

Implementation Plan
of
Philadelphia Gas Works to
the
Management and Operations Audit for the
Pennsylvania Public Utility Commission
Bureau of Audits
Docket No. D-2022-3030321



February 2023

Introduction

Philadelphia Gas Works (PGW) is pleased to submit this Implementation Plan for review by the Pennsylvania Public Utility Commission (PAPUC). The Implementation Plan is in response to the recommendations contained in the Management and Operations Audit Report (Docket No. D-2022-3030321) prepared by the PAPUC Bureau of Audits – Management Audit Division and issued on February 2, 2023. The Implementation Plan provides PGW’s commitment to act on the recommendations by addressing opportunities for improvement in operational effectiveness while improving service to our customers.

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Of the thirty-two (32) recommendations contained in the Audit Report, PGW has accepted twenty-six (26) of them completely, accepted in-part three (3), and rejected three (3).

As requested, this Implementation Plan details the actions to be taken, the expected completion dates and the individuals responsible for implementing each recommendation.

PGW management wishes to express its appreciation to the Audit staff for their collective efforts in assisting PGW in furthering the company’s program for continuous improvement. From the perspective of management this report is a very positive outcome to an extensive process and we look forward demonstrating the successful implementation of the recommendations we have accepted.

Chapter III – Corporate Governance

| | Description | Page | PGW Response |
|-------|---|-------------|---------------------|
| III-1 | Streamline corporate governance processes to efficiently align with PGW’s current regulatory framework. | 7 | Rejected |
| III-2 | Streamline the annual budget approval process. | 8 | Accepted in Part |
| III-3 | Establish committee charters for all PFMC board committees. | 9 | Rejected |
| III-4 | Evaluate director performance annually to identify opportunities for improvement and to ensure emerging needs and priorities are met. | 10 | Rejected |

Chapter IV – Executive Management and Organizational Structure

| | Description | Page | PGW Response |
|------|---|-------------|---------------------|
| IV-1 | Develop specific guidance for span of control expectations, periodically review spans of control, and document any narrow or wide spans for PGW’s management positions. | 11 | Accepted |
| IV-2 | Implement a safety management system and improve safety culture at PGW. | 12 | Accepted |

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Chapter V – Financial Management

| | Description | Page | PGW Response |
|-----|--|-------------|---------------------|
| V-1 | Update Internal Audit policies and procedures. | 13 | Accepted |
| V-2 | Formally document explanations for variances from the capital and operating budgets. | 14 | Accepted |

Chapter VI – Gas Operations

| | Description | Page | PGW Response |
|------|---|-------------|---------------------|
| VI-1 | Implement a policy and metrics-tracked plan to replace mercury regulators within the distribution system. | 15 | Accepted |
| VI-2 | Accelerate cast iron main replacement. | 16 | Accepted |
| VI-3 | Plan and implement a process for gathering equipment and installation data in the GIS database. | 17 | Accepted |
| VI-4 | Reorganize the CARC reporting structure to eliminate conflicts of interest with the SVP of Operations. | 18 | Accepted |

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Chapter VII – Emergency Preparedness

| | Description | Page | PGW Response |
|-------|---|-------------|---------------------|
| VII-1 | File Self-Certification forms with the Pennsylvania PUC annually. | 19 | Accepted |
| VII-2 | Correct various deficiencies in physical security. | 20 | Accepted |
| VII-3 | Establish a company-wide program for inspections for safety, security, medical, and fire equipment, and make assessable standardized first aid kits at all regularly occupied facilities. | 21 | Accepted |
| VII-4 | Explore ways to eliminate or mitigate the identified security risk through a business case analysis. | 22 | Accepted |
| VII-5 | Increase focus on cybersecurity by developing a dedicated cybersecurity budget, performing a staffing study and adjusting resources as needed, and create an executive level cybersecurity leadership position. | 23 | Accepted |
| VII-6 | Reinforce contingencies with the OT systems by cross-training, increasing resources, or by some other method. | 24 | Accepted |
| VII-7 | Document the threshold where cybersecurity risks will be relayed to the cabinet and board levels. | 25 | Accepted |
| VII-8 | Implement a cybersecurity-focused risk registry. | 26 | Accepted |

Chapter VIII – Materials Management

| | Description | Page | PGW Response |
|--------|--|-------------|---------------------|
| VIII-1 | Document the policies and procedures of PGW's cycle counting function. | 27 | Accepted |
| VIII-2 | Implement and/or increase automation of materials management processes to improve efficiency, accuracy, and ease-of-use. | 28 | Accepted |

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Chapter IX – Customer Service

| | Description | Page | PGW Response |
|------|--|-------------|---------------------|
| IX-1 | Leverage pandemic and low-income resources to help reduce the overall level of outstanding customer balances and maintain outreach efforts to engage payment troubled customers. | 29 | Accepted in Part |
| IX-2 | Improve customer service performance through expanding call center resources. | 30 | Accepted |
| IX-3 | Complete implementation of the replacement CIS. | 31 | Accepted |
| IX-4 | Establish reporting and key performance metrics for all back-office activities that support electronic, self-service, and alternative exchanges with customers. | 32 | Accepted |
| IX-5 | Repurpose or divest interest in district offices and reallocate resources to benefit PGW ratepayers. | 33 | Accepted in Part |

Chapter X – Information Technology

| | Description | Page | PGW Response |
|-----|---|-------------|---------------------|
| X-1 | Establish IS departmental performance metrics for transparency, evaluation, and improvement of productivity and efficiency. | 34 | Accepted |
| X-2 | Leverage and integrate data visualization software consistently across PGW. | 35 | Accepted |

Chapter XI – Fleet Management

| | Description | Page | PGW Response |
|------|---|-------------|---------------------|
| XI-1 | Improve efficiencies within the fleet department. | 36 | Accepted |

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Chapter XII – Human Resources and Diversity

| | Description | Page | PGW Response |
|-------|--|-------------|---------------------|
| XII-1 | Implement strategies for recruitment and retention of “at-risk” positions. | 37 | Accepted |
| XII-2 | Drive safety performance to meet industry standards. | 38 | Accepted |

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|--|---|----|--|
| | Appendix A- Glossary of Terms and their Acronyms | 39 | |
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|----------------------------------|---|
| Recommendation III-1: | Streamline corporate governance processes to efficiently align with PGW's current regulatory framework. |
| Response: | Rejected |
| Action Plan: | This recommendation is beyond the authority of PGW Management to address and is therefore rejected. |
| Individual Responsible: | Seth A. Shapiro – President and CEO |
| Expected Completion Date: | N/A |

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|----------------------------------|---|
| Recommendation III-2: | Streamline the annual budget approval process. |
| Response: | Accepted in part |
| Action Plan: | This recommendation is beyond the authority of PGW Management to address and is therefore only accepted in part. PGW has proposed streamlining modifications to the budgetary process to the Philadelphia Gas Commission (“PGC”) which has the sole authority to implement process changes. PGW is awaiting action by the PGC on its proposal. Based upon the disposition of this request PGW will institute any changes approved by the PGC. |
| Individual Responsible: | Raquel Guzmán – SVP, Administration and General Counsel |
| Expected Completion Date: | August 31, 2024 |

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Recommendation III-3: Establish committee charters for all PFMC board committees.

Response: Rejected

Action Plan: This recommendation is beyond the authority of PGW Management to address. However, PGW will share the recommendation with PFMC.

Individual Responsible: Seth A. Shapiro – President and CEO

Expected Completion Date: N/A

PGW Management and Operations Audit
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|----------------------------------|---|
| Recommendation III-4: | Evaluate director performance annually to identify opportunities for improvement and to ensure emerging needs and priorities are met. |
| Response: | Rejected |
| Action Plan: | This recommendation is beyond the authority of PGW Management to address. However, PGW will share the recommendation with PFMC. |
| Individual Responsible: | Seth A. Shapiro – President and CEO |
| Expected Completion Date: | N/A |

PGW Management and Operations Audit
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|----------------------------------|---|
| Recommendation IV-1: | Develop specific guidance for span of control expectations, periodically review spans of control, and document any narrow or wide spans for PGW's management positions. |
| Response: | Accepted |
| Action Plan: | PGW will conduct an analysis to develop specific guidance on its spans of control. PGW will then determine how and which aspects of it should be implemented. Once this is accomplished a decision will be made by senior management on next steps. |
| Individual Responsible: | William J. Ambrose, Jr. – VP, HR & Organizational Dev |
| Expected Completion Date: | March 2025 |

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|-----------------------------------|---|
| Recommendation IV-2: | Implement a safety management system and improve safety culture at PGW. |
| Response: | Accepted |
| Action Plan: | <p>In early 2022, PGW engaged an industry-proven third-party vendor to provide a GAP analysis, Road Map, and Framework to align PGW with API RP1173. A key part of this process will be the identification and implementation of a Safety Management System (SMS) structure. Implementation of an SMS, as part of the overall adoption of the API RP1173 standard, will improve safety performance and culture throughout PGW.</p> <p>PGW is reviewing the recommendations from the vendor and will apply appropriate resources toward the implementation of API RP1173. Although there will be annual benchmarks, it is anticipated full SMS implementation will be completed within a five-year timeframe on or before February 15, 2028.</p> |
| Individual Responsible: | Edward Fennell – Sr Dir, Safety, Security & Bus |
| Estimated completion Date: | 0-60 Months |

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Recommendation V-1: Update Internal Audit policies and procedures.

Response: Accepted

Action Plan: The Internal Audit (IA) Department accepts the PUC's recommended action(s) and will update its internal departmental policies and procedures within the suggested timeframe.

Individual Responsible: Darnell Folk – Internal Auditor ii

Expected Completion Date: August 15, 2023

PGW Management and Operations Audit
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|----------------------------------|---|
| Recommendation V-2: | Formally document explanations for variances from the capital and operating budgets. |
| Response: | Accepted |
| Action Plan: | PGW will develop a formal procedure to document explanations for variances from the capital and operating budgets. This procedure will include enhancing PGW's reporting capabilities to allow more detailed review by expenditure categories. PGW will utilize the capabilities of Tableau as a vehicle to improve variance reporting. |
| Individual Responsible: | William Gallagher – Vice President Budget and Strategic Development |
| Expected Completion Date: | August 31, 2023 |

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| Recommendation VI-1: | Implement a policy and metrics-tracked plan to replace mercury regulators within the distribution system. |
| Response: | Accepted |
| Action Plan: | Starting in 2022, PGW began developing a plan and metrics to track and replace mercury regulators within the distribution system at an expedited pace. |
| Individual Responsible: | Joseph Hawkinson – Vice President of Field Operations |
| Expected Completion Date: | March 1, 2024 |

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| Recommendation VI-2: | Accelerate cast iron main replacement. |
| Response: | Accepted |
| Action Plan: | In July of 2022, PGW applied for \$45 million in funding from the Natural Gas Distribution Infrastructure Safety and Modernization Grant to accelerate cast iron main replacement. The grant would enable PGW to replace approximately 24 miles of at-risk cast iron main over five years. |
| Individual Responsible: | Joseph Hawkinson – Vice President of Field Operations |
| Expected Completion Date: | December 1, 2024 |

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| Recommendation VI-3: | Plan and implement a process for gathering equipment and installation data in the GIS database. |
| Response: | Accepted |
| Action Plan: | PGW is in the process of evaluating processes and technology for gathering data in the GIS database. This evaluation requires analyzing hardware, software, and the functionality of field practices to ensure both fiscal and operational efficiency. This is an ongoing collaborative effort between Field Operations and Data Analytics. |
| Individual Responsible: | Joseph Hawkinson – Vice President of Field Operations |
| Expected Completion Date: | September 1, 2025 |

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| Recommendation VI-4: | Reorganize the CARC reporting structure to eliminate conflicts of interest with the SVP of Operations. |
| Response: | Accepted |
| Action Plan: | As of January 1, 2023, the responsibilities of Customer and Regulatory Affairs, which includes the PUC technical compliance responsibilities, have been realigned and no longer fall within the Operations hierarchy. Customer and Regulatory Affairs reports up thorough Senior Vice President of Customer and Regulatory Affairs, Denise Adamucci, who reports directly to Seth Shapiro, CEO. |
| Individual Responsible: | Denise Adamucci – SVP of Customer and Regulatory Affairs and Robert Smith – SVP of Operations and Supply Chain |
| Expected Completion Date: | January 1, 2023 |

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|----------------------------------|---|
| Recommendation VII-1: | File Self-Certification forms with the Pennsylvania PUC annually. |
| Response: | Accepted |
| Action Plan: | PGW will file a Public Utility Security Planning and Readiness Self Certification Form for Year 2023 as required. PGW previously filed the form with its Annual Report. |
| Individual Responsible: | Raquel N. Guzmán – SVP, Administration & General |
| Expected Completion Date: | 0-6 Months |

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Recommendation VII-2: Correct various deficiencies in physical security.

Response: Accepted

Action Plan: PGW Security and Loss Prevention has recently completed a comprehensive security assessment of PGW locations. As a result:

The Facilities Department will:

1. Complete a detailed review of the physical security assessment and implement a correct action plan.
2. Review current Building Inspection Sheets and procedures and revise to address findings and other best practices.
3. Implement a high level interdepartmental periodic review of inspections.

The Security Department will:

1. Assist the Facilities Department in prioritizing deficiencies and identifying current best practices.
2. Continue to regularly schedule reviews of the physical security of all PGW locations.

Individual Responsible: John Zuk – SVP, Gas Management and Edward Fennell – Sr Dir, Safety, Security & Bus

Estimated completion Date: On or before August 31, 2024.

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Recommendation VII-3: Establish a company-wide program for inspections for safety, security, medical, and fire equipment, and make assessable standardized first aid kits at all regularly occupied facilities.

Response: Accepted. PGW currently does not provide access to first aid kits to office personnel at its headquarters, as there is a staffed medical department on site.

Action Plan: PGW currently provides standardized first aid kits at various locations.

Regarding a program for inspections of safety, security, medical, and fire equipment:

Facilities Department:

1. Building Safety inspections are managed through the computer maintenance management system. Review current Building Inspection Sheet and procedures and revise to address findings and other best practices.
2. Create listing and/or mapping of first aid kits to ensure all are inspected.
3. Implement high level interdepartmental periodic review of inspections.

Security/Safety Departments:

1. Participate in high level interdepartmental periodic review of Safety/Security inspections.
2. PGW will maintain a first aid kit at the security desk, at headquarters, for out of hours accessibility. This kit will be inspected with the same frequency as other safety and security equipment.
3. PGW will provide first aid kits at all other regularly occupied locations. These kits will also be inspected with the same frequency as other safety and security equipment.

Individual Responsible: John Zuk – SVP, Gas Management and Edward Fennell – Sr Dir, Safety, Security & Bus

Estimated completion Date: On or before February 15, 2024.

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Recommendation VII-4: Explore ways to eliminate or mitigate the identified security risk through a business case analysis.

Response: Accepted

Action Plan: PGW will complete an engineering study with an external firm to evaluate the feasibility and benefits of this recommendation.

Individual Responsible: Dan Cassidy – VP, Technical Operations

Expected Completion Date: March 1, 2024

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Recommendation VII-5: Increase focus on cybersecurity by developing a dedicated cybersecurity budget, performing a staffing study and adjusting resources as needed, and create an executive level cybersecurity leadership position.

Response: Accepted

Action Plan: PGW will partner with one or more vendors to perform a staffing study and will right size the security function according to the outcome of the study. PGW will develop a dedicated cybersecurity budget and create an executive level cybersecurity leadership position.

Individual Responsible: Frank Weigert – CIO

Expected Completion Date: September 29, 2023

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| Recommendation VII-6: | Reinforce contingencies with the OT systems by cross-training, increasing resources, or by some other method. |
| Response: | Accepted. Recommendation VII-6 |
| Action Plan: | PGW is in the process of identifying individuals that are best qualified for this effort. The plan is to have at least 2 resources capable of providing comprehensive technical support for the OT environment. In addition, there will be employees trained to support portions of the OT environment (i.e. routers, switches, antivirus) This will be a joined and continuous effort between the Information Security and IS Technical Services Teams at PGW. |
| Individual Responsible: | Jackie Zhou – Dir, Information Security and Joanne Kelly – Dir, Technical Services |
| Expected Completion Date: | Continuous effort, fully implemented by March 2025. |

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Recommendation VII-7: Document the threshold where cybersecurity risks will be relayed to the cabinet and board levels.

Response: Accepted

Action Plan: PGW will document the threshold where cybersecurity risks will be relayed to the cabinet and board levels and will partner with a vendor to facilitate the development and implementation of a cybersecurity risk register. The estimated completion date is September 29, 2023.

Individual Responsible: Jackie Zhou – Director Information Security

Expected Completion Date: September 29, 2023

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Recommendation VII-8: Implement a cybersecurity-focused risk registry.

Response: Accepted

Action Plan: See VII-7

Individual Responsible: Jackie Zhou – Director Information Security

Expected Completion Date: September 29, 2023

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| Recommendation VIII-1: | Document the policies and procedures of PGW's cycle counting function. |
| Response: | Accepted |
| Action Plan: | Update cycle count policies/procedures to include the thresholds warranting further investigation and the investigation process to resolve discrepancies. |
| Individual Responsible: | Anthony Mauro – VP, Supply Chain |
| Expected Completion Date: | June 30, 2023 |

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| Recommendation VIII-2: | Implement and/or increase automation of materials management processes to improve efficiency, accuracy, and ease-of-use. |
| Response: | Accepted |
| Action Plan: | Materials Management will continue to integrate systems and automate processes whenever required resources become available. |
| Individual Responsible: | Anthony Mauro – VP, Supply Chain |
| Expected Completion Date: | Ongoing |

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Recommendation IX-1: Leverage pandemic and low-income resources to help reduce the overall level of outstanding customer balances and maintain outreach efforts to engage payment troubled customers.

Response: Accepted in Part

Action Plan: PGW is engaged in an active LIHEAP outreach plan to assist and encourage its customers to take advantage of available grants. Recently, PGW submitted a new Universal Service & Energy Conservation Plan to the PUC and has received approval of that Plan. The Plan seeks to assist low-income customers, many of whom are payment troubled. PGW will shortly begin implementation of the programs approved in that Plan. With respect to other customers, PGW provides payment agreements and leveled billing for customers, and utilizes regulated collection practices to assist customers with managing their debt.

Individual Responsible: Denise Adamucci – SVP, Customer & Reg Affairs

Expected Completion Date: Universal Service Plan active through 2027.

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| Recommendation IX-2: | Improve customer service performance through expanding call center resources. |
| Response: | Accepted |
| Action Plan: | To improve staffing levels, since the spring of 2022, PGW has onboarded four new hire customer service representative (CSR) classes equating to 38 new CSRs. In 2023, PGW anticipates onboarding additional new hire CSR classes. Also, to improve staffing levels, PGW has been using the services of outside contract call centers since the summer of 2022. |
| Individual Responsible: | Denise Adamucci – SVP, Customer & Reg Affairs and Bernard Cummings – VP, Customer Service & Collect |
| Expected Completion Date: | December 31, 2024 |

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|----------------------------------|---|
| Recommendation IX-3: | Complete implementation of the replacement CIS. |
| Response: | Accepted. PGW is in the process of working to replace its current CIS. |
| Action Plan: | PGW's CIS replacement is underway, with significant project management planning resources developing schedules and working to resolve any impediments to implementation. Currently, a go-live with a new CIS is expected to occur by the end of calendar year 2023. |
| Individual Responsible: | Denise Adamucci – SVP, Customer & Reg Affairs and Frank Weigert – CIO & VP, Info Services |
| Expected Completion Date: | December 31, 2023 |

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Recommendation IX-4: Establish reporting and key performance metrics for all back-office activities that support electronic, self-service, and alternative exchanges with customers.

Response: Accepted

Action Plan: Currently, PGW has a Customer Self-Service KPI. The current KPI at the moment focus is more on concepts related to electronic interactions related to payments. Moving forward, PGW will work to develop internal metrics and dashboards that report and track back-office activities beyond payments.

Individual Responsible: Denise Adamucci – SVP, Customer & Reg Affairs and Bernard Cummings – VP, Customer Service & Collect

Expected Completion Date: September 30, 2023

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Recommendation IX-5: Repurpose or divest interest in district offices and reallocate resources to benefit PGW ratepayers.

Response: Accepted in Part

Action Plan: Due to PGW's ownership and governance structure, decisions concerning the divesting of the physical assets of the district offices will be determined in conjunction with its owner the City of Philadelphia.

However, in regards to the reallocation of personnel once dedicated to the district offices, those employees have been reallocated to other areas of Customer Affairs. Also, other non-personnel operating, and capital expenditures previously dedicated to the district offices have been dedicated to other business objectives.

Individual Responsible: Denise Adamucci – SVP, Customer & Reg Affairs and Bernard Cummings – VP, Customer Service & Collect

Expected Completion Date: December 31, 2024

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|----------------------------------|--|
| Recommendation X-1: | Establish IS departmental performance metrics for transparency, evaluation, and improvement of productivity and efficiency. |
| Response: | Accepted. PGW accepts recommendation X-1 |
| Action Plan: | While Information Services has continued to track several metrics internally, we have already begun the process of reviewing existing metrics regarding their usefulness for the organization. We are identifying additional new metrics and will create a Tableau dashboard with Key performance indicators that will be published to the organization. Due to the involvement of several key resources with the CIS project and the desired level of automation for this reporting effort, we anticipate this to be completed by March 1, 2024. However, we will publish metrics available today at an earlier date. |
| Individual Responsible: | Frank Weigert – CIO |
| Expected Completion Date: | March 1, 2024 |

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Recommendation X-2: Leverage and integrate data visualization software consistently across PGW.

Response: Accepted

Action Plan: The Data & Analytics department was formed as a hub and spoke organization. The idea was to have data experts curating data sources for departmental stewards to transform into visualizations to inform, answer and support critical business decisions. Data & Analytics has recently deployed the Tableau Champions Program to identify, educate and empower departmental users of the Tableau product. These Champions will help promote a data driven culture at the departmental level, putting data at the center of every conversation and business decision. They will serve as liaisons and will partner with the Data & Analytics department to accelerate the adoption of the data visualization software here at PGW. We estimate a company-wide adoption to be completed by March of 2025.

Individual Responsible: Dan Furtek – VP Data Analytics

Expected Completion Date: March 31, 2025

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Recommendation XI-1: Improve efficiencies within the fleet department.

Response: Accepted

Action Plan: The Fleet Department's move to the new North Operations Center in 2023 will address many of the inefficiencies noted in the audit report. In addition, the Fleet Department will look to identify and implement process improvements to increase wrench time and reduce indirect time.

Individual Responsible: Anthony Mauro – VP, Supply Chain

Expected Completion Date: January 31, 2024

PGW Management and Operations Audit
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|----------------------------------|--|
| Recommendation XII-1: | Implement strategies for recruitment and retention of “at-risk” positions. |
| Response: | Accepted |
| Action Plan: | Currently in progress |
| Individual Responsible: | William J. Ambrose, Jr. – VP, HR & Organizational Dev |
| Expected Completion Date: | March 2026 |

PGW Management and Operations Audit
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|-----------------------------------|--|
| Recommendation XII-2: | Drive safety performance to meet industry standards. |
| Response: | Accepted. As a municipal natural gas utility, PGW statistics should be compared to companies engaged in similar work (construction, appliance repair) in an exclusively urban environment. Additionally, unlike many other companies, PGW does not contract out its physical labor such as excavation, with the result that a higher percentage of heavy work means a higher percentage of injuries from said heavy work as a result of increased risk. Comparing PGW's injury/accident statistics to general BLS statistics, or even utility worker statistics for non-urban environments, does not provide a fully appropriate comparison. |
| Action Plan: | PGW will continue to align with the natural gas industry following best practices for safety. PGW will also continue with the implementation of a Safety Management System (SMS) that will result in additional policies and procedures designed to reduce injuries and accidents. PGW will also participate in safety related industry activities to remain up to date. Additionally, see response to IV-2 inclusive of an implementation timeline with a completion date on or before February 15, 2028. |
| Individual Responsible: | Edward Fennell – Sr Dir, Safety, Security & Bus |
| Estimated completion Date: | 0-24 Months |

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Appendix A: Glossary

A.

| Item | Acronym | Description |
|---|----------------|--------------------|
| accounts payable | A/P | |
| affirmative action | AA | |
| affirmative action plan | AAP | |
| American Gas Association | AGA | |
| automated call director | ACD | |
| automated clearinghouse | ACH | |
| Automated Computer Aided Drafting | AutoCAD | |
| Automated Data Processing | ADP | |
| Automated Information Management System | AIMS/AIMS2 | |
| automated meter reading | AMR | |
| automated time management system | ATMS | |
| automatic external defibrillator | AED | |

B.

| Item | Acronym | Description |
|---------------------------------------|----------------|--------------------|
| Bank of America | BOA | |
| Billing Collection & Customer Service | BCCS | |
| billion cubic feet | Bcf | |
| Board of Directors | BOD | |
| British thermal unit | BTU | |

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|------------------------------------|-----|--|
| Bureau of Consumer Service | BCS | |
| Business Technology Consultant | BTC | |
| Business Transformation | BT | |
| business transformation | BT | |
| Business Transformation Initiative | BTI | |

| Item | Acronym | Description |
|--|----------------|--------------------|
| Business Transformation Steering Committee | BTSC | |
| business unit | BU | |

C.

| Item | Acronym | Description |
|-----------------------------------|----------------|--------------------|
| calendar year | CY | |
| Cannot Get In | CGI | |
| Chief Executive Officer | CEO | |
| Chief Financial Officer | CFO | |
| Chief Information Officer | CIO | |
| Chief Operating Officer | COO | |
| Cincinnati Gas & Electric Company | CG&E | |
| code division multiple access | CDMA | |
| commercially-off-the-shelf | COTS | |
| compressed natural gas | CNG | |
| continuing property records | CPR | |
| contract management system | CMS | |
| corrective maintenance | CM | |

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|---------------------------------|-----|--|
| Credit & Collections | C/C | |
| customer assistance program | CAP | |
| Customer Contact Center | C3 | |
| Customer Responsibility Program | CRP | |
| Customer Review Unit | CRU | |
| customer service center | CSC | |
| customer service representative | CSR | |



D.

| Item | Acronym | Description |
|---|----------------|--------------------|
| database administrator | DBA | |
| decathehrs | DTH | |
| Delaware Department of Transportation | DelDot | |
| Item | Acronym | Description |
| Department of Transportation | DOT | |
| disabled-owned business enterprise | DBE | |
| Dispute Resolution Unit | DRU | |
| Distribution Integrity Management Program | DIMP | |



E.

| Item | Acronym | Description |
|-----------------------------|----------------|--------------------|
| electronic data interchange | EDI | |
| electronic funds transfer | EFT | |
| end of year | EOY | |

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|---|------|--|
| Energy Insurance Mutual | EIM | |
| enterprise resource planning | ERP | |
| enterprise risk management | ERM | |
| Enterprise Steering Committee | ESC | |
| equal employment opportunity | EEO | |
| Equal Employment Opportunity Commission | EEOC | |
| Expert Agent Selection | EAS | |



F.

| Item | Acronym | Description |
|--------------------------------------|----------------|--------------------|
| Federal Energy Regulatory Commission | FERC | |
| Field Services Department | FSD | |
| file/print | F/P | |
| financial size category | FSC | |
| fiscal year | FY | |
| Fixed Utility Services | FUS | |
| Fleet Operations | FO | |
| Flexible Spending Account | FSA | |
| free-is-good | FIG | |
| full-time equivalent | FTE | |

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G.

| Item | Acronym | Description |
|-------------------------------|----------------|--------------------|
| gas cost recovery | GCR | |
| Gas Industry Standards Board | GISB | |
| Gas Processing Department | GPD | |
| General Counsel | GC | |
| general ledger | G/L | |
| geographic information system | GIS | |

H.

| Item | Acronym | Description |
|--|----------------|--------------------|
| heating, ventilation, and air conditioning | HVAC | |
| Human Resource Information System | HRIS | |
| Human Resources | HR | |

I.

| Item | Acronym | Description |
|---|----------------|--------------------|
| Information Services | IS | |
| Information Systems Audit and Control Association | ISACA | |
| information technology | IT | |
| instruction set architecture | ISA | |
| integrated voice response | IVR | |
| Internal Audit | IA | |
| International Customer Management Institute | ICMI | |
| International Swaps & Derivative Association | ISDA | |

PGW Management and Operations Audit
Implementation Plan

J.

| Item | Acronym | Description |
|-------------|----------------|--------------------|
| | | |

K.

| Item | Acronym | Description |
|---------------------------|----------------|--------------------|
| key performance indicator | KPI | |

L.

| Item | Acronym | Description |
|---|----------------|--------------------|
| Landlord Cooperation Program | LCP | |
| liquid natural gas | LNG | |
| Living Disaster Recovery Planning System | LDRPS | |
| local area network | LAN | |
| local distribution company | LDC | |
| long-term disability | LTD | |
| Low Income Home Energy Assistance Program | LIHEAP | |

M.

| Item | Acronym | Description |
|--------------------------------------|----------------|--------------------|
| Main Replacement Prioritization | MRP | |
| Materials Management Department | MMD | |
| Medical Review Officer | MRO | |
| Meter Investigation Unit | MIU | |
| minority business enterprise | MBE | |
| Minority Business Enterprise Council | MBEC | |

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Implementation Plan

| | | |
|---------------------------------------|-------|--|
| Minority Supplier Development Council | MSDC | |
| minority/women business enterprise | M/WBE | |
| thousand cubic feet | Mcf | |

N.

| Item | Acronym | Description |
|--|----------------|--------------------|
| National Association of Securities Dealers | NASD | |
| National Association of Women Business Owners | NAWBO | |
| Natural Gas Approved Standardized Buy/Sell Agreement | NASBY | |
| New Jersey Department of Transportation | NJDot | |
| New York Stock Exchange | NYSE | |
| non-payment shutoff program | NPSO | |
| not-to-exceed | NTE | |

O.

| Item | Acronym | Description |
|---|----------------|--------------------|
| Office of Federal Contract Compliance Program | OFCCP | |
| operations and maintenance | O&M | |
| Operations Systems Support | OSS | |
| Organizational Development | OD | |
| overtime | OT | |

P.

| Item | Acronym | Description |
|----------------------|----------------|--------------------|
| Parts and Labor Plan | PLP | |

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Implementation Plan

| | | |
|---|---------|---|
| payback period | PBP | |
| payment arrangement | PAR | |
| Pennsylvania Department of Transportation | PennDOT | |
| Pennsylvania Human Relations Commission | PaHRC | |
| Pennsylvania Public Utility Commission | PaPUC | |
| performance improvement plan | PIP | |
| personal computer | PC | |
| Philadelphia Commission on Human Relations | PCHR | |
| Philadelphia Facilities Management Corporation | PFMC | |
| Philadelphia Gas Commission | PGC | Same acronym as purchased gas costs |
| Philadelphia Gas Works | PGW | |
| Philadelphia Housing Authority | PHA | |
| Philadelphia Human Rights Commission | PHRC | |
| preventive maintenance | PM | |
| Pricewaterhouse Coopers, LLC | PwC | |
| project management office | PMO | |
| Project Management Professional | PMP | |
| Public Utility Commission | PUC | |
| purchase order | PO | |
| purchased gas costs | PGC | Same acronym as Philadelphia Gas Commission |
| Purchasing Management Association of Philadelphia | PMAP | |

Q.

| Item | Acronym | Description |
|-------------|----------------|--------------------|
|-------------|----------------|--------------------|

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Implementation Plan

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|------------------------------|------------------|--|
| quality assurance | QA | |
| quality-of-service isolation | QoS isolation | |

R.

| Item | Acronym | Description |
|-------------------------------|----------------|--------------------|
| request for proposal | RFP | |
| request for quote | RFQ | |
| Return Material Authorization | RMA | |
| Revenue Protection Unit | RPU | |

S.

| Item | Acronym | Description |
|---|----------------|--------------------|
| Sarbanes-Oxley Act | SOX | |
| Securities and Exchange Commission | SEC | |
| Senior Vice President | SVP | |
| separate trading of interest and principal securities | STRIPS | |
| service level agreement | SLA | |
| Small Business Administration | SBA | |
| Source of Authority | SOA | |
| Southeastern Pennsylvania Transportation Authority | SEPTA | |
| storage area network | SAN | |
| Strategic Alignment Score | SAS | |
| Strategic Focused Organization | SFO | |
| Supervisory Control and Data Acquisition | SCADA | |
| Supply Chain | SC | |

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Implementation Plan

T.

| Item | Acronym | Description |
|-----------------------------|----------------|--------------------|
| tax-exempt commercial paper | TXCP | |
| third-party administrator | TPA | |
| Transcontinental Pipeline | Transco | |

U.

| Item | Acronym | Description |
|--|----------------|--------------------|
| unaccounted-for gas | UAG | |
| Underground Facilities Database | UFD | |
| uninterruptible power supply | UPS | |
| United States Department of Transportation | USDOT | |
| Utility Emergency Service Fund | UESF | |
| Utility Workers Union of America | UWUA | |

V.

| Item | Acronym | Description |
|-----------------|----------------|--------------------|
| Vice President | VP | |
| virtual machine | VM | |

W.

| Item | Acronym | Description |
|---------------------------|----------------|--------------------|
| wide area network | WAN | |
| women business enterprise | WBE | |

PGW Management and Operations Audit
Implementation Plan

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|-----------------------|----|--|
| workers' compensation | WC | |
|-----------------------|----|--|

X, Y.

| Item | Acronym | Description |
|-------------|----------------|--------------------|
| | | |

Z.

| Item | Acronym | Description |
|----------------------|----------------|--------------------|
| zero balance account | ZBA | |