIT TO THE COMMUNITY AND THEIR CUSTOMERS?

A. No. Mr. Wachter opines that the Company's sponsorship with major sports teams spurs economic growth and a positive community for Western Pennsylvania and cites a 2018 study on the revenue generated by major sports teams in the City of Pittsburgh. However, as stated in my direct testimony, if the Company is spending money in an attempt to benefit the overall community in some way, it is more representative of a charitable contribution.[55] For example, ratepayers who are not sports fans may not want a portion of their gas payment to go towards team sponsorships that presumably benefit the overall community, and they have no option to remove the portion of their bill that is allocated towards the Company's sponsorship of professional sports teams.

[54] http://www.ppgpaintsarena.com/ppg-paints-arena/entrance-gates, accessed on April 24, 2024.
[55] I&E Statement No. 1, pp. 25-27.

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR ADVERTISING EXPENSE?

A. No. I continue to recommend an allowance of $53,737 for advertising expense, or a reduction of $1,370,197 ($1,423,934 - $53,737) to Peoples' claim for all of the reasons discussed above.

RATE CASE EXPENSE

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR RATE CASE EXPENSE.

A. In direct testimony, I recommended rate case expense be normalized over a period of 53 months resulting in an annual expense of $466,868 [($2,062,000 ÷ 53 months) x 12 months], or a reduction of $564,132 ($1,031,000 - $466,868) to the Company's claim. I disagreed with the Company's claimed two-year normalization period because it was not supported by the Company's historic filing frequency, was speculative in nature, and the Commission has agreed with I&E that the normalization period be based on actual historic filing frequency rather than future speculation.[56]

Using the Company's last three base rate case filing dates and the date of the current filing, an average interval is computed to be 53 months ((59 mo. + 83 mo. + 16 mo.) ÷ 3 intervals). The Company's requested 24-month recovery period is not supported by its historic filing record. Thus, the claimed two-year

[56] I&E Statement No. 1, pp. 27-33.

normalization period should be rejected as it would result in an unreasonable and unsupported increase in rates.

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION FOR RATE CASE EXPENSE?

A. Yes. Company witness Andrew P. Wachter disagreed with my recommendation that rate case expense be normalized over a 53-month period. Mr. Wachter states that I ignored the reason for the seven years between the 2012 case and the 2019 case due to the stay-out period from the settlement of the Company's acquisition of Equitable Gas Company (Equitable). Mr. Wachter asserts that I ignored the reason that the Company has not filed a base rate case since 2019 which was due to the Company receiving Accounting and Regulatory approval regarding its treatment of the tax repair election in 2020. Mr. Wachter states that the Company's two year normalization period is the estimated time for filing its next base rate case proceeding due to the Company's long-term infrastructure improvement plan (LTIIP) commitments. Finally, Mr. Wachter disagrees that the cases I provided to support my position are relevant due to Peoples' unique circumstances.[57]

[57] Peoples Statement No. 2-R, pp. 44-47.

Q. DO YOU AGREE WITH MR. WACHTER'S RESPONSE THAT YOU IGNORED THE STAY-OUT PERIOD AS A RESULT OF THE ACQUISITION OF EQUITABLE?

A. No. In the settlement of the Company's acquisition of Equitable, it was agreed that the Company would not file a base rate case until at least January 1, 2018.[58] However, the Company did not file its next base rate case until January 28, 2019, or more than a year after the end of the stay-out period. Furthermore, Mr. Wachter, in his rebuttal testimony in the Company's 2018 base rate case, stated that the Company did not file a base rate case sooner due to efficiencies gained from the Equitable acquisition.[59] This demonstrates that the Company did not need to file a base rate case before the end of the stay-out period which actually supports my recommendation for a longer normalization period.

Q. DO YOU AGREE WITH MR. WACHTER'S RESPONSE THAT YOU IGNORED THE COMPANY RECEIVING ACCOUNTING AND REGULATORY APPROVAL REGARDING ITS TREATMENT OF THE TAX REPAIR ELECTION IN 2020?

A. No. As stated in my direct testimony, I recognize that the Company received Accounting and Regulatory approval regarding its treatment of the tax repair election in 2020, however, Peoples has not filed a base rate case since 2019 (approximately five years ago). I believe that a two-year normalization period is

[58] Docket No. A-2013-2353647, Settlement Agreement, paragraph 27.
[59] Docket No. R-2018-3006818. Peoples Statement No. 3-R, p. 43, lines 6-8.

inappropriate and lacks the proper support. If Peoples were to file base rate cases with greater frequency, its normalization period will be shortened in future rate proceedings.[60]

Q. DO YOU AGREE WITH MR. WACHTER'S RESPONSE THAT THE TWO-YEAR NORMALIZATION BASED ON THE COMPANY'S LTIIP IS SUFFICIENT?

A. No. As stated in my direct testimony, the Commission has cited the importance of considering the involved utility's history regarding the frequency of rate case filings as an essential element in determining the normalized level of rate case expense for ratemaking purposes.[61] While the Commission allows utilities to normalize this expense, it is not appropriate to do so over a time period that is based on mere speculation of future filings or a simple statement that the Company plans to file another rate case within two years based on forecasted LTIIP capital expenditures.

Additionally, as stated in my direct testimony, the 2012 PPL base rate case[62] actually demonstrates that the use of historic filing frequency is more reliable as PPL was granted a 24-month normalization period, but it did not file its next base rate case until March 31, 2015[63] which was 36 months after the 2012

[60] I&E Statement No. 1, pp. 29-31.
[61] I&E Statement No. 1, pp. 27-28.
[62] PA PUC v. PPL Electric Utilities Corporation, Docket No. R-2012-2290597, pp. 47-48 (Order Entered December 28, 2012).
[63] PA PUC v. PPL Electric Utilities Corporation, Docket No. R-2015-2469275, p. 3 (Order Entered November 19, 2015).

base rate case proceeding. In contrast, I&E's recommendation of 32-months based on historic filing frequency was more accurate.[64]

Q. DO YOU AGREE WITH MR. WACHTER'S RESPONSE THAT THE CASES YOU PROVIDED AS SUPPORT ARE NOT RELEVANT?

A. No. The Commission has had a long-standing history of relying on historic filing frequency. As stated in my direct testimony, the Commission has historically stated that it considers prudently incurred rate case expense as an ongoing expense, occurring at irregular intervals, related to the rendering of utility service. The Commission has also cited the importance of considering the involved utility's history regarding the frequency of rate case filings as an essential element to determine the normalized level of rate case expense for ratemaking purposes.[65] Additionally, I included in my direct testimony six base rate cases citing the importance of historic filing frequency for determining rate case expense.[66]

Q. WHAT RECENT COMMISSION DECISIONS DID YOU RELY UPON TO SUPPORT YOUR RECOMMENDATION FOR A RATE CASE FILING INTERVAL BASED ON HISTORIC FILING FREQUENCY?

A. I referenced six base rate cases filed by Emporium Water Company,[67] and the City

[64] I&E Statement No. 1, pp. 31-32.
[65] I&E Statement No.1, pp. 27-28.
[66] I&E Statement No.1, pp. 32.33.
[67] *PA PUC v. Emporium Water Company*, Docket No. R-2014-2402324, p. 50 (Order Entered January 28, 2015).

of DuBois,[68] Columbia Gas of Pennsylvania, Inc.,[69] PECO Energy Company – Gas Division,[70] Philadelphia Gas Works (PGW),[71] and Columbia Water Company,[72] where the Commission adopted I&E's recommendation based on historic filing frequency.[73]

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR RATE CASE EXPENSE?

A. No. I continue to recommend that rate case expense be normalized over 53 months as the Company's historic filing frequency does not support the two-year normalization period claimed by the Company.[74]

UNCOLLECTIBLE ACCOUNTS EXPENSE

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR UNCOLLECTIBLE ACCOUNTS EXPENSE.

A. In direct testimony, I did not recommend a specific allowance for uncollectible accounts expense. I&E's recommendation is based on the cumulative

[68] *PA PUC v. City of DuBois - Bureau of Water*, Docket No. R-2016-2554150, pp. 65-66 (Order Entered March 28, 2017); *PA PUC v. City of DuBois - Bureau of Water*, Docket No. R-2016-2554150, p. 13 (Order Entered May 18, 2017).

[69] *PA PUC v. Columbia Gas,* Docket No. R-2020-3018835, Opinion and Order, pp. 78-79 (Order Entered February 19, 2021).

[70] *PA PUC v. PECO Energy Company- Gas Division*, Docket No. R-2020-3018929, Opinion and Order, pp. 117-119 (Order Entered June 22, 2021).

[71] *PA PUC v. Philadelphia Gas Works*, Docket No. R-2023-3037933, Opinion and Order, pp. 65-66 (Order Entered November 9, 2023).

[72] *PA PUC v. Columbia Water Company*, Docket No. R-2023-3040258, Opinion and Order, p. 34 (Order Entered January 18, 2024).

[73] I&E Statement No. 1, pp. 32-33.

[74] I&E Statement No. 1, pp. 27-33.

recommended adjustments made by all I&E witnesses and based on the process known as iteration, which effectively prevents the determination of a precise calculation until all adjustments have been made to the Company's claims. I&E's recommendation for uncollectible accounts expense is not a final recommendation as the Company's claims must be continually brought together in the Administrative Law Judge's Recommended Decision and again in the Commission's Final Order which could change the allowance for uncollectible accounts expense.

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION FOR UNCOLLECTIBLE ACCOUNTS EXPENSE?

A. Yes. Company witness Andrew P. Wachter responded to my uncollectible accounts expense recommendation. Mr. Wachter states that my adjustments were unreasonable and contrary to Commission precedent and should not be accepted. Mr. Wachter also states that uncollectible accounts expense should be based on the rate increase approved in this proceeding.[75]

Q. WHAT IS YOUR RESPONSE TO MR. WACHTER?

A. As I stated above, I&E's recommendation is not a final recommendation.[76] The I&E recommendation is based on the cumulative recommended adjustments made by all I&E witnesses through the process known as iteration, which effectively

[75] Peoples Statement No. 2-R, pp. 55-57.
[76] Peoples Statement No. 12-R, p. 3.

prevents the determination of a precise calculation until all adjustments have been made to the Company's claims. I agree with Mr. Wachter that uncollectible accounts expense should be based on the Administrative Law Judge's Recommended Decision and again in the Commission's Final Order regarding the Company's claims.

CASH WORKING CAPITAL

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR CASH WORKING CAPITAL (CWC).

A. In direct testimony, I recommended a total allowance of $35,564,531 or a decrease of $692,386 ($36,256,917 - $35,564,531) to the Company's claim. My recommendation was based on my adjustments to O&M expenses.[77]

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION FOR CASH WORKING CAPITAL?

A. Yes. Company witness Krista Snyder responded to my CWC recommendation. Ms. Snyder simply states that she did not agree with my recommendation for CWC.[78]

[77] I&E Statement No. 1, pp. 55-57.
[78] Peoples Statement No. 12-R, p. 3.

Q. DID THE COMPANY PROVIDE AN UPDATE TO CWC?

A. Yes. The Company's updated claim for CWC is $35,661,101.[79]

Q. DO YOU AGREE WITH THE COMPANY'S UPDATED CLAIM?

A. No.

Q. DO YOU HAVE AN UPDATE FOR I&E RECOMMENDED ADJUSTMENTS TO O&M EXPENSES?

A. Yes. All O&M expense adjustments that are cash-based expense claims are included when determining the Company's overall CWC requirement. Therefore, I have included cash-based O&M recommendations when computing the overall recommended CWC allowance.

Q. SUMMARIZE WHERE EACH OF THE RECOMMENDED O&M EXPENSE ADJUSTMENTS ARE REFLECTED IN THE CWC COMPUTATIONS.

A. <u>Gas Purchase Costs – Expense Lag Days</u>

I&E witness Cline recommended an increase to gas purchase costs of $4,5481,129, [80] which is reflected as an increase to the Gas Purchase Costs Lag Days calculation.[81]

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[79] Peoples Exhibit KMS-R-1.
[80] I&E Statement No. 3-SR.
[81] I&E Exhibit No. 1-SR, Schedule 3, p. 1, line 1.

Payroll - Expense Lag Days:

I recommended a reduction to labor expense of $2,272,848 which is reflected as a reduction to the Payroll Expense Lag Days calculation.[82]

Pension and Benefits – Expense Lag Days:

The following recommended adjustments are reflected in the Pension and Benefits Expense Lag Days calculation:[83] pension expense adjustment of $1,286,880, PBOPs adjustment of $894,141, and other employee benefits adjustment of $686,208 as discussed above, producing a total decrease of $2,867,229 to the Pension and Benefits Expense Lag Days calculation.[84]

Taxes Other Than Income Taxes – Expense Lag Days:

I recommended a reduction to payroll taxes of $213,648 which is reflected as a reduction to the Taxes Other Than Income Taxes Lag Days calculation.[85]

Other O&M Expenses – Expense Lag Days:

The following recommended adjustments are reflected in the Other O&M Expenses - Expense Lag Days calculation:[86] corporate insurance adjustment of $2,085,969, advertising expense adjustment of $1,370,197, and rate case expense

[82] I&E Exhibit No. 1-SR, Schedule 3, p. 1, line 2.
[83] I&E Exhibit No. 1-SR, Schedule 3, p. 1, line 3.
[84] I&E Exhibit No. 1-SR, Schedule 3, p. 2.
[85] I&E Exhibit No. 1-SR, Schedule 3, p. 1, line 4.
[86] I&E Exhibit No. 1-SR, Schedule 3, p. 1, line 5.

adjustment of $564,132 as discussed above, producing a total decrease of $4,020,298 to the Other O&M Expense – Expense Lag Days calculation.[87]

Summary of I&E-Updated Recommended CWC Allowance:

Q. BASED ON THE ABOVE SURREBUTTAL TESTIMONY, WHAT IS YOUR UPDATED RECOMMENDED ALLOWANCE FOR CWC?

A. Based on reflecting all of I&E's recommended adjustments as discussed above, my updated recommendation for CWC is an allowance of $35,267,845 or a decrease of $393,256 ($35,661,101 - $35,267,845) to the Company's revised claim.[88]

Q. IS YOUR UPDATED RECOMMENDATION FOR CWC A FINAL RECOMMENDED ALLOWANCE?

A. No. Similar to what I stated in direct testimony, all adjustments to the Company's claims must be continually brought together in the Administrative Law Judge's Recommended Decision and again in the Commission's Final Order. This process, known as iteration, effectively prevents the determination of a precise calculation until all adjustments have been made to the Company's claims.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

[87] I&E Exhibit No. 1-SR, Schedule 3, p. 3.
[88] I&E Exhibit No. 1-SR, Schedule 3, p. 1, line 10.

I&E Statement No. 2-SR
Witness: Anthony Spadaccio

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PEOPLES NATURAL GAS COMPANY LLC

Docket No. R-2023-3044549

Surrebuttal Testimony

of

Anthony Spadaccio, CRRA

Bureau of Investigation & Enforcement

Concerning:

Rate of Return

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INTRODUCTION OF WITNESS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Anthony Spadaccio. My business address is Pennsylvania Public Utility Commission, Commonwealth Keystone Building, 400 North Street, Harrisburg, PA 17120.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Pennsylvania Public Utility Commission (Commission) in the Bureau of Investigation & Enforcement (I&E) as a Fixed Utility Financial Analyst Supervisor.

Q. ARE YOU THE SAME ANTHONY SPADACCIO WHO IS RESPONSIBLE FOR THE DIRECT TESTIMONY CONTAINED IN I&E STATEMENT NO. 2 AND THE SCHEDULES IN I&E EXHIBIT NO. 2?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to address statements made in the rebuttal testimony of Peoples Natural Gas Company LLC (Peoples or Company) witness Paul R. Moul (Peoples Statement No. 13-R) and the Pennsylvania Office of Consumer Advocate (OCA) witness Aaron L. Rothschild (OCA Statement 3R)

regarding rate of return topics including the cost of common equity and the overall fair rate of return that will be applied to the Company's rate base.

SUMMARY OF MR. ROTHSCHILD'S REBUTTAL TESTIMONY

Q. SUMMARIZE MR. ROTHSCHILD'S RESPONSE IN REBUTTAL TESTIMONY TO YOUR RECOMMENDATIONS MADE IN DIRECT TESTIMONY.

A. Mr. Rothschild takes issue with my overall return on equity (ROE) recommendation including certain aspects of my Discounted Cash Flow (DCF) and Capital Asset Pricing Model (CAPM) analyses. Additionally, he disagrees with my acceptance and use of the Company's actual capital structure.[1]

Q. WHAT IS MR. ROTHSCHILD'S SPECIFIC CRITICISM REGARDING YOUR DCF ANALYSIS?

A. Mr. Rothschild opines that the result of my DCF analysis is unreasonably high because I rely on five-year earnings per share growth rate forecasts which are not indicative of future sustainable growth rates.[2]

[1] OCA Statement 3R, p. 2, lines 11-14.
[2] OCA Statement 3R, p. 4, lines 11-21.

Q. HOW DO YOU RESPOND TO MR. ROTHSCHILD'S CRITICISMS OF YOUR DCF ANALYSIS?

A. First, it should be noted, in the context of recommending an appropriate return on equity and overall rate of return, I&E's role is to perform an unbiased analysis using current and reputable sources. In determining an appropriate growth rate for my DCF analysis, I relied upon the forecasted earnings estimates from Value Line, Yahoo! Finance, and Zacks.[3] These resources are trusted and used industry wide, including by most Company, advocate, and Commission witnesses who submit rate of return testimony. Mr. Rothschild, Mr. Moul, and I all utilize these sources in our respective DCF analyses.

Next, the estimates I use from the sources listed above are five-year growth forecasts which are not short-term, nor are they intended to be viewed as sustainable indefinitely as Mr. Rothschild seems to suggest is my intention.[4] I believe the five-year growth estimates are reasonable as they cover the time period of the Fully Projected Future Test Year (FPFTY) and rate case filing frequency of many utilities. In this proceeding, I&E witness Christopher Keller determines the Company's historical rate case filing frequency to be 53 months[5] or approximately 4.42 years ($53 \div 12 \approx 4.42$).

Finally, the Commission has repeatedly confirmed I&E's DCF methodology for determining a fair return on common equity. Specifically, in the

[3] I&E Exhibit No. 2, Schedule 6.
[4] OCA Statement No. 3R, p. 6, lines 15-20.
[5] I&E Statement No. 1, p. 30, lines 5-7.

2020 Columbia Gas rate case, and the 2023 Columbia Water rate case the Commission agreed with the ALJ's recommendation to use I&E's cost of equity methodology, which included using five-year growth estimates in the DCF analysis.[6]

Q. WHAT IS MR. ROTHSCHILD'S SPECIFIC CRITICISM REGARDING YOUR CAPM ANALYSIS?

A. Mr. Rothschild opines that the result of my CAPM analysis is not useful as a comparison to my DCF result because my calculated market risk premium (MRP) is excessive.[7] He asserts that the MRP is an important variable of the CAPM model, and if the MRP is miscalculated, the rest of the calculations would be skewed accordingly.[8] Ultimately, Mr. Rothschild recommends the Commission disregard my "flawed" CAPM analysis.[9]

Q. HOW DO YOU RESPOND TO MR. ROTHSCHILD'S CRITICISMS OF YOUR CAPM ANALYSIS?

A. To an extent, there is some merit to Mr. Rothschild's argument. I believe the differences in our applications of the CAPM illustrate just how subjective the

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6 *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.;* Docket No. R-2020-3018835, p. 141 (Order Entered February 19, 2021); *Pa. PUC v. Columbia Water Company,* Docket No. R-2023-3040258, p. 105 (Order entered January 18, 2024).

7 OCA Statement No. 3R, p. 7, lines 4-10.

8 OCA Statement No. 3R, p. 7, lines 13-20.

9 OCA Statement No. 3R, p. 9, lines 1-2.

inputs of this cost of equity model can be. The results of the CAPM analyses from Mr. Rothschild, Mr. Moul, and myself vary wildly. For example, Mr. Rothschild presents CAPM results as low as 7.50%[10] which is 792 basis points (15.42% - 7.50%) lower than Mr. Moul's CAPM result of 15.42%.[11] Markedly, the result of my CAPM analysis sits comfortably in the middle at 10.91%.[12] Specific to Mr. Rothschilds criticism, as similarly noted above, I employed reputable and widely accepted sources including Value Line, Blue Chip Financial Forecasts, and the historical overall market returns for the past 98 years in determining each component of my CAPM, including the MRP and ultimately the final CAPM result.

In direct testimony, I thoroughly discuss the disadvantages of the CAPM and explain why the DCF is the superior model.[13] In the end, as I explain below, I do not base my recommendation on the CAPM, I simply provide the results as a comparison.

Q. SUMMARIZE MR. ROTHSCHILD'S RESPONSE CONCERNING YOUR RECOMMENDED CAPITAL STRUCTURE.

A. Mr. Rothschild disagrees with my recommended capital structure largely because it conflicts with my acknowledgement that a 50% common equity and 50% long-

[10] OCA Statement No. 3, p. 77, Table 8.
[11] Exhibit PRM-1 Schedule 1.
[12] I&E Statement No. 2, p. 32, ln. 8.
[13] I&E Statement No. 2, p. 17, ln. 9 through p. 20, ln. 2.

term debt capital structure is theoretically optimal. He argues that my adoption of the Company's claimed actual capital structure is inconsistent with the average actual capital structures used by gas utilities.[14]

Q. WHAT IS YOUR RESPONSE TO MR. ROTHSCHILD'S REBUTTAL TESTIMONY REGARDING YOUR RECOMMENDED CAPITAL STRUCTURE?

A. Generally, with few exceptions such as municipalities and smaller investor-owned utilities with largely contributed capital, the actual and FPFTY capital structure of a company and/or the parent company should be reviewed and applied in the cost of equity analysis to truly reflect the utility's financing structure (capitalization ratio) that will be used to finance the utility's rate base. Based on this fundamental procedure and comparing the Company's actual capital structure with the proxy group's capital structure range, the Company's claimed capital structure is reasonable in this case. It is difficult to assess the reasonableness of a company's capitalization ratio because there are pros and cons of higher debt or higher equity in the capital structure ratio. For example, a higher debt ratio may result in higher financial risk and borrowing costs which negatively impacts ratepayers. Conversely, an excessively high equity ratio results in ratepayers having to fund an unnecessarily high return.

[14] OCA Statement No. 3R, p. 7, ln. 3 through p. 12, ln. 7.

As stated in my direct testimony, although it isn't always feasible, I believe a capital structure of 50% common equity and 50% long-term debt is ideal and optimal when trying to balance the financial risks of a company as well as controlling costs to ratepayers.[15] However, applying a 50/50 capital structure to every utility in every case as Mr. Rothschild seems to suggest is short-sighted. I believe motivation to make the best financing decisions possible while considering financial risks and affordability to ratepayers would be reduced if a utility believes the Commission will automatically adopt a 50/50 capital structure. For example, it would be financially beneficial for a utility to have an actual debt ratio greater than 50% and an equity ratio lower than 50% only to have it artificially brought to 50/50 during a rate case. In this example, the utility would unnecessarily be collecting the more expensive calculated cost of equity on part of its long-term debt portion which would not be beneficial to ratepayers. Further, the greater long-term debt percentage could possibly lead to a credit rating downgrade and higher debt costs. Using company specific information that is known, measurable, and reasonable, whenever possible, more accurately results in a fair overall rate of return. I will note, however, that there are a few limitations and exceptions as previously mentioned, which is precisely the reason we review the capital structure information of a proxy group.

Further, my recognition that a 50/50 capital structure is theoretically

[15] I&E Statement No. 2, p. 12, ln. 1 through p. 14, ln. 7.

optimal is intended to illustrate that Mr. Moul's various other adjustments to his calculated cost of equity are unnecessary. Since the Company is benefiting from a more equity heavy capital structure, I believe any further consideration regarding financial risk is unwarranted.

Finally, other than in the 2023 Columbia Water rate case, I&E has historically been very consistent in adopting a company's claimed/actual capital structure in rate proceedings, especially when it falls within the range of capital structures of the proxy group derived from information provided by S&P Global Market Intelligence – Data Management Solutions. Notably, in this single instance, where I&E strayed from this methodology and in fact recommended a 50/50 capital structure, the Commission rejected the positions of both I&E and OCA, stating:[16]

> On consideration of the record evidence, we are persuaded by Columbia's argument that an actual capital structure should be utilized in setting an overall rate of return in this proceeding….At the outset, we reinforce that an actual capital structure represents the Company's decision, in which it has full discretion, on how to capitalize its rate base. This actual capitalization forms the basis upon which Columbia attracts capital.

For comparison, in that proceeding, Columbia's actual claimed equity ratio that led to I&E's 50/50 recommendation was 63.34%, much higher than People's claim of 54.67% in this proceeding.

[16] *Pa. PUC v. Columbia Water Company,* Docket No. R-2023-3040258, p. 83 (Order entered January 18, 2024).

SUMMARY OF MR. MOUL'S REBUTTAL TESTIMONY

Q. SUMMARIZE MR. MOUL'S RESPONSE IN REBUTTAL TESTIMONY TO YOUR RATE OF RETURN RELATED RECOMMENDATIONS.

A. Mr. Moul provides updates to his cost of equity analysis, disputes my recommendations regarding an appropriate proxy group, my reliance on and application of the Discounted Cash Flow (DCF) method, the DCF growth rate, and disallowance of his leverage adjustments to the DCF and beta of his Capital Asset Pricing Model (CAPM). Further, Mr. Moul disagrees with the appropriate risk-free rate to use and my exclusion of a size adjustment in my CAPM analysis, my disagreement with his use of the Risk Premium (RP) and Comparable Earnings (CE) methods, and my recommended disallowance of additional basis points for management performance. Finally, Mr. Moul suggests that the Commission-determined Distribution System Improvement Charge (DSIC) rates should serve as a benchmark cost of equity in this proceeding.

PROXY GROUP

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING YOUR PROXY GROUP.

A. Mr. Moul claims that I erroneously omitted Southwest Gas Holdings, Inc. from my proxy group. He argues that I incorrectly employed the criterion that 50% or more of a company's revenues must be generated from the regulated gas utility industry as opposed to using both income and the percentage of assets. He claims

that margins on non-utility business segments within the companies in our proxy groups are dissimilar to the utility business.[17]

Q. DO YOU AGREE WITH MR. MOUL'S ASSERTION THAT THE PERCENTAGE OF GAS UTILITY ASSETS TO TOTAL ASSETS IS A MORE APPROPRIATE CRITERION?

A. No. Calculating the percentage of utility assets that make up the total assets of a company is not always a reliable way of determining if a business is primarily a regulated utility. Assets are accounted for at the original cost minus depreciation, which means that the value of an asset depends on its age. Therefore, it is possible for the regulated utility segment of a company to have assets that are predominately depreciated. Although a utility may have assets that are significantly depreciated, it does not always indicate the level of business a company does. A company, or its parent company, can have most of its utility assets depreciated but still do more business as a utility than as another business.

Another reason that the percentage of utility business is not always accurately represented by using the percentage of utility assets to total assets is that there are differences between businesses in the amount of capital needed. Generally, a utility company requires a higher level of assets (asset value) to produce a comparatively small level of cash flow while another business may need

[17] Peoples Statement No. 13-R, p. 13, ln. 3 through p. 14, ln. 10.

only a small amount of assets to produce a large level of cash flow. Therefore, comparing the assets of a gas utility segment to the total assets of a company is not an appropriate criterion as it could be misleading.

Q. PLEASE REITERATE WHY YOU ELIMINATED SOUTHWEST GAS HOLDINGS, INC. FROM YOUR PROXY GROUP.

A. As explained in my direct testimony, Southwest Gas Holdings, Inc. was excluded for not meeting my criterion that 50% or more of revenues must be generated from regulated gas utility operations. Again, this criterion is important because revenues represent the percentage of cash flow a company receives from each business line related to providing a good or service. If less than 50% of revenues come from the gas distribution sector, the companies are not comparable to the subject utility as they do not provide a similar level of regulated business.[18]

Q. DO YOU HAVE ANY CHANGES TO YOUR PROXY GROUP?

A. No. For the reasons discussed above, the percentage of revenue is an appropriate criterion. As Southwest Gas Holdings, Inc. includes an insufficient percentage of regulated gas revenues of 39%,[19] it should not be included in the proxy group and compared to Peoples.

[18] I&E Statement No. 2, p. 10, lines 1-12.
[19] Peoples Statement No. 13-R, p. 14, ln. 2.

DISCOUNTED CASH FLOW

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING YOUR DCF ANALYSIS.

A. Mr. Moul agrees that results of a DCF analysis should be given weight, but he asserts that use of multiple methods provides a superior foundation to determine the cost of equity. He compares the DSIC rate determined by the Commission in the Quarterly Earnings Summary Reports to the rates calculated using market data. He further disagrees with my results based on the outcomes of certain individual companies and disputes my growth rate analysis. Finally, Mr. Moul disagrees with my recommendation to reject his leverage adjustment.[20]

EXCLUSIVE USE OF THE DCF

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING YOUR USE OF THE DCF.

A. Mr. Moul asserts that the use of more than one method provides a superior foundation for the cost of equity determination. He claims that the use of more than one method will capture the multiplicity of factors that motivate investors to commit their capital to a particular enterprise.[21]

[20] Peoples Statement No. 13-R, p. 14, ln. 12 through p. 22, ln. 8.
[21] Peoples Statement No. 13-R, p. 15, lines 1-6.

Q. WERE ANY METHODS OTHER THAN THE DCF EMPLOYED IN YOUR ANALYSIS?

A. Yes. Although my recommendation was based on the results of my DCF analysis, I also employed the CAPM as a comparison. For the reasons discussed in my direct testimony, the DCF method is the most reliable.[22] Although no one method can capture every factor that influences an investor, including the results of methods less reliable than the DCF does not make the end result more reliable or more accurate. In direct testimony, I cited several cases that illustrate the methodology I employed is consistent with the methodology historically used by the Commission in base rate proceedings as recently as 2017, 2018, 2020, and 2021.[23]

However, as indicated in my direct testimony,[24] the Commission recently deviated from prior Commission practice when it indicated in the 2022 Aqua Pennsylvania, Inc. (Aqua) rate case order that its method "for determining Aqua's ROE shall utilize both I&E's DCF and CAPM methodologies"[25] and that "I&E's DCF and CAPM produce a range of reasonableness for the ROE … ."[26] Similarly, most recently, the Commission's 2024 Columbia Water rate case order relied on the results of I&E's DCF and CAPM analyses for determining Columbia Water's

[22] I&E Statement No. 2, p. 17, ln. 9 through p. 18, ln. 15.
[23] I&E Statement No. 2, p. 17, lines 14-16.
[24] I&E Statement No. 2, p. 21, ln. 16 through p. 22, ln. 5.
[25] *Pa. PUC v. Aqua Pennsylvania, Inc.,* Docket Nos. R-2021-3027385 & R-2021-3027386, pp. 154 (Order entered May 16, 2022).
[26] *Pa. PUC v. Aqua Pennsylvania, Inc.,* Docket Nos. R-2021-3027385 & R-2021-3027386, pp. 178 (Order entered May 16, 2022).

ROE.[27] In my direct testimony, I fully explain why the CAPM should not be used as a primary method and continue to express those concerns in this proceeding as to why it should only be used as a comparison to, not a check of, the DCF. Thus, I disagree with a method that provides the CAPM comparable weight to the DCF method.[28] In fact, my illustration in this surrebuttal testimony of the extreme variation in results achieved by the CAPM analyses between Mr. Rothschild and Mr. Moul only highlights the unreliability and subjectivity of the CAPM method, further invalidating its use for establishing an appropriate ROE for ratemaking.

DSIC RATES

Q. SHOULD THE COMMISSION CONSIDER THE AUTHORIZED DSIC RATE ESTABLISHED IN THE QUARTERLY EARNINGS SUMMARY REPORTS AS AN APPROPRIATE MEASURE TO DETERMINE THE COST OF EQUITY IN THIS PROCEEDING?

A. No. Mr. Moul's comparison between the I&E recommended return on equity in this proceeding and the Commission's DSIC rate is misguided. My understanding is that the DSIC rate is designed to encourage its use and to incentivize accelerated pipeline replacement and infrastructure upgrades to bring aging infrastructure closer to meeting safety and reliability requirements in between base rate filings. To suggest the cost of equity must be at or above the DSIC rate in this base rate

[27] *Pa. PUC v. Columbia Water Company,* Docket Nos. R-2023-3040258, p. 105 (Order entered January 18, 2024).
[28] I&E Statement No. 2, p. 19, ln. 15 through p. 21, ln. 1.

proceeding is inappropriate and not in the public interest. Additionally, the DSIC rate establishes a benchmark above which a utility company is considered "overearning" for use of the DSIC mechanism. As such, the DSIC rate should not serve as a proper measurement of a subject utility's cost of equity in a base rate proceeding since the DSIC rate is routinely higher than any return on equity approved in such base rate proceedings. In fact, 66 Pa. C.S. § 1358(b)(3) states the following:

> The distribution system improvement charge shall be reset at zero if, in any quarter, data filed with the commission in the utility's most recent annual or quarterly earnings report show that the utility will earn a rate of return that would exceed the allowable rate of return used to calculate its fixed costs under the distribution system improvement charge.

Finally, the DSIC mechanism serves to lower a utility's risk because it reduces the lag time in the recovery of a company's capital outlays. DSIC spending requires preapproval of eligible plant via a Long-Term Infrastructure Improvement Plan so there is little question as to the prudence of those expenditures.

Q. ARE THERE ANY POTENTIAL PROBLEMS WITH AWARDING A RETURN ON EQUITY THAT IS EQUAL TO OR HIGHER THAN THE DSIC RATE?

A. Yes. First, if a company achieves the awarded return that is above the DSIC rate, it eliminates the possibility for the utility to utilize the DSIC mechanism until its

earnings fall below the DSIC rate. Further, if a company believes it will receive a return higher than the DSIC rate in a litigated base rate proceeding, it will remove the incentive to use the DSIC mechanism between rate filings and may encourage the more frequent filing of base rate cases. Additionally, it may encourage litigation as opposed to settlement of cases, since companies may improperly believe this is the new norm, which will increase rate case costs to customers.

Therefore, in my opinion, the DSIC rate should generally be an incentive rate that is higher than a return on equity percentage granted in a rate proceeding.

EVALUATING THE DCF BASED ON INDIVIDUAL RESULTS

Q. SUMMARIZE MR. MOUL'S RESPONSE IN REBUTTAL TESTIMONY REGARDING THE RESULTS OF YOUR DCF.

A. Mr. Moul explains that when some results are unreasonable on their face, the reliability of, or the witness' application of, that method must be questioned. He points to the results of two companies in my proxy group (Chesapeake Utilities and One Gas Inc.) and claims that they fall into the category of unreasonableness. Mr. Moul attempts to support his theory by arguing that the return on equity for these companies fails to provide a sufficient spread over the current 5.55% yield on A-rated public utility bonds.[29]

[29] Peoples Statement No. 13-R, p. 21, ln. 1 through p. 22, ln. 12.

Q. WHAT IS YOUR RESPONSE TO MR. MOUL'S ATTEMPT TO DISAGGREGATE YOUR RESULTS?

A. The 9.96% result of my DCF analysis offers a 5.59% margin over the undisputed 4.37% cost of debt (9.96% - 4.37% = 5.59%). My recommended cost of equity is well more than double the Company's claimed cost of debt and provides a 4.41% margin (9.96% - 5.55% = 4.41%) over Mr. Moul's claimed 5.55% yield on A-rated public utility bonds. I certainly believe these measures satisfy Mr. Moul's statement that, "It is a fundamental tenet of finance that the cost of equity must be higher than the cost of debt by a meaningful margin to compensate for the higher risk associated with a common equity investment."[30]

GROWTH RATE

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING YOUR GROWTH RATES.

A. Mr. Moul argues that the Yahoo! Finance and Zacks growth rate projections for Northwest Natural Gas Co. and One Gas Inc are outliers as they are too far below the 6.75% growth rate he used. He suggests that had I eliminated these estimates, the result of my DCF analysis would have increased from 9.96% to 10.48%.[31]

[30] Peoples Statement No. 13-R, p. 21, lines 8-10.
[31] Peoples Statement No. 13-R, p. 21, ln. 14 through p. 22, ln. 8.

Q. DO YOU AGREE WITH MR. MOUL'S RECALCULATION OF YOUR DCF RESULTS BASED ON THE REMOVAL OF COMPANIES DUE TO THEIR GROWTH RATES BEING TOO LOW?

A. No. First, although he claims Northwest Natural Gas Co. is one of the companies with too low of a growth rate, he instead eliminates the DCF result for Chesapeake Utilities. Presumably, Mr. Moul is aware that Northwest Natural Gas Co. has a higher than the average dividend yield which is why he left it in his recalculation of my results. That aside, his recalculation results in a DCF that is 52 basis points (10.48% - 9.96%) higher than my recommendation, yet still 127 basis points (11.75% - 10.48%) below his own cost of equity recommendation.

Mr. Moul's decision to remove these estimates only serves to inflate the DCF result, as his argument lacks objective rationale and defeats the purpose of using a proxy group. Mr. Moul himself states, "[t]he principal purpose of assembling a barometer group is to avoid relying on data for a single company that may not be representative and to thereby smooth out any abnormalities."[32] This acknowledgement is counterintuitive to his suggestion to remove individual companies from my analysis due to growth estimates he deems are too low. Ironically, and worth noting, Mr. Moul employs the very same growth estimates for the companies and sources he is criticizing in his own proxy group and analysis.[33]

[32] Peoples Statement No. 13-R, p. 21, lines 1-3.
[33] Peoples Exhibit PRM-1, Schedule 9.

Finally, while he takes issue with the 4.33% and 4.67% estimates, which are 158 (5.91% - 4.33%) and 124 (5.91% - 4.67%) basis points lower than my average growth rate estimate of 5.91%, he is not concerned with the 7.27% and 8.00% growth estimates for Atmos Energy Corp. and NiSource Inc., respectively. These estimates are 136 (7.27% - 5.91%) and 209 (8.00% - 5.91%) basis points, respectively, higher than the average.

LEVERAGE ADJUSTMENT

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING HIS LEVERAGE ADJUSTMENT.

A. First, Mr. Moul states that credit rating agencies do not measure the market-required cost of equity for a company, nor are they concerned with how it is applied in the rate-setting context. Rather, the credit rating agencies are only concerned with the interests of lenders and the timely payment of principal and interest by companies. Then, Mr. Moul questions my references to prior Commission orders. Finally, Mr. Moul disagrees with my claim that investors base their decisions on the book value of a company's debt and equity.[34]

[34] Peoples Statement No. 13-R, p. 30, ln. 14 through p. 33, ln. 17.

Q. WHAT IS YOUR RESPONSE TO MR. MOUL'S REBUTTAL TESTIMONY CONCERNING CREDIT RATING AGENCIES?

A. Mr. Moul has actually supported my argument that his proposed leverage adjustment is not needed by stating that the credit rating agencies are only concerned with the timely payment of principal and interest by utilities. Mr. Moul's stated need for the leverage adjustment is based on his assertion that the difference between the book value capital structure and his market value capital structure poses a financial risk difference.[35]

Financial risk does in fact relate to the capital structure of a company, but it is created by the financing decisions (the use of debt or equity) and the amount of leverage or debt with which a company chooses to finance its assets. Financial risk and the book value capital structure of a company are represented in the financial statements, which are part of what is evaluated by rating agencies. Mr. Moul agrees with me that credit rating agencies use a company's booked debt obligations, found in the financial statements, in their analysis to assess financial risk and determine creditworthiness.[36]

Q. SUMMARIZE MR. MOUL'S RESPONSE TO YOUR REFERENCE TO PRIOR COMMISSION ORDERS.

A. Mr. Moul refers to the discussion in my direct testimony about six recent cases

[35] Peoples Statement No. 13, p. 33, lines 10-17.
[36] Peoples Statement No. 13-R, p. 31, lines 1-4.

where the Commission has rejected a "leverage adjustment." He explains that even though the Commission declined to make a "leverage adjustment" in a prior Aqua Pennsylvania case, it does not invalidate its use. Further, he states, "Notably, the Commission did not repudiate the leverage adjustment in the Aqua case, but instead arrived at an 11.00% return on equity for Aqua by including a separate return increment for management performance."[37] Next, Mr. Moul claims that the adjustment proposed in the City of Lancaster case was much different than what he proposes in this case. Then, regarding UGI Electric Utilities, Inc. – Electric Division (UGI Electric), Mr. Moul acknowledges the Commission granted a "management performance increment," not a leverage adjustment when arriving at the allowed equity return. As for the Columbia Gas case, Mr. Moul concedes that the Company accepted I&E's return on equity recommendation, which did not include a leverage adjustment or addition of points for management performance. Additionally, in the 2020 PECO Gas case, he argues that the Commission arrived at an equity return on the higher side without a leverage adjustment, therefore no adjustment was warranted. Finally, in the 2021 Aqua case, Mr. Moul acknowledges that the Commission set the cost of equity without a leverage adjustment.[38]

[37] Peoples Statement No. 13-R, p. 31, lines 16-20.
[38] Peoples Statement No. 13-R, p. 31, ln. 22 through p. 32, ln. 18.

Q. WHAT IS YOUR RESPONSE TO MR. MOUL REGARDING THE REFERENCED PRIOR COMMISSION ORDERS IN YOUR DIRECT TESTIMONY?

A. In this proceeding, Mr. Moul is recommending a 141-basis point "leverage adjustment." To be clear, the Commission did in fact refuse to accept the leverage adjustment in the Aqua case by stating "…we reject the ALJ's recommendation to allow a 65 basis point leverage adjustment."[39] The management performance points awarded to Aqua were case-specific and in no way related to the proposed leverage adjustment. Regarding the City of Lancaster case, the Commission did not reject the leverage adjustment based on the manner in which it was calculated, but rather, the Commission stated, "…the ALJ's recommendation is in error as any adjustment to the results of the market based DCF as we have previously adopted are unnecessary and will harm ratepayers."[40] Regarding the UGI Electric case, the Commission concluded that "…an artificial adjustment in this proceeding is unnecessary and contrary to the public interest. Accordingly, we decline to include a leverage adjustment in our calculation of the DCF cost of equity."[41] Regarding the most recent Columbia Gas case, the Commission stated,

> … we have adopted the ALJ's recommendation to use I&E's DCF methodology utilizing I&E's dividend yield of 3.34% and growth rate of 6.52%. As noted above, the ALJ did not specify a recommended cost of equity for Columbia in their

[39] *Pa. PUC v. Aqua Pennsylvania, Inc.,* Docket No. R-00072711, pp. 38-39 (Order entered July 31, 2008).
[40] *Pa. PUC v. City of Lancaster – Bureau of Water*; Docket No. R-2010-2179103, p. 101 (Order entered July 14, 2011).
[41] *Pa. PUC v. UGI Utilities, Inc. – Electric Division;* Docket No. R-2017-2640058, pp. 93-94 (Order entered October 25, 2018).

> Recommended Decision. However, we note that I&E's methodology results in an ROE of 9.86%.[42]

The ALJ's Recommended Decision stated the following:

> The ALJ agrees with BIE's reasoning that Columbia Gas' calculated return on equity was flawed for five reasons: (1) the weights given to the results of the Company's CAPM, RP, and CE analyses; (2) certain aspects of Columbia's discussion of risk; (3) Columbia Gas' application of the DCF including the forecasted growth rate and leverage adjustment used; (4) Columbia's inclusion of a size adjustment, reliance on the 30-year Treasury Bond for the risk- free rate, and the use of a double-adjusted *beta* in the CAPM analysis; and (5) the Company's request for an additional 20 basis points for "strong management performance" is unjustified.[43]

While the Company accepted I&E's DCF return without regard to the leverage adjustment or management performance in the last base rate case, in the Recommended Decision, the ALJ clearly rejected the Company's proposed leverage adjustment and the Commission agreed with the ALJ's Recommended Decision.

In the PECO Energy – Gas Division case, the Commission stated,

> … we have adopted the ALJ's recommendation to use I&E's DCF methodology and to use I&E's CAPM calculation as a check on the reasonableness of the DCF determined cost of equity. Therefore, we shall adopt the ALJ's recommended 10.24% cost of equity. In our view, this is an appropriate cost of equity for PECO given the record developed in this proceeding.[44]

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[42] *Pa. PUC v. Columbia Gas of Pennsylvania*; Inc. Docket No. R-2020-3018835, p. 141 (Order entered February 19, 2021).

[43] *Pa. PUC v. Columbia Gas of Pennsylvania*; Inc. Docket No. R-2020-3018835, Recommended Decision, pp. 184-185.

[44] *Pa. PUC v. PECO Energy Company – Gas Division*. Docket No. R-2020-3018929, p. 171 (Order entered June 22, 2021).

In the Recommended Decision, the ALJ agreed with I&E's recommended cost of equity which did not include a leverage adjustment.[45]

Finally, regarding the 2021 Aqua base rate case, the Commission did in fact reject the Company's proposed leverage adjustment as follows,

> We find I&E's arguments in opposition to the Company's position to be persuasive. For example, as I&E observed, credit rating agencies assess financial risk based upon a company's booked debt obligations and the ability of its cash flow to cover the interest payments on those obligations. The agencies use a company's financial statements, and not the company's market capital structure, in conducting their analysis. It is a company's financial statements that affect the market value of the stock, and, therefore, the financial statements and the book value capital structure are relied upon in an analysis such as that done by rating agencies. I&E St. 2 at 40; I&E St. 2-SR at 10. Accordingly, we find that the record in this proceeding supports rejecting the Company's requested leverage adjustment.[46]

Q. WHAT IS YOUR RESPONSE TO MR. MOUL'S ASSERTION THAT INVESTORS DO NOT BASE THEIR DECISIONS ON BOOK VALUE, BUT RATHER THE RETURN THEY EXPECT TO EARN ON THE DOLLARS THEY INVEST?

A. Investors purchase securities such as stocks at market value as opposed to book value. In doing so, they accept the returns and associated risks implied by market prices. However, financial statements, which are based on book values, show the entire true financial position of a company, providing the foundation for

[45] *Pa. PUC v. PECO Energy Company – Gas Division*. Docket No. R-2020-3018929, Recommended Decision, p. 215.

[46] *Pa. PUC v. Aqua Pennsylvania, Inc*. Docket No. R-2021-3027385, pp. 166-167 (Order entered June 22, 2021).

investment and financing decisions. For example, financial institutions such as banks lend money based on actual book values and not the current price of a stock. Further, almost all financial ratios used in financial analysis utilize at least one book value variable from either the income statement or the balance sheet.

Mr. Moul's assertion that investors are unconcerned with the book value debt, or "some accounting value of little relevance to them,"[47] of a utility is unsupported. Clearly an investor takes the financial risk of the utility into consideration when determining a required return. In addition, the market capitalization information included in Value Line's reports and discussed by Mr. Moul is not the same as market value capital structure. Market capitalization refers to the number of shares outstanding multiplied by the current price. A market value capital structure refers to the ratio of market debt to market equity, which, to my knowledge, is not included in Value Line's reports. Therefore, Mr. Moul's contention that Value Line includes market capitalization data does not offer any support for his leverage adjustment.

Q. HAS YOUR RECOMMENDATION CHANGED FROM DIRECT TESTIMONY REGARDING MR. MOUL'S LEVERAGE ADJUSTMENT?

A. No. For the reasons discussed above, I continue to recommend that Mr. Moul's 141-basis point leverage adjustment be rejected.

[47] Peoples Statement No. 13-R, p. 33, lines 10-12.

INFLATION

Q. DOES THE DCF ADEQUATELY FACTOR IN RECENT INFLATIONARY TRENDS?

A. Yes. My DCF calculation includes a spot stock price when determining the dividend yield and analysts who generate forecasted earnings growth rates should take inflation into consideration as well; therefore, it contains the most up-to-date projected information of any model. Thus, Mr. Moul's concerns of increasing inflation[48] are adequately covered by use of the DCF as a primary model for determining an appropriate return on equity.

CAPITAL ASSET PRICING MODEL

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING YOUR APPLICATION OF THE CAPM.

A. Mr. Moul opines that my CAPM analysis understates the cost of equity for a few reasons, including my use of the yield on 10-year Treasury Notes for my risk-free rate, failure to use leverage adjusted betas, and rejection of his size adjustment.[49] Each of these topics are discussed in more detail below.

[48] Peoples Statement No. 13-R, p. 20, lines 19-21.
[49] Peoples Statement No. 13-R, p. 37, lines 19-21.

RISK-FREE RATE

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING YOUR USE OF THE YIELD ON THE 10-YEAR U.S. TREASURY NOTE.

A. Mr. Moul claims that by using the 10-year Treasury Note, I introduced a systematic understatement of CAPM returns. He opines that his use of the yield on a 30-year U.S. Treasury Bond is more appropriate than my use of the yield on a 10-year Treasury Note because 30-year bonds are "more a reflection of investor sentiment of their required returns…" and are also less susceptible to "policy initiatives of monetary officials…". Additionally, he provides a recalculation of my risk-free rate to use in the CAPM formula.[50]

Q. DO YOU AGREE WITH MR. MOUL THAT USING THE YIELD OF A 30-YEAR U.S. TREASURY BOND IS MORE APPROPRIATE DUE TO A LONGER-TERM BOND BEING LESS SUSCEPTIBLE TO FEDERAL POLICY ACTIONS?

A. No. As explained in my direct testimony,[51] I chose the 10-year Treasury Note as it balances the short-comings of the short-term T-Bill and the 30-year Treasury Bond. Although long-term Treasury Bonds have less risk of being influenced by federal policies, they have substantial maturity risk associated with the market risk. In addition, long-term treasury bonds bear the risk of unexpected inflation.

[50] Peoples Statement No. 13-R, p. 38, ln. 9 through p. 40, ln. 3.
[51] I&E Statement No. 2, p. 29, ln. 15 through p. 30, ln. 12.

As such, my choice of a 10-year Treasury Note is more appropriate. Additionally, as mentioned in my direct testimony, the Commission has recently agreed with I&E and recognized the 10-year Treasury Note as the superior measure of the risk-free rate of return.[52]

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING YOUR CALCULATION OF THE RISK-FREE RATE USED IN THE CAPM FORMULA.

A. Mr. Moul opines that I have incorrectly given the same weight to the yield on the 10-year Treasury Note for the second quarter of 2024 as I do for the entire five-year period encompassing 2025 to 2029. He then recalculates the risk-free rate by averaging the 10-year Treasury yield forecasts by year from 2024 through 2028 in an attempt to increase my calculated risk-free rate.[53]

Q. DO YOU AGREE WITH MR. MOUL'S ANALYSIS OF YOUR RISK-FREE RATE?

A. No. Mr. Moul's new calculation proposes to give equal weight to each separate year from 2024 to 2028. The flaw with this approach is that the further out into the future one forecasts, the less reliable and more speculative the estimates become; therefore, to give the less reliable estimates equal weight would not be

[52] *Pa. PUC v. UGI Utilities, Inc. – Electric Division,* Docket No. R-2017-2640058, p. 99 (Order entered October 25, 2018).

[53] Peoples Statement No. 13-R, p. 38, ln. 21 through p. 39, ln. 7.

appropriate. It is more appropriate to weight the quarters and years as I have done in my direct testimony.[54] My calculation provides a more accurate estimation of the risk-free rate during the FPFTY, as the further out one forecasts, the less reliable the information becomes.

More importantly, what Mr. Moul fails to recognize is that my risk-free rate of 3.88% is higher than 3.75%[55] risk-free rate he uses in his own CAPM analysis. Therefore, his criticisms of my risk-free rate are pointless and carry no weight.

LEVERAGED ADJUSTED BETAS

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING THE USE OF LEVERAGED ADJUSTED BETAS.

A. Mr. Moul simply claims that I failed to use leveraged adjusted betas.[56] He does not offer an explanation beyond what he argued in his direct testimony.

Q. IS THE USE OF "LEVERAGED ADJUSTED BETAS" IN CAPM ANALYSIS APPROPRIATE?

A. No. Mr. Moul's adjustment only serves to inflate the result of his CAPM analysis which I have discussed in greater detail in my direct testimony.[57] Value Line is a well-known and trusted source that both investors and the Commission rely upon,

[54] I&E Exhibit No. 2, Schedule 9.
[55] Peoples Statement No. 13, p. 46, lines 1-2.
[56] Peoples Exhibit PRM-1, Schedule 13, p. 2.
[57] I&E Statement No. 2, p. 56, ln. 9 through p. 57, ln. 9.

therefore, it is not necessary to make any type of adjustment to the Value Line betas. Additionally, it is worth mentioning again that a stock with a price movement that is greater than the overall stock market will have a beta that is greater than one and would be described as having more investment risk than the market. Due to being regulated and the monopolistic nature of utilities, very rarely do they have a beta equal to or greater than one. Therefore, in this case, to apply an adjusted beta of 1.10 to the entire industry or gas proxy group as Mr. Moul has done is completely irrational.

SIZE ADJUSTMENT

Q. SUMMARIZE YOUR DIRECT TESTIMONY REGARDING A SIZE ADJUSTMENT.

A. In direct testimony, I stated that Mr. Moul's 102-basis point CAPM size adjustment is unnecessary because none of the technical literature he cited in his direct testimony supporting investment adjustments related to the size of a company is specific to the utility industry. In addition, I presented an article by Dr. Annie Wong that demonstrates there is no need to make an adjustment for the size of a company in utility rate regulation. Further, I noted that the Commission has recently rejected the application of a size adjustment to the CAPM cost of

equity calculation where it agreed that the same literature the Company cites is not specific to the utility industry.[58]

Q. SUMMARIZE MR. MOUL'S RESPONSE IN REBUTTAL TESTIMONY REGARDING A SIZE ADJUSTMENT.

A. Mr. Moul states that enormous changes have occurred in the industry since the article "Utility Stocks and the Size Effect: An Empirical Analysis" by Dr. Annie Wong was published. He also references the Fama/French study, "The Cross-Section of Expected Stock Returns," to illustrate that his size adjustment is a separate factor from beta that helps explain systematic risk and returns. Additionally, Mr. Moul opines external factors, such as loss of larger customers and unexpected changes in expenses, can affect the financial performance of a small company.[59]

Q. DOES THE TIME THAT HAS ELAPSED SINCE AN ARTICLE WAS WRITTEN NECESSARILY INVALIDATE ITS RESULTS?

A. No. Although Mr. Moul states that enormous changes have occurred in the industry since the 1960s, he presents no evidence that these "changes" have caused the need for a size adjustment. To the contrary, Dr. Wong's study demonstrated that one does *not* need to be made in the regulated utility industry.

[58] I&E Statement No. 2, p. 57, ln. 11 through p. 60, ln. 5.
[59] Peoples Statement No. 13-R, p. 40, ln. 5 through p. 41, ln. 17.

As stated in my direct testimony, absent any credible article to refute Dr. Wong's findings, Mr. Moul's size adjustment to his CAPM results should be rejected.

Q. DOES THE FAMA/FRENCH STUDY REFUTE DR. WONG'S ARTICLE?

A. No. As stated in my direct testimony, Dr. Wong's article presents evidence that although a size effect may exist for industrial stocks, it does not exist for utility stocks. As the Fama/French study is not specific to utility stocks, it does not demonstrate that a size effect exists in the utility industry. In addition, the size effect that exists for industrial stocks varies to such an extent that it is difficult to predict. The difficulty in predicting the effect of size is demonstrated in the variance from year to year of the measurement of difference between the annual returns on the large and small-capitalization stocks of the NYSE/AMEX/NASDAQ in the Ibbotson *Stocks, Bonds, Bills & Inflation: 2015 Yearbook*. As stated on page 100 of the SBBI Yearbook,

> While the largest stocks actually declined in 2001, the smallest stocks rose more than 30%. A more extreme case occurred in the depression-recovery year of 1933, when the difference between the first and 10th decile returns was far more substantial. The divergence in the performance of small- and large- cap stocks is evident. In 30 of the 89 years since 1926, the difference between the total returns of the largest stocks (decile 1) and the smallest stocks (decile 10) has been greater than 25 percentage points.

Page 109 states,

> In four of the last 10 years, large-capitalization stocks (deciles 1-2 of NYSE/AMEX/NASDAQ) have outperformed small-capitalization stocks (deciles 9-10). This has led some market

> observers to speculate that there is no size premium. But statistical evidence suggests that periods of underperformance should be expected.

Page 112 states,

> Because investors cannot predict when small-cap returns will be higher than large-cap returns, it has been argued that they do not expect higher rates of return for small stocks.

Q. ARE MR. MOUL'S CONCERNS REGARDING THE IMPACT OF LOSING LARGE CUSTOMERS OR UNEXPECTED INCREASES IN EXPENSES VALID?

A. No. Regulated utility companies have the option to file base rate cases to address declining revenues and to recover the increasing costs of doing business in addition to emergency rate relief provisions for large unforeseen impacts. In contrast, non-utility businesses that may be significantly impacted by events of this nature due to small operating size do not have these opportunities. Further, while a smaller utility may pay higher prices for services and materials just due to volume buying power, the actual costs are part of the revenue requirement presented by that company, so to increase the return to account for the potential size disadvantage would only further unfairly burden ratepayers who are already likely paying higher utility bills to recover the higher operating costs.

Q. WHAT IS YOUR RECOMMENDATION REGARDING MR. MOUL'S SIZE ADJUSTMENT?

A. I continue to recommend that his use of the 1.02% size adjustment be disallowed in calculating the CAPM.

Q. MR. MOUL HAS RECALCULATED YOUR CAPM RESULTS.[60] DO YOU AGREE WITH HIS RECALCULATION?

A. No. Mr. Moul's recalculation is incorrect for a couple of reasons. As stated in both my direct testimony and above, he used an inaccurate risk-free rate and an unnecessary size adjustment. Because of these factors, the recalculation of my CAPM results as Mr. Moul illustrates is unreliable and unnecessary.

Q. DO YOU HAVE ANY ADDITIONAL COMMENTS REGARDING YOUR CAPM ANALYSIS?

A. Yes. My recommended cost of equity is primarily based upon my DCF analysis for the reasons explained above and in my direct testimony. I present a CAPM analysis to the Commission for comparison, not recommendation purposes as the inputs are highly subjective, and other than beta, not company or industry specific.

[60] Peoples Statement No. 13-R, p. 39, ln. 8 through p. 40, ln. 3.

RISK PREMIUM

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING THE RISK PREMIUM METHOD.

A. Mr. Moul opines that the RP approach should be given serious consideration because it is straight-forward, understandable, and uses a company's own borrowing rate. He claims it provides a direct and complete reflection of a utility's risk and return. Mr. Moul also states that I make an unfounded assertion that the RP method does not measure the current cost of equity as directly as the DCF.[61]

Q. DO YOU AGREE WITH MR. MOUL THAT THE RP METHOD PROVIDES A DIRECT AND COMPLETE REFLECTION OF A UTILITY'S RISK AND RETURN?

A. No. The RP method produces an indirect measure when compared to the DCF method.

Q. PLEASE COMMENT ON THE INDIRECT MEASURE OF THE RP METHOD VERSUS THE MORE DIRECT MEASURE OF THE DCF METHOD.

A. Mr. Moul claims my statement, that the Risk Premium method does not measure

[61] Peoples Statement No. 13-R, p. 43, ln. 24 through p. 45, ln. 7.

the current cost of equity as directly as the DCF, is without foundation. However, in my direct testimony, I have clearly illustrated how the two measures are different.[62] The main reason is that the RP method determines the rate of return on common equity indirectly by observing the cost of debt and adding to it an equity risk premium. The DCF measures equity more directly through the stock information (using equity information), whereas the RP method measures equity indirectly using debt information.

COMPARABLE EARNINGS

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING THE CE METHOD.

A. Mr. Moul claims that using the CE method satisfies the comparability standard established in the *Hope* case. Additionally, he states, "the financial community has expressed the view that the regulatory process must consider the returns that are being achieved in the non-regulated sector to ensure that regulated companies can compete effectively in the capital markets."[63]

Q. DO YOU BELIEVE THAT THE COMPANIES USED BY MR. MOUL IN HIS CE METHOD ANALYSIS ARE COMPARABLE TO PEOPLES?

A. No. As explained in my direct testimony,[64] the companies in Mr. Moul's analysis

[62] I&E Statement No. 2, p. 15, ln. 6 through p. 24, ln. 17.
[63] Peoples Statement No. 13-R, p. 45, ln. 18 through p. 46, ln. 13.
[64] I&E Statement No. 2, p. 37, lines 1-17.

are not utilities, and therefore, are too disparate to be used in a CE analysis. For example, the criteria Mr. Moul uses to choose the companies in his CE group results in the selection of companies such as Altria Group Inc. (Tobacco), Corteva Inc. (Chemical), Harris Corp. (Aerospace/Defense), Ingredion Inc. (Food Processing), Monster Beverage Corp. (Beverage), Quest Diagnostics Inc. (Medical Services), Tyler Technologies (IT Services), and Watsco Inc. (Retail Building Supply) just to name few.[65] All these companies operate in industries very different from a utility company and operate under varying degrees of regulation. Also, a large majority, if not all the companies Mr. Moul uses in his analysis, are not monopolies as utilities largely are. This means that they have significantly more competition and would require a higher return for the added risk. Further, the CE method should be excluded because it is entirely subjective as to which companies are comparable and it is debatable whether historical accounting returns are representative of the future.

MANAGEMENT PERFORMANCE POINTS

Q. SUMMARIZE THE COMPANY'S REBUTTAL TESTIMONY REGARDING MANAGEMENT PERFORMANCE POINTS.

A. Mr. Moul continues to advocate for 25 additional basis points to the cost of equity as he believes Peoples has performed in an exemplary manner. As in his direct

[65] Peoples Exhibit PRM-1, Schedule 14.

testimony, he points to Mr. Huwar's testimony for support.[66] Further, Mr. Moul claims that I simply disagree with Peoples' claimed excellent performance without addressing or refuting any of the items highlighted by the Company's witnesses.[67]

Mr. Huwar reiterates his direct testimony, arguing that the factors he itemizes support 25 additional basis points under 66 Pa. C.S. § 523 for exemplary management performance.[68] He states, "[t]he Company agrees with Mr. Spadaccio in his assertion that it has used its above average performance in areas which fall under its responsibilities under 66 Pa C.S.A. Section 1501 to justify its claim for a management performance adjustment." He claims that I do not dispute the Company's claims of above average performance, rather I just ignore the claimed achievements and effectively disregard the provisions of 66 Pa. C.S. § 523.[69]

Q. WHAT IS YOUR RESPONSE TO THE COMPANY'S REBUTTAL TESTIMONY REGARDING THE CONSIDERATION OF ADDITIONAL BASIS POINTS FOR MANAGEMENT PERFORMANCE?

A. As discussed in greater detail in my direct testimony,[70] I maintain that Peoples, or any utility company for that matter, should not reap additional rewards for programs funded by ratepayers or for meeting their obligations under 66 Pa C.S.A.

[66] Peoples Statement No. 13-R, p. 46, ln. 15 through p. 47, ln. 8.
[67] Peoples Statement No. 13-R, p. 47, lines 1-3.
[68] Peoples Statement No. 1-R, p. 2, lines 4-15.
[69] Peoples Statement No. 1-R, p. 4, lines 12-19.
[70] I&E Statement No. 2, p. 60, ln. 15 through p. 65, ln. 10.

§1501. Also, while I am aware that under 66 Pa C.S.A. §523 the Commission shall consider a utility's performance, it is not mandatory that the Commission grant additional points.

Further, the issuance of equity points to recognize management performance must always be done on a case-by-case basis. Again, as discussed in my direct testimony, the situation in the 2021 Aqua case was very specific to that company rescuing troubled water and wastewater systems and preventing health and safety concerns regarding drinking water. This scenario does not apply to Peoples.

Finally, while I don't dispute the Company's specific accomplishments identified by Mr. Huwar, I must emphasize my primary argument, that for any company, true strong management performance is earning a higher return through its efficient use of resources and cost cutting measures. The greater net income resulting from cost savings and true efficiency in management and operations is available to be passed on to shareholders. Therefore, the benefits of "exemplary performance" are already realized. It is nonsensical to support the idea that since ratepayers fund the initiatives and accomplishments Mr. Huwar mentions, ratepayers should then in turn fund a higher equity return for Peoples' investors.

Q. DO YOU HAVE ANY ADDITIONAL COMMENTS CONCERNING THE COMPANY'S CLAIM REGARDING MANAGEMENT PEFORMANCE?

A. Yes. While I am aware of the current levels of inflation and high interest rates, I

believe it is important not to overburden ratepayers.

Additionally, and perhaps most importantly, I must reiterate that most of the programs the Company discusses are ultimately *funded by ratepayers* and any savings resulting from cost cutting measures would likely be offset by the addition of basis points for management performance as ratepayers would have to fund those additional costs as well. This defeats the purpose of efforts to reduce costs to benefit ratepayers.

Q. HAS YOUR RECOMMENDATION REGARDING THE COMPANY'S REQUEST FOR ADDITIONAL BASIS POINTS FOR MANAGEMENT PERFORMANCE CHANGED?

A. No. I continue to recommend that any additional basis points for management performance be rejected.

OVERALL RATE OF RETURN

Q. DO YOU HAVE ANY FINAL COMMENTS REGARDING YOUR RECOMMENDED RETURN ON EQUITY OR OVERALL RATE OF RETURN?

A. Yes. A report issued by Regulatory Research Associates, a group within S&P Global Market Intelligence,[71] announced that the average ROE authorized for gas

[71] Regulatory Research Associates, "Major energy rate case decisions in the US – January-March 2024, Quarterly update on decided rate cases," *S&P Global Market Intelligence*, April 19, 2024.

utilities in rate cases decided in the first quarter of 2024 was 9.78%, which is within 18 basis points of my recommended ROE in this proceeding.

Q. HAS YOUR OVERALL RATE OF RETURN RECOMMENDATION CHANGED FROM YOUR DIRECT TESTIMONY?

A. No. My recommended cost of equity and overall rate of return remain unchanged from my direct testimony.

Q. WHAT IS YOUR OVERALL RATE OF RETURN RECOMMENDATION?

A. I recommend the following rate of return for Peoples:

I&E
Summary of Cost of Capital

Type of Capital	Ratio	Cost Rate	Weighted Cost
Peoples Natural Gas Company LLC			
Long-Term Debt	45.33%	4.37%	1.98%
Common Equity	54.67%	9.96%	5.45%
Total	100.00%		7.43%

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

I&E Statement No. 3-SR
Witness: Ethan H. Cline

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PEOPLES NATURAL GAS COMPANY LLC

Docket No. R-2023-3044549

Surrebuttal Testimony

of

Ethan H. Cline

Bureau of Investigation and Enforcement

Concerning:

Fully Projected Future Test Year Reporting Requirements
Discount Rate Customers
Weather Normalization Adjustment
Present Rate Revenue
Cost of Service Methodology
Proposed Rate Revenue
Scale Back of Rates

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INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Ethan H. Cline. My business address is Pennsylvania Public Utility Commission, 400 North Street, Harrisburg, PA 17120.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Pennsylvania Public Utility Commission in the Bureau of Investigation and Enforcement ("I&E") as a Fixed Utility Valuation Engineer.

Q. ARE YOU THE SAME ETHAN H. CLINE THAT SUBMITTED I&E STATEMENT NO. 3 AND I&E EXHIBIT NO. 3 ON MARCH 22, 2024?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony submitted by witnesses on behalf of Peoples Natural Gas LLC ("Peoples" or "Company"): Andrew P. Wachter (Peoples St. No. 2-R), Carol A. Scanlon (Peoples St. No. 3-R), Luke Ravenstahl (Peoples St. No. 7-R), Dawn M. Folks (Peoples St. No. 11-R), and Ralph Zarumba (Peoples St. No. 15-R). I will also address the rebuttal testimony submitted on behalf of the Office of Consumer Advocate ("OCA") by Clarence L. Johnson (OCA St. 4R), Office of Small

Business Advocate ("OSBA") by Robert D. Knecht (OSBA St. No. 1-R), and Peoples Industrial Intervenors ("PII") by Richard A. Baudino (PII St. No. 1-R).

Q. DOES YOUR TESTIMONY INCLUDE AN EXHIBIT?

A. No. However, I will refer to my direct testimony and exhibit in this surrebuttal testimony.

FPFTY REPORTING REQUIREMENTS

Q. WHAT DID YOU RECOMMEND REGARDING PLANT ADDITIONS THAT PEOPLES PROJECTS TO BE IN SERVICE DURING THE FPFTY ENDING SEPTEMBER 30, 2025?

A. I recommended that the Company provide the Bureau of Investigation and Enforcement and the Office of Consumer Advocate an update that includes actual plant additions and retirements for the twelve months ending August 31, 2024, and for the twelve months ending September 30, 2025 to be submitted no later than March 1, 2026, under this docket number (I&E St. No. 3, p. 3).

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION?

A. Yes. Peoples' witness Folks agreed with my recommendation on page 3 of Peoples Statement No. 11-R.

DISCOUNT RATE CUSTOMERS

Q. WHAT DID YOU RECOMMEND CONCERNING THE DISCOUNT RATE CUSTOMERS?

A. For any discount rate customers that have not had their competitive alternatives verified for longer than ten years at the time of the Company's next base rate case, I recommended that the Company provide a competitive alternative analysis for each of those customers and justify the customers' discount rates as part of its filing in the next base rate case. Further, I recommended that the Commission order the Company to provide a competitive alternative analysis for each discount rate customer that has not been verified within ten years of each of Peoples' prospective base rate cases in perpetuity. (I&E St. No. 3, p. 6)

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION?

A. Yes. First, the Company reaffirmed that it is in support of ensuring discounts offered are appropriate and in the interests of all ratepayers. Second, the Company disagreed with my recommendation to provide a competitive alternative analysis for each discount rate customer for those customers who have not had their competitive alternatives verified in more than ten years. Instead, the Company proposed to limit any new contract terms to 10 years and for any contract term greater than 10 years, the Company could commit to completing a re-evaluation and verification of the competition every 10 years. (Peoples St. No. 7-R, p. 3)

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSED ALTERNATIVE TO YOUR RECOMMENDATION?

A. Yes. The Company's proposal to limit agreements to 10 years and complete re-evaluations and verifications of competitive alternatives every 10 years for longer term contracts is reasonable.

Q. DID YOU RECOMMEND ANY ADJUSTMENTS TO THE COMPANY'S METHOD OF REFLECTING THE REVENUE RECEIVED AND EXPENSES INCURRED TO SERVE DISCOUNT RATE CUSTOMERS IN ITS COST OF SERVICE STUDIES?

A. Yes. I recommended that the discount rate customers be separated into their own, separate customer class with an appropriate allocation and/or assignment of the costs to serve the discount customers. (I&E St. No. 3, p. 10).

Q. DID THE COMPANY AGREE WITH YOUR RECOMMENDATION TO SEPARATE DISCOUNT RATE CUSTOMERS INTO THEIR OWN SEPARATE CUSTOMER CLASSES IN THE NEXT BASE RATE CASE?

A. No. Peoples witness Zarumba stated on page 36 of Peoples Statement No. 15-R that he disagrees with my recommendation, that retaining discount customers on the Peoples system provides a contribution to fixed costs benefiting all customers, and the allocated cost of service associated with these customers is relevant to determine the costs of serving the customer class irrespective of the discount.

Q. IS MR. ZARUMBA'S STATEMENT RESPONSIVE TO YOUR RECOMMENDATION?

A. No. Separating discount rate customers into their own, separate customer class would not have any effect on the retention of those customers as the contracts themselves would not be affected. The purpose of a separate customer class for discount rate customers, as I stated on page 10 of I&E Statement No. 3, is to show whether the revenue received from the classes that formerly included discount rate customers is sufficient to recover the cost of providing service to the various classes. My recommendation does not allocate any additional costs to discount customers, but instead provides additional transparency to the costs that are not recovered due to the discount. Therefore, I continue to recommend discount rate customers be separated into their own cost of service class.

Q. WHAT DID YOU RECOMMEND REGARDING THE COMPANY'S PROPOSAL TO INCLUDE ELECTRIC SERVICE AS A VIABLE COMPETITIVE ALTERNATIVE?

A. As I described on page 11 of I&E Statement No. 3, the inequity in eligibility for discounted rates from electric service being considered a viable competitive alternative would not result in just and reasonable rates. Therefore, I recommended the Commission reject the Company's proposal to include electric service as a viable competitive alternative.

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION?

A. Yes. The Company disagreed with my recommendation for four reasons. First, the Company claimed that electricity is clearly competitive with natural gas. Second, low-income customers will be unaffected because the Company does not anticipate or intend to provide discounted rate options for residential customers. Third, prior to Peoples' last base rate case the Company's tariff included provisions to allow for considering electricity as competitive alternative and that provision was removed as part of the settlement of the Company's last base rate case. Fourth, the Company claims that several other Pennsylvania Natural Gas Distribution Companies ("NGDC") all reference electricity as a competitive alternative on their company websites.

Q. DO YOU AGREE THAT ELECTRICITY IS COMPETITIVE WITH NATURAL GAS?

A. I agree that the cost of electricity and the cost of natural gas are both variable and, at times, electric service could be competitive with natural gas. However, that variability is another reason why electric service should not be considered a viable competitive alternative. It is not reasonable to guarantee discounted rates to a customer for a period of up to 10 years due to an alternative that may not be competitive for the entire period of the contract.

Q. DO YOU AGREE THAT LOW-INCOME RESIDENTIAL CUSTOMERS WOULD NOT BE AFFECTED BY CUSTOMERS BEING GRANTED DISCOUNTED RATES DUE TO ELECTRIC ALTERNATIVES?

A. Yes. If the Company's commitment to not offer discounts to residential customers and to only allocate revenue shortfalls within the same customer class are followed, the low-income residential customers would not be affected by discounted rates.

Q. DID YOU MENTION CUSTOMERS OTHER THAN LOW-INCOME RESIDENTIAL CUSTOMERS WHO COULD BE HARMED BY ELECTRIC-ALTERNATIVE DISCOUNTS?

A. Yes. On page 11 of I&E Statement No. 3, I mentioned that smaller commercial customers who could not afford the investment necessary to switch from natural gas service to electric service would also be harmed by allowing electric service as a viable alternative for the purposes of discounted rates.

Q. DID THE COMPANY ADDRESS THE POTENTIAL HARM TO SMALL COMMERCIAL CUSTOMERS?

A. No. The Company did not address the harm to smaller commercial customers who are unable to afford the investment necessary to switch from natural gas service to electric service. This harm would also apply to smaller industrial customers in the

same manner. Allowing electric service as a viable alternative is unfair to those customers and therefore not in the public interest.

Q. PLEASE RESPOND TO PEOPLES' CLAIM THAT ELECTRIC SERVICE WAS INCLUDED AS A VIABLE ALTERNATIVE IN PEOPLES' TARIFF PRIOR TO THE PREVIOUS BASE RATE CASE AND WAS REMOVED ONLY AS A PART OF THE SETTLEMENT OF THAT CASE (PEOPLES ST. NO. 7-R, P. 6).

A. Peoples' prior inclusion of electric service as a viable alternative does not mean that it should be re-included after the present proceeding. As the Company noted, it was removed from the tariff as part of the settlement of the prior base rate case. Whenever a base rate case is settled, the Commission must nevertheless determine the proposed settlement to be in the public interest. The agreement of the parties to remove electric service as a viable alternative as part of the settlement was accepted by the Commission.

Q. PLEASE ADDRESS THE OTHER NGDCS THAT PEOPLES CLAIMS INCLUDE ELECTRIC SERVICE AS A COMPETITIVE ALTERNATIVE.

A. The Company's statement regarding the other NGDCs allowing electric service as a competitive alternative is misleading. Specifically, Columbia Gas of Pennsylvania's ("Columbia Gas") tariff regarding flexible rate provisions states "In the sworn affidavit submitted by the customer, the following must be

documented: (a) The customer has alternate fuel capability in place and operable or would otherwise construct facilities to obtain *gas service* from an alternate source;"[1] (*emphasis added).* The tariff for National Fuel Gas Distribution Corporation ("NFG") makes no mention of electric service as a viable alternative. Philadelphia Gas Works' tariff only refers to alternate fuel sources in reference to interruptible service, which is not the same as Peoples' discounted rates. The tariffs for Pike County Light and Power Company and UGI Utilities, Inc. – Gas Division each make no mention of discounted rates at all. Additionally, Peoples' mention of cost savings calculators on the websites of each company refers to residential service, which, as established by the Company, is not eligible for discounted service. Therefore, the Company's plea to be treated the same as its peer companies across Pennsylvania is based upon incorrect assumptions and should be rejected.

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION?

A. No. For the reasons described above, I continue to recommend the Commission reject the proposal to include electric service as a viable competitive alternative.

[1] Columbia Gas of Pennsylvania, Inc. Supplement No. 181 to Tariff Gas – Pa. P.U.C. No. 9 Second Revised Page No. 69 Canceling First Page No. 69.

WEATHER NORMALIZATION ADJUSTMENT

Q. WHAT DID YOU RECOMMEND REGARDING PEOPLES' PROPOSED WEATHER NORMALIZATION ADJUSTMENT?

A. I recommended that Peoples' Weather Normalization Adjustment ("WNA") be approved on the condition that a 3% deadband is included. My recommendation maintains consistency with the Commission's previous ruling and with existing WNAs of Columbia, NFG, and UGI. (I&E Ex. No. 3, p. 15).

Q. WHAT PARTIES RESPONDED TO YOUR RECOMMENDATION?

A. Peoples witness Scanlon disagreed with my recommendation to include a 3% deadband for the reasons described below. OCA witness Johnson also disagreed based on position of the OCA that the WNA should be rejected entirely.

Q. WHY DOES THE COMPANY NOT AGREE WITH YOUR RECOMMENDATION TO INCLUDE A 3% DEADBAND IN THE WNA?

A. Peoples witness Scanlon did not agree with my recommendation to include a 3% deadband for three reasons. First, Ms. Scanlon claimed that a deadband reduces the effectives of the WNA. Second, Ms. Scanlon claimed that the 2021 Columbia Gas Order should not apply to Peoples' WNA because it compares the full billing cycle of actual Heating Degree Days ("HDD") to the comparable full cycle of normal HDDs and not day-to-day weather fluctuations. Third, Ms. Scanlon

suggested that including a deadband in the WNA would make it more difficult for customers to understand. (Peoples St. No. 3-R, pp. 6-8).

Q. DO YOU AGREE THAT INCLUDING A DEADBAND REDUCES THE EFFECTIVENESS OF A WNA?

A. No. A deadband does not reduce the effectiveness of a WNA because there is no need to adjust for weather within the 3% surrounding the established normal HDD.

Q. WHAT IS THE BASIS FOR PEOPLES' POSITION THAT THE 2021 COLUMBIA GAS ORDER SHOULD NOT APPLY TO ITS WNA PROPOSAL?

A. Ms. Scanlon referenced on pages 6-7 of Peoples Statement No. 3-R that my cite to the 2021 Columbia Gas Order which stated that "without an extraordinary set of circumstances, there is no need for Columbia to reconcile day-to-day temperature variations that are part of normal business." She then implied that this Order does not apply to Peoples' WNA proposal because it does not reconcile day-to-day temperature changes, but rather compares a customer's full billing cycle of actual HDDs to the comparable full cycle of normal HDDs and, therefore, any day-to-day weather fluctuations will be flushed out.

Q. DO YOU AGREE WITH THE COMPANY'S POSITION THAT THE 2021 COLUMBIA GAS ORDER DOES NOT APPLY TO PEOPLES' WNA PROPOSAL?

A. No. While it is true the Peoples' WNA reconciles HDDs on a billing-cycle basis, the 2021 Columbia Gas Order is still applicable because Columbia Gas' WNA, which the Order specifically applies to, also reconciles HDDs on a billing-cycle basis. Therefore, there is no difference between Peoples' proposed WNA and the Columbia Gas WNA that the Order is specifically addressing.

Q. WHAT RATIONALE DOES MS. SCANLON PROVIDE FOR HER POSITION THAT A 3% DEADBAND WILL MAKE THE WNA MORE DIFFICULT FOR CUSTOMERS TO UNDERSTAND?

A. On pages 7-8 of Peoples Statement No. 3-R, Ms. Scanlon uses the example of a case where the variation in weather is 3.1% versus 3.0% in which the WNA would be applied to a 0.1% change in weather. The Company claims that this could create more complexity and confusion for customers.

Q. DO YOU AGREE THAT A 3% DEADBAND WOULD CAUSE ADDITIONAL CONFUSION FOR CUSTOMERS?

A. No. As previously referenced, there are currently several Pennsylvania NDGCs that currently employ a WNA that includes a deadband. I am unaware of any additional customer confusion that resulted from the inclusion of a deadband.

Additionally, in response to the Company's example, there is no difference between a WNA adjustment applied to a 0.1% change in weather caused by a variation of 3.1% versus 3.0% and one caused by a variation of 0.1% versus 0.0%.

Q. DID OCA WITNESS JOHNSON DISAGREE WITH YOUR RECOMMENDATION TO INCLUDE A 3% DEADBAND IN THE COMPANY'S PROPOSED WNA?

A. OCA witness Johnson's testimony was mostly regarding its position that the WNA should be rejected in total. However, regarding my recommendation for the 3% deadband, Mr. Johnson did claim that I provided no calculation or analysis regarding why I selected 3% for the deadband. (Peoples St. 4R, pp. 22-27)

Q. WHY DID YOU SELECT 3% FOR YOUR DEADBAND RECOMMENDATION?

A. My 3% deadband is based on the Commission's prior 2021 Columbia Gas Order which established that 3% represents "normal" weather. I have no evidence that would support a change to the Commission's ruling on what represents normal weather, therefore my recommendation remains consistent with what the Commission previously established.

Q. DO YOU OPPOSE THE ABILITY OF THE OCA TO RECOMMEND THE WNA BE REJECTED IN TOTAL?

A. No. While I do not necessarily share the same concerns detailed by the OCA, I do not oppose its ability to express those concerns regarding the WNA.

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION?

A. No. I continue to recommend that any WNA approved by the Commission be on the condition that a 3% deadband be included.

PRESENT RATE REVENUE

WEATHER ADJUSTMENT

Q. WHAT NORMALIZED HDD AND PRESENT RATE REVENUE DID YOU RECOMMEND?

A. I recommended the Company use 5,443 HDD as its normalized HDD in the FPFTY, which was based on the 20-year average calculation. The resulting adjustment is to increase the combined present rate revenue by $9,311,915 from $833,215,509 to $842,527,424 as shown on the table below.

Q. ARE THERE ANY CORRECTIONS YOU NEED TO MAKE?

A. Yes. Peoples' witness Wachter correctly pointed out that I inadvertently did not include an adjustment for Gas Supply Expenses in my direct testimony. Therefore, as stated on Peoples Statement No. 2-R, p. 10, the proposed rate

increase of I&E should be increased by $4,548,129 from $83,525,000 to $88,073,129.

Q. DID THE COMPANY OTHERWISE AGREE WITH YOUR RECOMMENDATION TO USE 5,443 HDD AS ITS NORMALIZED HDD IN THE FPFTY?

A. No. Peoples witness Zarumba provided further discussion of why the Company prefers an average of a 65-year regression analysis and the 20-year average to determine the HDDs in the FPFTY. Specifically, on pages 6-11 of Peoples Statement No. 15-R, Mr. Zarumba provides further detail and comparisons regarding the 65-year regression analysis compared to the regression – average analysis and the 20-year average analysis.

Q. WHAT ADDITIONAL SUPPORT DID MR. ZARUMBA PROVIDE TO SUPPORT THE COMPANY'S PROPOSED HDD?

A. On pages 9-11 of Peoples Statement No. 15-R, Mr. Zarumba provided a comparison of the results of the three types of analyses mentioned above for the time periods of 2003-22 and 1993-22 by totaling the net errors and dividing the net errors by the total HDD for the periods. Mr. Zarumba then claimed that the regression analysis provided the most accurate forecast, the regression – 20-year average produced the second most reliable results, and the straight 20-year average provided the least reliable results.

Q. DOES MR. ZARUMBA'S TESITMONY ASSUAGE YOUR CONCERNS REGARDING THE COMPANY'S PROPOSED HDD PROJECTION?

A. No. While Mr. Zarumba's testimony provides further detail into the statistical reasons why he selected a 65-year regression analysis as compared to other regression analyses, I do not agree that his testimony provides explanation for why the Commission should approve the HDDs generated by averaging the 65-year regression analysis and the 20-year average analysis. In particular, Mr. Zarumba's testimony makes the percentage errors shown on Figures 2 and 3 on page 10 of Peoples Statement No. 15-R look significantly different. However, the actual numerical differences of at most approximately 0.2% are de minimis and do not prove that the results of the regression analysis are significantly better than the 20-year average when compared to actual, historical weather data.

Q. DOES MR. ZARUMBA'S TESTIMONY PROVIDE ANY FURTHER INSIGHT INTO WHY THE COMPANY IS DECIDING TO ALTER ITS HISTORIC METHOD FOR CALCULATING HDDS?

A. No. Mr. Zarumba's statistical analysis does not explain why a rolling, historic average calculation of HDD was historically acceptable to the Company, the Commission, and the other NGDCs as detailed in the chart below, however, is not in the present base rate case.

NGDC	Docket No.	Testimony Ref.	HDD methodology
Columbia Gas	R-2018-2647577	St. No. 2, p. 4	20 yr. Average
Columbia Gas	R-2020-3018835	St. No. 2, p. 5	20 yr. Average
Columbia Gas	R-2021-3024296	St. No. 2, p. 4	20 yr. Average
Columbia Gas	R-2022-3031211	St. No. 2, pp. 4-5	20 yr. Average
NFG	R-2022-3035730	St. No. 13, p. 6	15 yr. Average
UGI Gas	R-2021-3030218	St. No. 8, p. 7	15 yr. Average

Q. DOES PEOPLES TESTIMONY SHOW ANY INCONSISTENCY IN ITS DISCUSSION OF HDD?

A. Yes. Peoples witnesses Scanlon and Zarumba simultaneously compare statistical results to weather predictions while determining HDDs and state that weather is inherently unpredictable when justifying the WNA (Peoples St. No. 3-R, pp. 19-20 and Peoples St. No. 15-R, pp. 4, 12). This inconsistency is similar to that of the Company's request to be treated the same as its peer companies across Pennsylvania when discussing competitive alternatives (Peoples St. No. 7-R, p. 6) but ignoring both peer companies and Commission precedent when discussing WNA, HDDs, and cost of service methodologies as discussed throughout my surrebuttal testimony.

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION?

A. No. For the reasons discussed above, I continue to recommend the Commission use 5,443 HDD as calculated by the 20-year average methodology.

COST OF SERVICE

Q. WHICH COST OF SERVICE STUDY DID YOU RECOMMEND THE COMMISSION USE TO ALLOCATE THE REVENUE INCREASES AMONG THE DIFFERENT CUSTOMER CLASSES IN THIS PROCEEDING?

A. I recommended the Commission base its allocation on the peak and average COSS that does not allocate the cost of mains on a customer basis as provided by the Company on Peoples Volume 4, Exhibit No. IV, Section 53.53 (IV-B-1(B)) to allocate the final revenue increases among the different customer classes. (I&E St. No. 3, p. 26).

Q. WHICH PARTIES RESPONDED TO YOUR RECOMMENDATION?

A. Peoples witness Zarumba, OSBA witness Knecht, and PII witness Baudino each disagreed with my recommendation on the basis of the allocation of mains. OCA witness Johnson disagreed with my recommended allocation based on a mathematical error.

Q. WHAT METHODOLOGY FOR THE ALLOCATION OF MAINS DO WITNESSES ZARUMBA, KNECHT, AND BAUDINO SUPPORT?

A. Mr. Zarumba stated on page 24 of Peoples Statement No. 15-R that he does not believe it is appropriate to exclude any customer component from mains classification. Mr. Knecht stated on page 5 of OSBA Statement No. 1-R that he retains his recommendation that the Commission consider all of the cost allocation methods offered by the experts in this proceeding to allocate the rate increase among the classes in a fair and reasonable manner. Mr. Baudino stated on page 17 of PII Statement No. 1-R that he does not agree with relying solely on the results of the Peak and Average CCOSS to allocate the Company's revenue increase and maintains his support of the Company's proposed allocation of the midpoint between the Peak and Average and Demand/Customer studies.

Q. WHAT SUPPORT DO THESE PARTIES PROVIDE FOR IGNORING COMMISSION PRECEDENT?

A. Mr. Knecht referred back to his direct testimony and the "lengthy discussion" of the history of cost allocation where his conclusion was that Commission precedent has only limited applicability to this case (OSBA St. No. 1, p. 31). This statement conclusion was relied upon by Mr. Zarumba on pages 24-25 of Peoples Statement No. 15-R.

Q. DO YOU AGREE THAT COMMISSION PRECEDENT HAS ONLY LIMITED APPLICABILITY TO THIS CASE?

A. No. The history that Mr. Knecht uses to muddy the waters of what should be clear precedent is faulty and misleading. First, Mr. Knecht references the results of cases in which the Average and Excess methodology is used. Second, Mr. Knecht referred to the results of a non-unanimous settlement that included the customer component of mains. Third, Mr. Knecht stated that the Commission has approved the use of a customer component for joint-use electric distribution plants. (OSBA St. No. 1, pp. 28-32).

Q. IS THE HISTORY OF THE AVERAGE AND EXCESS METHODOLOGY PERTINENT IN THIS CASE?

A. No. Neither the Company nor any other parties have proposed the use of the Average and Excess cost of service methodology in this case. Therefore, the Commission's history with this methodology has no bearing on this case.

Q. SHOULD THE RESULTS OF A NON-UNANIMOUS SETTLEMENT SET PRECEDENT?

A. No. It is my understanding that settlements, non-unanimous or otherwise, do not set precedent as they are compromises between parties in order to reach an amicable resolution. In my experience, during settlement discussions allocation methodology is often set aside in favor of finding a mix of revenue allocations that

all parties find reluctantly acceptable. Additionally, Mr. Knecht stated on page 31 of OSBA Statement No. 1 that the Commission declined to issue a finding regarding the appropriate cost allocation methodology to adopt in the non-unanimous settlement while then deciding to use that non-decision as precedent anyway.

Q. SHOULD THE ALLOCATION OF ELECTRIC PLANT BY AN EDC HAVE ANY BEARING ON THE ALLOCATION OF MAINS BY AN NGDC?

A. No. The Commission specifically rejected comparing an electric distribution company with an NGDC because it is an apples-to-oranges comparison, because cost causation for electric distribution companies and NDGCs are different (2021 Columba Gas Order, pp. 214-215).

Q. DID THE OSBA RECOGNIZE THE HISTORY OF THE COMMISSION REJECTING INCLUSION OF A CUSTOMER COMPONENT FOR MAINS COSTS?

A. Yes. On page 28 of OSBA Statement No. 1, Mr. Knecht stated "[w]ith respect to the issue of mains plant classification, the Commission has generally rejected the inclusion of a customer component for mains costs…" Mr. Knecht then attempted to undercut this statement with a reference to joint-use electric distribution plant which, as I established above, has no bearing on this case.

Q. DID THE PARTIES SUFFICIENTLY SUPPORT THEIR CLAIM THAT THE COMMISSION SHOULD INCLUDE A CUSTOMER COMPONENT FOR MAINS CLASSIFICATIONS?

A. No. The underlying theory behind the Company, PII, and OSBA's alternatives, namely that mains should be allocated at least partially by number of customers, has consistently been rejected by the Commission. None of the parties have provided any new data or information in this case that would justify the Commission suddenly reversing course on its well-established position on this issue.

Q. WAS THERE A MATHEMATICAL ERROR IN THE CALCULATION OF THE SYSTEM AVERAGE INCREASE IN YOUR DIRECT TESTIMONY?

A. Yes. Several parties pointed to a mathematical error in my calculation of the system average increase in reference to my gradualism limit on pages 36 and 38 of I&E Statement No. 3. Specifically, the system average increase should be 34.4% and 1.5 times the system average increase should be 51.6% instead of the 35.8% as stated in my direct testimony. (PII St. No. 1-R, pp. 17-18, OCA St. No. 4R, pp. 7-8).

Q. DO YOU WISH TO CHANGE YOUR ALLOCATION RECOMMENDATION?

A. Yes. An analysis of the OCA's proposed allocation and the correction of my

mathematical error shows that my corrected allocation would be similar to that of OCA witness Johnson. Therefore, I withdraw my original allocation and support the allocation proposed by OCA witness Johnson in OCA Exhibit CJ-2.

Q. DID ANY PARTIES ADDRESS THE LGS ML CLASS?

A. Yes. OSBA witness Knecht took issue with the allocation of any cost to the LGS ML rate class as it consists solely of negotiated rate customers and those rates are, therefore, unaffected by tariff rate increases (OSBA St. No. 1-R, pp. 11-12).

Q. HOW SHOULD THE EXCESS REVENUE REQUIREMENT ASSIGNED TO THE LGS ML RATE CLASS BUT NOT RECOVERED THROUGH THE NEGOTIATED RATES BE RECOVERED?

A. As I discussed on pages 9-10 of I&E Statement No. 3, the Company proposed, and I agreed, that any revenue shortfalls from discounted rates should be recovered from other customers in that tariff class. Therefore, any difference between the allocated revenue requirement in the LGS ML class and the revenues recovered from those customers should be recovered from the other LGS customers.

Q. WHAT DID YOU RECOMMEND REGARDING COST OF SERVICE FOR NEGOTIATED RATE CUSTOMERS?

A. On pages 28-29 of I&E Statement No. 3, I recommended that discount rate customers be separated into their own customer class in the Company's COSS in

the next base rate case.

Q. DOES THE FACT THAT THE LGS ML RATE CLASS CONSISTING SOLELY OF NEGOTIATED RATE CUSTOMERS SATISFY YOUR RECOMMENDATION TO SEGREGATE NEGOTIATED RATE CUSTOMERS INTO THEIR OWN RATE CLASS?

A. No. While the LGS ML rate class, at this time, consists solely of negotiated rate customers, not all of the Company's negotiated rate customers fall in that rate class. Therefore, the existence of the LGS ML rate class does not satisfy my recommendation.

Q. HOW DID THE COMPANY RESPOND TO YOUR RECOMMENDATION TO SEPARATE DISCOUNT RATE CUSTOMERS INTO THEIR OWN RATE CLASS?

A. Mr. Zarumba disagreed with my recommendation based on his reasoning that retaining these customers on the Peoples system provides a contribution to fixed costs benefiting all customers and the allocated cost associated with these customers is relevant to determine the costs of serving the customer class irrespective of the discount (Peoples St. No. 15-R, p. 36).

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION?

A. No. Separating the discount customers into their own rate class would have no

effect on the retention of those customers or determining the costs of serving those customers or the other customers in the non-discount rate class. As I stated on page 29 of I&E Statement No. 3, "[a] clear picture of the overall revenue shortfall would allow the Commission to appropriately evaluate the allocation of that shortfall and determine the proper allocation of that shortfall, whether to spread it across all revenue classes or to continue the Company's policy of other customers in the same rate class recovering the revenue shortfall."

CUSTOMER COST ANALYSIS

Q. WHICH CUSTOMER COST ANALYSIS DID YOU SUPPORT IN YOUR DIRECT TESTIMONY?

A. As I stated on pages 31-32 of I&E Statement No. 3, the only result that should be considered when determining the residential customer charge is the $19.96 of the Peak and Average Minimum Cost study. I will further discuss my customer charge recommendation below.

Q. DID ANY PARTIES RESPOND TO YOUR CUSTOMER COST ANALYSIS RECOMMENDATION?

A. Yes. OCA witness Johnson did not agree with my recommendation to determine the residential customer charge based on the Peak and Average customer cost analysis provided by the company because he claims that includes costs that are unaffected by the addition or departure of customers (OCA St. No. 4R, p. 17).

Q. DO YOU AGREE WITH MR. JOHNSON'S ARGUMENT THAT A CUSTOMER COST ANALYSIS SHOULD INCLUDE ONLY COSTS THAT CHANGE WITH THE ADDITION OR SUBTRACTION OF A SINGLE CUSTOMER?

A. No. While I&E has supported this methodology in past cases, the Commission specifically rejected this methodology in the disposition of the fully litigated UGI Utilities, Inc. – Electric Division's base rate (Docket No. R-2017-2640058, p. 174 (Order entered October 25, 2018). Because the direct customer cost analysis methodology was rejected by the Commission, I determined that the costs included in the Company's Peak and Average customer cost analysis were consistent with what was approved by the Commission in the 2017 UGI Electric base rate case.

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION?

A. No. I continue to recommend that the Commission base the customer charge under proposed revenue on the Company's provided Peak and Average customer cost analysis.

<u>CUSTOMER CHARGE</u>

Q. DID YOU RECOMMEND ANY ADJUSTMENTS TO THE COMPANY'S PROPOSED CUSTOMER CHARGES?

A. Yes. I recommended that the proposed residential customer charge, at the

Company's full requested increase, be reduced by $1.50 from $21.50 to $20.00 in order to be consistent with the results of the Peak and Average customer cost analysis. Additionally, as discussed below, I recommended that the customer charges be included in any scale back in the event that the Commission grants less than the full increase. (I&E St. No. 3, pp. 33-34)

Q. DID ANY PARTIES RESPOND TO YOUR CUSTOMER CHARGE RECOMMENDATION?

A. Yes. The Company stated that my recommended residential customer charge is similar to the Company's proposal (Peoples St. No. 15-R, p. 38). OCA witness Johnson disagreed with my customer charge recommendation based upon our differing approaches to the customer cost analysis (OCA St. 4R, p. 18).

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION?

A. No. I continue to recommend the residential customer charges at the fully requested increase be set at $20.00 and be included in any scale back of rates as discussed below.

PROPOSED REVENUE ALLOCATION

Q. HOW SHOULD THE COMPANY'S RATES BE DETERMINED?

A. The Company's rates should be set based on the cost of service study the Commission determines is the most reasonable method of allocation in the present

base rate proceeding. As I discussed above, I believe that the OCA's proposed allocation is the most reasonable method of allocation.

SCALE BACK OF RATES

Q. WHAT SCALE BACK METHODOLOGY DID YOU RECOMMEND IF THE COMMISSION GRANTS LESS THAN THE FULL INCREASE?

A. If the Commission grants less than the Company's requested increase, I recommended that the Commission scale-back rates based upon the cost of service study that it approves in a proportional manner. I recommended all customer charges and usage rates for each rate class that received a proposed increase should be scaled back. (I&E St. No. 3, p. 38).

Q. DID ANY PARTIES DISAGREE WITH YOUR SCALE BACK RECOMMENDATION?

A. No.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

COMMONWEALTH OF PENNSYLVANIA

March 28, 2024

The Honorable Mary D. Long
Administrative Law Judge
Pennsylvania Public Utility Commission
Piatt Place, Suite 220
201 Fifth Avenue
Pittsburgh, PA 15222

Re: Peoples Natural Gas Company LLC (Peoples Natural Gas Division and Peoples Gas Division) Base Rate Case Filing Original Tariff GAS – PA PUC No. 48 / Docket No. R-2023-3044549

Dear Judge Long:

Pursuant to Interim Order dated March 25, 2024, enclosed please find Direct Testimony and Exhibits of Robert D. Knecht, labelled OSBA Statement No. 1 REVISED and associated Exhibits IEc-1 through IEc-3, on behalf of the Office of Small Business Advocate ("OSBA"), in the above-captioned proceeding.

As evidenced by the enclosed Certificate of Service, all known parties will be served, as indicated.

If you have any questions, please do not hesitate to contact me.

Sincerely,

/s/ Steven C. Gray

Steven C. Gray
Assistant Small Business Advocate
Attorney ID No. 77538

Enclosures
cc: PA PUC Secretary Rosemary Chiavetta (Cover Letter & Certificate of Service only)
Mark D. Ewen / Robert D. Knecht
Parties of Record

OSBA Statement No. 1 REVISED

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**Docket No. R-2023-304459**
	:	
PEOPLES NATURAL GAS COMPANY, LLC	:	

Direct Testimony and Exhibits of

ROBERT D. KNECHT

On Behalf of the

Pennsylvania Office of Small Business Advocate

Topics:

Non-Residential Rate Classes
Allegheny Valley Connector
Gathering System
Cost Allocation
Flex Rates
Revenue Allocation and Rate Harmonization
Rate Design
Weather Normalization Clause
UPC Trends

Date Served: March 28, 2024

Date Submitted for the Record: _____

DIRECT TESTIMONY OF ROBERT D. KNECHT

1. Introduction and Context

Q. Mr. Knecht, please state your name and briefly describe your qualifications.

A. My name is Robert D. Knecht (*he/Mr.*). I am an independent economic consultant, specializing in the preparation of analysis and expert testimony in the field of regulatory economics. For more than 30 years, I was a Principal IEc, and I served as Treasurer of that firm for 15 years. I obtained a B.S. degree in Economics from the Massachusetts Institute of Technology in 1978, and a M.S. degree in Management from the Sloan School of Management at M.I.T. in 1982, with concentrations in applied economics and finance. My résumé and a listing of the expert testimony filed in utility regulatory proceedings during the past five years are included in Exhibit IEc-1.

I have represented the OSBA in numerous base rate proceedings before the Commission since 1994, for both electric and natural gas utilities. I have not, heretofore, participated in a Peoples Natural Gas base rate proceeding, although I did testify in earlier proceedings involving a forerunner to the Peoples Gas Division, the T.W. Phillips Gas & Oil Company. I also participated in Peoples Natural Gas proceedings involving its acquisition by Aqua America, Inc. at Docket No. A-2018-3006061 et al., and in the tax repairs proceeding at Docket No. P-2020-3021191.

Q. Please describe your assignment in this matter.

A. I am appearing in this proceeding on behalf of the Pennsylvania Office of Small Business Advocate ("OSBA"). The OSBA requested that I review the Peoples Natural Gas Company LLC ("Peoples" or "the Company") filing to evaluate whether the rates proposed for small business customers are consistent with sound economics and regulatory principles. My analysis focuses primarily on issues of cost allocation, revenue allocation and rate design, along with targeted analysis of certain revenue requirement issues. If I have not addressed a particular issue, it cannot be inferred that I agree with Peoples' proposal for that topic.

Q. Please provide a brief description of the organizational background for the Company.

A. Working backward in time:

- Peoples currently consists of two divisions, the Peoples Natural Gas Division ("PNG Division") and the Peoples Gas Division ("PG Division"). [1]
- Both divisions serve geographical areas in southwestern Pennsylvania.[2]
- The current company resulted from the formal merger of the two predecessor companies to those divisions, approved by the Commission in August 2022.
- Both of these Companies were acquired from the investment firm SteelRiver Infrastructure Partners by Aqua America, Inc. (now Essential Utilities, Inc.), in a transaction approved by the Commission in early 2020.
- While it was owned by SteelRiver, the Peoples Natural Gas entity acquired the Equitable Gas Company in 2013.

[1] At present, the PNG Division and the PG Division have separate tariffs, although certain utility functions have been consolidated, and tariff structures have been partially harmonized. To try to maintain clarity, I refer to the combined entity as "Peoples" or "the Company," and the individual entities as the "PNG Division" and the "PG Division."

[2] Several counties served by Peoples are also served by Columbia Gas of Pennsylvania in the southwestern part of the Commonwealth.

- Prior to its acquisition by SteelRiver in 2011, the Peoples Gas entity was the T.W. Phillips Gas & Oil Company.

Q. Please provide the context for your evaluation of the Company's filing.

A. OSBA attempted to obtain the Company's strategic plan and its long-term load forecast in order to provide context for my evaluation. The Company apparently has neither, aside from an unprioritized listing of strategic goals and a reference to its LTIIP.[3] The LTIIP is essentially a business-as-usual capital investment program, wherein the Company plans to replace its obsolescent facilities, to continue its automated meter read program, and to increase over-pressure protection efforts..[4]

The key elements to the Company's filing that are addressed in this testimony are the following:

- An overall increase in revenues of $156 million for the fully projected future test year ("FPFTY") ending September 30, 2025, of which $152.7 million comes from base rates, an increase of approximately 30.5;[5]

- Tariff unification and harmonization of most base rates and gas supply "demand" charges for the PNG and PG Divisions;[6]

- Differentiated increases by rate class, ranging from modest net decreases (the PG Division SGS and MGS classes) to a nearly 50 percent increase (the PNG Division Rate SGS class).[7]

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[3] OSBA-I-1

[4] https://www.puc.pa.gov/pcdocs/1681422.pdf

[5] IEc WP2 Reevenue Allocation Rate Design. My electronic workpapers are listed in Exhibit IEc-2 and will be circulated with this testimony. for this testimony, I include DSIC, TRS, TCJA, STAS and MFC tariff charges in "base rates." Gas cost revenues are excluded.

[6] The PNG Division TRS rider and the PG Division TCJA rider will remain differentiated, and some gas cost charges will be differentiated pending the next Section 1307(f) proceeding.

[7] IEc WP2.

- A 34 percent increase to gas suppliers for use of the gathering system, which will recover 28 percent of gathering system costs;[8]

- Implementation of a new Rate MLS mainline service class for large customers sited in close proximity to transmission lines;

- Adoption of a new mechanism for deriving normal heating degree days ("HDDs");

- Implementation of a weather-normalization adjustment tariff mechanism for the Residential, SGS and MGS classes.

Q. Would the large proposed rate increase for Peoples result in rates for small business customers that are outside the range of those at other Pennsylvania natural gas distribution companies ("NGDCs")?

A. Pure like-to-like comparisons across utilities are difficult, and conclusions from such comparisons should be viewed with some caution. Nevertheless, I compiled a comparison of base rates charges across Pennsylvania NGDCs for residential and small/medium commercial customers, summarized in Table IEc-1 below.

[8] Exhibit RNZ-3.

Table IEc-1 Residential and Small Commercial Average Rates ($/mcf)		
	Residential	**Small Commercial**
National Fuel Gas	$5.10	$3.77
PNG Division Current	**$5.77**	**$3.50**
UGI Gas	$7.05	$4.93
PECO Gas	$7.12	$5.62
PNG/PG Proposed	**$8.32**	**$5.55**
PG Division Current	**$8.74**	**$6.50**
Philadelphia Gas Works	$9.91	$6.93
Columbia Gas of PA	$11.56	$8.45
Base rates exclude PGC, DSIC, GPC, MFC, STAS, TCJA, TRS, and Universal Service charges. Sources: IEc WP6 Rate Comparison		

Table IEc-1 generally indicates that the proposed increase would move rates for the PNG Division from among the lowest in the Commonwealth to the upper tier of rates, although remaining below those for PGW and Columbia Gas of PA.[9]

Q. How is the balance of your testimony organized?

A. This testimony has the following sections:

- Section 2 provides an overview of the non-residential rate classes in both the PNG and PG Divisions.

[9] The PGW rates reflect the results of a recent PGW base rates proceeding. It is my understanding that Columbia Gas will submit another base rates filing in the near future.

- Section 3 addresses the Company's proposed rate treatment regarding costs associated with the Allegheny Valley Corridor ("AVC"), both in general and regarding the Company's proposed changes in this proceeding.

- Section 4 addresses the rate treatment for costs associated with the Company's natural gas gathering system.

- Section 5 addresses cost allocation issues.

- Section 6 addresses the Company's proposals with respect to competitive "flex" rate customers, as well as the Company's proposal to implement a Main Line Service ("MLS") rate.

- Section 7 addresses the Company's proposals for revenue allocation among the rate classes, as well as the proposal to harmonize the PNG Division and PG Division rates.

- Section 8 addresses rate design issues affecting small and medium business customers.

- Section 9 presents out evaluation of the Company's proposals with respect to defining "normal" weather conditions, and the related proposal for a weather normalization adjustment ("WNA") mechanism.

- Section 10 presents the results of my statistical analysis of trends in gas use-per-customer.

2. Review of Non-Residential Rate Classes

Q. Before getting into the details of your analysis of the filing, please summarize the rate classes under which businesses take service from Peoples.

A. The Company's tariff has a number of schedules under which non-residential customers take service. These tariff schedules are generally distinguished by size of customer as measured by annual throughput and type of service. Service types include sales service, in which customers purchase gas supplies from the utility, and transportation service, in which customers purchase gas supplies from competitive natural gas suppliers (NGSs). Customers who take transportation service may purchase balancing service from the Company.

The Company has been harmonizing the tariffs for the PNG Division and the PG Division over the past few years, such that rate class names and eligibility requirements are the same. However, substantial tariff charge differences remain.

Both divisions offer the major categories of non-residential service described below. The PNG Division tariff has separate tariff schedules for sales service to the individual rate classes, and then a standalone tariff schedule for transportation service which has separate charges for each sub-class. The PG Division has separate rate schedules for each sales category and each transportation service category. The Company proposes to retain the PNG Division approach in the consolidated tariff.

The Company's tariff generally includes three levels of non-residential service, denoted SGS, MGS and LGS.[10] Rate SGS applies to customers with annual volume up to 1,000 mcf; MGS applies to customers with annual volume from 1,000 to 25,000 mcf, and LGS applies to customers with volume above 25,000 mcf.

In total, the non-residential rate classes represent about 58 percent of the Company's total throughput, or about 75.0 of Peoples' total 130.4 billion cubic feet ("Bcf") in the FPFTY.

[10] A separate tariff schedule applies to transportation customers, namely Rate GS-T, but the base rate charges align between the sales and transportation rates.

Customer size varies widely, ranging from small businesses that consume less than 100 mcf per year to very large industrial customers with more than one Bcf per year.

Finally, the tariffs for the Company's larger rate classes allow for discounted, negotiated "flex" rates, for customers who have the potential to economically use an alternative fuel or to bypass the distribution system to interstate pipelines or local supply. Rates for these customers are therefore set based on market or competitive alternative conditions rather than utility cost to serve. To allow the Company to set regular tariff rates based on allocated cost, the customers who currently have flexed rates are segregated into a separate class for cost allocation purposes.

Table IEc-2 below provides an illustrative summary of the key attributes of the non-residential customers in each rate class in each division.

Table IEc-2
Summary of Peoples Non-Residential Rate Classes

	PNG Division				PG Division		
	SGS	**MGS**	**LGS**		**SGS**	**MGS**	**LGS**
Customers	44,507	5,074	232		3,930	441	29
Class Bcf per Year	9.65	16.21	37.59		0.83	1.51	9.23
Avg mcf/Customer	217	3,194	162.317		211	3,420	321,184
Load Factor	19.7%	23.4%	53.8%%		15.3%	18.2%	58.2%
Transport %	31%	80%	99%		15%	63%	100%
Negotiated Rate %	0.1%	0.5%	54.8%		0.1%	1.9%	71.1%
Avg. Current Rate excl. COG $/mcf	$3.93	$3.00	$1.25		$6.76	$4.79	$0.71

Notes: Transport and negotiated rate percentages are volumetric.
Sources: IEc WP2 Revenue Allocation Rate Design

I have a few observations regarding the SGS and MG classes. First, the PNG Division SGS and MGS classes are more than 10 times larger than the PG Division in total, although per-

customer average annual volumes are about the same. PG class load factors are also moderately lower. Shopping rates are a little lower at PG than PNG. Few SGS or MGS customers are eligible for negotiated rates in either division, but a majority of Rate LGS volumes are subject to flex rates. Flex rates are the primary reason for the much lower average base rates paid by LGS, compared to the SGS and MGS customers.

As part of my review of non-residential customers, I attempted to develop an understanding of the mix of customers in the general service classes by business category. The Company does not track this information.[11] For the non-residential classes, the Company does track its revenues segregated between "commercial" and "industrial" customers. However, like many utilities, a "commercial" customer is any non-residential customer that does not qualify as industrial, or which is a master-metered multifamily residence.[12] A summary of the commercial/industrial split is shown in Table IEc-3 below and detailed further in IEc WP2 Revenue Allocation Rate Design. For each rate class, Table IEc-3 reports the percentage of combined PNG/PG load, split between commercial/industrial, and split between sales/shopping. In general, virtually all customers and over 90 percent of the volumes in both the SGS and MGS classes are deemed to be "commercial." SGS customers, however, are much more likely to take sales service for gas supply from the Company, while MGS customers are more likely to take transportation service (i.e., "shop"). LGS customers, by contrast, are much more weighted toward the "industrial" category, and the vast majority of both commercial and industrial LGS loads are served through transportation service.

[11] OSBA-I-2. This response includes a reference to OCA-VI-1, but that response is unrelated to the makeup of the general service classes. The Pennsylvania Small Business Advocate has directed us to obtain detail regarding the makeup of small business customers taking service from certificated public utilities as part of my review. I am advised by counsel that OSBA may challenge the adequacy of the Company's responses in this respect in settlement negotiations or in its briefs in this matter.

[12] See Appendix D, Proposed Tariff, Original Page No. 8. Based on the language in the tariff, it appears that any residential building that is not individually metered is deemed to be "commercial."

Table IEc-3 Load Mix for Peoples Non-Residential Customers			
	Total	**Sales**	**Transport**
SGS Summary			
Commercial	99.3%	69.5%	29.8%
Industrial	0.7%	0.5%	0.2%
Total	100.0%	69.9%	30.1%
MGS Summary			
Commercial	92.0%	20.7%	71.3%
Industrial	8.0%	0.7%	7.3%
Total	100.0%	21.3%	78.7%
LGS Summary			
Commercial	16.1%	0.4%	15.8%
Industrial	83.9%	0.0%	83.8%
Total	100.0%	0.4%	99.6%
Source: IEc WP2			

The Company's tariff defines a "small business customer" as either a commercial or industrial customer with annual usage below 300 mcf, regardless of whether that customer is, in fact, a business. Using this definition, all small businesses take service under Rate SGS, but many Rate SGS customers would not qualify as small businesses.[13] As such, it is impossible to derive any information regarding the makeup of small businesses in the Company's customer base.

[13] Pursuant to the Small Business Advocate Act, a small business is "[a] person, sole proprietorship, partnership, corporation, association or other business entity which employs fewer than 250 employees and which receives public utility service under a small commercial, small industrial or small business rate classification."

For this testimony, I focus my attention on impacts of the Company's proposals on the Rate SGS classes, although I also consider impacts on Rate MGS customers, who likely have fewer than 250 employees and who are often otherwise unrepresented in rate proceedings.

3. <u>Allegheny Valley Connector ("AVC")</u>

Q. Please provide your understanding of the AVC assets.

A. The record evidence is minimal. Ms. Scanlon indicates only that "[t]he AVC facilities consist of transmission and storage facilities that are used to provide service to customers."[14] In response to OSBA request for a more detailed explanation, the Company indicated only that "AVC capacity is able to provide supply to all regions of PNG and PG through multiple delivery points and company interconnects, with the exception of the Grove City area which does not have a physical delivery point from AVC."[15] As such, I am aware only that the AVC facilities represent upstream transmission and storage capacity. Peoples categorizes the AVC costs as gas supply costs, pursuant to advice of counsel.[16]

Q. How are the AVC costs recovered from customers?

A. The Company deems that, for legal reasons, these costs are upstream gas supply costs to be recovered in gas supply charges. Best I can determine, these costs are allocated to the various rate classes based on an allocation method that was put in place in 2013 when the assets were absorbed into the current company through the merger between Peoples and Equitable, and the allocation factors at the time remain in place, regardless of changes in class volumes or other factors since that time.[17] The costs are recovered in non-bypassable "demand" charges to all customers in each rate class, both sales and transportation service.[18]

Q. Why are the AVC costs an issue in this proceeding?

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[14] Peoples Statement No. 3 at 22.

[15] OSBA-I-13(a).

[16] OSBA-I-13(b) Attachment

[17] OSBA-I-13. Note that it is not clear whether the allocation factors reflect actual usage of the AVC system, as the Company did not or could not provide volumes on the system by rate class in OSBA-I-13(e).

[18] The Company refers to the AVC charge as the "AVC demand charge," but it is in fact a volumetric charge. The AVC demand charge applies to both sales and transportation service customers.

A. The Company currently collects these costs only from PNG division customers.

It proposes to expand recovery of these costs to encompass the PG Division customers. The Company does not propose any conceptual change to the revenue requirement for AVC costs, the cost allocation method, the long-standing allocators, or the rate recovery method for these costs. The impact of the proposed changes is to shift some gas supply cost recovery from PNG division customers to PG division customers, in the amount of about approximately $6.5 million. This change serves to only slightly offset a portion of the proposed large rate increase for PNG Division customers in this proceeding.

Q. Do you have any issues regarding the Company's approach to AVC costs?

A. I have preliminary concerns, subject to developing a better understanding of the history for this issue and for consideration as to whether this issue is better addressed in the next PGC proceeding.

With those caveats, the Company's approach has potentially problematic aspects. First, the allocation of costs has not been updated since about 2013. Adding the PG customers into the recovery base will not affect the cost allocation because the allocators are fixed. This does not appear to be consistent with the Company's logic that the PG customers may all be able to benefit from the AVC capacity. If that is, in fact, the case, then the allocators should change. For example, suppose all of the PG customers were small businesses. If all of those customers can now share in the benefit of the AVC capacity, surely the allocation of AVC costs to small businesses should increase.

Second, the recovery of costs from both sales and transportation customers does not appear to reflect the relative use of the AVC system. Per OSBA-I-13(e), some 70 percent of volumes on the AVC system are related to retail sales customers, whereas retail sales customers comprise 46 percent of overall load.

Third, the approach charges all customers for the AVC capacity, regardless of whether the customers directly benefit from that capacity. For Peoples' gas sales customers, this is a reasonable approach, because that charge blends a variety of upstream transmission and storage costs. However, it is less obvious why it is appropriate to apply the AVC demand

charge to all transportation customers. Socializing the cost of the AVC capacity to all transportation appears to provide an inequitable competitive advantage to NGSs who are able to use that capacity relative to those who cannot. An alternative approach would be to impose usage-based charges on transportation service customers or their NGSs through the supplier tariff. In this alternative, only those transportation customers who use the AVC would be obligated to pay for it.

Q. What is your recommendation at this time?

A. Based on the information available, I recommend that the Commission defer any approval of the approach proposed by the Company to the PGC proceeding. I will continue to evaluate this issue and consider the responses of other parties in rebuttal testimony before offering a specific proposal.

4. <u>Gathering System Rate Treatment</u>

Q. Please provide your understanding of Peoples' gas gathering system.

A. Peoples' gathering system consists of a series of gas pipes, compressors and metering/regulating equipment that are interconnected to gas producing facilities, to transport gas from the wellhead into the gas distribution system, where it is then transported to end users. Gathering volumes have been declining, but still represent some 28 BCF. The gathering system generally operates at low pressure. About 2400 load customers are served directly from the gathering system.[19] Mr. Zarumba derives the Company's revenue requirement for the gathering system at $33.0 million.[20]

Q. Please explain the Company's proposed cost allocation and cost recovery mechanism for its gathering system costs.

[19] OSBA-I-15(d)

[20] Exhibit RNZ-3.

My understanding of the Company's allocation method is based on the allocation workpapers supplied by the Company in discovery.[21] The Company proposes to allocate gathering system costs as follows.

- Gathering system plant costs in accounts 325 through 337 are classified as volumetric, and then allocated among the various rate classes using an allocation factor based indirectly on class volumes, as described below.

- To develop the allocators, the Company first splits the costs between PNG and PG Divisions, at a 73/27 ratio, which appears to be based on the Company's judgment regarding the use of the gathering system.[22]

- Each division's cost is then split between system gas supply and transportation service, presumably also based on the Company's estimate of usage of the gathering system. A significant majority of the costs are ascribed to transportation customers, at 88 percent for the PNG Division and 76.5 percent for the PG Division.[23]

- For each division, the segregated costs are then allocated based on respective class volumes; i.e., the sales service cost portion being allocated based on sales volumes and transport service costs are allocated based on transportation service volumes. Transportation service costs are further segregated between Priority One and other transportation service customers by class in this allocation, based on HTY volumes.

- Revenues from gas producers are then deducted from allocated costs, and the balance of the costs are then recovered as part of base distribution rates from all customers within each class. Mr. Zarumba calculates that gas suppliers will provide revenues of $7.0 million at current rates and $9.4 million at the Company' proposed

[21] OCA-V-001g Attachment.

[22] See OSBA-I-15(c).

[23] See OCA-V-001g Attachment.

rates, representing about 21 and 28 percent of the $33.0 million in gathering system costs respectively.

Q. Is this a reasonable approach?

A. Conceptually, this approach has a couple of problems.[24]

First, the Company indicates that the primary benefits of the gathering system are (a) that it provides access to lower cost gas for Peoples' customers, and (b) it provides access to market for gas producers.[25] As such, the gathering system is a gas supply asset, and it would be more properly considered to be part of gas supply costs.[26]

For system gas supply costs, it would not be unreasonable to simply treat these costs in the same manner as all other gas supply costs and recover the costs in the volumetric PGC charge to all gas sales customers. In that way, the benefits of lower cost gas and the costs of the gathering system are balanced.

For transportation customers, however, the benefits accrue only to transportation customers who purchase gas that is supplied through the gathering system. Thus, a volumetric charge to all transportation customers would contain a mismatch between the customers who use the gathering system and those who pay for it.

The problems are compounded by the allocation approach.

First, it is unclear why the Company chooses to allocate the costs among the rate classes based on all volumes, once the costs have been split between sales and transportation. A more accurate approach would be to allocate the costs based on the actual volumes in the

[24] The issue of allocating gathering system costs may be further complicated by the fact that that the costs for the Goodwin-Tombaugh project may be included in the gathering system costs per OCA-VIII-23. However, Exhibit DF-1 indicates that the G-T costs are being assigned to distribution mains account 376. I therefore assume that G-T costs are not reflected in the costs functionalized to "gathering" in the Company's ACOSS.

[25] OSBA-I-15(a).

[26] Although the Company does not make the argument, it may be reasonable to consider that the gathering system allows the Company to avoid high pressure transmission costs, as I understand that the supplies are delivered into the distribution system at low pressure.

gathering system used by each class. This approach may, however, be precluded by data availability issues, if the Company is unable to segregate usage of the gathering system by NGSs on a class-by-class basis.[27]

A more fundamental problem is that the Company proposes to recover gathering system costs from all customers within each class, irrespective of the fact that the benefit of the gathering system applies almost entirely to transportation service customers. For example, Peoples assigns Rate MGS 16.8 percent of gathering system costs. However, only a small fraction of the gathering system volumes is related to sales service customers, estimated by Peoples at 6.5 percent. Meanwhile, the sales customer share of overall MGS volumes is 21.3 percent. Because the gathering system costs are recovered equally from sales and transport customers, the Company's approach to allocating gathering system costs implicitly requires MGS sales customers to pay the gathering system costs incurred by transportation customers.[28]

A conceptually superior method would be to recover gathering system costs from the PGC customers, NGSs and gas producers who use the system.[29] This approach would result in a more accurate assignment of costs in two ways, first through a more accurate allocation of the costs among rate classes based on actual usage, and second through a more accurate recovery of costs within each rate class from the customers who actually benefit from the gathering system.

Q. Do you have a specific recommendation?

A. It is unlikely that the Company or the Commission would implement a change of this magnitude in the recovery method for gathering system costs without a thorough evaluation by the Company. I therefore recommend that the Commission direct the Company to

[27] OSBA-I-15.

[28] IEc WP4.

[29] A reasonable share of costs related to serving load customers on the gathering system should be deducted from the gathering system revenue requirement.

evaluate an alternative approach to recovery of gathering system costs in its next base rates proceeding. Conceptually, the Company should:

- Develop a total revenue requirement for the gathering system using the approach posited by Mr. Zarumba;
- Deduct the revenues derived from producers, using the judgement-based approach currently used by the Company;
- Evaluate whether a credit for avoided high-pressure transmission costs is appropriate;
- Deduct a reasonable cost for the deemed cost to serve the end-use customers on the gathering system, potentially reflecting a percentage of the distribution revenues provided by those customers;
- Segregate the net gathering system costs between sales and transportation service customers, using the best information available;
- Recover the sales portion of the costs in the PGC;
- Recover the transportation portion of the costs through a charge in the gas supply tariff to the NGSs and transportation customers who directly rely on the gathering system for supply.

5. Cost Allocation

5.1 Cost Allocation Overview

Q. What is the purpose of a utility's allocated cost of service study ("ACOSS")?

A. The primary criterion for setting regulated utility rates is the cost incurred by the utility for providing the service.[30] To assign costs to specific customers, utilities aggregate customers into rate classes, within which the customers have similar load sizes, seasonal consumption, peak demand patterns, and other characteristics. An ACOSS is an analytical tool with which the utility's total cost (or "revenue requirement") is allocated among each of the rate classes. These allocated costs are then used as a key input in determining the total revenues that the utility plans to recover from each rate class through tariff rates.

An ACOSS is generally described as consisting of three steps. The ACOSS first segregates costs based on the specific functions performed by the utility ("functionalization"). For an NGDC, this typically involves gas supply, transmission, storage/load balancing, distribution and customer service. In this matter, the Company also has a separate gathering system function. The Company also proposes to sub-functionalize its distribution service into "regulated pressure" and "low pressure" service.

The second step is denoted "classification," in which costs are grouped in categories based on a cost causation factor. For NGDCs, these factors are usually (a) costs that vary with overall consumption of gas, (b) costs that vary with peak demands, and (c) costs that vary with number of customers. For the first category, the nomenclature includes "energy-related," "commodity-related," or "average demand-related" costs, which are all arithmetically equivalent. Costs that vary with peak demand are those related to aspects of the system that must be sized to meet maximum load conditions. Different components of the utility system are often sized to meet different peak demand measures. The third category are costs that vary with the number of customers, including meters and service lines, and (sometimes) aspects of the distribution system associated with interconnecting customers. I note that some gas utilities also include classification categories involving

[30] The Commonwealth Court affirmed this basic principle, referring to cost of service as the "polestar" criterion. Lloyd v. Pennsylvania Public Utility Commission, 904 A.2d 1010, 1020 (Pa. Cmwlth. 2006).

"excess demand" or "excess volumes," typically for costs related to load balancing. These classifications represent the difference between peak demand and average demand, or peak season volumes and average volumes.

The third step is "allocation," in which the classified costs are distributed among the rate classes. Allocation methods generally include direct assignment methods, in which costs are tracked in the accounting system by class, allocation using physical factors including annual volumes, peak demands, or customer count (weighted or unweighted), of allocated using "internally developed allocators," in which allocation factors for certain general cost items (e.g., general plant) are indirectly developed based on the allocation of more direct costs (e.g., distribution plant, or distribution labor).

In using the results from an ACOSS to develop class revenue requirements, utilities and regulatory authorities usually have a longer-term goal of moving the revenue recovered from each class as close as possible to the costs allocated to that class. That is, in each proceeding, regulators try to move class revenues more into line with cost-based rates. Thus, rate classes whose revenues substantially exceed allocated costs are assigned either relatively low rate increases or rate decreases. Rate classes whose revenues are well below allocated costs are assigned larger rate increases than those classes whose revenues are only slightly below allocated costs.

In addition to class revenue requirement issues, an ACOSS can provide useful cost information regarding the specific nature of utility tariff charges. In particular, an ACOSS provides a cost basis for the relative magnitude of the various individual tariff charges, including the customer charge, demand charges, and commodity charges.

Q. How does an ACOSS assign costs to the various rate classes?

A. The underlying principle of an ACOSS is that costs are assigned to the rate classes that *cause* the utility to incur those costs. This principle of cost causation is both equitable and economically efficient. It is equitable because costs are borne by those customers who cause them. It is economically efficient because the price signal for consumption from a particular rate class is reasonably consistent with the cost incurred by the utility to provide the service. In that way, the consumer receives the correct price signal for determining whether to

purchase more or less of the utility service. In effect, the consumer balances the value received from the purchase of that service against the utility's cost of providing the service.

Q. What are the major areas of contention for an NGDC ACOSS?

A. Natural gas distribution mains typically represent a very large share of an NGDC's rate base. Moreover, the methods used by NGDCs for assigning those costs among classes, most notably the "classification" step but also functionalization and allocation issues, produce wildly disparate results. As such, the methods chosen for assigning mains costs among the various rate classes are usually the most contentious in distribution base rates proceedings.

Q. What has the Company put forward with respect to ACOSS analysis?

A. On behalf of the Company, Mr. Ralph Zarumba has filed an electronic ACOSS model as CONFIDENTIAL Exhibit 11. The electronic model contains the flexibility to be simulated across several dimensions. First, costs can be allocated separately for the PNG Division and the PG Division, or as a combined entity. Second, the model can be simulated separately with and without the Company's proposed Rate MLS. Third, the model can be simulated under alternative mains classification and allocation methods.

Q. Have you developed an alternative version of the ACOSS?

A. Although my normal procedure is to develop an independent model to verify the calculations in the Company's filing, I am unable to do so in this proceeding due to the significant complexity of the model and resource constraints. However, I have used the Company's electronic model to develop an alternative simulation reflecting the recommended methodological changes I present in this testimony.

For the reasons discussed in Section 7 below, I did not see a need to develop separate simulations for the PNG and PG Divisions, nor was it necessary to develop separate simulations that segregate the proposed Rate MLS class. The revenue allocation and rate implications of harmonizing rates between the PNG and PG Divisions are also discussed in Section 7.

5.2 Mains Cost Functionalization

Q. Please describe the issue related to the functionalization (or sub-functionalization) of gas distribution mains in this proceeding.

A. As detailed by Mr. Zarumba, the Company proposes to segregate its gas mains costs between those that operate at "regulated pressure," and those that operate at "low pressure." The Company proposes to assign the regulated pressure system costs to all customer classes (excluding demands for those customers who take service directly from transmission mains), while allocating the low-pressure system costs to all customers in the R, SGS and MGS rate classes.

Q. Is this proposal reasonable?

A. In general, I agree that making a serious effort to better align specific distribution system assets with the customers who are served by those assets will improve cost allocation.

However, in this case, Peoples has employed an inappropriately biased approach. In particular, the Company has credibly concluded that low-pressure system assets should not be assigned to the Rate LGS class, because no LGS customers take service at low pressure.[31] However, the Company has unreasonably assumed that all regulated pressure system assets are used to serve customers in the downstream low-pressure system. In fact, it is likely that some significant aspects of the regulated-pressure system are used only to serve customers who take service at the higher pressure, and therefore should not be assigned to customers taking service at low pressure. Moreover, the Company has assumed that all customers in the R, SGS and MGS classes take service at low pressure, when in fact the Company reports that about 453,000 customers take low-pressure service whereas the Company allocates the low-pressure system to 700,000 RS, SGS and MGS customers.[32] This problem is

[31] OSBA-I-16.

[32] OSBA-I-16(e). I note that OSBA-I-17(a) appears to suggest that all RS, SGS and MGS customers take service at low pressure, although the Company may have misinterpreted that IR given the figures provided in OSBA-I-16.

compounded by the Company's determination that, for classification purposes, there is no distinction between the regulated-pressure and low-pressure systems.[33]

A better approach for this type of sub-functionalization was undertaken by Columbia Gas of Pennsylvania.[34] In particular, based on its analysis for its 2019 base rates case, Columbia determined that some 28 percent of its regulated pressure system costs were not associated with providing service to lower pressure systems.[35] Since that time, however, Columbia has determined that the sub-functionalization is no longer necessary or appropriate, as it is aggressively phasing out its low-pressure operations.[36]

5.3 Mains Cost Classification

Q. Please discuss the issue of allocating mains costs.

A. As I indicated earlier, classifying mains costs is often one of the most contentious aspects of an NGDC's cost allocation study, for three primary reasons. First, mains represent a substantial portion of the Company's rate base. Since expenses are typically allocated in the same manner as plant, mains cost allocation represents the primary basis upon which other costs are allocated (O&M, and indirectly, A&G). Second, mains are "joint use" assets, meaning that many of the system mains are used by more than one customer class at a time. As such, economic theory provides only limited guidance as to how such costs should be allocated. Moreover, it is difficult to identify the specific factors which cause the costs to be incurred. Finally, the different theories used by cost allocation analysts produce substantially different cost allocation results, and thus the choice of a specific methodology will have a significant impact on the rates paid by each rate class.

With respect to the theory of how mains costs should be allocated, there are some areas of general agreement. First, there is agreement that the cost allocation should, to the extent practicable, reflect "cost causation," such that costs are assigned to the rate classes that cause

[33] OSBA-I-37.

[34] See citation provided in OSBA-I-15.

[35] See RDK Workpapers filed at Docket No. R-2018-2647577 (RDK WP2).

[36] OSBA-I-15.

the costs to be incurred. There is also general agreement that NGDC mains must be installed to interconnect all the utility's customers, and they must have sufficient capacity to reliably meet the peak demands of the firm service customers served under design conditions.[37] Finally, there is general agreement that mains costs exhibit significant economies of scope and scale. That is, it is more cost effective for one utility to serve a particular geographic area than to allow for competition in gas delivery. In addition, as the carrying capacity of a main increases, its cost increases at a much lower rate. Thus, all other factors being equal, the cost per unit of maximum carrying capacity for any particular main declines as mains diameter increases.

After that, agreement ends. Some (but far from all) analysts believe that, because the system must interconnect many customers, some portion of mains costs are causally related to customer count (i.e., that some mains costs should be *classified* as customer-related). The supporting argument for this position is that it requires more footage of mains to connect many smaller customers than one larger customer, even if total demand is the same. In addition, a NGDC is more likely to be able to use larger, less costly pipe to serve larger customers than to serve smaller customers. There is some statistical evidence in support of this relationship, but it is far from universally accepted.[38] To that end, there are methodologies that have been developed for estimating such a "customer component" of mains costs, but they are theoretically and conceptually weak.[39]

In addition, most analysts believe that at least some component of mains costs should be allocated on the basis of peak demand, because mains must be sized to meet the peak. However, some analysts believe also that a causal relationship nevertheless exists between mains costs and the annual system throughput. Finally, analysts disagree strongly about how the benefit of scale economies should be reflected in mains cost allocation. One set of analysts argues that scale economies mean that more costs should be allocated on a

[37] PGW confirms that its distribution system is sized to meet customers' design day demands. PICGUG-I-3.

[38] http://publicsde.regie-energie.qc.ca/projets/235/DocPrj/R-3867-2013-B-0005-Demande-Piece-2013_11_15.pdf

[39] See http://publicsde.regie-energie.qc.ca/projets/235/DocPrj/R-3867-2013-C-ACIG-0028-Preuve-RappExp-2015_02_26.pdf at Exhibit IEc-3 in that document.

throughput basis, while other analysts argue that these same scale economies imply that more costs should be allocated on a customer basis.

This dispute has endured for decades. The conceptual arguments offered today are little changed from those advanced when one of use (Mr. Knecht) first became involved with utility cost allocation in the early 1990s, and doubtless extend much further back in time. This issue cannot be resolved based on those arguments, at least in part because much of the actual cost causation is dependent on the topology of the utility's actual distribution system and its customer mix.

In my view, the only potential method for developing a more accurate and utility-specific evaluation of mains cost causation would be a system modelling approach, in which mains costs are assigned to customers downstream based on design system conditions. In that way, costs are assigned based on causation.

Are there difficulties with this approach? Of course. How do you address the issue that some mains are fully depreciated while some are new and much higher cost? How is excess capacity reflected, so as to not overburden customers downstream from little used mains? There are many questions, but they cannot be resolved until utilities undertake the effort. Such a study simply cannot be performed by external analysts in the context of a utility base rates case.

Thus, one potential approach is simply to live with the precedent established by the regulator and utility past practice. While this approach may be unsatisfying to the theoretician, it at least has the benefit of retaining a more stable cost allocation result from rate case to rate case.

A second approach is to use a variety of methods, to at least put some boundaries around the problem. I have adopted this latter approach in this proceeding.

Q. Please describe the mains classification/allocation methods that have been advanced in Pennsylvania NGDC base rates proceedings.

A. The three methods most recently used in Pennsylvania NGDC cost allocation studies are the customer-demand ("CD") method, the average-and-excess ("A&E") method, and the peak-

and-average method. While these methods are sometimes referred to as allocation methods, they are more accurately described as cost classification methods. Algebraically, the CD allocation method can be described as:

$$CD_i = W_{CD} * [P_i/P_T] + (1-W_{CD}) * [C_i/C_T]$$

Where: P is peak demand, C is number of customers, W is the weighting factor, i is the customer class, and T is the total utility.

Q. Please explain the CD Method.

A. The CD method is based on the cost causation hypothesis that mains are sized to meet peak demand and are extended to provide service to the customer base. Thus, in the CD method, mains costs are classified into demand and customer components. The demand component of cost is then allocated using some measure of peak demand, and the customer component is allocated using some measure of the number of customers. While this method has theoretical appeal in terms of cost causation, the available quantitative methods for classifying the costs are imperfect.

Q. Within the CD method, how are the weighting factors determined?

A. The methods most commonly used are both based on the conceptual idea that the customer component of mains costs is the cost of the system with little or no carrying capacity, such that all costs above that amount are related to increases in demand.[40] In the "minimum system" approach, the "customer-related" cost is measured as the cost of the system if it consisted entirely of the smallest size main currently used on the system. The minimum system approach is often criticized for implicitly including "demand-related" costs in the customer component, because the minimum system has some carrying capability. Thus, some analysts attempt to make an adjustment for the carrying capability of the minimum system, but there is no obvious or standard way to do so.

[40] As I discuss elsewhere, this theoretical concept is suspect, in that (a) there is no reason to conclude that the non-demand component of costs is solely related to number of customers, and (b) this approach fails to reflect the customer-related costs of expanding the length of the distribution system to serve more customers. Nevertheless, until NGDCs undertake a more detailed modeling of their systems, this is the approach that is used.

The alternative to the minimum system approach is the "zero-intercept" method, in which a statistical relationship between mains cost and mains diameter is derived, and the cost of a theoretical zero-diameter pipe is derived from the statistical relationship. This approach generally produces a smaller customer component for costs than the minimum system approach, and it avoids the complaint that it has any load carrying capability. The zero-intercept approach, however, is often criticized because the statistical analysis is not directly based on measured costs and it requires judgement in the selection of the statistical methods employed.

Q. Please explain the A&E allocation method.

A. As its name implies, the A&E method is a weighted average of costs classified as relating to "average demand" and costs classified to "excess demand.". Average demand is simply total throughput divided by 365 days. For cost allocation purposes, it is arithmetically identical to a total throughput allocator. Excess demand is the difference between peak demand and average demand. Thus, for a "100% load factor" customer who uses the same amount of gas every day, the excess demand is zero. As a formula:

$$A\&E_i = W_{AE} * [A_i/A_T] + (1-W_{AE}) * [(P_i-A_i)/(P_T-A_T)]$$

Where A represents average demand.

With respect to the issue of the weighting factor, the traditional A&E methodology uses system load factor as the weight for the average demand component.

Q. Please explain the peak-and-average ("P&A") approach.

A. Mr. Zarumba describes the P&A method as a "more simplistic" version of the A&E approach.[41] I respectfully disagree with this characterization of the P&A method, particularly for natural gas distribution utilities.

The P&A allocator is a simple weighted average of a peak demand allocator and an average demand (i.e., volumetric) allocator, typically with 50/50 weighting in Pennsylvania.

[41] Peoples Statement No. 15 at 17.

$$P\&A_i = W_{PA} * [A_i/A_T] + (1-W_{PA}) * [P_i/P_T]$$

As such, the P&A allocator explicitly assumes that half of mains costs are causally related to annual throughput. Since none of the distribution system is designed to meet average demands (or customers would be very cold during a polar vortex), the P&A allocator is not consistent with cost causation.[42]

By contrast, the A&E allocation factor is conceptually similar to a peak demand allocator, because it is based on an *average* demand factor and a *peak minus average* demand factor. In fact, under specific conditions, the A&E allocator and the peak demand allocator produce identical results.[43] Those conditions are (a) the weighting factor is the coincident peak system load factor (the ratio of system average demand to system peak demand), and (b) peak system demand equals the sum of the peak demands of the individual classes (i.e., there is no demand diversity across classes). Because load factor weighting of the A&E allocator is common, and because NGDC peak demands are strongly dependent on extreme weather conditions and thus exhibit little diversity within a particular geographic area, an A&E allocator for an NGDC tends to be very similar to simple peak allocator. As such, the A&E classification approach is more consistent with cost causation than the P&A approach.

Q. Does the Commission have a policy regarding mains cost allocation?

A. For Peoples, the Company indicates that the Commission has not affirmatively ruled in respect of its cost allocation methodology since at least 2008.[44]

The Commission's revealed preference, both explicit and implicit, is that it does not have a standard policy regarding mains cost allocation, and that it intends to evaluate the issue on a case-by-case basis.[45] Nevertheless, in its recent decisions, the Commission indicates that it

[42] In this respect, I fully agree with Mr. Zarumba. See Peoples Statement No. 15 at 18.

[43] Those conditions are (a) the weighting factor is the system load factor (the ratio of average demand to peak demand), and (b) peak system demand equals the sum of the peak demands of the individual classes (i.e., no demand diversity).

[44] OSBA-I-7.

[45] Non-Proprietary Version Opinion and Order, Docket No. R-2020-3018929, Order Entered June 22, 2021 ("PECO Order"), at 230-231.

has relied substantially on precedent with respect to mains cost allocation, despite having some consistencies in the approved method across NGDCs.[46]

With respect to the issue of mains plant classification, the Commission has generally rejected the inclusion of a customer component for mains costs, although it has approved the use of a customer component for joint-use electric distribution plants, where the cost causation logic is the same. The Commission also affirmatively non-unanimous settlement that implicitly relied in part on cost allocation evidence that relied on an alternative method.

Regarding the allocation method for mains, the Commission has approved both P&A and A&E methods, as summarized below:

National Fuel Gas (1994):	83 Pa. PUC 262 (1994)	P&A
PPL Gas (2007):	R-00061398	A&E
PGW (2007):	R-00061931	A&E
Columbia Gas (2021)	R-2020-3018835	P&A[47]
Columbia Gas (2022)	R-2022-3031211	--[48]
PECO Gas (2021)	R-2020-3018929	A&E
PGW (2023)	R-2023-3037933	A&E

I did not participate in the NFG matter.

In the case involving PPL Gas, the Commission approved an allocation of mains costs using a variant on the A&E allocation method advanced by the utility expert witness. In that proceeding, the approved weighting was 40 percent to average demand and 60 percent to excess demand.[49]

[46] Opinion and Order, Docket No. 2020-3018835, Order Entered February 19, 2021 ("Columbia Order"), at 213-214.

[47] In its decision, the Commission correctly observed that no party offered an A&E approach in the proceeding. Columbia Order at 214.

[48] See discussion below.

[49] PA PUC et al. v. PPL Gas Utilities Corporation, R-00061398, Order Entered February 8, 2007, page 112 – 114.

In the 2007 PGS proceeding, the Commission approved the mains cost allocation method advanced by the Office of Trial Staff ("OTS"), now the Bureau of Investigation and Enforcement ("I&E"), in which (a) mains were deemed to have a zero customer component, and (b) mains were to be allocated using an "average and excess" ("A&E") allocation factor for all mains costs. [50] In particular, the methodology advocated by OTS used a 50/50 weighting of the "average" and "excess" components of the A&E allocation factor.[51] The Commission also indicated that " . . . we find that the allocation of distribution mains investment costs should be done using both annual and peak demands." The A&E methodology was applied to the Company's compliance filing in that proceeding, and was also used in the Company's 2010 base rates case.

In the Columbia Gas proceeding at Docket No. R-2020-3018835, the Commission adopted the OCA proposal to rely on a 50/50 weighted P&A allocation factor. The Commission indicated:

> Furthermore, distribution mains exist and are related to both annual demands and peak demands. Both annual and peak demands must be recognized in the allocation of distribution mains cost if the allocation is to be in accord with the principle of cost-causality. It is not reasonable to allocate distribution mains investment based solely on design peak day demands as in Columbia's Customer-Demand ACCOSS. The basic reason Columbia invests in its distribution system is to meet the annual demands for gas by customers. Additionally, a portion of the total cost of distribution service is related to installing a system with enough throughput capacity to meet design peak demands in excess of annual demands.[52]

It should be noted that no party had put forward an A&E allocation methodology in that proceeding, and thus it was presumably not an option for the Commission. The Commission

[50] Opinion and Order, Pennsylvania Public Utility Commission, Docket No. R-00061931, Order entered September 28, 2007, page 80.

[51] See, e.g., Docket No. R-00061931, OSBA Statement No. 2 at 19. However, PGW reports that it has no knowledge of the weighting scheme adopted by the Commission. OSBA-I-6(c).

[52] Opinion and Order, Pennsylvania Public Utility Commission, Docket Nos. R-2020-3018835 et al., Order Entered February 19, 2021, at 217-218.

also explicitly rejected consideration of a mains cost allocation methodology that included a customer component of costs.

In a subsequent litigated PECO Gas base rates proceeding, the Commission approved the Company's proposed A&E allocation method, that produced an allocation factor substantially similar to a peak demand allocator. In so doing, the Commission stressed the importance of peak demand as a cost causation factor for mains costs, citing to the gas distributions system being designed to meet peak demands, the need to assign considerable weight to the excess demand component of costs, the problematic double counting of average demand in the P&A allocator in both the peak component and the average demand component, and the P&A overstatement of the cost of service of more efficient gas users.[53] The Commission also declined to establish a standard methodology for mains cost allocation, concluding that cost causation may vary among the various NGDCs.[54]

In the 2021 PECO Gas matter, the Commission indicated that the A&E method was more appropriate than the P&A method used in the Columbia matter because PECO's ". . . distribution mains system is designed to meet the demands of its system on a design day that all customers can be served. . . . Therefore, we conclude that the excess demand component of PECO's distribution mains system garners considerable weight in the balance of mains costs."[55] As Columbia Gas (and all other Pennsylvania NGDCs) also size their mains to meet design day demand, it is unclear whether the Commission made some specific finding regarding the topology of the PECO Gas system that makes the A&E method more appropriate. As I participated in both the PECO Gas and Columbia Gas proceeding, I do not recall that any evidence was presented that PECO Gas' distribution planning criteria were different from those used by Columbia Gas. As such, the Commission's logic in the PECO Gas matter would appear to reasonably apply to all Pennsylvania NGDCs.

[53] Opinion and Order, Pennsylvania Public Utility Commission, Docket No. R-2020-3018929 et al., Order Entered June 17, 2021, at 228-231. The Commission did not directly address the issue of the treatment of interruptible service within the A&E allocator.

[54] *Id*.

[55] PECO Order, at 229.

In the most recent Columbia Gas base rates proceeding at Docket No. R-2022-3031211, the Commission approved a non-unanimous settlement that could only be cost justified by reflecting the views of a party that relied on a cost allocation analysis that included a customer component to mains costs. While the Commission declined to issue a finding regarding the appropriate cost allocation method to adopt, it did not require that a non-unanimous settlement be consistent with Commission precedent for cost allocation. In that proceeding, the Commission ruled:

> We note that even in cases in which the revenue allocation methodology is litigated, a determination regarding which ACCOSS should be used should be determined on a case-by-case basis. We have observed that 'the inherent distinctions between utilities and rate cases may result in different methodologies to be reasonable for different reasons. In other words, the best-suited ACCOSS may depend on the circumstances of the situation on a case-by-case basis.'[56]

The classification of mains costs was recently litigated for PGW at Docket No. R-2023-3037933. In that matter, the Commission confirmed the use of a 50/50 A&E method, primarily on the basis of precedent. The Commission concluded:

> Based on a review of the respective advocates' arguments in support of the record ACCOSSs before us, we believe that the Company's proposed AED [A&E] methodology is reasonable and best suited for this proceeding. We agree with the ALJs, PGW, and the OCA that the use of the AED methodology generally adheres with prior Commission directives. Indeed, Commission precedent, including the proceeding for the 2007 PGW Rate Case, and the recent proceeding in Columbia 2021, weigh against the idea that mains costs include a customer component. Further, we agree with the ALJs that the Parties advocating for the CD method did not sufficiently justify a departure from the AED method, nor did they develop weightings for the use of the CD method.[57]

[56] PUC v. Columbia Gas of Pennsylvania, Inc. Docket No. R-2022-3031211 (Order entered December 8, 2022) at 107, footnote 30.

[57] Opinion and Order, Pennsylvania Public Utility Commission, Docket No. R-2023-3037933, Order Entered November 9, 2023, at 137.

As the Commission has made it clear that the mains cost allocation methods can vary both between NGDCs and for a particular NGDC from case to case (at least for the purpose of evaluating non-unanimous settlements), I conclude that Commission precedent has only limited applicability to this case.

Q. Are there conceptual reasons why the CD method should be considered in the context of this proceeding?

A. There are reasons of economies of scale, and industry practice.

The economist's concept of "economies of scale" is that it is often less expensive, *per unit of demand*, to serve a large customer than to serve a small customer. For that reason, many prices in both regulated and unregulated markets include volume discounts. A similar situation applies to distribution mains. It is very likely that an NGDC will need to install many more feet of distribution main to serve 50 residential customers, each with a design day demand of 1.5 Mcf per day, than it would to serve one commercial customer with peak demand of 75 Mcf per day. Therefore, it will cost the NGDC more, per unit of peak demand, to serve the 50 residential customers than to serve the one commercial customer.

Regarding industry practice, there is, of course, no standard practice for classifying mains costs, and there is some diversity among NGDCs and regulators regarding the methodologies chosen. With that caveat, however, the CD approach is within industry norms. In its text, Gas Rate Fundamentals, the American Gas Association ("AGA") indicates distribution mains have both a peak demand and customer component.[58] That text details the cost causation rationale as follows:

> The closer a plant item (e.g., a meter and service line) is located to a customer, the more that particular item is related to the specific requirements of that customer. Thus, the customer component of distribution costs reflects the theoretical distribution system that would be needed to serve customers at nominal or minimal load conditions.[59]

[58] Gas Rate Fundamentals, Fourth Edition. American Gas Association, 1987. See Table 7-4 at page 142 and the example cost allocation study at page A-17. The implied demand/customer classification split for joint-use distribution mains in the AGA sample study is 68 percent demand, 32 percent customer.

[59] Id., page 136.

In addition to AGA, NARUC's "Gas Distribution Rate Design Manual" recognizes that segregating mains costs into demand and customer components is one of the standard classification methodologies used in the industry. Moreover, in its cost allocation example, the NARUC manual splits distribution mains costs into 80 percent demand, 20 percent customer components.[60]

Moreover, the issue of cost classification applies also to the electric distribution plant, where similar arguments are made both in support of and opposed to demand-customer classification splits. For example, in the last PPL Electric base rates case, the Commission generally relied on a cost allocation study that used a "minimum system" approach for classifying distribution costs into customer and demand components.[61]

Q. What approach does the Company take with respect to mains classification?

A. For its revenue allocation proposal, the Company relies on an average of two separate simulations for assigning mains costs, namely a method in which mains are classified into customer and peak demand components ("CD" method), and a simulation in which mains costs are classified into "average demand" and "peak demand" components ("P&A" method). The Company makes a modest adjustment to the CD allocation method to reflect the load carrying capability of the minimum system. These two methods produce widely disparate results, particularly for the larger customers on the system.

Q. What analysis did you perform regarding mains cost classification for this proceeding?

A. To supplement the Company's analysis, I developed a zero-intercept classification approach. A comparison of the classification factors is shown in Table IEc-4 below, and my analysis is detailed in IEc WP3 Minsys Z-I.

[60] National Association of Regulatory Utility Commissioners, "Gas Distribution Rate Design Manual," 1989, page 46.

[61] Opinion and Order, Pennsylvania Public Utility Commission, Docket No. R-00049255, entered December 22, 2004, pages 81 to 82. Note also that the Commission more explicitly approved the use of cost allocation studies that included demand-customer classification splits for electric distribution, at Docket No. R-00922378 (pages 198-202) for West Penn Power and Docket No. R-00943271 (pages 193-198) for Pennsylvania Power & Light Co.

Table IEc-4 Summary of Distribution Mains Cost Classification Customer Cost Share (%)			
	PNG	**PG**	**Combined**
Peoples MinSys	52.8%	46.4%	51.3%
Peoples Minsys Adjusted	50.6%	40.7%	48.4%
IEc Zero-Intercept	29.1%	29.3%	29.1%
Sources: IEc WP3 Minsys Z-I			

Q. What approach do you take for mains cost allocation in this proceeding?

A. My alternative simulation of the Company's ACOSS model uses a modified CD method, based on (a) not segregating regulated-pressure and low-pressure mains due to the deficiencies in the Company's approach discussed above, and (b) using my zero-intercept cost classification factors. As discussed in Sections 7 and 8 below, I rely both on my simulation and the Company's ACOSS analysis for revenue allocation and rate design purposes.

5.4 Design Day Demand Allocator

Q. Do you agree with Mr. Zarumba's argument that the measure for peak demand for an NGDC allocated cost of service study should be design day demand?[62]

A. I do. By definition, gas distribution systems are built to meet design requirements. No NGDC plans only to meet the actual peak demands in recent prior years.

Q. Please describe the Company's method for deriving the design demand allocator.

A. The Company describes its method in OCA-XI-2. It indicates that the systemwide design day demand is derived using a statistical analysis of historical daily sendout, which is then used to estimate demand under design conditions (74 HDD or -9.0 degrees F.). This statistical analysis generally indicates that consumption increases more than proportionally

[62] Peoples Statement No. 15 at 19-21.

with HDDs, in that it (a) includes an "HDD-squared" independent variable, and (b) an above-average January "dummy" variable.[63]

The Company then allocates the design day demands to the various rate classes ". . . based on historical normalized usage factors for base load and heat load."[64] Based on my interpretation of the workpapers provided with OCA-XI-2, it appears that this allocation is based on:

- Specifying a measure of both class daily baseload demand, average daily January load by class, and average January HDDs, although the specific method for doing so is not specified in the workpapers;[65]
- Deriving a class average January heating load as the difference between daily January average and baseload;
- Calculating January class heating load per degree day based on an unspecified HDDs for January (presumably consistent with the average January load);
- Deriving unadjusted class design day demand from base load plus heating use per HDD multiplied by design HDD;
- Normalizing the unadjusted class design day demands to the system demand. Note that the class-specific design day demands as derived;
- Segregating design day demands between divisions based on overall design day relationship for 2023 PGC case.[66]

Q. Please describe your concern regarding design day demands.

[63] The statistical analysis and design day estimate also rely on a "twoday46" independent variable, which is not defined in the workpapers.

[64] From a practical cost allocation perspective, the systemwide design day demand is not particularly relevant; the only calculation that affects allocated costs is the allocation of the design day demand.

[65] My calculations using the monthly data in IEc WP1 Monthly Load Analysis show similar but not identical results.

[66] OSBA-I-36.

A. While the details are not available, the methodology is not unreasonable. Using average class-specific January loads is a reasonable approach in light of the non-linear relationship between load and HDDs. The Company's method may serve to understate the contribution of more temperature-sensitive loads to design day demands, as the non-linear effects *within* January are not reflected in the method. However, I see no obvious way to recognize those effects without daily metered data by class. As such, I take no exception to the Company's analysis, pending clarification for the details of the averaging calculations.

However, it appears that actual peak demands on recent peak days have substantially exceeded the "design" demands for that class used in the ACOSS. Peoples argues that Rate LGS actual class peaks would likely exceed design day peaks, because LGS customers are not heat sensitive and are therefore likely to have higher individual customer peaks than those for a design day requirement.[67] While this argument has some merit, it does not explain why Rate LGS demands on actual peak days far exceeded the assumed design conditions, without any apparent interruption of service.

5.5 Technical Issues

Q. Please provide your assessment of the Company's treatment of storage costs in its ACOSS.

A. The Company's approach to storage costs is partially explained by Statement No. 15. Mr. Zarumba explains that storage lines and metering equipment (Accounts 353 and 355), representing about a quarter of storage plant costs, are related to the Dice Storage Field, which provides balancing for unexpected load fluctuations for both sales and transportation service customers. The costs are allocated based on winter throughput volumes weighted by monthly storage utilization.

The majority of storage costs, consisting primarily of wells, well equipment and compressor station, are not directly addressed by Mr. Zarumba but are allocated based on design day demands inclusive of both sales and transportation service customers.

[67] OSBA-I-34.

Conceptually, storage costs should generally be allocated based on measures of "excess" volume, representing the difference between winter loads and average loads. An excess load measure correctly recognizes that very high load factor customers contribute very little to the need for storage assets, particularly those assets that are filled in summer and discharged in winter (like the Dice Storage Field).[68] As such, using excess volume and excess demand allocators would be a theoretically superior approach to the Company's method.

In addition, depending on the specific requirements for NGSs, transportation customers often provide most or all of the seasonal balancing they require. As such, it is not obvious that it is appropriate to assign a full share of the Company's storage asset costs to transportation customers.

Overall, storage costs are relatively small, and my understanding of the specific functions of the storage assets is limited.[69] Therefore, I have not, as yet, developed an alternative proposal.

Q. Please comment on the weighted average customer allocator used for allocating meter reading expense Account 902.

A. The Company proposes to allocate subcomponents of the costs for this account based on number of customers, number of large C&I meters, and a combination of the two allocators. However, first, the Company appears to have a spreadsheet error regarding the allocation of the large C&I meters, such that the costs are vastly overstated in the combined allocation factor. Second, the Company simply assumes that all C&I meters have the same cost, when in fact the meters for SGS customers are far smaller than those for LGS customer, and therefore a weighted approach should be employed. I have made both adjustments in IEc WP4 Allocation Factors.

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[68] OSBA-I-27.

[69] The Company's filing contains little information about the nature and purpose of the storage assets included in the base rates revenue requirement.

Q. Do you have other technical observations regarding the Company's ACOSS analysis?

A. I have the following observations, some of which have de minimis impacts:

- The Company's allocation of Account 908 customer service costs appears to have an inadvertent spreadsheet error, in which intra-residential costs are incorrectly allocated to all customer classes.[70] A corrected version is included in IEc-WP4 Allocation Factors.

- As discussed above, the Company proposes to allocate regulated-pressure and low-pressure mains separately. However, both the accumulated depreciation and depreciation expense appear to be lumped together and allocated in proportion to the combined mains plant. Because the accumulated depreciation percentages are substantially different between regulated and low-pressure mains, a more accurate method for allocating the costs would be to separately allocate both the accumulated depreciation and depreciation expense separately. The Company concludes that doing so would have only a minor impact.[71] Because I do not advocate segregation of mains costs into the low- and regulated-pressure systems, I have not made any correction for this factor.

- The Company imposes more rigorous payment requirements on non-residential customers than it does for the residential class.[72] In my experience, this treatment results in materially lower collections lags for non-residential customers, and consequently a lower contribution to cash working capital costs. Ideally, the allocation factor for cash working capital should reflect the relative revenue lag for the various rate classes. The Company, however, has declined to provide revenue

[70] Correctly calculated, this allocator appears to reasonably reflect the CAP administrative costs identified in OSBA-I-19.

[71] OSBA-I-18.

[72] OSBA-I-22.

lag by rate class.[73] I therefore have not attempted to adjust the ACOSS for this bias.

- The Company's allocator for collections costs is based on unweighted receivables aging. As older receivables require more collections efforts, I have replaced the Company's allocator with a weighted approach, based on the age of the receivables.[74]

- In my experience, A&G costs (Accounts 920-932) are increasing as a share of utility revenue requirements. Peoples' claimed A&G costs amount to more than $62 million, or some 12 percent of O&M costs. Like most utilities, Peoples allocates these costs based on broad internally developed allocation factors, such as labor and plant. I endeavored to obtain more detailed information regarding the specific nature of these costs to attempt to develop a more accurate allocation approach, but the Company's response directed us to a separate listing of total costs by account.[75] I have therefore not modified the Company's proposed treatment for these costs at this time, pending a more detailed response from the Company.

Q. How do the results of your cost allocation analysis compare to the Company's results?

A. A comparison of class revenue-cost ratios at present rates is shown in Table IEc-5 below. As shown, my alternative simulation generally produces revenue-cost ratios between the two methods used by the Company for classes other than Rate LGS. The Rate LGS class is assigned higher costs in my approach primarily due to the changes to mains cost functionalization, as well as to the adjustment of the Rate LGS design day demand level. Thus, the LGS revenue-cost ratio in my simulation is lower than that reported in the Company's analysis, but still above system average.

[73] OSBA-I-23.

[74] See calculations in IEc WP4 Allocation Factors.

[75] OSBA-I-28; OCA-VII-33.

Table IEc-5 Comparison of Cost Allocation Results Normalized Revenue-Cost Ratios at Current Rates			
	Peoples CD	**Peoples A&E**	**IEc CD**
Residential	91.8%	103.7%	97.4%
SGS	97.2%	86.9%	96.5%
MGS	127.0%	83.2%	115.4%
LGS	161.3%	111.5%	106.6%
Total	**100.0%**	**100.0%**	**100.0%**
Sources: IEc WP7 IEc ACOSS Alternative CONFIDENTIAL			

6. Flex Rate Customers and Rate MLS

Q. Please summarize the economic and regulatory issues surrounding Peoples' "flex rate" customers.

A. In general, utility tariff charges are set based on allocated cost of service and other rate design criteria, and these tariff charges apply to all customers within the rate class. However, under certain conditions, it can be beneficial to all customers to allow the utility to negotiate rate discounts from the regular tariff rates to retain customers who have lower-cost competitive options. These options include alternative fuel, pipeline bypass, and in the case of western Pennsylvania, "gas-on-gas competition" from other NGDCs.[76] The specific criteria where negotiated discounts are in the interests of all ratepayers are the following:

- Negotiated rates exceed the incremental cost of providing service to the customer. Thus, for example, if Peoples needs to upgrade its distribution system to continue to provide service to a flex rate customer, the negotiated rates must be sufficient to justify that expenditure.

[76] NGDCs do not "compete" for customers in overlapping service territories on the basis of cost or service. They have historically "competed" on the basis of which NGDC can offer the largest rate discount to those customers who have options and pass the cost for those discounts on to captive customers who do not have options.

- In the case of alternative fuel competition, negotiated tariff rates plus the cost of gas are set at or near the full delivered cost of the alternative fuel plus the customer's costs of conversion.

- In the case of pipeline bypass, negotiated tariff rates are justified only if there is a credible engineering plan for how the customer could physically bypass the NGDC. If that criterion is met, the negotiated tariff rate plus the cost of gas should be set at or near the customer's full cost for bypassing the NGDC and taking service directly from the pipeline. This cost necessarily includes obtaining the necessary permits to allow for such bypass.

- In the case of NGDC "competition," the Commission has determined that where customers are served in overlapping NGDC service territories, the minimum flex rate that can be charged is the lowest regular tariff rate of the NGDCs serving the customer's location.[77]

Q. Have you evaluated whether Peoples' flex rate customers meet these criteria?

A. I reviewed the Company's filing at the conceptual level. The Company has 17 flex rate customers, with the vast majority of the flex rate volume in the Rate LGS class.[78] My review encompassed Mr. Ravenstahl's testimony and the Company's responses to a variety of discovery requests on this subject.[79] Based on that review, I conclude that the criteria and approach undertaken by the Company are consistent with the criteria stated above. I have not, at this time, reviewed the specifics of the discounts for individual flex rate customers.

The issue of the treatment of flex rate discounts for revenue allocation is addressed in Section 7 below.

[77] *Opinion and Order,* Pennsylvania Public Utility Commission, Docket Nos. P-2011-2277868 and I-2012-2320323, Order Entered May 4, 2017, page 52. To my knowledge, there has not been a firm resolution as to how the lowest applicable tariff rate should be defined. See *Opinion and Order,* Pennsylvania Public Utility Commission, Docket Nos. P-2011-2277868 and I-2012-2320323, Order Entered June 13, 2019.

[78] See IEc WP8 Flex Rate Shortfall HIGHLY CONFIDENTIAL.

[79] PNG Statement No. 7, OCA-XI-5, OCA-XI-7, OCA-XI-8, OSBA-I-20, OSBA-I-29

Q. Please provide your understanding of the Company's proposed Rate MLS.

A. Within the Rate LGS class, the Company has 13 customers who are located in close proximity to either interstate transmission mains or the Company's transmission mains. The Company proposes to establish a separate class for these customers, with the eligibility requirements of a minimum of 500 mmcf per year and a location within 1000 feet of a transmission main. MLS volumetric rates would be differentiated depending on whether the customer uses the Peoples transmission system or connects directly to an interstate pipeline.

The Company's cost allocation approach for this proposed class is to include it as an option within the ACOSS model presented by Mr. Zarumba. Mr. Zarumba's analysis indicates that the effect of including the MLS class in the ACOSS model simulation is simply to split allocated costs between the LGS class and the MLS class, with no impact on the other rate classes. In effect, the Company (reasonably) does not include the design day demands of transmission-connected customers in its demand allocators for distribution system costs, regardless of whether the MLS customers are treated as a separate class for ACOSS simulation.

From a practical perspective, the Company anticipates that there would only be a small impact in this proceeding associated with implementing Rate MLS. Almost all MLS-eligible customers already have flex rates that are lower than the cost-based rates proposed for Rate MLS. As such, those customers would have no need to change tariff classes, at least until their contracts turn over. The Company indicates that there is one current flex rate customer whose rates would be lower on the proposed Rate MLS, which would result in a reduction of about $339,000 in FPFTY revenues.[80]

Q. Do you agree with the Company's proposal to establish a separate MLS tariff class?

A. I do. The current LGS class is a mixed bag of customers, some of whom use the distribution system and some who do not. As the objective of defining rate classes is to aggregate customers with similar costs to serve, the current rate class eligibility rules do not meet the basic criteria. The Company has, to a large extent, been setting tariff charges for the LGS

[80] PII-III-4.

class that are based on the cost to provide service through the distribution system, and then providing what appear to be large competitive flex rate discounts to most or all of the MLS-eligible customers.

I conclude, therefore, that establishing a separate Rate MLS class will help clarify the issue as to how much of the flex rate discounts provided to large customers are related to cost to serve differentials within the current LGS classes, and how much are due to competitive considerations.[81]

The implications of Rate MLS for revenue allocation are addressed in Section 7 below.

7. Revenue Allocation and Rate Harmonization

Q. What is revenue allocation?

A. Revenue allocation is the assignment of the dollar net increase or decrease to each of the Company's rate classes in a base rates proceeding. In contrast, *rate design* determines how the allocated revenue is recovered from individual ratepayers within each class. From a cost recovery standpoint, revenue allocation addresses *inter-class* cross-subsidization issues, while rate design addresses *intra-class* cross-subsidization issues.

Q. What are the primary economic and regulatory criteria for revenue allocation?

A. In general, allocated cost is the primary criterion used by regulators in the revenue allocation process. Most utilities and regulators adopt a policy in a base rates proceeding of attempting to move revenues more into line with allocated costs by varying the magnitude of the rate increases for the individual classes. However, regulators also subject the rate increases to other non-cost criteria of ratemaking. Of the traditional rate design criteria, the most common non-cost considerations in the revenue allocation process are:

- the *gradualism* principle (or avoidance of "rate shock"), in which large rate increases for individual customers or classes of customers are avoided; and

[81] My rough analysis in IEc WP8 Flex Rate Discounts HIGHLY CONFIDENTIAL suggests that a significant portion of the flex rate discounts reported by the Company are cost-to-serve differences.

- the *value of service* principle, which is often used to mitigate rate increases for customers or customer classes with relatively elastic demand. [82]

Using these criteria, the utility will develop a proposal for assigning the increase in the revenue requirement among the classes that reflects both cost and non-cost considerations. With this proposal, the ACOSS can be simulated at both present and proposed rates to evaluate the magnitude of "progress" that has been made toward the policy of achieving cost-based rates.

Q. Please summarize the process used by Peoples for its proposed revenue allocation in this proceeding.

A. The Company's proposal is to allocate the rate increase such that the proposed rates will result in a revenue that is equal to the average allocated cost from the CD and P&A ACOSS simulations.[83] The Company's proposed revenue allocation is summarized in Table IEc-6 below, and detailed in IEc WP2 Revenue Allocation Rate Design. As shown, the Company's proposal results in a slight average rate decrease for Rate LGS customers, an increase for SGS customers well above system average, and increases for the Residential and MGS classes that are in the ballpark of system average.

While rate gradualism is difficult to define, the Company's proposal is within the range of the typical rule of thumb that has been applied in other cases in Pennsylvania, namely that of limiting the increase to 1.5 or 2.0 times the system average increase. In light of the enormous magnitude of the overall proposed increase, I believe a 1.5 times system average cap should be the upper limit for class average increases in this proceeding.

[82] See, for example, Principles of Public Utility Rates, Second Edition, Bonbright, Danielsen, Kamerschen, 1988, pages 383 to 387. The criteria in this text apply to the overall development of a utility rate structure. The criteria that I discuss in this testimony are those that apply to the revenue allocation portion of the process, which is only one aspect of the overall development of utility rates.

[83] I note that Mr. Zarumba refers to the indexed rate of return metric to demonstrate that the Company's proposed revenue allocation moves class revenues closer to allocated costs. As detailed in Appendix A, the indexed rate of return metric can produce counterintuitive and unreliable results with respect to revenue allocation. However, because the Company generally proposes that revenue allocation move rates fully in line with allocated costs, the indexed rate of return does not distort the results. For my analysis, I rely on the normalized revenue-cost ratio method, for the reasons detailed in Appendix A.

I also observe that the Company's proposal for the SGS class is not far from a 1.5:1.0 ratio. As discussed further in the next section, this approach limits the Company's ability to harmonize Rate SGS rates between the PNG and PG divisions, without violating gradualism concerns. For example, the Company's proposed increase for the PNG Division SGS class is over 49 percent, above the 1.5:1.0 constraint (in addition to being simply eye-watering).

Table IEc-6
Peoples Revenue Allocation Proposal ($mm)

	Current Revenues	Proposed Increase	Percent Increase	Proposed Revenues
Residential	$348.2	$118.7	34.1%	$467.0
SGS	$43.5	$18.3	42.0%	$61.9
MGS	$55.9	$16.4	29.3%	$72.3
LGS	$53.7	($0.7)	-1.3%	$52.9
Total	**$501.3**	**$152.7**	**30.5%**	**$654.0**

Revenue values reflect all class revenues excluding gas costs.
Sources: IEc WP2 Revenue Allocation Rate Design

Q. What is your alternative revenue allocation proposal?

A. For revenue allocation in this proceeding, I recommend using an average of the cost allocation results I present in this testimony, and the cost allocation results relied upon by the Company for its revenue allocation. The calculations are shown in IEc WP2 Revenue Allocation Rate Design and summarized in Table IEc-7 below. As shown, my proposal would result in a modest rate increase for the LGS class, an increase for the Residential class that is nearly identical to the Company's proposal, and modestly lower increases for the SGS and MGS classes than that proposed by the Company.

Table IEc-7 IEc Revenue Allocation Proposal ($mm)				
	Current Revenues	**Proposed Increase**	**Percent Increase**	**Proposed Revenues**
Residential	$348.2	$118.4	34.0%	$467.0
SGS	$43.5	$16.8	38.6%	$61.9
MGS	$55.9	$11.9	21.2%	$72.3
LGS	$53.7	$5.6	10.5%	$52.9
Total	**$501.3**	**$152.7**	**30.5%**	**$654.0**
Revenue values reflect all class revenues excluding gas costs. Sources: IEc WP2 Revenue Allocation Rate Design				

Q. Does the Company's proposal to harmonize the rates between the PNG and PG Divisions have implications for revenue allocation?

A. As discussed above, the issues regarding rate harmonization are primarily those of the magnitude of the impacts and the timing for the harmonization. For evaluating whether the impact of rate harmonization violates the normal rules for rate gradualism, I conclude that no individual class rate increase for either division should exceed 1.5 times the system average increase.

The Company's proposal, however, fails that test, as the proposed base rate increase for the SGS class is (an eyepopping) 49.8 percent, which is 1.64 times the system average base rate increase of 30.5 percent. Thus, to comply with the normal constraints of gradualism, either the Company's proposed revenue allocation to the SGS class must be reduced, or full harmonization of the PNG and PG Division Rate SGS tariffs should be deferred until the next base rates proceeding.

In the context of my revenue allocation proposal, however, full harmonization of the SGS class rates would result in an increase for the PNG Division customers that is just slightly above the 1.5 times limit (1.51). As such, it will remain a painful increase for those customers, but it lies within the rule of thumb I have adopted in other base rate proceedings in Pennsylvania. Reductions in the overall increase, of course, will help.

Q. On that subject, do you have any recommendations regarding the revenue allocation treatment of a reduction in the overall proposed increase?

A. For this proceeding, under my revenue allocation proposal, all rate classes are assigned material percentage rate increases. In this context, there is no reason why the traditional "proportional scaleback" approach would be unreasonable, on a combined class basis. In that approach, each class' assigned increase at the full revenue requirement is reduced by the ratio of the overall allowed increase to the Company's proposed overall increase.

8. Rate Design Issues

Q. Please describe the base rate tariff structure for the SGS and MGS rate classes.

A. The base rates charges for both classes consist of a customer charge and a volumetric charge. For both classes, the customer charge is differentiated depending on the size of the customer, with the SGS class split at 500 mcf per year, and the MGS class split at 2,500 mcf per year. Table IEc-8 below summarizes the Company's current and proposed base rate charges for the two classes.

Table IEc-8
Peoples Proposed Rate Design: SGS and MGS

	PNG Division Current Rate	PG Division Current Rate	Proposed Harmonized Rate	Percent Increases (PNG/PG)
Rate SGS				
Customer Charge (<500) $/mo.	$20.00	$35.00	$25.00	25.0%/-28.6%
Customer Charge (>500) $/mo.	$40.00	$65.00	$50.00	25.0%/-23.1%
Delivery Charge $/mcf	$2.6994	4.5485	$3.8628	68.5%/-10.8%
Rate MGS				
Customer Charge (<2500) $/mo.	$85.00	$75.00	$105.00	23.5%/40.0%
Customer Charge (>2500) $/mo.	$130.00	$150.00	$150.00	15.4%/-14.3%
Delivery Charge $/mcf	$2.6668	4.8604	$3.8268	43.5%/-21.3%
Source: IEc WP2				

Note in reviewing this table that a significant majority of SGS customers fall in the "under 500 mcf per year" category, whereas the "under 2500 mcf per year" customers in Rate MGS represent a little over 60 percent of the customer base.

As shown, the current volumetric delivery rates for Rate SGS and Rate MGS are little different, despite significant differences in the cost to serve, especially for the current PNG Division customers. (This relationship is likely contributing significantly to the proposed large increase for SGS customers in this proceeding.)

For evaluating the split between revenue recovery through the customer charge and the volumetric delivery charge, I considered both the ACOSS cost implications and the practices of other Pennsylvania NGDCs.

As detailed in IEc WP6, the customer charges for smaller general service classes are reasonably similar, while the charges for medium general service customers vary widely. Table IEc-9 below provides a summary of the customer charges for smaller general service customers. As shown, the Company's current SGS customer charges for the smaller customer in the PNG and PV Divisions effectively span the range, from lowest (PNG) to highest (PG). The Company's proposed customer charge for SGS under 500 mcf would put it at the bottom of the range of current customer charges. The proposed charge for customers over 500 mcf would be near the top of the range, although still below the Columbia Gas high.

Table IEc-9 Pennsylvania NGDC: Small Commercial Customer Charges	
	$/month
PNG Division SGS (< 500 mcf) Current	**$20.00**
Peoples SGS (< 500 mcf) Proposed	**$25.00**
National Fuel Gas Dist'n C&PA (< 250 mcf)	$27.00
UGI Gas N/NT	$27.38
PGW GS-C	$27.65
PECO Gas GC	$29.86
Columbia Gas SGSS/SCD/SGDS (<644 Dth)	$29.92
PG Division SGS (<500 mcf) Current	**$35.00**
National Fuel Gas Dist'n C&PA (>250 mcf)	$37.00
PNG Division SGS (>500 mcf) Current	**$40.00**
Peoples SGS (>500 mcf) Proposed	**$50.00**
Columbia Gas SGSS/SCD/SGDS (>644 Dth)	$57.00
PG Division SGS (>500 mcf) Current	**$65.00**
Sources: IEc WP6 Rate Comparison	

In terms of allocated costs, I have considered both the fully loaded customer costs (in the IEc ACOSS simulation) and the Company's minimum customer cost calculations (which excludes certain costs that are classified as customer-related).

For the SGS class, the ACOSS results imply a customer cost of $22.20 to $34.73. The ACOSS results do not provide any cost basis for the differential between under- and over-500 mcf customers, and the Company has not made any effort to undertake such an evaluation. Because the under-500 mcf customer charge is well within the allocated cost range for smaller customers in the SGS class, and because the Company proposes to retain the relationship between the two current charges for the PNG Division, I take no exception to the Company's proposed SGS customer charges.

For the MGS class, the ACOSS results imply a cost range of $70.64 to $88.47 per month. These values are far below the customer charges proposed by Peoples ($105.00 and $150.00). I therefore recommend that no increase be assigned to the PNG Division Rate

MGS customer charges, and that the harmonized Rate MGS customer charges be set at that level. The volumetric delivery charge proposed by Peoples should then be adjusted upward to recover the reduced customer charge revenues. I estimate that, under Peoples' proposed revenue allocation, this would require a volumetric delivery charge for Rate MGS of $3.9375 per mcf, about 2.9 percent above the Company's proposal [84]

9. Normal Heating Degree Days and the Weather Normalization Mechanism

Q. What is the Company's proposal for "normal" weather for deriving its FPFTY loads?

A. For most residential and commercial customers, natural gas is used primarily for space heating purposes. As such, gas consumption is dependent on ambient temperature and other weather factors, and it can vary substantially from year to year with weather fluctuations. Average temperature for a particular period is reflected in a metric called heating degree days ("HDDs"), which for each day are measured as the difference between 65 degrees Fahrenheit and the actual average temperature for the day. Thus, if the average temperature on a day is 28° F., the HDDs for that day equal 37. HDDs are then summed for the period being evaluated. In effect, HDDs represent a measure of both average temperature and the period duration, and thus are an indicator of the volumetric need for space heating in that period.

For test year load forecasting, NGDCs generally rely on "normal" HDDs. Traditionally, normal HDDs were based on 30-year historical averages. However, over the past couple decades, average temperatures have been trending upward, and the 30-year average proved to be a biased estimator. NGDCs have addressed this issue in various ways, often by shortening up the period over which the average is calculated.

In this proceeding, Peoples proposes to directly reflect the trend increase in average temperatures with a statistical analysis of the trend in annual HDDs for the past 65 years. The Company's analysis indicates that annual HDDs exhibit a statistically significant trend decrease of about 14 HDD per year. Mr. Zarumba concludes that because the trend value is statistically significant, the trend forecast is the appropriate measure for defining "normal."

[84] OSBA-I-24.

However, for the FPFTY in this proceeding, the Company proposes to ease its way into using trend analysis, and to split the difference between two methods for deriving normal HDD. The first is the 20-year average HDD, and the second is the trend value for the FPFTY. This results in a normal HDD of 5341, that being the average of 5416 (20-year) and 5240 (trend).

Q. How have you evaluated this issue?

A. I confirmed the Company's statistical trend analysis. I then evaluated the accuracy of the various measures for forecasting purposes. That is, for each possible forecasting method, I examined how that method would have performed as a forecasting tool for a base rates proceeding with a FPFTY. Thus, for example, to test the 20-year averaging method for a hypothetical base rate proceeding for a 2017 FPFTY, I calculated the 20-year HDD average through 2015 and compared it to the actual 2017 HDDs. I repeat this analysis for all potential FPFTY years from 1989 through 2022, for a variety of forecasting methods including 10, 20 and 30 year averages, and the trend analysis approach posited by the Company. The detailed results are shown in IEc WP5 HDDs.

As shown in the workpapers, incorporating a trend into the FPFTY forecasts would have produced lower average forecast errors than any of the pure averaging methods. However, my analysis suggests that applying the Company's proposal for this proceeding, namely using an average of the 20-year method and the trend method, appears to be slightly better than relying only on the trend approach.

As such, I take no exception to the Company's proposed method for deriving normal annual HDDs.

Q. What is the Company's proposal for a weather normalization adjustment ("WNA") mechanism in this proceeding?

A. Some Pennsylvania NGDCs have adopted WNA mechanisms, which are quite similar in their structure.[85] A WNA is a form of rate decoupling mechanism, in which the Company is permitted to reconcile its revenues between those approved in the base rates case and those

[85] Reference PGW, Columbia ("pilot"), UGI and NFG mechanisms.

actually earned. A WNA mechanisms permits this reconciliation for reasons related to weather variances. If the weather is warmer than normal, the NGDC is permitted to earn supplemental revenues to make up the shortfall; if weather is colder than normal, the NGDC credits the ratepayer with a lower bill for base rates.[86]

Like the mechanisms at other Pennsylvania NGDCs, the Peoples WNA would segregate the metered load for each customer in each billing period into a base load component and a heating load component. The heating load component would then be adjusted by the ratio of normal HDDs for that period to actual HDDs for that period. The billed amount, in effect, would then be the sum of the base load and the adjusted heating load.

Q. Pursuant to Act 58 of 2018, the Commission's Policy Statement at Docket No. M-2015-2518883 contemplates the consideration of full and partial rate decoupling mechanisms in Pennsylvania.[87] How does the WNA compare to broader rate decoupling mechanisms?

A. The WNA mechanism as used in Pennsylvania is a partial rate decoupling mechanism, which has at least three advantages over broader rate decoupling mechanisms. First, the WNA provides mutual risk reduction benefits to both NGDC and ratepayer, in the form of revenue/bill stability. The NGDC gets more stable revenues; the ratepayer gets a more stable bill. In theory, the more stable NGDC revenues should reduce its risk, and thus its allowed rate of return.[88] In extremely cold conditions, the ratepayer gets a lower base rates bill under the WNA than it would without a WNA. In contrast, revenue decoupling mechanisms for non-weather variances generally involve an increase in risk for ratepayers and reduced risk for the NGDC. Consider economic fluctuations. In an unexpected economic downturn, a broad rate decoupling mechanism will impose higher charges on ratepayers to make up for the overall downturn in load, at the same time that the ratepayers are suffering the effects of

[86] Gas supply charges are not subject to the WNA. Thus, weather fluctuations will continue to cause bill fluctuations with respect to gas supply.

[87] See also Commission Order at Docket No. M-2018-3003269

[88] In practice, however, I observe that the proliferation of revenue decoupling mechanisms coincided with an increase in the risk premium for equity returns awarded by regulators.

the economic downturn. The NGDC, by contrast, is insulated from the effects of the economic downturn. Thus, as rate decoupling mechanisms go, the WNA is more balanced than broader mechanisms.

The second advantage is that the WNA mechanism can be adopted in "real time." Weather normalization adjustments can be calculated within the billing period in which the variance between actual and normal weather occurs. This avoids the intergeneration inequity problems of broader rate decoupling mechanisms.

The third advantage is that the WNA mechanism can be customer-specific. Weather normalization adjustment mechanisms can be designed to specifically reflect the weather-related usage of the individual customer. As such, it is a fairer mechanism than broader rate decoupling mechanisms, which have little or no linkage between the cause of the revenue variance and the recovery mechanism.

Q. Are there general concerns about the working of WNA mechanisms?

A. Yes, there are several.

First, use of a WNA mechanism means that a customer is being billed for a level of gas consumption that is not metered, but is only estimated. As such, it is often difficult to explain to customers why their rates appear to fluctuate up and down each month, or why there is a mysterious "WNA" charge/credit on their bills that is not related to any specific metered consumption amount.[89]

Second, the WNA mechanism weakens price signals for energy conservation during extreme periods. Under the WNA, a ratepayer has a lower per-mcf incentive to reduce usage during unusually cold periods than it does under traditional volumetric rates. As gas distribution systems are designed, at least in part, to meet extreme weather demands, the traditional rate approach is more consistent with cost causation and with how costs are allocated in the ACOSS.

[89] Peoples indicates that it will not use a separate WNA charge, but will simply hide the effect of the WNA in the volumetric charges. OSBA-I-4.

Third, the "heating load" that is subject to the WNA adjustment is not necessarily heating load. It is the difference between an arbitrary baseload and the customer's actual consumption in the month. Thus, the "heating load" could include many forms of consumption that are not heating related. First, the base load amount may be estimated incorrectly. The baseload is derived from load in the prior summer, which may be understated due to customer vacations, or may simply not be a representative period. If it is set too low, the "heating load" derived by difference is overstated, and the adjustments from the WNA are similarly overstated. In addition, any fluctuation in loads from normal will be ascribed to heating load and subject to WNA multipliers, regardless as to whether that load is related to space heating. Consider houseguests, which may serve to increase hot water and cooking loads, all of which would be considered heating load in the difference-based WNA mechanism.

Fourth, problems can be exacerbated in periods where actual HDDs are low, such as a warm spell in the spring. Unless protections are in place, an unadjusted WNA might produce very large multipliers, if, say, the normal HDDs are 300 and the actual HDDs are 30. For customers who happen to have an unusual load in that period, the WNA would charge that load at a factor of 10:1.[90]

Q. Has the Company adopted mechanisms to minimize these problems?

A. Generally, it has not.[91] If the Commission adopts the proposed WNA, I recommend that the following protections be adopted:

- To avoid problems similar to those experienced by PGW's WNA in 2022, the WNA should be modified such that the WNA not apply when actual HDDs for a billing period are below 100 HDDs. This will avoid the potential for the extreme multipliers exhibited in PGW.

[90] The PGW mechanism did, in fact, produce such anomalous results in the spring of 2022.

[91] OSBA-I-12.

- Rather than make an arbitrary assumption about usage rates for new customers, the WNA should simply not apply to new customers until actual summer usage is established.

- The Company should develop a process for monitoring customers' implied heating usage per degree day, to determine whether the Company's use of a residual approach for deriving the heating load is producing wide variations in assumed heating load per degree day.

Q. Do you have any other specific technical concerns regarding the implementation of the WNA mechanism?

A. I am concerned about the response to OSBA-I-12(a). Based on my interpretation of the response, it appears that the Company proposes to use an average of the past 10 years to define normal *daily* HDDs that are necessary for deriving the billing period normal HDD for each individual customer. My concern is that the average annual HDD for that period appears to have been 5389 HDDs, modestly higher (colder) than the 5341 normal value used for load forecasting. Thus, based on my understanding of the Company's proposal, if the actual HDDs in FPFTY 2025 exactly meet the 5341 normal value used for load forecasting, the Company will be permitted to increase its charges for heating load by about 0.9 percent.

I therefore recommend that the Company clarify its proposed method for deriving normal HDDs for individual billing periods to ensure that they are consistent with the annual normal HDDs used for load forecasting.

Q. What, then, is your recommendation regarding the proposed WNA mechanism?

A. From both a regulatory and ratepayer perspective, WNA mechanisms have advantages and disadvantages. At a minimum, I do not believe that the Company's WNA should be adopted unless and until the concerns cited above are resolved.

In general, however, because rate decoupling mechanisms are explicitly contemplated in the Commission's policy statement, the Commission has approved similar mechanisms at other NGDCs, I take no general exception to Peoples adoption of a WNA in this proceeding, subject to resolution of the specific issues detailed above.

10. Billing Determinants for the FPFTY

Q. What analysis have you undertaken with respect to the Company's load forecast and billing determinants for the FPFTY?

A. The magnitude of the Company's proposed rate increase is based on the future test year revenue requirement less the revenues that would be generated under current rates. To derive the current rate revenues, the Company must develop a load forecast for each class, and then derive the billing determinants from that load forecast. Current approved tariff charges can be applied to the billing determinants in the "proof of revenue" analysis to calculate the current rate revenues.

In general, for base rate proceeding load forecasts for most customers, NGDCs begin with a historical measure of gas usage levels for each category of customer (sometimes by rate class, sometimes using alternative customer groupings), adjust those usage levels to comport with the "normal" weather assumptions in the test year, and further adjust those values for changes in both the customer count and the usage per customer in the FPFTY. For the largest customers, load forecasts are typically developed based on direct consultations with the customer.

In this proceeding, the Company generally follows that procedure. For the Residential, SGS, and MGS classes, the Company relies on a historical measure of use-per-customer, which it weather normalizes, and then it applies a 0.5 percent downward adjustment for conservation. For the LGS customers, forecast use per customer is set based on historical levels.[92]

The Company's support for the conservation adjustment factor of 0.5 percent is based on reported weather-normalized use per customer aggregated into broad residential and commercial categories over the past eight years.[93] That analysis suggests an average decline,

[92] Peoples Statement No. 3 at 5-8.

[93] OSBA-I-5.

but there is significant variability in the trend, and the use of aggregate statistics can mask non-conservation effects.

Q. What analysis have you prepared regarding the Company's UPC estimates?

A. I conducted a statistical assessment of the conservation declines for the heat sensitive classes, using the detailed reviewed the Company's analysis of its proposed adjustments to the use-per-customer for the Residential, SGS and MGS rate classes, and a more detailed level than that prepared by the Company. In particular, I conducted a statistical analysis of the monthly gas consumption by rate class provided in OSBA-I-05. In that analysis, I developed a statistical model for each rate class reflecting actual heating degree days ("HDDs") in that month and a trend variable, to evaluate the reasonableness of the Company's assumptions that weather-normalized use per customer is declining for all rate classes except Rate LGS.

This analysis is presented in some detail in IEc WP1. To a large extent, the statistical analysis did not show a statistically significant trend effect, either for a total class load analysis or a per-customer analysis. A summary of the implications of that analysis is shown in Table IEc-10 below. That table includes only the results for Rates R, SGS and MGS, as per-customer usage for the largest customers is very sensitive to the changes for a relatively small number of customers.

Based on this analysis, I recommend that the Company's conservation adjustment factor be rejected, and that use per customer for the temperature sensitive classes be based on historical average use per customer.

Table IEc-10 Statistical Evidence for Trends in Gas Consumption				
	PNG Consumption		**PG Consumption**	
	Total	**Per-Customer**	**Total**	**Per-Customer**
Residential Retail	No	No	No	No
Residential Transport	Declining	No	No	Increasing
Commercial SGS Retail	Increasing	No	No	No
Commercial MGS Retail	No	No	Declining	No
Commercial SGS Transport	No	No	Increasing	No
Commercial MGS Transport	No	Increasing	Increasing	No
Industrial SGS Retail	Increasing	Increasing	No	No
Industrial MGS Retail	No	No	No	No
Industrial SGS Transport	No	No	Increasing	Increasing
Industrial MGS Transport	No	No	Increasing	Increasing
Total				
Source: IEc WP1				

Q. Does this conclude your direct testimony?

A. Yes, it does.

APPENDIX A

MEASURES OF PROGRESS TOWARD COST BASED RATES

PENNSYLVANIA UTILITY COST AND REVENUE ALLOCATION

Introduction

The Pennsylvania Commonwealth Court held that cost of service is "the polestar" criterion for assigning a utility rate increase among the various rate classes.[94] Parties to Pennsylvania base rates proceedings generally agree that this criterion implies that the revenues for each class at the rates approved by the Commission should be closer to allocated costs than the rates in place when the rate case is filed. Thus, parties to the proceeding will typically compare some metric for cost recovery under "proposed rates" with that same metric for cost recovery under "current rates." This comparison can show (a) *whether* the proposed rates result in class revenues that are closer to allocated costs, and (b) *how much* progress the proposed rates make toward moving class revenues toward allocated costs.

While different metrics are used for this analysis, the most common metric in Pennsylvania is the "indexed rate of return" metric (also called the "relative rate of return" or "unitized rate of return" metric). This appendix demonstrates why the indexed rate of return is not a reliable metric for identifying whether proposed rates are closer to allocate costs than current rates, and that even where the indexed rate of return correctly implies that there is progress toward cost-based rates, it is not a reliable indicator of the amount of progress that is achieved.[95] This appendix also compares the indexed rate of return to three other metrics for evaluating progress toward cost-based rates, namely the dollar subsidy, the rate of return differential, and revenue-cost ratio metrics.

[94] Lloyd v. Pennsylvania Public Utility Commission, 904 A.2d 1010, 1020 (Pa. Cmwlth. 2006).

[95] This problem with the indexed rate of return metric was identified in OSBA-sponsored testimony at least as early as 1994. This critique has been presented in expert testimony many times since. No credible rebuttal to these basic conclusions has been submitted, but the widespread use of this flawed metric continues.

The Structure of the Cost Allocation Study

The indexed rate of return metric is derived from the method that is most often used for utility cost allocation in Pennsylvania. When a utility or regulator develops a revenue requirement for a test year, it simply sums all of the individual cost items for that year, including operating and maintenance ("O&M"), administrative and general ("A&G"), depreciation, taxes other than income, income taxes and allowed return on rate base. Thus, the objective of a cost allocation study should be to simply allocate each of these cost elements to the various rate classes. Because the allowed return and associated income tax are derived from rate base, the cost allocation study allocates all net plant and other rate base items to the various rate classes, and the return and income taxes can then be allocated in proportion to rate base.

Cost allocation studies in Pennsylvania, however, are most often conducted on a class rate of return basis. That is, the cost allocation study calculates a class rate of return by taking revenues, deducting the allocated O&M, A&G, depreciation and taxes other than income, to produce a pre-tax class net income. Income taxes are then most often allocated based on the calculated pre-tax class income, and a net income by class value is derived by difference. The allocated pre-tax and net income figures are thus not a cost of capital, but represent the implied return provided by each class under the revenues (current or proposed) used in the cost allocation study. These net income values are then divided by the allocated rate base, to produce percentage class rates of return.[96] Thus, with this approach to cost allocation, there is a desire by utilities and regulators to develop a metric for evaluating progress toward cost-based rates that is based on the class rates of return produced by the cost allocation study.

Defining Progress Toward Cost-Based Rates

It is not necessarily obvious what it means to "move rates more into line with allocated cost" between current and proposed rates. At the simplest level, one could argue that if the current rate revenues for a particular class are below the allocated cost for that class at the full proposed

[96] Some Pennsylvania utilities also calculate cost of service using a "levelized rate of return" method, in which return and income tax costs are allocated such that each class produces the system average rate of return. This approach is arithmetically equivalent to allocating return and income tax costs in proportion to rate base, as described above.

revenue requirement, any increase in rates will move that class's revenues closer to allocated cost. However, the objective of this exercise is to measure the progress toward cost-based rates for each rate class compared to that for all of the other classes. Thus, a revenue allocation proposal must be evaluated for its impact on all of the rate classes.

Also at the simplest level, of course, a proposed revenue allocation will by definition move rates more into line with allocated cost if each class's revenues are moved exactly to the full proposed allocated cost of service. Or, equivalently, rates are exactly cost-based when each class's revenues are set such that the class produces the system average rate of return. Therefore, there is no question that moving a class exactly to an indexed rate of return of unity (1.0) is necessarily consistent with making rates more cost-based.

In many base rate proceedings, however, moving rates fully into line with allocated costs cannot be achieved due to consideration of other rate design factors, most notably "rate gradualism," which serves to limit the increase for any particular class of customers in any rate proceeding, and has the aim of gradually moving rates into line with allocated cost.

Thus, in terms of determining whether a particular rate proposal moves rates into line with allocated cost, this appendix takes the position that there is progress toward cost-based rates if the proposed relative rate increases across the various classes, when followed for a number of base rates proceedings (in which there is no change in the relative cost structure), will eventually result in cost-based rates. Thus, for any particular metric, it is important to consider not only the difference between the metric and current rates and proposed rates in one base rates case, but also what that metric will imply going into the next base rates case.

As shown further in the numerical example below, this standard for defining progress implies that for classes with revenues below allocated cost at current rates (or, equivalently, with a class rate of return below system average), progress can only be achieved by assigning that class a rate increase above the system average increase. This, of course, is just plain common sense. If a class is under-recovering costs, it should be assigned an above average increase. As shown below, however, the indexed rate of return metric fails at common sense.

The Numerical Example

This appendix takes the approach of defining a specific numerical example, and showing the implications of various different metrics on different rate increase scenario. The calculations associated with this example are also provided in MS Excel electronic format (IEc WP5), and parties are able to simulate alternative examples to evaluate the rigor of this analysis.

The example attached to this appendix shows the arithmetic impacts of a single two-class utility example under four different rate increase proposals. Each page shows the implications of a different revenue-cost metric, namely the indexed rate of return, dollar subsidy, differential rate of return, the revenue-cost ratio and the normalized revenue-cost ratio.

The example involves two rate classes, A and B, in which each generates the same revenue at current rates, but in which Class A has a moderately higher cost to serve. The four rate increase scenarios are (I) an across-the-board increase in which both classes get the same percentage increase, (II) a scenario with a moderately higher percentage increase for Class B, and (III) a slightly higher percentage increase for Class A, and (IV) a moderately higher percentage increase for Class B.

The common-sense answer is that the across-the-board scenario (I) should show no progress toward cost-based rates, Scenario II should indicate that revenues are moving farther away from costs, and Scenarios III and IV should show that revenues are moving slightly and modestly closer to allocated costs. The discussion of each metric below highlights where the metric produces results that are at odds with these expectations.

To evaluate the question as to whether there is consistent progress toward cost-based rates, the metrics are evaluated at both proposed rates in the "current" base rates proceeding, and for what the values would imply going into the next base rates case after a uniform increase in costs.

The Indexed Rate of Return Metric

The indexed rate of return metric is measured as the class rate of return divided by the system average rate of return, at current and proposed rates. If revenues are fully in line with allocated costs, the class indexed rate of return is unity (1.0). Thus, if a class has an indexed rate

of return at present rates that is higher than system average, it is deemed to be over-recovering costs, and conversely, where the indexed rate of is below unity, the class is under-recovering allocated costs.

As a standalone measure for relative cost performance, there is nothing wrong with the indexed rate of return metric – for any particular system average rate of return scenario, the farther a class's indexed rate of return is from unity, the farther it is from allocated costs.

Moreover, since an indexed rate of return of unity represents cost-based rates, it is conceptually appealing to conclude that if the indexed rate of return moves closer to unity, there is progress toward cost-based rates. Moreover, it is similarly appealing to conclude that progress toward cost-based rates could be measured by how much closer the index gets toward unity between current and proposed rates. Unfortunately, this intuitive approach fails in the actual arithmetic.

Utilities have used this approach for decades in Pennsylvania. While it is not clear why alternative methods have not been adopted, it may be that the metric is attractive to both utilities and regulators in that it tends to show significant progress toward.[97] cost-based rates when in fact there is little such progress. This then allows utilities to claim that they are following the cost standard without having to make politically unpopular decisions regarding differentiating rate increases among the various rate classes.

When applied in an actual example, the indexed rate of return fails even the simplest test. In the example shown, the current rates class rates of return are 2.50% and 5.71% for Classes A and B respectively, producing indexed rates of return of 0.625 and 1.429 relative to the system average return of 4.00%. When a 30% increase is applied to both classes, the system average rate of return rises to 8.00%, and the class returns rise to 6.25% and 10.00% respectively, yielding indexed rates of return of 0.781 and 1.250.

[97] The Commission has, on occasion, adopted methods other than indexed rate of return. See, for example, *Pennsylvania Public Utility Commission v. City of Bethlehem -- Water Department*, Docket No. R-2020-3020256, Order entered April 15, 2021, at 36.

Thus, despite the fact that both classes get the same percentage increase and common sense says that there should be no progress toward cost-based rates, the indexed rate of return metric not only implies that there is progress, but that there is significant progress. The Class A indexed rate of return moves from 0.625 to 0.781, which appears to imply that the class has moved 42 percent of the way to cost-based rates.[98]

The fallacy of this logic is shown in the implications for the next rate case. When costs increase, the system average rate of return falls back to its lower level and the indexed rate of return metrics all shift farther away from unity. Thus, as shown, an across-the-board increase in the current rate case followed by an across-the-board cost increase for the next case will demonstrate that, in fact, there is no progress toward cost-based rates and the indexed rates of return are right back where they started.

The other revenue increase scenarios show similar problems with the indexed rate of return metric. In Scenario II, despite a smaller percentage increase for the higher-cost Class A, the indexed rate of return again implies that there is progress toward cost-based rates, which is obviously nonsense. This is again demonstrated by the implications for the next base rates case, which understandably show that rates are farther out of line than they were going into the current rate case. It is simply unreasonable to believe that assigning larger percentage increases to the rate class that is already over-recovering costs will somehow reduce inter-class subsidies. And yet that is the implication of the indexed rate of return metric.

In Scenarios III and IV, the indexed rate of return does produce the correct directional answer, namely that rates are moving more into line with allocated cost. But the indexed rate of return metric implies that both scenarios result in enormous progress toward cost-based rates, when in fact there is relatively little progress, particularly in Scenario III. As shown in the example, despite a small differential in the rate increases, the indexed rate of return implies that revenues

[98] "Progress" is measured by how much the metric has moved divided by how far it needs to move to become fully cost-based. Thus, in the residential class example, the index moves from 0.625 to 0.781, a difference of 0.156, compared to moving fully to cost-based rates, which would require the index to move from 0.625 to 1.000, a difference of 0.375. Progress is measured as 0.156/0.375, or 42 percent.

have moved 50 percent of the way toward allocated cost. Realistically, however, as shown in the implications for the next base rates case, the actual progress is much lower.

Thus, the indexed rate of return metric is a wholly unreliable guide for evaluating progress toward cost-based rates in a utility rate proceeding, because it (a) may show progress toward cost-based rates when in fact revenues are moving farther away from costs, and (b) will overstate the magnitude of progress toward cost-based rates when progress is occurring.

The Dollar Subsidy Method

While the indexed rate of return metric is the most common approach used by Pennsylvania utilities, the Commission has also supported the use of the dollar subsidy metric. In an order involving the City of Bethlehem – Water Department, the Commission concluded:

> "As noted by the OSBA, the proper yardstick for measuring the degree of movement toward cost of service is the change in the absolute level of class subsidies at present and proposed rates."[99]

In the dollar subsidy method, the total cost to provide service is calculated using the method described above, in which each component to cost, including return and income taxes, is allocated to each cost. The difference between current rate revenues and the allocated cost is the dollar subsidy.[100]

In allocating the return and income tax costs under the "current rates" evaluation, the values used represent only the return that the utility would achieve and the income taxes that it would incur if it were assigned no rate increase. These values therefore do not represent the utility cost of capital, but simply residual values of what is left from current rate revenues after O&M, A&G, depreciation and other taxes are deducted.

[99] *Pennsylvania Public Utility Commission v. City of Bethlehem -- Water Department*, Docket No. R-2020-3020256, Order entered April 15, 2021, at 36.

[100] This appendix uses the term "subsidy" as the difference between revenues and fully allocated cost in a utility cost allocation study. Theoretical economics generally defines subsidy based on incremental cost concepts, rather than fully allocated cost.

When the dollar subsidy metric is applied to the four alternative revenue allocation proposals in the attached example, it implies the following:

- For the across-the-board increase, the dollar subsidy metric indicates that the dollar value of the revenue-cost difference increases under proposed rates, implying that rates are moving farther away from costs. In dollar terms, that conclusion is correct, although in percentage terms the subsidies remain the same.

- When a larger increase is assigned to Class B, the dollar subsidy metric indicates correctly that rates are moving farther away from allocated cost, and that the problem will be worse with the next base rates proceeding.

- When a modestly larger increase is assigned to Class A, the dollar subsidy metric implies that there is no progress toward cost-based rates in the current rate proceeding, and that the situation will be worse in the next base rates case. In effect, even though the slightly higher rate increase for Class A will (eventually) lead to cost-based rates, the dollar subsidy method implies that there is no progress.

- When a materially larger increase is assigned to Class A, the dollar subsidy metric correctly indicates that there is progress toward cost-based rates.

Thus, overall, the dollar subsidy metric will tend to slightly understate progress toward cost-based rates, but the distortion is far smaller (and in the opposite direction) of that of the indexed rate of return metric.

The Differential Rate of Return

The differential rate of return metric is similar to the indexed rate of return metric, in that both approaches calculate class rates of return and current and proposed rates, and compares each class's return to the system average. However, where the indexed rate of calculates the *ratio* of class to average return, the differential rate of return calculates the *difference* between class and average rates of return. In the indexed rate of return, cost-based rates are achieved with an indexed rate of return of unity (1.0); for the differential rate of return, cost-based rates are achieved with a differential rate of return of zero.

When applied to the four revenue allocation scenarios in the example, the differential rate of return produces results that are nearly the same as the dollar subsidy method. That is, the differential rate of return calculation will slightly understate progress toward cost-based rates, but the results are much less distorted than those from the indexed rate of return metric.

Revenue-Cost Ratio

The revenue cost ratio is similar to the dollar subsidy metric, except rather than taking the difference between revenues and allocated costs, it takes the ratio of revenues to allocated cost. Like the indexed rate of return, cost-based rates are achieved at a revenue-cost ratio of unity (1.0 or 100 percent).

Unlike the indexed rate of return metric, however, the revenue-cost ratio generally does not distort the implications of a revenue allocation proposal. As shown in the example, in all four revenue allocation proposals, the revenue-cost ratio correctly indicates when there is progress toward cost-based rates and when there is not.

The only downside to this unadjusted revenue-cost ratio approach is that the progress toward cost-based rates in the current case is not the same as that going into the next base rates case. This results because the mix of operating costs allocated to each class is different from the mix of rate base costs. This minor distortion is addressed in the final metric below.

Normalized Revenue-Cost Ratio

The normalized revenue-cost ratio makes a technical correction to the revenue-cost ratio metric to reduce the distortion associated with using a non-cost parameter, namely the residual return and income tax costs, as a measure of cost at current rates. This metric uses fully allocated costs including the utility's allowed return on capital as the cost metric at both current and proposed rates. In this metric, however, the revenues at current rates are "normalized" by applying the system average rate increase to each class. Thus, in this metric, the current rates revenue-cost ratio is the revenues that would be earned from each class if an across-the-board rate increase were applied divided by the fully allocated class revenue requirement. This is then compared to the revenue-cost ratio that results from the actual proposed revenue allocation.

As shown in the attached example, this metric correctly shows the progress toward cost-based rates in each of the scenarios, and it also correctly predicts what each class' revenue-cost performance will be going into the next base rates case if there is no change in the underlying cost structure.

Summary

The indexed rate of return is a metric that has intuitive appeal, in that cost-based rates are achieved when the index is at unity (1.0), and that it would seem therefore that moving the index closer to 1.0 would represent progress toward cost-based rates.

Alas, it is not that simple. As shown in the examples attached, and as evidenced in hundreds of utility rate proceedings in Pennsylvania, the indexed rate of return is not a reliable metric for gauging progress toward cost-based rates for any particular revenue allocation proposal. It may give a directionally correct answer, and it may not. And even when it does correctly show progress, it implies that there is much more progress toward cost-based rates than actually exists.

Of the five metrics evaluated in this review, the indexed rate of return is the only metric to fail the test and imply that there is progress toward cost-based rates when there is none, and even when rates are moving substantially away from allocated cost.

All the other metrics evaluated in this review are superior to the indexed rate of return approach. The dollar subsidy and differential rate of return have a modest disadvantage in that they may imply that there is no progress toward cost-based rates when in fact some small progress is occurring. This is a relatively modest disadvantage since the distortion is much smaller than that in the indexed rate of return, and moreso because it will encourage Pennsylvania utilities and regulators to adopt revenue allocation proposals that are more aggressive in moving revenues into line with allocated cost, consistent with the legal standard that cost of service be the polestar criterion.

Overall, however, the revenue-cost metric, particularly the normalized revenue-cost metric, does not suffer from the distortions of any of the other methods, and is the most reliable of the methods on offer.

EXHIBIT IEc-1

RÉSUMÉ AND EXPERT TESTIMONY LIST

FOR

ROBERT D. KNECHT

Overview

Mr. Knecht has more than 40 years of economic consulting experience, focusing on the energy, utility, metals and mining industries. For the past 30 years, Mr. Knecht's practice has primarily involved providing analysis, consulting support and expert testimony in regulatory matters, primarily involving electric and natural gas utilities. Mr. Knecht's work includes many aspects of utility regulation, including industry restructuring, cost unbundling, cost allocation, rate design, rate of return, customer contributions, energy efficiency programs, smart metering programs, treatment of stranded costs and utility revenue requirement issues. He has consulted to state advocacy agencies, industrial customer groups, law firms, regulatory agencies, government agencies and utilities, in both the United States and Canada. He has provided expert testimony in more than one hundred separate utility proceedings.

In addition to his work with regulated utilities, Mr. Knecht has consulted on international industry restructuring studies, prepared economic policy analyses, participated in a variety of litigation matters involving economic damages, and developed energy industry forecasting models.

Mr. Knecht served as a Principal of IEc for 33 years, and as its Treasurer for 15 years. He is currently an independent consultant who remains affiliated with IEc.

Education

Master of Science, Management (Applied Economics and Finance), Sloan School of Management, M.I.T.

Bachelor of Science, Economics, Massachusetts Institute of Technology

Select Project Experience

For more than 25 years, Mr. Knecht has provided consulting services, analysis and expert testimony before the Pennsylvania Public Utility Commission on all manner of regulatory proceedings to the **PENNSYLVANIA OFFICE OF SMALL BUSINESS ADVOCATE**. In addition to expert testimony, Mr. Knecht has assisted OSBA with the development of public policy positions, litigation strategy, and longer term strategy.

For the **ATTORNEY GENERAL OF THE STATE OF RHODE ISLAND**, Mr. Knecht provided consulting and expert witness services in an acquisition proceeding involving PPL Corporation's proposed acquisition of Narragansett Electric from National Grid. Mr. Knecht's testimony addressed financial, economic, environmental, tax, operating cost and rate implications.

For the **NEW BRUNSWICK PUBLIC INTERVENER,** Mr. Knecht provides consulting and expert witness services in a variety of regulatory proceeding before the New Brunswick Energy and Utilities Board involving New Brunswick Power, Enbridge Gas New Brunswick, and petroleum products. Mr. Knecht has addressed issues of load forecasting, costs forecasting, cost of capital, allocation of corporate overhead costs, utility cost allocation, revenue allocation, market-based rate design, cost-based rate design, and rate decoupling.

For **L'ASSOCIATION QUÉBÉCOISE DES CONSOMMATEURS INDUSTRIELS D'ÉLECTRICITÉ (AQCIE) AND LE CONSEIL DE L'INDUSTRIE FORESTIÈRE DU QUÉBEC (CIFQ)**, Mr. Knecht provided analysis, consulting advice and expert testimony before the Régie de l'énergie in regulatory matters involving Hydro Québec Distribution and TransÉnergie. This work includes revenue requirement, power purchasing, cost allocation, treatment of cross-subsidies, and rate design.

For the **INDEPENDENT POWER PRODUCERS SOCIETY OF ALBERTA**, Mr. Knecht provided consulting advice, analysis and expert testimony before the Alberta Energy and Utilities Board in a series of proceedings involving the restructuring of the electric utility industry, the unbundling of rates, and the development of transmission rates.

EXHIBIT IEc-2

IEc ELECTRONIC WORKPAPERS

IEc WP1 Monthly Load Analysis

IEc WP2 Revenue Allocation Rate Design

IEc WP3 Minsys Z-I

IEc WP4 Allocation Factors

IEc WP5 HDDs

IEc WP6 Rate Comparison

IEc WP7IEc ACOSS Alternative CONFIDENTIAL

IEc WP8 Flex Rate Revenues HIGHLY CONFIDENTIAL

EXHIBIT IEc-3

REFERENCED INTERROGATORY RESPONSES

OCA-V-1
OCA-VI-1
OCA-VII-33
OCA-VIII-23
OCA-XI-2
OCA-XI-5
OCA-XI-7
OCA-XI-8

OSBA-I-1
OSBA-I-2
OSBA-I-4
OSBA-I-5
OSBA-I-12
OSBA-I-13
OSBA-I-15
OSBA-I-16
OSBA-I-18
OSBA-I-19
OSBA-I-20
OSBA-I-22
OSBA-I-23
OSBA-I-24
OSBA-I-27
OSBA-I-28
OSBA-I-34
OSBA-I-36
OSBA-I-37

PII-III-4

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**Docket No. R-2023-304459**
PEOPLES NATURAL GAS COMPANY LLC	:	

VERIFICATION

I, Robert D. Knecht, hereby state that the facts set forth in the Direct Testimony labelled OSBA Statement No. 1 REVISED and associated Exhibits IEc-1 through IEc-3 are true and correct to the best of my knowledge, information, and belief, and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 19 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: March 28, 2024

Robert D. Knecht

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Peoples Natural Gas Company LLC (Peoples Natural Gas Division and Peoples Gas Division) Base Rate Case Filing Original Tariff GAS – PA PUC No. 48	**:**	**Docket No. R-2023-3044549 C-2024-3045385**

CERTIFICATE OF SERVICE

I hereby certify that true and correct copies of the foregoing have been served via email (*unless otherwise noted below*) upon the following persons, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

The Honorable Mary D. Long
Administrative Law Judge
Pennsylvania Public Utility Commission
Piatt Place, Suite 220
201 Fifth Avenue
Pittsburgh, PA 15222
malong@pa.gov

Scott B. Granger, Esquire
Bureau of Investigation and Enforcement
Commonwealth Keystone Building
400 North Street, 2nd Floor West
Harrisburg, PA 17105
sgranger@pa.gov

Gina L. Miller, Esquire
Jacob D. Guthrie, Esquire
Harrison W. Breitman, Esquire
Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101
OCAPNG2023BRC@paoca.org

Elizabeth R. Marx, Esquire
John W. Sweet, Esquire
Pennsylvania Utility Law Project
118 Locust Street
Harrisburg, PA 17101
pulp@pautilitylawproject.org

Joseph L. Vullo, Esquire
Burke Vullo Reilly Roberts
1460 Wyoming Avenue
Forty Fort, PA 18704
jlv@bvrrlaw.com

Meagan Moore, Esquire
PNG Companies LLC
375 North Shore Drive, 4th Fl.
Pittsburgh, PA 15212
meagan.moore@peoples-gas.com

Michael W. Gang, Esquire
Anthony D. Kanagy, Esquire
Nicholas A. Stobbe, Esquire
Post & Schell, P.C.
17 North Second Street
12th Floor
Harrisburg, PA 17101-1601
mgang@postschell.com
akanagy@postschell.com
nstobbe@postschell.com

Charis Mincavage, Esquire
Adeolu A. Bakare, Esquire
Lisa Charleton, Esquire
McNees Wallace & Nurick, LLC
100 Pine Street
Harrisburg, PA 17108
cmincavage@mcneeslaw.com
abakare@mcneeslaw.com
LCharleton@mcneeslaw.com

Kevin J. Moody, Esquire
Pennsylvania Independent Oil & Gas Assoc.
212 Locust Street, Suite 600
Harrisburg, PA 17101-1510
kevin@pioga.org

DATE: March 28, 2024

/s/ Steven C. Gray
Assistant Small Business Advocate
Attorney I.D. No. 77538

COMMONWEALTH OF PENNSYLVANIA

April 18, 2024

The Honorable Mary D. Long
Administrative Law Judge
Pennsylvania Public Utility Commission
Piatt Place, Suite 220
201 Fifth Avenue
Pittsburgh, PA 15222

Re: Peoples Natural Gas Company LLC (Peoples Natural Gas Division and Peoples Gas Division) Base Rate Case Filing Original Tariff GAS – PA PUC No. 48 / Docket No. R-2023-3044549

Dear Judge Long:

Enclosed please find Rebuttal Testimony and Exhibits of Robert D. Knecht, labelled OSBA Statement No. 1-R and associated Exhibits IEc-1 through IEc-2, on behalf of the Office of Small Business Advocate ("OSBA"), in the above-captioned proceeding.

As evidenced by the enclosed Certificate of Service, all known parties will be served, as indicated.

If you have any questions, please do not hesitate to contact me.

Sincerely,

/s/ Steven C. Gray

Steven C. Gray
Senior Attorney
Assistant Small Business Advocate
Attorney ID No. 77538

Enclosures
cc: PA PUC Secretary Rosemary Chiavetta (Cover Letter & Certificate of Service only)
Mark D. Ewen / Robert D. Knecht
Parties of Record

OSBA Statement No. 1-R

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**Docket No. R-2023-304459**
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

Rebuttal Testimony and Exhibits of

ROBERT D. KNECHT

On Behalf of the

Pennsylvania Office of Small Business Advocate

Topics:

Cost Allocation
Flex Rates
Revenue Allocation

Date Served: April 18, 2024

Date Submitted for the Record:

REBUTTAL TESTIMONY OF ROBERT D. KNECHT

1. Introduction and Context

Q. Mr. Knecht, please state your name and briefly describe your qualifications.

A. My name is Robert D. Knecht. I submitted direct testimony and associated exhibits earlier in this proceeding as OSBA Statement No. 1 REVISED, and my qualifications were presented therein.

Q. Please describe the purpose of this rebuttal testimony.

A. This rebuttal testimony addresses only cost allocation and revenue allocation issues, in response to the direct testimony of the following witnesses:

- Mr. Ethan H. Cline, I&E Statement No. 3
- Mr. Clarence L. Johnson, OCA Statement No. 4
- Mr. Richard A. Baudino, PII Statement No. 1

Cost allocation issues are reviewed in Section 2. Revenue allocation issues, including the treatment of negotiated rate ("flex rate") customers, are addressed in Section 3.

2. Cost Allocation Issues

Q. Please summarize the key cost allocation issues you raised in your direct testimony.

A. The major recommendations in my direct testimony regarding the Company's allocated cost of service study ("ACOSS") include the following:

- The Company's proposal to bifurcate distribution mains between regulated-pressure and low-pressure system, to fully charge all customers for the entire regulated-pressure system, and to exempt LGS customers from contributing to all low-pressure system costs is not justified by the evidence and is inconsistent with the practices of other Pennsylvania natural gas distribution companies ("NGDCs.").

- The Company's design day demand level for the LGS class in the peak demand allocation factor appears to be materially lower than actual peak day Rate LGS demands served by the Company.

- Distribution mains costs should be classified into customer-related and demand-related components, with demand costs allocated based on design day demands. The established approach for doing so is a minimum system analysis, wherein the customer component reflects the cost of the system that is not related to load. Concerns regarding the load carrying capability of some minimum system analyses can be addressed through the use of a "zero-intercept" methodology.

- The Company's allocation of Account 902 meter reading costs appears to have an inadvertent spreadsheet error which over-assigns costs to the LGS class.

- I also identified other technical corrections to the ACOSS with relatively small impacts on overall allocated costs.

Q. Do any of the other parties address the issue of segregating mains between regulated-pressure and low-pressure systems?

A. No. On that subject, however, I observe that the Pennsylvania Office of Consumer Advocate ("OCA") opposed similar proposals in the Company's last base rate case and in Columbia's 2012 base rates case.[1] In both cases, OCA presented cost causation arguments and cited strongly to the Commission's decision in Matter R-00942991 involving National Fuel Gas, wherein a similar bifurcation of mains was rejected.[2]

Q. Do any of the other parties address your concerns regarding design day demands for the LGS class?

[1] Docket No. R-2012-2321748 (Columbia), OCA Statement No. 3 (Watkins) at 9; and Docket No. R-2018-3006818 (PNG), OCA Statement No. 3 (Watkins), at 17-20. Note that OCA continued to oppose Columbia's sub-functionalization of mains in subsequent proceedings, even with Columbia's efforts to more closely match mains costs to the customers using those mains as discussed in my direct testimony. *See* Docket No. R-2014-2406274, OCA Statement No. 3 (Watkins) at 19-22; Docket No. R-2015-2468056, OCA Statement No. 3 (Mierzwa) at 7-9.

[2] Pa. PUC v. Nat'l Fuel Gas Distribution, 83 Pa. PUC 262, 318-321 (1994).

A. No.

Q. Please review the parties' positions regarding the classification and allocation of mains costs.

A. The various experts fall into two general categories. OCA witness Johnson and I&E witness Cline support classifying and allocating mains costs half based on design day peak demand and half based on average annual demand, denoted the "peak-and-average" or "P&A" approach. PNG witness Zarumba, PII witness Baudino and I all conclude that cost causation for mains should involve segregating costs into a customer component, related to the higher costs of extending the distribution system to attach smaller customers, and a design day demand component, reflecting that individual mains must be sized to meet downstream design day demand. This approach is denoted the "CD" method.[3] However, this group uses both the P&A and CD methods in developing revenue allocation recommendations for this proceeding.

In this proceeding, there are three experts who rely on a variety of methods for classifying and allocating mains costs in this proceeding, and two experts who rely on a single methodology. The experts favoring the use of multiple methods (Zarumba, Baudino, Knecht) make similar arguments regarding the flaws in the peak-and-average ("P&A") methodology relied upon by the other witnesses (Cline, Johnson). These include:

- Mains must be sized to meet design day demands of downstream customers.[4]
- Mains are not sized to meet annual average demands.[5]

[3] Mr. Zarumba developed a "minimum system" approach to classifying mains costs, which he adjusts slightly for the load carrying capability of the minimum system. Mr. Baudino does not challenge that approach. I included consideration of a zero-intercept approach to mains classification, which is an alternative approach for excluding load carrying capability in the minimum system.

[4] PNG Statement No. 15 at 18, PII Statement No. 1 at 8, OSBA Statement No. 1 REVISED at 34.

[5] PNG Statement No. 15 at 18-19, PII Statement No. 1 at 8, OSBA Statement No. 1 REVISED at 34.

- The gas distribution system must be extended to attach the customers, and extending the system to serve many smaller customers is more costly than serving fewer larger customers.[6]

In respect of Commission precedent, the history is presented in significant detail in my direct testimony. Based on that review, I conclude that the Commission's position is more nuanced than that suggested by Mr. Cline's direct testimony.[7] The Commission has also indicated that it would evaluate mains cost classification and allocation on a case-by-case basis.[8]

I therefore retain my recommendation that the Commission consider all of the cost allocation methods offered by the experts in this proceeding to allocate the rate increase among the classes in a fair and reasonable manner.

Q. OCA witness Mr. Johnson recommends a modification to the allocation of customer service costs, wherein costs associated with large customer care are assigned only to the MGS and LGS classes. Do you agree with his proposal?

A. I agree that customer service costs for large customers should be assigned to the classes that benefit from those services. I respectfully disagree that Mr. Johnson's proposal to allocate those costs between MGS, LGS and LGS ML based on revenues. In my experience, most large customer care costs involve large industrial customers with complex metering and billing issues. By contrast, Mr. Johnson allocates over half of those costs to the MGS class. Moreover, the magnitude of the impact of this proposal is quite small, as the costs involved are only $1.3 million. Should it be necessary for me to update my ACOSS analysis in surrebuttal, I will incorporate Mr. Johnson's recommendation, albeit with a volumetric allocator which would assign a more realistic (but probably still excessive) 27 percent of the costs to Rate MGS.

[6] PNG Statement No. 15 at 6, PII Statement No. 1 at 9, OSBA Statement No. 1 REVISED at 32.

[7] I&E Statement No. 3 at 27. Mr. Cline cites only to one decision in support of this claim.

[8] OSBA Statement No. 1 REVISED at 31 and footnote 56.

4. Revenue Allocation and Flex Rate Customers

Q. By way of background, please address the magnitude of the Company's proposed rate increase in this proceeding, and the large differences between your revenue allocation analysis and that of the other rate witnesses.

A. In this proceeding, the Company's claimed revenue deficiency is $156.0 million.[9] The Company proposes to recover that claimed deficiency with a $2.4 million increase in gathering system fees, a $0.9 million increase in late fees, and $152.7 million net increase in tariff charges. The tariff charges include a variety of charges and tariff riders that are generally related to base rates costs. A summary of the Company's proposed rate increases is shown in Table IEc-R1 below:

Table IEc-R1
Peoples Proposed Revenue Increases $mm

	Current Revenues	Proposed Revenues	Proposed Increase	Percent Increase
Customer and Delivery Charges	**$504.9**	**$678.6**	**$173.7**	**34.4%**
DSIC/STAS	$28.1	0	($28.1)	
TRS/TCJA	($38.6)	($34.2)	$4.3	
MFC/GPC/SCR	$10.1	$9.7	($0.4)	
Sub-Total Tariff Excl COG	**$501.3**	**$654.0**	**$152.7**	**30.5%**
Late Fees	$5.4	$6.4	$0.9	
Gathering Fees	$7.0	$9.4	$2.4	
Miscellaneous Revenues	$1.8	$1.8	$0.0	
Cost of Gas	$317.7	$317.7	$0.0	
Total	**$833.2**	**$989.2**	**$156.0**	**18.7%**
Sources: IEc WPR1 Revenue Allocation Rate Design				

Messrs. Cline, Johnson and Baudino all prepare their evaluations of the revenue deficiency using the $173.7 million figure shown in the first row of Table IEc-R1, whereas my analysis

[9] OCA Statement No. 2 at 4, I&E Statement No. 1 at 3.

was based on the non-gas tariff revenue increase of $152.7 million.[10] I used the $152.7 million for analysis and comparison in this proceeding for the following reasons.

First, the Company's proposed rates reflect the roll-in of the DSIC and, to a much smaller extent, the STAS.[11] As those charges are proportional to base rates, the reduction in the DSIC/STAS are directly related to the proposed increase in the case. Moreover, ratepayers are already paying those charges, and thus the actual bill impact when the proposed rates go into effect will be the increase net of the roll-in of DSIC charges. For that reason, in my experience, Pennsylvania utilities generally evaluate the rate increases based on the combined effects of the increase in the base tariff charges and the impact of zeroing out the DSIC.

Second, both the TRS and the TCJA are tax credit items, related to assets that are included in base rates costs.[12] The TCJA credit declines as a result of the filing, because the test year taxes are derived at the lower corporate income tax rate specified in the TCJA.

The MFC, GPC and SCR are tariff riders related to recovery of costs associated with the gas supply function beyond the cost of gas, including uncollectibles, procurement costs, and costs for administering the retail choice program. The costs associated with these functions are included in the Company's revenue requirement, and they are part of the costs allocated in the ACOSS.

[10] Mr. Cline makes reference to total revenues, but he appears to rely on the customer/delivery charge revenues shown in Table IEc-R1 for his recommendations.

[11] The Distribution System Improvement Charge ("DSIC") is a tariff mechanism through which costs related to investments made by regulated Pennsylvania public utilities above those reflected in regular rates may be directly passed through to customers, generally subject to a 5 percent cap. The State Tax Adjustment ("STAS") is a true-up mechanism related to changes in state taxes subsequent to those reflected in a base rates proceeding.

[12] The Tax Repairs Surcredit ("TRS") is a rate rider credit to PNG customers associated with the tax effects of a change in the depreciation method for PNG division assets. The Tax Cut and Jobs Act rider is a credit to ratepayers related to the federal government adoption of the TCJA in 2017, which lowered the statutory corporate income tax rate.

Thus, my comparison analysis in this testimony is generally based on the net $152.7 million increase, but I have included comparisons of revenue allocation proposals at the $173.7 million level.

Q. Please summarize the positions of the parties.

A. A summary of the results is shown in Table IEc-R2 ($152.7 million) and Table IEc-R3 ($173.7 million) below.

Table IEc-R2
Comparison of Revenue Allocation Proposals
All Non-Gas Tariff Revenues

	Total	Residential	SGS	MGS	LGS	LGS ML
Increase $000						
Peoples	152,716	118,734	18,305	16,398	1,209	-1,929
OSBA	152,717	118,421	16,811	11,854	5,631	0
I&E*	152,715	107,921	14,237	18,434	2,521	9,602
OCA I	152,715	88,875	21,746	32,357	60	9,678
OCA II	152,715	89,991	21,144	27,386	4,517	9,678
PII	152,715	125,697	19,230	17,493	-7,776	-1,929
Percent Increase						
Peoples	30.5%	34.1%	42.0%	29.3%	2.5%	-32.3%
OSBA	30.5%	34.0%	38.6%	21.2%	11.8%	0.0%
I&E*	30.5%	31.0%	32.7%	33.0%	5.3%	160.6%
OCA I	30.5%	25.5%	49.9%	57.9%	0.1%	161.9%
OCA II	30.5%	25.8%	48.6%	49.0%	9.5%	161.9%
PII	30.5%	36.1%	44.2%	31.3%	-16.3%	-32.3%

* The I&E revenue allocation is shown in the table at page 38 of I&E Statement No. 3, but that table appears to have an inadvertent arithmetic error in deriving the system average percentage increase. I expect that correcting this error would result in a very different revenue allocation proposal, in light of Mr. Cline's reliance on the P&A ACOSS method.

An alternative version of this Table using the $173.7 million increase is shown in Appendix A.

Sources: IEc WP R1 Revenue Allocation Rate Design

Table IEc-R3
Comparison of Revenue Allocation Proposals
Customer and Commodify Charges Only

	Total	Residential	SGS	MGS	LGS	LGS ML
Increase $000						
Peoples	173,739	132,254	19,862	18,436	3,187	0
OSBA	173,740	131,942	18,367	13,891	7,610	1,929
I&E*	173,738	121,442	15,793	20,472	6,429	9,602
OCA I	173,738	102,395	23,302	34,395	3,968	9,678
OCA II	173,738	103,511	22,700	29,424	8,425	9,678
PII	173,738	139,218	20,786	19,531	-5,797	0
Percent Increase						
Peoples	34.4%	38.0%	45.1%	32.3%	6.5%	0.0%
OSBA	34.4%	37.9%	41.8%	24.4%	15.5%	27.6%
I&E*	34.4%	34.9%	35.9%	35.9%	13.1%	137.2%
OCA I	34.4%	29.4%	53.0%	60.3%	8.1%	138.3%
OCA II	34.4%	29.8%	51.6%	51.6%	17.2%	138.3%
PII	34.4%	40.0%	47.3%	34.2%	-11.8%	0.0%

* The I&E revenue allocation is shown in the table at page 38 of I&E Statement No. 3, but that table appears to have an inadvertent arithmetic error in deriving the system average percentage increase. I expect that correcting this error would result in a very different revenue allocation proposal, in light of Mr. Cline's reliance on the P&A ACOSS method.

An alternative version of this Table using the $173.7 million increase is shown in Appendix A.

Sources: IEc WP R1

Both Tables IEc-R2 and IEc-R3 show that the Residential class represents a large share of current rates revenues, and is assigned a large share of the overall rate increase by all parties. Peoples, OSBA, PII and (to a lesser extent) I&E all assign that class rate increases modestly above system average, while OCA assigns a large but modestly below average increase.

Small commercial (and a few industrial) customers in Rate SGS attract above-average increase recommendations from all parties, ranging substantially from 32.7 to 49.9 percent.

Medium commercial and industrial customers in Rate MGS similarly face a wide array of proposed increases, with OCA proposing increases far in excess of system average, I&E and PII proposing increases modestly above system average, Peoples proposing a modestly below average increase and OSBA with a below average increase.

Increases to the customers who are included in the LGS and the proposed LGS Mainline ("LGS ML") class are complicated by the lack of information regarding the current rate revenues associated with the customers who are implicitly included in the LGS ML class in the COSS analysis.[13] For the purpose of preparing my analysis of the Company's proposed revenue allocation split between LGS and LGS ML, I relied on the values reported in the Exhibit 11 workbook, at worksheet Revenue Recon 1, cells Z84 to AB90. That exhibit indicates that the current LGS ML base rate revenues are $6.997 million, with a net credit of $1.018 million in unspecified riders (which I believe to be primarily the TRS/TCJA credits less the DSIC charge). The COSS exhibit does not specify the Company's proposed base rate revenues for LGS ML, although I expect that those are unchanged as the LGS ML customers are all flex rate customers. However, the COSS exhibit does indicate that the proposed LGS ML rates will have a rate rider credit of $2.947 million, presumably reflecting the DSIC reset. This implies a net reduction in LGS ML revenues of $2.974 - $1.018 = $1.956 million in the net charges to the LGS ML customers, which is the value shown in Table IEc-R2.[14]

In evaluating the other parties' revenue allocation proposals, I assume that they take no exception to the Company's proposed change in rate rider revenue for LGS ML, and thus I include that effect in the net increase shown in Table IEc-R2.

With that background, the parties all propose an increase for the LGS class (excluding LGS ML customers) that is well below the system average, with PII proposing a large rate decrease. (Note the PII decrease shown in Table IEc-R2 reflects the combined effects of

[13] OSBA requested a breakout of LGS ML revenues in OSBA-I-6(a), but the Company declined to provide that information.

[14] To my knowledge, the Company has not explained why flex rate LGS ML customers should be assigned a net rate decrease in this proceeding.

Mr. Baudino's proposed base rate reduction and the reduction from the DSIC being zeroed out.) For the LGS ML customers, I&E and OCA generally advocate setting the presumed revenues from the class at allocated cost, whereas Peoples, PII and OSBA generally apply a zero base rate increase.

Q. Please expand on the issue of revenue allocation to flex rate customers and the positions of the parties with respect to Rate LGS ML.

A. By definition, revenues from flex rate customers are not based on tariff charges, but are set through negotiation based on the cost of the customers' competitive alternatives. The Company generally agrees that rate discounts to flex rate customers should be no more than that necessary to prevent those customers from leaving the system. To my knowledge, no party has challenged the Company's compliance with that principle. Thus, it can be reasonably assumed that the current rates being charged to all flex rate customers represent the maximum revenues for the class, and that no increase to those customers is possible without a significant risk of losing those customers to their competitive alternatives.

For Rate LGS ML, Peoples' witness Mr. Zarumba indicates that LGS ML customers ". . . are all served under special contracts but are classified as LGS customers." [15]

The positions of the parties are as follows.

Mr. Cline representing I&E makes the very reasonable proposals that (a) Peoples be required to regularly update its competitive analyses for flex rate customers, and (b) that it be required to separately allocate costs to flex rate customers in the next base rates case. I agree with both recommendations. However, I believe that segregating the LGS ML class for cost allocation goes a long way toward achieving Mr. Cline's cost allocation recommendation, because the LGS ML customers are all flex rate customers and represent a significant share of the overall flex rate revenues.[16] However, Mr. Cline assigns a $9.6 million increase to

[15] Peoples Statement No. 15 at 47.

[16] Base rate revenues for Rate LGS ML are $7.0 million, which represents the vast majority of the volumetric flex rate revenues reported in the proof of revenues ($8.2 million), as well as the vast majority of the current rate revenues for flex rate revenues reported in OSBA-I-29 (which are confidential).

that class (offset somewhat by the DSIC effect), to bring revenues in line with allocated cost. Mr. Cline does not explain how a rate increase can be assigned to flex rate customers, much less an increase of over 160 percent.

OCA witness Mr. Johnson recognizes that LGS ML customers are negotiated rate customers and that ". . . their bills will be unaffected by gradualism constraints." Nevertheless, Mr. Johnson proposes to increase revenues from LGS ML customers by $9.7 million in both scenarios (also somewhat offset by rate rider effects) to reflect the fully allocated cost of service, because ". . . Mainline is a construct which is supposed to prevent inter-class subsidies."[17] I respectfully disagree with Mr. Johnson's characterization of Rate LGS ML. Rate LGS ML is a separate class of customers who have a very different cost to serve than other Rate LGS customers, because they do not use the gas distribution system. As such, a separate class is justified based on cost characteristics. Segregating the Rate LGS ML customers has the added benefit that it segregates most of the flex rate customers, which, as Mr Cline correctly notes, aids in determining whether the non-flex rate LGS customers are or are not covering their allocated costs.[18]

As I interpret it, both the Company and PII assume that the current rates for the LGS ML customers will remain in effect, and that the LGS ML customers will benefit from zeroing out the DSIC. I disagree with this assumption. Because parties generally agree that revenues from flex rate customers should be maximized, there is no justification for the Commission to grant a net rate reduction for this class, particularly recognizing that the class is currently under-recovering allocated costs.

My proposal is that the revenue increase to LGS ML customers, inclusive of rate rider effects, should be zero. The LGS ML flex rate customers obviously find the current rates inclusive of the DSIC charges to be acceptable. To the extent the Company is contractually obligated to zero out the DSIC without that reduction being rolled into base rates, any

[17] OCA Statement No. 4 at 30.

[18] Mr. Baudino makes a similar argument. PII Statement No. 1 at 11.

shortfall should be the responsibility of the Company for failing to maximize flex rate customer revenues.

Q. Mr. Baudino makes the argument that the revenue shortfall associated with flex rates to the LGS ML customers should not be assigned entirely to the Rate LGS class for recovery, but should be borne by all rate classes. Do you agree?

A. I do. Retaining the margin from customers who would otherwise opt for competitive alternatives benefits all customers. Thus, the shortfall between fully allocated costs and market-based revenues should reasonably be shared among all customer classes. In my direct testimony, I did not make an explicit adjustment for this reallocation, as I concluded that much of the shortfall associated with flex rates was cost-based. I therefore applied my proposed revenue allocation mechanism to the combined LGS classes. This resulted in an allocation to the combined LGS class of $5.6 million, reflecting my alternative allocation of costs.

To evaluate whether this allocation was unreasonable if no increase is assigned to the LGS ML customers, I developed two alternative reallocations of the LGS ML shortfall to the other rate classes, based on the results of my alternative ACOSS. As detailed in RDK WPR1 Revenue Allocation Rate Design, that analysis implies a revenue allocation of $4.5 to $5.1 million to the non-ML LGS class (on the $142.7 million increase basis). I therefore conclude that it is not unreasonable to apply the LGS revenue allocation proposal in my direct testimony to the non-ML LGS class, while setting the net increase for the LGS ML class to zero.

Q. What are the implications of the various proposals on rate increases for the SGS and MGS customers in the PNG Division and the PG Division?

A. No party challenged the Company's proposal to harmonize rates for the two divisions. For both the SGS and MGS classes, this generally requires that PNG Division customers face an increase that is modestly larger than that for the combined class, and the PG Division customers generally see a rate decrease.

I therefore evaluated the implications of each of the revenue allocation proposals for the SGS and MGS rate classes. To do so, I accepted the Company's proposed customer charge for

each class, and I adjusted the volumetric charges to produce each party's recommended revenue allocation for each class. The implications of the various parties' revenue allocation proposals on the SGS and MGS rate classes for the PNG Division and the PG Division are shown in Table IEc-R4, based both on the $152.7 million and $173.7 million increases. The proposed class increases are compared to the common "rule-of-thumb" cap for rate gradualism, namely an increase that is 1.5 times system average.

Table IEc-R4
Implications of Parties' Revenue Allocation Proposals by Division
Percent Increase

	RATE SGS			RATE MGS		
	PNG	**PG**	**Combined**	**PNG**	**PG**	**Combined**
All Non-Gas Revenues ($152.7 million increase): 1.5X system average = 45.7%						
Peoples	49.8%	-10.6%	42.0%	35.8%	-14.0%	29.3%
OSBA	46.2%	-12.7%	38.6%	27.2%	-19.3%	21.2%
I&E	39.9%	-16.3%	32.7%	39.6%	-11.6%	33.0%
OCA I	58.2%	-5.7%	49.9%	65.8%	4.6%	57.9%
OCA II	56.7%	-6.6%	48.6%	56.4%	-1.2%	49.0%
PII	52.1%	-9.3%	44.2%	37.8%	-12.7%	31.3%
Customer/Commodity Charge Only ($173.7 million increase): 1.5X system average = 51.6%						
Peoples	54.8%	-15.8%	45.1%	40.5%	-19.0%	32.3%
OSBA	51.2%	-17.8%	41.8%	32.0%	-23.8%	24.4%
I&E	45.0%	-21.2%	35.9%	44.3%	-16.8%	35.9%
OCA I	63.2%	-11.3%	53.0%	70.2%	-1.8%	60.3%
OCA II	61.7%	-12.1%	51.6%	60.9%	-7.1%	51.6%
PII	57.1%	-14.6%	47.3%	42.5%	-17.8%	34.2%

Source: IEc WPR1 Revenue Allocation Rate Design

As shown, the Company's proposal for the PNG SGS class is modestly higher than the 1.5 times system average rule-of-thumb constraint for gradualism. The PII revenue allocations for the PNG SGS class are further above the normal limit. And the OCA revenue

allocations, even adjusted for gradualism, produce increases for both the PNG SGS and PNG MGS customers that are well in excess of the normal limit for gradualism, with eye-popping increases up to 70 percent.

Table IEc-4 would appear to indicate that parties other than I&E and OSBA gave little heed to the implications for rate class increases on a division basis, which of course is how current rates are set. Thus, if the Commission adopts a revenue allocation proposal offered by Peoples, OCA, or PII, I recommend that the Company's proposal to consolidate the rates for the PNG and PG division be rejected, and that separate rates be maintained to avoid unduly high percentage increases on the rates paid by the PNG Division SGS and MGS customers.

Q. Please summarize your concerns with the revenue allocation recommendations of the other parties.

A. My review is summarized as follows:

Intervenor ACOSSs rely on inappropriate sub-functionalization of mains costs (Peoples, OCA, I&E, PII);

Intervenor ACOSSs rely on a design day demand allocator for Rate LGS that is well below actual peak demands (Peoples, OCA, I&E, PII);

Some intervenor revenue allocation proposals are based solely on the P&A ACOSS method, which is not consistent with cost causation (OCA, I&E);

Some intervenor revenue allocation proposals assign large rate increases to negotiated "flex" rate customers that cannot be imposed without risking the loss of the customers and their associated margin (OCA, I&E);

Some intervenor revenue allocation proposals for the small and medium general service classes result in rate increases that exceed the normal limits for rate gradualism on a combined class basis (OCA for SGS and MGS), and on a current divisional rate class basis (Peoples SGS, OCA SGS and MGS, PII SGS).

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

EXHIBIT IEc-R1

IEc ELECTRONIC WORKPAPER

RDK WPR1 Revenue Allocation and Rate Design*

THE ABOVE REFERENCED WORKPAPER (EXHIBIT IEc-R1) IS AVAILABLE IN EXCEL ONLY; THEREFORE, ALL PARTIES WILL BE SERVED WITH THE EXCEL WORKPAPER SIMULTAEOUSLY TO SERVICE OF REBUTTAL TESTIMONY

EXHIBIT IEc-R2

REFERENCED NON-CONFIDENTIAL
INTERROGATORY RESPONSES

OSBA-I-6**

****ALL PARTIES WERE PREVIOUSLY SERVED WITH THE ABOVE-REFERENCED INTERROGATORIES (EXHIBIT IEc-R2); THEREFORE, IF ANY PARTY WISHES TO REQUEST THE ABOVE-REFERENCED INTERROGATORIES, PLEASE CONTACT STEVEN C. GRAY AT SGRAY@PA.GOV****

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**Docket No. R-2023-304459**
PEOPLES NATURAL GAS COMPANY LLC	:	

VERIFICATION

I, Robert D. Knecht, hereby state that the facts set forth in the Rebuttal Testimony labelled OSBA Statement No. 1-R and associated Exhibits IEc-R1 through IEc-R2 are true and correct to the best of my knowledge, information, and belief, and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 19 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: April 18, 2024

Robert D. Knecht

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Peoples Natural Gas Company LLC (Peoples Natural Gas Division and Peoples Gas Division) Base Rate Case Filing Original Tariff GAS – PA PUC No. 48	**:**	**Docket No. R-2023-3044549 C-2024-3045385**

CERTIFICATE OF SERVICE

I hereby certify that true and correct copies of the foregoing have been served via email (*unless otherwise noted below*) upon the following persons, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

The Honorable Mary D. Long
Administrative Law Judge
Pennsylvania Public Utility Commission
Piatt Place, Suite 220
201 Fifth Avenue
Pittsburgh, PA 15222
malong@pa.gov

Scott B. Granger, Esquire
Bureau of Investigation and Enforcement
Commonwealth Keystone Building
400 North Street, 2nd Floor West
Harrisburg, PA 17105
sgranger@pa.gov

Gina L. Miller, Esquire
Jacob D. Guthrie, Esquire
Harrison W. Breitman, Esquire
Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101
OCAPNG2023BRC@paoca.org

Elizabeth R. Marx, Esquire
John W. Sweet, Esquire
Pennsylvania Utility Law Project
118 Locust Street
Harrisburg, PA 17101
pulp@pautilitylawproject.org

Joseph L. Vullo, Esquire
Burke Vullo Reilly Roberts
1460 Wyoming Avenue
Forty Fort, PA 18704
jlv@bvrrlaw.com

Meagan Moore, Esquire
PNG Companies LLC
375 North Shore Drive, 4th Fl.
Pittsburgh, PA 15212
meagan.moore@peoples-gas.com

Michael W. Gang, Esquire
Anthony D. Kanagy, Esquire
Nicholas A. Stobbe, Esquire
Post & Schell, P.C.
17 North Second Street
12th Floor
Harrisburg, PA 17101-1601
mgang@postschell.com
akanagy@postschell.com
nstobbe@postschell.com

Charis Mincavage, Esquire
Adeolu A. Bakare, Esquire
Lisa Charleton, Esquire
McNees Wallace & Nurick, LLC
100 Pine Street
Harrisburg, PA 17108
cmincavage@mcneeslaw.com
abakare@mcneeslaw.com
LCharleton@mcneeslaw.com

Kevin J. Moody, Esquire
Pennsylvania Independent Oil & Gas Assoc.
212 Locust Street, Suite 600
Harrisburg, PA 17101-1510
kevin@pioga.org

DATE: April 19, 2024

/s/ Steven C. Gray

Steven C. Gray
Senior Attorney
Assistant Small Business Advocate
Attorney I.D. No. 77538

COMMONWEALTH OF PENNSYLVANIA

May 3, 2024

The Honorable Mary D. Long
Administrative Law Judge
Pennsylvania Public Utility Commission
Piatt Place, Suite 220
201 Fifth Avenue
Pittsburgh, PA 15222

Re: Peoples Natural Gas Company LLC (Peoples Natural Gas Division and Peoples Gas Division) Base Rate Case Filing Original Tariff GAS – PA PUC No. 48 / Docket No. R-2023-3044549

Dear Judge Long:

Enclosed please find Surrebuttal Testimony and Exhibits of Robert D. Knecht, labelled OSBA Statement No. 1S and associated Exhibits IEc-S1 and IEc-S2, on behalf of the Office of Small Business Advocate ("OSBA"), in the above-captioned proceeding.

As evidenced by the enclosed Certificate of Service, all known parties will be served, as indicated.

If you have any questions, please do not hesitate to contact me.

Sincerely,

/s/ Steven C. Gray

Steven C. Gray
Senior Attorney
Assistant Small Business Advocate
Attorney ID No. 77538

Enclosures
cc: PA PUC Secretary Rosemary Chiavetta (Cover Letter & Certificate of Service only)
Mark D. Ewen / Robert D. Knecht
Parties of Record

OSBA Statement No. 1S

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**Docket No. R-2023-3044549**
	:	
PEOPLES NATURAL GAS COMPANY LLC	:	

Surrebuttal Testimony and Exhibits of

ROBERT D. KNECHT

On Behalf of the

Pennsylvania Office of Small Business Advocate

Topics:

Allegheny Valley Connector
Gathering System
Cost Allocation
Flex Rates
Revenue Allocation and Rate Harmonization
Rate Design
Weather Normalization Clause
UPC Trends

Date Served: May 3, 2024

Date Submitted for the Record: _____

SURREBUTTAL TESTIMONY OF ROBERT D. KNECHT

1. Introduction and Context

Q. Mr. Knecht, please state your name and briefly describe your qualifications.

A. My name is Robert D. Knecht. I submitted direct testimony, rebuttal testimony and associated exhibits earlier in this proceeding, and my qualifications were presented therein.

Q. Please describe the purpose of this surrebuttal testimony.

A. This surrebuttal testimony responds to the rebuttal testimony submitted by the following witnesses:

- Company witnesses Mr. Andrew P. Wachter, Ms. Carol A. Scanlon, Ms. Dawn M. Folks, and Mr. Ralph Zarumba;
- Pennsylvania Office of Consumer Advocate ("OCA") witness Mr. Clarence L. Johnson;
- Peoples Industrial Intervenors ("PII") witness Mr. Richard A. Baudino.

This testimony is organized by subject matter, and it follows the same organization as my direct testimony.

2. Review of Non-Residential Rate Classes

No rebuttal testimony was presented on this subject.

3. Allegheny Valley Connector ("AVC")

Q. Please address the testimony surrounding the AVC issue.

A. The Company describes the AVC system as upstream transmission and storage capacity. Beyond that, the Company provided little information regarding the use of the AVC system in direct testimony and OSBA discovery, and it similarly provides little in rebuttal. The costs are deemed to be gas supply costs, which are recovered in non-bypassable "demand" charges to all customers in each rate class, both sales and transportation service.

Ms. Scanlon's rebuttal testimony accurately and concisely summarizes my concerns regarding the Company's method for recovering these costs as ". . . (1) the allocation of [AVC] costs has not been updated since about 2013, (2) the recovery of [AVC] costs from both sales and transportation customers does not appear to reflect the relative use of the AVC system, and (3) the appropriateness of applying AVC costs to all transportation customers [who may not use the AVC capacity].[1]

Ms. Scanlon generally agreed with the recommendation in my direct testimony that this issue be deferred to the Company's current Section 1307(f) PGC case. From a procedural perspective, I now believe this issue would be more thoroughly addressed if the Company would undertake and present a careful evaluation of the issue in a rate proceeding, rather than attempting to address the issue starting in the middle of the current PGC case.

I therefore recommend that the Commission direct Peoples to undertake an evaluation of the cost recovery method for the AVC costs to address the three issues cited by Ms. Scanlon, and that it file its results in the 2025 Section 1307(f) proceeding.

4. Gathering System Rate Treatment

Q. Please summarize the issues regarding the treatment of gathering system costs.

A. Peoples' proposes to recover about 29 percent of Peoples' gathering system costs from the gas producers on the system.[2] For the balance of the costs, the Company proposes to socialize these costs, allocating them among rate classes in a way that does not reflect class usage of the gathering system, and requiring all customers in each class to pay for the system regardless of whether the customer benefits from the system. In general, the gathering system is disproportionately used by transportation customers.

[1] It should be recognized that while Peoples socializes the AVC costs, the AVC capacity disproportionately benefits Peoples' PGC customers. To my knowledge, transportation customers have not objected to this method in this proceeding.

[2] Exhibit RNZ-3 page 2.

A better method would be to recover gathering system costs from the PGC customers, the NGSs, and the gas producers who use the system.[3] This approach would result in a more accurate assignment of costs in two ways. First, there would be a more accurate allocation of the costs among rate classes based on actual usage. Second, costs would be recovered from the specific customers who benefit from the gathering system. I therefore recommended that the Company evaluate whether the recovery of net gathering system costs could be recovered directly from the customers who benefit from that system. I laid out a set of detailed considerations, including the potential for recovering the costs from the PGC charge and gas supply tariff charges to NGSs.

Mr. Zarumba provides non-quantitative rebuttal testimony that both PGC and transportation customers benefit from the gathering system, and therefore both groups should pay for that system. That issue was never in doubt. The problem is that Mr. Zarumba makes no quantitative showing that his allocation methodology reasonably reflects usage of the gathering system.

The questions that I raised in my direct testimony are (a) whether the costs of the gathering system are reasonably shared between PGC sales customers and transportation customers, and (b) whether the use of the gathering system by transportation customers is reasonably recovered by the specific customers who use that system. As shown in my direct testimony, the answer to both questions under the Company's proposal is "no." Mr. Zarumba's rebuttal addresses none of my concerns. The basic issue is that Mr. Zarumba's method disproportionately recovers costs from sales customers.

Mr. Wachter argues only that gathering system costs are base rate costs, and that Peoples is legally precluded from recovering such costs in the PGC charge. While I cannot comment on Mr. Wachter's legal analysis, I conclude that his concern is not a bar to developing a tariff mechanism for recovering gathering system costs from the specific customers who benefit from them. For example, for the PGC customers, it would be straightforward to establish a base rates charge that applies only to PGC customers associated with system gas supply

[3] A reasonable share of costs related to serving load customers on the gathering system should be deducted from the gathering system revenue requirement.

procured through the gathering system, much in the way the current GPC charge currently functions.

For transportation customers, Mr. Wachter makes no assertions regarding the legality of recovering these from the gas suppliers who use the gathering system for transportation service. As these suppliers are using utility assets to transport gas, they should be treated like any other base rates customer.

I therefore retain my recommendation that, for its next base rates proceeding, the Company prepare and file an evaluation as to how the Company can more accurately recover the costs of the gathering system from the customers who benefit from that system.

5. Cost Allocation

5.1 Cost Allocation Overview

No rebuttal testimony addressed this issue.

5.2 Mains Cost Functionalization

Q. Please summarize the mains cost functionalization debate.

A. In my direct testimony, I objected to the Company's sub-functionalization of mains costs between the regulated-pressure and the low-pressure systems. While the Company's method attempts to reflect the fact that larger customers do not use the low-pressure system, it fails to recognize that portions of the regulated system are not used to serve small customers, and that many smaller customers also do not use the low pressure system. This inaccurately biases the cost allocation in favor of large customers. Until these errors are fixed (as Columbia Gas did), mains should be allocated in aggregate.

The Company neither rebutted this testimony, nor did it modify its allocated cost of service study ("ACOSS") to reflect my recommended modification.

The OCA remained silent on this issue.

Mr. Baudino, representing PII, opposes my recommendation, arguing that it is inappropriate to allocate low pressure system costs to Rate LGS customers who do not use that system. I agree. However, I also agree that it is inappropriate to allocate the portions of the regulated

pressure system that are dedicated to large customers to those customers who do not use it, and it is inappropriate to allocate the low-pressure system to small customers who do not use it. Moreover, there is solid Commission precedent that rejects the Company's approach.[4]

If Peoples wants to move closer to a direct assignment method for mains costs that are differentiated based on service pressure, it should do so on an unbiased and more careful basis. It has not.

I therefore retain the approach in my direct testimony, and I apply consistent treatment of regulated-pressure and low-pressure mains in my surrebuttal ACOSS.

5.3 Mains Cost Classification

Q. Please summarize the mains cost classification debate.

A. In this proceeding, three witnesses argue that cost causation considerations imply that mains costs should be classified into peak demand and customer components (the "CD" method), namely Mr. Zarumba (Peoples), Mr. Baudino (PII) and me (OSBA). We agree that the minimum system approach to classification will overstate the customer component of costs due to the load carrying capability of the minimum system method, although we disagree with respect to how to do so. Mr. Zarumba adopts an adjustment mechanism that remains unexplained, which Mr. Baudino apparently support. I proposed consideration of the zero-intercept methodology. Despite this cost causation agreement, we all use a combination of the results from the CD method and the peak-and-average ("P&A") method to develop revenue allocation proposals, to reflect Commission precedent.

Mr. Cline representing I&E supports the P&A method for mains classification for reasons of Commission precedent but did not file rebuttal testimony. Mr. Johnson (OCA) also supports the P&A method.

Regarding this fundamental disagreement, I conclude that the basic arguments for the relative advantages of the two approaches are set out in direct and rebuttal testimony of the various parties and need no further argument.

[4] Pa. PUC v. Nat'l Fuel Gas Distribution, 83 Pa. PUC 262, 318-321 (1994).

Q. Please respond to the critques of your zero-intercept classification analysis.

A. Mr. Zarumba acknowledges that the zero-intercept approach is a standard one, and he offers no rebuttal to my direct testimony.

Mr. Baudino complains that I did not present a detailed description of the zero-intercept analysis in the text of my testimony, but merely provided my detailed workpapers. As Mr. Baudino also acknowledges, the zero-intercept analysis is one of the standard approaches, and the methodology for undertaking such analysis is relatively straightforward. I am quite certain Mr. Baudino is capable of understanding the analysis in my workpapers. Moreover, Mr. Baudino would subject me to a much higher standard than he applies to the Company. Like my zero-intercept analysis, the Company makes a quantitative adjustment in its filing for the load carrying capability of the minimum system. That method was neither included nor detailed in its filing and was demonstrated (without explanation) only through discovery. Even with the benefit of the discover, the Company's method is (a) not standard, (b) not explained in testimony, and (c) shown only in the details of Mr. Zarumba's workpapers. Why Mr. Baudino does not require the same detailed explanation from the Company that he apparently requires of me is unknown.

Moreover, regarding my testimony, I responded to three rounds of interrogatories from the Company regarding my direct testimony, and I made myself available to both the OCA and the Company for informal discovery regarding questions relating to my direct testimony and associated workpapers. Mr. Baudino undertook no efforts to pursue formal or informal discovery with respect to any questions he may have had regarding my workpapers. As such, I believe that Mr. Baudino's complaint has no merit.

Mr. Johnson takes the position that the zero-intercept approach cannot be used because it involves extrapolating the cost of mains outside the range of the independent variables in the statistical analysis, namely by applying the regression equation to a theoretical zero-diameter main. This application is an example of "unconditional forecasting," in that the independent variables are known with certainty. Under these conditions, it is true that the level of uncertainty for the forecast is higher than that for estimated values within the range of actual

inputs.[5] Nevertheless, it is obvious than many economists use historical regression analysis to produce forecasts that rely on independent variables beyond those for the historical period.

Moreover, the statistical analysis in the zero-intercept construct is hardly the only aspect of uncertainty in the allocators applied to mains. Load forecasts, which support the average demand used in the P&A allocator, are often developed using regression analysis, both for trends and weather sensitivity. Similarly, design day demands are typically developed based on a historical statistical relationship between load and temperature, and that statistical equation then applied to extreme design day conditions. Doing so almost always involves extrapolating the regression results that lie well beyond the actual historical temperature observations used in the regression analysis. These design day demands are then used to develop the peak component of the P&A allocator. By Mr. Johnson's standard, both the peak and the average demand allocators in his recommended P&A allocator should be rejected, because they too are very uncertain, and they involve extrapolation of a historical pattern beyond the actual historical levels.

The basic facts regarding my zero-intercept analysis are that both Mr. Zarumba and Mr. Baudino concede that the zero-intercept is one of the standard approaches for addressing the load carrying capability of the minimum system. The data I relied upon was developed by Mr. Zarumba, and it reflects the Company's actual costs to install mains by material and by diameter, adjusted for inflation over the long-term. In my experience, the development of this data set represents best practices, and it is better than that used by some other utilities. Consistent with standard practice, I prepared statistical regression analyses, split between steel and plastic mains, and further split between the PNG and PG divisions, that showed the relationship between the Company's actual cost for mains and the diameter of the mains. Not surprisingly, the results are dominated by the PNG division because it is ten times the size. I employed linear and quadratic forms for the statistical analysis, also consistent with normal practice, and I selected the statistical equation with the better fit.

[5] Econometric Models and Economic Forecasts, Pindyck, R.S. and D.L. Rubinfeld, McGraw-Hill Book Company, c. 1956, Section 6.1, pp. 159-168.

In short, all of the methods offered in this proceeding for allocating mains costs involve significant uncertainty. Perhaps the only conclusion that can be stated with absolute confidence is that gas distribution utilities cannot and do not size mains to meet average demand, because if they did so, their customers would freeze in the dark.

5.4 Design Day Demand Allocator

Q. Please summarize the design day demand allocator issue.

A. In my direct testimony, I cited to the Company's filing Exhibit No. 17, COS-10, which indicated that the actual peak day demands for the LGS class were much higher than the design day demands used in the Company's ACOSS. In so doing, I had assumed that the Company had daily metering information for a significant portion of the LGS loads.

Peoples' witness Dawn Folks responds to my concern by explaining that the Company's filing material was inaccurate and unreliable, although the Company does not appear to have corrected its exhibit.

However, I reviewed the design day estimates that I developed by rate class using statistical analysis of monthly data, and it does not appear that the Company's reported actual values for peak day conditions for the LGS class are consistent with my statistical analysis of the temperature sensitivity of the LGS load. I therefore conclude that Ms. Folks rebuttal appears to be correct, and I modified my surrebuttal ACOSS to use the Rate LGS design day demand value developed by the Company.

Mr. Baudino also raises issues regarding the derivation of the LGS design day demand in his rebuttal testimony. While I respectfully disagree with his analysis in many respects, his concern is mooted by my adoption of the Company's parameter in my surrebuttal ACOSS.

5.5 Technical Issues

Q. Please summarize the technical issues.

A. In my direct testimony, I identified technical errors and inconsistencies in the allocation factors for Accounts 902, 908 and the collections allocator, and I proposed alternatives. In rebuttal, Mr. Zarumba generally accepted those corrections, with his own modest adjustments and corrections to my analysis. In total, the differences between Mr. Zarumba's

rebuttal allocation factors and my proposed factors have minimal impact on the results of the cost allocation study, I accept his adjusted allocators in my surrebuttal ACOSS.

As discussed in my rebuttal testimony, I agreed with Mr. Johnson that costs for large customer service should be recovered only from large customers, but I proposed a different allocator than did Mr. Johnson. In his rebuttal, Mr. Zarumba also agreed conceptually with Mr. Johnson, but he made some modest adjustments to the underlying costs. I incorporated all of these considerations in my surrebuttal ACOSS. The overall effect of these changes is also small.

5.6 Cost Allocation Results

Q. How do the results of your cost allocation analysis compare to those in your direct testimony?

A. A working electronic version of my surrebuttal ACOSS is filed with this testimony as IEc WPS1 Surrebuttal ACOSS. A comparison of class revenue-cost ratios at present rates is shown in Table IEc-S1 below.

Table IEc-S1
Comparison of Cost Allocation Results
Normalized Revenue-Cost Ratios at Current Rates

	Peoples CD Rebuttal	Peoples A&E Rebuttal	IEc ZI Direct	IEc ZI Surrebuttal
Residential	91.8%	103.7%	97.4%	96.6%
SGS	97.2%	86.9%	96.5%	94.6%
MGS	127.0%	83.2%	115.4%	112.5%
LGS	161.3%	111.5%	106.6%	118.9%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Sources: IEc WP7 IEc ACOSS Alternative CONFIDENTIAL

As shown in Table IEc-S1, my surrebuttal ACOSS reduces costs assigned to the LGS class and shifts those costs to the other classes. This change is driven primarily by modifying the design day demand allocator for the LGS class to reflect Peoples' rebuttal testimony that it filed an erroneous exhibit.

6. Flex Rate Customers and Rate MLS

Q. What aspects of your testimony on the subject of flex rate customers and Rate MLS were rebutted?

A. Mr. Baudino indicates that I failed to reflect that Rate MLS customers are negotiated rate customers, and that any rate increase assigned to the LGS class will be borne by non-MLS customers. I acknowledged this oversight in my rebuttal testimony, and I have incorporated that consideration into my surrebuttal revenue allocation proposal below.

7. Revenue Allocation and Rate Harmonization

Q. What are the implications of the previous sections on your recommendations for revenue allocation and rate harmonization?

A. Based on the results of the surrebuttal ACOSS, I updated my revenue allocation analysis using the methodology applied in my direct testimony, and with the considerations that I included in my rebuttal testimony. I therefore developed two alternative revenue allocation options for this surrebuttal.

The first is based on the methodology that I used in my direct testimony, in which the shortfall from the LGS-MLS rate class is not reallocated among the other rate classes. This approach would be consistent with the positions of the Company and OCA that any shortfall from the LGS-MLS class should be recovered from other LGS customers.

However, as I explained in my rebuttal testimony, I agree conceptually with Mr. Baudino that retaining the competitive LGS-MLS customers benefits all customers, and that a reallocation is therefore appropriate.[6] I therefore developed an alternative revenue allocation proposal with a reallocation of the LGS-MLS shortfall. As was the case in my rebuttal analysis, I considered two alternative methods for reallocating the LGS-MLS shortfall in this analysis. I also retained my recommendation that no rate increase be assigned to any class.

[6] I have consistently taken this position in numerous base rates proceedings in Pennsylvania where discounted flex rates are justified by competitive conditions.

The details of my proposal are shown in IEc WP2S Revenue Allocation Surrebuttal. A summary is shown in Table IEc-S2 below.

Table IEc-S2
IEc Surrebuttal Revenue Allocation Proposals

	Peoples Proposal		IEc Surrebuttal No MLS Reallocation		IEc Surrebuttal With MLS Reallocation	
	$mm	**%**	**$mm**	**%**	**$mm**	**%**
Residential	$118.73	34.1%	$120.41	34.6%	$122.15	35.1%
SGS	$ 18.31	42.0%	$ 17.41	40.0%	$17.63	40.5%
MGS	$ 16.40	29.3%	$ 12.65	22.6%	$12.93	23.1%
LGS	($0.72)	-1.5%	$2.24	4.2%	$0	0.0%
LGS-MLS	--	0.0%			$0	0.0%
Total	**$152.72**	**30.5%**	**$152.72**	**30.5%**	**$152.72**	**30.5%**

Revenue values reflect all class revenues excluding gas costs.
Sources: IEc WPS2 Revenue Allocation Surrebuttal

As shown in Table IEc-S2, my revenue allocation proposals are only modestly different from that offered by the Company, with the largest impact being a lower increase for the MGS rate class. This difference reflects primarily my alternative sub-functionalization of mains costs as discussed above. Also, with the modification to the design day demand allocators, my approach implies a zero increase for the Rate LGS class when the shortfall from the competitive LGS-MLS class is reallocated to all other classes.

Q. Is this proposal consistent with rate gradualism?

A. The rule-of-thumb for rate gradualism in Pennsylvania has generally been that no rate class should experience an increase that is more than 1.5 times the system average. As I explained in my direct testimony, this evaluation should be undertaken for the PNG and PG divisions separately, as that is how the rate increases will be imposed. I also indicated that the Company's proposal would result in an increase for the PNG Division SGS class that is more than 1.5 times the system average.

No party submitted rebuttal to this aspect of my direct testimony.

With the changes to the cost allocation and revenue allocation calculations discussed above, my revenue allocation proposals result in an increase for the PNG Division SGS class of at least 1.56 times the system average. To keep the PNG Division SGS increase at 1.50 times system average, $0.94 million would need to be shifted away from that class. That amount could be shifted to other rate classes, or it could be shifted to the PG Division SGS class (which is assigned a rate decrease). The latter approach would defer full harmonization of the base rate tariff charges until the next base rates case.[7]

8. Rate Design Issues

Q. Please summarize your rate design recommendations from your direct testimony.

A. For the SGS class, the base rate tariff consists of a monthly customer charge, differentiated for customers above and below 500 mcf per year, and a volumetric charge. I did not take issue with the Company's proposal. For the MGS class, the base rate tariff consists of a monthly customer charge, differentiated for customers above and below 2500 mcf per year, and a volumetric charge. I concluded that the allocated customer cost for this class was well below the current charges, and therefore no increase in the customer charge was justified.

Q. Did any party rebut these recommendations?

A. No.

9. Normal Heating Degree Days and the Weather Normalization Mechanism

Q. In your direct testimony, you expressed concerns about the proposed WNA producing anomalous results, particularly in periods with relatively low actual levels of heating degree days ("HDDs") or when customers have relatively high usage due to factors other than HDDs. How does the Company respond?

A. Mr. Zarumba conducted an analysis of the impact of the proposed WNA on the Company's historical bills for the past five years, and he concludes that anomalous results occur only in 0.07 percent of the bills. However, Mr. Zarumba limits his definition of anomalous results

[7] Note that even under the Company's proposal PG Division SGS customers will be subject to the TCJA rider which will not apply to the PNG Division customers.

to cases in which the base bill increase is over 100 percent. That is quite a high standard for an anomaly.

Moreover, Mr. Zarumba's analysis does not attempt to identify how often customers have high usage rates that are not related to heating degree days. Thus, for a customer who has an unusually high gas use in a particular month that is due to factors other than temperature (e.g., houseguests, or a small commercial customer with a surge in business activity), a month in which HDDs are "only" 50 percent above normal will see its extra non-heat usage multiplied by a factor of 1.5 due to the WNA. And that customer will not appear in Mr. Zarumba's analysis as a problem.

Moreover, even under Mr. Zarumba's approach, there were some 18,000 bills with anomalous results.

In terms of protection for customers, the Company's response in discovery is that it is ". . . continuing to evaluate additional customer protections to put in place."[8] As I indicated in my direct testimony, until these specific concerns are addressed, I recommend against adoption of the Company's proposed WNA mechanism.

Q. Please address your concern regarding a potential mismatch between the HDD value used by the Company to forecast weather-normalized load and the HDDs used to develop base levels for the HDD mechanism.

A The Company uses a combination of a 20-year average and a trend regression method to forecast annual normal HDDs of 5,341. The Company indicated that it used a 10-year average HDD level to set the base level for the WNA, which I calculated to be 5,389 as shown in my workpapers. However, based on Ms. Scanlon's rebuttal testimony and a more careful review of the Company's workpapers, I recognize that the Company normalizes the 10-year average such that the values used for the WNA base levels total to 5,341. I therefore withdraw my concern.

[8] OCA-XXVI-007.

10. Billing Determinants for the FPFTY

Q. Please review the issue regarding FPFTY loads.

A. The Company's load forecast for the test year assumes a downward adjustment in the test year to reflect energy conservation. For my direct testimony, I conducted a detailed statistical analysis of the Company's actual consumption levels by class by month, and I detected no evidence of a systematic downward trend to consumption that was not explained by changes in heating degree days.

Peoples' witness Scanlon provides rebuttal testimony, but it does not address the statistical evidence upon which my conclusions were based. Ms. Scanlon simply refers to a Time Magazine article indicating that the government will be mandating more efficient appliances in 2027.

There is little doubt that the efficiency of new gas-fired appliances has been and will continue to improve. For load forecasting, however, the question is not only whether new appliances are more efficient, but also how customers will react to having more efficient appliances. It would not be surprising, for example, if gas users might spend their efficiency savings from a new heating system on simply keeping their houses warmer, thereby offsetting net effect on their gas consumption (but having improved welfare).

Evaluating this tradeoff requires data analysis, which the Company has not undertaken. I therefore retain my recommendation that the Company's billing determinants be modified to take out the arbitrary and unsupported conservation factor.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

EXHIBIT IEc-S1

RDK ELECTRONIC WORKPAPERS

IEc WPS1 Surrebuttal ACOSS*

IEC WPS2 Revenue Allocation Rate Design Surrebuttal*

THE ABOVE REFERENCED WORKPAPERS (EXHIBIT IEc WPS1 & EXHIBIT IEc WPS2) ARE AVAILABLE IN EXCEL FORMAT ONLY; THEREFORE, WILL BE SERVED UPON ALL PARTIES VIA ELECTRONIC MEANS ONLY, SIMULTANEOUS TO SERVICE OF SURREBUTTAL TESTIMONY

EXHIBIT IEc-S2

REFERENCED INTERROGATORY RESPONSES

OCA-XXVI-007

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OCA-XXVI-007

Witness: Zarumba, Ralph **Title:** Consultant, Black & Veatch Management Consulting, LLC

Question: Reference Mr. Zarumba's Rebuttal Testimony, Peoples St. No. 15-R at page 20. Confining the review to only May 2018, what is the percentage of "unusual bills?" What is the average discrepancy (percent above normal May bill) for bills which were higher than expected?

Answer: May 2018 accounted for 70% of the total unusual bills. The second question is ambiguous, however we are interpreting this question as a request for the average increase for customers with 100%+ increases to the base rate portion of their bill. For May 2018 bills that had a 100%+ increase to the base rate portion of their bills, the average percentage increase was 238%. The Company is continuing to evaluate additional customer protections to put in place.

Submit Date: 4/30/2024

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**Docket No. R-2023-304459**
PEOPLES NATURAL GAS COMPANY LLC	:	

VERIFICATION

I, Robert D. Knecht, hereby state that the facts set forth in the Surrebuttal Testimony labelled OSBA Statement No. 1S and associated Exhibits IEc-S1 and IEc-S2 are true and correct to the best of my knowledge, information, and belief, and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 19 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: May 3, 2024

Robert D. Knecht

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Peoples Natural Gas Company LLC (Peoples Natural Gas Division and Peoples Gas Division) Base Rate Case Filing Original Tariff GAS – PA PUC No. 48	**:**	**Docket No. R-2023-3044549 C-2024-3045385**

CERTIFICATE OF SERVICE

I hereby certify that true and correct copies of the foregoing have been served via email (*unless otherwise noted below*) upon the following persons, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

The Honorable Mary D. Long
Administrative Law Judge
Pennsylvania Public Utility Commission
Piatt Place, Suite 220
201 Fifth Avenue
Pittsburgh, PA 15222
malong@pa.gov

Scott B. Granger, Esquire
Bureau of Investigation and Enforcement
Commonwealth Keystone Building
400 North Street, 2nd Floor West
Harrisburg, PA 17105
sgranger@pa.gov

Gina L. Miller, Esquire
Jacob D. Guthrie, Esquire
Harrison W. Breitman, Esquire
Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101
OCAPNG2023BRC@paoca.org

Elizabeth R. Marx, Esquire
John W. Sweet, Esquire
Pennsylvania Utility Law Project
118 Locust Street
Harrisburg, PA 17101
pulp@pautilitylawproject.org

Joseph L. Vullo, Esquire
Burke Vullo Reilly Roberts
1460 Wyoming Avenue
Forty Fort, PA 18704
jlv@bvrrlaw.com

Meagan Moore, Esquire
PNG Companies LLC
375 North Shore Drive, 4th Fl.
Pittsburgh, PA 15212
meagan.moore@peoples-gas.com

Michael W. Gang, Esquire
Anthony D. Kanagy, Esquire
Nicholas A. Stobbe, Esquire
Post & Schell, P.C.
17 North Second Street
12th Floor
Harrisburg, PA 17101-1601
mgang@postschell.com
akanagy@postschell.com
nstobbe@postschell.com

Charis Mincavage, Esquire
Adeolu A. Bakare, Esquire
Lisa Charleton, Esquire
McNees Wallace & Nurick, LLC
100 Pine Street
Harrisburg, PA 17108
cmincavage@mcneeslaw.com
abakare@mcneeslaw.com
LCharleton@mcneeslaw.com

Kevin J. Moody, Esquire
Pennsylvania Independent Oil & Gas Assoc.
212 Locust Street, Suite 600
Harrisburg, PA 17101-1510
kevin@pioga.org

DATE: May 3, 2024

/s/ Steven C. Gray

Steven C. Gray
Senior Attorney
Assistant Small Business Advocate
Attorney I.D. No. 77538

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket No. R-2023-3044549
Office of Consumer Advocate	:	Docket No. C-2024-3045268
Office of Small Business Advocate	:	Docket No. C-2024-3045385
v.	:	
	:	
Peoples Natural Gas Company LLC	:	

DIRECT TESTIMONY
OF
DAN WEAVER

on behalf of the

PENNSYLVANIA INDEPENDENT
OIL & GAS ASSOCIATION

Dated: March 22, 2024

Q. PLEASE STATE YOUR NAME AND OCCUPATION.

A. I am Dan Weaver, President and Executive Director of the Pennsylvania Independent Oil & Gas Association (PIOGA).

Q. WHAT IS PIOGA?

A. PIOGA is a trade association representing oil and natural gas interests throughout Pennsylvania. PIOGA was formed by the April 1, 2010 merger of the Pennsylvania Oil and Gas Association known as POGAM into the Independent Oil and Gas Association of Pennsylvania (IOGA of PA), and the name changed to its present name. PIOGA's members include oil and natural gas producers and Commission-licensed natural gas suppliers and marketers (NGSs) that deliver natural gas produced from Pennsylvania conventional and unconventional formations to the pipeline systems of both divisions of Peoples Natural Gas Company LLC (Peoples) – Peoples Natural Gas Division (PNGD) and Peoples Gas Division (PGD) – for system supply as well as for Peoples' transportation customers. PIOGA and its producer members were long-term participants in the collaborative Production Enhancement Services (PES) agreements and programs with Peoples starting in the early 2000s. PIOGA producers agreed to pay transportation rates in return for Peoples'providing relaxed water vapor content standards based upon regulator set pressure and contributed to the installation of compression and dehy facilities on various Peoples systems to increase the availability and throughput of Pennsylvania-produced conventional natural gas on the legacy Peoples Natural Gas pipeline system. The PES program was terminated as part of the settlement of Peoples last base rate case in 2019 in which Rate AGS was established for the Peoples Division.

Q. WHAT IS YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND?

A. I am a Penn State University graduate with a degree in History. I was born and raised in in the heart of the historic oil industry, Oil City, Pennsylvania. I served 11 years as a Museum Educator at the Drake Well Museum in Titusville and one two-year term as the Manager of the Friends of Drake Well Museum. I was instrumental in the creation of the Drake Well Museum Mobile Energy Education Training Unit (MEET-U trailer), a portable classroom that has traveled over 200,000 miles to provide information about energy to students and the public in Pennsylvania, Ohio, West Virginia, and New York. Prior to becoming PIOGA President and Executive Director, I was Director of Public Outreach at PIOGA where I was responsible for communications and public education. I launched the PIOGA Energy Education Program (PEEP), a "teach-the-teachers" program for educators in grades 5 through 8, to provide age-appropriate energy curriculum for future generations.

Q. WHAT DO YOU DO AS PRESIDENT AND EXECUTIVE DIRECTOR OF PIOGA?

A. I work closely with elected leaders, regulators and the civic community to advance responsible development of Pennsylvania oil and natural gas and to promote a favorable environment for the success of the exploration, production, transportation and downstream use of Pennsylvania natural gas. To support these efforts, I direct and participate in PIOGA's lobbying and educational outreach activities, committee meetings, preparation of public comments, and technical training workshops. I also provide information in support of our litigation, including participating in negotiations with Peoples regarding matters affecting the operations of our producer and NGS

members on the Peoples pipeline systems. These activities address rates, terms and conditions of service concerning our producer and NGS members.

Q. WHAT IS YOUR EXPERIENCE IN THE OIL AND NATURAL GAS INDUSTRY?

A. I consider myself the conductor of the orchestra – I may not have played every instrument, but I know what they should look and sound like. I have been intimately involved with the oil and gas industry for nearly two decades, including conventional and unconventional. I have spent time on both rotary and percussion drillings, while making holes and servicing wells. I have been on well completion jobs including sand notching, nitrogen fracs and high volume multistage lateral stimulations. I have had the opportunity to work with and learn from some of the most technically proficient leaders and operators in the industry as to how our industry works.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying on behalf of PIOGA.

Q. HAVE YOU TESTIFIED PREVIOUSLY IN ANY PUC PROCEEDINGS?

A. Yes. I have provided written testimony in Peoples' purchased gas costs (PGC) proceedings as well as in matter involving National Fuel Distribution Corporation's tariff requirement that NGSs enter into a Data Security Agreement requiring NGSs to purchase and carry cybersecurity insurance with coverage of no less than $5 million per incident (Docket No. C-2020-3019621). I also provided written testimony concerning remediation of the Goodwin Gathering System and reduced payment for retainage on the Goodwin system in the proceeding in which the Commission approved the acquisition of the Peoples' companies by the Aqua America, Inc. companies (Docket Nos. A-2018-3006061, A-2018-3006062 and A-2018-3006063).

Q. ARE YOU FAMILIAR WITH PEOPLES' TESTIMONY IN THIS MATTER?

A. Yes, I am familiar with the testimony of Micheal Huwar, Andrew Wachter, Carol Scanlon, Edward Palombo, Dawn Folks and Ralph Zarumba concerning the issues PIOGA is addressing in this proceeding.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to describe PIOGA's relationship with Peoples and our reactions to Peoples' proposals that affect the operations of our producer and NGS members. I also identify the issues addressed by the testimony of PIOGA's other witnesses.

Q. WHAT IS PIOGA's RELATIONSHIP WITH PEOPLES?

A. PIOGA has developed good working relationship with Peoples beginning with the PES agreements and programs I mentioned earlier and continuing with the Peoples-Producers Cooperation Committee (PPCC) created after the termination of the PES Project Review Committee following Peoples' 2019 base rate case. Peoples collaborated with PIOGA to mitigate the costs to producers of the extremely high level of lost and unaccounted for gas on the Goodwin gathering system. Peoples also supports PIOGA's activities on behalf of its members by allowing producers and NGSs to pay an additional penny/Mcf on the gathering fee and remitting that money to us.

We believe Peoples has the same understanding of our relationship, as shown by Mr. Huwar's statements that Peoples:

- "prioritizes and supports the utilization of the available and affordable energy supply we have right here in Southwestern Pennsylvania"
- works with producers "to optimize the incredible asset of natural gas for the benefit of this Commonwealth and Southwestern Pennsylvania"

- "continues to support and encourage local production of natural gas in whatever ways we can"
- considers "the local producers on our system as partners in making sure this region and our Commonwealth realize the full economic benefits of having this incredible abundance of gas supply right beneath our feet"

Q. WHAT ARE PEOPLES' PROPOSALS THAT AFFECT THE OPERATIONS OF PIOGA'S PRODUCER AND NGS MEMBERS THAT PIOGA IS ADDRESSING?

A. We are addressing: (i) Peoples' proposal to unify the PNGD and PGD tariffs; (ii) Peoples proposal to apply the Allegheny Valley Connector (AVC) capacity charge to the PGD system; and (iii) issues concerning the rate, terms and conditions of existing and proposed Rate AGS and Peoples' proposal to apply PNGD's Rate AGS to the PGD system.

Q. WHAT ARE PIOGA's REACTIONS TO THESE PROPOSALS?

A. PIOGA supports the unification of the tariffs of the two divisions, with some changes to address our concerns with the rate, terms and conditions of existing and proposed Rate AGS and the Master Interconnect and Measurement Agreement (MIMA) required by Rate AGS. We support application of the AVC charge to the PGD because of the benefits concerning Peoples' transportation program described in Peoples' testimony.[1]

Q. WHAT ARE PIOGA's CONCERNS WITH RATE AGS AND THE MIMA?

A. We believe the terms and conditions of existing and proposed Rate AGS, as well as certain provisions of the MIMA, significantly diminish the value of the service provided under Rate AGS. We also believe that the tariff unification proposal goes too far in applying Rate AGS to the PGD system and not far enough with respect to water vapor content standards set forth in the MIMAs for the three legacy utilities.[2] We are also

[1] Peoples Statement (St.) No. 3 (Scanlon) at 24:14-21.

[2] PIOGA Exhibit DW-1 (Peoples' responses to PIOGA-I-6 (Peoples Division, p.7; Equitable Division, p.8) and PIOGA-I-7 (Peoples Gas Division).

concerned that Peoples has not stated whether or how the revenues received from the Rate AGS fee would be used to provide value to producers for the service. The Rate AGS "Character of Service" language disclaims any obligation to do so, and Peoples' testimony seems to indicate that the revenues will be used for leak detection and repair work and waste methane fees required by the 2022 Inflation Reduction Act (IRA).[3]

Q. HOW DO THE TERMS AND CONDITIONS OF RATE AGS DIMINISH THE VALUE OF THE SERVICE PROVIDED UNDER RATE AGS?

A. Rate AGS "Character of Service" language provides that:

> The Company's only obligation under this Rate Schedule shall be to receive gas from any gathering receipt point and to permit that gas to flow against the existing pressure in the Company's facilities. Peoples shall not be obligated to lower such line pressure by compression or otherwise to accommodate receipts from local Appalachian producers under this Rate Schedule.

Peoples asserts the value of the service under Rate AGS is access to its system,[4] but we believe this language and certain provisions in the MIMA significantly diminish, and may remove, that value, by allowing Peoples to limit and restrict the flow of conventional production into the system when some accommodations could be made to facilitate producers' operations without jeopardizing Peoples' ability to operate its pipeline system safely and reliably. PIOGA witness Marc Jacobs provides support for the "value of service" and MIMA issues while PIOGA witness James Brant provides an example of a Peoples accommodation.

Q. HOW DOES PIOGA PROPOSE TO ADDRESS THIS ISSUE IN THE LANGUAGE OF RATE SCHEDULE AGS?

[3] Peoples St. No. 4 (Palombo) at 18:9 – 19:7.

[4] PIOGA Exhibit DW-2 (Peoples' response to OSBA-I-15.a.): "Value to producers of access to Peoples gathering system - Means to move gas - in some cases, to move it at a lower cost than other alternatives, in other cases, it is their only option to move gas."

A. PIOGA proposes that the "Character of Service" language for Rate AGS for the PNGD system be revised as follows to show that the service actually provides value beyond simple access to Peoples system while preserving Peoples' ability to operate its pipeline system safely and reliably as it does now.

CHARACTER OF SERVICE

The Company's obligation under this Rate Schedule is, insofar as it can consistently do so, to receive all conventional gas the party has available during the term of the MIMA, at the full flow of the gas from any receipt point into the Company's system and to permit that gas to flow against the varying pressures from time to time maintained in the pipelines; provided, however, the Company may restrict the flow or discontinue the taking of gas temporarily, when and for such length of time as in its commercially reasonable judgment, based upon considerations of safe and reliable operation of its pipelines and facilities, customer demand, gas quality and repair and maintenance requirements, it deems necessary to maintain the integrity of its system.

Peoples shall not be obligated to lower such line pressure by compression or otherwise to accommodate receipts from local Appalachian producers under this Rate Schedule, but shall use all reasonable efforts to notify producers to adjust their producer regulator set points to allow conventional production to flow in response to higher pipeline pressures, not to exceed pipeline MAOP.

Service under this Rate Schedule shall be subject to Operational Flow Orders pursuant to Item 24 of the Rules and Regulations of this Tariff. Nothing in this Rate Schedule shall limit the Company's right to interrupt service or to take other action as may be required to alleviate conditions, which threaten the integrity of its system.

Notwithstanding anything contained herein to the contrary, in the event that the pressure of the party's gas at the point of delivery becomes too high, in the Company's opinion, for the safe operation of the Company's pipeline system, the Company may choke back or control the flow of the gas to reduce such pressure to a point of safety.

We believe this language is consistent with how Peoples operates its system to facilitate the introduction of lower pressure gas from conventional wells into its system.[5]

[5] PIOGA Exhibit DW-3 (Peoples' responses to PIOGA-II-2 and PIOGA-VI-5).

Q. WHY DOES PIOGA BELIEVE THE TARIFF UNIFICATION PROPOSAL GOES TOO FAR IN APPLYING RATE AGS TO THE PGD?

A. PIOGA's concerns are legal and historical. The legal concern arises from Peoples' 2018 purchased gas costs (PGC) proceeding in which the Commission rejected PIOGA's definitions for gathering and distribution lines concerning Peoples proposal to impose a producer retainage charge to recover a portion of the unaccounted for gas (UFG) expense on gathering lines. Peoples argued, and the Commission agreed, that Peoples' definitions of "gathering" pipelines in that proceeding were in alignment with the definitions set forth in the gas pipeline safety regulations of the federal Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) and the PUC, as well as the Federal Energy Regulatory Commission (FERC) "modified primary function test" for classifying pipeline for accounting purposes (Docket Nos. R-2018-2645278 [Peoples-Peoples Division] and R-2018-3000236 [Peoples-Equitable Division]).

Unlike in the 2018 PGC case with respect to the legacy Peoples Natural Gas and Equitable Gas systems, in this case Peoples acknowledges that the PGD system has no pipelines classified as "gathering" per FERC's Chart of Accounts or PHMSA's gas pipeline safety regulations, or the PUC's gas pipeline safety regulations, which are the same as PHMSA's.[6] The pipeline structure and operation of the TW Phillips system did not change when Peoples acquired the system in 2011. That system had no pipelines classified as gathering per FERC, PHMSA and PUC requirements, and that did not change after Peoples' acquisition. While in this case Peoples argues that the PGD system

[6] Peoples St. No. 4 (Palombo) at 15:4-5 ("PGD does not have a Gathering System per its Books and Records"); 22:3-4 ("the PG system does not have gathering pipelines as defined by federal DOT code or by the FERC Chart of Accounts gathering definition"); PIOGA Exhibit DW-2 (Peoples' response to OSBA-I-15.d.) ("there are no DOT or FERC accounting gathering pipelines on the PG system").

has pipelines and facilities "that function more like gathering,"[7] these pipelines and facilities function the same way now as they did under TW Phillips' ownership. I am not a lawyer, but it seems to me that these pipelines cannot be the basis for a fee for using a "gathering" system if their function has not changed and they have never been classified as "gathering" in accordance with the PUC's determination in the Peoples Division-Equitable Division 2018 PGC case.

As confirmed in the testimony of PIOGA witness Marc Jacobs, our historical concern is based upon the fact that the TW Phillips system, which is now the PGD system, never had a gathering fee. I believe this is explained by the fact that the system never had any pipelines classified as gathering per FERC, PHMSA and PUC requirements. I also note that while the PGD Rate GS is titled "Gathering Service", the word "gathering" is not otherwise used in the rate schedule and was not used in the Gas Purchase Agreement (GPA) for Rate GS to describe PGD the pipelines covered by Rate GS. The GPA was not used after PGD started using the first version of the MIMA in March 2017.[8]

Q. WHAT IS PIOGA's RESPONSE TO PEOPLE'S RATIONALE FOR APPLYING PNGD'S $0.26 RATE AGS FEE TO THE PGD SYSTEM?

A. Peoples' rationale is that producers and customers both benefit from gathering systems so both groups should share in bearing the costs of those systems. But the PGD system does not have a gathering system or gathering pipelines, so that rationale doesn't apply to Peoples' proposal to apply PNGD Rate AGS to the PGD system. That explains why the

[7] Peoples St. No. 4 (Palombo) at 15:6 ("[Peoples] does have systems that serve a similar purpose to the PNGD Gathering system."); 22:4-5 ("[Peoples] does have facilities that move local production to the Company's distribution system."); PIOGA Exhibit DW-2 (Peoples' response to OSBA-I-15.d.) ("there are pipelines that function more like gathering that move local production to distribution areas").

[8] PIOGA Exhibit DW-4 (Peoples' responses to PIOGA-I-2 (with GPA attachment) and PIOGA-III-1 (without attachments)).

TW Phillips system never had a gathering fee before Peoples acquired it and why it never had one after Peoples acquired it. Producers on the TW Phillips system didn't pay a fee for use of the pipelines and facilities that Peoples now says are functioning as gathering pipelines despite never having been classified as such as required by the applicable regulations if these pipelines were functioning as gathering pipelines. The TW Phillips customers paid for the costs of operating these facilities. We don't believe that uniformity, consistency, standardization and administrative ease provide valid reasons to impose a fee for the use of "gathering" pipelines that are not now, and never have been, gathering pipelines.

Q. WHAT IS PIOGA's PROPOSAL CONCERNING THE LEVEL OF PNGD'S $0.26 RATE AGS FEE?

A. Peoples' Rate AGS fee of $0.26/Mcf is "set on a negotiated basis using value of service considerations rather than cost-of-service as a guide."[9] We believe that the fee overstates the value of the service provided under Rate AGS as explained above and as shown in the testimony of the other PIOGA witnesses referenced above. Accordingly, we believe this fee should be reduced even if PIOGA's proposals for changes in the language of Rate AGS and the MIMA are accepted because the value of the service is overstated because of the "only obligation" language. Peoples acknowledges that "[t]here is no specific formula or methodology to determine the allocation [gathering pipeline costs] to producers and customers."[10] Peoples also acknowledges that "[t]here is a practical limit to how much of the gathering system costs can be recovered from producers" because the market prices "that producers will receive for their gas purchased by Peoples for system

[9] Peoples St. No. 15 (Zarumba) at 10:3-5.

[10] PIOGA Exhibit DW-5 (Peoples' response to PIOGA-II-3).

supply . . . are low by historical standards and it is likely that this has contributed to the reduction of production from conventional wells since 2012."[11] We fully agree with these statements.

Despite our opposition to application of PNGD's Rate AGS to the PGD system, we are not opposed to sharing with customers – through a system-wide spreading of conventional production costs that involves gathering pipelines to include production that does not – the costs of pipelines and facilities producers use to provide low cost natural gas to customers. We believe that a reasonable cost spreading is a blended rate involving the reduction of the $0.26/Mcf rate based upon the percentage of volumes that do not involve gathering pipelines compared to the total volumes that involve both. The percentage of year-over-year (2017-2023) conventional volumes on the PGD system (67,513,134) compared to the total volumes on both divisions (236,963,249) is about 29%.[12] Applying this percentage to the $0.26/Mcf rate results in a reduction of $0.08, for a system-wide blended rate of $0.18/Mcf. We believe our proposal brings together the existing and differing programs of the two divisions and sets a producer paid fee structure establish a reasonable and ongoing producer revenue contribution consistent with Peoples' value of service considerations.

To be consistent with the facts concerning the lack of gathering pipelines on the PGD system, the rate schedule imposing any such charge on the PGD system could not have language referring to "gathering" lines or a "gathering system" or reference a "gathering" rate, nor could the PGD Master Interconnect and Measurement Agreement (MIMA).

[11] Peoples St. No. 4 (Palombo) at 19:11-16.

[12] PIOGA Exhibit DW-6 (Peoples' response to PIOGA-I-8).

Instead, the PGD rate schedule should be titled "Rate Transportation Service" instead of "Rate Appalachian Gathering Service" and the "Availability" language should be revised as follows: "Service under this rate schedule is available to any party desiring to transport gas through the Peoples Gas Division ~~gathering~~ system, provided that:" and "The transportation ~~gathering~~ rate is $0.18 per Mcf, plus applicable retainage*."

Peoples' Fully Projected Future Test Year (FPFTY) projects a $7.8 million contribution from conventional producers from a system-wide fee of $0.26/Mcf.[13] PIOGA's proposed fee of $0.18/Mcf would reduce that contribution to $5.4 million.

Q. WHY DOES PIOGA BELIEVE THE TARIFF UNIFICATION PROPOSAL DOES NOT GO FAR ENOUGH WITH RESPECT TO WATER VAPOR CONTENT STANDARDS?

A. Peoples emphasizes that it has operated, and will continue to operate, both divisions – in other words, all three legacy utility systems – as one integrated pipeline system, and that unifying the two tariffs is the next step in this process. Peoples has explained how more consistent and standard gas quality requirements improve the safe and reliable operation of an integrated system:

> Peoples believes standardizing gas quality is a more effective and efficient way to operate as one utility to meet or exceed tariff gas quality requirements across the system. It also allows for standardizing operating procedures which is more efficient in training and transfer of job skills across the entire system. Standard gas quality requirements can also help prevent claims that some producers may be getting preferential treatment if they are held to less stringent gas quality requirements at their delivery points than other producers. All of these contribute to improving safe and reliable service to customers.[14]

[13] Peoples St. No. 4 (Palombo) at 22:20 – 23:2.

[14] PIOGA Exhibit DW-7 (Peoples' response to PIOGA-V-2).

PIOGA fully agrees with Peoples' explanation. PIOGA witness Marc Jacobs explains why the moisture curve water vapor content standards on the legacy Peoples Natural Gas system should be the standards across Peoples' fully integrated pipeline system.

Q. WHAT DO YOU HAVE TO SAY ABOUT THE DECLINE IN LOCAL CONVENTIONAL PRODUCTION ON THE PEOPLES SYSTEM?

A. We acknowledge Peoples' data showing that the level of local conventional production on the Peoples system has been consistently declining. DEP data[15] confirms that from 2019 to the present, only five conventional gas only wells have been dug, and three of those appear to be home use wells based on the operator names. We also agree with Peoples that the low price environment conventional producers face is likely the primary reason for this situation because of the costs of well drilling, completion and operation, and acknowledge that the low price environment is beyond Peoples' control. However, PIOGA cannot stand by and do nothing to try to help conventional producers reduce their operation costs and increase their deliveries of conventional production on the Peoples system. In view of the price benefits to Peoples' customers from local conventional production and, more broadly, the benefits to conventional producers, their families and their businesses as well as to the local economies where their production facilities are located, we are relying on Peoples' commitment to continue "to support and encourage local production of natural gas in whatever ways we can" in proposing some operational changes concerning Rate AGS and the MIMA that will enable conventional producers to reduce their operation costs and increase deliveries of conventional production while not

[15] PIOGA Exhibit DW-8 (DEP data - conventional wells drilled 1/1/2019-3/20/2023).

jeopardizing Peoples' ability to operate its pipeline system safely and reliably. Our MIMA proposals are set forth in the testimony of Marc Jacobs.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, but I reserve the right to address issues raised by other parties that affect PIOGA's interests.

VERIFICATION

I, Dan Weaver, hereby state that:

The foregoing testimony, marked as PIOGA St. No. 1, was prepared by me or at my direction and under my direct supervision and, if at hearing I were asked the same questions set forth in this testimony, my responses would be the same as set forth above.

The facts set forth above are true and correct to the best of my knowledge, information and belief, and I expect to be able to prove the same at a hearing held in this matter.

I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Dan Weaver

Dated: March 22, 2024

PIOGA Exhibit DW-1

Peoples' responses to PIOGA-I-6 (Peoples Division, p.7; Equitable Division, p.8) and PIOGA-I-7 (Peoples Gas Division).

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-I-006

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples Natural Gas Division (PNGD) existing Rate AGS. What are the water vapor standards on the PNGD system?

Answer: Water Vapor - PNGD will authorize water content to the chart as Schedule 1 to this Appendix B attached. However, Peoples maintains the right to require a lower (more stringent) water vapor content than the level set forth in Appendix B if the water vapor levels at specific receipt point(s) are detrimentally affecting customer service or creating operational issues.

Submit Date: 2/20/2024

APPENDIX B TO MASTER AGREEMENT
INSPECTIONS AND GAS QUALITY

SECTION I
ROUTINE INSPECTIONS OF INTERCONNECT FACILITIES

1.01 **Interconnect Facility(ies) Maintenance**. Peoples shall have the right to periodically inspect Producer's records and the Interconnect facilities to verify that all operating and maintenance functions are being performed effectively. If Producer cannot provide adequate documentation, or if Producer's operating and maintenance procedures are inadequate as determined by Peoples, Producer will have seventy-two (72) hours to produce proper documentation and/or revise inadequate procedures. If, after the seventy-two hour period, documentation is not provided and/or procedures are not modified, Peoples retains the right to take further action as it deems necessary including the right to shut-in the Interconnect until adequate documentation/procedures have been verified and secured.

1.02 **Changes to Interconnect Facility.** The Producer has an obligation to notify Peoples in writing 24 hours prior to changes to Producer Interconnect facilities that would require modifications to an Interconnect, Peoples' System or Gas composition, and Peoples shall have the right to reject changes to the Interconnect Facility. Peoples retains the right to take action as it deems necessary in its reasonable discretion, including the right to shut-in the Interconnect, in the event notification does not occur. The cost of any damages as a result of changes to Producer's Interconnect Facility will be borne entirely by the Producer; provided, that if Peoples or its designee accesses and operates Producer's Interconnect Facility, Peoples shall indemnify and hold harmless Producer for any and all environmental, health and safety liabilities directly resulting from Peoples' or its designee's access or operation of the Producer's Interconnect Facility. Peoples shall replace, fix and repair, at its cost, any portion of Producer's Interconnect Facility that Peoples or its designee intentionally or negligently harms, damages or breaks as a result of Peoples' accessing or operating the Facility.

1.03 **Interconnect Facility Operations.** Peoples shall have the right to shut-in the Interconnect immediately if meter set equipment is not operating properly, an overpressure condition exists, design limitations are exceeded, or safe operating conditions are compromised. Furthermore, Peoples has the right to keep the Interconnect shut-in until the Producer makes the necessary provisions to rectify the situation. If the abnormal conditions repeatedly arise, Peoples has the right to shut-in the Interconnect indefinitely.

1.04 **Interconnect Facility Inspections.** Peoples shall have the right to inspect the Interconnect Facility including, but not limited to, the following: calibrate the meter; inspect regulators; inspect valves; and inspect and calibrate Gas quality facilities. If during the course of these inspections, Peoples determines, using commercially reasonable discretion, that installation procedures where not followed, equipment was not maintained, or equipment was modified to not comply with specifications established in this Master Agreement, Peoples has the right to shut-in the Interconnect until corrective actions by the Producer occur and additional inspections performed. If continued inspection violations occur, Peoples has the right to shut-in the Interconnect indefinitely. Peoples shall indemnify and hold harmless Producer for any and all environmental, health and safety liabilities directly resulting from Peoples' or its designee's inspection in calibrating the meter, inspecting regulators, inspecting valves, and inspecting and calibrating gas quality equipment within the Producer's Interconnect Facility. Peoples shall replace, fix and repair, at its cost, any portion of Producer's Interconnect Facility that Peoples or its designee intentionally or negligently harms, damages or breaks as a result of the activities described above.

1.05 **Reserved.**

1.06 **Reserved.**

1.07 **Annual Measurement Equipment Testing**. All measurement equipment shall be inspected and tested by a Peoples Approved Vendor once each calendar year not to exceed fifteen (15) months from the

previous inspections at Producer's expense. This annual inspection must be completed by technicians trained to operate pressure regulating equipment in accordance with the manufacturer's procedures and specifications. Peoples reserves the right to request documentation for regular testing and technician training. The annual testing shall include, but is not limited to the following equipment: Check Valve, Regulator(s) Lock-up test, Electronic corrector (EGM) calibration, meter calibration and spot sample Gas analysis (frequency according to section 2.01 of this Appendix B) at the Interconnect. Inspection reports shall be submitted, within 30 days after the yearly inspection date, to Peoples. In the event the Producer fails to submit the yearly inspection reports, Peoples shall have the right to periodically inspect Producer's records to determine if measuring equipment has been inspected and tested, as required by the Master Agreement. If Producer cannot provide documentation, within five (5) days of Peoples' request, Producer is required to immediately shut-in the Interconnect at which measurement and testing records are deficient, for a period of one week, or until the Producer can provide proof that the measuring equipment has been inspected and tested, and is working properly, whichever is longer. If Producer cannot provide documentation that its measuring equipment has been inspected and tested on additional occasions, Peoples retains the right to take further action at its discretion, including the right to require the shut-in of the applicable Interconnect for additional time periods. If Producer repeatedly violates this provision, Peoples has the right to permanently discontinue accepting Gas from wells that Producer has dedicated to said Interconnect Facility.

SECTION II
GAS QUALITY REQUIREMENTS

2.01 **General.** Before Peoples permits the flow of Gas from a New Facility into the Peoples' System, Producer will provide a Gas sample analysis by a Peoples Approved Vendor and Peoples shall review the Gas sample analysis to verify that it is of marketable quality. Producer will contract with a Peoples Approved Vendor to perform an initial (within one (1) year of the execution of this Agreement) Gas quality sample analysis and provide inspection report to Peoples for each Interconnect Facility that have not otherwise been tested by Producer or Peoples within the year prior to the execution of this Agreement. Receipt Point(s) with daily volumes at or above 1,000 mcf/day will be required to have a Gas quality sample analysis conducted on an annual basis. Receipt Point(s) with daily volumes below 1,000 mcf/day will be required, after obtaining the initial analysis, to have a Gas quality sample analysis' conducted every five (5) years thereafter, unless the Gas sample analysis does not meet Peoples specifications, requirements and/or standards, as set forth in this Agreement, including any Appendixes, Exhibits, Addendums, Schedules and Amendments, in which case, Peoples will require the Interconnect to be shut in until Gas sample meets Peoples specifications. Peoples reserves the right to require more frequent Gas quality sample analyses in order to address operational, safety or service related issues. The initial and ongoing Gas sample analyses shall include testing for water vapor, N2, O2, CO2, CH4 (methane through pentane), heating value (BTU - dry and saturated), specific gravity by a certified tester using GPA 2261-13 and GPA 2172-09 standards and shall conform with the following specifications:

(a) Liquids – The Gas shall be free of water and hydrocarbons in liquid form at the temperature and pressure at which the Gas is delivered.

(b) Moisture Content – The Gas shall not have water content in excess of seven (7) pounds of water per million cubic feet of Gas measured at standard conditions of 14.73 psia and 60°F, unless otherwise approved by an authorized representative of Peoples or as set forth in Schedule 1. The moisture content of the Gas shall be such that it is of marketable quality, and does not cause any safety or operational problems or other adverse effects on Peoples' System or any downstream systems to which the Gas may flow. Producer will be advised of any additional or specific moisture content limits for the Interconnect, or of any changes in such limits, should they be required.

(c) Water Vapor – Peoples will authorize water content according to the chart attached as Schedule 1 to this Appendix B. However, Peoples maintains the right to require a lower (more stringent) water vapor content than the level set forth in Appendix B if the water vapor levels at specific Receipt Point(s) are detrimentally affecting customer service or creating operational issues.

(d) Carbon Dioxide and Other Inerts – The Gas shall not contain more than four percent (4%) by volume of total combined inerts such as carbon dioxide, nitrogen, argon, and helium; provided that the total carbon dioxide content shall not exceed two percent (2.0%) by volume.

(e) Dust, Gums and Solid Matter – The Gas shall be commercially free of dust, gums, gum-forming constituents, or other liquid or solid matter which might become separated from the Gas in the course of transportation through pipeline.

(f) Heating Value – Unless otherwise approved, in writing, by Peoples, the Gas delivered shall contain not less than 967 BTU per standard cubic foot and shall not exceed 1,100 BTU per standard cubic foot of Gas calculated as the gross saturated value at 14.73 psia and 60° Fahrenheit, and a utilization factor of one thousand three hundred (1,300) plus or minus six percent (6%), the utilization factor being defined as that number obtained by dividing the heating value of the Gas by the square root of its specific gravity. Gas accepted by the Company that contains less than 967 BTU per cubic foot will be enhanced to ensure that Gas delivered by the Company to its end-use customers shall meet the heating value requirements set forth in applicable regulations, orders or laws. The Producer may be responsible for the costs of such enhancement.

(g) Temperature – The temperature of the Gas delivered into the Peoples' System shall not exceed 100°F unless approved by an authorized representative of Peoples. The temperature shall not be less than 40°F as delivered to Peoples' System after passing through all regulation, measuring and over protection equipment.

(h) Oxygen – The Gas shall not contain more than 2,000 parts per million (0.2% of one percent) of oxygen by volume.

Should circumstances warrant more in-depth Gas sample analyses, such as the suspected or known presence of other constituents, Peoples reserves the right to require testing for additional compounds including not limited to the following:

(a) Hydrogen Sulfide – The Gas shall not contain more than four (4) parts per million on a volumetric basis, or three-tenths (0.3) of a grain of hydrogen sulfide per one hundred (100) cubic feet.

(b) Total Sulfur – The Gas shall not contain more than 170 parts per million, on a volumetric basis, or ten (10.0) grains of total sulfur per one hundred (100) standard cubic feet.

(c) Carbon Monoxide – The Gas shall not contain more than one-tenth percent (0.1%) by volume of carbon monoxide.

(d) Gasoline - Not contain more than two-tenths (0.2) of a gallon of gasoline per one thousand (1,000) standard cubic feet unless otherwise approved by an authorized representative of Peoples.

(e) Bacteria – The Gas, including any associated liquids, shall not contain any microbiological organism, active bacteria, or bacterial agent capable of causing or contributing to: (i) injury to Peoples' pipelines, meters, regulators, or other facilities and appliances through which Producers Gas flows; or (ii) interference with the proper operation of Peoples' System. Microbiological organisms, including, but not limited to, sulfate reducing bacteria (SRB) and acid producing bacteria (ACB), when considered as a possibility, shall be tested for their existence utilizing the American Petroleum Institute test method API-R38 or other acceptable test method as determined by both Parties.

(f) Siloxane – All Gas delivered through an Interconnect into Peoples' System that includes Gas from landfill well(s) or gathering lines fed by landfill Gas sources shall meet the following on-going testing protocol:

Test Results, mg of SI / Nm^3	Action
≤ 0.4	November through February = once per week March through October = twice per month
0.40 - 0.60	Test daily until results are below 0.40
3 consecutive results ≥ 0.60 or a single test ≥ 1.0	Shut in gas until start-up conditions are re-established

2.02 **Gas Odorant.** Peoples will perform Gas odorant tests to confirm that the Gas delivered at the Producer's Interconnect Facility is properly odorized. If is found to have insufficient odor, then Producer will be required to purchase and install odorizing units and monitoring equipment according to Peoples' specifications and as set forth herein. The Producer is also responsible for the maintenance of this facility including the costs of odorant supply needed to maintain a sufficient odor in all Gas delivered at the Producer's Interconnect Facility. Odorizing units and monitoring equipment specifications

(a) Equipment and Ownership. The Producer will own the odorizer with associated equipment necessary to operate and deliver odor (odorizer system) and is responsible for all costs associated with operating the system. Peoples will approve the design of the odorizer system, whereinafter the Producer will purchase and install the odorizer system. Peoples may choose to be present for the installation and shall have the right to test the system after its installation. Thereafter, Peoples will operate and maintain the odorizer systems and, where applicable, a thermal electric generator (unless a public electric power supply can be made available to the site), together with necessary valves, tubing and fittings, in order to properly odorize Gas delivered to measurement equipment. If the odorizer system is located outside of the Interconnect Facility location, the Producer shall provide site access to Peoples, as described in Section 1.03 of Appendix A, for the site where the odorization system is located. Peoples shall indemnify and hold harmless Producer for any and all environmental, health and safety liabilities directly resulting from Peoples' or its designee's accessing or operating Producer's odorizer system. Peoples shall also replace, fix and repair, at its cost, any portion of Producer's odorizer system that Peoples or its designee intentionally or negligently harms, damages or breaks as a result of operating the odorizer system.

(b) Upgrades. If Producer should desire to upgrade or replace any of the currently existing odorizers or generators, all equipment must be subject to the review and approval of Peoples.

(c) Refill. Peoples will manage the filling and refilling (or tank exchange) of the odorant to make sure, that sufficient odorant is available for Gas delivered to the measurement equipment.

(d) Odorant Cost. Producer will reimburse Peoples, upon receipt of its invoices, for the cost of odorant, including all future tank refills.

(e) Odorizer Site. Producer will provide and maintain, at its own cost, perimeter fencing around the Odorizer sites to enclose and protect the odorizers and related equipment.

(f) Communication Cost. Producer will reimburse Peoples, upon receipt of its invoices, for the monthly cost of public telephone or cellular service for the communications equipment used to monitor the operation of the odorizers and the odorant level and for the monthly cost of electrical service used to operate and maintain the odorizers, if electric power is provided to the odorizers from a public supplier.

(g) Maintenance Cost. Producer will reimburse Peoples, upon receipt of its invoices, for the cost of any regular, periodic, and other odorizer maintenance service, including all labor and necessary

replacement parts or equipment, to assure the continued efficient operation of the odorizers. This includes reserve parts held in Peoples' stock to enable timely and proficient resolutions.

2.03 **Gas Quality Inspections.** If Gas sample analysis indicates that any of the Gas quality specifications, requirements and/or standards set forth in this Master Agreement have not been met, Peoples may refuse deliveries until the Producer makes the necessary provisions to fully comply with the Gas quality requirements.

2.04 **Gas Quality Inspections**. After initial deliveries are received, Peoples reserves the right to periodically sample Gas at the measurement equipment to validate the Gas quality. If the analysis indicates that Gas quality specifications, requirements and/or standards set forth in this Master Agreement are not met, Peoples has the right to shut in the Interconnect indefinitely until the Producer makes the necessary provisions to fully comply. Peoples shall indemnify and hold harmless Producer for any and all environmental, health and safety liabilities directly resulting from Peoples' or its designee's accessing Producer's measurement equipment. Peoples shall also replace, fix and repair, at its cost, any portion of Producer's measurement equipment that Peoples or its designee intentionally or negligently harms, damages or breaks as a result of accessing the equipment.

2.05 **Remedies.** Should any of the above substances enter Peoples' System and cause damage to metering, regulating and/or other equipment, or interruption of service, Producer shall reimburse Peoples for the costs to repair such damage and for any related costs which Peoples may incur to restore service to, and/or repair facilities of, its customers, including payments made by Peoples to customers in settlement of claims arising out of interruption of Gas service; provided that Producer was notified that Peoples was invoking indemnification under Section 13.03 and Producer was given the opportunity to defend against the claim prior to such settlement agreement.. Any such costs may be deducted from payments due Producer for Gas delivered. In addition, if the Gas delivered fails, in Peoples' reasonable opinion, using commercially reasonable discretion, to meet the quality specifications set forth herein, Peoples may elect to refuse to take all or any portion of such Gas until the Producer bring the Gas into conformity with such specifications. In the case of any such refusal, Producer agrees to exercise all due diligence to bring such Gas into conformance with the specifications set forth herein. Peoples has the right to shut in the Interconnect indefinitely until the Producer makes the necessary provisions to meet the Gas quality standards. Peoples may also elect to require continuous Gas quality monitoring with fail safe shut off as a provision to accept existing or new deliveries. Damages as a result of Gas quality violations are the responsibility of the Producer and the Interconnect shall be shut-in until damages are paid in full.

SCHEDULE 1 TO
APPENDIX B TO MASTER AGREEMENT
WATER VAPOR CONTENT

PEOPLES NATURAL GAS DIVISION
ALLOWABLE WATER VAPOR LEVEL (#/MMSCF) VS. REGULATOR SET PRESSURE (PSI)

PSI	#/mmscf
1	543
2	511
3	482
4	457
5	434
6	413
7	394
8	377
9	361
10	347
11	334
12	321
13	310
14	299
15	289
16	280
17	271
18	263
19	256
20	248
21	241
22	235
23	229
24	223
25	218
26	212
27	207
28	203
29	198
30	194
31	190
32	186
33	182
34	178
35	175
36	171
37	168
38	165
39	162
40	159
41	156
42	154
43	151
44	149
45	146
46	144
47	142
48	139
49	137
50	135

PSI	#/mmscf
51	133
52	131
53	129
54	128
55	126
56	124
57	122
58	121
59	119
60	118
61	116
62	115
63	113
64	112
65	111
66	109
67	108
68	107
69	106
70	104
71	103
72	102
73	101
74	100
75	99
76	98
77	97
78	96
79	95
80	94
81	93
82	92
83	91
84	90
85	89
86	88
87	88
88	87
89	86
90	85
91	85
92	84
93	83
94	82
95	82
96	81
97	80
98	80
99	79
100	78

PSI	#/mmscf
105	75
110	72
115	70
120	67
125	65
130	63
135	61
140	59
145	57
150	56
155	54
160	53
165	52
170	50
175	49
180	48
185	47
190	46
195	45
200	21
205	21
210	20
215	20
220	20
225	19
230	19
235	19
240	18
245	18
250	18
255	17
260	17
265	17
270	16
275	16
280	16
285	16
290	16
300	15
310	15
320	14
330	14
350	13
375	13
400	12

Peoples reserves the right to require more stringent water vapor standards in limited and specific situations where Peoples has determined through water vapor testing that the water vapor levels at identified production meter points are affecting customer service or creating operational issues.

SCHEDULE 1 TO
APPENDIX B TO MASTER AGREEMENT
WATER VAPOR CONTENT

EQUITABLE GAS DIVISION
ALLOWABLE WATER VAPOR LEVEL (#/MMSCF) VS. LOCATION

1. Producer meters connected to Equitable Gas Division's pipelines north of Creighton Compressor will be subject to 40#/mmscf water vapor standard.
2. Producer meters connected to Equitable Gas Division's pipeline south of Creighton Compressor will be subject to 20#/mmscf water vapor standard.

Peoples reserves the right to require more stringent water vapor standards in limited and specific situations where Peoples has determined through water vapor testing that the water vapor levels at identified production meter points are affecting customer service or creating operational issues.

Creighton Station

Front Street, Creighton PA 15030
Latitude: 40.583586, Longitude: -79.775129

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-I-007

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples Gas Division (PGD) existing Rate GS- Gathering Service.

a. What are the water vapor standards on the PGD system?

b. Is Peoples proposing any changes to these standards in this proceeding? Please explain your answer.

Answer: a. ALLOWABLE WATER VAPOR LEVEL (#/MMSCF) VS. LOCATION

1. Producer meters connected to pipelines on the suction side of a Peoples compressor will be subject to 40#/mmscf water vapor standard.

2. All other Producer meters will be subject to 20#/mmscf water vapor standard.

Peoples reserves the right to require more stringent water vapor standards in limited and specific situations where Peoples has determined through water vapor testing that the water vapor levels at identified production meter points are affecting customer service or creating operational issues.

b. Not at this time

Submit Date: 2/20/2024

PIOGA Exhibit DW-2

Peoples' responses to OSBA-I-15.a. & OSBA-I-15.d.

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OSBA-I-015

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples Statement No. 4 at 15-24; Exhibit EAP-1; Peoples Statement No. 15 at 10, Exhibit RNZ-3, Exhibit 11, allocation of gathering system costs:

a. Please explain more fully the "value-based considerations associated with producers' access to Peoples' gathering system" cited in Statement No. 15. In particular, please discuss the relative value of the gathering system to the various categories of customers (i.e., rate classes, sales versus transportation).

b. Please identify the specific customers and volumes by rate class that benefit from the difference between the $3.48 per mcf and $3.08 per mcf cited in Statement No. 4.

c. Re the "GatherVolumes" allocator in Exhibit 11:

i. Please explain how the volumes were derived;

ii. Please segregate the volumes for each class between sales service and transportation service volumes;

iii. Please provide the number of customers served by volumes flowing through the gathering system in each rate class, split between sales and transportation service customers.

Answer: a. Value to Peoples customers of producer's access to Peoples gathering system - Access to sources of lower cost gas.

Value to producers of access to Peoples gathering system - Means to move gas - in some cases, to move it at a lower cost than other alternatives, in other cases, it is their only option to move gas.

b. All system supply customers benefit since the local production will assist in lowering the overall gas commodity charge for all class of customers purchasing their commodity from Peoples. However, Peoples cannot identify by class how the difference between local production and interstate supplies would affect customers who purchase their commodity from a NGS, since Peoples doesn't have knowledge of how the NGS would allocate that price difference to the mix of customer rate class they serve.

c.

i. FPFTY Gathering volumes by division, system supply and transport (P1, NP1) were estimated by the Company. These volumes were then allocated to the classes based on FPFTY throughput sales. Please refer to the "Gathering Allocator" tab in Attachment OCA-5-001g (COSS External Factors). Note, cells E59 and E67 use the term "HTY" but should state "FPFTY."

ii. Please refer to Excel rows 6-8 in the "Gathering Allocator" tab in Attachment OCA-5-001g (COSS External Factors)

iii. Please see 15 (d) for total customers by class served from gathering. Peoples cannot distinguish sales verse transport customers by pipeline system.

Submit Date: 3/4/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: OSBA-I-015d-f

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples Statement No. 4 at 15-24; Exhibit EAP-1; Peoples Statement No. 15 at 10, Exhibit RNZ-3, Exhibit 11, allocation of gathering system costs:

d. Re Statement No. 4, page 17, please specify the number of customers and annual volumes by division and by rate class for customers served directly from the gathering system.

e. Please explain how loads for customers served directly from the gathering system are balanced.

f. Please explain generally why it is appropriate for all customers in a particular class to bear the cost of the gathering system when only a subset of customers in the class rely upon that system. In particular, please explain whether it would be more appropriate to recover the net costs of the gathering system as a gas supply charge to the customers who use the system.

Answer: d. There are 2,250 residential customers, 104 commercial customers, and 1 industrial customer served directly from gathering pipelines on the PNG system. Although there are no DOT or FERC accounting gathering pipelines on the PG system, there are pipelines that function more like gathering that move local production to distribution areas. These pipelines directly serve 1,662 residential customers, 83 commercial customers, and 1 industrial customer.

e. If the volumes delivered into the gathering system are greater than the direct customer consumption, the excess gas is delivered into other parts of the system through district regulating stations and/or compressor stations. If the volumes delivered into the gathering system are less than the direct customer consumption, additional gas is supplied to the gathering system to maintain adequate pressure and volumes to serve the customers.

f. Suppliers that serve transportation customers also have access to purchase the lower cost gas available from local production. For that reason, it is not more appropriate to recover the net costs of the gathering system as a gas supply charge to the customers who use the system.

Submit Date: 3/4/2024

PIOGA Exhibit DW-3

Peoples' responses to PIOGA-II-2 and PIOGA-VI-5

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-II-002

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples Statement No. 4 (Palombo) at p.18, lines 2-3. Please describe every way that Peoples operates its gathering and distribution systems to facilitate the introduction of lower pressure gas from conventional wells into its system.

Answer: Peoples operates the systems below Maximum Allowable Operating Pressures (MAOP) to comply with PHMSA regulations, and allow for pressure buildups but prevent over pressurization of the systems. Conventional local production is delivered to the systems such that the regulator set points of the production meters are set to allow for this pressure build up but not exceed MAOP. Set points can vary depending on seasonal temperatures, where customer demand may be higher or lower.

Submit Date: 2/26/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-VI-005

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Has Peoples allowed deliveries into its system at pressures higher than the regulator set point(s)? If so, please explain why and if Peoples raised the producer regulator set point(s) to allow producer gas to flow? If not, please explain why not.

Answer: Peoples obligations and requirements are to operate the pipeline systems within the MAOPs. Regulator set points can be adjusted and vary across the system to provide the most efficient operating pressures and optimal supply blend to maintain safe reliable service, so long as every set point is within the allowable MAOP.

Submit Date: 3/14/2024

PIOGA Exhibit DW-4

PIOGA Exhibit DW-4 (Peoples' responses to PIOGA-I-2 (with GPA attachment) and PIOGA-III-1 (without attachments)

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-I-002

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples Gas Division (PGD) existing Rate GS- Gathering Service.

a. Please provide the gas purchase agreement or Rate GS Service Agreement currently being used by PGD.

b. When did PGD begin using the agreement(s) provided in response to a. above?

c. Please provide the gas purchase agreement or Rate GS Service Agreement used by PGD prior to the agreements provided in response to a. above.

Answer: a. See attached current Master Interconnect Measurement Agreement (MIMA)

b. March 2017

c. See attached Gas Purchase Agreement (GPA)

Submit Date: 2/20/2024

Rev 02/15
(Non-dedicated year to year gas supply form)

GAS PURCHASE AGREEMENT

NO. __Y-__

Between

<COMPANY NAME>

Seller

a

n

d

PEOPLES TWP LLC

Buyer

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PEOPLES TWP LLC
GAS PURCHASE AGREEMENT
NO. #Y-XX

THIS AGREEMENT, made and entered into this ___ day of <Month>, 20__, by and between **<COMPANY NAME>** a <state>_____, having a business address of <ADDRESS>, <CITY>, <STATE> <ZIP>, hereinafter referred to as "Seller", and **PEOPLES TWP LLC**, a Pennsylvania limited liability company, having its principal office at 205 North Main Street, Butler, Pennsylvania 16001, hereinafter referred to as "Buyer".

WITNESSETH THAT:

WHEREAS, Seller is engaged in the business of producing natural gas and has, or will have, available for sale and delivery to Buyer a supply of natural gas from certain wells drilled, or to be drilled, in the Commonwealth of Pennsylvania; and

WHEREAS, Seller desires to sell and deliver to Buyer all of the natural gas produced from the well(s) described herein and from any other well(s) which may subsequently be made subject to this Agreement, and Buyer is willing to purchase said natural gas, upon the terms and conditions hereinafter set forth;

NOW, THEREFORE, the parties hereto, in consideration of the mutual promises contained herein, and intending to be legally bound hereby, have agreed and do hereby agree as follows:

SECTION I
GAS SOLD; RESERVATIONS BY SELLER;
DEDICATION; OPTION TO PURCHASE

1. Subject to the conditions hereinafter set forth, Seller hereby agree to produce and deliver and hereby sell to Buyer all the natural gas produced or that may be produced and saved by Seller from (2) wells hereinafter more particularly described as follows:

Name of Well	**Permit No.**	**Township**	**County**

all of which natural gas constitutes a gas reserve which, together with said well(s) and the pipelines and other facilities used by Seller to deliver natural gas from said well(s) to Buyer and all additions, replacements, and betterments thereto, Seller hereby dedicates to the performance and fulfillment of its obligations under this Agreement. Said well or wells are now held and operated by the Seller on tracts or parcels of land, hereinafter sometimes referred to as "the dedicated acreage", under and by virtue of the following described instruments for oil and gas purposes:

Name of Well	Description of Instrument

Except where otherwise expressly indicated, recordation references are to instruments duly of record in the Office of the Recorder of Deeds of the County in which the well(s) are located.

2. Seller excepts and reserves from this Agreement such quantities of gas produced and saved as may be required by Seller for use in its own operations for the production of oil and gas from said premises and also such quantities as the lessors thereof may be entitled to, under the provisions of the lease, for domestic purposes or for heat and light in the residences of said lessors, and as may be given or sold to the owners of the overlying surface for like domestic purposes.

3. Such rights of entry, use and occupation of the surface of said lands as are or may become vested in or held by Seller are hereby permitted to be used by Buyer under this Agreement.

4. Seller agrees not to permit the lease or leases embracing the gas dedicated to this Agreement to lapse or expire, or become forfeited, or to be surrendered for cancellation, during the term of this Agreement. Seller agrees, in its operations, not to waste gas that may be produced from any well drilled upon said dedicated acreage. Seller further agrees and binds itself not to dispose of any of the gas produced from or underlying the dedicated acreage to any other persons or company during the term of this Agreement, except for any gas with respect to which Buyer elects not to exercise the option to purchase granted to it by Seller in sub-section 5 of this Section I.

5. Seller hereby grants to Buyer the exclusive right and option during the term hereof to purchase, for the price and on the terms and conditions determined by Buyer to be applicable to similar newly drilled wells, all of the natural gas that may be produced during the term hereof from each and any additional well or wells to be drilled on the above described dedicated acreage or on any tract or parcel of land subsequently made subject to this Agreement. Within ten (10) days after completion of any such well(s), Seller shall give written notice to Buyer of such completion, and Buyer may exercise its option to purchase gas from such well(s) by giving written notice to Seller within twenty (20) days after receipt of Seller's notice of completion.

SECTION II
BUYER'S PURCHASE OBLIGATION; GAS VOLUME

1. Subject to the terms and conditions hereof, Buyer hereby purchases and agrees to pay for the natural gas to be produced and delivered by Seller hereunder. Buyer agrees, insofar as it can consistently do so, having regard for its other related interests, to take all the gas Seller has available during the term of this Agreement, at the full flow of said gas from Seller's pipeline into Buyer's pipeline against the varying pressures from time to time maintained in said lines; provided, however, that it is expressly understood and agreed that Buyer may restrict the flow or discontinue the taking of gas temporarily, when and for such length of time as in its judgment it is deemed

expedient so to do, its judgment being based upon consideration of market demand, relative price of the gas covered hereunder, convenient operation of its then existing pipeline facilities, repair and maintenance requirements, storage capacity, the line pressure it deems necessary to maintain, the competitive and other conditions in the various fields in which it is purchasing gas, and such other factors as it deems relevant. It is further expressly understood and agreed that from the first day of May of each year to the thirty-first day of October following, inclusive, Buyer may at its option restrict the flow or discontinue the taking of Seller's gas during all or a portion of said period. In the event Buyer, pursuant to the provisions of this sub-section 1 of Section II, determines to take less than the full flow of natural gas from the well or wells dedicated hereto, Buyer shall so notify Seller in writing, by email or by telefax, and Seller agree promptly to suspend production in whole or in part, as required.

2. Notwithstanding anything contained herein to the contrary, in the event that the pressure of Seller's natural gas at the point of delivery becomes too high, in Buyer's opinion, for the safe operation of Buyer's pipeline system, Buyer may choke back or control the flow of natural gas to reduce such pressure to a point of safety.

3. Buyer makes no representations concerning the pressure which will be maintained in its pipelines from time to time or other factors which may affect the quantity of gas which Seller may be able to deliver to Buyer.

SECTION III
TERM; COMMENCEMENT OF DELIVERIES

1. This Agreement shall be effective as of the date hereof and shall continue and remain in full force and effect for a primary term ending <MONTH> XX, 20__ and from year to year thereafter unless terminated on said date or any anniversary thereof by either party upon not less than sixty (60) days' advance written notice to the other party; provided, however, that (a) with respect to natural gas sold and purchased hereunder prior to the expiration of the term of this Agreement, the provisions of this Agreement, including without limitation Sections IV 3., VI 4., VII, VIII 2. and IX, and the respective rights, obligations and liabilities of Seller and Buyer hereunder shall continue to be effective and shall remain in full force and effect for a period of four (4) years after the expiration of such term and (b) if Seller fails or is unable to deliver to Buyer a quantity of gas from all wells drilled on the dedicated acreage sufficient to justify, in Buyer's opinion, the expense of the further operation of Buyer's gas measuring equipment, Buyer, upon ten (10) days' prior written notice, may at its option terminate this Agreement.

2. Deliveries of gas hereunder shall commence as soon as (a) all necessary facilities have been constructed and the well or wells have been connected to Buyer's pipeline and (b) Seller has furnished to Buyer all required documents and information concerning the well(s) and the above-described dedicated acreage.

SECTION IV
CONNECTION SITE; DELIVERY POINT; POSSESSION

1. Seller shall promptly construct and place in operation the necessary gathering line to connect said well or wells at a suitable site (the "Connection Site") designated by Buyer with Buyer's __-inch (X") diameter pipeline located on property now or formerly of _____ in _____ Township, _____ County, _____, and shall, at its own cost and expense, secure and maintain the necessary rights-of-way and related surface rights for Buyer's regulator, metering and other connection facilities at the Connection Site. One meter, the related fittings and other necessary equipment required at the Connection Site, including but not limited to any over-pressure safety equipment, shall be

provided and installed by Buyer at Seller's sole cost and expense as soon as reasonably possible after Seller's gathering line is operational and any necessary rights-of-way and related surface rights for Buyer's connection facilities have been furnished by Seller. If Seller does not remit payment for said facility and installation charges within ten (10) days after receiving Buyer's invoice for same, then Buyer may at its option deduct all or any portion of such charges from payments otherwise due to Seller under the terms of this or any other gas purchase agreement between Seller and Buyer.

2. The point of delivery (the "Delivery Point") for all gas purchased hereunder shall be at the inlet side of Buyer's meter at the Connection Site. Title to all gas delivered hereunder shall be considered as passing to and vesting in Buyer at the Delivery Point.

3. Seller shall be deemed to be in control and possession of the gas hereunder until it shall have been delivered to Buyer at the Delivery Point, after which Buyer shall be deemed to be in control and possession thereof. Buyer shall have no responsibility with respect to any gas hereunder until it is delivered to Buyer at the specified Delivery Point or because of anything which may be done, happen, or arise with respect to said gas before such delivery; and Seller shall have no responsibility with respect to said gas after its delivery to Buyer or because of anything which may be done, happen, or arise with respect to said gas after delivery of said gas to Buyer, except as hereinafter provided in Section VI, in accordance with the terms and conditions of this Agreement. Seller assumes the full cost and expense, as well as full and complete liability and responsibility, for collecting, gathering, and transporting the gas to the Delivery Point hereunder at the quality hereinafter specified.

SECTION V
MEASUREMENT

1. All gas purchased hereunder shall be measured by an orifice, turbine or displacement type meter or other approved measuring device of equal accuracy. Said meter shall be owned, installed, maintained, and read by Buyer.

2. The quantity of natural gas delivered to Buyer shall be determined as follows:

(i) The unit of volumetric measurement shall be a standard cubic foot of gas at a pressure base of fourteen and seventy-three hundredths (14.73) pounds per square inch absolute, a temperature base of sixty degrees (60°) Fahrenheit (five hundred twenty degrees (520°) absolute) and without adjustments for water vapor.

(ii) For orifice meter measurements, the methods of computation shall conform with the recommendations contained in Report No. 3 of the Gas Measurement Committee of the American Gas Association, including any revisions made thereto, applied in a practical manner. The specific gravity of the gas being measured shall be determined at the beginning of delivery and as often thereafter as conditions may warrant.

(iii) For displacement or turbine meters or other approved measuring devices, the meter readings at varying pressures shall be converted to gas quantities at base conditions set forth in sub-section 2(i) of this Section V.

(iv) In connection with the use of any type of measuring device, an atmospheric pressure of fourteen and four tenths (14.4) pounds per square inch shall be assumed, with no allowance for variation in atmospheric

pressure. The flowing gas temperature may be recorded at the Buyer's discretion. In the absence of a flowing gas temperature recorder, a temperature of sixty degrees (60°) Fahrenheit will be assumed.

3. In the event the meter used for measuring the natural gas delivered to Buyer hereunder is out of service or is determined by Buyer to be inaccurate by more than plus or minus two (2) percent for any period of time, during which time delivery of gas is continued by Seller to Buyer, then the quantity of natural gas delivered during such a period shall be estimated by Buyer by comparing the quantity of natural gas delivered during a like period and under similar conditions when the meter was in service and measuring the natural gas accurately, which estimation will be accepted by Seller.

4. If Seller challenges the accuracy of any meter in use under this Agreement and requests to have the meter tested, Buyer shall test the meter under suitable conditions in the presence of Seller if Seller wishes to exercise the right to be present or represented at such test. If the meter on test shall prove to be accurate within plus or minus two (2) percent, the cost of testing and repairing the same shall be borne by the Seller, but if the meter on test proves to be in error by more than plus or minus two (2) percent, then the cost of testing and repairing the same shall be borne by Buyer. Any resultant aggregate error exceeding two percent (2%) of computed delivery shall be adjusted in accordance with sub-section 3 of this Section V. Any such adjustment shall be made for a period not to exceed thirty (30) days prior to the date of the challenge by Seller.

5. In the event different prices may become effective under this Agreement for natural gas being produced from different wells located on said dedicated acreage hereinbefore described, Buyer may, at its option, provide and install at Seller's sole cost and expense a meter on Seller's well gathering line or field gathering line in order to measure the natural gas being produced from said tract or tracts of land for which a different price is to be paid, or, in the alternative, it may accept Seller's meter readings as hereinafter provided, which meter readings shall be subject to verification and correction through the inspection of Seller's records at reasonable times and intervals. Any natural gas delivered by Seller and measured by Buyer with such a meter on Seller's pipeline, will not be deemed delivered by Seller to and possession taken by Buyer under Section IV until such gas enters the measurement facilities on Buyer's pipeline, and any line loss occurring before natural gas enters Buyer's measurement facilities on Buyer's pipeline shall be the responsibility of Seller. Rights of way required by Buyer for ingress and egress to and from any field meter or meters and the related surface rights for such meter sites shall be furnished by Seller to Buyer free of cost for locations previously approved by Buyer. In the event that Buyer elects to accept Seller's meter readings, Seller shall submit to Buyer all individual well meter readings registering through Buyer's meter at the Connection Site within five (5) days following the end of each monthly measuring period. Payment for any such gas will not be made until Buyer receives said meter readings. If Seller's measurement is by orifice meter, Seller shall furnish to Buyer a copy of the applicable chart or charts.

SECTION VI
QUALITY

1. Seller agrees to install, operate and keep in efficient operating condition, at Seller's own expense, drips, separators, dehydrators, alcohol bottles, gas cleaners, and any other equipment necessary to insure that the gas delivered from each well hereunder shall be clean and commercially free from dust, objectionable odors or other solid or liquid matter which might interfere with its merchantability or cause injury to or interference with proper operation of the lines, regulators, meters or other equipment through which it flows. Seller also agrees to operate and keep in efficient

operating condition, regulators, relief valves, and any other equipment necessary to avoid excessive pressure in Buyer's and/or Seller's line.

2. The gas delivered from each well hereunder shall not contain: more than seven (7) pounds of water in a vapor state per million cubic feet; more than 0.3 grains of hydrogen sulfide per one hundred (100) cubic feet of gas; more than twenty (20) grains of total sulfur per one hundred (100) cubic feet of gas; more than four percent (4%) by volume of a combined total of carbon dioxide (CO_2) and nitrogen (N_2) components, provided, however, that the total carbon dioxide content shall not exceed two percent (2%) by volume; and more than two tenths of one percent (0.2%) by volume of oxygen (O_2). Seller agrees to make every effort to keep the gas completely free of oxygen. The presence and amount of any of the aforementioned substances shall be determined by Buyer using appropriate testing equipment.

3. All gas delivered hereunder shall have a minimum heat content of nine hundred eighty (980) British Thermal Units (Btu) per cubic foot (saturated) as measured on a Cutler-Hammer calorimeter, or the equivalent, and a utilization factor of one thousand three hundred (1,300) plus or minus six percent (6%), the utilization factor being defined as that number obtained by dividing the heating value of the gas by the square root of its specific gravity. The initial Btu determination shall be made by Buyer at its expense. Subsequent Btu determinations requested by Seller or Buyer shall be made by Buyer at Seller's expense.

4. Should any of the above substances enter Buyer's facilities and cause damage to metering, regulating and/or other equipment, or interruption of service, Seller shall reimburse Buyer for the costs to repair such damage and for any related costs which Buyer may incur to restore service to, and/or repair facilities of, its customers, including payments made by Buyer to customers in settlement of claims arising out of interruption of gas service. Any such costs may be deducted from payments due Seller for gas delivered. In addition, if the gas delivered fails in Buyer's opinion to meet the quality specifications set forth herein, then Buyer may elect to refuse to take all or any portion of such gas until the Seller bring the gas into conformity with such specifications. In the case of any such refusal, Seller agrees to exercise all due diligence to bring such gas into conformance with the specifications set forth herein.

5. Seller agrees to allow Buyer to take necessary well samples at such intervals of time as may be designated by Buyer to permit testing of the gas produced to determine the quality of the gas being sold by Seller.

6. Nothing contained herein is intended or shall be construed to exclude, modify, limit or negate any warranties, express or implied, as may be provided by law, including without limitation warranties of merchantability and fitness for a particular purpose.

SECTION VII
PAYMENTS; APPOINTMENT OF AGENT; WITHHOLDING

1. Payments for all gas delivered hereunder shall be made on or about the twenty-fifth (25th) day of each month for the gas delivered during the preceding measuring period. Such payments shall be made to the agent designated in sub-section 2 of this Section VII and shall be accompanied by a statement showing the quantity of gas delivered hereunder during the applicable period. Each statement of the quantity of natural gas delivered shall be conclusive upon the Seller unless objections in writing are made by Seller and received by Buyer within thirty (30) days after Seller has received such statement.

The parties acknowledge that other agreements exist between Seller and Buyer, which are not incorporated herein, that may result in either party owing payments under those agreements. The parties now agree that financial netting shall be permitted under this Agreement and either party shall have the right to request netting to apply in a particular payment period. Under the financial netting, the requesting party may calculate the net amount of all undisputed amounts due and owing, and/or past due, arising under this Agreement with amounts due and owing, and/or past due, arising under the other agreements. After such netting, the party owing the greater amount shall make a single payment of the net amount to the other party in accordance with this Section 7.

2. Seller hereby appoints as its agent:

Name: _____
Address: _____
_____

to whom all payments shall be paid and to whom all statements and checks shall be sent by United States mail, postage prepaid, addressed as indicated above until changed by Seller by certified or registered letter addressed to Buyer. Said agent is authorized to give the necessary receipts and acquittances to Buyer and to make adjustments and settlements under this Agreement, and Buyer shall have no obligation with respect to, or responsibility for, the application of any gas purchase proceeds paid to said agent. Although the terms and conditions of this Agreement extend to and are binding upon all parties hereto and their respective personal representatives, heirs, successors and assigns, in no event will Buyer issue, or be required to issue, more than one (1) monthly check in payment of the emoluments hereunder. If at any time more than one (1) person, party or entity becomes entitled to payment hereunder for the emoluments hereunder or in the event said agent shall resign or be discharged or shall otherwise be unable or unwilling so to act, Buyer may withhold further payment of money for purchase of natural gas hereunder, without liability for interest, until Buyer is furnished by Seller with the necessary documentation (properly executed and acknowledged by all necessary parties) designating an agent or a new agent, as the case may be, to receive such payment, for all parties interested in such payment.

3. Seller agrees, where applicable, to make complete and proper royalty payments, if any, due to the owners of the oil and natural gas underlying the tract or tracts hereinbefore described and further agrees to make complete and proper payments, if any, to the person, persons or companies owning working interests in any well or wells subject to this Agreement. In no event shall Buyer be obligated to make royalty, overriding royalty, or working interest payments for natural gas purchased hereunder.

4. If Seller fails to comply with any of the covenants or terms herein contained, Buyer may immediately withhold, without liability for interest, all payments due to Seller under the terms of this Agreement, and, at Buyer's option, may suspend taking delivery of said natural gas until all necessary actions have been taken by Seller and all adjustments have been made by Seller so that in Buyer's opinion Seller are fully complying with all covenants and terms of this Agreement.

5. In the event Buyer mistakenly pays excessive amounts to Seller for natural gas sold and purchased hereunder, which overpayments are caused by or result from a mistake of fact or law, miscalculation, coercion, duress, fraud, governmental or regulatory constraint, ignorance or want of knowledge, then Seller agrees that it will, within thirty (30) days following the date Buyer

furnishes Seller with a statement setting forth the amount due, make restitution of such excessive amounts to Buyer, without liability for payment of interest; provided, however, that Seller's obligation to make such restitution shall be limited to excessive amounts mistakenly paid by Buyer to Seller within the period commencing four (4) years prior to the date on which Buyer's demand for restitution is made hereunder. In the event of Seller's failure to make such restitution within said thirty (30) day period, then Buyer may deduct from payments otherwise due to Seller for the natural gas sold and purchased under this or any other gas purchase agreement between Seller and Buyer an amount equivalent to the excessive amounts mistakenly paid by Buyer to Seller. Nothing in this Agreement shall be construed as a waiver or relinquishment by Buyer of its rights to such excessive amounts mistakenly paid.

SECTION VIII
PURCHASE PRICE

1. Purchase Price. The purchase price per million British Thermal Units (per MMBtu), as such quantity of natural gas is determined under sub-section 1 below, to be paid by Buyer to Seller for all gas delivered hereunder shall be equal to the following, as of the first day of every calendar month ("Monthly Calculation Dates") during the term hereof:

(i) an MMBTU price equal to 100% of the Inside F.E.R.C.'s Gas Market Report, "Price of Spot Gas Delivered to Pipelines," for deliveries of Appalachian production into Dominion Transmission Inc.'s dry transmission system for first of month. The specific posting to be used for the pricing of all production hereunder shall be that set forth under the column labeled "Index" and described as "Dominion Transmission Inc.: Appalachia," for gas produced and delivered to the designated Delivery Points(s).

All calculations of prices hereunder shall be rounded to the nearest whole cent. The initial purchase price shall be the purchase price computed as of the Monthly Calculation Date immediately preceding the date of this Agreement.

Notwithstanding the provisions of this sub-section 1, Seller and Buyer expressly agree that Buyer shall have the right from time to time in its sole discretion upon written notice to Seller to change the frequency of purchase price adjustments hereunder, delete one or more of the components, add or substitute one or more new components, or otherwise modify the components or method of computation, utilized in determining the purchase price hereunder, provided that no such modification shall result in a purchase price lower than the purchase price Buyer is offering at the time of such modification for new supplies of Pennsylvania gas under Buyer's new gas purchase agreements for dedicated or non-dedicated gas supplies.

2. Btu Calculation. The purchase price provided herein is expressed per MMBtu. For purposes of applying such purchase price, all payments for gas sold and purchased hereunder shall be calculated by multiplying the following: (a) the applicable purchase price provided above; (b) a fraction, the numerator of which is the total heat content as determined in accordance with sub-section 3 of Section VI hereof, and the denominator of which is 1000; and (c) the volume of gas delivered to Buyer as determined under Section V hereof, and expressed in thousands of cubic feet (Mcf).

3. No Other Adjustments. It is expressly understood and agreed that the purchase price specified herein shall constitute full and adequate compensation to Seller for the gas to be delivered hereunder, for all of Seller's production-related and other costs, and for all of Seller's severance and other taxes, notwithstanding that Seller may be entitled to a higher price and/or additional compensation with respect to such costs and taxes pursuant to any applicable law, rule or regulation.

4. Cost Recovery. Notwithstanding any other provisions of this Agreement, if any order, opinion, determination, decision, enactment or regulation of the Pennsylvania Public Utility Commission, Federal Energy Regulatory Commission, or of any other governmental authority (Federal or State), or of any legislative body or court, may in Buyer's judgment have the effect, for any reason, either directly or as a precedent, of preventing Buyer's full and prompt recovery, as part of its purchased gas costs, of any portion of the purchase price already paid Seller or to be paid Seller in the future, then Buyer, in addition to its right to refund hereinafter specified, with the next monthly payment after the date of such order, opinion, determination, decision, enactment or regulation, or at such later date as it may elect, may in Buyer's sole discretion reduce the purchase price hereunder to that price level which will in Buyer's judgment enable Buyer to recover promptly its full costs. In such case, the price provisions applicable to Seller's deliveries of gas to Buyer shall be deemed modified as appropriate to assure Buyer its full cost recovery for gas previously purchased and for future purchases, and Seller shall refund to Buyer an amount equal to the difference between any purchase price previously paid and the reduced price level which will in Buyer's judgment enable Buyer to recover its full costs. Any such refund amount shall be paid by Seller to Buyer within thirty (30) days following the date Buyer furnishes Seller with a statement setting forth the amount due, or Buyer, at its option, may deduct such amount from payments otherwise due to Seller under the terms of this or any other gas purchase agreement between Seller and Buyer.

SECTION IX
TITLE WARRANTY; INDEMNIFICATION

1. Seller warrants generally the title to the natural gas delivered and sold hereunder to Buyer and that at the time of delivery said natural gas is or will be free and clear of all liens, encumbrances and claims whatsoever. Seller further warrants that at the time of delivery Seller will have good right and title to sell said natural gas as aforesaid, and Seller agrees to indemnify Buyer and save it totally harmless from all suits, claims, actions, debts, levies, damages, costs, losses and expenses (including legal fees and expenses) of any nature arising from or out of adverse claims of any kind or nature asserted by anyone whatsoever to said natural gas, including without limitation claims, suits, actions and demands which may arise due to the non-payment of landowner royalties, overriding royalties and rentals thereon or therefrom.

2. In the event any adverse claim to or against the natural gas sold and delivered hereunder, or any part thereof, is made by any person, Buyer may withhold payment for the natural gas to which the adverse claim pertains, without liability for payment of interest on the amounts withheld, or may refuse to accept delivery of such natural gas, until the dispute as to the ownership of said natural gas is settled by agreement between Seller and such adverse claimant or by the final decree of a court of competent jurisdiction. If litigation results from any such adverse claim, Buyer may pay any money withheld by it hereunder into court without further liability therefor, or may interplead all claimants to such natural gas, including Seller.

3. Seller and Seller's Agent, jointly and severally, for themselves and on behalf of their respective heirs, personal representatives, successors and assigns, hereby assume all risks with

respect to and all liability for and shall protect, indemnify and hold harmless Buyer, its successors, assigns, directors, officers, employees and agents, jointly and severally, from and against, any and all claims, costs, fines, penalties, demands, actions, controversies, obligations, liabilities, expenses (including legal fees and expenses), losses, damages and causes of action of every kind and character asserted by any person or persons or entity or entities, which, by allegation or in fact, arise out of or in any way relate to any act or omission of Seller and/or Seller's Agent, or their respective agents, employees, representatives, subcontractors or invitees, on or about the above-described dedicated acreage or in connection with Seller's performance of its obligations under this Agreement, including, without limitation, the drilling, completion, reworking, operation and/or maintenance of any wells and related facilities utilized in or dedicated to the performance of Seller's obligations under this Agreement, it being expressly understood and agreed that for purposes of this indemnity Seller hereby waives any protection which may be available to it under the Pennsylvania Workers Compensation Act or any other similar state or federal law.

4. Buyer at its option may deduct all or any portion of any claim for indemnity hereunder from payments otherwise due to Seller under the terms of this or any other gas purchase agreement between Seller and Buyer.

SECTION X
WELL & WELL CONDITIONS; WELL DATA

1. Seller shall equip each well on the dedicated acreage hereinbefore described with a valve suitable for gauging the pressure of natural gas in the well, and Buyer shall have the privilege of gauging such pressures at all reasonable times during the term of this Agreement. The gas producing wells on said dedicated acreage shall be and remain continuously connected to Seller's gathering lines for production deliveries, except to the extent that disconnection is required as wells are being repaired. Seller shall operate all wells in a reasonable and prudent manner and keep the same in good condition in order to maximize the production of natural gas.

2. Seller shall make the well or wells subject to this Agreement available to Buyer for inspection and/or testing at any reasonable times during the term of this Agreement.

3. Without the prior written consent of Buyer, Seller shall not use any mechanical means or accessory equipment to pump or compress the natural gas produced hereunder in order to aid its delivery into Buyer's pipeline.

4. If requested by Buyer, Seller shall furnish Buyer, within ten (10) days of any such request, copies of the completion report, all well logs, test results, and such other data as Buyer may reasonably request with respect to the well or wells subject to this Agreement.

SECTION XI
TAXES

Seller and Buyer shall each pay all taxes of every kind as respectively assessed to or levied on each, without right of contribution by the other, and neither the price to be paid for gas nor any other provision of this Agreement shall be affected by an increase or decrease in the rate or amount or the repeal of an existing tax imposed on either party, or by the enactment of a new tax.

SECTION XII
PERSONS BOUND; TRANSFERS BY SELLER

1. All terms, covenants, conditions and obligations of this Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective heirs, personal representatives,

successors and assigns, and shall be in the nature of covenants running with Seller's interest in the dedicated acreage and wells hereinbefore described.

2. Any sale or assignment by Seller of its interest in said dedicated acreage or the wells hereinbefore described or its interest in this Agreement or its interest in any other property, real or personal, required for or dedicated to the performance of this Agreement, shall be made expressly subject to the rights of Buyer hereunder and with provision that the assignee or purchaser shall assume and covenant to perform all of the Seller's obligations hereunder. Seller shall give prompt notice in writing to Buyer of any sale or assignment or other disposition of all or any part of its interest in the dedicated acreage and wells hereinbefore described and covered by this Agreement and shall furnish to Buyer copies of any relevant documents evidencing transfer or assignment of said Seller's interest. Until said notice and relevant documents have been given and furnished to Buyer, Buyer may withhold all payments that may become due hereunder, without liability for interest.

SECTION XIII
FORCE MAJEURE

In the event either party is rendered unable, wholly or in part, by Force Majeure to carry out its obligations under this Agreement, other than demand payments of amounts due hereunder, then the obligations of such party, so far as they are affected by such force majeure, shall be suspended during the continuance of any inability so caused. However, the party claiming the existence of force majeure shall use all reasonable efforts to remedy any situation which may interfere with the performance of its obligations hereunder. The term "Force Majeure" as used herein, and as applied to either party hereto, shall mean acts of the law, acts of God, strikes, lockouts, or other labor disturbances, acts of the public enemy, war, blockades, insurrections, riots, epidemics, fires, floods, washouts, arrests, and restraint of rulers and people, civil disturbances, explosions, breakage or accidents to machinery or lines of pipe, freezing of wells or pipelines, partial or entire failure of such wells, or any other cause, whether of the kind herein enumerated, or otherwise, not reasonably within the control of the party claiming suspension. It is understood that settlement of strikes, lockouts, or labor disturbances shall be entirely within the discretion of the party having the difficulty and that the above requirement that any Force Majeure shall be remedied with all reasonable dispatch shall not require the settlement of strikes, lockouts, or labor disturbances by acceding to the demands of the opposing party when such course is inadvisable in the discretion or judgment of the party having the difficulty.

SECTION XIV
COMMUNICATIONS

Unless otherwise provided herein, all notices, requests, demands or other communications which are required or contemplated by this Agreement, shall be in writing and sent by United States mail, postage prepaid, to the parties at the following addresses until changed by either party by written notice to the other party:

Seller: <COMPANY NAME>
Address: _____
_____
Attention: _____
Phone: (XXX) XXX-XXXX
Email address: _____
FAX: (XXX) XXX-XXXX

Buyer: Peoples TWP LLC
205 North Main Street
Butler, PA 16001
Attention: Gas Purchase Contract Department
Phone: (724) 431-4926
Email Address: ted.haas@peoplestwp.com
FAX: (724) 287-5041

SECTION XV
MISCELLANEOUS

1. This Agreement, insofar as it is affected thereby, shall be subject to all present and future valid and applicable laws and to the valid and applicable present and future rules, regulations or orders of any regulatory agency or authority having jurisdiction. Nothing contained herein shall be construed as affecting Seller's or Buyer's rights to contest the validity or applicability of any such rules, laws, regulations or orders.

2. This Agreement represents the entire understanding of the parties with respect to the subject matter hereof and supersedes and merges herein all prior negotiations, understandings, agreements, and representations. No change, waiver, modification, or amendment of this Agreement shall be binding or of any effect unless in writing duly signed by the party against which such change, waiver, modification, or amendment is sought to be enforced.

3. Whenever this Agreement makes reference to "this Agreement" or to any provision "hereof", or words to similar effect, such reference shall be construed to refer to the within instrument unless the context clearly requires otherwise. The titles of the Sections herein have been inserted as a matter of convenience of reference only and shall not control or affect the meaning or construction of any of the terms and provisions hereof. As used in this Agreement, the plural shall include the singular and the singular shall include the plural whenever appropriate.

4. This Agreement shall be governed by, construed and interpreted in accordance with the laws of the Commonwealth of Pennsylvania. If any one or more of the provisions of this Agreement shall be held to be invalid, illegal or unenforceable in any respect, such invalidity or unenforceability shall not affect any other provision of this Agreement, which shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the day and year first above written.

WITNESS OR ATTEST:

BUYER:

PEOPLES TWP LLC

_____ By: _____

Title: _____ Title: VP, Business Development & Gas Supply

WITNESS OR ATTEST:

SELLER:

<PRODUCER/COMPANY NAME>

_____ By: _____

Title: _____ Title: _____

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-III-001

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples' responses to PIOGA-I-7 and OCA-IV-1.

a. What were the water vapor content standards on the TW Philips system immediately before its acquisition by Peoples Natural Gas Company, PNG Companies LLC, or Steel River Infrastructure Fund North America LP , as appropriate, in May 2011? Please provide the documents that show the standards in effect at that time.

b. Did the Peoples' companies enforce the water vapor standards of the legacy TW Phillips system at all points of custody transfer following acquisition? Please explain your answer.

c. Did the Peoples companies change the water vapor standards on the legacy TW Phillips system after acquiring it? If so, please specify the changes and explain why they were made, and provide documents that show the changes.

Answer: a. Water vapor contents under prior owners are not relevant to current gas quality requirements. Current owners do not know if prior owners had different business strategies relative to local production, or what may have been acceptable gas quality to protect facilities from fluids and provide safe reliable service to customers, and prevent service interruptions related to gas quality issues.

b. As it is unrealistic to monitor all points of custody transfer, Peoples conducts random audits at producer meters to monitor and enforce water vapor standards. When offenders are discovered, Peoples aims to resolve the issue with the producer, and if unsuccessful, will ultimately shut in the meter.

c. In 2020, the standard Master Interconnect Measurement Agreement (MIMA) for PG was amended and revised for more consistent and standard gas quality requirements . Standard MIMA is attached.

Submit Date: 3/1/2024

PIOGA Exhibit DW-5

Peoples' response to PIOGA-II-3

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-II-003

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples Statement No. 4 (Palombo) at p.19, lines 11-12. Please explain the basis for this statement and describe all the factors that affect the practical limit.

Answer: Since both producers and customers benefit from local production, Peoples believes it is fair for producers and customers to share in the recovery of all gathering costs. There is no specific formula or methodology to determine the allocation to producers and customers. Factors considered in developing the gathering fees were to be fair and equitable to customers and producers. With price per Dth producers receive for gas purchases projected to remain low, Peoples recognized the importance to set a gathering fee for producers that would maintain the economics for producers and encourage them to continue to produce and deliver local production. Peoples also aimed to balance additional costs to customers with affordable energy costs. Peoples believes the proposed recovery allocation to producers and customers accomplishes these objectives.

Submit Date: 2/26/2024

PIOGA Exhibit DW-6

Peoples' response to PIOGA-I-8

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-I-008

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples Statement No. 4 (Palombo) at p.12, line 20 – p.11, line-3.

a. Please provide the volumes of local gas produced and delivered from conventional wells into the Peoples system, by year and Division (Peoples Division, Peoples Equitable Gas Division, Peoples Natural Gas Division and Peoples Gas Division, as appropriate), for 2017 through 2023.

b. Please specify the volumes in your response to a. above that were delivered into the (i) gathering systems, (ii) distribution systems and (iii) transmission systems of the Divisions.

Answer: a. Conventional production for 2017-2023. The Peoples Natural Division and Peoples Equitable Division are reported as PNGD beginning in 2020, after the base rate case that combined the entities.

	PNGD	PEGD	PGD	Total
2017	20,520,005	6,776,964	11,704,301	39,001,270
2018	20,996,077	6,373,001	10,790,052	38,159,130
2019	20,914,452	5,828,934	9,904,516	36,647,902
2020	24,548,517	-	9,754,061	34,302,578
2021	22,460,408	-	8,849,944	31,310,352
2022	20,910,201	-	8,557,709	29,467,910
2023	20,091,556	-	7,952,551	28,074,107

b. Peoples does not distinguish between local production by facility types. All conventional production is managed across the entire pipeline system consistently.

Submit Date: 2/20/2024

PIOGA Exhibit DW-7

Peoples' response to PIOGA-V-2

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-V-002

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples' response to PIOGA-III-1.c. Please explain how more consistent and standard gas quality requirements improved the safe and reliable operation of the system.

Answer: Peoples' believes standardizing gas quality is a more effective and efficient way to operate as one utility to meet or exceed tariff gas quality requirements across the system. It also allows for standardizing operating procedures which is more efficient in training and transfer of job skills across the entire system. Standard gas quality requirements can also help prevent claims that some producers may be getting preferential treatment if they are held to less stringent gas quality requirements at their delivery points than other producers. All of these contribute to improving safe and reliable service to customers.

Submit Date: 3/14/2024

PIOGA Exhibit DW-8

DEP data - conventional wells drilled 1/1/2019-3/20/2023

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP OFFICE OF OIL AND GAS MANAGEI
SPUD DATA

3/21/2024 1:02:25 PM

SPUD Date Range: 1/1/2019 - 3/20/2024; County: All; Municipality: All; Region: All; Operator: ; Well Configuration: Conventional

Well Count: 778

SPUD DATE	API / PERMIT	OGO #	OPERATOR	REGION	COUNTY	MUNICIPALITY	FARM NAME	WELL TYPE
1/2/2019	123-48235	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Glade Twp	LEHMAN 9	COMB. OIL&GAS
1/10/2019	123-48206	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	DAVIS LOT 7 7-53	OIL
1/21/2019	123-48234	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 569 K39	OIL
2/11/2019	123-48231	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 569 K26	OIL
2/13/2019	083-57148	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV 54	OIL
2/15/2019	123-48230	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 569 K25	OIL
2/20/2019	083-57094	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV 37	OIL
2/20/2019	123-48233	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 569 K34	OIL
2/22/2019	083-57145	OGO-69027	BULL RUN RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Keating Twp	COLE CREEK 4	OIL
2/25/2019	083-57098	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV 41	OIL
2/25/2019	123-48232	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 569 K33	OIL
2/26/2019	083-56928	OGO-45125	HOWARD DRILLING INC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	LOT 224 10	OIL
2/27/2019	083-56924	OGO-45125	HOWARD DRILLING INC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	LOT 224 12	OIL
2/28/2019	083-57144	OGO-69027	BULL RUN RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Keating Twp	COLE CREEK 3	OIL
3/1/2019	083-56923	OGO-45125	HOWARD DRILLING INC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	LOT 224 11	OIL
3/4/2019	083-57165	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV-58	OIL

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3/4/2019	123-48287	OGO-63140	DANIEL P HORNBURG	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	SPEEDY 4 OG WELL	OIL
3/4/2019	123-48205	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	DAVIS LOT 7 7-52	OIL
3/12/2019	123-48178	OGO-43655	WHILTON BROOKS A	EP DOGO NWDO Dstr Off	Warren	Glade Twp	CLAMPETT 11	OIL
3/15/2019	123-48204	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	DAVIS LOT 7 7-50	OIL
3/18/2019	083-57097	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV 40	OIL
3/25/2019	123-48146	OGO-63140	DANIEL P HORNBURG	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	DICKEY 28	OIL
3/26/2019	123-48279	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	ANF 153 15	OIL
4/2/2019	123-48278	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF 153 14	OIL
4/4/2019	123-48202	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	DAVIS LOT 7 7-49	OIL
4/4/2019	123-47964	OGO-67450	RUSS HOLDEN WELL SVC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	LOT 545 18	OIL
4/8/2019	123-48275	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF 153 13	OIL
4/10/2019	123-48274	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF 116 12	OIL
4/16/2019	123-48273	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF 153 11	OIL
4/18/2019	083-56925	OGO-45125	HOWARD DRILLING INC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	LOT 261 30	OIL
4/19/2019	083-57107	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3132 KANE ESTATE 10	OIL
4/19/2019	123-48272	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF 153 10	OIL
4/24/2019	083-56929	OGO-45125	HOWARD DRILLING INC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	LOT 261 31	OIL

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4/24/2019	083-57115	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3132 KANE ESTATE 16	OIL
4/26/2019	123-48179	OGO-43655	WHILTON BROOKS A	EP DOGO NWDO Dstr Off	Warren	Glade Twp	NUHFER N 5	OIL
4/29/2019	083-57111	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3132 KANE ESTATE 12	OIL
4/29/2019	123-47965	OGO-67450	RUSS HOLDEN WELL SVC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	LOT 545 19	OIL
4/30/2019	123-48188	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	MYERS 20	OIL
5/2/2019	009-20088	OGO-2017	COLUMBIA GAS TRANS LLC	EP DOGO NCDO Dstr Off	Bedford	Monroe Twp	WAYNE & MARY L EDWARDS OG WELL	STORAGE WELL
5/2/2019	083-57110	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3132 KANE ESTATE 11	OIL
5/2/2019	123-47967	OGO-67450	RUSS HOLDEN WELL SVC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	LOT 545 20	OIL
5/3/2019	009-20089	OGO-2017	COLUMBIA GAS TRANS LLC	EP DOGO NCDO Dstr Off	Bedford	Monroe Twp	NORMA D KEGG OG WELL	STORAGE WELL
5/7/2019	083-57114	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3132 KANE ESTATE 15	OIL
5/7/2019	083-57142	OGO-42055	SV ABS INTEREST WETMORE PROJ	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	LOT 415 N 24	OIL
5/13/2019	083-57113	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3132 KANE ESTATE 14	OIL
5/13/2019	083-57141	OGO-42055	SV ABS INTEREST WETMORE PROJ	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	LOT 415 N 23	OIL
5/15/2019	083-57112	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3132 KANE ESTATE 13	OIL
5/20/2019	083-57143	OGO-42055	SV ABS INTEREST WETMORE PROJ	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	LOT 415 N 29	OIL
6/3/2019	053-30875	OGO-69027	BULL RUN RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	IRON RUN 3	OIL

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6/5/2019	083-57150	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	KATIE K-77	OIL
6/6/2019	123-48210	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 282 282 3M	OIL
6/7/2019	083-57151	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	KATIE K-78	OIL
6/10/2019	053-30877	OGO-69027	BULL RUN RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	IRON RUN 5	OIL
6/10/2019	123-48243	OGO-65550	BF ADVENTURES LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	DEVORE BF 8	OIL
6/12/2019	083-57149	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	KATIE K-76	OIL
6/12/2019	123-48208	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 282 282 1M	OIL
6/13/2019	053-30876	OGO-69027	BULL RUN RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	IRON RUN 4	OIL
6/14/2019	123-48244	OGO-65550	BF ADVENTURES LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	DEVORE BF 9	OIL
6/18/2019	047-25053	OGO-8389	BRAWAND H WILLIAM	EP DOGO NWDO Dstr Off	Elk	Jones Twp	BRAWAND 89	OIL
6/19/2019	083-57119	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	FULLER 54	OIL
6/19/2019	123-48212	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 282 282 5M	OIL
6/24/2019	047-25054	OGO-8389	BRAWAND H WILLIAM	EP DOGO NWDO Dstr Off	Elk	Jones Twp	BRAWAND 88	OIL
6/24/2019	083-57117	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	FULLER 53	OIL
6/24/2019	123-48245	OGO-65550	BF ADVENTURES LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	DEVORE BF 10	OIL
6/27/2019	083-57116	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	FULLER 52	OIL
6/27/2019	123-48211	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 282 282 4M	OIL

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6/28/2019	123-48219	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	WARRANT 2877 C 102	OIL
7/3/2019	083-57123	OGO-69027	BULL RUN RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	HEWITT 1	OIL
7/3/2019	123-48213	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 282 282 6M	OIL
7/8/2019	083-57198	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3132 KANE ESTATE 21	OIL
7/8/2019	123-48255	OGO-68270	AUTUMN RIDGE ENERGY LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	MORRISON B 22	OIL
7/10/2019	123-48256	OGO-68270	AUTUMN RIDGE ENERGY LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	MORRISON B 23	OIL
7/10/2019	123-48209	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 282 282 2M	OIL
7/11/2019	123-48221	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	WARRANT 2877 C 104	OIL
7/15/2019	009-20090	OGO-2017	COLUMBIA GAS TRANS LLC	EP DOGO NCDO Dstr Off	Bedford	Mann Twp	REED ET AL OG WELL 12633	STORAGE WELL
7/15/2019	083-57178	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3132 KANE ESTATE 20	OIL
7/15/2019	123-48257	OGO-68270	AUTUMN RIDGE ENERGY LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	MORRISON B 24	OIL
7/17/2019	123-48254	OGO-68726	D R & D CO	EP DOGO NWDO Dstr Off	Warren	Glade Twp	BARKLEY 2	OIL
7/18/2019	083-57177	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3132 KANE ESTATE 19	OIL
7/18/2019	123-48258	OGO-68270	AUTUMN RIDGE ENERGY LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	MORRISON B 25	OIL
7/18/2019	123-48222	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	WARRANT 2877 C 110	OIL
7/19/2019	083-57140	OGO-45125	HOWARD DRILLING INC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	NIVER LOT 388 54	OIL
7/22/2019	083-57176	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3132 KANE ESTATE 18	OIL

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7/24/2019	123-48259	OGO-68270	AUTUMN RIDGE ENERGY LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	MORRISON B 26	OIL
7/25/2019	083-57192	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV 81	OIL
7/25/2019	123-48379	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	BRIGHT K-10	OIL
7/30/2019	083-57190	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV 83	OIL
7/31/2019	123-48380	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	BRIGHT K-11	OIL
8/1/2019	083-57188	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV-84	OIL
8/5/2019	123-48381	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	BRIGHT K-12	OIL
8/5/2019	123-48334	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	COLLINS PINE LOT 108 5	OIL
8/6/2019	083-57191	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV 85	OIL
8/6/2019	123-48223	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	WARRANT 2877 C 111	OIL
8/7/2019	123-48335	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	COLLINS PINE LOT 108 6	OIL
8/10/2019	083-57120	OGO-69052	ALLEGANY RESOURCE DEV LLC	EP DOGO NWDO Dstr Off	McKean	Keating Twp	MOTT FARM 1	OIL
8/12/2019	083-57189	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV 82	OIL
8/12/2019	123-48352	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF-116 19	OIL
8/13/2019	123-48337	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	COLLINS PINE LOT 105 121	OIL
8/14/2019	083-57201	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3122 KANE ESTATE 1	COMB. OIL&GAS
8/15/2019	123-48351	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF-116 18	OIL

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8/16/2019	123-48338	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	COLLINS PINE LOT 105 120	OIL
8/19/2019	123-48220	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	WARRANT 2877 C 103	OIL
8/22/2019	123-48288	OGO-68589	JETT OIL LLC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	CUNDARI 29	OIL
8/23/2019	123-48336	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	COLLINS PINE LOT 105 119	OIL
8/27/2019	123-48240	OGO-67350	BEARCAT OIL CO LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	FOGEL 111	OIL
8/27/2019	123-48402	OGO-68260	JOHNSON WELL SVC LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	RODGERS 21	OIL
8/27/2019	123-48353	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF-153 20	OIL
8/27/2019	123-48216	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 409 409 22	OIL
8/29/2019	123-48266	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 570 K15	OIL
8/30/2019	123-48403	OGO-68260	JOHNSON WELL SVC LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	RODGERS 22	OIL
9/3/2019	123-48382	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF-153 21	OIL
9/5/2019	123-48260	OGO-68270	AUTUMN RIDGE ENERGY LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	MORRISON B 27	OIL
9/5/2019	123-48265	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 570 K9	OIL
9/6/2019	123-48354	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	ANF-171 17	OIL
9/9/2019	123-48241	OGO-67350	BEARCAT OIL CO LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	FOGEL 112	OIL
9/10/2019	123-48367	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 500 1	OIL
9/10/2019	123-48215	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 409 409 21	OIL

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9/11/2019	053-30881	OGO-43865	CURTIS OIL INC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 44 28	OIL
9/11/2019	123-48168	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	COLLINS PINE LOT 105 116	OIL
9/11/2019	123-48350	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	ANF-171 16	OIL
9/12/2019	123-48268	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 570 K16	OIL
9/16/2019	083-57199	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	PHR WT 3131 1	OIL
9/16/2019	123-48261	OGO-68270	AUTUMN RIDGE ENERGY LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	MORRISON B 28	OIL
9/16/2019	123-48167	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	COLLINS PINE LOT 105 115	OIL
9/17/2019	053-30882	OGO-43865	CURTIS OIL INC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 44 29	OIL
9/17/2019	123-48347	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	MATSON-193 5	OIL
9/18/2019	123-48364	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 409 409 23	OIL
9/19/2019	123-48269	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 570 K23	OIL
9/20/2019	123-48262	OGO-68270	AUTUMN RIDGE ENERGY LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	MORRISON B 29	OIL
9/20/2019	123-48346	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	MATSON-193 4	OIL
9/23/2019	083-57133	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	PHR WT 3131 58	COMB. OIL&GAS
9/24/2019	053-30883	OGO-43865	CURTIS OIL INC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 44 30	OIL
9/25/2019	123-48369	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 500 7	OIL
9/25/2019	123-48365	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 409 409 24	OIL

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9/26/2019	123-48242	OGO-67350	BEARCAT OIL CO LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	FOGEL 113	OIL
9/26/2019	123-48270	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 570 K31	OIL
9/27/2019	083-57134	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	PHR WT 3131 59	COMB. OIL&GAS
9/27/2019	123-48263	OGO-68270	AUTUMN RIDGE ENERGY LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	MORRISON B 30	OIL
9/27/2019	123-48170	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	COLLINS PINE LOT 105 118	OIL
9/27/2019	123-48398	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	DANA-114 1	OIL
9/30/2019	123-48404	OGO-68260	JOHNSON WELL SVC LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	RODGERS 26	OIL
10/1/2019	123-48169	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	COLLINS PINE LOT 105 117	OIL
10/1/2019	123-48366	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 409 409 25	OIL
10/7/2019	083-57109	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	FULLER 51	OIL
10/7/2019	123-48284	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	CURTIN M 3	OIL
10/8/2019	123-48368	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 409 409 26	OIL
10/14/2019	083-57108	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	FULLER 55	OIL
10/14/2019	123-48277	OGO-68752	PLEASANT OIL & GAS	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	OAKLAND 12	OIL
10/14/2019	123-48285	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	CURTIN M 4	OIL
10/16/2019	123-48392	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	TIONA LOT 23 LOT 81 P41	OIL
10/18/2019	123-48348	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 501 31	OIL

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10/21/2019	123-48393	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	TIONA LOT 23 LOT 81 P53	OIL
10/22/2019	031-25711	OGO-69129	CULP SARAH D	EP DOGO NWDO Dstr Off	Clarion	Farmington Twp	CULP 1	GAS
10/23/2019	123-48394	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	TIONA LOT 23 LOT 81 P54	OIL
10/23/2019	123-48276	OGO-68752	PLEASANT OIL & GAS	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	OAKLAND 11	OIL
10/26/2019	123-48395	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	TIONA LOT 23 LOT 81 P66	OIL
10/28/2019	083-57153	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	KATIE 200 17	OIL
10/28/2019	123-48349	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 501 32	OIL
11/1/2019	083-57152	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	KATIE 200 16	OIL
11/4/2019	053-30902	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 8	OIL
11/6/2019	083-57155	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	KATIE 200 19	OIL
11/12/2019	053-30901	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 7	OIL
11/14/2019	083-57157	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	KATIE 200 21	OIL
11/22/2019	053-30900	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 6	OIL
11/29/2019	033-27257	OGO-40023	SAMMY-MAR LLC	EP DOGO NCDO Dstr Off	Clearfield	Huston Twp	POVLIK 1	WASTE DISPOSAL
12/3/2019	083-57154	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	KATIE 200 18	OIL
12/4/2019	053-30899	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 5	OIL
12/9/2019	083-57156	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	KATIE 200 20	OIL

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12/12/2019	123-48433	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Glade Twp	LEHMAN 21	COMB. OIL&GAS
12/20/2019	053-30898	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 4	OIL
12/20/2019	123-48432	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Glade Twp	LEHMAN 18	COMB. OIL&GAS
12/23/2019	083-57167	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	PHR WT 3131 57	COMB. OIL&GAS
12/24/2019	123-48267	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 547 K16	OIL
12/30/2019	123-48434	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Glade Twp	LEHMAN 26	COMB. OIL&GAS
1/2/2020	123-48271	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 570 K38	OIL
1/7/2020	053-30897	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 3	OIL
1/24/2020	083-57226	OGO-68270	AUTUMN RIDGE ENERGY LLC	EP DOGO NWDO Dstr Off	McKean	Corydon Twp	LOT 11 01	OIL
2/17/2020	083-57185	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 MAIN 220	COMB. OIL&GAS
2/17/2020	123-48442	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 8 8 54	OIL
2/20/2020	083-57183	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 MAIN 218	COMB. OIL&GAS
2/27/2020	123-48447	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 8 8 48	OIL
3/2/2020	083-57238	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	PHR WT 3131 53	COMB. OIL&GAS
3/10/2020	123-48445	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 8 8 47	OIL
3/18/2020	123-48446	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 8 8 46	OIL
3/20/2020	033-27255	OGO-69356	KENDRA DISP LLC	EP DOGO NCDO Dstr Off	Clearfield	Brady Twp	FRANK & SUSAN ZELMAN 1	WASTE DISPOSAL

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3/25/2020	123-48443	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 8 8 34	OIL
4/3/2020	123-48444	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 8 8 49	OIL
4/17/2020	123-48391	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 8 8 109	OIL
4/24/2020	123-48387	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 8 8 50	OIL
5/4/2020	123-48388	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 8 8 51	OIL
5/18/2020	123-48189	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	MYERS 16	OIL
6/30/2020	053-30909	OGO-43865	CURTIS OIL INC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 44 27	OIL
7/20/2020	053-30912	OGO-43865	CURTIS OIL INC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 44 33	OIL
7/27/2020	083-57121	OGO-69052	ALLEGANY RESOURCE DEV LLC	EP DOGO NWDO Dstr Off	McKean	Keating Twp	MOTT FARM 2	OIL
8/3/2020	053-30908	OGO-43865	CURTIS OIL INC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 44 31	OIL
8/10/2020	123-48401	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	ANF-172 24	OIL
8/12/2020	083-57122	OGO-69052	ALLEGANY RESOURCE DEV LLC	EP DOGO NWDO Dstr Off	McKean	Keating Twp	MOTT FARM 3	OIL
8/17/2020	123-48400	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF-153 22	OIL
9/10/2020	123-48399	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF-153 23	OIL
9/15/2020	123-48476	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 244 244 M23	OIL
9/21/2020	123-48389	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 8 8 74	OIL
9/21/2020	123-48475	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	CURTIN M 16	OIL

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9/25/2020	123-48474	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	CURTIN M 9	OIL
9/28/2020	083-57222	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 42	OIL
9/28/2020	123-48390	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 8 8 75	OIL
10/1/2020	123-48473	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Cherry Grove Twp	LOT 712 M 13	OIL
10/5/2020	083-57223	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 43	OIL
10/7/2020	083-57225	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 45	OIL
10/15/2020	083-57224	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 44	OIL
10/15/2020	083-56773	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	DUTTER LOT 226 28	OIL
10/21/2020	083-57221	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamlin Twp	PENNZOIL FARMOUT II 4 41	OIL
10/21/2020	083-56772	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	DUTTER LOT 226 27	OIL
10/27/2020	123-48450	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 470 34	OIL
10/28/2020	083-56774	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	DUTTER LOT 226 29	OIL
10/28/2020	123-48449	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 470 33	OIL
10/29/2020	123-48448	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 470 32	OIL
11/4/2020	083-56771	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	DUTTER LOT 226 26	OIL
11/11/2020	053-30914	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 9	OIL
11/13/2020	053-30911	OGO-68155	BALD HILL OIL	EP DOGO NWDO Dstr Off	Forest	Howe Twp	RUHLMAN 15	OIL

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11/20/2020	053-30918	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 10	OIL
11/23/2020	053-30910	OGO-68155	BALD HILL OIL	EP DOGO NWDO Dstr Off	Forest	Howe Twp	RUHLMAN 9	OIL
12/1/2020	123-48472	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 712 M 10	OIL
12/2/2020	053-30919	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 11	OIL
12/10/2020	053-30916	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 14	OIL
12/21/2020	053-30915	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 13	OIL
12/23/2020	083-57239	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	PHR WT 3131 54	COMB. OIL&GAS
1/6/2021	053-30917	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 12	OIL
1/8/2021	123-48493	OGO-2647	CURTIS & SON OIL INC	EP DOGO NWDO Dstr Off	Warren	Pine Grove Twp	VALENTINE 1	COMB. OIL&GAS
2/17/2021	123-48485	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	DANA 114 4	OIL
2/19/2021	083-57229	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3122 KANE ESTATE KE9	OIL
2/25/2021	083-57235	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3122 KANE ESTATE KE28	OIL
3/1/2021	083-57231	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3132 KANE ESTATE KE22	OIL
3/1/2021	123-48489	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	BRIGHT FRYE 5	OIL
3/2/2021	123-48482	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF 154 26	OIL
3/3/2021	123-48435	OGO-67285	LINDELL & MANEY LLC	EP DOGO NWDO Dstr Off	Warren	Brokenstraw Twp	DALLAS D 58	OIL
3/8/2021	123-48488	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	BRIGHT KO 13	OIL

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3/9/2021	123-48436	OGO-67285	LINDELL & MANEY LLC	EP DOGO NWDO Dstr Off	Warren	Brokenstraw Twp	DALLAS D 68	OIL
3/15/2021	123-48481	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF 116 25	OIL
3/18/2021	123-48437	OGO-67285	LINDELL & MANEY LLC	EP DOGO NWDO Dstr Off	Warren	Brokenstraw Twp	DALLAS D 69	OIL
3/22/2021	123-48483	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF 154 27	OIL
3/24/2021	123-48439	OGO-67285	LINDELL & MANEY LLC	EP DOGO NWDO Dstr Off	Warren	Brokenstraw Twp	BROWN B 6	OIL
3/30/2021	123-48440	OGO-67285	LINDELL & MANEY LLC	EP DOGO NWDO Dstr Off	Warren	Brokenstraw Twp	BROWN B 7	OIL
3/31/2021	123-48491	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	BRIGHT FRYE 2	OIL
4/6/2021	123-48438	OGO-67285	LINDELL & MANEY LLC	EP DOGO NWDO Dstr Off	Warren	Brokenstraw Twp	BROWN B 5	OIL
4/6/2021	123-48484	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF 154 28	OIL
4/7/2021	123-48490	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	BRIGHT FRYE 3	OIL
4/13/2021	123-48492	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	BRIGHT FRYE 1	OIL
4/13/2021	123-48495	OGO-50425	B & B RESOURCES	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	MOHWAK LEASE 60	OIL
4/19/2021	123-48514	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	BRIGHT KO 14	OIL
4/19/2021	123-48496	OGO-50425	B & B RESOURCES	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	MOHAWK LEASE 56	OIL
4/30/2021	123-48407	OGO-69027	BULL RUN RESOURCES LLC	EP DOGO NWDO Dstr Off	Warren	Cherry Grove Twp	SHERIFF RUN 6	OIL
5/5/2021	123-48406	OGO-69027	BULL RUN RESOURCES LLC	EP DOGO NWDO Dstr Off	Warren	Cherry Grove Twp	SHERIFF RUN 5	OIL
5/12/2021	123-48454	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 557 557 5	OIL

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5/14/2021	083-57215	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	KATIE 200 25	OIL
5/14/2021	123-48498	OGO-65550	BF ADVENTURES LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	DEVORE BF 1	OIL
5/17/2021	083-57244	OGO-68270	AUTUMN RIDGE ENERGY LLC	EP DOGO NWDO Dstr Off	McKean	Keating Twp	HAMMERMILL PAPER CO 101	OIL
5/20/2021	083-57212	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	KATIE 200 22	OIL
5/20/2021	123-48499	OGO-65550	BF ADVENTURES LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	DEVORE BF 6	OIL
5/25/2021	083-57213	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	KATIE 200 23	OIL
5/28/2021	083-57214	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	KATIE 200 24	OIL
6/3/2021	083-57217	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	KATIE 200 27	OIL
6/8/2021	083-57216	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	KATIE 200 26	OIL
6/10/2021	123-48453	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 557 557 4	OIL
6/11/2021	083-57236	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3132 KANE ESTATE KE24	OIL
6/15/2021	083-57232	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3122 KANE ESTATE KE26	OIL
6/17/2021	053-30928	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	MUZETTE MS 1	OIL
6/17/2021	123-48457	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 557 557 3	OIL
6/21/2021	083-57227	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3132 KANE ESTATE KE2	OIL
6/23/2021	031-25726	OGO-4585	ELDER OIL & GAS CO	EP DOGO NWDO Dstr Off	Clarion	Perry Twp	SCHNELL 2	OIL
6/23/2021	123-48487	OGO-67450	RUSS HOLDEN WELL SVC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	LOT 545 24	OIL

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6/24/2021	083-57211	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	FULLER 60	OIL
6/24/2021	123-48455	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 557 557 1	OIL
6/28/2021	123-48486	OGO-67450	RUSS HOLDEN WELL SVC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	LOT 545 23	OIL
6/30/2021	083-57233	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3132 KANE ESTATE KE23	OIL
7/1/2021	123-48456	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 557 557 2	OIL
7/6/2021	083-57210	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	FULLER 59	OIL
7/6/2021	123-48500	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	COLLINS PINE LOT 108 7	OIL
7/8/2021	083-57208	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	FULLER 57	OIL
7/8/2021	123-48408	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 547 K33	OIL
7/9/2021	083-57228	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3132 KANE ESTATE KE6	OIL
7/12/2021	053-30927	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	MUZETTE MS 2	OIL
7/12/2021	123-48503	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	COLLINS PINE LOT 105 122	OIL
7/14/2021	083-57209	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	FULLER 58 OG WELL	OIL
7/15/2021	123-48502	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	COLLINS PINE LOT 105 124	OIL
7/20/2021	123-48516	OGO-43655	WHILTON BROOKS A	EP DOGO NWDO Dstr Off	Warren	Mead Twp	WOLFE 55	OIL
7/21/2021	053-30926	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	MUZETTE MS 3	OIL
7/21/2021	083-57207	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	FULLER 56	OIL

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7/21/2021	123-48409	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 547 K34	OIL
7/22/2021	123-48501	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	COLLINS PINE LOT 105 123	OIL
7/26/2021	083-57237	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3132 KANE ESTATE KE25	OIL
7/27/2021	083-57284	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	PHR WT 3131 61	COMB. OIL&GAS
7/29/2021	031-25734	OGO-4585	ELDER OIL & GAS CO	EP DOGO NWDO Dstr Off	Clarion	Perry Twp	TREMBA 6	OIL
7/30/2021	083-57279	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	PHR WT 3131 46	COMB. OIL&GAS
7/30/2021	083-57230	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3122 KANE ESTATE KE17	OIL
8/2/2021	123-48515	OGO-43655	WHILTON BROOKS A	EP DOGO NWDO Dstr Off	Warren	Glade Twp	NUHFER N 2	OIL
8/2/2021	123-48410	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 548 K6	OIL
8/3/2021	083-57234	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	WT 3132 KANE ESTATE KE27	OIL
8/4/2021	053-30925	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	MUZETTE MS 4	OIL
8/5/2021	083-57280	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	PHR WT 3131 51	COMB. OIL&GAS
8/6/2021	123-48414	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 548 K12	OIL
8/9/2021	123-48544	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	DANA 114 3	OIL
8/12/2021	053-30935	OGO-69262	LABELLA MICHAEL	EP DOGO NWDO Dstr Off	Forest	Jenks Twp	LABELLA G1	GAS
8/16/2021	083-57281	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	PHR WT 3131 52	COMB. OIL&GAS
8/16/2021	123-48411	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 548 K7	OIL

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8/17/2021	123-48554	OGO-2647	CURTIS & SON OIL INC	EP DOGO NWDO Dstr Off	Warren	Warren City	REXNORD R3	OIL
8/19/2021	053-30929	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	MUZETTE MS 5	OIL
8/19/2021	123-48412	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 548 K8	OIL
8/23/2021	083-57290	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 46	OIL
8/24/2021	053-30934	OGO-43865	CURTIS OIL INC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 44 32	OIL
8/24/2021	123-48413	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 548 K9	OIL
8/26/2021	083-57294	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 50	OIL
8/30/2021	059-28128	OGO-38490	LEATHERWOOD LLC	EP DOGO SWDO Dstr Off	Greene	Morris Twp	STOCKDALE 1 OG WELL	GAS
8/30/2021	123-48531	OGO-50720	DAVIDSON ROGER D	EP DOGO NWDO Dstr Off	Warren	Mead Twp	YEARDON 19	OIL
8/31/2021	083-57293	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 49	OIL
9/3/2021	083-57292	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 48	OIL
9/7/2021	053-30938	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WARRANT 5106 2690	COMB. OIL&GAS
9/10/2021	053-30937	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WARRANT 5106 2689	COMB. OIL&GAS
9/10/2021	083-57291	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 47	OIL
9/13/2021	123-48528	OGO-69315	NUHFER FREDERICK	EP DOGO NWDO Dstr Off	Warren	Glade Twp	NUHFER ROGER 101	COMB. OIL&GAS
9/15/2021	083-57273	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 MAIN 205	COMB. OIL&GAS
9/16/2021	053-30936	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WARRANT 5106 2688	COMB. OIL&GAS

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9/17/2021	083-57272	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 MAIN 204	COMB. OIL&GAS
9/20/2021	083-47645	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	LOT 303 T1	COMB. OIL&GAS
9/20/2021	123-48556	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Glade Twp	LEHMAN 16	COMB. OIL&GAS
9/22/2021	083-57357	OGO-45125	HOWARD DRILLING INC	EP DOGO NWDO Dstr Off	McKean	Mount Jewett Boro	MATSON MATSON 4	OIL
9/23/2021	123-48505	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 434 434 SB 16	OIL
9/24/2021	053-30942	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WARRANT 5106 2694	COMB. OIL&GAS
9/27/2021	083-57275	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 MAIN 210	COMB. OIL&GAS
9/27/2021	083-57342	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	PHR WT 3131 60	COMB. OIL&GAS
9/27/2021	123-48557	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Glade Twp	LEHMAN 17	COMB. OIL&GAS
9/27/2021	123-48530	OGO-60855	HOLDEN OIL & GAS	EP DOGO NWDO Dstr Off	Warren	Watson Twp	LOT 545 H 15	OIL
9/29/2021	123-48529	OGO-60855	HOLDEN OIL & GAS	EP DOGO NWDO Dstr Off	Warren	Watson Twp	LOT 545 H 10	OIL
9/30/2021	053-30940	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WARRANT 5106 2696	COMB. OIL&GAS
9/30/2021	083-57327	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W317	COMB. OIL&GAS
9/30/2021	123-48532	OGO-50720	DAVIDSON ROGER D	EP DOGO NWDO Dstr Off	Warren	Mead Twp	YEARDON 20	OIL
10/1/2021	123-48549	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Glade Twp	LEHMAN 25	COMB. OIL&GAS
10/5/2021	053-30930	OGO-43865	CURTIS OIL INC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 43 4305	OIL
10/5/2021	083-57333	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W318	COMB. OIL&GAS

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10/6/2021	053-30941	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WARRANT 5106 2693	COMB. OIL&GAS
10/6/2021	123-48506	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 434 434 SB 17	OIL
10/7/2021	123-48494	OGO-2647	CURTIS & SON OIL INC	EP DOGO NWDO Dstr Off	Warren	Sugar Grove Twp	SHOP 3	OIL
10/11/2021	083-57264	OGO-45125	HOWARD DRILLING INC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	NIVER LOT 388 55	OIL
10/12/2021	053-30939	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WARRANT 5106 2692	COMB. OIL&GAS
10/13/2021	053-30931	OGO-43865	CURTIS OIL INC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 43 4306	OIL
10/19/2021	083-57263	OGO-45125	HOWARD DRILLING INC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	NIVER LOT 388 56	OIL
10/22/2021	123-48548	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Glade Twp	LEHMAN 24	COMB. OIL&GAS
10/26/2021	123-48590	OGO-69040	ANDERSON ENERGY SVC LLC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	NICKLAS 3	OIL
10/28/2021	123-48555	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Glade Twp	LEHMAN 15	COMB. OIL&GAS
11/4/2021	123-48525	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 523 23	OIL
11/16/2021	123-48542	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF 116 36	OIL
11/16/2021	123-48507	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 434 434 SB 18	OIL
11/23/2021	123-48541	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	ANF 171 31	OIL
11/26/2021	123-48508	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 434 434 SB 19	OIL
12/8/2021	083-57296	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W293	COMB. OIL&GAS
12/8/2021	123-48539	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	ANF 171 29	OIL

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12/9/2021	123-48510	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 434 434 SB 21	OIL
12/13/2021	083-57335	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W320	COMB. OIL&GAS
12/13/2021	083-57361	OGO-69027	BULL RUN RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	HEWITT 2	OIL
12/13/2021	123-48563	OGO-69107	LA OIL & GAS LLC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	SMITH 21	OIL
12/22/2021	083-57334	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W319	COMB. OIL&GAS
12/22/2021	123-48519	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 523 27	OIL
12/22/2021	123-48547	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF 154 35	OIL
12/27/2021	123-48509	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 434 434 SB 20	OIL
1/3/2022	083-57330	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W321	COMB. OIL&GAS
1/4/2022	123-48527	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 523 26	OIL
1/5/2022	123-48521	OGO-67350	BEARCAT OIL CO LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	FOGEL 75	OIL
1/6/2022	083-57350	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W331	COMB. OIL&GAS
1/7/2022	123-48526	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 523 25	OIL
1/10/2022	123-48546	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF 154 34	OIL
1/13/2022	083-57351	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W332	COMB. OIL&GAS
1/18/2022	123-48536	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	KYLANDER JOHN 1	OIL
1/19/2022	083-57352	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W333	COMB. OIL&GAS

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1/25/2022	123-48535	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	KYLANDER 42	OIL
1/27/2022	083-57331	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W322	COMB. OIL&GAS
2/3/2022	123-48592	OGO-68589	JETT OIL LLC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	CUNDARI 15	OIL
2/4/2022	053-30950	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 18	OIL
2/11/2022	083-57346	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W325	COMB. OIL&GAS
2/21/2022	083-57355	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	LOT 217 9	OIL
2/22/2022	123-48627	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	BEATY K 97	OIL
2/23/2022	053-30956	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 17	OIL
2/24/2022	083-57341	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 56	OIL
2/24/2022	083-57260	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV 45	OIL
2/25/2022	123-48593	OGO-68589	JETT OIL LLC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	CUNDARI 16	OIL
2/28/2022	053-30944	OGO-68155	BALD HILL OIL	EP DOGO NWDO Dstr Off	Forest	Howe Twp	RUHLMAN 17	OIL
3/1/2022	083-57338	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 51	OIL
3/1/2022	083-57377	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	LOT 217 12	OIL
3/4/2022	083-57340	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 53	OIL
3/7/2022	053-30945	OGO-68155	BALD HILL OIL	EP DOGO NWDO Dstr Off	Forest	Howe Twp	RUHLMAN 3	OIL
3/7/2022	053-30955	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 16	OIL

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3/10/2022	083-57339	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 52	OIL
3/10/2022	123-48629	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	BEATY K 99	OIL
3/11/2022	083-57378	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	LOT 217 13	OIL
3/17/2022	053-30946	OGO-68155	BALD HILL OIL	EP DOGO NWDO Dstr Off	Forest	Howe Twp	RUHLMAN 4	OIL
3/18/2022	123-48534	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	BEATY K 100	OIL
3/23/2022	053-30954	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 15	OIL
3/25/2022	123-48537	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	REIST R 1	OIL
3/28/2022	083-57337	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 54	OIL
3/30/2022	053-30951	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 19	OIL
3/31/2022	083-57261	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV 46	OIL
3/31/2022	083-57252	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV48	OIL
3/31/2022	083-57253	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV49	OIL
3/31/2022	123-48621	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	BEATY K 95	OIL
4/1/2022	123-48538	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	REIST R 2	OIL
4/7/2022	123-48524	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	KENNY SHERRY 27	OIL
4/12/2022	123-48618	OGO-50425	B & B RESOURCES	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	MOHAWK LEASE 53	OIL
4/13/2022	123-48520	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	KENNY SHERRY 26	OIL

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4/14/2022	123-48625	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	BEATY K 96	OIL
4/19/2022	053-30952	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 20	OIL
4/21/2022	123-48517	OGO-43655	WHILTON BROOKS A	EP DOGO NWDO Dstr Off	Warren	Mead Twp	WOLFE 87	OIL
4/22/2022	123-48661	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	BRIGHT FRYE 6	OIL
4/26/2022	123-48619	OGO-50425	B & B RESOURCES	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	MOHAWK LEASE 57	OIL
4/27/2022	083-57376	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	LOT 217 11	OIL
4/27/2022	123-48522	OGO-67350	BEARCAT OIL CO LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	FOGEL 76	OIL
4/28/2022	123-48628	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	BEATY K 98	OIL
5/2/2022	053-30953	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 21	OIL
5/2/2022	083-57262	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV 47	OIL
5/2/2022	123-48662	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	BRIGHT FRYE 7	OIL
5/3/2022	083-57347	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W326	OIL
5/6/2022	083-57399	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 MAIN 209	COMB. OIL&GAS
5/6/2022	083-57403	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 MAIN 223	COMB. OIL&GAS
5/6/2022	123-48591	OGO-68589	JETT OIL LLC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	CUNDARI 14	OIL
5/9/2022	123-48624	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Clarendon Boro	COLLINS PINE LOT 105 125	OIL
5/10/2022	053-30957	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 22	OIL

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5/10/2022	083-57402	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 MAIN 222	COMB. OIL&GAS
5/10/2022	083-57348	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W327	COMB. OIL&GAS
5/10/2022	123-48659	OGO-2647	CURTIS & SON OIL INC	EP DOGO NWDO Dstr Off	Warren	Farmington Twp	CRITZER C 28	OIL
5/10/2022	123-48663	OGO-60160	KYLANDER OIL INC	EP DOGO NWDO Dstr Off	Warren	Glade Twp	BRIGHT FRYE 8	OIL
5/12/2022	123-48622	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Clarendon Boro	COLLINS PINE LOT 108 8	OIL
5/13/2022	083-57398	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 MAIN 221	COMB. OIL&GAS
5/13/2022	083-57343	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W328	COMB. OIL&GAS
5/14/2022	083-57380	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	LOT 217 10	OIL
5/16/2022	123-48660	OGO-2647	CURTIS & SON OIL INC	EP DOGO NWDO Dstr Off	Warren	Farmington Twp	CRITZER C 29	OIL
5/18/2022	123-48623	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Clarendon Boro	COLLINS PINE LOT 108 9	OIL
5/20/2022	083-57344	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W329	COMB. OIL&GAS
5/25/2022	083-57345	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W324	COMB. OIL&GAS
5/25/2022	123-48626	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Clarendon Boro	COLLINS PINE LOT 105 205	OIL
5/26/2022	083-57415	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 MAIN 219	COMB. OIL&GAS
5/26/2022	123-48604	OGO-68589	JETT OIL LLC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	CUNDARI 40	OIL
5/27/2022	123-48561	OGO-69041	WILLIAM SOUTHWELL & SON OIL LLC	EP DOGO NWDO Dstr Off	Warren	Conewango Twp	GROSCH 214	OIL
6/1/2022	123-48533	OGO-63140	DANIEL P HORNBURG	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	DICKEY 36	OIL

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6/2/2022	083-57332	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W323	COMB. OIL&GAS
6/6/2022	123-48545	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	ANF 171 32	OIL
6/7/2022	053-30986	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	MUZETTE MS 13	OIL
6/13/2022	053-30992	OGO-43865	CURTIS OIL INC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 43 4310	OIL
6/13/2022	123-48543	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	ANF 171 33 OG WELL	OIL
6/14/2022	083-57379	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	LOT 217 8	OIL
6/20/2022	053-30962	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	PHR WT 2812 5	OIL
6/20/2022	053-30985	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	MUZETTE MS 11	OIL
6/20/2022	123-48560	OGO-69041	WILLIAM SOUTHWELL & SON OIL LLC	EP DOGO NWDO Dstr Off	Warren	Conewango Twp	GROSCH 213	OIL
6/20/2022	123-48540	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	ANF 171 30	OIL
6/22/2022	053-30991	OGO-43865	CURTIS OIL INC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 43 4308	OIL
6/23/2022	053-30963	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	PHR WT 2812 9	OIL
6/27/2022	123-48673	OGO-63140	DANIEL P HORNBURG	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	SPEEDY 9	OIL
6/28/2022	053-30966	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	PHR WT 2812 15	OIL
6/29/2022	053-30984	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	MUZETTE MS 10	OIL
6/29/2022	083-57393	OGO-42055	SV ABS INTEREST WETMORE PROJ	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	LOT 389 67 OG WELL	OIL
6/29/2022	123-48559	OGO-69041	WILLIAM SOUTHWELL & SON OIL LLC	EP DOGO NWDO Dstr Off	Warren	Conewango Twp	GROSCH 212	OIL

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7/5/2022	053-30965	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	PHR WT 2812 14	OIL
7/8/2022	053-30961	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	PHR WT 2812 1	OIL
7/8/2022	053-30983	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	MUZETTE MS 9	OIL
7/8/2022	083-57395	OGO-42055	SV ABS INTEREST WETMORE PROJ	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	LOT 376 OTT 14	OIL
7/8/2022	123-48570	OGO-63079	R & N RESOURCES LLC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 437 28	OIL
7/12/2022	123-48630	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 500 2	OIL
7/13/2022	123-48637	OGO-62950	BRANCH JOHN D	EP DOGO NWDO Dstr Off	Warren	Warren City	EAST SIDE 82	OIL
7/16/2022	123-48569	OGO-63079	R & N RESOURCES LLC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 437 22	OIL
7/18/2022	053-30981	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	MUZETTE MS 7	OIL
7/18/2022	083-57394	OGO-42055	SV ABS INTEREST WETMORE PROJ	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	LOT 376 OTT 13	OIL
7/18/2022	123-48587	OGO-2647	CURTIS & SON OIL INC	EP DOGO NWDO Dstr Off	Warren	Farmington Twp	MIKULA 14	OIL
7/19/2022	065-27098	OGO-20851	KAIB & KAIB	EP DOGO NWDO Dstr Off	Jefferson	Winslow Twp	T J FITZGERALD 1	COMB. OIL&GAS
7/20/2022	123-48558	OGO-69041	WILLIAM SOUTHWELL & SON OIL LLC	EP DOGO NWDO Dstr Off	Warren	Conewango Twp	GROSCH 211	OIL
7/21/2022	123-48631	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 500 8	OIL
7/22/2022	083-57407	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	PHR WT 3131 56	COMB. OIL&GAS
7/25/2022	123-48588	OGO-2647	CURTIS & SON OIL INC	EP DOGO NWDO Dstr Off	Warren	Farmington Twp	MIKULA 15	OIL
7/25/2022	123-48683	OGO-69040	ANDERSON ENERGY SVC LLC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	WENGER 12	OIL

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7/26/2022	123-48654	OGO-43655	WHILTON BROOKS A	EP DOGO NWDO Dstr Off	Warren	Glade Twp	NUHFER N 3	OIL
7/27/2022	083-57349	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W330	COMB. OIL&GAS
7/27/2022	083-57405	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	PHR WT 3131 50	COMB. OIL&GAS
7/27/2022	123-48649	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	DANA 114 2	OIL
7/28/2022	053-30982	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	MUZETTE MS 8	OIL
7/28/2022	123-48589	OGO-2647	CURTIS & SON OIL INC	EP DOGO NWDO Dstr Off	Warren	Farmington Twp	MIKULA 16	OIL
7/30/2022	123-48571	OGO-63079	R & N RESOURCES LLC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 437 36	OIL
8/1/2022	083-57500	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W334	COMB. OIL&GAS
8/1/2022	123-48684	OGO-69040	ANDERSON ENERGY SVC LLC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	WENGER 14	OIL
8/2/2022	083-57404	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	PHR WT 3132 7	COMB. OIL&GAS
8/2/2022	123-48573	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	WELD FARM LOT 76W W38	OIL
8/4/2022	053-30980	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WARRANT 4791 4791 4	OIL
8/4/2022	123-48523	OGO-67350	BEARCAT OIL CO LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	FOGEL 77	OIL
8/4/2022	123-48646	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF 154 45	OIL
8/6/2022	123-48572	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	WELD FARM LOT 76W W37	OIL
8/8/2022	083-57400	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W314	COMB. OIL&GAS
8/9/2022	083-57391	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	PHR WT 3131 55	COMB. OIL&GAS

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8/11/2022	083-57401	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W271	COMB. OIL&GAS
8/11/2022	123-48574	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	WELD FARM LOT 76W W45	OIL
8/15/2022	123-48607	OGO-66745	ALLSHOUSE TERRENCE L JR	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ALLSHOUSE CHAPMAN ONEIL 1000	OIL
8/15/2022	123-48647	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF 154 46	OIL
8/15/2022	123-48632	OGO-62950	BRANCH JOHN D	EP DOGO NWDO Dstr Off	Warren	Warren City	EAST SIDE 83	OIL
8/16/2022	083-57498	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W335	COMB. OIL&GAS
8/16/2022	083-57408	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	PHR WT 3132 4	COMB. OIL&GAS
8/17/2022	053-30979	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WARRANT 4791 4791 3	OIL
8/18/2022	083-57499	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	WT 5573 WEST W336	COMB. OIL&GAS
8/19/2022	083-57406	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	PHR WT 3132 2	COMB. OIL&GAS
8/24/2022	053-30978	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WARRANT 4791 4791 2	OIL
8/24/2022	123-48600	OGO-6211	MCCOOL JOHN E	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 369 15	OIL
8/25/2022	083-57369	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 55	OIL
8/26/2022	053-30903	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	PHR WT 2812 16	OIL
8/27/2022	123-48606	OGO-66745	ALLSHOUSE TERRENCE L JR	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ALLSHOUSE FRASER 1001	OIL
8/29/2022	123-48633	OGO-62950	BRANCH JOHN D	EP DOGO NWDO Dstr Off	Warren	Warren City	EAST SIDE 84	OIL

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8/30/2022	053-30977	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WARRANT 4791 4791 1	OIL
8/30/2022	083-57381	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 62	OIL
8/31/2022	053-30964	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	PHR WT 2812 10	OIL
8/31/2022	053-30988	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	FEGLEY FJB 3	OIL
8/31/2022	123-48648	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	ANF 171 43	OIL
9/2/2022	083-57382	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 63	OIL
9/3/2022	123-48575	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	WELD FARM LOT 80 M9	OIL
9/5/2022	123-48598	OGO-6211	MCCOOL JOHN E	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 369 13	OIL
9/6/2022	083-57422	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	HECKEL 32	OIL
9/6/2022	123-48576	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	WELD FARM LOT 80 M13	OIL
9/8/2022	083-57384	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 64	OIL
9/9/2022	123-48695	OGO-69027	BULL RUN RESOURCES LLC	EP DOGO NWDO Dstr Off	Warren	Cherry Grove Twp	SHERIFF RUN 7	OIL
9/9/2022	123-48577	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	WELD FARM LOT 80 M17	OIL
9/12/2022	053-30976	OGO-43865	CURTIS OIL INC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 43 4304	OIL
9/12/2022	083-57423	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	HECKEL 33	OIL
9/13/2022	053-30987	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	FEGLEY FJB 1	OIL
9/13/2022	083-57385	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 65	OIL

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9/13/2022	123-48645	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	ANF 194 44	OIL
9/16/2022	083-57373	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 60	OIL
9/16/2022	083-57424	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	HECKEL 30	OIL
9/20/2022	053-31002	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	WARRANT 5135 2715	COMB. OIL&GAS
9/22/2022	083-57425	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	HECKEL 31	OIL
9/22/2022	123-48664	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Mead Twp	UPPER FUNK 125	COMB. OIL&GAS
9/23/2022	083-57370	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 57	OIL
9/26/2022	053-31003	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	WARRANT 5135 2725	COMB. OIL&GAS
9/27/2022	123-48666	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Mead Twp	UPPER FUNK 130	COMB. OIL&GAS
9/28/2022	083-57372	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 59	OIL
9/29/2022	123-48669	OGO-69040	ANDERSON ENERGY SVC LLC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	NICKLAS 4	OIL
9/30/2022	123-48667	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Mead Twp	UPPER FUNK 132	COMB. OIL&GAS
10/3/2022	083-57371	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 58	OIL
10/4/2022	053-31001	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	WARRANT 5135 2714	COMB. OIL&GAS
10/5/2022	123-48668	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Mead Twp	UPPER FUNK 135	COMB. OIL&GAS
10/6/2022	083-57374	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 61	OIL
10/10/2022	053-31005	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	WARRANT 5135 2712	COMB. OIL&GAS

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10/10/2022	123-48665	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Mead Twp	UPPER FUNK 126	COMB. OIL&GAS
10/11/2022	083-57412	OGO-17647	SNYDER BROS INC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	BEVERLY 67	OIL
10/13/2022	123-48742	OGO-63140	DANIEL P HORNBURG	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	DICKEY 32	OIL
10/14/2022	053-31006	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	WARRANT 5135 2713	COMB. OIL&GAS
10/14/2022	123-48670	OGO-69040	ANDERSON ENERGY SVC LLC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	YAEGLE 10	OIL
10/17/2022	083-57411	OGO-17647	SNYDER BROS INC	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	BEVERLY 61	OIL
10/19/2022	123-48693	OGO-69027	BULL RUN RESOURCES LLC	EP DOGO NWDO Dstr Off	Warren	Cherry Grove Twp	SHERIFF RUN 8	OIL
10/21/2022	053-31004	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	WARRANT 5135 2709	COMB. OIL&GAS
10/24/2022	123-48694	OGO-69027	BULL RUN RESOURCES LLC	EP DOGO NWDO Dstr Off	Warren	Cherry Grove Twp	SHERIFF RUN 9	OIL
10/24/2022	123-48586	OGO-68260	JOHNSON WELL SVC LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	RODGERS 23	OIL
10/25/2022	047-25134	OGO-67360	FEIKLS OIL & GAS INC	EP DOGO NWDO Dstr Off	Elk	Jones Twp	FEIKLS 6	OIL
10/26/2022	053-30967	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	PHR WT 2812 18	OIL
10/31/2022	123-48582	OGO-68260	JOHNSON WELL SVC LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	RODGERS 15	OIL
10/31/2022	123-48682	OGO-69040	ANDERSON ENERGY SVC LLC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	IDA WENZEL 16	OIL
11/3/2022	083-57548	OGO-69268	FIRST AMER ENERGY INC	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	SWAMP ANGEL SECTION IV 4 40	COMB. OIL&GAS
11/3/2022	083-57363	OGO-45125	HOWARD DRILLING INC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	NIVER LOT 388 58	OIL
11/4/2022	123-48617	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Cherry Grove Twp	LOT 712 M 42	OIL

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11/4/2022	123-48583	OGO-68260	JOHNSON WELL SVC LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	RODGERS 16	OIL
11/7/2022	083-57547	OGO-69268	FIRST AMER ENERGY INC	EP DOGO NWDO Dstr Off	McKean	Lewis Run Boro	SWAMP ANGEL SECTION IV 4 39	COMB. OIL&GAS
11/9/2022	123-48584	OGO-68260	JOHNSON WELL SVC LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	RODGERS 17	OIL
11/9/2022	123-48718	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 434 434 SB 24	OIL
11/10/2022	083-57364	OGO-45125	HOWARD DRILLING INC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	NIVER LOT 388 57	OIL
11/10/2022	123-48614	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Cherry Grove Twp	LOT 712 M 5	OIL
11/11/2022	123-48641	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	LOT 487 30	OIL
11/18/2022	123-48613	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Cherry Grove Twp	LOT 712 M 4	OIL
11/21/2022	123-48642	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	LOT 487 31	OIL
11/21/2022	123-48650	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	RENSMA 2920 172 3	OIL
11/21/2022	123-48723	OGO-67450	RUSS HOLDEN WELL SVC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 32	OIL
11/26/2022	123-48724	OGO-67450	RUSS HOLDEN WELL SVC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 34	OIL
12/6/2022	123-48721	OGO-67450	RUSS HOLDEN WELL SVC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 35	OIL
12/14/2022	123-48722	OGO-67450	RUSS HOLDEN WELL SVC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 37	OIL
12/15/2022	123-48616	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Cherry Grove Twp	CURTIN M 14	OIL
12/15/2022	123-48643	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	LOT 487 32	OIL
12/22/2022	123-48715	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 434 434 SB 26	OIL

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12/28/2022	123-48714	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 546 K51	OIL
12/29/2022	123-48615	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Cherry Grove Twp	CURTIN M 7	OIL
12/30/2022	123-48644	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	LOT 487 33	OIL
1/3/2023	123-48636	OGO-62950	BRANCH JOHN D	EP DOGO NWDO Dstr Off	Warren	Warren City	EAST SIDE 81	OIL
1/9/2023	083-57441	OGO-69027	BULL RUN RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	HEWITT 3	OIL
1/9/2023	123-48704	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 546 K52	OIL
1/10/2023	123-48720	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 434 434 SB 25	OIL
1/10/2023	123-48651	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	MATSON 193 6	OIL
1/18/2023	083-57440	OGO-69027	BULL RUN RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	HEWITT 4	OIL
1/19/2023	123-48713	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 546 K47	OIL
1/24/2023	123-48717	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 8 8 97	OIL
1/24/2023	123-48635	OGO-62950	BRANCH JOHN D	EP DOGO NWDO Dstr Off	Warren	Warren City	EAST SIDE 80	OIL
1/30/2023	123-48729	OGO-62950	BRANCH JOHN D	EP DOGO NWDO Dstr Off	Warren	Warren City	EAST SIDE 90	OIL
1/30/2023	123-48707	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 547 K12	OIL
1/31/2023	123-48716	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 434 434 SB 23	OIL
2/7/2023	123-48708	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 547 K36	OIL
2/9/2023	123-48634	OGO-62950	BRANCH JOHN D	EP DOGO NWDO Dstr Off	Warren	Warren City	EAST SIDE 85	OIL

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2/15/2023	083-57541	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV 55	OIL
2/17/2023	123-48638	OGO-62950	BRANCH JOHN D	EP DOGO NWDO Dstr Off	Warren	Warren City	EAST SIDE 86	OIL
2/20/2023	083-57542	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV 56	OIL
2/20/2023	123-48719	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 434 434 SB 22	OIL
2/25/2023	083-57544	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV 58	OIL
2/27/2023	123-48686	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 410 410 DR8	OIL
3/2/2023	123-48639	OGO-62950	BRANCH JOHN D	EP DOGO NWDO Dstr Off	Warren	Warren City	EAST SIDE 87	OIL
3/6/2023	083-57538	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV 60	OIL
3/6/2023	123-48685	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 410 410 DR4	OIL
3/10/2023	123-48687	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 410 410 DR9	OIL
3/13/2023	083-57543	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV 57	OIL
3/13/2023	123-48711	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 546 K45	OIL
3/16/2023	083-57540	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV 62	OIL
3/20/2023	123-48688	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 410 410 DR14	OIL
3/22/2023	123-48640	OGO-62950	BRANCH JOHN D	EP DOGO NWDO Dstr Off	Warren	Warren City	EAST SIDE 88	OIL
3/22/2023	123-48655	OGO-67450	RUSS HOLDEN WELL SVC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	LOT 545 25	OIL
3/23/2023	083-57539	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV 61	OIL

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3/27/2023	123-48689	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 410 410 DR17	OIL
3/30/2023	083-57537	OGO-68675	PVE OIL CORP INC	EP DOGO NWDO Dstr Off	McKean	Sergeant Twp	BURNING WELL PV 59	OIL
3/30/2023	123-48657	OGO-43655	WHILTON BROOKS A	EP DOGO NWDO Dstr Off	Warren	Mead Twp	WOLFE 47	OIL
4/4/2023	123-48726	OGO-62950	BRANCH JOHN D	EP DOGO NWDO Dstr Off	Warren	Warren City	EAST SIDE 89	OIL
4/17/2023	123-48658	OGO-43655	WHILTON BROOKS A	EP DOGO NWDO Dstr Off	Warren	Mead Twp	WOLFE 53	OIL
4/19/2023	083-57558	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	LOT 217 217W 5	OIL
4/25/2023	123-48699	OGO-67350	BEARCAT OIL CO LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	FOGEL 78	OIL
4/27/2023	083-57557	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	LOT 217 217W 4	OIL
4/28/2023	123-48672	OGO-60855	HOLDEN OIL & GAS	EP DOGO NWDO Dstr Off	Warren	Watson Twp	LOT 545 H 13	OIL
5/1/2023	053-31036	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 23	OIL
5/5/2023	123-48671	OGO-60855	HOLDEN OIL & GAS	EP DOGO NWDO Dstr Off	Warren	Watson Twp	LOT 545 H 14	OIL
5/8/2023	083-57551	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	LOT 217 217W 2	OIL
5/9/2023	053-31017	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	WARRANT 5136 2718	COMB. OIL&GAS
5/9/2023	083-57443	OGO-69051	VANDERHOOF ENERGY PROD LLC	EP DOGO NWDO Dstr Off	McKean	Eldred Twp	JACKSON 130	OIL
5/10/2023	053-31048	OGO-43865	CURTIS OIL INC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 43 4307	OIL
5/15/2023	053-31037	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 24	OIL
5/15/2023	053-31015	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	WARRANT 5136 2717	COMB. OIL&GAS

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5/15/2023	083-57442	OGO-69051	VANDERHOOF ENERGY PROD LLC	EP DOGO NWDO Dstr Off	McKean	Eldred Twp	JACKSON 129	OIL
5/16/2023	123-48712	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 546 K46	OIL
5/17/2023	053-31033	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	CLINGER 4	COMB. OIL&GAS
5/17/2023	083-57628	OGO-68722	CLINE OIL INC	EP DOGO NWDO Dstr Off	McKean	Bradford City	NEWELL MC 1	OIL
5/19/2023	053-31034	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 25	OIL
5/22/2023	053-31032	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	CLINGER 3	COMB. OIL&GAS
5/23/2023	053-31014	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Jenks Twp	WARRANT 5138 2722	COMB. OIL&GAS
5/23/2023	083-57629	OGO-68722	CLINE OIL INC	EP DOGO NWDO Dstr Off	McKean	Bradford City	NEWELL MC2	OIL
5/25/2023	083-57556	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	LOT 217 217W 3	OIL
5/26/2023	053-31035	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 2 2 26	OIL
5/30/2023	053-31018	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Jenks Twp	WARRANT 5139 2723	COMB. OIL&GAS
5/31/2023	053-31044	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2735 1	COMB. OIL&GAS
5/31/2023	123-48709	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 546 K41	OIL
6/5/2023	083-57550	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	LOT 228 228 1	OIL
6/5/2023	123-48610	OGO-67285	LINDELL & MANEY LLC	EP DOGO NWDO Dstr Off	Warren	Brokenstraw Twp	MUSANTE M 16	OIL
6/6/2023	053-31019	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Jenks Twp	WARRANT 5139 2724	COMB. OIL&GAS
6/6/2023	083-57633	OGO-42055	SV ABS INTEREST WETMORE PROJ	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	LOT 376 OTT 15	OIL

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6/12/2023	053-31020	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	WARRANT 5138 2721	COMB. OIL&GAS
6/13/2023	083-57549	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	LOT 217 217W 1	OIL
6/13/2023	123-48798	OGO-43655	WHILTON BROOKS A	EP DOGO NWDO Dstr Off	Warren	Glade Twp	NUHFER N 4	OIL
6/14/2023	083-57634	OGO-42055	SV ABS INTEREST WETMORE PROJ	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	LOT 376 OTT 16	OIL
6/14/2023	123-48703	OGO-63079	R & N RESOURCES LLC	EP DOGO NWDO Dstr Off	Warren	Conewango Twp	BROWN 2	OIL
6/14/2023	123-48705	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 546 K5	OIL
6/15/2023	053-31016	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Jenks Twp	WARRANT 5138 2726	COMB. OIL&GAS
6/15/2023	123-48611	OGO-67285	LINDELL & MANEY LLC	EP DOGO NWDO Dstr Off	Warren	Brokenstraw Twp	MUSANTE M 17	OIL
6/19/2023	083-57552	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	LOT 228 228 2	OIL
6/20/2023	123-48612	OGO-67285	LINDELL & MANEY LLC	EP DOGO NWDO Dstr Off	Warren	Brokenstraw Twp	MUSANTE M 18	OIL
6/21/2023	031-25799	OGO-69538	CURD JOSH C	EP DOGO NWDO Dstr Off	Clarion	Beaver Twp	CURD 1	GAS
6/22/2023	123-48702	OGO-63079	R & N RESOURCES LLC	EP DOGO NWDO Dstr Off	Warren	Conewango Twp	BROWN 1	OIL
6/23/2023	053-30999	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 7 17	COMB. OIL&GAS
6/23/2023	123-48608	OGO-67285	LINDELL & MANEY LLC	EP DOGO NWDO Dstr Off	Warren	Brokenstraw Twp	MUSANTE M 9	OIL
6/23/2023	123-48799	OGO-43655	WHILTON BROOKS A	EP DOGO NWDO Dstr Off	Warren	Glade Twp	NUHFER N 8	OIL
6/23/2023	123-48710	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 546 K42	OIL
6/26/2023	083-57553	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	LOT 228 228 3	OIL

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6/26/2023	123-48679	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	ANF 154 40	OIL
6/28/2023	053-31000	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 7 18	COMB. OIL&GAS
6/29/2023	123-48698	OGO-67350	BEARCAT OIL CO LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	FOGEL 65	OIL
7/3/2023	053-31024	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 7 26	COMB. OIL&GAS
7/3/2023	123-48680	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF 154 41	OIL
7/5/2023	083-57554	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	LOT 228 228 4	OIL
7/10/2023	053-31010	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 8 25	COMB. OIL&GAS
7/11/2023	083-57563	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	FULLER 62	OIL
7/12/2023	123-48700	OGO-67350	BEARCAT OIL CO LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	FOGEL 95	OIL
7/12/2023	123-48681	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	ANF 154 42	OIL
7/13/2023	053-31030	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 8 28	COMB. OIL&GAS
7/13/2023	083-57562	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	FULLER 61	OIL
7/13/2023	123-48706	OGO-61220	KCS ENERGY INC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	SGL 29 LOT 546 K6	OIL
7/14/2023	083-57555	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	LOT 228 228 5	OIL
7/17/2023	053-31021	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 7 21	COMB. OIL&GAS
7/18/2023	083-57565	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	FULLER 63	OIL
7/18/2023	123-48609	OGO-67285	LINDELL & MANEY LLC	EP DOGO NWDO Dstr Off	Warren	Brokenstraw Twp	MUSANTE M 11	OIL

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7/19/2023	053-31022	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 7 25	COMB. OIL&GAS
7/24/2023	053-31023	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 7 22	COMB. OIL&GAS
7/24/2023	123-48701	OGO-67350	BEARCAT OIL CO LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	FOGEL 114	OIL
7/24/2023	123-48677	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	DANA 114 5	OIL
7/27/2023	053-31009	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 8 24	COMB. OIL&GAS
7/27/2023	083-57561	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 67	OIL
8/7/2023	123-48675	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF 116 37	OIL
8/8/2023	083-57566	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 66	OIL
8/10/2023	053-31061	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WARRANT 4791 4791 5	OIL
8/10/2023	053-31008	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 8 23	COMB. OIL&GAS
8/11/2023	083-57564	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Hamilton Twp	PENNZOIL FARMOUT II 4 68	OIL
8/15/2023	053-31062	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WARRANT 4791 4791 6	OIL
8/15/2023	123-48824	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	WT 4745 LOT 104 1	COMB. OIL&GAS
8/15/2023	123-48744	OGO-68589	JETT OIL LLC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	CUNDARI 13	OIL
8/16/2023	123-48809	OGO-45115	WELDBANK ENERGY CORP	EP DOGO NWDO Dstr Off	Warren	Mead Twp	TIONA LOT 23 LOT 81 P30	OIL
8/17/2023	053-30994	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 7 19	COMB. OIL&GAS
8/17/2023	123-48676	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	ANF 116 38	OIL

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8/21/2023	053-31025	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 7 24	COMB. OIL&GAS
8/22/2023	053-31063	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WARRANT 4791 4791 7	OIL
8/24/2023	053-30998	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 7 23	COMB. OIL&GAS
8/24/2023	083-57649	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Bradford Twp	WT 3426 1	COMB. OIL&GAS
8/25/2023	123-48743	OGO-68589	JETT OIL LLC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	CUNDARI 30	OIL
8/28/2023	123-48678	OGO-30524	WILMOTH INTERESTS INC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	ANF 153 39	OIL
8/30/2023	053-31026	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 8 22	COMB. OIL&GAS
9/1/2023	053-31071	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 10 20	COMB. OIL&GAS
9/1/2023	123-48825	OGO-68589	JETT OIL LLC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	CUNDARI 22	OIL
9/5/2023	053-31027	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 8 26	COMB. OIL&GAS
9/5/2023	123-48817	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	CURTIN M 15	OIL
9/7/2023	053-31064	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WARRANT 4791 4791 8	OIL
9/8/2023	053-31072	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 10 21	COMB. OIL&GAS
9/8/2023	053-31029	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 8 27	COMB. OIL&GAS
9/12/2023	123-48819	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	CURTIN M 6	OIL
9/13/2023	053-31049	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 7 20	COMB. OIL&GAS
9/14/2023	053-31073	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 10 22	COMB. OIL&GAS

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9/18/2023	053-31053	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 8 30	COMB. OIL&GAS
9/18/2023	059-28272	OGO-40063	IRON PENNSYLVANIA LAND LLC	EP DOGO SWDO Dstr Off	Greene	Jackson Twp	IS-1 WELL IS1 10000	COALBED METHANE
9/18/2023	059-28271	OGO-40063	IRON PENNSYLVANIA LAND LLC	EP DOGO SWDO Dstr Off	Greene	Jackson Twp	IS-2 WELL IS2-10001	COALBED METHANE
9/19/2023	053-31074	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 10 23	COMB. OIL&GAS
9/19/2023	123-48833	OGO-2647	CURTIS & SON OIL INC	EP DOGO NWDO Dstr Off	Warren	Farmington Twp	CRITZER C 27	OIL
9/21/2023	053-31082	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 10 24	COMB. OIL&GAS
9/21/2023	053-31051	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 8 29	COMB. OIL&GAS
9/25/2023	123-48831	OGO-2647	CURTIS & SON OIL INC	EP DOGO NWDO Dstr Off	Warren	Farmington Twp	CRITZER C 15	OIL
9/26/2023	053-31054	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 8 31	COMB. OIL&GAS
9/26/2023	053-31056	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	MUZETTE MS 16	OIL
9/26/2023	123-48820	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Cherry Grove Twp	LOT 712 M 41	OIL
10/2/2023	053-31012	OGO-43865	CURTIS OIL INC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	LOT 44 36	OIL
10/2/2023	053-31052	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 8 33	COMB. OIL&GAS
10/2/2023	083-57653	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	McKean	Bradford Twp	WT 3428 2	COMB. OIL&GAS
10/5/2023	053-31050	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 8 32	COMB. OIL&GAS
10/9/2023	083-57570	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	KATIE 200 31	OIL
10/9/2023	123-48821	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Cherry Grove Twp	LOT 712 M 44	OIL

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10/10/2023	053-31090	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 9 20	COMB. OIL&GAS
10/10/2023	053-31055	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	MUZETTE MS 15	OIL
10/10/2023	083-57646	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	DUTTER LOT 226 30	OIL
10/11/2023	083-57569	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	KATIE 200 30	OIL
10/13/2023	053-31091	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 9 21	COMB. OIL&GAS
10/13/2023	123-48818	OGO-68577	MEAD OIL LLC	EP DOGO NWDO Dstr Off	Warren	Cherry Grove Twp	LOT 712 M 11	OIL
10/16/2023	083-57567	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	KATIE 200 28	OIL
10/17/2023	083-57647	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	DUTTER LOT 226 31	OIL
10/18/2023	053-31104	OGO-68600	PENNHILLS RESOURCES LLC	EP DOGO NWDO Dstr Off	Forest	Howe Twp	WT 2850 LOT 9 19	COMB. OIL&GAS
10/20/2023	083-57568	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Lafayette Twp	KATIE 200 29	OIL
10/23/2023	123-48769	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 500 14	OIL
10/25/2023	083-57648	OGO-42580	MSL OIL & GAS CORP	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	DUTTER LOT 226 32	OIL
10/30/2023	053-31060	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	MUZETTTE MS 14	OIL
11/1/2023	123-48768	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 500 13	COMB. OIL&GAS
11/7/2023	083-57655	OGO-45125	HOWARD DRILLING INC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	NIVER LOT 388 59	OIL
11/8/2023	123-48771	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 500 9	OIL
11/13/2023	117-22222	OGO-15547	SENECA RESOURCES CO LLC	EP DOGO NCDO Dstr Off	Tioga	Richmond Twp	Mitcheltree 6450 54V 53948	GAS

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11/14/2023	053-31059	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	MUZETTE MS 12	OIL
11/17/2023	083-57654	OGO-45125	HOWARD DRILLING INC	EP DOGO NWDO Dstr Off	McKean	Wetmore Twp	NIVER LOT 388 60	OIL
11/24/2023	123-48770	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOT 500 3	OIL
11/28/2023	123-48775	OGO-69040	ANDERSON ENERGY SVC LLC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	IDA WENZEL 5	OIL
11/30/2023	053-31057	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	MUZETTE MS 17	OIL
12/4/2023	053-31079	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Jenks Twp	WARRANT 5138 2707	COMB. OIL&GAS
12/11/2023	053-31075	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	WARRANT 5136 2708	COMB. OIL&GAS
12/14/2023	053-31058	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	MUZETTE MS 6	OIL
12/15/2023	053-31076	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	WARRANT 5136 2710	COMB. OIL&GAS
12/20/2023	123-48873	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOWER FUNK 73	COMB. OIL&GAS
1/2/2024	053-31077	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	WARRANT 5136 2711	COMB. OIL&GAS
1/2/2024	123-48877	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOWER FUNK 95	COMB. OIL&GAS
1/8/2024	053-31078	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	WARRANT 5136 2716	COMB. OIL&GAS
1/9/2024	123-48876	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOWER FUNK 90	COMB. OIL&GAS
1/11/2024	053-31081	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Kingsley Twp	WARRANT 5138 2720	COMB. OIL&GAS
1/15/2024	123-48874	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOWER FUNK 77	COMB. OIL&GAS
1/18/2024	123-48863	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 8 8 96	OIL

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1/22/2024	123-48822	OGO-69040	ANDERSON ENERGY SVC LLC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	YAEGLE 11	COMB. OIL&GAS
1/29/2024	123-48875	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Mead Twp	LOWER FUNK 88	COMB. OIL&GAS
1/30/2024	053-31080	OGO-9601	MINARD RUN OIL CO	EP DOGO NWDO Dstr Off	Forest	Jenks Twp	WARRANT 5138 2719	COMB. OIL&GAS
1/30/2024	123-48823	OGO-69040	ANDERSON ENERGY SVC LLC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	YAEGLE 12	COMB. OIL&GAS
2/1/2024	123-48832	OGO-2647	CURTIS & SON OIL INC	EP DOGO NWDO Dstr Off	Warren	Farmington Twp	MIKULA 28	OIL
2/5/2024	123-48830	OGO-2647	CURTIS & SON OIL INC	EP DOGO NWDO Dstr Off	Warren	Farmington Twp	MIKULA 17	OIL
2/13/2024	123-48901	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Mead Twp	KINLEY LOT 51 43	COMB. OIL&GAS
2/16/2024	123-48894	OGO-63140	DANIEL P HORNBURG	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	SPEEDY 10	OIL
2/19/2024	123-48897	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Mead Twp	KINLEY LOT 51 39	COMB. OIL&GAS
2/23/2024	123-48808	OGO-68700	HEDGEHOG ENERGY LLC	EP DOGO NWDO Dstr Off	Warren	Watson Twp	HORNICK 22	OIL
3/6/2024	123-48872	OGO-25321	GAS & OIL MGMT ASSN INC	EP DOGO NWDO Dstr Off	Warren	Pleasant Twp	LOT 505 7	OIL
3/6/2024	123-48866	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 434 434 SB 27	OIL
3/11/2024	123-48898	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Mead Twp	KINLEY LOT 51 44	COMB. OIL&GAS
3/13/2024	123-48868	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 434 434 SB 28	OIL
3/18/2024	123-48899	OGO-12643	PIERCE & PETERSEN	EP DOGO NWDO Dstr Off	Warren	Mead Twp	KINLEY LOT 51 58	COMB. OIL&GAS
3/20/2024	123-48869	OGO-68490	CAMERON ENERGY CO	EP DOGO NWDO Dstr Off	Warren	Sheffield Twp	LOT 434 434 SB 29	OIL

WELL STATUS	LATITUDE	LONGITUDE	CONFIGURATION	UNCONVENTIONAL
Active	41.877456	-79.045958	Vertical Well	Conventional
Active	41.635778	-79.008806	Vertical Well	Conventional
Active	41.748933	-79.190339	Vertical Well	Conventional
Active	41.747794	-79.193589	Vertical Well	Conventional
Active	41.653392	-78.666492	Vertical Well	Conventional
Active	41.748939	-79.193861	Vertical Well	Conventional
Active	41.6535	-78.65625	Vertical Well	Conventional
Active	41.748317	-79.191919	Vertical Well	Conventional
Active	41.885069	-78.486225	Vertical Well	Conventional
Active	41.650842	-78.650497	Vertical Well	Conventional
Active	41.749317	-79.192608	Vertical Well	Conventional
Active	41.723947	-78.841572	Vertical Well	Conventional
Active	41.721078	-78.841956	Vertical Well	Conventional
Active	41.887617	-78.486067	Vertical Well	Conventional
Active	41.722706	-78.841567	Vertical Well	Conventional
Active	41.653506	-78.662211	Vertical Well	Conventional

Active	41.799444	-79.231611	Vertical Well	Conventional
Active	41.635028	-79.00775	Vertical Well	Conventional
Active	41.863806	-79.135417	Vertical Well	Conventional
Active	41.633972	-79.005389	Vertical Well	Conventional
Active	41.653197	-78.654478	Vertical Well	Conventional
Active	41.735167	-79.053611	Vertical Well	Conventional
Active	41.751581	-78.964758	Vertical Well	Conventional
Active	41.753667	-78.963561	Vertical Well	Conventional
Active	41.634167	-79.006861	Vertical Well	Conventional
Active	41.752225	-79.222108	Vertical Well	Conventional
Active	41.756725	-78.963206	Vertical Well	Conventional
Active	41.760239	-78.951714	Vertical Well	Conventional
Active	41.757919	-78.951628	Vertical Well	Conventional
Active	41.7095	-78.836158	Vertical Well	Conventional
Active	41.706594	-78.810175	Vertical Well	Conventional
Active	41.75575	-78.952606	Vertical Well	Conventional
Active	41.712228	-78.833528	Vertical Well	Conventional

Active	41.707764	-78.810917	Vertical Well	Conventional
Active	41.86125	-79.133694	Vertical Well	Conventional
Active	41.707297	-78.806336	Vertical Well	Conventional
Active	41.751908	-79.223547	Vertical Well	Conventional
Active	41.846694	-79.120917	Vertical Well	Conventional
Active	39.835833	-78.407981	Deviated Well	Conventional
Active	41.706247	-78.807656	Vertical Well	Conventional
Active	41.75265	-79.224767	Vertical Well	Conventional
Active	39.835689	-78.408086	Deviated Well	Conventional
Active	41.709131	-78.809906	Vertical Well	Conventional
Active	41.649939	-78.917328	Vertical Well	Conventional
Active	41.709567	-78.808136	Vertical Well	Conventional
Active	41.649617	-78.918728	Vertical Well	Conventional
Active	41.708747	-78.806539	Vertical Well	Conventional
Active	41.647983	-78.918519	Vertical Well	Conventional
Active	41.602433	-78.965683	Vertical Well	Conventional

Active	41.789544	-78.726086	Vertical Well	Conventional
Active	41.712222	-79.083722	Vertical Well	Conventional
Active	41.790869	-78.725683	Vertical Well	Conventional
Active	41.602533	-78.963356	Vertical Well	Conventional
Active	41.825639	-79.088778	Vertical Well	Conventional
Active	41.790519	-78.740542	Vertical Well	Conventional
Active	41.712444	-79.082694	Vertical Well	Conventional
Active	41.6034	-78.965083	Vertical Well	Conventional
Active	41.825417	-79.091	Vertical Well	Conventional
Active	41.584833	-78.639139	Vertical Well	Conventional
Active	41.826681	-78.84105	Vertical Well	Conventional
Active	41.7115	-79.084222	Vertical Well	Conventional
Active	41.585197	-78.640667	Vertical Well	Conventional
Active	41.827522	-78.842347	Vertical Well	Conventional
Active	41.825944	-79.089972	Vertical Well	Conventional
Active	41.828411	-78.843322	Vertical Well	Conventional
Active	41.711111	-79.083306	Vertical Well	Conventional

Active	41.640528	-79.062444	Vertical Well	Conventional
Active	41.827336	-78.737719	Vertical Well	Conventional
Active	41.710611	-79.0845	Vertical Well	Conventional
Active	41.706133	-78.803989	Vertical Well	Conventional
Active	41.878233	-78.940531	Vertical Well	Conventional
Active	41.87805	-78.939247	Vertical Well	Conventional
Active	41.710056	-79.08625	Vertical Well	Conventional
Active	41.641444	-79.066361	Vertical Well	Conventional
Active	39.796836	-78.420903	Deviated Well	Conventional
Active	41.705017	-78.807067	Vertical Well	Conventional
Active	41.878256	-78.937942	Vertical Well	Conventional
Active	41.8427	-79.124867	Deviated Well	Conventional
Active	41.705586	-78.809122	Vertical Well	Conventional
Active	41.877264	-78.937244	Vertical Well	Conventional
Active	41.64175	-79.064583	Vertical Well	Conventional
Active	41.659053	-78.893647	Vertical Well	Conventional
Active	41.705631	-78.8113	Vertical Well	Conventional

Active	41.878342	-78.942006	Vertical Well	Conventional
Active	41.649775	-78.679522	Vertical Well	Conventional
Active	41.841806	-79.121444	Deviated Well	Conventional
Active	41.651156	-78.676928	Vertical Well	Conventional
Active	41.84175	-79.1215	Deviated Well	Conventional
Active	41.652072	-78.676103	Vertical Well	Conventional
Active	41.842167	-79.121417	Deviated Well	Conventional
Active	41.765925	-79.063978	Vertical Well	Conventional
Active	41.653233	-78.676225	Vertical Well	Conventional
Active	41.641361	-79.063361	Vertical Well	Conventional
Active	41.766339	-79.063069	Vertical Well	Conventional
Regulatory Inactive Status	41.794492	-78.5876	Vertical Well	Conventional
Active	41.650239	-78.678008	Vertical Well	Conventional
Active	41.760181	-78.956983	Vertical Well	Conventional
Active	41.775814	-79.066064	Vertical Well	Conventional
Active	41.703458	-78.783522	Vertical Well	Conventional
Active	41.7588	-78.954589	Vertical Well	Conventional

Active	41.776694	-79.065914	Vertical Well	Conventional
Active	41.640778	-79.064667	Vertical Well	Conventional
Active	41.780444	-79.215361	Vertical Well	Conventional
Active	41.776322	-79.064803	Vertical Well	Conventional
Active	41.862344	-78.927267	Vertical Well	Conventional
Active	41.802233	-79.1132	Vertical Well	Conventional
Active	41.758103	-78.958364	Vertical Well	Conventional
Active	41.652667	-78.9985	Vertical Well	Conventional
Active	41.751333	-79.208478	Vertical Well	Conventional
Active	41.801886	-79.112261	Vertical Well	Conventional
Active	41.758506	-78.961347	Vertical Well	Conventional
Active	41.877381	-78.942383	Vertical Well	Conventional
Active	41.749436	-79.209267	Vertical Well	Conventional
Active	41.748972	-78.969175	Vertical Well	Conventional
Active	41.862258	-78.928731	Vertical Well	Conventional
Active	41.783236	-79.127647	Vertical Well	Conventional
Active	41.652583	-79.000222	Vertical Well	Conventional

Active	41.5943	-79.023319	Vertical Well	Conventional
Active	41.769736	-79.065786	Vertical Well	Conventional
Active	41.747775	-78.966547	Vertical Well	Conventional
Active	41.750256	-79.207631	Vertical Well	Conventional
Active	41.700583	-78.802253	Vertical Well	Conventional
Active	41.87735	-78.941097	Vertical Well	Conventional
Active	41.768994	-79.065681	Vertical Well	Conventional
Active	41.594214	-79.0248	Vertical Well	Conventional
Active	41.742489	-78.955675	Vertical Well	Conventional
Active	41.651917	-78.997389	Vertical Well	Conventional
Active	41.750922	-79.206061	Vertical Well	Conventional
Active	41.877469	-78.939983	Vertical Well	Conventional
Active	41.742506	-78.958683	Vertical Well	Conventional
Active	41.699489	-78.80125	Vertical Well	Conventional
Active	41.592811	-79.024861	Vertical Well	Conventional
Active	41.782092	-79.127758	Vertical Well	Conventional
Active	41.651556	-78.998778	Vertical Well	Conventional

Active	41.862725	-78.930058	Vertical Well	Conventional
Active	41.751344	-79.204131	Vertical Well	Conventional
Active	41.699181	-78.803461	Vertical Well	Conventional
Active	41.877294	-78.938528	Vertical Well	Conventional
Active	41.769217	-79.066861	Vertical Well	Conventional
Active	41.766628	-78.985197	Vertical Well	Conventional
Active	41.802839	-79.112447	Vertical Well	Conventional
Active	41.769939	-79.066775	Vertical Well	Conventional
Active	41.651361	-79.000306	Vertical Well	Conventional
Active	41.828675	-78.844458	Vertical Well	Conventional
Active	41.641833	-79.028944	Vertical Well	Conventional
Active	41.6515	-79.001778	Vertical Well	Conventional
Active	41.826622	-78.838589	Vertical Well	Conventional
Active	41.831717	-79.141556	Vertical Well	Conventional
Active	41.64075	-79.029194	Vertical Well	Conventional
Active	41.779292	-79.051364	Vertical Well	Conventional
Active	41.777506	-79.128867	Vertical Well	Conventional

Active	41.778747	-79.050161	Vertical Well	Conventional
Active	41.407286	-79.234686	Vertical Well	Conventional
Active	41.778225	-79.048881	Vertical Well	Conventional
Active	41.831828	-79.138036	Vertical Well	Conventional
Active	41.777714	-79.047658	Vertical Well	Conventional
Active	41.789497	-78.739419	Vertical Well	Conventional
Active	41.776606	-79.130019	Vertical Well	Conventional
Active	41.788539	-78.739344	Vertical Well	Conventional
Active	41.606889	-79.004528	Vertical Well	Conventional
Active	41.789067	-78.738272	Vertical Well	Conventional
Active	41.605833	-79.00425	Vertical Well	Conventional
Active	41.789417	-78.737078	Vertical Well	Conventional
Active	41.604722	-79.004	Vertical Well	Conventional
Active	41.182858	-78.583278	Vertical Well	Conventional
Active	41.788108	-78.738197	Vertical Well	Conventional
Active	41.611389	-78.998667	Vertical Well	Conventional
Active	41.788458	-78.737	Vertical Well	Conventional

Active	41.877308	-79.051272	Vertical Well	Conventional
Active	41.609944	-78.998472	Vertical Well	Conventional
Active	41.878656	-79.046072	Vertical Well	Conventional
Active	41.700169	-78.799092	Vertical Well	Conventional
Active	41.752375	-79.204811	Vertical Well	Conventional
Active	41.877492	-79.044553	Vertical Well	Conventional
Active	41.751142	-79.201967	Vertical Well	Conventional
Active	41.607889	-78.998667	Vertical Well	Conventional
Regulatory Inactive Status	41.859136	-78.891958	Vertical Well	Conventional
Active	41.823411	-78.852417	Vertical Well	Conventional
Active	41.63226	-78.982801	Vertical Well	Conventional
Active	41.821619	-78.853189	Vertical Well	Conventional
Active	41.631639	-78.983944	Vertical Well	Conventional
Active	41.697717	-78.800542	Vertical Well	Conventional
Active	41.631056	-78.985194	Vertical Well	Conventional
Active	41.630722	-78.986583	Vertical Well	Conventional
Active	41.081944	-78.746931	Vertical Well	Conventional

Active	41.629861	-78.985694	Vertical Well	Conventional
Active	41.630806	-78.983194	Vertical Well	Conventional
Active	41.630861	-78.981444	Vertical Well	Conventional
Active	41.630667	-78.979	Vertical Well	Conventional
Active	41.631667	-78.978667	Vertical Well	Conventional
Active	41.845389	-79.122472	Vertical Well	Conventional
Active	41.594394	-79.021903	Vertical Well	Conventional
Active	41.595325	-79.022683	Vertical Well	Conventional
Regulatory Inactive Status	41.793378	-78.587561	Vertical Well	Conventional
Active	41.591025	-79.024319	Vertical Well	Conventional
Active	41.746589	-78.963997	Vertical Well	Conventional
Regulatory Inactive Status	41.792269	-78.587539	Vertical Well	Conventional
Active	41.753706	-78.960272	Vertical Well	Conventional
Active	41.754083	-78.957233	Vertical Well	Conventional
Active	41.718278	-79.066639	Vertical Well	Conventional
Active	41.634444	-78.981861	Vertical Well	Conventional
Active	41.63825	-79.033222	Vertical Well	Conventional

Active	41.639222	-79.034889	Vertical Well	Conventional
Active	41.830972	-78.840464	Vertical Well	Conventional
Active	41.634167	-78.983389	Vertical Well	Conventional
Active	41.655139	-79.092889	Vertical Well	Conventional
Active	41.831061	-78.838781	Vertical Well	Conventional
Active	41.829975	-78.837125	Vertical Well	Conventional
Active	41.831028	-78.837122	Vertical Well	Conventional
Active	41.721217	-78.868894	Vertical Well	Conventional
Active	41.832433	-78.837508	Vertical Well	Conventional
Active	41.720258	-78.868892	Vertical Well	Conventional
Active	41.797876	-79.147197	Vertical Well	Conventional
Active	41.720739	-78.867783	Vertical Well	Conventional
Active	41.797019	-79.147622	Vertical Well	Conventional
Active	41.799892	-79.143431	Vertical Well	Conventional
Active	41.71975	-78.867803	Vertical Well	Conventional
Active	41.607861	-79.003722	Vertical Well	Conventional
Active	41.589611	-79.021083	Vertical Well	Conventional

Active	41.608556	-79.001583	Vertical Well	Conventional
Active	41.588694	-79.024861	Vertical Well	Conventional
Active	41.65625	-79.092861	Vertical Well	Conventional
Active	41.609417	-79.000361	Vertical Well	Conventional
Active	41.610417	-79.001111	Vertical Well	Conventional
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Active	41.610528	-78.999639	Vertical Well	Conventional
Active	41.919833	-79.159611	Vertical Well	Conventional
Active	41.76165	-78.979942	Vertical Well	Conventional
Active	41.705125	-78.802122	Vertical Well	Conventional
Active	41.706497	-78.802056	Vertical Well	Conventional
Active	41.704886	-78.803753	Vertical Well	Conventional
Active	41.839611	-79.118111	Vertical Well	Conventional
Active	41.758056	-78.965578	Vertical Well	Conventional
Active	41.829231	-79.303856	Vertical Well	Conventional
Active	41.840556	-79.11875	Vertical Well	Conventional

Active	41.829233	-79.302389	Vertical Well	Conventional
Active	41.759906	-78.963717	Vertical Well	Conventional
Active	41.829103	-79.300931	Vertical Well	Conventional
Active	41.757031	-78.968308	Vertical Well	Conventional
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Active	41.828233	-79.298253	Vertical Well	Conventional
Active	41.755353	-78.970378	Vertical Well	Conventional
Active	41.840278	-79.116194	Vertical Well	Conventional
Active	41.841361	-79.117194	Vertical Well	Conventional
Active	41.803194	-79.174806	Vertical Well	Conventional
Active	41.8445	-79.116861	Vertical Well	Conventional
Active	41.803889	-79.172444	Vertical Well	Conventional
Active	41.626883	-79.111303	Vertical Well	Conventional
Active	41.628153	-79.111011	Vertical Well	Conventional
Active	41.752072	-79.099892	Vertical Well	Conventional

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Active	41.823944	-79.094	Vertical Well	Conventional
Active	41.793281	-78.489014	Vertical Well	Conventional
Active	41.786903	-78.740628	Vertical Well	Conventional
Active	41.824778	-79.093389	Vertical Well	Conventional
Active	41.786778	-78.739256	Vertical Well	Conventional
Active	41.787153	-78.738072	Vertical Well	Conventional
Active	41.786289	-78.737478	Vertical Well	Conventional
Active	41.785786	-78.738572	Vertical Well	Conventional
Active	41.753283	-79.099881	Vertical Well	Conventional
Active	41.703653	-78.803825	Vertical Well	Conventional
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Active	41.754314	-79.100272	Vertical Well	Conventional
Active	41.704358	-78.805394	Vertical Well	Conventional
Active	41.100783	-79.638854	Vertical Well	Conventional
Active	41.756556	-79.223028	Vertical Well	Conventional

Active	41.825747	-78.839908	Vertical Well	Conventional
Active	41.756261	-79.099856	Vertical Well	Conventional
Active	41.756889	-79.224444	Vertical Well	Conventional
Active	41.703178	-78.806164	Vertical Well	Conventional
Active	41.755119	-79.099444	Vertical Well	Conventional
Active	41.824603	-78.841122	Vertical Well	Conventional
Active	41.764944	-79.063878	Vertical Well	Conventional
Active	41.824831	-78.843364	Vertical Well	Conventional
Active	41.759331	-79.202628	Vertical Well	Conventional
Active	41.702467	-78.804744	Vertical Well	Conventional
Active	41.469639	-79.224361	Vertical Well	Conventional
Active	41.769647	-79.068064	Vertical Well	Conventional
Active	41.825808	-78.842414	Vertical Well	Conventional
Active	41.769158	-79.070494	Vertical Well	Conventional
Active	41.7645	-79.100833	Vertical Well	Conventional
Active	41.469167	-79.225667	Vertical Well	Conventional
Active	41.826633	-78.843492	Vertical Well	Conventional

Active	41.758317	-79.202011	Vertical Well	Conventional
Active	41.769111	-79.069175	Vertical Well	Conventional
Active	41.701908	-78.802775	Vertical Well	Conventional
Active	41.700317	-78.806508	Vertical Well	Conventional
Active	41.113222	-79.644689	Vertical Well	Conventional
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Active	41.758658	-79.200147	Vertical Well	Conventional
Active	41.707428	-78.804506	Vertical Well	Conventional
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Active	41.698578	-78.795908	Vertical Well	Conventional
Active	41.758817	-79.198397	Vertical Well	Conventional
Active	41.763847	-78.979275	Vertical Well	Conventional
Active	41.439369	-79.162069	Vertical Well	Conventional
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Active	41.839083	-79.154111	Vertical Well	Conventional
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Active	39.970456	-80.334669	Vertical Well	Conventional
Active	41.79345	-79.098272	Vertical Well	Conventional
Active	41.834789	-78.838811	Vertical Well	Conventional
Active	41.833842	-78.838725	Vertical Well	Conventional
Active	41.536031	-79.170708	Vertical Well	Conventional
Active	41.537133	-79.169939	Vertical Well	Conventional
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Active	41.86335	-79.12345	Vertical Well	Conventional
Active	41.817719	-78.854483	Vertical Well	Conventional
Active	41.538244	-79.170992	Vertical Well	Conventional

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Plugged OG Well	41.692056	-78.819222	Vertical Well	Conventional
Active	41.877225	-79.049317	Vertical Well	Conventional
Active	41.72905	-78.6318	Vertical Well	Conventional
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Active	41.793839	-79.097233	Vertical Well	Conventional
Active	41.876436	-79.045406	Vertical Well	Conventional
Active	41.591772	-79.025389	Vertical Well	Conventional
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Active	41.984417	-79.310167	Vertical Well	Conventional
Active	41.660514	-78.887742	Vertical Well	Conventional
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Active	41.660567	-78.886336	Vertical Well	Conventional
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Active	41.744981	-78.971839	Vertical Well	Conventional
Active	41.646361	-78.976194	Vertical Well	Conventional
Active	41.820856	-78.859225	Vertical Well	Conventional
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Active	41.827281	-78.736256	Vertical Well	Conventional
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Active	41.828767	-78.872272	Vertical Well	Conventional
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Active	41.826211	-78.871933	Vertical Well	Conventional
Active	41.849944	-79.119389	Deviated Well	Conventional
Active	41.8251	-78.872711	Vertical Well	Conventional

Active	41.849944	-79.119306	Deviated Well	Conventional
Active	41.828761	-78.873919	Vertical Well	Conventional
Active	41.778528	-79.218639	Vertical Well	Conventional
Active	41.608833	-79.003083	Vertical Well	Conventional
Active	41.826197	-78.875431	Vertical Well	Conventional
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Active	41.850472	-79.11975	Deviated Well	Conventional
Active	41.60875	-79.004528	Vertical Well	Conventional
Active	41.837486	-78.836609	Vertical Well	Conventional
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Active	41.849722	-79.122389	Deviated Well	Conventional
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Active	41.831317	-78.834128	Vertical Well	Conventional
Active	41.611556	-79.002083	Vertical Well	Conventional
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Active	41.652453	-78.682303	Vertical Well	Conventional
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Active	41.796167	-79.173833	Vertical Well	Conventional
Active	41.804583	-79.171306	Vertical Well	Conventional
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Active	41.610639	-79.002861	Vertical Well	Conventional
Active	41.765611	-79.113056	Vertical Well	Conventional
Active	41.840278	-79.116306	Deviated Well	Conventional
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Active	41.731997	-78.888575	Vertical Well	Conventional
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Active	41.850972	-79.122111	Vertical Well	Conventional
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Active	41.978028	-79.275972	Vertical Well	Conventional
Active	41.841417	-79.11725	Deviated Well	Conventional
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Active	41.748733	-78.974522	Vertical Well	Conventional
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Active	41.467556	-79.229806	Vertical Well	Conventional
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Active	41.799583	-79.234528	Vertical Well	Conventional
Active	41.599478	-79.014628	Vertical Well	Conventional
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Active	41.603022	-79.012242	Vertical Well	Conventional
Active	41.466944	-79.227611	Vertical Well	Conventional
Active	41.667342	-78.909258	Vertical Well	Conventional
Active	41.64825	-79.016861	Vertical Well	Conventional
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Active	41.837103	-79.131714	Deviated Well	Conventional
Active	41.648111	-79.013139	Vertical Well	Conventional
Active	41.465944	-79.222889	Vertical Well	Conventional
Active	41.666308	-78.909758	Vertical Well	Conventional
Active	41.993167	-79.2705	Vertical Well	Conventional
Active	41.211838	-78.950121	Vertical Well	Conventional
Active	41.857222	-79.152528	Vertical Well	Conventional
Active	41.782556	-79.126039	Vertical Well	Conventional
Active	41.700656	-78.794106	Vertical Well	Conventional
Active	41.993222	-79.271806	Vertical Well	Conventional
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Active	41.699042	-78.793517	Vertical Well	Conventional
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Active	41.75852	-78.97604	Vertical Well	Conventional
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Active	41.825775	-79.127025	Vertical Well	Conventional
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Active	41.827611	-78.877806	Vertical Well	Conventional
Active	41.698058	-78.808142	Vertical Well	Conventional
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Active	41.671592	-79.004425	Vertical Well	Conventional
Active	41.830061	-78.833683	Vertical Well	Conventional
Active	41.599498	-79.016755	Vertical Well	Conventional
Active	41.825411	-79.125792	Vertical Well	Conventional
Active	41.837078	-79.131683	Deviated Well	Conventional

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Active	41.837344	-78.840494	Vertical Well	Conventional
Active	41.600842	-79.014789	Vertical Well	Conventional
Active	41.471056	-79.220861	Vertical Well	Conventional
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Active	41.671775	-79.007967	Vertical Well	Conventional
Active	41.846294	-78.667103	Vertical Well	Conventional
Active	41.780433	-79.065297	Vertical Well	Conventional
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Active	41.6267	-79.108867	Vertical Well	Conventional
Active	41.77935	-79.065336	Vertical Well	Conventional
Active	41.591447	-79.029239	Vertical Well	Conventional
Active	41.845467	-78.667347	Vertical Well	Conventional
Active	41.469028	-79.221556	Vertical Well	Conventional
Active	41.835039	-78.840097	Vertical Well	Conventional

Active	41.74107	-78.96879	Vertical Well	Conventional
Active	41.836286	-78.834903	Vertical Well	Conventional
Active	41.847789	-78.668142	Vertical Well	Conventional
Active	41.490183	-79.216853	Vertical Well	Conventional
Active	41.846211	-78.669267	Vertical Well	Conventional
Active	41.831033	-79.057658	Vertical Well	Conventional
Active	41.837458	-78.834908	Vertical Well	Conventional
Active	41.491778	-79.217097	Vertical Well	Conventional
Active	41.831428	-79.056489	Vertical Well	Conventional
Active	41.836183	-78.833242	Vertical Well	Conventional
Active	41.823947	-79.151586	Vertical Well	Conventional
Active	41.830867	-79.054772	Vertical Well	Conventional
Active	41.837458	-78.833297	Vertical Well	Conventional
Active	41.481311	-79.226797	Vertical Well	Conventional
Active	41.831394	-79.0535	Vertical Well	Conventional
Active	41.835117	-78.833142	Vertical Well	Conventional
Active	41.483039	-79.224822	Vertical Well	Conventional

Active	41.829953	-79.057711	Vertical Well	Conventional
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Active	41.733972	-79.054556	Vertical Well	Conventional
Active	41.483133	-79.226475	Vertical Well	Conventional
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Active	41.643306	-78.976917	Vertical Well	Conventional

PIOGA St. No. 2

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket No. R-2023-3044549
Office of Consumer Advocate	:	Docket No. C-2024-3045268
Office of Small Business Advocate	:	Docket No. C-2024-3045385
v.	:	
	:	
Peoples Natural Gas Company LLC	:	

DIRECT TESTIMONY
OF
D. MARC JACOBS, Jr.

on behalf of the

PENNSYLVANIA INDEPENDENT
OIL & GAS ASSOCIATION

Dated: March 22, 2024

Q. PLEASE STATE YOUR NAME AND OCCUPATION.

A. I am D. Marc Jacobs, Jr., Senior Vice President of Penneco Oil Company, Inc. (Penneco) which is a producer member of the Pennsylvania Independent Oil & Gas Association (PIOGA).

Q. WHAT IS PENNECO?

A. Penneco is a conventional oil and gas operator headquartered in Delmont, Pennsylvania with the majority of its managed assets and infrastructure located in the southwest quadrant of the Commonwealth.

Q. WHAT IS YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND?

A. I graduated from a midwestern state seminary with a Bachelor of Science Degree in Pastoral Theology in 1984. Immediately following, I joined Penneco in a family-principal leadership position and have been there ever since.

Q. WHAT DO YOU DO AS SENIOR VICE PRESIDENT?

A. I manage the production and infrastructure, regulatory compliance, plugging activities, and our UIC operations along with daily nuances and decision-making typical to a family business.

Q. WHAT IS YOUR EXPERIENCE IN THE OIL AND NATURAL GAS INDUSTRY?

A. In my 40 years in the industry, I have facilitated and managed our drilling and completions, our well site and pipeline construction, gas measurement and compression operations, and assisted in evaluation of prospects and development strategies.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying on behalf of PIOGA.

Q. HAVE YOU TESTIFIED PREVIOUSLY IN ANY PUC PROCEEDINGS?

A. No.

Q. WHY ARE YOU PROVIDING TESTIMONY IN THIS PROCEEDING?

A. I am providing testimony because Penneco delivers conventional production to the Peoples Natural Gas Company LLC (Peoples) pipeline system, and I have experience with Penneco's operations on the pipelines of all three legacy utilities that Peoples now operates as a fully integrated system – the Peoples Natural Gas Division (PNGD), comprising the legacy Peoples and Equitable Gas utilities, and the Peoples Gas Division (PGD), the former legacy TW Phillips utility Peoples acquired in 2011.

Q. ARE YOU FAMILIAR WITH PEOPLES' TESTIMONY IN THIS MATTER?

A Yes, I am familiar with the testimony of Micheal Huwar, Edward Palombo, Dawn Folks and Ralph Zarumba concerning the issues I am addressing in my testimony.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to support PIOGA's positions and proposals set forth in Dan Weaver's testimony concerning Peoples' tariff unification proposals, and Rate AGS and the Master Interconnect and Measurement Agreement (MIMA) required for service under PNGD's existing Rate AGS and Peoples' proposed Rate AGS for the PGD. Specifically, I explain why the moisture curve water vapor content standards on the legacy Peoples Natural Gas system should be the standards across Peoples' fully integrated pipeline system. I also explain how deliveries of gas into Peoples' pipelines at pressures higher than the producer regulator set points on those pipelines adversely affect the ability of those producers to deliver their gas into the Peoples system. I also explain how Peoples has responded to Penneco's production being shut-in in that situation and others. Finally, I identify certain provisions in the MIMA and explain how the provisions

should be revised to facilitate producers' operations and deliveries of conventional production to add value to the Rate AGS service without jeopardizing Peoples' ability to operate its pipeline system safely and reliably.

Q. WHAT WAS THE GATHERING FEE IMPOSED ON PRODUCERS' DELIVERIES INTO THE LEGACY TW PHILLIPS SYSTEM?

A. TW Phillips never imposed a gathering fee on producers for deliveries into its system.

Q. WHY DIDN'T TW PHILLIPS IMPOSE A GATHERING FEE ON PRODUCERS' DELIVERIES INTO THE LEGACY TW PHILLIPS SYSTEM?

A. I do not know why TW Phillips did not impose a gathering fee historically, but it suggests that TW Phillips may have had a model that profited despite not having a gathering fee. It may also be because TW Phillips didn't have gathering pipelines, as explained in Dan Weaver's testimony.

Q. WHAT ARE THE WATER VAPOR CONTENT STANDARDS ON THE PEOPLES DIVISION PIPELINE SYSTEM?

A. Peoples Division has maintained the water vapor content standards established on the legacy Peoples Natural Gas Company's system starting in the early 2000s by the collaborative Production Enhancement Services (PES) agreements and programs referenced in the testimony of PIOGA witness Dan Weaver. After the acquisition of the legacy Equitable Gas system, the Peoples Equitable Division has maintained that system's water vapor content standard. Peoples acquired the legacy TW Phillips system in 2011 and maintained the historic, relaxed enforcement application of the previous owner until shortly before imposing the legacy Equitable Gas system standards through

an updated version of the MIMA in 2020.[1] The current water vapor contents for the three legacy utility systems are set forth in PIOGA Exhibit DW-l.

Q. WHAT ELSE CAN TELL US ABOUT THE HISTORY OF THE WATER VAPOR CONTENT STANDARDS ON THE PGD SYSTEM?

A. Based on my experience delivering our gas to the TW Phillips system, it was never brought to our attention that any of their pipelines had a water vapor content problem. We never had to dry our gas and I'm not aware of TW Philips's having to enforce its standard by temporary or long-term shut-ins of conventional production. Peoples' discovery responses are consistent with my experience on the TW Phillips system before and after Peoples 2011 acquisition. Peoples did not begin performing producer meter audits until 2019, and after that it seems that the number of warnings and temporary shut-ins were minimal and did not result in significant customer service interruptions or outages, damage to customer appliances and facilities, or threats to the safe and reliable operation of the system.[2] Also, Peoples has installed only one dehy unit on the PGD system, and that was in September 2019.[3]

In addition, the current water vapor content standards on the PGD system are the same as those on the legacy Equitable Gas system, which are the most stringent on the Peoples system.

[1] PIOGA Exhibit DW-4 (Peoples' responses to PIOGA-I-2 and PIOGA-III-1); PIOGA Exhibit DMJ-1 (Peoples' responses to PIOGA-I-7 and PIOGA-III-1-(U) (supplemental) & 1.c. (without attachment)).

[2] PIOGA Exhibit DMJ-2 (Peoples' responses to PIOGA-III-1.c. (with attachment) and 2, and PIOGA-V-1).

[3] PIOGA Exhibit DMJ-2 (Peoples' response to PIOGA-III-2).

Q. WHAT CAN YOU TELL US ABOUT THE HISTORY OF THE WATER VAPOR CONTENT STANDARDS ON THE LEGACY PEOPLES NAURAL GAS COMPANY SYSTEM?

A. Based on my experience, the legacy Peoples Natural Gas Company system has operated without significant operational problems due to water vapor content issues since the current standards – which we refer to as the "moisture curve" – were established in the early 2000s. Unlike the standards on the other two legacy utility systems, these standards consider the system pressure at the receipt points. The lower the system pressure, the higher the vapor allowance. The higher the pressure, the more stringent the vapor limit. Peoples had achieved the perfect nexus of pressure and vapor content to manage efficient tolerances while insuring maximum, economic flow from producers. The water vapor standards required by the legacy Equitable Gas standards are nearly impossible to achieve physically due to desiccant drying properties at low pressure. Beyond the physical limitations, the economics of meeting these standards with the current and projected gas prices is completely unsustainable for conventional producers.

Q. WHAT IS PIOGA'S POSITION CONCERNING PEOPLES' PROPOSAL TO MAINTAIN THE DIFFERENT WATER VAPOR CONTENT STANDARDS ON THE PEOPLES SYSTEM

A. As PIOGA witness Dan Weaver states, we believe the standards on the Equitable Division and the PGD system should be the same, and they should be the current moisture curve standards on the Peoples Division system.

Q. WHY DOES PIOGA BELIEVE THE STANDARDS SHOULD BE THOSE ON THE PEOPLES DIVISION SYSTEM?

A. Our position is based upon the history I provide above and the reasons Peoples relies upon to support its tariff unification, as well as the benefits of consistent and standard gas quality requirements to both Peoples and producers for operations of Peoples' fully

integrated system, as stated in PIOGA Exhibit DW-2. Having one set of water vapor content standards across the Peoples system provides the same type of operational and administrative benefits for producers as for Peoples. In addition, there is a significant cost benefit to producers in having the Peoples Division moisture curve standards, as I explained above. Peoples has attempted to foster an incentive for increased conventional volumes via the PNGD Rate AGS. However, producers may be better enticed to invest in production growth if they didn't have to spend $1/Mcf for drying the gas to the current enforcement specs on the Equitable Division and PGD systems. Having the Peoples Division moisture curve standards would be more meaningful to conventional producers and result in the best opportunity for conventional producers to invest in aging assets to enhance production.

Q. HOW WOULD BEING REQUIRED TO MEET THE WATER VAPOR STANDRDS ON THE PGD SYSTEM AFFECT PENNECO'S OPERATIONS ON THAT SYSTEM?

A. Maintaining the requisite vapor levels at the former Equitable receipt points has always been a challenge due to the limits of desiccant chemistries and effectiveness at low pressure, but most recently, since about the time of the Peoples acquisition, desiccant prices have sky-rocketed turning any remaining profit margin upside down. Conventional operators are in desperate need of a lifeline and the previously mentioned "moisture curve" water vapor scale applied to all Peoples systems may be just the relief needed for viability.

Peoples audited two of our single well systems – one well, one receipt point – each producing 2 mcf/d and shut us off for a vapor level violation. We installed small desiccant vessels on each at a cost of $1,000 and flow was restored after about a month. Penneco has 29 CO meters on the PGD system (legacy TW Phillips receipt points) with

an approximate daily volume over 400 mcf. If we are forced to achieve the vapor levels represented in the MIMA on all of our PGD system connection points, the installation and maintenance costs will cause us to seriously re-evaluate the viability and status of assets dependent on those receipt points.

Q. WHAT IS A PRODUCER REGULATOR?

A. A producer regulator is a devise designed to maintain the downstream receipt point pressure to the prescribed system specs. As the producer receipt point pressure creeps toward the regulator set point, the flow through the regulator becomes restricted or shut off.

Q. WHO DETERMINES THE PRESSURE AT WHICH PRODUCER REGULATORS ARE SET?

A. The system owner/operator – Peoples in this case.

Q. WHAT HAPPENS TO DELIVERIES OF CONVENTIONAL PRODUCTION WHEN PEOPLES ALLOWS GAS TO FLOW ON PIPELINES WITH PRODUCER REGULATORS AT PRESSURES HIGHER THAN THE PRODUCER REGULATOR SET POINTS AT THE RECEIPT POINTS?

A. If the conventional producers' regulators are set properly, the gas flow at the receipt point stops.

Q. WHAT IS PENNECO'S EXPERIENCE WITH THIS SITUATION?

Penneco has a single well system that was purchased from TW Phillips years ago in Plum Borough on the Peoples Division system. The well and Peoples' meter are in a back yard of a home in a development of homes. Initially, when the set point was around 30 psi, the well was capable of flowing approximately 20 Mcf/d. We have been through multiple system downgrades over the years, with the set point being reduced from 30 psi to 8 psi, the most recent of which was 8 psi allowing no flow between May 25, 2022 and December 19, 2022, because the Peoples line pressure was 10 psi. We did flow 8 mcf

briefly between December 19, 2022 and December 27, 2022. The higher pressure gas is flowing from somewhere on this line, and it's not from us.

Were it not for our catalytic heater burning 3 mcf/month, we would be in jeopardy of an Active Status violation with PA DEP for this well. The greater issue is the pressure build-up on the old well positioned in a housing development. We only need a pound or two to feed, but the pipeline pressure is higher than our set point. Each year since the single digit line pressure set points were enforced, we have been able to flow just enough to keep active status with the PA DEP. As of today, we have flowed no volume in 2023 putting us in compliance jeopardy. We only need a set point increase of a pound for a limited basis for the sake of preserving our active status. But a few pounds would allow us to flow and reduce the pressure on the old well if Peoples were able to give us flow-preference over transmission or pipeline supplemental volumes.

Q. WHAT IS AN ACTIVE STATUS VIOLATION WITH PA DEP?

A. DEP treats failure to report production from a well for one year as an abandonment of the well.

Q. WHAT ARE THE CONSEQUENCES OF AN ACTIVE STATUS VIOLATION WITH PA DEP?

A. DEP requires abandoned wells to be plugged. Also, leases have "held by production" provisions that ensure production and threaten termination if there is no production for a certain period of time. Abandoning a well for lack of production can, if the well is on land leased by the producer, result in the loss of the lease if that is the only well on the leased premises. Fortunately, that is not the case with this well because we have another well on this leased land that is feeding into a different receipt point.

Q. HOW MUCH WOULD IT COST PENNECO TO PLUG THIS WELL?

We've had to start preparations for plugging this well, which we believe could cost between $80,000 - $100,00 because of the need to build a road and adapting the grade around the well to accommodate a rig, flare off the existing reservoir volumes prior to the plugging process, and implementing the requisite plugging design for the old, cemented packer well-construction typical of its vintage. It's difficult to know how much it will cost to plug conventional wells like this because the cost depends upon many factors, such as open-hole caving after shooting off and pulling the tubing above the packer – in which case we would be required to drill or wash out the open-hole to the tubing stub prior to cementing.

Q. HOW DO THESE ACTIVITIES AND COSTS COMPARE TO PLUGGING WELLS GENERALLY?

A. These activities and costs are typical for conventional wells of this vintage, i.e., around the 1960s. For newer, cased wells, the cost can be much less due to later construction design and materials but, with any plug job, the actual cost is difficult to predict because you don't know what you will run into until you start the work, and sometimes even while the work is being done.

Q. WHAT IS PENNECO'S EXPERIENCE WITH OTHER FLOW RESTRICTIONS?

A. Penneco experiences seasonal restrictions at various receipt points due to transitional supply and demand dynamics in the Spring and Fall. Typically, the inconsistent system pressures only last a few weeks to a month during each transition period.

Q. HOW DOES PENNECO BECOME AWARE OF THESE RESTRICTIONS?

A. There is no notice prior to the restriction. We simply assume the reason based on the timing.

Q. WHAT IS PENNECO'S EXPERINECE OPERATING UNDER THE PNGD MIMA?

A. Penneco has been operating under the PNGD MIMA since July 2020. This experience has revealed some issues that create uncertainty for producers' operations. Other MIMA provisions, if enforced across the board could have significant adverse effects on producers' operations. Others could provide cost savings for producers without jeopardizing Peoples' ability to operate its pipeline system safely and reliably.

Q. WHAT MIMA PROVISIONS CREATE UNCERTAINTY FOR PRODUCERS?

A. The MIMA provisions I reference are the same in the existing PNGD MIMA and the MIMA proposed for the PGD system. There are many MIMA provisions that have no restrictions on the time periods during which Peoples may restrict the flow or discontinue the talking of producers' gas. These provisions are identified in my Exhibit 3.[4] The general provision is under Article VI, INTERCONNECTION OPERATIONS, 6.01 Gathering Obligations: "As set forth elsewhere in this Agreement, it is expressly understood that Peoples may restrict the flow or discontinue the taking of Gas temporarily."

Q. HOW CAN THIS PROVISION BE CHANGED TO REMOVE THE UNCERTAINTY YOU'VE IDENTIFIED?

A. PIOGA proposes that a reasonable time restriction be inserted, which I believe is nine (9) months, as follows: "As set forth elsewhere in this Agreement, it is expressly understood that Peoples may restrict the flow or discontinue the taking of Gas temporarily, <u>not to exceed nine (9) consecutive months</u>." This would remove the jeopardy of an Active

[4] PIOGA Exhibit DMJ-3 (Peoples response to PIOGA-IV-2).

Status violation with PA DEP and the loss of leases for failing to comply with the "hold by production" provisions.

Q. WHAT MIMA PROVISIONS COULD HAVE SIGNIFICANT ADVERSE EFFECTS ON PRODUCERS' OPERATIONS?

A. Article VI, INTERCONNECTION OPERATIONS, 6.04 "Peoples Shut-in of Interconnect" provides as follows:

> Peoples retains the unilateral right to immediately shut-in or cause Producer to shut-in any Interconnect that, in Peoples' sole judgment, using commercially reasonable discretion, threatens the integrity and safe operation of Peoples' System. Additionally, if Peoples is purchasing the Gas from a particular Receipt Point, upon thirty (30) days advance written notice, Peoples may shut-in or cause Producer to shut-in that Receipt Point for economic reasons.

Peoples acknowledges that the last sentence of this provision allows Peoples to lower regulator set points and indefinitely stop the flow of producer gas at a particular Interconnect or Receipt Point.[5]

Article VI, INTERCONNECTION OPERATIONS, 6.05(a) "Producer Shut-in and Discontinuance" provides as follows:

> Producer shall provide thirty (30) days advance notice to Peoples of its intention to shut-in or discontinue delivery of Gas at any Receipt Point, after which notice the Parties shall engage in a good-faith discussion to determine if Peoples consent must be conditioned or withheld. If the shut-in or discontinuance is caused by an emergency event, Producer shall notify Peoples as quickly as possible, but in no event more than 24 hours after the event.

Article VI, INTERCONNECTION OPERATIONS, 6.05(c) provides as follows:

> If a shut-in occurs, Peoples shall have the right to remove its facilities at the Interconnect Point and terminate the Exhibit governing that Receipt Point.

Article X, MEASUREMENT, 10.17 "Low Volumes for Receipt Points" provides:

[5] PIOGA Exhibit DMJ-4 (Peoples response to PIOGA-IV-3).

(a) In the event that Producer does not deliver to Peoples an average of three (3) Dekatherms of Gas per Day at each Receipt Point during any ninety (90) consecutive day period, then Peoples may permit the low volume delivery to continue or notify Producer of the low volume situation to initiate a discussion of the operational and commercial circumstances of the Receipt Point, including line pressures impacting the Receipt Point.

Q. HOW CAN THESE PROVISIONS BE CHANGED TO MITIGATE POTENTIAL SIGNIFICANT ADVERSE EFFECTS ON PRODUCERS' OPERATIONS?

A. PIOGA suggests that the following changes can mitigate potential significant adverse effects on producers. Concerning 6.04, we suggest adding the following provision at the end:

> <u>As soon as possible after the threat to the integrity and safe operation of the system or the economic reasons no longer exist, if Peoples will use best efforts to limit flows of transmission or pipeline supplemental volumes to give conventional production flow-preference.</u>

Concerning 6.05(a), a compressor may be down for a rebuild or a producer system out of service for maintenance for an unanticipated reason other than an emergency event. PIOGA suggests that this provision include the word "unplanned" to account for this situation so that producers are not in jeopardy if violating this provision, as follows: "If the shut-in or discontinuance is caused by an emergency <u>or other unplanned</u> event, ..."

Concerning 6.05(c), we suggest adding the following at the end: "<u>only after Peoples has communicated cause and the producer given good-faith opportunity to forecast a remedy</u>."

Concerning 10.17, PIOGA acknowledges that Peoples reduced the 10 Dekatherms per day average through negotiations with PIOGA as a result of the settlement of the 2019 base rate case in 2020 to the current 3 Dekatherms per day average. However, many producers have conventional wells that produce less than 3 Dekatherms per day but are

still productive. PIOGAS suggests it is reasonable to reduce the 3 Dekatherms per day average to 1 to allow these wells to continue flowing so these producers could avoid the jeopardy of Active Status violations with PA DEP and the loss of leases for failing to comply with the "hold by production" provisions, as I explained above.

Q. WHAT MIMA PROVISION COULD BE CHANGED TO PROVIDE COST SAVINGS FOR PRODUCERS WITHOUT JEOPARDIZING PEOPLES' ABILITY TO OPERATE ITS PIPELINE SYSTEM SAFELY AND RELIABLY?

A. Appendix B, 1.07 "Annual Measurement Equipment Testing" provides, as pertinent to this question (emphasis added):

> All measurement equipment shall be inspected and tested by a Peoples Approved Vendor once each calendar year not to exceed fifteen (15) months from the previous inspections at Producer's expense. . . The annual testing shall include, but is not limited to the following equipment: Check Valve, Regulator(s) Lock-up test, Electronic corrector (EGM) calibration, meter calibration and spot sample Gas analysis (frequency according to section 2.01 of this Appendix B) at the Interconnect. **Inspection reports shall be submitted within 30 days after the yearly inspection date.** In the event the Producer fails to submit the yearly inspection reports, Peoples shall have the right to periodically inspect Producer's records to determine if measuring equipment has been inspected and tested, as required by the Master Agreement. If Producer cannot provide documentation, within five (5) days of Peoples' request, **Producer is required to immediately shut-in the Interconnect at which measurement and testing records are deficient, for a period of one week, or until the Producer can provide proof that the measuring equipment has been inspected and tested, and is working properly, whichever is longer.** If Producer cannot provide documentation that its measuring equipment has been inspected and tested on additional occasions, **Peoples retains the right to take further action at its discretion, including the right to require the shut-in of the applicable Interconnect for additional time periods**. If Producer repeatedly violates this provision, **Peoples has the right to permanently discontinue accepting Gas from wells that Producer has dedicated to said Interconnect Facility**.

Peoples has informed me that Penneco need not submit these reports but that they should be available upon request. I assume other producers have also been so informed. This

makes sense because this a lot of paperwork for producers to submit and for Peoples to review and retain. PIOGA suggests that this provision be changed o reflect Peoples' actual practice, as we understand it, as follows:

> Inspection reports shall be submitted ~~within 30 days after the yearly inspection date~~ upon request. In the event the Producer fails to submit the yearly inspection reports when requested, . .

This change will preserve all of Peoples' enforcement authority under this provision while relieving producers and Peoples from unnecessary activities and expense.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, but I reserve the right to address issues raised by other parties' testimony that affect PIOGA's interests.

VERIFICATION

I, D. Marc Jacobs, Jr. hereby state that:

The foregoing testimony, marked as PIOGA St. No. 2, was prepared by me or at my direction and under my direct supervision and, if at hearing I were asked the same questions set forth in this testimony, my responses would be the same as set forth above.

The facts set forth above are true and correct to the best of my knowledge, information and belief, and I expect to be able to prove the same at a hearing held in this matter.

I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

_____

D. Marc Jacobs, Jr.

Dated: March 22, 2024

VERIFICATION

I, D. Marc Jacobs, Jr. hereby state that:

The foregoing testimony, marked as PIOGA St. No. 2, was prepared by me or at my direction and under my direct supervision and, if at hearing I were asked the same questions set forth in this testimony, my responses would be the same as set forth above.

The facts set forth above are true and correct to the best of my knowledge, information and belief, and I expect to be able to prove the same at a hearing held in this matter.

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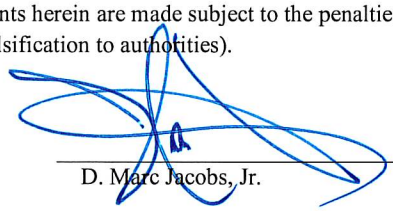


D. Marc Jacobs, Jr.

Dated: March 22, 2024

PIOGA Exhibit DMJ-1

Peoples' responses to PIOGA-I-7 and PIOGA-III-1-(U) (supplemental) & 1.c. (without attachment)

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-I-007

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples Gas Division (PGD) existing Rate GS- Gathering Service.

a. What are the water vapor standards on the PGD system?

b. Is Peoples proposing any changes to these standards in this proceeding? Please explain your answer.

Answer: a. ALLOWABLE WATER VAPOR LEVEL (#/MMSCF) VS. LOCATION

1. Producer meters connected to pipelines on the suction side of a Peoples compressor will be subject to 40#/mmscf water vapor standard.

2. All other Producer meters will be subject to 20#/mmscf water vapor standard.

Peoples reserves the right to require more stringent water vapor standards in limited and specific situations where Peoples has determined through water vapor testing that the water vapor levels at identified production meter points are affecting customer service or creating operational issues.

b. Not at this time

Submit Date: 2/20/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-III-001

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples' responses to PIOGA-I-7 and OCA-IV-1.

a. What were the water vapor content standards on the TW Philips system immediately before its acquisition by Peoples Natural Gas Company, PNG Companies LLC, or Steel River Infrastructure Fund North America LP , as appropriate, in May 2011? Please provide the documents that show the standards in effect at that time.

b. Did the Peoples' companies enforce the water vapor standards of the legacy TW Phillips system at all points of custody transfer following acquisition? Please explain your answer.

c. Did the Peoples companies change the water vapor standards on the legacy TW Phillips system after acquiring it? If so, please specify the changes and explain why they were made, and provide documents that show the changes.

Answer: a. Water vapor contents under prior owners are not relevant to current gas quality requirements. Current owners do not know if prior owners had different business strategies relative to local production, or what may have been acceptable gas quality to protect facilities from fluids and provide safe reliable service to customers, and prevent service interruptions related to gas quality issues.

b. As it is unrealistic to monitor all points of custody transfer, Peoples conducts random audits at producer meters to monitor and enforce water vapor standards. When offenders are discovered, Peoples aims to resolve the issue with the producer, and if unsuccessful, will ultimately shut in the meter.

c. In 2020, the standard Master Interconnect Measurement Agreement (MIMA) for PG was amended and revised for more consistent and standard gas quality requirements . Standard MIMA is attached.

Submit Date: 3/1/2024

PIOGA Exhibit DMJ-2

Peoples' responses to PIOGA-III-1.c. (with attachment) and 2, and PIOGA-V-1)

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-III-001

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples' responses to PIOGA-I-7 and OCA-IV-1.

a. What were the water vapor content standards on the TW Philips system immediately before its acquisition by Peoples Natural Gas Company, PNG Companies LLC, or Steel River Infrastructure Fund North America LP , as appropriate, in May 2011? Please provide the documents that show the standards in effect at that time.

b. Did the Peoples' companies enforce the water vapor standards of the legacy TW Phillips system at all points of custody transfer following acquisition? Please explain your answer.

c. Did the Peoples companies change the water vapor standards on the legacy TW Phillips system after acquiring it? If so, please specify the changes and explain why they were made, and provide documents that show the changes.

Answer: a. Water vapor contents under prior owners are not relevant to current gas quality requirements. Current owners do not know if prior owners had different business strategies relative to local production, or what may have been acceptable gas quality to protect facilities from fluids and provide safe reliable service to customers, and prevent service interruptions related to gas quality issues.

b. As it is unrealistic to monitor all points of custody transfer, Peoples conducts random audits at producer meters to monitor and enforce water vapor standards. When offenders are discovered, Peoples aims to resolve the issue with the producer, and if unsuccessful, will ultimately shut in the meter.

c. In 2020, the standard Master Interconnect Measurement Agreement (MIMA) for PG was amended and revised for more consistent and standard gas quality requirements . Standard MIMA is attached.

Submit Date: 3/1/2024

MASTER INTERCONNECT AND MEASUREMENT AGREEMENT

THIS MASTER INTERCONNECT AND MEASUREMENT AGREEMENT is entered into this ____ day of _____ 2023, by and between **Peoples Natural Gas Company LLC**, a Pennsylvania limited liability company, with an office located at 375 North Shore Drive, Pittsburgh, Pennsylvania 15212 (hereinafter referred to as "Peoples"), and [PRODUCER**]**, a _____[state] _____[type of company], with an office at [ADDRESS] (hereinafter referred to as "Producer"). As used in this Agreement, Peoples and Producer are also referred to individually as a "Party" and collectively as the "Parties."

WHEREAS, Peoples owns and operates certain Gas facilities and pipelines located in the Commonwealth of Pennsylvania (the "Peoples' System");

WHEREAS, Producer has available certain supplies of Gas which it desires to have delivered onto Peoples' System;

WHEREAS, this Agreement shall supersede, in its entirety, and terminate without cause, any previously executed Agreement(s) between the Parties for the transport and/or purchase of Gas for the Receipt Point(s) identified herein, including, but not limited to, prior Transportation Agreements, Gas Purchase Agreements, Production Enhancement Agreements, Field Purchase Agreements, Measurement Operating Agreements and Interconnection Agreements; however agreements related to blending and compression requirements, such as Gathering Interconnect Compression Agreements and Blending Service and Operation Agreements, shall not be terminated and shall continue pursuant to their terms and conditions.

NOW THEREFORE, in consideration of the promises and covenants contained herein, Peoples and Producer hereby agree as follows:

ARTICLE I
PURPOSE AND PROCEDURES

1.01 **Master Agreement**. This Master Agreement establishes the general terms and conditions under which Producer will deliver Gas onto Peoples' System at specified Receipt Point(s) through Interconnection Facility(ies), and thereafter the Gas shall either be transported through Peoples' System or sold directly to Peoples for whatever use deemed necessary and appropriate by Peoples.

1.02 **Exhibits**. The terms and conditions of each particular transaction whereby Producer will deliver Gas onto Peoples' System at specified Receipt Point(s) shall be included in individual Exhibits (hereinafter "Exhibit" or "Exhibits"). Information contained in the Exhibits shall include, but not be limited to:

(a) The designation for the transportation or sale of Gas for specific Receipt Point(s);

(b) The meter number and location at the Receipt Point;

(c) The time period (hereinafter "Service Term") during which the Gas is to be sold to Peoples or delivered onto Peoples' System;

(d) Applicable prices, rates and associated fees; however, the Parties agree that the Construction and Installation Fees, and any other operation, installation, or maintenance

types fees addressed in the Master Agreement, shall not be included on the Exhibit and shall instead be identified in separate written format(s), such as an invoice;

1.03 **Appendices and Exhibits as Part of Agreement**. Appendices to the Master Agreement establish additional terms and conditions required as a part of the Master Agreement. The entire agreement between the Parties shall include those provisions contained in the Master Agreement, the Appendices, and any effective Exhibits. The Appendices and each duly executed Exhibit are hereby incorporated into and made a part of this Master Agreement. The provisions of each respective Exhibit shall apply only to the Producer Sales Volume(s) subject to such Exhibit; however, the provisions of this Master Agreement and Appendices shall apply to all volumes in all Exhibits.

ARTICLE II
DEFINITIONS

2.01 **Definitions.** For the purposes of this Master Agreement, the following terms, when capitalized herein, shall have the meanings set forth below:

(a) "**Authorizations**" means any and all approvals, permits, licenses, franchises, or other authorizations required by any federal or state governmental authority which are necessary for the performance of a Party's obligations hereunder.

(b) "**Btu**" means a British thermal unit.

(c) "**Commission"** means the Pennsylvania Public Utility Commission that regulates the intrastate sales and transportation of Gas.

(d) **"Construction and Installation Fee"** means the fees charged to Producer for the actual labor, tools, materials, equipment and overhead expenses for the development, design and construction activities relative to completing the New Facilities contemplated by this Master Agreement.

(e) **"Contract Price"** means, in the instance in which Gas is sold to Peoples by Producer, the price paid for Gas delivered and taken as set forth in any then-effective Exhibit.

(f) **"Day"** means a period of twenty-four (24) consecutive hours, coextensive with a "day" as defined by the North American Energy Standards Board ("NAESB").

(g) "**Dekatherm**" means one million (1,000,000) Btus or one MMBtu.

(h) "**Existing Facility(ies)**" means Producer owned, operated or managed equipment and facilities, including, but not limited to, any measurement equipment transferred from Peoples to Producer pursuant to this Agreement, installed upstream of the Interconnect prior to October 29, 2019 that involve, at a minimum: (i) measurement equipment of whatever type used to determine the Producer Sales Volumes; (ii) any gas quality device of whatever type used to determine the quality of the gas being delivered to Receipt Point(s); (iii) any over-pressure control system of whatever type being used to protect Peoples' System's maximum pressure limitations; and (iv) any and all other equipment and devices installed from Producer's pipeline riser coming out of the ground from Producer's pipeline system through the measurement equipment and to the Interconnect. This term includes all of the above Producer owned, operated or managed equipment and facility(ies) (i) sold or assigned to an affiliated or legally associated company of that producer or (ii)

required to be moved to another Peoples' pipeline as a result of the abandonment of a Peoples pipeline pursuant to Sections 6.07, 10.17.

(i) **"FERC"** means the Federal Energy Regulatory Commission or any successor federal agency that regulates, or has the authority to regulate, the transportation of Gas in interstate commerce by pipeline.

(j) **"Gas**" means a mixture of hydrocarbon and non-hydrocarbon gases that satisfies the requirements of Article IX of this Master Agreement.

(k) **"Gathering Rate"** means for any Gas delivered by Producer onto Peoples' System at a Receipt Point which is subject to this Master Agreement, Producer shall pay to Peoples a gathering fee as set forth in an Exhibit hereto.

(l) "**Interconnect**" means the point of connection between the Producer's Existing Facility(ies) or New Facility(ies) and Peoples' System, comprised of the insulator, pipeline extension, riser, and the isolation valves installed downstream of the insulator, all owned by Peoples.

(m) "**Interconnect Facility(ies)**" means the Producer-owned Existing Facility(ies) and New Facility(ies) connected to Peoples' System at the Interconnect in accordance with the Master Agreement as amended from time-to-time.

(n) "**Mcf**" means one thousand (1,000) cubic feet of Gas.

(o) "**MMBtu**" means one million (1,000,000) Btu's or one Dekatherm.

(p) "**Modification to an Existing Facility**" means any non-emergency replacement, upgrade or downgrade on Existing Facility(ies).

(q) "**New Facility(ies)**" means Producer owned, operated or managed equipment and facilities (i) installed upstream of the Interconnect after October 29, 2019 through which Producer will deliver Gas onto Peoples' System at specified Receipt Point(s) and (ii) approved, designed, constructed and operated as set forth in herein, including any Existing Facility(ies) (i) sold or assigned to a non-affiliated party of Producer or a party with whom Peoples does not have a current master interconnection and measurement agreement with Peoples.

(r) "**Peoples Approved Vendor**" means any vendor Peoples has approved to provide the services required by the Master Agreement to be performed on behalf of the Producer by an independent contractor to comply with the Master Agreement; a list of approved vendors is posted on Peoples website, which list may change from time-to-time.

(s) RESERVED

(t) "**Producer Sales Volume(s)**" means the volume(s) of Gas measured at and credited to the Producer's Receipt Point(s) for the Production Period as determined and reported to Peoples by the Producer Chart Process, or as measured in accordance with Section 10.11.

(u) **"Production Period"** means a span of approximately thirty (30) days, which may or may not conform to the calendar month, during which time Producer's Gas will be measured

for delivery and purchase payment purposes. Production Periods shall be identified by the name of the month in which the period ends.

(v) "**Production Statement**" means the statement generated each calendar month by Peoples that details the Production Period and, for each Receipt Point, Producer Sales Volume(s) in Mcfs and MMBtus.

(w) **"Receipt Point(s)"** means the point(s) of receipt, or meter(s), of Producer's supplied Gas as set forth in the Exhibit specific to said point of receipt.

(x) **"Retainage Percentage"** means, for any Gas delivered by Producer onto Peoples' System at a Receipt Point which is subject to this Master Agreement, Peoples shall withhold a retainage percentage as set forth in an Exhibit hereto.

ARTICLE III
APPLICATION FOR NEW FACILITIES AND MODIFICATION TO EXISTING FACILITIES

3.01 **Application/Notification.** Producer shall submit to Peoples in writing the application for connecting a New Facility, and a notification request for any Modification to an Existing Facility.

3.02 **Application to Connect New Facility.** Within the application for connection of a New Facility, the Producer shall provide accurate information to Peoples concerning the following: (i) the location of the proposed connection utilizing the latitude and longitude coordinates on a USGS map; (ii) well plats, if applicable; (iii) the proposed maximum allowable operating pressure of the Producer's gathering line that will feed into the Receipt Point; (iv) the desired date for completion of the connection; (v) the Producer's estimated maximum, minimum and average amount of Gas to be delivered through the connection on a daily basis; (vi) the source of Gas; (vii) the Producer's estimated maximum, minimum and average receipt pressure through the connection; and (viii) any other information required by Peoples for the specific connection, including, but not limited to, Gas quality and odor intensity test results.

3.03 **Consideration of Application to Connect New Facility.** Peoples shall respond to the feasibility of Peoples' System's accepting delivery of Gas through the proposed New Facility connection and whether the application is approved, rejected or requires additional information or consideration. If the application is approved, Producer shall advance the application according to Article IV. If the application is rejected, Peoples shall explain the reason(s) for the rejection and may suggest alternatives that may, in Peoples' commercially reasonable discretion, be acceptable to Peoples, and Producer shall respond to the alternatives. If the application is acceptable but requires additional information or consideration, Peoples shall specify the additional information that, in Peoples' commercially reasonable discretion, may be required or the concerns requiring additional consideration for approval, and Producer shall provide the additional information or address the concerns requiring additional consideration. Thereafter Peoples shall approve the application if (1) its concerns have been satisfied and (2) no material changes in System conditions have occurred which would render the application no longer acceptable to Peoples.

3.04 **Modification to Existing Facilities.** Producer shall provide notice of Modification to an Existing Facility which shall include the current Peoples' meter station name, PO # being utilized to identify the existing Interconnect, and the details of the Modification. Provided the Modification is in accordance with the conditions in this Agreement and such Modification does not cause operational, safety or service related concerns, as determined by Peoples using commercially reasonable discretion, Peoples shall approve the Modification by providing written notice to Producer.

ARTICLE IV
INTERCONNECT DESIGN, INSTALLATION, ACTIVATION AND MAINTENANCE

4.01 **New Facility Design Specifications.** After approval of an application a for a New Facility connection, Producer shall submit to Peoples, for approval, the complete design, specifications and construction plans for the proposed New Facility. Producer agrees to make those changes to such design and construction plans as Peoples, in its commercially reasonable discretion, believes are necessary for the safe and reliable delivery of Gas into the Peoples' System.. If the plans are approved, Peoples' response shall provide the Producer with the construction date when Peoples will endeavor to make the tap onto Peoples' System. If the plans require modification, Peoples shall specify the modifications that Peoples, in its commercially reasonable discretion, believes are necessary for the safe and reliable delivery of Gas into the Peoples' System. Producer shall resubmit the plans that address the modifications that Peoples requests and Peoples shall respond whether the resubmitted plans are approved or denied.

4.02 **Equipment Requirements for New Facility.**

(a) The New Facility shall be comprised of equipment that includes: (i) Gas measurement equipment; (ii) two forms of overpressure protection; (iii) certain interconnect piping facilities including a check valve and an insulated/welded tie-in connection; and (iv) such other equipment as may be required by Peoples at the New Facility. Peoples shall specify the type of equipment to be provided by Producer and Producer shall not install any non-Peoples approved equipment at the New Facility. The minimum engineering and technical specifications for the New Facility are further detailed in Appendix A.

(b) Unless waived in writing by Peoples, all costs associated with the New Facility shall be the Producer's responsibility and any such costs paid by Peoples shall be reimbursed by Producer through the Construction and Installation Fee. If Producer does not remit payment for the Construction and Installation Fee within thirty (30) days after receiving Peoples' invoice for same, then Peoples may, at its sole option, shut-in the Interconnect until payment is made and may require all future payments for other operation, installation, or maintenance related work to be made in advance.

4.03 **New Facility Construction.** Scheduling of installation of the New Facility must be coordinated with Peoples. No New Facility construction shall commence until Producer has satisfied all of its prerequisite obligations under this Master Agreement and Peoples has notified Producer in writing that construction may commence. Producer and Peoples shall coordinate the construction of their respective facilities (New Facility and Interconnect).

4.04 **Activation of New Facility and Interconnect.** Producer shall notify Peoples in writing that Producer is ready to activate the New Facility and Interconnect. Activation of the New Facility and Interconnect shall be contingent upon readiness of Peoples, Peoples' acceptance of Gas analysis results as submitted by Producer, and completion of construction as specified and agreed upon by and between Peoples and Producer. Peoples shall have the right to conduct a separate Gas analysis for verification purposes. Peoples and Producer shall coordinate the installation, testing, and physical final tie-in to Peoples' System: Peoples shall perform the physical tie-in and Producer shall set the meter and commence the flow of Gas. Peoples shall develop all operations associated with purging the meter set and piping into service and, after physical tie-in, coordinate and oversee all such operations. After completion of all such operations, the New Facility and Interconnect shall be activated.

4.05 **Commencement of Operation of New Facility and Interconnect**. Producer shall notify Peoples, in writing, when the New Facility and Interconnect is complete, tested, and ready for operation.

Unless otherwise indicated, deliveries of Gas through the New Facility and Interconnect may commence as soon after activation as all Authorizations have been granted, the requisite documents have been submitted, and Producer has satisfied the terms and conditions of this Master Agreement.

4.06 **Debris and Obstructions.** At all times, Producer's New Facilities and Existing Facilities shall be cleared of all debris and obstructions.

4.07 **Maintenance.** Producer is responsible for, and shall assume the initial costs of landscaping, sign posting, painting, and final, post-construction cleanup at and around the New Facility.

4.08 **Identification.** A meter set identification sign shall be posted at each New Facility, and if not already done so, at each Existing Facility location. The sign shall, at a minimum, list the name of the Producer and the telephone number (including area code) where the Producer, or its operator, can be reached at all times (i.e. emergency contact number). Producer shall be responsible to replace and/or update the notification information as it changes, from time-to-time.

4.09 **As-built Drawings.** If requested by Peoples, Producer shall develop an "as-built" location drawing of the New Facility. The "as-built" drawing shall include all equipment from the inlet side of the Gas measurement equipment to the tie-in with Peoples' System. This detailed drawing shall include centerline measurements, valve, regulator, meter identification, pipe size(s) and type(s), and telemetering details. Producer shall provide a copy of this drawing (AutoCAD format) to Peoples, upon request. Upon request, Producer shall provide an "as-built" location drawing of any Existing Facility, when Peoples determines that such drawing is needed, in its commercially reasonable discretion, to rectify operational, safety or service related concerns.

4.10 **Telemetry**.

(a) For a New Facility electronic Gas measurement and communications equipment installed as part of the New Facility shall include equipment for monitoring, recording, and transferring data deemed essential by Peoples. Producer shall acquire, install and pay the on-going operating expenses for the electronic Gas measurement and communications equipment to provide Peoples, at a minimum, real-time information related to pressure, temperature, Gas flow and Gas quality (i.e., chromatograph) for any Receipt Point with a daily volume above 1,000 mcf/day. For any Receipt Point with a daily volume below 1,000 mcf/day, Peoples will not require telemetry, but will require a corrector unless the Receipt has an existing chart recorder that is operating in good working condition.

(b) For an Existing Facility, electronic Gas measurement and communications equipment shall be required when Peoples provides at least sixty (60) days advance notice to Producer detailing required modifications to the existing telemetry equipment, if any, which are required, as determined by Peoples' commercially reasonable discretion, to rectify operational, safety or service related concerns. In which case, the telemetry equipment shall be modified to include equipment for monitoring, recording, and transferring data deemed essential by Peoples. Producer shall acquire, install and pay the on-going operating expenses for the electronic Gas measurement and communications equipment to provide Peoples, at a minimum, real-time information related to pressure, temperature, Gas flow and Gas quality (examples of such equipment shall include, but not be limited to a chromatograph or in-line moisture analyzer).

ARTICLE V
FACILITIES OWNERSHIP

5.01 **Peoples' Facilities.** Peoples shall own, and Peoples or its designee shall design, install, operate, and maintain, all facilities and equipment on the downstream side of the isolation valve which connects the Peoples' System to the Producer's New Facility or Existing Facility as more specifically described in the Appendices and on the Typical Gas Purchase Meter Set drawing, a copy of which is maintained on the Peoples' producer services section of its website.

5.02 **Producer's Facilities.** Producer shall own, and Producer or its designee shall design, install, operate, and maintain all facilities and equipment upstream of the Interconnect. The location and positioning of the New Facility or Existing Facility shall be in accord with Peoples' standard design specifications as more specifically described in the Appendices and on the Typical Gas Purchase Meter Set drawing, a copy of which is maintained on the Peoples' producer services section of its website.

ARTICLE VI
INTERCONNECTION OPERATIONS

6.01 **Gathering Obligations.** Peoples will receive Gas from Producer at the Receipt Point, provided that if any person or entity besides Producer is flowing Gas through the Interconnect, all such persons or entities utilizing the Interconnect have entered into valid agreements with Peoples. Peoples shall receive Gas from the Receipt Point and permit that Gas to flow against the existing pressure in Peoples' facilities. Peoples shall not be obligated to lower existing line pressure by compression or otherwise to accommodate receipts from the point of interconnection. As set forth elsewhere in this Agreement, it is expressly understood that Peoples may restrict the flow or discontinue the taking of Gas temporarily. Peoples shall not be obligated to add any facilities or expand the capacity of its pipeline system in any manner in order to provide the services hereunder. Nothing in this Master Agreement or any applicable Exhibit shall limit Peoples' right to interrupt service or to take other action on a non-discriminatory basis as may be required to alleviate conditions which threaten the integrity of its system.

6.02 **Environmental Responsibility.** Each Party represents that no hazardous substance as that term is defined in the Federal Comprehensive Environmental Response Compensation Liability Act (CERCLA), petroleum or petroleum products, "asbestos material" as that term is defined in 40 CFR 61.41 (1987), polychlorinated biphenyls (PCBs), or "solid waste" as that term is defined in the Federal Resource Conservation Recovery Act (RCRA), will be leaked, spilled, deposited or otherwise released by either Party on the other Party's property. In the event that any of said above referenced materials are discovered on said property, each Party shall immediately notify the other Party of the discovery and existence of said materials. In the event of either Party's breach of the representations contained in this section, the full responsibility for the handling, remediation, treatment, storage or disposal of any such hazardous substance, petroleum or petroleum product, asbestos material, PCBs or solid waste discovered on said property, including the handling of such materials in compliance with all environmental laws including federal, state and local laws, rules and regulations, shall remain with such Party and such Party shall indemnify the other Party for any loss, injury, theft, damage to persons or property, or fines, penalties or compliance order issued by any governmental agency relating to pollution or protection of the environment including without limitation, laws and regulations relating to emissions, discharges, releases or threatened releases of chemicals, pollutants, contaminants, waste petroleum, toxic substances and hazardous substances occurring on said property. This section shall survive the termination of this Master Agreement.

6.03 **Facility Improvements.** Peoples retains the unilateral right to change the operations of its System and/or upgrade its System; provided, however, that such changes must be consistent with good utility practices and not violate local, state or Federal requirements. Such operational changes may require the adjustment and/or addition of equipment to an Existing Facility or a New Facility by the Producer in order to maintain delivery of Gas volumes; the cost of such adjustment and/or addition of equipment to will be borne entirely by the Producer.

6.04 **Peoples Shut-in of Interconnect.** Peoples retains the unilateral right to immediately shut-in or cause Producer to shut-in any Interconnect that, in Peoples' sole judgment, using commercially reasonable discretion, threatens the integrity and safe operation of Peoples' System. Additionally, if Peoples is purchasing the Gas from a particular Receipt Point, upon thirty (30) days advance written notice, Peoples may shut-in or cause Producer to shut-in that Receipt Point for economic reasons.

6.05 **Producer Shut-in and Discontinuance.**

(a) Producer shall not shut-in or discontinue delivery of Gas at any Receipt Point without first obtaining Peoples' consent, which consent will not be unreasonably withheld, but may be conditioned in the event the shut-in or discontinuance of the Gas delivery may, as determined by Peoples using commercially reasonable discretion, result in an operational, safety or service related concern on Peoples' System.

(b) Producer shall provide thirty (30) days advance notice to Peoples of its intention to shut-in or discontinue delivery of Gas at any Receipt Point, after which notice the Parties shall engage in a good-faith discussion to determine if Peoples consent must be conditioned or withheld. If the shut-in or discontinuance is caused by an emergency event, Producer shall notify Peoples as quickly as possible, but in no event more than 24 hours after the event.

(c) If a shut-in occurs, Peoples shall have the right to remove its facilities at the Interconnect Point and terminate the Exhibit governing that Receipt Point.

6.06 **Notice of Interruption of Gas Delivery at Receipt Point.**

(a) Peoples shall be notified of any and all repairs, changes, or other actions that may result in any interruption or discontinuance of Gas delivery at a Receipt Point as set forth in this paragraph. Unless caused by an emergency event, Producer shall advise Peoples in writing at least five (5) business days before taking the Receipt Point out of service for repairs or for any other reason that is anticipated to last more than seven calendar (7) days. When an emergency event occurs at the Receipt Point Producer shall notify Peoples as quickly as possible, but in no event more than 24 hours after the event. After Producer has completed all repairs to the Receipt Point or is otherwise prepared to resume delivery of Gas at the Receipt Point, Producer shall immediately reconnect the Receipt Point to Peoples' System and resume service, subject to ten (10) days' advance notification to Peoples, provided that the notice may be less than ten (10) days, however, Peoples may require the full ten (10) days to arrange for the reinstated flow of Gas through the Receipt Point.

6.07 **System Abandonment.** In the event Peoples should ever abandon, retire or cease to operate, in whole or in part, facilities used to purchase and/or transport Gas on a system-wide basis, or throughout a geographic portion of its system, (as opposed to one-off facility abandonments that are addressed in subsection 10.17(c)), Peoples shall advise the Producer(s) of the abandonment, retirement or cessation of operation as soon as reasonably practicable. Peoples may, in its commercially reasonable discretion, either terminate this Master Agreement, or terminate an Exhibit specific to the Receipt Point(s) impacted, upon at least ninety (90) days' written notice to Producer. During such ninety (90) day period, Peoples and Producer shall continue to engage in good-faith discussions, if so requested by Producer, to reasonably assist Producer in locating alternative delivery points for the Gas flowing through the impacted Receipt Point(s).

ARTICLE VII
OPERATIONAL COSTS AND PAYMENTS TO BE BORNE BY PRODUCER

7.01 **Gas Quality and Monitoring Costs.** Producer agrees to install, operate and keep in efficient operating condition, at Producer's own expense, the equipment necessary to insure that the gas delivered from each well hereunder meets the gas quality and other operational standards and requirements contained in this Master Agreement, Producer also agrees to install, own, operate and keep in efficient operating condition, equipment necessary, including, but not limited to, Type OSE Slam-Shut Valves if required by Peoples, to avoid excessive pressure in Peoples' and/or Producer's line. Producer shall be solely responsible for all costs and charges associated with monitoring, ensuring and maintaining the quality of Gas delivered into Peoples' System to meet the requirements in Article IX and all costs associated with quality remediation for Gas that does not meet those requirements. Peoples shall have access to Producer's Interconnect Facility and shall have the right, but not the obligation, to operate such Facility in the event Peoples determines, using commercially reasonable discretion, that its operation is required to prevent or alleviate operational, safety or service related concerns on Peoples' System; in such event, Peoples shall provide notice to the Producer of such operation as soon as practical and in-advance, when reasonable. Peoples shall indemnify and hold harmless Producer for any and all environmental, health and safety liabilities directly resulting from Peoples' or its designee's access or operation of Producer's Interconnect Facility. Peoples shall replace, fix and repair, at its cost, any portion of Producer's Interconnect Facility that Peoples or its designee intentionally or negligently harms, damages or breaks as a result of Peoples' access or operation of the Facility.

7.02 **Producer Interconnect Facilities Costs.** Producer shall be solely responsible for all costs and charges associated with monitoring, ensuring and maintaining the safe and reliable operation of pipeline, measurement, compression, regulation, dehydration, and any other appurtenant equipment associated with the Interconnect Facilities, which are upstream of the Interconnect. Peoples reserves the right to refuse receipts and/or deliveries through the Interconnect if Peoples, in its sole judgment, using commercially reasonable discretion, deems the operation of these facilities to threaten the safety or reliability of the Peoples' System.

7.03 **Royalty Payments**. Producer shall be solely responsible for all royalty, overriding royalty, and working interest payments attributable to Gas delivered to Peoples under this Master Agreement. In no event shall Peoples be obligated to make any royalty, overriding royalty, or working interest payments for Gas purchased under this Master Agreement.

ARTICLE VIII
ADDITIONAL WELLS

8.01 **Completion of Wells**. No well shall be added to any existing Receipt Point(s) without first obtaining the prior written consent of Peoples. All requests for new well additions shall be accompanied by a well plat, completion report, estimated flow rate and Gas quality sample, at the meter, and/or at the new well location, to evaluate the feasibility if adding the Gas deliveries from the new well to the existing Receipt Point(s). Peoples reserves the right, at its sole discretion, to request other information to inform its evaluation concerning the new well.

8.02 **Introduction of Well Gas**. At the time of introduction of Producer's well Gas into Peoples' System, a Peoples' representative shall operate the valves at the meter. During this operation, Producer and Peoples shall provide experienced personnel at the meter site.

8.03 **Producer's Facilities**. Producer shall promptly furnish the pipe, and shall construct and place in operation a suitable gathering pipeline to connect those wells currently or subsequently included under this Master Agreement to Peoples' System at the Receipt Point(s). Producer's meter site shall be cleared of all debris and obstructions before it is connected at the Receipt Point(s). Producer shall install all drips complete with automatic shut off and other devices necessary to separate fluids from the Gas in

Producer's gathering pipelines. Producer shall operate such drips and other devices so that all Gas delivered under this Master Agreement will meet at all times Peoples' gas quality specifications set forth in Article IX or Peoples' transporter's gas quality specifications. Peoples shall have access to such drips and other devices at the meter site and shall have the right, but not the obligation, to operate such drips and other devices in the event Peoples determines, using commercially reasonable discretion, that its operation is required to prevent or alleviate an operational, safety or service related concerns on the Peoples system; in such event, Peoples shall provide notice to the Producer of such operation as soon as practical.

8.04 **New Well Costs**. Producer shall be solely responsible for all costs associated with drilling, operating, and connecting new wells including, but not be limited to, hook-up fees; usage fees; all costs associated with the construction of gathering lines, tie-in lines, drip lines, measurement, compression, regulation and connection facilities; and all costs attributable to rentals, except as otherwise provided in this Master Agreement.

8.05 **General**. The wells located upstream of Receipt Point(s) shall remain continuously connected to Producer's gathering lines for production deliveries, except to the extent that disconnection is required for well repairs. Producer's Gas which is governed by an Exhibit A for the purchase of Gas cannot be diverted to other buyers without the express written consent of the Peoples, which consent shall not be unreasonably withheld, but may be conditioned in the event the deviation of gas may, as determined by Peoples using commercially reasonable discretion, result in an operational, safety or service related concern on the Peoples system. Producer shall provide ninety (90) days advance notice to Peoples of its intention to divert gas from upstream wells to other buyers; after which notice the Parties shall engage in a good-faith discussion to determine if Peoples consent must be conditioned or withheld. Producer shall operate such wells in a reasonable and prudent manner at all times and shall keep such wells in good condition in order to ensure the gas delivered onto the Peoples system meets the requirements and standards set forth in this Agreement, including any Appendixes, Exhibits, Addendums, Schedules and Amendments.

8.06 **Timing of Well Repairs**. To the extent possible, Producer shall make all necessary well repairs between May 1 and October 31 of the calendar year.

8.07 **Notice of Well Repairs**. Unless caused by an emergency event Producer shall advise Peoples in writing at least five (5) business days before taking any well located upstream of Receipt Point(s) out of production for repairs which are anticipated to last for more than seven calendar (7) days. When an emergency event occurs which impacts the availability of the Receipt Point, Producer shall notify Peoples as quickly as possible, but in no event more than 24 hours after the event. After Producer has completed all repairs, Producer shall immediately reconnect the well and resume production, subject to authorization for turn-in by Peoples' field personnel.

ARTICLE IX
PRESSURE, GAS QUALITY AND HEATING VALUE

9.01 **Regulation.** Peoples may require regulation and shall require over-pressure protection at the Receipt Point(s) under this Master Agreement. Such regulation shall maintain delivery pressures suitable to pressures in Peoples' System. Peoples shall specify and/or approve the type of regulators to be used and shall specify pressure ranges, and operating settings. All costs associated with such equipment, including installation costs, shall be the Producer's responsibility and any such costs paid by Peoples shall be reimbursed by Producer through the Construction and Installation Fee.

9.02 **Compression.** Producer shall not use any mechanical means or accessory equipment to pump or compress Gas to aid its delivery into Peoples' System without first obtaining and executing the Peoples' standard Compression Agreement.

9.03 **Pressure in Peoples' System.**

(a) Peoples makes no representations concerning the pressure that will be maintained in its pipeline system from time-to-time, or any other factors, which may affect the quantity of Gas that Producer may be able to deliver to Peoples. Subject to Section 6.03 Peoples has the right to upgrade, when necessary, pipeline operating pressures with no obligation to Producer other than providing notification of such matters.

(b) Although regulators are part of Producers' Interconnect Facilities and therefore owned by Producers, Peoples shall operate these regulators as provided by this Master Agreement. Accordingly, Peoples shall indemnify and hold harmless Producers for any and all environmental, health and safety liabilities directly resulting from Peoples' or its designee's access or operation of the regulators when setting the maximum allowable pressure set points within the Interconnect Facilities. Peoples shall replace, fix and repair, at its cost, any portion of Producers' Interconnect Facilities that Peoples or its designee intentionally or negligently harms, damages or breaks as a result of operating the regulators within the Facilities.

9.04 **Gas Quality.** All Gas delivered through an Interconnect into Peoples' System shall at all times meet or exceed the Gas quality specifications set forth in Appendix B hereto, as well as any quality and heat content requirements established by the operator of the downstream pipeline system(s) on which the Gas is ultimately transported.

9.05 **Siloxane.** All Gas delivered through an Interconnect into Peoples' System that includes Gas from landfill well(s) or gathering lines fed by landfill gas sources shall at all times meet, or exceed, the Gas quality siloxane specifications set forth in Appendix B hereto, as well as any siloxane specifications established by any operator of the downstream pipeline system(s) on which the Gas is ultimately transported. Before Peoples permits any flow of any amount of Gas into the Peoples' system, Producer shall provide Peoples with a certified siloxane analysis from a Peoples-approved agency denoting that the Gas proposed to be delivered into Peoples' System meets and/or exceeds those requirements. Peoples shall require monthly siloxane analysis tests performed by the Producer and timely submitted to Peoples. Peoples shall have the right to witness siloxane sampling and witness custody of that sample from source to destination. In the event Producer does not provide siloxane analysis, Peoples reserves the right to shut-in the Interconnect until said analysis is provided.

In the event Producer Gas quality, including, but limited to, siloxane causes damage to Peoples System, equipment, downstream pipeline, downstream equipment, downstream customer pipeline and/or downstream customer equipment, the Producer will be responsible for all costs to remedy the damage upon documentation proving Producer has caused the damage.

9.06 **Temperature.** Gas delivered through an Interconnect into Peoples' System shall not exceed 100° F. Gas having a temperature greater than 100° F may be delivered into Peoples' System only upon prior written approval by Peoples.

9.07 **Gas Taken and Co-mingled.** Peoples shall accept Gas taken and measured at the Receipt Point(s) in accordance with this Master Agreement. Such Gas shall be taken in its natural state, except as otherwise provided in this Master Agreement, subject to any modification thereof required by this Master

Agreement, at the pressure of the Gas flowing from Producer's pipelines into Peoples' System, against the varying pressures from time to time maintained therein.

ARTICLE X
MEASUREMENT

10.01 **Measurement Equipment.**

(a) Gas delivered to or received from Peoples' System through the Interconnect shall be measured at a site satisfactory to Peoples using measurement equipment designated by Peoples and owned by Producer. The requirements in this Section 10.01 shall not apply to any Existing Facility, unless the meter is nonfunctioning or inaccurate which requires Producer to immediately self-shut-in until the meter is replaced or Peoples provides at least sixty (60) days advance notice to Producer detailing modifications to the existing Interconnection Facilities which are required, in Peoples' commercially reasonable discretion, to rectify accuracy, operational, safety or service related concerns.

(b) The measurement facilities will be required to use electronic gas measurement (EGM), and the Producer is required to forward monthly EGM item trail(s) and audit trail(s) to one of Peoples' approved integration companies (which list of approved companies shall be maintained on the Peoples website) by the 28th of the month. The integration company will forward corrected volume(s) to Peoples once a month for processing of credit/payment. Producer is required to use the same integration company for both volume collection and meter testing.

(c) The measurement equipment for New Facilities shall be designed, installed, operated, maintained and owned by: (i.) Producer; or (ii.) Producer's designee as set forth in the Appendices. Producer is responsible for maintaining the accuracy of the measurement equipment and shall do so according to the Annual Measurement Equipment Testing requirement in Appendix B, Section 1.07. If Peoples determines, using commercially reasonable discretion, the measurement equipment is not accurate, Peoples may shut in the Interconnect until Producer corrects the deficiency. If repeated defects occur, Peoples reserves the right to shut in the Interconnect indefinitely. At any time after the termination of an Exhibit, Peoples shall have the right to remove its Interconnect facilities associated with the Receipt Point(s) identified in the terminated Exhibit. Producer shall be solely responsible for and shall bear the full costs of delivering Gas to the Receipt Point(s). Producer shall not modify the measurement equipment without the prior written consent of Peoples.

10.02 **Pipeline Safety.** Producer agrees to operate, maintain, test, and repair the meter set as a prudent operator in accordance with 49CFR DOT Part 192, PAPUC Chapter 59, and all other applicable state regulations and requirements, applicable industry codes and standards at Producer's expense.

10.03 **Check Measurement.** Producer may install, maintain and operate, at its sole cost and expense, check measuring equipment; provided, however, that such equipment shall be installed in a manner that will not interfere with the operation of the measuring equipment required by this Master Agreement.

10.04 **Orifice Meters.** Orifice meters installed in such measuring stations shall be constructed and operated in accordance with American National Standard Institute ("ANSI") standards, American Petroleum Institute ("API") 2530, American Gas Association ("AGA") AGA Report No. 3, Orifice Metering of Natural Gas and Other Related Hydrocarbon Fluids, Second Edition, dated September 1985, and any subsequent modifications and amendments thereto.

10.05 **Positive Displacement Meters.** Positive Displacement Meters installed at the measurement site shall be constructed and operated in accordance with provisions of AGA Measurement Committee Report No. 6 (AGA Report No. 6) dated January 1971 and any subsequent amendment or revisions thereto.

10.06 **Turbine Meters.** Turbine Meters installed at the measurement site shall be constructed and operated in accordance with the provisions of AGA Measurement Committee Report No. 7 (AGA Report No. 7), First Revision, dated November 1984, and any subsequent modifications and amendments thereto.

10.07 **Ultrasonic Meters.** Ultrasonic Meters installed at the measurement site shall be constructed and operated in accordance with the provisions of AGA Measurement Committee Report No. 9 (AGA Report No. 9), dated June 1998 and any subsequent modifications and amendments thereto.

10.08 **Electronics.** When and where electronic equipment and flow computers are installed at the measurement site, the Gas may have its volume, mass and/or energy content determined and computed in accordance with the applicable industry standards including, but not limited to, API 21.1, AGA Report Nos. 3, 5, 6, and 7 and any subsequent modifications and amendments thereto.

10.09 **Testing and Calibration**:

(a) Peoples shall have the right, at any time, to verify the accuracy of measurement equipment beyond the Producer Annual Measurement Equipment Testing requirements in Appendix B, Section 1.04, on all Receipt Points used in the measurement of Gas hereunder and shall do so at its expense. Peoples shall indemnify and hold harmless Producer for any and all environmental, health and safety liabilities directly resulting from Peoples' or its designee's access or operation of the measurement equipment when verifying the accuracy of the measurement equipment. Peoples shall replace, fix and repair, at its cost, any portion of Producer's Interconnect Facilities that Peoples or its designee intentionally or negligently harms, damages or breaks as a result of verifying the accuracy of the measurement equipment within the Facilities. Producer may request a special test be performed as described in Section 10.10 below.

(b) If during any test of the measuring equipment, an adjustment or calibration error is found which results in an incremental adjustment to the calculated hourly flow rate through each meter run in excess of two percent (2%) of the correct flow rate (whether positive or negative and using the correct flow rate as the percent error equation denominator), then any previous recording of such equipment shall be corrected to zero error in computing deliveries for any period during which the error existed (and which is either known definitely or agreed to by both Parties) and the total flow for the period predetermined in accordance with the provisions of Section 10.11 below. If the period of error cannot be determined or agreed upon between the Parties, such correction shall be made over a period extending over the last one-half (1/2) of the time elapsed since the date of the latest test, not exceeding a correction period of six (6) months.

(c) If, during any test of the measuring equipment, an adjustment or calibration error is found which results in an incremental adjustment to the calculated hourly flow rate which does not exceed two percent (2%) of the adjusted flow rate (as described in part (b) of this Section), all prior recording shall be considered to be accurate for quantity determination purposes.

(d) All equipment shall, in any case, be adjusted at the time of the test to record correctly.

10.10 **Special Test.** In the event Producer desires a special test (a test not scheduled by Peoples under the provisions of subsection 10.9(a) above) of any measuring equipment, seventy-two (72) hours advance notice in writing shall be given to Peoples, and both Parties shall cooperate to secure a prompt test of the accuracy of such equipment. If the measuring equipment tested is found to fall under the provisions of Paragraph 10.9(b) above or if an inspection of the primary measurement equipment indicates no problems, Peoples shall have the right to bill Producer for the cost of such special test including any labor, and other costs pertaining to such special test and Producer shall pay such costs.

10.11 **Measuring Adjustment.** If, for any reason, any measurement equipment is: (i) out of adjustment; (ii) out of service; or (iii) out of repair, and the total calculated hourly flow rate through each meter run is found to be in error by an amount of the magnitude described in subsection 10.9(b) above, the Producer Sales Volume(s) may be determined by Peoples in accordance with the first of the following methods which is, in Peoples' sole opinion, feasible:

(a) by using the registration of any mutually agreeable check metering facility, if installed and accurately registering (subject to testing as described in subsection 10.9(a) above;

(b) where parallel multiple meter runs exist, by calculation using the registration of such parallel meter runs; provided that they are measuring Gas from upstream and downstream headers in common with the faulty metering equipment, are not controlled by separate regulators, and are accurately registering;

(c) by correcting the error by re-reading of the official charts, or by straightforward application of a correction factor to the quantities recorded for the period (if the net percentage of error is ascertainable by calibration, tests or mathematical calculation); or

(d) by estimating the quantity, based upon deliveries made during periods of similar conditions when the meter was registering accurately.

Peoples will not be required to use check measurement, parallel measurement, re-read charts or estimates for more than three (3) consecutive billing periods. If Producer fails to fix the measurement equipment, Peoples may, at its discretion, upon advance notice, cause the shut in of the Interconnect. Failure to shut in will result in no credit for Gas delivered through a Receipt Points that is not recording for more than three (3) consecutive billing periods.

The estimated readings or deliveries so determined shall be used in determining the Producer Sales Volumes delivered for any known or agreed upon applicable period. In case the period is not known or agreed upon, such estimated deliveries shall be used in determining the quantities of Gas delivered hereunder during the latter half of the period from the date of the immediately preceding test to the date the measurement equipment has been adjusted to record accurately. The recordings of the measurement equipment during the first half of said period shall be considered accurate in computing Producer Sales Volumes.

10.12 **Measurement Corrections.** If an error is discovered in the Producer Sales Volumes, such error shall be adjusted within thirty (30) days of the determination thereof; provided, however, that any claim for adjustment shall be made within twenty-four (24) months of the Production Period in which the claimed error occurred. Such time limits shall not apply in the case of a deliberate act of omission or misrepresentation, or mutual mistake of fact.

10.13 **Termination.** If in Peoples' reasonable judgment, the Producer has tampered with the measurement equipment so as to misrepresent the actual volume of Gas delivered through the Receipt Point,

Peoples has the right to immediately shut-in the Interconnect Facility for an indefinite period of time. The Interconnect will remain shut-in until Peoples and Producer reach an agreement as to the most accurate Producer Sales Volumes during the period in question and the Producer provides restitution to the satisfaction of Peoples. If Peoples determines, using commercially reasonable discretion, that measurement equipment has been tampered with by Producer, Peoples reserves the right to remove its facilities at the Interconnect and, in its commercially reasonable discretion, terminate this Master Agreement and any other agreement(s) between Producer and Peoples, or any other natural gas company owned, or operated, by Peoples or its parent company, including, but not limited to, Peoples Gas KY LLC, Peoples Gas WV LLC, and Delta Natural Gas Company, Inc.

10.14 **Data and Records Retention.** Peoples and Producer shall retain and preserve for a period of at least two (2) years all measurement data, original test data, charts, and other similar records, in such Party's possession and shall provide requested documentation to the other Party upon thirty (30) days' written notice.

10.15 **Volume and Quality Determination.** The measurement of the quantity and quality of all Gas received and delivered hereunder shall be conducted in accordance with the following:

(a) Unit of Volume. The unit of volumetric measurement shall be a standard cubic foot of Gas at a pressure base of fourteen and seventy-three hundredths (14.73) pounds per square inch absolute, a temperature base of sixty degrees (60°) Fahrenheit (five hundred twenty degrees (520°) absolute) and without adjustments for water vapor. The unit of volume for measurement shall be one (1) cubic foot of Gas. To determine the Gross Heating Value of the unit of volume, such measured volumes will be converted to Mcf by multiplying by 1,000 and then, at the Company's discretion, multiplied by either (i) the Company's system average MMBtu/Mcf factor if the Receipt Point heat value has not been determined or (ii) the Receipt Point's Gross Heating Value per thousand cubic foot determined by a Gas sample analysis or Gas chromatograph to determine the MMBtus received, delivered and credited as the Producer Sales Volume at the Receipt Point hereunder. The Parties agree that nothing in this Master Agreement shall preclude either Party from proposing a modification to the unit of volume components defined herein in a future purchase Gas cost proceeding at the Commission.

(b) Orifice Meter Volume Computations. Computations of Gas Volumes from measurement data shall be made in accordance with ANSI/API2530 (AGA Report No. 3), Orifice Metering of Natural Gas and Other Related Hydrocarbon Fluids, Second Edition, dated September 1985, and any subsequent amendments or revisions.

(c) Positive Displacement Meter Volume Computation. Computation of Gas Volumes from data shall be in accordance with the AGA Measurement Committee Report No. 6 (AGA Report 6), dated January 1971, and any subsequent amendments or revisions.

(d) Turbine Meter Volume Computations. Computations of Gas Volumes from data shall be in accordance with AGA Measurement Committee Report No. 7 (AGA Report 7), First Revisions, dated November 1984, and any subsequent amendments or revisions.

(e) Ultrasonic Meter Volume Computations. Computations of Gas Volumes from data shall be in accordance with AGA Measurement Committee Report No. 9 (AGA Report 9), dated June 1998, and any subsequent amendments or revisions.

(f) Electronic Devices and Flow Computers Volume Computations. Computation of Gas Volumes from data or devices shall be in accordance with API 21.1, AGA Measurement Committee Report Nos. 3, 5, 6, and 7 and any subsequent amendments or revisions.

(g) Assumed Atmospheric Pressure. In connection with the use of any type of measuring device, an atmospheric pressure of fourteen and four tenths (14.4) pounds per square inch shall be assumed, with no allowance for variation in atmospheric pressure. The flowing Gas temperature may be recorded at Peoples' discretion. In the absence of a flowing Gas temperature recorder, a temperature of sixty degrees (60°) Fahrenheit will be assumed.

(h) Gross Heating Value. At least yearly, the Gross Heating Value of the Gas stream at each Receipt Point hereunder shall be determined by calculating the Gross Heating Value from an in-line chromatograph or a Gas analysis of a spot or continuous Gas sample except that for Receipt Point(s) with daily volumes below 1,000 mcf/day, the Gross Heating Value determination shall be required every five (5) years after the initial determination. The spot or continuous sample shall be taken at a suitable point to be representative of the Gas being analyzed.

(i) Other Tests. Other tests to determine water content, sulfur, and other impurities in the Gas shall be conducted by Peoples as necessary and shall be conducted in accordance with standard industry testing procedures.

(j) New Test Methods. If at any time during the term hereof, a new method or technique is developed with respect to Gas measurement, such new method or technique may be substituted for the method set forth in this Article when such methods or techniques are in accordance with the currently accepted standards of the American Gas Association, if mutually agreed upon by the Parties.

10.16 **Right of Inspections.** Peoples shall have the right to inspect equipment installed on the Interconnect Facility, measurement charts and other measurement or testing data at all times during business hours; but the reading, calibration and adjustment of such equipment and changing of charts shall be done by Producer, or its designee, unless agreed to otherwise by the Parties.

10.17 **Low Volumes for Receipt Points.**

(a) In the event that Producer does not deliver to Peoples an average of three (3) Dekatherms of Gas per Day at each Receipt Point during any ninety (90) consecutive day period, then Peoples may permit the low volume delivery to continue or notify Producer of the low volume situation to initiate a discussion of the operational and commercial circumstances of the Receipt Point, including line pressures impacting the Receipt Point. The Parties shall engage in a good-faith discussion to determine if there is a mutually agreeable basis for the Receipt Point to remain on Peoples' System. If a resolution is not possible, the Receipt Point may be terminated, in which case Peoples may remove its Interconnect facilities, as they relate to such Receipt Point(s), by giving Producer notice in writing sixty (60) days prior to the effective date of termination.

(b) In the event that the amount of Gas, or the quality of Gas, passing through any Receipt Point(s) is less than the measurement equipment minimum design requirements for accurate measurement, Peoples shall have the right to shut-in service from Producer until: (i) Producer has provided adequate supply to meet such design requirements and has proven to Peoples that such volumes exist; and/or (ii) the measurement equipment and Interconnect Facilities

have been redesigned and installed for the effective and efficient measurement of the revised volumes within the accuracy allowed and required by Peoples; and/or (iii) Producer has proposed, and Peoples has accepted in its sole discretion, an alternate method to accurately measure the volumes.

(c) Peoples may in its sole discretion, for operational, safety or unaccounted for Gas mitigation reasons, abandon pipelines connected to any Receipt Point. Prior to the abandonment, Peoples shall provide sixty (60) days advance notice to the Producer of its intention to abandon the facilities and, during such sixty (60) day period, shall engage in a good-faith discussion with Producer to determine if there is a mutually agreeable arrangement by which the Receipt Point(s) impacted by the abandonment may remain on the system. If a resolution during said period is not possible, Peoples may proceed with the pipeline abandonment and Interconnect termination. The Producer in its sole discretion may reconnect to Peoples at the nearest pipeline not affected by the abandonment.

ARTICLE XI
TERM

11.01 **Term.** This Term of this Master Agreement shall become effective upon its execution by both Parties and shall continue in full force and effect for a period of five (5) years thereafter ("Master Agreement Term"), unless earlier terminated as provided herein. At the end of the Master Agreement Term, the Master Agreement shall automatically renew on a month-to-month basis until terminated by either party upon thirty (30) days' prior written notice to the other party.

The term of service for each specific Receipt Point shall be as set forth in Exhibit A (the "Service Term"). To the extent that the Service Term for any specific Interconnection extends beyond the Master Agreement Term, then the Master Agreement shall remain in full force and effect for the specific Interconnection until the expiration or termination of the applicable Service Term.

The obligations of (i) Producer to indemnify Peoples and (ii) Peoples to indemnify Producer pursuant hereto shall survive the termination or cancellation of this Master Agreement and the Exhibits. Termination of this Master Agreement will result in the termination of all Exhibits and the disconnection of all Receipt Points governed by Exhibit A's. Costs associated with disconnection will be the responsibility of the Producer.

Upon termination of this Master Agreement, Peoples shall have the right to remove all its facilities from the Interconnect of the Receipt Point(s) identified in the Exhibit As hereto.

ARTICLE XII
BILLING AND PAYMENT

12.01 **Quantities Deemed Conclusive.** The Production Statement of the Producer Sales Volume(s) shall be deemed conclusive unless Producer forwards an objection to Peoples in writing within sixty (60) days after the receipt of the Statement.

12.02 **Withholding Payments** In the event of any adverse claim to or against the proceeds of this Master Agreement or any Gas delivered under this Master Agreement, or any part thereof, or against the proceeds of any other Gas supply and/or delivery contract that Peoples, any other natural gas company owned, or operated, by Peoples or its parent company, including, but not limited to, Peoples Gas KY LLC, Peoples Gas WV LLC, and Delta Natural Gas Company, Inc., has with Producer, is made by any person, Peoples may, upon written notice to Producer, refuse to receive Gas under this Master Agreement, as the

case may be, until the dispute is settled by agreement between Producer and such adverse claimant or by a final decree of a court of competent jurisdiction.

In the event the Producer fails to comply with any of the covenants or terms herein contained, Peoples may immediately withhold, without liability for interest, all payments due to Producer under the terms of this Master Agreement.

12.03 **Adjustments**. In the event that Peoples mistakenly overpays or underpays Producer for Gas purchased under this Master Agreement, and such overpayment or underpayment is the result of a mistake of law or fact, miscalculation, coercion, duress, fraud, governmental or regulatory constraint, then Producer or Peoples, as the case may be, shall promptly, upon demand by the other Party, make appropriate refund or adjustment in such overpayments or underpayments, without liability for the payment of any interest by either Party; provided, however, that the obligation of either Party to make restitution under this Master Agreement shall be limited to mistaken payments made within the period commencing four (4) years prior to the date on which demand for refund or adjustment is made. In the event of Producer's refusal or inability to refund any overpayments, Peoples may withhold payment for Gas purchased under this Master Agreement or any other contract between Peoples, any other natural gas company owned, or operated, by Peoples or its parent company, including, but not limited to, Peoples Gas KY LLC, Peoples Gas WV LLC, and Delta Natural Gas Company, Inc., and Producer in an amount equivalent to the overpayment, without liability for the payment of any interest on the amount withheld. Nothing in this Master Agreement shall be construed as a waiver or relinquishment by Peoples or Producer of its rights to recover any such overpayments or underpayments.

12.04 **Late Payments.** Charges billed to Producer, for which payment has not been received by Peoples in full by the due date indicated on the invoice, will be assessed a late-payment charge of two percent (2%) per month on the unpaid balance. If Producer's failure to pay any undisputed amount continues for fifteen (15) days after the due date, then Peoples, in addition to any other remedy it may have, may (a) shut in the Receipt Point until Peoples has received payment in full; (b) deduct the unpaid amount from any payments accruing to Producer under any agreement between the Producer and Peoples; (c) take Gas in kind from Producer in satisfaction of obligations; or, (d) terminate the Exhibit associated with the Receipt Point and/or terminate the entire Master Agreement, upon ten (10) days written notice to Producer. Peoples reserves its rights to exercise any and all remedies at law appropriate to collect any amounts due hereunder, including interest, not timely paid by Producer.

ARTICLE XIII
FAILURE TO PERFORM

13.01 **Suspension.** If Producer fails to comply with any of the covenants contained in this Master Agreement, or any other Gas supply and/or delivery agreement between Producer and any other natural gas company owned, or operated, by Peoples or its parent company, including, but not limited to, Peoples Gas KY LLC, Peoples Gas WV LLC, and Delta Natural Gas Company, Inc., Peoples may refuse to allow Gas to flow through the Interconnect until, in Peoples' sole opinion, Producer is fully complying with all of the terms and conditions of this Master Agreement. Peoples, in its sole judgment, shall have the right to shut-in the Interconnect immediately if equipment is not operating properly, an overpressure condition exists, design limitations are exceeded, or safe operating conditions are compromised. Furthermore, Peoples has the right to keep the Interconnect shut-in until the Producer makes the necessary provisions to rectify the situation. If the abnormal conditions repeatedly arise, Peoples has the right to shut-in the Interconnect indefinitely and/or to terminate this Master Agreement.

Producer shall reimburse Peoples for any damages caused by Producer failing to comply with any of the covenants contained in this Master Agreement, including payments made by Peoples to other affected

customers in settlement of claims arising out of such service if Producer was notified that Peoples was invoking indemnification under Section 13.03 and Producer was given the opportunity to defend against the claim prior to such settlement agreement. To the extent any damages required to be paid hereunder are liquidated, the Parties acknowledge that the damages are difficult or impossible to determine, otherwise obtaining an adequate remedy is inconvenient and the liquidated damages constitute a reasonable approximation of the harm or loss.

If litigation results from any dispute between Producer and Peoples, Peoples may pay any money withheld under this Master Agreement to a court of competent jurisdiction without any further liability, or may interplead all claimants, including Producer. The prevailing party in a litigated dispute between Peoples and Producer shall have the right to collect from the other party its reasonable costs and necessary disbursements and attorneys' fees incurred in enforcing this Master Agreement.

13.02 **Damages.** IN NO EVENT WILL EITHER PARTY BE LIABLE OR RESPONSIBLE FOR, EITHER UNDER THIS ARTICLE XIII, UNDER ANY THEORY OF LIABILITY OR UNDER ANY OTHER TERM OR PROVISION OF THIS MASTER AGREEMENT, FOR ANY LOSS OF PROFITS, LOSS OF BUSINESS, INTERRUPTION OF BUSINESS OR FOR INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OF ANY KIND, EVEN IF A PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

13.03 **Indemnity.**

(a) Producer agrees to indemnify, hold harmless and provide a defense for Peoples, its officers, directors, affiliates, agents, employees and contractors against any third party claims for any liability, loss or damage whatsoever (including, without limitation, claims for royalties, taxes, fees or other charges) occurring in connection with or relating in any way to: (i) breach of this Master Agreement by Producer; (ii) the negligence, willful misconduct or other tortious act(s) or omission(s) by Producer, its officers, directors, affiliates, agents, employees or contractors; (iii) the Gas prior to its delivery to Peoples at the Interconnect Facility; and/or (iv) the Gas to the extent the claim, liability, or damage arises as a result of the quality of the Gas delivered by Producer or other condition of the Gas. Such indemnification shall include, but not be limited to, all costs and reasonable attorneys' fees, whether or not such liability, loss or damage results from any demand, claim, action, or cause of action, by any person, association or entity, public or private, that is not a party to this Master Agreement.

(b) Peoples agrees to indemnify, hold harmless and provide a defense for Producer, its officers, directors, affiliates, agents, employees and contractors against any third party claims for any liability, loss or damage whatsoever occurring in connection with or relating in any way to: (i) the negligence, willful misconduct or other tortious act(s) or omission(s) by Peoples' when accessing, operating, adjusting, changing, or repairing any Producer-owned facilities or equipment in accordance with Peoples' rights to do so granted by this Master Agreement and (ii) the negligence, willful misconduct or other tortious act(s) or omission(s) by Peoples' when accessing, operating, adjusting, changing, or repairing any of the Producer facilities not pursuant to Peoples' rights to do so granted by this Master Agreement. Such indemnification shall include, but not be limited to, all costs and reasonable attorneys' fees, whether or not such liability, loss or damage results from any demand, claim, action, or cause of action, by any person, association or entity, public or private, that is not a party to this Master Agreement.

13.04 **Shut-In Remedy.** In any instance set forth in this Master Agreement in which Peoples has the right to shut-in an Interconnect, Peoples shall further have the right to remove its facilities associated

with the Interconnect and terminate this Master Agreement if whatever action resulted in the shut-in has not been remedied in the amount of time set forth in this Master Agreement, or if no exact time is set, within a reasonable timeframe as determined by Peoples.

ARTICLE XIV
REGULATORY APPROVALS

14.01 **Initial Regulatory Filing Requirements.** Both Peoples and Producer are responsible for identifying and obtaining any governmental and/or regulatory approvals that may be required for construction and operation of the facilities contemplated by this Master Agreement.

14.02 **Changes in Regulation Results in Material Adverse Effect.** If any other governmental agency, whether state or federal, takes any action or issues any determination that directly or indirectly results in a material adverse change to any provision of this Master Agreement, then the materially adversely affected Party (hereinafter "Affected Party") may either:

(a) continue to fulfill its obligations under this Master Agreement as altered by the change in regulation; or

(b) seek to renegotiate the affected terms of this Master Agreement by giving notice to the other Party within thirty (30) days of the material adverse change. If the Affected Party elects to renegotiate the terms of this Master Agreement, both Parties shall be obligated to renegotiate in good faith.

ARTICLE XV
GENERAL REPRESENTATIONS AND WARRANTIES

15.01 **Producer's General Representations and Warranties.** Producer makes the following general representations and warranties:

(a) Producer is duly organized, validly existing, and in good standing under the laws of the state in which it is organized and/or has full power and authority to execute and deliver this Master Agreement and to perform its obligations hereunder;

(b) Producer holds all necessary corporate authorizations and by the execution and delivery of this Master Agreement will not violate its Articles of Incorporation, Limited Liability Company Agreement or other applicable governing agreement or any applicable laws or regulations;

(c) There is no litigation, investigation, administrative proceeding or other action existing, pending, or threatened that would materially adversely affect the ability of Producer to fulfill its obligations under this Master Agreement;

(d) Producer's signatories possess authority to execute this Master Agreement such that a legal, valid, and binding obligation enforceable against Producer is created; and

(e) Producer shall be deemed to be in control and possession of the Gas hereunder until it shall have been delivered to Peoples at the Receipt Point. Producer assumes the full cost and expense, as well as full and complete liability and responsibility, for collecting, gathering, and transporting the Gas to the Receipt Point hereunder at the quality hereinafter specified.

15.02 **Peoples' General Representations and Warranties.** Peoples makes the following general representations and warranties:

(a) Peoples is duly organized, validly existing, and in good standing under the laws of the state in which it is organized and/or has full power and authority to execute and deliver this Master and to perform its obligations hereunder;

(b) Peoples holds all necessary corporate authorizations and by the execution and delivery of this Master Agreement will not violate its Articles of Incorporation, Limited Liability Company Agreement or other applicable governing agreement or any applicable laws or regulations;

(c) There is no litigation, investigation, administrative proceeding or other action existing, pending, or threatened that would materially adversely affect the ability of Peoples to fulfill its obligations under this Master Agreement; and

(d) Peoples' signatories possess authority to execute this Master Agreement such that a legal, valid, and binding obligation enforceable against Producer is created.

ARTICLE XVI
ASSIGNMENT

16.01 **Assignment of this Master Agreement.** This Master Agreement shall be binding upon and inure to the benefit of the successors, assigns, personal representatives, and heirs of the respective Parties hereto, and the covenants, conditions, rights and obligations of this Master Agreement shall run for the full term of this Master Agreement. No assignment of this Master Agreement, in whole or in part, will be made without the prior written consent of the non-assigning party, which consent will not be unreasonably withheld or delayed; provided, either party may transfer its interest to any parent or affiliate by assignment, merger or otherwise without the prior approval of the other party. Upon any transfer and assumption, the transferor shall not be relieved of or discharged from any obligations hereunder.

Producer shall give prompt notice in writing to Peoples of any sale or assignment or other disposition of all or any part of its interest in the Interconnect Facilities hereinbefore described and covered by this Master Agreement and Exhibit(s). Producer shall furnish to Peoples copies of any relevant documents evidencing the transfer or assignment of said Producer's interest. Until said notice and relevant documents have been given and furnished to Peoples, Peoples, upon written notice to Producer, may shut-in the Interconnect hereunder, and/or escrow any payments required hereunder, without liability. In the event that Producer fails to promptly provide said notice and relevant documents, Peoples shall have the right to terminate this Master Agreement, and/or any Exhibits, upon fifteen (15) days' notice.

ARTICLE XVII
NOTICE

17.01 **Notices.** Following execution and activation of this Master Agreement, all communications, invoices and payments ("Notices") required hereunder may be sent by a nationally recognized overnight courier service, hand delivered, by electronic mail, or by First Class U.S. mail; provided that for any Notices sent via electronic mail, a duplicate copy must also be sent via one of the other delivery methods described herein.

Peoples Natural Gas Company LLC
375 North Shore Drive
Pittsburgh, PA 15212
Attention: Director Gas Supply
Phone: 412-208-6525
Email: steven.p.kolich@peoples-gas.com

Producer:_____
Address:_____
City: _____
State: _____
Zip: _____

Attention:_____
Phone: _____
Email: _____

With a copy to:
Peoples
375 North Shore Drive
Pittsburgh, PA 15212
Attention: Senior Counsel
Email: jennifer.petrisek@peoples-gas.com

17.02 **Receipt of Communications.** Any notice required or permitted under this Master Agreement shall be in writing. Notice shall be deemed to have been received: (i) when sent by overnight mail or courier, on the next business day after it was sent or such earlier time as is confirmed by the receiving Party; (ii) when delivered by hand, at the time it is delivered to an officer or to a responsible employee of the receiving Party; and (iii) when delivered via First Class U.S. Mail, two (2) business days after mailing. Either Party may change its address or telephone number at any time by promptly giving notice of such change to the other Party. Either Party may modify any notice information specified above by written notice to the other Party.

ARTICLE XVIII
MISCELLANEOUS

18.01 **Choice of Law.** This Master Agreement shall be governed by and interpreted in accordance with the laws of the Commonwealth of Pennsylvania, without regard to the State's conflict of laws principles. This Master Agreement shall be deemed to have been executed in Pennsylvania.

18.02 **Construction of this Master Agreement.** No presumption shall operate in favor of or against either Party as a result of any responsibility either Party may have had for drafting this Master Agreement.

18.03 **Execution.** This Master Agreement may be executed in one or more counterparts, each of which shall be deemed an original, and all of which together shall constitute one and the same instrument. As used herein, the singular of any term shall include the plural.

18.04 **Captions.** The article and section captions of this Master Agreement are for purposes of reference only and shall not affect the meaning of any provision of this Master Agreement.

18.05 **Amendments.** This Master Agreement may only be amended or modified by written instrument signed by the duly authorized representatives of Producer and Peoples.

18.06 **Severability.** If any provision of this Master Agreement is held by any court of competent jurisdiction to be illegal, invalid, unenforceable, or in conflict with any law of the Commonwealth of Pennsylvania, the validity of the remaining provisions of this Master Agreement shall not be affected, and the rights and obligations of the Parties shall continue in full force and effect to the full extent permitted by law. If any provision of this Master Agreement is held invalid, illegal, unenforceable or in conflict with any

Pennsylvania law, the Parties shall meet promptly and negotiate in good faith a replacement provision to effectuate the intent of the Parties.

18.07 **Confidentiality.** This Master Agreement and all notices, statements, correspondence, and other communications or documents relating to the negotiation and administration of this Master Agreement are non-public, confidential, and proprietary ("Proprietary Information"). Each Party shall keep such Proprietary Information strictly confidential for a period ending two (2) years after the expiration or termination of this Master Agreement, except as may be required to comply with any statute or order of a court or government agency having subject matter jurisdiction, the Parties shall not disclose, reveal or divulge any Proprietary Information to any person or entity without the prior written consent of the other Party.

18.08 **Audits.**

(a) Accounting Audits: Peoples shall have the right to audit Producer's accounting records and other documents relating to materials delivered by or on behalf of Producer for Peoples' account for any calendar year within the twenty-four (24) month period following the end of such calendar year. This provision shall continue in full force and effect for a period of twenty-four (24) months from the effective date of termination of this Master Agreement.

(b) Field Audits: Producer gives Peoples permission to periodically come onto Producer's property in order to audit the Interconnect Facility to determine if it is in compliance under the terms of this Master Agreement. Permission for ingress/egress includes personnel, vehicles, and other equipment deemed necessary by Peoples. Peoples shall have permission to perform all operating and maintenance functions associated with verifying the integrity and functionality of equipment, piping, and appurtenances. If, in Peoples' judgment, modifications are necessary in order to assure proper operation of the equipment, Peoples shall notify Producer and describe the modifications and shut in the Interconnect. Peoples shall indemnify and hold harmless Producer for any and all environmental, health and safety liabilities resulting from Peoples' or its designee's intentional or negligent actions during a field audit. Peoples shall replace, fix or repair, at its cost, any portion of Producer's Interconnect Facility that Peoples or its designee intentionally or negligently harms, damages or breaks as a result of operating or attempting to maintain the Producer's Interconnect Facility.

18.09 **Waiver.** Any waiver by either Party of performance due by the other Party under the terms of this Master Agreement shall not operate as a waiver of any or all of such Party's rights with respect to all prior or subsequent obligations of the other Party.

18.10 **Incorporation of Appendices.** Each Appendix hereto is made subject to the terms and conditions hereof, and is fully incorporated into this Master Agreement by reference.

18.11 **Entire Agreement.** The entire agreement between the Parties shall include those provisions contained in this Master Agreement, which includes the Appendices and any effective Exhibit. In the event of a conflict between the terms of any Appendix and the terms of this Master Agreement, the terms of the Master Agreement shall govern. In the event of a conflict between the terms of any Exhibit and the terms of this Master Agreement, which includes the Appendices, the terms of the Exhibit shall govern.

18.12 **Force Majeure** In the event either party is rendered unable, wholly or in part, by Force Majeure to carry out its obligations under this Master Agreement, other than demand payments of amounts due hereunder, then the obligations of such party, so far as they are affected by such force majeure, shall be suspended during the continuance of any inability so caused. However, the party claiming the existence

of force majeure shall use all reasonable efforts to remedy any situation, which may interfere with the performance of its obligations hereunder. The term "Force Majeure" as used herein, and as applied to either party hereto, shall mean acts of the law, acts of God, strikes, lockouts, or other labor disturbances, acts of the public enemy, war, blockades, insurrections, riots, epidemics, fires, floods, washouts, arrests, and restraint of rulers and people, civil disturbances, explosions, breakage or accidents to machinery or lines of pipe, freezing of wells or pipelines, partial or entire failure of such wells, or any other cause, whether of the kind herein enumerated, or otherwise, not reasonably within the control of the party claiming suspension. It is understood that settlement of strikes, lockouts, or labor disturbances shall be entirely within the discretion of the party having the difficulty and that the above requirement that any Force Majeure shall be remedied with all reasonable dispatch shall not require the settlement of strikes, lockouts, or labor disturbances by acceding to the demands of the opposing party when such course is inadvisable in the discretion or judgment of the party having the difficulty.

This Master Agreement, as amended from time to time, constitutes the entire agreement between the Parties for the transportation and/or purchase and sale of Gas and supersedes all previous offers, negotiations, understandings and agreements between the Parties with respect to the transportation and/or purchase and sale of Gas. There are no agreements, modifications, conditions or understandings, written or oral, expressed or implied, pertaining to the transportation and/or purchase and sale of Gas which are not contained in this Master Agreement.

SIGNATURE PAGE IMMEDIATELY FOLLOWS

IN WITNESS WHEREOF, Peoples and Producer have duly executed this Master Agreement to be effective as of the day and year first written above.

PEOPLES NATURAL GAS COMPANY LLC	**[PRODUCER]**
By: _____	By: _____
Name: _____	Name: _____
Title: _____	Title: _____
Date: _____	Date: _____

APPENDIX A TO MASTER AGREEMENT
MINIMUM ENGINEERING & TECHNICAL SPECIFICATIONS

SECTION I
DESIGN OF INTERCONNECT FACILITIES

1.01 **General.** Producer shall be responsible for all aspects of the design and construction of a New Facility, subject to the terms and conditions of the Master Agreement, unless specifically noted otherwise by Peoples. Producer shall be responsible for maintaining any Existing Facility and New Facility to the specifications set forth in the Master Agreement, including all Appendices and Exhibits. Peoples reserves the right to inspect an Existing Facility and a New Facility to ensure it complies with the specifications and is operable; in the event said facility does not meet with the specifications or is inoperable, the Interconnect may be shut-in until the Producer remedies the deficiency(ies).

1.02 **Materials**. All material and equipment furnished for a New Facility shall be new and shall satisfy: (i) the generally accepted industry standards; and (ii) the specifications set forth in this Appendix.

1.03 **Site/Land Acquisition**

(a) Producer shall provide Peoples with the necessary rights-of-way, permits, and related surface rights including the rights of ingress, egress and regress necessary for Peoples to access the location of the New Facility. Producer shall also provide, if required, a right of way necessary for the tie-in of proposed New Facility to Peoples' System that is free of all costs and from all claims and liabilities for damages arising out of installation or the construction of the New Facility. To the extent that Producer has not previously provided Peoples with the necessary rights-of-way, permits, and related surface rights including the rights of ingress, egress and regress necessary for Peoples to access the location of an Existing Facility, and Peoples is hindered from accessing the location, Peoples shall have right to shut in the Interconnection, remove its facilities associated with the Interconnect and terminate the portion of the Exhibit applicable to the Interconnection.

(b) Producer and Peoples must agree beforehand to the location of the New Facility as well as the final tie-in location.

(c) Producer shall satisfy itself as to the character and types of surface and subsurface materials to be encountered in construction of the New Facility.

(d) Producer's right-of-way shall be cleared of all debris and obstructions before the New Facility is tied into Peoples' System. For Existing and New Facilities, Producer's right-of-way shall be maintained such that regular access to the Interconnection may be obtained.

(e) A New Facility shall be readily accessible, located in an area that is not susceptible to vehicular or other damage but as near as practical to the final tie-in point. Peoples reserves the right to require that a New Facility be enclosed within a locked fence or building. In the event of safety or operational concerns, Peoples reserves the right to require that an Existing Facility be enclosed within a locked fence or building.

(f) The meter set shall be readily accessible, located in an area that is not susceptible to vehicular or other damage but as near as practical to the final tie-in point

(g) All costs associated with Producer's obligations under this section shall be the Producer's responsibility and any such costs paid by Peoples shall be reimbursed by Producer through the Construction and Installation Fee.

(h) To the extent that Peoples is at any time required to pay for such rights-of-way or such costs or claims or liabilities, then such amounts and related expenses shall be incorporated within the Initial Construction and Installation payment made under this Master Agreement.

1.04 **Responsibility for Interconnect Facility Equipment**. The following table establishes the design, construction, operation, maintenance and cost responsibility for certain aspects of the Interconnect Facilities. All of the following design specifications designated as the Producer's responsibility shall be incorporated into the design and construction of the Receipt Point at Producer's sole cost unless waived by Peoples. Excluding Measurement Equipment, for which requirements are set forth in Section 10.01 of the Master Agreement, and Pressure/Flow Control Equipment, for which requirements are set forth in Section 4.01 of the Master Agreement, the Parties specifically agree that the design specifications identified in this Section 1.04 shall not apply to any Existing Facility(ies), unless required by the Pennsylvania Public Utility Commission or in order to address operational, safety or service related issues, in which case Peoples agrees to provide at least sixty (60) days advance notice to Producer documenting the operational, safety or service related issues and detailing required modifications to the existing Receipt Points(s).

RECEIPT POINT SPECIFICATIONS							
STATION EQUIPMENT	**REQ-UIRED**	**DESIGN**	**INSTALL**	**OWNER-SHIP**	**OPERATE**	**MAINTAIN**	**SPECIAL PROVISIONS/ EQUIPMENT SPECS.**
PIPING							
Pipeline-Tap & Valve	Yes	PG	PG	PG	PG	PG	
Inlet & Station Piping	Yes	S/T	S/T	S/T	S/T	S/T	Demarcation PT – TBD
Outlet & Station Piping	Yes	S/T	S/T	S/T	S/T	S/T	Demarcation PT - TBD
GAS CONDITIONING							
Filter Separator	TBD	S/T	S/T	S/T	S/T	S/T	
Liquid Level Shutoff	Yes	S/T	S/T	S/T	S/T	S/T	
MEASUREMENT							
Meter & Meter Runs	Yes	S/T	S/T	S/T	S/T	S/T	
Meter & Flow Control Risers, Valves, etc.	Yes	S/T	S/T	S/T	S/T	S/T	
Electronic Measurement	Yes	S/T	S/T	S/T	S/T	S/T	
GAS QUALITY							
Chromatograph	TBD	TBD	TBD	TBD	TBD	TBD	
Continuous Sampler	TBD	TBD	TBD	TBD	TBD	TBD	
H2O Dew Point Analyzer	TBD	S/T	S/T	S/T	S/T	S/T	
PRESSURE / FLOW CONTROL							
Primary Pressure Control	Yes	S/T	S/T	S/T	PG	S/T	Regulators
Overpressure Device	Yes	S/T	S/T	S/T	PG	S/T	Regulators
Slam Shut Valve	TBD	S/T	S/T	S/T	PG	S/T	
Emergency Valve	TBD	PG	PG	PG	PG	PG	
Flow Control Valve	TBD	TBD	TBD	TBD	TBD	TBD	

Heat	TBD	TBD	TBD	TBD	TBD	TBD	
Check Valve	Yes	S/T	S/T	S/T	S/T	S/T	
ODORIZATION							
Odorizer & Controls	TBD	S/T	S/T	S/T	PG	PG	
MISCELLANEOUS							
Communication service	TBD	PG & S/T	PG & S/T	PG & S/T	PG & S/T	PG & S/T	Each maintain own communication service
Electrical Service	TBD	S/T	S/T	S/T	S/T	S/T	

PG = Peoples; S/T = Producer
TBD = To be determined at the Design Specification Stage per Section 4.01 of the Agreement.

1.05 **Inlet Filter.** Filter/filter-separator facilities installed upstream of the Interconnect Facility at Receipt Point(s) must be considered and based upon specific Gas analysis. This Section 1.05 shall not apply to any Existing Facility, unless required by the Pennsylvania Public Utility Commission or in order to address operational, safety or service related issues, in which case Peoples agrees to provide at least sixty (60) days advance notice to Producer documenting the operational, safety or service related issues and detailing required modifications to the Existing Facility,

1.06 **Freeze Prevention.** In circumstances where heavier hydrocarbons and/or water vapor may be present within the Gas stream, Producer shall incorporate freeze protection measures into the design of the Interconnect Facility. The method and design of the freeze protection measures shall be submitted to the Peoples for approval and no construction shall commence until such time as Producer receives written approval from Peoples. If Producer's freeze protection measures involve the use of Gas for fuel, then the tap for such fuel supply line shall be made upstream of the measuring equipment, such that Producer bears the costs of the fuel. This Section 1.06 shall not apply to any Existing Facility, unless required by the Pennsylvania Public Utility Commission or in order to address operational, safety or service related issues, in which case Peoples agrees to provide at least sixty (60) days advance notice to Producer documenting the operational, safety or service related issues and detailing required modifications to the Existing Facility. Freeze protection measures which may be acceptable to Peoples include the following:

(a) Methanol Injection – should be installed downstream of meters

(b) Catalytic heaters / heat trace - for regulator bodies

(c) Indirect water bath heaters – for large pressure cuts and large flow volumes

(d) All Gas provided and delivered to Peoples shall have a temperature of no less than 45° F.

1.07 **Regulating and Overpressure Protection.** Peoples may require regulation and shall require over-pressure protection for all Receipt Point(s) under this Master Agreement. Such regulation shall deliver pressures suitable to pressures in Peoples' System. Peoples shall specify and/or approve the type of regulators to be used and shall specify pressure ranges, and operating settings. Producer will contract with a Peoples Approved Vendor to perform annual inspection and lock up test of each regulating and overpressure device, and provide inspection reports to Peoples.

(a) A primary pressure-limiting device shall be required whenever the Peoples' System has the possibility of realizing pressures exceeding the Peoples' pipeline MAOP.

(b) Overpressure protection devices shall be set such that pressures may not exceed the maximum allowable operating pressure for the facility into which Producer is delivering Gas.

(c) Overpressure protection devices must be designed to prevent a single incident from affecting the operation of the Interconnect.

(d) Security valves, monitor regulators, or control valves should be used for overpressure protection.

(e) Overpressure protection devices shall consist of a stand-alone valve operating on a pneumatic signal taken directly from the pipeline.

(f) If pilot loaded valves are used, the pilots shall not bleed when they are not operating. Pilot bleeds should be routed to downstream piping.

1.08 **Control Valves**

(a) Control valves shall be sized using the highest flow rate compounded with the lowest delivery pressure.

(b) All flow control valves should be installed to fail in the open position or in the last set positions, as applicable.

(c) Peoples shall approve the type and brand of control valve.

(d) Downstream taps for pressure control valves shall be noted on detail drawings, and shall also possess a pressure transducer for stations designed with telemetry.

1.09 **Miscellaneous Valves and Piping**

(a) Blow-down valves shall be installed to provide for venting of all sections.

(b) Meter header piping shall be sized for 1.5 times the total combined area of the total meter runs.

(c) Isolation valves will be installed on either side of regulators, meters, and control valves.

(d) Piping shall be Standard Weight unless approved otherwise by Peoples.

1.10 **Emergency Valve.** The design and installation shall include an emergency valve (ball valve preferred) located at least twenty-five (25) lineal feet (point to point) but not to exceed fifty (50) lineal feet from the tie-in with Peoples' System. The emergency valve shall be readily accessible, easily operated, and sufficiently marked for quick identification.

1.11 **Peoples Tie-in and Tap Sizing.** Peoples shall provide for the sizing and actual installation of tap for tie-in of a New Facility to Peoples' System. Producer shall provide data necessary for the sizing of the tap.

1.12 **Gas Chromatograph.** Auxiliary equipment may be required for measurement of Btu variations. Peoples shall have the final decision as to the type of Gas analysis required.

1.13 **Dehydration.** Gas received by Peoples at Receipt Point(s) shall be consistent with the requirements in Appendix B, Schedule 1 and contain no free liquids. In accordance with Section 7.01 of the Master Agreement, Peoples has the right to discontinue and/or terminate any Receipt Point(s) where Gas delivered contains free liquids.

1.14 **Dew Point Tester.** When deemed necessary by Peoples, Producer shall incorporate an on-line dew point tester as part of the Interconnect Facility. The unit shall be set such that any Gas volumes detecting

water content levels in excess of contractual specifications shall result in the automatic closure of an in-line valve thereby preventing further delivery of Gas into system. Valve shall remain closed until an acceptable water moisture content of the Gas can be provided. This Section 1.14 shall not apply to any Existing Facility, unless required by the Pennsylvania Public Utility Commission or in order to address operational, safety or service related issues, in which case Peoples agrees to provide at least sixty (60) days advance notice to Producer documenting the operational, safety or service related issues and detailing required modifications to the Existing Facility.

1.15 **Corrosion Coupon Tap.** When specified by Peoples, Producer shall provide for an in-line valve tap for installing corrosion coupons.

1.16 **Check Valve.** All Interconnect Facilities shall be installed with a check valve of some type so as to assure Gas flows in the direction proposed by this Master Agreement. Producer will contract with a Peoples Approved Vendor to perform annual inspection of each check valve and, in accordance with Appendix B, Section 1.07, shall provide the inspection report to Peoples.

1.17 **Building, fences, and site security**

(a) Buildings, or shelters, shall be provided to protect electronic Gas measurement and control equipment, as well as to act as noise barriers, protection from damage, and for meeting compliance with local ordinances. All buildings, shelters, fences, or the like, shall be designed to permit safe access around all facility piping and equipment. Designs for buildings, shelters, fences, or the like shall be submitted to Peoples' approval prior to installation or modification.

(b) Unless waived by Peoples in its reasonable discretion, all Interconnect Facility shall be fenced, consisting of chain link fencing eight feet (8') in height complete with three (3) strands of barbed wire, and at a minimum; one pedestrian gate and one truck gate installed at opposing ends of the site. This sub-section 1.17(b) shall not apply to any Existing Facility, unless required by the Pennsylvania Public Utility Commission or in order to address operational, safety or service related issues, in which case Peoples agrees to provide at least sixty (60) days advance notice to Producer documenting the operational, safety or service related issues and detailing required modifications to the Existing Facility.

(c) The site selected must be large enough to hold all equipment and accommodate all activities required for normal and maintenance operations.

1.18 **Power and telephone.** If required, Producer shall provide electric power and telephone at site.

SECTION II
INSTALLATION, TESTING, and INSPECTION

2.01 **Testing**

(a) All measurement equipment shall be tested in accordance with specifications provided by Peoples. Peoples shall specify minimum test pressure and test duration. Tests shall be conducted using a recording chart of which Peoples shall receive the original or a clear copy of the original test chart.

(b) Peoples shall not activate the New Facility and Interconnect until a copy (or original) of the test chart has been received and approved.

2.02 **Inspection**

(a) Peoples reserves the right to inspect all New Facilities during construction.

(b) Prior to startup of construction, Producer shall provide three (3) days' notice to Peoples.

(c) All girth welds must be 100% radiographically inspected and approved.

(d) Producer shall be responsible for all expenses, including inspection by Peoples, relative to construction inspections of the New Facilities.

APPENDIX B TO MASTER AGREEMENT
INSPECTIONS AND GAS QUALITY

SECTION I
ROUTINE INSPECTIONS OF INTERCONNECT FACILITIES

1.01 **Interconnect Facility(ies) Maintenance**. Peoples shall have the right to periodically inspect Producer's records and the Interconnect facilities to verify that all operating and maintenance functions are being performed effectively. If Producer cannot provide adequate documentation, or if Producer's operating and maintenance procedures are inadequate as determined by Peoples, Producer will have seventy-two (72) hours to produce proper documentation and/or revise inadequate procedures. If, after the seventy-two hour period, documentation is not provided and/or procedures are not modified, Peoples retains the right to take further action as it deems necessary including the right to shut-in the Interconnect until adequate documentation/procedures have been verified and secured.

1.02 **Changes to Interconnect Facility.** The Producer has an obligation to notify Peoples in writing 24 hours prior to changes to Producer Interconnect facilities that would require modifications to an Interconnect, Peoples' System or Gas composition, and Peoples shall have the right to reject changes to the Interconnect Facility. Peoples retains the right to take action as it deems necessary in its reasonable discretion, including the right to shut-in the Interconnect, in the event notification does not occur. The cost of any damages as a result of changes to Producer's Interconnect Facility will be borne entirely by the Producer; provided, that if Peoples or its designee accesses and operates Producer's Interconnect Facility, Peoples shall indemnify and hold harmless Producer for any and all environmental, health and safety liabilities directly resulting from Peoples' or its designee's access or operation of the Producer's Interconnect Facility. Peoples shall replace, fix and repair, at its cost, any portion of Producer's Interconnect Facility that Peoples or its designee intentionally or negligently harms, damages or breaks as a result of Peoples' accessing or operating the Facility.

1.03 **Interconnect Facility Operations.** Peoples shall have the right to shut-in the Interconnect immediately if meter set equipment is not operating properly, an overpressure condition exists, design limitations are exceeded, or safe operating conditions are compromised. Furthermore, Peoples has the right to keep the Interconnect shut-in until the Producer makes the necessary provisions to rectify the situation. If the abnormal conditions repeatedly arise, Peoples has the right to shut-in the Interconnect indefinitely.

1.04 **Interconnect Facility Inspections.** Peoples shall have the right to inspect the Interconnect Facility including, but not limited to, the following: calibrate the meter; inspect regulators; inspect valves; and inspect and calibrate Gas quality facilities. If during the course of these inspections, Peoples determines, using commercially reasonable discretion, that installation procedures where not followed, equipment was not maintained, or equipment was modified to not comply with specifications established in this Master Agreement, Peoples has the right to shut-in the Interconnect until corrective actions by the Producer occur and additional inspections performed. If continued inspection violations occur, Peoples has the right to shut-in the Interconnect indefinitely. Peoples shall indemnify and hold harmless Producer for any and all environmental, health and safety liabilities directly resulting from Peoples' or its designee's inspection in calibrating the meter, inspecting regulators, inspecting valves, and inspecting and calibrating gas quality equipment within the Producer's Interconnect Facility. Peoples shall replace, fix and repair, at its cost, any portion of Producer's Interconnect Facility that Peoples or its designee intentionally or negligently harms, damages or breaks as a result of the activities described above.

1.05 **Reserved.**

1.06 **Reserved.**

1.07 **Annual Measurement Equipment Testing**. All measurement equipment shall be inspected and tested by a Peoples Approved Vendor once each calendar year not to exceed fifteen (15) months from the previous inspections at Producer's expense. This annual inspection must be completed by technicians trained to operate pressure regulating equipment in accordance with the manufacturer's procedures and specifications. Peoples reserves the right to request documentation for regular testing and technician training. The annual testing shall include, but is not limited to the following equipment: Check Valve, Regulator(s) Lock-up test, Electronic corrector (EGM) calibration, meter calibration and spot sample Gas analysis (frequency according to section 2.01 of this Appendix B) at the Interconnect. Inspection reports shall be submitted, within 30 days after the yearly inspection date, to Peoples. In the event the Producer fails to submit the yearly inspection reports, Peoples shall have the right to periodically inspect Producer's records to determine if measuring equipment has been inspected and tested, as required by the Master Agreement. If Producer cannot provide documentation, within five (5) days of Peoples' request, Producer is required to immediately shut-in the Interconnect at which measurement and testing records are deficient, for a period of one week, or until the Producer can provide proof that the measuring equipment has been inspected and tested, and is working properly, whichever is longer. If Producer cannot provide documentation that its measuring equipment has been inspected and tested on additional occasions, Peoples retains the right to take further action at its discretion, including the right to require the shut-in of the applicable Interconnect for additional time periods. If Producer repeatedly violates this provision, Peoples has the right to permanently discontinue accepting Gas from wells that Producer has dedicated to said Interconnect Facility.

SECTION II
GAS QUALITY REQUIREMENTS

2.01 **General.** Before Peoples permits the flow of Gas from a New Facility into the Peoples' System, Producer will provide a Gas sample analysis by a Peoples Approved Vendor and Peoples shall review the Gas sample analysis to verify that it is of marketable quality. Producer will contract with a Peoples Approved Vendor to perform an initial (within one (1) year of the execution of this Agreement) Gas quality sample analysis and provide inspection report to Peoples for each Interconnect Facility that have not otherwise been tested by Producer or Peoples within the year prior to the execution of this Agreement. Receipt Point(s) with daily volumes at or above 1,000 mcf/day will be required to have a Gas quality sample analysis conducted on an annual basis. Receipt Point(s) with daily volumes below 1,000 mcf/day will be required, after obtaining the initial analysis, to have a Gas quality sample analysis' conducted every five (5) years thereafter, unless the Gas sample analysis does not meet Peoples specifications, requirements and/or standards, as set forth in this Agreement, including any Appendixes, Exhibits, Addendums, Schedules and Amendments, in which case, Peoples will require the Interconnect to be shut in until Gas sample meets Peoples specifications. Peoples reserves the right to require more frequent Gas quality sample analyses in order to address operational, safety or service related issues. The initial and ongoing Gas sample analyses shall include testing for water vapor, N2, O2, CO2, CH4 (methane through pentane), heating value (BTU - dry and saturated), specific gravity by a certified tester using GPA 2261-13 and GPA 2172-09 standards and shall conform with the following specifications:

(a) Liquids – The Gas shall be free of water and hydrocarbons in liquid form at the temperature and pressure at which the Gas is delivered.

(b) Moisture Content – The Gas shall not have water content in excess of seven (7) pounds of water per million cubic feet of Gas measured at standard conditions of 14.73 psia and 60°F, unless otherwise approved by an authorized representative of Peoples or as set forth in Schedule 1. The moisture content of the Gas shall be such that it is of marketable quality, and does not cause any safety or operational problems or other adverse effects on Peoples' System or any downstream systems to which the Gas may flow. Producer will be advised of any additional or specific moisture content limits for the Interconnect, or of any changes in such limits, should they be required.

(c) Water Vapor – Peoples will authorize water content according to the chart attached as Schedule 1 to this Appendix B. However, Peoples maintains the right to require a lower (more stringent) water vapor content than the level set forth in Appendix B if the water vapor levels at specific Receipt Point(s) are detrimentally affecting customer service or creating operational issues.

(d) Carbon Dioxide and Other Inerts – The Gas shall not contain more than four percent (4%) by volume of total combined inerts such as carbon dioxide, nitrogen, argon, and helium; provided that the total carbon dioxide content shall not exceed two percent (2.0%) by volume.

(e) Dust, Gums and Solid Matter – The Gas shall be commercially free of dust, gums, gum-forming constituents, or other liquid or solid matter which might become separated from the Gas in the course of transportation through pipeline.

(f) Heating Value – Unless otherwise approved, in writing, by Peoples, the Gas delivered shall contain not less than 967 BTU per standard cubic foot and shall not exceed 1,100 BTU per standard cubic foot of Gas calculated as the gross saturated value at 14.73 psia and 60° Fahrenheit, and a utilization factor of one thousand three hundred (1,300) plus or minus six percent (6%), the utilization factor being defined as that number obtained by dividing the heating value of the Gas by the square root of its specific gravity. Gas accepted by the Company that contains less than 967 BTU per cubic foot will be enhanced to ensure that Gas delivered by the Company to its end-use customers shall meet the heating value requirements set forth in applicable regulations, orders or laws. The Producer may be responsible for the costs of such enhancement.

(g) Temperature – The temperature of the Gas delivered into the Peoples' System shall not exceed 100°F unless approved by an authorized representative of Peoples. The temperature shall not be less than 40°F as delivered to Peoples' System after passing through all regulation, measuring and over protection equipment.

(h) Oxygen – The Gas shall not contain more than 2,000 parts per million (0.2% of one percent) of oxygen by volume.

Should circumstances warrant more in-depth Gas sample analyses, such as the suspected or known presence of other constituents, Peoples reserves the right to require testing for additional compounds including not limited to the following:

(a) Hydrogen Sulfide – The Gas shall not contain more than four (4) parts per million on a volumetric basis, or three-tenths (0.3) of a grain of hydrogen sulfide per one hundred (100) cubic feet.

(b) Total Sulfur – The Gas shall not contain more than 170 parts per million, on a volumetric basis, or ten (10.0) grains of total sulfur per one hundred (100) standard cubic feet.

(c) Carbon Monoxide – The Gas shall not contain more than one-tenth percent (0.1%) by volume of carbon monoxide.

(d) Gasoline - Not contain more than two-tenths (0.2) of a gallon of gasoline per one thousand (1,000) standard cubic feet unless otherwise approved by an authorized representative of Peoples.

(e) Bacteria – The Gas, including any associated liquids, shall not contain any microbiological organism, active bacteria, or bacterial agent capable of causing or contributing to: (i) injury to Peoples' pipelines, meters, regulators, or other facilities and appliances through which Producers Gas flows; or (ii) interference with the proper operation of Peoples' System. Microbiological organisms, including, but not limited to, sulfate reducing bacteria (SRB) and acid producing bacteria (ACB), when considered as a possibility, shall be tested for their existence utilizing the

American Petroleum Institute test method API-R38 or other acceptable test method as determined by both Parties.

(f) Siloxane – All Gas delivered through an Interconnect into Peoples' System that includes Gas from landfill well(s) or gathering lines fed by landfill Gas sources shall meet the following on-going testing protocol:

Test Results, mg of SI / Nm^3	Action
≤ 0.4	November through February = once per week March through October = twice per month
0.40 - 0.60	Test daily until results are below 0.40
3 consecutive results ≥ 0.60 or a single test ≥ 1.0	Shut in gas until start-up conditions are re-established

2.02 **Gas Odorant.** Peoples will perform Gas odorant tests to confirm that the Gas delivered at the Producer's Interconnect Facility is properly odorized. If is found to have insufficient odor, then Producer will be required to purchase and install odorizing units and monitoring equipment according to Peoples' specifications and as set forth herein. The Producer is also responsible for the maintenance of this facility including the costs of odorant supply needed to maintain a sufficient odor in all Gas delivered at the Producer's Interconnect Facility. Odorizing units and monitoring equipment specifications

(a) Equipment and Ownership. The Producer will own the odorizer with associated equipment necessary to operate and deliver odor (odorizer system) and is responsible for all costs associated with operating the system. Peoples will approve the design of the odorizer system, whereinafter the Producer will purchase and install the odorizer system. Peoples may choose to be present for the installation and shall have the right to test the system after its installation. Thereafter, Peoples will operate and maintain the odorizer systems and, where applicable, a thermal electric generator (unless a public electric power supply can be made available to the site), together with necessary valves, tubing and fittings, in order to properly odorize Gas delivered to measurement equipment. If the odorizer system is located outside of the Interconnect Facility location, the Producer shall provide site access to Peoples, as described in Section 1.03 of Appendix A, for the site where the odorization system is located. Peoples shall indemnify and hold harmless Producer for any and all environmental, health and safety liabilities directly resulting from Peoples' or its designee's accessing or operating Producer's odorizer system. Peoples shall also replace, fix and repair, at its cost, any portion of Producer's odorizer system that Peoples or its designee intentionally or negligently harms, damages or breaks as a result of operating the odorizer system.

(b) Upgrades. If Producer should desire to upgrade or replace any of the currently existing odorizers or generators, all equipment must be subject to the review and approval of Peoples.

(c) Refill. Peoples will manage the filling and refilling (or tank exchange) of the odorant to make sure, that sufficient odorant is available for Gas delivered to the measurement equipment.

(d) Odorant Cost. Producer will reimburse Peoples, upon receipt of its invoices, for the cost of odorant, including all future tank refills.

(e) Odorizer Site. Producer will provide and maintain, at its own cost, perimeter fencing around the Odorizer sites to enclose and protect the odorizers and related equipment.

(f) Communication Cost. Producer will reimburse Peoples, upon receipt of its invoices, for the monthly cost of public telephone or cellular service for the communications equipment used to monitor the operation of the odorizers and the odorant level and for the monthly cost of electrical service used to operate and maintain the odorizers, if electric power is provided to the odorizers from a public supplier.

(g) Maintenance Cost. Producer will reimburse Peoples, upon receipt of its invoices, for the cost of any regular, periodic, and other odorizer maintenance service, including all labor and necessary replacement parts or equipment, to assure the continued efficient operation of the odorizers. This includes reserve parts held in Peoples' stock to enable timely and proficient resolutions.

2.03 **Gas Quality Inspections.** If Gas sample analysis indicates that any of the Gas quality specifications, requirements and/or standards set forth in this Master Agreement have not been met, Peoples may refuse deliveries until the Producer makes the necessary provisions to fully comply with the Gas quality requirements.

2.04 **Gas Quality Inspections**. After initial deliveries are received, Peoples reserves the right to periodically sample Gas at the measurement equipment to validate the Gas quality. If the analysis indicates that Gas quality specifications, requirements and/or standards set forth in this Master Agreement are not met, Peoples has the right to shut in the Interconnect indefinitely until the Producer makes the necessary provisions to fully comply. Peoples shall indemnify and hold harmless Producer for any and all environmental, health and safety liabilities directly resulting from Peoples' or its designee's accessing Producer's measurement equipment. Peoples shall also replace, fix and repair, at its cost, any portion of Producer's measurement equipment that Peoples or its designee intentionally or negligently harms, damages or breaks as a result of accessing the equipment.

2.05 **Remedies.** Should any of the above substances enter Peoples' System and cause damage to metering, regulating and/or other equipment, or interruption of service, Producer shall reimburse Peoples for the costs to repair such damage and for any related costs which Peoples may incur to restore service to, and/or repair facilities of, its customers, including payments made by Peoples to customers in settlement of claims arising out of interruption of Gas service; provided that Producer was notified that Peoples was invoking indemnification under Section 13.03 and Producer was given the opportunity to defend against the claim prior to such settlement agreement.. Any such costs may be deducted from payments due Producer for Gas delivered. In addition, if the Gas delivered fails, in Peoples' reasonable opinion, using commercially reasonable discretion, to meet the quality specifications set forth herein, Peoples may elect to refuse to take all or any portion of such Gas until the Producer bring the Gas into conformity with such specifications. In the case of any such refusal, Producer agrees to exercise all due diligence to bring such Gas into conformance with the specifications set forth herein. Peoples has the right to shut in the Interconnect indefinitely until the Producer makes the necessary provisions to meet the Gas quality standards. Peoples may also elect to require continuous Gas quality monitoring with fail safe shut off as a provision to accept existing or new deliveries. Damages as a result of Gas quality violations are the responsibility of the Producer and the Interconnect shall be shut-in until damages are paid in full.

SCHEDULE 1 TO
APPENDIX B TO MASTER AGREEMENT
WATER VAPOR CONTENT

ALLOWABLE WATER VAPOR LEVEL (#/MMSCF) VS. LOCATION

1. Producer meters connected to pipelines on the suction side of a Peoples compressor will be subject to 40#/mmscf water vapor standard.
2. All other Producer meters will be subject to 20#/mmscf water vapor standard.

Peoples reserves the right to require more stringent water vapor standards in limited and specific situations where Peoples has determined through water vapor testing that the water vapor levels at identified production meter points are affecting customer service or creating operational issues.

EXHIBIT A-__
to
Master Agreement

Additional Terms and Conditions Governing Transportation of Gas

This Exhibit A ("Exhibit") is made part of and is subject to the terms and conditions of the Master Agreement made and entered into by and between **Peoples Natural Gas Company LLC**, with an office located at 375 North Shore Drive, Pittsburgh, Pennsylvania 15212 (hereinafter referred to as "Peoples"), and **[Producer]** with an office at [Address] (hereinafter referred to as "Producer"). Producer and Peoples are also referred to herein individually as a "Party" and collectively as the "Parties."

This Exhibit A-__ shall supersede, in its entirety, and terminate without cause, any the previously executed Agreement(s) between the Parties for the transport of Gas for the Receipt Point(s)identified herein including, but not limited to, prior Transportation Agreements, Gas Purchase Agreements, Production Enhancement Agreements, Field Purchase Agreements, Measurement Operating Agreements and Interconnection Agreements; however agreements related to blending and compression requirements, such as Gathering Interconnect Compression Agreements and Blending Service and Operation Agreements, shall not be terminated and shall continue pursuant to their terms and conditions.

The Service Term Start Date for each individual Receipt Point shall be the latter of _____ or the first day of the immediately succeeding Production Period in which Producer delivers Gas to Peoples at the Receipt Point. The Service Term End Date for each individual Receipt Point shall be _____. After this initial term, this Exhibit will automatically renew for month-to-month periods unless either Producer or Peoples provides written notice of termination to the other party at least (thirty) 30 days prior to the expiration date. If either party terminates a Receipt Point, the Producer's Interconnect Facility(ies) will be disconnected and the Interconnect shall be abandoned unless a subsequent Exhibit is executed within thirty (30) calendar days.

The Rates for Gathering are subject to the applicable tariff in effect at the time of delivery into the Peoples' System. These charges are subject to change. Rates for certain qualifying incremental conventional production, and for unconventional horizontal production and landfill production shall be determined by Peoples based on supporting information provided to Peoples by the Producer and in accordance with the applicable tariff and shall be specified in Schedule 1 to this Exhibit. The Receipt Point(s) and applicable Retainage Percentage and Gathering Rate shall be identified in Schedule 1 to Exhibit A-__, which is attached hereto and made a part hereof.

This Exhibit shall become effective upon its execution by both Peoples and Producer and shall continue in full force and effect through the end of the latest Service Term End Date set forth herein, including any extensions thereof. The obligations of Producer to make payment hereunder and the obligation of Producer to indemnify Peoples, and Peoples to indemnify Producer, pursuant hereto shall survive the termination or cancellation of the Master Agreement and this Exhibit. Peoples shall have the right to terminate this Exhibit, upon thirty (30) days advance written notice to Producer, if Gas has not flowed for the previous period of twelve (12) consecutive months, or if Peoples or its designee has caused the Interconnect Facilities to be disconnected or removed.

SIGNATURE PAGE IMMEDIATELY FOLLOWS

IN WITNESS WHEREOF, Peoples and Producer have duly executed this Exhibit on this _____ day of _____, 20____.

PEOPLES NATURAL GAS COMPANY LLC	**[PRODUCER]**
By: _____	By: _____
Name: _____	Name: _____
Title: _____	Title: _____
Date: _____	Date: _____

SCHEDULE 1 TO
EXHIBIT A-__ TO MASTER AGREEMENT
RECEIPT POINT(S), RETAINAGE PERCENTAGE AND GATHERING RATE

Unless otherwise set forth below, the Retainage Percentage and the Gathering Rate for the following Receipts Point(s) are subject to the applicable tariff in effect at the time of Gas delivery into the Peoples' System and are subject to change.

Receipt Point(s)	Special Terms for Unconventional Wells

EXHIBIT A-__
to
Master Agreement

Additional Terms and Conditions Governing the Purchase of Gas

This Exhibit A ("Exhibit") is subject to the terms and conditions of the Master Agreement made and entered into by and between **Peoples Natural Gas Company LLC**, with an office located at 375 North Shore Drive, Pittsburgh, Pennsylvania 15212 (hereinafter referred to as "Peoples"), and **[PRODUCER]** with an office at [ADDRESS] (hereinafter referred to as "Producer"). Producer and Peoples are also referred to herein individually as a "Party" and collectively as the "Parties."

This Exhibit A-__ shall supersede, in its entirety, and terminate without cause, the previously executed Agreement(s) between the Parties for the purchase of Gas for the Receipt Point(s) identified herein, including, but not limited to, prior Transportation Agreements, Gas Purchase Agreements, Production Enhancement Agreements, Field Purchase Agreements, Measurement Operating Agreements and Interconnection Agreements; however agreements related to blending and compression requirements, such as Gathering Interconnect Compression Agreements and Blending Service and Operation Agreements, shall not be terminated and shall continue pursuant to their terms and conditions.

The following sets forth the additional terms and conditions whereby Peoples shall purchase Gas from Producer at the specific Receipt Point(s) identified in this Exhibit.

1. **Sale and Purchase Obligations**. Producer shall produce and sell to Peoples, and Peoples shall take and pay for, quantities of Gas delivered to the Receipt Point(s) set forth below. Peoples shall have no obligation to pay for any Gas until such time as it has been produced and delivered to the designated Receipt Point(s). Except in instances where Peoples and Producer agree otherwise, Producer's sale shall be a full requirements sale where all Gas produced shall be delivered to Peoples. Notwithstanding the foregoing, Peoples may reduce or suspend its purchases under this Master Agreement in the event that Peoples has insufficient pipeline capacity or insufficient market demand to facilitate the sale and/or use of Producer's Gas. Upon notice to Producer, Producer shall promptly comply with Peoples' reduction or suspension request. As provided for in Section 6.07 of the Master Agreement, in the event Peoples should ever cease, in whole or in part, to sell Gas directly to end-use customers (otherwise known as providing merchant or sales service), then Peoples may, in its sole discretion, terminate this Exhibit, or the Master Agreement, upon at least sixty (60) days written notice to Producer.

2. **Agency**. Peoples reserves the right to act as Producer's agent to market the production dedicated hereunder while continuing to pay Producer the price set forth in this Exhibit. All other terms and conditions of the agreement shall remain in full force and effect.

3. **Title to Gas**. Producer warrants that it will have good and merchantable title to or will have the right to sell all Gas delivered under this Master Agreement and that such Gas will be free and clear of all liens, encumbrances, and adverse claims by third parties. Producer shall indemnify and hold Peoples harmless from any and all suits, claims, actions, debts, levies, accounts, damages, costs, losses, and expenses of any nature arising from or out of any adverse claims of any kind or nature asserted by any person or entity concerning such Gas, including, but not limited to any claims, suits, actions, or demands that may arise due to the nonpayment of any landowner royalties, overriding royalties, or rentals.

4. **Possession, Control, and Liability**. Title to all Gas purchased under this Master Agreement shall pass from Producer to Peoples at the Receipt Point(s). As between the Parties to this Master Agreement, Producer shall be deemed to be in possession and control of the Gas to be delivered to Peoples until

Producer delivers the Gas to Peoples at the Receipt Point(s), and Peoples shall be deemed in possession and control thereafter.

5. **Peoples' Monthly Production Statement and Payment**. On or before the last business day of each calendar Month during the term of this Master Agreement, Peoples shall: (i) send Producer a Production Statement, in either hardcopy or electronic form, reflecting the Producer Sales Volume(s) during the relevant Production Period; and (ii) make payment to Producer by check or by automated clearinghouse (ACH) direct deposit pursuant to a separate ACH direct deposit agreement.

6. **Producer's Agent**. Although the terms of this Master Agreement extend to and are binding upon all Parties hereto, their respective heirs, successors, personal representatives and assigns, in no event will Peoples remit, or be required to remit, payment to more than one (1) payee per month in exchange for the Gas produced and sold hereunder. Accordingly, Producer hereby appoints the following Agent to receive all statements and payments hereunder:

   Name: _____ (the "Agent")
   Address: _____
   _____

   The Agent is authorized to give the necessary receipts and acquaintances to Peoples and to make adjustments and settlements under this Master Agreement, and Peoples shall have no obligation with respect to, or responsibility for, the application of any Gas purchase proceeds paid to the Agent. If at any time the Agent shall resign or be discharged or shall otherwise be unable or unwilling so to act, Peoples may withhold further payment of money for purchase of Gas hereunder, without liability for interest, until Peoples is furnished by Producer with the necessary documentation (properly executed and acknowledged by all necessary parties) designating a new agent, as the case may be, to receive such payment, for all parties interested in such payment.

7. **Royalties**. In no event will Peoples be obligated to make royalty, over-riding royalty or working interest payments for Gas purchased under this Master Agreement.

8. **Regulatory Authorities**. Peoples shall use reasonable efforts to obtain the necessary regulatory approvals from the Commission to recover the prices paid to Producer for Gas purchased under this Master Agreement. If the Commission issues an order, opinion, act, regulation, or rule that prohibits Peoples from recovering as part of Peoples' Gas cost recovery proceeding the full price paid to Producer for Gas purchased under this Master Agreement, then Peoples may at any time: (i) credit the difference between the price paid for Gas under this Master Agreement and the amount permitted to be recovered through Peoples' rates against amounts due Producer; or (ii) receive a refund of such amounts directly from Producer upon request by Peoples.

9. **Taxes**. Producer shall pay or cause to be paid all taxes, fees, levies, penalties, licenses or charges imposed by any government authority ("Taxes") on or with respect to the Gas upstream of Receipt Point(s) and all Taxes at the Receipt Point(s). Peoples shall pay or cause to be paid all Taxes on or with respect to the Gas downstream of Receipt Point(s). If a party is required to remit or pay Taxes which are the other Party's responsibility hereunder, the Party responsible for such Taxes shall promptly reimburse the other Party for such Taxes. Any Party entitled to an exemption from any such Taxes or charges shall furnish the other Party any necessary documentation thereof.

10. **Service Term**. The Service Term Start Date for each individual Receipt Point shall be the latter of the _____ or the first day of the immediately succeeding Production Period in which Producer delivers Gas to Peoples at the Receipt Point. The Service Term End Date for each individual transaction shall be _____. After this initial Service Term, this Exhibit will automatically renew from month-

to-month periods unless either Producer or Peoples provides written notice of termination to the other party at least thirty (30) days prior to the expiration date. If either party terminates a Receipt Point Exhibit, the Producer will be disconnected and the Interconnect shall be abandoned unless a subsequent Exhibit is executed within thirty (30) calendar days.

11. **Receipt Point(s)**. The Receipt Point(s), Retainage Percentage, Gathering Rate and Purchase Price shall be identified in Schedule 1 to Exhibit A-__, which is attached hereto and made a part hereof.

12. **Rates**. The rates for gathering charges are subject to the applicable tariff in effect at the time of delivery into the Peoples system. These charges are subject to change. Rates for certain qualifying incremental conventional production, and for unconventional horizontal production and landfill production shall be determined by Peoples based on supporting information provided to Peoples by the producer and in accordance with the applicable tariff. The Receipt Point(s) and applicable Retainage Percentage and Gathering Rate shall be identified in Schedule 1 to Exhibit A-__, which is attached hereto and made a part hereof.

This Exhibit shall become effective upon its execution by both Peoples and Producer and shall continue in full force and effect through the end of the latest Service Term End Date set forth herein, including any extensions thereof. The obligations of Peoples to make payment hereunder for Gas which has been delivered and the obligation of Producer to indemnify Peoples, and Peoples to indemnify Producer, pursuant hereto shall survive the termination or cancellation of the Master Agreement and this Exhibit. Peoples shall have the right to terminate this Exhibit, upon thirty (30) days advance written notice to Producer, if Gas has not flowed for the previous period of twelve (12) consecutive months, or if Peoples or its designee has caused the Interconnect facilities to be disconnected or removed.

IN WITNESS WHEREOF, Peoples and Producer have duly executed this Exhibit on this _____ day of _____, 20____.

PEOPLES NATURAL GAS COMPANY LLC

By: _____

Name: _____

Title: _____

Date: _____

[PRODUCER]

By: _____

Name: _____

Title: _____

Date: _____

AGENT
Acknowledged as to the obligations of Agent only

By: _____

Name: _____

Title: _____

Date: _____

SCHEDULE 1 TO
EXHIBIT A-__ TO MASTER AGREEMENT
RECEIPT POINT(S), CONTRACT PRICE, RETAINAGE PERCENTAGE AND GATHERING RATE

Unless otherwise set forth below, the Retainage Percentage and the Gathering Rate for the following Receipts Point(s) are subject to the applicable tariff in effect at the time of Gas delivery into the Peoples' System and are subject to change.

Receipt Point(s)	Contract Price	Special Terms for Unconventional Wells
	___% Inside F.E.R.C. First of the Month Eastern Gas Appalachia Index* $/___	

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-III-002

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples' response to PIOGA-I-7. Have the Peoples companies installed any drying apparatus on the legacy TW Phillips system after acquiring it? If not, please explain why not. If so, please specify:

i. the apparatus installed;

ii. the pipelines on which it was installed;

iii. the dates of the installations; and

iv. the water vapor standards to which each apparatus dried the gas.

Answer: Yes. A unit was installed at the Kinter compressor facility, upstream of the compressor engines. Below is the requested information:

i. JW Williamson 500,000 BTU tri-Ethylene Glycol Dehy

ii. Depending on the time of year, the gas can be delivered into either the storage pool, or high pressure pipelines

iii. September 2019

iv. The unit settings are such that the gas is dried to approximately 7-8# during the winter when gas is typically delivered to pipelines, but possibly slightly higher in the 12# range during the summer when the gas is being injected to storage.

Submit Date: 3/1/2024

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-V-001

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples' response to PIOGA-III-1.b. For the period June 2011 through January 2024 on the legacy TW Philips system, please identify how many incidents of noncompliance with the system's water vapor standards were discovered.

a. how many of these incidents were resolved without shutting-in production;

b. how many of these incidents resulted in shutting-in production;

c. how many of these incidents jeopardized the safe and reliable operation of the system; and

d. how many of these incidents resulted in damage to the system or customers' facilities or gas usage appliances?

Answer: Peoples did not start to perform producer meter audits on the PG system until 2019. From 2019-2023, Peoples discovered 28 violations and 123 warnings, for a total of 151 incidents of water vapor gas quality issues.

a. All 123 warnings were resolved without shutting-in production

b. The 28 violations resulted in a temporary shut-in of production until the issues were resolved. All were turned back on.

c. While it is impossible to determine if any specific incident jeopardizes safe and reliable operations, all occurrences can contribute to corrosion problems, service interruptions for water or freeze offs, and overall general integrity of the facilities.

d. There is no way to determine if a specific incident contributed to damage to customer appliances or facilities. However, excessive water content creates customer outages due to freeze offs pipes, meters, regulators, and other equipment. In addition, specific customers with CNG fueling stations for their fleet experience outages when the water content is too high to operate their facility.

Submit Date: 3/14/2024

PIOGA Exhibit DMJ-3

PIOGA Exhibit DMJ-3 (Peoples response to PIOGA-IV-2)

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-IV-002

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples' response to PIOGA-I-2.a. Re "6.01 Gathering Obligations. . . . As set forth elsewhere in this Agreement, it is expressly understood that Peoples may restrict the flow or discontinue the taking of Gas temporarily."

a. Please identify where else in the MIMA Peoples is authorized to restrict the flow or discontinue the taking of gas temporarily.

b. Are there any restrictions on the time periods during which Peoples may restrict the flow or discontinue the taking of gas pursuant to Section 6.01 or any of the provisions identified in your response to a. above? If so, please specify the provision(s) and the associated restriction(s). If not, please explain why not for each such provision.

Answer: a. Sections 6.04, 7.02, 13.04, Appendix A 1.03, Appendix A 1.13, Appendix B 1.01, Appendix B 1.04, Appendix B 2.01

b. No specific time periods. Flows may be restricted for various operational and/or compliance reasons. And when resolved with collaboration with producers, restriction is lifted.

Submit Date: 3/11/2024

PIOGA Exhibit DMJ-4

Peoples response to PIOGA-IV-3

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-IV-003

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples' response to PIOGA-I-2.a. Re "6.04 Peoples Shut-in of Interconnect", does Peoples' authority to shut-in, or cause Producer to shut-in, (a) any Interconnect to protect the integrity and safe operation of the Peoples' System or (b) a Receipt Point for economic reasons, include lowering regulator set points and indefinitely stopping the flow of producer gas at a particular Interconnect or Receipt Point? If so, please explain why. If not, please explain why not.

Answer: Yes. Peoples may lower set points for various operational reasons such as (but not limited) to prevent line pressure buildup during low customer demands, reduce operating pressure to safely address potential hazardous leaks, isolate line segments for pipeline replacement tie-in connections, stop the flow of gas due to a line pull, etc. Peoples may also lower set points to flow additional interstate deliveries to meet pipeline and storage obligations.

Submit Date: 3/11/2024

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket No. R-2023-3044549
Office of Consumer Advocate	:	Docket No. C-2024-3045268
Office of Small Business Advocate	:	Docket No. C-2024-3045385
v.	:	
	:	
Peoples Natural Gas Company LLC	:	

DIRECT TESTIMONY
OF
JAMES V. BRANT

on behalf of the

PENNSYLVANIA INDEPENDENT
OIL & GAS ASSOCIATION

Dated: March 22, 2024

Q. PLEASE STATE YOUR NAME AND BUSINESS POSITION.

A. I am James V. Brant, Vice President of Land, Rights of Way and Facilities for the Kriebel Companies.

Q. PLEASE DESCRIBE THE KRIEBEL COMPANIES.

A. The Kriebel Companies (Kriebel) are the companies independently owned by the Kriebel family that acquire natural gas reserves in western Pennsylvania for drilling and operating traditional shallow, or conventional, gas wells. These companies are: Kriebel Minerals, Inc.; Kriebel Well Services, Inc.; Kriebel Resources Co., LLC; and Kriebel Wells. The Kriebel Companies are members of the Pennsylvania Independent Oil & Gas Association (PIOGA).

Q. WHAT DO YOU DO AT KRIEBEL AND WHAT IS YOUR WORK HISTORY AT KRIEBEL?

A. As the vice president of land and exploration activities for the Kriebel Companies, I manage leasing, rights-of way acquisitions, pipeline installation and any issues, division orders and farm taps. I am responsible for supervising the pipeline mapping of Kriebel wells and am also a member of Kriebel's marketing team, which is responsible for developing market options for new wells. I joined Kriebel in 1982 as a landman, responsible for obtaining oil and natural gas leases and pipeline rights-of-way along with meter taps on utilities pipelines. I was promoted to Director position in 1993 and VP in 2023. I am also a member of PIOGA's Market Development Committee and I participate in the Peoples-Producers Cooperation Committee (PPCC) meetings when I can.

Q. WHAT DO YOU DO AT KRIEBEL AND WHAT IS YOUR WORK HISTORY AT KRIEBEL?

A. As the VP of land and exploration activities for the Kriebel Companies, I manage leasing, rights-of way acquisitions and pipeline installation and any issues, division orders and

farm taps. I am responsible for supervising the pipeline mapping of Kriebel wells and am also a member of Kriebel's marketing team, which is responsible for developing market options for new wells. I joined Kriebel in 1982 as a landman, responsible for obtaining oil and natural gas leases and pipeline rights-of-way. I was promoted to director in 1993 and VP in 2023. I am also a member of PIOGA's Pipeline and Natural Gas Market Development Committee and a PIOGA representative on the Peoples/Equitable Gas Project Review Committee.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying on behalf of PIOGA.

Q. HAVE YOU TESTIFIED PREVIOUSLY IN ANY PUC PROCEEDINGS?

A. Yes, I provided written rebuttal testimony concerning the Office of Consumer Advocate's (OCA) proposal for separate retainage charges for the then-Peoples Natural Gas Company LLC's and then-Peoples Natural Gas Company LLC – Equitable Division's distribution and gathering facilities for the recovery of lost and unaccounted for gas (LUFG) costs in the companies' 2017 purchased gas costs cases (Docket Nos. R-2017-2586310 and R-2017-2586318).

Q. WHY ARE YOU PROVIDING TESTIMONY IN THIS PROCEEDING?

A. I am providing testimony because Kriebel delivers conventional production to the Peoples Natural Gas Company LLC (Peoples) pipeline system, and I have experience with Kriebel's operations on the pipelines of all three legacy utilities that Peoples now operates as a fully integrated system – the Peoples Natural Gas Division (PNGD), comprising the legacy Peoples and Equitable Gas utilities, and the Peoples Gas Division (PGD), the former legacy TW Phillips utility.

Q. ARE YOU FAMILIAR WITH PEOPLES' TESTIMONY IN THIS MATTER?

A Yes, I am familiar with the testimony of Micheal Huwar, Edward Palombo, Dawn Folks and Ralph Zarumba concerning the issues I am addressing in my testimony.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to support certain aspects of PIOGA's positions and proposals set forth in Dan Weaver's testimony concerning Rate AGS and the Master Interconnect and Measurement Agreement (MIMA) required for service under PNGD's existing Rate AGS and Peoples' proposed Rate AGS for the PGD. Specifically, I explain how deliveries of gas into Peoples' pipelines at pressures higher than producer regulator set points on those pipelines adversely affect the ability of those producers to deliver their gas into the Peoples system. I also explain how Peoples has responded to Kriebel's inability to deliver its conventional production in that situation.

Q. WHAT ARE PRODUCER REGULATORS?

A. Producer regulators are regulators that are on the upstream side of producers' meters that measure the gas that producers deliver into a pipeline. In this case the Peoples pipeline system. For example, the Peoples Indiana Loop pipeline has a maximum operating pressure (MAOP) of 203 psig with a producer regulator set point of 185 psig. If Peoples line pressure reaches 185 psig, the regulator in my exhibit labeled 1 and 2[1] will shut the producers gas in.

Q. WHO DETERMINES THE PRESSURE AT WHICH PRODUCER REGULATORS ARE SET?

A. Peoples.

[1] PIOGA Exhibit JVB-1 (Peoples Typical Gas Purchase Meter Set).

Q. WHAT HAPPENS TO DELIVERIES OF CONVENTIONAL PRODUCTION WHEN PEOPLES ALLOWS GAS TO FLOW ON PIPELINES WITH PRODUCER REGULATORS AT PRESSURES HIGHER THAN THE PRODUCER REGULATOR SET POINTS AT THE RECEIPT POINTS?

A. The producers' gas is shut-in.

Q. WHAT IS KRIEBEL'S EXPERIENCE WITH THIS SITUATION?

A. Early in the first quarter of 2023 our production group ask me my thoughts on why we were shut-in on the Peoples Greensburg Loop being that we were in the winter months of the year. I told them that I would look into the problem and get back to them. I knew that Peoples had adjusted regulators based on where producers were on the system. Some were set at 65 psig and some were set at 70 psig.

Q. WHAT DID YOU DO AND WHAT WAS THE RESULT OF YOUR INQUIRY?

A. I placed a call to Peoples supervisor Tom Rosso based in the Greensburg office. I explained the issue we were having and he explained to me that they were bringing gas in at the Reed Station interconnect at 72 psig so as not to lose Latrobe Steel as a customer. I explained to Tom that Peoples' bringing gas in off EQT's AVC pipeline at Reed Station at a pressure higher than our regulator set points was shutting us in. I went on and said that if Peoples was going to continue bringing gas into the gathering line at 72 psig, we should be able to raise our regulator set points. Tom was very helpful and we came up with a solution to set seasonal regulator set points, adjusting for cold weather on October 30th at 75 psig and then lowering said pressures back down on April 30$^{th.}$. The solution has worked great ever since from Kriebel's point of view, and I have not received any negative feedback from Peoples.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, but I reserve the right to address issues raised by other parties that affect PIOGA's interests.

VERIFICATION

I, James V. Brant, hereby state that:

The foregoing testimony, marked as PIOGA St. No. 3, was prepared by me or at my direction and under my direct supervision and, if at hearing I were asked the same questions set forth in this testimony, my responses would be the same as set forth in above.

The facts set forth above are true and correct to the best of my knowledge, information and belief, and that I expect to be able to prove the same at a hearing held in this matter.

I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

James V. Brant

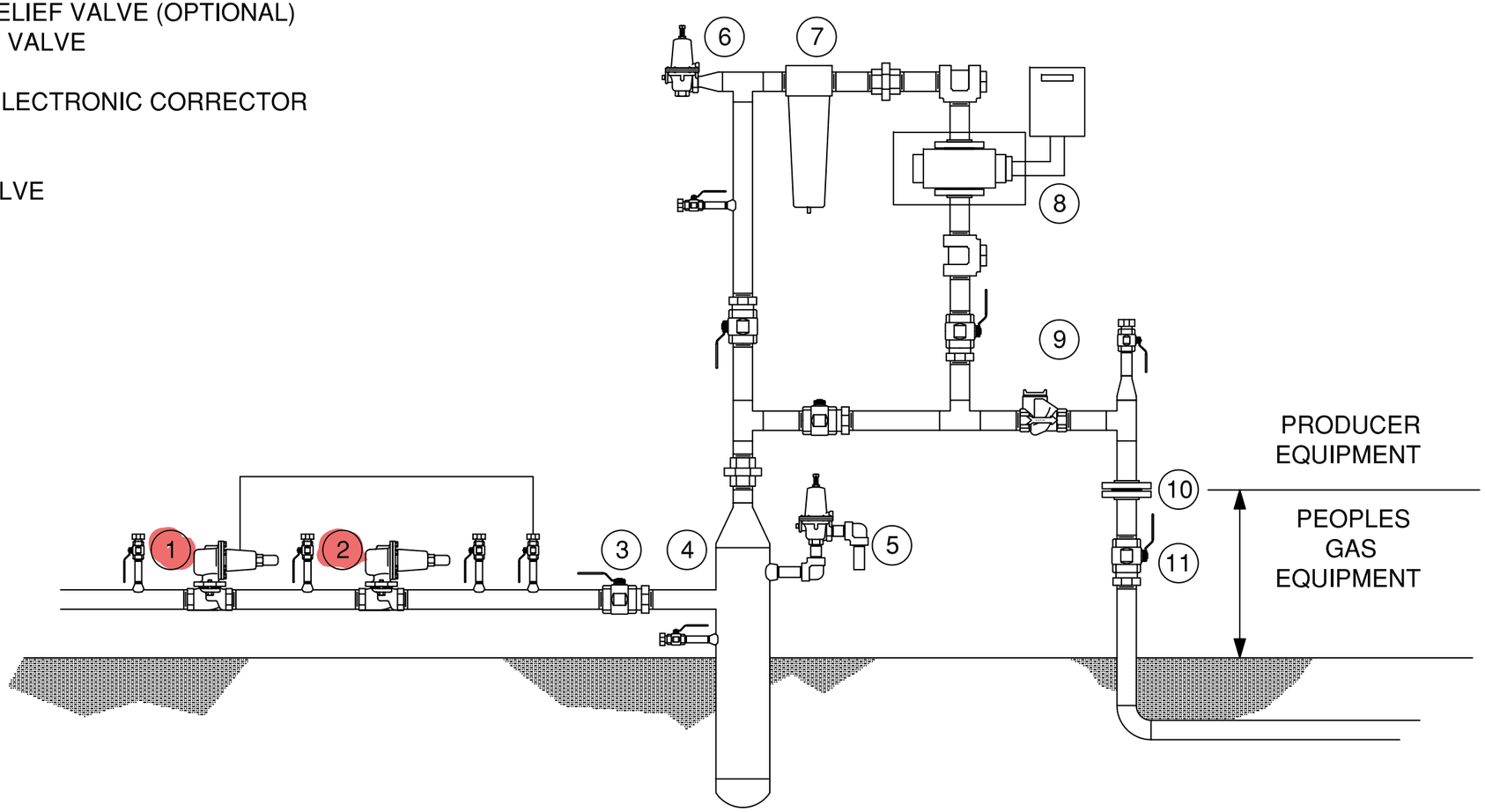
Dated: March 22, 2024

PIOGA Exhibit JVB-1

Peoples Typical Meter Set

ITEM NUMBER

1. REGULATOR OR SLAM SHUT DEVICE - PEOPLES DETERMINED SETPOINT
2. REGULATOR OR SLAM SHUT DEVICE - PEOPLES DETERMINED SETPOINT
3. ISOLATION VALVE
4. POSITIVE SHUT OFF DRIP
5. ASME CODE RELIEF VALVE (OPTIONAL)
6. TOKEN RELIEF VALVE
7. FILTER
8. METER WITH ELECTRONIC CORRECTOR
9. CHECK VALVE
10. INSULATOR
11. ISOLATION VALVE



6/2/2016 - FOR CONSTRUCTION - J.C.C.
11/2/2016 - MODIFIED OPP CONFIGURATION - J.C.C.

TYPICAL GAS PURCHASE METER SET

PEOPLES

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket No. R-2023-3044549
Office of Consumer Advocate	:	Docket No. C-2024-3045268
Office of Small Business Advocate	:	Docket No. C-2024-3045385
v.	:	
	:	
Peoples Natural Gas Company LLC	:	

SURREBUTTAL TESTIMONY
OF
D. MARC JACOBS, Jr.

on behalf of the

PENNSYLVANIA INDEPENDENT
OIL & GAS ASSOCIATION

Dated: May 3, 2024

Q. PLEASE STATE YOUR NAME AND OCCUPATION.

A. I am D. Marc Jacobs, Jr., Senior Vice President of Penneco Oil Company, Inc. (Penneco) which is a producer member of the Pennsylvania Independent Oil & Gas Association (PIOGA).

Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN THIS PROCEEDING?

A. Yes, I submitted direct testimony on behalf of PIOGA, marked as PIOGA Statement (St.) No. 2.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is address certain subjects in the rebuttal testimony of Peoples Natural Gas Company LLC (Peoples) witness Edward Palombo, Peoples St. No. 4-R, concerning the relationship between Peoples and PIOGA and our member companies, operating conditions on the Peoples system , and water vapor content standards on the Peoples integrated pipeline system.

Q. WHAT IS YOUR RESPONSE TO MR. PALOMBO'S COMMENTS CONCERNING THE RELATIONSHIP BETWEEN PEOPLES AND PIOGA?

A. I can state that PIOGA is pleased with Mr. Palombo's confirmation of Peoples' continued commitment to maintaining and enhancing the overall long-term relationship between Peoples and PIOGA and our member producers and marketers. We fully agree that both organizations recognize and understand how local production can benefit producers, Peoples and its' customers, and the proposals in my direct testimony are intended to continue our long history of collaboration and cooperation to identify opportunities where both organizations can improve our core businesses: allow producers to deliver locally produced natural gas, and allow Peoples to manage its pipeline system to provide safe, reliable gas service to customers at an affordable price.

More specifically, my direct testimony is primarily addressing three (3) concerns: 1) maximize throughput of conventional production; 2) limit restrictions that unnecessarily hamper throughput; and 3) prevent unnecessary compliance jeopardy with the Pennsylvania Department of Environmental Protection (PA DEP) related to production and plugging wells; all while still providing Peoples with the management latitude it needs to continue to operate its system safely and reliably. In this testimony I offer clarification of two of my proposals that may have been misunderstood.

But before I get to that, I want to say that PIOGA agrees that the situation concerning one of our producer member's shut-in of a production meter on the Peoples' system due to different regulator set pressures at various delivery points, discussed by Mr. Palombo, is a prime example where Peoples and PIOGA can collaborate to mutually benefit each other and system operations. I am pleased to say that a shut-in situation involving pipeline pressure experienced by my company that I described in my direct testimony (pp.7-8) is another example. Since my testimony was served, the line pressure situation has been resolved and production is flowing through that meter, reducing the pressure build-up on this old well positioned in a housing development and preserving the well's Active Status with DEP.

Q. WHAT ARE THE PROPOSALS YOU'D LIKE TO CLARIFY?

A. To remove the jeopardy of an Active Status violation with PA DEP, I proposed that the general provision in the Master Interconnect and Measurement Agreement (MIMA) concerning Peoples authority to temporarily restrict the flow or discontinue the taking of gas, Article VI, INTERCONNECTION OPERATIONS, 6.01 Gathering Obligations, include a reasonable time period restriction: "As set forth elsewhere in this Agreement, it is expressly understood that Peoples may restrict the flow or discontinue the taking of

Gas temporarily, not to exceed nine (9) consecutive months." Mr. Palombo described my proposal as suggesting "the Commission limit the duration Peoples can restrict pressures and flows to nine months" and responded that this proposal was not reasonable because "[i]t is not practical to place a limit on the duration of the restriction since it is unknown how long it may take to resolve the operating issue."

I am clarifying two points concerning Mr. Palombo's description: I am proposing that **Peoples** make this change to its MIMA, not the Commission, and my proposal is nine (9) **consecutive** months. I am not aware of the Commission in the past having been asked to approve People's MIMA or changes to it, and the requirement that the 9 months be consecutive is important. We understand that how long it may take to resolve an operating issue is unknown, but it seems that with collaboration and cooperation, how to resolve even the most serious operating issue could be determined within 9 consecutive months. It seems unreasonable for producers to have to operate with the uncertainty of an unlimited "temporary" restriction.

Another point that requires clarification involves the consequence of an Active Status violation with PA DEP. Producers understand that plugging and abandonment of wells is a typical activity of the exploration and production business, and there is immediately a future liability for plugging and abandoning a well the day it is drilled. We are not seeking to avoid these costs or asking Peoples to be a backstop for producers to avoid these costs for any reason, and certainly not by allowing a producer to deliver unauthorized low volumes or low-quality gas to maintain a well's Active Status. We ARE seeking to avoid incurring these costs unnecessarily and prematurely, that is, before a well has ceased being productive. This clarification applies equally to my proposal to

reduce the MIMA Article X, MEASUREMENT, 10.17(a) "Low Volumes for Receipt Points" 3 Dekatherms per day average to 1 to allow these low flow but still productive wells to continue flowing.

Q. WHAT IS YOUR RESPONSE TO PEOPLES' DESCRIPTION OF PIOGA'S PROPOSAL FOR A SYSTEMWIDE WATER VAPOR CONTENT STANDARD?

Mr. Palombo states that "PIOGA is proposing that the Company relax its current standards." That is not accurate. PIOGA is requesting that the current standard on the legacy Peoples Natural Gas Company system, which has been in place for nearly 20 years, be applied systemwide. I note that Peoples did not dispute my direct testimony (p.5, lines 4-15) concerning the history of the moisture curve standard on the legacy Peoples Natural Gas Company system, including that "Peoples had achieved the perfect nexus of pressure and vapor content to manage efficient tolerances while insuring maximum, economic flow from producers." Nor did Peoples dispute my testimony that the water vapor content standards on the legacy Equitable Gas system "are nearly impossible to achieve physically due to desiccant drying properties at low pressure," and that "the economics of meeting these standards with the current and projected gas prices is completely unsustainable for conventional producers."

Q. IS THERE ANYTHING ELSE IN MR. PALOMBO'S REBUTTAL TESTIMONY YOU'D LIKE TO ADDRESS?

A. Yes. Peoples also did not respond in testimony to two (2) of my proposals: 1) the addition of an advance communication requirement and opportunity to cure to MIMA Article VI, INTERCONNECTION OPERATIONS, 6.05(c) concerning Peoples' right to remove its facilities and terminate the Exhibit governing the Receipt Point for a shut-in well; and 2) changing the MIMA Appendix B, 1.07 "Annual Measurement Equipment Testing" requirement to submit inspection reports within 30 days to submission "upon request." I

am hopeful that this indicates Peoples views these as reasonable requests and does not oppose them.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes, but I reserve the right to address issues raised by other parties' testimony that affect PIOGA's interests.

VERIFICATION

I, D. Marc Jacobs, Jr. hereby state that:

The foregoing testimony, marked as PIOGA St. No. 2-S, was prepared by me or at my direction and under my direct supervision and, if at hearing I were asked the same questions set forth in this testimony, my responses would be the same as set forth above.

The facts set forth above are true and correct to the best of my knowledge, information and belief, and I expect to be able to prove the same at a hearing held in this matter.

I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

_____

D. Marc Jacobs, Jr.

Dated: May 3, 2024

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket No. R-2023-3044549
Office of Consumer Advocate	:	Docket No. C-2024-3045268
Office of Small Business Advocate	:	Docket No. C-2024-3045385
v.	:	
	:	
Peoples Natural Gas Company LLC	:	

SURREBUTTAL TESTIMONY
OF
DAN WEAVER

on behalf of the

PENNSYLVANIA INDEPENDENT
OIL & GAS ASSOCIATION

Dated: May 3, 2024

Q. PLEASE STATE YOUR NAME AND OCCUPATION.

A. I am Dan Weaver, President and Executive Director of the Pennsylvania Independent Oil & Gas Association (PIOGA).

Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN THIS PROCEEDING?

A. Yes, I submitted direct testimony on behalf of PIOGA, marked as PIOGA Statement (St.) No. 1.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is respond to the rebuttal testimony of Peoples Natural Gas Company LLC (Peoples) witness Edward Palombo, Peoples St. No. 4-R, concerning water vapor content standards, application of the Peoples Natural Gas Division (PNGD) Rate AGS to the Peoples Gas Division (PGD), and operating conditions on the Peoples system.

Q. WHAT IS PEOPLES' POSITION CONCERNING PIOGA's PROPOSAL FOR A UNIFORM WATER VAPOR CONTENT STANDARD ACROSS THE PEOPLES SYSTEM?

A. Although Peoples agrees with PIOGA that "[o]ne consistent standard is the most efficient and effective way to ensure gas quality, and reduce or prevent customer outages associated with fluids, help mitigate corrosion of pipelines and facilities, and maintain safe and reliable service to customers," Peoples opposes PIOGA's proposal for one consistent water vapor content standard across the three legacy systems that Peoples asserts it operates as an integrated pipeline system.

Q. WHAT ARE PEOPLES' WATER VAPOR CONTENT STANDARDS UNDER ITS TARIFF UNIFICATION PROPOSAL?

A. Mr. Palombo describes the current PNGD water vapor standards as a combination of the legacy Peoples Natural Gas Company and legacy Equitable Gas Company water vapor standards listed in the current consolidated PNGD Master Interconnect Measurement Agreement (MIMA), and states that Peoples "is proposing to have these standards that are currently in the MIMA also apply to producers on the PGD system so that all producers across the entire Peoples system have the same standards." (St. No. 4-R at p.3, line 15 through p.4, line 6).

Q. DOES PEOPLES' PROPOSAL RESULT IN ALL PRODUCERS ACROSS THE ENTIRE PEOPLES SYSTEM HAVING THE SAME WATER VAPOR CONTENT STANDARDS?

A. No, because as the current PNGD MIMA shows, the moisture curve applies only to the legacy Peoples Natural Gas Company system and the 40#/mmscf or 20#/mmscf water vapor standards apply only to the legacy Equitable Gas Company system.[1] Peoples initially stated that it is not proposing any change to the current water vapor standards on the PGD system, which are the same as the ALLOWABLE WATER VAPOR LEVEL (#/MMSCF) VS. LOCATION standards on the legacy Equitable Gas system.[2] But in a recent discovery response Peoples states that it agrees to apply the existing moisture curve applicable to the legacy Peoples Natural Gas Company system to the legacy Peoples Gas Division facilities, but only when producers on the PGD system are paying a gathering fee; and even though producers are paying a gathering fee on the legacy

[1] PIOGA Exhibit DW-1 (Peoples' response to PIOGA-I-6 (Peoples Division – ALLOWABLE WATER VAPOR LEVEL (#/MMSCF) VS. REGULATOR SET PRESSURE (PSI), p.7 of 8; Equitable Division - ALLOWABLE WATER VAPOR LEVEL (#/MMSCF) VS. LOCATION, p.8 of 8).

[2] PIOGA Exhibit DW-1 (Peoples' response to PIOGA-I-7 (Peoples Gas Division).

Equitable Gas system, Peoples' proposal is that he water vapor requirements "specific to the legacy Equitable facilities will remain in place."[3] So it is apparent that under both of Peoples' proposals, producers across the entire Peoples system would not have the same standards across the entire Peoples system. Under the original proposal, the legacy Peoples Natural Gas Company system would have the moisture curve standard while the legacy Equitable and legacy PGD (TWP) systems would have the different legacy Equitable Gas system standards, and under the new proposal the legacy Peoples Natural Gas Company system and legacy PGD (TWP) systems would have the moisture curve standard while the different legacy Equitable Gas system standards would remain in place. These different standards do not comport with the "the most efficient and effective way to ensure gas quality, and reduce or prevent customer outages associated with fluids, help mitigate corrosion of pipelines and facilities, and maintain safe and reliable service to customers" that, as I stated in my direct testimony,[4] PIOGA and Peoples agree upon – one consistent standard. PIOGA's proposal is the only one that does. PIOGA's proposal also avoids the problem of differential treatment for producers based upon the point of connection to Peoples' system.

Q. HOW DOES PEOPLES DESCRIBE PIOGA's PROPOSAL FOR A UNIFORM WATER VAPOR CONTENT STANDARD ACROSS THE ENTIRE PEOPLES SYSTEM?

A. The following statements in Mr. Palombo's rebuttal testimony do not accurately describe the status of PIOGA's proposed uniform moisture curve standard on the Peoples system:

[3] PIOGA Exhibit DW-9 (Peoples' response to PIOGA-X-1).

[4] PIOGA St. No. 1 at p.12, line 12 through p.13, line 3.

- The original water vapor standards and moisture curve of the legacy Peoples Natural Gas Company requested by PIOGA are not currently in effect on Peoples' system. (St. No. 4-R at p.3, lines 9-15)

- "The current PNGD water vapor standards . . . include use of the water vapor curve." (St. No. 4-R at p.3, lines 15-18)

- "PIOGA is proposing that the Company . . . revert back to legacy PNGD standards that no longer apply." (St. No. 4-R at p.4, lines 9-10)

- "The Company agrees to use of a water vapor or moisture curve to determine the allowed level of water vapor in production gas delivered to the Company facilities. The moisture curve referenced by witness Jacobs is included in the water vapor requirements in the MIMA." (St. No. 4-R at p.4, lines 13-16)

Despite contradicting each other, these statements along with Peoples new proposal in its recent discovery response show that Peoples could apply PIOGA's proposed uniform standard across its entire system without jeopardizing its ability to operate its pipeline system safely and reliably – for a price.

Q. WHAT IS PIOGA's RESPONSE TO THIS NEW PROPOSAL?

A. The new proposal shows why the language in PNGD's existing Rate AGS should be changed as PIOGA proposes. As explained in my direct testimony, the "character of service" language in PNGD's existing Rate AGS that Peoples proposes to apply to the PGD system imposes only one obligation on Peoples – to permit Appalachian producers' gas "to flow against the existing pressure in the Company's facilities" – and specifically disclaims any obligation "to lower such line pressure by compression or otherwise to accommodate receipts from local Appalachian producers." So Peoples wants producers of lower-cost, base load conventional gas that provides benefits to customers to pay additional fees for application of a water vapor content moisture curve standard that has been in place on the legacy Peoples Natural Gas Company system since 2005, without

any assurance that the additional fees would result in any change in Peoples' operation of its system to enable increased deliveries of their gas.

In Peoples' 2019 base rate case, the witness for Snyder Brothers, Inc. (SBI) explained the value to producers of the Peoples Production Enhancement Services (PES) agreements and program [also referred to as Peoples Production Enhancement Program (PEP)] I mentioned in my direct testimony:

> Peoples started its Production Enhancement Program ("PEP") in early 2002. It began as a three-year agreement with various producers on a voluntary basis, where Peoples would install and operate compression facilities to lower gathering system line pressure to allow more local gas to flow and reduce summer shut-ins. Producers who were part of this agreement paid a per thousand cubic feet ("Mcf") charge to help fund facility enhancements to Peoples' gathering system. The program was expanded in 2005 when dehydration investment was added to the types of potential PEP Program facility enhancements in order to improve local gas production quality so producers would need to do less dehydration prior to the point of entry. The program was amended and then renewed, and the PES Program is still in effect today. It is voluntary for Pennsylvania Independent Oil and Gas Association ("PIOGA") producers who choose to participate. In general, these programs helped bring more local gas into the Peoples system; however, the individual producers may not necessarily have all experienced production increases as a result of the PEP and PES Programs.[5]

Peoples' witness Joe Gregorini also explained the purpose of the PES program and the use of PES revenues:

> [T]the Peoples Division operates the PA PES program which represents a series of voluntary agreements that Peoples entered into with many, but not all, natural gas producers on the Peoples system. The voluntary PA PES program, which began in 2002, is designed to increase the flow of locally produced gas into the Peoples systems through the installation and operation of compression facilities, dehydration equipment and strategic delivery interconnections with other systems. For the HTY 12-month period ending

[5] PIOGA Exhibit DW-10, Docket No. R- 2018-3006818, SBI St. No. 1, Direct Testimony of Diane Meyer Burgraff, at p.4, line 21 through p.5, line 11. Available at https://www.puc.pa.gov/pcdocs/1758201.pdf.

September 30, 2018, Peoples recovered $7.0 million in PA PES gathering rate revenues from participating producers on the Peoples Division.[6]

Ms. Burgraff's testimony also set forth the amounts for 2012-2018 that Peoples recovered in PES program revenues and the amounts of those revenues Peoples spent on capital investments for PES program projects that would reduce gathering UFG and/or upgrade Peoples' gathering systems:

Table 1

YEAR	PES REVENUE (IN $MIL)	PES CAPITAL INVESTMENT (IN $MIL)
2012	$ 12.4	$ 0.6
2013	$11.3	$ 0.4
2014	$10.4	$ 1.2
2015	$ 9.0	$ 2.0
2016	$ 7.2	$ 0.3
2017	$ 7.2	$ 0.8
2018	$ 7.1	$ 3.0
TOTAL	$ 64.6	$ 8.3

Peoples' responses to SBI-Peoples-I-29 and SBI-Peoples-I-31 are attached to my Direct Testimony as Exhibit 1 (EDB-1).[7]

Finally, Ms. Burgraff's testimony quoted a 2015 letter from Jeffry Nehr, Vice President of Peoples Gas Supply and Business Development, showing the services producers were receiving for the PES fees they were paying:

1. Continued operation and maintenance of utility compression;
2. Negotiated water vapor standard;
3. Access to Equitrans AVC Capacity; and
4. Peoples/IOGA-PA gathering investment of $1,500,000 annually to enhance deliverability of Pennsylvania production on the Peoples system through new interconnections with the Equitable and Peoples TWP systems.

[6] PIOGA Exhibit DW-11, Docket No. R- 2018-3006818, Peoples St. No. 2, Direct Testimony of Joseph A. Gregorini, at p.20, line 21 through p.21, line 9. Available at https://www.puc.pa.gov/pcdocs/1604087.pdf.

[7] PIOGA Exhibit DW-10, SBI St. No. 1 at p.6, lines 5-16.

> Peoples' September 23, 2015, letter from Jeffry Nehr is attached to my Direct Testimony as Exhibit 2 (EDB-2).[8]

In stark contrast to the service provided to producers under PNGD Rate AGS's "only obligation" character of service provision, it is clear that the PES program provided substantial value to conventional producers.

Q. WHAT IS PEOPLES' POSITION RE PIOGA's PROPOSED RATE AGS LANGUAGE?

A. Peoples opposes any change to the language of Rate AGS and asserts that:

> Rate AGS has been developed and established so that Peoples can also provide a level of service to Appalachian producers to foster a business relationship that takes advantage of the benefits of local production gas. Gas that is produced locally presents value for producers to sustain a profitable business, while assisting Peoples in procuring natural gas for customers in a most cost-effective environment. The balance for Peoples is to accomplish this without sacrificing safe operations and reliable service. The language proposed by PIOGA aims to remove the flexibility for Peoples to make the most prudent daily operational decisions that meets this balance. To revise the language to lift the restrictions and operate the system that meets producers' expectations to freely flow conventional gas at all times, or not have the ability to adjust pressures that ensure safe operations, or shut-in meters that deliver low quality gas, is not consistent with being a prudent operator or providing reliable service.[9]

Q. WHAT IS PIOGA's RESPONSE TO PEOPLES' CLAIMS?

A. Peoples' claims are not based on an accurate description of PIOGA's proposed language or the history of Rate AGS. First of all, Peoples developed the PES program to foster a business relationship with Appalachian producers. But with all due respect to Peoples, Rate AGS was initially called "Apollo Gathering Service" and was not "developed" by the legacy Equitable Gas Company for the same purpose as Peoples' developed the PES program. As explained by Ms. Burgraff in her direct testimony in Peoples' 2019 base rate

[8] PIOGA Exhibit DW-10, SBI St. No. 1 at p.7, lines 6-18.

[9] Peoples St. No. 4-R at p.13, lines 10-21.

case, Equitable Gas first proposed Rate AGS in a 2003 proceeding seeking PUC approval to acquire the PA-North Gathering System located in its Apollo District "for use in the public service" and "so as not to allow a third party to acquire the system that could place 520 essential human needs customers at risk."[10] Ms. Burgraff explained that because Equitable Gas was in a rate moratorium until January 2006, it did not propose to raise customer rates for the increased rate base, operation and maintenance expenses, and depreciation expenses that would normally increase due to the acquisition; instead, Equitable proposed to charge producers on the pipeline system to recoup its rate base and operation and maintenance costs during the moratorium.[11] Ms. Burgraff observed that Equitable Gas reacquired gathering facilities over the period beginning in 1999 until 2004 and placed these facilities in rate base, and concluded that "[t]hese facilities were never purchased to primarily benefit producers and were instead purchased to assist in meeting Equitable's obligation to secure low cost gas for end-use customers."[12]

Secondly, PIOGA's proposed language[13] neither states nor suggests that PIOGA expects Peoples: (i) to operate its system "to freely flow conventional gas at all times;" or (ii) "not [to] have the ability to adjust pressures that ensure safe operations, or shut-in meters that deliver low quality gas." Nor would PIOGA's proposed language: (i) prevent Peoples from operating its pipeline system as described in Mr. Palombo's rebuttal testimony at p.8, line 21 through p.11, line 5; (ii) . require Peoples to allow producers' meters to operate outside the appropriate guidelines to transport local production; or (iii)

[10] PIOGA Exhibit DW-10, SBI St. No. 1 at p.2, lines 7-10.

[11] PIOGA Exhibit DW-10, SBI St. No. 1 at p.2, lines 10-15.

[12] PIOGA Exhibit DW-10, SBI St. No. 1 at p.3, line 21 through p.4, line 3.

[13] PIOGA St. No. 1 at p.7, lines 5-30.

remove the flexibility for Peoples to make the most prudent daily operational decisions to provide a level of service to Appalachian producers that fosters a business relationship that takes advantage of the benefits of local production gas, enables producers to sustain profitable businesses, assists Peoples in procuring natural gas for customers in a most cost-effective environment, and enables Peoples to accomplish all this without sacrificing safe operations and reliable service.

PIOGA served the following discovery (Set X) on Peoples concerning its claims about the effects of PIOGA's proposed language (emphasis added):

> 6. Reference Peoples Statement No. 4-R (Palombo) at p.8, line 21 through p.11, line 5. Please **identify** PIOGA's proposals that would prevent Peoples' operation of its pipeline system as described in the referenced portion of Mr. Palombo's rebuttal testimony, and **explain** how PIOGA's proposals would do so.
>
> 7. Reference Peoples Statement No. 4-R (Palombo) at p.12, lines 17-20. Please **identify** PIOGA's proposals concerning adjusting regulator set points that would require Peoples to allow producers' meters to operate outside the appropriate guidelines to transport local production.
>
> 8. Reference Peoples Statement No. 4-R (Palombo) at p.13, lines 13-18. Please **identify** the language proposed by PIOGA that would remove the flexibility for Peoples to make the most prudent daily operational decisions that meets the balance described in the referenced testimony, and **explain** how PIOGA's language would do so.
>
> 9. Reference Peoples Statement No. 4-R (Palombo) at p.13, lines 18-21. Please **identify** the language proposed by PIOGA that would remove Peoples' ability (a) to adjust pressures that ensure safe operations or (b) to shut-in meters that deliver low quality gas, and **explain** how PIOGA's language would do so.

The instructions for Set X included the following:

> (a) As used herein, "describe", "explain", "identify" and "specify" mean to set forth fully, in detail and unambiguously, each and every fact of which Peoples has knowledge relevant to the answer called for by the request.[14]

[14] PIOGA Exhibit DW-12 (PIOGA Set X to Peoples).

Peoples' response to all four of these discovery requests references: (i) my proposed Rate AGS language that, in Peoples view, provides "when and why Peoples can restrict the flow of gas or lower line pressures;" (ii) PIOGA witness Marc Jacobs' nine (9) *consecutive* month restriction concerning temporary flow restrictions and meter shut-ins for adjustments to operating pressures; and (iii) Mr. Jacobs' provision for "Peoples to make best efforts to limit flows of transmission or pipeline supplemental volumes to give conventional production flow-preference."[15] Peoples asserts that (i) and (ii) above "clearly reduce the ability for Peoples to make daily, weekly, or monthly decisions on how to operate its system most prudently and safely and provide reliable service to rate paying customers," but does not explain how these provisions do so. Likewise, Peoples asserts that (iii) above "limits Peoples from making quick and appropriate decisions on the most optimal blend of supplies to meet customer demands," but does not explain how it does so.

Thirdly, my proposed Rate AGS language is based upon terms and conditions in Section II, BUYER'S PURCHASE OBLIGATION; GAS VOLUME, Nos. 1 & 2, of the Rate GS-Gathering Service Gas Purchase Agreement (GPA) used by the PGD prior to its adoption of a MIMA in March 2017,[16] and adopts *verbatim* the 2nd paragraph of the "Character of Service" section of existing PNGD Rate AGS. As I note above, Peoples had the opportunity to explain in discovery responses how any of these proposed provisions would adversely affect Peoples' ability to operate its system in the manner described in Mr. Palombo's rebuttal testimony, but Peoples did not do so.

[15] PIOGA Exhibit DW-13 (Peoples response to PIOGA-X-6).

[16] PIOGA Exhibit DW-4 (Peoples response to PIOGA-I-2.c. at pp. 5 & 6 of 60).

Finally, Peoples response to the discovery requests quoted above states that "Peoples has contractual obligations with interstate pipelines that may impact deliveries at various points across the system, which have to factor in to where and how much gas needs to be delivered."[17] Peoples' allowing higher pressure gas to flow on its gathering pipelines because of contractual obligations with interstate pipelines, rather than to maintain the integrity of its pipeline system, diminishes the value of the gathering service by placing a higher value on these contractual obligations than on deliveries of lower-cost, base load conventional gas that provides benefits to customers. We agree with Mr. Palombo's statements that Peoples' determining "the optimal regulator set pressure that can maximize the local production AND maintain system operations at safe and reliable levels" is a challenge, and that Peoples' adjusting regulator set pressures for operational reasons to maintain system operations at safe and reliable levels, or seasonally, is unavoidable. And we agree that this does not diminish the value of the gathering service, but not because the "service is still provided to all other producer meters that are operating within the appropriate guidelines to transport local production" as Mr. Palombo asserts. In these situations, lower regulator set points are appropriate, but lower regulator set points are not appropriate for producers whose production is shut-in because Peoples is allowing higher pressure gas to flow on its gathering pipelines because of contractual obligations with interstate pipelines.

[17] PIOGA Exhibit DW-13 (Peoples response to PIOGA-X-6).

Q. WHAT IS PIOGA'S RESPONSE TO PEOPLES' REASONS FOR OPPOSING PIOGA'S RATIONALE AGAINST APPICATION OF PNGD RATE AGS TO THE PGD SYSTEM?

A. Peoples' asserts that PNGD's Rate AGS gathering fee is not based upon the classification of pipelines as gathering in accordance with the federal Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) regulations or the Federal Energy Regulatory Commission (FERC) natural gas chart of accounts. This assertion ignores the history of Rate AGS on the legacy Equitable Gas Company system. It also ignores Peoples' justification for imposition of PNGD's Rate AGS gathering fee in Peoples 2019 base rate case and the producer retainage charges in Peoples' 2018 PGC proceedings, and for the PUC's approval of these fees and charges – producers' use of the gathering system and contribution to Peoples' recovery of gathering system costs. Ms. Burgraff's direct testimony in Peoples 2019 base rate case set forth the history of the legacy Equitable Gas Company's Rate AGS, which is the basis for PNGD's Rate AGS. As of the late 1990s the legacy Equitable Gas Company owned no gathering facilities because it had transferred all of its gathering facilities to other affiliates in years prior to that time period; Equitable began to reacquire gathering facilities in 1999 with the Carnegie Gas acquisition, then followed with the PA-North Gathering system and then acquired the Crooked Creek gathering system.[18] As stated above, the legacy Equitable Gas Company first proposed Rate AGS in a 2003 proceeding seeking PUC approval to acquire the PA-North Gathering System. Ms. Burgraff further explained that in Equitable's 2004 PGC proceeding at Docket No. R-00049154, Rate AGS — Apollo Gathering Service — became Rate AGS — Appalachian Gathering Service and the

[18] PIOGA Exhibit DW-10, SBI St. No. 1 at p.2, lines 18-19; 21-22; p.3, lines 5-8; and p.4, lines4-6.

Availability clause expanded the applicability of the rate from the Apollo District gathering pipelines to pipelines throughout Equitable's entire service territory. In Equitable's 2008 base rate case at Docket No. R-2008-2029325, Equitable's cost-of-service study showed all non-gas costs of the gathering system as assigned to producers.[19] In addition to the facts set forth in my direct testimony concerning Peoples' two 2018 purchased gas costs (PGC) proceedings,[20] Peoples' direct testimony and briefs in those proceedings clearly relied upon the classification of the Peoples-Peoples Division and Peoples-Equitable Division pipelines as gathering per the DOT/PHMSA classification of pipelines and the FERC natural gas chart of accounts classification to support its producer retainage charge:

> **Direct Testimony**
> Peoples Natural Gas is continuously challenged to reduce UFG on its pipelines that gather gas from local production wells. The gathering system comprises approximately 2,100 miles of older, low pressure pipe, much of which has provided service for producers and customers for many years and is nearing the end of its useful life. The customers are generally scattered across the gathering system in relatively rural areas and there are very few areas where there are high concentrations of customers. Since the Commission adopted regulations requiring industry-wide UFG reporting, when possible by pipeline system function, beginning in 2014, Peoples Natural Gas has segmented the loss attributable to the gathering pipelines from the loss attributable to other functional pipeline systems.
>
> The Company is proposing to charge conventional gas producers a retainage rate of 2% for gas gathered into the system. This would be the beginning of a long-term process of rationalizing the costs and the recovery of the costs of systems that were constructed primarily for the purpose of gathering gas rather than serving end use customers.[21]

[19] PIOGA Exhibit DW-10, SBI St. No. 1 at p.3, lines 3-8.

[20] PIOGA St. No.. 1 at p.8, lines 3-13.

[21] Docket No. R-2018-2645278, Peoples-Peoples Division, Peoples Natural Gas St. No. 1, Direct Testimony of Lynda W. Petrichevich, at p.9, line:23 through p.10, line 9 and p.13, lines13-17. Available at https://www.puc.pa.gov/pcdocs/1560820.pdf.

Main Brief[22]

Conventional gas producers should pay at least a portion of the UFG on the gathering systems for several reasons. First and foremost, conventional producers are the primary beneficiaries of the gathering system because it often provides the only way to move their gas to market. (pp.5-6)

[I]t is completely reasonable that the Company adheres to and applies the Commission's and PHMSA's definitions to classify pipelines. (p.18)

[T]he Company's classification of pipelines based on their primary function is consistent with FERC practice. (p.18)

The classification of pipelines should be driven by the definitions and analyses used by the Commission, PHMSA, and FERC. (p.20)

Likewise, Peoples' direct testimony in its 2019 base rate case also relied upon classification of the pipelines as gathering per PHMSA and FERC regulations to support its Rate AGS gathering fee:

Producers benefit from gathering lines because, in most cases, it is their only means to get their gas production to a market.[23]

Gathering system costs are incurred to provide a market for supplies produced by local wells and to provide cost effective gas supplies to customers. In my opinion, it is appropriate for both producers and customers to share in paying these costs.[24]

The gathering system lowers the amount of interstate pipeline capacity that is required to serve customers and lowers pipeline demand costs recovered from all sales and transportation customers. In addition, customers served directly from the gathering system receive their service from gathering pipelines and not distribution pipelines. Finally, some of Peoples Natural Gas' distribution areas are served only by local gas from the gathering systems.[25]

Producers derive substantial benefit from the gathering facilities as it is their source to a market.[26]

[22] Docket No. R-2018-2645278, Peoples-Peoples Division, Peoples Main Brief, available at https://www.puc.pa.gov/pcdocs/1572351.pdf.

[23] PIOGA Exhibit DW-11, Peoples St. No. 2 at p.16, lines 8-9.

[24] PIOGA Exhibit DW-11, Peoples St. No. 2 at p.18, lines 11-13.

[25] PIOGA Exhibit DW-11, Peoples St. No. 2 at p.18, lines 18-23.

[26] PIOGA Exhibit DW-11, Peoples St. No. 2 at p.19, lines 1-2.

Peoples currently charges amounts to producers for gathering system costs through gathering fees on its Equitable Division and through the PA Production Enhancement Service ("PA PES") program fees on the Peoples Division.[27]

Q. WHAT IS THE SIGNIFICANCE OF THE APPLICATION OF THE FEE TO DELIVERIES INTO DISTRIBUTION AND TRANSMISSION PIPELINES?

A. Peoples' assertion that "the gathering fee is collected regardless if the pipeline is classified under DOT or FERC as distribution, transmission, or gathering has no significance. Peoples has emphasized that the vast majority of conventional gas is delivered into the gathering systems and, as shown above, the gathering fee as well as the producer retainage charges are not used for producers to contribute to the recovery of the costs of the distribution and transmission systems. When asked if PNGD pipelines not classified under DOT or FERC as gathering are included in Peoples' overall cost of gathering service, Peoples responded "no."[28] Mr. Palombo's statement that "[t]he AGS service and associated gathering fees are applied at any delivery point to help recover some of the costs to operate and maintain pipelines and facilities that receive and transport local production gas" is not an accurate statement of Peoples' justification for the fees as shown above because it omits any mention of "gathering" pipelines and facilities. His statement that "Peoples believes this is a fair and equitable sharing between customers and producers for recovery of total gathering cost of service" is an accurate statement of Peoples' recovery of costs to which the gathering fees contribute.

[27] PIOGA Exhibit DW-11, Peoples St. No. 2 at p.19, line 22 through p. 20, line 1.

[28] PIOGA Exhibit DW-14 (Peoples response to PIOGA-X-4).

Q. WHAT IS THE SIGNIFICANCE OF THE RATE INCREASE PROPOSED IN THIS CASE WITH RESPECT TO THE APPLICATION OF THE PNGD RATE AGS GATHERING FEE TO THE PGD SYSTEM?

A. It has no significance because the gathering fee is not a cost of service-based rate. Mr. Palombo's statement that "[u]nder PIOGA's alternative proposal [for a reduced gathering (PNGD system) or transportation (PGD system) fee], producers would not bear any of the rate increase proposed in this case" and Peoples belief "that producers should pay some portion of rising costs that drive this proceeding" are simply not applicable. When asked to identify the portions of the (a) rate increase proposed in this proceeding and (b) rising costs that drive this proceeding that are attributable to producers are included in the total gathering cost of service, Peoples simply referred to the increased cost of gathering service in this case compared to the cost of gathering service in the 2019 base rate case.[29] While this information is not fully responsive to the questions, the increase could be explained by the inclusion of the PGD pipelines that are not classified as gathering but that Peoples asserts "function more like gathering than distribution." But if pipelines "function more like gathering than distribution" they should be classified as gathering under the "modified primary function test," which Peoples argued in its 2018 PGC cases is determinative, as stated above.

Q. WHAT IS THE SIGNIFICANCE SOME LEGACY TW PHILLIPS PIPELINES HAVING BEEN CLASSIFIED AS GATHERING IN THE PAST?

A. In response to my testimony that the PGD system can't have a "gathering" fee when it has no pipelines classified as gathering per DOT and FERC regulations, Peoples states that the "PGD (legacy TW Phillips) did in fact have DOT classified gathering and

[29] PIOGA Exhibit DW-15 (Peoples response to PIOGA-X-5).

production pipelines but reclassified them to distribution as part of segmenting business functions prior to their acquisition by Peoples." This reclassification occurred in 2001,[30] and Peoples acquired the legacy TW Phillips system in 2011. That the PGD system had some pipelines classified as gathering in the past provides no support for application of PNGD's Rate AGS to the PGD system because these pipelines are not now classified as gathering. Peoples had over 12 years to reclassify these pipelines as gathering if indeed they "function more like gathering than distribution," but Peoples did not do so. Finally, Mr. Palombo's statement that the pipelines reclassified from gathering to distribution "have been discussed in testimony and identified as the pipelines that 'function more like gathering than distribution' in receiving and transporting local production gas" is confusing in view of a Peoples discovery response. When asked if PGD pipelines that were reclassified by TW Phillips from gathering to distribution prior to Peoples' acquisition of the legacy TW Phillips system are included in Peoples' overall cost of gathering service, Peoples responded "no."[31]

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes, but I reserve the right to address issues raised by other parties that affect PIOGA's interests.

[30] PIOGA Exhibit DW-16 (Peoples response to PIOGA-X-3-Revised).

[31] PIOGA Exhibit DW-14 (Peoples response to PIOGA-X-4).

VERIFICATION

I, Dan Weaver, hereby state that:

The foregoing testimony, marked as PIOGA St. No. 1-S, was prepared by me or at my direction and under my direct supervision and, if at hearing I were asked the same questions set forth in this testimony, my responses would be the same as set forth above.

The facts set forth above are true and correct to the best of my knowledge, information and belief, and I expect to be able to prove the same at a hearing held in this matter.

I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Dan Weaver

Dated: May 3, 2024

PIOGA Exhibit DW-9

Peoples' response to PIOGA-X-1

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-X-001

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples Statement No. 4-R (Palombo) at p.4, lines 13-16. Does Peoples agree to the use of a water vapor or moisture curve to determine the allowed level of water vapor in production gas delivered to all of the Company facilities? If not, please explain why not.

Answer: Peoples agrees to use the existing moisture curve in the PNG MIMA for production on the legacy Peoples Natural Gas Division (PNGD) facilities, and will apply it to the legacy Peoples Gas Divisions (PGD or TWP) facilities once PGD is paying a gathering fee. The water vapor requirements in the current PNGD MIMA specific to the legacy Equitable facilities will remain in place.

Submit Date: 4/29/2024

PIOGA Exhibit DW-10

Docket No. R- 2018-3006818, SBI St. No. 1
Direct Testimony of Diane Meyer Burgraff

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**R-2018-3006818**
	:	
PEOPLES NATURAL GAS COMPANY, LLC	:	

DIRECT TESTIMONY

OF

DIANE MEYER BURGRAFF

ON BEHALF OF

SNYDER BROTHERS, INC ("SBI")

APRIL 29, 2019

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**R-2018-3006818**
	:	
PEOPLES NATURAL GAS COMPANY, LLC	:	

DIRECT TESTIMONY OF DIANE MEYER BURGRAFF
ON BEHALF OF
SNYDER BROTHERS, INC ("SBI")

I. WITNESS BACKGROUND

Q. PLEASE STATE YOU NAME AND BUSINESS ADDRESS.

A. My name is Diane Meyer Burgraff. My address is 37 Whittaker's Mill Road, Williamsburg, VA 23185.

Q. PLEASE DESCRIBE BY WHOM YOU ARE EMPLOYED AND IN WHAT CAPACITY.

A. I am an independent consultant employed by Snyder Brothers, Inc., VEC Energy LLC, and Snyder Armclar Gas Co., LP (collectively, "SBI").

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE

A. Please see Attachment A to this testimony.

Q. PLEASE DESCRIBE THE PURPOSE OF THIS TESTIMONY.

A. The purpose of this testimony is to explain the reasons why Rate AGS as proposed should be rejected and, in the alternative, to make recommendations as to how Rate AGS should be changed if approval for some form of Rate AGS is to occur.

II. HISTORY OF RATE AGS

Q. PLEASE DESCRIBE THE HISTORY OF RATE AGS.

A. Rate AGS, initially called Apollo Gathering Service, was proposed for the first time in Equitable Gas Company's ("Equitable" or "Equitable Division") April 1, 2003 Application filing at Docket No. G-00031009, for approval to acquire gathering facilities in Armstrong and Indiana Counties from its affiliate, Equitable Field Services. Equitable referred to the facilities as the PA-North Gathering System, even though Equitable was serving end-use customers from the system. Equitable explained in the Application filing that the acquisition was (a) for use in the public service and (b) was needed so as not to allow a third party to acquire the system that could place 520 essential human needs customers at risk. Equitable did not propose to raise rates to its customers due to the acquisition but stated that normally rate base, operation and maintenance expenses, and depreciation expenses would increase. Equitable was in a rate moratorium until January 2006, so it could not raise base rates. Instead, it proposed to charge producers along the pipeline system route (which was limited to its Apollo District) to recoup its rate base and operation and maintenance costs.

The rate, Apollo Gathering Service, changed dramatically by way of a one-paragraph mention at the very end of the testimony of Mr. Narkevic in 1307(f) testimony in 2004 at Docket No. R-00049154, when Rate AGS—Apollo Gathering Service—became Rate AGS—Appalachian Gathering Service. While described in testimony of Mr. Narkevic as a minor wording change to the Rate AGS tariff page, in reality the wording change was not minor at all. The Availability clause on the tariff page expanded the applicability of the rate from the Apollo District to Equitable's entire service territory, and the rate schedule was renamed. Thus, Rate AGS—Appalachian Gathering Service—was born in a proceeding

where no party affected by the wording change and the expanded applicability of the rate was a party to the case, namely producers.

Prior to that 2004 Equitable 1307(f) case, Equitable owned no gathering facilities as of the late 1990's because it had transferred all of its gathering facilities to other affiliates in years prior to that time period. Equitable began to reacquire gathering facilities in 1999 with the Carnegie Gas acquisition, then followed with the aforementioned PA-North Gathering system in 2001, and then acquired the Crooked Creek gathering system sometime between 2003-2006. In Equitable's 2004 1307(f) case at Docket No. R-00049154, Equitable proposed the six-year amortization of $6.6 million related to five capital improvement projects for their newly acquired gathering system and to recover those costs from system supply customers as gas-related demand costs. This project was called the Northern Asset Optimization Project or "NAOP." This was proposed in the same proceeding when Mr. Narkevic was expanding Rate AGS. Mr. Quinn, for Equitable in that proceeding, stated in his Rebuttal Testimony that "the vast majority of the benefits associated with the project (the NAOP) will accrue to PGC ratepayers." Rebuttal Testimony of John M. Quinn, Page 10, Lines 1-2, *Pennsylvania Public Utility Commission, et al. v. Equitable Gas Company* at Docket Nos. R-00049154 and R-00049154C0001 (June 21, 2004). All of the governmental parties were opposed to recovery of the NAOP non-gas costs through gas cost rates in that case and believed that all of those costs should be in base rates and recovered from end-use customers. None of the governmental parties mentioned producers as a party that should pay for the NAOP investment. Over the period beginning in 1999 until 2004, Equitable acquired gathering facilities. Why would a public utility buy gathering facilities to primarily benefit producers and place these facilities in rate base? The simple answer is they did not buy these systems

to benefit producers. These facilities were never purchased to primarily benefit producers and were instead purchased to assist in meeting Equitable's obligation to secure low cost gas for end-use customers.

Equitable continued Rate AGS in its tariff when it filed and settled its 2008 base rate case at Docket No. R-2008-2029325. In Equitable's 2008 base rate case, Equitable's cost-of-service study showed all non-gas costs of the gathering system as assigned to producers. In a span of four years, Equitable had completely changed its story about who was responsible for gathering system costs.

Thus, Rate AGS, which began the practice of charging producers for non-gas costs associated with a gathering system, came to be during a rate moratorium as a way to enable Equitable to recover its costs of acquiring a gathering system serving 520 residential customers in the Apollo District, who should have been responsible for the costs. It took hold in a case where no producer was represented. It lives on because of settlements. It has never been a rate litigated to conclusion in any base rate case and has stayed in Equitable's tariff simply because of a settlement among parties in its 2008 base rate case.

III. HISTORY OF THE PRODUCTION ENHANCEMENT SERVICES PROGRAM

Q. WHILE EQUITABLE WAS EXPANDING RATE AGS, WHAT WAS PEOPLES DOING IN TERMS OF ITS GATHERING SYSTEM COST RECOVERY?

A. Peoples Gas (prior to becoming Peoples Division) was busy developing its Production Enhancement Services Program ("PES") at nearly the same time as Equitable was expanding Rate AGS. Peoples started its Production Enhancement Program ("PEP") in early 2002. It began as a three-year agreement with various producers on a voluntary basis, where Peoples would install and operate compression facilities to lower gathering system line pressure to

allow more local gas to flow and reduce summer shut-ins. Producers who were part of this agreement paid a per thousand cubic feet ("Mcf") charge to help fund facility enhancements to Peoples' gathering system. The program was expanded in 2005 when dehydration investment was added to the types of potential PEP Program facility enhancements in order to improve local gas production quality so producers would need to do less dehydration prior to the point of entry. The program was amended and then renewed, and the PES Program is still in effect today. It is voluntary for Pennsylvania Independent Oil and Gas Association ("PIOGA") producers who choose to participate. In general, these programs helped bring more local gas into the Peoples system; however, the individual producers may not necessarily have all experienced production increases as a result of the PEP and PES Programs.

Q. WAS THE PES PROGRAM ADDRESSED IN THE SETTLEMENT OF PEOPLES 2012 BASE RATE CASE AT DOCKET NO. R-2012-2285985?

A. Yes. The settlement of the Peoples' 2012 base rate case at Docket No. R-2012-2285985 addressed the PES Program as follows: Peoples was to utilize $3.8 million of the $7.6 million of PES Program revenues in excess of costs of providing Production Enhancement Services to reduce unaccounted for gas ("UFG") on Peoples' gathering system or for upgrades to Peoples' gathering system. The remaining $3.8 million of PES Program revenue in excess of costs was to be used to offset sales and transportation rates for end-use customers.

Q. HAS PEOPLES REDUCED UNACCOUNTED FOR GAS ON ITS GATHERING SYSTEM IN THE LAST SEVERAL YEARS?

A. Peoples still has an unaccounted for gas percentage on its combined gathering system of 8.9%, so it has not made much headway in that regard. Peoples' response to SBI-Peoples-I-

18 is attached to my Direct Testimony as Exhibit 1 (EDB-1). Peoples has had a UFG percentage on the gathering facilities of close to 9% or over 9% since 2016, and it is not certain whether they separately measured gathering system UFG prior to that time, but high levels of gathering UFG have been an issue for Peoples for many years.

Q. WHAT AMOUNTS HAS PEOPLES RECOVERED IN PES PROGRAM REVENUES OVER THE YEARS SINCE ITS INCEPTION, AND WHAT HAS IT SPENT ON CAPITAL INVESTMENTS FOR PES PROGRAM PROJECTS THAT WOULD EITHER REDUCE GATHERING UFG AND/OR UPGRADE ITS GATHERING SYSTEM?

A. Peoples was only able to provide information from the years 2012-2018 for both revenue and capital investment, as shown below. Information prior to 2012 was not readily available, according to Peoples.

Table 1

YEAR	PES REVENUE (IN $MIL)	PES CAPITAL INVESTMENT (IN $MIL)
2012	$ 12.4	$ 0.6
2013	$11.3	$ 0.4
2014	$10.4	$ 1.2
2015	$ 9.0	$ 2.0
2016	$ 7.2	$ 0.3
2017	$ 7.2	$ 0.8
2018	$ 7.1	$ 3.0
TOTAL	$ 64.6	$ 8.3

Peoples' responses to SBI-Peoples-I-29 and SBI-Peoples-I-31 are attached to my Direct Testimony as Exhibit 1 (EDB-1).

Q. DID PEOPLES SPEND ANY OF THE PES DOLLARS ON OPERATION AND MAINTENANCE EXPENSES?

A. In response to discovery at SBI-Peoples-I-31 (EDB-1), Peoples stated that some examples of expense items using PES Program revenues include compression rentals, engine overhauls, pipeline pigging, and field equipment communications.

Q. WHAT ARE PRODUCERS GETTING IN EXCHANGE FOR THE PES FEES THEY ARE PAYING?

A. In Peoples' September 23, 2015, letter from Jeffry Nehr, Vice President of Peoples Gas Supply and Business Development, the following services were to be continued from the prior PES Agreement:

1. Continued operation and maintenance of utility compression;
2. Negotiated water vapor standard;
3. Access to Equitrans AVC Capacity; and
4. Peoples/IOGA-PA gathering investment of $1,500,000 annually to enhance deliverability of Pennsylvania production on the Peoples system through new interconnections with the Equitable and Peoples TWP systems.

Peoples' September 23, 2015, letter from Jeffry Nehr is attached to my Direct Testimony as Exhibit 2 (EDB-2).

Q. LOOKING AT TABLE 1 ABOVE SHOWING PES PRORGAM REVENUES AND CAPITAL INVESTMENT, IS IT FAIR TO SAY THAT THE PES PROGRAM WAS BENEFICIAL TO PEOPLES MORE SO THAN FOR PRODUCERS OR END-USE CUSTOMERS?

A. Yes. The PES Program clearly generated revenue well in excess of capital expenditures (even factoring in a rate design credit to other customer classes), and so it appears that it benefited Peoples' owners more than it did the producers or end-use customers.

Q. DID PEOPLES OBTAIN PAPUC APPROVAL TO CHARGE PRODUCERS FOR RETAINAGE ON THE GATHERING SYSTEM IN PEOPLES' 2018 1307(F) CASE?

A. Yes. Ironically, after all of these years of Peoples collecting a sizeable amount of PES Program revenue from producers with the stated goal of the PES settlement in the 2012 base rate case to use funds, specifically $3.8 million, to improve UFG on the gathering system and upgrade the gathering system, Peoples prevailed in the 2018 1307(f) proceeding at Docket No. R-2018-264527 in its argument that producers should now help fund the UFG problem on the Peoples gathering system through an additional approach: retainage. Rate GS (Gathering Service) was approved by the PAPUC as an addition to Peoples' tariff in the fall of 2018, at the conclusion of Peoples' 2018 1307(f) case, to allow the recovery of 2% retainage on conventional well production entering the Peoples system through a gathering or distribution line. Peoples Gas Division's currently approved Rate GS, Equitable Gas Division's currently approved Rate AGS, and the proposed Rate AGS combining the Peoples and Equitable Divisions are attached to my Direct Testimony as Exhibit 3 (EDB-3).

It seems that Peoples continues to look to others to blame and to charge for its high gathering system UFG. It should be Peoples owners, and not the producers, absorbing at least 2% of

the retainage on the gathering system as their share of the responsibility for the ongoing high levels of UFG that are still not addressed.

IV. PEOPLES PROPOSAL IN THIS PROCEEDING

Q. PLEASE DESCRIBE PEOPLES CURRENT APPROACH FOR RECOVERY OF THE NON-GAS COSTS RELATED TO THE GATHERING SYSTEM.

A. Currently Peoples (Peoples Division and Equitable Division) have a variety of ways they are recovering non-gas costs related to gathering facilities. For the Equitable Division, there is in place Rate AGS (Appalachian Gathering Service, attached hereto as Exhibit 3 (EDB-3)), a fully negotiated rate, which recovers all or some of Equitable Division's non-gas gathering system costs. For the Peoples Division, there are two methods for recovery of gathering system non-gas costs. First, the PES Program recovers from some producers, on a voluntary basis, a portion of non-gas gathering system costs. PES is not a tariffed service. It is an agreement with a portion of the PIOGA-member producers. Second, there are sales service and transportation rates on the Peoples Division system that recover the remaining portion of non-gas gathering system costs. Note that Peoples' currently approved Rate GS (attached hereto as Exhibit 3 (EDB-3)) is only for recovery of retainage and not non-gas costs.

Q. WHAT IS PEOPLES PROPOSING IN THIS PROCEEDING WITH RESPECT TO GATHERING SYSTEM NON-GAS COST RECOVERY?

A. Peoples is proposing a two-pronged combined Rate AGS to be effective for both the Peoples and Equitable Divisions. The first prong, Rate AGS applicable to both Peoples and Equitable Division conventional gas production, has a minimum and a maximum rate and is indexed to gas supply prices. The second prong of the Rate AGS proposal is applicable to production from non-conventional sources (Marcellus shale and Utica shale gas and landfill gas). For

gas from unconventional sources, Peoples is proposing a fully negotiated rate with no maximum or minimum. This proposed two-prong Rate AGS will, as proposed, recover approximately one-third of the non-gas gathering system costs from unconventional producers at a negotiated rate and from conventional producers at the proposed minimum rate. Those non-gas costs, not recovered through Rate AGS, were allocated to sales and transportation customers. Those costs are about two-thirds of the non-gas costs of the gathering system. The PES agreement for the Peoples Division is proposed to be eliminated.

Q. SINCE THE EQUITABLE DIVISION ALREADY HAD IN PLACE A RATE AGS RECOVERING GATHERING SYSTEM NON-GAS COSTS, IS IT PEOPLES PROPOSAL IN THIS CASE TO UTILIIZE THE EXISTING TARIFF LANGUAGE ALREADY IN THE EQUITABLE RATE AGS TARIFF AND MAKE IT APPLICABLE TO ALL PEOPLES AND EQUITABLE PRODUCERS?

A. No. The existing Rate AGS rate (attached hereto as Exhibit 3 (EDB-3)) in the Equitable tariff is applicable to gas delivered into the gathering system or the distribution system. Equitable's tariff does not address gas coming to the transmission system. Gathering and distribution systems are generally lower pressure systems and typically the gas entering those systems would be from conventional production wells. Peoples new proposed Rate AGS (attached hereto as Exhibit 3 (EDB-3)) is expanded to include all Pennsylvania gas including non-conventional supplies entering any delivery point on its pipeline system including transmission lines. Also, unlike the existing Rate AGS for Equitable, which is a fully negotiable rate, the new proposed Rate AGS differs in other ways such as it has a maximum and minimum rate for conventional supplies and an indexing mechanism.

V. COST ALLOCATION

Q. HAS THE PAPUC EVER APPROVED RECOVERY OF NON-GAS GATHERING SYSTEM COSTS FROM ANY ENTITY, OTHER THAN END-USE CUSTOMERS, THROUGH A FINAL ORDER WHERE THE ISSUE WAS LITIGATED?

A. No, not to my knowledge. Mr. Gregorini discusses in Peoples Statement No. 2 on Page 37, Lines 11-13, that the Commission approved a gathering service tariff and fee structure for Equitable before its merger with Peoples. The approval of the gathering tariff by the Commission was as part of a settlement among the parties, which involved a negotiation and was not as a result of a fully litigated case as to Rate AGS. I am not aware of any utilities in Pennsylvania other than the Peoples Companies (Peoples, Equitable, and TW Phillips) that have gathering investments in local distribution company ("LDC") rate base.

If the PAPUC were to order rate base cost recovery from producers in this proceeding, that decision would serve to redefine the word "public" in public utility service to include producers as part of the public and redefine rate base as property used and useful in the public service including service to producers. Producers would become public utility customers.

Q. IS PEOPLES' COST ALLOCATION TO CUSTOMER CLASSES CONSISTENT WITH ITS COST ALLOCATION IN PRIOR PEOPLES AND EQUITABLE BASE RATE CASES WHEN MR. FEINGOLD SERVED AS A WITNESS?

A. No. Mr. Feingold has served as a Peoples witness on cost allocation studies dating back to the 1980s and served as the cost allocation and rate design witness in Peoples' 1983 base rate case at Docket No. R-832315 and as the rate design witness in Peoples' 1986 base rate case at Docket Nos. R-850270 and R-860310. He has had knowledge of then Peoples Gas' (now

Peoples Division) pipeline system including its gathering system for more than thirty-five years. He also recommended, while serving as the rate design witness for Peoples in its 1986 base rate proceeding, that Peoples introduce a gathering system transportation rate for Peoples to recover gathering system costs from end-use customers who used the gathering system for transporting gas. Then, as today, there were and still are end-use customers served directly from the gathering system. Mr. Feingold did not, in the 1986 case, recommend charging producers for a portion of gathering system costs. His approach to gathering system cost allocation in base rate case class cost allocation studies has changed since then from case to case and from year to year, but the function of Peoples' gathering system has not changed at all.

Q. DID MR. FEINGOLD SERVE AS THE COST-OF-SERVICE WITNESS FOR EQUITABLE IN ITS 2008 BASE RATE CASE AT DOCKET NO. R-2008-2029325?

A. Yes.

Q. DID MR. FEINGOLD DO A COST ALLOCATION STUDY THAT INCLUDED, AS A CUSTOMER CLASS, RATE AGS IN EQUITABLE'S 2008 BASE RATE CASE AT DOCKET NO. R-2008-2029325?

A. Yes. In that proceeding, Equitable proposed a negotiable gathering system rate. Mr. Feingold performed a class cost-of-service allocation study using Rate AGS producer ratepayers as a class of customer. He directly assigned all gathering system costs to producers under Rate AGS in his 2008 study, even though there were over 3,600 end-use customers served from the gathering system, and he was aware of that when he supported that recommendation.

Q. DID MR. FEINGOLD SERVE AS THE COST-OF-SERVICE WITNESS FOR PEOPLES IN ITS 2012 BASE RATE CASE AT DOCKET NO. R-2012-2285985?

A. Yes.

Q. DID MR. FEINGOLD USE THE SAME APPROACH FOR COST ALLOCATION FOR GATHERING SYSTEM COSTS IN PEOPLES' 2012 BASE RATE CASE AT DOCKET NO. R-2012-2285985 THAT HE USED IN EQUITABLE'S 2008 BASE RATE CASE?

A. No, he did not. He used a completely different approach. In Peoples' 2012 base rate case, he did not have a producer class of customer in his class cost-of-service study as he did in the Equitable case in 2008. He instead used PES Program revenues of $7.65 million to credit to the cost-of-service before doing the class cost-of-service allocation study for end-use customer classes. While that approach in the 2012 case provides end-use customers with a credit for producer contributions to costs of the gathering system, it does not show the class cost-of-service for the producer class of customer.

Q. WHAT HAS MR. FEINGOLD DONE IN THE INSTANT COMBINED PROCEEDING REGARDING ALLOCATION OF GATHERING SYSTEM COSTS TO PRODUCERS?

A. Mr. Feingold has indicated through response to SBI-Peoples-I-4 (attached hereto as Exhibit 1 (EDB-1)) that producers should be held responsible for some or all of the costs of Peoples' gathering system. He did not, however, do a class cost-of-service study that included customer class Rate AGS in this proceeding as he did for Equitable's last base rate case when he was the cost allocation witness. He explains in Peoples Statement No. 11, Page 9, Line 19 through Page 10, Line 3, that it would not be helpful in rate design since rates for the class

were being developed using value of service principles. He instead used the same approach as he used in Peoples' 2012 base rate case by crediting Rate AGS producer revenues to the class cost-of-service study for end-use customer classes. This approach does not show a producer class in the class cost-of-service study.

Q. DID MR. FEINGOLD, USING PRINCIPLES OF COST CAUSATION, ASSIGN GATHERING SYSTEM COSTS TO A PRODUCER CLASS OF CUSTOMERS IN EQUITABLE'S 2008 RATE CASE, WHEN EQUITABLE PROPOSED THAT RATE AGS BE NEGOTIABLE OR VALUE-OF-SERVICE BASED?

A. Yes. The approach used in 2008 for Equitable for cost allocation by Mr. Feingold is completely contrary to his rationale and approach in this proceeding where he argues that a cost-of-service study for the producer class of customers should not be performed because it would be of no value since the rates for the producer class of customers are being set using value-of-service principles. Peoples Statement No. 11, Page 9, Lines 21-23 and Page 10, Lines 1-3, *Pennsylvania Public Utility Commission, et al. v. The Peoples Natural Gas Company LLC* at Docket No. R-2018-3006818 (Jan. 28, 2019). A fully negotiable rate using value of service principles was the proposal in Equitable's 2008 case when Mr. Feingold did perform a class cost-of-service study that included the producer customer class.

Q. HAS MR. FEINGOLD SHOWN CONSISTENCY IN HIS COST-OF-SERVICE OPINIONS AND STUDIES OVER THE LAST THIRTY-FIVE YEARS FOR NON-GAS GATHERING SYSTEM COSTS OWNED BY A PENNSYLVANIA LDC?

A. No. He has assigned no non-gas costs of the gathering system to producers (Peoples' 1983 and 1986 base rate cases), then all non-gas gathering system costs to producers (Equitable's 2008 base rate case), and then some of the non-gas costs to producers (Peoples' 2012 and

2019 base rate cases). Mr. Feingold's position on both producer responsibility for gathering system costs and appropriateness of inclusion of a class cost-of-service study for a producer class of customers has varied from case to case over the last 35 years with no explanation for his changing opinion. In Mr. Feingold's testimony, he explains that the most important considerations he relies on for determining cost allocation methodologies are "cost causality," a sound rationale and theoretical basis, "stability of results over time," and "logical consistency and completeness." Peoples Statement No. 11, Page 19, Line 13 through Page 20, Line 6, *Pennsylvania Public Utility Commission, et al. v. The Peoples Natural Gas Company LLC* at Docket No. R-2018-3006818 (Jan. 28, 2019). The inconsistency demonstrated in allocation of non-gas gathering system costs over the last thirty-five years falls short of incorporating those considerations.

What has remained consistent in the last thirty-five years is the function of the gathering system.

Q. IS MR. FEINGOLD CORRECT THAT VALUE-OF-SERVICE PRINCIPLES ARE BEING USED IN THIS PROCEEDING BY PEOPLES TO SET RATE AGS?

A. No, not for conventional gas supplies. Rate AGS will apply the same indexed rate to all producers supplying gas from conventional wells. Rate AGS rates will not be set based on producer negotiation relative to conventional gas supplies or any consideration of individual producers' options for other markets for their gas supply. Peoples suggests that its minimum rate of $0.26 per Mcf was, in part, based on discussions with PIOGA, but a one-size fits all minimum rate is hardly the same as a value-of-service based rate since the value-of-service to each producer may, and likely will, vary depending on a producer's alternatives. Mr. Feingold has changed the definition of "value-of-service" from one that looks at the

producer's options and costs for marketing its supply to one that looks at the wholesale market price for gas.

Q. IN YOUR OPINION, SHOULD PRODUCERS BE RESPONSIBLE FOR THE NON-GAS COSTS OF PEOPLES' GATHERING SYSTEM?

A. No. The gathering system was installed to move local gas, including at the time Peoples-owned production wells, to end-use customers. The gathering system is still serving the same function that it has served since it was installed and is still serving the same function it did thirty-five years ago when Mr. Feingold had a completely different opinion on who should pay for it. Mr. Feingold can argue that times were different then, but Peoples was serving retail and transportation customers in 1986 just as it does today, and many of the same gathering lines are still moving gas to those end-users, some of whom are probably still in the same homes or businesses.

VI. MAXIMUM AND MINIMUM RATES FOR RATE AGS

Q. WHAT IS PEOPLES' PROPOSED MAXIMUM RATE FOR RATE AGS AND HOW WAS IT DEVELOPED?

A. Peoples is proposing the maximum for Rate AGS for conventional gas supplies be set at the full cost for the gathering system plus allocated overheads on a per Mcf basis. Mr. Feingold calculates the total cost of the gathering system to be $0.76 per Mcf. Recall that Mr. Feingold, in this proceeding, did not opt to do a class cost-of-service study that included the class of customer called producers, so the producer class cost-of-service study cannot be used as a guide to set rates for producers. The selection of the entire full cost of the gathering system on a per Mcf basis as the maximum rate for Rate AGS ignores the fact the Peoples has proposed in this case to recover two-thirds of the cost of the gathering system from end-

use customers. Any movement upward in Rate AGS by way of Peoples' proposed indexing mechanism from the minimum rate of $0.26 cents per Mcf (used in the proof of revenue) toward the maximum rate of $0.76 per Mcf, will result in over-recovery of non-gas costs of the gathering system. Taken to the extreme, if Rate AGS moved all the way to the maximum rate of $0.76 per Mcf as a result of the gas price index feature of proposed Rate AGS, Peoples would recover costs as follows: two-thirds of the non-gas gathering system costs from end-use customers as designed in the proof of revenue and then an additional almost 100% of the costs of the gathering system from producers at the $0.76 per Mcf maximum rate, resulting in an over-recovery of the costs of the gathering system by close to two-thirds.

Q. WHAT IS YOUR OPINION AS TO THE MAXIMUM RATE PROPOSAL FOR RATE AGS?

A. It is my opinion that the recommendation for the maximum rate as proposed by Peoples be rejected. Peoples, the party with the burden of proof in this proceeding, has offered no justification for the reasoning as to why the maximum rate for Rate AGS is reasonable. The only explanation offered by Peoples is to describe how the rate was mathematically derived and no explanation as to why it makes sense. The Rate AGS maximum rate can result in significant cost over-recovery. This is not a reasonable result and this proposal should be rejected. Peoples' owners are the beneficiaries of this proposal and not producers or end-use customers.

Q. IS THERE AN ERROR IN THE MAXIMUM RATE CALCUATION THAT HAS BEEN CORRECTED BY MR. FEINGOLD?

A. Yes. In response to SBI-Peoples-II-24 (attached hereto as Exhibit 1 (EDB-1)), I questioned Mr. Feingold's inclusion of purchased gas costs as a component of cash working capital in

the maximum gathering system rate proposed. Mr. Feingold corrected his total gathering cost-of-service in that discovery response in response to my inquiry, but Peoples has not yet shown any correction to the proposed maximum rate.

Q. TURNING TO THE MINIMUM RATE PROPOSAL FOR RATE AGS FOR CONVENTIONAL GAS SUPPLY, WHAT IS PEOPLES PROPOSING?

A. Peoples is proposing a minimum rate of $0.26 per Mcf.

Q. HOW DID PEOPLES ARRIVE AT ITS MINIMUM RATE?

A. Peoples stated, in response to SBI-Peoples-I-7 (attached hereto as Exhibit 1 (EDB-1)), its rationale with no specifics as to why the rate level of $0.26 was chosen for the minimum rate as proposed for conventional gas supply. Peoples mentions "discussions with PIOGA" in its response to SBI-Peoples-I-7 as a reason for the rate level. For a rate level that seems so specific at $0.26, there is no justification for the rate level itself provided by Peoples, the party who bears the burden of proof in this proceeding.

Peoples' response to SBI-Peoples-I-7 suggests the $0.26 rate minimum is based on the value-of-service to producers. Mr. Feingold, in his Direct Testimony, offers his view on value-of-service principles in rate design by quoting the NARUC Gas Rate Design in Peoples Statement No. 11, Page 38, Lines 5-7, *Pennsylvania Public Utility Commission, et al. v. The Peoples Natural Gas Company LLC* at Docket No. R-2018-3006818 (Jan. 28, 2019):

> When using value of service principles, we normally look not to the cost of providing the service, but rather to the alternatives available to the customer.

Peoples has not offered any studies that attempt to quantify the alternatives available to producers, that would be useful to guide Peoples in determining the value-of-service to producers for rate setting purposes. The alternatives that would be available to producers mentioned, but not quantified, in Peoples' response to SBI-Peoples-I-51 (attached hereto as

Exhibit 1 (EDB-1)) include shutting in production, reworking of wells to increase production, or laying pipelines to alternative markets. All of these alternatives are producer-specific, and a $0.26 rate for all conventional producers certainly is not a value-of-service based rate.

Peoples has provided nothing to support its $0.26 minimum rate other than vague references to discussions with PIOGA and its own judgement.

My opinion, however, after review of discovery in SBI-Peoples-I-9 (attached hereto as Exhibit 1 (EDB-1)), is that it appears that Peoples' PES Program customers are paying an average fee of $0.26 per Mcf at present rates, so that average PES Program fee is possibly the source of the $0.26 minimum rate for Rate AGS proposed by Peoples for conventional supplies. It would be helpful if Peoples would explain its rationale if this is, in fact, the source of the $0.26 proposed rate. An average fee of $0.26 in the PES Program means that some producers are paying a fee lower than $0.26 and some are paying no fee at all because they opted out of the voluntary program.

Q. DID YOU REQUEST INFORMATION IN SUPPORT OF THE $0.26 RATE MINIMUM FOR CONVENTIONAL PRODUCTION IN PROPOSED RATE AGS?

A. Yes. In response to discovery at SBI-Peoples-II-7 (attached hereto as Exhibit 1 (EDB-1)), I requested workpapers, contemporaneous notes, or any other documents that support the $0.26 rate proposal. Peoples responded that it took no notes that supported the $0.26 rate when the discussions with PIOGA took place and Peoples offered no other rationale.

Q. TO SUMMARIZE THE RATE AGS MAXIMUM AND MINIMUM RATE PROPOSALS, WHAT IS YOUR OPINION?

A. As to the maximum rate, if implemented as proposed, it could result in significant over-recovery of non-gas costs by recovering the same costs twice, once from producers and again

from all end-use customers, which is unreasonable. The minimum rate level has no supporting documentation as to how the level was derived or why a specific rate level represents a value-of-service to all producers.

VII. GRADUALISM AND PEOPLES' RATE DESIGN

Q. DOES PEOPLES' RATE INCREASE HAVE A DISPROPORTIONATE IMPACT ON PEOPLES' PRODUCERS AS COMPARED TO EQUITABLE'S PRODUCERS?

A. Yes. Approximately 17% of Peoples' producers who flow that gas into the Peoples system are getting more than a 150% increase, on average, in their rate as shown by Peoples' response to SBI-Peoples-II-28 (attached hereto as Exhibit 4 (EDB-4)). The impact on Equitable's producers is much less, as can be seen in Peoples' response to SBI-Peoples II-28. This rate increase for those producers getting an increase on both the Peoples and Equitable Divisions can hardly be characterized as gradual and these rate spikes could have an impact on quantity of local gas supply coming to Peoples. Producers that are getting these large increases may look to other markets for their supply. This result would be detrimental to end-use customers. This percentage rate increase is unreasonable for some producers and if this proposal is approved the rate increases to those producers getting increases needs to be adjusted to incorporate the concept of gradualism.

I recommend, if Rate AGS is approved (although I strongly recommend against its approval), for all producers getting a rate increase from a current PES Program fee, that the increase be limited to the same overall percentage increase that is applicable on average to end-use customers at the conclusion of this proceeding. For producers who are currently paying no PES Program fee at all, their increase should be set at the current straight average rate paid by all producers on the Peoples system who are getting a rate increase as a result of this

proceeding, as shown in SBI-Peoples-II-28, increased by the overall average rate increase that will be applicable to end-use customers at the end of this proceeding.

For producers who are currently paying no PES Program fee at all, the recommended increase would be set at $0.10 adjusted upward by the overall average rate increase assigned end-use customers at the conclusion of this proceeding, but that the $0.10 rate adjusted rate also be negotiable to take into consideration value-of-service to the producer and the value of the low-cost gas to the end-use customers.

VIII. INDEXING OF RATE AGS

Q. PEOPLES, IN ITS TARIFF FOR RATE AGS, REFERS TO AN INDEX OF RATE AGS TO GAS COSTS. DOES INDEXING OF NON-GAS COSTS TO A GAS PRICE INDEX MAKE ANY SENSE?

A. No, for a number of reasons that I will discuss.

First, the gathering system costs to be recovered are non-gas costs or base rate costs and do not vary with the price of gas supply.

Second, it seems that Peoples' theory for indexing the rate is that as gas prices rise, producers can afford to pay more toward gathering system non-gas costs, but there has been no evidence provided by Peoples of the value that producers place on Rate AGS service other than the explanation by Mr. Gregorini that discussions with PIOGA were in part responsible for the selection of the $0.26 minimum rate. SBI-Peoples-I-7 (EDB-1). Just because a party can afford to pay more for a service does not mean they will value it more and want to pay more for it. Peoples has offered no explanation or support for the proposal that the value a producer would place on the service would increase or decrease with the price of gas supply index. This proposed index is not related to increased investment by Peoples, but rather to its theory

that the producers who get a higher gas price for their supply will place more value on the service and be willing to pay more under Rate AGS.

Third, with respect to recovery of gathering system costs, Peoples' proposal to use an indexed rate to recover gathering system costs from producers is inconsistent with the recovery of the remainder of gathering system costs from end-use customers. Peoples has not proposed sales and transportation rates that are tied to gas price index for their share of gathering system costs.

It should be noted that the Peoples Division and Equitable Division have a DISC (Distribution System Improvement Charge) in place (Rider E to their tariffs) that allows for recovery between base rate cases of repairs, improvements, or replacement of property in certain plant accounts. Account 332 (Field Lines) and 334- (M&R Station Equipment-Purchased Gas-Meters) are among the included accounts eligible for DISC recovery. Both of these accounts are part of Gathering Plant in Service and together represent more than half of the original cost dollars in the gathering system. Peoples is therefore already getting an indexing of sorts for gathering investment, but to be clear, the DISC relates to allowed recovery of incremental capital investment made by Peoples between rate cases. Peoples' proposed index has nothing to do with that concept, but rather just permits over-recovery of costs related to plant investment already in service.

The final reason Peoples' proposed index should be rejected is that any increase in the price of gas will raise the level of Rate AGS and will result in an over-recovery of non-gas costs to the benefit of Peoples' owners and not its customers.

Q. REFERRING TO PROPOSED RATE AGS IN THE RATE SECTION OF THE TARIFF PAGE, PLEASE EXPLAIN THE 12.4% THAT IS USED ON THE TARIFF PAGE TO GET TO THE RATE AGS INDEX PRICE.

A. With respect to the derivation of the 12.4% quoted in the Rate AGS proposed tariff (attached hereto as Exhibit 3 (EDB-3)), it is just a percentage that was derived after the $0.26 minimum rate was determined. SBI-Peoples-I-49 (attached hereto as Exhibit 1 (EDB-1)). Recall that the $0.26 rate is not a rate that has any justification by Peoples other than Peoples' description that it was derived after discussions with PIOGA. The 12.4% was the percentage produced when the 12-month average Dominion South Point gas supply price was divided by the $0.26 rate.

Q. DOES PEOPLES OFFER ANY EXPLANATION OF THE RATIONALE FOR INDEXING OF RATE AGS TO GAS SUPPLY PRICES AT DOMINION SOUTH POINT?

A. In response to SBI-Peoples-I-14 (attached hereto as Exhibit 1 (EDB-1)), Mr. Gregorini stated "The applicable rate under Rate AGS is tied to the local gas market index in order to increase producer contributions as market prices increase to help offset the share of costs paid by Peoples' ratepayers."

Q. IS MR. GREGORINI CORRECT THAT PEOPLES' END-USE CUSTOMERS' SHARE OF COSTS WILL BE OFFSET IF PEOPLES' RATE AGS IS APPROVED AND THE PRICE OF GAS SUPPLY FOR DOMINION SOUTH POINT RISES?

A. No, he is not. Peoples did not propose any true-up mechanism or reconciliation mechanism in this case to accomplish what Mr. Gregorini is describing. If Rate AGS is approved as

proposed, and gas supply prices rise, it is Peoples' owners and not end-use customers that will be receiving the benefit.

Q. PLEASE SUMMARIZE YOUR OPINION ON THE RATE INDEXING PROPOSAL FOR RATE AGS.

A. The rate is ill-conceived. Non-gas costs should not be indexed, and this proposal could result in significant cost over-recovery to the benefit of Peoples' owners and to the detriment of all producers and end-use customers.

IX. RATE AGS FOR GAS PRODUCERS NOT USING THE GATHERING SYSTEM

Q. WHAT IS PEOPLES' PROPOSAL REGARDING CHARGING RATE AGS TO RECOVER NON-GAS GATHERING SYSTEM COSTS TO PRODUCERS WHO MAKE NO USE OF THE GATHERING SYSTEM?

A. As stated in the Rate AGS proposed tariff, "Gathering of natural gas from unconventional sources, including but not limited to horizontally drilled Marcellus and Utica shale gas and landfill gas, shall be negotiated and agreed to within the MIMA." The MIMA refers to the Master Interconnect and Measurement Agreement, an agreement between Peoples and a producer. It sets forth the terms and conditions for delivery of gas into the Peoples system.

Q. DOES THIS MEAN PEOPLES IS PROPOSING TO CHARGE RATE AGS TO GAS THAT IS NOT FLOWING THROUGH PEOPLES' GATHERING SYSTEM?

A. Yes. Peoples is proposing to charge a fully negotiated rate for the recovery of non-gas gathering system costs with no maximum or minimum on gas volumes coming from unconventional sources whether or not the producer actually uses the gathering system as a point of entry for the supply. In the Peoples and Equitable Divisions, the vast majority of non-conventional supplies use the distribution system (and in some cases the transmission

system) as a point of entry into the Peoples system, and not the gathering system. SBI-Peoples-I-17 and SBI-Peoples-III-10 (attached hereto as Exhibit 1 (EDB-1)). Only two non-conventional wells, both on the Equitable Division system, with an annual throughput in the Historic Test Year ("HTY") of 387,166 Mcf, flow into the gathering system. SBI-Peoples-I-14 (EDB-1). No gas from unconventional sources flows into Peoples' gathering system. Peoples is projecting to recover in the Fully Projected Future Test Year ("FPFTY"), at proposed rates, $740,603 annually from gas volumes from unconventional sources on the Equitable system and $223,169 annually on the Peoples system. SBI-Peoples-I-9 (EDB-1).

Q. DO YOU AGREE WITH PEOPLES' PROPOSAL TO RECOVER NON-GAS COSTS OF PEOPLES' GATHERING SYSTEM FROM PRODUCERS WHO DO NOT EVEN USE THE GATHERING SYSTEM?

A. No, I do not. Peoples, who has the burden of proof, has not offered any rationale at all as to why non-conventional producers not using the gathering system would bear any responsibility for paying for it.

Q. IN WHAT WAYS DOES GAS RETAINAGE HAVE A BEARING ON THIS CASE?

A. In SBI-Peoples-I-40 (attached hereto as Exhibit 1 (EDB-1)), SBI asked why producers who bring gas supplies directly into the transmission or distribution system would be charged under the new proposed Rate AGS when they make no use of the gathering system.

Peoples had a two-pronged response to that inquiry. In its first prong of the response, Peoples references SBI-Peoples-I-42 (attached hereto as Exhibit 1 (EDB-1)), which explains a PAPUC recent Order in the last Peoples 1307(f) case at Docket Nos. R-2018-2645278 and R-2018-3000236, approving a retainage charge of 2% for producers who flow gas directly into the gathering system. Peoples apparently thinks that the PAPUC Order in that

proceeding is relevant to this case regarding the issue of gas supply point of entry and use or non-use of the gathering system.

The second prong of the response to SBI-Peoples-I-40, was not responsive to the question asked because it referenced Mr. Gregorini's testimony in Peoples Statement No. 2, Page 23, Lines 16-23 and Page 24, Lines 1-3, *Pennsylvania Public Utility Commission, et al. v. The Peoples Natural Gas Company LLC* at Docket No. R-2018-3006818 (Jan. 28, 2019). Mr. Gregorini does not address in the lines referenced the issue of why producers would be charged for a gathering pipeline system that they do not use, nor does he address this important question anywhere in his testimony. Neither prong of Mr. Gregorini's response to SBI-Peoples-I-40 was responsive to the question asked.

Q. WHAT WAS DECIDED ON THE ISSUE OF RETAINAGE IN PEOPLES' LAST 1307(F) CASE THAT PEOPLES WANTS TO BELIEVE IS RELEVANT TO THE ISSUE OF CHARGING PRODUCERS FOR NON-GAS COSTS OF THE GATHERING SYSTEM WHEN THEY ARE NOT DELIVERING GAS INTO THE GATHERING SYSTEM?

A. In the last 1307(f) case, Peoples requested through a new Rate GS, a retainage percentage from producers for gas flowing into Peoples Division gathering system from *conventional* wells. The vast majority of gas from conventional wells enters the Peoples system through gathering lines. Peoples and Equitable have significantly higher unaccounted for gas on the gathering systems, 8.7% and 9.2 % respectively, than they have on the remainder of their pipeline systems. SBI-Peoples-I-18 (EDB-1). Peoples' proposal in its 2018 1307(f) case, to recover retainage from conventional producers, was described by Peoples as a way to encourage producer participation in reducing UFG on Peoples' gathering system.

Peoples argued that, since the vast majority of the gas supply from conventional wells flows into the gathering system, it was easier administratively to just have one retainage rate that applied to all conventional well gas entering the Peoples system, since only a small additional amount entered the Peoples system directly through distribution lines. It is interesting to note that Peoples made no mention of conventional well supply flowing directly into transmission lines in the 2018 1307(f) case even though Peoples has conventional supplies coming in through transmission lines.

Peoples' second argument for the insertion of a 2% retainage rate on conventional gas supply from producers in the Peoples Division tariff Rate GS was the need for consistency with the existing Equitable tariff Rate AGS. Since Rate AGS in Equitable's tariff allowed for the recovery of retainage of volumes from local gas producers, Peoples argued it wanted consistency with Equitable's tariff language for Peoples' tariff on the retainage issue. Upon examination, Peoples' proposal was not consistent with the then-effective Equitable tariff after all because the Equitable tariff had a negotiated retainage level not a specified percentage.

Peoples' third argument for the insertion of the 2% retainage charge on conventional gas supply from producers dealt with point of entry of conventional gas supplies. Peoples argued that, from a consistency standpoint, Equitable's tariff allowed for the recovery of retainage on gas supply through Rate AGS, not only for gas flowing into the gathering system but also for gas being injected directly into the distribution system. Note that Equitable's tariff does not mention gas coming into the transmission system.

The Commission agreed in its order at the conclusion of the 1307(f) 2018 case that *conventional* well supply would have the same retainage rate, set at 2%, for producers

regardless of whether the conventional supplies were entering from the gathering system or the distribution system. This is discussed on pages 70-76 of the Final Order at Docket Nos. R-2018-2645278 and R-2018-3000236 (attached hereto as Exhibit 5 (EDB-5)) in the discussion of PIOGA Exception No. 6. Rate GS was approved for insertion into the Peoples Division tariff. (EBD-3). The important point to take away from this subject is that Peoples was only granted Commission authority in its last gas cost proceeding to collect 2% retainage from producers delivering *conventional* gas supply and only on gas entering through gathering lines or distribution lines as an entry point. The Order from Peoples last 1307(f) case make no mention at all of recovering retainage on non-conventional gas supply nor does it address the transmission system as a point of entry for any supplies. Peoples' filing in accordance with the Commission's Order in the last 1307(f) case does not comply with that Order since Peoples' newly minted Rate GS tariff now states: "any party desiring to deliver conventional well supply directly into the Company's system." The tariff language as stated is overly broad and would permit deliveries into Peoples' transmission system, which was not contemplated in the Order from the 2018 1307(f) case. Peoples estimates that is has 238,736 Mcf annually coming into the transmission system that are conventional supplies. SBI-Peoples-III-10 (attached hereto as Exhibit 1 (EDB-1)). Peoples has broadened its tariff language to include transmission lines in its compliance filing from the last 1307(f) case without PAPUC approval, and it appears, in doing so, that Peoples has also opened the door for the proposal made in this proceeding. It is an example of a minor wording change with bigger, long-term implications.

Q. TURNING TO THE INSTANT PROCEEDING, HOW DOES THE 2018 PEOPLES 1307(F) ORDER HAVE ANY RELEVANCE?

A. Again, with reference to the response to SBI-Peoples-I-40 (EDB-1), Peoples uses the Order from the 2018 1307(f) case as a justification for why their proposal in the present case—to charge Rate AGS for the recovery of non-gas gathering system costs from producers on all Pennsylvania supply, both conventional gas supply and gas from unconventional sources, and regardless of point of entry into Peoples' pipelines including transmission lines—is reasonable. Peoples' 2018 1307(f) case made no mention of non-conventional gas supplies and did not address the transmission system as a point of entry. The inclusion of the distribution system as an entry point was added to help Peoples with an administrative burden issue. The case dealt with having producers who used the gathering system (conventional supplies) help contribute toward gathering system retainage to lessen the burden of gathering system UFG on end-use customers.

Now Peoples wants to use that approval from the last 1307(f) case for the 2% retainage on conventional supplies as a justification to charge to all producers of Pennsylvania supply a fully negotiable rate for recovery of non-gas gathering plant investment and related costs on all gas coming into the Peoples system (from conventional and non-conventional sources) regardless of whether the producer even uses the gathering system.

In Rate AGS as proposed (EDB-3), the tariff states:

> Gathering of natural gas from unconventional sources, including but not limited to, horizontally drilled Marcellus and Utica shale gas and landfill gas, shall be negotiated and agreed to within the MIMA.

What started as a request by Peoples in a gas cost case to expand their proposal on 2% retainage from conventional well gas supply entering the gathering system to include the

additional minimal amount of conventional gas well supply that flows directly into distribution lines, in order to ease what Peoples characterized as administrative burden, now has an entirely new dimension in this proceeding as it is being used as a justification in proposed Rate AGS to the expand point of entry of supplies to include all pipeline systems and to expand all Pennsylvania sources of supply to include both conventional and unconventional supplies. The reason put forth by Peoples in its 2018 1307(f) case, for the minor additional expansion of retainage to include the conventional supplies directly entering into the distribution system, was simply to ease an administrative burden and with a minimal impact on total retained volumes in their proposal.

Peoples' proposed Rate AGS, if approved, will impact all non-conventional gas supply delivered into the Peoples system regardless of point of entry. This new proposal is also inconsistent with the Equitable Division's existing tariffed Rate AGS, because Peoples' proposed Rate AGS applies to all supply coming in through transmission lines while Equitable's existing Rate AGS does not. (EDB-1). This seemingly minor wording change on point of entry and conventional versus non-conventional supplies is not minor at all and is a familiar tactic if we recall how Rate AGS was born as described earlier in my testimony. The convenient omission of tariff language can sometimes be as important or even more so than the language that is included.

Q. SHOULD THE ORDER IN PEOPLES' LAST 1307(F) CASE HAVE ANY BEARING ON THIS CASE OR BE CITED AS PRECEDENT IN THIS CASE?

A. No. The issue in the 2018 1307(f) Peoples gas cost case was limited to whether it was appropriate to assess retainage of conventional well gas entering into the Peoples system through a gathering line and the minimal additional conventional supply that flows directly

into a distribution pipeline, in order to reduce gathering system UFG for end-use customers. The Order in Peoples 2018 1307(f) case dealt with charging retainage of 2% to conventional well producers using the gathering system to help ease the end-user cost burden associated with high levels of gathering system UFG.

Q. SHOULD PEOPLES EXISTING TARIFF RATE GS (GATHERING SERVICE) AS IT NOW APPEARS IN PEOPLES DIVISION CURRENTLY APPROVED TARIFF BE REVISED TO CORRECT A MISTAKE?

A. Yes, to make it clear that gas is only to be retained on conventional gas supplies coming into a gathering line or a *distribution* line. The Rate GS as it presently appears in Peoples tariff does not comply with the Commission Order in Peoples' 2018 1307(f) case because it states that 2% retainage will apply to all conventional gas supplies, and it is not specific on point of entry, thus allowing for retainage on conventional supply entering through a transmission line, in violation of the Commission Order at Docket No. R-2018-2645278. Peoples did not request, and the Commission did not grant, retainage on supply coming into Peoples through a transmission line. This omission of tariff language should be corrected, especially if this incorrect and overly broad point-of- entry tariff language that now appears in Peoples Division tariff for Rate GS is going to be used as a justification or precedent to expand applicability of the proposed Rate AGS to unconventional supplies entering through a transmission line or distribution line. It seems to be another use of the minor wording change or language omission tactic.

Q. AS TO THIS PROCEEDING AND PEOPLES PROPOSAL TO CHARGE ALL PRODUCERS A NEGOTIATED RATE UNDER RATE AGS FOR GAS FROM UNCONVENTIONAL SOURCES, REGARDLESS OF THE POINT OF ENTRY INTO PEOPLES SYSTEM, WHAT IS YOUR OPINION?

A. Peoples, who has the burden of proof, has not provided any proof of the reasonableness of its proposal.

If Peoples uses the argument that (a) the PAPUC Order in Peoples' 2018 1307(f) gas cost case supports its proposal on this issue, it does not. That case limited the recovery of retained volumes from conventional gas well supply only and only for gas entering through a gathering line and the minor additional conventional supply that flows directly into a distribution pipeline to ease an administrative burden issue cited by Peoples.

If Peoples argues that (b) its proposal is consistent with the Equitable tariff on the issue of point of entry of supplies and therefore should be approved, it is not. Equitable's present tariff Rate AGS only mentions charging Rate AGS on gas supply coming into gathering pipelines or directly into distribution lines but is silent on the issue of charging for gas entering transmission lines. Peoples' proposal in this proceeding is not consistent with either argument (a) or (b).

Peoples has provided no argument or defense for the reasonableness of its proposal in this case. There is no justification for charging Rate AGS to recover gathering pipeline investment and related costs from producers who make no use of the gathering system. This proposal should be rejected as unreasonable and without justification, and the language discussing the assessment of a negotiated Rate AGS on unconventional supplies should be stricken from Peoples' proposed Rate AGS tariff.

Q. EVEN THOUGH PEOPLES' PROPOSAL FOR RATE AGS AS IT APPLIES TO NON-CONVENTIONAL SUPPLIES IS COMPLETELY NEGOTIABLE WITH NO MAXIMUM OR MINIMUM APPLICABLE RATE, WHAT HAS PEOPLES ASSUMED IN THIS CASE RELATIVE TO REVENUE AT PROPOSED RATES FOR NON-CONVENTIONAL GAS SUPPLY ENTERING THE PEOPLES SYSTEM?

A. In response to SBI-Peoples-I-9 (EDB-1), for "System 2," which is defined in response to SBI-Peoples-II-9 (attached hereto as Exhibit 1 (EDB-1)) as "non-conventional production," Peoples has assumed revenues for the FPFTY using a rate of $0.26 per Mcf for the Peoples Division non-conventional supplies and a rate of $0.22 per Mcf for the Equitable Division non-conventional supplies. This rate for Peoples is identical to the rate minimum Peoples plans to charge conventional gas producers under proposed Rate AGS, and for Equitable the rate is only $0.04 less than for conventional producers under proposed Rate AGS. In each case, there is no individually negotiated rate shown for each producer, as SBI-Peoples-I-9 requested. This suggests that there will be no individual negotiation with producers; instead, just Peoples and Equitable will dictate their price for the non-conventional producers to pay for a gathering system that those producers do not even use, without any consideration of the impact on local gas supply levels for end-use customers.

Q. IS PEOPLES DIVISION CURRENTLY CHARGING PRODUCERS OF NON-CONVENTIONAL SUPPLIES A RATE OR FEE FOR INJECTING GAS INTO THE PEOPLES DIVISION SYSTEM?

A. Yes, according to response to discovery in SBI-Peoples-I-9 (EDB-1), the Peoples Division is charging a fee of $0.16 per Mcf on 858,142 Mcf of non-conventional gas coming into the

Peoples system for a total annual revenue at present rates of $137,335. This fee of $0.16 is through the PES Program after the PIOGA $0.01 fee has been removed. Whether those supplies are entering the Peoples system through a distribution line or a transmission line is not clear, but response to SBI-Peoples-I-14 (EDB-1), Peoples made it clear that it has no non-conventional supplies directly entering the gathering system. It is not clear what the producers who are paying the $0.16 are getting in return for their fees, unless it is less stringent water vapor standards, since they clearly would not benefit from other purported PES Program benefits that involve upgrades to the gathering system.

Q. IS THE EQUITABLE DIVISION CURRENLTY CHARGING PRODUCERS OF NON-CONVENTIONAL SUPPLIES RATE AGS FOR INJECTING GAS INTO THE EQUITABLE DIVISION SYSTEM?

A. Yes. Referring to Peoples' response to SBI-Peoples-I-9 (EDB-1), the Equitable Division shows it is charging a rate of $0.22 per Mcf on 3,366,376 Mcf of non-conventional gas entering the Equitable Division system and a total revenue at present rates of $740,603. Peoples' response to SBI-Peoples-I-14 (EDB-1) indicates that only 387,366 Mcf for the HTY of non-conventional gas supply flowed into Equitable's gathering system, so the balance of gas supplies of almost 3,000,000 Mcf must flow directly into its distribution system since the Equitable Division does not have authority under its Rate AGS tariff to assess producers who deliver gas directly into a transmission line. It is not clear what these customers are getting in return for their rate since the bulk of the non-conventional supply does not use the gathering system.

Q. WHAT CAN WE CONCLUDE FROM EXAMINIATION OF DISCOVERY RESPONSE SBI-PEOPLES-I-9?

A. Regardless of what the Peoples Division and Equitable Division are doing today with respect to non-conventional gas supplies and charging producers fees or rates, the issue at hand is who should bear the cost responsibility moving forward for the non-gas costs of the Peoples Division and Equitable Division combined gathering system and what is fair and reasonable. Clearly, gas supplies that are not flowing into the gathering system are not using the system. Whether producers who actually flow their supplies *into* the gathering system should help pay for it is another issue to be decided in this proceeding, but there is no reason at all to charge producers Rate AGS for recovery of non-gas gathering system costs if they *make no use* of the gathering system. Peoples has offered no reason for why it makes sense to do so. The language in Rate AGS to charge unconventional supply for Rate AGS should be stricken.

X. PIOGA FEE

Q. IS PEOPLES BILLING A FEE ON BEHALF OF PIOGA?

A. Yes, the Equitable Division is billing a $0.01 fee per Mcf on all Pennsylvania volumes entering the system. Equitable is acting as a billing and collections agent for PIOGA. On the Peoples Division system, PIPSCO bills the PIOGA fee in the PES Program bill that goes to producers. PIPSCO, according to Peoples' response to SBI-Peoples-III-10 (EDB-1), is likely a subsidiary of PIOGA. It seems an odd business relationship that a company the size of Peoples can bill for all of its other services, but chooses to farm-out its PES Program revenue billing of over $5 million per year to a company that they have such little knowledge of, that Peoples does not even know who owns it, and in doing so agrees that a trade association can also tack on a fee to be billed to PES Program customers that covers

administrative costs of the trade association. When Mr. Gregorini was asked in discovery why they are billing PIOGA fees, his answer was a non-answer as to why they bill the PIOGA $0.01 fee on behalf of this trade association. SBI-Peoples-III-3 (attached hereto as Exhibit 1 (EDB-1)). Peoples does not bill for any other trade association.

Q. DO YOU HAVE ANY RECOMMENDATION AS TO PIOGA FEES BILLED BY THE PEOPLES AND EQUITABLE DIVISIONS?

A. Yes. PIOGA administrative fees, or for that matter, the fees of any trade association, are not appropriate fees to include in the bill of a public utility, unless they are part of the costs of providing utility service and included on the books of the utility as a general and administrative operation and maintenance expense or are a non-utility service being billed by the utility, such as appliance service work, or similar. These fees are not in that category. The Peoples and Equitable Divisions should not be acting in the role of a no-cost billing and collection agent for any trade association's fees and this practice should be discontinued immediately. These are not costs of providing any utility service, and they have no place on any utility bill. It is also inappropriate for a trade association such as PIOGA or its affiliate or subsidiary to bill for any of Peoples' services and include their own administrative fees on the same bill. These practices should also be immediately discontinued. The benefits to PIOGA from this arrangement are clear while the benefits to Peoples from this arrangement are less obvious. The practice of co-branding implies that a mutually beneficial relationship exists between the co-branders. If no such relationship exists, then these practices should be terminated. If it is beneficial for Peoples' customers for Peoples to bill and collect PIOGA administrative fees, Peoples should disclose what those benefits are.

XI. LOCAL GAS BENEFITS

Q. DO PEOPLES' END-USE CUSTOMERS BENEFIT FROM LOCAL GAS SUPPLY?

A. Yes. Peoples acknowledges that local gas is a benefit to end-use customers.

Q. DO YOU AGREE WITH MR. GREGORINI'S ANALYSIS OF THE COST OF LOCAL SUPPLIES VERSUS INTERSTATE SUPPLIES THAT HE DESCRIBES IN PEOPLES STATEMENT NO. 2, PAGE 17, LINES 1-19?

A. Not entirely. The fixed costs of the gathering system do not vary with the amount of gas purchased, so I think it is misleading to include sunk costs – the fixed costs of $0.76 – in the comparison that Mr. Gregorini shows in Peoples Statement No. 2 JAG Exhibit 1. I would remove that line item from the comparison. That line item would only be relevant if the gathering system costs became gas costs and they are not. Thus, the revised comparison would show that local gas is even more beneficial from a cost standpoint than Mr. Gregorini shows in his exhibit and the rate comparison should read $2.0509 per Mcf for local gas and $3.3687 for interstate supply. This cost savings should be taken into consideration when making policy decisions that could affect future availability of low-cost Pennsylvania supply.

Q. HOW DOES LOCAL SUPPLY HELP LOWER PIPELINE DEMAND COSTS?

A. As shown in Peoples' response to SBI-Peoples-II-26 (attached hereto as Exhibit 1 (EDB-1)), we can see that over the years from 2015 to the present, savings in demand costs have ranged from $2.9 to $4.4 million annually to end-use customers by the use of local gas. Clearly local gas provides a benefit to end-use customers and these benefits need to be taken into consideration when evaluating charges to producers and the impact that those charges could have on local supply availability to end-use customers.

XII. SHIFTING OF BASE RATE COSTS TO GAS COSTS

Q. DOES THE PROPOSAL TO RECOVER GATHERING SYSTEM INVESTMENT AND RELATED COSTS FROM PRODUCERS RESULT IN THE SHIFTING OF NON-GAS COSTS TO GAS COSTS?

A. Yes, the old adage that there is no such thing as a free lunch is true in this Rate AGS proposal. One of the questions that needs answering is who the winners are and who the losers are in the shifting of non-gas costs out of base rates and into gas costs. At first blush, this proposal shifts costs away from end-use customers so they would be the winners. They are not the winners upon closer inspection. End-use customers are not benefitted if the gathering system investment and related cost recovery is either (a) just shifted from non-gas costs to gas costs and/or (b) if the shift results in the loss of lower cost Pennsylvania supply.

Q. WILL THE SHIFT OF GATHERING SYSTEM COST RECOVERY OUT OF BASE RATES JUST SHIFT THESE COSTS FROM BASE RATES TO GAS COSTS?

A. A producer, like any other business, will pass through increased costs if it can contractually do so. Producers will pass along Rate AGS costs through gas prices if they can do so under the terms of their supply contracts. The producer's costs will be made even higher if gas supply prices rise and the indexed Rate AGS rises as a result of the Rate AGS indexing mechanism proposed. This will result in even more costs to recover from end-use customers through gas supply prices. Non-gas costs are not indexed in base rates, but they will be under proposed Rate AGS.

If the producer is unable to pass along the Rate AGS costs, because of contractual limitations, it will bear the burden of these higher costs without the ability to recover them. This, of

course, will make the producer look to other markets for its gas. If low-cost Pennsylvania supply moves from the Peoples system, it is the end-use customers that are harmed as a result.

Q. HOW IS THE INDEXING OF RATE AGS HELPFUL TO END-USE CUSTOMERS?

A. It is not helpful at all. Gathering system non-gas costs would not be indexed if they were in base rates. As proposed, the indexing of Rate AGS just benefits Peoples' owners if gas prices rise.

Q. TO SUMMARIZE, IS THE SHIFTING OF COST RECOVERY OF GATHERING SYSTEM INVESTMENT AND EXPENSES FROM NON-GAS COSTS TO GAS COSTS A BENEFIT TO END-USE CUSTOMERS?

A. No. Non-gas gathering system costs are not going to go away simply because they are no longer in end-users' base rates. These costs will either be recovered through gas supply prices or will result in less local Pennsylvania supply on the Peoples system or combination of both. These costs are part of the infrastructure that brings Pennsylvania low-cost supplies to end-users. Charging the supplier does not make the cost disappear, but doing so may make the low-cost gas disappear. It is a bad policy decision to approve the shifting of rate base costs into purchased gas costs and to embrace a proposal that could result in the loss of low-cost supply to all of Peoples' end-use customers.

XIII. DECLINE IN CONVENTIONAL PRODUCTION

Q. DO YOU HAVE ANY EVIDENCE THAT THE IMPLEMENTATION OF RATE AGS ON THE EQUITABLE SYSTEM CAUSED A PRODUCER TO MOVE GAS TO OTHER MARKETS?

A. Yes. Since the beginning of 2009, SBI has moved 15,736,416 Mcf from the Equitable system because of the implementation of Rate AGS on the Equitable system. Instead of going to

Equitable end-use customers, this low-cost supply went to other markets. SBI built new infrastructure or used existing infrastructure to move that low-cost supply off of the Equitable system. It is Equitable's end-use customers who were the losers as a result. I do not have similar information for other producers, but I think that it is likely that SBI was not the only producer to move supply from the Equitable system because of Rate AGS, to the detriment of Equitable's end-use customers.

The Peoples Division and Equitable Division producers have other market options for their supplies even though Peoples seems to fail to recognize or does not care about this fact in its proposal to recover non-gas costs from producers. Producers have market options, and this fact needs to be taken into consideration when making the policy decision as to whether or not to move non-gas costs into gas supply costs and shift cost recovery of rate base to producers.

Ultimately, it is the end-use customers on the Peoples system who will bear the added cost burden of higher priced interstate supplies as producers tire of the added costs on the Peoples system and move their supplies off the Peoples system to other markets.

Q. MR. GREGORINI IN HIS TESTIMONY DESCRIBES THE DECLINE IN LOCAL PRODUCTION FROM CONVENTIONAL WELLS IN PEOPLES STATEMENT NO. 2, PAGE 14, LINE 1. WHEN ASKED IF THE IMPLEMENTATION OF RATE AGS ON THE EQUITABLE SYSTEM COULD BE A REASON FOR THAT DECLINE, WHAT WAS HIS RESPONSE?

A. In response to SBI-Peoples-II-2 (attached hereto as Exhibit 1 (EDB-1)), Mr. Gregorini replied "No" to the question, "Can Mr. Gregorini say with certainty that none of the decline in volume on the Equitable system is related to Rate AGS?" He cannot say with certainty

that the decline in production on the Equitable system was not related to the implementation of Rate AGS.

Q. HAS PEOPLES IMPLEMENTED ANY PRICE INCENTIVE MECHANISMS TO ENCOURAGE NEW PRODUCTION IN DISTRIBUTION AREAS WHERE LOCAL GAS IS THE ONLY SOURCE OF SUPPLY?

A. No. Peoples, in response to SBI-Peoples-I-35 and SBI-Peoples-II-17 (attached hereto as Exhibit 1 (EDB-1)), has stated it has not needed any incentive mechanisms to get the supply it needs in these isolated areas. As conventional supplies continue to decline, the implementation of Rate AGS for Peoples is not helpful in encouraging the development of local low-cost supply in isolated areas where local gas is the only source of supply. Currently there are 903 end-use customers on the Peoples' combined system that have local gas as their only source of supply and 3,515 customers that are served directly from the gathering system. SBI-Peoples-I-12 and SBI-Peoples-I-13 (attached hereto as Exhibit 1(EDB-1)).

Again, Peoples is failing to look at the implications of shifting rate base cost recovery to producers and those implications include the impact on end-use customers served using local supply.

From a policy standpoint, these impacts need to be taken into consideration.

XIV. MIMA AGREEMENT AND WATER VAPOR

Q. DO YOU HAVE ANY CONCERNS WITH THE PROPOSED RATE AGS AS IT RELATES TO WATER VAPOR CONTENT OF PENNSYLVANIA SUPPLY ENTERING THE PEOPLES GATHERING SYSTEM?

A. Water vapor content of gas supply is specified in the MIMA accompanying proposed Rate AGS and the same language appears in the MIMA accompanying the existing PES

Agreement. Water vapor content is specified as a maximum of seven (7) pounds per million cubic feet unless allowed to be higher by negotiation. The PES Program, since it was not a mandatory program, allowed the producers the option to self-treat their supply, if necessary, in order to obtain a gas quality acceptable for injection into Peoples' gathering system and forego payment of the PES Program charge. Alternatively, producers could pay the PES Program fee and be allowed to deliver gas into Peoples' gathering system using less stringent water vapor standards through a negotiation of these less stringent standards as per the MIMA. The PES Program fee included contributions to enhance or install water dehydration facilities on Peoples' gathering system.

Under Rate AGS, Peoples is proposing a mandatory fee of either a minimum of $0.26 for conventional supplies or an unknown to-be-negotiated rate for unconventional supplies and no agreement at all in proposed Rate AGS or the referenced MIMA to relax water vapor standards. Since proposed Rate AGS recovers a portion of the non-gas cost of the gathering system, the proposed rate will include any dehydration facilities that were enhanced as a result of the payment of the PES Program fees by producers, as well as any other dehydration facilities that are part of the gathering system. Thus, Rate AGS should allow its ratepayers the same level of relaxed water vapor standards that were given to former PES Program fee-payers. The fee-payers under the PES Program were paying for relaxed water vapor standards and the same should apply for Rate AGS ratepayers. The MIMA accompanying proposed Rate AGS allows for, but does not require, a negotiation of water vapor standards from the maximum of seven (7) pounds per million cubic feet requirement. The MIMA accompanying proposed Rate AGS should state that the water vapor standards are fully negotiable, and no maximum water vapor content should be stated. The benefit of relaxed

water vapor standards for those producers who signed the PES Agreement was a major reason, in my client's view, as to why the PES Program was so well subscribed in 2015. In 2015, at the time the PES Agreement was being renewed and extended, Peoples changed its tariff to tighten water vapor standards for non-PES Program subscribers.

If Peoples does not agree to relax water vapor standards in a producer's MIMA and a producer must pay Rate AGS and also pay to self-treat the gas to the seven (7) pounds of water per million cubic feet standard in order to deliver the gas into Peoples' gathering system, as set forth in the MIMA on page 2 of Appendix B (attached hereto as Exhibit 6 (EDB-6)), then the cost of Rate AGS to the producer is even higher than the stated rate. SBI-Peoples-I-28 (attached hereto as Exhibit 1 (EDB-1)). Producers will be paying in Rate AGS for dehydration but also will be required to self-treat before the gas enters the Peoples system to meet the seven (7) pound standard which will require their own dehydration investment as well.

Peoples' proposed Retail Tariff and Supplier Tariff also make mention of the seven (7) pound per million cubic feet water vapor standard.

I recommend, as part of removing proposed Rate AGS from Peoples' tariff, that the maximum seven (7) pound per million cubic feet language be removed from Peoples' proposed Retail and Supplier Tariffs and also from the MIMA and that maximum water vapor content be a negotiable item as part of the MIMA. Alternatively, if Rate AGS in some form is to be approved, then I would recommend that dehydration by Peoples be provided as service for the rate paid by producers and that no additional dehydration be required from Pennsylvania producers at point of entry of Pennsylvania supplies.

XV. RECOMMENDATIONS AND SUMMARY

Q. WHAT ARE YOUR RECOMMENDATIONS FOR RATE AGS?

A. My recommendations are as follows

1. Rate AGS, as proposed, should be rejected in its entirety for the Peoples Division. Producers have paid more than a fair share of gathering system costs already (assuming any share at all is fair) through PEP and PES Program fees and gathering system retainage. The voluntary PES Program should remain in effect.

2. Rate AGS's proposed minimum rate is not supported by any evidence as to its reasonableness or fairness and must be rejected for all of the reasons described in my testimony. It results in a rate spike for some producers and does not conform to principles of gradualism.

3. Rate AGS's proposed maximum rate is not supported as to its reasonableness or fairness, can result in significant over-collection of fixed costs of the gathering system to the enrichment of Peoples' owners and must be rejected for all of the reasons described in my testimony.

4. Rate AGS's indexing is not supportable as to its reasonableness or fairness since there is no supportable reason to index non-gas costs and this proposal will result in over-collection of non-gas costs. This proposal must be rejected for all of the reasons described in my testimony.

5. Rate AGS, in the present tariff of the Equitable Division, should be limited to gas flowing into the gathering system only. Producers flowing gas into transmission or distribution lines should not be forced to pay non-gas costs of the gathering system when they are not using that system.

6. If Rate AGS for Peoples is not approved, Peoples' proposed Retail and Supplier Tariffs and the MIMA Agreement should all be changed to eliminate mention of the seven (7) pounds per million cubic feet of gas as the maximum allowable water vapor content of gas and instead should be silent on the issue of maximum water vapor standard. Producers should, through the MIMA, be able to negotiate water vapor standards that are reasonable for Peoples and for the producer based on the individual situation and the point of delivery.

7. If Rate AGS is not approved for the Peoples Division, the existing tariff page for Rate GS for the Peoples Division should be changed immediately to comply with the PAPUC Order in the last 2018 1307(f) gas cost case that limits the retainage to conventional supplies coming into a gathering line or *distribution* line. The current tariff language is overly broad and vague as to point of supply entry.

8. Equitable Division's Rate AGS should have the words "with a minimum" stricken from the Rates section of the tariff to make it clear that retainage is 2%, as Commission approved, from the 2018 1307(f) gas cost case and not a *minimum* of 2%.

9. Equitable Division's Rate AGS existing tariff language needs to be changed. The words "as well as to deliver gas directly into the Company's distribution system" should be stricken from the tariff in the Applicability section of Rate AGS in the Equitable Division tariff. Producers who do not use the gathering system should not be charged for it.

Q. IF THE PAPUC DECIDES TO APPROVE RATE AGS IN SOME FORM FOR BOTH THE PEOPLES AND EQUITABLE DIVISION PRODUCERS, WHAT WOULD YOU RECOMMEND FOR THE STRUCTURE OF RATE AGS?

A. I would recommend the following changes to proposed Rate AGS if rate AGS will be approved, but to be clear my primary recommendation is that Rate AGS be eliminated from the Peoples tariff:

1. If Rate AGS is allowed to become effective in some form, it should be a maximum rate not exceeding $0.26 Mcf (assuming that $0.26 cents is the current average PES Program fee) applied only to supplies flowing into the gathering system and applicable only to those producers already paying at least $0.26 per Mcf in either a PES Program fee or under Equitable Division's Rate AGS. There should be no indexing of the rate.

2. To address the issue of gradualism as discussed in my testimony, for those producers currently paying less than $0.26 per Mcf either through a PES Program fee or through the Equitable Division's Rate AGS, the rate increase for such producers should not exceed the overall average rate increase for end-use customers as allowed in either a final order or settlement of this proceeding. For those producers not currently paying a PES Program fee at all, their new fee under Rate AGS should be set at the current straight average rate currently being charged to producers on the Peoples system that are getting a rate increase, which is $0.10, and then that rate should be increased by the overall average increase for end-use customers as allowed in either a final order or settlement of this proceeding. In setting the rate for all producers who flow gas into the gathering system, these rates should allow for downward flexibility, if needed, to reflect value-of- service to producers and with

the goal of keeping low-cost supplies on the Peoples system for the benefit of end-use customers. A one size fits all approach is not good for producers or end-use customers.

3. Rate AGS, if permitted to take effect should not be expanded to include non-conventional supplies that do not use the gathering system. The Peoples Division has no non-conventional supplies flowing into the gathering system and the Equitable Division has only two wells with 387,166 Mcf annually that flow directly into the gathering system. Producers who do not use the gathering system should not be assigned gathering system costs.
4. Rate AGS for the recovery of non-gas costs, if allowed to take effect for the Peoples Division in some form, should be limited to gas flowing into the gathering system only and not into the distribution system or the transmission system. The administrative burden argument, used by Peoples in its 2018 1307(f) gas cost case as a reason why gas from conventional wells should have a 2% retainage applied whether the gas flowed into a gathering line or a distribution line, should not be permitted to be used in this proceeding as an excuse to charge producers for non-gas costs of a pipeline system they do not use. Producers who flow their supplies directly into a distribution line or a transmission line are not making use of the gathering system and should not be paying for the non-gas costs of the gathering system.
5. If Rate AGS in some from is allowed to take effect, the language referencing a water vapor standard should be stricken from Peoples' Retail Tariff, the Supplier Tariff, and also from the MIMA. If Rate AGS is imposed on Peoples' producers, then Peoples should provide all dehydration for the Pennsylvania supplies entering the gathering system in exchange

for payment of the rate and Pennsylvania gas supplies at the gathering system point of entry should be accepted without dehydration by producers.

Q. ARE THERE ANY OTHER RECOMMENDATIONS YOU WOULD LIKE TO MAKE?

A. Yes. Peoples should discontinue billing and collecting PIOGA fees in its Equitable Division. In the Peoples Division, it should instruct the billing agent, PIPSCO, to stop billing and collecting PIOGA fees as part of PES Program billings and should also stop any billing of PIOGA fees in bills Peoples Division sends directly to producers that are not sent through PIPSCO. Moving forward, regardless of whether Rate AGS is approved as proposed, in some other form, or not approved at all, Peoples should no longer collect fees on behalf of PIOGA or any other trade association unless and until it can demonstrate how ratepayers are benefitted by such a practice.

Q. ARE THERE ANY OTHER ISSUES YOU WOULD LIKE TO ADDRESS?

A. Yes. If there is any outstanding discovery or yet to be received revisions to discovery, I reserve the right to supplement or amend my testimony.

Q. DOES THIS CONLCUDE YOUR TESTIMONY?

A. Yes. Thank you.

Attachment A

Diane Meyer Burgraff received her B.S. from West Virginia University in 1972 with a major in Mathematics and received her M.B.A. from the University of Pittsburgh in 1974 with an emphasis on Finance and Accounting. She also graduated from a six-week full time executive education program from the University of Pittsburgh in 1990. She was employed for almost twenty-five years with the Peoples Natural Gas Company in Pittsburgh, PA. There the former Ms. Meyer, held positions of increasing responsibility beginning as a Cost Analyst working on base rate cases and PGC filings and capital budget project analyses. She was promoted to Assistant Director of Rates from 1981-1984, and then to Director of Rates from 1984-1990. She was elected Vice President of Financial and Rates from 1991 until a corporate realignment in 1997 when many financial responsibilities moved to CNG Corporate. After 1997 until her departure from Peoples Gas in 1999, she was Vice President of Rates and Regulatory Affairs. As Financial Vice President, the former Ms. Meyer was responsible for Accounting, Treasury, Rates and Budget functions including taxes, payroll, bill payment processing, general and plant accounting, cash management, rates, long term planning and budgeting, and gas well accounting. For two years she was also responsible for the Information Technology area. Approximately 150 people reported to her as Financial Vice President.

At Peoples Gas, Ms. Meyer testified in every base rate case from 1981-1999, approximately eight of them during that time frame, most of the gas cost proceedings during that time frame, and many other complaint cases and other cases involving her former employer in various courts.

Since leaving Peoples Gas, Diane Meyer Burgraff has worked as an independent consultant and expert witness and has testified on behalf of PA Office of Consumer Advocate and the WV

Consumer Advocate Division of the Public Service Commission. She has also submitted testimony for clients such as IOGA of PA (now PIOGA), IECPA, and natural gas suppliers.

Mrs. Burgraff resides in Williamsburg, VA. She serves as an Executive Partner at the Mason School of Business at The College of William and Mary.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**R-2018-3006818**
	:	
PEOPLES NATURAL GAS COMPANY, LLC	:	

EXHIBITS

OF

DIANE MEYER BURGRAFF

ON BEHALF OF

SNYDER BROTHERS, INC ("SBI")

APRIL 29, 2019

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Russell Feingold

SBI-I-4 From a cost-causation standpoint and not a value of service standpoint, does Mr. Feingold believe that producers should be held responsible for some or all of the costs of Peoples' gathering system?

Response: Yes.

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-I-7 Please provide workpapers, documents, emails, and any other documentation used to derive the minimum rate proposed for Rate AGS and the maximum rate proposed for Rate AGS.

Response: Peoples established the proposed minimum gathering rate at $0.26 per Mcf because it represents a rate level that could be assessed to producers in a low-natural gas market period and, in our judgement, would not lead to potential producer shut-ins and may help to mitigate declining production trends. The proposed minimum rate and this supporting rationale was in part based on feedback received from PIOGA during discussions regarding a revised Rate AGS rate structure to replace the existing PA PES program at the Peoples Division and the AGS tariff at the Equitable Division. Those discussions focused on ways to establish a reasonable and ongoing producer contribution to offset end-use customer's charges and that would also not create an economic disincentive for conventional produces to continue to produce gas supplies into the Peoples' systems.

The maximum Rate AGS rate is equal to the fully allocated gathering cost of service for the fully projected future test year as set forth in Peoples Exhibit RAF-3 to witness Feingold's testimony.

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SBI-1-7
Attachment

DTI SP App Index - January First of the Month ("FOM") Close

		@ 1/2/2019
FPFTY		$/Dth
Nov-19	$	2.188
Dec-19	$	2.402
Jan-20	$	2.566
Feb-20	$	2.513
Mar-20	$	2.350
Apr-20	$	2.080
May-20	$	1.933
Jun-20	$	1.927
Jul-20	$	1.908
Aug-20	$	1.914
Sep-20	$	1.750
Oct-20	$	1.724
Avg.	$	2.105
Gathering	$	0.260
Minimum		12.4%

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-I-9 Please provide workpapers showing how Rate AGS revenues at present rates and at proposed rates were developed. Please list the producer by letter or number, not a name, such as producers A, B, etc. For each producer list the future test year volumes, rate at present and at proposed rates, and revenue that when added together produce the Revenue at present and at proposed rates for Rate AGS.

Response: See attached. The development of the Rate AGS revenues was calculated by system, rather than by discrete producer.

Peoples Natural Gas Company
Docket No. R-2018-3006818
SBI 9

FPFTY Volume By Month

	Gathering System	11/30/2019	12/31/2019	1/31/2020	2/29/2020	3/31/2020	4/30/2020	5/31/2020	6/30/2020	7/31/2020	8/31/2020	9/30/2020	10/31/2020	TME 10/31/2020
PNGD	System 1	1,721,946	1,716,448	1,710,968	1,705,506	1,700,061	1,694,633	1,689,223	1,683,830	1,678,454	1,673,095	1,667,754	1,662,429	20,304,346
PNGD	System 2	72,793	72,561	72,329	72,098	71,868	71,639	71,410	71,182	70,955	70,728	70,502	70,277	858,342
EGCD	System 1	954,272	957,485	944,575	869,511	853,973	627,930	919,155	1,036,478	752,213	771,171	733,653	718,734	10,139,149
EGCD	System 2	332,056	321,680	311,627	301,889	292,455	283,316	274,462	265,885	257,576	249,527	241,729	234,175	3,366,376
														34,668,213

Present Rate

	Gathering System	11/30/2019	12/31/2019	1/31/2020	2/29/2020	3/31/2020	4/30/2020	5/31/2020	6/30/2020	7/31/2020	8/31/2020	9/30/2020	10/31/2020	TME 10/31/2020
PNGD	System 1	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26
PNGD	System 2	$ 0.16	$ 0.16	$ 0.16	$ 0.16	$ 0.16	$ 0.16	$ 0.16	$ 0.16	$ 0.16	$ 0.16	$ 0.16	$ 0.16	$ 0.16
EGCD	System 1	$ 0.72	$ 0.72	$ 0.72	$ 0.72	$ 0.72	$ 0.72	$ 0.72	$ 0.72	$ 0.72	$ 0.72	$ 0.72	$ 0.72	$ 0.72
EGCD	System 2	$ 0.22	$ 0.22	$ 0.22	$ 0.22	$ 0.22	$ 0.22	$ 0.22	$ 0.22	$ 0.22	$ 0.22	$ 0.22	$ 0.22	$ 0.22

FPFTY Revenue at Present Rate

	Gathering System	11/30/2019	12/31/2019	1/31/2020	2/29/2020	3/31/2020	4/30/2020	5/31/2020	6/30/2020	7/31/2020	8/31/2020	9/30/2020	10/31/2020	TME 10/31/2020
PNGD	System 1	$ 447,706	$ 446,277	$ 444,852	$ 443,432	$ 442,016	$ 440,605	$ 439,198	$ 437,796	$ 436,398	$ 435,005	$ 433,616	$ 432,232	$ 5,279,130
PNGD	System 2	$ 11,647	$ 11,610	$ 11,573	$ 11,536	$ 11,499	$ 11,462	$ 11,426	$ 11,389	$ 11,353	$ 11,316	$ 11,280	$ 11,244	$ 137,335
EGCD	System 1	$ 687,076	$ 689,389	$ 680,094	$ 626,048	$ 614,861	$ 452,109	$ 661,792	$ 746,264	$ 541,593	$ 555,243	$ 528,230	$ 517,488	$ 7,300,187
EGCD	System 2	$ 73,052	$ 70,770	$ 68,558	$ 66,416	$ 64,340	$ 62,329	$ 60,382	$ 58,495	$ 56,667	$ 54,896	$ 53,180	$ 51,519	$ 740,603
														$ 13,457,254

Peoples Natural Gas Compa
Docket No. R-2018-3006818
SBI 9

FPFTY Volume By Month

	Gathering System	11/30/2019	12/31/2019	1/31/2020	2/29/2020	3/31/2020	4/30/2020	5/31/2020	6/30/2020	7/31/2020	8/31/2020	9/30/2020	10/31/2020	TME 10/31/2020
PNGD	System 1	1,721,946	1,716,448	1,710,968	1,705,506	1,700,061	1,694,633	1,689,223	1,683,830	1,678,454	1,673,095	1,667,754	1,662,429	20,304,346
PNGD	System 2	72,793	72,561	72,329	72,098	71,868	71,639	71,410	71,182	70,955	70,728	70,502	70,277	858,342
EGCD	System 1	954,272	957,485	944,575	869,511	853,973	627,930	919,155	1,036,478	752,213	771,171	733,653	718,734	10,139,149
EGCD	System 2	332,056	321,680	311,627	301,889	292,455	283,316	274,462	265,885	257,576	249,527	241,729	234,175	3,366,376
														34,668,213

Proposed Rate

	Gathering System	11/30/2019	12/31/2019	1/31/2020	2/29/2020	3/31/2020	4/30/2020	5/31/2020	6/30/2020	7/31/2020	8/31/2020	9/30/2020	10/31/2020	TME 10/31/2020
PNGD	System 1	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26
PNGD	System 2	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26
EGCD	System 1	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26
EGCD	System 2	$ 0.22	$ 0.22	$ 0.22	$ 0.22	$ 0.22	$ 0.22	$ 0.22	$ 0.22	$ 0.22	$ 0.22	$ 0.22	$ 0.22	$ 0.22

FPFTY Revenue at Proposed Rate

	Gathering System	11/30/2019	12/31/2019	1/31/2020	2/29/2020	3/31/2020	4/30/2020	5/31/2020	6/30/2020	7/31/2020	8/31/2020	9/30/2020	10/31/2020	TME 10/31/2020
PNGD	System 1	$ 447,706	$ 446,277	$ 444,852	$ 443,432	$ 442,016	$ 440,605	$ 439,198	$ 437,796	$ 436,398	$ 435,005	$ 433,616	$ 432,232	$ 5,279,130
PNGD	System 2	$ 18,926	$ 18,866	$ 18,806	$ 18,746	$ 18,686	$ 18,626	$ 18,567	$ 18,507	$ 18,448	$ 18,389	$ 18,331	$ 18,272	$ 223,169
EGCD	System 1	$ 248,111	$ 248,946	$ 245,589	$ 226,073	$ 222,033	$ 163,262	$ 238,980	$ 269,484	$ 195,575	$ 200,504	$ 190,750	$ 186,871	$ 2,636,179
EGCD	System 2	$ 73,052	$ 70,770	$ 68,558	$ 66,416	$ 64,340	$ 62,329	$ 60,382	$ 58,495	$ 56,667	$ 54,896	$ 53,180	$ 51,519	$ 740,603
														$ 8,879,080

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-I-12 How many sales customers and transportation customers by class are served directly from the Peoples Division and the Equitable Division gathering systems? Please provide this information separately for the Peoples Division and the Equitable Division and separately by rate schedule if available.

Response: Peoples has approximately 3,515 meters directly connected to gathering systems.

Division	Retail	Transportation	Grand Total
EGCP	2,138	192	2,330
PNGC	913	272	1,185
Grand Total	3,051	464	3,515

The requested information by rate schedule is not readily available.

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-I-13 Reference Peoples Statement No. 2, Page 18, Lines 22-23. How many customers by class of customer on the Peoples Division gathering system and the Equitable Division gathering system are located in areas where gas supply coming from the Peoples Division or the Equitable Division gathering system is the only source of supply? Please provide this information separately for the Peoples Division and the Equitable Division. If the information is only available in aggregate form, please provide the information in that form.

Response: The table below details the number of customers by class, by system type, where local production currently is the only source of supply. Absent the local production in these areas, it is possible that gas service to these customers may be able to be maintained with revisions to Peoples' facilities to create bi-directional feeds and create new delivery points into the systems.

Owner and class	Distribution	Gathering	Grand Total
Residential	588	268	856
Commercial	35	11	46
Industrial	1	-	1
Grand Total	624	279	903

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-I-14 Reference Peoples Statement No. 2, Page 14, Lines 7-8.

a. Provide the total volume of non-conventional gas that flowed through the Peoples Division and the Equitable Division gathering systems in the historic and future test periods. Please provide this information separately for the Peoples Division and the Equitable Division. If the information is only available in aggregate form, please provide the information in that form.

b. Provide the volume referenced in (a) that went to off-system markets for the Peoples Division and the Equitable Division. Please provide this information separately for the Peoples Division and the Equitable Division. If the information is only available in aggregate form, please provide the information in that form.

Response:

a. Two non-conventional wells flow into the gathering system, both are located on the Equitable Division, and they had a total throughput for the historic test period of 387,166 Mcf. Peoples does not estimate future test period production by well.
b. None of the volumes from subpart (a). were nominated off-system.

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-I-17 Does any Pennsylvania gas supply enter Peoples' system directly into transmission or distribution lines?

a. If the response is "yes", then provide the annual amount of that supply for the historical and future test periods for the Peoples Division and the Equitable Division. Please provide this information separately of the Peoples Division and the Equitable Division. If the information is only available in aggregate form, please provide the information in that form.

Response: Yes. Peoples does have local production that enters into Peoples transmission and distribution lines. The majority of which (85%) is from non-conventional production.

The annual amount for the historical test period for the Peoples Division is 1.115 Bcf and for the Equitable Division is 6.045 Bcf. Peoples does not estimate production for the future test year by this breakout.

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-I-18 What is the percentage of UFG on the Peoples Division gathering system and the Equitable Division gathering system for the historic year or most recent twelve-month period available? Please provide this information separately for the Peoples Division and the Equitable Division. If the information is only available in aggregate form, please provide the information in that form.

Response: The gathering systems on Peoples Division have 8.7% UFG for the twelve month reporting period ended August 31, 2018. The gathering system on the Equitable Division has 9.2% UFG for the same period. These two systems provide for a total gathering loss rate of 8.9% for all of Peoples over the same twelve month period.

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-I-28 Now that the PES Program is being abandoned and the proposed new Rate AGS is a mandatory charge from producers to recover gathering system base rate costs, which includes dehydration equipment, will those formerly added more stringent water vapor standards be eliminated since suppliers will now be paying for dehydration investment through their Rate AGS? Insofar as your response references any work papers, documents, emails, or any other documentation, please provide copies thereof.

Response: No. The dehydration equipment owned and operated by Company along with the gas quality provisions contained in the tariff are both necessary to protect Peoples' pipeline systems and to ensure that natural gas of adequate quality is delivered to customers.

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-I-29 How much money has been paid to date by producers under the PES Program?

Response: Refer to the attachment for the requested information for 2012-2018. The requested information prior to 2012 is not readily available because it was managed and housed in a financial system no longer utilized and maintained by the Company.

SBI-I-29
Attachment

Year	PES Revenues
2011	$ 5,936,360.97
2012	$ 12,465,867.83
2013	$ 11,291,247.02
2014	$ 10,496,380.98
2015	$ 9,034,166.97
2016	$ 7,234,382.51
2017	$ 7,237,245.87
2018	$ 7,140,101.42
2019	$ 1,010,870.00
Total	$ 71,846,623.57

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-I-31 Please list PES Program funds by year from the inception of the PES Program and how those funds were invested by project and by property account on Peoples' books.

Response: Refer to the attachment for the requested information for 2012-2018. The requested information prior to 2012 is not readily available because it was managed and housed in a financial system no longer utilized and maintained by the Company. The PES Program funds are committed by Peoples and the producers through the Project Review Committee (PRC) for both capital and expense to enhance or maintain throughput of Pennsylvania produced natural gas. People's accounting system tracks the capital but not the expense associated with the PRC projects. Some examples of expense items include compression rentals, engine overhauls, pipeline pigging and field equipment communications.

SBI-1-31
Attachment

Reconcile Finance PA PES Projects to Fixed Asset Records

2012		2013		2014		2015		2016		2017		2018	
Row Labels	Sum of DEC YTD	Row Labels	Sum of DEC YTD	Row Labels	Sum of DEC YTD	Row Labels	Sum of DEC YTD	Row Labels	Sum of DEC YTD	Row Labels	Sum of DEC YTD	Row Labels	Sum of DEC YTD
1. PRODUCTION ENHANCE	$ 610,677.98	1. PRODUCTION ENHANCE	$ 383,010.71	1. PRODUCTION ENHANCE	$ 1,152,418.82	1. PRODUCTION ENHANCE	$ 2,070,145.23	1. PRODUCTION ENHANCE	$ 307,565.98	1. PRODUCTION ENHANCE	$ 820,789.03	1. PRODUCTION ENHANCE	$ 2,987,395.72
51378	$ 904.06	55057.1.1	$ 167.70	2014016.1.1	$ 22,127.29	2014025.1.2	$ 262.53	2015010.1.1	$ (60,929.52)	ST152 SALVAGE	$ (1,498.00)	ST152 RET UNIT 3	$ 46,521.00
51378.1.1.1	$ 24.27	55058.1.1	$ 264.55	2014019.1.1	$ (0.00)	2015010.1.1	$ 274,587.97	55587.1.1	$ (1,309.49)	ST151 RET CHILLER	$ 6,076.36	55882.9	$ (54,823.60)
55057.1.1	$ 13,163.87	55059.1.1	$ 109.56	2014025.1.2	$ 64,847.95	55531.1.2	$ 1,124.85	55694.1.1	$ 10,434.70	ST151 SALVAGE	$ (2,052.80)	KINTER SALVAGE	$ (5,840.05)
55058.1.1	$ 10,609.26	55060.1.1	$ 98.29	55062.1.1	$ 368.32	55532.1.2	$ 1,124.85	55694.4.4	$ 14,890.54	KINTER MAIN UNIT INST	$ 50,111.80	KINTER MAIN UNIT INST	$ 2,083,021.30
55059.1.1	$ 7,249.49	55061.1.1	$ 226.63	55231.1.3	$ (3,645.00)	55533.1.2	$ 1,124.85	55695.1.2	$ 219,686.88	XS263-INST 800' PIPE - PAPEP	$ 113.29	ST151 INST MOISTURE ANALYZER	$ 461.65
55060.1.1	$ 5,515.47	55062.1.1	$ 125.29	55531.1.2	$ 153,646.33	55535.1.2	$ (502.07)	55781.1.3	$ 51,175.78	ST151 INST MOISTURE ANALYZER	$ 7,747.14	ST132 INST MOISTURE ANALYZER	$ 746.67
55061.1.1	$ 14,096.60	55063.1.1	$ 259.74	55531.4.4	$ 1,174.81	55541.1.1	$ 74,214.15	55782.1.3	$ 65,617.09	ST132 INST MOISTURE ANALYZER	$ 3,240.67	ST152 INST UNIT 3	$ 99,234.31
55062.1.1	$ 7,321.59	55064.1.1	$ 447.75	55532.1.2	$ 172,510.13	55587.1.1	$ 20.16	55834.1.11	$ 8,000.00	INTANGIBLE CIAC-PAPEP	$ 51,000.00	55916.1.3	$ 818,074.44
55063.1.1	$ 17,623.76	55065.1.1	$ 272.96	55533.1.2	$ 241,173.79	55597.1.2	$ 102,433.69	Grand Total	$ 307,565.98	ST152 INST UNIT 3	$ 383,922.80	Grand Total	$ 2,987,395.72
55064.1.1	$ 17,018.47	55231.1.3	$ 32,246.85	55534.1.2	$ 0.00	55597.4.4	$ 388.79			ST151 INST CHILLER	$ 322,127.77		
55065.1.1	$ 17,706.24	55364.1.2	$ (60,629.58)	55535.1.2	$ 41,385.92	55598.1.2	$ 57,737.52			Grand Total	$ 820,789.03		
55150.1.1.1	$ 168,634.51	55375.1.2	$ 388,109.92	55541.1.1	$ 370,542.98	55598.4.4	$ 1,020.00						
55151.1.1.1	$ 166,549.67	55453.1.2	$ 21,311.05	55557.1.1	$ 86,996.97	55599.1.2	$ 52,564.92						
55195.1.3	$ 18,351.69	Grand Total	$ 383,010.71	55587.1.1	$ 1,289.33	55666.1.2	$ 278,489.63						
55231.1.3	$ 94,149.40			Grand Total	$ 1,152,418.82	55694.1.1	$ 1,112,035.32						
55364.1.2	$ 60,629.58					55695.1.2	$ 113,518.07						
55375.1.2	$ 1,234.58					Grand Total	$ 2,070,145.23						
5V07356482	$ (10,104.53)												
Grand Total	$ 610,677.98												

Finance PA PES Proj matches:	Fixed Asset PA PES Project
2014016.1.1	WBS 2014016.1.1
2015010.1.1	WBS 2015010.1.1
55195.1.3	WBS 55195.1.3
55231.1.3	WBS 55231.1.3
55375.1.2	WBS 55375.1.2
55453.1.2	WBS 55453.1.2
55531.1.2	WBS 55531.1.2
55531.4.4	WBS 55531.4.4
55532.1.2	WBS 55532.1.2
55533.1.2	WBS 55533.1.2
55541.1.1	WBS 55541.1.1
55694.1.1	WBS 55694.1.1
55694.4.4	WBS 55694.4.4
55695.1.2	WBS 55695.1.2
55782.1.3	WBS 55782.1.3
55834.1.11	WBS 55834.1.11

Fixed Asset PA PES Project Only (No Finance Match)	
51376-11 ST 15900 ARNOLD STATION MIST EXTRACTO	
55574-ST157 RET CRANKSHAFT- PAPEP	
6' OF 12" PROJ 36365.8	
WBS 2013 O/H ADJ PNG.1	
WBS 33421.1.3	REPLACE COMPRESSORS & EQUIP
WBS 36365.1.3	ST16300 ARMBURST STATION
WBS 38641.1.3.1	INSTALL DEHY AT REDBANK ST34300
WBS 38641.1.3.2	INSTALL DEHY AT BELKNAP ST13200
WBS 38641.1.3.3	INSTALL DEHY AT EGRY ST15600
WBS 38641.1.3.4	INSTALL DEHY AT LATROBE ST13200
WBS 41576.1.2	INSTALL NEW HIGH LEVEL ALARM
WBS 51369.1.1.1	11 ST 15500 LATROBE FILTER SEP
WBS 51376.1.1.1	11 ST 15900 ARNOLD STATION MIST EXTRACTO
WBS 51377.1.1.1	11 ST 13200 BELKNAP ST MIST EXTRACTOR
WBS 51407.1.1.1	11 ST 15700 CREEKSIDE FILTER SEP
WBS 55163.1.3	ST163 INST HOLDER
WBS 55574.1.3	ST157 INST CRANKSHAFT- PAPEP
WBS 55595.1.3	ST156 EGRY DISCHARGE LINE
WBS 55774.1.3	ST343 INST 12" STL
WBS 55837.1.3	ST163 INST MOISTURE ANALYZER

$'s in:	
2011	
2014	
2011	
2014 (Overhead)	
2010-2011	
2011	
2011	
2011	
2011	
2011	
2010-2011	
2011-2012	
2011	
2011	
2011-2012	
2012-2013	
2014	
2014-2015	
2016-2017	
2016-2017	

Finance PA PES Project Only (No Fixed Asset Match)	
51378	11 TP 7911 LAUREL RIDGE FITLER SEPARATOR
2014019.1.1	G259 INST VILLAGE CONNECT - PAPEP
2014025.1.2	HRD013 INST M&R EQUIPMENT
51378.1.1.1	11 TP 7911 LAUREL RIDGE FITLER SEPARATOR
55057.1.1	TP7625 INST ANALYIZER
55058.1.1	TP371 INST ANALYIZER
55059.1.1	TP7200 INST ANALYIZER
55060.1.1	TP598 INST ANALYIZER
55061.1.1	TP371-TP7625 INST ANALYIZER
55062.1.1	TP944 INST ANALYIZER
55063.1.1	TP7676-TP7215 INST ANALYIZER
55064.1.1	TP7625-TP7600-TP7800 INST ANALYIZER
55065.1.1	TP371-TP4555 INST MOIST ANALYIZER
55150.1.1.1	TP7300 INST 20" STL BLAIR
55151.1.1.1	TP7300 INST 20" STL CAMBRIA
55364.1.2	CANCELED - ST156 INST 10" VALVE
55534.1.2	14KIS-XS353 INST VILLAGE M&R - PAPEP
55535.1.2	XS339 ADD RUN
55557.1.1	GP2077 INST 900' of 6" PLA
55587.1.1	CANCEL-GP418 INST 1500' of 6" PLA
55597.1.2	XS359 INSTALL EQUIPMENT
55597.4.4	XS359 R/W
55598.1.2	XS358 INST M&R STATION
55598.4.4	XS358 R/W
55599.1.2	XS357 INST M&R STATION
55666.1.2	XS362 INST M&R STATION
55781.1.3	ST151 INST MOISTURE ANALYZER
5V07356482	GP1032 ESTIMATE 0 VARIOUS 11111

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-I-35 What, if anything, is Peoples doing to encourage or provide incentive for producers to drill new gas wells for the benefit of customers served in isolated areas where production is declining, and the customers are served from gathering lines and run the risk of losing natural gas as their energy source due to pipeline abandonment? Please describe any incentives Peoples is offering to encourage well production in these areas. Insofar as your response references any work papers, documents, emails, or any other documentation, please provide copies thereof.

Response: Refer to the proceeding and Recommended Decision in Pa PUC Order dated August 11, 2016 in Docket Nos. R-2016-2528562 and R-2016-2529260. Per this Order, the Company received approval of a price incentive mechanism that can be offered to local producers to encourage the production of local gas in specific areas where the Company may require local gas supplies for the efficient operation of its system. To date, Peoples has not utilized this mechanism because it has been able to utilize other more cost effective supply options to ensure the availability of supplies. Peoples intends to continue to explore the possible use of this price incentive when and where it may be needed.

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-I-40 If a producer injects Pennsylvania gas directly into Peoples' transmission or distribution system and does not make use of Peoples' gathering system, why would they be charged a negotiated rate under Rate AGS or any rate at all under Rate AGS? Insofar as your response references any workpapers, documents, emails, or any other documentation, please provide copies thereof.

Response: Refer to the response to SBI-I-42 regarding local gas entering non-gathering systems. Regarding non-traditional local gas entering the distribution or transmission system, refer to Peoples Statement No. 2, page 23, lines 16 through 23 and Page 24, lines 1 through 3.

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-I-42 Does Peoples charge the two (2) percent retainage charge on Pennsylvania gas supply that does not use Peoples' gatheringsystem? If yes, why?

Response: Yes. Application of the producer retainage charge was approved by the PUC in Docket Nos. R-2018-2645278 and R-2018-3000236 (Peoples Natural Gas 1307(f)-2018 Proceeding).

Below is an excerpt from the PUC Order, pages 75 and 76:

Peoples has given several reasons it believes applying the proposed charge to both distribution and gathering system is more efficient than having a different application for the Rate GS tariff for the Peoples Division and a different Rate AGS tariff for Equitable. For instance, Peoples has indicated that it modelled the proposed producer charge after Equitable's Rate AGS tariff which applies both gathering fees and retainage to production entering both its distribution and gathering lines. PNG St. 1-R at 27. According to Peoples, this is to prevent the Company from having to introduce different rules depending on which company's system a well ties into. PNG St. 1-R at 27; Peoples Gas St. 1-R at 26; PNG R.B. at 15. Secondly, Peoples avers the difference between applying the charge to only a gathering system when compared to applying it to both distribution and gathering systems is so minimal that it is not worth the challenges the Company would face in proposing two different tariffs for the two divisions of the Company. PNG M.B. at 16. Peoples argue [sic] a recalculation based on the volumes from gathering system-only compared to both gathering and distribution system results in an increase from 2.0% to 2.17%, a less than 10% difference. Tr. at 56. Finally, Peoples contends the proposed Rate GS tariff also avoids the possibility of differential treatment for producers based on their point of connection to Peoples' system. PNG R. Exc. at 21-22. Here, we find the reasons given by Peoples to support its proposed retainage charge to be reasonable. We further note that PIOGA has not presented any evidence in this proceeding to demonstrate that the application of the proposed producer charge to both gathering and distribution system similar to Equitable's already-existing Rate AGS is unreasonable.

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-I-49 Reference Peoples Statement No. 2, Page 22, Lines17-23 and Peoples Natural Gas Exhibit No. JAG – 2. Please provide the derivation of the 12.4% referred to in Rate AGS and provide all supporting documents.

Response: Refer to the attachment. The average natural gas market price in our region (DTI South Point) for the FPFTY was projected to be $2.10 per Dth, as of January 2019. This price and projected period represents a low natural gas market price period and one where higher gathering charges could detrimentally affect local supplies into the systems. The 12.4% factor was derived from: 1) the average projected natural gas market price in our region (DTI South Point) for the FPFTY of $2.10 per Dth; and 2) the proposed minimum gathering rate of $0.26 per Mcf as described in response to SBI-I-7.

SBI-I-49
Attachment

DTI SP App Index - January First of the Month ("FOM") Close

	1/2/2019
FPFTY	$/Dth
Nov-19	2.188
Dec-19	2.402
Jan-20	2.566
Feb-20	2.513
Mar-20	2.350
Apr-20	2.080
May-20	1.933
Jun-20	1.927
Jul-20	1.908
Aug-20	1.914
Sep-20	1.750
Oct-20	1.724
Avg.	2.105
Gathering	$ 0.260
	12.4%

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-I-51 As a rate that is being set based on value of service principles, what are the costs of alternatives that are available to producers that Peoples used in determining the value of service for Rate AGS? Please list the cost of each alternative and how that was used in rate setting.

Response: The cost of alternatives for producers would include shutting in production, reworking wells to improve production, or laying new pipelines to alternative markets. The Company has not quantified the costs of these alternatives.

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-II-2 Reference Peoples Statement No. 2, Page 14, Line 1.

a. Please provide by year, beginning in 2012, the volumes of conventional local production separately for Equitable and Peoples.
b. Can Mr. Gregorini say with certainty that none of the decline in volume on the Equitable System is related to Rate AGS?

Response:

a. The following table lists the conventional production for the years 2012-2018. Note: The conventional production data for the Equitable division is only available for 2014-2018, since the Peoples' acquisition of the Equitable Gas utility assets.

	PNG	EGC
2012	35,805,144	N/A
2013	33,631,385	N/A
2014	28,430,737	8,466,212
2015	26,304,420	7,540,846
2016	22,104,643	6,933,048
2017	20,636,236	6,776,964
2018	21,219,208	6,183,001

b. No.

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-II-7 Reference Peoples' response to SBI-Peoples-I-7. Please provide all workpapers, contemporaneous notes, and any other documents that support the assertion that "feedback" received by Peoples from PIOGA was a basis for the minimum rate proposal of $0.26 for Rate AGS.

Response: Peoples did not take contemporaneous notes or work papers when that discussion took place.

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-II-9 Reference Peoples' response to SBI-Peoples-I-9. What are System 1 and System 2 as referenced in Peoples' response?
a. Please explain what each system is and why the rate is different for each system.

Response: System 1 refers to conventional production and System 2 refers to non-conventional production. The EGC System 2, which is non-conventional production would pay a negotiated rate under Rate AGS, whereas the other systems would pay the market based rate.

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-II-17 Reference Peoples' response to SBI-Peoples-I-35. Please provide a copy of the price incentive mechanism referred to in response to SBI-Peoples-I-35.

Response: Below is the price incentive mechanism approved in Peoples' 2016 1307(f) proceeding. There is no "copy" per se.

Production incentives, in the form of higher gas purchase prices, may be offered in discrete areas of the Company's system that: (a) are experiencing declining receipts of local gas volumes, would improve service reliability with additional local gas volumes, and have no current economically viable alternative to receipts of local gas to serve customers; or (b) have limited sources of gas supply feeding the system, would improve service reliability with additional supply feeds, and have no current economically viable alternatives to such additional supply feeds in order to improve service reliability.

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Russell Feingold

SBI-II-24 Reference Peoples' response to SBI-Peoples-I-48. Please explain why producers receiving service under Rate AGS should be charged for a return component for the working capital that Peoples must keep on hand to pay purchased gas costs before revenue receipt.

Response: Peoples' total gathering cost of service was derived under the presumption that the responsibility for these costs would be shared between the utility's end-use customers and gas producers. However, recognizing that gas producers do not cause Peoples to incur a working capital component to accommodate the lag associated with the timing of the payment and receipt of revenues related to purchased gas costs, the total gathering cost of service of $26,559,887 used to establish the maximum rate under Rate AGS should be reduced by $78,893, or 0.3%. The document entitled, SBI-II-24 Attachment 1 provides the supporting basis for this calculation.

Peoples Natural Gas Comapny LLC
Total Gathering Cost of Service
Revision to reflect the proper allocation of gas cost cash working capital

Cost Component	As Filed Amount	Revised Amount	Difference
Rate Base			
Plant in Service			
Intangible Plant	$6,303,250	$6,294,275	($8,975)
Production Plant	$124,160,959	$124,160,959	$0
General Plant	$6,003,790	$6,003,790	($0)
Total Plant in Service	$136,467,999	$136,459,024	($8,975)
Depreciation Reserve			
Intangible Plant	$2,977,641	$2,973,401	($4,240)
Production Plant	$53,322,074	$53,322,074	$0
General Plant	$2,253,738	$2,253,738	$0
Total Depreciation Reserve	$58,553,454	$58,549,214	($4,240)
Other Rate Base Items			
Materials and Supplies	$134,191	$134,191	($0)
Prepayments	$268,603	$268,603	($0)
Cash Working Capital	$1,474,819	$681,837	($792,982)
Deferred Income Taxes	($8,709,824)	($8,709,824)	($0)
Total Other Rate Base Items	($6,832,212)	($7,625,194)	($792,982)
Total Net Rate Base	$71,082,334	$70,284,616	($797,718)
Expenses			
Natural Gas Production and Gathering	$9,791,837	$9,791,837	$0
Administrative & General	$5,231,285	$5,231,079	($206)
Depreciation Expense	$3,926,018	$3,924,915	($1,103)
Taxes Other Than Income Taxes	$697,338	$697,338	$0
Total Expenses	$19,646,478	$19,645,170	($1,308)
Return on Net Rate Base	$5,685,172	$5,621,370	($63,802)
Federal Income Taxes on Return	$1,228,237	$1,214,453	($13,784)
Total Gathering Cost of Service	$26,559,887	$26,480,994	($78,893)
Gathering Service Revenues			
At Present Rates (HTY)	$15,544,187	$15,544,187	$0
At Proposed Rates (FPFTY)	$8,929,271	$8,929,271	$0

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-II-26 Reference Peoples Statement No. 2, Page 18, Lines 19-20. Please provide a calculation of the reduction in pipeline demand costs that is enjoyed by Peoples' sales and transportation customers because of the use of local gas for the HTY, FTY, FPFTY, and the five calendar years preceding the HTY.

Response: The reduction in pipeline demand costs can be calculated by multiplying the local gas peak day supply times Peoples average demand costs for all other pipeline transportation services.

The estimated cost reduction for the HTY, FTY and FPFTY would be:

		Peak Day Local Supply	Peoples' Average Demand Cost Interstate	Estimated Cost
	YEAR	Dth	Pipelines	Reduction
HTY/FTY/FPFTY^	2019	28,496	$ 8.48	$ 2,899,753
	2018	34,008	$ 8.36	$ 3,411,683
	2017	32,864	$ 8.38	$ 3,304,804
	2016	34,008	$ 8.38	$ 3,419,844
	2015*	44,187	$ 8.38	$ 4,443,445
	^Use 2018 as a proxy for each of the HTY, FTY and FPFTY			
	*Prior to October 2015 Peoples Division and Equitable Division			
	had separate gas cost rates.			

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-III-3 Does Peoples bill or collect fees on behalf of any other trade association?

a. If the response is "no," then why is Peoples collecting fees for PIOGA?
b. Does PIOGA pay for this service, or is Peoples receiving compensation in some other form from PIOGA for this service?
c. If the response is "yes," then what is Peoples' compensation for this service?

Response: No.

a. Under the current program, Peoples collects its PA PES fees and a $0.01/Mcf fee (on behalf of PIOGA) directly from producers that sell gas to Peoples. It does this by netting those fees against the amounts that Peoples pays for gas purchases from those same producers. Peoples already has in place an invoice process with these producers so assessing PA PES fees in this manner creates no additional administrative responsibilities.
b. No.
c. N/A.

Docket No. R-2018-3006818
Peoples Natural Gas Company LLC
Data Requests

Respondent: Joseph Gregorini

SBI-III-10 Reference Peoples' response to SBI-Peoples-II-17.

a. For the 1.115 Bcf coming into the transmission and distribution system for the Peoples Division for the HTY, please provide a breakdown as follows: transmission-conventional, transmission-non-conventional, distribution-conventional, distribution-non-conventional.

b. Please provide the same breakdown described in part (a) for the 6.045 Bcf of gas coming into the Equitable Division system for the HTY.

Response:

a. For the Peoples Division, 789,453 Mcf out of the 1.115 Bcf is from non-conventional production of which 1,838 Mcf came into a transmission line and 787,615 came into a distribution line. The conventional volumes are not routinely aggregated between production entering the transmission lines versus distribution lines so that breakout is not readily available. However, Peoples estimates 238,736 Mcf came into a transmission line and 87,181 Mcf came into a distribution line.

b. For the Equitable Division, our original response to SBI-II-17 inadvertently omitted a couple production meters therefore the correct amount is 6.577 Bcf of which all is non-conventional and enters a distribution system.

PEOPLES

September 29, 2015

Re: IOGA-PA / Peoples Production Enhancement Service Agreement

Dear Producer:

Peoples Natural Gas Company and the Independent Oil & Gas Association of Pennsylvania have entered into an agreement effective April 2016, to extend the existing Production Enhancement Service Agreement (PES) that is set to expire and would eliminate certain benefits and services fees associated with the existing interstate pipeline agreement.

The PES program has been in effect since the mid 2000's with two major goals of the program; enhance deliverability of PA production and to integrate services to economize the cost of meeting the water vapor requirements for pipeline quality natural gas. Enhancements made to the systems include installing compressor stations and pipeline interconnects, upgrading and installing pipelines, strategically located water dehydration system to bring the production into compliance with pipeline quality gas. We believe all parties have benefited from this agreement and believe it is in the best interest of all to extend the agreement.

During the term of the extended PES agreement each producer will continue to receive the benefits of the PES program, however the parties have agreed to eliminate the off-system pipeline capacity fee (currently $0.1659/MCF billed each month as part of PES) and the current gas retainage charge for off-system deliveries resulting in annual producer cost savings of $6,000,000. The services that will continue to include:

1. Continued operation and maintenance of existing utility compression
2. Negotiated water vapor standard
3. Access to Equitrans AVC capacity
4. Peoples/IOGA-PA gathering investment of $1,500,000 annually to enhance the deliverability of PA production on the Peoples system through new interconnections with the Equitable and Peoples TWP systems

The details of the new fees, and the other provisions of the agreement, are included in the attached "Amendment to Production Enhancement Service Agreement".

The effective date of the agreement is the beginning of Peoples' April 2016 production period. Peoples must have 80% participation by volume in the program or the new agreement with IOGA-PA will be terminated. Therefore, your timely attention and execution of the attached documents is critical to the implementation of this agreement.

In order to implement the terms of the agreement for the April 2016 production period, the enclosed Amendments to Production Enhancement Agreement must be returned to Peoples at the following address by November 1, 2015:

Leslie Tafel Peoples Natural Gas Company 225 North Shore Drive, Pittsburgh, PA 15212

Both parties plan to renegotiate the fees on Exhibit B when Peoples is eligible to file a new rate case with the Pennsylvania Public Utility Commission. The effective date of those new rates cannot occur prior to January 1, 2018.

Sincerely,

Jeffrey S. Nehr

Jeffrey S. Nehr
Vice President, Gas Supply and Business Development
Peoples Natural Gas

Lou D. D'Amico
President and Executive Director
Pennsylvania Oil and Gas Association

Supplement No. 98
Gas—PA PUC No. 45

PEOPLES NATURAL GAS COMPANY LLC

RATES AND RULES GOVERNING THE FURNISHING OF NATURAL GAS SERVICE TO RETAIL GAS CUSTOMERS

Quarterly 1307(f) Gas Cost,
Rider E, Merchant Function Charge,
Rider F, Universal Service Charge
Filing

ISSUED: December 31, 2018
BY: Morgan K. O'Brien
President
375 North Shore Drive
Pittsburgh, PA 15212

EFFECTIVE: January 1, 2019

NOTICE

This tariff makes changes to existing rates.
(See page 2)

PEOPLES NATURAL GAS COMPANY LLC

SUPPLEMENT NO. 98 TO GAS-PA PUC NO. 45
EIGHTY-NINTH REVISED PAGE NO. 2
CANCELLING EIGHTY- EIGHTH REVISED PAGE NO. 2

LIST OF CHANGES

	Current	Proposed	Increase/ (Decrease)
Rider B			
Rate RS, SGS, MGS, LGS, NGPV			
Capacity Charge	$1.0398	$0.9953	($0.0445)
Gas Cost Adjustment Charge	($0.0418)	($0.0372)	$0.0046
Natural Gas Supply Charge	$2.9474	$3.8865	$0.9391
Rider E - Merchant Function Charge			
RS	$0.1024	$0.1257	$0.0233
SGS,MGS,LGS	$0.0261	$0.0321	$0.0060
Rider F- Universal Service Charge	$0.4961	$0.5479	$0.0518

ISSUED: December 31, 2018

EFFECTIVE: January 1, 2019

PEOPLES NATURAL GAS COMPANY LLC

SUPPLEMENT NO. 95 TO GAS—PA PUC NO. 45
SECOND REVISED PAGE NO. 57
CANCELLING FIRST REVISED PAGE NO. 57

RATE GS – GATHERING SERVICE
(C)

AVAILABILITY

Service under this rate schedule is available to any party desiring to deliver conventional well gas directly into the Company's system, provided that there exists: (1) a gas purchase agreement with the Company or an executed Rate GS Service Agreement; and (2) compliance with the provisions of this Rate Schedule and with all other provisions of this Tariff.

RATES

All volumes of gas received at any point under this service will be subject to a 2.0% retainage rate.

TERM

The term for service shall be a minimum of one (1) year from the commencement of deliveries of gas supplies.

CHARACTER OF SERVICE

The Company's only obligation under this Rate Schedule shall be to receive gas from any conventional well and to permit that gas to flow against the existing pressure in the Company's facilities. The Company shall not be obligated to lower such line pressure by compression or otherwise to accommodate receipts from local producers under this Rate Schedule.

Service under this Rate Schedule shall be subject to Operational Flow Orders pursuant to Section 22 of the Rules and Regulations of this Tariff. Nothing in this Rate Schedule shall limit the Company's right to interrupt service or to take other action as may be required to alleviate conditions which threaten the integrity of its system.

(C) Indicates Change.

Appendix C – Equitable Tariff No. 46 – effective January 1, 2019

SUPPLEMENT NO. 67
TO

GAS - PA. P.U.C. NO. 46

Peoples Natural Gas Company LLC
EQUITABLE Division

RATES and RULES

FOR

GAS SERVICE IN

CITY OF PITTSBURGH

AND TERRITORY ADJACENT THERETO

(For Lists of Communities Served, see Page No. 4)

Quarterly 1307(f) Gas Cost,
Rider F, Merchant Function Charge,
Rider D, Universal Service Charge
Filing

ISSUED: December 31, 2018
By: Morgan K. O'Brien
President
Peoples Natural Gas Company LLC
375 North Shore Drive
Pittsburgh, PA 15212

EFFECTIVE: January 1, 2019

NOTICE

This tariff makes changes to existing rates.
(See page 2)

Appendix C – Equitable Tariff No. 46 – effective January 1, 2019

PEOPLES NATURAL GAS COMPANY LLC

SUPPLEMENT NO. 66
TO GAS - PA. P.U.C. NO. 46
SIXTIETH REVISED PAGE NO. 2
CANCELING FIFTY-NINTH REVISED PAGE NO. 2

LIST OF CHANGES MADE BY THIS TARIFF SUPPLEMENT

	Current	Proposed	Increase (Decrease)
Rate RS			
Natural Gas Supply Charge	$ 3.9872	$ 4.8818	$ 0.8946
Natural Gas Delivery Charge	$ 3.1269	$ 3.1315	$ 0.0046
Rate GSS			
Natural Gas Supply Charge	$ 3.9872	$ 4.8818	$ 0.8946
Natural Gas Delivery Charge	$ 2.5492	$ 2.5538	$ 0.0046
Rate GSL			
Natural Gas Supply Charge	$ 3.9872	$ 4.8818	$ 0.8946
Natural Gas Delivery Charge	$ 2.4532	$ 2.4578	$ 0.0046
Rate FDS			
Capacity and Balancing Charge	$ 1.0398	$ 0.9953	$ (0.0445)
Rider A - Purchased Gas Cost			
Current PGC	$ 3.9454	$ 4.8446	$ 0.8992
C factor	$ 3.9872	$ 4.8818	$ 0.8946
E factor	$ (0.0418)	$ (0.0372)	$ 0.0046
Rider F - Merchant Function Charge			
Rate RS	$ 0.1024	$ 0.1257	$ 0.0233
Rate GSS and Rate GSL	$ 0.0261	$ 0.0321	$ 0.0060
Rider D - Universal Service	$ 0.2246	$ 0.2904	$ 0.0658

PEOPLES NATURAL GAS COMPANY LLC

SUPPLEMENT NO. 64
TO GAS - PA. P.U.C. NO. 46
FIRST REVISED PAGE NO. 82
CANCELLING ORIGINAL PAGE NO. 82

RATE AGS – APPALACHIAN GATHERING SERVICE

APPLICABILITY

These rates shall be applicable throughout the territory served by the Company.

AVAILABILITY

Service under this rate schedule is available to any party desiring to transport gas through the gathering system as well as to deliver gas directly into the Company's distribution system, provided that there exists: (1) a gas purchase agreement with the Company or an executed Rate AGS Service Agreement; and (2) compliance with the provisions of this Rate Schedule and with all other provisions of this Tariff.

RATES

All volumes of gas received at any point under this service will be subject to a gathering rate (billed in dekatherms) and a retainage rate with a minimum of 2%. All rates for this service shall be determined by negotiation. **(C)**

SURCHARGES AND RIDERS

Customers served under this rate schedule are subject to Rider E Distribution System Improvement Charge (DSIC) except that the DSIC rate may be reduced or eliminated for any customer with competitive alternatives or negotiated contracts.

TERM

The term for service shall be a minimum of one (1) year from the commencement of deliveries of gas supplies.

CHARACTER OF SERVICE

Equitable's only obligation under this Rate Schedule shall be to receive gas from any Appalachian receipt point and to permit that gas to flow against the existing pressure in Equitable's facilities. Equitable shall not be obligated to lower such line pressure by compression or otherwise to accommodate receipts from local Appalachian producers under this Rate Schedule.

Service under this Rate Schedule shall be subject to Operational Flow Orders pursuant to Section 11.13 of the Rules and Regulations of this Tariff. Nothing in this Rate Schedule shall limit Equitable's right to interrupt service or to take other action as may be required to alleviate conditions which threaten the integrity of its system.

(C)Indicates Change

Original Tariff Gas—PA PUC No. 47
Cancels and Supersedes Tariff Gas – PA PUC No. 45 and 46

PEOPLES NATURAL GAS COMPANY LLC

RATES AND RULES GOVERNING THE FURNISHING OF NATURAL GAS SERVICE TO RETAIL GAS CUSTOMERS

ISSUED: January 28, 2019
BY: Morgan K. O'Brien
President
375 North Shore Drive
Pittsburgh, PA 15212

EFFECTIVE: March 29, 2019

NOTICE

This tariff combines Tariff Gas – PA PUC No. 45 for the Peoples Division and Tariff Gas – PA PUC No. 46 for the Equitable Division. Upon approval of this Tariff Gas – PA PUC No. 47, all Peoples Natural Gas customers (including the former Peoples and Equitable Divisions) will be subject to the rates and rules set forth herein.

This tariff makes changes to existing rates.

(See page 2)

PEOPLES NATURAL GAS COMPANY LLC **GAS—PA PUC NO. 47**
ORIGINAL PAGE NO. 2

LIST OF CHANGES

Page	Page Description	Revision Description
2, 2A, 2B	List of Changes	List of Changes
3, 4	Summary of Rates	Summary of prices for each rate schedule and rider updated.
3A, 4A	Summary of Rates	Pages removed; no longer needed.
5	Table of Contents	"Ratepayer" changed to "Customer". Rate GL added from Equitable Division tariff. Rider names updated.
6	Definitions of Terms	Applicant definition updated. "Ratepayer" changed to "Customer". "Customer" definition added.
7	Definitions of Terms	"Ratepayer" changed to "Customer". "Ratepayer" definition removed.
8	Classification of Customers	"Ratepayer" changed to "Customer". Definition of residential, commercial, and industrial customer modified.
9	Classification of Customers	"Ratepayer" changed to "Customer".
10	Rates Available Under This Tariff	"Ratepayer" changed to "Customer". Rate GL added from Equitable tariff.
11	Description of Territory	Additional cities/boroughs and townships included.
12	Description of Territory	Additional boroughs and townships included.
14	Description of Territory	Additional boroughs and townships included.
15	Description of Territory	Additional townships included.
16	Description of Territory	Additional cities/boroughs and townships included.
16A	Description of Territory	Additional townships included.
17	Rules and Regulations	Additional language added for conditions of furnishing service to customers. "Ratepayer" changed to "Customer". Transfer fees and connect fees eliminated.
18	Rules and Regulations	Moved cash deposit language into part b. "Ratepayer" changed to "Customer".
19	Rules and Regulations	"Ratepayer" changed to "Customer". Calculation of interest rate for commercial and industrial deposits modified to match residential calculation. Additional descriptive language added for cases where Applicant cannot furnish a cash deposit.
20	Rules and Regulations	Modified language for connection of service. Meter installation specifications from Equitable tariff included. Residential main allowance added.
20A	Rules and Regulations	New Page Added
21	Rules and Regulations	"Ratepayer" changed to "Customer". Turn-on fees updated. Winterizing and collection language added.
22	Rules and Regulations	Non-liability language added. "Ratepayer" changed to "Customer". Measurement of gas language modified.
23	Rules and Regulations	"Ratepayer" changed to "Customer". Accepted forms of payment added. Billing cycle language added.
24	Rules and Regulations	Billing cycle language added. Final bill language added. Dishonored Payment language from Equitable Division tariff added.
25	Rules and Regulations	"Ratepayer" changed to "Customer". Obstruction of meter language added. Meter ownership language added.
26	Rules and Regulations	Rule 15 moved to page 26. Renamed Section 17 "Emergency Curtailment". Language added to Section 16. "Ratepayer" changed to "Customer". Moved "Discontinuance of Service and Curtailment" section to page 27.
27	Rules and Regulations	Renamed Section 17 "Emergency Curtailment". Removed "Gas Shortage Curtailment Related to Long-Term Supplies" section. Old language from Page 29 moved here.
28	Rules and Regulations	Deleted old Section 17 language. Moved appendix to this page.

PEOPLES NATURAL GAS COMPANY LLC **GAS—PA PUC NO. 47**
ORIGINAL PAGE NO. 2A

LIST OF CHANGES (CONTINUED)

29	Rules and Regulations	Rules and Regulations renumbered. Section 18 Priority of Service Curtailment moved from Section 17. Service Agreement and Flexible Rates added. “Ratepayer” changed to “Customer”.
30	Rules and Regulations	“Ratepayer” changed to “Customer”.
31	Rules and Regulations	“Ratepayer” changed to “Customer”.
32	Rules and Regulations	“Ratepayer” changed to “Customer”. Rules and Regulations renumbered.
33	Rules and Regulations	“Ratepayer” changed to “Customer”. Additional release of customer information language and contact information added. Rules and Regulations renumbered.
35	Rules and Regulations	Language added from supplier tariff. Various fees eliminated. Remaining fee amounts updated. Rules and Regulations renumbered.
36	Rate RS – Residential Service	“Ratepayer” changed to “Customer”. Customer and delivery charges updated. Late payment charge language modified. Rider name updated.
37	Customer Assistance Program	Availability description updated. “Ratepayer” changed to “Customer”.
38	Customer Assistance Program	Monthly payment amount updated. “Ratepayer” changed to “Customer”.
39	Customer Assistance Program	“Ratepayer” changed to “Customer”. Rules 7 and 8 modified.
39A	Pilot Extended Customer Assistance Program	“Ratepayer” changed to “Customer”.
40	Rate SGS – Small General Service	“Ratepayer” changed to “Customer”. Customer and delivery charges updated. Rider name updated.
41	Rate SGS – Small General Service	“Ratepayer” changed to “Customer”.
42	Rate MGS – Medium General Service	“Ratepayer” changed to “Customer”. Customer and delivery charges updated. Rider name updated.
43	Rate MGS – Medium General Service	“Ratepayer” changed to “Customer”.
44	Rate LGS – Large General Service	“Ratepayer” changed to “Customer”. Customer and delivery charges updated. Rider name updated.
45	Rate LGS – Large General Service	“Ratepayer” changed to “Customer”.
46	Rate GS-T – General Service Transportation	“Ratepayer” changed to “Customer”. Language added to rule (7).
47	Rate GS-T – General Service Transportation	“Ratepayer” changed to “Customer”.
48	Rate GS-T – General Service Transportation	“Ratepayer” changed to “Customer”.
49	Rate GS-T – General Service Transportation	“Ratepayer” changed to “Customer”. Language added to rule (17).
50	Rate GS-T – General Service Transportation	“Ratepayer” changed to “Customer”. Customer charges updated.
51	Rate GS-T – General Service Transportation	“Ratepayer” changed to “Customer”. Delivery charges updated.
51A	Rate GS-T – General Service Transportation	Late payment charge moved to this page.
52	Rate GS-T – General Service Transportation	“Ratepayer” changed to “Customer”. Liability point 3 updated.

PEOPLES NATURAL GAS COMPANY LLC **GAS—PA PUC NO. 47**
ORIGINAL PAGE NO. 2B

LIST OF CHANGES (CONTINUED)

53	Rate GS-SB – General Service – Standby	"Ratepayer" changed to "Customer".
54	Rate GS-SB – General Service – Standby	"Ratepayer" changed to "Customer". Customer charges updated.
55	Rate GS-SB – General Service – Standby	Language moved to page 54. Page now intentionally left blank.
57	Rate Appalachian Gathering Service	New rate added.
58	Rate GL – Gas Lights	Rate added from Equitable Division's tariff.
60	Rate CER – Competitive Energy Rate	Rate language modified. "Ratepayer" changed to "Customer".
61	Rider A – State Tax Surcharge	Rider renamed. Rate Revised.
62	Rider B – Recovery of Purchased Gas Costs	Rider renamed. "Ratepayer" changed to "Customer".
63	Rider B – Recovery of Purchased Gas Costs	Rider renamed. "Ratepayer" changed to "Customer".
63A	Rider B – AVC Capacity Charge	Rider renamed. "Ratepayer" changed to "Customer".
63B	Rider B – AVC Capacity Charge	Rider renamed. "Ratepayer" changed to "Customer".
64	Rider C – Transition Cost Mechanism	Rider renamed. "Ratepayer" changed to "Customer".
65	Rider C – Transition Cost Mechanism	Rider renamed. "Ratepayer" changed to "Customer".
66	Rider Supplier Choice	Rate Revised. Ratepayer" changed to "Customer".
67	Rider E – Merchant Function Charge	Rider renamed. Rate Revised. "Ratepayer" changed to "Customer".
68	Rider F- Universal Service	Rider renamed. Rate revised. "Ratepayer" changed to "Customer". Bad debt offset percentage updated.
69	Rider G – Gas Procurement Charge	Rider renamed. Rate revised. "Ratepayer" changed to "Customer".
71	Rider H – Ratepayer Trust Rate Credit	Rider eliminated.
72	Rider H – Ratepayer Trust Rate Credit	Rider eliminated.
73	Rider J – Rager Mountain Storage Credit	Rider eliminated.
74	Rider K – Distribution System Improvement Charge (DSIC)	Rider renamed. Rate revised.
75	Rider K – Distribution System Improvement Charge (DSIC)	Riders renamed.
76	Rider K – Distribution System Improvement Charge (DSIC)	Rider renamed.

PEOPLES NATURAL GAS COMPANY LLC

GAS—PA PUC NO. 47
ORIGINAL PAGE NO. 57

RATE APPALACHIAN GATHERING SERVICE

AVAILABILITY

Service under this rate schedule is available to any party desiring to transport gas through the gathering system, as well as to deliver gas directly into the Company's distribution and transmission system, provided that:

(1) a Master Interconnect and Measurement Agreement ("MIMA") has been executed between the Company and the party; and

(2) the party is in compliance the MIMA, the provisions of this Rate Schedule and with all other provisions of this Tariff.

RATES

The gathering rate ($/Mcf) will be set on a monthly basis in an amount equal to 12.4% of the beginning of the month price ($Dth) published in Platts, Gas Daily publication, under the heading Appalachia, Dominion, South Point, but in no event shall be less than $0.26 per Mcf, plus applicable retainage. The gathering rate shall not exceed the fully allocated cost of service associated with gathering system, as determined in the most recent base rate case proceeding.

Gathering of natural gas from unconventional sources, including but not limited to, horizontally drilled Marcellus and Utica shale gas and landfill gas, shall be negotiated and agreed to within the MIMA.

TERM

The terms for gathering service shall be a set forth in the MIMA.

CHARACTER OF SERVICE

The Company's only obligation under this Rate Schedule shall be to receive gas from any gathering receipt point and to permit that gas to flow against the existing pressure in the Company's facilities. Peoples shall not be obligated to lower such line pressure by compression or otherwise to accommodate receipts from local Appalachian producers under this Rate Schedule.

Service under this Rate Schedule shall be subject to Operational Flow Orders pursuant to Item 24 of the Rules and Regulations of this Tariff. Nothing in this Rate Schedule shall limit the Company's right to interrupt service or to take other action as may be required to alleviate conditions, which threaten the integrity of its system.

PIOGA Exhibit DW-11

Docket No. R- 2018-3006818, Peoples St. No. 2
Direct Testimony of Joseph A. Gregorini

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	Docket No. R-2018-3006818
PEOPLES NATURAL GAS COMPANY LLC	:	

PREPARED DIRECT TESTIMONY OF
JOSEPH A. GREGORINI,
SENIOR VICE PRESIDENT, CHIEF OPERATING OFFICER
PEOPLES NATURAL GAS COMPANY LLC

DATE SERVED: January 28, 2019
DATE ADMITTED: _____

Peoples Statement No. 2

PREPARED DIRECT TESTIMONY OF
JOSEPH A. GREGORINI

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Joseph A. Gregorini. My business address is 375 North Shore Drive, Pittsburgh, Pennsylvania 15212.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Peoples Natural Gas Company LLC ("Peoples" or "Company") as Senior Vice President, Chief Operating Officer.

Q. PLEASE STATE BRIEFLY YOUR EDUCATIONAL BACKGROUND AND EMPLOYMENT EXPERIENCE.

A. I graduated from The Pennsylvania State University in November 1982 with a Bachelor of Science Degree in Mineral Economics. In January 1983, I began full-time employment with the Federal Energy Regulatory Commission ("FERC") as an Economist in the Allocation and Rate Design Branch of the Office of Pipeline and Producer Regulation. While at the FERC, I participated as a member of the FERC staff in various kinds of proceedings, including base rate and certificate proceedings.

In July 1986, I left the FERC and joined Equitable Gas Company ("Equitable") as an Energy Planner in Equitable's Energy Planning Department.

In August 1987, I joined Peoples as a Rate Analyst and was promoted to Senior Rate Analyst in March 1989. In these positions, my responsibilities have included the

preparation and coordination of rate case components and other filings and the preparation of Peoples' cost of service and rate design studies.

In December 1997, I was promoted to the position of Supervisor, Rates and Regulatory Affairs. In 1999, my position was reclassified to Manager, Pricing and Regulatory Affairs. In April of 2010, I was promoted to Peoples' Vice President, Rates and Regulatory Affairs. In 2016, I was promoted to Senior Vice President of Rates, Reliability, and Sales. Currently, my role is Senior Vice President, Chief Operating Officer. In that capacity, I am responsible for directing Gas Operations, Customer Operations, and Gas Reliability (Gas Supply, Gas Control, GIS/Planning, and Safety/Training) as well as overseeing the Company's Sales and Marketing and efforts.

Q. PLEASE LIST THE FILING REQUIREMENTS THAT YOU ARE SPONSORING AS WITNESS.

A. Please refer to Appendix A for a complete list of the filing requirements for which I am the responsible witness.

Q. WHAT ARE YOUR RESPONSIBILITIES FOR PURPOSES OF THIS PROCEEDING?

A. My responsibilities which I will describe in separate sections of my testimony are:

1. Safety Programs
2. Peak Day and Annual Gas Supply Plan
3. Local Production - Gathering and Cost Recovery
4. Operations Capital Work Plan

5. UFG Mitigation
6. Other Operations Initiatives
7. Extension of Facilities – Tariff Modification

SAFETY PROGRAMS

Q. PLEASE DESCRIBE SOME OF THE COMMITMENTS PEOPLES HAS MADE TO THE SAFE OPERATION OF ITS PIPELINE SYSTEM.

A. One of Peoples' core values is Safety. This means that, in every strategic or operational issue that we consider, we incorporate the expected effect on Safety in our decision-making process. We want Safety to permeate our Company's culture so our employees are thinking of Safety at all times, at home, on their way to and from work, and while they are on the job. We want them to focus on their own personal safety as well as that of our customers and of the operation of our pipeline system.

One way we have done this is to include a Safety component in everyone's incentive compensation goals. In addition, all Operations Department employees also have a pipeline compliance component included in their performance expectations and incentive compensation goals. We also have engaged our Compliance Process Managers, Safety Department, and the entire Operations leadership team on a regular basis by conducting weekly safety conference calls where injuries, accidents, operating guidelines (Job Procedures and Standard Operating Procedures or "SOPs"), line hit damages, and near miss safety incidents are reviewed. In addition, we have implemented procedures for ongoing safety observations of work activities by supervisors and rapid dissemination of injury

details to the all field leadership and union personnel. We also work closely with our union to solve all safety related issues and to communicate and advance safety initiatives throughout the organization. A component of this is management's and employees' commitment to operational and safety training at our Training Center where employees obtain hands-on experience through controlled simulations of emergency events and other real life situations that enhance their safety awareness and hone their emergency response capability. We have also perfected our compliance work tracking system. This system schedules our prescribed, routine maintenance, compliance check work and provides for information system tracking of our planning and progress.

Q. PLEASE DESCRIBE THE COMPANY'S EMPLOYEE SAFETY PROGRAM.

A. Peoples' Employee Safety Program is multi-dimensional and includes numerous activities focused on accident prevention and compliance with applicable safety regulations. Safety is supported through active participation by operations leadership, a strong union management partnership, and engagement with industry organizations.

The three cornerstones of Peoples' Employee Safety Program are:

- Training and Education - where technical skills, emergency response, and specialized safety training is provided to employees, contractors, and external partners.
- Awareness and Communication – where weekly and monthly safety meetings, pre-job briefings, safety alerts, and intranet website resources are used to inform and refresh safety messaging.

- Investigations, Observations, and Safety Analysis – where safety incidents and risks are thoroughly investigated, discussed, trended, and mitigated.

Finally, and in recognition of the success of safety prioritization and program implementation, Peoples was the recipient of two Energy Association of Pennsylvania's Job Safety Awards in 2018, the Motor Vehicle Fleet Safety Achievement Award and the Safety Improvement Award.

Q. EARLIER YOU MENTIONED THE COMPANY'S TRAINING PROGRAM, COULD YOU DESCRIBE IT IN MORE DETAII.

A. Peoples operates an in house training facility in McKeesport, PA that provides multi-week introductory training for new hires, training for employees entering new job classifications, initial and refresher operator qualification (OQ) training on covered tasks performed by each field classification for both employees and contractors, and supplemental training for field personnel. By providing training internally, as opposed to using a 3rd party vendor, Peoples is able to ensure training captures company-specific processes and procedures and allows us to provide direct oversight of rigorous testing methods.

In addition to providing training to employees and contractors, the training team also conducts community outreach sessions for audiences beyond those affiliated with Peoples. These sessions include:

- First Responder Training: Emergency training for local volunteer fire departments
- Natural Gas Construction Heat Installation Training
- Natural gas utility and pipeline field skills training: This program is to prepare a new potential workforce for a career in the gas and pipeline industry.

Q. ARE THERE OTHER NOTEWORTHY SAFETY RELATED INITIATIVES THAT YOU WOULD LIKE TO DISCUSS?

A. Yes. Peoples has initiated steps to begin implementation of an enterprise-wide safety management system. The Company has also recently begun a self-review of its system and job procedures and SOPs in light of the unfortunate events that occurred in Boston, Massachusetts in September 2018 involving over-pressurization of a low-pressure pipeline system.

Q. PLEASE DESCRIBE THE SAFETY MANAGEMENT SYSTEM INITIATIVE

A. Safety Management Systems (SMSs) involve a systematic approach to managing safety; including the structures, policies, and procedures an organization uses to direct and control its activities. Because SMSs have proven to be successful in many industries (aviation, nuclear power, and chemical manufacturing industries to name a few), pipeline operators in partnership with American Petroleum Institute (API), U.S. Pipeline and Hazardous Materials Safety Administration (PHMSA), and state regulators developed API Recommended Practice 1173 to bring the benefits of SMSs to pipeline operations. API 1173 provides pipeline operators the framework to review an existing SMS or develop and implement a new pipeline SMS. The framework builds upon an operator's existing practices by drawing upon industry experiences, lessons learned, and existing standards. Particular emphasis is placed on proactive thinking of what can go wrong in a systematic manner, clarifying safety responsibilities throughout the pipeline operator's organization

(including contractor support), and the important role of top management and leadership at all levels.

Peoples has recognized the value of adopting API 1173 and developed three phases over a 2-year timeline for implementing an SMS. Phase 1 of the program focuses on developing the SMS team that will conduct an assessment and gap analysis of the current overall safety program verses the API 1173 recommendations. The assessment will identify and prioritize the focus areas for developing the plans and resources to fill the gaps, and assess impacts to the organization. Phase 2 involves executing the implementation plan; assessing the impacts to the organization; resolving process changes; and evaluating work load distribution. Phase 3 establishes the ongoing responsibilities and support, the actions for continuous improvement, and the methodology for tracking and communicating progress. Full implementation of the program is estimated to be 4Q 2020.

Q. PLEASE DESCRIBE THE BOSTON INCIDENT SELF-REVIEW

A. The Boston, MA pipeline incident involved the over-pressurization of a low pressure distribution system, supplied by multiple underground regulating stations reducing pressure from a higher pressure system, in an urban residential and commercial area. Because Peoples has many similar distribution systems, we proactively decided to initiate a Self-Review of all relevant facilities, tasks, job procedures, and emergency plans that reference Over Pressure Protection (OPP). The objectives of the review were to conduct an asset profile of all low pressure systems; a thorough review all SOPs and Job Aids that involve OPP; propose and consider SOP enhancements in light of the incident; develop

immediate/short term/long term action plans for operations; and update Communications and Incident Management Plans as necessary.

As a result of the Self Review, Peoples implemented several immediate action plans and SOP changes, conducted a complete field inventory of all underground regulating facilities and sensing lines, and developed emergency simulations and table top exercises to simulate a similar large scale incident. We are also evaluating the operational benefits of revising engineering standards for the designs of new regulating stations to include a redundant form of OPP; considering the retrofit of existing regulating stations to install redundant OPP; and evaluating all low pressure distribution systems for full relief capacity to prevent over pressurization.

Q. PLEASE DESCRIBE THE COMPANY EFFORTS TO REDUCE FACILITY DAMAGES.

A. Peoples is consistently implementing measures to improve our line locating performance. Among the recently implemented measures are routine root cause investigations and operations-wide conference calls, involving all construction, field operations and field customer service managers and supervisors to review utility fault damages as "lessons learned" exercises. Peoples has also invested in state of the art locating equipment such as marker balls, "snake" service line locators and a vacuum excavator to improve line locating performance. Five vacuum excavation vehicles are scheduled for delivery in 2019, with additional vehicles to be added in 2020.

A significant step toward reducing facility damages and improving our line locating performance occurred in 2014 through early 2015 as we transitioned all Peoples

companies' line locating work in house to be performed solely by Peoples' employees. As shown in the chart below, this initiative has resulted in year-over-year improvements in our rate of utility fault damage ("UFD") percentage. UFDs are those situations where the utility operator is responsible (e.g. inaccurate mapping, line marking errors) for a damage occurring to its own facility.

Year	UFD Rate
2013	22.3%
2014	19.8%
2015	16.5%
2016	16.2%
2017	16.0%
2018	15.9%

Q. PLEASE DESCRIBE HOW ACT 50, THE ONE-CALL LAW, HAS AFFECTED THE COMPANY'S DAMAGE PREVENTION EFFORTS?

A. The Act 50 One-Call laws have brought several procedural changes to Peoples. These changes include additional damage reporting to PA One Call and the PUC including -- damages incurred to our facilities by outside parties and damages caused to other party's facilities by our personnel -- and maintenance of the locations of abandoned pipelines on our maps so that we are able to more effectively locate abandoned pipelines. In addition to these ACT 50 related changes and in support of ways to reduce risk across our system, Peoples also recently performed an in-depth damage prevention process review that

involved, among other things, a best practices review. As a result of this analysis the Company will:

1. use construction inspectors to further ensure safe digging practices by our contractors;
2. use the newly acquired vacuum excavator equipment to determine facility locations when normal locating practices are inconclusive;
3. make additional facility information available to the job site;
4. provide refresher training for locators that will also provide a forum for sharing best practices; and
5. develop education on safe excavation practices and intervention procedures to be used in response to routine offenders.

Q. PLEASE DESCRIBE WHAT THE COMPANY HAS DONE AND PLANS TO DO GOING FORWARD TO MANAGE THE RISKS ASSOCIATED WITH LEAKAGE.

A. Let me start by mentioning that Peoples has in place extensive leak management SOPs that are designed to ensure safe and reliable delivery of natural gas to our customers. Peoples recently implemented additional enhanced operating procedures to further ensure safety across the system. These enhancements include adoption of: 1) the Gas Piping Technology Committee ("GPTC") Leak Classification and Action Criteria for Grade 1, 2, and 3 leaks; 2) newer operating procedures designed to identify and replace shorter sections of leak prone pipelines instead of repairing those sections; and 3) procedures on the handling of Grade 1 leaks (potentially most hazardous leaks) which require that Grade 1 leaks only be vented as a last resort, Peoples' Operations Management personnel being directly involved

and consulted in Grade 1 leak situations, and vented Grade 1 leaks being monitored on a daily basis during frost/frozen ground conditions. Later in my testimony I also describe other effective leak mitigation measures that include the accelerated replacement of older higher-risk bare steel pipelines under our Long Term Infrastructure Improvement Plan ("LTIIP") and our Unaccounted for Gas ("UFG") mitigation plan.

PEAK DAY AND ANNUAL GAS SUPPLY PLAN

Q. AS THE WITNESS SUPPORTING THE ANNUAL AND PEAK REQUIREMENTS AND SUPPLY VOLUME PROJECTIONS USED IN THIS FILING, PLEASE GENERALLY DESCRIBE HOW PEOPLES FORMULATES ITS ANNUAL GAS SUPPLY PLAN.

A. Each year, Peoples Natural Gas projects its total system requirements and available sources of supply. On the requirements side of the analysis, Peoples develops throughput projections by various requirements categories including usage by class of customer. The Company then adds monthly projections for company use and lost and unaccounted for gas to arrive at total projected system requirements on a monthly basis.

Certain operational considerations play a role in the requirements analysis. For example, there are portions of Peoples Division's service territory that are not physically interconnected with the main portion of Peoples' facilities, particularly in the Grove City area. Similarly, there are portions of Equitable Division's service territory that require support from specific interstate pipeline delivery points at times of high demand. As a result, Peoples needs to project specifically the requirements that it will have in those areas

in order to assure that it will have supplies available from the particular sources of supply that it is able to call on to serve those areas.

On the supply side of the analysis, Peoples pursues a least-cost reliable-service strategy through a combination of local and interstate assets and supplies. Local assets include an on-system storage facility and the gathering system, which allows Peoples to enhance the delivery of gas supplies produced locally in western Pennsylvania. The Company's interstate assets are comprised of a portfolio of transportation and storage services with five interstate pipelines that provides Peoples with access to a variety of supply source locations. Using this gas supply portfolio, Peoples uses an economic dispatch approach that also takes into account reliability, operational requirements, and contractual obligations. Under that approach, Peoples reviews the cost of its various sources of supply and plans to use those that are least costly. The Company starts by base loading local supplies; that is, using local gas first. From there the Company then turns to the existing pipeline supply assets and existing gas supply agreements. These include the firm transportation and storage service agreements with interstate pipelines and the long-term firm gas supply commodity agreement with EQT Energy.

Q. HOW DOES PEOPLES TYPICALLY DETERMINE ITS CUSTOMERS' REQUIREMENTS AND ASSOCIATED GAS SUPPLIES ON A DESIGN PEAK DAY?

A. Peoples uses a forecasting model that employs a number of variables including temperature, wind speed, and historical consumption levels. The values accorded the temperature and wind speed variables are minus 9 degrees Fahrenheit and 15.8 miles per

hour respectively. The values assigned to consumption levels and the other variables change over time. Using send-out data for the four years ended May 2018 the Company calculated a total system peak day design requirements of 1,282 MMcf per day.

Q. WILL THE COMPANY SUPPLY THE ENTIRETY OF THE 1,282 MMCF FOR ITS CUSTOMERS?

A. No. Peoples is responsible to ensure supplies of 1,014 MMcf to meet sales and Priority One customer's design day requirements as well as other system usage requirements. The supply of 1,014 MMcf per day reflects a combination of local gas volumes (29.3 MMcf), on-system storage design day supply (32.0 MMcf), and interstate delivered suppliers (952.7 MMcf). The remaining supplies (268.4 MMcf) will be acquired by third-party suppliers to satisfy the usage requirements of Non-Priority One transportation customers.

Q. PLEASE DESCRIBE HOW LOCAL GAS PURCHASES FROM CONVENTIONAL WELLS ARE USED TO SATISFY SYSTEM GAS SUPPLY NEEDS.

A. Peoples and natural gas suppliers operating on our system use natural gas produced from local shallow wells as a base load supply to meet customer's usage requirements. However, since 2012, local gas produced and delivered from conventional wells into the Company's system has declined year-over-year. In 2012, Peoples (including the Equitable Division) received supplies from conventional wells totaling approximately 48.3 BCF. In 2017, a total of approximately 30.1 Bcf of conventional production was delivered into the Peoples' systems. Over this six-year period, this represents a total decline of 18.2 Bcf, or

38%. A reversal of this ongoing decline is not expected. The conventional production volume level for the 11 months ended November 30, 2018 is 27.7 Bcf.

Q. DOES PEOPLES HAVE A POLICY REGARDING ADDITIONAL MARCELLUS SHALE WELL PRODUCTION?

A. Peoples' current role in the development of Marcellus Shale has been to provide producers of unconventional gas with similar access to both on-system and off-system markets as provided to conventional producers. Peoples has been able to accept Marcellus Shale production into its systems on a case by case basis, using the same analysis for Marcellus Shale production tap requests that it uses for conventional production tap requests. The analysis includes (i) the location and quantity of gas supply, (ii) the unused pipeline capacity at the proposed injection point, (iii) the anticipated gas quality and the investment required to resolve gas quality issues, and (iv) the impact of the production on existing base load supplies from local and interstate alternatives.

Peoples' market fundamentally benefits from having access to additional direct feed local Marcellus Shale production. It provides a replacement supply for declining conventional production volumes. Also, local gas supplies, including gas produced into the Peoples' system from both conventional and Marcellus wells, represent a lower cost supply than interstate delivered gas. Peoples plans to remain involved in finding opportunities to utilize Marcellus Shale gas produced in Peoples' service territory, and that activity will continue to benefit Peoples' market.

LOCAL PRODUCTION - GATHERING AND COST RECOVERY

Q. PLEASE DESCRIBE GENERALLY THE TRADITIONAL GATHERING PIPELINE SYSTEM.

A. Both the Peoples and Equitable Divisions have distribution systems that serve customers in and near the natural gas production regions of Pennsylvania. In fact, it was natural gas from the western Pennsylvania gas fields that originally served the customers of both Divisions.

Gathering systems are pipeline facilities that have the primary purpose of moving conventionally produced gas from production fields to transmission and distribution facilities for delivery to end use customers. In contrast, distribution pipelines generally are a system of mains and service lines that primarily function to deliver natural gas to individual homes and businesses. However, in some instances, customers and small distribution systems are connected directly to gathering systems in rural areas where it is not economic to extend pipelines from the major distribution centers because of the low density of potential customers.

In addition to gathering pipelines, gathering systems also typically include compression facilities and equipment to monitor and treat the gas. Gathering compressors are used to increase the flow of local production by raising the gathering pipeline pressure to the pressure of the pipeline that the gathering pipeline feeds into, typically a transmission pipeline or higher pressure gathering pipeline or higher pressure distribution pipeline. Gas monitoring and treatment is another part of a gathering system. Peoples requires producers to remove water and other contaminants from the gas delivered to the gathering system. In some cases,

the gas is further treated by Peoples at compressor stations where dehydration facilities are installed to remove water prior to delivering gas to transmission or distribution systems.

There are also situations where Peoples receives locally produced gas directly into its distribution and transmission systems. This production can be from both conventional and unconventional sources.

Q. DO GAS PRODUCERS BENEFIT FROM GATHERING SYSTEMS?

A. Yes. Producers benefit from gathering lines because, in most cases, it is their only means to get their gas production to a market. The gas produced into the gathering systems originates from conventional wells. Generally, gathering systems cannot be used to receive and deliver higher pressure gas produced from unconventional sources such as Marcellus Shale.

Q. DO CUSTOMERS BENEFIT FROM LOCAL PRODUCTION AND GATHERING SYSTEMS?

A. Yes. Customers receive a notable cost savings benefit from local production delivered into the Peoples' systems. Production directly feeding utility pipelines avoids costly interstate pipeline charges, which include fixed reservation charges for interstate pipeline reservation space, usage charges to cover variable interstate pipeline costs and retainage to cover gas loss and gas used in interstate pipeline operations. In some cases, gas purchased in the interstate market may require more than one interstate pipeline contract to bring gas to Peoples' city-gate.

Q. HAS THE COMPANY PREPARED A COMPARISON OF THE COST PER MCF OF DELIVERING GAS THROUGH INTERSTATE PIPELINES TO THE COST OF DELIVERING GAS THROUGH THE GATHERING SYSTEM?

A. Yes. Peoples Natural Gas Exhibit No. JAG-1 provides this comparison for the projected twelve months ended October 31, 2020 (Fully Projected Future Test Year - "FPFTY"). It shows that gas produced into and delivered through the gathering systems is notably less costly than gas procured on and delivered from Peoples' interstate pipeline suppliers. The total average cost of gas delivered via the gathering system for the FPFTY is estimated at $2.81 per Mcf. The total average cost of gas delivered via the interstate systems for the FPFTY is estimated at $3.37 per Mcf. This results in an estimated cost savings of $0.56 per Mcf or $7.0 million per year for the local gas purchased by Peoples' for our on-system customers alone. Customers that purchase local gas supplies from third party marketers can reasonably be expected to receive a similar cost per Mcf savings benefit. As noted in Peoples Natural Gas Exhibit No. JAG-1, this analysis reflects the various costs incurred by Peoples' ratepayers for the FPFTY which include: the projected average commodity cost of gas delivered to the Peoples' system; Peoples' costs to own and operate the gathering systems (including gathering UFG); and interstate pipeline costs for capacity, retainage, and delivery. Mr. Feingold calculated and presented testimony in support of the projected non-gas costs incurred by Peoples to own and operate the gathering systems.

Q. DOES INTERSTATE PIPELINE GAS AND LOCAL GAS SERVE THE SAME PURPOSES?

A. While both supply sources provide the gas supply needed by the customer, pipeline gas is much more flexible in that it is provided to the Company at significantly higher pressure which is required in peak periods of usage and for injection into storage. The amount of pipeline gas entering the Company's system can also more easily be adjusted up or down to meet the daily gas consumption swings due to weather. In addition, pipeline gas generally meets higher quality standards relating to containing impurities and water and creates fewer operational problems.

Q. HOW SHOULD THE BASE RATE COSTS OF THE GATHERING SYSTEM BE RECOVERED?

A. Gathering system costs are incurred to provide a market for supplies produced by local wells and to provide cost effective gas supplies to customers. In my opinion, it is appropriate for both producers and customers to share in paying these costs.

Q. WHAT FACTORS SHOULD BE CONSIDERED IN ALLOCATING THESES COSTS BETWEEN CUSTOMERS AND LOCAL SUPPLIERS?

A. As I have noted previously, customers benefit from obtaining local gas at a cost lower than interstate pipeline gas. The gathering system lowers the amount of interstate pipeline capacity that is required to serve customers and lowers pipeline demand costs recovered from all sales and transportation customers. In addition, customers served directly from the gathering system receive their service from gathering pipelines and not distribution pipelines. Finally, some of Peoples Natural Gas' distribution areas are served only by local gas from the gathering systems.

Producers derive substantial benefit from the gathering facilities as it is their source to a market. In addition, Peoples Natural Gas operates its gathering and distribution systems to facilitate the introduction of lower pressure gas from conventional wells into its system.

While it is difficult to quantify these benefits, it is clear that both producers and customers benefit from the gathering systems.

Q. HOW DOES PEOPLES PROPOSE TO RECOVER THE COSTS OF THE GATHERING SYSTEMS?

A. There is a practical limit to how much of the gathering system costs can be recovered from producers. Currently, the average price that producers received for their gas when purchased by Peoples for system supply is $2.27/Mcf for the twelve months ended September 30, 2018. The projected average market price that producers will receive for their gas purchased by Peoples for system supply is $2.16/Mcf for the projected twelve months ended October 31, 2020 (FPFTY). These prices are low by historical standards and it is likely that this has contributed to the reduction of production from conventional wells since 2012.

Given the relatively low historic and projected prices for local gas and the historical and ongoing declines in conventional production, the Company is concerned that without a change to the current gathering fee structure paid by producers, we will continue to experience declines in local gas available to customers on our system.

Peoples currently charges amounts to producers for gathering system costs through gathering fees on its Equitable Division and through the PA Production Enhancement

Service ("PA PES") program fees on the Peoples Division. The Company proposes to terminate these charges and fees and institute a uniform gathering service rate for all conventional gas production that will start at a base level and increase as the price of gas increases. The proposal is set forth in a new tariff rate schedule – Appalachian Gathering Service -- that is attached to my testimony as Peoples Natural Gas Exhibit No. JAG-2.

Q. PLEASE EXPLAIN THESE EXISTING GATHERING PROGRAMS AND THE ASSESSMENT OF CHARGES TO PRODUCERS.

A. The current structure for assessing gathering related charges on the Equitable Division and Peoples Division differ.

At the Equitable Division and well before Equitable Gas Company was acquired and merged with Peoples in 2013, a gathering tariff service and fee structure was approved by the Commission and put in place. That service, which currently exists today, is provided under Rate AGS – Appalachian Gathering Service. Under Rate AGS any conventional natural gas producers desiring to produce gas into and transport gas on the distribution or gathering systems are subject to a gathering rate and a gas retainage charge. It is not a voluntary program. All producers transporting conventional local production on the system are subject to gathering rates and retainage charges which are determined through negotiation. For the HTY 12-month period ending September 30, 2018, Peoples recovered $7.2 million in gathering rate revenues on the Equitable Division.

Unlike the Equitable Division, the Peoples Division does not have a tariffed gathering service. Instead, the Peoples Division operates the PA PES program which represents a series of voluntary agreements that Peoples entered into with many, but not

all, natural gas producers on the Peoples system. The voluntary PA PES program, which began in 2002, is designed to increase the flow of locally produced gas into the Peoples systems through the installation and operation of compression facilities, dehydration equipment and strategic delivery interconnections with other systems. For the HTY 12-month period ending September 30, 2018, Peoples recovered $7.0 million in PA PES gathering rate revenues from participating producers on the Peoples Division. I should also note that in the most recent 1307(f) 2018 case at Docket Nos. R-2018-2645278 and R-2018-3000236, Peoples Division received Commission approval to begin assessing a retainage charge of 2% to all conventional well producers.

Q. PLEASE EXPLAIN THE COMPANY'S PROPOSAL TO INSTITUTE A UNIFORM GATHERING RATE FOR CONVENTIONAL GAS PRODUCTION.

A. Before I describe the mechanics of the gathering pricing proposal I would like to point out that our gathering rate proposal is designed to bring together the existing and differing programs of the two Divisions and set a producer paid gathering fee structure that attempts to establish a reasonable and ongoing producer revenue contribution (to offset the customer's share of gathering costs) that also does not create an economic disincentive for conventional gas producers to continue to produce low cost gas supplies into the Peoples' systems. This proposal eliminates the voluntary aspect of the legacy Peoples' PA PES program. All conventional gas producers will be required to pay the same uniform gathering fee for any gas produced into and transported on the distribution or gathering systems. The proposal also will adjust and tie the gathering rate to market natural gas prices so that if we experience future market price increases from the current historically

low levels, producers will receive higher prices for their gas produced into the Peoples systems and in turn will be able to increase revenue contributions to help offset the gathering system costs borne by customers in future Peoples rate cases. As set forth and described in Peoples Natural Gas Exhibit No. JAG-2, a gathering rate will be assessed to any party desiring to transport gas through the gathering system, as well as deliver locally produced gas directly into the Company's distribution or transmission systems.

Lastly I'd like to point out that this proposal addresses the recovery of gathering related non-gas costs and does not address the assessment of gas retainage charges to producers. Peoples plans to continue to assess the gas retainage rates currently charged to producers. Any revisions to the current gas retainage charges will be addressed in ongoing 1307(f) purchased gas cost proceedings.

Q. WHAT IS THE GATHERING RATE STRUCTURE APPLICABLE TO GAS DELIVERED INTO THE GATHERING SYSTEMS OR CONVENTIONAL GAS PRODUCED AND DELIVERED INTO THE DISTRIBUTION OR TRANSMISSION SYSTEMS?

A. That gathering rate will be based on a minimum charge of $0.26/Mcf and will be subject to monthly adjustment as natural gas market prices change. The monthly gathering rate will be set at a level equal to the higher of $0.26/Mcf or 12.4% of the first of the month Dominion South Point Appalachia Index market price as published in Platts, Gas Daily. The maximum gathering rate will be set equal to the fully allocated gathering cost of service rate. As determined by Peoples witness Feingold, the maximum gathering cost of service rate for the FPFTY is $0.76/Mcf.

Q. WHAT IS THE PROPOSED LEVEL OF THE GATHERING CHARGE PER MCF FOR GAS DELIVERED INTO THE GATHERING SYSTEMS OR CONVENTIONAL GAS PRODUCED AND DELIVERED INTO THE DISTRIBUTION OR TRANSMISSION SYSTEMS AND HOW MUCH REVENUE DOES THE COMPANY PROJECT TO RECOVER IN THE FULLY PROJECTED FUTURE TEST YEAR?

A. Based on latest projected average Dominion South Point Appalachia Index market price for the FPFTY of $2.10/Dth and the gathering rate parameters discussed above, a uniform gathering rate of $0.26/Mcf would be applicable for the FPFTY period. The annual volume projection of conventional production that will be subject to the gathering fee for the FPFTY is 31.3 Bcf. This volume projection was based on recent actual production levels adjusted to reflect current production decline trends. The resulting revenues to be paid for by conventional well producers for the FPFTY is $8.2 million.

Q. YOU MENTIONED EARLIER IN YOU TESTIMONY THAT PEOPLES ALSO RECEIVES UNCONVENTIONAL SUPPLIES INTO ITS SYSTEMS. ARE THERE GATHERING FEES ASSESSED TO PRODUCERS BY PEOPLES FOR UNCONVENTIONAL SUPPLIES AND IF SO WHAT ARE THE EXPECTED ANNUAL REVENUES?

A. Yes. As set forth in the new tariff rate schedule – Appalachian Gathering Service (Peoples Natural Gas Exhibit No. JAG-2), Peoples will charge a rate for gathering natural gas produced from unconventional sources that will be determined through negotiation. It's

important that this rate be negotiable because Peoples needs to compete with midstream and interstate pipelines to acquire this gas supply. Marcellus producers generally have multiple options to get their gas to market. Based on the negotiated rate currently charged to existing unconventional producers and the associated expected annual volumes produced from unconventional sources for the FPFTY, Peoples projects to generate $740,763 in annual gathering fees from unconventional gas producers for the FPFTY period.

Q. BASED UPON THE COMPANY'S FPFTY PROJECTION OF RECOVERIES UNDER THE GATHERING CHARGES TO CONVENTIONAL AND UNCONVENTIONAL PRODUCERS HOW MUCH OF THE GATHERING COSTS WILL BE RECOVERED?

A. The Company projects that it will recover $8.9 million, or approximately 33% of the $26.6 million in costs for the gathering system identified by Mr. Feingold.

Q. HOW DOES THE COMPANY PROPOSE TO RECOVER THE REMAINDER OF THE GATHERING COSTS THAT ARE NOT PROJECTED TO BE RECOVERED FROM PRODUCERS?

A. We have directed Mr. Feingold to allocate the remaining costs to the various customer classes. He uses a volumetric allocation factor to assign gathering plant and associated expenses to customer classes based on the percentage of annual gas volumes in each class supplied by Pennsylvania gas producers.

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OPERATIONS - CAPITAL WORK PLAN

Q. PLEASE DESCRIBE THE COMPANY's PIPELINE REPLACEMENT PROGRAM.

A. In 2011, Peoples began a comprehensive infrastructure replacement program that targets the removal and replacement of all cast iron and unprotected bare steel pipelines and associated services. On September 22, 2017, Peoples filed a combined distribution Long-Term Infrastructure Improvement Plan ("LTIIP") for the Peoples Division, Equitable Division, and Peoples Gas (Formerly Peoples TWP) for 2017-2021 outlining the planned pipeline replacement for the aforementioned time period. In addition, within the filing, the Peoples Companies committed to replace all currently identified at risk[1] distribution pipe by 2034. The current combined LTIIP, which covers the distribution systems, was approved by the PUC in January 2018.

Q. WHAT APPROACH IS PEOPLES TAKING TO CARRY OUT THE PIPELINE REPLACEMENT PLAN?

A. Peoples is undertaking a hybrid contractor and employee approach to carry out the plan. Peoples uses contractors to install mains, service and perform restoration, while the Company's employees perform the work they are expert in, such as inspections, tie-ins, and work involving live gas. This hybrid approach is the most efficient and cost effective method for the Company as Peoples will avoid the significant upfront investment in pipeline installation equipment, facilities, and fleet. Peoples has negotiated five-year

[1] At risk pipe is unprotected bare steel, cast iron, copper, wrought iron or any other at-risk pipe.

contracts with two of our largest contractors in the areas with the most construction and have negotiated three-year contracts with others in outlying areas. In addition, Peoples has hired 118 additional construction related employees since December 2016.

Q. HOW MANY MILES OF PIPE HAVE BEEN RETIRED RECENTLY FROM THE PEOPLES SYSTEM UNDER ITS PIPELINE REPLACEMENT PROGRAM?

A. Between 2013 and 2018, the Company retired the following miles of pipelines under the replacement programs.

YEAR	PEOPLES	EQUITABLE	TOTAL
2013	38.8	20.1	58.9
2014	30.7	22.4	53.1
2015	35.0	30.9	65.9
2016	37.6	25.8	63.4
2017	47.5	40.5	88.0
2018	99.0	47.0	146.0

From 2013 through 2018, Peoples has replaced and/or retired 475 miles of pipelines at both the Peoples and Equitable Divisions under pipeline replacement programs.

Q. HOW MANY MILES OF PIPE DOES PEOPLES PLAN TO REPLACE IN IN ITS CURRENTLY APPROVED LTIIP?

A. In the Company's current LTIIP, Peoples proposed the following replacement miles for the years 2018-2021.

YEAR	PEOPLES	EQUITABLE	TOTAL
2018	73	53	126
2019	59	66	125
2020	63	63	126
2021	68	54	122

It's important to note that Peoples exceeded its 2018 LTIIP mileage goal of 126 miles by actual removing 146 miles of higher risk pipelines.

Q. HOW MUCH DOES PEOPLES PROPOSE TO SPEND ON LTIIP PROJECTS AND HOW MANY MILES OF PIPE DOES PEOPLES PROPOSE TO REPLACE IN 2019 AND 2020?

A. In the currently approved LTIIP Peoples expects to replace 125 miles in 2019 and 126 miles 2020. The LTIIP categories and associated capital spending for 2019 and 2020 in our currently approved LTIIP are shown immediately below

Approved LTIIP Spending

LTIIP Categories	2019	2020
Pipeline Replacements	$168.2 m	$171.7 m
Metering - ERT Program	$7.0 m	$7.0 m
Others – Regulators	$2.5 m	$2.5 m
Other Metering	$6.0 m	$6.0 m
Tracking and Traceability	$2.8 m	$0.0 m
Total Approved LTIIP	$186.5 m	$187.2 m

Q. PLEASE GENERALLY DESCRIBE THE OPERATIONS GROUP'S PART OF PEOPLES' CAPITAL BUDGET.

A. Peoples Natural Gas Company's Capital Budget for calendar years 2019 and 2020 totals $257.4 M and $280.9 M respectively. The Operations portion of these funding levels, which covers everything except Fleet, Facilities, Tools, Work Equipment and IT/Telecom related expenditures, is 87% of the total budget or $222.5 M and $244.0 M respectively. The majority of the Operations capital budget is dedicated to completing the Company's LTIIP and the Gathering UFG reduction plan. Over the 2-year period, these plans will result in the replacement/abandonment of 312 miles of pipeline, replacement of 37,250 company owned service lines and 9,661 customer owned service lines, changing out 24,000 meters, upgrading/replacing 80 regulating stations, completing the Smart Meter Program at the Peoples Division, upgrading approximately 124,000 old 40G ERT devices at the Equitable Division to 500 G technology and moving an additional 500 inside meters per year outside.

Another 5% of the Operation's capital budget is targeted to other non-LTIIP maintenance and compliance activities to maintain safe and reliable operations. Activities include compressor station overhauls and enhancements, regulating station odorization, and new pipeline interconnects.

The remaining portion of the Operation's capital budget, is focused on extending our pipeline facilities and installing new meters to serve new customers.

Q. WHAT ARE THE FTY AND FPFTY AMOUNTS FOR THE OPERATIONS PORTION OF THE CAPITAL BUDGET?

A. The Peoples' total Capital Budget spend for the FTY and FPFTY are $276.8 M and $296.6 M respectively. The Operation's portion of the FTY and FPFTY capital budget is $234.7 M and $256.3 M or approximately 85% which is consistent with the calendar budget levels. Also consistent with the calendar year budgets, is the composition of the Operation's budget of LTIIP & UFG Gathering Plans at 87%, new customer facilities investment at 9% and the balance for non-LTIIP related maintenance and compliance activities.

Q. PLEASE DESCRIBE THE COST SAVINGS IN PIPELINE REPLACEMENT THAT THE COMPANY HAS REALIZED DUE TO THE MERGER BETWEEN PEOPLES AND EQUITABLE?

A. One of the benefits of the merging the Peoples and Equitable businesses was the ability to avoid the replacement of duplicative pipelines in our overlapping service territories. The Company estimates that by avoiding the replacement of duplicative pipelines it saved over $41 million in capital expenditures through 2017, about $10 million per year. Peoples also

experienced meaningful cost savings in 2018 as well but because we are still analyzing the results of 2018 pipeline replacement activities, the exact cost savings estimate for 2018 is not available at this time.

Q. PLEASE DESCRIBE THE COMPANY'S INITIATIVE TO IMPLEMENT ENCODER RECEIVER TRANSMITTER (ERT) METERING TECHNOLOGY.

A. In 2016, the Peoples Division began a five-year plan to implement ERT technology on all customer meters. The technology is used to transmit data from meters over a short range so a utility vehicle can collect meter data without a worker physically reading each meter. Since then, Peoples has accelerated the program and projects to finish these installations by December 2019, which is during the beginning of the Fully Projected Future Test Year. Peoples will also begin a multi-year program in 2020 to replace older generation ERT equipment that is aging and have battery units that are near the end of their useful lives.

As shown above, Peoples' LTIIP capital work plan includes $7.0 million in 2019 and $7.0 million in 2020 for investment related to the ERT program.

Q. HOW IS PEOPLES ADDRESSING THE GOODWIN-TOMBAUGH GATHERING SYSTEMS?

A. The Goodwin-Tombaugh systems are gathering systems that were acquired from EQT Corporation by Peoples' parent company in December 2013 as part of the acquisition of Equitable. Consistent with the terms of the Commission approved settlement in the acquisition case, at closing these gathering systems were transferred to a new unregulated sister company of Peoples – PNG Gathering LLC. These systems are not owned by

Peoples but Peoples has been the system operator since closing. Beginning in 2014, Peoples undertook immediate steps to establish safe and reliable operations of both gathering systems. These steps included: clearing and mowing of right-of-ways ("ROWs"); GPS and GIS mapping all Goodwin-Tombaugh asset records (lines, producer taps, customers, interconnections and other facilities); replacement and installation of line markers; incorporating Goodwin-Tombaugh facilities into the Peoples' damage prevention program; and establishment of numerous odor inspection sites with ongoing (quarterly) odorization surveys. Since that time Peoples has performed ongoing maintenance and compliance activities such as: ROW mowing, line walling and leak surveys; managing, classifying and repairing leaks under its normal compliance program; identifying and abandoning zero flow production meters; certain remediation pipeline projects; and ongoing updates to mapping data as a result of field verifications. In addition to these maintenance/compliance activities Peoples has been undertaking an ongoing assessment program to develop a long-term plan regarding the possible remediation of some or all of these systems. In the very near future, Peoples will be meeting with the state parties including Commission staff, the Office of Consumer Advocate and the Office of Small Business Advocate to discuss and review Peoples' proposed plan and recommendations. Following those discussions Peoples will present to and file a plan with the Commission. Peoples has not included any operating/maintenance or capital costs in claim in this rate case.

UNACCOUNTED FOR GAS ("UFG") MITIGATION

Q. PLEASE DESCRIBE WHAT THE OPERATIONS GROUP IS DOING TO ADDRESS THE REDUCTION OF THE COMPANY'S UFG.

A. The Peoples' gathering systems are the largest contributor to UFG. Accordingly, Peoples presented in the 2018 1307(f) proceeding (R-2018-2645278 and R-2018-3000236) its plan to aggressively implement a UFG Mitigation Plan to Address Gathering Pipelines. Some of the plan components include:

1. Establishment of a dedicated and ongoing UFG team to identify and implement effective UFG mitigation measures on the gathering and distribution systems;
2. Segmentation program to enhance the identification of mitigation target areas on the gathering systems;
3. Find-it/Fix-it program - Peoples is transitioning to a program to annually leak survey bare steel gathering lines and prioritize for repair any found leaks;
4. The accelerated removal and replacement of 115 miles of at-risk gathering pipelines for the 2018 – 2021 period;
5. Mapping and Gas Measurement enhancements; and
6. Enhancements to theft-of-service processes and procedures.

Q. IN ADDITION TO THE UFG MITIGATION PLAN, HAS PEOPLES SET TARGETS REGARDING GATHERING UFG?

A. Yes. In the Settlement of Peoples' 2018 1307(f) proceeding, R-2018-2645278 and R-2018-3000236, the Company agreed to a gathering UFG target of 9.0% for the twelve months ending August 31. 2019, 8.5% for the year ending August 31, 2020, and 7.5% for the year ending August 31, 2021.

OTHER OPERATIONS INITIATIVES

Q. ARE THERE ANY OPERATIONAL INITIATIVES THAT YOU WOULD LIKE TO DISCUSS?

A. Yes. Some of these are a result of state or federal regulatory initiatives while some are Company driven initiatives to improve the overall customer experience. They include:

- Inside Meter Programs – In May 2014, the Commission adopted a final rulemaking order that amended § 59.18 (relating to meter, regulator and service line location) to be consistent with Federal regulations. One of the major requirements resulting from these regulations is that many existing meters currently located inside of a building must be relocated outside. The regulations require that Gas utilities shall have 20 years from the effective date of this regulation to complete replacement of existing facilities in compliance with the requirements. Peoples estimates that it has approximately 4,800 inside meters that will need to be relocated outside by 2034. Of these inside meters, we estimate that about 800 meters have been or will be associated with pipeline replacement projects and have or will be relocated outside as part of the pipeline replacement work under the existing approved LTIIP. The remaining eligible inside meters, which total about 4,000, will be relocated outside as part of a 10-year program that will begin in 2019. Peoples plans to relocate approximately 400 – 500 of these non-LTIIP inside meters per year over the 10 year program.

Projected capital expenditures associated with the non-LTIIP meters relocation project is $1.6 million in 2019 and $1.7 million in 2020.

- DOT Transmission Integrity Rule 2.0 – This DOT rulemaking which is known as the "Transmission Integrity Mega Rule" is expected to be issued in three separate final rulemakings in 2019 and 2020. It is expected to require additional pipeline assessments in areas beyond high consequence areas that weren't previously in scope. This rule may also result in integrity assessments for pipe and fittings that don't have reliable records documenting previous pressure tests and material attributes. We will continue to monitor developments with this rule and will be prepared to change our strategy and operations moving forward to ensure compliance with any new regulations that are established.
- DOT Tracking and Traceability – Peoples wants to be prepared to support the upcoming DOT Tracking & Traceability rule that requires pipe and related components be tracked and traced through bar coding technology. It will allow Peoples to track the location where pipe and components are installed, the date of installation and the parties involved with installation. It will also trace important information associated with the pipe and components including manufacturer, production data, lot information, material, size, pressure and temperature ratings and other related data. Peoples projects to incur a total of $5.03 million in capital expenditures from late 2018 through 2019 for necessary hardware and software in support of this program.
- Customer Experience - In July 2018, Peoples began a pilot program of offering customers the ability to schedule appointments within a two-hour timeframe in

the Waynesburg and Ginger Hill locations. The Company has continued to expand these offerings throughout other locations and plans a full roll out of this program in all areas by the second quarter of 2019. Customers have responded positively to the program. In addition, this program improved the Company's Can't Get In ("CGI") rate. The CGI rate for the two-hour appointment orders is less than half of standard orders.

Further, last year we implemented a pilot program in some of our shop locations where our field customer service employees are now able to take customer payments when they are at a customer's home working a credit order. This avoids the inconvenience of terminating and then reestablishing service for those customers able and willing to make a payment to avoid possible termination. We look to expand this program in 2019.

Our field employees engage with customers on a daily basis. We provide them with resources such as customer friendly handouts regarding natural gas pipelines and business cards with our 1-800-400-WARM phone line to encourage customers to call and get help with their gas bill. Particularly when they arrive at a home of a customer facing termination or whose service is off due to lack of payment, our employees encounter customers in real need of support. We recognize that customers who struggle to pay the gas bill often struggle to manage other basic necessities such as rent, food or medical care. Our employees were very concerned for the customers they were encountering and wanted to find a way to help. As a result, we created a program we call "Help At Peoples Now' or HAPN. Under this program we

established a dedicated phone line that all field employees could use, while still at the customer's home, to reach someone in our Customer Relations department. Our Customer Relations team can immediately step into action, helping customers access Peoples CAP or Emergency Furnace & Line Repair Program or connect them to other resources such as food pantries, community agencies and programs of other utilities. This employee partnership has great benefits, not only to the customers who receive invaluable assistance, but to the employees involved as well.

EXTENSION OF FACILITIES – TARIFF MODIFICATION

Q. PLEASE DESCRIBE PEOPLES' CURRENT MAIN EXTENSION POLICY.

A. As detailed in section 4 of existing Peoples Natural Gas' tariff, the Company uses an economic analysis when a customer requests the Company to extend its facilities to serve them. This analysis compares the net present value ("NPV") of the customer's projected future revenue to the cost the Company would incur to add that customer. If the projected revenues are greater than the projected costs, the Company will extend facilities without cost to the customer. However if projected costs are greater than projected revenues, Peoples requires the customer to pay a contribution in aid of construction (CIAC) or as an alternative, at the Company's discretion, the customer may take service under Pilot Rider MLX, Mainline Extension Service. The CIAC is the amount required to make the analysis whole. Peoples performs the same analysis if multiple potential customers asked to be served off a single extension of facilities.

Q. PLEASE EXPLAIN RATE MLX.

A. Under Rate MLX, customers pay a higher delivery rate, as noted in the tariff, in lieu of providing a CIAC for Peoples to extend facilities to serve them. The Company selects the rate tier based upon the minimum delivery rate required for Peoples to cover the investment costs to extend facilities. All customers taking service from the extension pay the same MLX delivery rate.

Q. SINCE THE PURPOSE OF MLX IS TO ENABLE MORE PEOPLE TO ELECT NATURAL GAS SERVICE, WHY IS PEOPLES CONSIDERING A MODIFICATION TO ITS CURRENT MAINLINE EXTENSION POLICY AT THIS TIME?

A. One of the more significant barriers for residential customers to receive or convert to natural gas is the CIAC. While Rider MLX helps to reduce this barrier by spreading the cost of a customer contribution over a period of time, it does not reduce the overall cost a customer must pay to have the Company extend its main to serve them. Given the plentiful supply of low-cost gas from Marcellus Shale in Pennsylvania, this is an ideal opportunity to help more people convert to natural gas and enjoy the cost savings of this efficient natural resource.

Q. WHAT DOES PEOPLES PROPOSE TO ASSIST POTENTIAL CUSTOMERS WHO WISH TO USE NATURAL GAS?

A. To help more Pennsylvanians enjoy the benefits of natural gas, Peoples is proposing a tariff change that, alone and in combination with MLX, will further encourage more people to elect natural gas service. We are proposing an allowance of 150 feet of main line per residential applicant without the need for an economic analysis in normal situations. This proposal also is designed to simplify the calculation and application of the main line extension policy which currently is based on a detailed economic evaluation. Our proposal will make the rules for extending service to residential customers more transparent and easier to understand. It will also simplify the administrative calculation in determining and establishing residential customer contributions.

Q. DOES THE COMPANY CURRENTLY OFFER ANY FOOTAGE ALLOWANCE FOR CUSTOMERS TO CONNECT TO PEOPLE'S SYSTEM?

A. No, the Company does not currently offer customers any mains footage allowance to connect to its natural gas system. Currently, all extensions are evaluated based on a detailed economic evaluation.

Q. IS THE COMPANY AWARE OF ANY NGDCS WHO OFFER A FOOTAGE ALLOWANCE TO RESIDENTIAL CUSTOMERS?

A. Yes, the Company's affiliate, Delta Gas, offers 100 feet of main line allowance per customer in Kentucky. In West Virginia, where Peoples WV operates, gas utilities are required to extend mains 100 feet for each customer, at no cost to the customer. In addition, Columbia Gas of Pennsylvania offers a 150 foot per customer main line allowance, Valley Energy offers a combination of up to 200 feet of service per customer and or main extension per customer.

Also, Columbia Gas of Ohio, Columbia Gas of Maryland, Delmarva Power (DE), Duke Energy (OH) and Dominion East (OH) are some of the many companies who offer extensions of mainline without charge to applicants.

Q. WHAT IS PEOPLES' MAIN EXTENSION TARIFF CHANGE PROPOSAL?

A. Peoples proposed tariff change would only apply to residential extensions. For each residential applicant that requests a main line extension, Peoples would install the first 150 feet of main line without charge to the customer in normal situations. At the discretion of the Company, certain projects, which contain abnormal underground conditions, such as crossing a stream or state highway, or visible ledge, or rock that will affect excavation or excessive permitting fees would not be eligible for the 150 foot allotment. For those projects without the abnormal conditions, as more applicants join in a single project to extend gas facilities, the Company will be able to install greater length of main without charge to the applicants. For example, on a single project with four customers electing to receive natural gas, the Company will install up to 600 feet of main line without requiring a CIAC.

For extension projects greater than 150 feet per customer, the Company will determine the required customer contribution by subtracting 150 feet per customer from the actual average foot per customer associated with the specific mainline extension project. That difference would then be multiplied by the actual cost per foot associated with the extension project to determine the customer contribution required for each customer within the project area. For example, if a residential customers required a 200 foot line extension, the Company would calculate the contribution amount based on the cost to extend facilities by 50 feet. The applicants would be required to pay this up front or through Rider MLX.

Q. HOW DID THE COMPANY DETERMINE 150 FEET WAS THE APPROPRIATE OFFER?

A. Please see Exhibit JAG-3. Peoples calculated the miles of road and housing units in its service territory and found that there was an average of 128 feet of road per every housing unit. Since Peoples is also pursuing a program to expand gas service into rural areas, the Company also calculated the miles of road and housing units for the Company's rural area outside of Allegheny County and found that there was an average of 180 feet of road per every housing unit in the more rural areas of the Company's service territory. By offering a 150 foot allowance to each applicant, the Company is providing an allowance equivalent to the average distance of extending its main from one housing unit to the next within its service territory.

Q. WHAT WILL BE THE RATEMAKING TREATMENT OF THE ALLOWANCE?

A. The cost of all facilities installed will be included in rate base in future proceedings and revenues will be reflected for the new customers added in future proceedings. If further customers are connected to facilities constructed within the allowance, no credit would be provided to the original customers added as part of the extension. If a CIAC is required, and new customers are later added to the extension, the Company's existing rules regarding provision of a credit under its main extension rules will continue to apply. Peoples is not reflecting any additional revenues or capital in this case for the main line allowance proposed in this case.

Q. WILL THIS PROPOSAL REPLACE THE USE OF THE COMPANY'S PILOT RIDER MLX?

A. No, Peoples will continue to offer Rider MLX to customers as an option for customers who require an extension greater than 150 feet and those not eligible under the 150 foot provision.

Q. PLEASE SUMMARIZE YOUR TARIFF CHANGE PROPOSAL.

A. Peoples proposes to adopt a streamlined approach that will extend its main 150 feet without charge to an applicant for each applicant that applies for a line extension. In this way, the Company is simplifying the process for the customer and addressing a barrier many applicants face when they wish to select natural gas as their heating source, the cost of the main line extension. The proposal will make it easier for applicants to select natural gas service.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes. I reserve the right to supplement my testimony as other issues arise during the course of this proceeding. Thank you.

APPENDIX A

Exhibit	**Filing Requirement**
Ex. 10, Sch. 3	53.53.III.E.22
Ex. 12, Sch. 1	53.53.III.E.5
Ex. 12, Sch. 2	53.53.III.E.18
Ex. 12, Sch. 3	53.53.III.E.23
Ex. 12, Sch. 4	53.53.III.E.24
Ex. 12, Sch. 5	53.53.III.E.26
Ex. 12, Sch. 6	53.53.III.E.30
Ex. 12, Sch. 7	53.53.III.E.36
Ex. 12, Sch. 10	53.53.IV.B.11
Ex. 12, Sch. 11	53.53.I.C.1
Ex. 12, Sch. 12	53.53.III.E.28
Ex. 12, Sch. 15	53.53.III.E.3
Ex. 12, Sch. 16	53.53.IV.B.14
Ex. 13, Sch. 7	53.53.III.E.27
Ex. 15, Sch. 2	53.53.I.C.2
Ex. 15, Sch. 3	53.53.IV.B.8
Ex. 17, COS-10	COS 10
Ex. 17, COS-11	COS 11
Ex. 17, COS-12	COS 12
Ex. 17, COS-14	COS 14
Ex. 17, COS-16	COS 16
Ex. 17, COS-17	COS 17
	Supp-ROR10

Cost Comparison - Local Gas Purchased and Delivered via Gathering vs. Interstate Supplied Deliveries (Peoples Natural Gas)

Index - DTI Appalachian Index Cost per Dth 1/ $ 2.10 / Dth

	Local Gas via Gathering				Interstate Gas*			
Commodity Cost 2/	103% of Index	$ 2.1630	/ Mcf			$ 2.1840	/ Mcf	
Gathering UFG (A) or Interstate Retainage (B)	8.9%	$ 0.1934	/ Mcf	A	2.58%	$ 0.0564	/ Mcf	B
Producer Contribution - Gathering Retainage 3/	-2.10%	$ (0.0454)	/ Mcf					
Delivery Cost to City-Gate		$ -				$ 0.0885	/ Mcf	
Gathering System Cost (A) or Interstate Capacity (B)		$ 0.7600	/ Mcf	A		$ 1.0398	/ Mcf	B
Producer Contribution - Gathering Fee 4/		$ (0.2600)	/ Mcf			$ -		
Total Delivered Cost		$ 2.8109	/ Mcf			$ 3.3687	/ Mcf	

$ 0.5577 Local Gas Discount

* Based on weighted average cost of all existing Peoples interstate FT and storage contracts.

1/ DTI Appalachian Index Price as estimated for the FPFTY - November 2019 through October 2020

2/ Commodity Cost for Local Purchases is 103% DTI App Index and interstate supplies are converted from Dth to Mcf at 1.04 system average Btu.

3/ Gathering retainage level recovered from producers on the Peoples Division and Equitable Division.

4/ Gathering Fee is the producer paid fee under Peoples' proposed Appalachian Gathering Service rate schedule for the FPFTY - November 2019 - October 2020.

APPALACHIAN GATHERING SERVICE

AVAILABILITY

Service under this rate schedule is available to any party desiring to transport gas through the gathering system, as well as to deliver gas directly into the Company's distribution and transmission system, provided that:

(1) a Master Interconnect and Measurement Agreement (MIMA) has been executed between the Company and the party; and

(2) the party is in compliance with the MIMA, the provisions of this Rate Schedule and with all other provisions of this Tariff.

RATES

The gathering rate ($/Mcf) will be set on a monthly basis in an amount equal to 12.4% of the beginning of the month price ($/Dth) published in Platts, Gas Daily publication, under the heading (C) Appalachia, Dominion, South Point, but in no event shall be less than $0.26 per MCF, plus applicable retainage. The gathering rate shall not exceed the fully allocated cost of service associated with gathering system, as determined in the most recent base rate case proceeding.

Gathering of natural gas from unconventional sources (including but not limited to horizontally drilled Marcellus and Utica shale gas and landfill gas), shall be negotiated and agreed to within the MIMA.

TERM

The terms for gathering service shall be a set forth in the MIMA.

CHARACTER OF SERVICE

The Company's only obligation under this Rate Schedule shall be to receive gas from any gathering receipt point and to permit that gas to flow against the existing pressure in the Company's facilities. Peoples shall not be obligated to lower such line pressure by compression or otherwise to accommodate receipts from local Appalachian producers under this Rate Schedule. Service under this Rate Schedule shall be subject to Operational Flow Orders pursuant to Item 23 of the Rules and Regulations of this Tariff. Nothing in this Rate Schedule shall limit the Company's right to interrupt service or to take other action as may be required to alleviate conditions, which threaten the integrity of its system.

County	Number of Housing Units	Miles of Road	Feet Between Homes
Allegheny County	600,795	5,789	50.9
Armstrong County	32,786	1,820	293.2
Beaver County	79,508	1,689	112.2
Blair County	56,856	1,225	113.8
Butler County	83,224	2,368	150.3
Cambria County	65,972	1,771	141.7
Clarion County	20,554	1,446	371.5
Fayette County	63,763	2,146	177.7
Greene County	16,713	1,504	475.2
Indiana County	38,995	2,106	285.2
Jefferson County	22,700	1,397	324.9
Lawrence County	41,244	1,200	153.6
Mercer County	52,268	2,038	205.9
Somerset County	38,458	2,217	304.4
Venango County	27,591	1,379	263.9
Washington County	95,896	2,877	158.4
Westmoreland County	170,475	3,672	113.7
Rural Average - Excluding Allegheny County	907,003	30,857	179.6
Total Average	1,507,798	36,646	128.3

Sources:
http://www.dot.state.pa.us/public/pubsforms/Publications/PUB%20600.pdf
https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=PEP_2017_PEPANNHU&prodType=table

PIOGA Exhibit DW-12

PIOGA Set X to Peoples

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No. R-2023-3044549
	:	
Peoples Natural Gas Company LLC	:	
	:	

PIOGA INTERROGATORIES and REQUESTS FOR DOCUMENTS, SET X
to
PEOPLES NATURAL GAS COMPANY LLC

The Pennsylvania Independent Oil & Gas Association (PIOGA) hereby propounds the following interrogatories and requests for documents to Peoples Natural Gas Company LLC (Peoples) to be answered by those officers, employees, or agents who may be cognizant of the requested facts and who are authorized to answer on behalf of the Company.

INSTRUCTIONS

(a) As used herein, "describe", "explain", "identify" and "specify" mean to set forth fully, in detail and unambiguously, each and every fact of which Peoples has knowledge relevant to the answer called for by the request.

(b) As used herein, "relates to" or "relating to" mean referring to, concerning, responding to, containing, regarding, discussing, describing, reflecting, analyzing, constituting, disclosing, embodying, defining, stating, explaining, summarizing, or in any way pertaining to.

(c) These interrogatories are continuing. You are required to change, supplement and correct all answers to conform to available information, including information that first becomes available after answers are served.

(d) These instructions apply to all interrogatories and document requests hereafter propounded by PIOGA in this proceeding, whether or not included with or attached to subsequent interrogatories and document requests.

(e) If Peoples believes that any request set forth in these interrogatories and document requests is ambiguous or unclear in any way, please notify the undersigned PIOGA counsel as soon as possible so that the request may be properly clarified prior to the preparation of a written response.

PIOGA INTERROGATORIES and DOCUMENT REQUESTS, SET X
to
PEOPLES NATURAL GAS COMPANY LLC

Docket No. R-2023-3044549

1. Reference Peoples Statement No. 4-R (Palombo) at p.4, lines 13-16. Does Peoples agree to the use of a water vapor or moisture curve to determine the allowed level of water vapor in production gas delivered to all of the Company facilities? If not, please explain why not.

2. Reference Peoples Statement No. 4-R (Palombo) at p.4, lines 16 through p.5, line 1. Please identify where in PIOGA's direct testimony that PIOGA states or suggests that gas quality standards, other than water vapor content, that are in the current MIMA and tariff should not be applied.

3. Reference Peoples Statement No. 4-R (Palombo) at p.7, lines 11-16.

   a. Please identify the pipelines that the legacy TWP system pipelines had classified as (i) DOT gathering and (ii) DOT production prior to reclassifying them to distribution prior to their acquisition by Peoples.

   b. When were these pipelines first classified as (i) DOT gathering and (ii) DOT production? Please provide all documents showing when these classifications occurred and the reasons for the classifications.

   c. When did the legacy TWP system reclassify these pipelines to distribution. Please provide all documents showing when this reclassification occurred and the reasons for the reclassification.

4. Reference Peoples Statement No. 4-R (Palombo) at p.7, lines 5-11 and 17-20, and Peoples Exhibit RNZ-3.

   a. Are PNGD pipelines not classified under DOT or FERC as gathering included in Peoples' overall cost of gathering service? If so, please identify them, state the costs of these pipelines included in Peoples' overall cost of gathering service, and identify where these costs are shown in Peoples Exhibit RNZ-3.

b. Are PGD pipelines that were reclassified from gathering to distribution prior to Peoples' acquisition of the legacy TW Phillips system included in Peoples' overall cost of gathering service? If so, please identify them, state the costs of these pipelines included in Peoples' overall cost of gathering service, and identify where these costs are shown in Peoples Exhibit RNZ-3.

5. Reference Peoples Statement No. 4-R (Palombo) at p.8, lines 3-6.

   a. Please identify the portions of the (a) rate increase proposed in this proceeding and (b) rising costs that drive this proceeding that are attributable to producers.

   b. Please identify where the portions identified in your response to 3.a. above are included in Peoples Exhibit RNZ-3.

6. Reference Peoples Statement No. 4-R (Palombo) at p.8, line 21 through p.11, line 5. Please identify PIOGA's proposals that would prevent Peoples' operation of its pipeline system as described in the referenced portion of Mr. Palombo's rebuttal testimony, and explain how PIOGA's proposals would do so.

7. Reference Peoples Statement No. 4-R (Palombo) at p.12, lines 17-20. Please identify PIOGA's proposals concerning adjusting regulator set points that would require Peoples to allow producers' meters to operate outside the appropriate guidelines to transport local production.

8. Reference Peoples Statement No. 4-R (Palombo) at p.13, lines 13-18. Please identify the language proposed by PIOGA that would remove the flexibility for Peoples to make the most prudent daily operational decisions that meets the balance described in the referenced testimony, and explain how PIOGA's language would do so.

9. Reference Peoples Statement No. 4-R (Palombo) at p.13, lines 18-21. Please identify the language proposed by PIOGA that would remove Peoples' ability (a) to adjust pressures that ensure safe operations or (b) to shut-in meters that deliver low quality gas, and explain how PIOGA's language would do so.

Respectfully submitted,

Kevin J. Moody, Esq.
General Counsel
Pennsylvania Independent Oil & Gas Association
212 Locust Street, Suite 300
Harrisburg, PA 17101-1510
717-525-1556

Dated: April 22, 2024

PIOGA Exhibit DW-13

Peoples response to PIOGA-X-6

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-X-006

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples Statement No. 4-R (Palombo) at p.8, line 21 through p.11, line 5. Please identify PIOGA's proposals that would prevent Peoples' operation of its pipeline system as described in the referenced portion of Mr. Palombo's rebuttal testimony, and explain how PIOGA's proposals would do so.

Answer: PIOGA has offered several suggested language revisions that directly affect how Peoples should operate its systems to accommodate conventional production. For example, witness Weaver proposes replacing the current language in the Rate AGS with additional provisions of when and why Peoples can restrict the flow of gas or lower line pressures. Also, with respect to flow restrictions and meter shut-ins for adjustments to operating pressures, witness Jacobs specifically proposes a nine (9) month restriction where Peoples does not adjust pressures, except for cases of emergencies or unplanned activities. Both of these suggested revisions clearly reduce the ability for Peoples to make daily, weekly, or monthly decisions on how to operate its system most prudently and safely and provide reliable service to rate paying customers. Witness Jacobs also proposes adding provisions for "Peoples to make best efforts to limit flows of transmission or pipeline supplemental volumes to give conventional production flow-preference". While he caveats the proposed language with "as soon as possible after the threat to the integrity and safe operation of the system of the economic reason no longer exists", this still limits Peoples from making quick and appropriate decisions on the most optimal blend of supplies to meet customer demands. Peoples has contractual obligations with interstate pipelines that may impact deliveries at various points across the system, which have to factor in to where and how much gas needs to be delivered.

Submit Date: 4/29/2024

PIOGA Exhibit DW-14

Peoples response to PIOGA-X-4

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-X-004

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples Statement No. 4-R (Palombo) at p.7, lines 5-11 and 17-20, and Peoples Exhibit RNZ-3.

a. Are PNGD pipelines not classified under DOT or FERC as gathering included in Peoples' overall cost of gathering service? If so, please identify them, state the costs of these pipelines included in Peoples' overall cost of gathering service, and identify where these costs are shown in Peoples Exhibit RNZ-3.

b. Are PGD pipelines that were reclassified from gathering to distribution prior to Peoples' acquisition of the legacy TW Phillips system included in Peoples' overall cost of gathering service? If so, please identify them, state the costs of these pipelines included in Peoples' overall cost of gathering service, and identify where these costs are shown in Peoples Exhibit RNZ-3.

Answer: a. No

b. No

Submit Date: 4/29/2024

PIOGA Exhibit DW-15

Peoples response to PIOGA-X-5

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-X-005

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples Statement No. 4-R (Palombo) at p.8, lines 3-6.

a. Please identify the portions of the (a) rate increase proposed in this proceeding and (b) rising costs that drive this proceeding that are attributable to producers.

b. Please identify where the portions identified in your response to 3.a. above are included in Peoples Exhibit RNZ-3.

Answer: Overall, the producers contribute to various increases in costs that drive the rate increase. The most explicit indication is the overall cost of the gathering system in this case of $32,982,446 (see Exhibit RNZ-3 attached to Peoples Statement No. 15 - the Direct Testimony of Ralph Zarumba) compared to the cost of the gathering system in the last case of $26,559,887.

Submit Date: 4/29/2024

PIOGA Exhibit DW-16

Peoples response to PIOGA-X-3- Revised

Interrogatory Response

Case Name: 2023 Base Rate Case

Company: Peoples Natural Gas Company LLC

Docket Number: R-2023-3044549

Question Number: PIOGA-X-003

Witness: Palombo, Edward **Title:** Vice President Reliability

Question: Reference Peoples Statement No. 4-R (Palombo) at p.7, lines 11-16.

a. Please identify the pipelines that the legacy TWP system pipelines had classified as (i) DOT gathering and (ii) DOT production prior to reclassifying them to distribution prior to their acquisition by Peoples.

b. When were these pipelines first classified as (i) DOT gathering and (ii) DOT production? Please provide all documents showing when these classifications occurred and the reasons for the classifications.

c. When did the legacy TWP system reclassify these pipelines to distribution. Please provide all documents showing when this reclassification occurred and the reasons for the reclassification.

Answer: a. In 2000, T. W. Phillips (now the Peoples Gas Division or PGD) reported 1,509 miles of distribution, 44 miles of transmission, and 1,542 miles of gathering on the annual DOT reports. In 2001, PGD initiated a project to reclassify gathering and some transmission pipe to distribution where applicable. Subsequently, in the 2001 annual DOT reports, PGD reported 3,086 miles of distribution, 40 miles of transmission, and 0 miles of gathering. The 1,509 mile increase of distribution is primarily attributed to the reclassification of all gathering lines.

b. The pipelines were classified as gathering when they were originally installed.

c. As stated in (a), the lines were reclassified in 2001. Please reference the 2000 and 2001 annual DOT reports that are available to the public on the PHMSA website.

Submit Date: 5/1/2024

PENNSYLVANIA WEATHERIZATION PROVIDERS TASK FORCE

PWPTF Statement No. 1

Direct Testimony of Jennifer Warabak

In Re: Peoples Natural Gas Company, LLC

Docket Number: R-2023-3044549
C-2024-3045268
C-2024-3045385

Q. Please state your full name and business address.

A. Jennifer Warabak, 165 Amber Lane, PO Box 1127, Wilkes-Barre, Pennsylvania 18703-1127.

Q. By whom are you employed and in what capacity?

A. I am employed by the Commission on Economic Opportunity (CEO) as Executive Director. I am submitting this testimony on behalf of the Pennsylvania Weatherization Providers Task Force as a member of the Task Force.

Q. What are the interests of the Task Force in this rate case?

A. The Pennsylvania Weatherization Providers Task Force, Inc., is a Pennsylvania non-profit corporation and a statewide association of thirty-seven (37) organizations providing utility assistance and energy conservation services in each of the Commonwealth's sixty-seven counties. The Task Force, through its member agencies, a number of which are Pennsylvania community-based organizations, administers universal service programs for a number of utility companies. The Task Force members serve low-income ratepayers and it is part of our responsibility to our constituency to advocate for their interests in regulatory proceedings and this proposed request will certainly have an impact upon those low-income ratepayers. In addition to the affordability of transmission and distribution rates, the Task Force is particularly interested in the adequacy and operation of a company's universal service program.

Q. What background and experience in energy issues qualify you to submit testimony in this case?

A. I was appointed as the acting Executive Director of the Commission on Economic Opportunity in October 2022. I have been employed at CEO for over 20 years and during my tenure I have been involved in numerous energy related programs that CEO operates. From 2004 to 2016, I was CEO's Energy Services Coordinator where I supervised CEO's energy programs. During that time, I managed eight hardship utility programs and managed the LIHEAP Crisis program for Luzerne County on behalf of the Pennsylvania Department of Human Services as well as other utility customer assistance programs for several utility companies. In 2016 I became CEO's Program and Planning Coordinator where I evaluated program effectiveness and recommended modifications and/or improvements across the spectrum of programs offered by CEO, in the areas of energy, housing, job training etc.

During my tenure in those positions, CEO's experience and the expertise of its staff in energy programs has been recognized on state and national levels. CEO's energy related programs have been acknowledged by receipt of a Superior Achievement Award from the United States Department of Energy. CEO has weatherized more than 27,000 homes under the U.S. Department of Energy Weatherization Assistance Program. CEO also serves as a subcontractor for universal programs operated by several Pennsylvania gas and electric utility companies. CEO is also the PA Department of Public Welfare's contracted operator of the crisis component of the Low-Income Home Energy Assistance Program (LIHEAP) in Luzerne and Wyoming Counties. CEO was also a major contractor for PPL in the Low-Income Renewable Energy Pilot, and secured funding and installed

several solar thermal water heating systems for the former PG Energy and UGI Gas Division.

Q. Before addressing the specifics of your testimony, does the Task Force take a position on whether the Company's rate increase should be granted?

A. Our main focus is on the funding and availability of universal service programs and opposing rate designs that discourage conservation. In this case, we do not necessarily oppose a rate increase, but do oppose any rate increase unless it is accompanied by measures that would provide additional relief to the Company's customers, particularly low-income customers, from the effects of a rate increase.

Q. Please describe the other areas of your testimony.

A. My testimony will address the Company's proposal to increase the fixed monthly charge for residential customers as well as proposals to help low-income customers deal with any resulting rate increase.

In its request for a rate increase the Company does not propose any additional increase in funding or measures that would help low-income customers deal with the proposed rate increase. Further, an increase in the fixed monthly charge, as requested by the Company, would negatively impact a customer's motive and ability to conserve energy. The company's proposal if granted would increase rates, discourage conservation and leave a customer with less ability to conserve energy and less ability to reduce their bills. Despite the impact of its proposal on residential customers, and in particular low-

income customers, the Company's proposal offers nothing in the way of changes or increases in funding to its low-income programs, programs that would help mitigate the negative impact of the Company's proposals especially considering these difficult economic times.

Despite these difficult financial times for all, if approved, the Company's proposal would provide its Peoples Natural Gas Division (PNGD) with an annual revenue increase of $148,558,437, or approximately 20%, and Peoples Gas Division (PGD) with an annual revenue increase of $7,466,250, or approximately 8.5%. Combined, the Company would receive an annual revenue increase of $156,024,687, or approximately 18.7%, on a total annual revenue basis. If Peoples' request is approved, the total bill for PNGD residential customer using 80 Mcf per year would increase from $73.16 to $88.79 per month or by 21.4%. The total bill for a PGD residential customer using 80 Mcf per year would increase from $84.00 to $90.35 per month or by 7.6%. Despite these substantial requests for increases in rates, the Company requests a substantial rate increase and nothing additional to help low-income customers.

Q. What rate design issue would you like to address?

A. In this case the Company is proposing to increase its fixed monthly charge for its PGND from $14.50 to $21.50, an increase of nearly 50%. For its PGD it proposes to increase the fixed monthly charge from $15.75 to $21.50. I am concerned about this proposal and the Task Force opposes any increase to the fixed monthly customer charges.

Part of the proposed increase to residential customer's rates will be due to this increase in the fixed monthly customer charge. This increase in the monthly fixed charge

concerns me, as it has the Commission, because it discourages conservation and impacts a customer's ability to save money through conservation; as the Company moves towards charging customers based upon the Company's fixed costs and away from a customer's consumption there is less incentive, and ability, to conserve. One of the only defenses a family, particularly a poor family, has against the sharp increases in energy costs is to conserve – lower the thermostat, seal air leaks, change filters regularly, add more insulation, get a more efficient heating unit, etc. The Company's proposal to increase the fixed costs greatly impacts a customer's motive to conserve and the ability to lessen the impact of any rate increase. The combined effect of an increase in rates and an increase in fixed monthly charges, without any changes to universal service funding or other measures to help low-income customers, not only results in higher rates but also lessens the ability of customers to deal with those increases. In particular, the negative impact would be particularly harsh on the Company's low-income customers and the Company's proposed request ignores the interests of its low-income customers.

Q. How does the effect of the Company's requests impact upon your testimony in this case?

A. I believe that should a rate increase be granted there should be relief offered in the form of increases to universal funding programs and other relief that would help low-income customers deal with any increase granted. For a typical residential customer, these requested increases are substantial, but for a low-income customer, the effects can be dramatic, especially in this economic climate. High utility costs are not the only challenge for a poor person. Our agencies have been helping low-income people for

years and know firsthand that they face financial challenges on many fronts -- housing, energy costs, food and health care -- and a dramatic increase in any of those areas can have a devastating impact.

It is for these reasons that if an increase is granted it should be conditioned upon an increase in funding and relief to the Company's low-income customers.

Q. Should a request for a rate increase be granted what type of measures would you suggest be implemented for low-income customers?

A. In discovery responses in this case the Company indicated as of January 2024, PNGD had 135,425 estimated low-income customers and PGD had 13,048 estimated low-income customers. The average annual income of their confirmed low-income customers just over $19,00. As a result of this proceeding rates are likely to increase, a customer's ability to conserve will decrease (if the fixed monthly charge is increased) yet no additional relief is being provided to customers that would allow them to increase their conservation of energy and decrease their monthly bills.

Q. Turning now to universal service programs what issues would you like to address?

A. I want to address the Company's low-income usage reduction program (LIURP). Despite their large number of low-income customers, the Company estimates that its LIURP program it will serve 374 customers in 2024 with a budget of $3,030,000.

We are proposing increased funding for LIURP because there is an unmet need for LIURP services as indicated by the number of the Company's low-income customers

relative to the number it anticipates will receive LIURP services in 2024.

Q: Do you have any recommendations regarding the funding level for LIURP?

A: Yes. I am recommending that should a rate increase be granted then the number of customers served annually be increased by 50. That would begin to meet the unmet need for LIURP services. Based upon the LIURP budget of $3,030,000 serving 374 customers, the approximate average LIURP cost is just over $8,000 so to increase the number of jobs by 50 would mean an annual LIURP funding of $400,000.

Q. Are there any other universal service topics that you want to address?

A. Yes. The Task Force recommends that the Company's contribution to its hardship fund be increased commensurate with the percentage increase in rates to the residential class that results from this proceeding. Although modest in comparison to other universal service funding, the proposal will help customers deal with a rate increase in these difficult economic times.

I also recommend that hardship funding be distributed in accordance with the percentage of low-income customers in the counties served by the Company.

Q. Can you please summarize your recommendations?

A. Yes. The Task Force is recommending the following:

1. That the Company's request to increase its fixed residential monthly customer charge be denied;

3. That annual funding for LIURP be increased by $400,00 and that any unused funds be carried over and added to the following year's funding;

4. That the Company's contribution to its Hardship fund be increased commensurate with the percentage increase in residential rates that result from this proceeding;

5. That Hardship funds be distributed in accordance with the percentage of low-income customers in the counties served by the Company.

Q. Does this conclude your testimony?

A. Yes

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket No. R-2023-3044549
Office of Consumer Advocate	:	C-2024-3045268
Office of Small Business Advocate	:	C-2024-3045385
	:	
v.	:	
	:	
Peoples Natural Gas Company, LLC	:	

CERTIFICATE OF SERVICE

The undersigned certified that he served a copy of the foregoing Pennsylvania Weatherization Providers Task Force's Statement No. 1 – Direct Testimony of Jennifer Warabak upon the following participants this 22nd day of March, 2024, via electronic mail:

Meagan Moore, Esquire
PNC Companies LLC
375 North Shore Drive
4th Floor
Pittsburgh, PA 15212
Meagan.moore@peoples-gas.com

Michael W. Gang, Esquire
Anthony D. Kanagy, Esquire
Nicholas A. Stobbe, Esquire
Post & Schell, P.C.
17 North Second Street
12th Floor
Harrisburg, PA 17101-1601
mgang@postschell.com
akanagy@postschell.com
nstobbe@postschell.com

NazArah Sabree, Small Business Advocate
Steven C. Gray, Esquire
Office of Small Business Advocate
555 Walnut Street
1st Floor, Forum Place
Harrisburg, PA 17101-1923
Ra-sba@pa.gov
sgray@pa.gov

Gina L. Miller, Esquire
Christopher M. Andreoli, Esquire
Jacob D. Guthrie, Esquire
Aron J. Beatty, Esquire
Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101-1923
gmiller@paoca.org
candreoli@paoca.org
jguthrie@paoca.org
abeatty@paoca.org

Todd S. Stewart, Esquire
Hawke McKeon & Sniscak LLP
100 North Tenth Street
Harrisburg, PA 17101
tsstewart@hmslegal.com

Scott B. Granger, Esquire
Bureau of Investigation & Enforcement
Commonwealth Keystone Building
400 North Street, 2nd Floor West
P.O. Box 3265
Harrisburg, PA 17105-3265
sgranger@pa.gov

Elizabeth R. Marx, Esquire
John W. Sweet, Esquire
Pennsylvania Utility Law Project
118 Locust Street
Harrisburg, PA 17101
pulp@pautilitylawproject.org

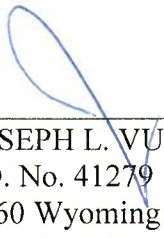
Tanya C. Leshko, Esquire
Buchanan Ingersoll & Rooney, PC
409 North Second Street
Suite 500
Harrisburg, PA 17101-1357
Tanya.leshko@bipc.com

Kevin J. Moody, Esquire
Pennsylvania Independent Oil & Gas Assoc.
212 Locust Street
Suite 600
Harrisburg, PA 17101-1510
kevin@pioga.org

Tishekia Williams, Esquire
Duquesne Light Company
411 7th Avenue
15th Floor
Pittsburgh, PA 16219
twilliams@duqlight.com

Charis Mincavage, Esquire
Vasiliki Karandrikas, Esquire
Erin McCaulley, Esquire
McNees Wallace & Nurick, LLC
100 Pine Street
P.O. Box 1166
Harrisburg, PA 17108
cmincavage@mcneeslaw.com
vkarandrikas@mcneeslaw.com
emccaulley@mcneeslaw.com
Linda Evers, Esquire
Donald R. Wagner, Esquire
Stevens & Lee
111 North Sixth Street
Reading, PA 19601
lre@stevenslee.com
drw@stevenslee.com

Daniel Clearfield, Esquire
Carl R. Schultz, Esquire
Eckert Seamans
213 Market Street
8th Floor
Harrisburg, PA 17101
dclearfield@eckertseamans.com
cshultz@eckertseamans.com



JOSEPH L. VULLO, ESQUIRE
I.D. No. 41279
1460 Wyoming Avenue
Forty Fort, PA 18704
(570) 288-6441
e-mail: jlvullo@bvrrlaw.com
Attorney for Pennsylvania Weatherization Providers Task Force