Duquesne Light Company

Docket No. R-2021-3024750

DLC Exhibit 5

Direct Testimony – Part I

BOOK 8

Duquesne Light Company
Distribution Rate Case
Docket No. R-2021-3024750

Filing Index

Exhibit 1 - Summary of Filing

Book 1

Part I - Schedule A and General Information

Part II - Primary Statements of Rate Base & Operating Income

Book 2

Part III - Rate of Return

Book 3

Part IV - Rate Structure & Cost Allocation

Book 4

Part V - Plant & Depreciation Supporting Data

Part VI - Unadjusted Comparative Balance Sheet & Operating Income Statements

Exhibits 2 thru 4 - Summary of Measures of Value & Rate of Return

Book 5

Exhibit 2 - Fully Projected Future Test Year (January 1, 2022 through December 31, 2022)

Book 6

Exhibit 3 - Future Test Year (January 1, 2021 through December 31, 2021)

Book 7

Exhibit 4 - Historic Test Year (January 1, 2020 through December 31, 2020)

Exhibit 5 - Direct Testimony

Book 8

Statement 1 - C. James Davis

Statement 2 – Jaime Bachota

Statement 3 - Todd A. Mobley

Statement 4 - Benjamin B. Morris

Statement 5 – Krysia Kubiak

Statement 6 – Yvonne Phillips

Statement 7 - Katherine M. Scholl

Statement 8 – Sarah Olexsak

Statement 9 – Jennifer Neiswonger

Book 9

Statement 10 - Robert L. O'Brien

Statement l1 - John J. Spanos

Statement 12 - Matthew L. Simpson

Statement 13 - Paul R. Moul

Statement 14 - James H. Milligan

Statement 15 - Howard S. Gorman

Statement l6 - David B. Ogden

Statement 17 – Margot Everett

Book 10

Exhibit 6 - Jurisdictional Separation and Allocated Cost of Service Studies

Book 11

Exhibit 7 - Depreciation Studies

Book 12

Confidential Testimony and Exhibits

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2021-3024750

Duquesne Light Company

Statement No. 1

DIRECT TESTIMONY OF C. JAMES DAVIS

Subjects: Overview, Cost Management, and Economic Development

PUBLIC VERSION

April 16, 2021

Q. Please state your name and business address.

A. My name is C. James Davis. My business address is 411 Seventh Avenue, Pittsburgh, PA 15219.

Q. By whom are you employed and in what capacity?

A. I am employed by Duquesne Light Company ("Duquesne Light" or "Company") as the Director – Rates, Energy Procurement, and Federal/RTO Affairs. I am responsible for the oversight and direction of the Company's Rates & Tariff Services Department, Supply Procurement and RTO Settlement activities, as well as Federal and RTO affairs.

Q. What are your qualifications, work experience and educational background?

A. I graduated from St. Vincent College with a Bachelor of Arts degree in Computer Science in 1989 and Duquesne University with a Master of Business Administration in 1995. Prior to joining Duquesne Light, I had more than 24 years of diversified experience in the utility industry working for Allegheny Energy and FirstEnergy. I have held positions in Risk Management, Finance, Portfolio Management, Generation Dispatch, and Commodity Operations.

Q. Have you previously testified before the Commission or other regulatory agencies?

A. Yes, I testified in the 2016 Petition of Duquesne Light Company for Approval of a Distribution System Improvement Charge at Docket No. P-2016-2540046, in the

Company's Petition for a Default Service Plan for the period of June 1, 2017 through May 31, 2021 at Docket No. P-2016-2543140, in the Company's 2018 base rate proceeding at Docket No. R-2018-3000124, in the Peoples Natural Gas 2018 base rate proceeding at Docket No. R-2018-3006818, and in the Company's Petition for a Default Service Plan for the period of June 1, 2021 through May 31, 2025 at Docket No. P-2020-3019522.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to provide an overview of Duquesne Light, to explain the reasons for the proposed rate increase and to identify the witnesses providing direct testimony on behalf of Duquesne Light. My testimony has been divided into five sections: Section I provides an overview of Duquesne Light and its requested rate increase. In Section II, I discuss the Company's initiatives to manage cost, provide outstanding support for our customers, and provide highly reliable electric service. Section III details the primary reasons for requesting this rate relief. Section IV describes the proposed economic development program for large nonresidential customers. Section V describes the organization of the filing, introduces Duquesne Light's witnesses in the proceeding and reviews the importance of this case to Duquesne Light, its customers, and Southwestern Pennsylvania.

Q. Are you sponsoring any exhibits at this time?

A. Yes, I am sponsoring the Statement of Reasons; CONFIDENTIAL Exhibit CJD-1, the Company's 2020 Annual Diversity Report; and CONFIDENTIAL Exhibit CJD-2, a special rate contract.

I. OVERVIEW OF DUQUESNE LIGHT AND THE REQUESTED DISTRIBUTION RATE INCREASE

Q. Please provide some background on Duquesne Light

A. For more than 135 years, Duquesne Light has been serving the people of the greater Pittsburgh region with reliable electric service. The Company provides distribution, transmission, and default supply services to approximately 600,000 customers within its service territory that extends across two counties and covers approximately 817 square miles. Duquesne Light is a "public utility" and an "electric distribution company" ("EDC") as those terms are defined under 66 Pa. C.S. §§ 102 and 2803.

Q. Why is the Company filing a general rate case requesting an overall increase in rates at this time?

A. The Company has been investing in the distribution system to provide safe, reliable service to its customers, which has been especially essential in the time of the COVID-19 pandemic. The Company must continue to invest to satisfy the needs of its customers, while also maintaining the ability to attract capital to support these investments. The Company's proposal will enable it to maintain a balance amongst: 1) providing safe, reliable service to customers; 2) controlling costs; 3)

providing enhanced customer assistance for those in need; and 4) stimulating beneficial customer growth to mitigate the economic effects of the pandemic on our region and our customers.

Q. Please describe the increases and changes in rates for distribution service that the Company is proposing.

A. The Company is proposing a general rate increase to its distribution rates and is also proposing to roll its Distribution System Improvement Charge ("DSIC") into base rates. The Company also proposes to expand its offering of a Transportation Electrification Program and to provide a Community Development Rider aimed at nonresidential customers that would attract new customers to the region and/or enable existing customers to expand operations. The Company also is proposing to establish COVID-19 relief programs for residential and small/medium commercial customers that are currently dealing with the economic effects of the pandemic.

Q. Please describe the changes to existing rate riders that affect distribution base rate revenue in this proceeding.

A. The Company implemented a Distribution System Improvement Charge ("DSIC") Rider beginning October 1, 2016, pursuant to the Commission's order at Docket No. P-2016-2540046. The Company proposes to roll the projected DSIC Rider charges and costs into base distribution rates and reset the DSIC Rider to zero as of the effective date of the base distribution rates determined in this proceeding. The DSIC Rider will remain at zero until the Company has placed in service plant in

DSIC eligible accounts in excess of the claimed amounts included in its estimated December 31, 2022 rate base in the current proceeding. As explained by Mr. O'Brien in his direct testimony (Duquesne Light St. No. 10), while the roll in of the DSIC charges has the effect of increasing base distribution rates by $29.2 million, this will have no impact on customers' bills, because customers will no longer pay the current surcharge which will be set to zero when new distribution rates become effective as a result of this proceeding.

Q. Please provide a summary of the Company's request for a distribution rate increase.

A. Duquesne Light is requesting the Commission approve a $115.0 million distribution rate increase effective January 15, 2022. If the Company's request is approved as submitted, the total bill (which includes rates for distribution, surcharges, transmission, and generation) for a residential customer using 600 kilowatt-hours ("kWh") per month and taking default power service from the Company would increase from $100.12 per month to $107.85 per month or by 7.72 percent.

II. COMPANY INITIATIVES TO MANAGE COSTS, PROVIDE OUTSTANDING SUPPORT FOR OUR CUSTOMERS, AND HIGHLY RELIABLE ELECTRIC SERVICE

Q. Please describe some of Duquesne Light's efforts to control costs while maintaining high levels of customer service and reliability.

A. The Company has always recognized a need to control costs and in 2020 created a team specifically focused on this issue, The Affordability and Innovation Management ("AIM") Organization. The AIM Organization provides the structure and support to take an idea and ensure its implementation to create value to our customers. The organization has four pillars of focus to drive improvement in our business while remaining focused on our customers. The AIM Organization's pillars are the Affordability Office, Business Analytics, Business Process Maturity, and the Innovation Center. I will provide a high-level overview of each: The Affordability Office takes ideas in a data driven approach to ensure risk and value are identified throughout the life cycle of the idea. The Affordability Office deploys the training, methodology, and performance accountability to ensure progression of the ideas. The Business Analytics group establishes governance and quality around our data while also deriving sophisticated insights from the data. Business Process Maturity looks at the maturity of our processes across the business and evaluates our maturity in those particular areas in comparison with our peers. Lastly, the Innovation Center takes a holistic look on innovative thought and explores new and forward-thinking opportunities.

Q. Please describe some of benefits Duquesne Light's AIM Organization has realized to date.

A. In 2020, the Company realized approximately $7 million in sustainable cash savings via AIM initiatives, which represents a combination of capital deployment, operations and Maintenance ("O&M") expense and working capital savings.

Q. What benefits does the Company project for the Future Test Year?

A. The Company has engaged in over 125 initiatives to drive approximately $6.3 million in projected sustainable O&M savings and approximately $8 million in projected sustainable capital savings across the business. These initiatives not only drive affordability but also improve safety, reliability, customer service, and sustainability.

Q. What benefits does the Company project for the Fully Projected Future Test Year?

A. In addition to the sustainable savings discussed above, the Company projects approximately $1.0 million in sustainable O&M savings and approximately $11.0 million in sustainable capital savings.

Q. Please provide an example of a program that reduces cost and addresses sustainability.

A. The Company has developed an E-Bill initiative that touches upon several of these areas. The Company's ability to offer a simpler E-Bill enrollment process, along with easy access to E-Bill, improves the affordability of our product, serves our customers in their preferred communication channel, and reduces the consumption of paper to drive sustainability.

Q. Has the Company performed any surveys or studies to track customer satisfaction?

A. As Ms. Neiswonger describes in her direct testimony (Statement No. 9), the Company has conducted transaction surveys of customers who have had interactions with the Company as well as other surveys conducted on a monthly basis to measure overall satisfaction with Duquesne Light.

Q. Please describe the results of the surveys.

A. In general, the surveys indicate that for the four-year period beginning in 2017 over seventy three percent of Duquesne Light customers have been satisfied with our service and in 2020, the percentage increased to seventy five percent. Ms. Neiswonger describes the results in detail in her direct testimony.

Q. Please describe some of Duquesne Light's efforts to provide outstanding customer service.

A. The Company has undertaken several initiatives to improve customer satisfaction and engagement over the past several years as well as a complete bill redesign to improve the readability of the customer bill. The initiatives include:

- A new Duquesne Light mobile app available in the App Store and Google Play;
- Customer segmentation and initiative-specific personas to deliver more timely and relevant messages to customers in the channel they prefer;

- A self-serve Payment Arrangement portal on DuquesneLight.com to provide a simplified process for customers to set up a payment arrangement;
- A small and medium-size concierge Business Center within our Contact Center to better serve business customers;
- An email engagement platform to send relevant, timely email communications to customers with content related to storm preparation, energy efficiency information, products and services, and more; and
- A presence on Nextdoor, a social platform that allows the Company to send targeted neighborhood messages regarding outages and other important information.

Q. How has the Company helped low-income customers meet their need and ability to afford electric service?

A. In addition to energy efficiency programs, the Company has four Universal Services programs that assist low-income customers: 1) Customer Assistance Program ("CAP"), 2) Customer Assistance Referral and Evaluation Services ("CARES"), 3) the Hardship Fund, and 4) Smart Comfort/Low Income Usage Reduction Program ("LIURP"). These programs are described in detail by Ms. Scholl in her direct testimony (Statement No. 7).

Q. How has the Company performed with respect to its reliability metrics?

A. The Company measures its reliability performance based on three system and customer reliability metrics: System Average Interruption Duration Index

("SAIDI"), System Average Interruption Frequency Index ("SAIFI"), and Customer Average Interruption Duration Index ("CAIDI"). Mr. Morris describes in his direct testimony (Statement No. 4) the overall reliability metrics of the Company. In summary over the past five years of benchmarked data (*i.e.*, 2016 through 2020 utilizing the Pennsylvania Public Utility Commission's annual *Electric Service Reliability in Pennsylvania* report and *Quarterly Electric Reliability* reports), Duquesne Light has been either the top-performing large Electric Distribution Company ("EDC") or the second top-performing EDC in the Commonwealth, depending on the specific reliability metric.

Q. How has the Company been able to continue to perform at such a high level?

A. The Company attributes its strong reliability performance over the 2016 to 2020 period to the Company's ongoing T&D System Capacity and Reliability plant additions initiated in its LTIIP as well as vegetation management efforts.

Q. What steps is the Company taking to further improve its service reliability and reduce outages?

A. As Mr. Morris discusses in his testimony (Statement No. 4), the Company must continue to invest in its distribution system to maintain and enhance its reliability and resilience, which is a main driver of the Company's rate proposal.

Q. Mr. Morris addresses the Company's projected investments in 2022. Is the Company also considering how to provide safe, reliable, and affordable service in subsequent years?

A. Yes. The Company is looking ahead to understand customers' potential future needs and how to address them. Duquesne Light is focused on leveraging investments in the distribution grid to provide better visibility and situational awareness of the system, ensuring the integration of Distributed Energy Resources ("DER") and other emerging technologies. As the distribution system owner and operator, Duquesne Light plays an integral role in ensuring that the grid remains reliable and safe as new technologies emerge. The Company looks forward to engaging with the Commission and stakeholders on these issues in the future.

Q. What steps has the Company taken to support diversity, equity, and inclusion?

A. In 2019, the Company established a Diversity and Inclusion Committee ("Diversity Committee") composed of a cross functional selection of employees tasked with enhancing the Company's culture of inclusion and equity. The Diversity Commitee began by implementing a comprehensive internal education and awareness campaign including unconscious bias training as well as various heritage month celebrations. To build upon those efforts, the Company also hired its first Chief Diversity Officer and worked to establish a comprehensive strategy to advance diversity, equity, and inclusion at Duquesne Light.

Q. Please describe management's program to address diversity, equity, and inclusion.

A. In 2020, the Company reaffirmed and accelerated its commitment to diversity, equity, and inclusion by introducing its first Inclusion Strategy, launching three newly formed Business Employee Resource Groups (BERGs), transforming its Diversity Committee to a Diversity, Equity and Inclusion Council ("DEI Council"), initiating phase two of unconscious bias training, and expanding its talent attraction and outreach programs. The Company's 2020 Annual Diversity Report, which is provided to the Commission on a confidential basis pursuant to the Commission's Diversity Policy Statement and is attached as CONFIDENTIAL Exhibit CJD-1, describes these efforts in more detail, along with priorities and plans for 2021 and beyond.

III. REASONS FOR REQUESTED RATE RELIEF

Q. Please explain the reasons for the increase in base rates proposed in this proceeding.

A. The three primary reasons for the Company to increase its base distribution rates are as follows:

1. **The continued growth in the Company's distribution rate base.** The Company has invested heavily in the distribution system, consequently the rate base has grown by 17.4 percent since the last base rate proceeding. As Mr. O'Brien describes in his direct testimony (Statement No. 10) the

projected rate base at December 31, 2022 will be $336.758 million greater than the level currently reflected in current base distribution rates.

2. **The sharp reduction in sales.** Duquesne Light's projected 2022 revenue at current rates is $9.2 million dollars less that what was agreed to in the Settlement Agreement approved by the Commission. As Mr. Mobley addresses in his direct testimony (Statement No. 3), sales to residential, commercial and industrial customers combined are expected to decline by approximately 1.4 percent annually each year between 2019-2025. The decline in usage in the Company's service area is due to a combination of factors that include the increases in efficiency of appliances, increases in net metering, and federal mandates to lighting standards, as well as the implementation of Pennsylvania's state-mandated energy efficiency and conservation programs under Act 129. These declines are partially offset by projected customer and Electric Vehicle growth. The Company has made an $8.450 million revenue adjustment to reflect this projected loss, as Mr. O'Brien describes in his direct testimony and calculates in Schedule D-5B.

3. **Increase in operations and maintenance ("O&M") expense.** Duquesne Light's projected O&M expenses are 10.76 percent higher than in the last rate proceeding. The primary drivers include: 1) an increase of approximately 100 employees primarily in the Operations and Information Technology areas; 2) wage increases of approximately 3.0 percent per year; 3) costs of the previously mentioned Riders and COVID-19 relief programs

included in base rates; 4) inclusion of the Company's electrical model to improve reliability and responding to customer outages; and 5) increased costs associated with COVID-19. These increases are partially offset by AIM cost saving measures.

IV. DESCRIPTION OF THE PROPOSED COMMUNITY DEVELOPMENT RIDER

Q. Does the Company's tariff currently provide for an economic development rate or rider?

A. No, the current tariff does not provide for a programmatic rate or rider for economic development. It does, however, provide for the Company to enter into special contracts for electric service with industrial or commercial customers on an individual basis to address changing business needs, operating conditions, or less expensive competitive alternatives for energy.

Q. Is the Company proposing a new economic development rate or rider in this case?

A. Yes. As detailed in the direct testimony of Ms. Everett (Statement No. 17), Duquesne Light is proposing a Community Development Rider that will provide a defined discount to eligible commerical and instrustrial customers in Duquesne Light's service territory.

Q. If the Company can enter into special contracts, why does it seek a specific Community Development Rider?

A. The Company is proposing a Community Development Rider for two reasons. First, to establish a measured, time bound program that has defined parameters addressing when an industrial or commercial customer could qualify for such program. These parameters would address issues such as the number of new or incremental jobs being created, the amount of new or incremental load being added to the service territory, the amount of a discount to the applicable general service rate that would be applied and a term for how long the discount would apply. Second, a standalone Community Development Rider will reduce the administrative burden of implementing such a program, compared to pursuing economic development through a series of individual special contracts.

Q. Will the Community Development Rider be subsidized by other customers?

A. No, as Ms. Everett addresses in her direct testimony (Statement No. 17), the rate design of the Community Development Rider will collect all incremental costs created by the customer utilizing the rider and in addition provide a contribution to fixed costs.

Q. Will the Community Development Rider be available for only new customers?

A. No, the Company is proposing that the Rider would be available for both new and existing customers. In the case of existing customers, the discount available under the rider would only apply to the new incremental load.

Q. Does the Company intend to eliminate the use of special contracts?

A. No, the Company does not intend to eliminate the use of special contracts; however, they will continue to be used sparingly. Special contracts still have a useful purpose to address changing business needs, operating conditions, or less expensive competitive alternatives for energy. The Community Development rider is meant to specifically address growth in our service territory, whereas the special contracts would still be used to address more complex situations.

Q. Does the Company currently have any special contracts?

A. Yes, the Company does have one special contract that was reviewed and approved by the Commission at Docket P-2019-3014640.

Q. Is the Company providing a confidential report concerning the customer contract approved by the Commission at Docket P-2019-3014640?

A. Yes. As the Company explained in its Petition seeking approval of the contract on November 21, 2019, the contract was entered into with **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** ("Customer") pursuant to Rule 4 of the Company's tariff. The contract establishes a special distribution rate for the Customer for the period **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL].** Specifically, the contract provides a **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**.

The Company incurred approximately **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** in capital costs to extend service to the customer. The contract was designed to recover all of these costs over the contract's **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** term. In its confidential response to discovery request TUS P-4, the Company agreed to "provide a confidential report to the Commission that details the revenue resulting from this Contract at the end of the contract period, or in a future rate case, whichever occurs first." I am providing this report on behalf of the Company via my testimony.

Q. What are the revenues the Company has realized resulting from the contract?

A. As of the date of this testimony, the Company has not realized revenues from the contract because the customer has not yet energized service. During the period the contract was pending before the Commission, the COVID-19 pandemic struck, and **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**. This impacted the customer's construction activities and necessitated several successive postponements of service energization.

The customer has since resumed construction, and the Company anticipates it will energize service in spring of 2021; however, the remaining duration of the rate contract – **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** – will not be sufficient to recover the Company's incremental capital costs to serve the customer.

Q. How does the Company propose to recover these costs?

A. The Company has executed a revised contract with the customer to continue until **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** and include a revenue guarantee. This revised contract is attached to my testimony as CONFIDENTIAL Exhibit CJD-2. This revised contract duration, together with the revenue guarantee, will ensure the Company's recovery of incremental capital costs incurred to serve the Customer. The Company is requesting the Commission's approval of this revised contract as part of this proceeding.

V. ORGANIZATION OF THE FILING, WITNESSES, AND THE IMPORTANCE OF THE CASE TO DUQUESNE LIGHT

Q. Please identify the other witnesses presenting testimony on behalf of Duquesne Light and the principal matters they will address.

A. In addition to my testimony, which is Statement No. 1, the Company's witnesses are presenting testimony as follows:

Jaime Bachota	Statement No. 2	Provides an overview of the Company's accounting process. Explains the Company's actual financial results for the Historic Test Year and reviews the budgeted financial results for the Future Test Year and the Fully Projected Future Test Year.
Todd Mobley	Statement No. 3	Provides an overview of the sales forecast. Describes the outcome of the sales forecast model for the Historic Test Year, the Future Test Year, and the Fully Projected Future Test Year. Gives supporting details on the impacts of key drivers to the

		overall sales forecast including the effects of Energy Efficiency and Conservation.
Benjamin Morris	Statement No. 4	Describes the Company's capital additions planned to be placed in service through the end of the Fully Projected Future Test Year. Provides a description of the Company's electric delivery system, a description of the planning process to ensure the system continues to meet the needs of its customers. This would include items such as reliability metrics, line losses, and other capital projects.
Krysia Kubiak	Statement No. 5	Describes the Company's proposal to create a Stimulus Rider to address commercial customers impacted by the COVID-19 pandemic.
Yvonne Phillips	Statement No .6	Describes the Company's proposal to modify Tariff Rule 41 – Prohibition of Residential Master Metering to allow master metering of certain new multifamily residential premises.
Katie Scholl	Statement No. 7	Describes the Company's Universal Service Program as well as the Company's education and outreach for its proposed residential customer COVID-19 relief program.
Sarah Olexsak	Statement No. 8	Describes the proposed Transportation Electrification Programs ("TE Programs") and explains how the Company proposes to recover costs associated with the TE Programs.
Jennifer Neiswonger	Statement No. 9	Describes the Company's customer satisfaction and the initiatives designed to further enhance

		Duquesne Light customers' experience.
Robert L. O'Brien	Statement No. 10	Discusses the components of Duquesne Light's overall revenue requirement, and supports certain pro forma ratemaking adjustments for the fully projected future test year ended December 31, 2022 ("FPFTY"), the future test year ended December 31, 2021 ("FTY") and the historic test year ended December 31, 2020 ("HTY"), and portions of the claimed measures of value, including Duquesne Light's cash working capital allowance.
John J. Spanos	Statement No.1 1	Provides the service life study and depreciation study which supports the Company's depreciation accruals for rate making purposes utilizing Commission approved procedures.
Matthew L. Simpson	Statement No. 12	Discusses the Company's tax expense and related tax information for the Historic Test Year, the Future Test Year, and the Fully Projected Future Test Year, and describes the proposed Federal Tax Adjustment Charge.
Paul R. Moul	Statement No. 13	Provides evidence, analysis and recommendation concerning the appropriate rate of return that the Commission should recognize in the determination of the revenues that the Company should realize as a matter of the proceeding.
Jim Milligan	Statement No. 14	Provides explanation of the Company's current and future capital structure, cost of long-term debt, current credit ratings and the importance of maintaining the credit worthiness of the Company.

Howard S. Gorman	Statement No. 15	Describes the Jurisdictional Separation Studies and the unbundled, Allocated Cost of Service Study used in this proceeding.
Dave Ogden	Statement No. 16	Addresses the allocation of the proposed revenue increase among the rate classes and the relative rate class returns. Describes the rate design principles and how they are used to determine the proposed rates. Proves out that the proposed rates produce the target revenue for each class. Describes the proposed changes to the Company's retail tariff.
Margot Everett	Statement No. 17	Describes the rate design principles for the Community Development Rider, TE Programs, Residential Subscription Rate Pilot, and Standby Service.

Q. Please explain the importance of the proposed rate increase to Duquesne Light.

A. In order to provide continued and enhanced reliability, prepare for catastrophic events such as storms or cyber-attack, and meet increasing customer service needs, the Company must continue to make substantial investments in new distribution plant as well as replace ageing infrastructure including the investments identified in its Commission-approved LTIIP. The Company must do this during a period of declining sales, DSIC revenues reaching the limit of 5.0 percent of distribution revenue provided by 66 Pa. C.S. §1358(a) by the end of the Future Test Year, and increasing O&M expenses. Due to these factors, Duquesne Light's projected overall rate of return for the Fully Projected Future Test Year, at present rates, is

only 5.36 percent, with an estimated return on common equity of 6.29 percent. As Mr. Moul will address in his direct testimony (Statement No. 13), this level of return on equity is inadequate to attract the capital and sustain the level of investment necessary to ensure customers continue to receive safe, reliable electric service. Therefore, it is important that the Company be granted the rate relief it has requested in this proceeding.

Q. Does this complete your Direct Testimony at this time?

A. Yes. I reserve the right to supplement my testimony as may be necessary through the course of this proceeding.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2021-3024750

Duquesne Light Company

CONFIDENTIAL EXHIBIT CJD-1

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2021-3024750

Duquesne Light Company

CONFIDENTIAL EXHIBIT CJD-2

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2021-3024750

Duquesne Light Company

Statement No. 2

Direct Testimony of Jaime A. Bachota

Subject: Accounting Overview and Budget

Dated: April 16, 2021

DIRECT TESTIMONY OF JAIME A. BACHOTA

Q. Please state your full name, business affiliation and address.

A. My name is Jaime A. Bachota. I am the Assistant Controller of Duquesne Light Company ("Duquesne Light" or the "Company"). My business address is 411 Seventh Avenue, Pittsburgh, PA 15219.

Q. Please describe your education and work experience.

A. I graduated from Duquesne University with a Bachelor of Science in Business with a concentration in accounting. After graduating I was employed with Deloitte & Touche LLP for seven years.

I joined the Company in 2007 in the title of Supervisor of Internal and External Reporting and was promoted to Assistant Controller in 2018. In my role as Assistant Controller, I have responsibility for accounting, financial reporting, payroll, timekeeping and accounts payable.

Q. Have you previously testified before the Commission or other regulatory agencies?

A. No.

Q. What is the purpose of your testimony in this proceeding?

A. My testimony covers two main areas. First, I will provide an overview of the Company's accounting processes and explain the Company's actual financial results for the Historic Test Year ended December 31, 2020. Second, I will present

and review the budgeted financial results for the Future Test Year ending December 31, 2021 and the Fully Projected Future Test Year ending December 31, 2022.

Q. Are you sponsoring any exhibits as part of your direct testimony?

A. Yes, I am. I am responsible for all of the recorded historical accounts, as well as the budgeted and projected accounts of the Company. As such, I am sponsoring all of the Company's financial statements, including income statements and balance sheets for the Historic Test Year ended December 31, 2020. I am sponsoring the Company's budget for the Future Test Year ending December 31, 2021 and the Fully Projected Future Test Year ending December 31, 2022. With regard to the Pennsylvania Public Utility Commission's ("Commission") data filing requirements filed with this proceeding, I sponsor the responses related to the Company's financial statements and regarding measures of value and operating income. Please see Exhibit JAB-1 to my testimony for the listing of data filing requirements that I am sponsoring. My name is at the top of each data filing requirement that I sponsor.

Q. Please describe the material presented on Schedules B-1 through B-4 and Schedules B-6 through B-8 of DLC Exhibits 2, 3 and 4?

A. All of the data shown in Schedules B-1 through B-4 and Schedules B-6 through B-8 were derived from either the books and records of Duquesne Light for the twelve months ended December 31, 2020 and prior, or the budget for Duquesne Light for the twelve months ending December 31, 2021 and twelve months ending December

31, 2022. Schedules B-1 shows the budgeted balance sheet of Duquesne Light as of December 31, 2021 and December 31, 2022, and the actual balance sheet as of December 31, 2020. The balance sheets of Duquesne Light are prepared in accordance with Federal Energy Regulatory Commission ("FERC") requirements. Schedules B-2 include the statements of Duquesne Light's operating income for the twelve months ended December 31, 2020 and budgeted for the twelve months ending December 31, 2021 and twelve months ending December 31, 2022. Details of actual and budgeted operating revenues are provided in Schedules B-3. Schedules B-4 provide the actual and budgeted operations and maintenance expenses of Duquesne Light by FERC account, including the major categories of expense, such as purchased power, transmission, distribution, customer accounts, customer service and administrative and general expenses. Schedules B-6 and B-7 present the embedded cost of debt as of December 31, 2020 and estimated as of 2021, as well as December 31, 2022. The capital structure of Duquesne Light for the test year and prior years is shown on Schedules B-8. Please see further discussion of Schedules B-6, B-7 and B-8 in the testimony of Mr. James Milligan (DLC Statement No. 14).

Q. Please explain the accounting system utilized by the Company.

A. For the twelve months ended December 31, 2020, Duquesne Light maintained its accounting records on the Oracle Fusion general ledger package, which is cloud based and was fully implemented in 2018. The accounting records are maintained in accordance with the FERC's Uniform System of Accounts ("USofA"). Financial

statements for Duquesne Light are also prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP").

Duquesne Light maintains its property, plant and equipment accounting records on the Power Plan Consultant's fully integrated asset accounting system, referred to as PAAM. The USofA requires that utilities record all construction and retirements of electric plant by means of work orders. The work order system must show the nature of each addition to, or retirement from, electric plant, the total cost thereof, and the plant account or accounts affected. Duquesne Light uses such a work order system, and under this system, an authorized work order is used for all capital work performed.

Q. Are there cloud-based service arrangements that are included in the proceeding?

A. Yes, $3.1 million of implementation costs associated with cloud-based service arrangements from January 1, 2021 through December 31, 2022 have and will be recorded as operating expenses for GAAP purposes.

Q. Is Duquesne Light including cost of cloud-based software in rate base in its claim for recovery in this rate case?

A. Yes. As the Company explained in its 2018 base rates case, cloud-based information systems provide benefits to customers over extended periods of time and not just the period in which the costs are incurred, and so should be treated as capital and includable in rate base. The Commission approved the inclusion of

cloud-based software costs in the Company's rate base in that 2018 proceeding, finding in relevant part: "Commencing with implementations subsequent to May 1, 2015, the Company shall be permitted to capitalize the development costs for cloud-based information systems." Consistent with that approval, the Company has continued to include such costs in rate base in this case. These costs are reflected as an adjustment to rate base in DLC Exhibit 2, Schedule D-11, which is sponsored by Mr. Robert L. O'Brien. Please see further discussion of this adjustment in the testimony of Mr. Robert L. O'Brien (DLC Statement No. 10).

Q. How does Duquesne Light account for new plant put into service and associated retirements of existing plant?

A. Costs of new construction are tracked in the system by the use of work orders. At the completion of each project, operations personnel notify asset accounting that the constructed or purchased assets related to a specific work order are now used and useful for their intended purpose. Based on this information, the work order is placed in service and ultimately unitized, or charged to the correct units of property in the plant accounting system. At month end, journal entries are automatically generated and posted to the general ledger for these new in-service dollars. In addition, the system calculates the allowance for funds used during construction ("AFUDC"), spreads overheads, calculates depreciation expense, processes unitized additions and processes plant retirements. The related journal entries are created and automatically posted to our general ledger.

Q. Please explain why Duquesne Light is requesting permission to recover AFUDC for land held for future use.

A. Duquesne Light has not included land held for future use in rate base in this proceeding because the land is not currently providing service to customers. However, larger projects often have relatively long lead times from commencement to completion. While Duquesne Light is authorized to record AFUDC on the project expenditures once the project commences, Duquesne Light frequently must acquire land or land rights before construction begins. It is appropriate to allow Duquesne Light to record AFUDC on land acquired to provide future service and add such amount to rate base when the project is used to provide service to customers.

Q. Does Duquesne Light have an internal audit program?

A. Yes, Duquesne Light has an Internal Audit Department, which implements the annual internal audit program approved by the Audit Committee of our Board of Directors. This department reports to the Audit Committee, as well as the Vice President, Rates and Regulatory Affairs, General Counsel. They perform a slate of annual internal audit and analysis projects to ensure the Company maintains strong internal controls.

Q. Does Duquesne Light have an external audit conducted periodically?

A. Yes, both Duquesne Light Holdings, Inc. and Duquesne Light ("Companies") have external audits conducted annually by Deloitte & Touche LLP. Deloitte & Touche

LLP recently completed their audits of the financial statements of the Companies for 2020, the results of which were unqualified opinions on the consolidated financial statements of the Companies as of December 31, 2020. Deloitte & Touche LLP also performs an annual audit of Duquesne Light's regulatory financial statements that are included in the FERC Form 1. Deloitte & Touche LLP is in the fieldwork phase of its audit of the December 31, 2020 regulatory financial statements to be included in the December 31, 2020 FERC Form 1. The Company anticipates filing its FERC Form in April 2021. In addition to the annual audits performed by Deloitte & Touche LLP, both the FERC and the Commission have performed periodic audits of Duquesne Light.

Q. Have any major accounting changes occurred since the Company's last rate case?

A. There have been accounting changes that have occurred since our last distribution rate case in response to new pronouncements that have been issued by the Financial Accounting Standards Board ("FASB") and others. The Company has implemented these new standards and pronouncements in order to maintain their accounting records in accordance with GAAP. Please refer to data filing requirement II-D-12 that outlines the accounting changes that have occurred since our last rate case filing.

Q. Are you responsible for the budget process for the Future Test Year and the Fully Projected Future Test Year?

A. Yes. In coordination with the Financial Planning & Analysis (FP&A) and Business Valuation Department, the Finance department accumulates all of the budget data from various sources each year to prepare a full income statement, balance sheet and cash flow budget for the Company for the year. The Company prepares a five year budget during its annual budgeting process.

Q. Please describe the Company's budget process.

A. Each year there is an annual planning process that begins in June. The budget process requires active participation at many levels throughout the organization. Retail sales of electricity are budgeted by our FP&A and Business Analysis and Valuation Department, while other revenues such as pole and duct attachment and rental of electric property are budgeted by our operations group. Operations and maintenance expenses are budgeted by individual cost center managers within the Company. Our Human Resources Department provides input on employee levels, salary increase projections and fringe benefit costs. The Tax Department assists in the budgeting of taxes other than income taxes, as well as income tax expense. Asset Accounting prepares the budget for depreciation and amortization expense, as well as AFUDC, based in part on information received from the Operations Group for expected capital expenditures. Our Treasury Department assists by preparing financing plans, budgeting the interest expense we expect to incur and calculating the amortization of debt discounts and premiums. The information necessary for the budget is summarized by the Financial Planning & Analysis Department in cost element detail, which shows total labor, fringes, outside services

and other cost elements. See Exhibit JAB-2 to my testimony, which describes the cost elements the Company uses to prepare its budget, and Exhibit JAB-3 for a listing of the individual cost centers within Duquesne Light.

Q. Does the Company typically prepare its budget by FERC account?

A. No, we typically prepare the budget for Duquesne Light by cost element detail as this level of detail enhances the review by our cost center managers and assists them in estimating their expenses for budgeting purposes. To satisfy the requirements for this rate filing, our cost element budget was allocated to FERC accounts. Certain cost element budget amounts could be specifically assigned to certain FERC accounts as they are easily identifiable to those accounts. For other cost element budget amounts, an allocation to FERC accounts was performed based on the same percentage to the total as the actual costs for fiscal year 2020 operating and maintenance expenditures, which were reported by both cost element and FERC account. Once this allocation was performed, the results were reviewed to ensure they appeared reasonable and adjustments were made as necessary to reflect expected variances. This process is more fully described in the testimony of Mr. Robert O'Brien (DLC Statement No. 10).

Q. Has the operating budget historically provided a reasonable estimate of actual expenditures?

A. Yes, over the past three years the total operations and maintenance budget has reasonably approximated the actual costs incurred.

Q. How was the budgeted retail sales derived?

A. Mr. Mobley prepares a detailed budget for retail sales based on an extensive econometric analysis. Please see his testimony in DLC Statement No. 3 for details regarding this budget process.

Q. How were the other operating revenues budgeted?

A. Other operating revenues may be divided into two categories, operationally-oriented and miscellaneous. Our Operations Group provides the budgeted amounts for operationally-oriented revenues such as pole and duct attachment, rental of electric property, miscellaneous transmission charges and other miscellaneous operationally-oriented revenue. The miscellaneous categories are determined based on historical trends adjusted for known changes or initiatives being undertaken. These amounts include late payment charges, returned check fees and reconnect fees.

Q. How do cost center managers prepare their budgets for operations and maintenance expenses?

A. Cost center managers across the Company are provided with budgeting instructions and a budget template to fill out and submit to the Company's Senior Manager of Financial Planning & Analysis, who reports to me. This template identifies and requires cost center managers to budget using cost elements that the Company uses to develop, track and report on its budget. Cost center managers use their

knowledge of the employee salary costs in their cost center and guidance provided in the budgeting directions on employee levels and management salary increases to determine the budgeted wages. Throughout the year, these cost center managers receive monthly reports that compare their actual spending to budgeted expenses. Cost center managers are required to explain any significant deviations from budget as they occur throughout the year. This reporting and the related accountability helps managers to improve each successive year's budget and more accurately quantify the various costs that they expect to incur during the coming year, such as outside consultants, materials and supplies and others.

Q. Do these cost center managers budget for costs that are expected to be capitalized, as well as expensed?

A. Yes they do. The Operations Group and other groups that spend capital dollars are provided with budget templates including all of the cost elements that are budgeted for capital. They use their understanding of the capital projects that have been planned for the next several years, as well as projections of the operating costs that they incur on an annual basis, to accurately project the capital spending for their cost center. During the year, these cost center managers receive monthly reports of the actual capital work they have performed to help them manage their costs and plan their work activities in a manner consistent with their budget.

Q. Do the budgeted employee levels for the Company include an assumed level of open positions at any given time?

A. Yes, the Company incorporates into its budget a "vacancy reserve" of 100 people to prevent ongoing, normal transitional openings from inflating our salary and wage expense. We anticipate that we will always have a level of open positions equal to our vacancy reserve unfilled but believe that vacant positions beyond those reflected in this reserve will be filled by the end of the fully projected future test year.

Q. How do you budget for depreciation expense?

A. Our Asset Accounting Department prepares the budget for depreciation and amortization expense based on current property, plant and equipment accounts and projected capital expenditures and retirements, including estimated in-service dates, for the coming year.

Q. How are income taxes and taxes other than income taxes budgeted?

A. Our Tax Department performs calculations to project income taxes and each type of taxes other than income taxes for budgeting purposes. Budgeted pre-tax book income is used to project income taxes based on statutory tax rates. The process of budgeting taxes other than income differs based on the type of tax. Gross receipts tax is based on estimated taxable revenues multiplied by the expected tax rate, projected to be 59 mills in 2021 and 2022. The Public Utility Realty Tax ("PURTA") and other real estate taxes are budgeted based on the amounts paid in the prior year, adjusted for any major additions or sales of real estate property. Payroll taxes are budgeted based on the expected tax rates applied against the

estimated payroll costs to be incurred. Miscellaneous taxes are budgeted based on the expected amounts expected to be incurred for items such as sales and use tax audits.

Q. Please describe how interest expense and the amortization of debt discounts are calculated for the budget.

A. Our Treasury Department calculates the interest costs by multiplying the outstanding debt balances by the applicable interest and dividend rates. Annual amortization expense is determined by dividing the original unamortized balance of costs and premiums by the original life of the debt issuance. New financings are modeled into the budget when capital requirements exceed cash sources. The expected costs for these new financings, such as the expected interest rates and costs to be incurred are provided by outside financial institutions.

Q. Please provide a general description of the process used by the Company to determine its distribution revenue requirement.

A. The Company first developed the 2021 and 2022 budgets for construction expenditures, operating revenues, operating expenses and other elements. Next, each of the budget elements were analyzed to determine where pro forma adjustments would be required to reflect the Future Test Year or Fully Projected Future Test Year under normalized conditions. The pro forma results for the Future Test Year and the Fully Projected Future Test year were used to prepare a

jurisdictional separation to show the distribution plant, revenue and expenses for the Company's Pennsylvania jurisdiction only.

Q. Can you provide more detail on the overall process you described?

A. Yes, I can. I will use the operating budget as the example, but each of the measures of value, revenue and expense elements were determined following the same basic procedures. I was responsible for the development of the overall Duquesne Light budget for the Fully Projected Future Test Year. With regard to the operating expenses, Mr. Robert O'Brien (Statement No. 10) converted the Company's fully projected future test year budget from the cost element format that we use, to a FERC format, which is presented on DLC Exhibit 2, Schedule B-4 and included on DLC Exhibit 2, Schedule D-2. Mr. Robert O'Brien, working with myself and other Company personnel, developed pro forma adjustments to the budget expenses by cost element, as shown on DLC Exhibit 2, Schedules D-7 through D-16. Each of these adjustments was distributed to the appropriate FERC account as shown on DLC Exhibit 2, Schedule D-3. These processes provided a total Duquesne Light pro forma level of expenses by FERC accounts for the fully projected future test year ending December 31, 2019. Mr. Howard Gorman (Statement No. 15) then used these pro forma expenses in preparation of his Jurisdictional Separation Study, which is summarized on DLC Exhibit 2, Schedules C-1 and D-1.

Q. Was this process followed for each of the elements included in the Company's revenue requirement presentation?

A. Yes it was. For example, Mr. Robert O'Brien used the Company's budget for construction expenditures, construction closed to plant, plant retirements, depreciation expense, and other measures of value components as a starting point for pro forma adjustments. The resulting total Company pro forma measures of value was used by Mr. Howard Gorman in his Jurisdictional Separation Study to determine the amounts for the Pennsylvania jurisdiction. A comparison of the total Company and Pennsylvania jurisdictional pro forma measure of value amounts is shown on DLC Exhibit 2, Schedule D-1, page 3. In addition, Mr. Robert O'Brien used the Company's budget calculation for depreciation expense and made pro forma adjustments to reflect the use of the year-end plant in service for the Fully Projected Future Test Year ending December 31, 2022, using the depreciation rates recommended by Mr. John Spanos (Statement No. 11) and pro forma plant additions to determine the total pro forma depreciation expense for the total Company. Mr. Howard Gorman used this data to determine the portion assigned to the Pennsylvania jurisdiction on a pro forma basis for the test year.

Q. Do you have an administrative services agreement that allows Duquesne Light employees to provide services to affiliates?

A. Yes, Duquesne Light has an administrative services agreement in place with its affiliates. This agreement has been filed with the Commission, and is updated periodically as necessary. This agreement is explained and included as part of the response to data filing requirement II-D-8.

Q. Do you consider work that Duquesne Light employees may be doing for affiliates in the budgeting process?

A. Yes, cost center managers provide information in the budgeting process regarding any work that their department is doing for any affiliate company. In addition, the Company maintains an electronic time recording system ("E-Time") for recording and allocating employees' time between various affiliates and projects. Employee costs are budgeted using actual historical allocation data from E-Time, adjusted for information received from cost center managers about changing circumstances or project assignments. A projected allocation of all employees' costs between the Company and its affiliates is prepared in this manner. The cost charged to any affiliate includes the employee's salary and related benefits, as well as proportionate rent and supply costs. A total of all of the allocation amounts is calculated and is included in the budget process as a reduction in Duquesne Light's expense, which we refer to as subsidiary reimbursements.

Q. Does Duquesne Light share office space with its affiliates, and are the affiliates charged for this space?

A. Affiliates of Duquesne Light do not lease office space in the same building as the Company, and those affiliates have separate lease agreements with the building owner for the space they utilize.

Q. Please provide a summary of ring fencing measures that are in place at Duquesne Light in order to provide a separation between Duquesne Light's regulated operations and those of its parent and other nonregulated affiliates.

A. Duquesne Light and its parent, Duquesne Light Holdings ("DQE Holdings"), maintain policies and practices which provide effective segregation (ring fencing) between the activities of the Company and those of its parent and nonregulated affiliates. In addition, various external agencies and regulatory bodies have placed restrictions on the Company that provide additional assurance that effective separation has been achieved. The Company is a separate legal entity from DQE Holdings, maintains stand-alone financial statements, receives its own credit rating from Standard & Poor's and Moody's and is able to independently raise capital via external markets.

Other ring fencing measures include:

- The Company's Articles of Incorporation limit it from declaring or paying dividends on any shares of capital stock ranking junior to Duquesne Light's Preferred Stock if the Common Stock equity of Duquesne Light is less than 25% of total capitalization.
- DQE Holdings LLC, the ultimate parent company, has appointed a locally based, independent director to its Board of Directors in order to ensure that our organization models best practices in corporate governance and that corporate decisions reflect the interests of our local community.
- The Company does not participate in its Parent's cash concentration system (cash pool) with DQE Holdings or other affiliates that are not regulated by the

Commission. As a result, nonregulated entities cannot use the Company's surplus cash for their operations.

Q. In conjunction with other Commission approved settlement agreements, has the Company agreed to ring fencing measures?

A. Yes. The Company has agreed to the following ring fencing measures:

- Duquesne Light shall not guarantee the debt or credit instruments of its parent or any affiliate not regulated by the Commission, except as approved by the Commission upon a determination that such guarantee provides net benefits to customers.
- Duquesne Light shall not grant a mortgage or other lien on any property used and useful by Duquesne Light in providing retail utility service to the public subject to the Commission's jurisdiction, except for the financing needs of Duquesne Light.
- Duquesne Light shall not make any loan or otherwise extend credit to its parent or any affiliate not regulated by the Commission for a term of one year or more, except as approved by the Commission upon a determination that such loan or credit extension provides net benefits to customers.
- DQE Holdings will not permit a change in ownership among the members of DQE Holdings without prior Commission approval if such change would result in a change in control under the then-applicable Commission standards.
- Duquesne Light will seek Commission approval of all new or amended agreements with affiliates consistent with Chapter 21 of the Public Utility Code.

- Duquesne Light shall continue to have outstanding separately issued debt held by investors not affiliated with Duquesne Light or its affiliates, unless the Commission authorizes to the contrary.
- Duquesne Light's long-term debt ratio as a percentage of total capitalization shall not exceed 60%, absent approval from the Commission.
- Duquesne Light shall notify the Commission of its intention to declare a special cash dividend to DQE Holdings, at least 30 days before declaring the dividend.
- The Chief Executive Officer ("CEO") of DQE Holdings will be a member of DQE Holdings Board of Directors (Board), and will also chair a management committee, which will contain representatives of both the senior management team and the ownership consortium.
- DQE Holdings shall maintain, and cause its subsidiaries including Duquesne Light to maintain, separate books and financial records.
- DQE Holdings will maintain corporate organizational and financial policies sufficient to permit Duquesne Light to continue to meet requirements to maintain its own credit ratings, separate from its parent.
- DQE Holdings and its subsidiaries shall remain organized in a manner that provides corporate separation of regulated and non-regulated activities.

Q. How do you budget for fringe benefits provided to employees?

A. This process varies, depending on the type of fringe benefits. However, common benefit programs are provided to employees of Duquesne Light and its affiliates. Therefore, the initial step is determining the total cost expected to be incurred. The

Human Resources department reviews each of the health coverage plan costs for the current year and then the budget is developed taking into consideration the present number of eligible employees, projected changes in the numbers of eligible employees, anticipated changes in employee contribution levels and estimated cost increases. Once the total cost has been established, the percentage of that total cost that is applicable to Duquesne Light employees and affiliate employees is determined on a pro-rated basis. The respective cost allocable to each company is then charged to the appropriate company.

Q. Do you allocate the cost of fringe benefits to both capital jobs and expense?

A. Yes we do. This allocation is calculated based on the total amount of budgeted labor costs to be incurred from the annual budgeting process. Based on past experience and their knowledge of planned capital projects, cost center managers separately budget the amount of labor that will be charged to expense or to capital. The result is used to allocate the benefit costs so that the benefit costs are allocated between expense and capital in a manner that is proportionate to the related labor costs.

Q. Please briefly describe the process used to calculate the pro forma jurisdictional measure of value, net operating income and required revenue increase for the Pennsylvania jurisdiction.

A. The process began with the Company's 2021 and 2022 calendar year budgets by cost elements, which are determined by total Company requirements and can be

compared to budget and recorded amounts from prior years. The budgeted cost elements were then distributed to FERC accounts where necessary. Pro forma adjustments were made to the Company's budget amounts that allow for easy comparison for each adjustment. Finally, the total pro forma amounts were separated to the Pennsylvania jurisdictional level in the aggregate as opposed to making this calculation for each budget element and each pro forma adjustment.

Q. Please describe how the Company's request for an increase in its electric distribution rates is supported by your data.

A. The requested increase is supported by the Company's budgeted financial data. In Schedule C-1 and D-1 of DLC Exhibit 2, we summarize the revenues, expenses, rate base, and deficiencies in revenue for the Fully Projected Future Test Year. Duquesne Light is requesting an overall rate increase for the total Pennsylvania Jurisdiction of $85.8 million, exclusive of DSIC roll-in. Duquesne Light's capital structure is shown in DLC Exhibit 2, Schedule B-8, with the requested return on equity of 10.95% reflected on DLC Exhibit 2, Schedule B-9.

Q. Are you aware of the requirement that a comparison of actual to budget data is to be supplied quarterly when you utilize a Future Test Year?

A. Yes, Exhibit JAB-4 has been provided showing a breakdown of revenues and expenses for the Future Test Year and Fully Projected Future Test Year. We will provide quarterly comparisons of actual results to the budget numbers presented as the actual data for each quarter becomes available. In addition, the Company will

provide, as directed by the Commission, data evidencing the accuracy of estimates contained in its Fully Projected Future Test Year.

Q. Did the Company prepare a schedule comparing its actual expenses for the twelve months ended December 31, 2019 to its projections in the last rate case proceeding?

A. Yes, please see Exhibit JAB-5. As recognized in the previous rate case settlement agreement, the agreement was deemed to be a black box settlement which represents a compromise of the Parties' positions on various issues.

Q. **Did Duquesne Light prepare a comparison of its rate base additions for the twelve months ended December 31, 2019 to its projections in the 2018 rate case?**

A. Yes, please see Exhibit JAB-6 for this comparison.

Q. Have you made any adjustments in your Future Test Year or Fully Projected Future Test Year to account for known and measurable changes?

A. Yes, we have. Mr. Robert O'Brien is sponsoring all the adjustments that are known and measurable, and his testimony (Statement No. 10) will address those items specifically.

Q. Was the Company impacted by the effects of the novel coronavirus (COVID-19) during the year ended December 31, 2020?

A. Yes.

Q. Did the Company incur incremental uncollectible expenses (as defined in the Commission's May 13, 2020 Secretarial Letter at Docket No. M-2020-3019775)?

A. Yes. The Company experienced increased levels of customer delinquencies in the year ended December 31, 2020 and thus far into 2021. These delinquent amounts resulted in an increase (above uncollectible expense claimed in its last base rates case of $10,471,000) of $4,186,575, which was recorded as a regulatory asset at December 31, 2020. The amount of the regulatory asset has grown to $5.3 million through March 2021 due to the continuation of the moratorium on terminations for nonpayment.

Q. How were the uncollectable expenses included within the Company's current rates and the incremental costs above that calculated?

A. The Company used its uncontested projection of uncollectible expense in its prior rate proceeding, $10,471,000, as its baseline for calculating incremental amounts attributable to the COVID-19 pandemic and associated Commission actions.

Q. How does the Company plan to recover these incremental uncollectible expenses?

A. The Company has included an adjustment to normalize the associated incremental uncollectible expenses over a three year period as described in Mr. Robert

O'Brien's testimony (Statement No. 10). The Company also proposes to continue to record incremental uncollectible costs above what is included in this rate proceeding as a regulatory asset to be recovered in future rate proceedings.

Q. Why is the Company requesting a three-year recovery period?

A. Three years was selected as the most appropriate average because it is consistent with the typical and anticipated timing between distribution rate cases.

Q. Has the Company incurred other extraordinary, nonrecurring incremental COVID-19 related expenses (as defined in the Commission's May 13, 2020 Secretarial Letter at Docket No. M-2020-3019775) outside of incremental uncollectible expenses?

A. Yes. In accordance with the Secretarial Letter, the Company has tracked and maintained records of other extraordinary, nonrecurring incremental COVID-19 related costs net of savings associated with the pandemic. These costs primarily include waived late payment charges and waived reconnect fees, outside services and materials. Savings primarily include employee expenses associated with training costs and other employee events. These costs totaled approximately $4.2 million, net of related savings, through December 31, 2020.

Q. How does the Company plan to recover these other extraordinary, nonrecurring incremental COVID-19 related costs net of savings?

A. The Company has included an adjustment to normalize the associated other extraordinary, nonrecurring incremental COVID-19 related costs net of savings over a three year period as described in Mr. Robert O'Brien's testimony (Statement No. 10). The Company also proposes to continue to record incremental costs above what is included in this rate proceeding as a regulatory asset to be recovered in future rate proceedings.

Q. Why is the Company requesting a three-year recovery period?

A. Three years was selected as the most appropriate average because it is consistent with the typical and anticipated timing between distribution rate cases.

Q. Is there a specific provision that should be included in the Commission's final order related to the recovery of these other extraordinary, nonrecurring incremental COVID-19 related costs net of savings?

A. Yes. The Company proposes the following: "The Company shall be permitted to recover prudently incurred other extraordinary, nonrecurring incremental COVID-19 related costs net of savings included in this rate proceeding (commencing from March 2020) and shall be able to defer future other extraordinary, nonrecurring incremental COVID-19 related costs net of savings as a regulatory asset to be recovered in future rate proceedings."

Q. Does the Company plan to recover deferred costs of required Eligible Customer Listing solicitations in this rate filing?

A. Yes, pursuant to the Commission's order (Docket No. M-2010-2183412), the Company was granted permission to recover the costs associated with its required triennial eligible customer listing solicitations through its next base rate case proceeding. As of December 31, 2020, the Company maintains a regulatory asset of approximately $0.3 million, associated with the Company's 2018 triennial solicitation, for which recovery is being requested.

Q. How does the Company plan to recover these deferred costs?

A. As the costs associated with the Commission required solicitations is on-going, the Company has included an adjustment to normalize the associated costs over a three year period as described in Mr. Robert O'Brien's testimony (Statement No. 10).

Q. Why are you using a three year period for the normalization of the costs associated with Eligible Customer Listing solicitations?

A. Three years is consistent with the triennial solicitation requirement as established by the Commission.

Q. **Does the Company plan to recover deferred costs of Electric Vehicle programs in this rate filing?**

A. Yes. The Company maintains a regulatory asset of approximately $0.4 million, for which recovery is being requested.

Q. How does the Company plan to recover these deferred costs?

A. The Company has included an adjustment to normalize the associated costs over a three year period as described in Mr. Robert O'Brien's testimony (Statement No. 10).

Q. Why are you using a three year period for the normalization of the costs associated with Electric Vehicle programs?

A. Three years was selected as the most appropriate average because it is consistent with the typical and anticipated timing between distribution rate cases.

Q. What types of benefits do you provide to Duquesne Light employees?

A. Benefits for 2020 include medical and dental coverage, flexible spending accounts, life insurance, pet insurance, accident insurance, business travel insurance, disability benefits, an employee assistance program and tuition reimbursement. In addition, we maintain a retirement plan ("Plan") to provide pensions for eligible full-time employees. The Plan is closed to new participants. Upon retirement, an eligible employee receives a monthly pension based on his or her length of service and compensation. The cost of funding the pension plans is determined by the unit credit actuarial cost method. Our policy is to budget using the actuarially determined net periodic pension cost calculated by our actuaries under the provisions of Accounting Standards Codification 715 ("ASC 715"). All employees can also participate in the Company's defined contribution retirement plan; however, employees not eligible to participate in the pension plan receive expanded levels of Company matching funds in lieu of pension benefits.

Q. Is the Company self-insured for any employee benefits, and if so, how is the budget for those benefits estimated?

A. Yes, Duquesne Light is self-insured for its employee medical coverage, which is under national Preferred Provider Organizations ("PPO") arrangements. The budget estimates are developed based on the previous year's claim costs with adjustments for anticipated changes in the number of eligible employees, employee contribution levels and cost increases based on healthcare industry outlook. Duquesne Light does maintain stop-loss insurance coverage to cover individual claims that are over $300,000 per incident.

Q. How has Duquesne Light tried to minimize healthcare coverage costs?

A. Over the past several years, Duquesne Light has taken various steps to mitigate the high cost of healthcare, such as promoting employee wellness programs, performing dependent eligibility audits, increasing employee contribution levels, negotiating reductions in administrative fees and reviewing opportunities to enter healthcare exchanges.

Q. What is the current funded status of Duquesne Light's pension plan?

A. The Plan's funded status on a GAAP basis (the basis utilized for financial reporting purposes) as of December 31, 2020 is a deficit of approximately $69.5 million.

Q. What is the expected funded status at December 31 over the next six years?

A. Please see the chart below:

Expected Funded Status (in millions)

	2021	2022	2023	2024	2025	2026
Funded Status	$ (72.0)	$(68.7)	$ (65.1)	$ (61.3)	$ (57.3)	$ (53.1)

Q. How does Duquesne Light determine its level of pension cash contributions?

A. Duquesne Light's contributions to its pension plan are typically the larger of either the minimum amount required under the Pension Protection Act of 2006 ("PPA") or the amount required to fulfill regulatory commitments. However, in the event that a PPA determined minimum amount is zero, the Company also reviews the opportunity to make voluntary pension contributions in order to offset service costs as to not degrade the pension plan's funded status and to continue to foster the Company's de-risking strategies.

Q. What are Duquesne Light's projected pension contributions for the next 6 years?

A. Please see the below table for the Company's projected contributions (in millions).

2021	2022	2023	2024	2025	2026
$10.0	$10.0	$10.0	$10.0	$10.0	$10.0

Q. Do these projected contributions represent PPA minimum funding requirements?

A. No. Based on currently projected pension plan funding levels, the Company is not required to make any minimum pension plan contributions until 2025.

Projected pension plan contributions for inclusion in this rate filing represent voluntary pension contributions in order to offset service costs as to not degrade the pension plan's funded status and to continue to foster the Company's de-risking strategies.

Q. How have accounting changes affected the Company's pension plan?

A. The Company's accounting changes to its pension plan are described in data filing requirement II-D-12.

Q. What level of pension funding is the Company requesting in this case?

A. Consistent with its 2013 distribution rate case settlement agreement, the Company has incorporated a three year (2022-2024) average into its ratemaking calculations for the portion of contributions that will be recovered as an expense for ratemaking purposes. Mr. Robert O'Brien (Statement No. 10) explains this calculation in his testimony.

Q. Why is the Company requesting a three-year projected average for pension funding and not a six-year average?

A. Three years was selected as the most appropriate average because it is consistent with the typical and anticipated timing between distribution rate cases.

Q. How is Duquesne Light's pension plan managed?

A. Duquesne Light's Board of Directors periodically reviews the Plan's ongoing performance and approves any changes to the Plan's allocation targets between investment categories to ensure the portfolio is properly diversified. Plan performance is evaluated by reviewing the performance of individual money managers against established benchmarks. The Board delegates responsibility for implementing the approved allocation to a group of executives that compose the Pension Investment Committee. This Committee meets on a regular basis to review investment performance, interview managers of funds in which the Plan is invested and make the day to day decisions involved in managing the pension plan's investment portfolio. The Committee utilizes an outside investment advisory firm, LCG Associates, Inc., to provide technical analysis and administrative support in its work. Please refer to the testimony of Mr. James H. Milligan (DLC Statement No. 14) for additional information on the Pension Investment Committee.

Q. What steps has Duquesne Light taken to minimize pension costs?

A. In 2007, the Company amended the Plan such that non-represented employees hired after June 1, 2007 would not be eligible to participate in the Company's defined benefit pension plan. In 2010, the Company amended the Plan such that represented employees hired on or after October 1, 2010 would not be eligible to participate in the Company's pension plan. These two amendments effectively closed the plan to new participants. Employees hired after these dates receive expanded levels of Company matching under the Company's defined contribution retirement fund in lieu of pension benefits.

Q. Is the Company taking steps to reduce the investment risk associated with its pension trust?

A. Yes, we are. The Company is implementing a Liability Driven Investing ("LDI") strategy to mitigate the volatility associated with pension plan funding. LDI is an investment strategy that focuses on managing pension assets in relation to pension liabilities. The overall goal of LDI is to minimize the volatility of Plan funded status, and thus contribution volatility, by investing in long duration fixed income strategies that attempt to better match the duration of the Plan's liabilities. Please refer to the testimony of Mr. James Milligan (Statement No. 14) for further discussion of the Company's LDI strategy.

Q. Why is it appropriate to take these steps?

A. Reduced volatility in the pension plan funded status and pension plan funding will provide greater predictability to the Company's cash management and capital planning and ultimately provide for more stable rates for customers.

Q. Has Duquesne Light made the pension contributions under the terms of its 2018 Distribution Rate Case Settlement?

A. Yes. The Company is required by its 2018 distribution rate case settlement to fund the pension trust in an amount equal to $10.0 million per year; provided, however, contributions in any year in excess of the foregoing may be used on a cumulative basis to satisfy future contribution obligations. The rate case settlement further

concludes that should a pension contribution less than $10.0 million to the pension trust be appropriate, the Company may reduce the pension contribution and record a regulatory liability on its books that is equal to 50% of the reduction to the pension contribution below the level of $10.0 million. If a regulatory liability remains at the time of the Company's next rate proceeding, the amount will be refunded to rate payers as part of the next rate case proceeding. The Company made pension contributions totaling $30.0 million in the years 2018 through 2020. The Company plans to make pension contributions of $10.0 million in 2021. This represents an average annual pension contribution of $10.0 million over the last three years and therefore the Company will have no outstanding regulatory liability balance owed to rate payers as the end of the Future Test Year.

Q. What pension plan contribution commitment is the Company making with regard to its claim?

A. The Company commits to making pension contributions based on the three-year average (2022-2024) on a cumulative basis.

Q. Is the Company claiming the actuarially determined net periodic pension cost for pensions in this rate proceeding?

A. No, we are not. Consistent with our 2006, 2010, 2013 and 2018 distribution rate cases, we are requesting recovery of the expense component of the annual contributions that we plan to make to the pension plan. These contributions reflect voluntary pension contributions in order to offset service costs as to not degrade

the pension plan's funded status and to continue to foster the Company's de-risking strategies. Therefore the expense claim for pensions in this proceeding is based on projected pension plan voluntary contributions. The criteria used to determine these contributions are different from the criteria required to be used to determine pension costs under ASC 715.

Q. Please explain the proposed future accounting treatment with regard to pensions.

A. The Company is required to accrue an amount for pension costs each year determined in accordance with ASC 715. While the procedures used to determine the annual ASC 715 expense will ultimately equal the total contributions over the duration of the plan, the annual accrual will differ from the pension contribution on a year-to-year basis. For this reason, the Company requests that the Commission authorize the Company to continue to record annually the difference between the pension reimbursement received in rates and the ASC 715 pension expense as either a regulatory asset or liability. These amounts will then be reversed over time in the future. The Company records ASC 715 capitalized pension amounts as part of the previously discussed employee benefit allocation. Please refer to Mr. Robert O'Brien's testimony for further discussion the Company's capitalized pension amounts.

Q. Is there a specific provision that should be included in the Commission's final order related to pensions?

A. Yes, the provision is as follows:

"Continuing in calendar year 2022, Duquesne Light will deposit into its pension trusts an amount equal to $10,000,000 per year; provided, however, that contribution(s) in any year in excess of the foregoing may be used on a cumulative basis to satisfy future contribution obligations. The provision provides for recovery of the expense component of $5,000,000 (50% of the average cash contributions) of projected future pension contributions. Additionally, Duquesne Light will be permitted to include the other 50% of actual pension contributions from January 1, 2007, forward, net of related accumulated deferred income taxes, in rate base for rate making purposes. The rate base adjustment for pensions shall be the amount necessary to adjust the ASC 715 capitalized pension amounts to equal accumulated capitalized pension contributions, net of applicable deferred income taxes, from January 1, 2007 forward. The depreciation expense for book and ratemaking purposes will be based on the ASC 715 capitalized amounts. The adjusted amounts will be used for reporting rate base in reports to the Commission."

Q. What other postretirement benefits ("OPEBs") does Duquesne Light provide to its employees?

A. In addition to pension benefits, the Company provides certain healthcare benefits and life insurance for retired employees hired before October 1, 2010. The retiree life insurance plan is non-contributory. Retirees participating in the health care plan do make contributions, which have increased as part of our efforts to control costs. Health care benefits terminate when a retiree reaches age 65. We currently

account for and fund OPEBs through a Voluntary Employees Beneficiary Associated (VEBA) trust, into which we deposit the full amount of annual costs calculated by our actuary pursuant to ASC 715. Retiree OPEBs and administrative costs of maintaining the trusts and/or accounts are paid from the amounts deposited in the trust. The Company accrues the actuarially determined costs of the aforementioned postretirement benefits over the period from the date of hire until the date the employee becomes fully eligible for benefits.

Q. How have accounting changes impacted the Company's postretirement benefits?

A. The Company's accounting changes to its postretirement benefits are described in data filing requirement II-D-12.

Q. Are you claiming the actuarially determined net periodic cost for postretirement benefits in this rate proceeding?

A. Yes we are. The Company has incorporated a two year average into its ratemaking calculations for the portion of actuarially determined net periodic cost for postretirement benefits that will be recovered as an expense for ratemaking purposes. Two years was selected to be consistent with the treatment in its last distribution rate case settlement.

Q. Is Duquesne Light requesting that the difference between the rate allowance and the annual OPEB expense accrual be deferred as a regulatory asset or liability?

A. Yes. Any difference between the annual book accrual and the ratemaking allowance will be deferred and amortized over a reasonable period as an increase or decrease to the rate allowance for OPEBs in the next rate proceeding. This procedure is consistent with the Commission's requirement that the rate allowance be placed in the trust without regard to the actual annual accrual. As of December 31, 2020, the Company had recorded a regulatory liability of approximately $2.0 million related to OPEBs. The Company has amortized this amount over a three year period in its ratemaking calculations. As explained in Mr. Robert O'Brien's testimony (Statement No. 10), three year period was selected as it is consistent with the typical and anticipated timing between distribution rate cases.

Q. Is there specific language that should be included in the Commission's final order on the subject of OPEBs?

A. Yes, Duquesne asks for the same treatment as its last distribution case when the following provision was adopted:

"The Company accounts for and funds OPEBs through a Voluntary Employees Beneficiary Associated (VEBA) trust, into which it will deposit the full amount of annual costs calculated by the Company's actuary pursuant to ASC 715. Retiree OPEBs and administrative costs of maintaining the trusts and/or accounts are paid from amounts deposited in the trust. The Company accounts for the difference

between the net periodic postretirement benefit expense determined annually by the actuary in accordance with ASC 715 and the amount of ASC 715 postretirement benefit expense used to establish rates. That difference is recorded as a regulatory asset or liability and will be expensed or credited in future base rate proceedings in determining OPEB expense included in rates."

Q. Does this conclude your direct testimony?

A. Yes, it does. I reserve the right to supplement my testimony as may be necessary through the course of this proceeding.

CITATION	DESCRIPTION
53.53 I	**GENERAL FILING INFORMATION**
53.53 I A	**Summary of Filing**
53.53-A-3	Summary Tables
53.53-A-4	Generation Plant additions
53.53 I B	**General Description of Operations**
53.53-B-1	Corporate History
53.53-B-2	Description of the property of utilities
53.53-B-2a	Schedule of generating capability
53.53-B-2b	Generation outages
53.53-B-2c	Generation retirements
53.53-B-2d	Projected generation additions and retirements
53.53 II	**PRIMARY STATEMENTS OF RATE BASE & OPERATING INCOME**
53.53 II A	**Rate Base**
53.53-II-A-1	Test Year rate base and rates of return – future
53.53-II-A-2	Test year rate base and rates of return – historic
53.53-II-A-3	Generation cost information
53.53 II B	**Rate Base Supporting Schedules**
53.53-II-B-1	Plant held for Future Use
53.53-II-B-2	Construction Work In Progress
53.53-II-B-3	Claim for materials and supplies
53.53-II-B-6	Additional Items in Measure Of Value
53.53 II C	**Operating Income Statement**
53.53-II-C-1a	Budgeted Income Statement
53.53-II-C-1c	Income Statement present rates after adjustments
53.53-II-C-1d	Adjustment for revenue increase
53.53-II-C-1e	Income Statement requested rates
53.53-II-C-2	Similar schedule historic test year
53.53 II D	**Income Statement Supporting Schedules**
53.53-II-D-1	Schedule of revenues & expenses for FTY& HTY & variance explanation

53.53-II-D-2	Summary of test year adjustments
53.53-II-D-3	Nonrecurring & extraordinary items
53.53-II-D-4	Extraordinary property losses
53.53-II-D-5	Reserve for uncollectible
53.53-II-D-6	Claim for rate case expense
53.53-II-D-7a	Miscellaneous general expenses
53.53-II-D-7b	Outside service expenses
53.53-II-D-7c	Regulatory commission expenses
53.53-II-D-7d	Advertising expenses
53.53-II-D-7e	Research and Development
53.53-II-D-7f	Charitable and civic contributions
53.53-II-D-8	Affiliate charges for FTY and HTY
53.53-II-D-9	Social and Service organization memberships
53.53-II-D-10a	Avg &year-end # of employees & payroll & benefit expense – union
53.53-II-D-10b	Avg &year-end # of employees & payroll & benefit expense - non-union
53.53-II-D-10cc	Avg &year-end # of employees & payroll & benefit expense - mgt
53.53-II-D-10d	Wage rate, salary & benefit changes
53.53-II-D-10e	Claimed test year expense and employee benefit expense
53.53-II-D-10f	Percentage of O&M portion and basis
53.53-II-D-11	Leasing costs and method for calculating
53.53-II-D-12	Past & anticipated accounting changes & internal/external audit reports
53.53-II-D-13	Gross salvage, CR, net salvage for 4 previous years
53.53-II-D-26	Other items
53.53 II E	**Budgeted Data**
53.53-II-E-1	Copies of budgets & explanation of process
53.53-II-E-2	Budgets (operating & capital) for 3 years
53.53-III	**RATE OF RETURN**

53.53-III-E	**Parent - Subsidiary Relationship**
53.53-III-E-3	Balance sheet and income statement consolidated/parent
53.53-III-E-4	Organizational chart
53.53-III-F	**General Financial Data**
53.53-III-F-1	Quarterly and annual reports
53.53-III-F-2	Projected capital requirements and sources
53.53-V	**PLANT & DEPRECIATION**
53.53-V-A	**Adjusted original cost with accumulated depreciation**
53.53-V-A-1	Schedule of plant in service by function
53.53-V-A-3	Supporting schedules
53.53-V-A-4	Schedule of rate case adjustments
53.53-VI	**UNADJUSTED BALANCE SHEETS AND INCOME STATEMENTS**
53.53-VI-a	Balance sheet - 3 years
53.53-VI-b	Income Statement - 3 years
53.53-VI-c	Plant in Service - 3 years
53.53-VI-d	Accumulated depreciation - 3 years

Cost Elements

Cost Element	Description
10	Labor
11	Overtime Labor
12	Paid for Time Not Worked
14	Rent
15	Incentive Compensation
20	Stores Issues and Returns
22	Materials Purchased by Contractors
23	Materials Purchased
24	Utilities
30	Transportation
40	Telephone Services
42	Other Rent
43	Data Processing Leases
44	Insurance
45	Mobile Phone / Pager Costs
49	Regulatory Assessment & Fees
50	Healthcare & Misc. Benefits
51	Employee Expenses
52	Community Relations
53	Surcharge Revenue Offset
54	Pole Attachment Fees
55	Fiber Lease & Sonet Network – DQE Comm
56	DataCom Service Fees
57	Outside Engineering Services
58	Consulting Services
59	Outside Services
60	Pension Costs
61	Transmission Expenses
65	Uncollectible Accounts
66	Deferred Cost
67	Reimbursements
70	Social Security & Unemployment Taxes
72	Mailing Costs
75	Memberships / Dues
76	Business Meals
88	Subsidiary Reimbursements
99	Miscellaneous

Organization	Cost Center	Cost Center Name
Office of CEO		
	001	Office of the CEO
	400	Senior VP & CFO
Customer Service		
	019	Chief Customer Officer
	030	Credit & Collections
	032	Corporate Communications & Citizenship
	310	Universal Services Surcharge
	480	Energy Efficiency & Demand Reduction
	483	Metering Systems
	484	Street Lighting & Unmetered Services
	489	AMI Operations
	490	Customer Contact Center
	493	Customer Experience
	495	Universal Services
	496	Customer Billing
	498	Electric Vehicles
	499	Meter Operations
	553	Customer Affordability & Innovation
	847	Business Customers
General Counsel, Rate & Regulatory Affairs		
	002	Risk Management
	003	Internal Audit
	004	Regulatory Legal
	005	VP Office of General Counsel
	006	Commercial
	007	Compliance Services
	010	Regulatory and Consumer Relations
	020	Business Development
	034	Litigation & FERC
	040	Governmental Affairs
	050	Labor & Employment
	415	New Development Connections
	460	Federal & RTO Affairs
	465	Supply Procurement & Settlement
	470	Rates & Tariff Services
	492	State Regulatory Affairs

Organization	Cost Center	Cost Center Name
Human Resources		
	300	VP of Human Resources
	301	Employee & Labor Relations
	302	Organizational Development & Training
	303	Diversity & Inclusion
	500	Talent Acquisition
	512	HR Program & Services
	513	Other Benefits
	571	Retirement Programs
	573	Health & Wellness
Procurement & Supply Chain		
	561	Supply Chain Management
	586	Materials Management
Information Technology		
	364	Project Management Office
	365	Business Solutions
	366	Enterprise Architecture
	367	Deployment & Release Management
	440	Solutions Consulting
	445	Corporate Applications
	452	Metering Applications
	538	IT Network Services
	539	IT Service Management
	540	Office of the CIO
	541	Quality Assurance
	545	Computing Platforms
	546	Network Services
	547	Operations Systems
	548	Customer Apps
	551	Work, Asset & Financial Management
	552	Data and Integrations
	560	Information Security
	562	Governance, Risk & Compliance
	564	Identity & Access Management
Office of CFO		
	099	Innovation Center
	404	Pension Benefits
	406	Corporate Controller
	407	Tax Reporting
	409	Business Valuation & Analysis
	410	Accounting & Financial Reporting
	422	Accounts Payable & Payroll
	435	FP&A

Organization	Cost Center	Cost Center Name
	437	Workers Compensation
	438	Treasury Operations
	476	Affordability Office
	477	Business Process & Maturity
	478	Business Analytics
	494	Business Performance – SPARK
Operations		
	311	Health & Safety
	351	Workforce Development
	451	ADMS
	502	Vegetation Management
	503	Project Management
	520	Shops & Testing
	530	Property Services
	549	Telecommunications
	565	Real Estate and Rights of Way
	572	Transportation Services
	705	Environmental
	810	Asset Management
	820	Engineering
	821	Third Party Attachments
	830	Work Management & Performance
	832	Maint & Services - Penn Hills
	833	Maint & Services - McKeesport
	838	Maint & Services - Raccoon
	839	Maint & Services - Edison
	840	Operations Center
	845	Maint & Services - Preble
	848	Security Services
	849	Outage Coordination & Field Ops
	850	Transmission Planning
	852	Substation - Raccoon
	853	Substation - Preble Avenue
	855	Underground
Other		
	008	Subsidiary Reimbursements
	009	RTO Settlements
	096	Corporate Cost center
	101	AFUDC
	860	Purchased Power

DUQUESNE LIGHT COMPANY
STATEMENT OF INCOME
Operating Budget

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total 12 Mos. 12/31/2021
UTILITY OPERATING INCOME					
Operating Revenues (400)	$ 230,447,275	$ 228,498,991	$ 278,947,920	$ 237,776,693	$ 975,670,880
Operating Expenses					
Operation Expenses (401)	101,840,087	94,270,359	115,497,569	92,698,515	404,306,530
Maintenance Expenses (402)	12,093,528	11,194,621	13,715,356	11,007,965	48,011,470
Depreciation Expense (403)	50,348,046	50,905,500	51,780,423	52,821,031	205,855,000
Amort. & Depl. Of Utility Plant (404-405)	-	-	-	-	-
Regulatory Debits (Credits), net (407.3,407.4)	-	-	-	-	-
Taxes Other Than Income Taxes (408)	15,131,591	14,406,191	17,568,881	14,744,337	61,851,000
Income Taxes - Federal (409.1)	7,249,837	7,467,507	11,554,742	8,251,322	34,523,408
Income Taxes - Other (409.1)	2,632,693	2,711,737	4,195,968	2,996,370	12,536,768
Provision for Deferred Income Taxes, net (410.1,411.1)	(498,215)	(513,173)	(794,052)	(567,038)	(2,372,478)
Investment Tax Credit, net (411.7)	-	-	-	-	-
Total Utility Operating Expenses	188,797,567	180,442,741	213,518,888	181,952,502	764,711,698
Net Utility Operating Income	41,649,708	48,056,250	65,429,033	55,824,191	210,959,182
OTHER INCOME AND DEDUCTIONS					
Other Income					
Equity in Earnings of Subsidiary Companies (418.1)	-	-	-	-	-
Interest and Dividend Income (419)	-	-	-	-	-
Allowance for Other Funds Used During Construction (419.1)	867,548	1,261,799	1,661,856	1,832,969	5,624,172
Miscellaneous Nonoperating Income (421)	-	-	-	-	-
Gain on Disposition of Property (421.1)	-	-	-	-	-
Total Other Income	867,548	1,261,799	1,661,856	1,832,969	5,624,172
Other Income Deductions					
Loss on Disposition of Property (421.2)	-	-	-	-	-
Donations (426.1)	847,074	1,133,274	757,274	1,094,739	3,832,360
Penalties (426.3)	-	-	-	-	-
Exp. for Certain Civic, Political, & Related Activities (426.4)	-	-	-	-	-
Other Deductions (426.5)	-	-	-	-	-
Total Other Income Deductions	847,074	1,133,274	757,274	1,094,739	3,832,360
Taxes Applicable to Other Income and Deductions					
Income Taxes - Federal (409.2)	(21,274)	(21,912)	(33,906)	(24,212)	(101,304)
Income Taxes - Other (409.2)	(8,470)	(8,724)	(13,500)	(9,640)	(40,334)
Provision for Def. Inc. Taxes (410.2)	237,113	244,232	377,909	269,868	1,129,122
(Less) Provision for Def. Inc. Taxes (411.2)	(98,663)	(101,625)	(157,249)	(112,292)	(469,830)
Total Taxes on Other Inc. and Ded.	108,706	111,970	173,255	123,723	517,655
Net Other Income and Deductions	(88,232)	16,555	731,327	614,508	1,274,158
Interest Charges					
Interest on Long-Term Debt (427)	14,496,750	14,496,750	14,496,750	14,496,750	57,987,000
Amortization of Debt Disc. and Expense (428)	-	-	-	-	-
Amortization of Loss on Reaquired Debt (428.1)	764,866	435,726	555,723	642,440	2,398,755
Amortization of Premium on Debt - Credit (429)	-	-	-	-	-
Amortization of Gain on Reacquired Debt - Credit (429.1)	-	-	-	-	-
Interest on Debt to Assoc. Companies (430)	10,521	37,388	93,343	281,362	422,614
Other Interest Expense (431)	204,041	265,020	230,118	193,541	892,719
Allowance for Borrowed Funds Used During Construction-Cr. (432)	(422,333)	(422,333)	(422,333)	(422,333)	(1,689,332)
Net Interest Charges	15,053,845	14,812,551	14,953,600	15,191,760	60,011,756
Net Income	$ 26,507,631	$ 33,260,254	$ 51,206,759	$ 41,246,939	$ 152,221,584

DUQUESNE LIGHT COMPANY
STATEMENT OF INCOME
Operating Budget

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total 12 Mos. 12/31/2022
UTILITY OPERATING INCOME					
Operating Revenues (400)	$ 236,013,810	$ 234,018,465	$ 285,686,006	$ 243,520,273	$ 999,238,555
Operating Expenses					
Operation Expenses (401)	107,554,438	99,559,965	121,978,256	97,899,924	426,992,584
Maintenance Expenses (402)	11,683,944	10,815,482	13,250,844	10,635,147	46,385,416
Depreciation Expense (403)	52,681,096	53,264,381	54,179,847	55,268,676	215,394,000
Amort. & Depl. Of Utility Plant (404-405)	-	-	-	-	-
Regulatory Debits (Credits), net (407.3,407.4)	-	-	-	-	-
Taxes Other Than Income Taxes (408)	16,109,538	15,190,885	18,103,153	15,185,425	64,589,000
Income Taxes - Federal (409.1)	7,227,561	7,444,561	11,519,237	8,225,968	34,417,327
Income Taxes - Other (409.1)	2,624,603	2,703,404	4,183,075	2,987,163	12,498,246
Provision for Deferred Income Taxes, net (410.1,411.1)	(496,684)	(511,597)	(791,612)	(565,296)	(2,365,188)
Investment Tax Credit, net (411.7)	-	-	-	-	-
Total Utility Operating Expenses	197,384,496	188,467,082	222,422,800	189,637,006	797,911,384
Net Utility Operating Income	38,629,314	45,551,384	63,263,206	53,883,267	201,327,171
OTHER INCOME AND DEDUCTIONS					
Other Income					
Equity in Earnings of Subsidiary Companies (418.1)	-	-	-	-	-
Interest and Dividend Income (419)	-	-	-	-	-
Allowance for Other Funds Used During Construction (419.1)	1,064,962	1,548,926	2,040,019	2,250,070	6,903,977
Miscellaneous Nonoperating Income (421)	-	-	-	-	-
Gain on Disposition of Property (421.1)	-	-	-	-	-
Total Other Income	1,064,962	1,548,926	2,040,019	2,250,070	6,903,977
Other Income Deductions					
Loss on Disposition of Property (421.2)	-	-	-	-	-
Donations (426.1)	833,218	1,165,668	761,418	1,158,482	3,918,786
Penalties (426.3)	-	-	-	-	-
Exp. for Certain Civic, Political, & Related Activities (426.4)	-	-	-	-	-
Other Deductions (426.5)	-	-	-	-	-
Total Other Income Deductions	833,218	1,165,668	761,418	1,158,482	3,918,786
Taxes Applicable to Other Income and Deductions					
Income Taxes - Federal (409.2)	(35,442)	(36,506)	(56,488)	(40,338)	(168,774)
Income Taxes - Other (409.2)	(14,111)	(14,535)	(22,490)	(16,061)	(67,197)
Provision for Def. Inc. Taxes (410.2)	395,035	406,895	629,604	449,604	1,881,138
(Less) Provision for Def. Inc. Taxes (411.2)	(164,375)	(169,310)	(261,979)	(187,081)	(782,744)
Total Taxes on Other Inc. and Ded.	181,107	186,544	288,646	206,124	862,422
Net Other Income and Deductions	50,638	196,714	989,954	885,463	2,122,769
Interest Charges					
Interest on Long-Term Debt (427)	14,646,978	15,714,174	15,714,174	15,714,174	61,789,500
Amortization of Debt Disc. and Expense (428)	-	-	-	-	-
Amortization of Loss on Reaquired Debt (428.1)	777,669	443,020	565,025	653,194	2,438,909
Amortization of Premium on Debt - Credit (429)	-	-	-	-	-
Amortization of Gain on Reacquired Debt - Credit (429.1)	-	-	-	-	-
Interest on Debt to Assoc. Companies (430)	284,290	289,073	293,356	261,341	1,128,059
Other Interest Expense (431)	205,304	269,139	233,021	196,038	903,502
Allowance for Borrowed Funds Used During Construction-Cr. (432)	(422,333)	(422,333)	(422,333)	(422,333)	(1,689,332)
Net Interest Charges	15,491,908	16,293,074	16,383,243	16,402,413	64,570,638
Net Income	$ 23,188,044	$ 29,455,025	$ 47,869,917	$ 38,366,316	$ 138,879,301

OPERATION AND MAINTENANCE EXPENSES
12 MONTHS ENDED DECEMBER 31, 2019
ACTUALS VS. FULLY PROJECTED FUTURE TEST YEAR
($ IN THOUSANDS)

Line No	Description	Account No.	12 Months Ended December 31, 2019 ($ in Thousands) Actual	Forecast FPFTY	Variance
	Purchased Power Expenses:				
1	Purchased Power	555	$ -	$ -	$ -
2	Other Power Supply Expense	556	218,613	201,436	17,177
3	Total Purchased Power Expenses		218,613	201,436	17,177
	Transmission Expense:				
4	Operation Supervision & Engineering	560	950	766	184
5	Load Dispatching	561	1,083	949	134
6	Station Expenses	562	115	166	(51)
7	Overhead Line Expenses	563	206	599	(393)
8	Underground Line Expenses	564	303	88	214
9	Transmission of Electricity by Others	565	-	-	-
10	Miscellaneous Transmission Expenses	566	4,825	6,252	(1,426)
11	Rents	567	-	-	-
12	Maintenance Supervision & Engineering	568	639	508	131
13	Maintenance of Structures	569	943	1,161	(218)
14	Maintenance of Station Equipment	570	1,806	1,912	(107)
15	Overhead Lines	571	759	645	114
16	Underground Lines	572	7	114	(106)
17	Miscellaneous Maintenance & Repair	573	275	371	(95)
18	Total Transmission Expenses		11,912	13,530	(1,618)
	Distribution Expense:				
19	Operation Supervision & Engineering	580	6,890	5,381	1,508
20	Load Dispatching	581	1,307	1,211	96
21	Station Expenses	582	359	415	(56)
22	Overhead Line Expense	583	950	933	16
23	Underground Line Expense	584	423	482	(59)
24	Street Lighting & Signal Systems	585	-	-	-
25	Meter Expenses	586	1,450	1,187	263
26	Customer Installations Expense	587	-	-	-
27	Miscellaneous Expenses	588	7,555	7,761	(206)
28	Rents	589	-	-	-
29	Total Distribution Operation Expenses		18,934	17,372	1,563
30	Maintenance Supervision & Engineering	590	(14)	446	(460)
31	Maintenance of Structures	591	123	156	(33)
32	Maintenance of Station Equipment	592	3,376	2,684	692
33	Maintenance of OH lines	593	23,733	31,644	(7,912)
34	Maintenance of Underground lines	594	1,564	1,173	391
35	Maintenance of Line Transformers	595	19	25	(6)
36	Maintenance of Street Lighting & Signals	596	441	509	(69)
37	Maintenance of Meters	597	596	419	177
38	Maintenance of Miscellaneous Plant	598	119	69	49
39	Total Distribution Maintenance Expenses		29,955	37,125	(7,170)
40	Total Distribution Expenses		48,890	54,497	(5,607)

OPERATION AND MAINTENANCE EXPENSES

12 MONTHS ENDED DECEMBER 31, 2019

ACTUALS VS. FULLY PROJECTED FUTURE TEST YEAR

($ IN THOUSANDS)

Line No	Description	Account No.	12 Months Ended December 31, 2019 ($ in Thousands) Actual	Forecast FPFTY	Variance
	Customer Accounting Expense:				
41	Supervision	901	9,661	4,279	5,381
42	Customer Assistance	902	1,909	2,508	(599)
43	Records & Collections	903	5,089	11,497	(6,407)
44	Uncollectible Accounts	904	6,338	8,645	(2,307)
45	Miscellaneous Expenses	905	-	-	-
46	Total Customer Accounts Expense		22,996	26,929	(3,932)
	Customer Services Expense:				
47	Customer Service-Supervision	907	-	-	-
48	Customer Service-Customer Assistance	908	22,746	24,294	(1,548)
49	Customer Service-Information and Instruction	909	-	-	-
50	Customer Service-Miscellaneous Service & Info	910	-	-	-
51	Total Customer Service & Informational Expenses		22,746	24,294	(1,548)
	Sales Expense:				
52	Supervision	911	-	-	-
53	Demonstration and Selling Expenses	912	-	-	-
54	Advertising Expenses	913	-	-	-
55	Miscellaneous Sales Expenses	914	-	-	-
56	Total Sales Expense		-	-	-
	Administrative & General Expenses:				
57	Administrative and General Salaries	920	37,577	37,725	(148)
58	Office Supplies and Expenses	921	7,061	12,465	(5,404)
59	Administrative Expenses Transferred - Credit	922	-	-	-
60	Outside Services Employed	923	37,862	40,304	(2,442)
61	Property Insurance	924	5,726	6,075	(349)
62	Injuries and Damages	925	521	566	(45)
63	Employee Pension and Benefits	926	12,839	12,128	711
64	Regulatory Commission Expenses	928	782	407	375
65	General Advertising Expenses	930	8,979	-	(2,625)
66	Miscellaneous General Expenses			11,604	
67	Rents	931	3,932	3,354	578
68	Total Operation		115,279	124,628	(9,349)
69	Maintenance of General Plant	935	12,001	14,528	(2,527)
70	Total Administrative and General Expenses		127,280	139,156	(11,876)
71	**TOTAL OPERATION & MAINTENANCE EXPENSES**		**$ 452,438**	**$ 459,842**	**$ (7,404)**

Duquesne Light Company
Fully Projected Future Test Year - 12 Months Ended December 31, 2019
ADDITIONS TO PLANT
01/01/2019 - 12/31/2019

Line #	Description	Account Number	12 Months Ended April Actual	Forecast FPFTY	Variance
Intangible Plant					
1	Organization	301	-	-	-
2	Franchises and consents	302	-	-	-
3	Misc intangible plant	303	41,848	41,341	507
4	Total Intangible		41,848	41,341	507
Production Plant					
5	Land and land rights	310	-	-	-
6	Structures and Improvements	311	-	-	-
7	Misc power plant equipment	316	-	-	-
8	Total Production Plant		-	-	-
Storage Plant					
9	Land and land rights	340	-	-	-
10	Structures and improvements	341	-	-	-
11	Misc power plant equipment	346	-	-	-
12	Total Storage and Equipment		-	-	-
13	Total Production Plant		41,848	41,341	507
Transmission Plant					
14	Land and land rights	350	216	763	(547)
15	Structures and improvements	352	2,929	5,241	(2,312)
16	Station equipment	353	9,788	14,584	(4,796)
17	Towers and fixtures	354	295	691	(396)
18	Poles and fixtures	355	2,126	549	1,577
19	Overhead conductors, devices	356	1,784	3,835	(2,051)
20	Underground conduit	357	-	-	-
21	Undergrnd conductors, devices	358	100	-	100
22	Roads and trails	359	908	-	908
23	Regional transmission - computer hardward	382	-	2,214	(2,214)
24	Regional transmission - computer software	383	-	5,414	(5,414)
25	Total Transmission Plant		18,146	33,291	(15,145)
Distribution Plant					
26	Land and land rights	360	1,733	-	1,733
27	Structures and improvements	361	2,861	465	2,396
28	Station equipment	362	23,436	31,473	(8,037)
29	Poles, towers and fixtures	364	51,903	34,054	17,849
30	Overhead conductors, devices	365	39,177	24,679	14,498
31	Underground conduit	366	(3,008)	8,758	(11,766)
32	Undergrnd conductors, devices	367	29,046	14,519	14,527
33	Line transformers	368	23,873	31,632	(7,759)
34	Services	369	1,642	5,855	(4,213)
35	Meters	370	8,575	16,772	(8,197)
37	Street lighting,signal system	373	2,163	617	1,546
38	Total Distribution Plant		181,399	168,824	12,575
General Plant					
39	Land and land rights	389	-	-	-
40	Structures and improvements	390	15,226	4,846	10,380
41	Office furniture, equipment	391	5,477	8,512	(3,035)
42	Transportation equipment	392	3,162	7,000	(3,838)
43	Stores equipment	393	-	-	-
44	Tools, shop, garage equipment	394	4,047	1,831	2,216
45	Laboratory equipment	395	1	-	1
46	Power operated equipment	396	108	-	108
47	Communication equipment	397	6,352	11,776	(5,424)
48	Miscellaneous equipment	398	-	-	-
49	Other tangible property	399	-	-	-
50	Total General Plant		34,374	33,965	409
51	**Total Additions**		**275,766**	**277,421**	**(1,655)**

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2021-3024750

Duquesne Light Company

Statement No. 3

Direct Testimony of Todd A. Mobley

Subject: Sales Forecast

Date: April 16, 2021

DIRECT TESTIMONY OF TODD A. MOBLEY

Q. Please state your full name and business address.

A. Todd Allen Mobley; 411 Seventh Avenue, 7th Floor, Pittsburgh, PA 15219.

Q. What is your position at Duquesne Light Company ("Duquesne Light" or "Company")?

A. Director, Business Analytics.

Q. How long have you worked at Duquesne Light?

A. Since June 2014.

Q. What are your current responsibilities?

A. In addition to other responsibilities, I manage Duquesne Light's sales throughput forecasting.

Q. What are your qualifications, work experience and educational background?

A. I have a Bachelor of Science in Mathematics and a Master of Business Administration from the University of Notre Dame, including classes in statistics, probability, and regression modeling and forecasting. Beyond my time at Duquesne Light, relevant work experience includes more than three years of experience as a Quantitative Analyst at Allegheny Energy. I also have industry training through Itron's Energy Forecasting Group.

Q. What is the purpose of your direct testimony regarding Duquesne Light's request for increased rates?

A. The purpose of my testimony is to present the Company's sales forecast and the methodology used in its development.

Q. Are you sponsoring any exhibits as part of your direct testimony?

A. Yes, I am. I am sponsoring Exhibit TM-1, which is the past five years of weather normalized Company sales segmented by customer class. I am also sponsoring Exhibit TM-2, which is the Company's forecast of sales during the Historical Test Year through 2025, including the Future Test Year and Fully Projected Future Test Year, also segmented by customer class. Finally, I am sponsoring Exhibit TM-3, which displays the savings we expect to achieve through the Company's Act 129 Programs for the period of 2020 through 2025.

Q. Please explain how these exhibits were prepared?

A. These exhibits were prepared by me, starting with Exhibit TM-1, which is based on weather normalized internal Company sales records. Exhibit TM-2 comes from the results of the annual forecast models I develop, which will be further described in this testimony. Lastly, Exhibit TM-3 comes from the Company's most recent filing detailing our energy efficiency and conservation ("EE&C") programs related to PA Act 129. The Company's revised Act 129 EE&C Plan for the period June 1, 2021 through May 31, 2025 was filed with the Public Utility Commission on March 1, 2021.

Q. Before discussing your findings and methodology in detail, could you please address whether you accounted for the impacts of the COVID-19 pandemic?

A. Yes. The COVID-19 pandemic has had significant impacts across many aspects of customers' lives, including their electric consumption patterns. These anomalous impacts are most prominent in the Historic Test Year (HTY), 2020, as my findings below indicate. I discuss how the Company accounted for pandemic impacts in sales forecasts later in my testimony.

Q. Please summarize your findings.

A. The forecast assumes normal temperature patterns for all years. Duquesne Light control area sales declined 3.5% between 2019 and the Historic Test Year (HTY). Control area sales are projected to decline an additional 0.2% between the HTY and the Future Test Year (FTY). Control area sales are projected to decline an additional 0.6% between the FTY and the Fully Projected Future Test Year (FPFTY). Total control area sales are projected to decline at a compound annual growth rate of 1.4% between 2019 and 2025.

Residential usage comprises approximately 32% of Duquesne Light's annual sales during the FPFTY, and this segment is expected to decline at a compound annual growth rate of 1.3% between 2019 and 2025. This projected decline is being driven by energy efficiency and distributed generation trends, and is partially offset by projected customer and electric vehicle (EV) growth.

Commercial usage comprises approximately 48% of Duquesne Light's annual sales, and this segment is expected to decline at a compound annual growth rate of 1.6% between 2019 and 2025. This projected decline is being driven by

energy efficiency and distributed generation trends, partially offset by growth associated with EV and new large customers.

Finally, Industrial usage comprises approximately 20% of Duquesne Light's annual sales. This segment is expected to decline at a compound annual growth rate of 1.1% between 2019 and 2025. The projected decline is being driven by energy efficiency trends and customer declines.

These forecasts are detailed in Exhibit TM-2.

Q. What procedures and methodology does Duquesne Light utilize for preparing its forecasts?

A. I develop the sales forecasts by modeling each rate and customer class separately, using multiple regression. For Residential and Commercial rate classes, I employ Itron's Statistically Adjusted End-Use (SAE) framework, which captures electricity usage for heating, cooling, and all other end-uses through a series of composite variables. For Industrial rate classes, I use multiple regressions more heavily reliant on trend variables.

The raw regression forecasts are then adjusted for a handful of external factors, namely: projected growth in electric vehicles, growth in distributed generation connections, known and potential new large commercial and industrial customers, anticipated adoption of electric buses, and for Industrial rate classes, projected deemed Act 129 energy efficiency savings. The outcome is a calendar monthly forecast for kWh and customer count by rate class.

Q. What data do you utilize for the inputs into your forecasts?

A. The main data inputs used in the forecast models and their sources include:

- Historical kWh sales, customer count, and net metering requests by rate class provided internally
- 15 year historical daily temperature for Duquesne Light territory provided by AccuWeather.
- Historical and forecasted regional energy efficiency trends provided by Itron via the Energy Information Administration
- Historical and projected Duquesne Light Act 129 program deemed savings for Industrial customer class
- Historical and forecasted economic data for Allegheny and Beaver Counties provided by Oxford Economics
- Electric Vehicle electricity usage forecast provided by Electric Power Research Institute
- Projected growth rates in solar installations for PA provided by US Solar Market Insight report from GTM Research
- Market intelligence regarding known and potential new large commercial and industrial customers and known and potential behind-the-meter generation projects
- Google's Community Mobility Reports, which chart movement trends over time by geography, and across different categories of places such as retail and recreation, workplaces, and residential.

Q. How are Duquesne Light Company's Pa. Act 129 Energy Efficiency and Conservation obligations factored into your forecasts?

A. For Residential and Commercial classes, all energy efficiency and conservation effects, inclusive of Act 129, are incorporated through Itron's SAE model framework, which leverages the Energy Information Administration regional forecasts regarding end use equipment and appliance efficiency and saturation trends. For Industrial classes, the projected Act 129 deemed savings are subtracted from the unadjusted forecasts.

Q. Are there any major events impacting the Company's test year forecasts?

A. Major events addressed through adjustments to the raw regression forecasts and include: projected growth in electric vehicles, growth in net metering connections, known and potential new large commercial and industrial customers, known and potential behind-the-meter generation projects, and anticipated adoption of electric buses.

In addition to the above, the COVID-19 pandemic impacted the HTY, serving to increase Residential usage and decrease Commercial and Industrial usage due to the associated increased shelter at home and work from home activity, restrictions on business activities, and the overall downturn in economic activity. These trends are reflected in the regressions through incorporating Google's Community Mobility Reports.

Q. How does the COVID-19 pandemic impact the FPFTY?

A. The forecast assumes that restrictions on business activities and work-from-home activity mostly return to normal, pre-pandemic conditions by late 2021, and thus do not impact the FPFTY. However, the forecast also projects some level of permanent increase in working from home, which serves to increase the Residential forecast and decrease the Commercial forecast during the FPFTY as a result of this shift in behavior. Beyond these direct responses to the pandemic, the economic impacts and their related effects on the forecast are reflected through the projected economic data provided by Oxford Economics.

Q. Could you explain Duquesne Light Company's peak load demand forecasts?

A. Our peak load demand forecasts are provided to us by PJM, our Regional Transmission Organization. PJM develops peak load demand forecasts for each zone in its territory, and provides these forecasts to its members.

Q. Were your procedures and methodology for preparing these forecasts consistent with those utilized in prior Duquesne Light proceedings?

A. Yes. With the exception of certain adjustments related to the COVID-19 pandemic, which I discussed above, I employed the same methodology as in the Company's prior base rates proceeding, Docket Nos. R-2018-3000124 et. al.

Q Does this conclude your direct testimony?

A. Yes, it does. I reserve the right to supplement my testimony through the course of this proceeding.

Exhibit TM-1
Todd Mobley

Duquense Light Company

Weather Normalized Annual Retail Sales (GWh) by Customer Class

	2015	2016	2017	2018	2019
Residential	4,023	4,040	3,988	4,063	4,026
Commerical	6,368	6,258	6,142	6,121	6,034
Industrial	2,861	2,561	2,640	2,611	2,471
Lighting	57	56	53	54	53
Total	**13,309**	**12,914**	**12,823**	**12,850**	**12,584**

Year to Year Change by GWh

	2015	2016	2017	2018	2019
Residential		17	(51)	75	(37)
Commerical		(111)	(116)	(20)	(88)
Industrial		(301)	79	(28)	(140)
Lighting		(1)	(3)	1	(2)
Total		**(395)**	**(91)**	**27**	**(266)**

Year to Year Change by Percentage

	2015	2016	2017	2018	2019
Residential		0.4%	-1.3%	1.9%	-0.9%
Commerical		-1.7%	-1.9%	-0.3%	-1.4%
Industrial		-10.5%	3.1%	-1.1%	-5.4%
Lighting		-1.2%	-5.2%	2.3%	-2.9%
Total		**-3.0%**	**-0.7%**	**0.2%**	**-2.1%**

Exhibit TM-2
Todd Mobley

Duquense Light Company

Forecasted Retail Sales (GWh) by Customer Class

	Historic Test Year 2020	Future Test Year 2021	Fully Projected Future Test Year 2022	2023	2024	2025
Residential	4,193	4,021	3,895	3,834	3,782	3,722
Commerical	5,549	5,645	5,711	5,624	5,556	5,463
Industrial	2,352	2,405	2,399	2,367	2,343	2,312
Lighting	51	53	53	53	53	53
Total	**12,145**	**12,124**	**12,058**	**11,878**	**11,733**	**11,550**

Year to Year Change by GWh

	Historic Test Year 2020	Future Test Year 2021	Fully Projected Future Test Year 2022	2023	2024	2025
Residential	167	(172)	(126)	(61)	(52)	(60)
Commerical	(485)	96	66	(86)	(69)	(92)
Industrial	(119)	53	(6)	(32)	(24)	(30)
Lighting	(2)	3	(0)	(0)	(0)	(0)
Total	**(439)**	**(21)**	**(66)**	**(180)**	**(145)**	**(183)**

Year to Year Change by Percentage

	Historic Test Year 2020	Future Test Year 2021	Fully Projected Future Test Year 2022	2023	2024	2025
Residential	4.1%	-4.1%	-3.1%	-1.6%	-1.3%	-1.6%
Commerical	-8.0%	1.7%	1.2%	-1.5%	-1.2%	-1.7%
Industrial	-4.8%	2.2%	-0.2%	-1.3%	-1.0%	-1.3%
Lighting	-3.5%	5.0%	-0.4%	-0.4%	-0.4%	-0.4%
Total	**-3.5%**	**-0.2%**	**-0.5%**	**-1.5%**	**-1.2%**	**-1.6%**

Note: Historic Test Year (2020) is weather normalized

Exhibit TM-3
Todd Mobley

Duquense Light Company

Act 129 Program Savings (GWh) by Customer Class

	Historic Test Year 2020	Future Test Year 2021	Fully Projected Future Test Year 2022	2023	2024	2025
Residential	40	73	107	144	180	214
Commercial	28	54	79	103	128	152
Industrial	18	33	48	62	75	87
Lighting	-	-	-	-	-	-
Total	**86**	**160**	**235**	**309**	**383**	**453**

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2021-3024750

Duquesne Light Company

Statement No. 4

Direct Testimony of Benjamin Buxton Morris

Subjects: Electrical System, Planning Process, Reliability Performance, Plant Additions, Vegetation Management, Consolidated Tax Savings Adjustment

Date: April 16, 2021

DIRECT TESTIMONY OF BENJAMIN BUXTON MORRIS

I. INTRODUCTION

Q. Please state your full name and business address.

A. My name is Benjamin Buxton Morris. My business address is 2825 New Beaver Avenue, Pittsburgh, PA 15233

Q. What is your position at Duquesne Light Company?

A. I am the Director, Operations Work Management & Performance for Duquesne Light Company ("Duquesne Light" or the "Company").

Q. Please summarize your responsibilities and duties as they relate to this testimony.

A. In my capacity as the Director, Operations Work Management & Performance, I currently have three primary areas of responsibility: (1) Work Planning, (2) Work Management, and (3) Work Performance.

The first of these areas, Work Planning, involves leading the development of a five-year plan for Operations' construction, inspection, and maintenance work as part of the Company's annual business planning process. Additionally, this group tracks the Operations' performance versus its schedule and cost targets through a given year.

The second of these areas, Work Management, involves administering the work of Operations' field resources to ensure that the work being undertaken aligns

with what was included in the five-year plan for construction, inspection, and maintenance work. This administration includes the facilitation of decisions between the insourcing and outsourcing of work, depending on the capacity of the Company's field workers to take on new work at any given point in time. The administration of work also includes the scheduling of work for Company field workers and the provision of asset accounting support, work order management, and other clerical duties to the Company's field management.

The third and final of these areas, Work Performance, involves the development, reporting, and analysis of key performance indicators for Operations. The Work Performance function enables Company management to make data-driven decisions with respect to its operations. Additionally, the Work Performance function performs ad hoc quantitative analyses in support of the same goal of operational excellence.

I am providing this testimony on behalf of the Company primarily due to my oversight of the development of the five-year plan for Operations' construction, inspection, and maintenance work, discussed above in the context of the Work Planning function. This five-year plan underpins the operational expenditures for which the Company is seeking recovery through this proceeding.

Q. Please provide your educational background and describe your professional experience.

A. As stated above, I currently am the Director, Operations Work Management & Performance at Duquesne Light. Prior to this role, I served as the Senior Manager,

Operations Strategic Planning from November 2016 through February 2017; the Senior Manager, Strategic Planning & Operational Analytics from October 2015 through October 2016; and the Manager, Operational Analytics from December 2014 through September 2015.

Prior to joining Duquesne Light, I was a Vice President in the Regulated Utilities group of Macquarie Infrastructure and Real Assets, Inc. ("MIRA"), where I helped to identify new private equity investment opportunities and to manage existing private equity investments in the regulated utility industry. Specific private equity investments in the regulated utility industry that I helped to manage for MIRA included investments in Duquesne Light; in Aquarion Company, a water utility serving approximately 220,000 customers in Connecticut, Massachusetts, and New Hampshire; and in Hawaii Gas, a gas utility serving approximately 68,000 customers in Hawaii.

Prior to joining MIRA, I was an Associate in the Oil & Gas investment banking group of Macquarie Capital (USA) Inc., where I worked with clients in the upstream, midstream, downstream, and equipment/services sectors of the oil and gas industry. Specifically, I helped to provide strategic advice related to mergers and acquisitions, restructurings, and recapitalizations and to raise capital in the private and public equity and debt capital markets.

With respect to my educational background, I hold Bachelor of Arts degrees from Middlebury College and from Columbia University. I additionally hold a Master of Arts degree from Middlebury College, a Master of Finance degree from INSEAD, and a Master of Business Administration degree from Columbia

University. I am credentialed by the Project Management Institute as a Project Management Professional. I am credentialed by the Utility Safety & Ops Leadership Network as a Certified Utility Safety Professional.

Q. What is the purpose of your direct testimony?

A. The purpose of my testimony is to describe and explain Duquesne Light's plant additions in 2020, 2021, and 2022, which are the historic test year ("HTY"), future test year ("FTY"), and fully projected future test year ("FPFTY"), respectively. Specifically, my testimony describes: (1) Duquesne Light's electric delivery system, (2) Duquesne Light's planning process to ensure its electric system continues to meet the needs of its customers, (3) the Company's historical reliability performance, (4) major plant additions through the FPFTY, (5) the Company's vegetation management practices, and (6) the Company's plant additions in relation to the consolidated tax savings adjustment ("CTA") calculation.

II. ELECTRICAL SYSTEM

Q. Could you briefly describe Duquesne Light's electric system?

A. Duquesne Light provides electric service to more than 600,000 customers located primarily in Allegheny and Beaver counties (including the city of Pittsburgh), a service territory of approximately 817 square miles. Duquesne Light delivers electricity from a variety of generation sources through a transmission and distribution system at the voltages and in the quantity required by our customers. The system includes approximately 7,484 miles of distribution and sub-

transmission lines, approximately 669 miles of transmission lines, 159 company-owned substations, 195 customer-owned substations, approximately 212,227 utility poles, and 51,434 distribution transformers.

The transmission system consists of a network of 345 kV, 138 kV, and 69 kV transmission lines that supply a series of substations. These lines move bulk power from various sources of supply, which are not owned by Duquesne Light, to the places in Duquesne Light's service territory where it is needed. These lines are the most reliable form of power delivery and are the most electrically efficient. They enable the movement of large quantities of bulk power with minimal energy loss or voltage drop. These transmission lines supply power to several types of substations within our service territory. Substation transformers then convert the transmission voltages to lower (distribution) voltages that are used for distribution to the majority of Duquesne Light's customers. Costs for transmission assets are recovered through Duquesne Light's FERC-approved formula rate.

Once converted down to distribution voltages (typically 23 kV or 4 kV, except in our downtown Pittsburgh network system where there is both 11 kV and 23 kV primary distribution voltage), electricity is delivered to customers through the local distribution system. The local distribution system consists of distribution lines, transformers, switches, breakers, and other electrical equipment that Duquesne Light uses to deliver power from the various substations to the customer.

III. PLANNING PROCESS

Q. Does Duquesne Light have a planning process to ensure its electric system is reliable and able to meet the needs of its customers?

A. Yes. Duquesne Light's planning process encompasses a review of plant additions needed for service restoration, customer commitments, service capacity and reliability, and infrastructure support. This planning process addresses both our annual investment needs for plant additions and replacements as well as necessary investments in our energy delivery and support infrastructure to replace physical infrastructure that is either nearing obsolescence or unable to meet our customers' needs.

In light of evolving customer behaviors and expectations, Duquesne Light's planning process takes into account the changing nature of the distribution system. For instance, as the Company's customers seek to interconnect DERs to the distribution grid, Duquesne Light's Distribution Planning team studies the grid's capacity to host DERs at our customers' proposed interconnection-points, and develops plans by which to facilitate the interconnection process. Similarly, as our customers purchase electric vehicles and charge them at their residences or places of business, Duquesne Light's Distribution Planning team works to ensure that our grid has sufficient capacity to support the increased demand on the system.

IV. RELIABILITY PERFORMANCE

Q. Has Duquesne Light been able to maintain high levels of reliability since its last base rate proceeding?

A. Yes. The Company has maintained high levels of reliability. The Company measures its reliability performance based on three system and customer reliability metrics: System Average Interruption Duration Index ("SAIDI"), System Average Interruption Frequency Index ("SAIFI"), and Customer Average Interruption Duration Index ("CAIDI"). The Company consistently has performed well against the standards set by the Commission.

Q. Please summarize Duquesne Light's reliability metrics in recent history (e.g., over the past five years of benchmarked data).

A. Over the past five years of benchmarked data (*i.e.*, 2016 through 2020 utilizing a combination of the Pennsylvania Public Utility Commission's annual *Electric Service Reliability in Pennsylvania* report) for 2016 through 2019 and large Electric Distribution Companies' ("EDCs'") individual *Quarterly Electric Reliability Reports* for the fourth quarter of 2020 (Docket No. M-2016-2522508), Duquesne Light has been, on average over the five-year period, either the top-performing large EDC or the second top-performing large EDC in the Commonwealth, depending on the specific reliability metric.

For the SAIDI reliability metric over the 2016 through 2020 period, Duquesne Light was the top-performing (*i.e.*, #1) of the Commonwealth's seven large EDCs over the five-year period (*i.e.*, the arithmetic mean of 2016 through 2020 performance). With respect to individual years' performances, Duquesne Light was the #1 large EDC in 2016, 2018, 2019, and 2020 and the #3 large EDC in 2017. Duquesne Light performed better than the Company's Benchmark and

Standard values of 126 and 182, respectively, in each of the five years. This information is summarized in the following table.

Table 1 - SAIDI Performance Among Large Pennsylvania EDCs, 2016-2020

	2016	2017	2018	2019	2020	Mean
Duquesne Light	70	112	89	106	111	98
Benchmark	126	126	126	126	126	126
Standard	182	182	182	182	182	182
PA Large EDC "2"	178	217	165	253	190	201
PA Large EDC "3"	106	82	106	205	116	123
PA Large EDC "4"	171	239	195	252	214	214
PA Large EDC "5"	104	160	152	178	179	155
PA Large EDC "6"	94	104	141	150	122	122
PA Large EDC "7"	159	214	209	196	241	204
Rank (Duquesne Light)	#1	#3	#1	#1	#1	#1
Percentile (Duquesne Light)	0%	33%	0%	0%	0%	0%

For the SAIFI reliability metric over the 2016 through 2020 period, Duquesne Light was the second top-performing (*i.e.*, #2) of the Commonwealth's seven large EDCs over the five-year period (*i.e.*, the arithmetic mean of 2016 through 2020 performance). With respect to individual years' performances, Duquesne Light was the #1 large EDC in 2018 and 2020; the #2 large EDC in 2016 and 2019; and the #3 large EDC in 2017. Duquesne Light performed better than the Company's Benchmark and Standard values of 1.17 and 1.40, respectively, in each of the five years. This information is summarized in the following table.

Table 2 - SAIFI Performance Among Large Pennsylvania EDCs, 2016-2020

	2016	2017	2018	2019	2020	Mean
Duquesne Light	0.85	0.98	0.84	1.01	0.84	0.90
Benchmark	1.17	1.17	1.17	1.17	1.17	1.17
Standard	1.40	1.40	1.40	1.40	1.40	1.40
PA Large EDC "2"	1.44	1.47	1.27	1.54	1.27	1.40
PA Large EDC "3"	1.00	0.83	0.97	1.08	0.84	0.94
PA Large EDC "4"	1.43	1.73	1.71	1.72	1.58	1.63
PA Large EDC "5"	1.09	1.06	1.10	1.38	0.97	1.12
PA Large EDC "6"	0.78	0.71	0.84	0.85	0.90	0.82
PA Large EDC "7"	1.08	1.29	1.22	1.19	1.12	1.18
Rank (Duquesne Light)	#2	#3	#1	#2	#1	#2
Percentile (Duquesne Light)	17%	33%	0%	17%	0%	17%

For the CAIDI reliability metric over the 2016 through 2020 period, Duquesne Light was the top-performing (*i.e.*, #1) of the Commonwealth's seven large EDCs over the five-year period (*i.e.*, the arithmetic mean of 2016 through 2020 performance). With respect to individual years' performances, Duquesne Light was the #1 large EDC in 2016, 2018, 2019, and 2020 and the #2 large EDC in 2017. Duquesne Light performed better than the Company's Benchmark value of 108 in all years except 2017 and 2020, which were years marked by high storm activity. Duquesne Light performed better than the Company's Standard value of 130 in each of the five years except 2020. This information is summarized in the following table.

Table 3 - CAIDI Performance Among Pennsylvania EDCs, 2016-2020

	2016	2017	2018	2019	2020	Mean
Duquesne Light	82	115	106	106	132	108
Benchmark	108	108	108	108	108	108
Standard	130	130	130	130	130	130
PA Large EDC "2"	124	147	130	164	150	143
PA Large EDC "3"	106	99	110	189	137	128
PA Large EDC "4"	120	138	114	147	136	131
PA Large EDC "5"	95	150	138	129	185	139
PA Large EDC "6"	121	146	168	176	135	149
PA Large EDC "7"	147	166	171	165	216	173
Rank (Duquesne Light)	#1	#2	#1	#1	#1	#1
Percentile (Duquesne Light)	0%	17%	0%	0%	0%	0%

Duquesne Light's attributes its strong reliability performance over the 2016 to 2020 period to the Company's ongoing T&D System Capacity and Reliability plant additions and vegetation management efforts.

Q. Please summarize Duquesne Light's reliability metrics for 2020.

A. For 2020, the Company's SAIDI, SAIFI, and CAIDI performance was 111, 0.84, and 132, respectively. The Company's 2020 performance was below (*i.e.*, favorable to) the Benchmark values for SAIDI and SAIFI, but the Company's 2020 value for CAIDI was above (*i.e.*, unfavorable to) the Benchmark and Standard values as detailed in the chart below:

Table 4 - Duquesne Light 2020 Reliability Metrics

	SAIDI	SAIFI	CAIDI
2020	111	0.84	132
Benchmark	126	1.17	108
Standard	182	1.40	130

The Company attributes its CAIDI results in 2020 to increased storm activity during the year. The Company experienced a total of 27 Storm Days in 2020. The Company had five PUC Reportable Storms in 2020, which occurred in the months of April, June, July, August, and November. The Company had one Major Event Exclusion in 2020. In light of this higher storm activity, the Company's 2020 reliability performance was significantly impacted by the contribution of storm days. This fact is illustrated in the following table.

Table 5 - Duquesne Light 2020 Reliability Metrics by Day Type

	Incidents	SAIDI	SAIFI	CAIDI
Blue Sky Days	2,216	49	0.56	88
Storm Days	1,003	62	0.28	220
All Days	3,219	111	0.84	132
Benchmark	-	126	1.17	108
Standard	-	182	1.40	130

The Company's 2020 reliability performance on Blue Sky days was significantly below (*i.e.*, favorable to) the Benchmark and Standard values. In contemplation of increasing storm frequency and severity, the Company plans to continue to increase its reliability-driven capital investment and storm restoration work, among other efforts, as I discuss in further detail below.

Q. What steps is the Company taking to further improve its service reliability and reduce outages?

A. Duquesne Light must continue to invest in its distribution system to maintain and enhance its reliability and resilience. The Company's plant additions to this end are made in accordance with our planning process described above. Additionally, Duquesne Light must continue to maintain vegetation around its distribution assets to improve service reliability and reduce outages. The Company's vegetation management efforts are described in Section VI.

In addition to Duquesne Light's traditional transmission and distribution plant investments and vegetation management activities, the Company is investing in technology designed to help improve reaction time to service interruptions. Specifically, Duquesne Light is investing in an outage management system ("OMS") that will be implemented in 2022. This project is described in the "Plant Additions" section of this testimony, under the category of "IT Programs and Projects."

V. PLANT ADDITIONS

Q. Can you summarize the process used by Duquesne Light to determine which plant additions are necessary and when they must be added?

A. Yes. Duquesne Light identifies the need and priority for plant additions by comparing knowledge regarding the condition and use of its assets to knowledge regarding the future performance requirements of those assets. In cases when a problem with future performance is predicted, or where a need to improve

performance has been identified, Duquesne Light engineers develop a variety of reasonable alternatives to resolve the problem or meet the need. Each alternative is then evaluated on its technical and financial merits and the alternative with the greatest customer value consistent with Duquesne Light's materials, design, and construction standards is recommended.

A Company management team reviews these recommended plant additions and challenges the underlying technical and financial facts, assumptions, and conclusions. This process ensures that appropriate analytical rigor is applied to the decision-making process and ensures that each plant addition is considered within the context of all other capital needs. This is an iterative process that continues until a final decision is made on a plant addition.

Approved plant additions are then included in an integrated work plan that is used by Duquesne Light planners, engineers, schedulers, and project managers to ensure optimum sequencing of the many different additions made during any given year. As projects are completed, field supervisors perform project reviews to assure the scope of work has been completed and then notify the plant accounting department to ensure proper accounting treatment of the capital project.

Q. Can you explain how Duquesne Light seeks to balance plant additions with customer affordability?

A. Yes. With respect to plant additions, Duquesne Light strives to render its electric distribution service as affordable as possible for our customers by (1) making plant additions only when the Company believes that it is prudent to do so by virtue of

our planning process, (2) employing or procuring the least-cost labor, materials, and services that meet our materials, design, and construction standards, and (3) striving to maximize efficiency and productivity in our design and construction processes. The Company is also increasingly exploring alternatives to traditional distribution facility investments (also called "non-wires alternatives") as potentially cost-effective electric delivery solutions.

Q. Please explain the reasons why Duquesne Light invests in its distribution system.

A. Duquesne Light makes plant additions in order to provide safe and reliable service to our customers. Plant additions, including those planned through the end of the FPFTY, are necessary for five primary reasons and are categorized accordingly as: (1) Transmission and Distribution ("T&D") Service Restoration, (2) T&D Customer Commitments, (3) T&D System Capacity and Reliability, (4) T&D Support, and (5) IT Projects & Programs. The value of plant additions in these five functional categories during the HTY, FTY, and FPFTY is summarized in Exhibit BBM-1.

Q. Please explain Duquesne Light's anticipated Plant Additions for the time period of 2020, 2021, and 2022.

A. Duquesne Light plans to make $549.9 million of additions to Distribution Plant for the time period of 2020, 2021, and 2022. In addition to this amount, Duquesne Light plans to make $186.0 million of additions to Transmission Plant during the same

time period. The Company is not claiming any Transmission Plant additions in its rate base claim in this proceeding. Supporting these additions to both Distribution Plant and Transmission Plant, the Company plans to make $71.8 million and $69.6 million of additions to General Plant and Intangible Plant, respectively, for the period of 2020, 2021, and 2022. The value of plant additions in these accounting categories during the HTY, FTY, and FPFTY is summarized in Exhibit BBM-2.

Q. How do these Distribution Plant addition values compare with those of recent years (*e.g.*, 2017, 2018, and 2019)?

A. Duquesne Light's anticipated Distribution Plant additions for 2020, 2021, and 2022 are comparable to recent years. The table, below, illustrates that the Company's Distribution Plant additions range between a low of $161.0 million in 2022 and a high of $216.9 million in 2018. 2022 is a relatively low year for Distribution Plant additions, but the Company is anticipating a relatively high level of Transmission Plant additions that same year.

Table 6 - Plant Additions, 2017-2022

	2017	2018	2019	2020	2021	2022
				HTY	FTY	FPFTY
$ Millions	Actual	Actual	Actual	Actual	Forecast	Forecast
Intangible	$23.3	$32.9	$39.8	$12.7	$29.6	$27.2
Transmission	26.6	36.1	18.1	53.9	48.5	83.6
Regional Transmission	1.1	0.2	-	-	-	-
Distribution	166.4	216.9	181.4	178.9	210.0	161.0
General	21.8	30.9	43.3	10.2	31.7	29.9
Total	$239.2	$317.0	$282.6	$255.7	$319.8	$301.8

It is worth noting that the Duquesne Light's actual Distribution Plant additions for 2018 and 2019 exceeded its projections for those years presented in its last base rate case, R-2018-3000124. Specifically, the Company made $216.9 million of Distribution Plant additions in 2018, compared with its original projection of $153.5 million. Similarly, Duquesne Light made $181.4 million of Distribution Plant additions in 2019, compared with its original projection of $159.8 million.

Q. Please explain T&D Service Restoration as a primary reason for making plant additions.

A. Duquesne Light customers expect their electric service to be restored promptly if it is interrupted. T&D Service Restoration includes plant additions to replace equipment that has failed and either resulted in a service interruption to Duquesne Light customers or presented a significant risk of an imminent service interruption. Plant additions in this category include additions to replace equipment failures related to storms, adverse weather conditions, animal contacts, and equipment that fails due to reaching the end of its service life. This category also includes plant additions in response to outages caused by people and/or their equipment, including motor vehicle crashes.

Forecasts of plant additions needed for Service Restoration are estimated based on previous years' experience.

Q. Please summarize the types of plant additions that are included in the January 1, 2020 through December 31, 2022, projections for T&D Service Restoration.

A. In the time period of 2020, 2021, and 2022, Duquesne Light projects to make $111.3 million of plant additions in the T&D Service Restoration category. The service restoration program provides funding for the restoration of equipment that may require replacement due to damage caused by storms, wind, ice, or heat. Replacement includes both overhead and underground facilities. It also includes funding to replace equipment that may fail and cause customer outages or has the potential for causing imminent outages to customers. In calendar year 2020, Duquesne Light made $39.6 million of plant additions in the T&D Service Restoration category.

Q. Please explain T&D Customer Commitments as a primary reason for making plant additions.

A. Duquesne Light serves residential, commercial, industrial, and lighting customers. All customer classes rely on us to provide service for new or remodeled homes and businesses, and also to upgrade existing services to meet new capacity requirements they may have as a result of additional load such as computers, air conditioning, and modernization. T&D Customer Commitments also include plant additions associated with relocations of Company facilities that are regularly requested by governmental agencies due to highway improvements or other rights-of-way interferences. These projects include road widening, bridge repairs, sewer and water main replacements/upgrades, or other infrastructure improvements.

Forecasts of plant additions needed as a result of T&D Customer Commitments are based upon forecasted economic conditions in the Duquesne

Light service area, projected number of new customers, major customer projects that are known to us, and projects identified to us by state, county, city and local municipalities.

Q. Please summarize the types of plant additions that are included in the January 1, 2020 through December 31, 2022, projections for T&D Customer Commitments.

A. In the time period of 2020, 2021, and 2022, Duquesne Light projects making $68.3 million of plant additions for T&D Customer Commitments. This amount funds hundreds of various sized projects to install overhead or underground distribution equipment requested by residential, commercial or industrial customers, or governmental agencies in accordance with Duquesne Light service policies.

Q. Please explain T&D System Capacity and Reliability as a primary reason for making plant additions.

A. Duquesne Light customers expect our electric system to provide the equipment capacity needed to assure reliability and voltage stability. Plant additions to the Duquesne Light electric system are required to ensure that it continues to meet those needs as customer load grows or the location of load shifts within the Duquesne Light service territory. The types of additions required to ensure service capacity and reliability include substation upgrades, circuit extensions and conversions to ensure the distribution system meets our customers' voltage and load requirements,

and the installation of new equipment to replace deteriorated, obsolete, or failed equipment.

Forecasts of plant additions needed to ensure T&D System Capacity and Reliability are identified through analysis of inspection and maintenance program results, reliability data analysis, reviews of customer requests, and an engineering review of load growth in particular areas.

Q. Please summarize the types of plant additions that are included in the January 1, 2020 through December 31, 2022, projections for T&D System Capacity and Reliability.

A. In the time period of 2020, 2021, and 2022, Duquesne Light's projections include making $515.6 million of plant additions for T&D System Capacity and Reliability. The T&D System Capacity and Reliability forecasted plant additions of $515.6 million includes $433.3 million of programs and projects to address emergent issues and to systematically replace equipment that is at the end of its useful life. The remaining $82.3 million is related to programs and projects approved as a part of the Company's current Long Term Infrastructure Improvement Plan ("LTIIP") for the period through December 31, 2022.

Q. Please describe the Company's major T&D System Capacity and Reliability plant additions through the FPFTY that are not included in the current LTIIP.

A. There are three major capital programs and projects included in the T&D System Capacity and Reliability category that are not included in the current LTIIP. They

are (1) the Pole Assessment, Repair, and Replacement Program, (2) the Establish Riazzi Substation Project, and (3) the Oakland Capacity and Resiliency Project.

Q. Please describe the Pole Assessment, Repair, and Replacement Program.

A. This program includes the replacement and repair of poles and any associated supporting equipment for distribution class voltages. Transmission poles that fail inspection are replaced under a separate program. As required by Duquesne Light's Inspection and Maintenance ("I&M")[1] plan, the Company inspects distribution poles on a 12-year cycle. The I&M plan also provides for the replacement of poles as necessary and appropriate based on the condition of the pole.

The Company anticipates making $61.3 million of plant additions in the period from 2020 through 2022 as a result of this program.

Q. Is this an increase from prior years?

A. Yes, Duquesne Light is projecting increased cost of plant additions for its Pole Assessment, Repair, and Replacement Program relative to prior years. A time-series of plant additions related to the Pole Assessment, Repair, and Replacement Program can be found in the following table.

[1] Duquesne Light files its Inspection and Maintenance plan with the PUC as required by 52 Pa. Code § 57.195. *See* Docket No. M-2009-2094773.

Table 7 - Pole Assessment, Repair, and Replacement Additions, 2017-2022

	2017	2018	2019	2020	2021	2022	'17-'22
	-	-	-	HTY	FTY	FPFTY	-
$ Millions	Actual	Actual	Actual	Actual	Forecast	Forecast	CAGR
Plant Additions	$9.9	$21.1	$24.7	$21.3	$22.1	$20.8	16.0%

The table, above, shows an increase in plant additions related to the Company's Pole Assessment, Repair, and Replacement Program beginning in 2018. This increase is driven both by an increased failure rate in the Company's pole inspections, which has resulted in the need to replace a larger number of poles, and by an increase in the number of poles contracted out for replacement due to internal resource constraints resulting from the need to replace more poles, which has resulted in a higher unit-cost than internally replaced poles. The increased failure rate that Duquesne Light has experienced is the result of a combination of the condition of the poles in the specific geographic areas being inspected and the implementation of a new, more accurate testing methodology by the Company. To help mitigate the increase in plant additions, Duquesne Light began in 2019 to reinforce, as opposed to replace, certain poles that did not pass inspection. These facts are seen in the following table.

Table 8 - Pole Inspections and Replacement, 2017-2022

	2017	2018	2019	2020	2021	2022	'17-'22
	-	-	-	HTY	FTY	FPFTY	-
	Actual	Actual	Actual	Actual	Forecast	Forecast	CAGR
Poles Inspected	18,363	17,955	18,325	17,781	18,181	18,000	(0.4%)
Inspection Failure Rate	7.4%	9.3%	10.6%	11.7%	11.5%	11.5%	9.3%
Poles Failed	1,354	1,662	1,949	2,074	2,091	2,070	8.9%
Poles Reinforced	-	-	186	463	455	450	N/A
Poles Replaced	1,175	1,614	1,998	1,644	1,808	1,620	6.6%
Plant Additions ($ Millions)	$9.9	$21.1	$24.7	$21.3	$22.1	$20.8	16.0%
Plant Additions / Pole Replaced	$8,426	$13,073	$12,362	$12,956	$12,223	$12,840	8.8%

This table illustrates a relatively constant level of Plant Additions related to pole replacements over the 2018 through 2022 period. Duquesne Light expects Plant Additions to remain generally around this same level through at least the time that the current twelve-year inspection and replacement cycle is completed.

Q. Please describe the Establish Riazzi Substation Project.

A. The Oakland area is a highly concentrated load center on the Duquesne Light system. There are four universities, three hospitals, two museums, and densely arranged homes, shops, and restaurants. Presently, this area is supplied by a single source, Oakland Substation. There are 22 circuits emanating from Oakland Substation with limited capacity ratings. The capacity ratings are limited due to the fact that Duquesne Light's distribution circuits are predominantly underground in Pittsburgh's urban Oakland neighborhood, and because underground distribution circuits located in the same duct bank cause each other to heat up, thermally, in a phenomenon known as "mutual heating." When distribution circuits are subject to thermal heating, they lose electric distribution capacity. Due to anticipated load growth and limited circuit ampacity, an additional power source to Oakland

Substation must be established in the form of a new 138 kV – 23 kV substation. This substation is to be known as Riazzi Substation, and it will be located centralized to Oakland Substation's load center. Riazzi Substation will provide power to customers in the neighborhoods of Oakland, Shadyside, Squirrel Hill, Greenfield, Hazelwood, and Point Breeze.

This project will establish a new bulk substation in the Panther Hollow area and adjacent to the underground Arsenal – Oakland 138 kV transmission line to allow the line to be looped into the station. The substation is to consist of a 138 kV ring bus with four bus sections; two 100 MVA, 138 kV–23 kV power transformers; and three 23 kV bus sections each containing five 23 kV circuit positions.

The Company anticipates making $36.7 million of plant additions in the period from 2020 through 2022 as a result of this project.

Q. Please describe the Oakland Capacity and Resiliency Project.

A. The establishment of Riazzi Substation provides an alternate power source to supply the Oakland area. The Establish Riazzi Substation project plan includes construction of the substation and two distribution circuit getaways. The Oakland Capacity and Resiliency Project will fully utilize Riazzi Substation by establishing additional distribution duct paths and circuits. This expansion is intended to alleviate forecasted overloads of Oakland Substation distribution circuits, eliminate Oakland Substation circuits in order to increase ratings of the remaining circuits, and transfer large customers from Oakland Substation to Riazzi Substation in order to be able to support these and other customers. The scope of this project is to install

and extend an additional seven 23 kV circuits and underground infrastructure in and around Riazzi Substation.

The Company anticipates placing $17.6 million of plant additions in service in the period from 2020 through 2022 as a result of this project.

Q. You mentioned that the T&D System Capacity and Reliability category included $82.3 million in LTIIP programs and projects. Please explain.

A. On April 15, 2016, Duquesne Light filed a Petition for Approval of its LTIIP ("LTIIP Petition") at docket number P-2016-2540046. In the LTIIP Petition, Duquesne Light requested that the Commission approve its proposal for accelerating the repair, improvement and replacement of aging infrastructure for the six-year period beginning January 1, 2017. The Company's LTIIP was approved on September 15, 2016.

On May 26, 2016, the Company filed a petition seeking approval of a Distribution System Improvement Charge ("DSIC"). By Order entered April 20, 2017, the Commission approved the Company's DSIC at docket number P-2016-2540046. The Company recovers some costs associated with its LTIIP through its DSIC. As explained in the testimony of Mr. Davis (DLC Statement No. 1) and Mr. Ogden (DLC Statement No. 16), the Company is proposing to roll current DSIC into base rates and to reset the DSIC rate to zero.

Q. Please explain T&D Support as a primary reason for making plant additions.

A. Meeting the critical needs of Duquesne Light customers requires more than an electric distribution system. It requires assets to support the workforce who operate and maintain that system and provide other services to the Company's customers. T&D Support plant additions include items such as new vehicle purchases needed to replenish Duquesne Light's fleet upgrades to existing facilities, and the construction of new facilities needed to support the Company's workforce.

Forecasts of plant additions for T&D Support are based on past experience for items such as facility upgrades, and on analysis of needs for items such as new facilities and vehicle replacements.

Q. Please summarize the types of plant additions that are included in the January 1, 2020, through December 31, 2022, projections for T&D Support.

A. In the time period of 2020, 2021, and 2022, Duquesne Light will anticipates making $80.7 million in T&D Support plant additions. These plant additions are primarily programmatic in nature, and include annual additions to vehicle, metering, facility, communications, and tools and testing equipment plant.

Q. Please explain IT Programs and Projects as a primary reason for making plant additions.

A. Meeting the critical needs of customers requires IT assets to support the workforce and systems that serve them.

Q. Please summarize the types of plant additions that are included in the 2020, 2021, and 2022 projections for IT Programs and Projects.

A. IT Programs and Projects plant additions include corporate applications, cyber security, and Supervisory Control and Data Acquisition ("SCADA"), amongst other needs. Forecasts of plant additions for IT Programs and Projects typically are based both on past experience, on analyses of future needs for items such as hardware and software upgrades or supplements, and on the specifics of projects' scopes. Some of these projects, like the OMS implementation, have a direct impact on Duquesne Light's reliability.

The Company anticipates placing $101.4 million of plant additions in service in the period from 2020 through 2022 as a result of IT Programs and Projects.

Q. Please describe the OMS Project.

A. The OMS Project is expected to automate Duquesne Light's methods of handling outages by utilizing a single system to group outages, track customers without power, manage crews, update estimated times of restoration, and initiate automated restoration verification.

The Company's outage management process currently relies on the use of paper maps, multiple computer applications and stand-alone databases to support outage restoration. In today's process, an Outage Analysis System ("OAS") processes customer calls and lists all electrical circuits in the vicinity. Employees manually group customer outages together once the affected circuit is identified

and estimate the total number of customers without power. The outage management process currently is labor intensive, as it requires teams of individuals to sort and group individual trouble tickets, estimate customers out of power, enter data into various computer systems, and perform manual customer callbacks.

The OMS implemented as part of this project will digitize and automate Duquesne Light's current outage management process. For instance, where Duquesne Light today has employees manually grouping customer outages together once the affected circuit is identified and estimating the total number of customers without power, in the future, the OMS automatically will group and count customers together based on their electrical connectivity to one another. Similarly, where the Company today must manually create the equivalent of a work order into a restoration-specific work management system to repair identified trouble, in the future, the OMS will serve as that same restoration-specific work management system and eliminate the need for "swivel-chair" data-entry or for electronic integrations between disparate restoration-related systems. With these improvements to digitize and automate Duquesne Light's existing outage management process, the Company believes that it should be able to decrease the time and resources required to restore electric distribution service to our customers following an outage.

The Company anticipates placing $10.1 million of plant additions in service in the period from 2020 through 2022 as a result of the OMS Project.

VI. VEGETATION MANAGEMENT

Q. Please describe the Company's vegetation management program.

A. Duquesne Light professionally manages a comprehensive vegetation program utilizing industry best management practices to provide safe and reliable distribution service. This program is specifically designed for the management of vegetation along Duquesne Light's rights-of-way ("ROW") for the dependable operation of its distribution (4kV, 23kV, and 23TkV) system and includes: (i) select tree pruning and removal within or along the ROW, (ii) hazard tree assessment and the removal of defective, dead, or diseased trees within or along the ROW, and (iii) the selective mechanical and/or chemical control of incompatible tall-growing brush within the ROW. Specific methods for line clearance are chosen based on the type of work involved while achieving it in a professional, economical, and environmentally sound manner. This year-round operation ensures that the safety and reliability of approximately 7,500 distribution circuit miles complies with regulatory standards. The present frequency of vegetation management activities for the distribution system ranges between four to six years.

Q. What level of cost is the Company projecting for its vegetation management program for the FPFTY?

A. In total, the Company plans to spend $20.8 million, comprising both expense and capital costs, for its vegetation management program in the FPFTY. The Company is requesting $11.3 million of vegetation management expense in the FPFTY for pruning and selective mechanical and/or chemical control of incompatible tall-growing brush within the ROW. Additionally, the Company plans to make $9.5

million of vegetation management capital expenditures in 2022 related to tree removals and other ROW clearing.

Q. Is this an increase from prior years?

A. Yes, the Company's projected spending for its vegetation management activities in the FPFTY does represent an increase from prior years. Duquesne Light is required to manage vegetation within or along 1,300 miles of distribution circuits annually, and these activities result in a mixture of both expense for pruning-type activities and capital for removal-type activities. Depending on the vegetation management needs of the specific distribution circuit-miles maintained in a given calendar year, the mixture of pruning-type (*i.e.*, expense) vs. removal-type (*i.e.*, capital) activities may fluctuate in a given calendar year. For this reason, looking at the total cost of vegetation management activities, defined as the sum of both the pruning-type (*i.e.*, expense) and removal-type (*i.e.*, capital) costs, provides the most meaningful view of the true cost of the Company's vegetation management program. Additionally, again dependent on the needs of the specific 1,300 circuit-miles maintained in a given calendar year, each expense, capital, and total vegetation management costs may fluctuate slightly from year to year. For this reason, a rolling arithmetic mean (*e.g.*, a three-year mean) provides a normalized sense of cost-levels. The following table provides time-series data for the Company's vegetation management costs.

Table 9 - Vegetation Management Costs, 2017-2022

	2017	2018	2019	2020	2021	2022	'17-'22
	-	-	-	HTY	FTY	FPFTY	-
$ Millions	Actual	Actual	Actual	Actual	Forecast	Forecast	CAGR
Expense	$11.7	$11.4	$11.9	$9.9	$8.7	$11.3	(0.8%)
Capital	$3.4	$3.4	$5.2	$9.0	$7.5	$9.5	23.1%
Total	$15.1	$14.8	$17.1	$18.9	$16.3	$20.8	6.6%
3-Year Mean	*$15.0*	*$15.2*	*$15.7*	*$16.9*	*$17.4*	*$18.6*	*4.4%*

Focusing on the "3-Year Mean" for the Company's total vegetation management costs, one can see that these costs are forecast to increase at a compound annual growth rate ("CAGR") of 4.4% over the 2017 to 2022 period. This increase is driven primarily by Duquesne Light's removal-type (*i.e.*, capital) costs, which are forecast to increase at a CAGR of 23.1% over the 2017 to 2022 period.

With specific respect to vegetation management expense, the above table also illustrates that, while 2020 and 2021 were relatively low years for expense, Duquesne Light's forecasted 2022 level for expense is in line with the 2017 through 2019 period.

With specific respect to vegetation management capital, it is worth noting that the one-time removal-type (*i.e.*, capital) activities ultimately should serve to reduce ongoing pruning-type (*i.e.*, expense) activities, thereby reducing the multi-year total cost of Duquesne Light's vegetation management activities for the Company's customers. Ultimately, Duquesne Light's vegetation management capital should reduce over time as fewer removal-type activities remain on or near the Company's ROWs, and the ongoing pruning-type activities should be lower than current levels since fewer vegetation units remain to be pruned.

Q. Why are the Company's vegetation management costs increasing for the FPFTY?

A. While the Company's planned FPFTY vegetation management costs of $20.8 million is an increase from prior years, this fact is more a function of the size and quantity of the vegetation-units of the specific circuits along which Duquesne Light plans to manage vegetation in the FPFTY than it is a reflection of either (1) a change in total circuit-miles to be maintained, which remain fixed at the Company's required 1,300 distribution circuit-miles per year, or (2) a change to the specifications in accordance with which Company's manages vegetation along its circuits.

Duquesne Light's total vegetation management cost is a function of the number of vegetation-units (*i.e.*, trees) along the 1,300 distribution circuit-miles per year that the Company manages. Duquesne Light's vegetation management contractors walk the distribution circuit-miles that the Company intends to manage each year and conduct an inventory of the different vegetation-units that will be managed. In this manner, the Company creates an annual work plan and associated cost forecast for the 1,300 distribution circuit-miles that it will maintain in a given calendar year.

Since 2017, Duquesne Light has increased its focus on removal-type (*i.e.*, capital) vegetation management activities as a means by which to improve the reliability of the Company's electric distribution service for the benefit of our customers. Specifically, Duquesne Light has been working to expand the removal

of vegetation units to the full width of the Company's ROW. Additionally, in cooperation with landowners adjacent to the Company's ROWs, Duquesne Light has removed trees alongside of, as opposed to within, the Company's ROWs to reduce the risk of certain trees falling into the ROWs and causing a service interruption. This focus on expanding the width of Duquesne Light's managed corridors has increased the number of removal-type (e.g., capital) vegetation units that the Company has encountered in managing vegetation within and along its annual requirement of 1,300 distribution circuit-miles, and this fact is reflected in Duquesne Light's increased cost of removal-type (*i.e.*, capital) vegetation management. These capital costs ultimately should decrease to lower levels once the Company has completed expanding the width of its managed corridors.

Q. What impact will the Company's FPFTY vegetation management program have on its reliability of service?

A. As discussed above, Duquesne Light expects to be removing more vegetation-units in the FPFTY than it did in the HTY and FTY. As each vegetation-unit along the Company's circuits poses a potential threat to reliability, Duquesne Light's plan to remove more vegetation-units in the FPFTY is anticipated to result in a commensurately increased level of risk-reduction for the Company with respect to vegetation-driven electric distribution service interruptions experienced by its customers, all else equal.

VII. CONSOLIDATED TAX SAVINGS ADJUSTMENT ("CTA")

Q. In Mr. Simpson's Exhibit MLS-2, he calculates the CTA to be $5.8 million. Has Duquesne Light used at least 50 percent of that amount to support reliability or infrastructure related plant additions?

A. Yes. Duquesne Light projects placing approximately $549.9 million of Distribution Plant additions in service in the period from 2020 through 2022, $82.3 million of which are attributable to LTIIP Initiatives. This leaves $467.6 million of Distribution Plant additions projected to be placed in service in excess of the Company's LTIIP plant in the period from 2020 through 2022. This $467.6 million amount is much greater than 50% of the $5.8 million amount that Mr. Simpson identifies as the CTA.

VIII. CONCLUSION

Q. Are the plant additions and other programs described in your testimony necessary?

A. Yes, they are. The plant additions and other programs described herein are necessary to meet the needs of Duquesne Light's customers.

Q. Has the Company included any plant additions related to its LTIIP in its rate base claim in this proceeding?

A. As explained in the Direct Testimony of Mr. Davis, DLC Statement No. 1, and Mr. Ogden, DLC Statement No. 16, the Company is proposing to roll its LTIIP-related plant additions and other DSIC-eligible rate base into base rates at this time and not recover further costs through the Distribution System Improvement Charge, until

such time as the Company's DSIC-eligible rate base investment exceeds the levels identified for the FPFTY.

Q. Does this conclude your direct testimony?

A. Yes, it does. I reserve the right to supplement my testimony through the course of this proceeding.

Exhibit BBM-1

Duquesne Light Company

January 1, 2020 through December 31, 2022 Projected Plant Additions (by Category)

($)

	2020	2021	2022	2021-2022	2020-2022
	HTY	*FTY*	*FPFTY*	*TOTAL*	*TOTAL*
TRANSMISSION & DISTRIBUTION					
Service Restoration	$39,639,571	$35,757,076	$35,933,174	$71,690,250	$111,329,820
Customer Commitments	20,966,621	23,596,974	23,717,968	47,314,942	68,281,563
Programs	58,029,045	66,657,723	68,854,350	135,512,073	193,541,118
Projects	45,469,321	105,193,380	89,095,976	194,289,356	239,758,676
LTIIP Initiatives	41,169,684	20,889,335	20,224,819	41,114,154	82,283,838
System Capacity and Reliability	144,668,050	192,740,438	178,175,144	370,915,582	515,583,632
Support	24,063,494	30,396,186	26,250,880	56,647,065	80,710,559
Sub-Total	$229,337,736	$282,490,673	$264,077,167	$546,567,839	$775,905,575
INFORMATION TECHNOLOGY					
Projects and Programs	26,342,784	37,322,002	37,716,555	75,038,557	101,381,341
TOTAL	$255,680,520	$319,812,675	$301,793,722	$621,606,397	$877,286,917

Exhibit BBM-2

Duquesne Light Company

January 1, 2020 through December 31, 2022 Projected Plant Additions (by FERC Account)

($)

	2020	2021	2022	2021-2022	2020-2022
	HTY	*FTY*	*FPFTY*	*TOTAL*	*TOTAL*
INTANGIBLE PLANT					
301 - Organization	$-	$-	$-	$-	$-
302 - Franchises and consents	-	-	-	-	-
303 - Miscellaneous intangible plant	12,703,108	29,647,233	27,232,316	56,879,549	69,582,656
Sub-Total	$12,703,108	$29,647,233	$27,232,316	$56,879,549	$69,582,656
TRANSMISSION PLANT					
350 - Land and land rights	$37,020	$-	$-	$-	$37,020
352 - Structures and improvements	(230,457)	1,451,472	-	1,451,472	1,221,015
353 - Station equipment	23,331,142	34,418,372	24,068,435	58,486,806	81,817,948
354 - Towers and fixtures	8,528,291	5,706,564	4,732,858	10,439,422	18,967,713
355 - Poles and fixtures	2,128,789	-	11,240,740	11,240,740	13,369,529
356 - Overhead conductors, devices	20,086,024	6,911,151	32,243,646	39,154,797	59,240,821
357 - Underground conduit	100,581	-	-	-	100,581
358 - Underground conductors, devices	(100,581)	-	11,354,566	11,354,566	11,253,985
359 - Roads and trails	-	-	-	-	-
382 - Trans computer equipment	-	-	-	-	-
383 - Trans intangible plant	-	-	-	-	-

Sub-Total	$53,880,809	$48,487,558	$83,640,245	$132,127,803	$186,008,612
DISTRIBUTION PLANT					
360 - Land and land rights	$-	$-	$-	$-	$-
361 - Structures and improvements	312,432	973,216	1,330,582	2,303,799	2,616,230
362 - Station equipment	17,912,406	27,022,055	8,611,115	35,633,170	53,545,576
364 - Poles, towers and fixtures	65,826,351	35,412,401	31,265,580	66,677,981	132,504,332
365 - Overhead conductors, devices	40,567,561	38,307,678	33,148,115	71,455,793	112,023,354
366 - Underground conduit	746,632	43,871,172	23,826,852	67,698,024	68,444,656
367 - Underground conductors, devices	16,809,585	15,558,996	19,744,819	35,303,815	52,113,399
368 - Line transformers	24,944,060	35,469,612	29,966,741	65,436,353	90,380,413
369 - Services	2,762,070	6,351,565	6,000,837	12,352,402	15,114,473
370 - Meters	7,065,279	5,433,694	5,465,856	10,899,550	17,964,829
371 - Installs customer premise	-	-	-	-	-
373 - Street lighting, signal system	1,918,068	1,613,451	1,621,983	3,235,433	5,153,502
Sub-Total	$178,864,443	$210,013,839	$160,982,481	$370,996,320	$549,860,763
GENERAL PLANT					
389 - Land and land rights	$-	$-	$-	$-	$-
390 - Structures and improvements	2,435,532	14,020,764	9,632,696	23,653,460	26,088,992
391 - Office furniture, equipment	(2,822,557)	8,132,416	10,822,001	18,954,417	16,131,860
392 - Transportation equipment	7,726,393	6,000,000	6,000,000	12,000,000	19,726,393
393 - Stores equipment	207,126	-	-	-	207,126
394 - Tools, shop, garage equipment	2,088,935	1,577,829	1,577,766	3,155,595	5,244,530
395 - Laboratory equipment	-	-	-	-	-
396 - Power operated equipment	-	-	-	-	-
397 - Communication equipment	596,731	1,933,036	1,906,217	3,839,253	4,435,984
398 - Miscellaneous equipment	-	-	-	-	-
399 - Other tangible property	-	-	-	-	-
Sub-Total	$10,232,160	$31,664,045	$29,938,680	$61,602,725	$71,834,885

ADVANCED METERING INFRASTRUCTURE (AMI) SURCHARGE PLANT					
303 - Miscellaneous intangible plant	$-	$-	$-	$-	$-
370 - Meters	-	-	-	-	-
397 - Communication equipment	-	-	-	-	-
Sub-Total	$-	$-	$-	$-	$-
TOTAL	$255,680,520	$319,812,675	$301,793,722	$621,606,397	$877,286,917

1

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2021-3024750

Duquesne Light Company

Statement No. 5

Direct Testimony of

Krysia Kubiak

Subjects: New Business Stimulus Rider and Crisis Recovery Program

Dated: April 16, 2021

I. INTRODUCTION

Q. Please state your full name and business address.

A. My name is Krysia Kubiak. My business address is 411 Seventh Avenue, Pittsburgh, PA 15219.

Q. By whom are you employed and in what capacity?

A. I am employed by Duquesne Light Company ("Duquesne Light" or "Company") as Director, External Affairs.

Q. What are your job responsibilities?

A. In my role with Duquesne Light, I oversee our teams that handle Regulatory Affairs, Government Affairs, Clean Energy and New Development Connections, which helps new customers with seamless transition to obtaining service for large construction projects.

Q. What is your educational background?

A. I am a licensed attorney in Pennsylvania. I graduated from Swarthmore College in 1994, and from the College of William and Mary, Marshall-Wythe School of Law in 1997 with a Juris Doctorate.

Q. Please describe your professional experience.

A. I am in my fourteenth year working for Duquesne Light. Prior to my current role, I worked as an attorney for the Company handling litigation, Pennsylvania Public Utility Commission ("PUC" or "Commission") complaints and legal work at PJM Interconnection

LLC ("PJM") and the Federal Energy Regulatory Commission ("FERC"). In those prior roles, I developed an in-depth working knowledge of the legal and regulatory frameworks that guided the Company's customer-engagement, rate-setting, and financial assistance programs.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to provide details supporting the proposal by Duquesne Light to create two tariff riders that assist new and existing businesses that have experienced financial hardship due to the COVID-19 pandemic. The remainder of my testimony is organized as follows: Section II describes the COVID-19 pandemic and the impact on the business community, Section III describes the New Business Stimulus Rider ("NBSR") proposal available to new customers in certain districts, and Section IV describes the Crisis Recovery Program ("CRP") available to existing business customers who have been financially impacted by the COVID-19 pandemic.

II. BACKGROUND

Q. Are you generally familiar with the COVID-19 pandemic?

A. Yes. In or around March 11, 2020, the World Health Organization and the Centers for Disease Control and Prevention ("CDC") declared a novel coronavirus ("COVID-19") a "public health emergency of international concern," and the U.S. Department of Health and Human Services ("HHS") Secretary declared that COVID -19 created a public health emergency. On March 6, 2020 Pennsylvania Governor Tom Wolf proclaimed the existence of a state-wide disaster emergency pursuant to 35 Pa. C.S. § 7301(c). Then, on

March 19, 2020, Governor Wolf issued an Executive Order mandating all non-life-sustaining businesses in Pennsylvania close their physical locations because of the COVID-19 crisis. As a result, many Pennsylvanians are experiencing financial hardship. On April 1, 2020, Governor Wolf issued a statewide stay-at-home order, allowing Pennsylvania residents to leave their homes only for certain allowable activities and travel. On April 15, 2020, the Pennsylvania Secretary of Health issued an order directing life-sustaining businesses to institute mitigation measures to protect the safety of employees and customers. As mitigation efforts through the spring and into the summer limited the spread of the virus, case counts were relatively low. In the fall of 2020, with the resumption of certain congregant activities and in-person business operations, a resurgence of the pandemic caused the Governor and Secretary of Health to repeatedly adjust their response and renew mitigation orders at various times relating to limiting gatherings in social settings, teleworking, business occupancy limits, alcohol sales and other restrictions on business operations. As part of the November 23, 2020 order, the Secretary observed, "Despite the efforts taken to date, the pandemic continues to spread, and taking action to prevent that spread while continuing to allow for necessary resumption of economic and social activity requires the Commonwealth to take steps to minimize the danger to Pennsylvanians as a result of participating in that activity." To limit spread related to Thanksgiving holiday travel, the Governor concurrently issued a stay-at-home advisory extending through January 4, 2021. That order halted all sit-down service for bars and restaurants. According to the Pennsylvania COVID-19 Mitigation Guidelines as of late January 2021, in-person businesses may operate at 75% occupancy, except in the following instances: self-certified restaurants are restricted to 50% capacity for indoor dining; on-

premises alcohol consumption is conditionally permitted until 11 p.m.; gyms and spas are restricted to 50% occupancy with appointments strongly encouraged; entertainment venues such as casinos, theaters, and shopping malls are permitted to open at 50% occupancy.

Governor Wolf further amended his November 23, 2020 order, directing Mitigation, Enforcement and Immunity Protections, such that on April 4, 2021 those businesses identified above with 50% capacity restrictions were allowed to expand operations to 75% occupancy. Social distancing, face covering, and other mitigation measures still apply.

While Duquesne Light supports these efforts to protect public health and reduce the spread of the COVID-19 virus, the Company recognizes that many businesses have been adversely and disproportionately affected as a result of the restrictions. Specifically, small businesses such as a restaurants, bars, gyms, child care centers and event venues have been the hardest hit throughout this pandemic. Despite the recently expanded capacity, negative residual impacts, including reluctant consumer behavior, will continue to affect businesses to a significant degree for the foreseeable future.

Q. How has the COVID-19 pandemic affected businesses in Duquesne Light's service territory?

A. Duquesne Light furnishes electric service to more than 600,000 customers throughout its certificated service territory, which includes all or portions of Allegheny and Beaver Counties and encompasses approximately 800 square miles in western Pennsylvania. Of the 600,000 customers, approximately 55,000 customers are commercial business accounts. According to a survey of economic impacts of the COVID-19 pandemic on

workers residing in Allegheny County conducted by the University Center for Social and Urban Research ("UCSUR") at the University of Pittsburgh, 20.1% of workers employed at the beginning of March 2020 were no longer employed and receiving a wage or salary at the time of the survey conducted between April 15 and May 8, 2020. 83.1% of these reported that their recent separation was due to COVID-19.

According to the Allegheny Conference on Economic Development's ("ACED") *Redefined Growth Outlook for Key Sectors and Near-term Solvency Risks for Small Businesses*, "... the region has lost over 200,000 jobs and has yet to recover 45% of them [as of October 2020]. This represents a deeper setback than we experienced during the Great Recession and even during the collapse of Pittsburgh's industrial economy in the early '80s." Further, ACED offers, "Small businesses in the Pittsburgh region are important engines of our region's economy, accounting for 99% of all businesses and 75% of all jobs. They play an integral role in every industry. Many of these businesses could not absorb the pandemic-induced economic shock and are struggling to remain open. It is vital that we shore up these lifelines for economies across our region, both related to jobs and tax revenue for our towns and boroughs and to the essential role they play in community vitality and sense of place. Many of these establishments are points of pride in our communities and for our people – and must be supported as we move forward." The ACED analysis indicates that between a quarter and a third of small businesses (14,000 - 21,000) in the Pittsburgh region, accounting for between 100,000 – 188,000 jobs, are at risk of closing permanently.

Data presently available to the Company demonstrates that small and medium commercial customers are struggling to make payments. Duquesne Light anticipates that

small and medium commercial customers who have made timely payments prior to the COVID-19 pandemic may increasingly become payment troubled due to the ongoing pandemic. As of September 2020, small and medium commercial customers in Duquesne Light's service territory are carrying approximately $2 million more in delinquencies compared to September 2019. The Company has observed that this payment difficulty has affected certain businesses disproportionately, while other businesses continue to operate with no delinquencies or delays in bill payment.

Q. Have certain industries been disproportionately impacted by the COVID-19 pandemic?

A. Yes. Due to the inherent nature of their operations, certain businesses are particularly challenged to operate effectively, or at all, under the restrictions imposed to mitigate the spread of the virus. Childcare centers, retail boutiques, restaurants, and bars have closed in Duquesne Light's service territory. Many of the businesses that were once the heart of small town "main streets" are now shuttered. Regional results mirror national data which indicates that leisure and hospitality sector jobs were hardest hit, with an 11.7% year-over-year increase in the December unemployment rate for restaurants, bars, and similar hospitality venues. Personal service sector businesses, such as laundry and dry-cleaning services, have also struggled to rebound, with a 4.2% year-over-year unemployment rate increase. Allegheny Conference data for the region indicates that leisure and hospitality sector employment has only rebounded to between 70-75% of pre-COVID levels.

A Penn State Harrisburg Institute of State and Regional Affairs report, *The Impact of COVID-19 on Pennsylvania Child Care*, estimates that at least 280 child care providers

will close permanently statewide, with another 1,000 at risk of closure. Those providers which remain open and operating will continue to struggle with reduced capacity (and thereby reduced operating revenue) and ongoing overhead, payroll and facility expenses.

Q. Based on the results of the analysis, has the Company developed a proposal to provide assistance to new or existing "main street" businesses in its service territory?

A. Yes. The Company has developed two riders that are designed to restore vitality on main streets and assist existing businesses that have experienced financial hardship due to the COVID-19 pandemic. The first rider is the New Business Stimulus Rider ("NBSR"): a temporary discount provided to new small and medium commercial customers to incentivize new business development in vacant "main street" store fronts. The second rider is the Crisis Recovery Program ("CRP"): a temporary program for small and medium commercial customers that have become payment troubled and developed delinquent balances as a result of the COVID-19 pandemic.

III. PROPOSED NEW BUSINESS STIMULUS RIDER

Q. Please summarize the Company's New Business Stimulus Rider ("NBSR") proposal.

A. Duquesne Light's NBSR is designed to assist new customers who are billed in accordance with the following rate schedules as defined in the Company's Retail Electric Tariff: General Service Small ("GS"), General Service Medium Heating ("GMH"), General Service Medium < 25 kW and General Service Medium > 25kW (collectively, "GM"). New GS, GM, and GMH customers who apply for new electric service in a vacant storefront after June 1, 2021 will be eligible for a reduced distribution rate for 2 years,

beginning at enrollment. Enrolled GS, GM, and GMH customers will receive a 30% discount on the variable base distribution charges (distribution kilowatt hour and demand) portions of their bills. Mr. O'Brien discusses the costs associated with the NBSR in his direct testimony, Statement No. 10.

Q. What is the purpose of Duquesne Light's NBSR?

A. The NBSR will help support the rebuilding of small communities' business districts by incentivizing new businesses to occupy and operate from vacant storefronts in certain communities in Duquesne Light's service territory by providing them with a reduced distribution rate for 2 years.

Q. How will the Company's NBSR attract or retain businesses in Duquesne Light's service territory?

A. Research conducted among GS, GM, and GMH businesses in February 2021 indicates that the NBSR is a welcomed opportunity for new businesses to get started on the right foot. A majority of respondents (70%) expect the reduced distribution rate to be valuable to new businesses, primarily because it provides some relief after incurring start-up costs, as well as allowing for business owners to focus on other factors related to growing the business.

Q. Is Duquesne Light's NBSR consistent with the PUC's mission?

A. Yes. The PUC's mission includes balancing the needs of consumers and utilities, furthering economic development. Both components of the Company's COVID-19

Stimulus Rider align with the PUC's mission to balance the need of utilities and customers, while also encouraging economic development.

Q. Who is eligible for the NBSR?

A. Duquesne Light's NBSR will be available to new retail customers who will be billed in accordance with the GS, GM, or GMH rate schedules who apply to establish new electric service in a vacant storefront or brick-and-mortar location after June 1, 2021 within a Local Neighborhood Commercial ("LNC") Districts, as defined by City of Pittsburgh Code of Ordinances, or Qualified Low-Income Census Tracts ("QCT") as defined by the United States Department of Housing and Urban Development, or Neighborhood Assistance Program ("NAP") Districts, as defined by the United States Department of Housing and Urban Development.

Q. How long will enrollees benefit from the NBSR?

A. The NBSR will provide a discounted rate for 2 years. Upon enrollment, eligible customers will receive a 30% discount on the variable base distribution portion of their bill for a period of no more than 2 years from commencing service or until December 31, 2024, whichever occurs earlier.

Q. How will the potential enrollees apply for the NBSR?

A. When potential customers call for service, the customer will be screened then for eligibility in the program, and a customer service representative will send the customer a link to the

form to certify that they fit the criteria. Upon review, the business will be notified if they are eligible for the program.

Q. How will the Company promote or otherwise identify eligible customers for the NBSR?

A. When promoting a program to customers, Duquesne Light uses multiple channels to ensure broad delivery across our diverse customer base. This program will be promoted in targeted bill messages directly to customers, through social media channels, email communication, and on the DuquesneLight.com website, where it will be featured on a relevant landing page and highlighted on a promotional basis on the homepage carousel. The Company will also proactively reach out to development corporations and other community-based non-profit organizations to promote the program. Customers will be referred to contact the Company's Business Contact Center, consisting of a group of Customer Service Representatives ("CSRs") who are trained to address questions presented by small and medium commercial customers.

Q. Are NBSR customers eligible for other discounts offered by the Company during their enrollment?

A. No. Enrolled NBSR customers will be billed in accordance with the NBSR tariff provisions for a period of no more than 2 years from commencing service or until December 31, 2024, whichever occurs earlier. The tariff provision for the NBSR is shown on Mr. Ogden's Exhibit DBO-1, which is the proposed tariff supplement to the currently

effective Tariff Electric Pa. P.U.C. No. 25 implementing the proposed rates, riders and tariff revisions in this proceeding.

Q. What is the expected cost associated with implementing the NBSR, and how was it derived?

A. The Company has estimated that it will provide approximately $276,000 in discounts to enrolled customers. The discount cost estimate is based on an average of 270 new GS, GM, and GMH customers per year across Duquesne Light's service territory and assumes 100% enrollment.

Q. How is Duquesne Light proposing to recover the costs associated with the NBSR?

A. Duquesne Light proposes to recover the costs waived in accordance with the NBSR by incorporating the cost of the program into rates for GS, GM, and GMH customers. The Company is proposing to directly assign these costs to the rate classes that are eligible to participate in the COVID related programs (GS, GM<25, GM>25, & GMH). The direct assignment is reflected within the Company's allocated cost of service model and will be reflected in each applicable customer class's base rates. The proposed costs are reflected on Exhibit DLC 2, Schedule D-13 within the Company's Fully Projected Future Test Year. The average bill impact is estimated to be an average of $0.28 per month.

Q. Do you believe that the proposed NBSR is cost-effective and reasonable?

A. Yes. This program is cost-effective in that it provides assistance for business customers at the time that they need assistance the most – in the beginning of their business, when most

businesses lose money. It is a reasonable cost for existing customers that will end up as a significant benefit for the enrollees. Additionally, it is a well-timed program since it incentivizes customers to begin businesses at a time there may still be impacts from the pandemic. Furthermore, the program will benefit other businesses in the area, by increasing the foot traffic on the "main street" corridors, which increases traffic for existing businesses.

IV. PROPOSED CRISIS RECOVERY PROGRAM

Q. Please describe the Company's Crisis Recovery Program ("CRP").

A. Duquesne Light's CRP is designed to assist existing GS, GM, or GMH customers who did not have an overdue account balance on February 29, 2020, but have since accumulated a balance. Program participants will have their existing delinquent account balances temporarily frozen over a period of 6 bills, beginning with the first bill that renders 6 or more days after enrollment.

Q. Who is eligible for the CRP?

A. Existing customers billed in accordance with rates GS, GM, or GMH who did not have an overdue account balance on February 29, 2020, but have since accumulated a balance are eligible for the CRP. Existing customers who already have a payment arrangement on their account are also eligible, as long as they have complied with their existing payment arrangement. A customer who established service after February 29, 2020 and has since accumulated a balance would also be eligible for the CRP. Importantly, the customer must

demonstrate being impacted by the COVID-19 pandemic or subsequent orders from the Governor.

Q. For how long would the CRP participant's balance be frozen?

A. CRP customers will have 25% of their frozen delinquent account balance forgiven if they pay their electric charges in full at the end of 6 billing cycles, beginning with the first bill that renders 6 or more days after enrollment. The Company will not pursue termination or collection action on the frozen account balance until after the due date for the sixth bill has lapsed. Accordingly, timely payment for each bill rendered while the delinquent balance is frozen is not required.

Q. What happens at the end of the 6-bill period?

A. It depends on whether the enrolled customer paid their non-frozen electric charges in full at the end of 6 billing cycles. If the enrolled customer pays all their non-frozen electric charges, then 25% of the customer's frozen balance will be forgiven, and the customer will receive an 18-month payment arrangement on any remaining balance, unless the customer agrees to a shorter payment arrangement timeframe. If the enrolled customer does not make the appropriate payment, then the customer will receive an 18-month payment arrangement on the entire delinquent balance. Customers will be responsible for paying their monthly electric charges in addition to their payment arrangement amount each month until their balance is paid in full.

Q. Who is responsible for administering the CRP?

A. Duquesne Light Company's Business Contact Center will administer the CRP by verifying eligibility and setting up payment arrangements.

Q. How will Duquesne Light promote or otherwise identify potential CRP customers?

A. When promoting a program to customers, Duquesne Light uses multiple channels to ensure broad delivery across our diverse customer base. The CRP will be promoted in targeted bill messages directly to customers, through social media channels, email communication, and on the DuquesneLight.com website, where it will be featured on a relevant landing page and highlighted on a promotional basis on the homepage carousel. The Company will also proactively reach out to development corporations and other community-based non-profit organizations to promote the program. Customers will be referred to contact the Company's Business Contact Center, consisting of a group of Customer Service Representatives ("CSRs") who are trained to address questions presented by small and medium commercial customers.

Q. How will the Duquesne Light administer the CRP?

A. Once the customer is confirmed eligible for the CRP, the customer's existing account balance will be frozen for 6 billing cycles. Approximately 10 days before the end of the six billing cycles, the customer will receive a reminder that the customer must pay all charges billed since enrollment into the CRP in order to be eligible to have 25% of the account balance waived and an 18-month payment arrangement placed on the account for the remaining balance. The Company will evaluate the CRP customer's account balance at the end of the six billing cycles, and if the customer has paid non-frozen charges at the

end of the six billing cycles, the Company will waive 25% of the frozen account balance and provide the customer with an 18-month payment arrangement. Customers will be permitted to enter into shorter payment arrangements if desired.

Q. Under the proposal, when is the CRP expected to be complete?

A. The CRP is designed to be a temporary program and enrollment in the CRP will end on June 30, 2022.

Q. Are CRP customers eligible for other rate discounts offered by the Company during their enrollment?

A. No. Enrolled CRP customers will be billed in accordance with the CRP tariff provisions. The tariff provision for the CRP is shown on Mr. Ogden's Exhibit DBO-1, which is the proposed tariff supplement to the currently effective Tariff Electric Pa. P.U.C. No. 25 implementing the proposed rates, riders and tariff revisions in this proceeding.

Q. Please describe the benefits that the Company expects to achieve with the CRP.

A. As stated above, many businesses are in danger of closing due to the financial pressures of the pandemic. This program gives a break to those customers and makes it easier for them to begin the process back to a full recovery. The company hopes that the 6 month break from paying on their balance along with the 25% reduction in debt will allow these businesses to start the post-pandemic time with a clean slate. Research conducted among GS, GM, and GMH business owners in February 2021 revealed that a strong majority (78%) were negatively impacted by the COVID-19 pandemic. More than one-half of

respondents (54%) cite concern for their business's ability to recover from the pandemic. In addition, 75% report knowing of at least one small or mid-sized business in their community that is considering closing their business as a result of the pandemic. Further, more than one-half of those surveyed (58%) believe that support for struggling small businesses is insufficient. The CRP is viewed favorably among many customers surveyed, citing the opportunity to relieve a burden and focus on other expenses and recovery efforts. About one-half of customers surveyed (54%) believe that the 25% reduction will provide much needed relief to struggling businesses in the community and 44% believe it will allow for a quicker recovery.

Q. What is the expected cost associated with implementing the CRP, and how was it derived?

A. The write-off portion of the CRP program is estimated to be $400,000, depending on enrollment, which was calculated by comparing current delinquencies in the GS, GM, and GMH rate classes with the historical delinquencies of the same rate classes.

Q. How is Duquesne Light proposing to recover the costs waived in accordance with the CRP?

A. Duquesne Light proposes to recover the costs waived in accordance with the CRP by incorporating the cost of the program into rates for GS, GM, and GMH customers. The Company is proposing to directly assign these costs to the rate classes that are eligible to participate in the COVID related programs (i.e. GS, GM<25, GM>25, & GMH). The direct assignment is reflected within the Company's allocated cost of service model and will be

reflected in each applicable customer class's base rates. The proposed costs are reflected on Exhibit DLC 2, Schedule D-13, within the Company's Fully Projected Future Test Year. The average bill impact is estimated to be $0.31 per month.

Q. Do you believe that the proposed CRP is cost-effective and reasonable?

A. Yes. This program allows customers a chance to get their feet under them. After facing months of losses, experts predict that 2022 will be a time for recovery. However, if businesses are still dealing with old debts that occurred during the pandemic, it will be difficult for them to move forward. This program gives businesses an incentive to pay their bill regularly, while giving them a discount for their effort.

Q. Does this conclude your Direct Testimony at this time?

A. Yes. I reserve the right to supplement my testimony through the course of this proceeding.

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2021-3024750

Duquesne Light Company

Statement No. 6

Direct Testimony of Yvonne Phillips

Subject: Master Metering Proposal

Date: April 16, 2021

DIRECT TESTIMONY OF YVONNE PHILLIPS

Q. Please state your full name and business address.

A. My name is Yvonne Phillips. My business address is Duquesne Light Company, 411 Seventh Avenue, Pittsburgh, PA 15219.

Q. What is your position at Duquesne Light Company?

A. I am employed by Duquesne Light Company ("Duquesne Light" or "Company") as Director, Meter Operations.

Q. How long have you worked at Duquesne Light?

A. I have been employed by Duquesne Light since 2014.

Q. What are your current responsibilities?

A. I currently oversee the Meter Operations organization which includes Field Metering, Meter Shop, Meter Engineering, and our Smart Meter Operations Center.

Q. What are your qualifications, work experience and educational background?

A. I graduated from Seton Hill University with an MBA in 2004. I've held various utility management positions through my career with approximately 15 years in Metering.

Q. Are you sponsoring any exhibits, parts of exhibits or responses to the Commission's filing requirements as part of your direct testimony?

A. I am sponsoring the revision to tariff Rule 41 and the addition of Rule 41.1, included within witness Ogden's Exhibit DBO-1.

Q. What is the purpose of your direct testimony?

A. I address the Company's proposal to allow master-metering of certain new multifamily residential premises.

Q. Does the Company's tariff currently allow master metering of new residential multifamily premises?

A. No. Currently, Rule 41 of the Company's retail tariff prohibits residential master metering, providing that each residential dwelling unit in a building must be individually metered by the Company for buildings connected after January 1, 1981. Residential master metering would also violate tariff Rule 18, which provides that all electric energy shall be consumed by the customer to whom the Company supplies and delivers such energy, with limited exceptions.

Q. Why has the Company historically prohibited master metering of new residential multifamily premises?

A. The Company has not allowed master metering for residential customers for several reasons.

First, individual metering helps to ensure the Company can provide critical customer protections and assistance programs. For example, the Company's Customer Assistance Program (CAP) offers benefits to low-income customers that are linked to the customer's individual Duquesne Light account. Without visibility to residential customers through single metering applications, these programs cannot be afforded to all eligible customers.

Second, individual metering affords customer access to advanced metering infrastructure (AMI) functionalities, such as increased customer visibility to their interval data, usage tracking tools, and suggestions on how customers can conserve energy.

Third, individual metering allows residential customers to choose their own electric generation supplier (EGS).

Fourth, individual metering protects against inappropriate or illegal use of landlord-owned tenant submeters. For example, landlord-owned tenant submeters installed behind a utility master meter could enable unscrupulous landlords to overcharge their tenants for electricity, or turn off tenants' electricity as a means of eviction.

Q. Why is the Company making a proposal regarding master metering in this proceeding?

A. The Company is making a proposal in this proceeding pursuant to the Joint Petition for Settlement in its last base rates proceeding, Docket No. R-2018-3000124 ("Settlement"). Paragraph 59 of the Settlement provides:

> Within 180 days of the effective date of rates, Duquesne Light will convene a non-confidential collaborative with all parties to the proceeding, and all interested stakeholders who are developers of multifamily housing within its service territory, to discuss the feasibility of revising its retail tariff to permit master-metering of multifamily housing. Parties to the collaborative will specifically consider:
>
> a) Under what circumstances master-metering would be permitted, and the factors Duquesne Light would require a building owner to meet before approving a master-metering configuration;
> b) The impact that any such tariff change would have on low income tenants' ability to continue to afford utility service;
> c) The impact of individual customers not utilizing Advanced Metering Infrastructure ("AMI") meters; and
> d) The impact that any such change would have on the Company's revenue allocation and the ability to meet its projected revenue requirements.
>
> The parties to the collaborative will make a good faith effort, in coordination with the Company, to develop consensus on the scope of a tariff revision that permits master-metering, taking into consideration all of the foregoing factors. Additional collaborative meetings will be held thereafter, as necessary, but not less than on an annual basis, in an effort to reach consensus on any issues which remain unresolved after the first collaborative is held. Based on feedback from the collaborative meetings, Duquesne Light will present a proposal regarding master-metering of multifamily housing buildings as a part of its next general base rate case. The treatment of any alleged confidential information during the collaborative will be subject of an agreement of the parties and stakeholders participating in the collaborative.

Collaborative meetings were held on June 19, 2019, and February 24, 2021.

Q. Please summarize the Company's master metering proposal.

A. The Company is proposing to permit master metering for new residential multifamily premises where the premise:

- Is a new service (i.e., new construction or otherwise newly connected to the Company's distribution system);
- Is master-metered through entire building (i.e., no individual tenant meters);
- Has a minimum of four dwelling units; and
- Is low-income supportive housing. "Low-income supportive housing" refers to housing that is permanently available to low-income tenants where the housing provider is responsible for utility bills. To be eligible to master-meter a given residential building, in addition to satisfying the other eligibility criteria, a provider of low-income housing must either: (1) show that the building is a Public Housing Authority development, or (2) certify annually that all tenants are (i) eligible for a Housing Choice Voucher (HCV), available to residents who make 50% or less of the median family income, or (ii) have household incomes equal to or less than 150% of federal poverty guidelines.

Customers that are master metered under this proposal would also be subject to additional ongoing requirements, which I discuss later in my testimony. If a customer master metered under this proposal subsequently falls out of compliance with these eligibility criteria or ongoing requirements, they will be required to update the building's electrical systems, at customer expense, to allow the Company to separately meter each residential dwelling unit.

Q. Why is the Company proposing to limit master metering to new services?

A. The Company is proposing to limit master metering to new services for several reasons. First, converting an existing building from individual- to a master-metered service would deprive tenants of the benefits and protections provided through the individual customer meter, which I discussed earlier in my testimony. Also, conversions of existing services may produce inter- and intra-class revenue allocation impacts. Individually-metered dwelling units are billed on residential rates, whereas master-metered buildings are billed on nonresidential rates. Shifting existing loads between customer classes would therefore produce unpredictable corresponding shifts in revenue allocation. Finally, the new-service requirement mirrors the Company's original adoption of the residential master metering prohibition, which per Rule 41, applies on a proactive basis only to buildings connected after January 1, 1981.

Q. How did the Company derive the minimum threshold of four dwelling units?

A. The Company has historically applied this four-unit threshold for "multifamily buildings" in each of its Act 129 Energy Efficiency & Conservation ("EE&C") programs. Maintaining this threshold will support consistency across Company programs. Furthermore, this requirement will probably not substantially limit master-metering participation. The Company expects that the majority of multifamily housing that would satisfy the Company's other proposed master-metering eligibility criteria would already be designed to four units or larger.

Q. Why is the Company proposing to limit master metering to supportive housing?

A. This proposal responds to expressed stakeholder interest and is intended to ensure tenant protections. Parties' input in the Company's last base rates case, and in the subsequent collaborative meetings, suggested that supportive housing was a high stakeholder priority for master metering. The Company presented its plans for supportive housing master metering at the collaborative meeting held on February 24, 2021, which met with a positive response from the external stakeholders in attendance.

To an extent, supportive housing can be a substitute for the utility assistance programs available to individually-metered low-income customers. As I discussed above, these programs are not available to tenants of master-metered premises. However, it is my understanding that supportive housing provides tenants with other benefits that may help fill this gap. For example, based on stakeholder input, I understand that providers of supportive housing typically pay their tenants' electric bills, whether the building is individually- or master-metered. This mitigates the drawbacks of low income tenants not being able to participate in CAP.

Q. Will master metered customers be subject to any additional requirements?

A. Yes. Master metered housing providers may not resell electricity delivered to the building, such as through a tenant sub-metering arrangement. Such resale is already prohibited under the Company's tariff Rule 18, but is restated here for avoidance of doubt. Master metered housing providers will be required to participate in the

Company's applicable EE&C and LIURP programs, to ensure maximum benefits to low-income tenants. Master metered housing providers will be required to annually recertify their compliance with applicable master metering requirements, including tenants' household incomes or HCV eligibility where applicable, so the Company will know when a building will need to become individually metered. Finally, the master metered housing providers must post a security deposit, in an amount not to exceed two months' estimated bills, for the duration of the master metering.

Q. Why is the Company proposing to retain the customer's security deposit for the duration of master metering?

A. Compared to an individually-metered building, a master metered building may represent increased collections risk if the landlord defaults on their electric bills. Individual metering allows the Company to engage directly with payment-troubled occupants, and where necessary, to terminate service to individual units. Terminating service to a master metered building, on the other hand, is "all or nothing." Such service terminations are therefore subject to extensive additional process and tenant protections under sections 1521-1533 of the Public Utility Code. In light of the practical and legal issues associated with landlord-ratepayer customer collections, it is reasonable to allow the Company to retain these master metered customers' security deposits.

Q. Does this conclude your direct testimony?

A. Yes. I reserve the right to supplement my testimony through the course of this proceeding.

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2021-3024750

Duquesne Light Company

Statement No. 7

Direct Testimony of Katherine M. Scholl

Subject: Residential Customer Assistance Programs

Dated: April 16, 2021

Introduction and Summary

Q. Please state your full name and business address.

A. My name is Katherine Scholl. My business address is 411 Seventh Avenue, Mail Drop 15-1, Pittsburgh PA 15219.

Q. **What is your position at Duquesne Light Company ("Duquesne Light" or "Company")?**

A. I am the Director of Billing and Revenue Management.

Q. How long have you worked at Duquesne Light?

A. I have been with Duquesne Light since May 2016.

Q. What are your current responsibilities?

A. In my current position, I oversee three areas: 1) Billing; 2) Credit and Collections; and 3) Universal Services.

Q. What are your qualifications, work experience and educational background?

A. I attended Duquesne University, where I graduated Magna Cum Laude with a Bachelor of Science in Business Administration and also completed my Masters in Business Administration with High Honors.

I joined Duquesne Light in 2016 as the Director of Customer Experience. In that role, I oversaw several areas including Energy Efficiency/Act 129; Universal Services; Transportation Electrification; Customer Research and Experience

Recovery; and the more broad-based customer experience function, which included oversight of customer interfaces including the website, mobile application, and interactive voice response (IVR) system.

Prior to joining Duquesne Light in 2016, I spent nearly ten years at Giant Eagle Inc. in Pittsburgh, where my responsibilities included directing various aspects of customer relationship management (CRM), including the design and administration of loyalty programs, targeted marketing, and customer data analytics. I was also responsible for the company's Payment Acceptance Strategy, which involved optimizing relationships with payment systems providers to balance the cost of meeting customers' preferences for using various forms of tender with the cost of payment acceptance.

Prior to joining Giant Eagle, I spent seven years at Acxiom Corporation providing customer acquisition and relationship management consulting services to top credit card issuers in the United States and the United Kingdom. Prior to joining Acxiom Corporation, I spent 6 years in various roles in Consumer Lending and Credit Card management at Mellon Bank.

Q. Have you testified before the Pennsylvania Public Utility Commission ("PUC" or "Commission") in prior proceedings?

A. Yes. I have testified in Duquesne Light's 2018 base rate proceeding at Docket No. R-2018-3000124 and the Company's Default Service Plan IX ("DSP IX") proceeding at Docket No. P-2020-3019522.

Q. What is the purpose of your direct testimony in this proceeding?

A. The purpose of my testimony is to describe existing and proposed residential customer assistance programs available to help Duquesne Light customers recover from the economic impacts of the COVID-19 pandemic. These programs provide long term or short term assistance designed to help customers maintain affordable electric service based on the individual needs of the customer segment.

II. Universal Service and Energy Conservation Plan

Q. Please describe the Company's existing Universal Service and Energy Conservation Plan ("USECP").

A. Duquesne Light's USECP includes 4 programs: 1) Customer Assistance Program ("CAP"), 2) Customer Assistance Referral and Evaluation Services ("CARES"), 3) the Hardship Fund, and 4) Smart Comfort/ Low Income Usage Reduction Program ("LIURP").

Q. Please describe CAP.

A. CAP is a special payment program for payment-troubled customers with a gross household income at or below 150 percent of Federal Poverty Level ("FPL"). The program is designed to provide long term assistance to low income customers. Most CAP customers are required to recertify their income every two years; customers reporting zero income are required to recertify every six months. CAP customers are given a discount on their monthly electric service bill based on their income. In 2018, the Commission approved the implementation of a percentage of

payment plan ("PIPP") for Duquesne Light CAP customers.[1] Under the current plan, CAP customers are billed in one of three ways: 1) a percentage of their monthly gross household income, as outlined in the chart below; 2) the average monthly bill; or 3) their actual usage if less then PIPP and average monthly bill.

Q. Please explain the PIPP tiers.

A. Under the Company's CAP, customers are billed in accordance with the following tiers:

Income Category	Residential Service Percent of Income Payment:	Residential Electric Heat Percentage of Income Payment:
Up to 50% FPL	2%	6%
51% to 100% FPL	4%	10%
101% to 150% FPL	4%	10%
*Minimum Payment	$20	$40

Q. Please explain the Average Monthly Bill method.

A. If the customer's average monthly bill (based on a 12 month rolling average that would otherwise be the budget billing payment) is less than what the CAP bill would be as determined under the PIPP, the customer's monthly payment will equal the 12 month average bill. The monthly payment is reviewed and updated (if necessary) every four months to determine whether the customer is best served in the PIPP or in the Average Monthly Bill plan. The average monthly bill is not the budget amount and is not subject to reconciliation.

[1] *See Duquesne Light Company Universal Service and Energy Conservation Plan*, Order on Reconsideration, at Appendix A (entered April 19, 2018, at Docket No. M-2016-2543423).

Q. Please explain the actual usage method.

A. If the customer's bill based on their actual usage is less than what the CAP bill would be as determined under the PIPP or average monthly bill methods, the customer's payment will be based on their actual usage for that month. Customers whose actual usage in any given month results in a bill that is less than the Minimum Payment are billed based on actual usage.

Q. How are customers with $0 income billed under the new PIPP program structure?

A. Customers who report $0 income are required to make the minimum CAP payment. As a cost containment measure, the Company requires a monthly minimum CAP payment amount of $20 for residential service customers, and $40 for residential heating customers (except where a customer's actual usage in a given month results in a bill that is less than the minimum payment; in which case, the customer is billed based on actual usage). The mandatory minimum payment ensures that CAP customers pay a portion of their energy costs while helping to control costs borne by non-CAP residential service customers.

Q. Other than a monthly discount, has the Company provided any additional payment assistance for customers enrolled in CAP?

A. Yes. When the Company implemented its new PIPP structure in January 2021, CAP customers were provided the opportunity to earn forgiveness of their entire delinquent balance. All CAP customer delinquent balances were frozen and will be forgiven over a twenty-four month period if the customer makes the required

monthly payments. The total customer delinquency associated with CAP accounts was approximately $10.5M. The Company will recover 55% of the CAP account delinquent amount through Rider No. 5 related to Universal Services. The Company is not seeking recovery of the remaining 45% of the CAP account delinquent amount.[2] Accordingly, CAP customers have been provided a fresh start under the new program, and are virtually guaranteed affordable bills based on their income moving forward.

Q. Is the Company proposing any changes to its CAP in this proceeding?

A. No, except to update the participation level to reflect the estimated CAP enrollment in 2022 to 35,853, as identified in witness Ogden's Exhibit DBO-1. The Company's USECP is currently pending Commission review at docket number M-2019-3008227. The newly implemented CAP provides affordable payments as described in the Commission's *Policy Statement on Customer Assistance Programs* at 52 Pa. Code §§ 69.261- 69.267. The merits of the Company's USECP are presently being considered in a prior proceeding. No additional changes are proposed in this proceeding.

Q. Please describe the CARES program.

A. Duquesne Light's CARES program assists payment-troubled and special needs customers to obtain necessary social service support and assistance. The CARES program serves an important function in connecting customers in need of assistance

[2] *See Duquesne Light Company Universal Service and Energy Conservation Plan*, Order on Reconsideration (entered April 19, 2018, at Docket No. M-2016-2543423).

with community resources. The program focuses on residential customers whose income is at or below 150% of the FPL and senior citizens whose income is at or below 200% of the FPL. Customers may be referred to CARES by internal and external sources including but not limited to other Duquesne Light departments, other utility companies, community based organizations ("CBOs") (e.g., Holy Family and Catholic Charities), the PUC, or word of mouth. An outreach worker or community agency acts as an intermediary between the customer and the Company in an effort to link the customer to the necessary social service programs that will enhance the customer's ability to pay for electric service.

Q. Is the Company proposing any changes to its CARES program in this proceeding?

A. No. The Company's USECP is currently pending Commission review at docket number M-2019-3008227. The merits of the Company's USECP are presently being considered in that proceeding. However, it is important to highlight the availability of these programs given the Company's request for base rate increase as a reminder that Duquesne Light continues to work to provide needed assistance to its customers.

Q. Please describe the Hardship Fund.

A. Duquesne Light's Hardship Fund is administered by the Dollar Energy Fund ("DEF"). The primary features of the DEF include direct financial assistance for customers with overdue energy bills, protection against termination for nonpayment, and referral to other programs and services. The Hardship Fund

operates from October 1st of each year and continues until funds are depleted. DEF is designed specifically for lower-income residential customers (household income at or below 200% of the FPL) who are unable to pay their electric service. Approved applicants receive a grant of up to $500 based on overdue balance. A household can receive only one Dollar Energy Fund grant during a program year. Upon receipt of the grant, a 30-day stay on termination is placed on the account.

Q. Is the Company proposing any change to the Hardship fund in this proceeding?

A. No. The Company's USECP is currently pending Commission review at docket number M-2019-3008227 and no additional changes are proposed in this proceeding.

Notably, in April 2020, Duquesne Light was granted permission by the Commission to temporarily expand DEF eligibility to customers up to 250% of the FPL and to increase the maximum grant amount to $1,000. The Company also contributed an additional $750,000 to the DEF program which enabled an additional ~1,300 customer grants in 2020. This is another example of how the Company has, and will continue to seek ways to balance affordability with the need to invest in the infrastructure to maintain safe, reliable and affordable service to our customers.

Q. Please describe the Smart Comfort Program.

A. Smart Comfort is Duquesne Light's Low-Income Usage Reduction Program ("LIURP"). The program targets residential customers whose gross household

income is less than 150% of the FPL and senior citizens whose gross household income is less than 200% of the FPL, with base load electric usage more than 500 kWh per month and who have been residing at their current address for at least six months. Smart Comfort has evolved from strictly weatherization to an "end use" strategy. Usage reduction measures include cost effective appliance and lighting replacements in addition to determining if weatherization is warranted. Additionally, low-income customers, whose base load usage is less than 500 kWh per month, are referred to Watt Choices (Duquesne's Energy Efficiency / Act 129 program. Through the Smart Comfort program, the Company provides energy efficiency and conservations measure to low income customers to help reduce their electric service bill. Recently, the Company has established an allowance for health and safety that authorizes LIURP contractors to spend up to $200 per electric baseload Smart Comfort visit without prior Company approval on incidental repairs including health and safety items when necessary to allow for conservation measures to be installed. For electric heating customers, the Company will authorize the Smart Comfort contractor an allowance up to $600 per Smart Comfort visit without prior Company approval where the inclusion of health and safety and incidental repair will remedy situations that would otherwise impede the installation of conservation measures.

Q. Is the Company proposing any changes to the Smart Comfort program in this proceeding?

A. No. The Company's USECP is currently pending Commission review at docket number M-2019-3008227 and no additional changes are proposed in this proceeding.

Q. How does the Company recover its cost for the USECP?

A. The cost of Duquesne Light's four USECP programs are recovered though Rider No. 5 – Universal Service Charge ("USC"). The USC is a cost recovery mechanism to recover the costs incurred by the Company to provide its USECP. The USC is applicable to all residential customers who take distribution service under Rate Schedules RS, RH and RA except for residential customers in the CAP. The Company's allocation of universal service cost to residential customers is consistent with Commission precedent and principles of cost allocation. The Company is not proposing changes to its cost recovery mechanism in this proceeding.

III. Residential COVID-19 Debt Relief Program

Q. Is Duquesne Light proposing any additional residential customer assistance programs in this proceeding?

A. Yes. The Company is proposing a new temporary residential COVID-19 debt relief program. Unlike the Company's existing universal service programs, the COVID-19 debt relief program is a short-term program designed to provide targeted assistance to low to moderate income customers with delinquencies as a result of the pandemic.

Q. Please describe the residential COVID-19 debt relief program.

A. The residential COVID-19 debt relief program is available to non-CAP customers earning 151% - 300% FPL with a delinquent balance of at least $100. Under the program, customers who make a payment will receive matching forgiveness up to $300 and a payment arrangement up to 36 months on the remaining unpaid balance. Grants will be awarded to qualified applicants on a first come first serve basis. Total forgiveness will not exceed the total program budget of $3 million.

For customers or applicants seeking restoration, the Company will also waive the reconnection fee and restore service if 25% of outstanding balance is paid. Subject to approval, the program would begin January 15, 2022 and remain open until the earlier of March 31, 2022 or when funding is exhausted.

Q. What is the program budget?

A. $3 million for grants plus $500,000 in administrative costs, which include technology development, resources for processing applications and customer inquiries, and marketing/promotional costs.

Q. How can customers apply for the residential COVID-19 Relief Program?

A. Customers will be able to apply online. Additionally, the Company is exploring opportunities to accept applications through a Community Based Organization such as the Dollar Energy Fund, and/or through the Company's own Contact Center.

Q. Does the Company plan to advertise the program?

A. Yes. The Company plans to advertise the program through bill messages and/or inserts, social media, and emails to customers.

Q. Are the costs for the residential COVID-19 Relief Program included in the Company's claim?

A. Yes. The total costs of the residential COVID-19 Relief Program are included in the Company's revenue requirement as described in the testimony of Witness O'Brien, Statement No. 10.

Q. Does this conclude your direct testimony?

A. Yes. I reserve the right to supplement my testimony through the course of this proceeding.

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2021-3024750

Duquesne Light Company

Statement No. 8

Direct Testimony of Sarah J. Olexsak

Subject: Transportation Electrification Programs

Date: April 16, 2021

TABLE OF CONTENTS

I. INTRODUCTION AND PURPOSE OF TESTIMONY

Q. Please state your full name and business address.

A. My name is Sarah J. Olexsak. My business address is Duquesne Light Company, 411 Seventh Avenue, Pittsburgh, PA 15219.

Q. What is your position at Duquesne Light Company?

A. I am employed by Duquesne Light Company ("Duquesne Light" or "Company") as Manager, Transportation Electrification.

Q. How long have you worked at Duquesne Light?

A. I have been employed by Duquesne Light since May 2018.

Q. What are your current responsibilities?

A. As the Manager, Transportation Electrification, my primary responsibilities include developing and implementing the Company's transportation electrification ("TE") strategy. In this role, I oversaw the execution of the EV ChargeUp Pilot approved as part of the Company's prior base rate case, Docket No. R-2018-3000124. I also contributed to the development of the Company's EV Time-of-Use Rate for default supply, which was approved by the Commission at Docket No. P-2020-3019522 and will be available to customers in June 2021.

Q. What are your qualifications, work experience and educational background?

A. I have been employed in the energy and automotive sector since 2006. Prior to joining Duquesne Light Company, I was employed at the U.S. Department of Energy ("U.S. DOE") within the Office of Energy Efficiency and Renewable Energy ("EERE"). During my eight-year tenure in EERE, I held a variety of positions within the Office of Strategic Programs and the Vehicle Technologies Office. These positions included Manager, Electrification and Project Manager, Innovation & Deployment, wherein I managed electric vehicle (EV) market readiness research and performed analysis to inform strategic investment across EERE's research portfolio, and Coordinator of the Workplace Charging Challenge. I also served as a Senior Sustainability Officer on assignment to the White House Council on Environmental Quality. Prior to this, I worked as a consultant to the U.S. DOE under employment by Sentech, Inc. managing the evaluation of EV and battery manufacturing loan and tax credit proposals, and as an analyst at the U.S. Fuel Cell Council (now the Fuel Cell and Hydrogen Energy Association), the trade association of the hydrogen fuel cell industry.

I currently serve on the Pittsburgh Region Clean Cities Board. I have an M.S. in Energy Policy and Climate from Johns Hopkins University, and a B.S. in Biology from Muskingum University.

Q. Are you sponsoring any exhibits, parts of exhibits or responses to the Commission's filing requirements as part of your direct testimony?

A. Yes. I am sponsoring the following exhibits:

Exhibit SO-1: EV ChargeUp Pilot Annual Report (January 2019 – February 2020)

Exhibit SO-2: EV ChargeUp Pilot Annual Report (March 2020 – February 2021)

Exhibit SO-3: EV ChargeUp Pilot Progress Report

Exhibit SO-4: Duquesne Light Customer EV Survey Results Summary

Exhibit SO-5: Home Charging Pilot Customer Agreement

In addition, I am sponsoring Rider Nos. 23 (Home Charging Pilot) and 24 (Fleet Charging Pilot), which are included within Company witness Mr. Ogden's Exhibit DBO-1.

Q. What is the purpose of your direct testimony?

A. The purpose of my testimony is to present the Company's proposed Transportation Electrification Programs ("TE Programs"). Within my testimony, I will: 1) describe why the Company is proposing the TE Programs; 2) report on the performance of the Company's transportation electrification pilots ("EV ChargeUp Pilot") to date; and 3) describe in detail the proposed TE Programs.

Q. Why is the Company proposing the TE Programs in this case?

A. Transportation electrification market trends demonstrate there is a need and benefit for utility planning and investment in infrastructure and programs. The goal of the TE Programs is to increase utilization of and equitable access to safe and reliable electric transportation fuel in the Company's service territory. The key objectives of the TE Programs are:

1) Maximize the benefits of transportation electrification for customers and communities by evaluating the impacts EVs have on the electric grid, informing the Company's distribution system planning, and advancing our ability to serve our customers' evolving needs;
2) Serve as a trusted advisor to customers to help them transition to an electrified transportation environment; and
3) Leverage learnings from the EV ChargeUp Pilot and the Company's unique position to mitigate market obstacles through new products and services.

Q. Please summarize the Company's TE Programs.

A. The proposed TE Programs consists of two Portfolios. The first is the Charging Infrastructure Portfolio, comprising three programs intended to increase the number of EV charging stations in the Company's service territory, as a means of facilitating the EV market. The second component is the Customer Portfolio, which includes Awareness, Education, and Engagement, Fleet Electrification Advisory Service, and Registration Incentive programs. The Customer Portfolio is designed to increase customer knowledge of transportation electrification and allow the Company to more effectively engage customers.

These programs are summarized in the table below. This table includes projected program budgets for calendar year 2022; however, as I discuss later in my testimony, each of these programs is designed to operate on an ongoing basis through at least 2024.

Table 1: TE Programs Budgets

Component	Description	2022 Budget
Charging Infrastructure Portfolio		
Public, Workplace, and Multi-Unit Dwelling Make-Ready Pilot	Public, workplace, and multi-unit dwelling make-ready investment to support Level 2 and DC fast charging stations	$1,047,940
Fleet and Transit Charging Pilot	Optional fleet and public transit make-ready and charging station program to install and support Level 2 and DC fast charging stations	$2,013,730
Home Charging Pilot	Optional turnkey service for residential customers to install Level 2 charging stations at their home.	$503,650
Customer Portfolio		
Awareness, Education, and Engagement	Support for customers to make informed decisions about fueling vehicles with electricity.	$392,460
Fleet Electrification Advisory Service	Vehicle and charging infrastructure planning and analysis support for public and private fleet customers.	$292,400
Registration Incentive	$50 one-time registration incentive for customers who own or lease an EV.	$68,000
	Capital Program Cost For 2022	$2,964,090
	Expense Program Cost For 2022	$1,353,090
	Total Program Cost For 2022	$4,317,180

Q. What are the projected bill impacts of the Company's EV proposals?

A. The Company estimates that these proposed programs would add approximately $0.20, or 0.19%, to the monthly bills of a typical residential customer; and $0.88, or 0.09%, to the monthly bills of a typical nonresidential customer on rate GM.

II. TRANSPORTATION ELECTRIFICATION LANDSCAPE

A. EV and Charging Market Overview

Q. Please describe the market for EVs at the national level.

A. Market trends indicate a broad movement towards vehicle electrification. Across the U.S., EV production and sales have increased steadily over the last decade and continue to trend upward. The Edison Electric Institute indicates that as of March 2021, there were more than 1.7 million EVs on the road.[1] From 2015 to 2021, EV registrations increased by more than 300% across the U.S. EV sales are expected to increase rapidly over the next decade.[2] By 2030, 18.7 million EVs are expected on the roads and annual EV sales are forecasted to exceed 3.5 million per year, accounting for more than 20% of annual vehicle sales. The forecasted growth is driven by the more than $135 billion automakers plan to invest in vehicle electrification by 2030.[3] American drivers will soon have even more choices, with approximately 130 EV makes and models projected by 2026, up from 51 available in 2019.[4] National-level fleets are also driving demand. For example, President

[1] Edison Electric Institute (2021, March). "Electric Transportation Benefits Customers and Communities," Obtained from: https://www.eei.org/issuesandpolicy/electrictransportation/Documents/Electric_Transportation_Benefits_Customers_and_Communities.pdf

[2] Electric Power Research Institute (2021, February). U.S. EV Registration Data as of December 2020.

[3] M.J. Bradley & Associates (2019, August). "Electric Vehicle Market Status," Obtained from: https://www.mjbradley.com/sites/default/files/ElectricVehicleMarketStatusUpdate08142019.pdf

[4] Deloitte (2020, July). "Electric vehicles: Setting a course for 2030," Obtained from: https://www2.deloitte.com/us/en/insights/focus/future-of-mobility/electric-vehicle-trends-2030.html

Biden ordered the federal government, which purchases more than 50,000 vehicles per year, to develop a plan to transition to zero emission vehicles.[5]

Q. Please describe the EV market within the Company's service territory.

A. At the local level, EV penetration within the Company's service territory is growing rapidly, although it still represents a small portion of total market share. Despite the COVID-19 pandemic, there was a 21% increase in new EV registrations and a 33% increase in total number of EVs within the Company's service territory from December 2019 to December 2020, bringing the total registered to approximately 4,123.[6] The Electric Power Research Institute indicates EV registration in the Company's service territory will be between 18,900 and 30,325 by 2025 – up to 635% more than the existing number of registrations.[7]

Fleets at the state and local are also driving demand. The State of Pennsylvania plans to convert 25% of its fleet to electric by 2025 and the City of Pittsburgh aims to have a fossil fuel free fleet by 2030.[8] The Company has already

[5] Federal Register (2021, January). "Tackling the Climate Crisis at Home and Abroad," Obtained from: https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad.

[6] Electric Power Research Institute (2021, February). Duquesne Light Company Service Territory EV Registration Data as of December 2020.

[7] Electric Power Research Institute (2021, January). Duquesne Light Company Service Territory EV Sales Projections as of 2020.

[8] City of Pittsburgh Mayor William Peduto (2017, June). "Executive Order 2017-08: Reinforcing Pittsburgh's Commitment to the Global Partnership on Climate Change," Obtained from: https://apps.pittsburghpa.gov/mayorpeduto/Climate_exec_order_06.02.17_(1).pdf.

started electrifying its fleet and aims to find electric solutions for 30% of its fleet by 2030, including 100% of its light-duty vehicles.

Q. What are some of the benefits of increased transportation electrification driving this demand?

A. Increased EV adoption displaces petroleum with more efficient electric fuel, which results in benefits for customers who drive EVs, as well as those who do not. Such benefits include:

- Increased Distribution System Utilization: EVs support efficient use of the electric grid. Most charging occurs during non-peak hours, which helps spread the Company's fixed distribution costs over more kilowatt-hours, while mitigating grid impacts. This applies downward pressure on delivery rates for all customers, and supports efficient planning and construction of distribution facilities.
- Reduced Greenhouse Gas ("GHG") Emissions: Transportation is responsible for 20% of annual CO_2 emissions in Pennsylvania, contributing to climate change.[9] A key strategy to reduce these emissions is to increase the deployment of EVs. According to the U.S. Department of Energy, a light duty vehicle charging up in Pennsylvania emits 1/3 of the amount of GHG

[9] PA DEP (2021, January). "Pennsylvania Electric Vehicle Roadmap: 2021 Update," Obtained from: http://files.dep.state.pa.us/Energy/OfficeofPollutionPrevention/StateEnergyProgram/PAElectricVehRoadmapBookletDEP5334.pdf.

emissions of a comparable gasoline-fueled vehicle. As the local generation mix continues to shift towards clean energy sources, total emissions attributable to EV fueling will continue to decline over time. The average passenger EV on the road is estimated to save 7,970 lbs. CO_2e per year compared to an internal combustion engine vehicle. The Company's EV ChargeUp Pilot has already supported the reduction of 100 tons CO_2 emissions (Exhibit SO-1: EV ChargeUp Pilot Annual Report (January 2019 – February 2020) and Exhibit SO-2: EV ChargeUp Pilot Annual Report (March 2020 – February 2021).

- Improved Air Quality: Increased transportation electrification will cut criteria pollutants emitted by motor vehicles including ozone, particulate matter, carbon monoxide, nitrogen dioxide and hazardous air pollutants (HAPs), leading to better overall health, including fewer respiratory conditions. This is particularly important in the Company's service territory, where the air quality consistently ranks among the worst in the nation. For example, in 2020, Allegheny County received a failing "F" grade from the American Lung Association for three measures of air pollution — ozone, particle pollution in a 24-hour period and annual particle pollution.[10] In this same area, transportation is responsible for 22% of air pollution, according to the U.S. EPA's 2015 National Emissions Inventory.

[10] American Lung Association (2020). "State of the Air: Allegheny County," Obtained from: https://www.stateoftheair.org/city-rankings/states/pennsylvania/allegheny.html.

- Boost to the Local Economy: Transportation electrification is also expected to benefit Pennsylvania's economy. As of 2019, the electric transportation industry in Pennsylvania already supported nearly 4,400 jobs across 151 different companies and accounted for more than $430 million in gross state product. Jobs in the state's electric transportation industry are projected to grow 24% between 2019 and 2024,[11] compared with 3% growth across statewide employment over the same timeframe.
- Customer Savings: Customers driving electric benefit from a reduced total cost of ownership when compared to an internal combustion engine vehicle. EVs require less maintenance[12] and electricity fueling costs are more predictable and more than 50% cheaper compared to the costs of gasoline fuel in Pennsylvania.[13]
- Energy Security: As noted by the U.S. Department of Energy, EVs are an important part of continuing the country's successful trend of minimizing imported petroleum. The diversification of fuel sources used in the generation of electricity results in a more secure and domestically generated energy

[11] Advanced Energy Economy (2020, May). "Electric Transportation Supply Chain in Pennsylvania," Obtained from: https://info.aee.net/electric-transportation-supply-chain-in-pennsylvania.
[12] U.S. Department of Energy (2021, March). "Maintenance and Safety of Hybrid and Plug-In Electric Vehicles," Obtained from: https://afdc.energy.gov/vehicles/electric_maintenance.html.
[13] U.S. Department of Energy (2021, March). "eGallon," Obtained from: https://www.energy.gov/maps/egallon.

source for the electrified portion of the transportation sector, adding to our nation's energy security.[14]

Q. Does transportation electrification benefit disadvantaged communities?

A. Yes. Transportation electrification helps to mitigate disproportionate health impacts felt by disadvantaged communities. As noted by Synapse Energy Economics, "Importantly, because transportation sector emissions occur at ground level where they are less likely to be dispersed and more likely to have an impact on customers' health, a decrease in tailpipe emissions is likely to produce the most health benefits for the customers who are physically located near where the vehicles are operated. This is particularly relevant in situations where EVs may be used to reduce emissions from transit buses, school buses, and large trucks, which disproportionately impact lower-income and communities of color located near industrial and transit sites."[15]

This holds true in the Company's service territory, where low-income individuals are disproportionately exposed to air pollution caused in part by ground transportation used to move people and goods throughout a community. As part of its EV ChargeUp Pilot, as summarized in Exhibit SO-3: EV ChargeUp Pilot

[14] U.S. Department of Energy (2021, March). "Electric Vehicle Benefits and Considerations," Obtained from: https://afdc.energy.gov/fuels/electricity_benefits.html.

[15] Synapse Energy Economics (2019, November). "Making Electric Vehicles Work for Utility Customers," Obtained from: https://www.synapse-energy.com/sites/default/files/Making-Electric-Vehicles-Work-for-Utility-Customers.pdf.

Progress Report, attached to my testimony, the Company aligned with the PA Department of Environmental Protection (DEP) definition of Environmental Justice (EJ) Areas to identify disadvantaged communities within its service territory that could especially benefit from greater transportation electrification. According to the Breathe Project's Black Carbon Map, many of the EJ Areas are also exposed to some of the highest amounts of black carbon pollution in our region.[16] A shift toward transportation electrification will help reduce these impacts.

Q. Is charging infrastructure in the Company's service territory keeping pace with the growing need?

A. No. According to the U.S. Department of Energy's Alternative Fuels Data Center, the Pittsburgh region needs at least 2,149 workplace and public Level 2 (L2) charging ports and 78 public direct current fast charger (DCFC) ports by 2025 to keep up with a median projection of EV growth for the area. Currently, there are only 389 Level 2 charging ports and 62 DCFC ports (20 accessible by non-Tesla EVs) in the region.

Q. Have state and local governments recognized the need for more EV charging infrastructure?

[16] Breathe Project (2021, March). "Black Carbon Nitrogen Dioxide Map," Obtained from: https://breatheproject.org/pollution-map/.

A. Yes, and both have recommended that electric distribution companies play a role in helping to meet this need. In 2019, the PA DEP released its "Electric Vehicle Roadmap" describing five years of action to drive EV adoption. The Roadmap includes a utility transportation and electrification directive, noting how utilities can play a unique role in advancing transportation electrification due to their existing role in serving public interests; knowledge of installing and maintaining electricity infrastructure; stable business structure that continues to be involved in electric distribution for the long-term; and cost recovery mechanisms that allow for the installation of chargers where there is the greatest need rather than where there is greatest profit. Additionally, the City of Pittsburgh's EV Task Force made several recommendations for transportation electrification at the local level to bridge charging gaps by creating and then promoting regional charging opportunities and networks. To address the need for more local public charging, the task force recommends working with the Company to increase Level 2 public charging infrastructure throughout city neighborhoods at existing and new properties and to make obtaining permits for DCFC infrastructure easier.[17]

Q. Are these state and local examples consistent with trends elsewhere in the country?

[17] City of Pittsburgh (2019, September). "EV Task Force Recommendations," Obtained from: https://apps.pittsburghpa.gov/redtail/images/8371_EV_Task_Force_Recommendations.pdf.

A. Yes. Public utilities across the country are increasingly investing in EV programs and infrastructure, ranging from residential charging services to charging infrastructure make-ready investment to charging station ownership. As of January 2021, 52 electric companies in the U.S. received approval for transportation electrification-related filings, representing a total investment of more than $1.51 billion, representing a total potential investment of nearly $3 billion.[18]

Q. On March 31, 2021, President Biden proposed the American Jobs Plan, which includes $174 billion for transportation electrification programs.[19] In light of this announcement, why is Duquesne Light still proposing transportation electrification programs in this case?

A. President Biden's recent announcement in support of transportation electrification is extremely encouraging, but it does not obviate the Company's proposed programs for several reasons. First, as of the date of this testimony, the President's infrastructure plan is a conceptual proposal that would require Congressional approval to implement. Second, details of the President's plan have not been shared with the public, so we cannot assume that it will address the objectives outlined in the Company's proposal. Lastly, the Company is uniquely positioned to support its

[18] Edison Electric Institute (2021, February). "Electric Transportation Biannual State Regulatory Update," Obtained from: https://www.eei.org/issuesandpolicy/electrictransportation/Documents/FINAL_ET%20Biannual%20State%20Regulatory%20Update_February2021.pdf.

[19] The White House (2021, March) "Fact Sheet: The American Jobs Plan," Obtained from: https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/31/fact-sheet-the-american-jobs-plan.

customers with programs that may not be included in a federal infrastructure plan, such as those that address home charging.

B. EV ChargeUp Pilot Performance

Q. What TE initiatives has the Company previously implemented?

A. As part of the EV ChargeUp Pilot, the Company has implemented a Level 2 Charging Station Evaluation, a DCFC Evaluation, an EV Registration Incentive and executed Education and Outreach activity.

Q. Has the Company submitted annual reports concerning the Company's implementation of the EV ChargeUp Pilot?

A. Yes, the Company filed annual reports in 2020 and 2021 pursuant to the parties' settlement in the Company's 2018 base rates case ("Settlement"). These reports are attached as Exhibits SO-1 and SO-2, respectively, to my testimony. They provide, among other things: (a) charging infrastructure deployed over time, including by location, and activation date; (b) charging infrastructure installation costs by site type (broken out by capital and rebate costs); (c) for all charging stations deployed, the usage rate by site type and charger type; and (d) estimated avoided emissions resulting from the programs.

Q. Is the Company providing a report in this filing on the EV ChargeUp Pilot Level 2 Charging Evaluation?

A. Yes. The Settlement provides that the Company will provide a report in this proceeding on the EV ChargeUp Pilot Level 2 Charging Evaluation. This report is attached as Exhibit SO-3 to my direct testimony. The report evaluates customer participation and feedback, public access to charging stations and charging station usage, identifies the charging station revenues received by the Company from charging station site host customers, and discusses the Company's activities under the DCFC Evaluation, EV Registration Incentive, and Education and Outreach components of the EV ChargeUp Pilot.

In addition to the results identified in Exhibit SO-3, as I discuss further in my testimony, the EV ChargeUp Pilot yielded valuable experience that has informed the development and design of the TE Programs proposed in this proceeding.

III. CHARGING INFRASTRUCTURE PORFOLIO

Q. Please summarize the proposed Charging Infrastructure Portfolio.

A. The Charging Infrastructure Portfolio includes the following:

- A Public, Workplace, and Multi-Unit Dwelling (MUD) Make-Ready Pilot, through which the Company will construct and own make-ready infrastructure to facilitate the deployment of approximately 30 Level 2 charging stations and 4 DC fast charging stations annually.

- A Fleet and Transit Charging Pilot, through which the Company will construct and own make-ready and charging station infrastructure to serve customers with electric fleets. Approximately 38 Level 2 charging stations will be deployed annually in partnership with non-transit customers, and 6 DC fast charging stations will be deployed in 2022 to power electric buses for the Port Authority of Allegheny County.
- A Home Charging Pilot, through which the Company will construct and own make-ready and charging station infrastructure to serve residential customers. The Company projects an average of 125 new residential participants each year.

The table below provides additional detail on the Charging Infrastructure Portfolio:

Table 2: Charging Infrastructure Portfolio

	Public, Workplace, and MUD Make-Ready Pilot	Fleet and Transit Charging		Home Charging Pilot
		Fleet Pilot	Transit Pilot	
Number of Installations	Average of 30 Level 2 and 4 DC fast charging stations installed annually	Average of 38 Level 2 charging stations installed annually	6 DC fast charging stations installed in 2022	125 Level 2 charging stations installed annually
Example Deployment	Public parking garage, community recreation center	Parcel delivery service, paratransit service	Port Authority of Allegheny County	Homeowner
Ownership Structure	DLC owns "make-ready" infrastructure; customer-site host owns charging station	DLC owns "make-ready" infrastructure; customer or DLC owns charging station	DLC owns "make-ready" infrastructure and charging station	Customer owns "make-ready" infrastructure and DLC owns charging station
Maintenance	DLC maintains make-ready infrastructure; customer site-host maintains charging station	DLC maintains make-ready infrastructure; Charging station owner maintains station	DLC maintains make-ready infrastructure and charging station	Customer maintains make-ready infrastructure; DLC maintains charging station
Cost to Participating Customers	Tariffed general service distribution rate	Tariffed general service distribution rate plus monthly per-port fee	Tariffed general service distribution rate	Tariffed residential distribution rate plus monthly fee
Low Income Customer and EJ Area Considerations	Specialized technical assistance and $5,000 Level 2 charging station rebate for customers that serve EJ Areas	Target 25% of customers participating annually serve or are located in EJ Areas	Electric buses serve EJ Areas and low-income customers	Low-income customers eligible for $2,000 installation upgrade allowance
2022 Capital Costs	$899,570	$728,710	$984,000	$351,810
2022 O&M Costs	$147,370	$201,190	$99,830	$151,840

Q. Why is the Company proposing the Charging Infrastructure Portfolio?

A. The Company's Charging Infrastructure Portfolio will help address a market need, improve distribution system utilization, ensure installations are done safely and

economically, and expand access to the environmental and public health benefits of EVs, particularly for low income customers and those living within EJ Areas.

Q. Is the Company proposing to own infrastructure (make-ready and charging stations) as part of its proposals?

A. Yes. The Company is proposing to own make-ready and/or charging stations in each of its Charging Infrastructure Portfolio programs. The Program Summary table provides a description of the ownership structure and I will provide further detail in my testimony about each program.

Q. Why is it appropriate for the Company to install and own make-ready and charging infrastructure?

A. Through the EV ChargeUp Pilot, the Company has seen that the upfront cost of charging infrastructure, together with the time and resources necessary to manage an installation, can deter customers from deploying charging stations. This exacerbates the lack of charging infrastructure and range anxiety, which, as I discuss below, are the leading reasons the Company's customers cite for not adopting EVs. The Company's proposed investments in charging infrastructure address these primary obstacles to EV adoption, and will facilitate charging infrastructure deployment in much-needed locations, including EJ Areas.

Additionally, the Company's experience with electrical infrastructure planning, and ability to achieve economies of scale, can help lower costs and produce more efficient projects for customers than they could achieve on their own.

Q. Will the Company's proposals stifle competition?

A. No. The Company's proposed investments are intended to accelerate EV charging development, particularly where market gaps exist such as for multi-unit dwellings ("MUDs") and fleets. This will encourage greater EV adoption that will, in turn, expand opportunities for competitive market providers. Greater EV adoption can help improve the economics of charging stations by expanding the population of charging station customers and increasing charging station utilization.

Additionally, the Company's proposed infrastructure deployments through these programs represent a small fraction of the investment needed to support anticipated EV growth. As I discuss further below, the Company's programs would support approximately 90 public, workplace and MUD L2 station and 12 public DCFC deployments from 2022 through 2024, compared to the 1,760 L2s and minimum of 16 DCFCs (with significantly more DCFC needed to support non-Tesla drivers) needed in the Company's service territory over the same time period based on a median EV adoption projection. The Company's proposed programs will therefore not hinder the development of the competitive EV market.

Finally, the Company will maintain a market neutral approach by holding competitive solicitations for the products and outside services procured to

implement these programs. This will provide opportunities for market providers, as well as ensure competitive prices for customers.

Q. How does the Company's proposed Charging Infrastructure Portfolio provide opportunities for low-income customers?

A. As I discuss in further detail below, each of the Company's proposed infrastructure activities were informed by assessing best practices for ensuring equity in the growth of electric mobility. These programmatic considerations will help address the cost and awareness barriers, and provide a tailored approach to serving the unique challenges of our low-income customers and those within EJ Areas.

A. Public, Workplace, and Multi-Unit Dwelling Make-Ready Pilot

Q. Please summarize the Company's proposed Public, Workplace, and Multi-Unit Dwelling Make-Ready ("Make-Ready") pilot.

A. This pilot is designed to address the charging infrastructure gap in the Company's service territory by expanding upon its EV ChargeUp Pilot Level 2 Evaluation. Through the Make-Ready pilot, the Company will work with customers to provide all necessary supply infrastructure, including service connections and EV make-ready behind the meter for L2 and DCFC stations in public, workplace, and MUD settings. Customers will be responsible for the procurement, installation, ownership and maintenance of the charging station. There will be no additional fees required

from the participating customers beyond applicable charges for electric delivery and supply.

Q. Why is the Company proposing the Make-Ready pilot?

A. The Company is proposing the Make-Ready pilot based on the need for more charging infrastructure in the Company's service territory. This need has been substantiated from projections of EV growth and feedback from residential customers, summarized in Exhibit SO-4, indicating the lack of charging and range concerns as a barrier to purchasing an EV. For example, in a 2020 survey, the Company's customers identified that the top two major barriers to purchasing EVs were lack of public charging stations nearby (66%) and concerns regarding vehicle driving range (64%).

To support the growth in light-duty EVs from approximately 4,000 today to an estimated 18,900 to 30,325 by 2025,[20] the Pittsburgh region will need to substantially increase its public, workplace, and MUD charging infrastructure. The table below shows the number of public and workplace L2 and DCFC ports available today and the additional ports required to support the anticipated range of EV growth. These numbers do not fully account for the charging ports required to support customers living in MUDs, which represent approximately 26% of

[20] Electric Power Research Institute (2020). Projections for Duquesne Light Company's Service Territory as of 2020.

households in Allegheny and Beaver counties. Additionally, an estimated 35% of households rent their home, which can make home charging more challenging and increases the need for sufficient public and workplace charging.[21]

Table 3: Regional Charging Infrastructure Needs

Year Scenario	L2 Ports*	DCFC Ports
2021 - Current Supply[22]	389	62**
2025 - Median Need[23]	2149	78
2025 - High Need[24]	3008	125

*Includes public and workplace ports. 2021 figure includes public L2 only. The current number of non-public workplace charging installations is unknown.
**Currently only 20 of the 62 available DCFC ports can serve non-Tesla vehicles.

Q. Please describe how learnings from the EV ChargeUp Pilot are applied to the proposed activity.

A. The Make-Ready pilot builds on lessons learned from the EV ChargeUp Pilot to help minimize costs and streamline program management and implementation. The Make-Ready pilot includes the following key changes:

- Include DCFC stations in addition to L2 charging stations.

[21] United States Census Bureau (2019). "American Community Survey - Table DP04," Obtained from: www.data.census.gov.
[22] U.S. Department of Energy (2021, January). "Alternative Fuels Data Center," Obtained from: https://afdc.energy.gov.
[23] U.S. Department of Energy (2021, January). "Alternative Fuels Data Center EVI Pro Lite tool estimate based on projection of EPRI median scenario of 18,900 EVs in Pittsburgh region," Obtained from: https://afdc.energy.gov/evi-pro-lite.
[24] U.S. Department of Energy (2021, January). "Alternative Fuels Data Center EVI Pro Lite tool estimate based on EPRI High scenario of 30,325 EVs in Pittsburgh region," Obtained from: https://afdc.energy.gov/evi-pro-lite.

- Include workplace and MUD sites, in addition to public charging station host customers.
- Reduce the minimum number of required charging station ports per site.
- Provide specialized technical assistance and financial support for qualified customers serving EJ Areas.
- The Company will construct and own electrical make-ready infrastructure instead of providing a rebate to the customer for make-ready costs.

Expand to Include DCFC

As described above, the Pittsburgh region is severely lacking the required non-Tesla DCFC infrastructure. Robust DCFC deployment is necessary because customers need a much faster way to charge their vehicle (30-45 minutes) than the 4-8 hours it can take to fully charge using a L2 station. The upfront equipment costs of DCFC stations can cost more than $50,000. These higher equipment costs combined with low early-stage levels of utilization can deter customer investment in DCFCs.[25]

Expand to Include Workplace and MUD Locations

[25] *E.g.*, Ross McClane and Qiyu Liu (2021, January). "The United States Needs More Fast Charger: China Can Show How," Obtained from: https://rmi.org/the-united-states-needs-more-fast-chargers-china-can-show-how/.

The Make-Ready pilot aims to ensure that investments are made in charging infrastructure where they will see the greatest utilization. With the majority of charging happening at home and 26% of households in Allegheny and Beaver counties living in MUDs,[26] having sufficient charging is essential to support MUD customers interested in EVs. MUD charging proved the most durable during the pandemic. In fact, the two EV ChargeUp Pilot sites with the greatest usage during the pandemic are public sites that are accessible to multi-unit dwelling residential customers, reflecting the importance of charging accessibility at such locations.

Outside of the home, workplace charging is the most-utilized type of charging infrastructure.[27] Studies show that individuals who have access to workplace charging are six times more likely to purchase an EV than those who do not.[28] Expanding the Make-Ready pilot to include site hosts at these locations will make it more feasible for customers to switch to an EV and can help meet the anticipated EV growth.

Reduce Number of Required Ports

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[26] United States Census Bureau (2019). "American Community Survey - Table DP04," Obtained from: www.data.census.gov.
[27] Idaho National Laboratory (2015). "Plugged In: How Americans Charge Their Electric Vehicles," Obtained from: https://avt.inl.gov/sites/default/files/pdf/arra/PluggedInSummaryReport.pdf.
[28] U.S. Department of Energy (2017, January). "Workplace Charging Challenge Progress Update 2016: A New Sustainable Commute," Obtained from: https://www.energy.gov/sites/prod/files/2017/01/f34/WPCC_2016%20Annual%20Progress%20Report.pdf.

The EV ChargeUp Pilot required participating customers to install at least 4 dual-port charging stations, which translates to 8 charging ports, per site.[29] Several customers that were interested in the program were unable to participate because they could not meet this 8 charging port requirement. The Make-Ready pilot lowers the required number of ports to 4 per site to expand customer access.

EJ Area Support

The Make-Ready pilot will provide specialized technical assistance and financial support for qualified L2 charging station host customers within EJ Areas. While these customers may be interested in hosting charging infrastructure for their communities, they may lack the funding and internal resources to manage the installation process. The Make-Ready pilot can help overcome these barriers.

Q. Why is the Company proposing to own the make-ready rather than offer customers a rebate as it did under the EV ChargeUp Pilot?

A. From executing the EV ChargeUp Pilot, the Company learned that the upfront cost of charging infrastructure, along with the resources to manage the project, can be deterrents for customers. Providing customers with a rebate did not directly address these impediments. For the Make-Ready Pilot, the Company is proposing

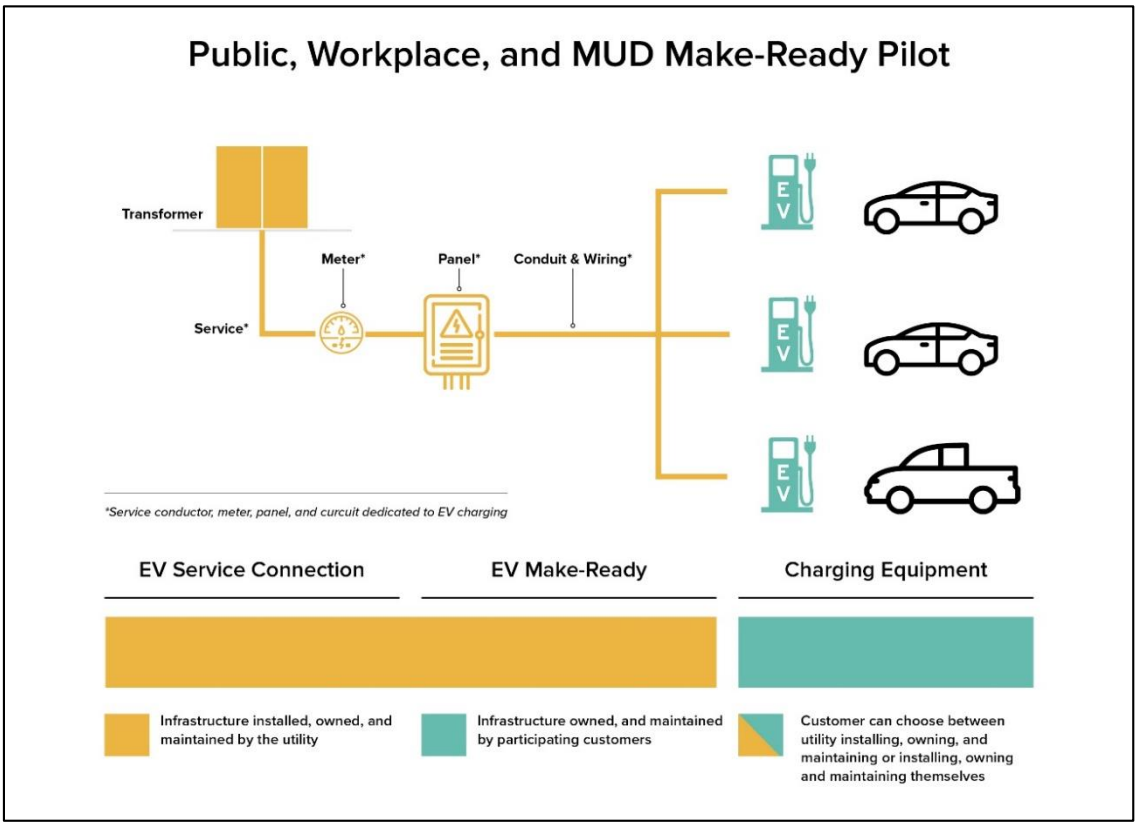
[29] See Settlement paragraph 45(b).

ownership of the make-ready to address these issues and accelerate charging infrastructure investments in its service territory.

Q. What services will the Company provide through the Make-Ready pilot?

A. The Company will install, own, and maintain EV charging station make-ready, which may include new panels, conduit, and wiring, located between the meter and the charging station. The Customer will own, operate, and maintain the EV charging stations. A simplified typical example is depicted in the below illustration:

Figure 1: Public, Workplace, and MUD Make-Ready Pilot Example Ownership Structure



In addition, in response to customer feedback from the EV ChargeUp Pilot, the Company will continue to provide participating customers with a list of pre-qualified vendors for the customer-owned and -installed charging stations. The Company will identify these qualified vendors and equipment through competitive solicitation. The stations will be required to, among other things, provide interoperability and managed charging capabilities that would enable customers participate in possible future managed charging programs, and to share usage data with the Company. Customers will choose their charging station hardware and

networking service from this qualified vendor list, or will have the option to select their own stations so long as they meet the Company's safety and technical standards.

Q. Will participants be required to separately meter the charging stations?

A. No. The Company evaluated this option, but determined that the benefits of requiring a separate meter were outweighed by the cost and inconvenience to the participating customers. Customers interested in a separate meter for their EV charging load may do so by establishing a separate service to the charging stations.

Q. Will the Customer share charging data with the Company under the Make-Ready pilot?

A. Yes, participating customers will be required to grant the Company access to their charging data through the network provider. The Company will use these data to better understand charging station utilization, charging patterns for different use cases, and potential grid impacts. These data may also help the Company identify future services for these customer segments. The Company will follow its Privacy Policy[30] for collecting, storing, and using these customer data.

Q. Who will be eligible to participate in Make-Ready pilot?

[30] Duquesne Light Company (2019, January). "Duquesne Light Privacy Policy," Obtained from: https://www.duquesnelight.com/customer-support/policies-forms/privacy-policy.

A. Non-residential customers that own, lease or manage commercial properties or MUDs will be eligible to participate.

Q. What will be the requirements to participate in the Make-Ready pilot?

A. Eligible customers will be required to meet the following to participate in the Make-Ready pilot:

- Own or lease property, and demonstrate site control thereof (which may include written permission from the property owner), suitable for charging station installation.
- For L2 sites: Install a minimum of 4 charging ports (e.g., 2 dual-port chargers), or for customers in EJ Areas, a minimum of 2 charging ports (e.g., 1 dual-port charger).
- For DCFC sites: Install a minimum of 2 DCFC charging ports of at least 150kW, which must be publicly accessible.
- Operate and maintain charging stations.
- Subscribe to charging station networking service.
- Provide the Company charging data via network vendor.
- Grant the Company any rights-of-way or easements deemed necessary.
- Execute a contract memorializing the Company's and customer's respective obligations under the pilot.

Q. How will the Company evaluate customer applications to the Make-Ready pilot?

A. The Company will evaluate applicant sites based on a variety of factors, including technical feasibility and anticipated charging station utilization. As part of this evaluation, the Company will analyze the projected costs of the project, as well as the projected incremental distribution revenues the project may yield. The Company will reject proposed projects with disproportionately high estimated per-port costs and/or disproportionately low projected utilization.

Q. How will the Make-Ready pilot support charging station growth in EJ Areas?

A. Though the pilot removes customers' up-front costs of make-ready infrastructure, the costs of the charging station alone may be too much to bear for some customers who serve EJ Areas. Therefore, for qualified customers serving EJ Areas, the pilot will provide a charging station rebate of up to $5,000 per dual-port L2 unit. In addition, the Company will provide specialized technical assistance, which can help reduce the project management burden for the charging station installation portion of the project. The Company aims to select charging station sites located in EJ Areas for at least 25% of annual pilot participants.

Q. Please describe how the Company will conduct outreach and education about the Make-Ready pilot.

A. The Company will conduct outreach and education through a variety of channels. The Company will host content on its website explaining the pilot, as well as produce print collateral materials. The Company's Major Account Managers will also discuss the program directly with non-residential customers. In addition, the Company will engage with local non-profits and trade association groups to target groups like property managers and developers.

The Company will seek to leverage other funding sources, such as governmental grants, to help expand the reach of the program. For example, as part of its engagement with customers through this program, the Company will educate customers on other funding that they may be eligible for, such as Driving PA Forward rebates or grants.

Q. How many customers are projected to participate in the Make-Ready pilot?

A. The Company projects that a total of 14 customers, comprising 12 L2 site locations and 2 DCFC locations, will participate in the Make-Ready pilot on an annual basis. To help control Pilot costs, the Company will cap participation at 21 new customers annually.

Q. What are the Company's projected costs of the pilot in 2022?

A. The Company's projected costs for 2022 are as follows:

Table 4: Make-Ready 2022 Pilot Cost

Make Ready 2022 Pilot Costs	
Capital	
Make Ready Design, Installation and Equipment	$624,000
Operations Support and Oversight	$275,570
Expense	
Program Management	$29,600
Disadvantaged Community Support	$112,770
Advertising and Collateral	$5,000
Total	**$1,046,940**

The Company estimates incurring similar annual capital and expense costs in subsequent years.

Q. How will the Company recover its costs of the Make-Ready pilot?

A. Costs for this program will be recovered through base distribution rates.

B. Fleet and Transit Charging Pilot

Q. Please summarize the Company's proposed Fleet and Transit Charging pilot.

A. Through the Fleet and Transit Charging pilot, the Company will install, own, and maintain EV infrastructure, including make-ready infrastructure and charging stations, on behalf of fleet customers, including the Port Authority of Allegheny County (Port Authority). The goal of the pilot is to reduce the upfront cost for EV

charging infrastructure and reduce the project planning and execution burden for customers to help spur transportation electrification adoption.

Q. Why is the Company proposing the Fleet and Transit Charging pilot?

A. The Company is proposing the Fleet and Transit Charging pilot to help customers overcome key barriers to fleet electrification. As I mentioned earlier in my testimony, the coming years will bring a host of new vehicle types to market, including pick-up trucks and delivery vehicles. Switching to an electric option can produce meaningful savings for customers. For example, an electric school bus is estimated to save $6,400 annually in fuel and maintenance costs, and an electric transit bus is estimated to produce lifetime savings of $81,000 compared to a diesel transit bus.[31] However, upfront costs of vehicles and charging infrastructure,[32] along with the resources required to execute projects with a new technology, can hinder customers from realizing these savings. This pilot is intended to help bridge this deployment gap. The Company believes it is well-positioned to help customers navigate this emerging market and provide technical and implementation support to encourage them to adopt EVs.

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[31] Alana Miller, Hye-Jin Kim, Jeffrey Robinson, and Matthew Casale of Frontier Group, PIRG Education Fund, and PennEnvironement. (2018, May). "Electric Buses Clean Transportation for Healthier Neighborhoods and Cleaner Air," Obtained from: https://pennenvironment.org/sites/environment/files/reports/Electric%20Buses%20-%20PA%20-%20May%202018.pdf.

[32] Lynn Daniels and Chris Nelder of the Rocky Mountain Institute (2021). "Steep Climb Ahead," Obtained from: https://rmi.org/insight/steep-climb-ahead/.

This program also aligns with the Commonwealth's goals of achieving 100% zero emission vehicles sales for all new medium and heavy duty vehicles by 2050 and reaching 30% of new medium and heavy duty sales by 2030, as articulated in a 2020 Memorandum of Understanding among Pennsylvania, 14 other states, and the District of Columbia.[33]

Finally, fleet electrification promotes environmental health benefits as I discussed earlier in my testimony. Medium and heavy-duty fleet electrification in particular produces environmental and air quality benefits for surrounding populations, "especially those residents nearest major roadways, warehouse distribution centers and other pollution hotspots."[34]

Q. Describe the Company's proposal with respect to Transit Charging.

A. The Company proposes to install, own, and maintain six 150kW DCFC stations at Port Authority's East Liberty Garage. These units are the same size as the stations installed as part of the Company's DCFC Evaluation Pilot. This charging infrastructure is required by Port Authority to power six 40-foot electric buses that Port Authority will receive in 2021, and will support its planned fleet electrification objectives. In all other respects, except where I note otherwise, the Company's Transit Charging proposal mirrors the Fleet Charging pilot.

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[33] NESCAUM (2020) "Multi-State Medium- and Heavy-Duty Zero Emission Vehicle Memorandum of Understanding," Obtained from: https://www.nescaum.org/documents/multistate-truck-zev-governors-mou-20200714.pdf/.

[34] American Lung Association (2020, September). "The Road to Clean Air: Benefits of a Nationwide Transition to Electric Vehicles," Obtained from: https://www.lung.org/clean-air/electric-vehicle-report.

Q. How will the Fleet and Transit Charging Pilot be structured?

A. Under the Fleet and Transit Charging Pilot, the Company will:

- Continue to install, own, operate and maintain electric facilities up to the customer's service point.
- Install, own and maintain the make-ready infrastructure, including new service panel, conduit, and wiring as applicable, from the service point up to the charging station stub.

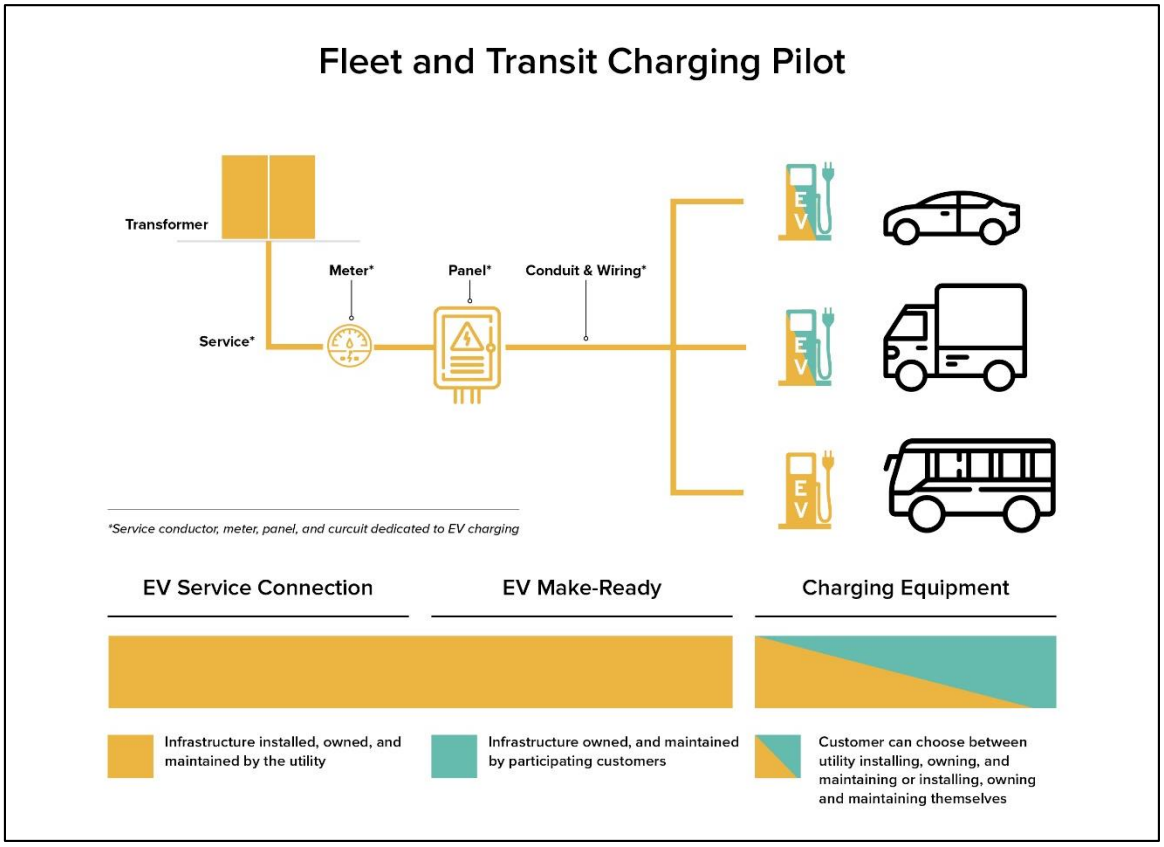
Participating customers will have the option to:

- Have the Company purchase, install, own and maintain the charging stations. Customers will be assessed a monthly charge to cover the cost of the charging stations and on-going data management and maintenance (Bundled Option); or
- Have the Company purchase, install, own and maintain the charging stations. Customers can pay up-front for costs of the charging stations and pay a smaller, on-going monthly charge to cover data management and maintenance ("Pre-Pay Option"); or
- Purchase, install, own and maintain their own charging stations ("Customer-Supplied Charging Stations") with no additional fee applied.

For the Port Authority specifically, the Company will purchase, install, own and maintain the make-ready and charging stations.

A simplified illustration is provided below:

Figure 2: Fleet and Transit Charging Pilot Example Ownership Structure



If the customer elects for the Company to own and maintain the charging stations under either the Bundled or Pre-Pay Options, the customer will select the charging stations from a pre-approved list. The Company plans to issue a competitive solicitation to identify the charging stations and network options for its pre-approved list.

Alternatively, customers selecting the Customer-Supplied Charging Station option can own and maintain the charging stations on their own, so long as they meet the Company's safety and technical standards. In this circumstance, the

Customer will own, install, and maintain the charging stations, and the Company will install, own, and maintain the make-ready infrastructure, similar to the Make-Ready pilot.

Q. What services will the Company provide through the Fleet and Transit pilot?

A. The Company will oversee the planning, design, and implementation of the applicable EV infrastructure.

First, the Company will work with the customer through the proposed Fleet Electrification Advisory Service, which I discuss later in my testimony, to conduct a fleet assessment or leverage an existing assessment. Using an assessment, the Company and customer will determine the size of the project and identify appropriate and cost-effective locations for charging infrastructure. The Company will work with the customer to design and install the make ready infrastructure and, as applicable, the charging stations.

Following installation, the Company will maintain the Company-owned equipment for the duration of the customer's participation in the pilot.

Q. Will participants be required to separately meter the charging stations?

A. With the exception of the Port Authority, no. The Company evaluated this option, but determined that the benefits of requiring a separate meter were outweighed by the cost and inconvenience to the participating customer. Customers interested in a

separate meter for their EV charging load may do so by establishing a separate service to the charging stations.

Q. Who will be eligible to participate in the pilot?

A. Non-residential customers that own, lease, or operate a fleet of at least six on-road vehicles will be eligible for this pilot.

Q. What will be the requirements to enroll and participate in the pilot?

A. Eligible customers will be required to meet the following to participate in the pilot, for the duration of the customers' participation:

- Demonstrate that EVs are currently in-use at the participating site(s) or provide proof of purchase with anticipated delivery date.
- Install a minimum of 4 charging ports per site.
- Own or lease property, and demonstrate site control thereof (which may include written permission from the property owner), suitable for charging station installation.
- Operate and maintain (as applicable) the charging stations.
- Where the Company will not own the charging stations, subscribe to a charging station networking service.
- Provide the Company charging data via network vendor.
- Grant the Company and rights-of-way or easements deemed necessary.

- Execute a contract memorializing the Company's and customer's respective obligations under the pilot.

Q. How will the Company evaluate Customer applications?

A. The Company will evaluate applicant sites based on a variety of factors, including technical feasibility and anticipated charging station utilization. As part of this evaluation, the Company will analyze the projected costs of the charging station project, as well as the projected incremental distribution revenues the project may yield. The Company will reject proposed projects with disproportionately high estimated per-port costs and/or disproportionately low projected utilization.

Q. What is the term of customer's participation in the pilot?

A. A customer's participation in the pilot will be for ten years. The Company is proposing a ten-year period to align with depreciable lives of the make-ready and the charging stations, and to ensure Company's recovery of the costs of the charging stations from the participating customer when applicable. Upon expiration of this ten-year period, ownership of the charging stations and make-ready will either pass automatically to the customer on an "as is" basis, or the customer may renew the service agreement under any applicable program then offered by the Company.

Q. What happens if the customer terminates the service agreement before the end of the contract term?

A. Customers that leave the program prematurely will be required to purchase the make ready and charging stations at the remaining undepreciated value of the equipment, or alternatively, to have the Company remove the infrastructure, and reimburse the Company's costs of removal and stranded equipment (if any).

Q. How will the pilot support disadvantaged communities?

A. The Company will target school districts, municipal governments, and non-profit organizations that serve EJ Areas to participate in the pilot. The Company will target that 25% of projects annually serve or are sited within EJ Areas.

Q. Please describe how the Company will conduct outreach about the pilot.

A. The Company will conduct outreach and education through a variety of channels. The Company will employ outreach strategies similar to those I outline above for the Make-Ready Pilot. Additionally, the Company will leverage its relationships with its Community Based Organizations (CBOs) to identify appropriate non-profit entities serving low income customers and EJ Areas. The Company will also conduct outreach to fleet distributors who sell in key customer segments. Finally, the Company will leverage relationships with participating charging station vendors, as well as the vendor providing the fleet electrification assessments, to conduct outreach to prospective customers.

Q. How many customers are projected to participate in the pilot?

A. The Company projects that in addition to the Port Authority, a total of 7 customers will participate annually, comprising a mix of customers including school districts or bus operators, local government, non-profits, and commercial customers. To help control Pilot costs, the Company will cap participation at 12 new participants annually.

Q. What are the Company's projected costs of the Pilot?

A. The Company projects the following costs for the non-Transit Fleet portion:

Table 5: Non-Transit Fleet 2022 Pilot Costs

Non-Transit Fleet 2022 Pilot Costs	
Capital	
Make Ready Design, Installation, and Hardware	$198,900
Charging Stations, Network Fees, Commissioning	$268,520
Operations Project Management and Oversight	$137,790
IT	$123,500
Expense	
Maintenance and Warranty	$102,000
Shipping	$4,590
Program Management and Administration	$91,330
Marketing/Advertising/Education	$1,000
Sales Tax	$2,270
Total	**$929,900**

The Company estimates incurring similar annual capital and expense costs in subsequent years.

The Company projects the following costs for the Transit portion:

Table 6: Transit 2022 Pilot Costs

Transit 2022 Pilot Costs	
Capital	
Make Ready Installation and Hardware	$300,000
Charging Stations and Commissioning	$510,000
Operations Project Management and Oversight	$174,000
Expense	
Maintenance and Warranty	$99,830
Total	**$1,083,830**

The Company anticipates no additional Transit capital expenditures after 2022. Annual expenses for Transit are expected to decrease substantially after 2022. The Company is therefore proposing to normalize recovery of the $99,830 over a three-year period, or $33,280 per year.

Q. Will customers be required to pay a separate fee to participate in the Pilot?

A. With the exception of the Port Authority, yes. Participating customers who select the Bundled Option will be required to pay a monthly fee designed to recover the costs of the charging stations, shipping, commissioning, sales tax, and associated network data and maintenance costs over the 10-year contract duration. Customers

who select the Pre-Pay Option will pay upfront for the charging station, shipping, commissioning, and sales tax and will pay a smaller monthly fee designed to cover the cost of maintenance, and network data. The monthly fee does not include costs for make-ready design, equipment, and installation, program management, IT, and marketing and education, which will be recovered through base rates.

Table 7: Fleet Pilot Monthly Per Port Fees

Option	Monthly Per Port Fee
Bundled Option	$63.24
Pre-Pay Option	$28.82

Company witness Ms. Everett discusses program cost recovery, including the calculation of these monthly fees, in further detail in her direct testimony, DLC St. No. 18.

The Port Authority will not be required to pay a separate fee to participate in the Pilot. The Port Authority plays a critical role in the community – 80% of its bus routes serve low-income communities and it provided over 40 million rides in 2020 even through the pandemic.[35] In light of its unique position and functions in the Company's service territory, the Port Authority will not be required to pay a separate fee to participate in the Pilot.

Q. Has the Company conducted a benefit-cost analysis of this pilot?

[35] Port Authority of Allegheny County (2021). "Annual Service Report 2020," Obtained from: https://www.portauthority.org/siteassets/inside-the-pa/surveys-and-reports/annual_service_report_fy2020_web.pdf

A. Yes. As Company witness Ms. Everett discusses in detail in her direct testimony, DLC St. No. 18, the Company conducted benefit-cost analyses of this Pilot using several methodologies. These analyses indicate that the Pilot is cost effective.

C. Home Charging Pilot

Q. Please summarize the Company's proposed Home Charging pilot.

A. The Company proposes to offer an optional pilot to install a L2 station in residential customers' homes. The Company will install, own, and maintain the L2 station on the customer's behalf over a 5-year period.

Q. Why is the Company proposing the Home Charging pilot?

A. The Company is proposing the Home Charging pilot to benefit customers and help drive EV adoption.

Q. What barriers to EV adoption does the pilot address?

A. The pilot facilitates installation of L2 charging stations, which the Company has identified as a central obstacle to residential EV adoption. For the average EV driver, 80% of charging happens at home. In order to feel comfortable and to maximize the convenience of converting to an EV, many people need to have access to sufficiently-fast charging at home. L2 stations provide quick and controllable charging.

Purchasing and installing a L2 station can present a number of barriers for customers. For many people this is a brand new way to fuel their vehicle. The technology is unfamiliar, with an array of options and features to consider. The Company's customer surveys on this topic indicate that the majority of survey respondents are unfamiliar with key topics, such as electrical requirements, general price, charging station brands and models, and installation. See Exhibit SO-4: Duquesne Light Customer EV Survey Results Summary for further details.

Additionally, the station and its installation can be expensive. The Company's experience suggests that slightly less than half of L2 installations in its service territory require additional electrical work in the form of panel upgrades or additional breakers. This additional electrical work can cost anywhere from $1,000-$3,000 or more, depending on the complexity and the upgrades required. This is in addition to the cost of the station itself, which can range from $250 for a basic, non-WiFi connected station to $750 for a Wi-Fi connected, "smart" station, plus an average cost of $500 to install the station.

These barriers can be overwhelming and create a "hassle" factor that turns people off from switching to an EV. The pilot will address each of these obstacles by offering customers an affordable, convenient, all-inclusive service to install a L2 station in their home, potentially at no up-front cost.

Q. Have the Company's customers indicated interest in the pilot?

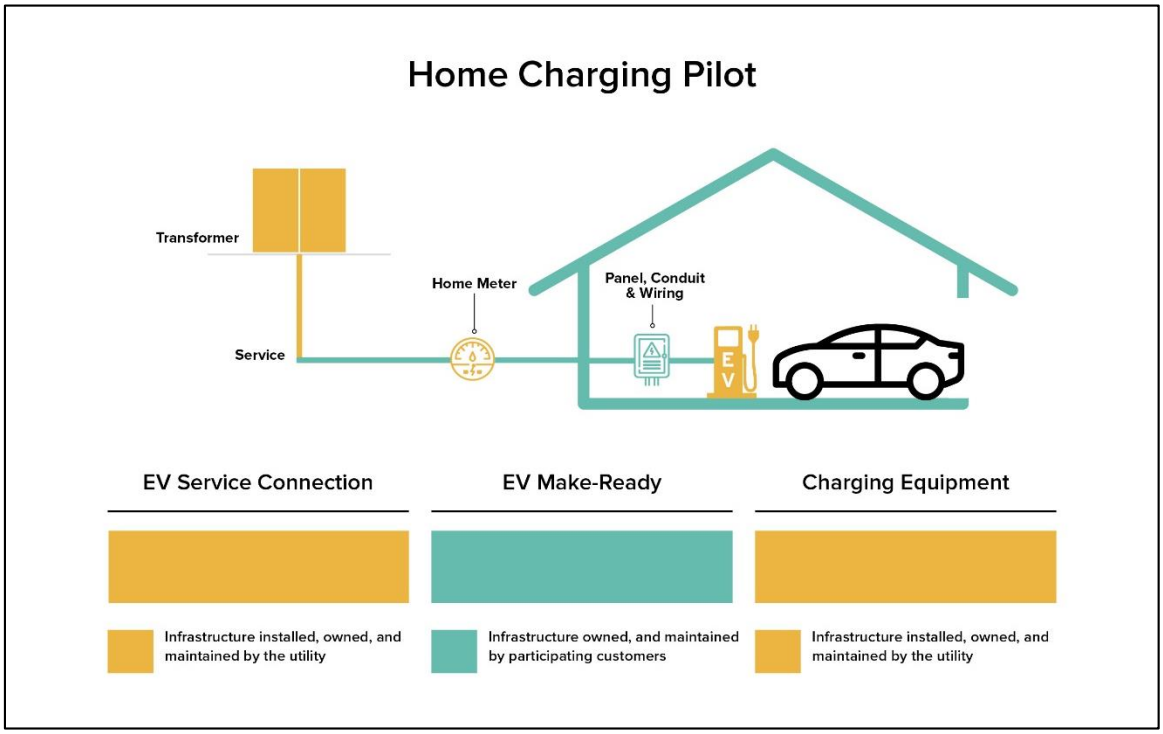
A. Yes. In a survey the Company conducted of customers who indicated that they were extremely likely or likely to purchase an EV for their next vehicle, 69% of participants agreed that the home charging install program would make it easier for them to drive electric, and 65% responded that they were likely to participate in the program if offered. See Exhibit SO-4 for further details.

Q. What services will the Company provide through the pilot?

A. Through the pilot, the Company will install, own, and maintain L2 stations for residential customers. The Company will also pay for a standard charging station installation up to $500 ("Standard Installation Costs"). Installation costs above $500, or upgrades to home electrical equipment such as for a new panel or breaker ("Home Electrical Upgrade Costs"), shall be borne by the customer, except for low-income participants, whom I address further below. In addition, the Company will coordinate charging station troubleshooting and station repair or replacement in the event of a station failure.

A simplified typical example is depicted in the below illustration:

Figure 3: Home Charging Pilot Example Ownership Structure



Q. Who will be eligible to participate in the Home Charging pilot?

A. All residential customers who meet the following requirements will be eligible to apply:

- Be a Duquesne Light residential customer with no overdue bills at the service address;
- Own a single-family detached, row house or duplex property with a personal garage or private driveway suitable for charging station installation; and
- Own or lease an EV, which is registered to the service address.

Customers' enrollment in the Pilot shall be for a period of five years. Participating customers will be required to:

- Execute a Home Charging Pilot Customer Agreement, which is provided as Exhibit SO-5;
- Agree to share their charging data via the charging station vendor for the duration of their participation; and
- Maintain active Wi-Fi at the service address with sufficient signal at charging station location for the duration of their participation.

Q. What happens at the conclusion of the customer's five-year term of participation?

A. At the conclusion of the five year contract term, ownership of the charging station, as well as all associated responsibilities for on-going maintenance and management, will pass automatically to the customer. Alternatively, the customer will have the option to enter into a new service agreement under any applicable programs then offered by the Company, or pay the Company $200 (i.e., the Company's estimated average cost of charging station removal) to remove the station.

Q. What happens if the customer defaults or terminates the agreement early?

A. Customers who default or terminate the agreement early will be required to make a lump-sum payment of all amounts due under the remaining term of the agreement.

The Company will also remove the station at customer request for a fee of $200. A customer's default will not be grounds for termination of electric service to the customer's residence.

Q. Is the Company's proposal consistent with those adopted in other states?

A. Yes. A number of other utilities, including Madison Gas & Electric and Xcel Energy, have implemented similar charging station turn-key services.[36]

Q. Will the pilot provide the Company with additional insight that may aid distribution planning?

A. Yes. The average L2 load (7.2 kW-12kW) can significantly increase a household's electric demand. The Pilot enrollment process will provide the Company notice of increasing load, which can facilitate distribution system investment that may be required to ensure grid reliability and safety. This advance notice will become increasingly important as EV adoption, and corresponding system issues associated with EV clustering, accelerate.

Q. Will the Company offer additional assistance to low-income customers interested in participating in the pilot?

[36] Madison Gas and Electric (2019, March). Application of Madison Gas and Electric Company for Authority to Change Electric and Natural Gas Rates. Docket No. 3270-UR-120. Obtained from: https://apps.psc.wi.gov/APPS/dockets/content/detail.aspx?id=3270&case=UR&num=120;
Xcel Energy (2019, May). Compliance Filing Residential Electric Vehicles Charging Tariff Docket No. E002/M-15-111 AND E002/M-17-817. Obtained from: Document ID 20195-153306-01.

A. Yes. As I indicated earlier, the Company will cover up to the Standard Installation Costs. Where a participant is low-income – i.e., where the customer's household income is no greater than 150% of federal poverty guidelines – the Company shall cover up to $2,000 of combined Standard Installation Costs and required Home Electrical Upgrade Costs that are necessary to accommodate charging station installation and that otherwise might put the program out of reach. The customer will be responsible for paying for any upgrades beyond this allowance.

Q. Please describe how the Company will conduct outreach and education about the pilot.

A. The Company will conduct outreach and education about its pilot through a variety of methods. It will include information about the program and enrollment processes on its website. The Company will also engage with local auto dealerships and charging station vendors, conduct social media and digital advertising, and promote the program at public events, such as ride-and-drives.

Q. How many customers are projected to participate in the pilot?

A. The Company projects 125 customers annually and will cap participation at this amount.

Q. What are the Company's projected costs of the pilot?

A. The Company projects the following pilot costs:

Table 8: Home Charging 2022 Pilot Costs

Home Charging 2022 Pilot Costs	
Capital	
Charging Station Hardware and Installation	$183,040
IT	$126,100
Operations Engineering	$42,670
Expense	
Program Management	$105,535
Data Management	$7,800
Charging Station Maintenance	$4,125
Marketing/Advertising/Education	$13,600
Low-Income Assistance	$19,500
Sales Tax	$1,280
Total	**$503,650**

The Company estimates incurring similar annual capital and expense costs in subsequent years.

Q. Will customers be required to pay a separate fee to participate in the pilot?

A. Yes. Similar to the Company's proposed Fleet Charging pilot, participating customers will be required to pay a monthly fee of $21.17 designed to recover the costs of the charging stations, installation, sales tax, and maintenance costs over the 5-year term of the agreement. The monthly fee does not include costs for program management, IT, operations engineering, and marketing and education, which will

be recovered through base rates. Company witness Ms. Everett discusses program cost recovery, including the calculation of this fee, in further detail in her direct testimony, DLC St. No. 18.

Q. Has the Company conducted a benefit-cost analysis of this pilot?

A. Yes. As Company witness Ms. Everett discusses in detail in her direct testimony, DLC St. No. 18, the Company conducted benefit-cost analyses of this Pilot using several methodologies. These analyses indicate that the Pilot is cost effective.

IV. CUSTOMER PORFOLIO

Q. Please summarize the Company's proposed Customer Portfolio.

A. The Customer Portfolio includes the following three components:

- Awareness, Education, and Engagement ("AEE"), which will allow the Company to provide transportation electrification informational services to customers.
- Fleet Electrification Advisory Service, which will support planning and analysis for an average of 7 fleet customers annually.
- A Registration Incentive, which will allow the company to engage with EV drivers and gather data to assist with distribution system planning.

A. Awareness, Education, and Engagement

Q. Why is the Company proposing to conduct customer transportation electrification awareness, education, and engagement?

A. The Company's AEE efforts are intended to (1) fill an information gap in the Company's service territory around EVs and charging stations generally; and (2) educate customers about the Company's transportation electrification programs. The Company will build upon its education and outreach efforts to date, as discussed in Exhibit SO-3, to support customers who have not yet been reached and provide assistance to customers who are navigating the rapidly evolving electric transportation market transformation.

The Company's lessons learned to date indicate that customers face a significant learning curve associated with transportation electrification, and lack of consumer awareness continues to be one of the most significant barriers to greater adoption of EVs.

The Company is well-positioned to address this barrier. Many aspects of EV education bear directly on the Company's systems and functions. For example, current and prospective EV owners may require fundamental information regarding different EV charging technologies, how to connect EV charging equipment to the Company's grid, and bill impacts. This information can often best be provided (and in some instances, can only be provided) by the Company.

Q. Please describe the Company's plans for future AEE activities.

A. As mentioned elsewhere throughout my testimony, the Company will undertake program-specific outreach to ensure that customers are aware of the programs available to them and educate them on the program benefits and requirements. The Company will continue employing several communication channels, including the Company's website, web tools, community based events, technical assistance and internal knowledge building. The Company will also continue to regularly examine customer feedback and adjust its communication approaches accordingly. For example, in a recent evaluation of its EV Guide web tool, the Company found that the majority of users accessed the tool via a mobile device (50%) compared to 44% on desktop and 6% on tablet. The Company therefore plans to evaluate and improve the usability of EV educational content and support on mobile devices.

Q. Does the Company plan to engage low-income customers and communities through its AEE activities?

A. Yes. As shown in the table below, the Company's research indicates that the distribution of individuals who state that they are likely to purchase an EV as their next vehicle is fairly evenly distributed among household income levels. This suggests that EVs are not only for the Company's wealthiest customers; with equitable awareness and education, all customers can evaluate how EVs can serve as a cost-saving solution to their mobility needs.

Table 9: EV Purchase Intent by Income

Household Income	% of individuals within Income Class likely to purchase an EV as their next vehicle
<$20,000	6%
$20,000-$49,999	21%
$50,000-$74,999	20%
$75,000-$99,999	16%
>$100,000	24%
Prefer not to answer	13%

Ensuring that AEE efforts serve low income customers, especially those within EJ Areas, is a high priority for Duquesne Light. The Company recognizes that the needs of communities that it serves vary widely, and EV engagement must be responsive and inclusive to those varied needs. AEE efforts tailored to low income customers will be informed by equitable best practices that are emerging in other regions of the country, including the Greenlining Institute's "Electric Vehicles for All Equity Toolkit."[37]

Q. What are the Company's projected costs of the AEE activities?

A. The Company's projected costs for 2022 are as follows:

[37] Greenlining Institute (2021). "Electric Vehicles for All: An Equity Toolkit," Obtained from: https://greenlining.org/resources/electric-vehicles-for-all/.

Table 10: AEE 2022 Costs

AEE 2022 Costs	
Expense	
Tools and Software	$187,460
Advertising and Market Research	$95,000
Events	$85,000
Sponsorship and Training	$25,000
Total	**$392,460**

The Company expects to incur similar annual expenses in subsequent years.

Q. How will the Company recover its costs of the AEE activities?

A. These costs will be recovered through base distribution rates.

B. Fleet Electrification Advisory Service

Q. Please summarize the Company's proposed Fleet Electrification Advisory Service.

A. This service will provide targeted outreach to customers with vehicle fleets to help them to develop fleet electrification plans. Through this service, the Company will collect and analyze customer fleet data and produce fleet strategic electrification plans for participating customers. The plan will identify which vehicles are the best candidates for electrification, calculate total cost of ownership, estimate GHG emissions and emission reductions, identify available financial incentives, and

estimate the charging infrastructure required to support electrification. The end result will be a plan that the customer can use to guide its decision-making about fleet electrification efforts going forward. Where applicable, the Company will further assist participating customers in implementing these plans through the Fleet Charging pilot.

Q. Why does the Company believe it is important to offer this service?

A. This service will leverage the Company's expertise to help fleet customers overcome unique challenges to fleet electrification. Many fleet customers interested in electrification lack the resources to understand the nascent EV market, evaluate their own fleets, and analyze the financial and practical implications of electrification. Without undertaking such a full-scale evaluation, many fleets will not make the transition in the near future due to the large number of unknowns. The Fleet Electrification Advisory Service will address this gap.

In addition to benefitting participating customers, this program will also benefit the Company by providing early, detailed insight into customers' electric service needs. The Company anticipates that engaging with customers early in the planning process will help inform the Company's distribution system planning, construction, and operation decisions.

Q. What customers will be eligible and targeted for this service?

A. Non-residential customers with a minimum fleet size of 10 vehicles will be eligible to participate. This minimum fleet size requirement is reduced to 6 vehicles for 501(c)(3) not-for-profit entities. The Company anticipates that customers with smaller fleets will be able to use the tools and information on the Company's website to conduct self-guided fleet evaluations. The Company will primarily target those customers that may not already have national, corporate-level support to conduct this type of evaluation, and, in particular, will focus on public-sector entities such as municipal governments and school districts.

Q. Please describe how the Company will conduct outreach and education for the Fleet Electrification Advisory Service.

A. The Company will recruit municipal governments, school districts, non-profits, and private sector commercial customers to participate in this service. The Company will host Fleet Electrification Advisory Service content and application instructions on its website, and will conduct direct customer outreach via its Major Accounts, Government Affairs, Universal Services, and Transportation Electrification teams. The Company will also work with local non-profits, trade associations, and fleet dealers to help inform customers of this opportunity and identify good candidates for inclusion.

Q. How many customers are projected to participate in the service?

A. The Company is anticipating that a total of 36 customers will participate from 2022 through 2024.

Q. How will low-income customers and communities benefit from this service?

A. The Company will target non-profit organizations that serve EJ Areas to participate in the Fleet Electrification Advisory Service. Perhaps even more than other customers with fleets, these entities may lack the resources or expertise to undertake a fleet electrification evaluation, even if doing so would ultimately benefit their operations and the communities they serve. The Company anticipates having at least two non-profit entities serving EJ Areas participate on an annual basis.

Q. What are the Company's projected costs for this service?

A. The Company projects the following costs in 2022 for this service:

Table 11: Fleet Electrification Advisory Service 2022 Costs

Fleet Electrification Advisory Service 2022 Costs	
Expense	
Customer Assessments	$194,300
Program Management	$40,600
Fleet Identification	$50,000
Marketing/Advertising/Education	$2,500
IT	$5,000
Total	**$292,400**

The Company expects to incur similar annual expenses in subsequent years.

Q. How will the Company recover its costs of the service?

A. The costs of this service will be recovered through base distribution rates.

C. Registration Incentive

Q. Please summarize the Company's proposed Registration Incentive.

A. The Registration Incentive will offer a one-time incentive to customers that register their EV with the Company. It is designed to provide the Company with information regarding the location and usage patterns of customers with EVs and to assist with future distribution system planning.

Q. Why is the Company proposing to continue the Registration Incentive?

A. As of December 2020, there were approximately 3,900 EVs in operation in the Company's service territory. As of December 2020, only 17% of these vehicles have been registered with the Company. The customer information collected to date serves as a good foundation, but more responses are needed for a representative sample. Additionally, as more customers purchase EVs, the need to stay apprised of the evolving impact that the vehicles are having on the grid becomes more important, as discussed further in Exhibit SO-3.

Q. Is the Company proposing any changes to the Registration Incentive?

A. Yes. During administration of the EV ChargeUp Pilot, the Company found that the manual application of the incentive to a customer's bill is process-intensive. Moving forward, the Company proposes to provide the incentive in the form of a pre-paid debit card instead of a bill credit.

The Company proposes to reduce the incentive amount from $60 to $50. This would reduce costs an average of approximately $16,500 per year from 2022-2024. An incentive amount of $50 is in line with EV registration programs offered by other electric utility companies, including PECO.[38] The Company does not anticipate that this incentive reduction will impact customer participation.

Q. How will customers apply for the Registration Incentive?

A. Customers apply for the Registration Incentive by visiting Duquesne Light's website and accessing the application link. Applicants must complete the application and include the required documentation, including proof of vehicle registration.

Q. What are the eligibility requirements for the Registration Incentive?

A. The applicant must be a residential or nonresidential customer who owns or leases an EV. Applications are evaluated to ensure that each vehicle is registered only once; only one incentive is available per qualified vehicle. Only plug-in EVs, as

[38] PECO (2021). "Smart Driver Rebate," Obtained from: https://pecorebateportal.com/electric-vehicles/smart-driver-rebate.html.

identified by the U.S. Environmental Protection Agency and U.S. Department of Energy's fueleconomy.gov database, qualify.

Q. How many customers do you expect to receive the Registration Incentive?

A. The Company estimates that an average of 3,977 customers will participate each year from 2022-2024. This estimate is based on an average of EPRI's median and high EV adoption scenarios within the Company's service territory. It assumes an uptake of the incentive by 25% of EVs in operation in 2022, 30% of EVs in operation in 2023, and 35% of EVs in operation in 2024.

Q. What are the Company's projected costs of the Registration Incentive?

A. The Company anticipates the following expenses for this activity in 2022:

Table 12: Registration Incentive 2022 Costs

Registration Incentive 2022 Costs	
Expense	
Incentives	$47,660
Program Administration	$13,290
Advertising and Collateral	$7,000
Total	**$67,950**

The Company expects to incur similar annual expenses in subsequent years.

Q. How will the Company recover its costs of the Registration Incentive?

A. These costs will be recovered through base distribution rates.

VI. OTHER TRANSPORTATION ELECTRIFICATION MATTERS

Q. Does the Company's proposal include other aspects related to the EV ChargeUp Pilot?

A. Yes. The Settlement in the Company's previous base rates case deferred resolution of certain EV ChargeUp Pilot issues to this proceeding. These issues are (1) recovery of L2 rebate costs; (2) treatment of unspent Registration Incentive funds; and (3) a plan for an EV load management program. I address each of these issues, as well as the costs of the DC Fast Charging Evaluation undertaken as part of the EV ChargeUp Pilot, in this section.

Q. What did the 2018 Settlement provide with respect to L2 rebate expenses?

A. In relevant part, the Settlement authorized the Company to invest up to $650,000 in expense in the form of rebates behind the meter. The Settlement provides that "Determination of the appropriate method of cost recovery for the behind the meter Level 2 rebate costs will be deferred" to this base rate case proceeding. Settlement ¶ 45(b).

Q. How much expense did the Company incur in L2 rebate costs?

A. The Company incurred $413,848 of L2 rebate costs under this program. I address the Company's proposed treatment of these expenses below.

Q. What did the 2018 Settlement provide with respect to customer Registration Incentives?

A. The Settlement provided for $70,000 per year in registration incentives, and further provides that "[a]ny unused portion of the $70,000 per year will be addressed" in this proceeding. Settlement ¶ 45(e).

Q. Is there any unused portion of the $70,000 per year of Registration Incentives?

A. Yes. At the conclusion of 2020, unused Registration Incentives totaled $48,580 for 2019 and $51,640 for 2020. The Company recorded these amounts as a regulatory liability. The unused portion of the 2021 program budget is projected to be $39,922, for a total expected unused incentive amount of $140,142 for 2019-2021. This 2021 estimate is based on an average of EPRI's median and high EV adoption scenarios within the Company's service territory and assumes an uptake of the incentive by 20% of EVs in operation.

Q. What is the Company's proposal with respect to L2 rebate expenses and unused Registration Incentive expenses?

A. The Company is proposing to net these two amounts ($413,848 - $140,124 = $273,724) and recover the net amount normalized over a three-year period. Company witness Mr. O'Brien's testimony addresses this in further detail in his direct testimony, DLC St. No. 10.

Q. What does the Settlement provide with respect to DC Fast Charging Evaluation?

A. In relevant part, the Settlement provided as follows:

> a. The Company's proposed DC Fast Charging Evaluation will be limited to make ready infrastructure, as defined in DLC Statement No. 6, and fast charging stations owned by the Company to be used solely for the Company and the Port Authority of Allegheny County electric bus evaluation. The cost associated with this investment included in rate base in this case is $500,000.

2018 Rate Case Settlement, ¶ 45(a).

Q. Did this Settlement provision limit the Company's costs of the DC Fast Charging Evaluation?

A. No; the Settlement simply identified the extent of the investment that was deemed to be included in rate base through the FPFTY of the 2018 rate case.

Q. Has the Company incurred additional costs to implement the DC Fast Charging Evaluation?

A. Yes. The Company incurred a total of $854,736 in capital investment for this activity.

Q. Is the Company proposing to be allowed to include the entire amount in rate base in this proceeding?

A. Yes. It was not possible to complete the evaluation for $500,000. For example, in order to deliver service to the two (2) 150kW bus DCFCs and install make ready infrastructure, the Company needed to construct new service facilities. These costs were prudent because they supported system upgrades that will facilitate further DCFC installations at the Port Authority's garage at a reduced cost per charging station. Moreover, the DC Fast Charging Evaluation provides many benefits for customers, as I explain in Exhibit SO-3.

Q. Please summarize the 2018 Settlement's provisions regarding an EV load management program.

A. The Settlement provides at ¶ 45(d) that the Company will assess the EV ChargeUp Pilot data and develop a plan for an EV load management program, to be proposed in this proceeding.

Q. How do the Company's proposals support EV load management?

A. Several components of the Company's proposals, as well as its existing EV programs, are designed in part to help EV customers manage their load.

First, as Company witness Ms. Everett describes in detail in her direct testimony, DLC St. No. 18, the Company is proposing a residential subscription rate pilot in this proceeding, wherein participating residential customers' variable distribution charges will be based on their demand subscription level. This program will incent participating customers to spread out or "flatten" their electric load,

which may be particularly attractive to customers with EVs that can be charged during off-peak hours.

Additionally, in its Default Service Plan IX proceeding, Docket No. P-2020-3019522, the Company obtained approval for the Electric Vehicle Time of Use rate (EV-TOU) supply rate program that will become effective in June 2021. The EV-TOU rate is a voluntary supply rate available to residential customers who own or lease an EV, and small and medium commercial customers that own or lease an EV or that own charging stations. It provides a schedule of three time periods (peak, shoulder, and off-peak) and promotes vehicle charging with lower supply rates during shoulder and off-peak hours.

The Company's proposals also reflect the need to continue to collect and analyze data to inform how the Company and its customers plan for, accommodate, and manage EV loads. Closely related to these efforts, as Company witness Mr. Morris describes in his direct testimony, DLC St. No. 4, one driver of this rate case is the Company's ongoing investment in distribution and IT system technologies. As Mr. Morris discusses, these investments will help to mature the Company's system planning and operational flexibility, which can support future load management strategies.

VII. CONCLUSION

Q. Does that conclude your testimony?

A. Yes it does. I reserve the right to supplement my testimony through the course of this proceeding.

Michael Zimmerman
Senior Counsel, Regulatory

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April 2, 2020

Via Electronic Filing

Ms. Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg, PA 17120

Re: Duquesne Light Company's EV ChargeUp Pilot Annual Report
Docket No. R-2018-3000124

Dear Secretary Chiavetta:

Pursuant to Paragraph 45(f) of the *Joint Petition for Approval of Settlement Stipulation*, approved in relevant part by the Pennsylvania Public Utility Commission by Order entered December 20, 2018 at the above-captioned docket, please find enclosed for filing Duquesne Light Company's EV ChargeUp Pilot Annual Report for the period January 1, 2019 through February 29, 2020.

Should you have any questions, please do not hesitate to contact me.

Respectfully Submitted,

Michael Zimmerman
Senior Counsel, Regulatory

Enclosure

EV ChargeUp Pilot Annual Report
January 2019 – February 2020

April 2, 2020

Introduction

Duquesne Light Company (the "Company") hereby submits this Report pursuant to the *Joint Petition for Approval of Settlement Stipulation* ("Settlement"), approved in relevant part by the Pennsylvania Public Utility Commission by Order entered December 20, 2018 at Docket No. R-2018-3000124 ("Settlement"). Settlement ¶ 45(f) provides that the Company will submit an annual report concerning the Company's implementation of the EV ChargeUp Pilot ("Pilot"), including: (a) charging infrastructure deployed over time, including by location, and activation date; (b) charging infrastructure installation costs by site type (broken out by capital and rebate costs); (c) for all charging stations deployed, the usage rate by site type and charger type; and (d) estimated avoided emissions resulting from the programs.

The Company's EV ChargeUp Pilot commenced on January 1, 2019. This Report covers the period January 1, 2019 through February 29, 2020.

Charging Infrastructure Deployment

Level 2 Charging Station Evaluation

The Pilot has deployed 49 Level 2 dual-port charging stations (98 plugs) at nine publically-accessible customer sites. Each site included a minimum of four Level 2 dual port charging stations. Table 1 indicates the date of site electrification for each of the Level 2 charging station evaluation sites.

Table 1: Level 2 Charging Station Evaluation (as of 2/29/2020)

Customer Site	Site Electrification Date	Number of Plugs	DLC Installation Costs (Up to and Including Meter)	DLC Installation Costs (Rebate)	Electricity consumed (kWh)	CO_2 Avoided (Tons)
1	10/11/2019	16	$977	$69,149	2,116	2.49
2	11/20/2019	10	$1,572	$18,650	1,393	1.64
3	12/19/2019	8	$1,545	$52,819	2,511	2.96
4	12/30/2019	8	$1,627	$32,342	2,153	2.54
5	12/30/2019	8	$624	$24,056	685	0.81
6	1/14/2020	8	$1,872	$55,514	3,017	3.56
7	1/14/2020	8	$2,103	$29,550	496	0.58
8	1/21/2020	8	$1,959	$32,740	203	0.24
9	2/28/2020*	24	$343	$100,000	0	0

**Charging stations installed but site not yet electrified*

This table depicts only Duquesne Light's costs. As the table shows, Duquesne Light incurred relatively low front-of-meter costs associated with each installation. This indicates that Duquesne Light is able to serve these charging station installations mainly through pre-existing distribution grid capacity.

Participating customers have demonstrated a high level of "buy-in" with respect to charging station installation. Duquesne Light worked closely with customers as part of the Pilot, including assisting customers in leveraging the Pilot to obtain other sources of project funding. Customer-reported project cost data (including costs related to charging station installation, charging station hardware, service fees, signage, etc.) indicates that the Company's rebate covered about 1/3 of project costs, customers themselves covered 1/3 of project costs, and the state's Driving PA Forward rebate program covered 1/3 of project costs.

DC Fast Charging Station Evaluation

The Pilot deployed two DC fast charging stations at one Port Authority of Allegheny County location for electric buses and Company fleet vehicles. The DC fast charging stations were activated on February 20, 2020, and the Port Authority's electric buses were placed into service on March 30, 2020.

Table 2: DC Fast Charging Station Evaluation (as of 2/29/2020)

Customer Site	Site Electrification Date	Number of Plugs	DLC Installation Costs	Electricity consumed (kWh)	CO_2 Avoided (Tons)
1	2/20/2020	2	$715,000[1]	0	0

The Port Authority has also demonstrated success in leveraging other funding sources to support fleet electrification, including funding from the Federal Transit Administration's Low or No Emission Vehicle Program for the incremental cost difference between its electric buses and traditional diesel buses.

[1] Consistent with Settlement ¶ 45(a), only $500,000 of this investment has been included in rate base.

Estimated Avoided Emissions

The Company has developed a framework to estimate the avoided emissions (Appendix 1). The objective of this framework is to measure the difference in emissions from the use of electricity as a transportation fuel resulting from the Pilot relative to a business-as-usual scenario in which petroleum-based transportation fuels are used for vehicle travel.

The Pilot has resulted in total estimated avoided emissions of 14.8 Tons CO_2 as of 2/29/2020. Table 1 indicates estimated avoided emissions (CO_2) of the Level 2 charging stations for each of the Level 2 charging station evaluation sites. No avoided emissions have been recorded as a result of the DC fast charging station evaluation as of 2/29/2020.

Conclusion

The Company is encouraged by the positive overall response to the Pilot to date, particularly with respect to the high degree of “buy-in” demonstrated by participants. This response affirms the Company’s continued support for transportation electrification. With strategic planning, transportation electrification can provide benefits to all utility customers, the electricity system, and the environment. The Company is uniquely positioned to realize these benefits by supporting the deployment of critical electrical infrastructure, spurring the deployment of innovative technologies, generating customer awareness of transportation electrification, and managing EV load to enhance system flexibility and reliability.

The Company continues to experience ongoing interest from customers, and foresees significant additional opportunities to accelerate the benefits of electric transportation for all Duquesne Light customers. The Company looks forward to further engaging with the Commission and stakeholders on transportation electrification in future proceedings.

Appendix 1

Level 2 Charging Station Evaluation Avoided Emissions Framework

Avoided Emissions Framework Inputs

Input	Unit	Assumption
Energy dispensed	kWh	EV Charge Rebate data
EV Fuel Economy	kWh per mile (kWh/mi)	0.3 kWh/mi[2]
Gasoline Vehicle Fuel Economy	miles per gallon (mpg)	24.9 mpg[3]
2018 Average Pennsylvania Carbon Intensity of Electricity Generation	grams of CO_2 per kWh (lb. CO_2/kWh)	.789 lb. CO_2/kWh[4]
Carbon Intensity of Gasoline	pounds of GHG per gallon (lb/gal)	23.5 lb/gal[5]

Avoided Emissions Framework Intermediate Outputs

Intermediate Output	Unit	Calculation
Electric Vehicle Miles Traveled (eVMT)	mi	Energy Dispensed / EV Fuel Economy
Electric Vehicle Total Emissions	lb. CO_2	Energy Dispensed * 2018 Average PA Carbon Intensity of Electricity Generation
Avoided Gasoline Vehicle Emissions	lb. CO_2	(eVMT / Gasoline Vehicle Fuel Economy) * Carbon Intensity of Gasoline

Avoided Emissions Framework Final Output

Final Output	Unit	Calculation
Net Avoided Emissions	Tons of CO_2	(Avoided Gasoline Vehicle Emissions – Electric Vehicle Total Emissions) / 2,000 lb.

[2] Most commercially available EVs have fuel economies between 0.25kWh/mi and 0.35kWh/mi. https://www.fueleconomy.gov/feg/PowerSearch.do?action=noform&path=3&year1=2017&year2=2018&vtype=Electric&srchtyp=newAfv&pageno=1&sortBy=Comb&tabView=0&tabView=0&rowLimit=50
[3] https://www.epa.gov/automotive-trends/highlights-automotive-trends-report
[4] Includes CO_2 emissions https://www.eia.gov/electricity/data/state/emission_annual.xls; https://www.eia.gov/electricity/data/state/annual_generation_state.xls
[5] https://afdc.energy.gov/vehicles/electric_emissions_sources.html

Exhibit SO-2

EV ChargeUp Pilot Annual Report
March 2020 – February 2021

April 16, 2021

Introduction

Duquesne Light Company (the "Company") hereby submits this Report pursuant to the *Joint Petition for Approval of Settlement Stipulation* ("Settlement"), approved in relevant part by the Pennsylvania Public Utility Commission by Order entered December 20, 2018 at Docket No. R-2018-3000124 ("Settlement"). Settlement ¶ 45(f) provides that the Company will submit an annual report concerning the Company's implementation of the EV ChargeUp Pilot ("Pilot"), including: (a) charging infrastructure deployed over time, including by location, and activation date; (b) charging infrastructure installation costs by site type (broken out by capital and rebate costs); (c) for all charging stations deployed, the usage rate by site type and charger type; and (d) estimated avoided emissions resulting from the programs.

The Company's EV ChargeUp Pilot commenced on January 1, 2019. The first reporting period covered January 1, 2019 through February 29, 2020. This Report covers the period March 1, 2020 through February 28, 2021.

Charging Infrastructure Deployment

Level 2 Charging Station Evaluation

The Pilot has deployed 49 Level 2 dual-port charging stations (98 plugs) at nine publically-accessible customer sites. Each site included a minimum of four Level 2 dual port charging stations. Table 1 indicates the date of site electrification for each of the Level 2 charging station evaluation sites.

Table 1: Level 2 Charging Station Evaluation

Customer Site	Site Electrification Date	Number of Plugs	DLC Installation Costs (Up to and Including Meter)	DLC Installation Costs (Rebate)	Electricity consumed (kWh) (Activation – 2/29/20)	CO_2 Avoided (Tons) (Activation – 2/29/20)	Electricity consumed (kWh) (3/1/20 – 2/28/21)	CO_2 Avoided (Tons) (3/1/20 – 2/28/21)	Electricity consumed (kWh) (Total)	CO_2 Avoided (Tons) (Total)
1	10/11/2019	16	$977	$69,149	2,116	2.49	10,647	12.6	12,763	15.1
2	11/20/2019	10	$1,572	$18,650	1,393	1.64	2,594	3.1	3,987	4.7
3	12/19/2019	8	$1,545	$52,819	2,511	2.96	7,594	9.0	10,105	12.0
4	12/30/2019	8	$1,627	$32,342	2,153	2.54	10,115	11.9	12,268	14.4
5	12/30/2019	8	$624	$24,056	685	0.81	3,428	4.0	4,113	4.8
6	1/14/2020	8	$1,872	$55,514	3,017	3.56	4,964	5.9	7,981	9.5
7	1/14/2020	8	$2,103	$29,550	496	0.58	3,000	3.5	3,496	4.1
8	1/21/2020	8	$1,959	$32,740	203	0.24	1,058	1.49	1,261	1.7
9	2/28/2020	24	$343	$100,000	0	0	0	0	0	0

Data indicates Level 2 charging station utilization across all sites was negatively impacted due to the COVID-19 pandemic. Beginning in March 2020, shortly after sites were electrified, customer site hosts generally observed decreased usage of their parking facilities. In one instance, Customer Site Host 9, the charging stations have not been utilized since the site was electrified. The Company attributes this to the COVID-19 pandemic.

Table 1 depicts only Duquesne Light's costs. As the table shows, Duquesne Light incurred relatively low front-of-meter costs associated with each installation. This indicates that Duquesne Light is able to serve these charging station installations mainly through pre-existing distribution grid capacity.

Participating customers have demonstrated a high level of "buy-in" with respect to charging station installation. Duquesne Light worked closely with customers as part of the Pilot, including assisting customers in leveraging the Pilot to obtain other sources of project funding. Customer-reported project cost data (including costs related to charging station installation, charging station hardware, service fees, signage, etc.) indicates that the Company's rebate covered about 1/3 of project costs, customers themselves

covered 1/3 of project costs, and the state's Driving PA Forward rebate program covered 1/3 of project costs.

DC Fast Charging Station Evaluation

The Pilot deployed two DC fast charging stations at one Port Authority of Allegheny County location for electric buses and Company fleet vehicles. The DC fast charging stations were activated on February 20, 2020, and the Port Authority's electric buses were placed into service on March 30, 2020.

Table 2: DC Fast Charging Station Evaluation

Customer Site	Site Electrification Date	Number of Plugs	DLC Installation Costs	Electricity consumed (kWh) (Activation – 2/29/20)	CO_2 Avoided (Tons) (Activation – 2/29/20)	Electricity consumed (kWh) (3/1/20 – 2/28/21)	CO_2 Avoided (Tons) (3/1/20 – 2/28/21)	Electricity consumed (kWh) (Total)	CO_2 Avoided (Tons) (Total)
1	2/20/2020	2	$854,736[1]	0	0	25,198	34.8	25,198	34.8

Estimated Avoided Emissions

The Company has developed a framework to estimate the avoided emissions from the Level 2 Charging Station Evaluation (Appendix 1) and the DC Fast Charging Station Evaluation (Appendix 2). The objective of these frameworks are to measure the difference in emissions from the use of electricity as a transportation fuel resulting from the Pilot relative to a business-as-usual scenario in which petroleum-based transportation fuels are used for vehicle travel.

The Pilot has resulted in total estimated avoided emissions of 66.3 Tons CO_2 for the Level 2 Charging Station Evaluation and 34.8 Tons CO_2 for the DC Fast Charging Station Evaluation from 3/1/20 through 2/28/21. Table 1 indicates estimated avoided emissions (CO_2) of the Level 2 charging stations for each of the Level 2 Charging Station Evaluation sites. Table 2 describes the avoided emissions recorded as a result of the DC Fast Charging Station Evaluation.

[1] Settlement ¶ 45(a) $500,000 of this investment approved for recovery in rate base.

Conclusion

The Company continues to be encouraged by the positive overall response to the Pilot to date, particularly with respect to the high degree of “buy-in” demonstrated by participants. This response affirms the Company’s continued support for transportation electrification. With strategic planning, transportation electrification can provide benefits to all utility customers, the electricity system, and the environment. The Company is uniquely positioned to realize these benefits by supporting the deployment of critical electrical infrastructure, spurring the deployment of innovative technologies, generating customer awareness of transportation electrification, and managing EV load to enhance system flexibility and reliability.

In spite of the pandemic the Company continues to experience ongoing interest from customers, and foresees significant additional opportunities to accelerate the benefits of electric transportation for all Duquesne Light customers. The Company looks forward to further engaging with the Commission and stakeholders on transportation electrification in future proceedings.

Appendix 1

Level 2 Charging Station Evaluation Avoided Emissions Framework

Avoided Emissions Framework Inputs

Input	Unit	Assumption
Energy dispensed	kWh	EV Charge Rebate data
EV Fuel Economy	kWh per mile (kWh/mi)	0.3 kWh/mi[2]
Gasoline Vehicle Fuel Economy	miles per gallon (mpg)	24.9 mpg[3]
2018 Average Pennsylvania Carbon Intensity of Electricity Generation	grams of CO_2 per kWh (lb. CO_2/kWh)	.789 lb. CO_2/kWh[4]
Carbon Intensity of Gasoline	pounds of GHG per gallon (lb/gal)	23.5 lb/gal[5]

Avoided Emissions Framework Intermediate Outputs

Intermediate Output	Unit	Calculation
Electric Vehicle Miles Traveled (eVMT)	mi	Energy Dispensed / EV Fuel Economy
Electric Vehicle Total Emissions	lb. CO_2	Energy Dispensed * 2018 Average PA Carbon Intensity of Electricity Generation
Avoided Gasoline Vehicle Emissions	lb. CO_2	(eVMT / Gasoline Vehicle Fuel Economy) * Carbon Intensity of Gasoline

Avoided Emissions Framework Final Output

Final Output	Unit	Calculation
Net Avoided Emissions	Tons of CO_2	(Avoided Gasoline Vehicle Emissions – Electric Vehicle Total Emissions) / 2,000 lb.

[2] Most commercially available EVs have fuel economies between 0.25kWh/mi and 0.35kWh/mi. https://www.fueleconomy.gov/feg/PowerSearch.do?action=noform&path=3&year1=2017&year2=2018&vtype=Electric&srchtyp=newAfv&pageno=1&sortBy=Comb&tabView=0&tabView=0&rowLimit=50

[3] https://www.epa.gov/automotive-trends/highlights-automotive-trends-report

[4] Includes CO_2 emissions https://www.eia.gov/electricity/data/state/emission_annual.xls; https://www.eia.gov/electricity/data/state/annual_generation_state.xls

[5] https://afdc.energy.gov/vehicles/electric_emissions_sources.html

Appendix 2

DCFC Evaluation Avoided Emissions Framework

Avoided Emissions Framework Inputs

Input	Unit	Assumption
Total Energy Consumed by Bus Trip	kWh	Measured directly by bus
Diesel Transit Bus Avg Fuel Economy[6]	MPGe	3.26 MPGe
2018 PA Total Electrical Power Generation[7]	MWh	215,385,830 MWh
2018 PA Total CO_2 Emissions from Electrical Power Generation[8]	metric tons CO_2	77,030,723 metric tons CO_2
Carbon Intensity of Gasoline[9]	lb CO_2/ gal	23.5 lb / gal

Avoided Emissions Framework Intermediate Outputs

Intermediate Output	Unit	Calculation
Electric Bus CO_2 Emissions per Kilowatt-Hour	lb CO_2 / kWh	(2018 PA Total CO_2 Emissions from Electrical Power Generation * 2204.62 lb / metric ton) / (2018 PA Total Electrical Power Generation * 1000 kWh / MWh)
Electric Bus Trip CO_2 Emissions	lb CO_2	Total Energy Consumed by Bus Trip / Electric Bus CO_2 Emissions per Kilowatt-Hour
Diesel Transit Bus Equivalent Trip CO_2 Emissions	lb CO_2	(Trip distance miles / Diesel Transit Bus Avg Fuel Economy) * Carbon Intensity of Gasoline

Avoided Emissions Framework Final Output

Final Output	Unit	Calculation
Net Avoided Emissions	Tons of CO_2	(Diesel Transit Bus Equivalent Trip CO_2 Emissions - Electric Bus Trip CO_2 Emissions) / 2,000 lb / ton

[6] https://afdc.energy.gov/data/10310
[7] "Net Generation by State by Type of Producer by Energy Source, 1990-2019"; found at https://www.eia.gov/electricity/data/state/
[8] "U.S. Electric Power Industry Estimated Emissions by State, 1990-2019'; found at https://www.eia.gov/electricity/data/state/
[9] https://afdc.energy.gov/vehicles/electric_emissions_sources.html

Exhibit SO-3

EV ChargeUp Pilot
Progress Report

April 2021

Introduction

Duquesne Light Company (the "Company") hereby submits this Report pursuant to the *Joint Petition for Approval of Settlement Stipulation* ("Settlement"), approved in relevant part by the Pennsylvania Public Utility Commission by Order entered December 20, 2018 at Docket No. R-2018-3000124 ("Settlement"). Settlement ¶ 45(f) provides that the Company will submit a report in its next rate case proceeding on the EV ChargeUp Pilot Level 2 Charging Evaluation ("L2 Pilot Evaluation"), including: (a) customer participation and feedback; (b) public access to charging stations; (c) charging station usage; and (d) identifies the charging station revenues received by the Company from charging station owners participating in the L2 Pilot Evaluation. The Company is providing information to meet this reporting requirement herein and is also covering information related to the performance of three additional activities included in the EV ChargeUp Pilot; DC Fast Charger Evaluation, EV Registration Incentive, and Education and Outreach.

The Company's EV ChargeUp Pilot commenced on January 1, 2019. This Report covers the period January 1, 2019 through February 28, 2021.

L2 Pilot Evaluation

Through the L2 Pilot Evaluation, the Company offered Commercial customers a rebate for electrical make-ready costs required to install a minimum of 4 dual-port L2 charging stations available for public use within the Company's service territory.

L2 Pilot Evaluation Public Access

The L2 Pilot Evaluation supported the deployment of charging stations at nine publically-accessible customer sites. Sites are all located within parking garages, and each site is accessible to a combination of user types. For example, one installation at a mixed use transit oriented development site is accessible to those accessing public transit, working at nearby businesses, patrons of retail or restaurants, or living in nearby multi-unit dwellings. To raise awareness of completed L2 Pilot Evaluation installations, the Company partnered with the installation site host customer to install promotional

signage in heavily-trafficked facility common areas such as parking garage lobbies and elevators.

The Company earmarked a minimum of 10% investment allocation for the L2 Pilot Evaluation for disadvantaged communities. To identify such communities, the Company aligned with the definition of Environmental Justice (EJ) Area found in the Pennsylvania Department of Environmental Protection's Environmental Justice Public Participation Policy.[1] Under this policy, an EJ Area is defined as any census tract where 20 percent or more individuals live at or below the federal poverty line, and/or 30 percent or more of the population identifies as a non-white minority, based on data from the U.S. Census Bureau and the federal guidelines for poverty. Ultimately, 78% of L2 Pilot Evaluation rebate funds were allocated to projects within these EJ Area communities.

L2 Pilot Evaluation Charging Station Usage

Figure 2 shows the number of unique users of charging stations each month and Figure 3 shows the total number of charging station sessions by month. Throughout the program lifetime through the end of February, 2021, more than 4,500 charging station sessions have been recorded. The first charging station incented by the program was electrified on October 11, 2019. As additional sites became electrified in the following months, usage grew quickly. In mid-March 2020, usage declined dramatically due to the COVID-19 pandemic. Usage of the charging stations rebounded to some extent over the course of 2020, but it is still stunted due to members of the community traveling away from home at a reduced rate due to the pandemic. In fact, the top two sites with the greatest usage during the pandemic are public sites that are accessible to multi-unit dwelling residential customers, reflecting the importance of charging accessibility at such locations regardless of pandemic conditions.

Figure 2: Number of Charging Station Unique Users by Month (Nov 2019 – Feb 2021)

[1] https://www.dep.pa.gov/PublicParticipation/OfficeofEnvironmentalJustice/Pages/PA-Environmental-Justice-Areas.aspx

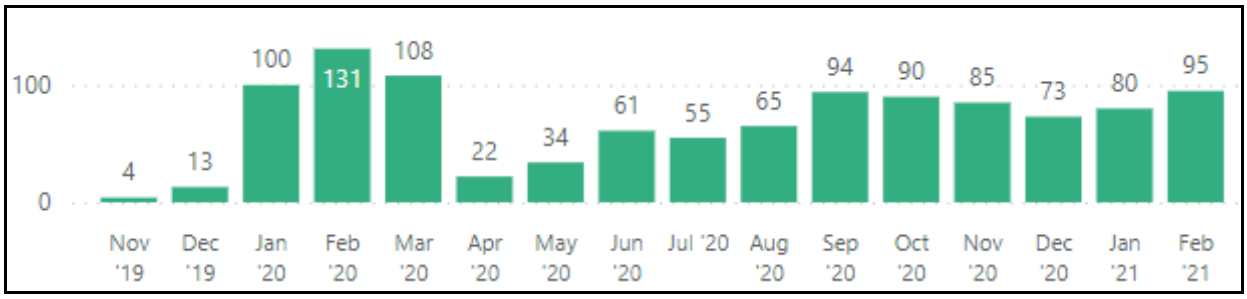
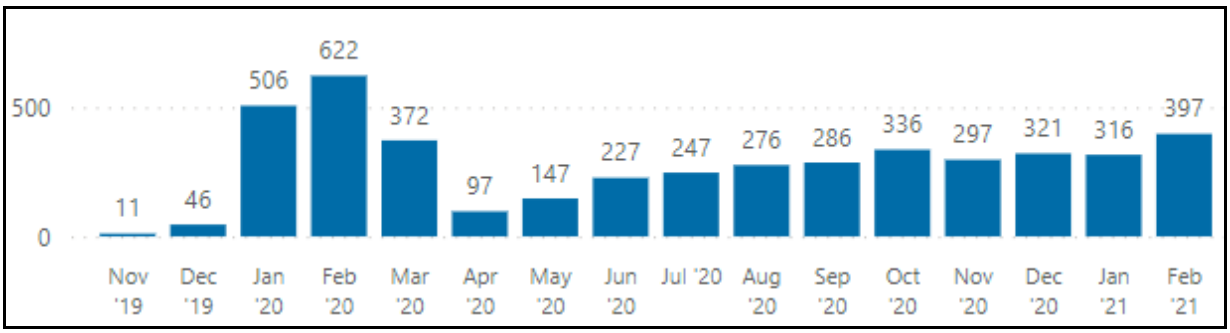


Figure 3: Number of Charging Station Sessions by Month (Nov 2019 – Feb 2021)



L2 Pilot Evaluation Charging Station Revenues (by year)

Table 1 identifies the charging station revenue received by the Company from charging station owners. In total, a combined incremental revenue of $10,732 has been received by the Company as of February 2021. As described above, the utilization of the charging stations was significantly impacted by the COVID-19 pandemic. It is expected that during post-pandemic times and with increased EV adoption in the region, these revenue figures will continue to grow over the charging stations' lifetime.

Table 1: Charging Station Revenue[2] Received by the Company by Year (Nov 2019 – Feb 2021)

Customer Site	Site Electrification Date	Revenue (2019)	Revenue (2020)	Revenue (2021)	Cumulative Total Revenue
1	10/11/2019	$7.38	$782.69	$145.58	$935.65
2	11/20/2019	$107.65	$831.58	$135.23	$1,074.46
3	12/19/2019	$82.92	$2,439.27	$503.81	$3,026.00
4	12/30/2019	$0	$1,404.46	$190.63	$1,595.09
5	12/30/2019	$0.22	$873.59	$208.02	$1,081.83
6	1/14/2020	$0	$1,286.02	$211.51	$1,497.54
7	1/14/2020	$0	$565.01	$183.32	$748.34
8	1/21/2020	$0	$657.27	$93.96	$751.23
9	2/28/2020	$0	$14.32	$7.55	$21.87

L2 Pilot Evaluation Customer Feedback

The Company conducted extensive outreach with Commercial customers to educate them on the L2 Pilot Evaluation. Program collateral was produced to cover DLC and customer roles and requirements, program costs and benefits, customer application instruction. Education sessions were held one-on-one with commercial customers interested in participating in programs and general program awareness was achieved through promotion in local trade and member organization networks.

The L2 Pilot Evaluation was successfully undertaken with nine Commercial customers, resulting in the installation of 98 Level 2 charging station ports. After all charging station installations were complete, the Company conducted an evaluation to obtain feedback on the activity. Customers shared that having pre-qualified charging station vendors made selecting a charging station easier and that they have been pleased with the vendors' hardware and networks. Customers described that they benefit from the Company's technical support throughout the charging station planning and installation process. In particular, they noted value of Company leading site walks with

[2] Revenue figures represent estimated incremental base distribution revenues, exclusive of surcharges or transmission/supply charges.

representatives of the Company's distribution planning, distribution engineering, and metering teams, as well as the customers' facility management and engineering and electrical leads. During these site walks, the Company led teams to identify installation siting that would optimize cost efficiency and utilization of charging stations.

All customers who participated in the L2 Pilot Evaluation also took advantage of the state's Driving PA Forward Level 2 charging station rebate program, many of whom became aware of the program as a result of the Company's outreach efforts. The Company provided support for customers as they completed the state rebate application and rebate redemption process. Customers described that the availability of the Company's rebate, leveraged alongside the state rebate, was critical in their ability to execute the project. Customer-reported project cost data indicates that the Company's rebate covered about 1/3 of project costs, customers themselves covered 1/3 of project costs, and the state's Driving PA Forward rebate program covered 1/3 of project costs.

Customers provided critical feedback to their participation in the L2 Pilot Evaluation as well. Customers shared a desire for a more user-friendly process to submit and track all required paperwork. They felt that the timeline was aggressive, and that the charging station procurement and permitting processes presented unexpected and time-intensive challenges. Customers indicated that it was difficult to only be able to decide to execute a project until after a) running procurement processes and obtaining project cost estimates from charging station vendors, engineering firms, and electrical contractors, and then b) applying and qualifying for the L2 Pilot Evaluation and state rebate program.

Approximately 20 additional Commercial customers expressed interest in the L2 Pilot Evaluation but were unable participate for a number of reasons. Some customers cited not having the need for or ability to devote the parking space for all four dual port charging stations required by the L2 Pilot Evaluation. Other customers faced challenges with the timeline, needing more time for planning and procurement. A few customers

had impending parking facility renovations or new build construction that did not align with the L2 Pilot Evaluation timeline.

DC Fast Charger Evaluation

The Company's DC Fast Charger Evaluation project allowed the Company to provide the make-ready and charging station infrastructure for the first two electric buses at Port Authority's East Liberty Garage. The charging stations were activated on February 20, 2020, and Port Authority's electric buses were placed into service on March 30, 2020.

The DC Fast Charger Evaluation project has enabled Port Authority and the Company to collaborate on many aspects of bus electrification planning and implementation that will benefit the growth of electric buses within the transit fleet. For example, the two organizations worked closely to define service needs for distribution upgrades required to power the charging infrastructure and evaluate a path forward for future expansion. The project has also already resulted in an estimated avoided emissions of 34.8 Tons CO_2 through February 28, 2021.

EV Registration Incentive

The Company began offering the EV Registration Incentive to customers as part of the EV ChargeUp Pilot on April 1, 2019. The EV Registration Incentive offers a one-time incentive to customers that register their EV with DLC.

Year	Incentives (#)	Incentives ($)
2019	357	$21,420
2020	306	$18,360
2021	501	$30,060

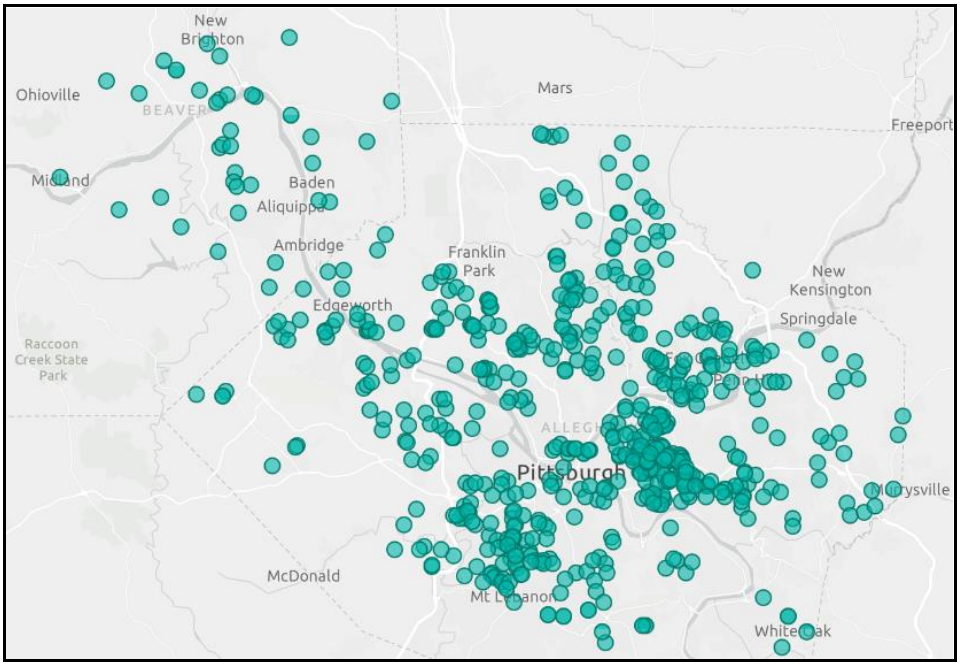
The EV Registration Incentive has increased the Company's ability to engage with EV driving customers. The ability to identify EV-driving customers provides a pathway for engaging with this customer segment to better understand their evolving needs and be

able to share information about EV-related products and services offered by the Company. Information gained through the EV Registration Incentive has the potential to help the growth of EV charging infrastructure in places where it will have the greatest utilization. For example, through a brief survey that accompanies the EV Registration Incentive application, customers have identified whether or not they have access to workplace charging and, in some cases, the name of their employer. This information can help the Company provide support to businesses that are likely to consider installing charging or expanding existing charging stations at their facilities.

The customer survey accompanying the incentive application provides high-level data such as home charging type and typical time of day that the customer charges their vehicle. As the EV Registration Incentive customer database as a whole grows, it can inform distribution system planning. For example, it may help the Company mitigate reactive, and potentially more costly, transformer and distribution circuit upgrades.

One way that the Company has utilized the EV Registration Incentive database to inform distribution planning is by conducting a residential EV clustering analysis. Residential EV clustering is when multiple homes with EVs are located very close to one another and have the potential to be serviced from the same neighborhood transformer. The Company is especially interested in residential EV clustering because it represents a higher than typical potential for EVs to overload a transformer. To conduct the analysis, EV-driving customers' residential addresses were plotted on a map of the Company's service territory (Figure 4). Ten areas of residential EV clustering were identified. Preliminary modeling of the corresponding service accounts found that as many as half of the clusters share a transformer. The Company is monitoring the overall usage of the shared transformers to determine if there is any concerns of overloading the transformer.

Figure 4: Location of customers who have participated in the Company's EV Registration Incentive activity as of December 2020



Education and Outreach

The Company's Education and Outreach activity has filled an EV and charging station information gap in the Pittsburgh Region. The Company has undertaken numerous EV-focused educational initiatives, and developed internal capabilities to support customers as they transition to electric transportation. A highlight of accomplishments is as follows:

- *Communication Channels*: The Company has used a variety of communication channels to inform customers about vehicle electrification and fueling vehicles with electricity. This includes but is not limited to print informational cards and handouts for use at in-person events; inclusion in print and digital versions of DLC's ServiceLine customer newsletter; EV-focused informational emails, traditional and paid social media on Facebook, LinkedIn, and Twitter platforms; DLC Newsroom stories; press releases; YouTube videos; article series featured in the Green Voice newsletter; earned media such as newspaper coverage and television and radio interviews.

- *Website*: From January 2019 to December 2020, the Company's EV landing page recorded approximately 11,500 unique page views, with visitors spending two minutes and 43 seconds on the page during their visit. The page was a home for providing customers information about details of the EV ChargeUp Pilot. In April 2021, a redesigned and enhanced EV landing page on the DLC website was launched. The page was informed by interviews with commercial and residential customers, and emphasizes DLC's ability to provide customers with technical support for EV and charging related questions. The page features improved informational content for residential customers seeking information about EVs and charging, as well as content devoted to commercial customers interested in installing charging stations at their business or adding EVs to their fleet.
- *Web Tools*: The EV Guide web tool was launched in July 2019. Located at https://ev.duquesnelight.com/, the EV Guide provides customized information about available EV model options available for sale in the Pittsburgh region. It helps customers evaluate how the total cost of ownership and expected greenhouse gas emissions compare to similar gasoline vehicles, locate charging stations throughout the area, see how their electrical bill would be impacted by charging their vehicle based on their vehicle use patterns, and find current information about available federal and state EV purchase incentives and tax credits. A print companion piece for the EV Guide web tool was also developed. The piece showcases available vehicle models and costs for use by DLC customers without internet access and for distribution at community-based events. In the first 17 months of operation, the EV Guide web tool has recorded 9,667 unique users and 12,302 sessions, meaning on average one in four users return to the site after their initial session.
- *Community Based Events*: The Company provided EV and charging information to customers and sponsored a variety of events, for example:
    - Exhibited an EV and a simulated "electric garage" home charging display at the Pittsburgh Home & Garden Show

- Executed the inaugural EV Car Show at the annual SolarFest event at the Frick Environmental Center
- Organized EV display booths for the Beaver and Mount Lebanon Farmers Markets
- Held launch events for new charging station installations at two downtown Pittsburgh Parking Authority parking garages
- Held a Charging Station Installation webinar attended by over 55 stakeholders to share learned by commercial customers who participated in DLC's Charging Station Evaluation.
- Organized live and virtual events annually for Pittsburgh's National Drive Electric Week, including a Workplace Charging Workshop held in partnership with the Green Building Alliance attended by over 60 commercial customers.
- Representatives from the Company served as EV subject matter expert by speaking or presenting at numerous community meetings, workshops, working group sessions, and other events. Select presentations include Pittsburgh Region Clean Cities' Odyssey Day workshop for fleets and PA DEP's "Driving EVs: The Benefits and Basics for Pennsylvanians" webinar.

- *Technical Assistance*: Direct customer service technical support was provided to customers who submitted calls and emails to the Company about EVs and fueling their vehicles with electricity. The centrally managed account ElectricVehicles@duqlight.com was established to field customer inquiries via email and the Company's Contact Center was provided frequently asked question content to provided improved support to customers who reach the company via phone.

The Company has also tracked customer perceptions and awareness of EVs through customer surveys and panels. The survey results suggest that customers' awareness of EVs has increased substantially over the course of the Company's Education and Outreach efforts. For example:

- 14% of respondents were likely extremely or likely to consider an EV as their next vehicle in 2018. That figure increased to 23% by 2020.
- 35% of those who have researched EV technology are likely to consider purchasing an EV in 2020. In 2018 only 25% of individuals who had researched EVs were likely to consider purchasing an EV.
- Awareness of public charging increased from 33% in 2018 to 40% in 2020.

Exhibit SO-4

Schmidt Market Research

Duquesne Light
Electric Vehicle Customer Research
Summary of Findings (2018-2021)

Introduction

To support the development and evaluation of its electric vehicle (EV) education and outreach efforts, Duquesne Light Company (DLC) has retained Schmidt Market Research to conduct primary research to gather feedback and insights among customers. Since 2018, five research studies have been executed and topics have included interest in owning an EV, familiarity, and knowledge of various aspects of EVs (e.g., home and public charging, technology, pricing) as well as the perceived benefits and challenges associated with driving an EV. Insights about at-home charging and time of use pricing reveals specific opportunities for DLC to help its customer base overcome specific barriers to adoption and inform load management strategies.

Section 1: Awareness & Attitudes related to Electric Vehicles

While current ownership is low among customers in Duquesne Light's service territory, interest in EVs continues to grow, and customers' overall perceptions of EVs are improving. For example, in 2018, 48% of customers surveyed perceived EVs to be 'much better' or 'somewhat better' than gasoline vehicles overall. This proportion of customers increased to 57% in 2020.

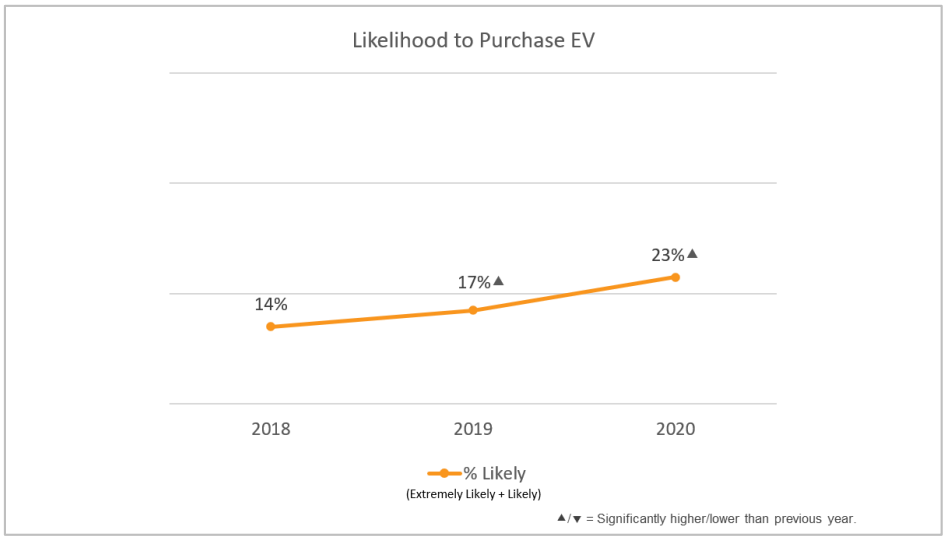
Overall familiarity with EVs has remained stable since 2018 (around 22%). Research has shown that increased familiarity with EVs among customers leads to greater interest in future ownership. 35% of DLC customers surveyed in 2020 who had researched EV technology in the past were 'extremely likely' or 'likely' to consider buying or leasing an EV in the future, a significant increase from 25% in 2018. Despite growing interest, more than half of prospective EV owners do not have personal experience driving or riding in an EV.

Customers report that programs provided by DLC could help lower some barriers to EV adoption. For example, a recent study conducted among prospective EV buyers suggests that home charging installation and maintenance programs supported by DLC would "make it easier" to drive an EV (69%) – and current owners also see value in the programs.

Section 2: Interest & Barriers to EV Adoption

Adoption of EVs continues to grow, and likelihood to consider an EV for the next vehicle purchase is improving over time as well. The proportion of customers surveyed who are 'extremely likely' or 'likely' to buy/lease an electric vehicle was 14% in 2018, 17% in 2019, and 23% in 2020.

Figure 1



Customer satisfaction with the EV experience is strong and likely to stay that way in the near-term. Interest in purchasing another EV in the future suggests that current owners are fairly satisfied with their EV experience. In 2020, 88% of owners indicated they were likely to consider purchasing another EV in the future, up from 75% in 2018. As customers buy and integrate EV driving into their daily lives, many report finding that their normal routines are well suited to the capabilities of their EVs. While some recognize the limitations on driving range, many report it is not a problem for their lifestyle.

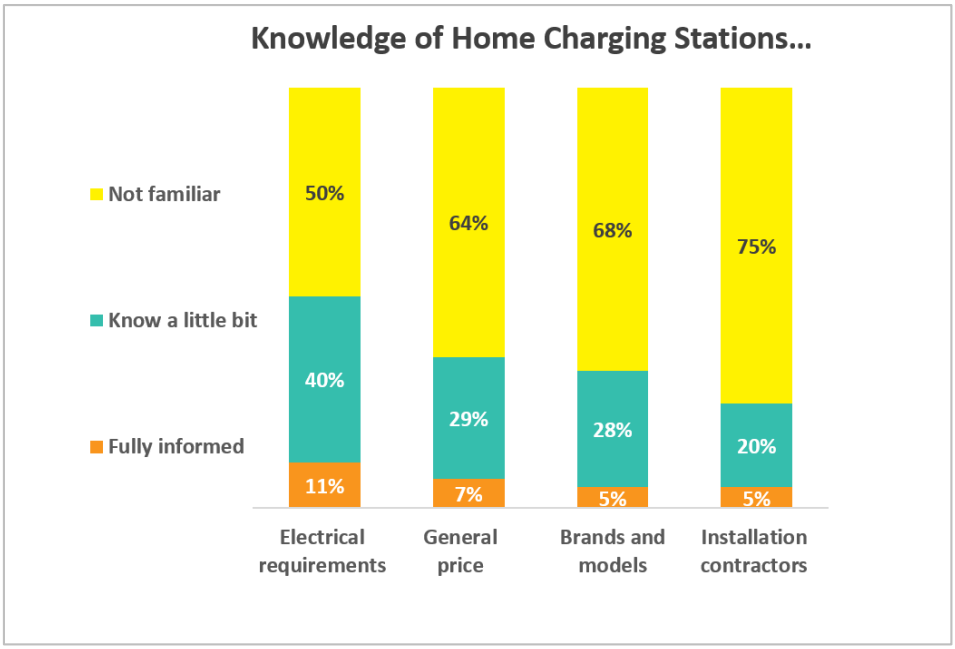
While progress is being made, EV concerns persist among Duquesne Light customers. The 2018 study identified environmental impact and reduced cost of everyday use as drivers of interest in EVs, but those surveyed expressed concerns about driving range, the ability to recharge, vehicle options to choose from, and purchase price. Since that study, there have been advances in driving range, vehicle options, and cost. However, these considerations remain relevant among prospective buyers. In 2020, the top three major barriers to purchasing EVs identified among customers were lack of public charging stations nearby (66%), concerns on vehicle driving range (64%) and lack of at home EV charging. (61%).

Few Duquesne Light customers have researched the topics that are viewed as the primary adoption barriers, such as driving distance, charging equipment, and cost of ownership, indicating an opportunity to educate customers to overcome perceived drawbacks. A January 2021 study of prospective EV owners shows that less than one-half have researched at-home charging options and/or public charging stations. The January 2021 study also revealed that knowledge of at-home charging stations remains fairly low – especially in terms of pricing, brands/models, and installation contractors in addition to the electrical requirements (Figure 2).

Section 3: Charging Needs & Infrastructure

Helping prospective EV buyers install home charging stations may help increase adoption, since 48% of Duquesne Light customers expect to require a Level 2 station to meet their charging needs. However, 27% of prospective owners are unsure about their expected charging needs. These customers may need additional resources to assist in making this determination. The January 2021 study revealed that knowledge of at-home charging stations remains fairly low – especially in terms of pricing (64%), brands/models (68%), and installation contractors (75%) in addition to the electrical requirements (50%) (Figure 2).

Figure 2



A home charging installation program could also make more people comfortable with getting a Level 2 charger. In January 2021, 69% of customers who indicated that they were 'extremely likely' or 'likely' to purchase an EV for their next vehicle, agreed that a home charging installation program would make it easier to drive an electric vehicle and 65% of these respondents would be likely to participate in this program if offered.

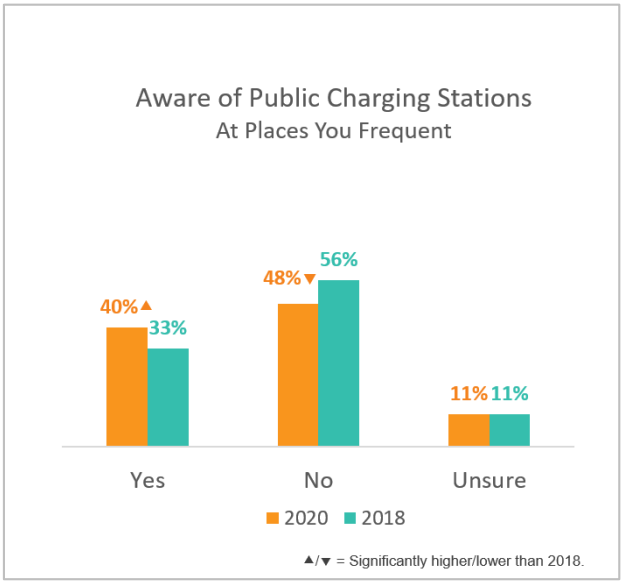
A post-COVID environment will require more robust non-residential charging infrastructure. Post-COVID, customer input suggests there is likely to be more of a need for charging options outside the home – though most drivers are still unlikely to rely on local options on a daily basis due to accessible at home charging. Current EV drivers suggest that public charging stations situated in commercial shopping areas, public parks and recreation areas, and other locations such as hospitals, and airports in Duquesne Light's service area are nice to have and seen as a convenience to many.

Exhibit SO-4

Current EV drivers also indicate that higher-powered DC Fast Charging along corridors is important for longer-distant traveling.

Awareness of public charging stations located in areas Duquesne Light customers frequent is growing with 40% aware of a public charging station in 2020, up from 33% in 2018 (Figure 3).

Figure 3



Home Charging Pilot Customer Agreement

This Home Charging Pilot Customer Agreement ("Agreement") is made and entered into by and between Duquesne Light Company ("DLC"), and the Customer identified below, hereinafter referred to as "Customer", and is effective on the date signed by DLC.

Customer Information

Customer Name:	
Customer Service Address:	
Customer Phone Number:	
Customer Email Address:	
DLC Account Number:	

Recitals

A. DLC is conducting a Home Charging Pilot (the "Program") that involves installing home electric vehicle ("EV") charging equipment at a qualified homeowner residence (the "Service Address").

B. The Program will allow DLC to obtain information about EV use and charging information.

C. A summary of the program is attached as Attachment 1.

Agreement

Now, therefore, for good and valuable consideration, Customer and DLC, intending to be legally bound by this Agreement, agree as follows:

1. **DLC Installation, Operation, and Maintenance of Charging Stations.**

    a. DLC, through its own resources or its network of authorized third party independent contractors, shall provide, install, maintain, repair or replace (collectively the "Services") Level 2 electric vehicle charging equipment (the "Charging Station") and associated electrical service modifications on property owned by the Customer at the Service Address listed above, consistent with terms of the Program as approved by the Pennsylvania Public Utility Commission. Customer must choose a Charging Station from the DLC approved vendor list. DLC shall provide, at its cost, all reasonably necessary maintenance for the Charging Station. In the event of equipment failure, DLC will utilize good utility practice to bring the equipment back to working order as quickly as is reasonably practicable. DLC, in DLC's sole discretion, shall have the right to repair, modify, or replace the Charging Station at any time during the Term of this Agreement.

b. Upon completion of the installation and at all times during the Term of this Agreement, ownership of and title to the Charging Station shall remain with DLC. The Customer shall ensure that the Charging Station shall not be subject to any lien, security interest or other claim asserted by any creditor of the Customer, and any sale of the Customer Service Address by the Customer shall not include the Charging Station.

c. Customer shall maintain the connection between the Charging Station and an Internet service provider via Wi-Fi connection, for the operation of the Charging Station under this Agreement.

2. Monthly Charge.

a. The Customer's charge for the Charging Station shall be the following monthly rate per Charging Station for the Term of this Agreement ("Monthly Charge"):

Rate Options	Monthly Charge	Services Included in Monthly Charge	Customer Upfront Out-of-Pocket Expenses
Home Charging Pilot	$19.57	• Charging Station and Standard Installation Costs. • Maintenance and Management Services.	• Additional Installation Costs (as defined below)

b. DLC will include the Monthly Charge for the Charging Station on the Customer's first utility bill invoiced after the installation date of the Charging Station. The Customer agrees to pay the Monthly Charge pursuant to DLC's billing terms.

c. Installation typically includes extending electrical facilities from the electrical panel to the home charging station and related work. DLC agrees to pay up to $500[1] in installation costs ("Standard Installation Costs"). In some cases, additional upgrades to the electric panel and/or additional installation work beyond that typically anticipated may be required. In the event that installation requires work that cost more than the Standard Installation Costs, or upgrades to the customer's home electrical equipment ("Additional Installation Costs") payment of these Additional Installation Costs are separate from and in addition to the Monthly Charge. Additional Installation Costs will be invoiced separately by a third-party independent contractor and Customer will pay any invoice for Additional Installation Costs directly to the independent contractor.

3. Program Term, Default, and Termination.

[1] For qualified low-income Customers, DLC may pay up to $2,000 in installation costs, which may include home electrical equipment upgrade costs in addition to charging station installation costs.

a. Term. This Agreement is effective upon the Company's receipt of an Agreement fully executed by Customer. The Term shall commence on the first billing date after the Charging Station is installed, and DLC and the Charging Station vendor have confirmed that the Charging Station is operational, and will continue in effect for a minimum of sixty (60) months (the "Term").

b. Termination by DLC for Cause/ Early Termination. If Customer defaults in the performance of any material provision of this Agreement, including payment of Customer's utility bill, DLC will provide Customer written notification that the Customer is in default. If the default is not cured within thirty (30) days, or the Customer fails to take reasonable steps to begin curing the default to the satisfaction of DLC, this Agreement shall be terminated and Customer shall provide access to DLC or DLC's third party independent contractor to remove the Charging Station. The Customer shall be responsible for the termination fees outlined below and for all expenses associated in enforcing this Agreement including attorneys' fees and other associated costs.

   If Customer cancels the Agreement before completion of the Term or DLC terminates for default, the Customer agrees to pay a sum equal to the number of months remaining in the Term multiplied by the Monthly Charge per Charging Station plus a one-time $200 removal fee.

   Upon early termination by Customer or termination for cause by DLC, DLC or a third party independent contractor will remove the Charging Station from the Customer's residence. Removal of the Charging Station shall not include any removal or possession of the dedicated home circuit or wiring installed to supply the Charging Station with electricity ("Ancillary Hardware") All such Ancillary Hardware will be disconnected by DLC or its authorized third party independent contractor and left in place at the Service Address.

c. End of Term. Unless terminated earlier per Section 3(b) or the parties enter into a subsequent contract, upon expiration of the initial Term, ownership of the Charging Station shall pass automatically to Customer.

   TRANSFER OF THE CHARGING STATION TO CUSTOMER IS MADE "AS IS, WHERE IS" AND DLC MAKES NO WARRANTY OR REPRESENTATION, WHETHER EXPRESS OR IMPLIED IN FACT OR IN LAW OR MERCHANTABILITY, FITNESS FOR ANY PURPOSE, STATE OF REPAIR, CONDITION OR SAFETY OF THE CHARGING STATION, NOR COMPLIANCE WITH APPLICABLE LAW, RULE, ORDER AND REGULATION, CONCERNING THE CHARGING STATION.

d. Relocation. If the Customer moves to a different premises and remains a DLC residential electric customer and otherwise eligible for the Program within the initial 60-month Term, per DLC Tariff rule 9C, DLC shall relocate the Charging

Station to a suitable location at Customer's new premises at Customer's request and expense. The Customer acknowledges that failure to notify DLC of relocation, or Customer's tampering with or relocation of the Charging Station itself, may result in DLC's immediate termination of this Agreement and incurrence of any early termination fees.

e. DLC Termination for Convenience. DLC, in its sole discretion, may terminate the Agreement at any time, in which case DLC will provide Customer with sixty (60) days' prior written notice. The Customer may continue using the Charging Station until removal.

4. **Title to Equipment and Data**. At all times under this Agreement where DLC shall own and maintain title to the Charging Station, the Customer shall not make any alterations, changes, or modifications to the Charging Station without first securing written permission from DLC and any applicable underlying manufacturer.

   Customer hereby grants to DLC a non-assignable, non-transferable, and non-exclusive license to use the Charging Station electric consumption data and related information (the "Usage Data"). DLC shall therefore have the right to use, copy, and distribute such Usage Data and information as necessary and helpful to evaluate electric vehicles and electric vehicle support equipment and for any other DLC business purpose consistent with DLC's Customer Privacy Policy. Customer shall authorize the Charging Station vendor to release such Usage Data to DLC by completing the Data Release and Authorization Form located in Attachment 2. To the extent applicable, DLC shall indemnify and hold harmless the Customer from any and all claims whatsoever for the use and distribution of said Usage Data.

5. **Customer Obligations and Duties.** Throughout the Term of this Agreement:

   a. Customer shall grant to DLC such access to the Service Address and Charging Station as may be deemed necessary by DLC.

   b. Customer shall be responsible for the expense and installation of any Additional Installation Costs necessary to install and provide electricity to the Charging Station. Customer may opt to use DLC's third party independent contractor for the additional upgrade or installation work in addition to any standard installation work, provided that Customer will be responsible for the expense to have the third party independent contractor complete the additional work. Alternatively, Customer may choose a separate contractor to complete the additional upgrade or installation work. However, in either case, DLC's third party independent contractor must perform installation of the Charging Station. All installation and upgrade work is subject to the required inspection and wiring approvals.

c. In the event the Charging Station fails to operate or otherwise requires repair, the Customer shall promptly notify DLC. Customer agrees to remedy minor issues that do not require qualified technicians to address, including but not limited to the resetting of a tripped circuit breakers or assisting with software or interconnectivity issues.

d. The Customer will establish and maintain an account with the applicable Charging Station vendor and for wireless internet connectivity enabling communication between the Charging Station and Charging Station vendor's hardware and software.

e. Customer will use DLC's Charging Station in accordance with the manufacturer's recommendations and releases DLC from any loss or damage caused by the Charging Station.

f. Customer shall maintain the area surrounding the Charging Station and will promptly notify DLC of any problems related to the Charging Station that the Customer becomes aware of. Customer required maintenance includes, but is not limited to, pavement maintenance, pruning of vegetation, and snow removal. For avoidance of doubt, Customer is not responsible for the ongoing maintenance of the Charging Station itself. Per DLC Tariff Rule 23, Customer shall protect DLC Charging Station and related property on the premises.

g. Customer agrees to participate in surveys and provide feedback about the Program, as well as to cooperate with DLC in fulfilling DLC's reporting requirements to any federal, state, or local regulatory or governing entities.

6. **Customer Use.** Customer acknowledges that they are accepting this Agreement on behalf of all persons who use the Charging Station and charging services at the Customer Address and that they have sole responsibility for ensuring that all other users understand and comply with the terms and conditions of this Agreement and any applicable policies. Although DLC has general responsibility for maintaining and servicing the Charging Station during the Term, the Customer will be liable to DLC for any damage to the Charging Station caused or allowed to be caused by the Customer including, without limitation, damage caused by the Customer's misuse, abuse, removal, transfer, or tampering with the Charging Station or damage caused by vandalism. Customer shall indemnify, defend and hold harmless DLC and its affiliates, suppliers, and agents against all claims and expenses (including reasonable attorneys' fees) arising out of the use of the Charging Station or the breach of this Agreement or any applicable policies.

7. **Insurance.** Customer shall have in full force and effect a standard fire and homeowner's insurance policy with amounts sufficient to cover the full replacement cost of the Charging Station. The Customer hereby waives any and all claims and rights of action (by way of subrogation or otherwise) against DLC (and against any insurance

company insuring DLC) which may hereafter arise on account of bodily injury or damage to the Charging Station or the Service Address, resulting from any fire, or other perils or claims of the kind covered by standard fire and homeowner's insurance policies regardless of whether or not, or in what amount, such insurance is now or hereafter carried by the parties, or either of them. Customer agrees that DLC self-insures against any loss or damage which could be covered by a commercial general public liability insurance policy and or a property policy.

8. **Charging Stations Provided "AS IS".** CUSTOMER ACKNOWLEDGES AND AGREES THAT DLC IS NOT THE MANUFACTURER OF THE CHARGING STATION AND MAKES NO REPRESENTATIONS OR WARRANTIES ABOUT THE USE OR OPERATION OF THE CHARGING STATIONS OR ANY EQUIPMENT INSTALLED FOR THE OPERATION OF THE CHARGING STATION. DLC PROVIDES THE CHARGING STATION "AS IS". DLC DOES NOT GUARANTEE THAT THE CHARGING STATION WILL PERFORM UNINTERRUPTED.

9. **Limitations of DLC's Liability.** DLC's liability is limited to repair or replacement of the Charging Station at DLC's sole discretion and as may be required by this Agreement. Notwithstanding anything to the contrary contained in this Agreement, to the full extent allowed by applicable law, in no event shall DLC be liable to the Customer for indirect, incidental, special, consequential, or punitive damages arising out of this Agreement or the transactions contemplated hereunder whether for breach of contract, tort (including negligence), or otherwise and whether or not the Customer has been advised of the possibility of such damages. Notwithstanding anything set forth in this Agreement to the contrary, under no circumstances shall DLC's total liability under this Agreement exceed the total cost of the Charging Station plus installation costs made by DLC under this Agreement. This section shall survive the termination of this Agreement.

   By participating in this Program, Customer agrees that DLC has no liability concerning the quality, safety and/or operation of the plug-in electric vehicle, any mileage performance, or any estimated energy usage.

10. **Privacy Law.** Customer acknowledges and agrees that Customer is knowingly consenting to and authorizing: (a) DLC to release and share Customer's name, address, telephone number, charging data and any charging or electrical usage patterns with DLC's third party independent contractors, in order for the authorized third party independent contractors to provide the Charging Station and services to Customer under the Program; and (b) DLC's independent contractors to share information with DLC about Customer regarding Customer's site assessment, quoted additional installation work (if applicable), Additional Installation Costs and Standard Installation Costs. DLC's use of the above information shall be consistent with DLC's privacy policies.

11. **No Partnership**. Nothing in this Agreement shall be construed as creating any partnership, joint venture, or other business relationship between DLC and the Customer. The Customer shall not, for any purpose, be considered an agent of DLC.

12. **Assignment**. This Agreement shall not be assigned except with the prior written consent of all parties hereto. The terms and conditions of this Agreement shall bind any permitted successors and assigns of the parties.

13. **Severability**. If any term or provision of this Agreement is found by a court of competent jurisdiction to be illegal or otherwise unenforceable, that finding shall not invalidate the entire Agreement and the remaining provisions shall remain in full force and effect, and such invalid provisions shall be deemed to be modified to be enforceable to the fullest extent permitted by law.

14. **Waiver.** DLC's failure to insist on performance of any of the terms and conditions herein or to exercise any right or privilege or DLC's waiver of any breach hereunder shall not thereafter waive any of DLC's rights or privileges under this Agreement or at law. Any waiver of any specific breach shall be effective only if given expressly by DLC in writing.

15. **Notices**. All notices required by this Agreement shall be sent by email with notifications from the Customer to DLC addressed to electricvehicles@duqlight.com and notifications from DLC to Customer addressed to the email address set forth above. Either party may change its email address by sending notice of the change to the other party at its current email address and specifically referencing this Agreement in its notification.

16. **Dispute Resolution.** If any dispute arises between the parties regarding issues or interpretations of the Agreement or the services performed pursuant to the Agreement, Customer shall first email electricvehicles@duqlight.com with a summary of the issue and a contact phone number. DLC will consider all disputes and respond within fifteen (15) days of receiving notice of a dispute. In the event the Customer is dissatisfied with the resolution of the dispute, Customer has the right to file a complaint with the Pennsylvania Public Utility Commission. DLC will take no other action to enforce this Agreement until any complaint filed with the Commission is resolved.

17. **Governing Law**. This Agreement shall be governed by, enforced and interpreted in accordance with the laws of the Commonwealth of Pennsylvania, without regards to its internal conflict of law principles.

18. **Entire Agreement.** This Agreement contains the entire agreement between DLC and Customer with respect to the subject matter. No changes, modifications or amendments of any terms or conditions of this Agreement are valid or binding unless agreed to by the parties in writing and signed by their authorized agents.

[SIGNATURE NEXT PAGE]

Customer Signature

By signing this Agreement, Customer acknowledges and certifies the following:

- Customer has received, read and understands the Home Charging Pilot requirements and concurs that they meet all eligibility criteria as outlined in the Program.
- Customer has received, read and understands the terms and conditions of this Agreement and agrees to abide by and be bound by the terms and conditions.
- The person signing represents that they are duly authorized, with full authority to bind Customer, and that no signature of any other person or entity is necessary to bind Customer.

Signature: _____

Printed Name: _____

Title: _____

Date: _____

ATTACHMENT 1

Duquesne Light Company (DLC)

Home Charging Pilot Summary

1. **Customer Eligibility.** To be eligible for the DLC Home Charging Pilot , Customers must:

    a. own a single-family home, defined as a detached single family home, townhome/row house, or duplex ("Service Address");

    b. have an active DLC electric service account with no past due bills at the Service Address;

    c. have a personal garage or private driveway at Service Address where Charging Station will be installed and that is adequate to protect DLC's Charging Station and related facilities;

    d. own or lease an electric vehicle ("EV"), which is registered to the Customer Service Address;

    e. have and maintain wireless internet ("Wi-Fi") service at the Service Address with sufficient signal at the Charging Station installation location;

    f. agree to and sign the DLC Home Charging Pilot Customer Agreement;

    g. choose an eligible Charging Station from the DLC approved list of Charging Station vendors; and

    h. share charging data with (and sign any required authorization paperwork) DLC via the applicable charging station vendor.

2. **Initial Site Assessment.** Before scheduling installation of the home charging station, DLC will direct the Installer to complete a site assessment of the residence. This assessment will determine where the home charging station and electrical connections will be located, any electrical and other modifications required for installation, and any Additional Installation Costs to Customer. The installer will also verify that the Customer has Internet Wi-Fi connectivity available for use by the Customer and DLC to communicate with the home charging station.

    Installation typically includes extending a separate 240-volt circuit from the electrical panel to the home charging station, which includes drilling holes and running electrical

wire and conduit. It also includes securely mounting the home charging station to an interior garage wall, exterior wall, or pedestal provided as part of the installation.

In the event the installation requires work that is not typical or would otherwise cost more than $500, the Installer will discuss this extra work with the Customer and estimate the cost of this additional work in a written proposal to the Customer. To continue with the installation, the Customer must agree to pay the Installer to complete this additional work as described in the Installer's proposal or use a separate contractor of Customer's choosing to complete the additional required work. These costs are separate from and in addition to the Home Charging Pilot Monthly Charge.

3. **Installer**. Installation of the home charging station and all standard installation work will be carried out by DLC's installer, a Pennsylvania licensed electrical contractor (the "Installer"). This Installer is hired by DLC and carries commercial general liability insurance.

4. **Installation**. Installation will commence only after the Customer has signed the Home Charging Pilot Customer Agreement. If any homeowner association, review board, or other neighborhood body must approve such installation at the Customer's residence, installation will commence only after the Customer conveys to DLC and DLC confirms receipt of written documentation of that body's approval.

   DLC will supply the home charging station to the Installer prior to the installation. The Installer will supply or otherwise arrange for all labor, materials, equipment, necessary permits, and inspections. The installation will require obtaining applicable permit(s) and related inspections and will comply with all applicable local, state, and national electrical and building codes.

5. **Residence Requirements.** An adult member of the Customer's household must be present at the time of all home visits related to the Home Charging Pilot , including the initial site assessment and installation. It is the Customer's responsibility to provide reasonable access to DLC and the Installer to complete work related to the Home Charging Pilot.

   The Customer will maintain and pay for home Wi-Fi Internet service for use with the Home Charging Pilot and the home charging station.

ATTACHMENT 2

HOMEOWNER DATA RELEASE AND AUTHORIZATION

I (the Customer identified in the Home Charging Pilot Customer Agreement) have enrolled in Duquesne Light Company ("DLC") Home Charging Pilot (the "Program") pursuant to that described in the Home Charging Pilot Customer Agreement. I understand that, as a condition of my participation in the Program, I am required to authorize you, as my Charging Station Vendor, to release usage information (the "Usage Information") generated by DLC's Charging Station at my service address to DLC in connection with the Program. I understand that the release of such information may include a release to DLC of certain personally identifiable information about me including, but not limited to, name, account number, service address, email address, billing address, type of electric vehicle ("EV"), billing information, EV use, and electronic and charging information (collectively the "PII"). I also understand and agree that you, as my Charging Station Vendor, are not responsible for, nor has any authority with respect to, DLC's privacy practices or how DLC may use any information about me. In consideration for being allowed to participate in the Program, I hereby authorize you, as my Charging Station Vendor, to release the Usage Information and the PII to DLC. I hereby forever release and disclaim, on behalf of myself, my heirs, and my assigns, you, as my Charging Station Vendor, and DLC from any and all claims I may have against either party, their employees, officers, and directors arising out of or in connection with the release of usage information and/or PII to DLC.

I understand and agree that the Program is being offered solely by DLC and not by you, my Charging Station Vendor. I hereby agree that you, as my Charging Station Vendor, shall have no liability whatsoever from DLC's failure to delivery any of the benefits offered by DLC in connection with the Program and hereby forever release and disclaim, on behalf of myself, my heirs, and my assigns, you, as my Charging Station Vendor, from any and all claims I may have against you, your employees, officers, and directors arising out of or in connection with DLC's failure to deliver such benefits.

Signature: _____

Name:_____

Date:_____

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2021-3024750

Duquesne Light Company

Statement No. 9

DIRECT TESTIMONY OF JENNIFER NEISWONGER

Subjects: Customer Service Performance and Enhancement, Customer Education for Residential Subscription Rate Pilot

Dated: April 16, 2021

Direct Testimony of Jennifer Neiswonger

Q. Please state your full name and business address.

A. My name is Jennifer Neiswonger. My business address is 411 Seventh Avenue, Mail Drop 15-1, Pittsburgh, PA 15219.

Q. What is your position at Duquesne Light Company ("Duquesne Light" or "Company")?

A. I am the Interim Director of Customer Experience.

Q. How long have you worked at Duquesne Light?

A. I have been with Duquesne Light since January 2017.

Q. What are your current responsibilities?

A. I oversee three areas within the Company's Customer Service department: 1) Energy Efficiency / Act 129 Programs; 2) Transportation Electrification; and 3) Customer Experience, which includes the design and implementation of strategies to: improve customer satisfaction, respond more effectively to customer needs and preferences, and make interactions with customers through various channels as seamless and efficient as possible.

Q. What are your qualifications, work experience and educational background?

A. I attended Robert Morris University, where I graduated Cum Laude with a Bachelor of Science in Business Administration and also completed my Masters in Business

Administration. Prior to being appointed the Interim Director in January 2021, I spent 4 years as Manager, Customer Experience at Duquesne Light where I was responsible for the day-to-day management and implementation of our Customer Experience strategy mentioned above. And prior to that, I spent over eleven years at Giant Eagle Inc. in Pittsburgh, where I held various customer-related positions, including most recently as the Senior Manager of Customer Loyalty, where I was responsible for the strategic development and administration of customer-facing programs, such as the loyalty card and associated rewards, digital engagement programs, and point-of-sale offers. In earlier roles with the company, I developed and implemented the omni-channel marketing strategy for a significant line of business and collaborated with in-store banks on targeted and in-store marketing campaigns to grow the number of joint customers.

Q. What is the purpose of your direct testimony?

A. The purpose of my testimony is to explain the Company's historical customer service performance and the initiatives designed to further enhance Duquesne Light customers' experience. I also discuss customer education for the Residential Subscription Rate Pilot.

Q. How is your testimony organized?

A. Section I of my direct testimony discusses the Company's customer service performance and metrics. Section II of my direct testimony discusses customer service initiatives implemented to enhance the customer's experience with the Company. Section III discusses customer education for the residential subscription rate proposed by Ms. Everett in Statement No. 17.

Q. Are you sponsoring any exhibits?

A. Yes. I am sponsoring the following exhibits:

Exhibit JAN-1	Customer Service Performance Metrics
Exhibit JAN-2	2020 Research America survey results
Exhibit JAN-3	J.D. Power 2020 Residential and Business Customer Satisfaction Study results
Exhibit JAN-4	Residential Subscription Rate Pilot Program Marketing and Education Costs

I. CUSTOMER SERVICE PERFORMANCE

Q. Please explain the metrics used to measure the Company's customer service performance.

A. At Duquesne Light, we measure customer service performance in several ways. The Company monitors, tracks and reports on those customer service performance metrics required by 52 Pa. Code § 54.153(b). Among other metrics, the Company monitors, tracks and reports:

- 54.153(b)(1) Telephone Access:
  - Percent of calls answered within 30 seconds;
  - Average busy-out rate; and
  - Call abandonment rate.
- 54.143(b)(2) Billing:

- Number and percent of residential bills not rendered once every billing period; and
- Number and percent of small business bills not rendered once every billing period.

- 54.143(b)(3) Meter Reading:
  - The number and percent of residential meters for which the company has failed to obtain an actual or ratepayer supplied reading within the past 6 months to verify the accuracy of estimated readings in accordance with § 56.12(4)(ii);
  - The number and percent of residential meters for which the company has failed to obtain an actual meter reading within the past 12 months to verify the accuracy of the readings, either estimated or ratepayer read in accordance with § 56.12(4)(iii); and
  - The number and percent of residential remote meters for which it has failed to obtain an actual meter reading under the time frame in § 56.12(5)(ii).
- 54.153(b)(4) Response to Disputes:
  - The actual number of disputes for which the company did not provide a response to the complaining party within 30 days.

Q. How has the Company performed with respect to those metrics?

A. The Company's performance with respect to those metrics is included as Exhibit JAN-1.

Q. How else does the Pennsylvania Public Utility Commission ("Commission") benchmark the Company's customer service performance versus other electric utilities?

A. The Commission's Bureau of Consumer Services ("BCS") releases a quarterly UCARE Report that measures major Pennsylvania utilities' customer service performance across several metrics. The BCS's most recent UCARE Report, which covers calendar year 2020, is publicly available on the Commission's website here: https://www.puc.pa.gov/filing-resources/reports/consumer-activities-report-evaluation/.

Q. How does the Company compare to other utilities in the UCARE Report?

A. In 2020, the Company had a 39% decline in needs further investigation (NFI) residential consumer complaints and a 61% decline in first contact resolution (FCR) statistics for residential and commercial. The Company was second lowest for both metrics compared to the other PA Electric Distribution Companies (EDCs). In the 2019 UCARE Report, the Company ranks first among Pennsylvania EDCs in highest percent change (2017 to 2019) of residential service reconnections at 44%. The Company also experienced a 31% improvement in our Commission infraction rate from 0.21 to 0.16 and was second lowest for consumer complaint rate.

Q. Has the Company performed any surveys related to customer satisfaction?

A. Yes. As required by 52 Pa. Code § 54.154, the Company works with Research America to conduct transaction surveys of customers who have had interactions with the Company. Research American benchmarks results across Pennsylvania's EDCs.

Q. How has the Company performed with relation to these surveys?

A. The Research America report for 2020 is included as Exhibit JAN-2. Duquesne Light ranks #6 out of 8 Pennsylvania utilities with 90.6% of customers surveyed rating their satisfaction with Duquesne Light 7 or higher on a scale of 1-10. In 2019, Duquesne Light ranked #5 out of 8 with 88.2% of customers surveyed rating 7 or higher.

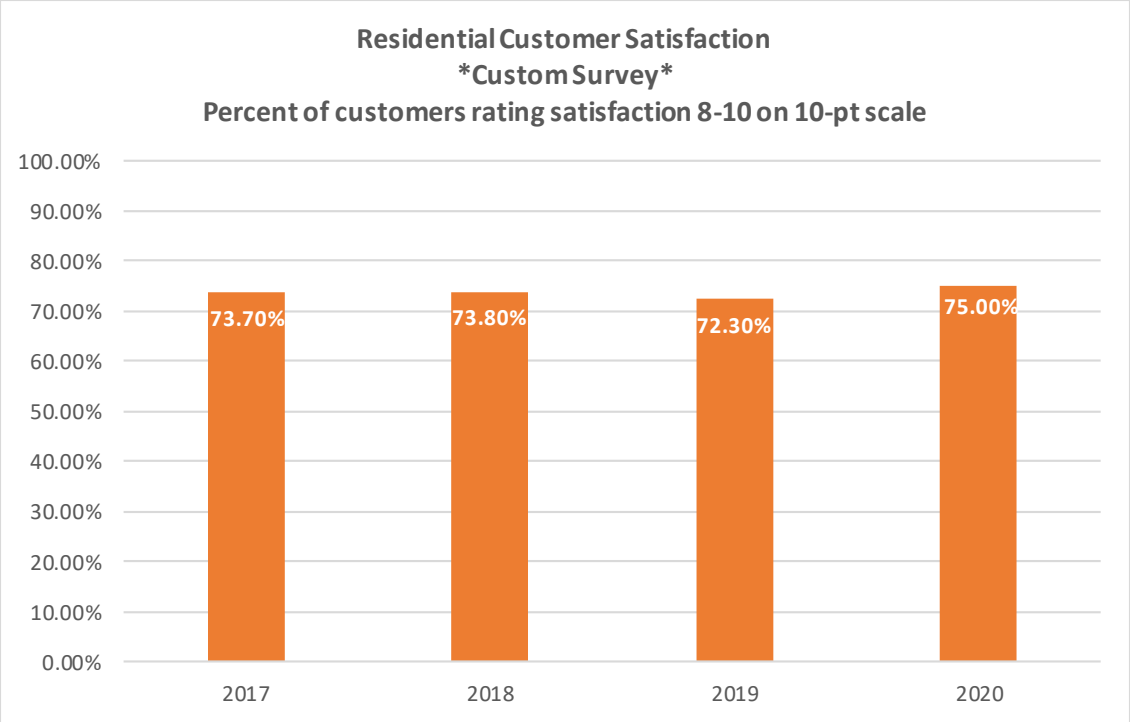
Q. Are there any other surveys that the Company conducts to assess customer satisfaction?

A. Yes. The Company contracts with Schmidt Market Research to conduct monthly custom surveys via the phone and web. The surveys measure overall satisfaction with Duquesne Light and probe on areas that are likely to influence customer satisfaction such as power quality and reliability, company reputation, energy efficiency, corporate citizenship, billing and payment, and experience with the website and mobile app.

Q. Please summarize the results of these surveys.

A. In 2017, the Company started reporting satisfaction on an 8-10 scale whereas previously it was reported on a 6-10 scale with the goal to identify the percentage of customers that are truly satisfied and rate the Company based on those top 3 boxes. The Company saw consistent results in 2017 and 2018, with a slight decrease in satisfaction in 2019. In 2020, satisfaction exceeded the prior 3 year trend. See Chart 1 below.

Chart 1:



Q. Does the Company benchmark its customer satisfaction performance versus other electric utilities?

A. Yes. The Company benchmarks its performance using the J.D. Power Residential and Business Electric Utility Customer Satisfaction surveys.

Q. How has the Company performed in these benchmarking studies?

A. J.D. Power benchmarks residential customer satisfaction for a calendar year that runs January through December. For the overall customer satisfaction index, Duquesne Light scored 736 which was on par with the peer group (East Large) average score. This was an improvement over the 2019 and 2018 scores of 722 and 699, respectively. See Exhibit JAN-3 for additional details.

Business customer satisfaction is also measured on a calendar year basis. For the full-year 2020, Duquesne Light ranked number third in its peer group (East Mid-size) with a score of 791, only 7 points out of first place. Duquesne Light scored 792 in 2019 and 785 in 2018. See Exhibit JAN-3 for additional details.

Q. Are there any other metrics the Company uses to measure customer service?

A. Yes, we also track service reliability as measured by SAIDI, SAIFI, and CAIDI. Mr. Benjamin Morris provides an overview of the Company's reliability performance in his direct testimony, Statement No. 4.

II. ENHANCING CUSTOMER EXPERIENCE

Q. Are there any areas where the Company is seeking to enhance the customer experience?

A. Yes. The Company established a Customer Service vision and guiding principles in 2020 that puts the customer top-of-mind with the goal to "…provide a seamless, personalized experience along with innovative products and services." The Company seeks to enhance the customer experience by continuing to develop more self-serve features and serving customers in the channels they prefer.

Q. Please discuss the customer service initiatives implemented from 2018 through 2020.

A. Customer Service initiatives for 2018 - 2020 include:

- A new Duquesne Light mobile app available in the App Store and Google Play;

- Customer segmentation and initiative-specific personas to deliver more timely and relevant messages to customers in the channel they prefer;
- A self-serve Payment Arrangement portal on DuquesneLight.com to provide a simplified process for customers to set up a payment arrangement;
- A small and medium-size concierge Business Center within our Contact Center to better serve business customers;
- An email engagement platform to send relevant, timely email communications to customers with content related to storm preparation, energy efficiency information, products and services, and more; and
- A presence on Nextdoor, a social platform that allows the Company to send targeted neighborhood messages regarding outages and other important information.

Q. Is the Company planning additional customer enhancements in the next few years to improve customer satisfaction?

A. Yes. With the implementation of the email engagement platform and customer segmentation and personas mentioned above, the Company plans to build upon that foundation and implement a preference center in order to deliver communications in the customer's channel of choice as well as journey mapping to improve the key journeys that customers experience while doing business with the Company. As a means of continuous improvement, the Company also plans to add additional self-serve features to the website and mobile app such as budget billing enrollment and implement an additional customer

service channel through live chat. These additional enhancements are already in progress and the Company is not seeing rate recovery for these items.

III. CUSTOMER EDUCATION FOR RESIDENTIAL SUBSCRIPTION RATE PILOT

Q. Please generally describe the proposed residential subscription rate.

A. As stated in Ms. Everett's direct testimony (Statement No. 17), the Company proposes to implement a pilot residential subscription rate that would offer customers the option to select a specified level of grid access for distribution service for a set monthly charge. This rate design substitutes the traditional volumetric rate structure, or price per kWh consumed, for a more stable rate structure that is easy to understand and predictable for customers. The energy subscription rate is a rate design option that may meet pricing needs of customers, like data plans for cell phones or standard pricing for video streaming services.

Q. How many customers will be permitted to participate in the residential subscription rate pilot?

A. The pilot will launch starting January 2022 and will be limited to 2,000 participants who can enroll over a one-year period (through December 2022).

Q. How will Duquesne Light promote or otherwise advertise the residential subscription rate pilot to its customers?

A. Exhibit JAN-4 lists the proposed customer education budget for the residential subscription rate pilot program. As mentioned above, the pilot program will have a limited number of participants and the Company plans to take a targeted approach to enrollment leveraging

email and direct mail, as opposed to mass outreach, to maximize and control the number of customers participating in the pilot.

The Company will include information about the residential subscription rate on its website to allow customers to learn more and determine if the subscription rate is right for them. In addition, an educational video will be developed and posted on the website and included in targeted emails. We are assuming a 1% response rate on our targeted communications (email and direct mail). Accordingly, plan to reach out to 300,000 customers through email and direct mail in order to enroll 2,000 participants along with a control group as mentioned in Ms. Everett's testimony.

Lastly, as part of the program, the Company will implement usage alerts via email, SMS and outbound voice to notify customers when they are approaching or exceeding their subscription level.

Q. Is the Company proposing to recover the costs of creating customer education and outreach materials, and incremental costs to evaluate the program?

A. Yes. As stated in Ms. Everett's testimony, the total estimated cost of designing and implementing the Residential Subscription Pilot is $67,000 over the course of three years. These costs include creating a new rider in the billing system, creating customer education and outreach materials, and incremental costs to evaluate the program. Only costs that are incremental to normal levels of staffing and operations are included in this estimate Only costs that are incremental to normal levels of staffing and operations are included in this estimate.

Q. How will the Company measure customers' satisfaction with the residential subscription rate pilot?

A. The company plans to measure satisfaction with customers participating in the pilot program in a number of ways:

- Track and report the length of time that customers remain in the pilot program, and
- Conduct periodic surveys throughout the pilot with customers enrolled in the subscription rate, and
- Conduct a post-survey with customers that choose to be removed from the pilot program.

Q. Does this conclude your testimony?

A. Yes. I reserve the right to supplement my testimony as may be necessary through the course of this proceeding.

EXHIBIT JAN-1

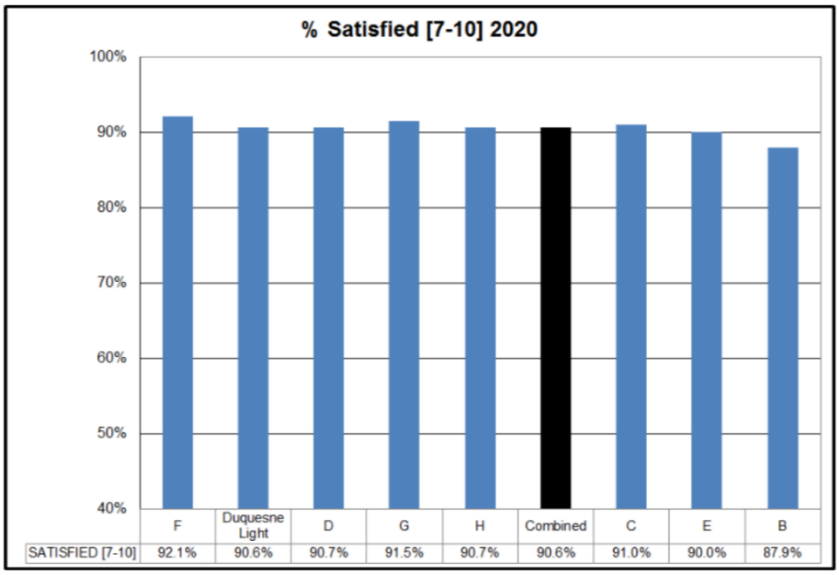
CUSTOMER SERVICE PERFORMANCE METRICS

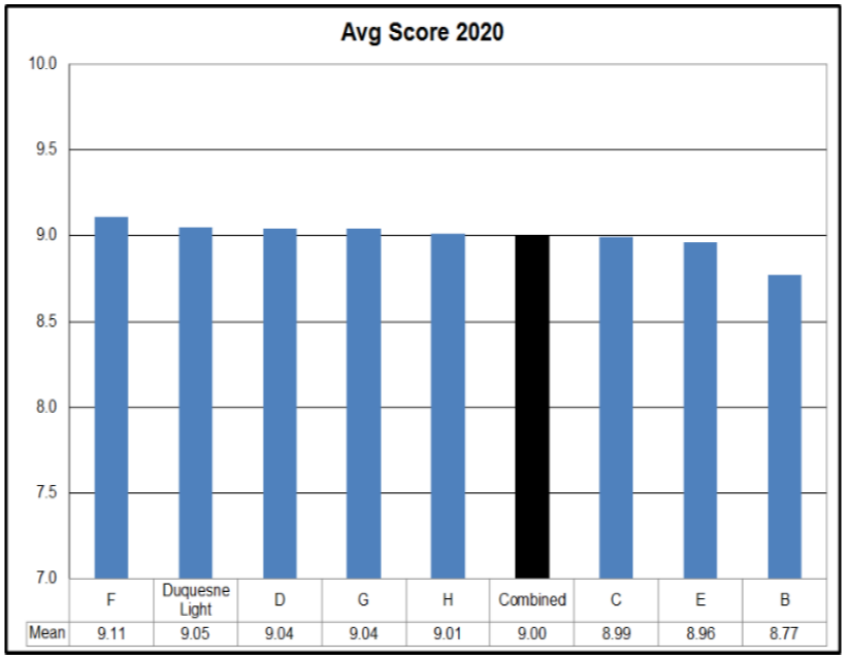
2020 FULL-YEAR AVERAGE

54.1433(b)(1) Telephone Access:	
Percent of calls answered within 30 seconds	Actual: 88.25% Goal: >80%
Average busy-out rate	Actual: 0.28% Goal: 0%
Call abandonment rate	Actual: 4.19% Goal: <6.5%
54.143(b)(2) Billing:	
Average monthly number and percent of residential bills not rendered once every billing period	1 / 0.0002%
Average monthly number and percent of small business bills not rendered once every billing period	0 / 0
54.143(b)(3) Meter Reading:	
Average monthly number and percent of residential meters for which the Company failed to obtain a reading in the past six months in accordance with § 56.12(4)(ii)	3 / 0.0005%
Average monthly number and percent of residential meters for which the Company failed to obtain a reading in the past twelve months in accordance with § 56.12(4)(iii)	1 / 0.0002%
Average monthly number and percent of residential meters for which the Company failed to obtain an actual reading under the timeframe in § 56.12(5)(i).	0 / 0
54.143(b)(4) Response to disputes	
The actual number of disputes for which the company did not provide a response to the complaining party within 30 days	2020 Total: 0

EXHIBIT JAN-2

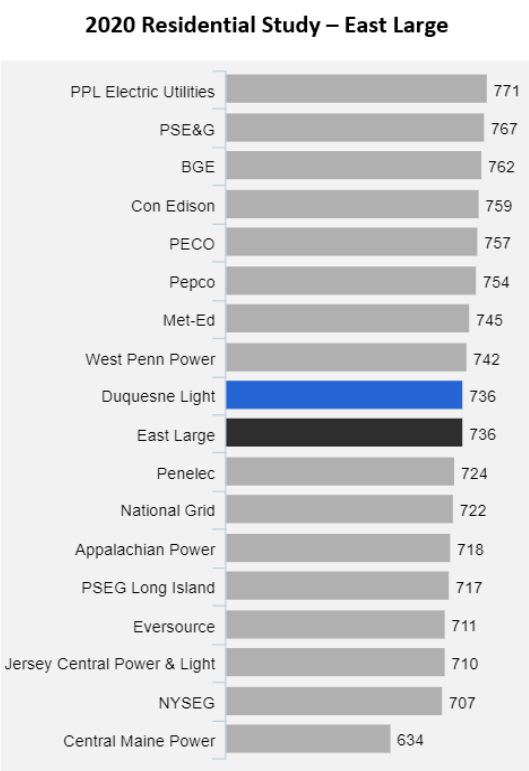
RESEARCH AMERICA 2020 SURVEY RESULTS





LC EXHIBIT JAN-3

J.D. POWER 2020 RESIDENTIAL AND BUSINESS CUSTOMER SATISFACTION



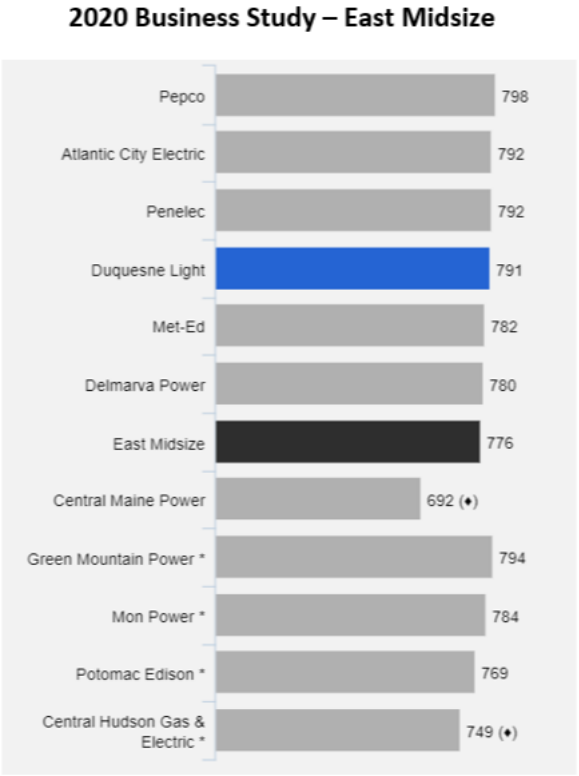


EXHIBIT JAN-4

RESIDENTIAL SUBSCRIPTION RATE PILOT PROGRAM

MARKETING AND EDUCATION COSTS

	Cost			
Item	**Year 1**	**Year 2**	**Year 3**	**Total**
Webpage Feature / Updates	$ -	$ -	$ -	$ 0
Enrollment Video and Targeted Email*	$ 25,000	$ 0	$ 0	$ 25,000
Targeted Direct Mail**	$ 36,000	$ 0	$ 0	$ 36,000
Usage Alerts – SMS + Email, Voice***	$ 5,000	$ 500	$ 500	$ 6,000
Total	**$ 66,000**	**$ 500**	**$ 500**	**$ 67,000**
*Target 200K customers, assumes 1% response or 2,000 enrollments				
**Target 100K customers, assumes 1% response or 1,000 enrollments (~3K total to allow for control group); $0.12 print/production + $0.24 postage				
***Assumes monthly outbound notification to 25% of enrolled customers (500) regarding overages; 50% email, 25% voice, 25% SMS				