



**NATIONAL FUEL GAS
DISTRIBUTION CORPORATION**

MANAGEMENT AND OPERATIONS AUDIT

Pennsylvania Public Utility Commission

Bureau of Audits

Issued October 2024

Docket No. D-2023-3040107

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I INTRODUCTION

Pennsylvania law grants the Pennsylvania Public Utility Commission (PA PUC) the general administrative power and authority to supervise and regulate public utilities within the Commonwealth of Pennsylvania per 66 Pa. C.S. § 501(b). Management and operational audits are required of certain Pennsylvania-based utility companies pursuant to 66 Pa. C.S. § 516(a). Specifically, the PA PUC can investigate and examine the condition and management of any public utility under 66 Pa. C.S. § 331(a).

In accordance with the PA PUC's ongoing program to identify improvements in the management and operations of its jurisdictional fixed utilities, it was determined that a management and operations audit should be conducted of National Fuel Gas Distribution Corporation's Pennsylvania operating division (NFGDC-PA). This report summarizes the PA PUC's Management Audit Division's audit work and outlines its conclusions. The findings presented in the report identify areas where weaknesses or deficiencies exist. In all cases, recommendations are offered to improve, correct, or eliminate these conditions. The final and most important step in the management audit process is the implementation of recommendations.

A. Objectives and Scope

The objectives of this management and operations audit were:

- To provide the PA PUC, NFGDC-PA, and the public with an assessment of the efficiency and effectiveness of the company's operations, management methods, organizational structure, practices, and procedures
- To identify opportunities for improvement and develop recommendations to address those opportunities
- To provide an informed basis for future regulatory and other inquiries into the management and operations of NFGDC-PA

The scope of this audit was limited as explained in Section B. Audit Approach.

B. Audit Approach

The management and operations audit was performed by auditors of the Management Audit Division of the PA PUC's Bureau of Audits (PUC auditors). The audit process began with pre-fieldwork analysis as outlined below:

- A five-year internal trend (2018 – 2022) and ratio analysis was completed using financial and operational data obtained from the company, PA PUC, and other available sources.

- Input was solicited from the PA PUC’s bureaus and offices, external parties, and NFGDC-PA regarding concerns or issues they would like addressed during our review.
- Prior management and operations audits, follow-up management efficiency investigations, implementation plans, implementation plan progress reports, other audits conducted by the PA PUC, annual diversity reports, and other available documents were reviewed.

This information was used to determine the scope of the management audit. Specifically, the following functional areas were selected for in-depth analysis and are included in this report:

- Executive Management and Organizational Structure
- Corporate Governance
- Affiliated Interests and Cost Allocations
- Financial Management
- Gas Operations
- Customer Service
- Purchasing and Materials Management
- Emergency Preparedness
- Human Resources and Diversity
- Fleet Management
- Information Technology

The pre-fieldwork analysis should not be construed as a comprehensive evaluation of the management or operations of the functional areas not selected for in-depth examination. If we conducted a thorough review of those areas, additional weaknesses or deficiencies may have been discovered.

Fieldwork began on July 18, 2023 and continued through February 13, 2024. The principal components of the fact gathering process included:

- Interviews with company personnel as well as other PA PUC bureaus
- Analysis of records, documents, and reports of a financial and operational nature focused primarily on the period 2018 – 2022 and 2023 as was available
- Visits to select company facilities with observations and walk-throughs of work practices

C. Functional Area Ratings

For the functional areas selected for in-depth examination, the PUC auditors rated the area relative to the expected performance level at the time of the audit. This expected performance level is the state at which each functional area should be

operating given the company’s resources and general operating environment. Expected performance is not a “cutting edge” operating condition; rather, it is management of a functional area such that produces reasonably expected operating results.

Listed below are the categories used to rate each functional area’s operating or performance level:

- Meets Expected Performance Level
- Minor Improvement Necessary
- Moderate Improvement Necessary
- Significant Improvement Necessary
- Major Improvement Necessary

Our rating for each reviewed functional area is presented in Exhibit I-1.

**Exhibit I-1
National Fuel Gas Distribution Corporation
Management and Operations Audit
Functional Rating Summary**

Functional Area	Meets Expected Performance Level	Minor Improvement Necessary	Moderate Improvement Necessary	Significant Improvement Necessary	Major Improvement Necessary
Executive Management and Organizational Structure	X				
Corporate Governance		X			
Affiliated Interests and Cost Allocations			X		
Financial Management			X		
Gas Operations				X	
Customer Service		X			
Purchasing and Materials Management		X			
Emergency Preparedness		X			
Human Resources and Diversity		X			
Fleet Management	X				
Information Technology		X			

D. Benefits

Wherever possible, the PUC auditors estimated the potential savings anticipated from implementing the recommendations made in this report. The audit report details potential annual cost savings of approximately **\$3.1 million**. We tried to identify, whenever practical, the potential savings through recommendation implementation. Some of these savings could be an actual reduction in costs, avoided costs, or increased revenues, whereas others would result in better deployment and/or use of

existing resources. These quantifications require some judgment and may require effort beyond the scope of the audit for further refinement. Therefore, actual benefits from effective implementation of the recommendations are uncertain and could differ from the estimate. An overall summary of the annual and/or one-time costs savings quantified in the audit report is shown in Exhibit I-2.

**Exhibit I-2
National Fuel Gas Distribution Corporation
Quantifiable Savings Summary**

Recommendation	Annual Savings	One-Time Savings
Analyze and improve the billing process to reduce billing lag and decrease associated interest expense. (VI – 2)	\$ 1,500,000	
Acquire and implement automated metering technology. (VII – 1)	1,400,000	
Track billing adjustments by reason to identify potential process improvements to decrease the number of billing adjustments. (VIII – 1)	122,000	
Analyze safety incident root cause data to identify areas of improvement for training and safety programs and enhance enforcement procedures to appropriately motivate employee compliance. (XI – 3)	86,000	
Totals	\$ 3,108,000	---

For most recommendations, it was impractical to estimate quantitative benefits as the benefits are of a qualitative nature or insufficient data was available to quantify the impact. For example, it is difficult to estimate the actual benefit where new management practices or procedures are recommended where such did not previously exist nor were not fully functional. Similarly, changes in workflow or implementation of good business practices could result in improved efficiency and effectiveness of a function but cannot be easily quantified.

NFGDC-PA will have options to implement the recommendations, and as a result, the PUC auditors have not estimated the cost of implementation for recommendations where no savings were quantified. However, it should be noted that the cost of implementing some recommendations could be significant.

E. Recommendation Summary

Chapters III through XIII provide findings, conclusions, and recommendations for each functional area reviewed in-depth during this audit. Exhibit I-3 summarizes the recommendations with the following priority assessments for implementation:

- INITIATION TIME FRAME – Estimated time frame on how quickly the company should be able to initiate its implementation efforts given the company’s resources and general operating environment. The time necessary to complete implementation is expected to vary depending on the nature of the recommendation and the scope of the effort necessary and resources available to effectively implement the recommendation.

- BENEFITS – Net quantifiable benefits have been provided where they could be estimated as discussed in section D. Benefits. Our overall rankings are not solely based on quantifiable dollars but rather our assessment of the potential overall impact of the recommendation on the efficiency and/or effectiveness of the company and/or the services it provides.
 - HIGH BENEFITS – Implementation of the recommendation would result in major service improvements, substantial improvements in management practices and performance, and/or significant cost savings.

 - MEDIUM BENEFITS – Implementation of the recommendation would result in important service improvements, meaningful improvements in management practices and performance, and/or meaningful cost savings.

 - LOW BENEFITS – Implementation of the recommendation is likely to result in service, management practice, and/or performance improvements and/or enhanced cost controls.

**National Fuel Gas Distribution Corporation
Management and Operations Audit
Summary of Recommendations**

Rec. No.	Recommendation	Page No.	Initiation Time Frame	Benefits \$
III Executive Management and Organizational Structure				
	None			
IV Corporate Governance				
IV – 1	Expand NFG Co.'s Board of Directors' expertise in key skills and a variety of strategic priorities outside the natural gas industry.	22	12 – 18 Months	Medium
IV – 2	Implement a requirement that NFG Co.'s directors must formally submit signed acknowledgements of the Code of Business Conduct and Ethics, Statements of Disclosure, and Insider Trading Policy, annually.	22	3 – 6 Months	Low
V Affiliated Interests and Cost Allocations				
V – 1	Update the appropriate affiliated interest agreement(s) to include a description of the emergency transfer of trucks and/or equipment during the normal course of business; however, non-emergency transfers of trucks and/or equipment, in excess of \$10,000, require advance approval by the PA PUC.	29	6 – 9 Months	Low
V – 2	Conduct periodic market studies to support reasonableness of transactions with affiliates.	31	6 – 12 Months	Medium
V – 3	Develop and implement a routine internal audit schedule that provides ongoing review of every department using indirect/common cost allocation and consider a periodic third-party consultant study of the entire indirect/common cost allocation process for optimal control.	32	6 – 12 Months	Medium
V – 4	Revise the Service Agreement and Cost Allocation Manual with consistent terms and detail and then submit to the PA PUC for approval.	33	3 – 6 Months	Low
VI Financial Management				
VI – 1	Revise the Dividend Policy to include advance notification to the PA PUC for any dividend payments by NFGDC-PA which would exceed 85% of net income.	40	3 – 6 Months	Low
VI – 2	Analyze and improve the billing process to reduce billing lag and decrease associated interest expense.	42	0 – 6 Months	High Annual Savings \$1,500,000
VII Gas Operations				
VII – 1	Modernize the geographic information system and optimize the mapping tool interface and proactively verify historical infrastructure records to improve mapping accuracy.	49	0 – 6 Months	Low

**National Fuel Gas Distribution Corporation
Management and Operations Audit
Summary of Recommendations**

Rec. No.	Recommendation	Page No.	Initiation Time Frame	Benefits \$
VII Gas Operations (continued)				
VII – 2	Acquire and implement automated metering technology.	51	6 – 12 Months	High Annual Savings \$1,400,000
VII – 3	Discontinue collecting physical forms of payment on customers' premises.	53	0 – 3 Months	High
VIII Customer Service				
VIII – 1	Track billing adjustments by reason to identify potential process improvements to decrease the number of billing adjustments.	59	3 – 6 Months	Medium Annual Savings \$122,000
VIII – 2	Submit a supplement to revise tariff language regarding residential security deposits to ensure ample information is available for customers and applicants.	60	3 – 6 Months	Low
VIII – 3	Evaluate the effectiveness of current, while researching additional, outreach efforts to focus on the most effective outreach strategies and rigorously evaluate vendor performance to ensure optimal support.	61	3 – 6 Months	Low
IX Purchasing and Materials Management				
IX – 1	Develop and implement procedures to control rolling stock to ensure accuracy of work order accounting and mapping records and to impede theft and/or material misuse.	66	6 – 12 Months	Medium
IX – 2	Develop and implement a quantitative goal for annual diverse spend considering a component of year-over-year improvement.	68	3 – 6 Months	Low
X Emergency Preparedness				
X – 1	Designate an individual or group to provide oversight over and develop a centralized emergency response guiding document repository.	72	6 – 12 Months	Low
X – 2	Identify safety and/or security measures needed at each NFGDC-PA facility and install the appropriate equipment.	73	0 – 3 Months	Medium
XI Human Resources and Diversity				
XI – 1	Conduct periodic salary surveys for all hourly positions to ensure offering competitive compensation to attract and retain this workforce segment.	80	6 – 12 Months	Medium
XI – 2	Reduce chronic absenteeism through the enhancement and consistent enforcement of sick leave policies and identify union contract terms that are incompatible with these policies to revise during the next contract renegotiation.	82	3 – 6 Months	Low

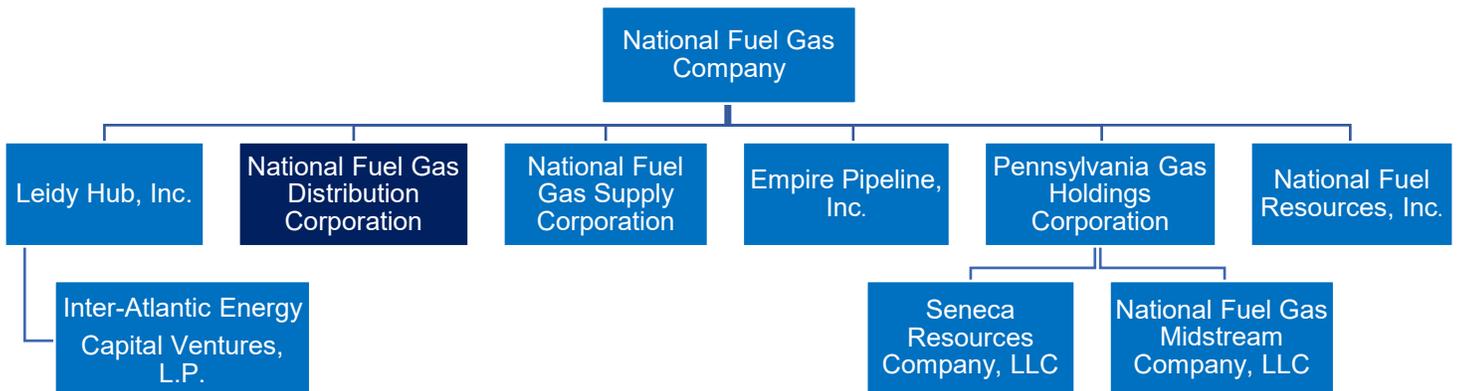
**National Fuel Gas Distribution Corporation
Management and Operations Audit
Summary of Recommendations**

Rec. No.	Recommendation	Page No.	Initiation Time Frame	Benefits \$
XI Human Resources and Diversity (continued)				
XI – 3	Analyze safety incident root cause data to identify areas of improvement for training and safety programs and enhance enforcement procedures to appropriately motivate employee compliance.	85	3 – 6 Months	Medium Annual Savings \$86,000
XII Fleet Management				
	None			
XIII Information Technology				
XIII – 1	Conduct information technology focused end-user surveys to gauge satisfaction and collect feedback to determine potential areas of improvement.	93	3 – 6 Months	Low
XIII – 2	Implement the information technology improvement strategy to improve NFG Co.'s performance on future routine third-party maturity assessments.	94	0 – 3 Months	Low

II BACKGROUND

National Fuel Gas Distribution Corporation (NFGDC) is a natural gas distribution utility owned by National Fuel Gas Company (NFG Co.). NFG Co. is a holding company incorporated in 1902 and organized under the laws of the state of New Jersey. NFG Co. is headquartered in Williamsville, New York and is publicly traded on the New York Stock Exchange under the ticker symbol “NFG”. Its principal business segments include exploration and production, pipeline and storage, gathering, and utility. The company’s operating subsidiaries are shown in Exhibit II-1.

**Exhibit II-1
National Fuel Gas Company
Corporate Entity Chart
As of February 2024**



Source: Data Request EM-34

NFG Co.’s primary business segments:

- Exploration and production services are provided through Seneca Resources Company, LLC (Seneca), a Pennsylvania limited liability company. Seneca is primarily engaged in the exploration, development, and production of natural gas in the Appalachian region of the United States.
- Pipeline and storage operations are provided jointly by National Fuel Gas Supply Corporation (Supply Corp.), a Pennsylvania corporation; and Empire Pipeline, Inc. (Empire), a New York corporation. Supply Corp. and Empire provide interstate natural gas transportation services for affiliated and non-affiliated companies through integrated gas pipeline systems in Pennsylvania and New York. They also provide storage services through underground natural gas storage fields.

- Gathering services are provided through wholly-owned subsidiaries of National Fuel Gas Midstream Company, LLC (Midstream), a Pennsylvania limited liability company. Through these subsidiaries, Midstream builds, owns, and operates natural gas processing and pipeline gathering facilities throughout the Appalachian region.
- Utility operations are provided through NFGDC, a New York corporation. NFGDC provides natural gas utility services to approximately 754,000 customers through a local distribution system located in western New York and northwestern Pennsylvania. Both the New York (NFGDC-NY) and Pennsylvania (NFGDC-PA) operating divisions share common management but are two distinct divisions. NFGDC-NY serves the principal metropolitan areas of Buffalo, Niagara Falls, and Jamestown in New York; whereas NFGDC-PA serves Erie and Sharon in Pennsylvania.

Notable changes to NFG Co.'s primary subsidiaries throughout the audit period include:

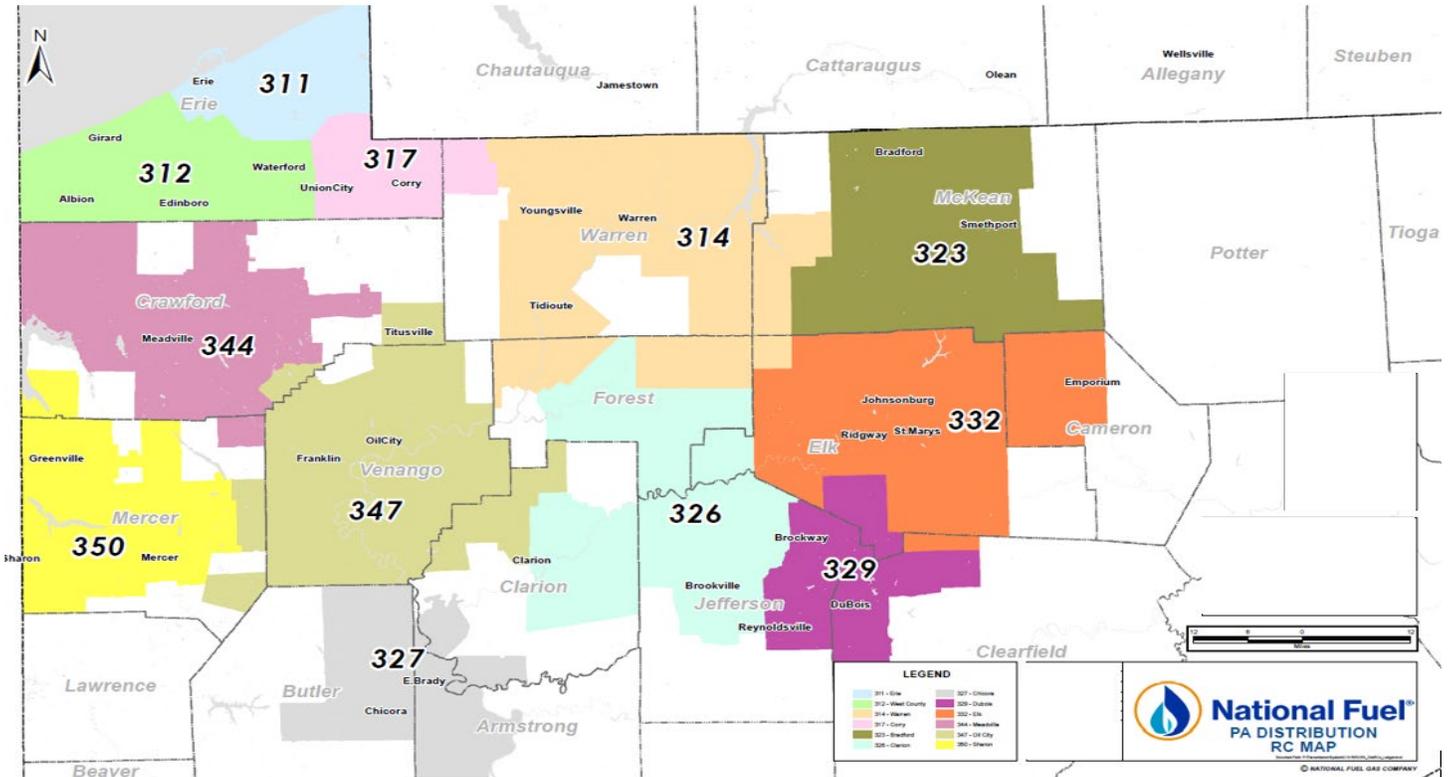
- On August 1, 2020, National Fuel Resources, Inc. (NFR, Inc.), NFG Co.'s energy marketing subsidiary, completed the sale of its commercial and industrial gas contracts to a subsidiary of Marathon Energy Corporation. This sale, in conjunction with the turnback of NFR Inc.'s residential customers to NFGDC, effectively ended NFR Inc.'s day-to-day operations. NFR Inc. retained one transportation contract with a non-affiliated pipeline; however, NFG Co. plans to fully divest NFR Inc. after the termination of this contract.
- In July 2022, Leidy Hub, Inc. (Leidy Hub), a wholly-owned direct subsidiary of NFG Co. focused on a variety of non-regulated business activities, acquired a 16.07% limited partnership interest in Inter-Atlantic Energy Capital Ventures, L.P. (ECV), a Delaware limited partnership. ECV is a venture capital fund focused on environmental, social, and corporate governance initiatives in the natural gas sector.

Although the NFG Co. subsidiaries, shown in Exhibit II-1, are legally organized as separate companies, NFG Co. has an integrated business model. NFG Co. is led by a key group of executives that hold various officer-level positions across multiple entities. The roles and responsibilities of these positions were well defined and there was no evidence that this structure inhibits organizational effectiveness at NFGDC-PA.

As the utility segment of NFG Co., NFGDC sells natural gas and provides gas transportation services to customers in New York and Pennsylvania and is regulated by both the New York Public Service Commission and the Pennsylvania Public Utility Commission (PA PUC). Like its parent, NFGDC is also headquartered in Williamsville, New York; but NFGDC-PA maintains an office in Erie, Pennsylvania which is dedicated to its Pennsylvania operating division. NFGDC-PA services 15 counties within Pennsylvania through 12 designated service territories defined by geographical boundaries. A depiction of NFGDC-PA's operating territory, broken down by service

territory, is provided in Exhibit II-2, and Exhibit II-3 provides NFGDC-PA’s residential, commercial, and industrial customer base statistics as of year-end 2023.

**Exhibit II-2
National Fuel Gas Distribution Corporation
Pennsylvania Operating Area
As of February 2024**



Source: Data Request GO-46

**Exhibit II-3
National Fuel Gas Distribution Corporation – Pennsylvania Division
Customer Statistics
As of December 31, 2023**

Customer Class	No. of Customers	Percentage of Total Customers	MCF Delivered	Percentage of Total MCF Delivered	Revenue	Percentage of Total Revenue
Residential	196,831	92.1%	17,288,976	40.3%	\$180,688,206	74.2%
Commercial	16,210	7.6%	9,031,663	21.0%	44,053,295	18.1%
Industrial	596	0.3%	16,596,322	38.7%	16,970,850	7.0%
Other	-	0.0%	-	0.0%	1,609,615 ¹	0.7%
Totals	213,637	100.0%	42,916,961	100.0%	\$243,321,966	100.0%

Source: NFGDC-PA’s 2022 Annual Report to the PA PUC

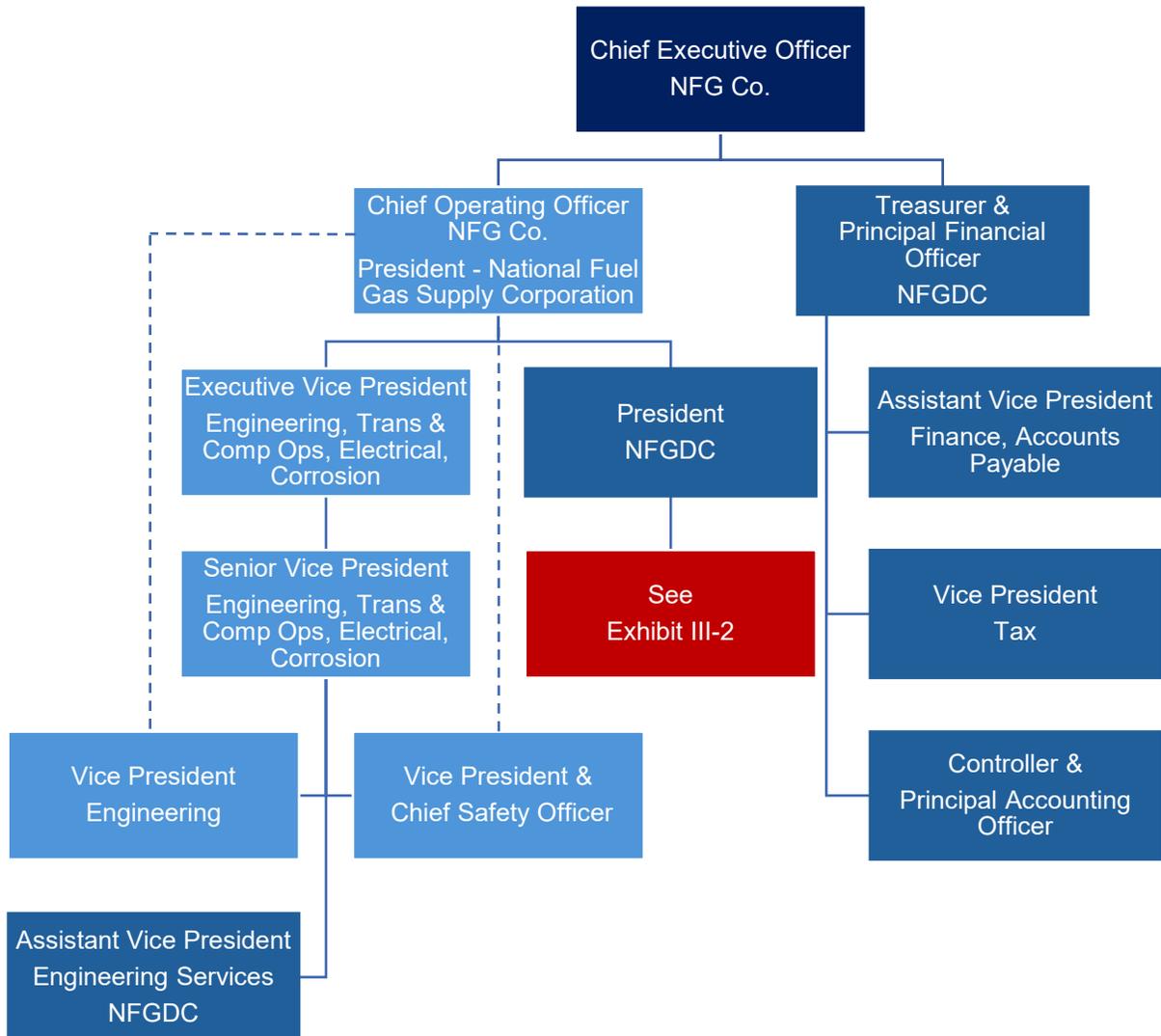
¹ Other revenue consists of rent from gas property, customers’ forfeited discounts and penalties, and miscellaneous gas revenue.

III EXECUTIVE MANAGEMENT AND ORGANIZATIONAL STRUCTURE

Background

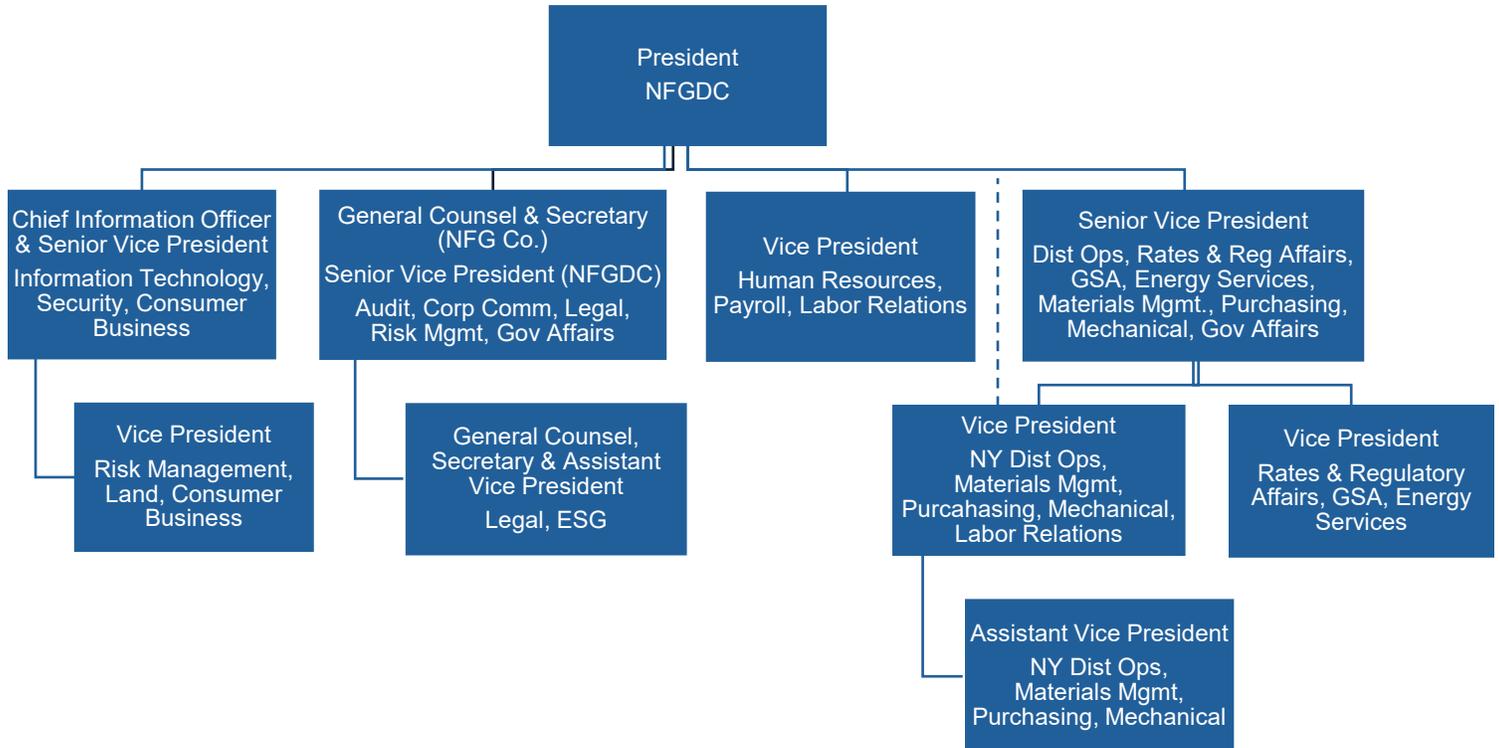
As discussed in chapter II – Background, National Fuel Gas Company (NFG Co.) owns and distributes natural gas through its regulated subsidiary, National Fuel Gas Distribution Corporation (NFGDC). Exhibit III-1 displays the senior executive officers of NFGDC. Officers of NFGDC often also serve as officers of the parent company, NFG Co., or other affiliates. Exhibit III-2 displays the executive officers who report to the President of NFGDC.

**Exhibit III-1
National Fuel Gas Distribution Corporation
Senior Executive Leadership Team
As of February 2024**



Source: Data Request EM-37

**Exhibit III-2
National Fuel Gas Distribution Corporation
Executive Leadership Team Reporting to President
As of February 2024**



GSA = gas supply administration
 ESG = environmental, social, governance
 Source: Data Request EM-37

The President of NFGDC reports to the Chief Operating Officer (COO) of NFG Co. The Engineering and Finance Departments, although part of NFGDC, do not report to the President of NFGDC (see Exhibits III-1 and III-2). The Engineering Department ultimately reports to NFG Co.’s COO via the National Fuel Gas Supply Corporation’s branch of the organizational chart. Meanwhile, the Finance Department reports directly to the Chief Executive Officer of NFG Co.

Across NFG Co., there were multiple positions that reported to more than one direct supervisor because those positions handled functions under the direction of different managerial staff. For example, the Vice President of Risk Management, Land, and Consumer Business for NFGDC reports to both NFGDC’s Chief Information Officer & Senior Vice President Information Technology, Security, Consumer Business and the Senior Vice President of Audits, Corporate Communications, Legal, Risk Management, and Government Affairs. In these circumstances, a position could be assigned to report, directly or indirectly, to two supervisors of the same or different hierarchical levels. NFGDC’s Vice President New York Distribution Operations, Materials Management, Purchasing, Mechanical, and Labor Relations is an example of a job role that reports to two direct supervisors at different hierarchical levels by reporting to a Senior Vice President of NGFDC while also reporting to NFGDC’s

President. This integrated management model purportedly allows NFG Co.'s subsidiaries to operate with an overall reduced number of senior management positions which theoretically improves its efficiency and cost effectiveness. There was no evidence that the integrated management model caused conflict or diminished oversight.

NFGDC's executive compensation strategy is administered by NFG Co.'s Board of Directors' (NFG Co. Board) Compensation Committee (CC). The CC retains independent consulting firms to provide analyses of compensation practices specific to both the energy industry and the general labor market. When setting compensation for executive officers, the CC's primary goal is to provide balanced incentives for creating stockholder value in both the near- and long-term. The CC awards a combination of cash and equity components designed to focus management's efforts on drivers of stockholder value including financial, safety, environmental, diversity, and customer service performance. Total compensation for executive officers is comprised of the following components:

- **Base Salary** – This is the fixed level of pay generally referencing the median for the energy industry and based upon independent compensation studies provided by consultants. The CC makes subjective adjustments considering defined performance metrics. For 2022, the target percentage of base salary as a component of total compensation was set at 17% for the CEO and, on average, 25% for all other named executive officers.
- **Annual Cash Incentive** – This consists of target awards set as a percentage of base salary to motivate performance through the achievement of near-term financial, operating, and ESG goals.
- **Long-Term Equity Incentive Compensation** – These are stock incentives awarded in relation to three distinct performance conditions: three-year reductions in greenhouse gas emission and methane intensity levels, three-year total shareholder return, and three-year return on capital. Performance conditions are objectively defined and measured against a recognized peer group.
- **Health, Welfare, and Retirement Benefits** – NFGDC provides competitive benefits comparable to those offered by similar utilities.

NFGDC's senior officers and management begin the annual strategic planning process by establishing targets for the business segments. These targets are based on historical performance with adjustments for future expectations or improvements. Meanwhile, both a one- and five-year forecast are created. The one-year forecast is developed in coordination with the capital and operations and maintenance budgets and is updated quarterly while the five-year forecast is updated annually. NFGDC's Board of Directors reviews the strategic plans during its September meeting with the finalized targets and goals becoming effective October 1st which is the beginning of NFGDC's fiscal year.

The company envisions base rate cases to be a significant part of future strategic plans. NFGDC's Pennsylvania operating division's (NFGDC-PA) last base rate increase² was approved by the Pennsylvania Public Utility Commission (PA PUC) to go into effect on July 27, 2023. The company requested the increase due to inflation, rate base growth, cost recoupment, and the increased labor rate market environment. Prior to this base rate increase, the company's last increase was in 2007. Generally, NFGDC anticipates requesting base rate increases more routinely, approximately every three to five years, for the foreseeable future to meet the financial requirements of its long-term strategic plan.

Succession planning for NFG Co.'s executive officers and its subsidiaries is the responsibility of the NFG Co. Board. For NFGDC's non-officer positions, this responsibility is delegated to departmental officers and managers. The company uses a customized nine box model which aligns potential and personal performance on the two axes. Each of the nine outcomes provide a reference point for development planning and pathways that can be created for employees.

The Human Resources Department (HR Department) reviews and reports on spans of control, quarterly. These routine reviews were initiated in July 2021. Each review focuses on between four to twelve departments. The reviews closely align with budget preparation, fiscal year-end, and promotion schedules. The HR Department verifies reasonable spans of control considering role responsibilities, one-to-one reporting relationships, and positions that report to multiple direct supervisors. Results are reviewed with the affected departments for evaluation.

Exhibit III-3 displays NFGDC's departmental year-end staffing levels including executive, salaried, and hourly personnel. NFGDC-PA's staff has both non-unionized and unionized employees throughout its 12 operations territories. Unionized employees are represented by either the International Brotherhood of Electrical Workers or the National Conference of Fireman and Oilers.

NFGDC-PA's overall staffing has increased by 15% from 2019 – 2023. The company cited the primary driver of this increase was system modernization (i.e., replacement of antiquated pipe). Other changes, such as a notable increase in the Construction Department and equivalent decrease in the Consumer Business Department, were due to a reporting structure realignment (i.e., general fitters). In addition, the company increased staffing in its PA Customer Response Center (see chapter VIII – Customer Service for more information).

² Order, at docket no. R-2022-3035730, adopted at the Public Meeting held on June 15, 2023

**Exhibit III-3
National Fuel Gas Distribution Corporation – Pennsylvania Division
Staffing by Department³
As of December 2023**

Department	2019	2020	2021	2022	2023
Construction	100	107	109	114	151
Corporate Communications	2	2	2	2	2
Corrosion Control	1	2	3	3	2
Consumer Business	84	80	79	79	46
Distribution	8	7	6	8	7
Distribution Operations	-	42	53	50	53
Energy Services	5	4	5	4	5
Engineering Services	9	11	13	14	14
Executive	2	2	3	3	3
Field	-	-	-	-	1
Government Affairs	1	1	1	1	1
Human Resources	5	6	5	7	6
Land	6	6	6	6	7
Legal	1	1	1	1	1
Mechanical	3	4	3	4	4
Oil City Customer Assistance Center	5	4	5	5	4
Operations Clerical	7	7	8	7	7
Operations General	31	1	-	2	-
PA Customer Response Center	92	87	93	96	104
Risk Management	8	6	6	7	7
Safety	-	2	2	2	2
Security	4	5	4	4	4
Total	374	387	407	419	431

Source: Data Request EM-36

Findings and Conclusions

Our examination of the executive management function included a review of NFG Co.'s entity and organizational structures, spans of control, the roles and responsibilities of executive management, strategic planning, company-wide staffing, and succession planning. Based on our review, nothing came to our attention that would lead the PUC auditors to conclude that areas reviewed were not being addressed adequately; therefore, no recommendations have been developed for this area.

³ This data excludes staff committed solely to the New York operating division but includes staff whose roles support both New York and Pennsylvania operating divisions.

IV CORPORATE GOVERNANCE

Background

As discussed in chapter II – Background, National Fuel Gas Company (NFG Co.) owns and distributes natural gas through its regulated subsidiary, National Fuel Gas Distribution Corporation (NFGDC). NFG Co. is a publicly traded company listed on the New York Stock Exchange (NYSE) under the symbol “NFG”; therefore, it is subject to the corporate governance requirements of the Sarbanes-Oxley Act of 2002 (SOX) and the listing standards of the NYSE.

The NFG Co. Board of Directors (NFG Co. Board) has 11 directors. There is only one employee director, the Chief Executive Officer (CEO); however, two former CEOs serve on the NFG Co. Board. The employee director is not independent and does not receive additional compensation to serve on the NFG Co. Board in excess of the approved annual compensation package. The remaining ten non-employee directors are independent as defined by the NYSE’s listing standards and the Securities and Exchange Commission’s (SEC) regulations.

Beginning in 2024, all non-employee directors will stand for election to a 12-month term at the annual stockholders’ meeting held in March each year. The average director tenure is 8.4 years. The full NFG Co. Board met seven times during 2023. Non-employee directors are compensated through a cash retainer and common stock for service to the NFG Co. Board and its committees.

The NFG Co. Board conducts its business through the following committees:

- **Audit Committee (AC)** – The AC’s core responsibilities are to provide oversight of the integrity of NFG Co.’s financial statements and internal controls; the external auditor’s qualifications, performance, and independence; compliance with legal and regulatory requirements; and performance of the internal audit function including risk management. In addition, the AC provides information in the annual proxy statement and reviews related-party transactions. The AC’s charter requires a minimum of three independent members with at least one member being a financial expert. At the time of audit fieldwork, there were three financial experts serving on the AC. The AC met nine times during 2023.
- **Compensation Committee (CC)** – The CC’s core responsibilities are to exercise delegated authority of the NFG Co. Board regarding compensation of NFG Co.’s officers; make recommendations to the NFG Co. Board regarding compensation of directors and other compensation-related matters; exercise authority granted by various compensation plans approved by the NFG Co. Board and/or the company’s shareholders; and perform activities required of the CC by applicable laws, rules, or regulations including those of the SEC and NYSE. The CC’s charter requires a minimum of three independent members. The CC met five times during 2023.

- **Nominating and Corporate Governance Committee (NCGC)** – The NCGC’s core responsibilities are to identify and nominate individuals qualified to become directors of the NFG Co. Board using board-approved criteria. In addition, the NCGC develops and recommends corporate governance principles to the NFG Co. Board; provides oversight of strategy, initiatives, and reporting with respect to corporate responsibility; and oversees the annual board evaluation. The NCGC’s charter requires a minimum of three independent members. The NCGC met four times during 2023.
- **Executive Committee (EC)** – The EC may exercise the NFG Co. Board’s authority with respect to matters other than those for which the action of the full NFG Co. Board is required under applicable laws. For example, the EC may vet potential merger and acquisition opportunities before full action of the NFG Co. Board is undertaken. The EC met once during 2023.
- **Financing Committee (FC)** – The FC may exercise the NFG Co. Board’s authority with respect to specific delegated matters. For example, the NFG Co. Board authorizes the FC to issue NFG Co.’s long-term debt or equity securities. The FC met once during 2023.

The AC’s charter, last amended June 15, 2017, and the CC’s and NCGC’s charters, last amended June 15, 2022; each define the purpose, authority, and responsibilities of the respective committee. The EC and FC serve as an advisory function to the NFG Co. Board and therefore do not have charters. Instead, the EC and FC operate as ad hoc committees, receiving specific duties from the NFG Co. Board when needed. Activities of the full NFG Co. Board are governed by the Corporate Governance Guidelines (Guidelines). The NFG Co. Board’s and committees’ meeting minutes, for the period 2018 – June 2023, were thorough, complete, and provided evidence that each is following the respective Guidelines and charters while engaging in activities to provide robust oversight to NFG Co.

As previously described, NFGDC is a wholly-owned subsidiary of NFG Co. and therefore, is not required to have a board of directors that complies with the rules and regulations of the SEC nor the NYSE. NFGDC maintains a board of directors (NFGDC Board) with membership composed of the NFG Co.’s President and CEO (since 2016); NFG Co.’s Treasurer and Principal Financial Officer (since May 1, 2023); NFG Co.’s General Counsel and Secretary (since 2020); NFGDC’s President (since 2019), and NFGDC’s Senior Vice President (since June 30, 2023). The NFGDC Board meets, as needed, to handle specific tasks and responsibilities including, but not limited to, electing/appointing officers for NFGDC and reviewing and approving dividend payments to NFG Co., borrowing requests, audit reports and plans, and capital and operations and maintenance budgets. There are no standing committees serving the NFGDC Board.

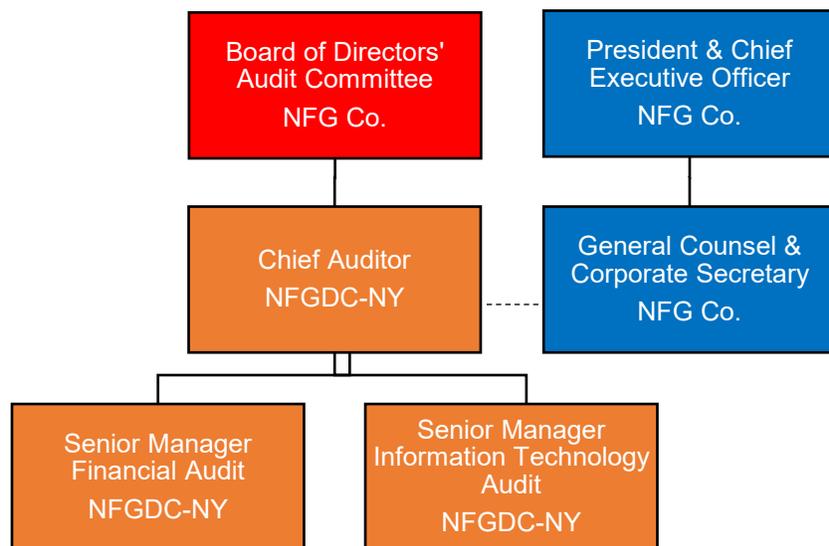
NFG Co. maintains an informative governance section on its corporate website⁴ to ensure current information is available to all stakeholders. The Guidelines and

⁴ www.nationalfuel.com

committees' charters are available as well as biographies for current directors and officers of NFG Co. and its subsidiaries, including NFGDC. In addition, the Code of Business Conduct and Ethics (Code), Political Activities Principles, and the hotline for reporting accounting and auditing matters are provided.

As shown in Exhibit IV-1, the Chief Auditor reports functionally to the NFG Co. Board's AC and administratively to NFG Co.'s General Counsel & Corporate Secretary. The AC reviews and approves the Audit Services Department's (Audit Services) charter, budget, and risk-based audit plan. In addition, the AC oversees the appointment, retention, performance, and dismissal of the Chief Auditor. Audit Services is based out of NFGDC's New York operating division.

**Exhibit IV-1
National Fuel Gas Distribution Corporation – New York Division
Audit Services Department Organizational Structure
As of November 2023**



Source: Data Request EM-35

Audit Services' mission is to provide an independent, objective assurance and consultation function to add value through improved business processes. Audit Services follows mandatory guidance as set forth in the Institute of Internal Auditors' (IIA) International Professional Practices Framework and maintains IIA membership for all department staff. Four auditors hold Certified Internal Auditor certifications.

NFG Co. engages PricewaterhouseCoopers LLC (PwC) as its external auditing firm to provide opinions on internal control over financial reporting and the annual financial statements. NFG Co. maintains a policy requiring engagement partners to be rotated at least every five years as required by the SEC. In 2021, NFGDC's Accounting Department conducted a cost/benefit analysis of the services provided by PwC. That analysis weighed qualitative and quantitative factors and resulted in the

decision to stay with PwC. Exhibit IV-2 shows the audit fees charged by PwC for 2021 – 2023.

**Exhibit IV-2
National Fuel Gas Company
Audit Fees
For the Years 2021 – 2023**

2021	2022	2023
\$ 1,933,000	\$ 1,997,354	\$ 2,285,187

Source: NFG Co.'s Proxy Statements

Findings and Conclusions

Our examination of the corporate governance function included a review of NFG Co.'s and NFGDC's boards of directors, including the structure and charters of active committees; governance policies, practices, and procedures; and internal and external audit services. Based on our review, NFG Co. should initiate or devote additional effort to improving the efficiency and/or effectiveness of the corporate governance function by addressing the following:

- **Finding IV – 1: NFG Co.'s Board of Directors lacks diversity of key skills and experience.**
- **Finding IV – 2: NFG Co.'s directors do not sign annual acknowledgements of governance policies.**

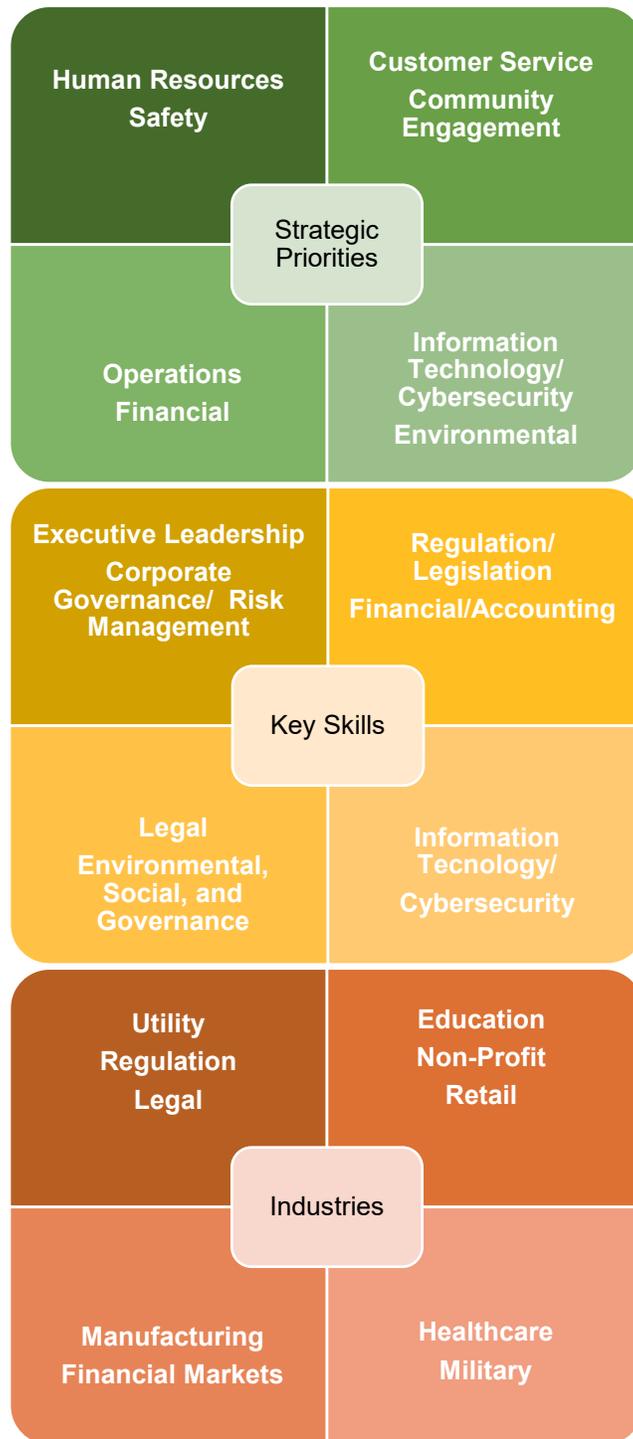
Discussion

Finding IV – 1: NFG Co.'s Board of Directors lacks diversity of key skills and experience.

According to the directors' biographies on NFG Co.'s website, most have experience in finance and/or operations areas of the natural gas industry. NFG Co. stated that two of its recently hired directors have more varied experience, one from the manufacturing and industrial customer perspective and another in environmental, social, and governance (ESG), albeit in the natural gas industry.

It is a best business practice for boards to employ directors with varying backgrounds, education, and professional experience to provide robust and well-rounded oversight. Regional Pennsylvania utility holding/parent companies' board members have experience across strategic priorities, key skills, and industries as shown in Exhibit IV-3.

**Exhibit IV-3
Regional Peer Utilities
Board Experience: Strategic Priorities, Key Skills, and Industries**



Source: Observations of PUC auditors

The company stated that the NFG Co. Board's aim is to have experience/skills within various strategic priorities of the natural gas industry. Although this strategy

ensures that board members are familiar with traditional operations, it may limit other perspectives that could enhance overall efficiency and effectiveness. For instance, information technology and cybersecurity are no longer considered support services, but instead, critical components of business activities in the current landscape. Therefore, NFG Co. should look to expand director expertise to include varied skill sets, experience, and industry types in addition to the natural gas industry.

Recommendation IV – 1: Expand NFG Co.’s Board of Directors’ expertise in key skills and a variety of strategic priorities outside the natural gas industry.

Finding IV – 2: NFG Co.’s directors do not sign annual acknowledgements of governance policies.

Employees and officers must sign formal acknowledgements each year for the Code of Business Conduct and Ethics (Code), Statement of Disclosure (SoD), and Insider Trading Policy (Policy). Although NFG Co. Board’s directors are familiar with the Code, they do not formally sign an annual acknowledgement. The AC began an annual review of the Code as of June 2022, but prior to that, the Code was only reviewed to approve updates. Similarly, the NFG Co. Board’s meeting minutes showed evidence of the SoD process being discussed during the March board meeting each year. The directors review and discuss all SoDs filed by the officers and other employees. NFG Co. stated that the directors will be submitting annual SoDs starting in 2024.

Meanwhile, the Policy is not formally acknowledged by the NFG Co. Board’s directors in any routine official action. The most recent review and adoption of amendments for the Policy occurred in September 2023. Although directors routinely receive a copy of the Policy in connection with the quarterly blackout period⁵; there is no assurance that the Policy is reviewed and acknowledged.

Positive tone at the top is fostered and best practices dictate that when those in the highest positions of authority formally sign to acknowledge all governance policies, annually. In addition, officers and employees are more likely to follow policies that directors formally acknowledge. Therefore, directors should adhere to and formally acknowledge compliance with the Code, SoD, and Policy.

Recommendation IV – 2: Implement a requirement that NFG Co.’s directors must formally submit signed acknowledgements of the Code of Business Conduct and Ethics, Statements of Disclosure, and Insider Trading Policy, annually.

⁵ A blackout period is when insiders are prohibited from trading company stock before and after quarterly or annual financial results are released.

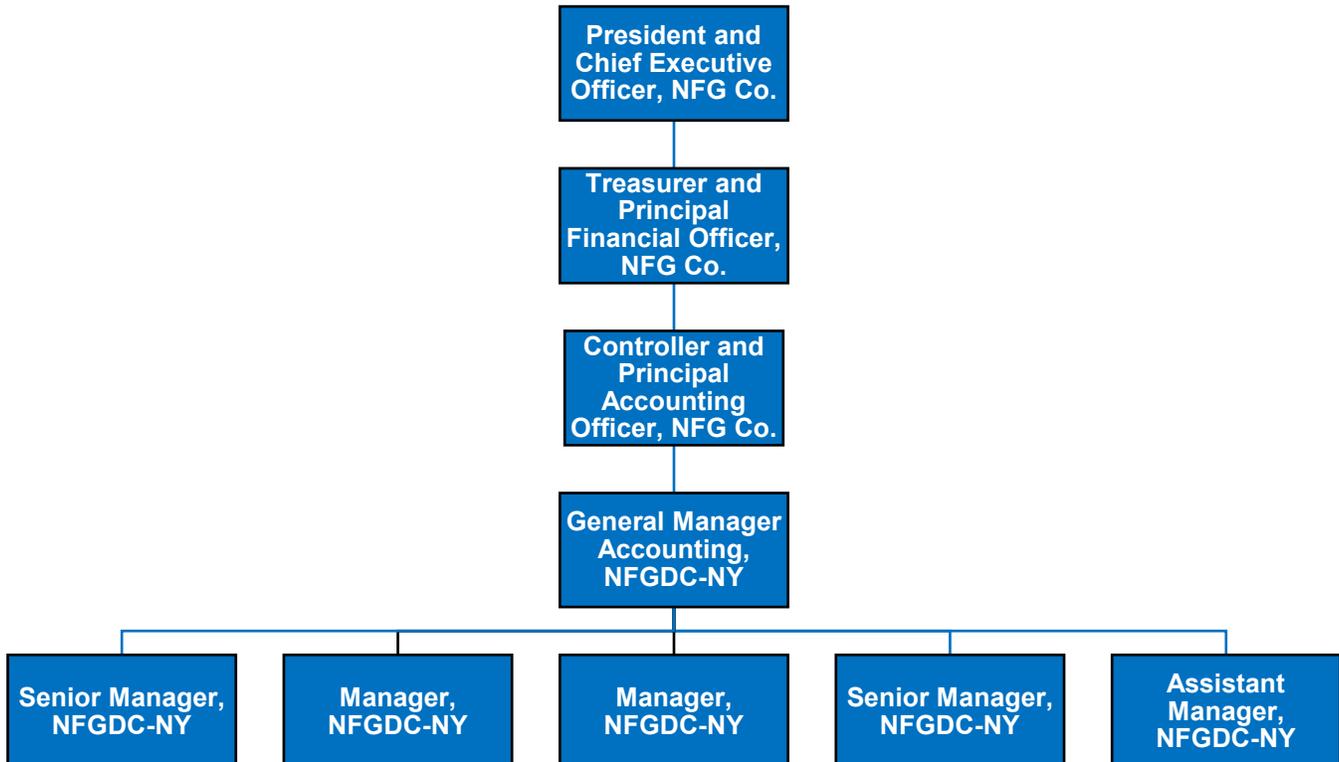
V AFFILIATED INTERESTS AND COST ALLOCATIONS

Background

As discussed in chapter II – Background, National Fuel Gas Company (NFG Co.) owns and distributes natural gas through its regulated subsidiary, National Fuel Gas Distribution Corporation (NFGDC). NFGDC is a public utility subject to regulation by the Pennsylvania Public Utility Commission (PA PUC). NFGDC transacts business with other regulated and unregulated affiliates including providing goods and services to affiliates through both its New York (NFGDC-NY) and Pennsylvania (NFGDC-PA) operating divisions.

Accounting processes are performed out of NFGDC-NY. The Accounting Department's (Accounting) organizational structure is shown in Exhibit V-1. *Oracle PeopleSoft Financials and Supply Chain Management* is the main software platform used for the accounting function and includes accounts payable, accounts receivable, purchasing, inventory, asset management, project costing, and general ledger modules. There are also other applications used in conjunction to record and report financial data.

**Exhibit V-1
National Fuel Gas Distribution Corporation – New York Division
Accounting Department Organizational Structure
As of November 2023**



Source: Data Request EM-37

Transactions between NFGDC-PA and its affiliates are governed by two affiliated interest agreements (AIAs): the NFG Co. and Participating Subsidiaries Fifth Amended and Restated Money Pool Agreement⁶ and the Revised Service Agreement (SA)⁷. These documents list the following affiliates with which NFGDC-PA may conduct business:

- NFGDC-NY
- NFG Co.
- National Fuel Gas Supply Corporation (Supply Corp.)
- Empire Pipeline, Inc. (Empire)
- Seneca Resources Company, LLC (Seneca)
- National Fuel Gas Midstream Company, LLC (Midstream)

NFGDC's Cost Allocation Manual (CAM) provides guidance on how to track and record time for cost allocation purposes. The CAM is available on the company's intranet. Every employee can initiate charges to affiliates. This becomes necessary when an employee performs a task for the benefit of an affiliate which is not their home business unit. The time and labor system automatically generates the appropriate labor and overhead charges from the employees' input data. Supervisors then review and approve these charges. In certain instances, manual journal entries may be necessary to record charges to affiliate accounts. Accounting is responsible for monitoring and paying intercompany charges from affiliates.

Accounting conducts annual meetings, in May or June, to discuss common expenses by department. The purpose of these meetings is to remind each department to directly charge whenever possible, to use causal factors that reflect the work being charged, and to use common expense allocation as a last resort. In September, Accounting and the various common expense departments review an updated list of charges having occurred since the annual meeting to ensure the departments are appropriately following this procedure.

NFGDC provided examples of when routine review detected charges that could have been charged directly/indirectly instead of through common cost allocation as well as the associated correcting entries. Cost allocation is a critical area requiring strict control for regulated entities, and although NFGDC has review procedures, improvements are possible. (see Finding V – 3).

Total annual charges, by type, for the years 2021 – 2023, from and to NFGDC-PA's affiliates are shown in Exhibits V-2 and V-3. To see a list of the services provided to and from NFGDC's affiliates, see Finding V – 2.

⁶ Approved by the PA PUC, at docket no. G-2009-2092081, on August 8, 2018

⁷ Approved by the PA PUC, at docket no. G-2018-3002838, on September 21, 2018

Exhibit V-2
National Fuel Gas Distribution Corporation – Pennsylvania Division
Summary of Charges from Affiliates
For the Years 2021 – 2023

Affiliate	Type of Charge	2021	2022	2023	Compound Change
NFG Co.	Interest	\$ 5,571,166	\$ 6,336,527	\$ 9,221,665	28.66%
NFG Co.	Miscellaneous	48,876	187,014	6,193	(64.40%)
NFG Co.	Employee Benefits	1,776	1,776	1,776	0.00%
Supply Corp.	Labor (fully loaded cost)	2,758,993	2,732,871	3,179,240	7.35%
Supply Corp.	Rental	437,177	486,013	599,345	17.09%
Supply Corp.	Transportation	127,352	136,100	155,255	10.41%
Supply Corp.	Computer Expense	-	-	214,960	NM
Supply Corp.	Gas Purchases	31,533,178	32,331,807	34,282,994	4.27%
Supply Corp.	Employee Benefits	-	91	-	NM
Supply Corp.	Miscellaneous	23,139	2,082	5,017	(53.44%)
Supply Corp.	Inventory	273,657	229,740	377,786	17.50%
Supply Corp.	Officer Direct Charges	193,528	186,007	-	NM
Supply Corp.	Officer Allocations	9,036	8,425	13,726	23.25%
Supply Corp.	Miscellaneous Allocations	2,227	42,707	3,193	19.74%
NFGDC-NY	Labor (fully loaded cost)	4,674,615	4,550,957	3,959,181	(7.97%)
NFGDC-NY	Rental	461,640	481,379	505,716	4.67%
NFGDC-NY	Inventory	4,819,615	4,992,675	6,966,469	20.22%
NFGDC-NY	Transportation	52,540	64,900	58,694	5.69%
NFGDC-NY	Computer Expense	380,210	1,593,287	1,969,150	127.58%
NFGDC-NY	Information Services Allocations	4,246,053	4,973,678	5,017,114	8.70%
NFGDC-NY	Employee Benefits	4,010,938	4,411,507	4,508,816	6.03%
NFGDC-NY	Research and Development	77,993	149,231	137,795	32.92%
NFGDC-NY	Miscellaneous	16,989	70,148	104,931	148.52%
NFGDC-NY	Officer Direct Charges	12,000	12,000	12,360	1.50%
NFGDC-NY	Common Expense	1,168,413	1,306,137	1,316,094	6.13%
NFGDC-NY	Officer Allocations	45,782	61,997	208,679	113.50%
NFGDC-NY	Messenger Expense	306,646	261,660	301,655	(0.82%)
NFGDC-NY	Customer Billing	1,924,803	2,015,227	1,740,750	(4.90%)
NFGDC-NY	Miscellaneous Allocations	291,980	170,767	170,548	(23.57%)
Empire	Officer Allocations	-	-	33	NM
Midstream	Labor (fully loaded cost)	7,469	19,025	15,534	44.21%
Total Charges to NFGDC-PA		\$ 63,477,791	\$ 67,815,735	\$ 75,054,669	8.74%

NM – due to years with no charging activity, this calculation would not be meaningful

Sources: Data Requests AI-02, AI-24, and AI-43 and auditor analysis

Exhibit V-3
National Fuel Gas Distribution Corporation – Pennsylvania Division
Summary of Charges to Affiliates
For the Years 2021 – 2023

Affiliate	Type of Charge	2021	2022	2023	Compound Change
NFGDC-NY	Labor (fully loaded cost)	\$ 2,119,205	\$ 606,231	\$ 1,082,904	(28.52%)
NFGDC-NY	Inventory	179,808	258,093	217,637	10.02%
NFGDC-NY	Employee Benefits	5,654	5,235	9,757	31.37%
NFGDC-NY	Transportation	22,590	43,386	26,968	9.26%
NFGDC-NY	Common Expense	30,139	52,270	231,796	177.32%
NFGDC-NY	Officer Allocations	4,065	14,963	25,061	148.30%
NFGDC-NY	Messenger Expense	2,654	1,598	-	NM
NFGDC-NY	Miscellaneous	191,648	1,215,321	621,401	80.07%
NFGDC-NY	Rentals	41,242	-	24,083	(23.58%)
NFGDC-NY	Taxes	1,392	-	-	NM
NFGDC-NY	Meter Shop Expense	-	-	7,017	NM
NFGDC-NY	Officer Direct Charges	-	-	2,945	NM
NFGDC-NY	Customer Billing	-	-	477	NM
Empire	Labor (fully loaded cost)	96,597	20,455	36,247	(38.74%)
Empire	Transportation	1,331	1,477	1,318	(0.49%)
Empire	Officer Allocations	62	184	494	182.27%
Seneca	Labor (fully loaded cost)	51,990	3,512	9,452	(57.36%)
Seneca	Miscellaneous	55,783	42,639	30,927	(25.54%)
Supply Corp.	Labor (fully loaded cost)	2,877,374	316,455	739,243	(49.31%)
Supply Corp.	Rentals	101,563	99,818	89,235	(6.27%)
Supply Corp.	Officer Allocations	371	923	2,473	158.18%
Supply Corp.	Messenger Expense	58,704	48,279	51,241	(6.57%)
Supply Corp.	Miscellaneous Allocations	125,154	37,384	-	(100.00%)
Supply Corp.	Inventory	189,928	177,453	234,789	11.18%
Supply Corp.	Employee Benefits	-	-	6,579	NM
Supply Corp.	Transportation	125,036	127,438	126,080	0.42%
Supply Corp.	Miscellaneous	6,020	8,669	1,082	(57.60%)
Supply Corp.	Officer Direct Charges	-	52	1,986	NM
NFG Co.	Miscellaneous	-	-	6	NM
NFG Co.	Officer Direct Charges	-	54	-	NM
Midstream	Labor (fully loaded cost)	154,232	69,899	68,003	(33.60%)
Midstream	Transportation	4,706	14,073	6,861	20.74%
Midstream	Miscellaneous	180	1,752	400	49.07%
Midstream	Inventory	3,410	18,538	17,907	129.16%
Midstream	Officer Allocations	62	184	494	182.27%
Total Charges from NFGDC-PA		\$ 6,450,900	\$ 3,186,335	\$ 3,674,863	(24.52%)

NM – due to years with no charging activity, this calculation would not be meaningful

Sources: Data Requests AI-02 and AI-43 and auditor analysis

Findings and Conclusions

Our examination of the affiliated interests and cost allocation function focused primarily on a review of contracts and agreements governing transactions between affiliates; cost allocation methodologies, policies, procedures, and practices; employee time and expense reporting; internal control and audit of cost allocations; etc. Based on our review, NFGDC should devote additional effort to improving its affiliated interests and cost allocation function by addressing the following:

- **Finding V – 1: NFGDC-PA transferred capital assets in excess of \$10,000 to and from affiliates without PA PUC approval.**
- **Finding V – 2: NFGDC has not performed market studies to support the reasonableness of affiliate transactions.**
- **Finding V – 3: NFGDC has not sufficiently audited indirect and common cost allocation processes.**
- **Finding V – 4: NFGDC’s Cost Allocation Manual and Service Agreement lack sufficient detail.**

Discussion

Finding V – 1: NFGDC-PA transferred capital assets in excess of \$10,000 to and from affiliates without PA PUC approval.

Because NFGDC-NY and NFGDC-PA operate relatively close to each other, business circumstances arise for which it would be advantageous to share or transfer assets such as equipment, vehicles, tools, systems, etc. Significant asset transfers, resulting in a net transfer of (\$256,759) from NFGDC-PA, occurred in 2023. There were no asset transfers during 2020 and 2021 and three immaterial asset transfers in 2022 resulting in a net transfer from NFGDC-PA of (\$238). Exhibit V-4 shows the transfers of assets to and from NFGDC-PA that occurred in 2023.

Exhibit V-4
National Fuel Gas Distribution Corporation – Pennsylvania Division
Transfers of Assets to/from Affiliates
For the Calendar Year 2023

Transfers To (in dollars)	
NFGDC-NY	Amounts
Auto	\$ (39,383)
Truck (greater than 1 ton)	(118,578)
Trucks (less than or equal to 1 ton)	(194,332)
Power Operated Equipment Mainliners	(172,782)
Power Operated Equipment Misc. Construction	(5,972)
Supply Corp.	Amounts
Trucks (greater than 1 ton)	(190,123)
Power Operated Equipment Excavation	(19,114)
Power Operated Equipment Misc. Construction	(48,740)
Transfers From (\$)	
NFGDC-NY	Amounts
Auto	22,602
Trucks (greater than 1 ton)	73,324
Trucks (less than or equal to 1 ton)	62,236
Power Operated Equipment Misc. Construction	6,264
Supply Corp.	Amounts
Auto	312,612
Trucks (greater than 1 ton)	55,227
Net Transferred Assets from NFGDC-PA to Affiliates	\$ (256,759)

Source: Data Request AI-42

As codified at Title 66 Pa. C.S. § 2102, AIAs must be filed with and approved by the PA PUC except in cases where annual transaction totals between affiliates are less than \$10,000. NFG Co. asserts that asset transfers between NFGDC's New York and Pennsylvania operating divisions are not transfers among affiliates because they relate to the same legal entity. However, NFGDC-PA and NFGDC-NY each serve a distinct and separate customer rate base and are regulated by two different state agencies. This mischaracterization of the entities poses a risk of cross-subsidization between Pennsylvania's and New York's ratepayers. NFGDC-PA's AIAs do not explain these transactions and, as such, are not in compliance with Title 66 § 2102. To deter cross-subsidization and provide transparency, these types of asset transfers, specifically across regulated utility divisions, should receive prior approval from the PA PUC.

Furthermore, the company explained that asset transfers of this nature between NFGDC's New York and Pennsylvania operating divisions occur during the usual course of business when a piece of equipment or vehicle breaks down and is needed immediately before a new acquisition can be made. These stipulations should be included in an AIA to explain the circumstances under which assets would need to be borrowed/transferred due to an emergency to be later reviewed and adjusted on the books in an appropriate manner to rectify potential cross-subsidization of either regulated utility.

Recommendation V – 1: Update the appropriate affiliated interest agreement(s) to include a description of the emergency transfer of trucks and/or equipment during the normal course of business; however, non-emergency transfers of trucks and/or equipment, in excess of \$10,000, require advance approval by the PA PUC.

Finding V – 2: NFGDC has not performed market studies to support the reasonableness of affiliate transactions.

NFG Co. does not have a service company like many utilities' parent/holding companies. As discussed earlier, NFGDC's operating divisions provide a large majority of the services to affiliates. Annually, Accounting meets with each of NFGDC's departments to perform analyses of the type of work tasks being performed to determine which business functions were performed by and for each affiliated entity. Also on an annual basis, each department prepares an operations and maintenance (O&M) budget presentation for senior management. During the O&M budget presentations, each department provides rationale for projected internal labor costs and vendor spend to highlight future cost changes for the fiscal period. Exhibit V-5, on the next page, shows which services are provided by which entities amongst NFG Co.'s subsidiaries.

NFGDC stated that they are currently working on an audit recommendation, made by the New York Public Service Commission, related to service level agreements. Through this process, the company plans to complete an analysis of the costs of goods and services provided by shared departments. NFGDC asserts that examining cost competitiveness of goods and services at the departmental level is sufficient; however, this practice does not consider market prices or service levels. Without recent market cost analyses, the auditor was unable to determine if the amounts charged for goods and services between NFGDC and its affiliates were fair and reasonable. NFGDC-PA could be paying higher than market price for goods and services provided by affiliates and conversely, could be charging less than market price for goods and services provided to affiliates. In either of those scenarios, cross-subsidization would occur between regulated utility divisions and/or non-regulated affiliates.

**Exhibit V-5
National Fuel Gas Company
Services Provided by Affiliated Entities
As of July 2023**

NFGDC-NY	NFGDC-PA	NFG Co.	Supply Corp.
Accounting	Corporate Communications	Executive	Engineering
Accounts Payable	Engineering	Financing	Land
Asset Management	Executive - Distribution	Office Space Rental	O&M – Distribution
Audit Services	Government Affairs		O&M – Gathering
Benefit Administration	Human Resources		O&M – Transmission
Budget	Land		
Cash Management	Legal		
Corporate Communications	Risk		
Credit, Collections, and Receivables	Safety		
Engineering	Security		
Executive	O&M – Distribution		
Executive - Distribution	O&M – Gathering		
Finance - General	O&M – Transmission		
Financial Planning			
Government Affairs			
Human Resources			
Information Technology			
Investor Relations			
Land			
Legal			
Materials Management			
Payroll			
Purchasing			
Rates & Regulatory Affairs			
Risk			
Safety			
Security			
Tax			
Telecommunications			
O&M – Distribution			
O&M – Transmission			

Source: Data Request FM-11

The National Association of Regulatory Utility Commissioners' Guidelines for Cost Allocations and Affiliate Transactions (NARUC Guidelines) advise that the price for services, products, or the use of assets, when provided by a regulated utility, should be at the higher of cost or market; and the price for services, products, or the use of assets, when provided to a regulated utility, should be at the lower of cost or market. This is known as the asymmetric pricing principle. A utility should be able to support with evidence that it is paying lower than market for a service. Performing routine market studies is necessary to support compliance with the NARUC Guidelines.

Market studies provide a utility, the PA PUC, and ratepayers with assurance that they are adequately applying the asymmetric pricing principle. A market study should compare the cost of shared goods and services to a benchmark of what third-party firms would charge to provide the same goods and services. Simply comparing the utility's

labor costs associated with providing a service to market costs does not consider additional costs incurred to provide the service nor a reasonable profit margin, both of which a regulated utility should be including in its analyses. In certain circumstances, a third-party may have levels of service beyond what is currently being provided to the utility by an affiliate at more favorable prices.

Recommendation V – 2: Conduct periodic market studies to support reasonableness of transactions with affiliates.

Finding V – 3: NFGDC has not sufficiently audited indirect and common cost allocation processes.

NFGDC has never performed an all-encompassing indirect/common cost allocation audit. This audit would ensure compliance with its policy to directly charge first, and to employ cost causative factors second, before resorting to the common cost allocation method. Furthermore, the company has not sought out third-party consultation to offer a thorough independent assessment of its allocation practices.

In 2022, indirect charges amounted to approximately \$8.8 million (35%) of the \$25.1 million total charges from NFGDC-NY to NFGDC-PA. Indirect charges are accumulated in a clearing account and then allocated monthly according to a predetermined cost causative allocation factor. In addition, \$1.3 million (5%) of the \$25.1 million total charges from NFGDC-NY to NFGDC-PA were allocated through the common cost allocation method.

The common cost allocation method considers three factors: net plant, O&M expense, and total volumetric throughput. Of the various standard shared service expenses, only four were allocated indirectly through clearing accounts:

- Computer Expense
- Information Services Allocations
- Messenger and Meter Shop Expenses
- Customer Billing

In 2021, NFG Co.'s Audit Services Department (Audit Services) conducted an internal audit on the common cost allocation process. Six departments' charging practices were chosen for review, and opportunities were noted for increased direct charging in two of the six selected departments. Given the amount of cost allocation activity at NFGDC, many more departments with material charges could benefit from this type of audit. Audit Services asserted that some indirect charging may have been covered by the common cost allocation audit that was completed in 2021; however, a comprehensive study has never been completed.

All charges between affiliates that can be charged directly should be directly charged until completely exhausted. Only then should non-direct costs be indirectly charged through carefully calculated cost allocation factors. In essence, common cost

allocation should be a last resort. Moreover, clearing accounts should be routinely reviewed to determine if any charges would have been more appropriately directly charged prior to finalizing indirect allocation. Any business activities charged through common cost allocation should be routinely reviewed to ensure direct or indirect charging cannot be used. Without periodic reviews of cost allocation methods, allocated charges may be misapplied and lead to misstated utility company expenses with potential negative effects to ratepayers in a future rate case.

Recommendation V – 3: Develop and implement a routine internal audit schedule that provides ongoing review of every department using indirect/common cost allocation and consider a periodic third-party consultant study of the entire indirect/common cost allocation process for optimal control.

Finding V – 4: NFGDC’s Cost Allocation Manual and Service Agreement lack sufficient detail.

A cost allocation manual (CAM) documents the organizational structure; cost allocation factors; policies, procedures, and methodologies; goods and services being provided; etc. Meanwhile, service agreements (SA) explain billing and payment terms, usually over a specified period, for provided goods and services. Both documents present clear guidelines for how goods and services are provided, billed, and expensed.

Several areas of concern were observed during review of the CAM and SA:

- Neither document noted consideration of the asymmetric pricing principle.
- Indirect cost allocation methods were not defined in the SA nor was a description of which methods are used for which types of charges included.
- The list of provided goods and services in the CAM (updated September 7, 2022) did not agree with those in the SA.
- Leasing terms were not provided in the CAM for NFGDC or Supply Corp. but were shown in the SA.
- Main office rent charged by NFG Co. was generically listed as “non-regulated” in the CAM and SA.
- Rent charged by NFGDC-PA to affiliates was not covered in the CAM nor SA.
- Asset transfers occurred at cost or net book value as opposed to considering the asymmetric pricing principle. Although material asset transfers occurred (see Finding V – 1), asset transfers were not covered in the SA nor in the CAM.

- NFGDC-PA has been proactive by filing new SAs with the PA PUC when affiliates are added; however, this requirement was not documented within the SA.
- Billing and payment terms were vague and overly subjective in the SA. The SA defines these terms as “bills shall be in reasonable detail and amounts billed shall be paid within a reasonable time after receipt”. In addition, there were no penalties/fees/interest to be assessed for late payments.
- The CAM described convenience accommodation payment arrangements through which one affiliate would pay an invoice on behalf of one or more other affiliates; however, there was no mention of this in the SA.
- Computer Expense charges from Supply Corp. to NFGDC-PA began in 2023; however, there was no mention of these types of charges in the CAM nor SA.

NFGDC claimed the SA was drafted in a manner that was approved by the PA PUC in the past. Meanwhile, the CAM, which was recently updated, had only minor omissions showing evidence that it was the more current, inclusive document. Nonetheless, the lack of critical details within the SA makes it insufficient to meet the PA PUC’s current requirements. AIAs should be re-filed with the PA PUC for approval each time there is a change in affiliates and/or the list of provided goods and services, preferably before transactions start to occur. The CAM and SA should be updated simultaneously to ensure they do not conflict. Other PA utilities have found it efficient and effective to file the CAM as an appendix of the SA for PA PUC approval to provide the necessary level of detail.

Recommendation V – 4: Revise the Service Agreement and Cost Allocation Manual with consistent terms and detail and then submit to the PA PUC for approval.

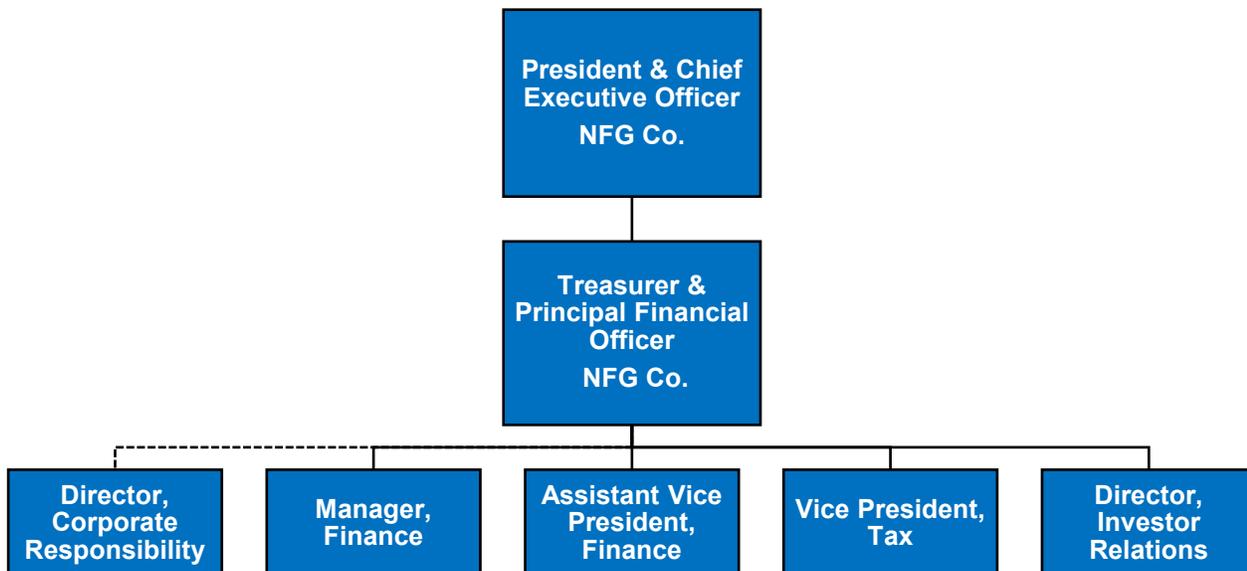
VI FINANCIAL MANAGEMENT

Background

As discussed in chapter II – Background, National Fuel Gas Company (NFG Co.) owns and distributes natural gas through its regulated subsidiary, National Fuel Gas Distribution Corporation (NFGDC). This chapter discusses NFGDC’s financial management organization structure and processes. The financial management activities for NFG Co.’s subsidiaries, including NFGDC’s Pennsylvania operating division (NFGDC-PA), are performed mostly by NFGDC’s New York operating division (NFGDC-NY).

NFGDC-NY manages the operations and maintenance (O&M) budgeting, cash flow and capital structure, short- and long-term financing, and pension fund administration. Exhibit VI-1 shows NFGDC-NY’s Finance Department’s organizational structure with its executive management supervision by NFG Co.

Exhibit VI-1
National Fuel Gas Distribution Corporation – New York Division
Finance Department Organizational Structure
As of November 2023



Source: Data Request EM-35

The annual O&M budgeting process begins in May or June. NFGDC’s departments each prepare a yearly operating budget, based on the fiscal year October 31 – September 30, which considers historical spending data and cost forecasts for the upcoming year. Department management prepares budget presentations to explain business needs to executive leadership. Following the budget presentations, preliminary budget data is entered into the *PeopleSoft Financial System*

for further analysis and review. Department management then offers final feedback, which could include updates for any material changes since the budget presentations, and final approval is completed before month-end close in October. These final O&M budgets are locked in for the upcoming fiscal year. Capital budgeting, done simultaneously, is part of the annual strategic planning process discussed in chapter III – Executive Management and Organizational Structure.

The five-year forecast is updated and reviewed in conjunction with the annual budgeting process. The updated five-year forecast is presented to NFG Co.'s Board of Directors (NFG Co. Board) during its September meeting. The annual budgets and five-year forecast data support the development of financial performance targets and specific operational goals.

Throughout the year, monthly budget reports are generated and distributed by NFGDC-NY's Budget Department. Each department is responsible for reviewing its own report and explaining any variances over a given dollar threshold (either \$5,000 or \$10,000, determined by department) and 10% over/under budget. The Budget Department then compiles a comprehensive summary variance report for NFG Co.'s Assistant Vice President and/or Treasurer to present during the monthly executive leadership meeting. In addition, the executive team has access to a dashboard of detailed financial data that compares historical and forecast data with the current year's performance.

NFG Co. maintains the sole bank account for NFGDC, which is used for both its New York and Pennsylvania operating divisions. NFGDC is typically in a net borrowing position; therefore, cash balances are small because revenue is promptly used to pay down short-term debt and current capital expenses. NFGDC's cash forecasting is done as part of the integrated forecasting process using an automated system, *Oracle Strategic Modeling (SM)*. Revenue, O&M expenses, capital expenditures, debt issuances and maturities including transactions with the money pool, interest expenses, income tax obligations, dividend payments, and other cash related items are entered into and/or calculated by *SM*. The cash receipts and payments for the above noted activity are modeled in the system to predict the expected sources and uses of cash over the forecast period.

NFG Co. manages NFGDC's capital structure to optimize debt and equity relative to operational risk while providing an adequate rate of return. NFGDC's capital structure has remained relatively consistent since the last management audit in 2017, ranging from 34% – 42% debt, excluding short-term debt used to fund working capital. Its debt has increased proportionally to its common equity, thereby maintaining the ratio. Dividends have remained consistent, and no new equity has been issued.

NFG Co. takes several measures to ensure competitive pricing on short-term borrowings. The borrowing rates available to NFG Co. through the commercial paper market are competitive with rates available via other short-term instruments. In addition, NFG Co. maintains a money pool as a source of short-term funding to NFGDC at the same weighted average rate of the current commercial paper market per the

terms of the NFG Co. and Participating Subsidiaries Fifth Amended and Restated Money Pool Agreement (MPA)⁸.

NFG Co. obtains additional financing through external markets and provides capital to NFGDC through intercompany debt agreements. The Pennsylvania Public Utility Commission (PA PUC) grants the authority for NFGDC to issue long-term promissory notes to NFG Co. through a financing petition⁹. The Credit and Security Agreement between NFG Co. and NFGDC, dated February 24, 2021, governs long-term loans and security arrangements. Exhibit VI-2 shows the long-term debt held by NFGDC and Exhibit VI-3 shows NFGDC's money pool borrowings and repayments for the fiscal years of 2018 – 2023.

**Exhibit VI-2
National Fuel Gas Distribution Corporation
Long-Term Debt
As of June 30, 2023**

Offering Date	Maturity Date	Amount Outstanding	Interest Rate
6/12/1995	6/13/2025	\$ 50,000,000	7.50%
9/27/2017	9/15/2027	100,000,000	4.15%
8/17/2018	9/1/2028	125,000,000	4.97%
2/24/2021	3/1/2031	50,000,000	3.07%
5/26/2023	10/1/2026	150,000,000	5.80%
Total		\$ 475,000,000	

Source: Data Request FM-03

**Exhibit VI-3
National Fuel Gas Distribution Corporation
Money Pool Borrowings/(Repayments)
For the Fiscal Years 2018 – 2023**

	2018	2019	2020	2021	2022	2023
Beginning Balance	\$ 0	\$ 63,900,000	\$ 72,800,000	\$ 88,600,000	\$ 123,400,000	\$ 249,200,000
Net Borrowings/ (Repayments)	63,900,000	8,900,000	15,800,000	34,800,000	125,800,000	(143,900,000)
Ending Balance	\$ 63,900,000	\$ 72,800,000	\$ 88,600,000	\$123,400,000	\$249,200,000*	\$ 105,300,000

*Substantial increase driven by working capital needs due to increased natural gas prices

Source: Data Request FM-55

NFG Co. considers many factors when deciding to issue long-term debt such as the overall need for capital based on projected cash flows and relative costs and the availability of financing. An example of how these considerations affect financing decisions was noted in the terms of the three-year loan NFGDC took in May 2023 as

⁸ Approved by the PA PUC, at docket no. G-2009-2092081, on August 8, 2018

⁹ Approved by the PA PUC, at docket no. S-2023-3041669, on August 24, 2023

shown in Exhibit VI-2. This loan was in conjunction with a three-year capital market bond issuance by NFG Co. in May 2023. Beginning in March 2023, the country experienced a regional banking crisis following the failure of two prominent banks neither of which had a business relationship with NFG Co. or NFGDC. These circumstances drove uncertainty in the lending marketplace reducing the availability of capital from banks, placing upward pressure on treasury rates, and increasing the overall cost of capital. Unrelated to the regional banking crisis at the time, NFG Co.'s cash flow projections showed a need for medium-term financing, and it was decided that a three-year public market bond offering through the debt capital markets was the most efficient strategy that fit within NFG Co.'s maturity profile. Depending on market conditions, NFG Co. expects to use a mix of short- and long-term debt to refinance the \$375 million of long-term debt coming due between calendar year 2026 – 2028.

To support sound financing practices, the NFG Co. Board provides oversight through its Financing Committee (FC) discussed in chapter IV – Corporate Governance. The Principal Financial Officer must present a proposal summarizing detailed analysis for any new financing opportunity to either the FC or the full NFG Co. Board. If approval is granted, a resolution is entered which provides NFGDC's officers with the authority to obtain financing at the approved terms and conditions.

NFG Co. maintains two ring-fencing protections for NFGDC's access to liquidity. First, per the MPA, NFGDC may only borrow from the money pool and may not invest in it. Furthermore, NFGDC has borrowing priority over all other participants. Second, NFGDC does not guarantee the liabilities of NFG Co. or any of its subsidiaries.

NFG Co. stated that it remains committed to its investment grade credit rating. Executive management reacts to changing macroeconomic and commodity price environments by adjusting capital spending plans so that the investment grade credit rating is not jeopardized. In addition, executive management ensures the availability of short-term liquidity as a safeguard in case of any sustained inability to access long-term capital markets.

NFGDC does not maintain its own credit rating, short-term credit facilities, nor issue its own capital market bond offerings; however, if financial conditions changed, NFG Co. contends it would evaluate other ways to finance its utility operations, including financing directly through NFGDC. NFG Co. claims there would be significant costs to establish NFGDC as an independent borrower without any material benefit to ratepayers to offset these costs. In addition, based on observation, it appears that larger NFG Co. issuances provide market liquidity at a reduced cost than what would be available for smaller issuances at NFGDC.

Since the last management audit in 2017, S&P Global Ratings (S&P) lowered NFG Co.'s credit rating. Like many companies at the beginning of the pandemic, on March 27, 2020, NFG Co. was downgraded from BBB to BBB-. S&P attributed this to a reduced forecast for natural gas prices and a possible risk that NFG Co. would struggle to refinance a December 2021 debt maturity. Natural gas prices rebounded after the downgrade, which improved NFG Co.'s cash flows and debt ratios in alignment with S&P's standards for upgrade. NFG Co. also successfully refinanced its 2021 debt

maturity with a lower rate than any other in its portfolio. Regardless, NFG Co. stated that S&P thereafter changed its upgrade criteria and the BBB- rating persisted through the end of audit fieldwork.

Although NFGDC does not seek out credit on its own, the auditors wanted to demonstrate NFGDC-PA’s individual financial standings for informational purposes. Exhibit VI-4 shows NFGDC-PA’s increase in debt since 2021 and Exhibit VI-5 shows the correlated reduction in its interest coverage ratio.

Exhibit VI-4
National Fuel Gas Distribution Corporation – Pennsylvania Division
Debt-to-Equity Ratio (in thousands)
For the Fiscal Years 2021 – 2023

	2021	2022	2023
Debt	\$ 148,366	\$ 187,010	\$ 176,051
Equity	\$ 269,578	\$ 280,850	\$ 286,994
Debt-to-Equity Ratio	0.55	0.67	0.61

Source: Data Request FM-58

Exhibit VI-5
National Fuel Gas Distribution Corporation – Pennsylvania Division
Interest Coverage Ratio (in thousands)
For the Fiscal Years 2021 – 2023

	2021	2022	2023
EBITDA	\$ 55,609	\$ 45,162	\$ 42,762
Interest Expense	\$ 6,475	\$ 7,306	\$ 9,361
Interest Coverage Ratio	8.59	6.18	4.57

EBITDA – earnings before interest, taxes, depreciation, and amortization

Source: Data Request FM-58

Due to several factors, NFG Co.’s pension became overfunded. To counter the significant overfunding, adjustments¹⁰ were proposed during NFGDC-PA’s 2021 base rate case to provide refunds to ratepayers. Exhibit VI-6 shows NFG Co.’s pension plan funding status as calculated by an external firm used to prepare actuarial valuation reports.

Exhibit VI-6
National Fuel Gas Company
Pension Funding Status
As of September 30, 2022

Projected Benefit Obligation	\$ (299,283,466)
Fair Value of Assets	461,437,996
Overfunding	\$ 162,154,530

Source: Data Request FM-26

¹⁰ Rate adjustments per Supplement No. 228 and 239 to Tarriff Gas-PA PUC No. 9 at docket no. R-2021-3027406

Findings and Conclusions

Our examination of the financial management function focused primarily on a review of accounting/finance policies and procedures, the budgeting and forecasting processes including budget variance tracking and reporting, short- and long-term financing policies and practices, dividend policies, and pension plan funding. Based on our review, NFGDC should initiate or devote additional effort to improving the efficiency and/or effectiveness of the financial management function by addressing the following:

- **Finding VI – 1: NFGDC’s Dividend Policy does not include a requirement to provide advance notification to the PA PUC when a dividend payment is expected to exceed 85% of net income.**
- **Finding VI – 2: NFGDC-PA’s manual meter reading process is causing a five-day billing lag resulting in cash flow restrictions.**

Discussion

Finding VI – 1: NFGDC’s Dividend Policy does not include a requirement to provide advance notification to the PA PUC when a dividend payment is expected to exceed 85% of net income.

NFGDC pays a quarterly dividend to its sole shareholder, NFG Co. NFGDC has a Dividend Policy, approved by NFGDC’s Board of Directors, which describes the calculation of the quarterly dividend amount. The following factors are considered:

- Net income
- Outlook
- Expected cash flows
- Capital structure
- Regulatory environment/requirements
- Long-term capital needs

Per the auditors’ recommendation as set forth in the PA PUC’s Bureau of Audits’ Focused Management and Operations Audit conducted in 2011¹¹, NFGDC created the formalized Dividend Policy. Over the more recent audit cycle, the auditors have been further recommending that jurisdictional utilities include the written requirement to provide advance notice for dividend payments that would exceed 85% of net income as is now required by the PA PUC. This notification should include a thorough explanation of why a dividend payout of that amount is warranted.

The goal for utilities is to balance a return for shareholders with suitable funds availability. As shown in Exhibit VI-7, NFGDC-PA did not pay dividends over 85% of net income throughout 2018 – 2023.

¹¹ At docket no. D-2011-2228385

Exhibit VI-7
National Fuel Gas Distribution Corporation – Pennsylvania Division
Dividends Paid and as a Percentage of Net Income
For the Fiscal Years 2018 – 2023

	2018	2019	2020	2021	2022	2023
Dividends Paid to NFG Co.	\$ 13,474	\$ 13,442	\$ 13,497	\$ 13,465	\$ 14,147	\$ 14,238
Net Income	22,599	27,298	22,634	20,390	35,229	16,856
Percentage of Net Income	60%	49%	60%	66%	40%	84%

Source: Data Request FM-47

NFGDC asserted it would comply by providing advance notice to the PA PUC for dividend payments made by NFGDC-PA that are expected to exceed 85% of net income. Adding this provision into its formal Dividend Policy will ensure that employees have the necessary guidance to make this notification. Providing this detailed advance notice guarantees that the PA PUC has the necessary information to perform its regulatory obligation to promptly address excess dividends which could negatively affect service, safety, or reliability.

Recommendation VI – 1: Revise the Dividend Policy to include advance notification to the PA PUC for any dividend payments by NFGDC-PA which would exceed 85% of net income.

Finding VI – 2: NFGDC-PA’s manual meter reading process is causing a five-day billing lag resulting in cash flow restrictions.

Billing lag refers to the time between when the company obtains meter readings to when it issues customer bills. At NFGDC-PA, there is a monthly meter reading window that is open for five days prior to customer bills being issued on the following day, or day six. This meter reading window is necessary to allow for the standard manual meter reading process as well as submission of customer-supplied meter readings. If neither the company obtains nor the customer provides a reading, then the company estimates the usage amount.

The company explained that manual meter readings are typically gathered and entered on day three of the meter reading window but may be gathered earlier or later during that meter reading window depending on meter reader availability. NFGDC-PA performs manual meter readings of most meters every other month, and they encourage customers to provide readings on the months for which their meter is not scheduled to be read to avoid billing estimation. Meanwhile, automated metering technology and billing processes observed at comparable Pennsylvania utilities have eliminated manual processes like NFGDC-PA’s and have reduced billing lag to one day.

Exhibit VI-8 shows the annual billings which represent revenue that NFGDC-PA could have routinely secured four days sooner if it reduced its billing lag to one day. This was calculated by multiplying the number of bills issued each month by NFGDC’s reported average monthly bill amount.

Exhibit VI-8
National Fuel Gas Distribution Corporation – Pennsylvania Division
Delayed Revenue
For the Years 2018 – 2023

Year	Total
2018	\$ 170,200,000
2019	161,200,000
2020	142,500,000
2021	161,900,000
2022	211,500,000
2023	\$ 182,500,000

Sources: Data Request CS-77, 2018 – 2022 PA PUC’s Quinquennial Reports Pursuant to Section 1415, PA PUC’s Rate Comparison Report for 2023, and auditor analysis

Billing lags require companies to finance operations through alternative sources of working capital. These sources come with additional interest costs, varying in amount, depending on the source of the working capital. As such, billing lags increase interest expense for the company, and ultimately, for the ratepayers. Exhibit VI-9 shows potential annual interest costs incurred because of the billing lag.

Exhibit VI-9
National Fuel Gas Distribution Corporation – Pennsylvania Division
Potential Excess Interest Costs Incurred
For the Years 2018 – 2023

Year	Total
2018	\$ 511,964
2019	544,166
2020	252,206
2021	86,081
2022	719,939
2023	\$ 1,432,785

Sources: Data Requests CS-77 and FM-62, 2018 – 2022 PA PUC’s Quinquennial Reports Pursuant to Section 1415, 2023 PA PUC’s Rate Comparison Report, and auditor analysis

For Exhibit VI-9, the delayed revenue amounts from Exhibit VI-8 were multiplied by four days’ worth of the average monthly money pool borrowing rate to show the potential excess interest costs incurred each month throughout 2018 – 2023. Over the six years presented, four days’ of billing lag may have resulted in as much as \$3.5 million of avoidable interest expense, and in the rising interest environment, this problem could be exacerbated going forward. Assuming current market conditions persist, reducing the billing lag to one day could potentially save NFGDC-PA as much as \$1.5 million¹², annually, in avoided interest expense.

¹² This estimate was calculated by multiplying the average monthly bill for 2023 (\$70.53) by the average number of bills per month for 2023 (215,624) by four days’ worth of interest at the most recent money pool rate (6.13%) for each month in a year.

Modernized technology is a barrier that must be overcome to minimize the billing lag. As detailed in Finding VII – 2 in chapter VII – Gas Operations, a large challenge for NFGDC is its metering technology. Automated metering is needed to realize the minimum billing lag, but improvements may be possible even without a technological solution.

Recommendation VI – 2: Analyze and improve the billing process to reduce billing lag and decrease associated interest expense.

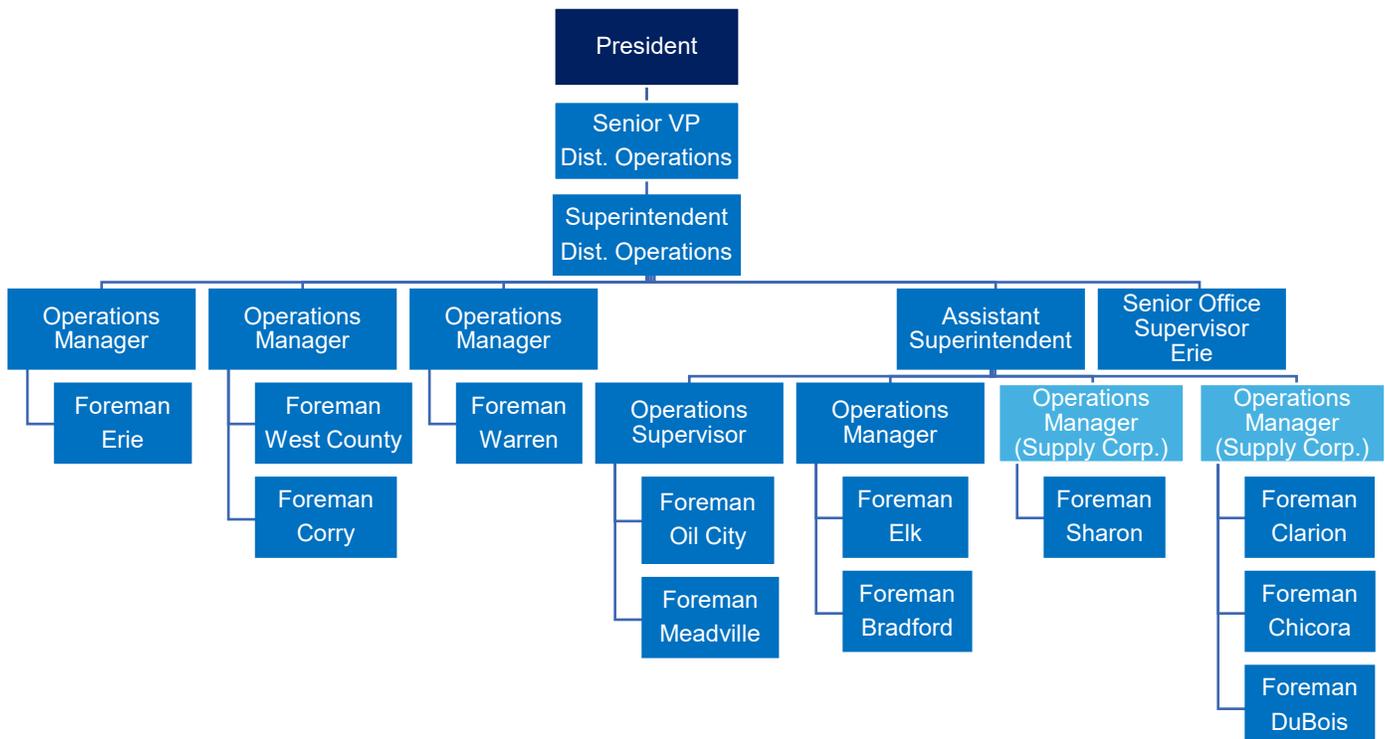
VII GAS OPERATIONS

Background

As discussed in chapter II – Background, National Fuel Gas Company (NFG Co.) owns and distributes natural gas through its regulated subsidiary, National Fuel Gas Distribution Corporation (NFGDC) which has separate groups for performing New York (NFGDC-NY) and Pennsylvania (NFGDC-PA) field operations. Pennsylvania field operations are performed from 12 service centers (see chapter II – Background, Exhibit II-2) under the direction of the Pennsylvania Distribution Operations Superintendent.

The Pennsylvania Distribution Operations Department’s (Operations) organizational structure is detailed in Exhibit VII-1, followed by the corresponding field operations staffing levels presented in Exhibit VII-2. All positions detailed in Exhibit VII-1 are NFGDC-PA employees except for the two Operations Managers who oversee the Sharon, Clarion, Chicora, and DuBois service centers. These two positions are housed within National Fuel Gas Supply Corporation (Supply Corp.). Field staff who report to the foreman include fitters; measurement, regulation, and service specialists; gas mechanics; corrosion technicians; meter readers; administrators; and clerks.

**Exhibit VII-1
National Fuel Gas Distribution Corporation – Pennsylvania Division
Distribution Operations Department Organizational Structure
As of February 2024**



Source: Data Request EM-35

Exhibit VII-2
National Fuel Gas Distribution Corporation – Pennsylvania Division
Distribution Operations Department Staffing
For the Years 2019 – 2023

Service Center	2019	2020	2021	2022	2023
Bradford	8	8	9	8	7
Chicora	5	6	6	6	6
Clarion	7	7	7	9	8
Corry	4	6	6	8	9
DuBois	15	16	17	15	15
Elk	13	11	14	15	15
Erie	69	71	73	74	77
Meadville	16	17	18	18	18
Oil City	21	21	26	24	25
Sharon	27	30	30	28	32
Warren	12	15	13	13	13
West County	11	13	13	16	16
General Distribution PA**	22	23	24	24	24
Total	230	244	256	258	265

** Operations staff housed in the NFGDC-PA headquarters in Erie, PA
Source: Data Request GO-62

NFGDC-PA’s training center is centrally located, within the Pennsylvania operating territory, in the Oil City Service Center. Extensive training is required for both Operations’ employees and field service contractors who work on the system. Both computer-based and hands-on training curricula are provided. The training center offers computer labs and testing rooms, an appliance re-light area, a welding area, a plastic adjoining room, and a live leak locating emergency simulation field.

NFGDC’s learning management system, *Onboard*, is used to track all training and certification requirements for each Operations’ employee. The initial training and education program is the same for all employees and includes odorization, explosive limits, ignition sources, and damage prevention. Additional training requirements are designated by position and must be completed before the employee is legally allowed to perform specified tasks. Each service center is equipped with touchscreen monitors that display each employee’s certification level to ensure employees are only assigned to tasks for which they have been properly trained and certified. This system also provides notifications of certification expirations.

At mid-year 2022, the Department of Transportation (DOT) annual report showed NFGDC-PA had approximately 795 miles of bare steel and wrought iron main in its system. The company labels this type of pipe as “leak prone pipe” (LPP). In 2023,

NFGDC started to include older plastics, with known issues to be more susceptible to leakage, in the DOT report in the LPP category¹³.

The company's stated target¹⁴ is to replace 48 – 57 miles of LPP, per year, through 2028; with 48 miles in 2023 and an annual average of 54.6 miles over the next five years. Furthermore, the company estimates that all bare steel and wrought iron in the system will be replaced by 2039. Due to its vulnerable nature, problematic plastic pipe may be prioritized for replacement ahead of bare steel and wrought iron as determined through risk assessment. NFGDC-PA's percentage of bare steel and wrought/cast iron compared to regional peer gas distribution companies is presented in Exhibit VII-3.

**Exhibit VII-3
National Fuel Gas Distribution Corporation – Pennsylvania Division
Unprotected Bare Steel and Wrought/Cast Iron Main
Comparative Panel
As of July 2022**

Unprotected Bare Steel Main (Percentage of Total)						
Company	2018	2019	2020	2021	2022	Change
Columbia	15.8%	14.5%	13.6%	12.6%	11.6%	(7.4%)
Peoples	20.7%	19.7%	18.6%	17.4%	16.4%	(5.6%)
Peoples TWP	27.0%	26.5%	25.8%	24.8%	24.0%	(2.9%)
UGI	5.9%	5.3%	5.2%	4.7%	4.4%	(6.9%)
Panel Average	17.3%	16.5%	15.8%	14.9%	14.1%	(5.0%)
NFGDC-PA	16.3%	15.8%	15.0%	14.7%	13.9%	(4.0%)

Wrought/Cast Iron* Main (Percentage of Total)						
Company	2018	2019	2020	2021	2022	Change
Columbia	1.1%	0.9%	0.8%	0.6%	0.5%	(16.2%)
Peoples	0.8%	0.8%	0.7%	0.7%	0.6%	(5.9%)
Peoples TWP	0.0%	0.0%	0.0%	0.0%	0.0%	NM
UGI	2.2%	2.0%	1.7%	1.3%	1.0%	(18.9%)
Panel Average	1.0%	0.9%	0.8%	0.6%	0.5%	(15.2%)
NFGDC-PA*	2.9%	2.8%	2.7%	2.6%	2.6%	(3.3%)

* NFGDC-PA does not have any cast iron – all iron reported to DOT is wrought iron

NM – due to zero amount reported throughout the period, this calculation would not be meaningful

Source: DOT's Annual Reports (2018 – 2022)

¹³ At calendar year-end 2023, the company had 27.75 miles of plastic LPP in its distribution system. This LPP will either be replaced or removed from the high-risk category based on engineering analysis per NFGDC's Distribution Integrity Management Plan. The amount of known plastic LPP could increase as new issues are discovered.

¹⁴ As stated in NFGDC-PA's Long-Term Infrastructure Improvement Plan that was approved by the Pennsylvania Public Utility Commission in December 2022 at docket no. P-2022-3034957

Exhibit VII-4 shows the success of leak reduction throughout the audit period. Leak grading helps prioritize leak reduction efforts. NFGDC uses a three-tiered grading methodology.

- Grade 1 – Due to location and/or relative magnitude, the leak poses a potentially hazardous condition to the public or buildings and must be repaired immediately.
- Grade 2 – The leak does not pose an immediately hazardous condition to the public or buildings and will be repaired within a year.
- Grade 3 – Any leak not classified as Grade 1 or Grade 2. These leaks will be monitored.

**Exhibit VII-4
National Fuel Gas Distribution Corporation – Pennsylvania Division
Leaks Outstanding at Year-End by Grade
For the Years 2019 – 2023**

Grade	2019	2020	2021	2022	2023
1	-	-	2	2	-
2	24	39	23	37	13
3	390	322	224	259	122
Total	414	361	249	298	135

Source: Data Request GO-57

In 2013, the Pennsylvania Public Utility Commission (PA PUC) adopted standard reporting requirements for unaccounted-for gas (UFG) at 52 Pa. Code § 59.111. These requirements distinguish and separate the UFG values for distribution, transmission, storage, and gathering losses. Throughout the audit period, NFGDC-PA filed the necessary reports using appropriate calculations. In its Annual Reports to the PA PUC, NFGDC-PA reported having UFG levels ranging from (0.1%) – 0.9% which are acceptable levels as specified in 52 Pa. Code § 59.111.

A common measure of a successful damage prevention program is to measure line hits through PA One Call. As shown in Exhibit VII-5, NFGDC-PA’s damage prevention program is trending in a positive direction. The company showed improvement in both the total number of third-party hits and the hits per 1,000 tickets ratio.

Exhibit VII-5
National Fuel Gas Distribution Corporation – Pennsylvania Division
Third-Party Hits by District and per 1,000 Tickets
For the Years 2019 – 2023

District	2019	2020	2021	2022	2023
Bradford	4	-	1	5	7
Chicora	6	6	2	1	2
Clarion	6	5	5	11	1
Corry	8	5	1	1	1
Dubois	12	8	13	16	3
Elk	13	5	6	9	7
Erie	60	35	59	46	39
Meadville	16	13	7	7	6
Oil City	22	21	20	18	16
Sharon	27	35	21	26	30
Warren	9	7	-	3	2
West County	17	13	7	9	17
Total Hits	200	153	143	152	131
Hits/1,000 Tickets	3.80	2.76	2.71	2.81	2.39

Source: Data Request GO-52

Operations is also responsible for meter reading. NFGDC uses the *Route Assignment Tool (RAT)* system for meter reading. *RAT* provides daily assignments and gathers meter reading entries along the route. The *RAT* system has threshold checks to provide reasonable high and low boundaries on readings. For readings out of tolerance, pictures must also be entered into the system. The Consumer Business Department's Bookkeeping group manually investigates any meter reading that is considered implausible because of the threshold checks by reviewing the previous month's usage, previous 12-months' usage, weather during the timeframe, etc.

Findings and Conclusions

Our examination of the gas operations function included a review of assigned responsibilities, policies and procedures, capital and operations and maintenance budgets and expenditures, system operations, preventative maintenance, capital work planning, workforce management, emergency response, gas control, UFG, safety, etc. Based on our review, NFGDC-PA should initiate or devote additional effort to improving the efficiency and the effectiveness of its gas operations function by addressing the following:

- **Finding VII – 1: There is evidence of inaccuracy in NFGDC-PA's mapping records.**
- **Finding VII – 2: NFGDC has outdated metering technology.**
- **Finding VII – 3: NFGDC accepts physical forms of payment on customers' premises.**

Discussion

Finding VII – 1: There is evidence of inaccuracy in NFGDC-PA’s mapping records.

Although accurate mapping for new construction is an industry standard, a significant portion of NFGDC’s distribution system was installed before modern electronic mapping was available. In addition, legacy paper maps, created decades ago, have been found to be inaccurate at times. Exhibit VII-6 displays the age of NFGDC-PA’s system.

Exhibit VII-6
National Fuel Gas Distribution Corporation – Pennsylvania Division
Miles of Pipeline by Decade of Installation
As of January 2024

Decade of Pipeline Installation	Miles of Pipeline (as of July 2023)	Percent of System
Pre-1940	312.227	6.5%
1940-49	78.671	1.6%
1950-59	323.62	6.7%
1960-69	584.142	12.1%
1970-79	677.451	14.0%
1980-89	811.484	16.8%
1990-99	788.302	16.3%
2000-09	492.754	10.2%
2010-19	468.456	9.7%
2020-Present	204.143	4.2%
Unknown	90.884	1.9%
All	4,832.134	100.0%

Source: Data Request GO-60

NFGDC’s geographic information system (GIS) incorporates a facilities management tool, *ArcFM*, which among other functions, includes the line locating system. This system interfaces with NFGDC’s infrastructure risk management system, *Irth*, which is used for damage prevention ticket management. Despite the tools embedded in the GIS system, the relative age of the system negatively affects line location.

NFGDC-PA receives over 50,000 excavation tickets per year. According to company estimates, approximately 1,300 of those annual tickets would be identified as locational challenges where the company has trouble locating its underground infrastructure. Although there are other potential causal factors increasing the difficulty of line location (e.g., tracer wires malfunctioning), problems identifying the location of infrastructure is largely a byproduct of mapping inaccuracy because mapping provides the foundational record of infrastructure’s location.

As highlighted in Exhibit VII-6, over half (57.7%) of NFGDC-PA's system was placed before 1990 and much of that infrastructure would have been recorded on paper maps. Reliance on paper maps and historical records does not equate directly to inaccurate records, but it simply indicates an increased likelihood of inaccuracy. Considering the average 1,300 locational challenges arising each year as noted through the damage prevention program, the PUC auditors conservatively estimate a minimum inaccuracy rate of 2.6% (1,300 out of 50,000).

To address the number of locational challenges and modernize the mapping and risk management systems, NFGDC is planning to make the following enhancements, many of which have already been initiated:

- Problematic location data will be captured in the GIS to track areas of concern and improve line location and mapping accuracy through communications with excavators/contractors (ongoing).
- The company is developing an application to apply a global positioning system (GPS) to pipeline as it is installed which would interface with current mapping systems (projected for 2024).
- Updated mapping information will be added to the GIS as inaccuracies are discovered during normal operations (ongoing).
- Tools with built-in GPS will enable the company's GIS to capture GPS coordinates for new construction (currently in pilot phase).
- Service lines will be replaced as main is replaced (ongoing).

The activities highlighted above will help NFGDC to identify or improve the mapping of its infrastructure; however, many of these initiatives are aimed at improving the future state or reacting to a current problem. Instead, NFGDC should also proactively examine its system for areas in need of an update. Accurate mapping is necessary for:

- PA One Call locating
- Damage prevention
- Selection of appropriate size and type of pipe for pressurization/connection with other distribution segments
- Location of shut off valves for each distribution segment
- Accuracy and minimization of field changes for future designing and planning

Recommendation VII – 1: Modernize the geographic information system and optimize the mapping tool interface and proactively verify historical infrastructure records to improve mapping accuracy.

Finding VII – 2: NFGDC has outdated metering technology.

NFGDC is the only major Pennsylvania natural gas or electric distribution company without an automated meter reading system. There are a limited number of larger commercial/industrial customers with automated meters; however, all residential meters must be read manually. Approximately 90% of all meters are dial/clock-faced type with approximately 15% found inside customers' homes and/or other buildings. As a result, meters are read every other month and estimates are used in-between readings.

Exhibit VII-7 displays meter reading performance data from the most recent Bureau of Consumer Services Customer Service Performance Report. This exhibit shows all major Pennsylvania natural gas and electric distribution companies' meters not read by the company or customer in six months and by the company in twelve months. NFGDC is the only Pennsylvania natural gas or electric utility in this report with a substantial number of unread meters in both categories.

Exhibit VII-7 National Fuel Gas Distribution Corporation – Pennsylvania Division Meters Not Read For the 2022 Year

6-Months (by Company nor Customer)			12-Months (by Company)		
Company	Number	Percent	Company	Number	Percent
Duquesne Light	72	0.01%	Duquesne Light	2	0.00%
Met-Ed	-	0.00%	Met-Ed	-	0.00%
PECO	117	0.01%	PECO	24	0.00%
Penelec	-	0.00%	Penelec	-	0.00%
Penn Power	-	0.00%	Penn Power	-	0.00%
PPL	8	0.00%	PPL	-	0.00%
UGI-Electric	2	0.00%	UGI-Electric	-	0.00%
West Penn	-	0.00%	West Penn	-	0.00%
Columbia	11	0.00%	Columbia	2	0.00%
NFGDC-PA	1,315	1.09%	NFGDC-PA	2,094	1.72%
PECO (Gas)	11	0.00%	PECO (Gas)	1	0.00%
Peoples	6	0.00%	Peoples	11	0.00%
PGW	162	0.03%	PGW	40	0.01%
UGI-Gas	58	0.01%	UGI-Gas	30	0.01%

Source: PA PUC's Bureau of Consumer Services' 2022 Customer Service Performance Report

NFGDC has begun investigating the feasibility of an advanced metering infrastructure solution for its New York and Pennsylvania operating divisions. A cross-functional team, representing NFGDC's key departments, was formed in July 2023. The company estimates that this feasibility study will continue through 2024. The company has conducted previous studies of this nature, and in the past, the company decided against modernizing its network. However, there are many benefits

from an automated system which is why every other major natural gas and electric distribution company has some form of automation.

There are 22 meter-reading positions dedicated to NFGDC-PA. These positions experience significant turnover resulting in lost productivity and excessive recruiting, onboarding, and training costs. An automated system would significantly reduce costs relating to meter reader recruitment and training. Based on the meter readers' average wage, incentive pay (based on meter reading accuracy rate), benefits, and onboarding/training costs, the PUC auditors estimate that the company could realize up to \$1.4 million in annual savings by replacing meter readers with automation. In addition, an automated system would provide additional savings, operational efficiencies, and benefits such as:

- Significantly reduced billing errors (see Finding VIII – 1 in chapter VIII – Customer Service)
- Significantly reduced billing lag (see Finding VI – 2 in chapter VI – Financial Management)
- Accelerated time frame for moving inside meters to the outside during system installation which could result in expedited compliance with 52 Pa. Code § 59.18 (g) (3)
- Elimination of the routine use of estimated meter readings
- Substantially reduced driving time for meter related issues with possible reduction in fleet vehicles
- Improved performance on metering performance metrics
- Improved customer interface, usage timing, and historical use tracking
- Remote service termination for non-payment and/or service misuse or theft enhancing safety for field technician tasks (see Finding VII – 3)
- More timely service restoration

Recommendation VII – 2: Acquire and implement automated metering technology.

Finding VII – 3: NFGDC accepts physical forms of payment on customers' premises.

NFGDC offers a variety of routine payment options including mail in; in-person drop boxes which accept cash payments; online including prescheduled autopay,

one-time pay, or pay by text; by phone both automated and with live agent assistance; and through authorized payment centers such as Money Gram or Western Union with a fee. When an account becomes delinquent, the company performs collection and service termination actions according to Chapter 56 – Standards and Billing Practices in the PA Code and Title 66 of the Statutes of Pennsylvania and Act 54 – Rules Regarding Discontinuance and Termination of Service.

According to the company's Collections Procedures Manual, updated as of Spring 2023, customers must pay in full to avoid service termination unless there are other circumstances involved such as medical conditions, approved payment plan, etc. It is NFGDC's policy to allow customers to provide a physical form of payment in the field to stop service termination. Upon acceptance of payment in the field, the utility's service technician provides the customer with a handwritten collection receipt.

Payments collected on customers' premises are secured in a locked cash bag and returned to a service center to be sent interoffice to NFGDC-PA's headquarters in Erie, PA. Senior clerical staff open the locked cash bags and reconcile the payments to copies of the customers' receipts. Payments are then given to the cashier for processing. If a field technician is uncomfortable with the possession of cash throughout a shift, a meeting can be arranged to transfer the collected payments to a supervisor.

There are known risks, related to cash control and more importantly employee safety, created by allowing staff to accept payments in the field. In 2023, utility service technicians collected \$375,000 in payments from customers during on-site service terminations. Although the company reported no incidents during these field collection activities, this practice increases the risk for safety incidents and reduces the level of control when potentially significant amounts of cash are collected. Physical forms of payment could be misplaced by utility service technicians or lost in transport. Despite the receipts, there is increased risk for customers to dispute the total amount paid, specifically in cash, and customers may later claim overpayment.

NFGDC indicated a concern that collection success will decline without offering this payment option; however, the company offers many payment options including real-time electronic options. In addition, the termination process gives customers multiple opportunities to avoid service termination. Although the PUC auditors applaud NFGDC's willingness to provide options for customers, accepting cash payments in the field is too fraught with risk, leads to poor monetary control, etc.

The PUC auditors recognize there are inherent safety concerns during the service termination process; however, accepting physical payments during these interactions greatly increases these risks. As discussed in Finding VII – 2, an automated metering system will improve the service termination and restoration processes and could potentially minimize these risks further.

In the future, NFGDC should direct customers to submit payments in advance or via one of the company's electronic payment options to avoid service termination. In addition to enhancing the safety environment, ending physical collection of payment in

the field would improve or eliminate multiple back-office processes like manual payment transportation and processing.

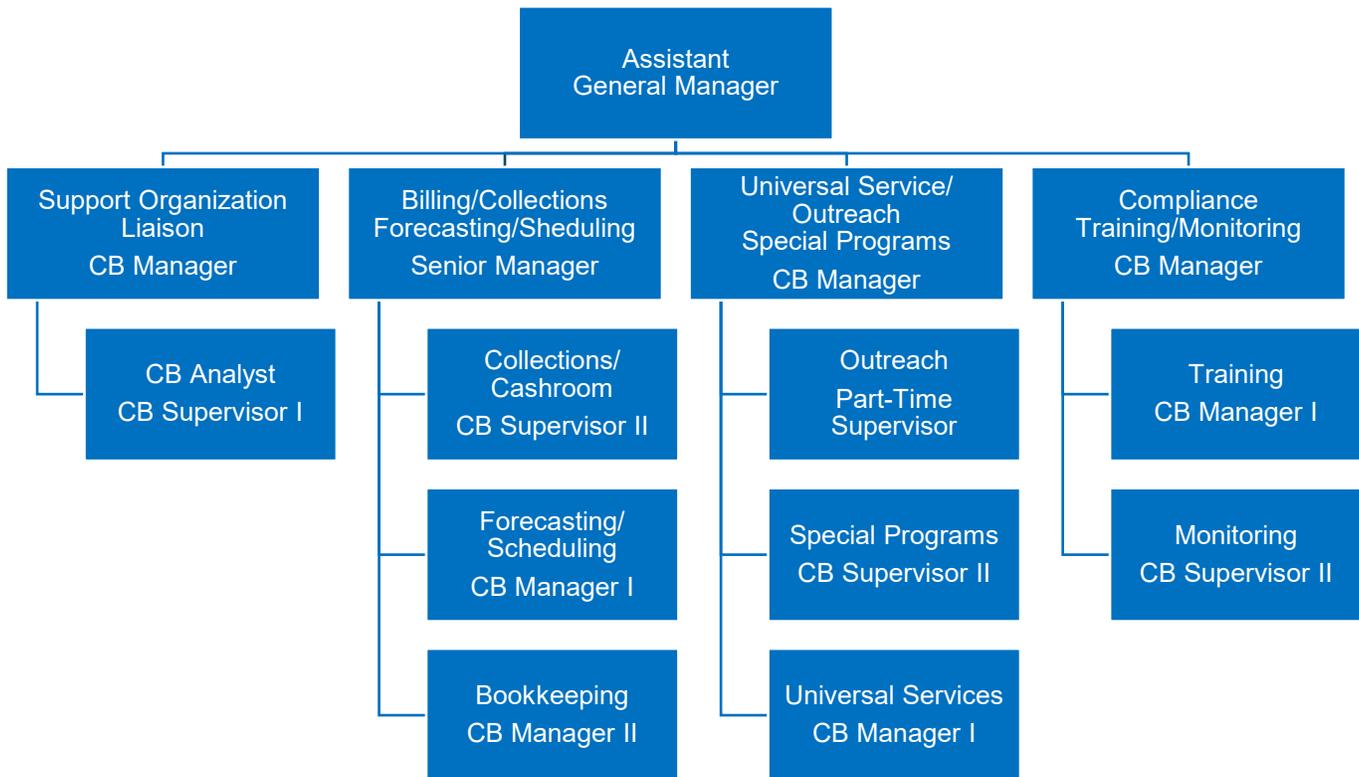
Recommendation VII – 3: Discontinue collecting physical forms of payment on customers' premises.

VIII CUSTOMER SERVICE

Background

As discussed in chapter II – Background, National Fuel Gas Company (NFG Co.) owns and distributes natural gas through its regulated subsidiary, National Fuel Gas Distribution Corporation (NFGDC). Customer service business activities for NFGDC are handled by the Consumer Business Department. Within the department, there is a team dedicated to NFGDC’s Pennsylvania operating division (Consumer Business-PA) which is shown in Exhibit VIII-1.

Exhibit VIII-1
National Fuel Gas Distribution Corporation – Pennsylvania Division
Consumer Business Department Organizational Structure
As of February 2024



CB = Consumer Business
 Source: Data Request CS-76

The Assistant General Manager reports to the General Manager of the Consumer Business Department who is responsible for both the New York and Pennsylvania operating divisions. Executive oversight for the Consumer Business Department is provided by NFGDC’s Vice President; Risk Management, Land, Consumer Business who reports directly to NFGDC’s Chief Information Officer &

Senior Vice President; Information Technology, Security, Consumer Business (see chapter III – Executive Management and Organizational Structure, Exhibit III-2).

Consumer Business-PA's mission is to provide responsive, professional service in compliance with regulatory requirements of the Pennsylvania Public Utility Commission (PA PUC). The executive team provides generalized goals for the department to support the key priorities established through annual strategic planning such as base rate case planning to support increased investment in system modernization and a renewed focus on the safety culture. Meanwhile, daily operational goals are centered around continuous improvement in customer service and satisfaction levels, reducing customer complaints to the PA PUC, billing and collections performance, and increasing customer outreach to improve access to and participation in universal service programs.

The department consists of four business units: call center, billing and collections, universal services and outreach, and performance compliance. In addition, there are various support functions which provide data analysis and quality assurance. The support services, in some circumstances, benefit other departments and are charged to the department using the support services.

Consumer Business-PA's call center activities are performed by the Customer Response Center (CRC) which is located in the Pennsylvania operating division's headquarters in Erie, PA. Although the Consumer Business-PA's CRC primarily serves the Pennsylvania operating division, for flexibility, there are some customer service representatives (CSRs) who have been cross-trained to handle incoming calls from both New York's and Pennsylvania's customers. In addition, there are 14 CSRs housed in the Consumer Business-PA's CRC who handle customer calls only from New York's customers.

In the post-COVID environment, approximately 50% of CSRs work full-time on-site while the other half work full-time remotely. Remote positions are offered depending upon availability and are awarded considering work performance and seniority. Consumer Business-PA maintains CSR staffing¹⁵ to meet required service levels by live agents. NFGDC does not use an automated call answering system. The company explained that this was an intentional strategy to maintain a personalized touch.

The company has been able to maintain above average service levels, particularly in the customers' satisfaction with the ease of reaching NFGDC-PA, as is shown in Exhibit VIII-2. Consumer Business-PA's compliance and monitoring group verifies performance is meeting the PA PUC's requirements and identifies areas for improvement to maximize training efforts. CRC staff is available to handle incoming calls Monday – Friday from 7:00 AM – 6:00 PM, and emergency calls are handled by the Pennsylvania Distribution Operations Department (Operations) after hours and on weekends.

¹⁵ Staffing levels by department are available in chapter III – Executive Management and Organizational Structure, Exhibit III-3.

Exhibit VIII-2
National Fuel Gas Distribution Corporation – Pennsylvania Division
Satisfaction with Ease of Reaching the Natural Gas Distribution Company
For the Years 2018 – 2022

	2018	2019	2020	2021	2022
Peer Utility Panel Average	89%	90%	92%	89%	81%
NFGDC-PA	93%	92%	93%	91%	87%

Sources: PA PUC's Bureau of Consumer Services' 2018 – 2022 Customer Service Performance Reports

Although all CSRs are trained to handle call center activities, for maximized flexibility and efficiency, many are cross-trained to perform other Consumer Business-PA activities such as billing, collections, bookkeeping, universal service and special programs functions, training, and compliance monitoring. When call volumes are unexpectedly high, those scheduled for back-off work can be temporarily reassigned to handle calls to ensure proper service levels are maintained.

The CRC underwent renovations in August 2023. Space that was once a redundant call center¹⁶ was renovated into a training facility. In addition to the CRC facility upgrades, NFG Co. recently performed a full overhaul of its corporate website in 2020. Customers seeking self-service options have full access to their accounts and can perform many billing maintenance tasks online¹⁷.

Meters are read and usage data is entered into a field meter reading tool by Operations (see chapter VII – Gas Operations). Once meter readings are gathered, usage data is exported to the customer billing system. Billing functions are mostly automated except in cases when usage data falls outside normal parameters triggering billing exceptions which must be investigated manually (see Finding VIII – 1 for more details). Similarly, collections activities are mostly automated. Prior to the COVID pandemic, NFGDC-PA maintained two walk-in Customer Assistance Centers in Erie, PA and in Oil City, PA; however, walk-in service has been discontinued indefinitely and in-person service is available by appointment only. At those two locations, the company continues to maintain payment drop boxes in which cash is still accepted for payment on accounts. The company has cash handling procedures for these types of payments and for cash collected by Operations' staff (see Finding VII – 3 in chapter VII – Gas Operations).

Collections activities for inactive past due accounts are also mostly automated. NFGDC-PA maintains contracts with five third-party collection agencies. The agencies provide one or more of three tiers of collection service (i.e., primary, secondary, and tertiary) which are based on the length of time the account has been delinquent. Collections staff set parameters within the customer service system to automatically assign a certain percentage of the total past due accounts to each third-party collection agency. The agencies providing the best recovery are rewarded with a higher percentage of the past due accounts.

¹⁶ Many utilities maintain redundant call center facilities for business continuity purposes, but in the post-COVID environment, most are relying economically on remote call handling capabilities.

¹⁷ www.nationalfuel.com

Consumer Business-PA's universal service and special programs business unit oversees its four universal service programs as well as any special payment arrangements required by PA PUC's settlements. Below are descriptions of NFGDC-PA's universal service programs available to customers who meet eligibility requirements:

- **Low Income Residential Assistance (LIRA Program)** – Discounted rate program for payment troubled heating customers meeting income level requirements of equal to or less than 150% of the federal poverty level
- **Customer Assistance and Referral Evaluation Service Programs (CARES)** – Referral program to a variety of assistance resources for those who have experienced a family crisis such as loss of income, divorce, or major illness; have a physical or mental disability; earn lower income levels; or are elderly
- **Neighbor for Neighbor Heat Fund (NFN)** – Program that offers grants toward utility bills for those living in NFGDC-PA's service territory that have made at least three customer payments over the past twelve-months and meet one of a list of criteria which includes being 55 years of age or older; being a veteran; having income between 151% – 200% of the federal poverty level; or a member of the household is disabled, is receiving unemployment compensation, has verifiable loss of income within the past 30 days, or has a medically related emergency
- **Low Income Usage Reduction Program (LIURP)** – PA PUC mandated weatherization program for customers with income below 150% of the federal poverty level, which can be extended to customers up through 200% of the federal poverty level in certain circumstances, with annual natural gas usage greater than 1,300 ccf (hundred cubic feet)

NFGDC uses the third-party, Dollar Energy Fund (DEF), as a primary administrator of its LIRA Program. DEF was the only respondent to NFGDC's 2021 request for proposals, and a three-year contract was executed on January 21, 2022. Prior to this, NFGDC used Dival Safety Inc. as its LIRA Program administrator. Although DEF handles the bulk of the enrollment and recertification processes for the LIRA Program, NFGDC has retained the ability to enroll customers itself to maximize program accessibility. Because DEF had only been active from the beginning of 2022, its performance could not fully be evaluated during audit fieldwork. However, the PUC auditors noted that NFGDC had sufficient service level review procedures in place to adequately monitor the third-party administrator's performance level.

Findings and Conclusions

Our examination of the customer service function included a review of the organizational structure and reporting relationships, assigned responsibilities, policies and procedures, performance measures and levels, customer services systems, call center and customer service center activities, universal service programs, credit and

collections processes, etc. Based on our review, NFGDC-PA should initiate or devote additional effort to improving the efficiency and the effectiveness of its customer service function by addressing the following:

- **Finding VIII – 1: NFGDC has higher than industry average billing adjustments and does not track them by root cause.**
- **Finding VIII – 2: NFGDC’s tariff does not provide sufficient disclosure of the residential security deposit process.**
- **Finding VIII – 3: NFGDC’s customer assistance program participation rate was lower than regional peer utilities throughout the audit period.**

Discussion

Finding VIII – 1: NFGDC has higher than industry average billing adjustments and does not track them by root cause.

Billing adjustments to customers’ bills can happen for several reasons including meter reading error, non-registering meters, etc. As shown in Exhibit VIII-3, NFGDC-PA’s billing adjustments throughout the audit period have fluctuated from the lowest level of 1.18% in 2020 to the highest level of 1.52% in 2023. Similar sized Pennsylvania utilities, using automated metering technology, have significantly lower adjusted bill rates (i.e., below 0.1%). NFGDC described the general reasons for billing adjustments but does not track billing adjustments by cause. In addition, the PUC auditors noted that performance reports indicated an expired goal of 1.9% for billing adjustments for the New York operating division, but no goal existed for NFGDC-PA.

**Exhibit VIII-3
National Fuel Gas Distribution Corporation – Pennsylvania Division
Billing Adjustments
For the Years 2019 – 2023**

	2019	2020	2021	2022	2023
Total Bills Issued	2,515,323	2,584,008	2,593,404	2,590,709	2,587,486
Total Adjusted Bills	34,273	30,531	35,642	32,836	39,332
Percentage of Total Bills Issued Adjusted	1.36%	1.18%	1.37%	1.27%	1.52%

Source: Data Request CS-77

Adjustments are one of the driving factors of billing lag¹⁸ which delays revenue collection. NFGDC has an excessive five-day billing lag, overall (see Finding VI – 2 in

¹⁸ Billing lag refers to the time between when the company reads a meter to when it issues a bill.

chapter VI – Financial Management). In addition, manual investigation and adjusting of customer bills increased Consumer Business-PA’s annual labor costs¹⁹ as shown below:

- 2019 – \$121,000
- 2020 – \$108,000
- 2021 – \$126,000
- 2022 – \$116,000
- 2023 – \$139,000

Therefore, average annual savings of approximately \$122,000 could be achieved by avoiding manual adjustment of bills. This could be accomplished by deploying an automated metering system (see Finding VII – 2 in chapter VII – Gas Operations), addressing process impediments through billing adjustment root cause analysis, etc. At a minimum, tracking adjustments by cause would help the company develop solutions to minimize the number of billing adjustments. These improvements could allow for manpower to be reduced and/or reassigned to more meaningful business activities.

Recommendation VIII – 1: Track billing adjustments by reason to identify potential process improvements to decrease the number of billing adjustments.

Finding VIII – 2: NFGDC’s tariff does not provide sufficient disclosure of the residential security deposit process.

Pa.C.S. 66 § 1404. Cash deposits and household information requirements. Subsection (a) (2) explains that a utility has the right to collect a deposit from, “Any applicant or customer who is unable to establish creditworthiness to the satisfaction of the public utility through the use of a generally accepted credit scoring methodology, as provided in a commission-approved tariff, and which employs standards for using the methodology that fall within the range of general industry practice.”

NFGDC’s Supplement No. 54 to Gas – Pa. P.U.C. No. 9 Fourth Revised Page No. 24 (Page 24) through Supplement No. 156 to Gas – PA. P.U.C. No – Second Revised Page No. 25 includes the following language:

The Company [NFGDC] may require customers to provide deposits for services. The Company may not deny the customer regulated services based on the customer’s failure to provide deposits for unregulated services.

¹⁹ The number of billing adjustments multiplied by the average time to adjust a bill of nine minutes divided by 60 minutes in an hour was multiplied by the fully loaded average hourly rate of a billing clerk.

Deposits may be required from Residential customers in accordance with the Pennsylvania Public utility Code and the Rules and Regulations of the Pennsylvania Public Utility Commission.

Until returned or credited, interest will accrue on Residential deposits at the rate of interest as determined by the Secretary of Revenue for interest on the underpayment of tax under Section 806 of the Act of April 19, 1929 (P.L.343, No. 176), known as The Fiscal Code. Interest accrued on Residential deposits will either be applied, together with the deposit, to any outstanding balance for service or will be paid at the time the deposit is returned.

A utility's tariff can be characterized as the users' guide for consumers. It takes the place of individual contracts with ratepayers and outlines the conditions for utility service. That being the case, it must have sufficient detail to inform current and potential customers of the utility's service rules. Although the regulation language specifically states that the method used to determine creditworthiness is to be explained in a PA PUC approved tariff (and implicitly, the requirements for a security deposit based on creditworthiness), it is the PA PUC's Technical Utility Services' expectation that utilities provide utmost clarity around starting utility service. Therefore, it would be prudent for a utility to include language in its tariff explaining the full terms surrounding a security deposit detailing when and how it would be administered. In addition, a public utility may not require a cash deposit from an applicant who is, based upon household income, confirmed to be eligible for a customer assistance program. This additional language should also be included within the tariff.

Recommendation VIII – 2: Submit a supplement to revise tariff language regarding residential security deposits to ensure ample information is available for customers and applicants.

Finding VIII – 3: NFGDC's customer assistance program participation rate was lower than regional peer utilities throughout the audit period.

The requirements of 66 Pa.C.S. § 2203(8) mandate that the PA PUC ensure universal service and energy conservation policies, activities, and services for residential natural gas customers are appropriately funded and available in each natural gas distribution company's (NGDC) territory. This law requires covered NGDCs to establish uniform reporting requirements for universal service and energy conservation policies, programs, and protections and to report this information to the PA PUC.

It is the responsibility of each NGDC to actively define its low-income population and to develop and implement a strategy to continuously notify those customers of the availability of universal service programs. Even when a regulated utility delegates the administration of one or more of its universal service programs to a third-party vendor, it retains ultimate responsibility to support and promote participation.

As shown in Exhibit VIII-4, NFGDC-PA’s LIRA Program participation rate was notably lower than a panel average of its peer utilities. NFGDC filed the required universal service and energy conservation plans²⁰ (USECP) throughout the audit period and complied with recommended revisions from its most recent base rate case²¹. Although NFGDC-PA’s programs, defined in the Background of this chapter, met standards and outreach efforts were in place; customer participation still lagged.

The company is seeking to change its LIRA Program to a percentage of income plan as opposed to its current discount plan which may provide greater benefits to the lowest income customers. This change, in turn, may make the program more attractive and beneficial to eligible customers, but the plan was not yet approved to go into effect during audit fieldwork. NFGDC-PA should explore enhanced options to promote its LIRA Program such as surveying applicants on how they became aware of the programs, establishing focus groups, meeting with industry peers, etc.

Exhibit VIII-4
National Fuel Gas Distribution Corporation – Pennsylvania Division
Customer Assistance Program Participation Rate Comparison Panel
For the Years 2018 – 2022

	2018	2019	2020	2021	2022
Columbia	34.9%	33.6%	34.6%	35.9%	34.2%
Peoples	28.9%	23.6%	28.7%	29.9%	26.3%
Peoples-Equitable	29.5%	29.4%	N/A	N/A	N/A
PGW	34.4%	36.8%	41.5%	48.4%	43.8%
UGI-North	26.2%	30.5%	N/A	N/A	N/A
UGI-South	25.8%	28.8%	N/A	N/A	N/A
UGI Utilities-Gas	N/A	N/A	31.3%	28.7%	23.4%
Panel Average	30.0%	30.5%	34.0%	35.7%	31.9%
NFGDC-PA	25.2%	22.9%	22.1%	25.7%	29.0%

Sources: PA PUC’s 2018 – 2022 Universal Service and Collections Reports and auditor analysis

Recommendation VIII – 3: Evaluate the effectiveness of current, while researching additional, outreach efforts to focus on the most effective outreach strategies and rigorously evaluate vendor performance to ensure optimal support.

²⁰ NFGDC’s USECP 2017 – 2020 at docket no. M-2016-2573847 and NFGDC’s USECP 2022 – 2026 at docket no. M-2021-3024935 — it should be noted that although there appears to be a gap of years between these two plans, no gap existed because, by PA PUC Order at docket no. M-2019-3012601, the PA PUC established a new USECP filing schedule and extended the duration of USECPs from three years to at least five years. The Order directed utility companies to provide updated enrollment and budget projections for the extended terms of existing USECPs based on the new filing schedule. NFGDC’s USECP 2017 – 2020 was extended through 2021 and the utility was directed to file its next five-year USECP (2022 – 2026) on April 1, 2021.

²¹ Docket nos. R-2022-3035730 and P-2023-3043550

IX PURCHASING AND MATERIALS MANAGEMENT

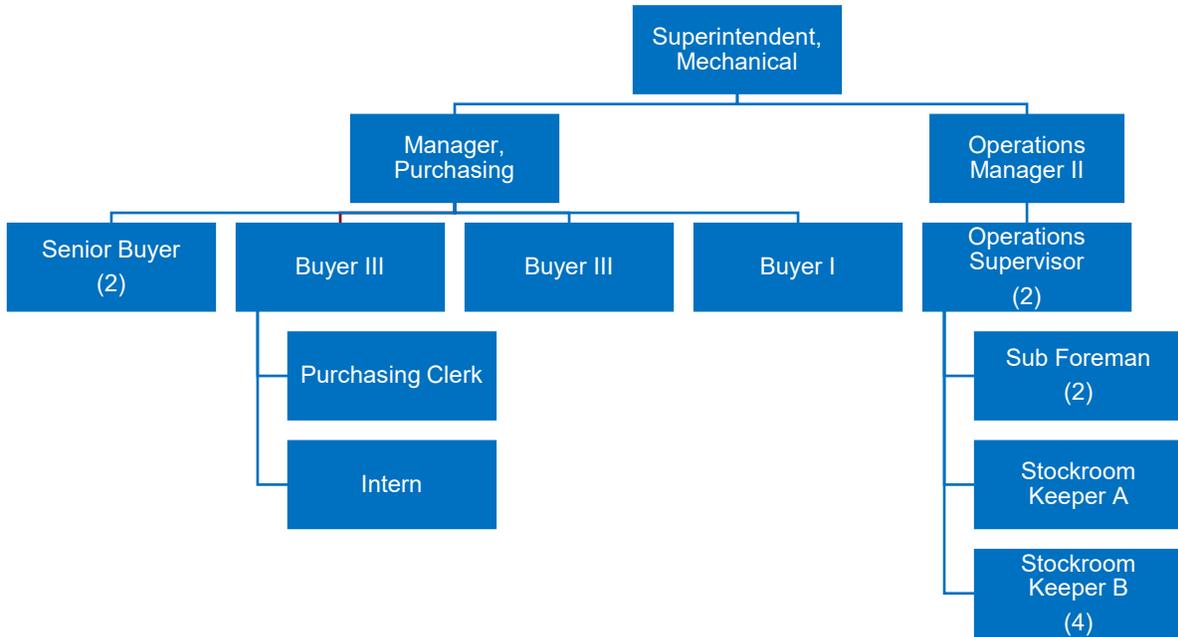
Background

As discussed in chapter II – Background, National Fuel Gas Distribution Corporation (NFGDC) is a natural gas distribution utility owned by National Fuel Gas Company (NFG Co.). The purchasing and materials management functions for all NFG Co.'s subsidiaries, with the exception of Seneca Resources Corporation, are managed by NFGDC's New York operating division (NFGDC-NY). NFGDC's Pennsylvania operating division (NFGDC-PA) maintains stockrooms, located in each of NFGDC-PA's 12 operations centers, to support local operations. Executive oversight is provided by the Assistant Vice President of New York Distribution Operations, Materials Management, Purchasing, and Mechanical. The reporting relationships of this branch of the executive leadership structure is presented in chapter III – Executive Management and Organizational Structure, Exhibit III-2.

Exhibit IX-1 shows the organizational structure of the Purchasing and Materials Management Department (P&MM). The exhibit, however, does not include NFGDC-PA personnel performing materials management functions at NFGDC-PA's stockrooms. Materials management responsibilities are assigned to Pennsylvania Distribution Operations Department's staff. Large, active stockrooms have individuals dedicated solely to the materials management function; however, it is more common for individuals to spend only part of their time on materials management duties. More information related to the location and composition of NFGDC's operations centers is available in chapter VII – Gas Operations.

The organizational structure, presented in Exhibit IX-1, was the result of restructuring efforts that became effective May 1, 2023. Prior to then, the purchasing function resided in the Accounting Department alongside the accounts payable function, and the materials management function was a standalone business unit in the Mechanical Operations Department. In addition to realigning the reporting structure, the company relocated the purchasing team to the physical site of its main warehouse, in Buffalo, New York, to cohere the department. The company said its goal for restructuring was to improve communications between those who perform purchasing and materials management to effectively streamline and enhance workflows. However, this change also allows for the proper segregation of duties necessary between purchasing and accounts payable functions.

Exhibit IX-1
National Fuel Gas Distribution Corporation – New York Division
Purchasing and Materials Management Department Organizational Structure
As of December 2023



Source: Data Request MM-40

Purchasing activities are governed by the Procurement Manual which was updated on January 25, 2022. In addition to providing procedural clarity, the Procurement Manual also reiterates the Code of Business Conduct and Ethics relative to the procurement processes and the segregation of duties including a robust five-tiered approval hierarchy. Lastly, the Procurement Manual describes P&MM’s vendor relations policies which explains the company’s stringent expectations for vendor qualification and performance.

NFGDC’s buyers follow a rigorous competitive bidding policy. All new procurement requests go through competitive bidding; however, there is also a standing purchase order review process to ensure that even long-term contracts remain competitively priced. Another part of NFGDC’s competitive bidding process is the company’s dedication to increasing business with diverse vendors. NFGDC has estimated its diverse spend as far back as February 2001 by querying activity with vendors who are now identified as diverse vendors. The company launched a Strategic Supplier Sourcing Program in December 2021 to invigorate and prioritize dedication to this initiative. Diverse spend for 2022 was \$31 million which represented a 268% increase over the estimated levels from 2001. For more details on NFGDC’s diverse spend initiative, see Finding IX – 2.

After materials are purchased, NFGDC performs the bulk of its materials management business activities from the main warehouse facility. Inventory

replenishment at the main warehouse is managed by an automated reordering process through *Oracle PeopleSoft Inventory*, NFGDC's inventory management system (IMS).

The main warehouse and each stockroom use *Matrix*, a barcode technology, to enhance efficiency and accuracy. NFGDC relies on the algorithms coded into the IMS to determine economic order points and quantities to maintain appropriate inventory turnover rates. The overall strategy is to balance maximizing material availability with minimizing resources tied-up in overstock.

NFGDC-PA's stockrooms are replenished internally from the main warehouse. There is a monthly schedule by which prepared material orders are picked up from the main warehouse and delivered to the designated stockroom. Replenishment can be automated through the IMS or completed manually by entering a material stock request. Under normal circumstances, the PUC auditors support an inventory turnover rate²² of at least 2.0; however, the post-COVID environment has brought about lingering procurement challenges requiring more leniency. The main warehouse had an average inventory turnover rate of 1.22 for the fiscal periods 2018 – 2023. Due to the lower activity and limited inventory levels, inventory turnover rates in NFGDC-PA's 12 stockrooms were much higher than those of the main warehouse, averaging 4.79 over the same period.

The main warehouse uses an industry-approved cycle counting methodology based on ABC analysis classification. Inventory items are classified according to dollar and volume criteria to identify which items should be counted more frequently. The IMS generates a daily cycle count list which represents a judgmental sample that ensures each item in inventory will be physically counted over a two-year cycle. Because stockrooms maintain much smaller inventory levels, they undergo wall-to-wall cycle counts on an 18-month rotation. If emergency circumstances arise that postpone any cycle count process, the requirement to enter the physical count data remains in the system and cannot be canceled. NFGDC maintains a policy that any variance over \$100 be investigated and corrected and/or explained.

To verify effectiveness of inventory management practices, a company must confirm that physical inventory matches the inventory records. For publicly traded companies, such as NFG Co., this is emphasized through inventory control requirements of the Sarbanes-Oxley Act of 2002 (SOX). SOX areas of focus related to inventory control include tracking and monitoring inventory, conducting physical inventory audits, and regularly reconciling inventory records with financial statements. NFG Co. has implemented and routinely tests approximately 15 key controls over supply chain functions and was able to provide evidence of improvements made through SOX compliance. In addition, the materials management function is governed by formal policy and procedure documentation. These were undergoing formal review and update during audit fieldwork with the goal to create a consolidated materials management manual like that used by the purchasing team.

²² The inventory turnover rate is a materials management performance metric that measures the number of times the full inventory is used over a one-year period; ideal inventory turnover rates vary by industry.

Oracle PeopleSoft Inventory has vast reporting capabilities spanning the full supply chain process. The P&MM management team, along with the overseeing executive team, will review many specialized reports to assess specific processes or situations; however, there are four primary reports monitored on a routine basis: the Match Exception Report, the Expediting Report²³, the Stock Out Report, and the Inventory Value Report. The Match Exception Report and the Expediting Report focus on procurement processes, and the Stock Out Report and the Inventory Value Report provide a gauge on materials management processes.

Findings and Conclusions

Our examination of the purchasing and materials management functions included a review of department organization and leadership; the assigned responsibilities, policies and procedures, information systems, and controls related to the supply chain process; and how NFGDC-PA is charged for these services. Based on our review, NFGDC should devote additional effort to improving its purchasing and materials management functions by addressing the following:

- **Finding IX – 1: NFGDC does not have appropriate controls over rolling stock.**
- **Finding IX – 2: NFGDC’s percentage of diverse spend for 2022 was lower than a panel average of regional peer utilities.**

Discussion

Finding IX – 1: NFGDC does not have appropriate controls over rolling stock.

At the main warehouse and NFGDC-PA’s 12 stockrooms, items are issued from inventory when a field technician requests them for use on a job. The items are charged to a specific work order at this time indicating that these materials will be consumed or installed into the system during the designated job.

Items that are not used can be returned; however, unused items are more often transferred to a different work order or kept on the truck for later use in an undocumented way. Technicians have field computers to complete item transfers, but this option is only available until the work order to which the item was originally charged is closed for billing. The amount of time before a work order is billed out is dependent on many factors but is typically within a few days of work completion. There is no option for the technician to return an item to a service truck bin location until needed on a future job or until the item could be returned to a materials management facility.

²³ The Expediting Report gives details of purchased item delivery delays to allow for alternative arrangements to be made should the materials be needed more expeditiously.

Because service trucks are not considered bin locations, there are no controls in place to verify that inventory. There are also no controls deterring technicians from overstocking materials. Materials charged to a specific work order could easily be lost or stolen, and the excess materials that were not used during a job would overstate plant maintenance expense. In addition to potential accounting inaccuracies, system mapping could be distorted since materials may be recorded as having gone into certain parts of the system that were not used (see Finding VII – 1 in chapter VII – Gas Operations).

The company indicated its concern over the burden of implementing a process to control rolling stock; however, the PUC auditors believe additional controls could be built into existing processes without undue burden. Even if this information were documented manually during job completion, this would not create an undue burden on the field technicians because of the minimal time and effort involved. Furthermore, NFGDC could consider outfitting its service trucks with the same barcode technology it has in its main warehouse and stockroom facilities for added convenience and efficiency.

Best inventory control practices would include processes to transfer items from a materials management facility to a service truck bin location. The service technicians would then record materials as they are consumed or installed into the system which would ensure maintenance expenses would be accurate and ratepayers would not bear the burden of the cost of materials that are not considered used and useful in providing natural gas distribution service. Furthermore, inventory count procedures should be implemented to routinely verify the accuracy of service truck inventory.

Recommendation IX – 1: Develop and implement procedures to control rolling stock to ensure accuracy of work order accounting and mapping records and to impede theft and/or material misuse.

Finding IX – 2: NFGDC’s percentage of diverse spend for 2022 was lower than a panel average of regional peer utilities.

In 2022, NFGDC conducted business with 152 diverse suppliers resulting in a total of 4,584 transactions contributing to its highest level of annual diverse spend in company history. The company tracks diversity ownership status for the following classifications: minority, women, LGTBQ+, service disabled/veteran, and disabled/physically challenged. It is important to note that NFGDC only tracks transactions with suppliers who self-identify as diverse vendors; they do not include unverified assumptions through observations made during business interactions.

NFGDC has made a concerted effort to improve its supply chain diversity program. The following are enhancements NFGDC has implemented throughout 2021 – 2023 to increase business with diverse vendors:

- Conducted diversity summits to review individual goals, provide training and updates on supply chain diversity and inclusion initiatives, and brainstorm on how to improve diverse spend
- Implemented procedural changes in the Procurement Manual to further promote transactions with diverse vendors
 - Recognized diversity status as a business reason to award a competitive bid
 - Embedded and prioritized diversity status identification in supplier on-boarding processes
 - Initiated a pilot program to promote accelerated payment terms to diverse suppliers
- Added a designated diverse spend buyer role within the purchasing team whose primary responsibilities are to foster and bolster NFGDC's relationships with diverse vendors and to motivate the company's continued focus on related initiatives
- Participated in networking through the following diverse supplier organizations:
 - Buffalo Niagara Partnership
 - Institute for Supply Management
 - National Minority Supplier Development Council
 - New York and New Jersey Minority Supplier Development Council
 - Three Rivers Business Alliance
 - National LGBT Chamber of Commerce
- Developed a "Doing Business with Diverse Suppliers" training to roll out across NFG Co.'s entities
- Revised NFG Co.'s Code of Business Conduct and Ethics to include expectations that suppliers observe the same non-discriminatory practices as NFG Co.

Exhibit IX-2 shows NFGDC's 2022 diverse spend as compared to regional peer natural gas distribution companies. It should be noted that NFGDC outperformed two of its peers but fell below the panel average.

**Exhibit IX-2
National Fuel Gas Distribution Corporation²⁴
Diverse Spend Comparison Panel
For Calendar Year Ended December 2022**

Peer Utility Diverse Spend Percentage	
Company A	19.9%
Company B	14.0%
Company C	27.8%
Company D	15.2%
Panel Average	19.2%
NFGDC	16.2%

Sources: Annual Diversity Reports filed with the PA PUC

Regulated utilities are required to comply with the Diversity at Major Jurisdictional Utilities and Major Telecommunications Utilities Statement of Policy at 52 Pa. Code §§ 69.801—69.809. Although NFGDC has demonstrated its commitment to increase business with diverse vendors and has encouraged each member of the purchasing team to continue to help execute the company’s supply chain diversity and inclusion initiatives, it has not set a quantitative performance goal for overall diverse spend. Managerial control over the effectiveness of the company’s Strategic Supplier Sourcing Program and other initiatives is not supported by a routinely monitored key performance metric. Diversity initiatives take time to improve diverse spend but maintaining a monitored performance metric will support the necessary focus and prioritization. Per 52 Pa. Code § 69.806, minimum improvement levels should be set, annually.

Recommendation IX – 2: Develop and implement a quantitative goal for annual diverse spend considering a component of year-over-year improvement.

²⁴ NFGDC reported that due to the nature in which it obtains materials and contracts for services/supplies, this metric is not solely for its Pennsylvania operating division.

X EMERGENCY PREPAREDNESS

Background

To protect infrastructure within the Commonwealth of Pennsylvania and ensure safe, continuous, and reliable utility service; effective June 2005; the Pennsylvania Public Utility Commission’s (PA PUC) regulations at 52 Pa. Code § 101 (Chapter 101) require all jurisdictional utilities to develop and maintain written physical security, cybersecurity, emergency response, and business continuity plans. Furthermore, pursuant 52 Pa. Code § 101.1, all jurisdictional utilities are required to submit a Self-Certification Form to the PA PUC, annually, documenting compliance with Chapter 101. This form, available on the PA PUC’s website, includes 13 questions as shown in Exhibit X-1.

Exhibit X-1 Pennsylvania Public Utility Commission Public Utility Security Planning and Readiness Self-Certification Form For the Year Ended December 31, 2022

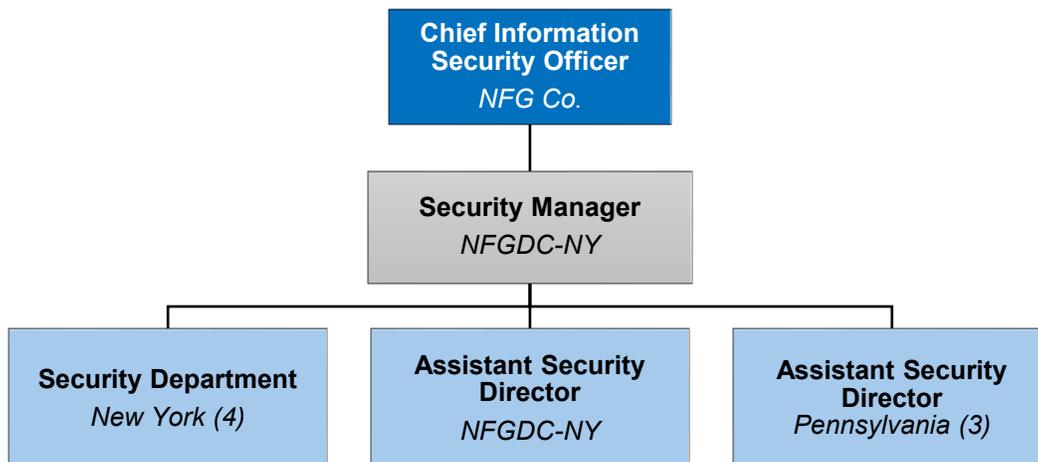
Item No.	Classification	Response (Yes–No–N/A)
1	Does your company have a physical security plan?	
2	Has your physical security plan been reviewed in the last year and updated as needed?	
3	Is your physical security plan tested annually?	
4	Does your company have a cybersecurity plan?	
5	Has your cyber security plan been reviewed in the last year and updated as needed?	
6	Is your cyber security plan tested annually?	
7	Does your company have an emergency response plan?	
8	Has your emergency response plan been reviewed in the last year and updated as needed?	
9	Is your emergency response plan tested annually?	
10	Does your company have a business continuity plan?	
11	Does your business continuity plan have a section or annex addressing pandemics?	
12	Has your business continuity plan been reviewed in the last year and updated as needed?	
13	Is your business continuity plan tested annually?	

Source: Public Utility Security Planning and Readiness Self-Certification Form available on the PA PUC’s website at http://www.puc.state.pa.us/general/onlineforms/pdf/Physical_Cyber_Security_Form.pdf

The PUC auditors use a NIST (National Institute of Standards and Technology) Cybersecurity Framework-based audit plan, modified to address the needs and capabilities of the PA PUC and the Pennsylvania utility companies. National Fuel Gas Distribution Corporation (NFGDC) submitted its 2022 Self-Certification Form, which was reviewed along with NFGDC’s physical security plans (PSP), cybersecurity plans (CSP), emergency response plans (ERP), business continuity plans (BCP) and associated manuals and procedures. In addition, physical inspections were performed on a sample of the company’s facilities including warehouses, district offices, and remote field locations. Due to the sensitive nature of the information reviewed, specific details are not disclosed in the audit report; instead, this information is presented in generalities.

NFGDC’s Security Department (Security), housed out of its New York operating division, oversees security for National Fuel Gas Company (NFG Co.) and its subsidiaries, including NFGDC-PA but excluding Seneca Resources Company, LLC. The department’s organizational structure is presented in Exhibit X-2. Security routinely reviews and evaluates security and safety features at facilities (buildings, stations, warehouses, etc.) across its Pennsylvania operating area. In addition to overall security, the department is tasked with investigating potential theft of service (ToS). The ToS Procedures Manual is designed to aid each type of theft investigation such as illegal consumption through bypassing locked meters, stolen meters, and/or meter tampering. All new employees receive training on ToS during orientation regardless of the job duties.

Exhibit X-2
National Fuel Gas Distribution Corporation – New York Division
Security Department Organizational Structure
As of December 2023



Source: Data Request EM-02

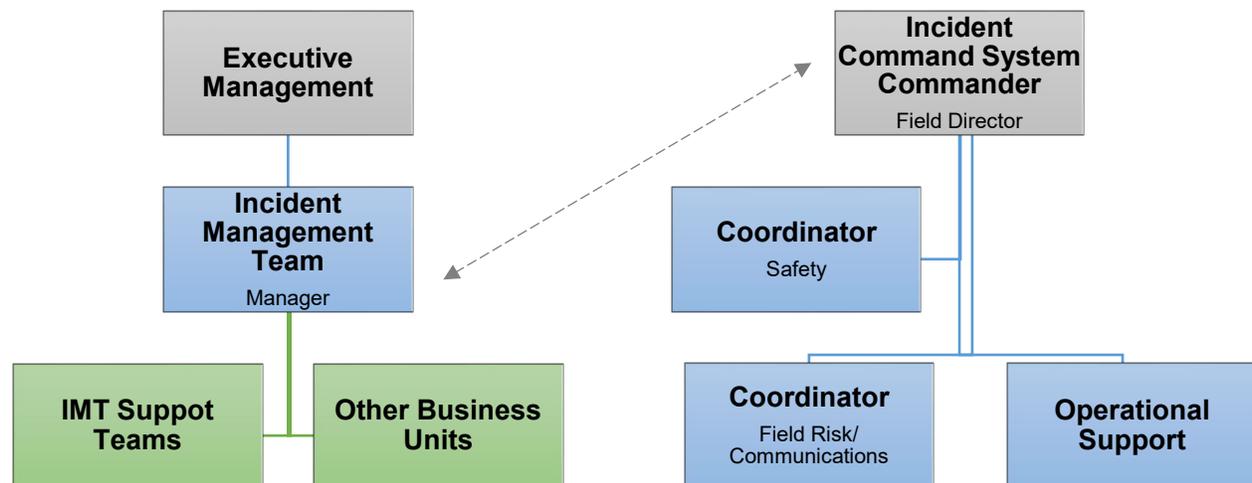
Although many individuals are involved in overall emergency preparedness, key personnel provide oversight of the four main emergency focus areas. NFGDC maintains many plans and processes within these four focus areas to follow best practices, guidelines, and formal regulations. The company tests its various PSPs, ERPs, and BCPs at least annually, if not multiple times per year. Cybersecurity measures are growing increasingly crucial and are monitored on a continuous basis. More information about how NFGDC handles its cybersecurity responsibilities is available in chapter XIII – Information Technology. The main overseer and purpose of the four main emergency focus areas are detailed in the following bullets.

- **PSP (Security Department)** – Define methods, procedures, and best practices to physically protect natural gas pipelines and other assets and facilities.

- **CSP** (Information Technology Department) – Serve as an enterprise-wide guide to facilitate appropriate, systematic response to information security events and CSPs are designed to prevent, or at least minimize, disruption of critical information systems and/or loss of sensitive, critical information and to support efficient and effective remediation and recovery.
- **ERP** (Pennsylvania Distribution Operations Department) – Establish guidelines for responding to and handling emergency conditions including accidental or uncontrolled natural gas release, potential line rupture, fires or explosions occurring near or involving pipeline facilities, equipment failure, natural disasters, and third-party damages.
- **BCP** (Safety Department) – Provide an organized and consolidated approach to managing response and recovery activities following any unplanned business interruption resulting in a long-term interruption of critical business functions.

NFG Co. has established an incident management team (IMT) and an incident command system commander to lead response and recovery in emergency situations. The commander would coordinate response with the IMT, as is thoroughly defined through the respective guiding documents. This approach is centralized to eliminate confusion and/or duplication of effort during disaster recovery. Exhibit X-3 depicts a flowchart of the chain of communication established for this strategy.

**Exhibit X-3
National Fuel Gas Company
Disaster Recovery Chain of Communication
As of December 2023**



Sources: Data Requests EP-18 and EP-19

Findings and Conclusions

Our examination of the emergency preparedness function included a review of the PSPs, CSPs, ERPs, and BCPs as well as vulnerability assessments and associated security measures. Based on our review of the companies' emergency preparedness efforts, NFG Co., and its subsidiary NFGDC-PA, should initiate or devote additional effort to improving the efficiency and/or effectiveness of the emergency preparedness function by addressing the following:

- **Finding X – 1: NFG Co. does not maintain a centralized repository of its emergency response guiding documents.**
- **Finding X – 2: Some of NFGDC-PA's facilities would benefit from enhanced safety and security features.**

Discussion

Finding X – 1: NFG Co. does not maintain a centralized repository of its emergency response guiding documents.

NFG Co.'s emergency response guiding documents were found to be complete and meet the regulations in Chapter 101. In addition to the requirements of Chapter 101, NFG Co. must maintain additional guiding documents to meet requirements of the New York Public Service Commission and the Travel Security Administration of the United States Department of Homeland Security. Due to the number of security plans required by the multiple layers of jurisdictional authorities, the process to update them all is cumbersome and unwieldy. This problem is compounded by the rapidly changing high-stakes security environment.

Due to extensive cross-referencing and intertwined directives among the various emergency response guiding documents, it is a best business practice that a utility effectively maintains and coordinates its emergency response guiding documents to ensure processes and procedures are clear and consistently applied. Creating a centralized repository of emergency response documents is a more manageable way to ensure this process is being appropriately controlled. The repository owner should verify each document has a designated owner who is accountable to ensure the necessary review and update. In addition, the repository owner should ensure there are no conflicting directives that could result in confusion or delays when using the plans.

Recommendation X – 1: Designate an individual or group to provide oversight over and develop a centralized emergency response guiding document repository.

Finding X – 2: Some of NFGDC-PA’s facilities would benefit from enhanced safety and security features.

Security personnel conduct site inspections, annually, during which they complete a risk and vulnerability assessment. These inspections are used to assess the appropriateness and soundness of safety and security measures related, but not limited to, perimeter control; electronic surveillance; visitor procedures; illumination; precious and/or potentially hazardous materials stored on-site; and site-specific environmental factors. The inspector also considers any security incidents since the last review.

Reviewing a sample of these assessments, combined with our own physical inspections, highlighted specific, albeit minor, areas of improvement. Due to the sensitivity of the information, the company has been made aware of our specific recommendation(s) to address those concerns.

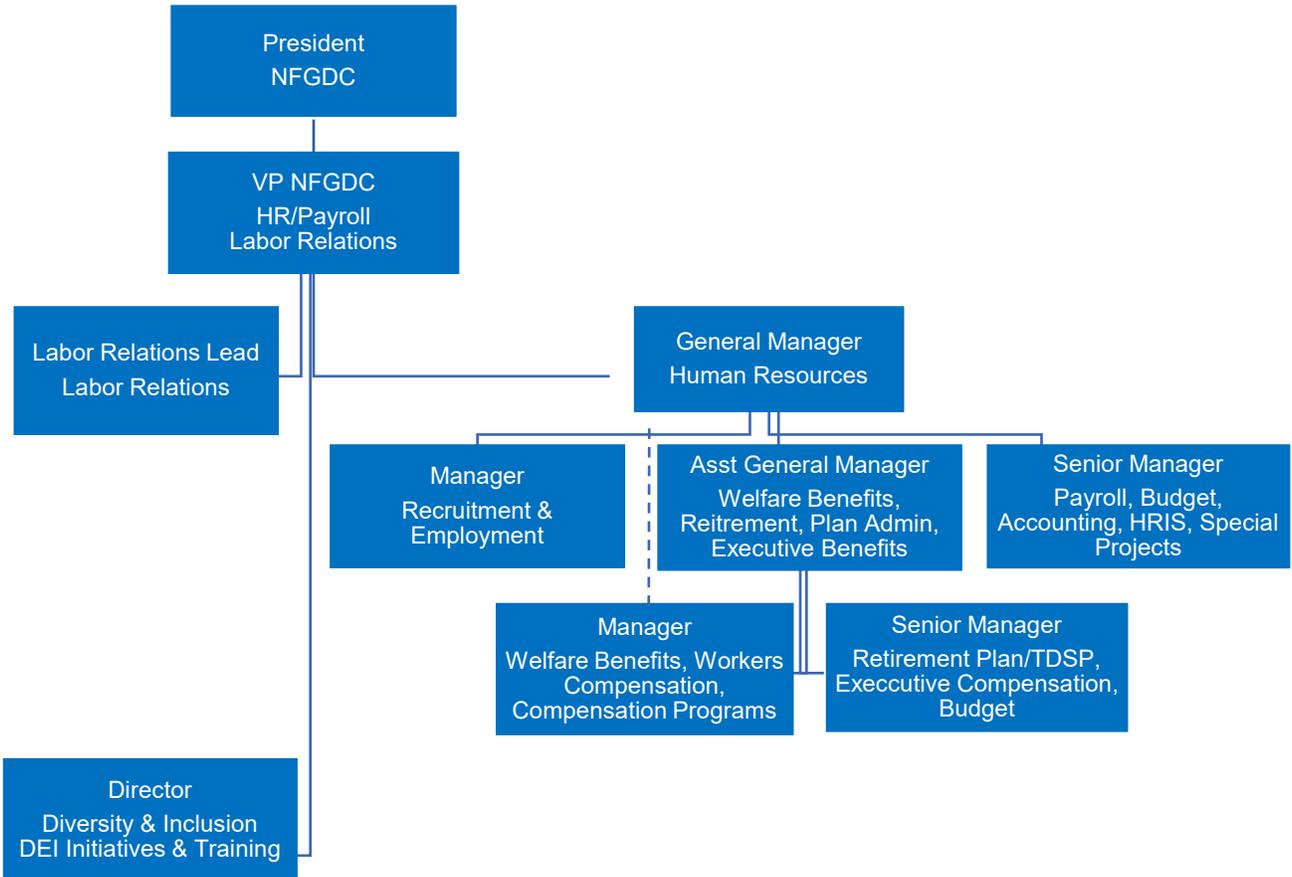
Recommendation X – 2: Identify safety and/or security measures needed at each NFGDC-PA facility and install the appropriate equipment.

XI HUMAN RESOURCES AND DIVERSITY

Background

As discussed in chapter II – Background, National Fuel Gas Distribution Corporation (NFGDC) is a natural gas distribution utility owned by National Fuel Gas Company (NFG Co.). NFGDC performs most human resources (HR) functions for NFG Co. and its subsidiaries. NFGDC’s Human Resources Department’s (HR Department) organizational structure is displayed in Exhibit XI-1. All positions in Exhibit XI-1 are housed in NFGDC’s New York operating division (NFGDC-NY) except for the Manager, Recruitment and Employment which is within the Pennsylvania operating division (NFGDC-PA). However, all positions have responsibilities to support both operating divisions.

**Exhibit XI-1
National Fuel Gas Distribution Corporation
Human Resources Department Organizational Structure
As of February 2024**



HRIS – human resources information system
 TDSP – tax-deferred savings plan
 DEI – diversity, equity, and inclusion
 Source: Data Request EM-35

NFGDC has a management training program, the Engineering Leadership Development Program, which helps employees gain diversified experience through rotational assignments in multiple departments. The program generally includes four six-month rotations. Although mainly focused on engineering and operations functions, the program can be comprised of assignments throughout any of the business areas at NFGDC. In addition, participants receive focused executive and HR Department guidance.

NFGDC's HRIS is *PeopleSoft*, an *Oracle* program, which is used as a record keeping system for HR activities. *PeopleSoft* can store basic demographic information; employment, contact, and payroll data; and benefit program participation. *PeopleSoft* offers many add-on components to address more advanced HR functions. For example, NFGDC uses the time and labor module, which interfaces with *SAP* to manage, plan, report, and retain employee work and leave time. The software can generate standard HR reports, at routine intervals or on demand, on assorted topics such as benefits and payroll, tax filings, leave and attendance, employee information, hiring statistics, and separations.

The following benefits are offered to NFGDC's active employees:

- Medical and prescription drug coverage
- Dental coverage
- Vision coverage
- 401(k) savings plan with company match
- Defined retirement plan (employees hired prior to mid-2003)
- Company tax-deferred savings plan
- Life insurance
- Long-term disability insurance
- Parental leave
- Flexible spending account
- Defined contribution retirement plan

Benefits are mostly consistent, with a few noted exceptions, between unionized and non-unionized positions. In addition, retired employees have alternate but comparable coverages for life insurance, medical, and prescription drug.

Benefits make up the bulk of labor costs. From 2019 – 2023, the largest component of benefit cost was related to pension and other post-retirement benefits (OPEB). As seen in Exhibit XI-2, NFGDC made a significant adjustment to OPEB²⁵ in fiscal year 2022 to adjust for pension overfunding. In brief, NFGDC discontinued offering a defined pension option to new employees starting in 2003. As of 2022, the defined pension was overfunded. The reflected adjustments established a volumetric surcharge credit as well as a one-time bill credit to customers by service class.

²⁵ Supplement Nos. 228 and 239 to Tariff Gas PA PUC No. 9 at docket no. R-2021-3027406

Exhibit XI-2
National Fuel Gas Distribution Corporation – Pennsylvania Division
Benefit Costs by Fiscal Year and as a Percentage of Payroll
Fiscal Years (Ending September 30) 2019 – 2023

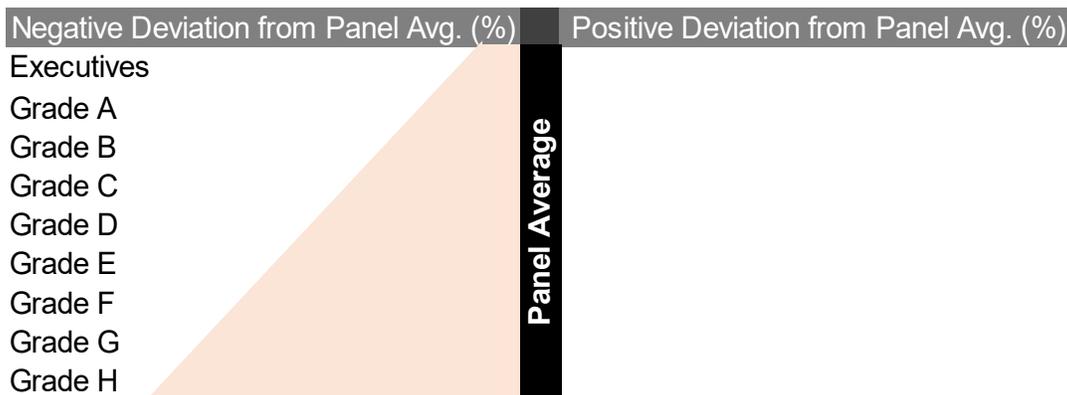
Expense	2019		2020		2021		2022		2023	
	\$M	%	\$M	%	\$M	%	\$M	%	\$M	%
Pension	\$ 1.0	5%	\$ 1.1	4%	\$ 1.2	5%	\$ 1.8	7%	\$ 3.0	10%
OPEB	6.9	30%	7.3	30%	7.4	29%	(21.9)	(82%)	(1.1)	(4%)
All Other Benefits	4.4	19%	4.6	20%	5.5	21%	6.1	22%	5.6	19%
Total	\$ 12.3	54%	\$ 13.0	54%	\$ 14.1	55%	\$(14.0)	(53%)	\$ 7.5	25%
NFGDC-PA Payroll	\$ 22.9	100%	\$ 24.0	100%	\$ 25.6	100%	\$ 26.5	100%	\$ 29.6	100%

Source: Data Request HR-18

NFGDC periodically engages in salary surveys to assess the company’s competitiveness in compensation compared to both the utility industry and the labor market as a whole. Secondly, these comparisons are relative to the northeastern United States as well as nationwide. Salary surveys provide benchmarks for base pay, incentive pay, and benefits. NFGDC’s target for employee compensation is +/- 10% of the survey median using both utility and general industry data. It should be noted that top executive compensation is handled separately; see chapter III – Executive Management and Organizational Structure for more details.

The surveys present employees grouped from Grade A (highest skill, qualification, and/or ability) down through Grade H. Due to the sensitive and proprietary nature of this data, this report will not disclose specific variances from the panel average; however, a general depiction of this data is displayed in Exhibit XI-3.

Exhibit XI-3
National Fuel Gas Distribution Corporation – Pennsylvania Division
Visual Depiction of Salary Grade Deviations from Panel Average
Based on 2022 Executive and 2023 Salaried Employee Salary Surveys



Sources: Interview Request EM-1, Interview Request HR-13, and auditor analysis

In addition to ensuring competitive base compensation levels, NFGDC has recently bolstered attraction and retention for executive and salaried positions by implementing remote work and other flexible work schedules and performance-based incentive pay and bonuses for salaried employees. These types of incentives and alternative work arrangements are sometimes unfeasible for unionized hourly staff which can present additional attraction and retention challenges (see Finding XI – 1).

The Pennsylvania Public Utility Commission (PA PUC) has encouraged utilities to proactively increase diversity in their workforce and procurement efforts for more than two decades. Originally in February 1995, and updated as of January 2021²⁶, the PA PUC adopted Chapter 69 regulations which encourage utilities to integrate diversity efforts as a part of the business strategy. Since March 1997, the PA PUC has encouraged utilities to file annual reports disclosing relative initiatives and results in both workforce and procurement. NFGDC's goal for workforce diversity and inclusion is to increase its rolling three-year representation averages. This applies to the applicant pool, new hires, and internal candidates who are promoted. For more details regarding NFGDC's diverse spend initiatives, see chapter IX – Purchasing and Materials Management.

Responsibilities to ensure workforce safety are shared between both NFGDC-NY and NFGDC-PA. The Safety Department's (Safety) organizational structure, as displayed in Exhibit XI-4, has executive oversight from the Chief Safety Officer. Although Safety supervisors are assigned to a specific operating division, their work supports all other subsidiaries.

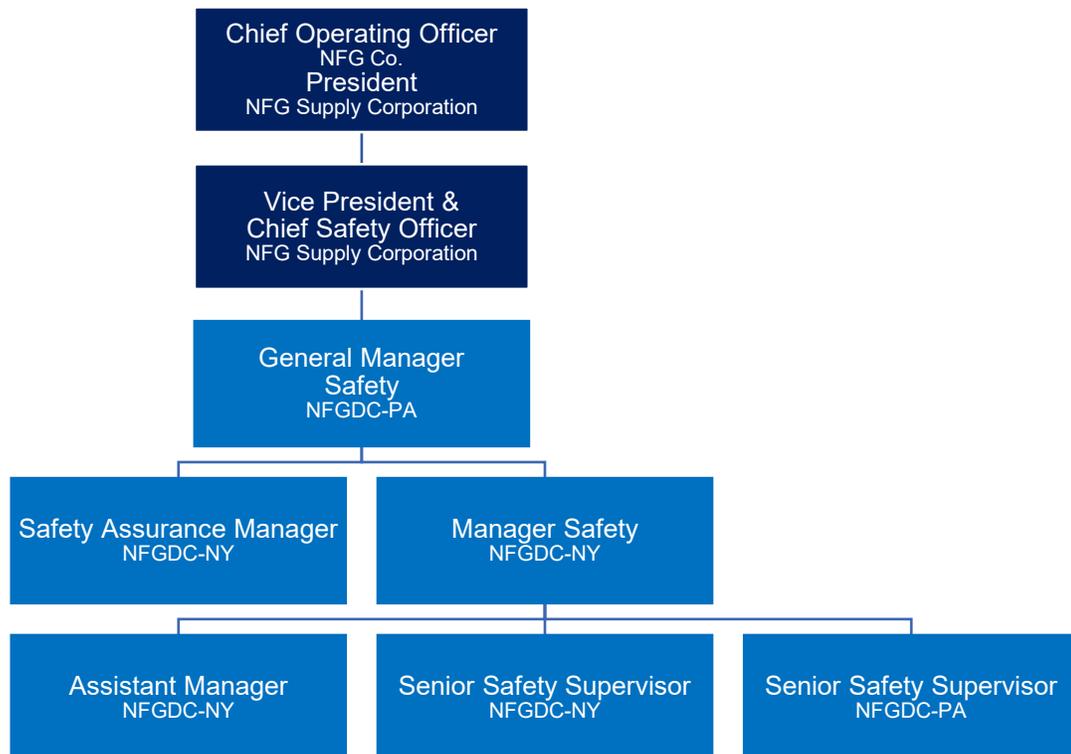
The Safety Department is responsible for compliance with the Occupational Security and Health Administration's (OSHA) requirements, injury incident investigation, and safety programs and training. Safety administers and maintains several initiatives and incident prevention programs that help to direct and enhance NFGDC's safety culture. Examples of these programs and initiatives include:

- **Safety Committees** – There is an oversight group comprised of senior management, other management levels, and union safety coordinators; two regional safety teams (east and west) of management and union safety coordinators; and a safety improvement team of the Distribution Operations Department's (Operations) supervisors, field employees, and management.
- **Root Cause Analysis** – Following all injury incidents, a safety department representative meets with the injured employee, supervisor, department manager, and subject matter experts to identify causal factors and develop specific action plans to prevent reoccurrence.

²⁶ See docket no. L-2020-3017284

- **Ergonomics** – To prevent common sprains and strains, NFGDC has a longstanding partnership with a professional ergonomist, who is a certified physical therapist and chiropractor, to develop an ergonomic training program to reduce the likelihood of injury. The program consists of interactive training events, led by the ergonomist, and periodic coaching by safety group representatives and/or Operations’ supervisors.
- **Dog Bite Prevention Training** – Classes are provided, typically twice a year, by a nationally recognized dog trainer using live dogs.
- **Professional Organization Membership** – NFGDC is a participating member of each the American Gas Association and the Interstate National Gas Association both of which give access to comparative safety statistics and best practice information.
- **Enhanced Personal Protective Equipment** – Items such as combustible gas indicators; hand, knee, and eye protection; heat awareness guidelines; automated external defibrillators; and customized tools are readily available.

**Exhibit XI-4
National Fuel Gas Distribution Corporation
Safety Department Organizational Structure
As of February 2024**



Source: Data Request EM-2

Findings and Conclusions

Our examination of the HR function included a review of assigned responsibilities, policies, and procedures; HRIS capabilities; compensation and benefits; workforce diversity initiatives; and safety programs. Based on our review, NFGDC should initiate or devote additional effort to improving the efficiency and/or effectiveness of the HR function by addressing the following:

- **Finding XI – 1: NFGDC does not conduct salary surveys for hourly positions.**
- **Finding XI – 2: NFGDC’s non-vacation absenteeism rates are increasing among hourly employees.**
- **Finding XI – 3: A significant percentage of safety incidents had underlying causes under employee control.**

Discussion

Finding XI – 1: NFGDC does not conduct salary surveys for hourly positions.

Although NFGDC periodically conducts salary surveys for salaried and executive positions, as detailed in the Background of this chapter, the HR Department does not conduct salary surveys for hourly positions. Hourly employees make up the largest part of NFGDC’s workforce, and therefore, obtaining this data would be invaluable to ensure appropriate compensation is being offered to attract and retain this segment.

Because the company has not verified competitive compensation levels for hourly positions, NFGDC-PA may not be compensating hourly workers within a reasonably comparable range to industry average. Offering competitive base pay is paramount for this segment because many hourly employees do not have options for remote work and/or flexible schedules due to hands-on technical work tasks or designated service hours. Furthermore, it is often difficult to provide performance-based incentives to hourly employees working within the bounds of a union contract.

NFGDC-PA’s overall turnover is within industry standards; however, the departments experiencing the highest turnover are comprised largely of hourly staff. Departmental turnover is shown in Exhibit XI-5. Government Affairs and Legal should be considered outliers due to the average staffing level only consisting of one employee, and therefore, not lending itself to statistical analysis.

**Exhibit XI-5
National Fuel Gas Distribution Corporation – Pennsylvania Division
Turnover by Department
For the Period 2019 – 2023**

Department	Average Staffing Level	Turns	Attrition Rate
Construction	116.2	44	7.6%
Corporate Communications	2.0	-	0.0%
Corrosion Control	2.2	1	9.1%
Customer Service	73.6	53	14.4%
Distribution	7.2	-	0.0%
Distribution Operations	49.5	11	4.4%
Energy Services	4.6	1	4.3%
Engineering Services	12.2	-	0.0%
Executive	2.6	-	0.0%
Field	0.5	-	0.0%
Government Affairs	1.0	1	20.0%
Human Resources	5.8	1	3.4%
Land	6.2	1	3.2%
Legal	1.0	1	20.0%
Mechanical	3.6	-	0.0%
Oil City CAC	4.6	2	8.7%
Operations Clerical	7.2	-	0.0%
Operations General	6.8	6	17.6%
PA CRC	94.4	56	11.9%
Risk Management	6.8	1	2.9%
Safety	2.0	-	0.0%
Security	4.2	-	0.0%
Total	403.6	179	8.9%

CAC – Customer Assistance Center

CRC – Customer Response Center (call center)

Sources: Data Requests EM-36 and HR-72 and auditor analysis

Although pay is important to any worker, it is not the only factor influencing workforce recruitment and retention. Therefore, in addition to offering competitive base pay, companies must be creative to find enrichment strategies to attract and retain hourly staff. Some strategies could include:

- Recognition programs
- Opportunities to work on special projects and/or committees
- Active succession programs to help less experienced employees see and realize a strong career path
- Team leadership hierarchies to offer job enrichment through mentoring opportunities
- Training/educational opportunities

Recommendation XI – 1: Conduct periodic salary surveys for all hourly positions to ensure offering competitive compensation to attract and retain this workforce segment.

Finding XI – 2: NFGDC’s non-vacation absenteeism rates are increasing among hourly employees.

NFGDC tracks employee absenteeism hours using 36 categories for three designated employee groups. One such category is regular sick time. Salaried employees receive 19 – 37 days of personal time off (PTO) depending on years of service. Salaried employees do not get designated sick time—the employee assumes the responsibility to manage allotted PTO to allow for absences for both vacation and sickness. Prior to January 1, 2021, hourly employees were allotted two – five sick days, each year, based on years of service in addition to time allotted for vacation. As of 2021, all hourly employees receive seven sick days to comply with a revised New York labor law²⁷. Although NFGDC-PA is not subject to this law, this practice is being applied consistently at both operating divisions.

Exhibit XI-6 displays absenteeism rates by cause from 2018 – 2023, including the associated trend lines. COVID-related absenteeism has been segregated from the data to ensure the trend of regular sick time use was not affected by extraordinary circumstances. For 2020 and 2021, COVID-related absenteeism accounted for approximately half of total non-vacation absenteeism. Total non-vacation absenteeism, excluding COVID-related absenteeism, increased on average approximately 16% a year throughout the audit period. Non-unionized hourly employee absenteeism increased 17% on average per year and unionized hourly employee absenteeism increased on average 25% per year.

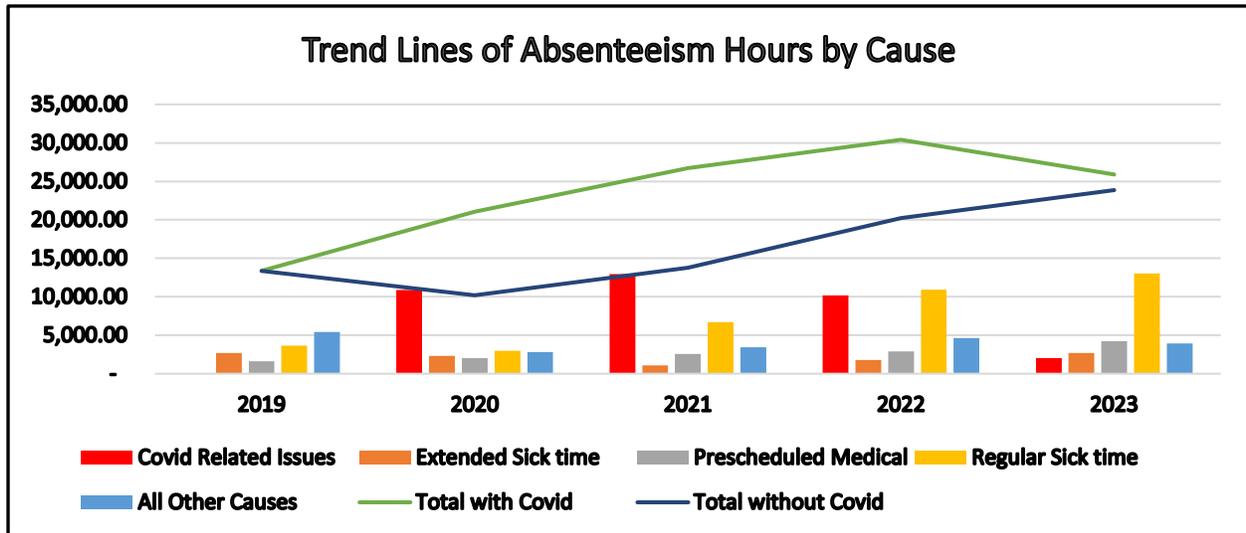
To minimize regular sick time, NFGDC monitors for patterns of abuse (e.g., Mondays, Fridays, after holidays, etc.). Sick time can be used for medical appointments; however, the company encourages employees to make medical appointments during non-work hours. Management counsels employees about absenteeism as needed. As an incentive, full-time hourly employees are eligible for the Perfect Attendance Program and can earn \$75 – \$375 based on consecutive years of service without a qualifying absence. For 2019 – 2023, annual program payouts ranged from \$1,950 – \$5,475.

NFGDC indicated that a contributing factor to increasing non-vacation absenteeism is the increased allotment of sick time to follow the labor law. It is also possible that the post-COVID workplace atmosphere, which is more discouraging of employees working even with mild sickness, may be contributing to this trend as well. Nonetheless, absenteeism has been increasing and is a factor that NFGDC will have to monitor and mitigate within its workforce.

²⁷ New York Labor Law Chapter 31, Article 6 § 196-b

Exhibit XI-6
National Fuel Gas Distribution Corporation – Pennsylvania Division
Absenteeism Hours by Cause
For the Years 2019 – 2023

Cause	2019	Rate	2020	Rate	2021	Rate	2022	Rate	2023	Rate
COVID-Related	-	0%	10,862.00	52%	12,940.70	48%	10,174.00	33%	2,041.00	8%
Extended Sick Time	2,702.25	20%	2,328.00	11%	1,064.00	4%	1,774.25	6%	2,688.00	10%
Prescheduled Medical	1,607.25	12%	2,048.00	10%	2,546.00	10%	2,916.00	10%	4,210.25	16%
Regular Sick Time	3,629.50	27%	2,983.75	14%	6,718.00	25%	10,921.75	36%	13,037.25	50%
All Other Non-Vacation Absence	5,431.42	41%	2,831.25	13%	3,445.50	13%	4,614.75	15%	3,925.75	15%
Total with COVID-Related	13,370.42	100%	21,053.00	100%	26,714.20	100%	30,400.75	100%	25,902.25	100%
Total without COVID-Related	13,370.42	N/A	10,191.00	N/A	13,773.50	N/A	20,226.75	N/A	23,861.25	N/A



Source: Data Request HR-66

Absenteeism policies, with clear consequences for misuse, should help lessen chronic absenteeism due to non-work-related minor illnesses which, in turn, will maximize productivity and minimize economic loss. Absenteeism policies should be consistently and aggressively enforced to ensure desired effects are achieved. Furthermore, union contract terms conflicting with the enforcement of absenteeism policies should be revisited during contract renegotiation.

Recommendation XI – 2: Reduce chronic absenteeism through the enhancement and consistent enforcement of sick leave policies and identify union contract terms that are incompatible with these policies to revise during the next contract renegotiation.

Finding XI – 3: A significant percentage of safety incidents had underlying causes under employee control.

Exhibit XI-7 displays the number of safety incidents by cause from 2019 – 2023. Incidents with causes under employee control are highlighted. Meanwhile, Exhibit XI-8 displays the number of motor vehicle accidents by cause from 2019 – 2023. Similarly, accident causes under employee control are highlighted. It should be noted that the company did not define categories for the causes of motor vehicle accidents, so the PUC auditors created categories for this exhibit from the raw accident description data.

**Exhibit XI-7
National Fuel Gas Distribution Corporation – Pennsylvania Division
Safety Incidents by Cause
For the Years 2019 – 2023**

Cause	2019	2020	2021	2022	2023	Total
Body position in line of fire	2	-	1	1	1	5
Complacency	-	-	-	-	-	-
Congested work area	1	-	-	-	-	1
COVID transmission	-	-	-	4	-	4
Failure to identify hazard(s)	2	-	1	3	1	7
Frustration	1	-	-	-	-	1
Improper ergonomic technique	1	-	-	-	-	1
Improper maintenance	-	1	-	-	-	1
Improper PPE or PPE not used	-	1	-	-	-	1
Improper tool or equipment	1	-	-	-	-	1
Improper work technique	3	-	1	-	1	5
Inadequate guarding of hazards	1	-	-	-	-	1
Insufficient knowledge of job	1	-	-	1	-	2
Other - bee sting	1	-	-	2	-	3
Other - dog hidden	1	-	-	-	-	1
Other - tick bite	-	-	1	-	-	1
Other - vehicle accident	-	-	1	-	-	1
Poor ergonomic technique	2	-	1	2	2	7
Poor housekeeping	-	-	-	1	-	1
Poor process design	-	-	1	-	-	1
Poor work location design or layout	1	-	1	1	-	3
Slippery conditions	-	1	-	-	-	1
Unnecessary haste (rushing)	-	-	1	-	1	2
Unsafe act of other	1	-	-	1	1	3
Total	19	3	9	16	7	54
Causes Under Employee Control	15	2	7	9	6	39
Portion Under Employee Control	79%	67%	78%	56%	86%	72%

Source: Data Request HR-68

**Exhibit XI-8
National Fuel Gas Distribution Corporation – Pennsylvania Division
Motor Vehicle Accidents by Cause
For the Years 2019 – 2023**

Cause	2019	2020	2021	2022	2023	Total
Driving infraction	4	-	-	2	-	6
Surroundings	9	2	8	5	10	34
Animal	1	2	1	5	6	15
Environment	-	1	2	-	-	3
Another driver	7	6	13	12	9	47
Total	21	11	24	24	25	105
Causes Under Employee Control	13	2	8	7	10	39
Portion Under Employee Control	62%	18%	33%	29%	40%	37%

Source: Data Request HR-69

Of the safety incidents that occurred from 2019 – 2023, 39 of 54 (72%) safety incidents had causes under employee control. Almost half of all incidents (24) fell within four of the 16 categories: failure to identify hazard(s), poor ergonomic technique, body position in line of fire, and improper work technique. Meanwhile, 39 of 105 (37%) motor vehicle accidents had causes under employee control from 2019 – 2023. Almost all accidents within the employee’s control, 34 of these 39, were due to drivers not being fully aware of their surroundings.

NFGDC has implemented several safety programs and policies, as described in the Background of this chapter, but with 72% of safety incidents and 37% of motor vehicle accidents having causes under employee control, additional analysis is warranted. NFGDC should determine what processes need to be improved to reduce these incidents/accidents (e.g. more training, more frequent reinforcement messaging, enforcement procedures, etc.).

In addition to the direct expenses related to safety incidents, they can also result in reduced efficiency and productivity due to lost and restricted time. Exhibit XI-9 displays an accumulation of lost hours due to incidents with causes under employee control. During 2019 – 2023, the company lost a minimum²⁸ of 10,000 hours from safety incidents with causes under employee control. This averaged approximately 2,000 hours per year which is the equivalent of one employee’s regular time labor efforts for an entire year. Based on the average fully-loaded salary for field operations crewmen, the total estimated cost associated with lost time from safety incidents with causes under employee control is approximately \$86,000, annually.

²⁸ Per OSHA’s regulation Part 1904 Subpart C: Recordkeeping Forms and Recording Criteria, the company is not required to track calendar days away from work if the injury or illness resulted in more than 180 calendar days away and/or days of job transfer or restricted; therefore, any days away or lost time injuries that exceeded 180 days were capped at this threshold which equates to 1,440 hours.

Exhibit XI-9
National Fuel Gas Distribution Corporation – Pennsylvania Division
Hours Lost by Safety Incident Under Employee Control
For the Years 2019 – 2023

Cause	2019	2020	2021	2022	2023	Total
Body position in line of fire	1,344	-	408	648	-	2,400
Complacency	-	-	-	-	-	-
Failure to identify hazard(s)	104	-	-	184	8	296
Frustration	40	-	-	-	-	40
Improper ergonomic technique	-	-	-	-	-	-
Improper maintenance	-	576	-	-	-	576
Improper PPE or PPE not used	-	-	-	-	-	-
Improper tool or equipment	-	-	-	-	-	-
Improper work technique	40	-	8	-	-	48
Inadequate guarding of hazards	-	-	-	-	-	-
Insufficient knowledge of job	56	-	-	80	-	136
Poor ergonomic technique	1,496	-	1,440	1,224	264	4,424
Poor housekeeping	-	-	-	400	-	400
Poor process design	-	-	472	-	-	472
Poor work location design or layout	16	-	8	1,120	-	1,144
Unnecessary haste (rushing)	-	-	256	-	56	312
Total Hours	3,096	576	2,592	3,656	328	10,248

Source: Data Request HR-75

Recommendation XI – 3: Analyze safety incident root cause data to identify areas of improvement for training and safety programs and enhance enforcement procedures to appropriately motivate employee compliance.

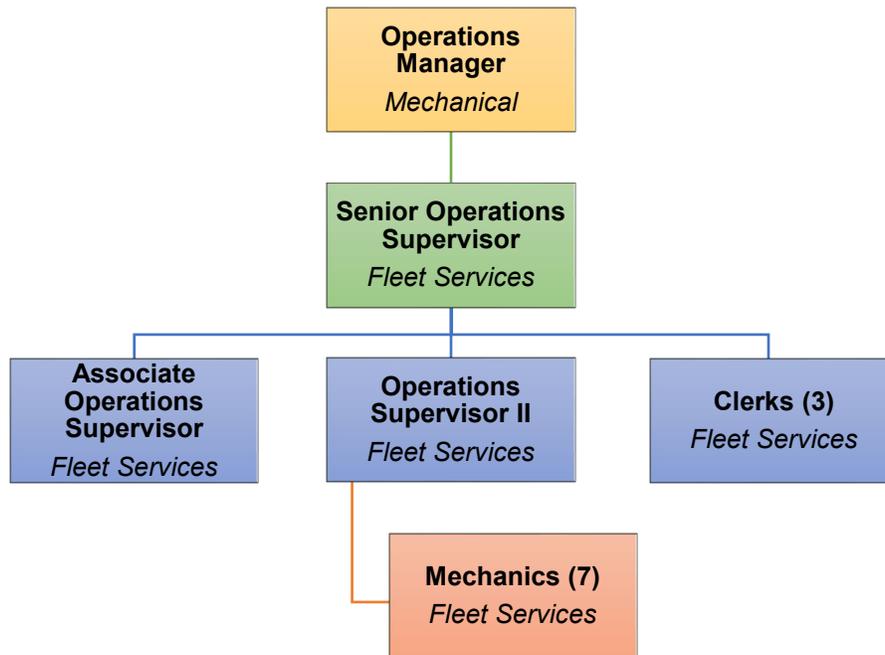
XII FLEET MANAGEMENT

Background

As discussed in chapter II – Background, National Fuel Gas Distribution Corporation (NFGDC) is a natural gas distribution utility owned by National Fuel Gas Company (NFG Co.). The Fleet Services Department (Fleet Services) is part of the Mechanical Department housed in NFGDC’s New York operating division (NFGDC-NY) and is responsible for maintaining the transportation and equipment fleet.

Fleet management functions are under the oversight of the Assistant Vice President – Mechanical (see chapter III – Executive Management, Exhibit III-2). Fleet Services’ organizational structure is presented in Exhibit XII-1.

Exhibit XII-1
National Fuel Gas Distribution Corporation – New York Division
Fleet Services Department Organizational Structure
As of August 2023



Source: Data Request VE-01

Fleet Services specifies and evaluates vendor bids and purchases, maintains, and disposes of all transportation units and construction equipment. Fleet Services works closely with NFGDC’s various departments, particularly the Distribution Operations Department, to develop vehicle specifications that meet business needs, balance business needs against standardized specifications, and maintain the competitive bid process. Standardization helps to minimize parts inventory

and achieves optimal equipment efficiency, both of which result in reduced operation and maintenance expenses.

The Senior Operations Supervisor is responsible for the following:

- Manages 1,400 vehicle and equipment assets valued over \$60 million
- Reviews operational costs for fuel and maintenance orders totaling over \$6 million, annually
- Oversees all vehicle replacement and acquisition strategies to ensure balance between capital investments and operating expenses
- Orders and disposes of all vehicles and equipment including the registration and permitting for larger vehicle types
- Determines appropriate upfitting and customization of vehicles and equipment for operational efficiency
- Liaises between fleet software and hardware providers who support daily operations
- Conducts morning safety meetings and responds to safety concerns of the department’s employees and end-users
- Responds to and finalizes vendor disputes

The fleet consists of passenger cars; trucks; construction equipment (e.g., tow-behind compressors, backhoes, front-end loaders, right-of-way mowing tractors, and compact excavators); and trailers which are used to transport construction equipment. Exhibit XII-2 shows NFGDC’s Pennsylvania operating division’s total number of vehicles and equipment, by class, at year-end for 2019 – 2023.

**Exhibit XII-2
National Fuel Gas Distribution Corporation – Pennsylvania Division
Vehicle and Equipment Totals
For the Years 2019 – 2023**

Description/code		2019	2020	2021	2022	2023
Passenger Cars	A/C	2	2	2	2	2
Trucks <10,000 lbs.	E	158	181	195	193	196
Trucks >10,000 lbs.	G	20	22	24	23	23
Construction Trucks	J	27	28	32	30	30
Large Construction Equipment	L	41	42	45	45	48
Small Construction Equipment	N	45	46	48	48	49
TOTALS		293	321	346	341	348

Source: Data Request VE-24

Fleet Services annual reviews and prioritizes units to be replaced. Designated vehicles are disposed of through auto auctions, internet sales, trade-in, or other means to maximize salvage value. Replacement guidelines have been developed for the different classes of vehicles and construction equipment. The trade-in policy for each class is shown below. It should be noted that historical maintenance cost for each vehicle or piece of equipment is considered in replacement decisions.

- **Class A/C Full and Mid-Size Passenger Cars** – Minimum of 60,000 miles and five years for senior officers; a minimum of 60,000 miles and six years for other passenger cars
- **Class E Trucks (under 10,000 lbs.)** – Minimum of 60,000 miles and five years or 80,000 miles and 3 years
- **Class G Trucks (10,000 lbs. and over)** – Seven to 10+ years
- **Class J Construction Trucks** – Seven to 10+ years
- **Class L Large Construction Equipment** – Six to 10+ years
- **Class N Small Construction Equipment** – Variable (dependent on condition)

NFGDC's current policy is to purchase all vehicles and equipment. When purchasing, Fleet Services considers manufacturer incentive allowances and does not limit purchases from a single manufacturer or vendor. The company maintains three volume purchase contracts: Stellantis - Volume Incentive Program; Ford Motor Company – Framework Agreement/Volume Incentives; and General Motors Fleet – Competitive Assistance Program.

NFGDC has retained the global fleet management services company, Holman Fleet (Holman), which was formerly known as Automated Resources International or ARI, since 2011. Holman's vehicle information system, called *Insights*, is a web-based fleet management system that provides real-time data and tracks key performance indicators (KPIs). Telematic devices, installed on each unit within NFGDC's fleet, connect to onboard diagnostics to collect and provide real-time data on GPS location, vehicle specifications, and statistics to monitor vehicle health and performance and driver behavior. NFGDC also procures vehicles/equipment through the *Insights* system.

KPIs are monitored in areas such as vendor grading, vehicles used less than 50 miles per month, average fuel use on a company-wide basis, and high maintenance/repair cost vehicles. Fleet Services performs vendor audits, at least once per year for each vendor, to grade vendors in five categories: communication, facilities and tools, attention to warranty concerns, prompt completion of work orders, and properly coded invoicing. Vendor grades are retained in *Insights* to be used during future procurement efforts.

Holman schedules and manages preventive maintenance (PM) work. Each month, necessary PMs are scheduled to be completed either by Fleet Services' mechanics or through commercial vendors depending on required services. NFGDC-NY has developed a Fleet Services Vendor Guide to direct vendors who perform maintenance/repairs on fleet units. In addition, Holman keeps records of authorizations for repairs and completed PMs for the life of each fleet unit.

Findings and Conclusions

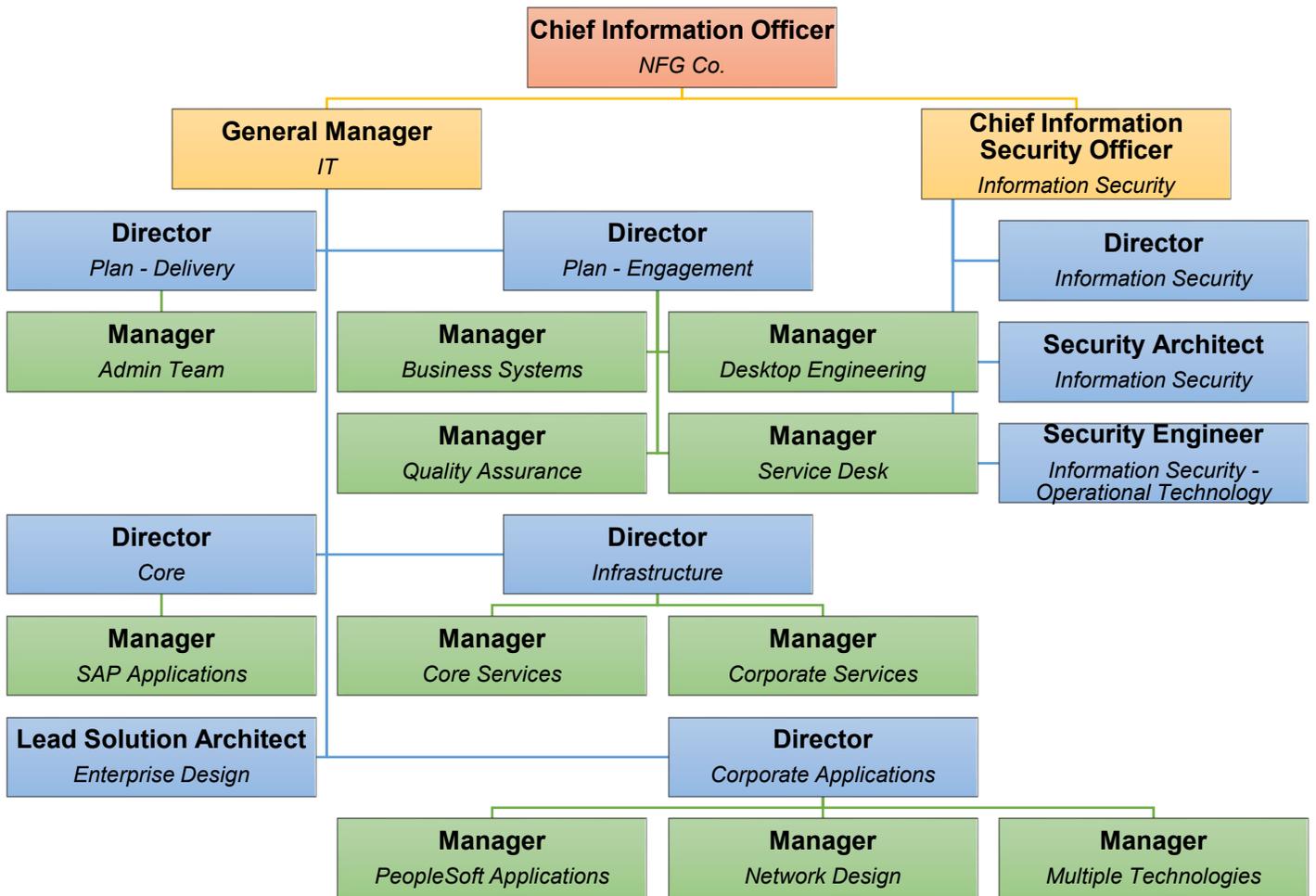
Our examination of the fleet management function focused primarily on a review of the vehicle and equipment acquisition and retirement processes including policies relative to competitive bidding, vehicle and equipment maintenance and repair procedures, and the process for monitoring vehicle and equipment utilization. Based on our review, no evidence came to our attention that would lead the PUC auditors to conclude that the areas reviewed were not adequately addressed; therefore, no recommendations have been developed for this area.

XIII INFORMATION TECHNOLOGY

Background

As discussed in chapter II – Background, National Fuel Gas Distribution Corporation (NFGDC) is a natural gas distribution utility owned by National Fuel Gas Company (NFG Co.). The information technology (IT) and cybersecurity functions are provided by NFGDC’s Information Technology Department (IT Department) which is housed in its New York operating division. The IT Department provides services to all NFG Co.’s subsidiaries except for Seneca Resources Company. The IT Department’s organizational structure is presented in Exhibit XIII-1.

**Exhibit XIII-1
National Fuel Gas Distribution Company – New York Division
Information Technology Department Organizational Structure
As of December 2023**



Source: Data Request IT-02

The mission and duties of the IT Department's business units are summarized below:

- **Plan: Delivery** – Provides oversight of the department's budget planning, project and program management, and application and system agility and acts as the audit liaison
- **Plan: Engagement** – Provides oversight of the quality assurance program, business systems analysis, service request and incident ticketing system, access management, end-user computing including mobile device management, and IT service management
- **Application Development: PeopleSoft/Custom** – Manages new application development and enhancements, customizes systems to meet operational needs, performs patch management, and supports *PeopleSoft* and the other custom applications
- **Application Development: SAP** – Manages new application development and enhancements, customizes systems to meet operational needs, performs patch management, and supports *SAP* applications
- **Infrastructure** – Provides oversight of the *Enterprise IT* technology platform, which includes hardware, software, network, data storage and administration; telecommunications and radio communications; collaboration; disaster recovery and business continuity services; and data center operations
- **Enterprise Design** – Collaborates with all IT business units to coordinate technology direction and align solutions to ensure security, maintainability, scalability, and performance
- **Information Security (InfoSec)** – Maintains an information security program to ensure the confidentiality, integrity, availability, and safety of IT and operational technology systems and develops infosec strategic plan to implement and execute administrative, technical, and physical security measures of the cybersecurity components throughout the organization

NFG Co. has retained a third-party to provide selected IT services for its subsidiaries, including NFGDC. The vendor provides managed lifecycle services for all non-mainframe infrastructure, software and hardware product lifecycle support, asset inventory management, computer and printer designs, on-site desktop support, and day-to-day management of the Service Desk employees. NFGDC plans to transition the Service Desk operations in-house beginning in mid-2024.

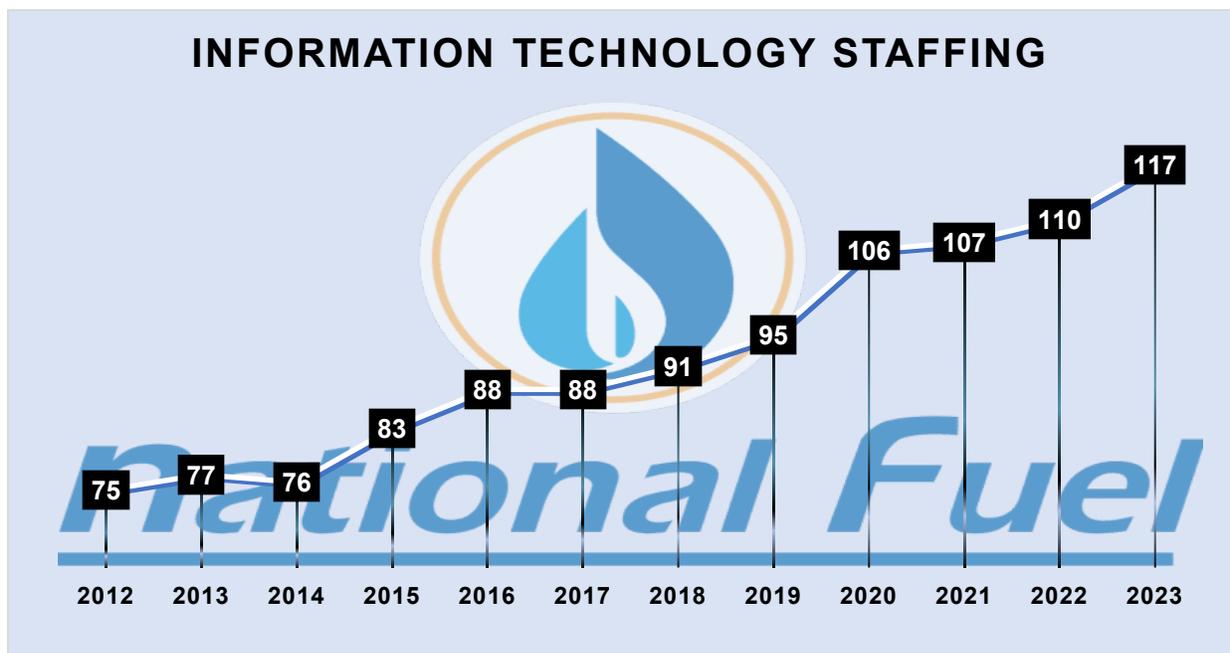
NFGDC has established performance-based goals to monitor the effectiveness of IT and cybersecurity business processes. The IT Department tracks performance metrics, such as progress with vulnerability management, system availability levels, and project status; to present in routine management reports. In addition, NFG Co. maintains multiple IT-focused committees to provide oversight of the IT strategic plan.

The IT Department’s directors provide regular updates during IT committee meetings about ongoing IT projects, cyber incidents, and/or concerns, global and specific utility-related cybersecurity threats and events, etc.

To optimize business system functionality, systems need continuous upgrade through proper patch maintenance and the implementation of emerging technologies. NFGDC conducts annual IT/cybersecurity audits and has a number of projects underway to modernize equipment, streamline IT processes, and strengthen IT security posture.

The IT Department’s historical staffing levels are displayed in Exhibit XIII-2. NFGDC has prioritized IT and cybersecurity as is evidenced by increased staffing. Since the 2012 management audit, NFGDC has increased staffing in IT and InfoSec from 75 to 117 full-time equivalents, a 56% increase. NFGDC cites its focus on information security, network architecture, and application development as the driver of this departmental growth.

Exhibit XIII-2
National Fuel Gas Distribution Company – New York Division
Information Technology Department Staffing
For the Years 2012 – 2023



Sources: 2017 Management Audit, Data Request IT-31, and auditor analysis

Findings and Conclusions

Our examination of the IT and cybersecurity functions included a review of the organizational structure, staffing levels, operational expenses, policies and procedures, cybersecurity measures, IT training techniques, and other related information. Based

on our review of the company's IT efforts, NFGDC should initiate or devote additional effort to improve the efficiency and/or effectiveness of the IT and cybersecurity functions by addressing the following:

- **Finding XIII – 1: NFGDC has not conducted surveys to assess end-users' satisfaction.**
- **Finding XIII – 2: A third-party cyber maturity review highlighted areas in need of improvement in NFG Co.'s information technology function.**

Discussion

Finding XIII – 1: NFGDC has not conducted surveys to assess end-users' satisfaction.

End-user satisfaction surveys are an important driver of IT organizational success to measure employee satisfaction with departmental processes. Satisfaction surveys provide insight on how to maximize productivity and open feedback channels. Currently, NFGDC only conducts surveys for the Service Desk function, which is provided by a third-party, and following new employee onboarding for NFG Co. and NFGDC.

NFGDC's IT Department provides many services to internal departments such as software deployment/upgrade, end-user computing, network management, application development, special service execution, cyber awareness training, etc. However, none of these services have formal feedback mechanisms. By implementing a formal end-user survey program, the relationships and processes between IT and non-IT departments will be strengthened and streamlined.

Recommendation XIII – 1: Conduct information technology focused end-user surveys to gauge satisfaction and collect feedback to determine potential areas of improvement.

Finding XIII – 2: A third-party cyber maturity review highlighted areas in need of improvement in NFG Co.'s information technology function.

In 2022, NFG Co. engaged a third-party to provide a proactive review of its IT framework and overall cyber capabilities to ensure that its IT strategy was aligned with business objectives and industry best practices. This assessment covered over 20 business activities in four functional objectives: security governance, cyber risk management, security architecture, and cyber defense. NFG Co.'s performance was scored against more than 800 data points. The maturity rating scale used, from lowest to highest, was Ad Hoc, Initial, Defined, Managed, and Optimized.

NFG Co.'s score was considered proprietary and confidential; however, it identified some potential areas for improvement. In response, NFG Co. prepared a strategy to improve its maturity score and hopes to implement improvements by mid-2024. Upon completion, NFG Co. plans to use the same third-party to reevaluate whether its remediation efforts have successfully improved its IT and cybersecurity posture.

Recommendation XIII – 2: Implement the information technology improvement strategy to improve NFG Co.'s performance on future routine third-party maturity evaluations.

XIV ACKNOWLEDGEMENTS

We wish to express our appreciation for the cooperation and assistance given to us during this Management and Operations Audit by the officers and staff of National Fuel Gas Distribution Corporation.

This audit was conducted by PUC auditors Craig Bilecki, CPA, Timothy Kerestes, Melissa Lawrence, and Eric McKeever of the Management Audit Division of the Pennsylvania Public Utility Commission's Bureau of Audits.

XV APPENDIX

National Fuel Gas Distribution Corporation – Pennsylvania: Financial and Operating
Data & Statistics

National Fuel Gas Distribution Corporation
Financial and Operating Data & Statistics

Appendix
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DATA AND STATISTICS	2018	2019	2020	2021	2022	Compound Growth
OPERATING REVENUE (\$)						
Residential	\$ 162,678,046	\$ 156,704,061	\$ 142,374,580	\$ 155,026,801	\$ 210,111,661	6.6%
Commercial	40,613,842	39,270,228	34,608,832	37,756,564	49,582,258	5.1%
Industrial	15,910,108	15,713,805	13,313,775	14,955,023	16,993,749	1.7%
Other	(3,903,037)	(4,831,178)	-	-	(1,930,661)	-16.1%
Total Operating Revenue	\$ 215,298,959	\$ 206,856,916	\$ 190,297,187	\$ 207,738,388	\$ 274,757,007	6.3%
OPERATION & MAINTENANCE (O&M) EXPENSES (\$)						
Operating Supervision and Engineering	\$ 408	\$ -	\$ 1,687	\$ -	\$ 150	-22.1%
Production Maps and Records	\$ -	\$ 2	\$ -	\$ -	\$ -	NM
Field Lines Expenses	\$ 4,493	\$ 16,892	\$ 15,806	\$ 15,333	\$ 11,438	26.3%
Field Compressor Station Expenses	\$ 217	\$ -	\$ 59	\$ -	\$ 1,279	55.8%
Field Measuring and Regulating Station Exp.	\$ 1,551	\$ 156	\$ 11,229	\$ 224	\$ 137	-45.5%
Purification Expenses	\$ 814	\$ 821	\$ 969	\$ 771	\$ 851	1.1%
Other Expenses	\$ 14,622	\$ 667	\$ -	\$ 6	\$ 364	-60.3%
Maintenance of Structures and Improvements	\$ -	\$ -	\$ 14	\$ -	\$ 398	NM
Maintenance of Field Lines	\$ 305	\$ 1,199	\$ 11,889	\$ 2,644	\$ (4,325)	NM
Maintenance of Field Compressor Station Eq.	\$ -	\$ -	\$ 67	\$ -	\$ -	NM
Maintenance of Field Meas. and Reg. Station Eq.	\$ 327	\$ -	\$ -	\$ 100	\$ -	-100.0%
Maintenance of Purification Equipment	\$ -	\$ 17	\$ 114	\$ -	\$ -	NM
Maintenance of Other Equipment	\$ -	\$ 4,730	\$ 23,135	\$ (8,210)	\$ 230	NM
Total Natural Gas Production Expenses	\$ 22,737	\$ 24,484	\$ 64,969	\$ 10,868	\$ 10,522	-17.5%
Natural Gas Well Head Purch., Interco. Trans.	\$ 65,711,239	\$ 51,655,276	\$ 34,542,457	\$ 66,875,119	\$ 131,035,488	18.8%
Natural Gas City Gate Purchases	24,460	25,233	40,382	56,907	71,973	31.0%
Purchases Gas Cost Adjustments	(3,200,081)	6,180,095	2,557,181	(10,699,890)	(10,898,248)	35.8%
Exchange Gas	(71,327)	13,948	30,229	6,580	117,690	NM
Purchased Gas Expenses	292,953	291,388	237,626	214,389	225,050	-6.4%
Gas Withdrawn from Storage - Debit	33,402,037	29,816,388	26,937,560	36,523,135	57,911,734	14.7%
Gas Delivered to Storage - Credit	(33,041,585)	(30,783,876)	(26,432,281)	(36,547,591)	(56,775,826)	14.5%
Gas Used for Other Utility Operations - Credit	(35,614)	(33,793)	(24,876)	(32,601)	(53,444)	10.7%
Total Gas Supply Operation Expenses	\$ 63,082,082	\$ 57,164,659	\$ 37,888,278	\$ 56,396,048	\$ 121,634,417	17.8%
Rents	\$ 10,732,289	\$ 10,719,895	\$ 12,203,574	\$ 13,572,480	\$ 13,271,646	5.5%
Total Underground Storage Expenses	\$ 10,732,289	\$ 10,719,895	\$ 12,203,574	\$ 13,572,480	\$ 13,271,646	5.5%
Operating Supervision and Engineering	\$ 1,894	\$ 4,689	\$ 7,813	\$ 3,870	\$ 5,108	28.1%
System Control and Load Dispatching	\$ 4,931	\$ 5,429	\$ 5,948	\$ 7,475	\$ 15,015	32.1%
Compressor Station Labor and Expenses	\$ 1,123	\$ 2,478	\$ 3,801	\$ 206	\$ 2,601	23.4%
Gas for Compressor Station Fuel	\$ 26	\$ 5	\$ 158	\$ -	\$ -	-100.0%
Mains Expenses	\$ 370,109	\$ 338,332	\$ 429,190	\$ 693,786	\$ 434,444	4.1%
Measuring and Regulating Station Expenses	\$ 53,984	\$ 70,049	\$ 67,944	\$ 69,432	\$ 81,187	10.7%
Transmission and Compression of Gas by Oth.	\$ 26,601,044	\$ 24,014,518	\$ 26,664,650	\$ 27,062,472	\$ 27,853,289	1.2%
Other Expenses	\$ 36,341	\$ 10,956	\$ 23,452	\$ 17,677	\$ 10,160	-27.3%
Rents	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	0.0%
Maintenance Supervision and Engineering	\$ -	\$ -	\$ 325	\$ -	\$ -	NM
Maintenance of Structures and Improvements	\$ 2,061	\$ 2,852	\$ 2,792	\$ 10,202	\$ 9,691	47.3%
Maintenance of Mains	\$ 148,111	\$ 108,180	\$ 253,724	\$ 207,637	\$ 315,829	20.8%
Maintenance of Compressor Station Equipment	\$ 73	\$ 36	\$ -	\$ -	\$ 84	3.6%
Maintenance of Measuring and Reg. Stat. Equip.	\$ 13,143	\$ 21,957	\$ 26,168	\$ 36,961	\$ 40,738	32.7%
Maintenance of Other Equipment	\$ 16,662	\$ 10,797	\$ 9,825	\$ 12,440	\$ 13,751	-4.7%
Operation Supervision and Engineering	\$ 2,581,867	\$ 2,863,426	\$ 2,889,680	\$ 3,583,790	\$ 4,557,122	15.3%
Total Transmission O&M Expenses	\$ 29,831,376	\$ 27,453,711	\$ 30,385,477	\$ 31,705,955	\$ 33,339,026	2.8%
Distribution Load Dispatching	\$ 615,326	\$ 618,851	\$ 609,382	\$ 606,820	\$ 801,838	6.8%
Compressor Station Labor and Expenses	16,793	22,360	24,271	26,770	12,097	-7.9%
Compressor Station Fuel and Power (Mjr Only)	-	-	56	149	12	NM
Mains and Services Expenses	3,955,734	3,317,206	3,379,449	3,311,916	4,017,474	0.4%
Measuring and Reg. Station Expenses - General	218,152	251,445	275,516	250,157	286,168	7.0%
Measuring and Reg. Station Expenses - Ind.	128,190	121,795	109,804	100,197	138,718	2.0%
Measuring and Reg. Station Exp. - City Gate	6,228	6,198	5,467	6,640	11,864	17.5%
Meter and House Regulator Expenses	789,395	844,004	649,052	718,840	825,280	1.1%
Customer Installations Expenses	672,544	635,710	632,968	740,289	975,200	9.7%
Other Expenses	3,667,414	3,712,156	4,187,028	4,362,541	4,984,464	8.0%
Rents	82,372	85,883	88,351	89,299	92,088	2.8%
Maintenance Supervision and Engineering	478,126	508,927	468,155	453,022	594,783	5.6%
Maintenance of Structures and Improvements	391,695	486,840	413,193	422,758	496,717	6.1%
Maintenance of Mains	1,529,349	1,402,391	1,328,700	1,469,468	1,645,690	1.8%
Maintenance Of Compressor Station Equipment	1,002	1,421	1,610	-	510	-15.5%
Maint. of Measuring & Reg. Station Equip. - Gen.	114,679	130,763	138,169	111,801	184,825	12.7%
Maint. of Measuring & Reg. Station Equip. - Ind.	149,191	117,789	71,688	76,774	64,336	-19.0%
Maintenance of Services	341,166	398,845	405,591	347,746	412,313	4.8%
Maintenance of Meters & House Regulators	332,770	332,628	342,662	388,985	379,860	3.4%
Maintenance of Other Equipment	133,275	125,510	126,722	124,799	114,439	-3.7%
Total Distribution O&M Expenses	\$ 13,623,401	\$ 13,120,722	\$ 13,257,834	\$ 13,608,971	\$ 16,038,676	4.2%
Supervision	\$ 623,849	\$ 936,477	\$ 901,770	\$ 875,348	\$ 904,962	9.7%
Meter Reading Expenses	\$ 1,270,457	\$ 1,401,714	\$ 1,124,238	\$ 1,152,899	\$ 1,407,470	2.6%
Customer Records & Collection Expenses	7,369,689	7,439,358	6,245,763	6,409,741	5,977,946	-5.1%
Uncollectable Accounts	2,903,508	2,749,234	3,879,616	3,562,194	3,328,733	3.5%
Misc. Customer Accounts Expenses	400,816	257,025	233,872	395,753	326,413	-5.0%
Total Customer Account Operations Expenses	\$ 12,568,319	\$ 12,783,808	\$ 12,385,259	\$ 12,395,935	\$ 11,945,524	-1.3%

NM = Not Meaningful

Source: National Fuel Gas Distribution Corporation's Annual Reports to the Pennsylvania Public Utility Commission (2018 – 2022)

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DATA AND STATISTICS	2018	2019	2020	2021	2022	Compound Growth
Supervision	\$ 169,073	\$ 174,170	\$ 140,385	\$ 122,261	\$ 72,965	-18.9%
Customer Assistance Expenses	\$ 2,539,643	\$ 2,564,559	\$ 2,534,583	\$ 2,526,996	\$ 2,748,125	2.0%
Inform. & Instructional Advertising Expenses	581,318	536,272	617,187	605,141	538,173	-1.9%
Misc. Customer Service & Inform. Expenses	467,855	440,316	393,752	477,567	433,713	-1.9%
Total Cust. Ser. & Inform. Operations Exp	\$ 3,757,889	\$ 3,715,317	\$ 3,685,907	\$ 3,731,965	\$ 3,792,976	0.2%
Advertising Expenses	71,869	80,584	39,703	39,154	39,175	-14.1%
Total Operation Sales Expenses	\$ 71,869	\$ 80,584	\$ 39,703	\$ 39,154	\$ 39,175	-14.1%
Administrative and General Salaries	\$ 6,824,287	\$ 7,112,927	\$ 8,342,336	\$ 6,789,763	\$ 8,994,587	7.1%
Office Supplies and Expenses	3,268,874	3,823,956	3,998,889	4,370,368	4,423,966	7.9%
Administrative Expenses Transferred-Credit	(751,589)	(844,695)	(761,306)	(837,498)	(939,863)	NM
Outside Service Employed	304,765	450,102	474,133	533,936	687,164	22.5%
Property Insurance	30,004	36,684	44,687	58,064	69,824	23.5%
Injuries and Damages	1,324,916	1,387,285	1,846,546	1,257,312	1,423,111	1.8%
Employee Pensions and Benefits	16,574,442	11,356,705	13,691,720	(6,603,800)	4,934,107	-26.1%
Regulatory Commission Expenses	1,255,711	1,187,755	1,200,547	1,287,961	1,688,855	7.7%
Miscellaneous General Expenses	543,351	504,073	878,183	674,153	(384,094)	NM
Rents	909,491	976,670	986,595	926,229	1,038,355	3.4%
Maintenance of General Plant	177,329	236,891	243,163	320,811	321,579	16.0%
Total Admin. and General O&M Expenses	\$ 30,461,581	\$ 26,228,333	\$ 30,945,493	\$ 8,777,299	\$ 22,257,591	-7.5%
Total Gas O&M Expenses	\$ 164,151,543	\$ 151,291,513	\$ 140,856,494	\$ 140,238,675	\$ 222,329,553	7.9%
RECEIPTS BY VOLUME (MCF)						
Purchased Gas	21,342,147	20,509,736	19,592,863	19,806,404	21,512,205	0.2%
Gas of Others Received for Transportation	28,714,710	28,591,527	24,357,235	26,319,582	25,580,296	-2.8%
Exchange Gas Received	252,949	226,558	209,791	220,427	217,983	-3.7%
Gas from Storage	7,418,455	6,768,933	6,668,001	7,029,191	7,119,925	-1.0%
Total Receipts	57,728,261	56,096,754	50,827,890	53,375,604	54,430,409	-1.5%
DELIVERIES BY VOLUME (MCF)						
Residential	20,259,460	19,801,667	18,477,870	18,213,509	20,127,302	-0.2%
Commercial	10,179,550	10,082,733	9,088,186	9,231,857	10,054,756	-0.3%
Industrial	19,074,137	19,112,193	15,953,190	18,268,899	17,059,085	-2.8%
Other	118,983	-	-	-	-	-100.0%
Total Sales	49,632,130	48,996,593	43,519,246	45,714,265	47,241,143	-1.2%
Injected into Storage	7,324,328	6,823,111	6,887,334	7,387,841	7,047,326	-1.0%
Interdepartmental Sales	-	-	-	-	-	NM
Exchange Gas	278,984	221,965	198,165	225,849	198,119	-8.2%
Off-system Sales	-	-	-	-	-	0.0%
Gas Used by Company	-	-	-	-	-	0.0%
Other Deliveries	7,603,312	7,045,076	7,085,499	7,613,690	7,245,445	-1.2%
Total Deliveries (Sales & Other Deliveries)	57,235,442	56,041,669	50,604,745	53,327,955	54,486,588	-1.2%
UNACCOUNTED FOR GAS (MCF)						
Total Receipts	57,728,261	56,096,754	50,827,890	53,375,604	54,430,409	-1.5%
Less: Total Deliveries	57,235,442	56,041,669	50,604,745	53,327,955	54,486,588	-1.2%
Unaccounted For Gas	492,819	55,085	223,145	47,649	(56,179)	NM
UFG AS A % OF TOTAL RECEIPTS						
Unaccounted For Gas	492,819	55,085	223,145	47,649	(56,179)	NM
Total Receipts	57,728,261	56,096,754	50,827,890	53,375,604	54,430,409	-1.5%
% Unaccounted For Gas	0.9%	0.1%	0.4%	0.1%	-0.1%	NM
AVERAGE CUSTOMERS						
Residential	197,920	195,447	197,051	197,091	196,870	-0.1%
Commercial	15,988	15,916	15,987	16,102	16,167	0.3%
Industrial	590	594	597	594	595	0.2%
Other	-	-	-	-	-	0.0%
Totals	214,498	211,957	213,635	213,787	213,632	-0.1%
AVERAGE EMPLOYEES						
Totals	366	375	387	407	419	3.4%
GAS LINES						
Field Lines (M. Ft.)	27,172	25,903	25,939	25,944	25,916	-1.2%
Field Lines (Miles)	5,146	4,906	4,913	4,914	4,908	-1.2%
Services	193,776	193,845	193,665	191,247	193,591	0.0%

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Pennsylvania Public Utility Commission

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