

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**VOLUME II**

**TESTIMONY AND EXHIBITS**

**ON BEHALF OF  
PHILADELPHIA GAS WORKS**

**PHILADELPHIA GAS WORKS**

**R-2025-3053112**

**FEBRUARY 2025**

**Philadelphia Gas Works  
2025 Base Rate Case**

**Docket No. F-2025-3053112**

**INDEX OF  
DIRECT TESTIMONY**

<b>Tab No.</b>	<b>Statement</b>
1	Statement 1 – Denise Adamucci
2	Statement 2 – Joseph F. Golden, Jr.
3	Statement 3 – James Christopher Lover
4	Statement 4 – Harold Walker
5	Statement 5 – Gregory R. Herbert
6	Statement 6 – Florian Teme
7	Statement 7 – Robert K. Smith
8	Statement 8 – Ronald Amen
9	Statement 9 – Ryan Reeves

# Tab 1

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

**DENISE ADAMUCCI**

ON BEHALF OF  
PHILADELPHIA GAS WORKS

Docket No. R-2025-3053112

Philadelphia Gas Works  
General Rate Increase Request

TOPICS:

Rate Filing Overview  
Support for Rate Request  
Introduction of New Rate Design Proposals (RNA, Optional  
Prepaid Gas Arrangements, CSBC)  
Weather Normalization Adjustment  
Quality of Service  
Projected Affordability Impacts  
Compliance with Prior Commission Directives

February 27, 2025

**Table of Contents**

	<b>Page</b>
<b>I. INTRODUCTION.....</b>	<b>1</b>
<b>II. RATE FILING OVERVIEW AND INTRODUCTION OF WITNESSES .....</b>	<b>2</b>
<b>III. REASONS FOR REQUESTED RATE INCREASE.....</b>	<b>6</b>
<b>IV. RATE DESIGN PROPOSALS .....</b>	<b>7</b>
<b>A. REVENUE NORMALIZATION ADJUSTMENT (“RNA”) .....</b>	<b>9</b>
<b>1. General Overview of Purpose and Benefits.....</b>	<b>9</b>
<b>2. New Program Offerings .....</b>	<b>14</b>
<b>a. Expanded funding through rates for a new Health and Safety Program, based on PGW’s experience with a LIURP pilot program.....</b>	<b>15</b>
<b>b. Efficient Home Program .....</b>	<b>16</b>
<b>c. New Repair and Renew Program.....</b>	<b>20</b>
<b>3. Proposed Tariff Revisions for RNA and Proposed New Program Offerings .....</b>	<b>22</b>
<b>B. WEATHER NORMALIZATION ADJUSTMENT (“WNA”).....</b>	<b>22</b>
<b>C. OPTIONAL PREPAID GAS ARRANGEMENTS.....</b>	<b>23</b>
<b>D. CHOICE SUPPLIER BILL CHARGE (“CSBC”).....</b>	<b>23</b>
<b>V. PGW’S PROVISION OF SERVICE TO CUSTOMERS .....</b>	<b>25</b>
<b>A. Management Quality, Efficiency and Effectiveness .....</b>	<b>25</b>
<b>B. Service Quality and Reliability .....</b>	<b>28</b>
<b>1. Customer Service .....</b>	<b>28</b>
<b>VI. PROJECTED IMPACTS ON AFFORDABILITY AND UNIVERSAL SERVICE.....</b>	<b>29</b>
<b>A. Affordability Generally .....</b>	<b>29</b>
<b>B. PGW’s Protections for Low-Income Customers.....</b>	<b>35</b>
<b>VII. PRIOR COMMISSION DIRECTIVES.....</b>	<b>38</b>
<b>VIII. CONCLUSION .....</b>	<b>39</b>

**TABLE OF EXHIBITS**

Number	Description
DA/RJA-1	52 Pa. Code § 69.3302 Factors In Support of PGW’s Proposed Revenue Normalization Adjustment (RNA)
DA/RJA-2	52 Pa. Code § 69.3302 Factors In Support of PGW’s Weather Normalization Adjustment (WNA)

1     **I.     INTRODUCTION**

2     **Q.     PLEASE STATE YOUR NAME AND CURRENT POSITION.**

3     A.     My name is Denise Adamucci and I am the Senior Vice President for Customer &  
4           Regulatory Affairs at Philadelphia Gas Works (“PGW” or “Company”).

5     **Q.     HOW LONG HAVE YOU HELD THIS POSITION?**

6     A.     I assumed my present position in January 2023. Prior to this position, I was Vice  
7           President of Regulatory Compliance and Customer Programs.

8     **Q.     WHAT ARE YOUR JOB RESPONSIBILITIES?**

9     A.     In my present position, I am responsible for the direction of all customer affairs and  
10          service, and Public Utility Commission (“Commission” or “PUC”) technical and  
11          regulatory compliance.

12    **Q.     PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.**

13    A.     I have been employed with PGW since 2004. I became PGW’s Vice President of  
14          Regulatory Compliance and Customer Programs in 2012. Prior to that, I worked in  
15          PGW’s Legal Department as a senior attorney. Before joining PGW, I worked in private  
16          practice at Manta and Welge, and then at Klett Rooney Lieber & Schorling (acquired by  
17          Buchanan Ingersoll & Rooney). I received an MA in English Literature from Arizona  
18          State University and a JD from Boston University School of Law.

19    **Q.     HAVE YOU EVER PROVIDED TESTIMONY BEFORE THIS COMMISSION?**

20    A.     Yes, most relevantly, I have provided testimony in PGW’s three more recent base rate  
21          cases (Docket Nos. R-2017-2586783, R-2020-3017206, and R-2023-3037933). I also  
22          presented testimony in support of PGW’s proposed revisions to its Weather  
23          Normalization Adjustment (“WNA”) Clause (Docket Nos. R-2022-3034229 and P-2022-  
24          3034264).

1 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

2 A. I will provide a high-level overview of the need and purpose of this rate filing and  
 3 introduce PGW’s other witnesses who provide detailed testimony and supporting  
 4 documentation for revenues, expenses, and rate base items included in the fully projected  
 5 future test year used in this base rate filing (FY 2026), testimony supporting PGW’s cost  
 6 of service study and revenue allocation as well as PGW’s proposed tariff revisions. I will  
 7 also address PGW’s level of service and considerations of affordability considering this  
 8 proposed rate increase, as well as PGW’s request to implement a decoupling mechanism  
 9 and, if this mechanism is granted, two additional new decoupling-related programs  
 10 including a new weatherization program and a new Repair and Renew program.

11 **Q. ARE YOU SPONSORING ANY EXHIBITS?**

12 A. Yes. The exhibits I am proposing are set forth in the Table of Exhibits following the  
 13 Table of Contents of this testimony.

14 **II. RATE FILING OVERVIEW AND INTRODUCTION OF WITNESSES**

15 **Q. PLEASE SUMMARIZE WHY PGW IS MAKING THIS RATE BASE INCREASE**  
 16 **REQUEST.**

17 A. PGW is requesting a rate increase to fund its continued provision of safe and reliable  
 18 service to our natural gas customers, and the City of Philadelphia as a whole. Adequate  
 19 rate relief is particularly important for PGW given that it is a municipally owned utility  
 20 and is regulated on a cash-flow basis. Essentially, this means that PGW is completely  
 21 dependent on revenues from its ratepayers to have the funds to maintain safe and  
 22 adequate service; PGW does not earn any return on its used and useful rate base in its  
 23 rates, and customers must pay all debt-issuance related costs (including interest and debt  
 24 service costs mandated by PGW’s Bond Ordinances). PGW recovers its costs of

1 operation through its distribution service rates, and when the level of sales goes down  
2 (compared to what was assumed in the last rate case), PGW collects less dollars to fund  
3 its operations.

4 More specifically, and as more fully explained by Mr. Golden, PGW's current rate  
5 request is driven by several factors. First, PGW needs additional revenues in order to  
6 cover the costs of capital improvements. In its continuing effort to keep its system safe  
7 and reliable, PGW invested and plans to invest about \$421.0 million in construction and  
8 capital projects since September 2024. Second, like every other business and individual,  
9 recent cost increases have meant that its existing revenue levels no longer cover the cost  
10 of PGW's operating expenses. For example, wages for PGW union employees are  
11 scheduled to rise 4% in FY 2026, with total operating expenses rising by over 15%.

12 Finally, PGW is experiencing material reductions in usage by its customers. Since the  
13 costs of capital additions and operating expenses do not similarly decrease when usage  
14 decreases, PGW must recover its costs from a customer base that is using less natural gas.  
15 The lower usage resulted in PGW's billed revenues being down \$57.4 million (\$31.8  
16 million net of WNA recovery) compared to the authorized revenue projection in PGW's  
17 2023 rate proceeding.

18 When PGW is not able to bill rates reasonably on par with PGW's rate request and  
19 need, PGW must seek rate relief sooner and in an amount greater than might otherwise  
20 have been necessary. Frequent rate cases are both time consuming for PGW's staff who  
21 are diverted from their core job responsibilities, and costly for PGW's ratepayers from  
22 whom rate case cost recovery must be sought. Therefore, PGW proposes a rate package  
23 for the Commission's consideration which balances the need for PGW to have the



1 revenue it needs to maintain safe and adequate service while attempting to ameliorate the  
 2 costs to ratepayers of future rate increases.

3 **Q. PLEASE DESCRIBE THE IMPACT OF PGW’S SERVICE TERRITORY**  
 4 **LIMITATION ON RATES.**

5 A. Placing pressure on the ability of PGW to receive adequate funding to maintain safe and  
 6 adequate service is the composition of PGW’s customer base – namely, the significant  
 7 proportion of low-income and lower-income ratepayers in PGW’s service territory.

8 **Q. PLEASE DESCRIBE HOW PGW ASSISTS ITS LOW-INCOME CUSTOMERS.**

9 A. To provide financial assistance for its low-income customers, PGW has one of  
 10 Pennsylvania’s largest utility low-income Universal Service programs. Its customer  
 11 assistance program (CAP or Customer Responsibility Program – CRP) reduces the  
 12 amount eligible low-income customers are required to pay and spreads those costs across  
 13 all of PGW’s other customers as part of base rates. In calendar year 2024, the average  
 14 non-CRP ratepayer paid approximately \$100 to support CRP.

15 **Q. WHAT IS PGW FILING IN SUPPORT OF THIS REQUEST?**

16 A. In support of the rate request as set forth in response to filing requirements and tariff  
 17 supplements, PGW is submitting testimony of the following witnesses discussing the  
 18 topics identified below:

St. No.	Witness	Title	Testimony Topics
1	Denise Adamucci	Senior Vice President, Customer & Regulatory Affairs, PGW	<ul style="list-style-type: none"> <li>• Rate Filing Overview</li> <li>• Need for Rate Relief – Capital Program, Cash on Hand Below PUC Recommended Level, Demand Trend</li> <li>• Affordability (analytical and qualitative/low-income programs)</li> <li>• Company-wide Topics and Successes</li> <li>• Customer Service</li> <li>• Low-Income Programs</li> </ul>

			<ul style="list-style-type: none"> <li>• Revenue Normalization Adjustment</li> <li>• Weather Normalization Adjustment</li> <li>• Introduce Witnesses</li> </ul>
2	Joseph F. Golden, Jr	Executive Vice President and Acting Chief Financial Officer, PGW	<ul style="list-style-type: none"> <li>• PGW's Need For Rate Relief</li> <li>• Overview Of PGW's Accounting Exhibits</li> <li>• Presentation Of PGW's Financial Information</li> <li>• Creation Of Projections for PGW's FTY and FPFTY</li> <li>• PGW's Capital &amp; Operating Budgets</li> <li>• Calculation Of Revenue Requirement</li> <li>• Cash Requirements</li> <li>• Financial Results at Present Rates</li> <li>• Rate Increase Request</li> <li>• Financial Impacts from PGW's Additional Proposals</li> <li>• Financial Impacts from Decoupling Proposal</li> <li>• Financial Impacts from Revisions To DSIC</li> </ul>
3	James C. Lover	Managing Director and Partner, PFM Financial Advisors LLC	<ul style="list-style-type: none"> <li>• Performance in Municipal Capital Markets</li> <li>• Financial Support for Revenue Requirement</li> <li>• Emphasis on all three rating agency medians and metrics and combined scorecard, peer levels of Days Cash on Hand and Debt Coverage</li> </ul>
4	Harold Walker III	Manager of Financial Studies, Gannett Fleming Valuation and Rate Consultants, LLC	<ul style="list-style-type: none"> <li>• Benchmarking</li> <li>• Cash Flow Ratemaking</li> <li>• IOU Analysis</li> <li>• Capital Structure</li> <li>• Calculation of Revenue Requirement based on Comp Average</li> </ul>
5	Gregory R. Herbert	Assistant Project Manager, Rate Studies, Gannett Fleming Valuation and Rate Consultants, LLC	<ul style="list-style-type: none"> <li>• Cost of Service Study</li> </ul>
6	Florian Teme	Vice President, Marketing and Energy Planning, PGW	<ul style="list-style-type: none"> <li>• Test Year Sales and Revenues</li> <li>• Revenue Allocation by Customer Class</li> <li>• Proposed Tariff Revisions</li> <li>• Rate Mechanisms Supporting Decoupling</li> </ul>

			<ul style="list-style-type: none"> <li>• CHP edits to TED Rider</li> </ul>
7	Robert Smith	Senior Vice President for Operations and Supply Chain, PGW	<ul style="list-style-type: none"> <li>• Efforts to Improve Safety, Reliability of PGW Infrastructure</li> <li>• PHMSA Pipeline Replacement Grants</li> </ul>
8	Ronald J. Amen	Managing Partner, Atrium Economic	<ul style="list-style-type: none"> <li>• Weather Normalization Adjustment</li> <li>• Revenue Normalization Adjustment</li> </ul>
9	Ryan Reeves	Director, Supply, Transportation, and Control	<ul style="list-style-type: none"> <li>• Prepaid Gas Arrangements</li> </ul>

1

2 **III. REASONS FOR REQUESTED RATE INCREASE**

3 A. PGW requests an increase in its annual base rate operating revenues of \$105 million, or  
 4 15.73% percent on a total revenue basis, with a proposed effective date of April 28, 2025.  
 5 Consistent with its mandatory budget process, the base rate increase requested in this  
 6 filing is based on a fully projected future test year starting on September 1, 2025  
 7 (“FPFTY”).<sup>1</sup>

8 **Q. ON WHAT BASIS IS PGW’S REQUESTED RATE RELIEF TO BE**  
 9 **CONSIDERED?**

10 A. PGW is a “City Natural Gas Distribution Operation” as that term is defined in the Public  
 11 Utility Code.<sup>2</sup> As such, just and reasonable rates for PGW are determined using the Cash  
 12 Flow Method. PGW has no shareholders and does not pay a dividend or a rate of return to  
 13 its owner (PGW does remit a fixed annual payment to the City of Philadelphia of \$18  
 14 million). Accordingly, all of the funds it needs to run the Company come from

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<sup>1</sup> The statutory definition of FPFTY, 66 Pa.C.S. § 315(e), would require that the FPFTY commence in November 2025 and continue for 12 months. As in the prior rate proceedings, and simultaneously with the filing of general base case, PGW has filed a Petition requesting that the Commission waive the application of the statutory definition of FPFTY so as to permit PGW to use a FPFTY beginning earlier than that which is mandated by § 315 on September 1, 2025 in this proceeding (Pursuant to 66 Pa. C.S. § 2212(c), PGW has the authority to request that the Commission suspend or waive this provision of the Public Utility Code).

<sup>2</sup> 66 Pa. C.S. § 102 (definitions).

1 ratepayers, via rates or borrowing. The costs of borrowing must, like rates, also be paid  
 2 by ratepayers. Therefore, rather than having its revenue requirement determined on the  
 3 basis of a fair rate of return on a used and useful rate base, PGW's rates are set by  
 4 determining the appropriate levels of cash and other financial metrics necessary to enable  
 5 PGW to pay its bills and maintain strong access to the capital markets at reasonable rates.  
 6 The Commission issued a policy statement more fully setting forth these criteria and the  
 7 financial and other considerations that are to be looked to in setting PGW's base rates at  
 8 just and reasonable levels.<sup>3</sup>

9 **IV. RATE DESIGN PROPOSALS**

10 **Q. IS PGW PROPOSING NEW COST RECOVERY MECHANISMS?**

11 A. Yes, PGW is proposing the following new rate recovery mechanisms: (1) a Revenue  
 12 Normalization Adjustment ("RNA"); (2) an optional sales service agreement for  
 13 interruptible transportation customers (Rates IT and IT-XLT) to participate in prepaid gas  
 14 arrangements; and (3) a Purchase Of Receivable ("POR") Choice Supplier Bill Charge  
 15 for suppliers ("CSBC"). I will provide a high-level overview of these proposed new  
 16 mechanisms below, with PGW Witnesses Golden, Teme, Reeves and Amen providing  
 17 more detail about how they have been developed and will be incorporated into PGW's  
 18 tariffs.

19 **Q. IS PGW PROPOSING OTHER CHANGES TO EXISTING TARIFF**  
 20 **PROVISIONS?**

21 A. Yes. Assuming PGW's RNA is adopted, then it would be willing to: (1) provide funding  
 22 for a new Health and Safety Program initiative; (2) implement a new efficient home

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<sup>3</sup> 52 Pa. Code §§ 69.2702-69.2703.

1 program; and (3) reinstitute a new appliance repair program. As I describe below, PGW  
2 proposes tariff revisions to ensure cost recovery for these new programs through either its  
3 Universal Service and Energy Conservation Surcharge (“USC”)<sup>4</sup> or its Efficiency Cost  
4 Recovery (“ECR”) Surcharge.<sup>5</sup>

5 PGW witness Teme describes other changes PGW is proposing regarding its Services  
6 Tariff, which include modification of the Technology and Economic Development  
7 (“TED”) Rider; removal of Gas Transportation – Rate GTS Firm Service (“GTS”); and,  
8 housekeeping changes to PGW’s General Services Tariff to remove no longer applicable  
9 surcharges.

10 PGW is simultaneously filing a Petition to remove the reconciliation of its  
11 Distribution System Improvement Charge (“DSIC”) from the 7.5% DSIC cap. As  
12 explained in the testimony of Mr. Smith, PGW has been experiencing an under-collection  
13 which it has not been able to bill because of the 7.5% cap. Removing the under-collection  
14 from the capped amount will enable PGW to fully utilize and recover funding for the  
15 projects and ensure that the related costs are recovered from ratepayers.

16 Finally, PGW proposes some minor clean up to its tariff language regarding meters to  
17 support its upcoming Advanced Metering Infrastructure (“AMI”) smart meter  
18 deployment. PGW’s existing tariff does not make clear that such smart meters fit within  
19 the current definition of meters (Section 11.1, page 53 of Gas Service Tariff – Pa. P.U.C.  
20 2). The clarifying language will assist PGW with fully deploying AMI which will result  
21 in the benefits as discussed by PGW witness Robert Smith (PGW St. No. 7).

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<sup>4</sup> See PGW Gas Service Tariff – Pa P.U.C. No 2 at Page No. 81.

<sup>5</sup> See PGW Gas Service Tariff – Pa P.U.C. No. 2 at Page No. 80.

1       **A. REVENUE NORMALIZATION ADJUSTMENT (“RNA”)**

2               ***1. General Overview of Purpose and Benefits***

3       **Q. IS PGW PROPOSING A REVENUE DECOUPLING MECHANISM IN THIS**  
4       **PROCEEDING?**

5       A. Yes. A detailed discussion of this proposal and how the mechanism will operate is  
6       provided in the Direct Testimony of Ronald Amen (PGW St. No. 8).

7       **Q. PLEASE PROVIDE A SUMMARY OF THE RNA PROPOSAL AND HOW THE**  
8       **MECHANISM WILL OPERATE.**

9       A. The RNA is a full revenue decoupling mechanism. The RNA’s goal is ensuring that  
10       PGW recovers PUC approved cash requirements – but only PUC approved amounts –  
11       with any excess billed to be credited back to customers. As Mr. Amen explains, the RNA  
12       mechanism is designed to either recover or refund the difference between the annual  
13       authorized revenue the Commission has allowed, and the combined revenues billed  
14       through customer billings and the Weather Normalization Adjustment (“WNA”)  
15       charges/credits for each eligible PGW rate class. The proposed RNA is fully reconcilable  
16       and will be subject to an annual true-up to ensure that there is no over- or under-  
17       collection related to the authorized revenue target.

18       **Q. WHY IS PGW PROPOSING THE RNA?**

19       A. The proposed RNA will provide important benefits to PGW. As stated above, PGW is a  
20       municipally owned utility that operates on a cash flow basis. As such, PGW is very  
21       different from the typical investor-owned utility. PGW does not have any profit and does  
22       not earn a rate of return, and the Company has very little margin to allow it to absorb  
23       significant changes to its Commission approved revenue that can result due to factors  
24       such as gas usage. Unlike an investor-owned utility, which could absorb the effects of  
25       collecting less revenue than was authorized through reliance on shareholders, PGW has

1 no shareholders and, thus, does not have this same ability. When faced with declining  
2 revenue below what has been authorized by the Commission, PGW's options are to  
3 reduce capital and/or operating expenditures, borrow additional money and/or file a  
4 request for rate relief. None of these options are solid choices that provide benefits for  
5 ratepayers. Reducing capital expenditures or operating expenses could have a negative  
6 impact on the ability to provide safe and reliable service by providing less money  
7 available for projects. Borrowing more money increases the costs ratepayers will have to  
8 pay to service the debt. Filing requests for rate relief is also an expensive proposition for  
9 ratepayers due to the litigious nature of rate cases<sup>6</sup> and the need for PGW to require key  
10 members of its workforce to divert attention to the litigation while still performing their  
11 day-to-day duties. Trends such as declining use per customer, loss of customers, changes  
12 in the economy, etc. can significantly impact the ability of PGW to bill and collect the  
13 revenues approved by the Commission. The cash flow nature of PGW's operations would  
14 benefit significantly from the stability provided by the RNA since it will ensure that  
15 PGW receives the Commission approved revenue necessary to sustain the Company's  
16 operations and to focus on providing just and reasonable service. The RNA would allow  
17 the Company to recover its full cost of service at the level approved by the Commission  
18 (no more and no less) and would ensure that PGW has the base level of revenues  
19 necessary for its operations.

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<sup>6</sup> As an example, the costs of PGW's 2023 base rate were approximately \$1.1 million.

1 **Q. DOES PGW CURRENTLY HAVE AN ALTERNATIVE RATE MECHANISM IN**  
2 **PLACE?**

3 A. Yes, PGW currently has a Weather Normalization Adjustment (“WNA”) which addresses  
4 weather-related variances in revenue. The WNA has been in place for over 20 years and  
5 has provided important stability to PGW. PGW is not proposing any changes to the  
6 WNA, which provides an expense or credit for customers based on actual versus normal  
7 weather. As an example, the most recent credit provided to customers through the WNA  
8 was close to \$4.0 million for the revenue month of January 2025. While a good weather-  
9 specific mechanism, the WNA does not take into consideration that customer usage  
10 varies based on more than just changes in weather, such as energy efficiency, changes in  
11 housing stock, partial fuel switching, and customer behaviors. The proposed RNA is  
12 intended to address those other variances.

13 **Q. WILL THE RNA PROVIDE BENEFITS TO CUSTOMERS?**

14 A. Yes. By removing the linkage between PGW’s revenue and gas consumption, PGW will  
15 be able to fully promote and expand programs that promote conservation and energy  
16 efficiency, and reduce carbon emissions, without the related negative impacts associated  
17 with declining gas sales. Under the RNA, customers will pay the same amount for gas  
18 delivery as if the Company has perfectly forecasted customer usage. This will ensure that  
19 customers benefit from energy conservation efforts, and it will also ensure that PGW – a  
20 municipal cash-flow utility – has adequate funds to cover the costs of providing service  
21 as approved by the Commission. These benefits are discussed in greater detail in Mr.  
22 Amen’s testimony. PGW Witness Lover discusses the RNA’s positive impact on credit  
23 ratings.



1 **Q. DOES THE RNA SHIFT THE RISK OF UNKNOWN FACTORS FROM PGW TO**  
 2 **CUSTOMERS?**

3 A. No, it does not. As Mr. Amen explains, the RNA simply assures that the level of revenues  
 4 that the PUC has determined to be fair and reasonable will in fact be realized by PGW.

5 **Q. DOES THE RNA ACT TO SHIFT THE RISK THAT THE UTILITY WILL EARN**  
 6 **ITS AUTHORIZED LEVEL OF PROFIT TO CUSTOMERS?**

7 A. No. Risk shifting might create concern for a non-municipally owned utility since  
 8 Commission approved revenue for the investor-owned utility includes a return on equity,  
 9 i.e., a profit that the utility can elect to share with its shareholders. In contrast, a  
 10 municipal utility such as PGW does not have shareholders, and its Commission approved  
 11 rates do not include a return on equity. None of the revenue PGW receives in rates is  
 12 returned to shareholders. Rather, the revenue PGW receives is used to operate the  
 13 Company for the benefit of the customers. Thus, an RNA for PGW – by definition – does  
 14 not enable risk shifting from customers to shareholders. PGW’s focus is only on covering  
 15 its cost of service and not on profit or earning any type of return. Customers will benefit  
 16 when PGW has stable revenues and can focus on infrastructure improvement, customer  
 17 service, and other programs that are beneficial to customers.

18 **Q. HOW DO PGW’S PROPOSED ENERGY EFFICIENCY PROGRAMS RELATE**  
 19 **TO THE RNA PROPOSAL?**

20 A. As noted previously, the RNA will stabilize PGW’s revenues and remove disincentives  
 21 for PGW to promote more energy conservation programs, such as concerns regarding  
 22 lessening the revenue available to provide safe and adequate service. Revenue decoupling  
 23 will better align PGW’s interests with public policy goals such as promoting energy  
 24 efficiency, conservation, and decarbonization. If its request for the RNA is granted, then  
 25 PGW proposes to expand its energy efficiency programs as discussed below.

1 **Q. HAS THE GENERAL ASSEMBLY SUPPORTED THIS TYPE OF RNA**  
2 **ALTERNATIVE RATEMAKING MECHANISM?**

3 A. Yes. The Pennsylvania General Assembly passed Act 58 of 2018, which added Section  
4 1330 to the Public Utility Code.<sup>7</sup> I am advised by counsel that through Act 58, the  
5 legislature endorsed the use of alternative ratemaking mechanisms by public utilities to  
6 enhance the safety, security, reliability, and availability of utility infrastructure.  
7 Decoupling mechanisms, such as the RNA proposed here, were specifically authorized  
8 by Section 1330, to be approved by the Commission through a base rate case.

9 **Q. HAS THE COMMISSION ADOPTED REGULATIONS PROVIDING FOR THIS**  
10 **TYPE OF ALTERNATIVE RATEMAKING MECHANISM?**

11 A. No. However, to implement Act 58 of 2018, the Commission adopted a policy statement  
12 identifying the factors the Commission expected to consider in approving alternative  
13 ratemaking methodologies.<sup>8</sup> A discussion of how the RNA proposal addresses the policy  
14 statement's factors is included in Joint Exhibit DA/RJA-1, which I am co-sponsoring  
15 with PGW Witness Ronald J. Amen.

16 **Q. ARE YOU AWARE OF THE COMMISSION APPROVING THIS TYPE OF**  
17 **FULL RNA MECHANISM FOR ANY OTHER PENNSYLVANIA UTILITY?**

18 A. No. While I am aware that the Commission has approved multiple partial decoupling  
19 mechanisms related to weather-related variances in revenue, I am unaware of any past  
20 approvals of a full revenue decoupling mechanism. Again, though, for the reasons I  
21 discussed above, PGW is not similarly situated to investor-owned utilities, there is real

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<sup>7</sup> 66 Pa. C.S. § 1330.

<sup>8</sup> 52 Pa. Code §§ 69.3301-69.3302.

1 value to PGW ratepayers in approving the proposed RNA, and there is clear legislative  
2 support for such a mechanism.

3 ***2. New Program Offerings***

4 **Q. WOULD IMPLEMENTATION OF THE RNA ENABLE PGW TO OFFER**  
5 **EXPANDED PROGRAM OFFERINGS TO CUSTOMERS?**

6 A. Yes, with the certainty that PGW will be able to recover its requested revenue  
7 requirements regardless of volumetric use, PGW would be positioned to offer expanded  
8 program offerings.

9 **Q. HAS PGW DEVELOPED ADDITIONAL PROGRAM OFFERINGS THAT IT**  
10 **WOULD BE WILLING TO IMPLEMENT IF ITS DECOUPLING MECHANISM**  
11 **IS APPROVED?**

12 A. Yes, PGW has developed three proposals that it could implement if the RNA is approved  
13 and proposes to recover the costs through the participating residential rate classes as part  
14 of the existing Efficiency Cost Recovery (“ECR”) surcharge. I am advised by counsel  
15 that pursuant to Sections 1307 and 1319 of the Public Utility Code, all prudent and  
16 reasonable costs for developing, managing, financing and operating demand side  
17 management programs may be recovered through an automatic adjustment clause. As  
18 such, recovery of these programs through the ECR will ensure that only the costs of the  
19 programs are recovered. The ECR will continue to be applied only to the bills of firm  
20 customers in the class for which the costs are incurred.

*a. Expanded funding through rates for a new Health and Safety Program, based on PGW’s experience with a LIURP pilot program*

**Q. PLEASE EXPLAIN PGW’S CURRENT PUC-APPROVED HEALTH AND SAFETY PROGRAM PILOT WHICH PGW DESIGNED AND PROPOSED, AND WHICH IS OFFERED THROUGH PGW’S LIURP.**

A. PGW’s current Low-Income Usage Reduction Program (“LIURP”) includes a Health and Safety Pilot.<sup>9</sup> The Health and Safety Pilot is funded through the Universal Service and Energy Conservation surcharge (or “USC”) which, among other things, is specifically designed to recover the costs of PGW’s LIURP.<sup>10</sup> PGW allows LIURP contractors to spend up to \$3,000 per-project on the installation of health and safety measures, without the cost impacting the project’s Total Resource Cost (“TRC”) cost-effectiveness. These repairs are distinguishable from the “incidental” repairs detailed in 52 Pa. Code § 58.12, which PGW classifies as minor repairs necessary to permit proper installation of program measures. Contractors propose a work scope that will achieve at least 15% savings. Projects are prioritized by the greatest savings opportunities and target the highest usage homes. Under the 2023 – 2027 Universal Services and Energy Conservation Plan, PGW allocated \$100,000 of its \$7,988,818 LIURP budget for this pilot program.

**Q. PLEASE EXPLAIN THE UTILIZATION RATE FOR THIS PILOT.**

A. In Calendar Years 2023 and 2024, health and safety measures were installed under this pilot in 138 homes, with \$193,046 in costs for such measures excluded from TRC cost-effectiveness testing. These installed health and safety measures enabled \$506,084 in cost-effective spending on additional energy savings measures, which would not

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<sup>9</sup> See PGW Further Revised Universal Service and Energy Conservation Plan 2023-2027 dated July 11, 2023 and filed at Docket No. M-2021-3029323.

<sup>10</sup> See PGW Gas Service Tariff – Pa. P.U.C. No. 2 at page 81, paragraph 1.

1 otherwise have been installed due to the negative health and/or safety concerns in  
2 participating homes. During this period, the average direct costs of all measures installed  
3 in pilot homes were 30% higher than the average direct costs of measures installed in  
4 other homes that were comprehensively treated, producing average gas savings that were  
5 essentially 25% higher in pilot homes than in non-pilot homes. This pilot provides  
6 significant value for customers, including for the health, comfort, and safety of their  
7 entire household.

8 **Q. IF PGW'S PROPOSED RNA IS APPROVED, WHAT IS PGW PROPOSING**  
9 **REGARDING THE NEW HEALTH AND SAFETY PROGRAM?**

10 A. If the RNA is approved, then PGW would be certain as to the amount of revenue it will  
11 be able to recover through base rates. As such, PGW is proposing to contribute \$100,000  
12 annually in this new Health and Safety program. This allocation will be recovered  
13 through PGW's ECR, and tariff language specifically designating the allocation for this  
14 purpose has been included in Tariff Supplement No. 176. As such, the new funding  
15 would not be part of the LIURP program and would not increase the overall LIURP  
16 budget or be recovered through Universal Service and Energy Conservation Surcharge  
17 intended to recover the costs of LIURP.

18 ***b. Efficient Home Program***

19 **Q. IF PGW'S PROPOSED RNA IS APPROVED, WHAT IS PGW PROPOSING**  
20 **REGARDING NEW HOME ENERGY ASSESSMENTS AND ENERGY**  
21 **EFFICIENCY MEASURES?**

22 A. If the RNA is approved, then PGW would be certain as to the amount of revenue it will  
23 be able to recover through base rates. As such, PGW would be able to implement a new  
24 efficient home program. It will offer home energy assessments and energy efficiency  
25 measures (which can include a number of measures, including insulation and repair or

1 replacement of equipment) at no cost to the customer, for residential customers earning  
2 up to 250% of the Federal Poverty Level (“FPL”). PGW proposes an annual (calendar  
3 year) budget of \$1,000,000 for the duration that its RNA is in effect, with work beginning  
4 for implementation starting January 1, 2026. This program will fulfill a need in  
5 supporting customers who want to better control their energy usage but are low income or  
6 those who are “ALICE” (asset limited, income constrained, employed – who are not  
7 typically eligible for low-income assistance). PGW expects an average job cost per home  
8 of approximately \$4,000, and completion of approximately 250-300 jobs per year.  
9 Customers in the program will receive an energy assessment and may receive energy  
10 efficiency measures as deemed cost-effective by a conservation service provider (“CSP”).  
11 These measures could include insulation, sealing air leaks, programmable or smart  
12 thermostats, low-flow faucet aerators and showerheads, pipe and duct insulation, and  
13 repair or replacement of heaters and water heaters.

14 **Q. HOW WILL PGW DETERMINE ELIGIBILITY FOR THE PROGRAM?**

15 A. Customers must have a household income of up to 250% FPL. They must also have 12+  
16 months of usage, no LIURP treatment at the property in the past 7 years and reside in a  
17 single-family home or duplex. Renters are eligible for the program, with their landlord’s  
18 consent. Customers must provide proof of income. Customers who are currently on CRP  
19 and have recertified in the past 12 months will be considered eligible for the 0-150% tier  
20 without further proof of income required. Those who are not on CRP will have their  
21 income reviewed by the CSP for eligibility.

22 Further, customers must be on a general service residential heating rate.  
23 Customers who have natural gas for water heating but not natural gas space heat will be  
24 given the option to receive a visit from the CSP that will provide limited water

1 conservation measures such as hot water pipe wrap, faucet aerators and low flow  
2 showerheads.

3 Customers whose income is between 151-250% FPL will be eligible for free  
4 heater and water heater replacements only in situations where an imminent health and  
5 safety issue, such as carbon monoxide or improper venting, is present, or in situations  
6 where the heating system is fully inoperable.

7 **Q. HOW WILL PGW MONITOR THE WORK THAT IS PERFORMED FOR**  
8 **CUSTOMERS?**

9 A. PGW will have third party quality assurance inspections performed on a random sample  
10 of 5-10% of jobs and will also perform an online survey to identify issues and concerns  
11 related with work quality, program communications and related matters. PGW will  
12 operate the program on a calendar year basis.

13 **Q. HOW WILL CUSTOMERS ENROLL IN THIS NEW PROGRAM?**

14 A. Customers will enroll in the program by contacting a CSP who has contracted with PGW  
15 via an RFP process. The CSP, who will have Building Performance Institute (“BPI”)  
16 certification, will perform a home energy assessment to identify building issues. The  
17 assessment will include a blower door test to identify areas where warm air escapes,  
18 combustion safety testing to ensure house heaters are operating efficiently and safely, and  
19 other safety checks. After the energy assessment, the CSP will recommend energy  
20 efficiency measures that they will return to perform for free, which can include  
21 insulation, sealing air leaks, programmable or smart thermostats, low-flow faucet aerators  
22 and showerheads, pipe and duct insulation, and repair or replacement of heaters and  
23 water heaters. PGW will evaluate job cost effectiveness using the Total Resource Cost  
24 (“TRC”) test. The TRC cost effectiveness approach is consistent with the approach stated

1 in PGW’s Demand Side Management (“DSM”) Plan for 2025-2027<sup>11</sup> as well as PGW’s  
2 Universal Service and Energy Conservation Plan.

3 **Q. WILL PGW COORDINATE THIS PROGRAM WITH LIURP AND**  
4 **ENERGYSENSE?**

5 A. Yes, there will be opportunity for coordination. PGW will screen applicants to confirm  
6 that they have not been treated within PGW’s LIURP, known as Home Comfort. In  
7 situations where a customer meets the LIURP qualifications of being below 150% FPL  
8 and has an annual gas usage that exceeds the LIURP minimum requirement, the customer  
9 may be treated through LIURP.

10 PGW will update communications for its EnergySense program to ensure that  
11 customers have a clear understanding of options between the programs because certain  
12 energy efficiency measures could be available in the Efficient Home Program and also  
13 EnergySense. This is to ensure that customers are aware of their most affordable options  
14 and can select the offering that is most favorable and preferable to them. PGW’s  
15 EnergySense program currently offers rebates for high efficiency furnaces, boilers, combi  
16 boilers, tankless water heaters and insulation to all residential customers, and it offers an  
17 “Affordable EnergySense” tier to provide more generous rebates for customers who have  
18 received CRP or LIHEAP in the last year. Program materials will clarify that customers  
19 earning under 250% FPL could be eligible for those measures in the Efficient Home  
20 Program if recommended by the CSP but are not guaranteed. The purpose of this is to set  
21 customer expectations and to naturally tie into the EnergySense programs. The main

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<sup>11</sup> PGW’s 2025-2027 DSM Plan was approved by Commission Order dated April 25, 2024 at Docket No. P-2014-2459362.



1 difference between the programs is that customers using the EnergySense rebates are able  
 2 to make their own decisions about what contractor they hire, materials and other details,  
 3 while customers in the Efficient Homes Program must use PGW’s CSP – but of course  
 4 the customer would make a choice for whether to proceed with the work scope and  
 5 equipment as the CSP proposed it.

6 **Q. WHAT BUDGET IS PGW PROPOSING FOR THIS PROGRAM?**

7 A. PGW’s proposed annual budget is set forth below:

Total spend L&M	\$ 850,000
Inspections	\$ 15,000
Marketing and Communications	\$ 15,000
Other Administrative Costs for personnel, income verification, program administrator costs, evaluation, and surveying	\$ 120,000
<b>Total Annual Program Spend</b>	<b>\$ 1,000,000</b>

8

9 **Q. HOW WILL PGW RECOVER THE COSTS OF THIS PROGRAM?**

10 A. PGW will recover the costs through the participating residential rate classes, as part of  
 11 the ECR surcharge.

12 ***c. New Repair and Renew Program***

13 **Q. IF PGW’S PROPOSED RNA IS APPROVED, PLEASE EXPLAIN THE NEW REPAIR AND RENEW PROGRAM PGW WOULD BE WILLING TO OFFER.**

14  
 15 A. If PGW’s RNA is approved, then PGW would be certain as to the amount of revenue it  
 16 will be able to recover through base rates, enabling it to offer a new Repair and Renew  
 17 program to customers who do not qualify through PGW’s LIURP.

18 **Q. PLEASE EXPLAIN PGW’S MOST RECENT PILOT OF A REPAIR AND RENEW PROGRAM.**

19  
 20 A. PGW implemented a pilot program in connection with its LIURP from 2023-2024 to fix  
 21 heating hazards so that customers can safely operate their equipment during heating

1 months. Thirty-six customers were treated through the Pilot. An analysis found that the  
2 average customer saved 33 MMBtu annually, or ~24% of their pre-treatment usage. This  
3 program resulted in many other benefits for customers, including health and safety  
4 improvements, comfort, and reduced energy costs. PGW found that of the customers  
5 surveyed, 74% of them had used portable space heaters before their treatment, though  
6 only 32% continued to use space heaters after being treated. Most related to comfort, the  
7 number of customers who reported their home was uncomfortably cold reduced from  
8 53% to 5%. And, most significantly, the survey found that 16% of customers had used an  
9 oven or stove for heat prior to treatment, and that amount was reduced to zero after  
10 treatment.

11 **Q. WHAT PROGRAM IS PGW OFFERING IF THE RNA IS APPROVED?**

12 A. Expanding upon the lessons learned from its Pilot program, PGW proposes that the  
13 Repair and Renew Program be offered for the duration that its RNA is in effect, with  
14 work on implementation starting January 1, 2026. In the Repair and Renew Program,  
15 PGW will contact confirmed low-income customers who have had gas service turned off  
16 or appliances “red tagged” due to unsafe operating conditions. PGW will mail a letter to  
17 the customer informing them of the program; and a CSP will contact the customers in  
18 priority order based on gas usage.

19 **Q. WHAT ARE THE ANTICIPATED COSTS OF THIS PROGRAM?**

20 A. The anticipated costs of the program are \$500,000 annually (calendar year).

21 **Q. HOW WILL THE COSTS OF THE REPAIR AND RENEW PROGRAM BE**  
22 **RECOVERED?**

23 A. PGW will recover the costs through the participating residential rate classes, as part of  
24 the ECR surcharge.

1                    **3. Proposed Tariff Revisions for RNA and Proposed New Program Offerings**

2    **Q. WHAT TARIFF REVISIONS ARE NECESSARY TO IMPLEMENT THE RNA?**

3    A. The mechanics of the RNA as well as the proposed tariff language are discussed more  
4        fully in Mr. Teme’s testimony but, as an overview, PGW proposes a new tariff page as  
5        part of Tariff Supplement No. 176 of PGW’s Gas Service Tariff – Pa. P.U.C. No. 2 for  
6        the RNA. PGW will file the RNA computation for approval in conjunction with the  
7        Company’s annual Section 1307(f)-GCR filing and the surcharge will continue to be  
8        automatically adjusted effective March 1, June 1, September 1, and December 1 of each  
9        year in accordance with Section 1307(f) quarterly adjustment procedures.

10   **Q. WHAT TARIFF CHANGES ARE NECESSARY TO IMPLEMENT THE THREE**  
11   **PROGRAMS CONNECTED WITH THE RNA’S APPROVAL?**

12   A. As noted above, program costs will be recovered through the ECR surcharge. As a  
13        reconcilable mechanism, recovery through the ECR will ensure that only the actual costs  
14        are recovered from ratepayers. Tariff Supplement No. 176, page 80 of PGW’s Gas  
15        Service Tariff – Pa. P.U.C. No. 2 has been revised to accomplish this.

16        **B. WEATHER NORMALIZATION ADJUSTMENT (“WNA”)**

17   **Q. IS PGW ADDRESSING ITS WNA IN THIS PROCEEDING?**

18   A. Yes. PGW is addressing its WNA consistent with the Commission’s direction to conduct  
19        an examination of the WNA in its next base rate proceeding.<sup>12</sup> As noted above, PGW’s  
20        WNA has been in place for over 20 years and has provided important stability to PGW.  
21        PGW is not proposing any changes to the WNA. The WNA is discussed in detail in the  
22        testimony of PGW Witness Ronald J. Amen.

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<sup>12</sup> *Pa. PUC v. Philadelphia Gas Works*, Docket Nos. R-2022-3034229 and P-2022-3034264, Opinion and Order (entered Sept. 21, 2023), Ordering ¶ 4.

1 **Q. DOES THE WNA CONTINUE TO BE JUST AND REASONABLE BASED ON**  
2 **THE FACTORS OUTLINED IN THE POLICY STATEMENT RELATED TO**  
3 **ALTERNATIVE RATEMAKING MECHANISMS AT 52 PA. CODE § 69.3302?**

4 A. Yes. A discussion of how the WNA addresses the policy statement's factors is provided  
5 in Joint Exhibit DA/RJA-2, which I am co-sponsoring with PGW Witness Ronald J.  
6 Amen.

7 **C. OPTIONAL PREPAID GAS ARRANGEMENTS**

8 **Q. IS PGW PROPOSING TO OFFER INTERRUPTIBLE TRANSPORTATION**  
9 **CUSTOMERS AN OPPORTUNITY TO RECEIVE A DISCOUNT ON THEIR**  
10 **GAS SUPPLY?**

11 A. Yes. As described more fully in the testimony of PGW Witness Ryan Reeves, PGW is  
12 proposing to permit IT and IT-XLT customers the opportunity to participate in prepaid  
13 gas arrangements which will allow them to receive a share of the discount available  
14 through these arrangements. PGW currently utilizes prepaid gas arrangements for firm  
15 customers and our proposal to expand its use for interruptible transportation customers is  
16 another example of how PGW is seeking to utilize its unique status as a municipally  
17 owned utility to assist its customers and increase revenue available to fund operations.

18 **D. CHOICE SUPPLIER BILL CHARGE ("CSBC")**

19 **Q. PLEASE EXPLAIN THE POR CHOICE SUPPLIER BILL CHARGE.**

20 A. The CSBC is a charge to POR Suppliers to reimburse PGW ratepayers for the POR  
21 Suppliers' share of the cost of creating and sending a bill to the customer.

22 **Q. WHAT ARE THE MARGINAL COSTS OF CREATING AND SENDING A BILL?**

23 A. For this proposal, PGW recommends passing only the costs of a monthly transactional  
24 Electronic Data Interface ("EDI") fee and bill printing and mailing costs to the suppliers  
25 relevant to their POR participating customers. PGW's EDI vendor charges PGW \$0.11  
26 per customer per month for its data transactions. PGW's bill print vendor charges PGW

1 approximately \$0.77 per bill to send mail and \$0.47 for an ebill. PGW is proposing to  
2 charge 50% of the bill print/ebill vendor costs.

3 **Q. WHY IS PGW PROPOSING TO ADD THIS FEE AS PART OF THIS RATE**  
4 **CASE?**

5 A. PGW is proposing this fee to better align costs to provide the POR program to suppliers.  
6 Notably, suppliers have their logos and bill messages set forth on PGW-issued bills.  
7 Currently, the cost of producing a bill is borne solely by PGW customers with the  
8 suppliers not covering any of the costs. To align these costs, PGW is proposing to charge  
9 suppliers for their share of a bill creation.

10 **Q. WHAT ARE THE FEES THAT WILL BE CHARGED TO THE SUPPLIERS?**

11 A. For customers who are receiving an electronic bill only, the supplier will be charged  
12 \$0.35 per customer per month. For customers who are receiving a physical bill, the  
13 supplier will be charged \$0.50 per customer per bill. This represents the \$0.11 previously  
14 mentioned plus 50% of the \$0.77 mailing costs. These billing fees will be added to  
15 Section 12.9.E.1 on page 50 of PGW's Supplier Tariff.

16 **Q. HOW WILL PGW ASSESS THESE COSTS TO ITS SUPPLIERS?**

17 A. PGW will include these fees as discount charges to the supplier to be netted as part of the  
18 existing POR program. Section 12.9.B.2.c on page 48 of PGW's Supplier Tariff will be  
19 updated to add that a calculation of the billing fee will be included as part of the Supplier  
20 charges.

1 **V. PGW'S PROVISION OF SERVICE TO CUSTOMERS**

2 **A. Management Quality, Efficiency and Effectiveness**

3 **Q. PLEASE SUMMARIZE THE COMPANY'S INITIATIVES AND ACTIVITIES**  
 4 **THAT HIGHLIGHT PGW'S COMMITMENT TO SERVING THE COMPANY'S**  
 5 **CUSTOMERS.**

6 A. The Company has focused on a number of areas that demonstrate the quality and  
 7 effectiveness of PGW's current management performance and its management's focus on  
 8 safe, reliable, and outstanding service. As examples:

- 9 • PGW applied for and was awarded a total of \$125 million Natural Gas  
 10 Distribution Infrastructure Safety and Modernization grants from the U.S.  
 11 Department of Transportation's (DOT) Pipeline and Hazardous Materials  
 12 Safety Administration (PHMSA), established by the historic Bipartisan  
 13 Infrastructure Law. These grants, combined with two other awards from  
 14 PHMSA since 2022, are expected to fund a \$125M infrastructure plan in  
 15 historically disadvantaged Philadelphia neighborhoods. The project will  
 16 result in the replacement of 66 miles of cast iron main, and the creation of  
 17 120 new skilled jobs, and reduce 412 metric tons of methane emissions.
- 18 • PGW has led on reducing emissions for a cleaner, greener future. In 2024,  
 19 PGW eliminated 7,581 metric tons of carbon dioxide equivalent emissions  
 20 and 4.5 metric tons were saved by adding electric vehicles to our fleet.  
 21 Also, customers saved 3,480 metric tons through PGW's energy-saving  
 22 grants, rebates, and educational programs.
- 23 • PGW added 5 new electric vehicles to its fleet thanks to an Alternative  
 24 Fuels Incentive Grant from the Pennsylvania Department of  
 25 Environmental Protection.
- 26 • PGW worked with AAA Mid-Atlantic to construct a compressed natural  
 27 gas (CNG) fueling station that serves 23 CNG vehicles in the AAA fleet.  
 28 The project was recognized by the Association of Energy Engineers for  
 29 excellence for renewable and alternative energy solutions.
- 30 • PGW enhanced PGWorks.com to allow customers to access instant  
 31 language translation in 50+ languages and select ADA options. These  
 32 upgrades are available on desktop and mobile/smart devices.
- 33 • PGW hires local students. Every summer, students from area high schools  
 34 and colleges gain valuable skills through PGW's internship opportunities.  
 35 PGW hired 27 students – 19 college and 5 high school – to work in  
 36 various departments this past summer. The high school students were part  
 37 of the WorkReady Program, which places teens with local companies for  
 38 six-week paid internships.

- 1 • PGW completed construction of its new, state-of-the-art North Operations  
2 Center in 2023, which houses PGW field operations, training facilities,  
3 and fleet services. Eight PGW buildings were consolidated into the North  
4 Operations Center, reducing PGW’s carbon emissions from those retiring  
5 facilities by 50%. Also, the consolidation will save PGW \$100 million  
6 over 5 years.
- 7 • PGW hosted the first ever Energy Innovation Symposium at Temple  
8 University featuring three panels of local and national energy experts to  
9 explore: The Future Hydrogen Economy; Low-Carbon Energy  
10 Technologies; and Our Clean Energy Future.
- 11 • PGW followed up this symposium with the 2nd Annual PGW Energy  
12 Innovation Symposium at Temple University featuring panels of local and  
13 national energy experts to explore: The Roadmap to Net Zero Emissions,  
14 Funding the Clean Energy Transition, and Clean Energy Case Studies.
- 15 • PGW launched an Energy Innovation Lab in 2021 – a two-year incubator  
16 program with a mission to help support newer businesses that have the  
17 potential to bring innovation to the energy industry and increase energy  
18 efficiency and affordability. Sponsored by PGW in conjunction with  
19 Temple University’s Small Business Development Center, this program  
20 provides small businesses with the necessary services and support to  
21 initiate change.
- 22 • PGW established the PGW Marketplace, where customers can receive  
23 significant EnergySense discounts on smart thermostats that regulate  
24 energy usage and help lower monthly energy bills.
- 25 • PGW began a pilot composting program at its corporate headquarters.  
26 Since its implementation in 2022, PGW has diverted nearly 3,000 pounds  
27 of food waste from landfills.
- 28 • PGW has taken proactive steps to ensure that its Hardship Fund program  
29 remains available to customers after the prior administrator stopped  
30 issuing grants and matching funds to customers without notice to PGW.  
31 PGW now has a new program administrator in place, allowing it to  
32 continue providing Hardship Funds to customers in significant need,  
33 whose income is at or below 175% of the FPL and whose service has been  
34 terminated or is in danger of being terminated.
- 35 • PGW implemented a Hardship Fund Pilot program aimed at customers  
36 who are ALICE at 151%-250% FPL. The Pilot program provides a one-  
37 time grant of up to \$750 for customers who recertified for CRP but were  
38 ineligible due to being above 150% of the FPL but less than 250%, or who  
39 have a Protection from Abuse Order and are in this income group. This is  
40 aimed to provide support for the “benefits cliff” that many lower-income  
41 customers experience.

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- PGW, in partnership with Councilmember Anthony Phillips and Germantown Avenue Crisis Ministry, staged the Energy for All Community Resources Day and provided information on various programs and resources including utility assistance grants.
  - PGW participated in the PUC's Universal Service Working Group to streamline bureaucratic processes with the intention on making it easier for low-income customers to get access to the utility assistance programs that they need.
  - PGW conducted a customer survey and focus groups aimed at enhancing its CRP application. PGW implemented this new application – which is now more intuitive and easier to follow and fill out and makes the process easier for customers to apply.
  - PGW has stood up a process to utilize the shared data from the Pennsylvania Department of Human Services (DHS) for LIHEAP. PGW's process will auto-recertify customers and allow for an expedited enrollment to streamline the application process. PGW is currently waiting for DHS confirmation that it can provide data that meets CRP requirements and data that is valid.
  - PGW has continued offering a variety of energy efficiency and demand-side management programs to customers through Phase IV of its voluntary Demand-Side Management (DSM) Plan. In addition to continuing the existing programs, the Phase IV DSM Plan includes:
    - A new EnergySense Kits (ESK) program that provides customers with a free kit of measures to address space heating, water heating, or both.
    - A new Small Business Assessments (SBA) program which provides free walkthrough energy assessments that recommend energy efficiency upgrades, to encourage small businesses to take advantage of prescriptive rebate programs.
    - A pilot program offering rebates for variable refrigerant flow (VRF) natural gas heat pumps as part of the Commercial Equipment Rebates program.
    - Additional funding to continue providing free smart thermostats to low-income customers as part of the Low-Income Smart Thermostat (LIST) program.



1 **B. Service Quality and Reliability**

2 **1. Customer Service**

3 **Q. PLEASE PROVIDE AN UPDATE REGARDING THE LEVEL OF SERVICE**  
 4 **PERFORMANCE OF PGW'S CALL CENTER.**

5 A. As explained more fully in PGW's Call Center Responsiveness Report filed on May 7,  
 6 2024 at Docket No. R-2023-3037933, PGW has taken many steps to improve the  
 7 performance of its call center. This has included extensive preparation and work  
 8 focusing on staffing, training, and managerial oversight. A robust staffing plan was  
 9 developed to ensure availability throughout the year in consideration of all PGW  
 10 initiatives. PGW engaged overflow vendors to assist with call volume. A robust coaching  
 11 and mentoring culture have been established to assist new hires with integrating into the  
 12 existing call center staff. Finally, PGW exercises strong managerial oversight by  
 13 regularly monitoring calls, working with representatives regarding their customer  
 14 handling and soft skills and engaging in regular meetings with overflow vendors to  
 15 discuss key performance indicators ("KPIs").

16 **Q. HAVE THE RESULTS OF THIS EFFORT BEEN REALIZED IN**  
 17 **PERFORMANCE METRICS?**

18 A. Yes, the call center improved upon its already excellent key performance indicators from  
 19 the prior rate case. Please see the below tables showing the improvements from Calendar  
 20 Years 2021-2022 through 2023-2024.

21 **Table V-B-1-a: 30-Second Call Response Rate**

Month	2021	2022	2023	2024
January	94.0%	77.0%	95.0%	99.0%
February	94.0%	74.0%	94.0%	99.4%
March	90.0%	72.0%	96.0%	97.5%
April	95.0%	71.0%	93.0%	93.2%
May	90.0%	69.0%	93.0%	95.4%

June	92.0%	68.0%	98.0%	97.1%
July	92.0%	78.0%	95.0%	97.4%
August	76.0%	86.0%	98.0%	97.2%
September	76.0%	83.0%	99.0%	98.4%
October	76.0%	88.0%	97.0%	97.0%
November	80.0%	95.0%	95.0%	97.9%
December	87.0%	98.0%	99.0%	98.6%
<b>Average</b>	<b>86.8%</b>	<b>79.9%</b>	<b>96.0%</b>	<b>97.3%</b>

**Table V-B-1-b: Call Abandonment Rate**

Month	2021	2022	2023	2024
January	6.0%	16.5%	2.0%	0.3%
February	3.0%	25.2%	1.8%	0.3%
March	4.0%	24.5%	1.3%	1.2%
April	2.0%	38.7%	2.0%	6.7%
May	5.0%	47.0%	2.0%	1.8%
June	3.0%	44.0%	1.0%	2.7%
July	10.0%	24.0%	1.0%	0.8%
August	21.0%	8.1%	1.0%	1.0%
September	17.0%	9.7%	1.0%	0.8%
October	18.0%	10.6%	1.0%	1.1%
November	17.0%	2.3%	2.0%	0.8%
December	7.0%	0.9%	0.0%	0.7%
<b>Average</b>	<b>9.4%</b>	<b>21.0%</b>	<b>1.3%</b>	<b>1.5%</b>

**VI. PROJECTED IMPACTS ON AFFORDABILITY AND UNIVERSAL SERVICE**

**A. Affordability Generally**

**Q. WHY IS AFFORDABILITY OF GAS DISTRIBUTION SERVICE AN IMPORTANT ISSUE TO THE COMPANY?**

A. PGW, operating in the city of Philadelphia, has a significant percentage of low and lower-income customers in its customer base. Approximately 27% of its customers are low-income – at or below 150% FPL – and qualify for CRP. An often-overlooked group of customers are defined as ALICE – Asset Limited Income Constrained Employed.

1 These include customers who have household income above 150% FPL up to 250% FPL  
2 (historically often described as the working poor). For this group, one large, unexpected  
3 expense can cause significant financial struggles. In Philadelphia, approximately 17% of  
4 customers are in this lower income ALICE group (hereafter ALICE). As such, PGW  
5 strives to ensure both affordable rates for all of its customers and ease and access to its  
6 robust low-income bill assistance programs.

7 **Q. HOW DOES THE COMPANY ASSESS THE AFFORDABILITY OF ITS**  
8 **SERVICE?**

9 A. The Company assesses the affordability of its service by comparing annual bills to  
10 household income in the community that we serve. Such an assessment requires at least  
11 two data points – the average monthly or annual bill and some measure of household  
12 income for the customer population. This is commonly referred to as an Energy Burden  
13 or a Bill-To-Income (BTI) ratio.

14 **Q. WHAT TYPE OF AFFORDABILITY ANALYSIS DID THE COMPANY**  
15 **CONDUCT?**

16 A. PGW utilized census data from the American Community Survey (ACS) and paired this  
17 data with its own internal residential customer and City of Philadelphia geographic data  
18 to conduct this analysis. PGW calculated the actual gas energy burden for its residential  
19 customers at a service-territory level looking back on historical rates and the proposed  
20 rate increase in this proceeding. We further analyzed this data to look at the energy  
21 burden broken down between low-income and non-low-income customers.

22 **Q. IS THERE A GENERALLY ACCEPTED STANDARD FOR THE**  
23 **AFFORDABILITY OF GAS SERVICE IN PENNSYLVANIA?**

24 A. No. There is no definitive standard for affordability in Pennsylvania. Benchmarks for  
25 affordability are a matter of policy. The PUC, in its CAP Policy Statement, has

1 determined that for low-income customers, an energy burden of 10% for gas and electric  
2 combined is just and reasonable.<sup>13</sup>

3 **Q. HOW IS THIS AFFORDABILITY INFORMATION USEFUL?**

4 A. Assessing affordability information for the entire residential customer population helps to  
5 demonstrate customer, energy burdens over time and, in comparison, under the  
6 Company's current or proposed tariff structure. Assessing affordability information for  
7 lower-income customers can indicate the extent to which bills may pose challenges for  
8 certain customers and how CRP addresses this issue.

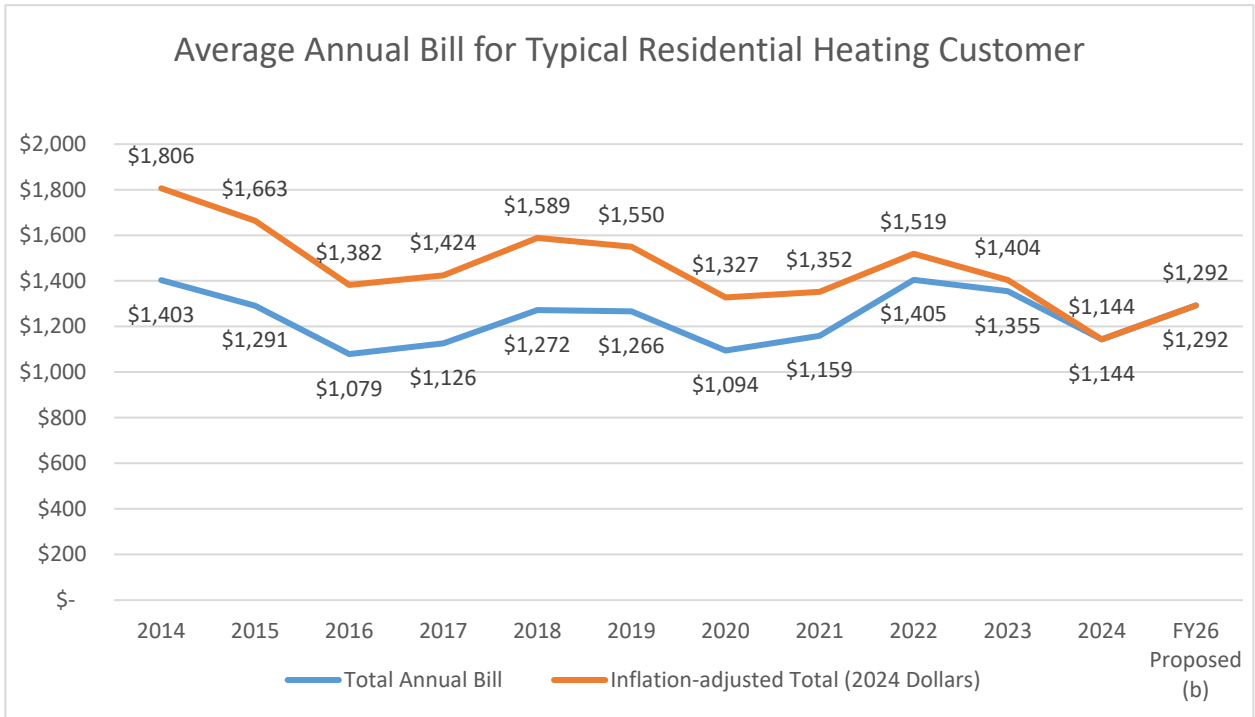
9 **Q. WHAT CONCLUSIONS DO YOU DRAW BASED ON THE COMPANY'S**  
10 **AFFORDABILITY ANALYSES?**

- 11 A. PGW has drawn the following conclusions from its analysis of affordability:
- 12 • The annual bill for a typical PGW heating customer has decreased \$259, or 18.5%  
13 over the last 10 years between 2014 and 2024. This is the customer ask-to-pay  
14 amount which includes all applicable surcharges such as the WNA.
  - 15 • Adjusted for inflation, this represents a \$662 or 36.7% decrease over the same time  
16 period.

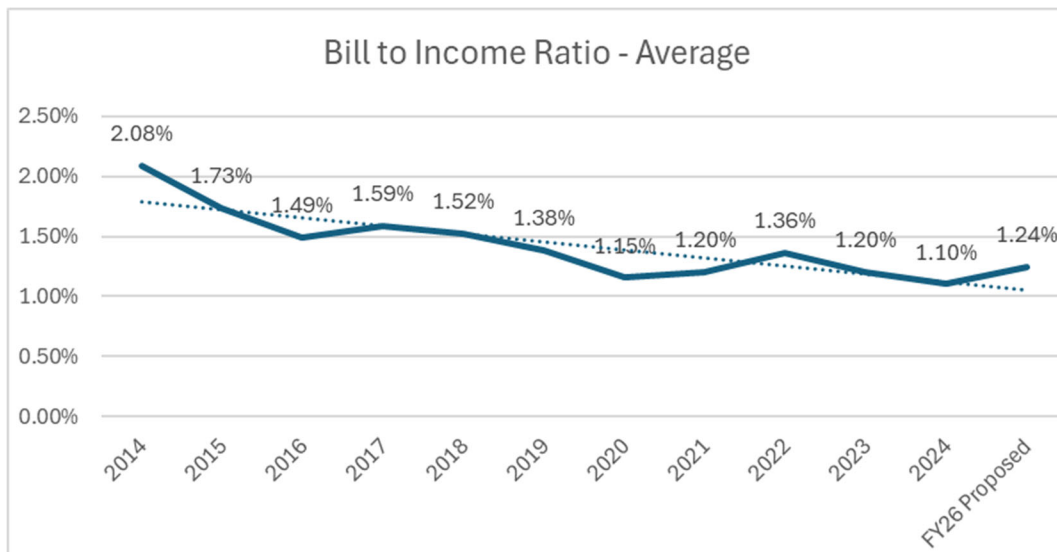
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<sup>13</sup> 52 Pa Code § 69.265(2)(B).

- 1 • With the proposed rates, this still represents a 7.9% decrease from 2014 that is a
- 2 28.5% decrease when adjusted for inflation.

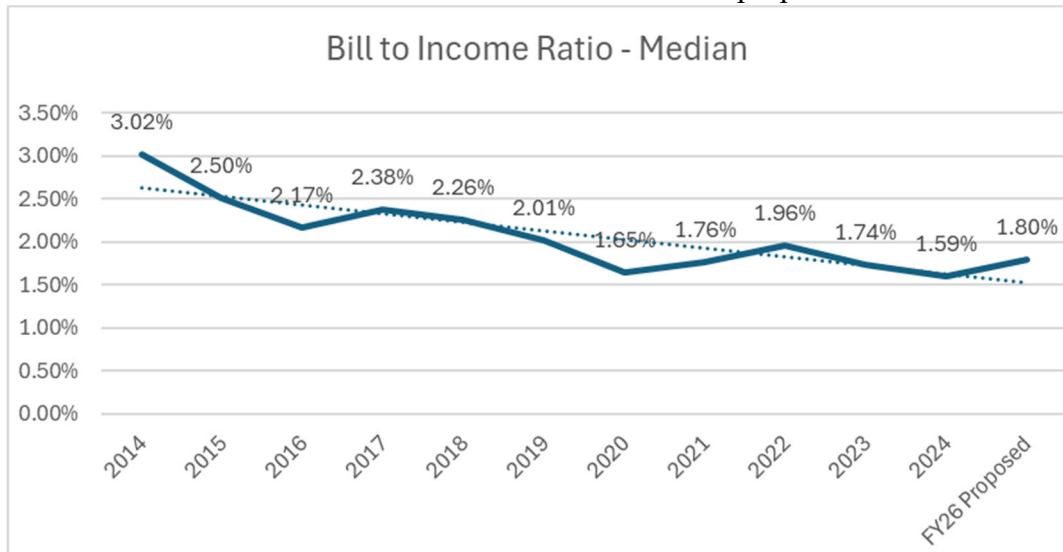


- 3
- 4 • The BTI, using average household income, for all residential PGW rate payers
- 5 (heating and non-heating) has decreased from 2.08% to 1.10% over the last 10 years,
- 6 it would be 1.24% of average household income under proposed rates.



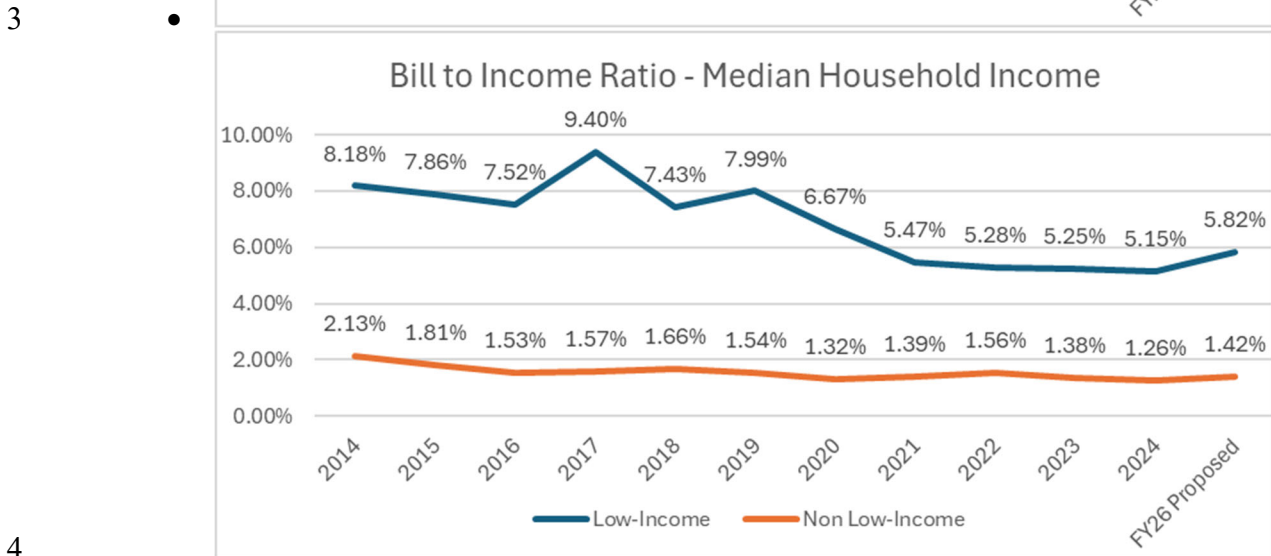
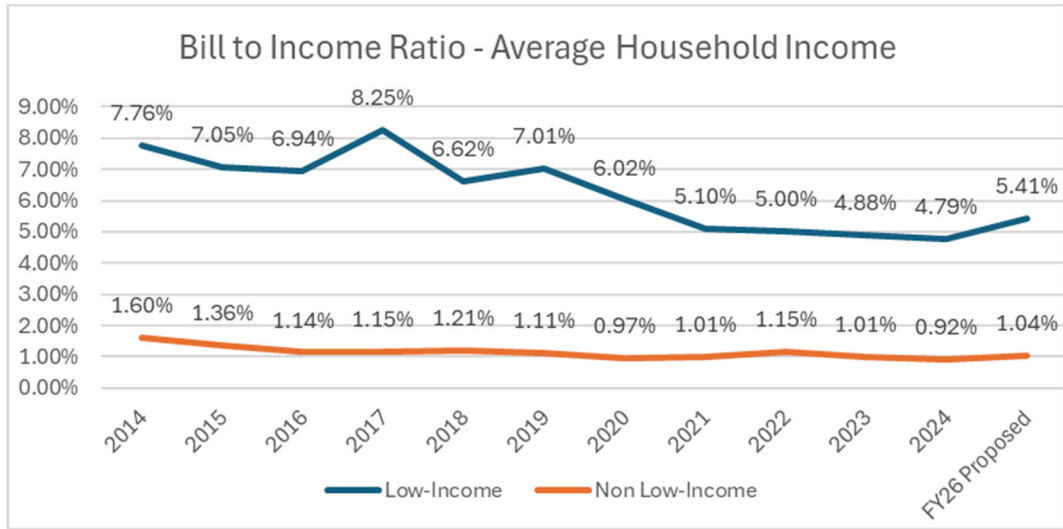
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- 1 • The BTI, using median household income, for all residential PGW rate payers  
 2 (heating and non-heating) has decreased from 3.02% to 1.59% over the last 10 years,  
 3 and would be 1.80% of median household income under proposed rates.



- 4 • Regardless of what is shown in the charts below, CRP customers have energy burdens  
 5 at or below PUC energy burden policies (with a minimum bill of \$25). In fact, CRP  
 6 customers can have effective energy burdens of less than 4% and 6% as the  
 7 application of LIHEAP grants provides further bill assistance on top of the CRP rates  
 8 of 4% or 6% of household income.
- 10 • The below graphs display the BTI ratios, broken out between low-income and non-  
 11 low-income customers using both average and median household income. The trends

1 of BTI have steadily decreased over time, with proposed rates still showing lower  
 2 BTI ratios.



4  
 5  
 6 The Company’s gas distribution service has been, is, and is expected to continue to be  
 7 affordable on average for its residential customers, including under the rates proposed in  
 8 this case.

1        **B. PGW’s Protections for Low-Income Customers**

2        **Q. PLEASE SUMMARIZE THE COMPANY’S INITIATIVES AND ACTIVITIES**  
3        **THAT HIGHLIGHT PGW’S COMMITMENT TO SERVING ITS LOW-INCOME**  
4        **CUSTOMERS.**

5        A.        PGW’s initiatives for its low-income customers since its last base rate case include the  
6        following:

- 7                • PGW redesigned its CRP application to be more intuitive and to make it easier to  
8                apply. PGW researched many other utility applications to identify the components  
9                and formats other utilities use. From there, PGW with the support of an external  
10              survey vendor, conducted surveys and focus groups to fine tune what customers  
11              felt would be best for the application. This research and initiative were shared in  
12              the PUC’s Universal Service Working Group (USWG).
- 13              • PGW was an active participant in the USWG, helping to provide valuable insight  
14              into how data sharing can be effectively utilized, how to design and build a  
15              common application, and to also champion the most effective models of cost  
16              sharing and design of the Universal Service costs in the Commonwealth.
- 17              • PGW is now participating in LIHEAP data sharing with DHS. While the DHS  
18              data is not yet validated by DHS and includes in net income reductions that do not  
19              apply to CRP, PGW has built an automated analytical process to identify which  
20              customers are eligible for auto recertification, those eligible for expedited  
21              enrollment, and those whose data PGW cannot use. This will allow PGW to  
22              deploy its resources quickly and efficiently to be able to better serve its low-  
23              income customers once DHS resolves its open issues.
- 24              • PGW conducted individual outreach to over 18,000 customers who received a  
25              LIHEAP grant but who were not on CRP. Because of the delays of the data  
26              sharing, PGW did not want to miss an opportunity to enroll customers and had its  
27              Universal Service reps send out a letter and make a phone call to these customers.
- 28              • PGW recently finished the first full calendar year of its Hardship Fund Pilot  
29              Program. This program provides one-time grants to customers rejected from CRP  
30              after recertifying and falling outside of the income eligibility guidelines or with a  
31              PFA. This program helps those ALICE customers.
- 32              • PGW stood up a new administrator of its Hardship Fund Administration. At risk  
33              customers can now quickly get the assistance they need after the previous  
34              administrator had issues with intaking and providing grants to customers.
- 35              • In Calendar Year 2024, PGW sponsored or attended 162 events that included  
36              presentations, speaking events, and table events aimed at enrolling customers into  
37              our low-income programs.



1 **Q. PLEASE DESCRIBE THE WORK THE COMPANY IS DOING TO INCREASE**  
 2 **PARTICIPATION IN ITS LOW-INCOME BILL ASSISTANCE PROGRAMS.**

3 A. From January 2023 through January 2025, CRP enrollment has increased from 50,401 to  
 4 65,512 participants.

5 **Q. HOW DOES PGW'S CRP PARTICIPATION LINE UP IN THE**  
 6 **COMMONWEALTH?**

7 A. Based on data reported by the PUC, PGW's participation rate is above the gas industry  
 8 average.

*CAP Participation – Natural Gas Utilities – 2021-2023*

Utility	2021		2022		2023	
	Participants Enrolled as of 12/31/21	CAP Participant Rate	Participants Enrolled as of 12/31/22	CAP Participant Rate	Participants Enrolled as of 12/31/23	CAP Participant Rate
Columbia	24,459	35.9%	23,982	34.2%	23,131	32.0%
NFG	7,201	25.7%	6,793	29.0%	7,077	29.6%
PECO-Gas	21,776	79.2%	22,334	77.1%	23,375	75.4%
Peoples	32,421	29.9%	28,367	26.3%	24,903	22.1%
PGW	53,466	48.4%	50,385	43.8%	54,938	42.7%
UGI Utilities – Gas	22,493	28.7%	19,914	23.4%	23,221	25.8%
<b>Total/Industry Average</b>	<b>161,816</b>	<b>38.4%</b>	<b>151,775</b>	<b>35.2%</b>	<b>156,645</b>	<b>34.1%</b>

9  
10

*CAP Participation – Electric Utilities – 2021-2023*

Utility	2021		2022		2023	
	Participants Enrolled as of 12/31/21	CAP Participant Rate	Participants Enrolled as of 12/31/22	CAP Participant Rate	Participants Enrolled as of 12/31/23	CAP Participant Rate
Duquesne	35,229	73.2%	38,092	74.5%	37,566	70.7%
Met-Ed	21,280	36.7%	21,325	36.7%	21,552	35.3%
PECO-Electric	121,408	86.1%	121,487	83.7%	123,043	80.6%
Penelec	28,463	39.1%	28,988	39.8%	28,821	38.0%
Penn Power	6,281	38.9%	6,835	41.9%	5,990	35.7%
PPL	64,673	32.9%	68,949	34.6%	75,539	36.8%
West Penn	24,792	39.3%	25,124	39.8%	25,116	37.4%
<b>Total/Industry Average</b>	<b>302,126</b>	<b>50.7%</b>	<b>310,800</b>	<b>51.3%</b>	<b>317,627</b>	<b>50.2%</b>

1  
2

3 **Q. WHAT IS THE LOW-INCOME POPULATION FOR PGW’S CRP-ELIGIBLE**  
4 **CUSTOMERS?**

5 **A.**

	2023 Philadelphia Low Income Comparison Table <sup>14</sup>	
	BCS / USRR Estimated Low-Income	PGW Needs Assessment
<b>Total</b>	<b>181,923</b>	<b>132,191</b>
Heating	No breakout between Heating / Non-	105,851
Non-Heating	Heating	26,340

6

7 In PGW’s 2023 Base Rate Case, the Commission directed PGW to adopt BCS’  
8 methodology for estimating low-income customers in its service territory. In the BCS  
9 methodology, low-income population in Philadelphia is determined by using the <150%  
10 percentage of households through the ACS 5-year survey. That number is then multiplied  
11 by the PGW customer population to determine the estimated low-income total. This  
12 produces an estimated count of approximately 182,000 customers.

13 This methodology is flawed in that the estimated low-income calculation assumes that  
14 every customer in Philadelphia County is both a PGW customer and a heating customer.

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<sup>14</sup> This is every household in Philadelphia regardless of heating source or other factors.

1 The Needs Assessment figure utilizes the most recent 1-year ACS survey to identify the  
2 number of total low-income households and then further by heating source, producing an  
3 estimated count of approximately 106,000 households.

4 **Q. WHAT WERE THE RESULTS OF THE HARDSHIP FUND PILOT PROGRAM?**

5 A. Calendar Year 2024 was the first of the Pilot program. PGW provided 157 grants and  
6 spent approximately \$88,000 of the \$100,000 budget. PGW continues to operate the  
7 program and expects to utilize the full amount of \$100,000 for Calendar Year 2025.

8 **Q. IS PGW PROPOSING ANY CHANGES TO THE HARDSHIP FUND PILOT  
9 PROGRAM AT THIS TIME?**

10 A. Yes, PGW is proposing to make the Hardship Fund Pilot Program permanent.

11 **Q. WHAT IS PGW DOING TO PROTECT ALICE CUSTOMERS?**

12 A. PGW already discussed its Hardship Fund Pilot Program, and the Efficient Home  
13 program proposal is another offering that supports ALICE customers.

14 **VII. PRIOR COMMISSION DIRECTIVES**

15 **Q. PLEASE EXPLAIN HOW PGW COMPLIED WITH THE COMMISSION  
16 DIRECTIVES FOLLOWING ITS LAST RATE CASE.**

17 A. PGW completed the below tasks consistent with the Commission’s directives from its last  
18 base rate case:

- 19 • Filed a report with the Commission on May 7, 2024 outlining how PGW intends  
20 to maintain or improve its current call center responsiveness (which I discussed  
21 previously).
- 22 • Developed and implemented a quarterly review process for addressing trends  
23 identified in Commission Decisions adverse to the Company. This Initial  
24 Decision Review Process was filed with the Commission on February 7, 2024.
- 25 • Adopted BCS's census-based estimated low-income customer count in order to  
26 utilize such data to i) increase Customer Responsibility Program enrollment and,  
27 ii) evaluate the effectiveness of PGW’s universal service program outreach and  
28 participation.
- 29 • Filed a Data Sharing and Coordination Plan on January 8, 2024 outlining how  
30 PGW intends to utilize data sharing.

- 1                   • Collected data to establish the net change in CRP participation compared with the  
2                   number of CRP participants at the effective date or rates established pursuant to  
3                   this base rate case, as well as the average shortfall per participant, to be presented  
4                   with its quarterly CRP reconciliation.

5 **VIII. CONCLUSION**

6 **Q. DOES THAT COMPLETE YOUR DIRECT TESTIMONY?**

7 **A.** Yes; however, I do reserve the right to supplement this testimony as may be appropriate.

**VERIFICATION**

I, Denise Adamucci, hereby state that: (1) I am the Senior Vice President for Customer & Regulatory Affairs for Philadelphia Gas Works (“PGW”); (2) the facts set forth in my testimony are true and correct (or are true and correct to the best of my knowledge, information and belief); and, (3) I expect to be able to prove the same at a hearing held in this matter. I understand that statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: 2/26/25

*Denise Adamucci*

Denise Adamucci  
Senior Vice President for Customer &  
Regulatory Affairs  
Philadelphia Gas Works

# **Joint Exhibit DA/RJA-1**

**Revenue Normalization Adjustment – 52 Pa. Code § 69.3302**

The Commission’s policy statement at 52 Pa. Code § 69.3302 identifies factors that the Commission may consider in determining just and reasonable alternative distribution ratemaking mechanisms and rate designs. The following addresses each of these factors related to PGW’s proposed Revenue Normalization Adjustment (“RNA”):

**Section 69.3302(a)(1): How the ratemaking mechanism and rate design align revenues with cost causation principles as to both fixed and variable costs.**

PGW’s proposed RNA recovers/refunds the difference between the annual authorized revenue the Commission has allowed (the approved revenue target), and the combined revenues received through customer billings and the WNA charges/credits for each eligible PGW rate class. The proposed RNA will be calculated and trued-up annually to ensure the Company neither over- nor under-collects the approved revenue target. With the implementation of the RNA, customers will pay approximately the same amount each year for gas delivery service as if the Company had perfectly forecasted its customer usage, which is the same basis upon which the Commission establishes PGW’s base rates. Accordingly, the RNA assures that revenue collection aligns with the allocation of costs to various customer classes in the prior rate case.

**Section 69.3302(a)(2): How the ratemaking mechanism and rate design impact the fixed utility’s capacity utilization.**

PGW’s proposed RNA does not have any identifiable impact on the utility’s capacity utilization.

**Section 69.3302(a)(3): Whether the ratemaking mechanism and rate design reflect the level of demand associated with the customer’s anticipated consumption levels.**

The approved revenue target under PGW’s proposed RNA reflects revenue from anticipated consumption in the fully projected future test year.

**Section 69.3302(a)(4): How the ratemaking mechanism and rate design limit or eliminate interclass and intraclass cost shifting.**

Since the RNA will be based upon the specific revenue target approved by the Commission for the applicable rate classes, which, in turn are based upon the Commission’s determination of the allocation of the revenue requirement, implementation will eliminate any interclass or intraclass cost shifting.

**Section 69.3302(a)(5): How the ratemaking mechanism and rate design limit or eliminate disincentives for the promotion of energy efficiency programs.**

The proposed RNA will break the link between the gas consumption of the Company’s customers and its cost recovery, thereby resulting in a better alignment of PGW’s interests with

the interests of its customers. As discussed above, the RNA will also stabilize PGW's revenues and remove any disincentive for PGW to promote energy conservation programs out of concern for lessening sales and, thus, the revenue available to provide safe and adequate service.

**Section 69.3302(a)(6): How the ratemaking mechanism and rate design impact customer incentives to employ efficiency measures and distributed energy resources.**

Under the RNA, customers will directly benefit from the efficiency and conservation measures they employ through a dollar-for-dollar reduction in gas costs. The RNA will allow PGW to more fully promote and expand programs to reduce carbon emission and promote conservation and energy efficiency, without experiencing associated losses due to declining gas sales. If the RNA is approved, PGW is proposing additional home energy assessments and energy efficiency measures at no cost to the customer, for residential customers earning up to 250% of the Federal Poverty Level. Customers will have numerous incentives available through PGW to improve energy efficiency.

**Section 69.3302(a)(7): How the ratemaking mechanism and rate design impact low-income customers and support customer assistance programs.**

For customers participating in PGW's Customer Responsibility Program ("CRP") via a percentage of income payment plan ("PIPP"), their bills will be unaffected by changes in delivery charges, including any addition or credit from the RNA. CRP customers who pay based on a CRP budget bill could see an increase in that bill. But those bills are still capped at the customer's authorized energy burden, since the customer pays either the budget bill or the PIPP, whichever is lower. In stabilizing the recovery by PGW of the costs of delivering safe and reliable gas to customers, the RNA likewise reduces the variability of distribution rates that are paid by consumers. All customers, including low-income customers, will benefit from this reduced variability of gas delivery charges, and will also benefit from the financial stability that the RNA will provide to PGW as a cash flow, municipally owned utility. This financial stability enables PGW to continue offering robust customer assistance programs, reduces or stabilizes its borrowing costs and avoids the cost of additional rate proceedings.

**Section 69.3302(a)(8): How the ratemaking mechanism and rate design impact customer rate stability principles.**

As discussed above, in stabilizing the recovery by PGW of the costs of delivering safe and reliable gas to customers, the RNA likewise reduces the variability of distribution rates that are paid by consumers. All customers will also benefit from the financial stability that the RNA will provide to PGW as a cash flow, municipally owned utility. This financial stability enables PGW to continue to mitigate the potential over or under-recovery of costs, reduces or stabilizes its borrowing costs, and avoids the cost of additional rate proceedings.



**Section 69.3302(a)(9): How weather impacts utility revenue under the ratemaking mechanism and rate design.**

Weather will not directly affect revenues under the RNA mechanism as the approved revenue target is based on normal weather. Adjustments related to weather will be addressed by PGW's existing WNA.

**Section 69.3302(a)(10): How the ratemaking mechanism and rate design impact the frequency of rate case filings and affect regulatory lag.**

Due to PGW's status as a municipal utility that operates under the cash flow method for ratemaking, the RNA has the potential to reduce the frequency of rate case filings and regulatory lag. When usage variations reduce PGW's opportunity to fully recover the costs of operating the natural gas utility, its ability to continue providing safe and reliable natural gas service to consumers is jeopardized. The proposed RNA is designed to ensure that the Company neither over- nor under-collects the approved revenue target. This will ensure that PGW has sufficient cash on hand to fulfill its obligations as a natural gas distribution company. While future rate cases will still be necessary to address changes to the cost of service, implementation of the RNA will likely reduce the frequency of future rate cases.

**Section 69.3302(a)(11): If or how the ratemaking mechanism and rate design interact with other revenue sources, such as Section 1307 automatic adjustment surcharges, 66 Pa.C.S. § 1307 (relating to sliding scale of rates; adjustments), riders such as 66 Pa.C.S. § 2804(9) (relating to standards for restructuring of electric industry) or system improvement charges, 66 Pa.C.S. § 1353 (relating to distribution system improvement charge).**

The proposed RNA only applies to base revenue requirements for the applicable rate classes and will be coordinated with PGW's existing WNA. Other surcharges do not apply to non-gas base rates.

**Section 69.3302(a)(12): Whether the alternative ratemaking mechanism and rate design include appropriate consumer protections.**

The proposed RNA will recovers/refunds the difference between the annual authorized revenue the Commission has allowed (the approved revenue target), and the combined revenues received through customer billings and the WNA charges/credits for each eligible PGW rate class. This ensures that customers are not overcharged, and any amount collected beyond the approved revenue target will be refunded back to customers.

**Section 69.3302(a)(13): Whether the alternative ratemaking mechanism and rate design are understandable to customers.**

PGW's proposed RNA is not a unique concept for regulated utilities and similar versions have been implemented successfully in many other jurisdictions. The basic concept is not difficult to

convey to customers, which is that the Commission has determined that PGW needs to bill a certain amount of revenues in order to fund its operations as a natural gas utility and providing customers with safe, secure and reliable natural gas service. In other words, once the Commission approves the revenue target – the level of costs that PGW incurs to operate the natural gas distribution system – it is important that PGW bill to recover that level of costs – no less and no more. The RNA is a mechanism that is designed to ensure that outcome.

**Section 69.3302(a)(14): How the ratemaking mechanism and rate design will support improvements in utility reliability.**

The RNA supports improvement in utility reliability by ensuring that PGW is recovering the costs associated with operating a natural gas utility and providing safe, secure and reliable natural gas service to the customers on its distribution system. These costs include maintenance of and upgrades to the infrastructure that are at the core of the Company's operations. With the financial stability that the RNA will provide, PGW will have the revenue necessary to fund its operations and continue its capital improvement program that is designed to enhance the reliability of its natural gas service.

**Section 69.3302(b): In any distribution rate filing by a fixed utility under 66 Pa.C.S. § 1308 (relating to voluntary changes in rate) that proposes an alternative ratemaking mechanism and rate design, the fixed utility shall explain how these factors impact the distribution rates for each customer class.**

PGW's proposed RNA ensures non-commodity related fixed cost recovery for the portion of fixed costs that are recovered through volumetric rates, to align with the assumptions embedded in previously authorized gas delivery rates and associated billing determinants.

# **Joint Exhibit DA/RJA-2**

### **Weather Normalization Adjustment – 52 Pa. Code § 69.3302**

The Commission’s policy statement at 52 Pa. Code § 69.3302 identifies factors that the Commission may consider in determining just and reasonable alternative distribution ratemaking mechanisms and rate designs. The following addresses each of these factors related to PGW’s Weather Normalization Adjustment (“WNA”):

**Section 69.3302(a)(1): How the ratemaking mechanism and rate design align revenues with cost causation principles as to both fixed and variable costs.**

PGW’s WNA is designed to enable the recovery of revenues through volumetric distribution rates that reflect the cost-of-service requirements determined in a base rate proceeding. A significant portion of these revenues is caused by fixed costs, such as operation and maintenance expenses, administrative and general expenses, depreciation and certain taxes, which do not vary with the amount of gas that is delivered to customers. These costs also do not vary, in the short term, with changes in the weather. In the absence of a rate design that affords PGW the opportunity to recover all fixed costs in a fixed monthly charge, the WNA mechanism better aligns distribution revenues with cost causation principles. The WNA accomplishes this result by allowing PGW to recover fixed costs through volumetric distribution rates by appropriately accounting for variation in usage due to weather.

**Section 69.3302(a)(2): How the ratemaking mechanism and rate design impact the fixed utility’s capacity utilization.**

PGW’s WNA has no identifiable impact on its capacity utilization.

**Section 69.3302(a)(3): Whether the ratemaking mechanism and rate design reflect the level of demand associated with the customer’s anticipated consumption levels.**

Yes. The base load is determined separately for each individual customer and is revised annually to reflect the non-temperature sensitive usage of customers; heating sensitive load is then calculated. Normal heating sensitive load is determined by calculating the load associated with a twenty-year average of annual heating degree days.

**Section 69.3302(a)(4): How the ratemaking mechanism and rate design limit or eliminate interclass and intraclass cost shifting.**

Since the WNA mechanism applies rates that are based upon the specific revenue allocation and rate design approved by the Commission for heating customers, its continued implementation will eliminate the potential for interclass or intraclass cost shifting related to weather driven usage deviations from the weather assumptions used in establishing rates. In other words, because the WNA is calculated at an individual customer level using weather-normalized usage specific to that customer, and delivery charges are specific to the customer’s rate class, there will be no interclass or intraclass cost shifting related to the WNA.

**Section 69.3302(a)(5): How the ratemaking mechanism and rate design limit or eliminate disincentives for the promotion of energy efficiency programs.**

PGW remains committed to the successful implementation of its Universal Service and Energy Conservation Plan. The Company has also demonstrated its commitments to saving customers money and ensuring efficient energy use by implementing various programs through its Demand Side Management program, such as the Low Income Smart Thermostat (LIST) program. The WNA only addresses variations due to weather and does not negatively impact energy efficiency programs.

**Section 69.3302(a)(6): How the ratemaking mechanism and rate design impact customer incentives to employ efficiency measures and distributed energy resources.**

Customers remain incentivized to employ efficiency measures that reduces both their overall bill and the portion of their bill that is subject to the WNA mechanism. A customer will realize a direct reduction in the gas commodity portion of his or her bill and a reduced WNA charge if they engage in conservation compared to their bill if they had not engaged in that conservation.

**Section 69.3302(a)(7): How the ratemaking mechanism and rate design impact low-income customers and support customer assistance programs.**

For customers participating in PGW's Customer Responsibility Program ("CRP") via a percentage of income payment plan ("PIPP"), their bills will be unaffected by changes in delivery charges, including any addition or credit from the WNA. CRP customers who pay based on a CRP budget bill could see an increase in that bill. But those bills are still capped at the customer's authorized energy burden, since the customer pays either the budget bill or the PIPP, whichever is lower. In stabilizing the recovery by PGW of the costs of delivering safe and reliable gas to customers, the WNA likewise reduces the variability of distribution rates that are paid by consumers. All customers, including low-income customers, benefit from this reduced variability, and also benefit from the financial stability that the WNA provides to PGW as a cash flow, municipally owned utility. This financial stability enables PGW to continue offering robust customer assistance programs, reduces or stabilizes its borrowing costs and avoids the cost of additional rate proceedings.

**Section 69.3302(a)(8): How the ratemaking mechanism and rate design impact customer rate stability principles.**

The WNA provides greater stability for customers since delivery charges are normalized for expected weather, which otherwise may be subject to erratic variability. In addition, the WNA helps to avoid the need for PGW to seek emergency rate relief or rates that would adequately

guard against financial risk that might occur due to abnormal weather in its service territory, which would potentially result in greater rate increases.<sup>1</sup>

**Section 69.3302(a)(9): How weather impacts utility revenue under the ratemaking mechanism and rate design.**

With the WNA’s purpose of achieving revenue neutrality, this mechanism reduces the impact of the weather when it varies from what is considered historically normal weather, on PGW’s revenue – for PGW, a twenty-year average of heating degree days. While the WNA does not ensure that PGW will recover 100% of its authorized distribution revenues, the clause reduces the amount of weather-related variation in both customer bills and associated utility distribution revenues. Without the WNA, PGW would be deprived of the opportunity to recover the Commission-approved distribution costs of service during times when warmer than normal weather occurs in its service territory and customers would not receive a credit when weather is colder than normal. This is particularly crucial for PGW as a cash flow-regulated utility with no shareholders and no profit margin as part of its rates. Virtually all of the revenue it requires to run the company and keep service safe and reliable comes from rates. Without the WNA, PGW could find itself without the cash to pay its bills or continue its capital improvement program if it experienced consistent, significantly warmer than normal periods and would certainly force PGW to file for emergency rate relief in order to maintain service.

The absence of a WNA would also place PGW in a position of receiving a higher amount of revenues from customers when the weather is colder than normal. Indeed, in the revenue month of January 2025, PGW just credited customers approximately \$4.0 million because of an experienced colder than normal month of approximately 10.4% more experienced degree days. The WNA serves to avoid both scenarios by minimizing the impact of weather on PGW’s revenues and customers’ bills and helping to assure that it has the cash it needs to continue to provide safe, reliable and adequate service.<sup>2</sup>

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<sup>1</sup> See *Pa. PUC v. Philadelphia Gas Works*, Docket Nos. R-2022-3034229 and P-2022-3034264, Recommended Decision (issued July 19, 2023), at 8-9, Findings of Fact 17, 21 and 24 (subsequently adopted by the Opinion and Order entered Sept. 21, 2023) (finding that “PGW’s WNA: (i) stabilizes cash flow from year-to-year; (ii) reduces the need for short-term borrowing from year-to-year; (iii) positively affects PGW’s credit rating; and (iv) reduces the need for costly base rate proceedings”; “[t]he continuation of PGW’s WNA is necessary for the continued financial health of the Company and to support the provision of safe and adequate natural gas service to approximately 500,000 customers in Philadelphia”; and “[w]ithout the WNA, PGW would need to seek Commission approval for significantly higher base rates to guard against financial risks that might occur due to abnormal weather in its service territory.”) The Commission also found that the parties did not meet their burden to demonstrate that their proposed modifications to the WNA were just and reasonable. See Order at 36.

<sup>2</sup> See *Pa. PUC v. Philadelphia Gas Works*, Docket Nos. R-2022-3034229 and P-2022-3034264, Recommended Decision (issued July 19, 2023), at 6 and 8-10, Findings of Fact 5, 15, 16, 22 and 31 (subsequently adopted by the Opinion and Order entered Sept. 21, 2023).

**Section 69.3302(a)(10): How the ratemaking mechanism and rate design impact the frequency of rate case filings and affect regulatory lag.**

Due to PGW's status as a municipal utility that operates under the cash flow method for ratemaking, the WNA has reduced the frequency of rate case filings and regulatory lag. Prior to the implementation of the WNA, when weather variations reduced PGW's billed revenues it correspondingly reduced its opportunity to fully recover the fixed costs of operating the natural gas utility. This seriously threatened PGW's ability to continue providing safe and reliable natural gas service to consumers. To ensure that PGW had sufficient cash on hand to fulfill its obligations as a municipally owned natural gas distribution company that operates on a cash basis, the WNA has been crucial to helping PGW maintain the level of revenues necessary for it to keep its distribution system safe and reliable, while, at the same time providing revenue neutrality to customers (not permitting PGW to achieve a windfall as a result of colder than normal weather.) As discussed above, PGW's WNA is calculated at a customer-specific level in real-time with the calculation of the customer's bill. As a result, there is no regulatory lag associated with the WNA. Without the WNA PGW would almost certainly have required more frequent filing of rate cases, including requests for emergency relief.<sup>3</sup>

**Section 69.3302(a)(11): If or how the ratemaking mechanism and rate design interact with other revenue sources, such as Section 1307 automatic adjustment surcharges, 66 Pa.C.S. § 1307 (relating to sliding scale of rates; adjustments), riders such as 66 Pa.C.S. § 2804(9) (relating to standards for restructuring of electric industry) or system improvement charges, 66 Pa.C.S. § 1353 (relating to distribution system improvement charge).**

The WNA only applies to distribution related charges – these are recovering the base distribution revenue requirement from applicable WNA customer classes for the heating season of October through April. The mechanism does not directly interact with other revenue sources but would be fully reconciled by PGW's proposed RNA such that any over recoveries or under recoveries associated with the WNA would be trued up through the proposed RNA reconciliation process.

**Section 69.3302(a)(12): Whether the alternative ratemaking mechanism and rate design include appropriate consumer protections.**

The WNA protects consumers from paying higher bills when the weather is colder than normal and benefits consumers by ensuring that their natural gas utility is financially strong and stable such that they continue to receive safe, secure and reliable natural gas service, regardless of variations in weather.<sup>4</sup> The WNA ensures weather-related revenue neutrality on a customer-by-customer basis as approved by the Commission.

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<sup>3</sup> See footnote 1, above.

<sup>4</sup> *Pa. PUC v. Philadelphia Gas Works*, Docket Nos. R-2022-3034229 and P-2022-3034264, Recommended Decision (issued July 19, 2023), at 34; *see also* Opinion and Order (entered Sept. 21, 2023), at 36.

**Section 69.3302(a)(13): Whether the alternative ratemaking mechanism and rate design are understandable to customers.**

The basic concept of the WNA is not difficult to convey to consumers, which is that the Commission has determined that PGW needs to recover a certain amount of revenues in order to fund its operations as a natural gas utility and providing consumers with safe, secure and reliable natural gas service, regardless of how the weather varies from one heating season to another. In other words, once the Commission has identified a level of fixed costs that PGW incurs to operate the natural gas distribution system, it is important that PGW recover that level of costs – no less and no more. The WNA is a mechanism that is designed to ensure that outcome.

**Section 69.3302(a)(14): How the ratemaking mechanism and rate design will support improvements in utility reliability.**

The WNA supports improvement in utility reliability by ensuring that PGW is recovering the PUC-determined level of fixed costs associated with operating a natural gas utility and providing safe, secure and reliable natural gas service to the customers on its distribution system. These costs include maintenance of and upgrades to the infrastructure, including financing for cast iron mains and other antiquated parts of the distribution system. With the financial stability that the WNA provides, PGW is able to continue its capital improvement program that is designed to enhance the reliability of its natural gas service.<sup>5</sup>

**Section 69.3302(b): In any distribution rate filing by a fixed utility under 66 Pa.C.S. § 1308 (relating to voluntary changes in rate) that proposes an alternative ratemaking mechanism and rate design, the fixed utility shall explain how these factors impact the distribution rates for each customer class.**

PGW’s WNA ensures non-commodity related fixed cost recovery for the portion of fixed costs that are recovered through weather-sensitive volumetric rates, by normalizing customer usage to align with the weather assumptions embedded in previously authorized gas delivery rates and associated billing determinants.

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<sup>5</sup> See *Pa. PUC v. Philadelphia Gas Works*, Docket Nos. R-2022-3034229 and P-2022-3034264, Recommended Decision (issued July 19, 2023), at 6, Findings of Fact 6 (subsequently adopted by the Opinion and Order entered Sept. 21, 2023) (finding that “[t]he goal of WNA design is to permit the utility to recover its authorized level of earnings that supports its distribution system, and for a cash flow regulated utility, the company’s authorized level of cash and liquidity.”).



# Tab 2

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

**JOSEPH F. GOLDEN, JR.**

ON BEHALF OF  
PHILADELPHIA GAS WORKS

Docket No. R-2025-3053112

Philadelphia Gas Works

General Rate Increase Request

TOPICS:

Calculation and Support for  
Requested Revenue Requirement  
Financial Condition  
Presentation of *Pro Forma* Test Year Data

February 27, 2025

## TABLE OF CONTENTS

	<b>Page</b>
I. INTRODUCTION .....	1
II. PGW’S NEED FOR RATE RELIEF.....	2
III. OVERVIEW OF PGW’S ACCOUNTING EXHIBITS AND BUDGETING PROCESS.	9
(A) Presentation of PGW’s Financial Information.....	9
(B) Creation of Projections for PGW’s FTY AND FPFTY .....	12
(C) PGW’s Capital Budgets .....	16
(D) PGW’s Revenue Bonds.....	24
IV. CALCULATION OF REVENUE REQUIREMENT.....	26
(A) Cash Requirements .....	28
(B) Financial Results at Present Rates .....	37
(C) Rate Increase Request.....	46
V. FINANCIAL IMPACTS FROM PGW’S ADDITIONAL PROPOSALS .....	46
(A) Financial Impacts from Decoupling Proposal.....	46
(B) Financial Impacts from Revisions to DSIC .....	47
VI. CONCLUSION.....	47

## TABLE OF EXHIBITS

JFG-1	<i>Pro Forma</i> Financial Statements (at Present Rates)
JFG-2	<i>Pro Forma</i> Financial Statements (at Requested Rates)
JFG-3	Presentation of Base Rate Revenue <i>Pro Forma</i> for the FPFTY (at Present Rates)
JFG-4	Presentation of Base Rate Revenue <i>Pro Forma</i> for the FPFTY (at Requested Rates)
JFG-5	Presentation of Base Rate Revenue for the HTY

1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND POSITION WITH THE COMPANY.**

3 A. My name is Joseph F. Golden, Jr. My position is Executive Vice President and Acting  
4 Chief Financial Officer for Philadelphia Gas Works (“PGW” or “Company”).

5 **Q. HOW LONG HAVE YOU HELD THIS POSITION?**

6 A. I was appointed Executive Vice President and Acting Chief Financial Officer in March  
7 2012. I started with PGW in August 1986. My prior titles at PGW include Controller,  
8 Treasurer, Manager Treasury Department, Senior Staff Accountant, and Staff  
9 Accountant. Before starting with PGW, I had prior work experience in public accounting,  
10 treasury accounting and cash management, and cost accounting for a manufacturing  
11 company.

12 **Q. WHAT ARE YOUR VARIOUS JOB RESPONSIBILITIES?**

13 A. In my present position, I am responsible for the treasury, accounting, and budgeting  
14 functions.

15 **Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND.**

16 A. I hold a Bachelor of Science degree in Accounting from Villanova University, a Master  
17 of Business Administration degree from Drexel University, and a Juris Doctor degree,  
18 *cum laude*, from Temple University School of Law.

19 **Q. HAVE YOU EVER PROVIDED TESTIMONY BEFORE THE PENNSYLVANIA  
20 PUBLIC UTILITY COMMISSION (“COMMISSION” OR “PUC”)?**

21 A. Yes. I submitted testimony in PGW’s last three base rate proceedings (Docket No. R-  
22 2017-2586783, Docket No. R-2020-3017206, and Docket No. R-2023-3037933). I also  
23 submitted rebuttal testimony on behalf of PGW in the Petition of Philadelphia Gas Works  
24 for Waiver of Provisions of Act 11 to Increase the Distribution System Improvement

1 Charge (“DSIC”) Cap and to Permit Levelization of DSIC Charges (Docket No. P-2015-  
2 2501500).

3 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

4 A. The purpose of my testimony is to support PGW’s claimed \$105.0 million base rate  
5 increase by providing *pro forma* financial projections demonstrating the need for and  
6 reasonableness of the requested increase.

7 **Q. ARE YOU SPONSORING ANY EXHIBITS?**

8 A. Yes. I am sponsoring PGW’s principal accounting exhibits that provide the *pro forma*  
9 financial projections at present rates, Exhibit JFG-1, and at proposed rates, Exhibit JFG-  
10 2. In addition, I am also sponsoring Exhibit JFG-3, Exhibit JFG-4 and Exhibit JFG-5.

11  
12 **II. PGW’S NEED FOR RATE RELIEF**

13 **Q. PLEASE SUMMARIZE THE RATE INCREASE SOUGHT BY PGW IN THIS**  
14 **PROCEEDING.**

15 A. PGW is requesting an increase in its annual base rate operating revenues of \$105.0  
16 million, or 15.73% percent on a total revenue basis, with a proposed effective date of  
17 April 29, 2025.

18 The \$105.0 million of additional base rate revenues are being requested above PGW’s  
19 current *pro forma* test year base rate revenues for PGW to recover its non-gas costs.

20 PGW’s non-gas costs are the costs incurred to provide public utility service, other than  
21 the cost of natural gas that is recovered in PGW’s 1307(f) proceedings before the  
22 Commission.<sup>1</sup>

23  

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<sup>1</sup> PGW’s next 1307(f) proceeding will be filed on February 28, 2025. *Pennsylvania Bulletin*, 2025 Schedule of Filing Dates for Recovery of Purchased Gas Costs, 54 Pa.B. 6840.

1 **Q. WHY IS PGW REQUESTING A RATE INCREASE?**

2 A. PGW needs more base rate revenues to continue to provide safe and reliable service for  
3 the following reasons:

4 **First**, PGW has continued to make an unprecedented level of investment in new and  
5 replacement utility plant to maintain and improve safe access to the largest and longest-  
6 operating municipal natural gas distribution network in the United States.

7 PGW invested and plans to invest about \$421.0 million in construction and capital  
8 projects between September 1, 2024 (the start of the Future Test Year (“FTY”)) and  
9 August 31, 2026 (the end of the Fully Projected Future Test Year (“FPFTY”)).

10 PGW issued new money bonds in FY 2025 to support the capital program, adding  
11 roughly \$16.2 million in annual debt service. The construction and capital improvements  
12 funded (by cash and borrowing) include PGW’s baseline Cast Iron Main Replacement  
13 Program (about \$36.6 million for 18 miles), PGW’s accelerated Cast Iron Main  
14 Replacement Program (\$36.2 million funded by the DISC), replacement and upgrade of  
15 the Customer Information Systems (“CIS”),<sup>2</sup> as well as numerous other projects to  
16 maintain or improve the safety and reliability of PGW’s gas distribution system.<sup>3</sup>

17 **Second**, just like every other business and individual, cost increases have meant that its  
18 existing revenue levels no longer cover the cost of PGW’s operating expenses or the

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<sup>2</sup> PGW’s capital budget will likely be updated to include additional spending on the CIS.

<sup>3</sup> This includes major projects such as the replacement of plant-wide air compressors, security cameras and a fiber optic network at the Richmond facility, the replacement and installation of metering equipment and new heater, generator, station modifications at various Metering and Regulation stations. *See*, PGW Answer to Filing Requirements, A.II.A.13. All of these projects are crucially necessary to PGW’s continuing ability to provide safe, reliable and reasonable natural gas service.

1 hundreds of millions of dollars of capital improvements that PGW needs to make to  
2 maintain and improve system safety and reliability.

3 **Third**, PGW is experiencing material reductions in usage by its customers. Since the  
4 costs of capital additions and operating expenses do not similarly decrease when usage  
5 decreases, PGW must recover its costs from a customer base that is using less natural gas.

6 The lower usage resulted in PGW’s billed revenues being down \$57.4 million compared  
7 to the authorized revenue projection in PGW’s 2023 rate proceeding.<sup>4</sup> The lower  
8 revenues, in turn, mean that PGW had less DISC revenues (since that surcharge is based  
9 on a percentage of the amount billed to customers under the applicable rates) and less  
10 cash to pay for construction and capital improvements (cash from rates used for  
11 construction and capital improvements is referred to as “pay-go,” “internally generated  
12 funds” or “IGF”).

13 The cumulative impact of additional plant investment, operating budget expense  
14 increases, and a decline in per-household utilization requires rate relief in order for PGW  
15 to generate sufficient cash to operate and provide adequate liquidity.

16 Exhibit JFG-1 illustrates that the cash balance, using current rates, at the end of the  
17 current fiscal year (FY 2025) is estimated to be \$23.5 million. (Exhibit JFG-1, Cash Flow  
18 Statement, line 24). It also shows that – without rate relief – PGW would end the FPFTY  
19 with a \$48.4 million **cash deficit**. (Exhibit JFG-1, Cash Flow Statement, line 24). Neither  
20 of these levels is sufficient for PGW to operate at present levels of safety and customer  
21 service, let alone maintain its current bond ratings and reasonable cost of borrowing.

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<sup>4</sup> \$31.8 million after factoring in WNA collections in FY24.

1 The lack of non-borrowed year-end cash means, among other things, that Debt Service  
2 Coverage (“DSC”) is falling dangerously close to default levels without rate relief. Using  
3 the Bond Ordinance calculations (which exclude the required \$18.0 million payment to  
4 the City), PGW’s debt service coverage would fall to 1.68x in the FPFTY - barely  
5 passing PGW’s statutory bond covenant requirement. (Exhibit JFG-1, Debt Service, line  
6 23). Using the more realistic calculations used by the rating agencies (which include the  
7 required \$18.0 million payment to the City), PGW’s DSC falls to **1.52x** in the FPFTY  
8 (Exhibit JFG-1, Debt Service, line 24) – barely passing the minimum level (of 1.50x) that  
9 would trigger a downgrade in PGW’s bond ratings. Using either calculation, the coverage  
10 levels are significantly lower than PGW’s goal of maintaining 2.0x or higher coverage in  
11 order to ensure sufficient cash flow and maintain the current “A” level bond ratings.

12 **Q. HAVE THOSE REASONS IMPACTED PGW’S FINANCIAL CONDITION?**

13 A. Yes. Let me begin with the Historic Test Year (“HTY”), FY 2024. PGW did not receive  
14 the anticipated level of base rate revenues in FY 2024. In the last rate proceeding, the  
15 Commission (and PGW) believed that PGW would receive \$468.2 million in base rate  
16 revenues. Exhibit JFG-5, line 10.<sup>5</sup> That did not happen. PGW only received \$436.3  
17 million in base rate revenues. Exhibit JFG-5, line 2. In FY 2024, PGW dealt with the  
18 lower revenues by managing its limited cash resources. That being said, that lack of cash  
19 (or IGF) meant that PGW needed to use \$35.0 million in short-term borrowing to fund  
20 construction expenses in FY 2024.

21 PGW’s use of short-term borrowing in FY 2024 boosted PGW’s actual results in its  
22 ending cash balance and days cash on hand metric for the fiscal year. The results,

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<sup>5</sup> See also PGW 2023 Compliance Tariff Supplements (November 20, 2023) at Proof of Revenues,  
<https://www.puc.pa.gov/pdocs/1806698.pdf>.



1 including the short-term borrowing, are shown on Exhibit JFG-1, which shows year-end  
2 cash of \$115.6 million and 90 days of cash on hand. If PGW had not relied upon its  
3 restricted short-term borrowing capacity of Capital Project Commercial Paper Notes,  
4 PGW's actual financial condition would have looked dramatically different. Without the  
5 short-term borrowing, PGW would have had to rely on non-borrowed year-end cash to  
6 fund its construction and capital expenses and would have ended FY 2024 with about  
7 \$80.6 million in non-borrowed year-end cash and 63.2 days of cash on hand, well below  
8 the levels experienced by its peers.

9 I would observe that the base rate revenue requested by PGW in this proceeding of  
10 \$523.2 million represents just a \$55.0 million increase from the base rate revenue level  
11 authorized in R-2023-3037933, on the basis of a FY 2024 fully projected future test year,  
12 and is actually slightly lower than the revenue requested by PGW in its 2023 base rate  
13 filing, which illustrates the shifts in consumption that have occurred following PGW's  
14 filing in the last case, as detailed further in PGW Statement No. 6.

15 To further address this dramatic drop in sales that PGW is now experiencing, the filing  
16 also includes a request for approval of a decoupling mechanism as an alternative rate  
17 mechanism in accordance with 66 Pa. C.S. § 1330. As detailed further in PGW  
18 Statements No. 1, 6, and 8, the decoupling proposal is intended to ensure more  
19 predictable and stable base rate revenue levels for PGW to prudently maintain the  
20 distribution system in a time of increasing volatility in demand and a warming weather  
21 trend, by adopting a mechanism utilized in jurisdictions nationally.

1 **Q. WHAT ABOUT THE FTY AND THE FPFTY?**

2 A. In the FTY, FY 2025, PGW is weathering the decreased revenues by managing its limited  
3 cash resources. PGW has also deferred some of its planned, non-critical construction and  
4 maintenance efforts.

5 Looking forward to the FPFTY, FY 2026, capital expenditures and operating expenses  
6 are projected to increase. Operating expenses (not including gas costs) are projected to  
7 rise by 15.3% in the FPFTY, as compared to the FTY. To maintain safe and reliable  
8 service to existing customers, the Company must invest to upgrade its infrastructure.  
9 Capital expenditures in the FPFTY (\$209.0 million) are projected to be similar to the  
10 FTY (\$212.0 million). (Exhibit JFG-2, Cash Flow, lines 11 and 12).

11 The projected increases in operating expenses and the large capital budget will result in  
12 PGW having an unacceptably low level of cash available in the FPFTY (if there is no  
13 increase in base rate revenues) to satisfy all of its cash obligations and to meet working  
14 capital requirements, to provide adequate liquidity and to timely pay its bills in the  
15 FPFTY.

16 **Q. PLEASE DESCRIBE SOME OF THE MAJOR COST INCREASES AND**  
17 **INFLATIONARY PRESSURES THAT PGW IS EXPERIENCING IN GREATER**  
18 **DETAIL.**

19 A. Budgeted employee-related expenses and non-commodity operating expenses have gone  
20 up significantly almost across the board. Here are some examples of the increases since  
21 FY 2023:

- 22 • \$19.1 million increase in budgeted labor, including related payroll and wage  
23 increases.
- 24 • \$10.2 million increase in Information Services.
- 25 • \$8.9 million increase in employee health insurance.

1 **Q. PLEASE PROVIDE AN OVERVIEW OF THE CAPITAL IMPROVEMENTS**  
2 **SINCE PGW’S PRIOR RATE REQUEST AS WELL AS THE CAPITAL**  
3 **IMPROVEMENTS PLANNED THROUGH THE END OF THE FPFTY.**

4 A. By the end of FY 2026, PGW will have added some \$293.4 million to its asset base (net  
5 utility plant) compared to the end of the HTY (Exhibit JFG-2, Balance Sheet, line 1),  
6 virtually all of this is designed to make the system safer for customers, reduce the  
7 chances of outages and improve customer service.

8 **Q. HOW HAVE MAJOR COST INCREASES AND INFLATIONARY PRESSURES**  
9 **IMPACTED THE COMPANY’S CAPITAL BUDGET?**

10 A. The cost to fund PGW’s construction and capital improvements have increased  
11 significantly since the last base rate case. This means that, compared to the past, it takes  
12 more dollars to fund the same level of capital projects.

13 In addition, PGW’s capital budget is increasing year-to-year due to the growing need to  
14 maximize investment in infrastructure, including (but not limited to) replacing cast iron  
15 mains, to enhance safety and reliability. As noted, PGW’s FPFTY Capital Budget is  
16 \$209.0 million, with about 69% of the spending associated with distribution system  
17 improvements, including “at risk” cast iron main and unprotected steel replacement. The  
18 other 31% of the expenditure is for equally crucial improvements to keep the system safe  
19 and reliable.

20 Part of the funding for PGW’s capital budget will come from cash, as I will explain in  
21 greater detail below. PGW’s total claim for IGF (cash-funded capital spending), as  
22 reflected in Exhibit JFG-2 (Cash Flow, line 28) is \$68.4 million. That claim consists of an  
23 IGF-specific cash claim of \$40.4 million plus a grant of \$28.0 million from the Pipeline  
24 and Hazardous Materials Safety Administration (“PHMSA”).

1 I would observe that PGW’s current IGF claims compare favorably to the IGF claims in  
 2 PGW’s last base rate case:

- 3 • PGW’s current total IGF claim is \$68.4 million. In the last base rate case, PGW’s  
 4 total IGF claim was \$64.0 million.
- 5 • PGW’s current IGF claim includes \$28.0 million of cash from PHMSA grants. In  
 6 PGW’s last base rate case, PGW’s IGF claim included \$10.8 million of cash from  
 7 PHMSA grants.
- 8 • The above-described PHMSA grants reduce PGW’s IGF-specific cash claim.  
 9 PGW’s current IGF-specific cash claim is \$40.4 million. In PGW’s last base rate  
 10 case, PGW’s IGF-specific cash claim of \$53.2 million.
- 11 • PGW’s current IGF-specific cash claim is only \$4.3 million higher than the IGF-  
 12 specific cash claim approved by the Commission in 2023. The Commission, in  
 13 PGW’s last base rate, approved an IGF-specific cash claim of \$36.1 million.

14  
 15 **III. OVERVIEW OF PGW’S ACCOUNTING EXHIBITS AND BUDGETING**  
 16 **PROCESS**

17 **(A) Presentation of PGW’s Financial Information**

18 **Q. PLEASE PROVIDE AN OVERVIEW OF PGW’S FINANCIAL INFORMATION.**

19 A. PGW’s financial statements report information about PGW as a whole using accounting  
 20 methods similar to those used by private sector businesses. I say similar because PGW is  
 21 a municipal utility. PGW has no shareholders and does not pay a dividend or a rate of  
 22 return to its owner (PGW, as required by law, does remit a fixed annual payment of \$18.0  
 23 million to the City of Philadelphia (“City” or “Philadelphia”). All of the funds needed to  
 24 operate PGW in a safe and reliable manner come from ratepayers or from borrowing (the  
 25 costs of principal and interest which then must be paid by ratepayers). All of PGW’s  
 26 revenues accrue to the benefit of customers. In other words, PGW does not have “below  
 27 the line” revenues or expenses.

1 While PGW, as a municipal utility, has no shareholders and does not earn a profit, it  
2 nonetheless must have rates that enable it to finance these improvements, pay its  
3 employees and maintain its system.

4 Exhibits JFG-1 and JFG-2

5 **Q. PLEASE PROVIDE AN OVERVIEW OF PGW'S PRINCIPAL ACCOUNTING**  
6 **EXHIBITS, EXHIBIT JFG-1 AND EXHIBIT JFG-2.**

7 A. PGW prepared a *pro forma* test year income statement, cash flow, debt service coverage  
8 and balance sheet that projects the Company's status in the FPFTY using current rates  
9 and using the proposed rates.

10 **Exhibit JFG-1** provides schedules showing PGW's Statement of Income, Cash Flow  
11 Statement, Debt Service Coverage Statement and Balance Sheet at present rates for the  
12 HTY, FY 2024, the FTY, FY 2025, and the FPFTY, FY 2026.

13 **Exhibit JFG-2** provides schedules showing PGW's Statement of Income, Cash Flow  
14 Statement, Debt Service Coverage Statement and Balance Sheet at proposed rates for the  
15 HTY, FTY and FPFTY.

16 **Q. PLEASE PROVIDE A BRIEF OVERVIEW OF THE FOUR KEY FINANCIAL**  
17 **STATEMENTS.**

18 A. The **Income Statement** (or Statement of Income) shows revenues and expenses. The  
19 Income Statement is used to show PGW's *pro forma* operating revenues. (Income  
20 Statement, line 12). Those total operating revenues include gas cost revenues that are not  
21 a part of base rates. The Income Statement also shows PGW's *pro forma* non-gas/other  
22 operating expenses (Income Statement, line 37), as a subtotal of total operating expenses

1 (Income Statement, line 38) – since total operating expenses includes natural gas and  
2 other raw materials (Income Statement, lines 13 to 14).

3 The **Cash Flow Statement** provides relevant information about PGW’s cash  
4 obligations/payments and the impact on PGW’s financial position. The Cash Flow  
5 Statement shows the sources of cash to pay for PGW’s construction and capital projects.  
6 Cash for construction comes from a combination of the following: borrowing/bond  
7 proceeds (Cash Flow, lines 7 to 8); cash (IGF) and/or grants (Cash Flow, line 28); and  
8 DSIC (Cash Flow, line 27).

9 The Cash Flow Statement also shows the *pro forma* non-borrowed year-end cash. (Cash  
10 Flow, line 24) That amount is used to calculate the days of cash on hand (“DCOH”)  
11 metric, which I will discuss in greater detail below.

12 The **Debt Service Coverage Statement** shows the DSC requirements for PGW’s short-  
13 and long-term borrowing. The amount of debt service (principal and interest that PGW is  
14 obligated to pay) is shown on the Cash Flow Statement. (Cash Flow, line 13). The Debt  
15 Service Coverage Statement shows the debt service coverage (amount of cash) that PGW  
16 is required to maintain. (Debt Service Coverage, line 19). It also calculates the debt  
17 service coverage level (multiple) both with and without the \$18.0 million payment to the  
18 City. (Debt Service Coverage, lines 23 to 24).<sup>6</sup>

19 The **Balance Sheet** shows all PGW’s assets, liabilities, and deferred inflows and outflows  
20 of resources. The Balance Sheet shows, among other things, the total capitalization

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<sup>6</sup> While PGW is obliged to pay the \$18.0 Million City Payment (unless waived by City), PGW’s bond ordinance instructs that its minimum required debt service coverage calculation of 1.5x should be calculated as if the \$18.0 million obligation did not exist, thus artificially enhancing PGW’s “official” debt service coverage level.

1 (Balance Sheet, line 45), the total long-term debt (Balance Sheet, line 46), and PGW's  
2 debt-to-equity ("DTE") ratio (Balance Sheet, line 47).

3 Exhibits JFG-3 and JFG-4

4 **Q. PLEASE PROVIDE AN OVERVIEW OF EXHIBIT JFG-3 AND EXHIBIT JFG-4.**

5 A. Exhibits JFG-3 and JFG-4 convert the accrual accounting shown on Exhibits JFG-1 and  
6 JFG-2 to cash basis accounting. They present *pro forma* base rate cash for the FPFTY:  
7 Exhibit JFG-3 is at present rates; Exhibit JFG-4 is at proposed rates. In addition, they  
8 show PGW's uses of cash, which is important for understanding PGW's cash  
9 requirements. I will discuss PGW's cash requirements in Section IV.B of my testimony.

10  
11 **(B) Creation of Projections for PGW's FTY AND FPFTY**

12 **Q. PLEASE EXPLAIN THE TEST YEAR ON WHICH PGW'S CLAIMED**  
13 **REVENUE REQUIREMENT IS BASED.**

14 A. PGW has based its claimed revenue requirement on the fully forecasted 12 months  
15 ending August 31, 2026, referred to as the FPFTY. The FTY is FY 2025 and the HTY is  
16 FY 2024. Those results are displayed on Exhibit JFG-1. The same financial results,  
17 assuming the proposed rate increase, are shown on Exhibit JFG-2. Each page of this  
18 exhibit shows data for: (1) the HTY, the 12 months ended August 31, 2024, or FY 2024;  
19 (2) the FTY, the 12 months ended August 31, 2025, or FY 2025; and (3) the FPFTY, the  
20 12 months ending August 31, 2026, or FY 2026.

21 Page 1 of Exhibits JFG-1 and JFG-2 displays operating revenues, operating expenses and  
22 net earnings (Statement of Income); page 2 displays PGW's Cash Flow Statement, page 3  
23 shows Debt Service Coverage; and page 4 shows PGW's Balance Sheet and  
24 capitalization ratios.

1 **Q. PLEASE DESCRIBE HOW THE DATA FOR THE HISTORIC TEST YEAR**  
2 **WERE DERIVED.**

3 A. The HTY data is the actual audited results for FY 2024.

4 **Q. PLEASE DESCRIBE HOW THE PROJECTED RESULTS FOR PGW'S FUTURE**  
5 **TEST YEAR AND FULLY PROJECTED FUTURE TEST YEAR WERE**  
6 **CREATED.**

7 A. The FTY and FPFTY results were derived by starting with PGW's current (FY 2025)  
8 Budget ("Budget year"), approved by the Philadelphia Gas Commission ("PGC"). PGW  
9 develops its annual Budget in the following manner. With respect to revenues, PGW's  
10 Marketing and Gas Planning departments calculated revenues and sales by class for the  
11 Budget year and provided projections for the forecast years.<sup>7</sup> This process is fully  
12 described in the testimony of Florian Teme (PGW Statement No. 6). Revenue-related  
13 expenses (chiefly natural gas) were then calculated.

14 **Q. PLEASE EXPLAIN HOW EXPENSES ARE DETERMINED FOR THE FTY AND**  
15 **THE FPFTY.**

16 A. The FTY and FPFTY expenses reflect PGW's Operating Budgets for those years.

17 **Q. PLEASE DESCRIBE PGW'S BUDGETING PROCESS.**

18 A. PGW has two budgets. It has an operating budget and a capital budget. PGW uses two  
19 budgets because the City uses separate operating budgets and capital budgets, and the  
20 capital budget has an additional level of approval required. The capital budget must also  
21 be approved by the Philadelphia City Council. PGW identifies and tracks all capital  
22 expenditures.

23 PGW's operating budget process covers gas costs as well as non-gas costs.

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<sup>7</sup> In a prior Gas Cost Rate proceeding (Docket No. R-2022-3030686), PGW committed to indicating where it has included a projection of LNG sales revenues in its pro forma revenue claim. PGW's "Other Operating Revenues" on Exhibits JFG-1 and JFG-2, line 11 includes LNG revenues of \$5.0 million in the FPFTY. That amount is derived from the current LNG sales contract that PGW has in place. An additional \$114,000 is included on line 1 (Non-Heating) for estimated LNG trucking sales.



1 The capital budget process covers capital expenditures for both debt-funded expenditures  
2 and IGF expenditures, inclusive of expenditures funded by DSIC, and grant funded  
3 expenditures, and identifies projected capital expenditures for the FPFTY.

4 **Q. WHO REVIEWS PGW’S BUDGETS?**

5 A. In addition to an internal review and approval process by the PGW executive team, PGW  
6 is required to obtain approval of its annual operating budget from both the Philadelphia  
7 Facilities Management Corporation (“PFMC”) (the equivalent of PGW’s Board of  
8 Directors) and the PGC. PGW’s annual capital budget must be approved by the PFMC,  
9 the PGC, and Philadelphia City Council.

10 **Q. CAN YOU PROVIDE MORE DETAIL ABOUT THE DEVELOPMENT OF THE**  
11 **OPERATING BUDGET USED FOR THE FPFTY?**

12 A. Generally speaking, Operating Budget expenses are determined in the following manner.  
13 Each department reviews its historic and current expense levels and submits its view of  
14 the expense levels it will experience in the budget year. Where increases or changes  
15 affecting particular expense levels were identified, those levels are reviewed by the PGW  
16 executive team for consistency, completeness and accuracy and are used to establish the  
17 expense for the respective budget year.

18 For FY 2025 and 2026, all departments/areas were required to prepare a new budget  
19 based on current business requirements and costs. Expense categories considered  
20 included: labor, general materials, purchased services, dues and subscriptions, employee  
21 expenses, healthcare, etc.

22 These results were then used to prepare the four key financial schedules for the FTY, FY  
23 2025, and the FPFTY, FY 2026.

1 Principally, in creating the FPFTY, PGW took into consideration the current level of  
2 inflation and its impact on forecasting future expenses. The FY 2026 Budget reflects a  
3 4.0% increase in wages, including incremental wage progression increases, that was  
4 negotiated with the Union. As part of the Budget process, each department within PGW  
5 was asked to project their costs for the Fiscal Year 2026 Operating Budget using the best  
6 cost information available to them.

7 **Q. DID THE BUDGET PREPARATION INCLUDE ANY PROJECTIONS**  
8 **REGARDING PGW'S FTE HEADCOUNT FOR FY 2026?**

9 A. Yes. PGW is projecting 1,637 active full-time employees for the FPFTY. It has 1,622 of  
10 full-time employees as of December 31, 2024.

11 **Q. PLEASE DESCRIBE HOW PGW'S PROJECTED HEADCOUNT FOR THE**  
12 **FPFTY WAS DEVELOPED?**

13 A. Each department at PGW was required to submit a Personnel Analysis detailing how  
14 many Full-Time Equivalent (FTEs) were projected to be required to run the department  
15 during the budget year. Departments were provided with actual current headcounts and  
16 were asked to analyze their department's future personnel requirements. Personnel  
17 changes were required to be detailed and include job title and union/non-union  
18 classification. After each department has developed its personnel requirements, they were  
19 totaled. For the FPFTY the total was 1,653. To account for some anticipated level of  
20 vacancy (1%), PGW projected a staffing level of 1,637. PGW headcount is approved by  
21 the PFMC. This vacancy-adjusted level was what was used to calculate wage expenses  
22 for the FPFTY.

1 **Q. DID ANY OF PGW'S DEPARTMENTS USE A GENERAL INFLATION**  
 2 **FACTOR WHEN DEVELOPING ITS BUDGET FOR THE FPFTY, FY 2026?**

3 A. The Departments within PGW were asked to make projections based on the best  
 4 available cost information. Most of PGW's 40 Departments did not use a general  
 5 inflation factor. Only about eight of PGW's Departments used a 2.2% inflation factor for  
 6 certain subitems when developing their FY 2026 Budgets for their departments.<sup>8</sup> When  
 7 they did so, it was mainly for a few categories, such as general material, tools &  
 8 uniforms, and electric. All of the rest of the projections were based on specific  
 9 information about operating plans and vendor increases anticipated for FY 2026.

10

11 **(C) PGW's Capital Budgets**

12 **Q. HOW IS PGW'S CAPITAL BUDGET DETERMINED?**

13 A. Through its annual capital planning process, PGW identifies potential capital  
 14 improvements based upon certain operating and economic assumptions, evaluates these  
 15 requirements, and establishes priorities considering available financial resources. It  
 16 considers these factors when developing its capital budget for a Fiscal Year.

17 The safety of PGW's operations and reliability of service are PGW's major concerns  
 18 when establishing the priorities of need for capital resources.

19 Under the terms of the Management Agreement, PGW provides each year's annual  
 20 Capital Budget to the City's Director of Finance and the Gas Commission so that they  
 21 can undertake their reviews, and offer recommendations to City Council, in advance of  
 22 budget approval. PGW is restricted to undertaking only such capital improvements which  
 23 have been included in a PGW capital budget approved by the City Council.

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<sup>8</sup> The 2.2% inflation factor is lower than the historical 2.5% level that was utilized pre-pandemic.

1 **Q. HOW DOES PGW PLAN TO PAY FOR CONSTRUCTION AND CAPITAL**  
2 **IMPROVEMENTS REFLECTED IN THE CAPITAL BUDGET?**

3 A. PGW has two potential sources of funding for construction and capital improvements.

4 First, it can borrow funds. Second, it can use cash either from rates (i.e., internally  
5 generated funds and DSIC revenue) or grants (such as the PHMSA grant for cast iron  
6 main replacement).

7 PGW's policy attempts to balance its capital structure by funding its annual capital  
8 spending from internally generated funds (approximately 50%) and long-term borrowing  
9 (approximately 50%). In the FPFTY and in the next few years, PGW anticipates that it  
10 will also be able to fund a portion of its construction expenditures via federal  
11 infrastructure improvement grants.

12 **Q. WHY IS PGW PROPOSING TO FUND THE CAPITAL EXPENDITURES WITH**  
13 **AN EQUAL SPLIT BETWEEN DEBT AND INTERNALLY GENERATED**  
14 **CASH?**

15 A. The key reasons are:

16 **First**, reliance on long-term debt creates more financial risk for PGW and its ratepayers.

17 Generally speaking, leverage refers to PGW's total debt. The more debt an entity has the  
18 greater the financial risk on each bondholder that they will not be able to recover their  
19 investment in the event of a default. Mr. Lover explains that a key metric used for  
20 comparing debt levels is debt to total capitalization. The higher the ratio, the weaker the  
21 credit strength.

22 PGW has seen a steady decline in its debt to capitalization ratio from a level of 84% in  
23 FY 2019 to a low of 59% in FY 2024.

1 PGW has a goal of keeping its debt to capitalization ratio below 60%. Reaching this goal  
2 requires PGW to be strategic in its use of long-term debt and to rely on IGF to fund a  
3 portion of the construction budget.

4 Mr. Walker explains that keeping PGW's debt to capitalization ratio below 60% is  
5 reasonable in comparison with PGW's municipal peer group. Mr. Walker shows that,  
6 from 2017 to 2023, the debt ratio of this group of municipal utilities averaged 47%.

7 That being said, a debt to capitalization ratio at around 60% would still have PGW in a  
8 weaker credit position than its peer utilities from the benchmarking study, as shown in  
9 the Exhibits of Harold Walker's benchmarking testimony. In addition, each of the rating  
10 agencies expressed concern about increased leverage (borrowing) by PGW, as noted by  
11 Mr. Lover (PGW Statement No. 3).

12 Borrowing hundreds of millions of dollars on a two-to-three-year cycle — rather than  
13 funding this part of PGW's capital improvement budget through internally generated  
14 funds, would increase PGW's debt to capitalization ratio and would weaken its credits  
15 strength.

16 **Second**, reliance on long-term debt actually creates more costs for PGW and its  
17 ratepayers. For the FPFTY, PGW is proposing to fund a portion of its \$209.0 million  
18 construction and capital program through \$68.4 million in IGF (with an additional \$36.2  
19 million from DSIC). That would require \$40.4 million in the FPFTY as cash from base  
20 rates and the \$28.0 million in grant money from PHMSA. If, instead, PGW borrowed  
21 \$40.4 million in the FPFTY it would require \$2.5 million in debt service and \$3.8 million  
22 in debt service coverage at 1.5x in the FPFTY. But since this would be an annual

1 requirement (in order to continue to fund necessary capital improvements), PGW would  
2 have to borrow more than \$40.0 million *each year* and this will quickly become more  
3 expensive for ratepayers than the IGF option.

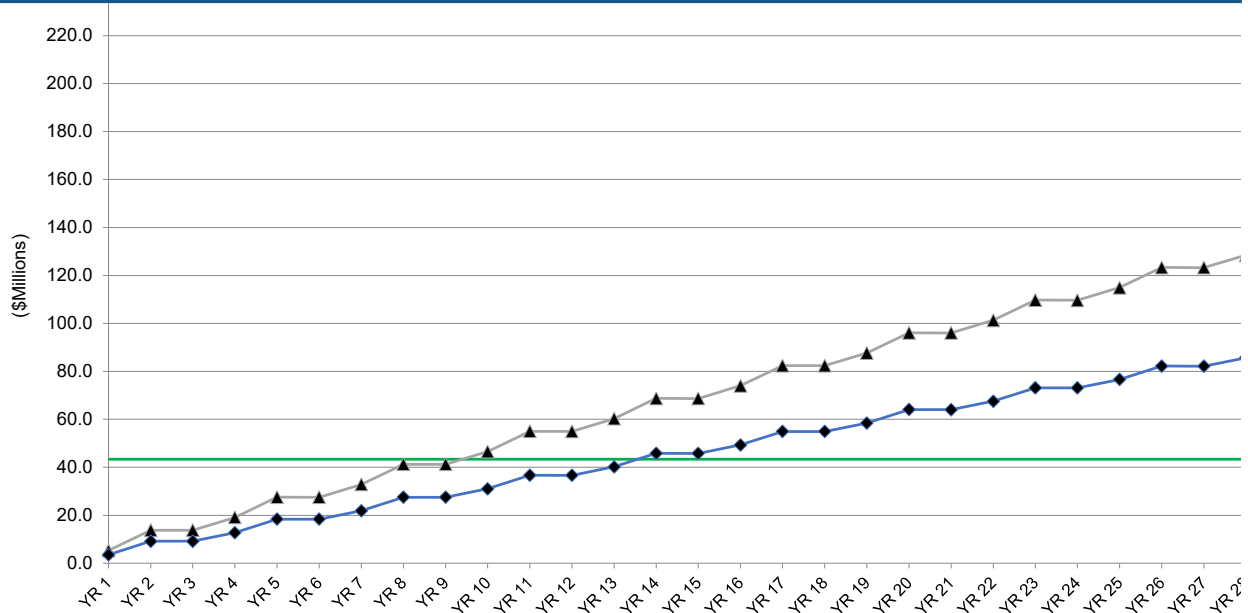
4 In FY 2026, PGW will experience the greatest debt service requirement in its history, a  
5 \$113.0 million cash outlay for principal and interest on its bonds. This will mark the third  
6 consecutive year that the debt service is in excess of \$100.0 million. The FY 2024 level  
7 was \$103.7 million. The FY 2025 level will be \$110.7 million. A mere nine fiscal years  
8 ago, FY 2017, PGW's debt service was \$67.6 million. FY 2026's debt service will be  
9 \$45.4 million greater than that of FY 2017. This is an increase of 67.2%. The strategy of  
10 borrowing money to fund current capital expenditures has increased the annual cash  
11 burden to customers by \$45.4 million in this nine-year span. This dramatic increase in  
12 debt service would have been even greater if PGW had not benefitted by multiple bond  
13 refundings from high to low interest rates, and PGW was able to fund some of its capital  
14 improvements using internally generated funds in the last nine years. This is not a  
15 theoretical financial exercise. This is a real cost to ratepayers.

16 The chart below illustrates why it would not be good for ratepayers if PGW were to  
17 increase long-term debt in place of the proposed IGF from rates. It is important to  
18 recognize that PGW would be required to issue a bond every three to four years in order  
19 to obtain the dollars to fund the portion of the capital program that is now funded by IGF.

20  
21  
22  
23

**Impact of \$40.4MM of Annual CAPEX Spending Funded through the Issuance of Additional Debt Instead of IGF**

**Projected Impact of Increased Debt Service Payments Versus a \$43.4MM Increase in Base Rates at 1.0x and 1.5x Coverage**



When one considers that rates must reflect not only the debt service payments but also the debt service coverage of any additional bond issuance, customers will start to pay more by year 10 and will pay more overall even on a discounted present value basis, when PGW finances its capital improvements via the issuance of long-term debt rather than from IGF.

**Third,** PGW proposal to use IGF to partially fund construction projects is a reasonable effort to balance the interests of current ratepayers and future ratepayers. PGW submits that a long-term policy that consistently applies the same rate of pay-go/IGF financing creates equity over time, because each generation will contribute proportionately the same amount of cash to finance the capital program.

1 In other words, decisions made today on funding construction projects will impact the  
2 affordability of gas service in the future. When utilities finance large projects through  
3 debt, the heavier burden of repayment falls on future ratepayers. This is shown in the  
4 above chart, which shows that the payments of principal and interest increase over time.  
5 Prioritizing long-term debt to finance today's construction projects makes protecting  
6 current customer interests (who will have lower rates) paramount over future customer  
7 interests (who will have to shoulder the consequences of higher debt service and debt  
8 service coverage) as well as over the long-term sustainability of the utility (which will  
9 have weaker credit and less capacity to borrow).

10 Further, PGW's debt issuances cover a range of construction projects with a range of  
11 useful lives. Bond maturities are largely a result of market demand; they are not tied to  
12 the asset's useful life. It is, therefore, unreasonable to assume that PGW is always issuing  
13 long-term debt with a repayment term equal to the life of the assets. PGW understands  
14 that investor-owned utilities are commonly focusing cash contributions (revenue  
15 financing) for capital programs on an annual basis in the range of 40% to 50%. PGW is  
16 unaware of investor-owned utilities intentionally extending their debt to its maximum  
17 maturity to match the useful life of their assets, and the prevalence of utilities with  
18 leverage ratios significantly below 100% implies that such utilities are, in fact, recovering  
19 their construction costs over a shorter period of time than the assets' useful lives.

20 **In addition**, there is one other point that is important to understand. The issue of the  
21 appropriate amount of IGF and the allowed level of PGW's construction program are one  
22 in the same for the purposes of this case. As noted above, PGW only has two  
23 discretionary sources of funding for its construction program: bonds and IGF (the portion



1 of its construction that is funded by government grants is not discretionary as PGW has  
 2 committed to undertaking the construction and expending the grant funds as a condition  
 3 of their receipt). PGW has already issued a long-term bond to fund about one half of its  
 4 annual construction budget for the FPFTY and for two years after that. All of those funds  
 5 are fully committed to construction projects authorized in its construction budget.

6 PGW’s proposed FY 2026 Budget contemplates that its capital program will be paid for  
 7 as follows:

<b>Net Construction Expenditures</b> (Exhibit JFG-2, Cash Flow, Lines 11 and 12)	<b>\$209.0 million</b>
Drawdown of Bond Proceeds (Exhibit JFG-2, Cash Flow, Line 7)	\$104.5 million
DSIC Spending (Exhibit JFG-2, Cash Flow, Line 27)	\$36.2 million
Internally Generated Funds <sup>9</sup> (Exhibit JFG-2, Cash Flow, Line 28)	\$68.4 million
Cash: \$40.4 million	
PHMSA Grants: \$28.0 million	

8 To set rates for PGW, the Commission must review the projected **level of spending** on  
 9 construction and capital projects. The Commission is not formally reviewing PGW’s  
 10 annual capital budget in and of itself. Adjusting the budget would mean that the  
 11 Commission is contradicting the capital budget approved by the PFMC, the PGC, and  
 12 Philadelphia City Council. That does not mean, however, that the Commission cannot  
 13 make adjustments to the projected **level of spending** for rate purposes. For example, if  
 14 the Commission were to determine that PGW’s capital budget is overstated, then the  
 15 Commission could make a reduction in PGW’s allowed IGF allowance to reflect the

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<sup>9</sup> The amount of IGF includes government grants totaling \$28.0 million for FY 2026. The amount of IGF without grants is \$40.4 million.

1 Commission-allowed level of spending. Conversely, if the Commission were to  
2 determine that its proposed level of IGF should be adjusted downward, it would fall upon  
3 PGW to make a corresponding adjustment (before the PFMC, PGC and the City) to its  
4 approved capital budget. But only one adjustment by the Commission would be  
5 appropriate. It would be inappropriate and unreasonable to adjust PGW's cash  
6 requirements twice – once for a “construction budget adjustment” and then again for an  
7 IGF adjustment. That would be a double count of the same adjustment.

8 **Q. CAN PGW DRAW DOWN MORE BOND PROCEEDS IF THE COMMISSION**  
9 **REDUCES THE PROPOSED LEVEL OF \$40.4 MILLION IN IGF-SPECIFIC**  
10 **CASH?**

11 A. No, that is not a reasonable solution because the bonds were issued to support bond  
12 issuance fees or to pay the costs of capital projects (detailed in PGW's Capital Budget).

13 PGW's existing long-term borrowed funds are anticipated to fund construction and  
14 capital projects through FY 2028.

15 If the bond proceeds are “diverted” from those projects to projects that PGW did not  
16 anticipate being paid for by bond proceeds, there will be less money to draw down for the  
17 projects that PGW anticipated would be paid by bond proceeds. Inevitably, certain  
18 projects that were anticipated to be paid by bond proceeds would need to be deferred or  
19 delayed to future fiscal years. This is what happened between FY 2024 and FY 2025.

20 PGW needed to use short-term borrowing in FY 2024 to complete certain projects (due to  
21 factors such as the lack of IGF-specific cash and lower-than anticipated revenues from  
22 the DISC). PGW drew down bond proceeds in FY 2025 to repay the short-term  
23 borrowing. PGW then needed to defer or delay projects.

1 **Q. CAN PGW ISSUE A NEW BOND, IF THE COMMISSION REDUCES THE**  
2 **PROPOSED LEVEL OF IGF?**

3 A. That is not a reasonable solution either because PGW would not be recovering any of the  
4 costs associated with the new bond issuance until PGW had these costs included in  
5 another future base rate increase that is approved by the Commission. A new bond  
6 issuance would create costs for PGW that would not be part of the Commission-approved  
7 rates. For example, the cost of issuance for the Bonds issued in September 2024 was  
8 more than \$3.3 million. In addition, the Commission-approved rates would not include  
9 either debt service on the new bond or set aside additional cash for the required debt  
10 service coverage (multiplier) for the new bond.

11

12 **(D) PGW's Revenue Bonds**

13 **Q. PLEASE SUMMARIZE RECENT ACTIVITY REGARDING PGW'S LONG-**  
14 **TERM DEBT ISSUANCES.**

15 A. In September 2024, PGW issued Gas Works Revenue Bonds for \$424.3 million in FY  
16 2025, which is the FTY for this proceeding. That amount included \$315.0 million in new  
17 money borrowing and \$109.3 million in refunding borrowing. The actual amount of new  
18 money borrowing in the September 2024 bonds is different than the \$348.0 million that  
19 was originally anticipated in PGW's last base rate case where it was anticipated to be  
20 issued in August 2024.

21 The "September 2024" bonds, among other things, retired the \$35 million in the  
22 commercial paper program (borrowed in FY 2024) and refunded the Thirteenth Series  
23 Refunded Bonds.

1 In PGW's last base rate case, it was anticipated that the "August 2024" bond would be  
2 issued during FY 2024 and would impose incremental debt service of approximately  
3 \$22.7 million. However, PGW did not issue those bonds at that time. PGW issued (long  
4 term) revenue bonds in September 2024, during FY 2025. Those "September 2024"  
5 bonds imposed incremental debt service of roughly \$16.2 million. So, the September  
6 2024 bonds reduced annual debt service costs by about \$6.5 million.

7 **Q. PLEASE DESCRIBE PGW'S CURRENT BOND RATING.**

8 A. For the most recent bond issuance (September 2024), PGW's bonds were rated "A"  
9 (three to four steps over minimum investment grade) by all three rating agencies. The  
10 respective bond ratings are Moody's "A3", S&P Global "A", and Fitch Ratings "A-".

11 **Q. HAS PGW TAKEN STEPS TO REDUCE ITS OVERALL BORROWING COSTS**  
12 **RELATED TO LONG-TERM DEBT?**

13 A. Yes. PGW looks for opportunities to refinance or redeem older bonds to create net  
14 present value savings. The refunding portion of the September 2024 bonds saved \$7.8  
15 million in debt service on a net present value basis.

16 **Q. DOES PGW HAVE TO SELL BONDS IN THE FORESEEABLE FUTURE?**

17 A. PGW does not anticipate issuing revenue bonds in the FPFTY. PGW has sufficient  
18 proceeds from the September 2024 bond issuance to draw down bond proceeds for  
19 construction and capital improvements in the FPFTY.

20 PGW's next bond issuance is projected to be in either FY 2027 or FY 2028. The amount  
21 of the next bond issuance has not yet been determined. The exact timing of the next bond  
22 issuance would be subject to, among other things, PGW's need for capital funds and  
23 market conditions.

1 That being said, if PGW were denied rate relief sufficient to continue to fund a portion of  
 2 its budget with non-DSIC IGF, PGW would have to go to the bond market to find funds  
 3 to maintain its capital program – or abandon some capital projects.

4  
 5 **IV. CALCULATION OF REVENUE REQUIREMENT**

6 **Q. PLEASE EXPLAIN THE BASIS ON WHICH PGW HAS CALCULATED ITS**  
 7 **REVENUE REQUIREMENT FOR THE FPFTY.**

8 A. As noted, PGW is not regulated on the basis of a fair rate of return on a used and useful  
 9 rate base as are investor-owned utilities; instead, the Company’s revenue requirement is  
 10 established on the basis of the “Cash Flow Method.” While I am informed that the use of  
 11 the Cash Flow Method is mandated by the Gas Choice Act,<sup>10</sup> the Commission has  
 12 explained how it intended to implement that standard for PGW. In its 2010 Policy  
 13 Statement, the Commission described the requirements of the Cash Flow Method as  
 14 follows:

15 (b) The Commission is obligated under law to use the cash flow  
 16 methodology to determine PGW’s just and reasonable rates. Included in  
 17 that requirement is the subsidiary obligation to provide revenue  
 18 allowances from rates adequate to cover its reasonable and prudent  
 19 operating expenses, depreciation allowances and debt service, as well as  
 20 sufficient margins to meet bond coverage requirements and other  
 21 internally generated funds over and above its bond coverage requirements,  
 22 as the Commission deems appropriate and in the public interest for  
 23 purposes such as capital improvements, retirement of debt and working  
 24 capital.<sup>11</sup>

25 The Commission also stated that, in determining just and reasonable rate levels for PGW  
 26 it would consider, among other relevant items, the following financial factors:

- 27 • PGW’s test year-end and (as a check) projected future levels of non-  
 28 borrowed year-end cash.

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<sup>10</sup> 66 Pa. C.S. § 2212(e); 52 Pa. Code § 69.2702(b) (“The Commission is obligated under law to use the cash flow methodology to determine PGW’s just and reasonable rates.”).

<sup>11</sup> 52 Pa. Code § 69.2702.

- 1 • Available short-term borrowing capacity and internal generation of  
2 funds to fund construction.
- 3 • Debt to equity ratios and financial performance of similarly situated  
4 utility enterprises.
- 5 • Level of financial performance needed to maintain or improve  
6 PGW’s bond rating thereby permitting PGW to access the capital  
7 markets at the lowest reasonable costs to customers over time.<sup>12</sup>

8 **Q. PLEASE EXPLAIN HOW PGW HAS APPLIED THIS GUIDANCE IN**  
9 **DETERMINING ITS REVENUE REQUIREMENT.**

10 A. As a “cash flow” regulated company, PGW’s operations are entirely funded from rates,  
11 either indirectly as a result of short-term or long-term borrowing (which then must be  
12 paid back from rates charged to ratepayers) or directly through charges to customers.  
13 Accordingly, PGW’s most important financial metrics are:

- 14 1) bond debt service coverage ratios;
- 15 2) end of year days cash on hand and liquidity balance;
- 16 3) debt to equity capitalization ratio; and
- 17 4) bond rating agency requirements to maintain its bond rating.

18 PGW believes that the essential directive of the Policy Statement is that PGW should be  
19 permitted to charge rates that produce the cash that it needs to operate and to fund the  
20 capital expenditures that are needed to keep its distribution system safe and reliable, and  
21 to permit PGW to maintain financial metrics that are consistent with comparable  
22 companies and reasonably necessary to at least maintain PGW’s investment grade bond  
23 rating. Below, PGW provides its calculation of that required level of rate increase.  
24

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<sup>12</sup> 52 Pa. Code § 69.2703.

1           **(A)   Cash Requirements**

2   **Q.   PLEASE PROVIDE AN OVERVIEW OF PGW'S CASH NEEDS.**

3   A.   PGW has a very real projected cash deficiency that must be addressed in order that PGW  
4       will be able to have the cash to pay its operating and construction and capital expenses.

5       PGW's *pro formas* show a net utility base of \$2,114,904,000 at the end of the FPFTY  
6       (JFG-1 and JFG-2, Balance Sheet, line 1). That amount is higher than the end of the HTY  
7       when the net utility base was \$1,821,459,999. This is an increase of \$293,445,000 in a  
8       two fiscal year period.

9       One of PGW's goals is to maximize investment in critical infrastructure, including (but  
10      not limited to) replacing cast iron mains, to enhance safety and reliability. As noted  
11      above, PGW projects construction expenses of \$209.0 million. The cash for construction  
12      will come from: a drawdown of bond proceeds, \$104.5 million; cash (IGF), \$68.4  
13      million, inclusive of the PHMSA grant of \$28.0 million; and DSIC, \$36.2 million.

14      Table 1 shows PGW's *pro forma* cash deficiency as follows:

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**Table 1  
PGW Cash Needs  
(Dollars in Thousands)**

After paying its gas costs and operating expenses, PGW has a limited amount of cash available:

<b>Funds Available</b> (Exhibit JFG-1, Debt Service Coverage, line 13)	<b>\$190,268</b>
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The available cash must be used to cover PGW’s debt service coverage requirement:

<b>Debt Service Coverage</b> (Exhibit JFG-1, Debt Service Coverage, line 19)	<b>(\$112,973)</b>
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That leaves a much smaller amount of available cash that must be used for PGW’s cash requirements:

<b>Net Funds Available for PGW’s Cash Outlays</b> (Exhibit JFG-1, Debt Service Coverage, line 21)	<b>\$77,295</b>
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PGW needs cash for the following:

<b>PGW Cash Needs For The FPFTY</b>	
<b>(1) City Payment</b> (Exhibit JFG-1, Cash Flow, line 17)	<b>(\$18,000)</b>
<b>(2) OPEB</b> PGW is required to make a cash contribution of \$18.5 million to the OPEB Trust Fund. This amount is funded via the OPEB surcharge (\$16.0 million) and base rates (\$2.5 million).  This amount is different than the OPEB expense shown in Exhibit JFG-1, Income Statement, line 29. Exhibit JFG-1 shows the accounting treatment per GASB 75, which does not reflect PGW’s actual cash obligation.	<b>(\$18,500)</b>
<b>(3) Pension</b> This amount is positive to reflect that the amount shown in accrual accounting is higher than PGW’s	<b>\$11,412</b>



<p>actual cash outlay. There is not an actual amount of cash being paid to PGW.</p> <p>(Exhibit JFG-3, Balance Sheet Column, line 25)</p>	
<p><b>(4) Retiree Health Benefits</b></p> <p>PGW is required to make cash payments for Retiree Health Benefits.</p> <p>(Exhibit JFG-3, line 55)</p>	<b>(\$35,280)</b>
<p><b>(5) Construction Expenditures, Cash (IGF)</b></p> <p>IGF supports PGW's historic removal of 18 miles of high-risk cast iron main each year. For the FPPTY, PGW projects that replacement of 18 miles of high-risk cast iron main will cost \$36.6. The requested IGF would also support the approximately \$4.2 million in indirect costs related to the PHMSA grants. PGW Statement No. 7 at 11.</p> <p>IGF could also support, if any cash was still available, (a) any under-collection of DSIC without reducing the amount of construction expenditures (about \$1 million each year), (b). other construction and capital projects, (c) increases in working capital, or (d) other unanticipated capital expenditures.</p> <p>(Exhibit JFG-1, Cash Flow, line 28 less the PHMSA Grants, discussed below)</p>	<b>(\$40,363)</b>
<p><b>(5B) Construction Expenditures, Cash (PHMSA Grants)</b></p> <p>PGW's IGF claim consists of an IGF-specific cash claim of \$40.4 million (above) plus a PHMSA Grant of \$28.0 million.</p>	<b>(\$27,987)</b>
<p><b>(6) Construction Expenditure, DSIC</b></p> <p>PGW's accelerated main replacement program funded through the DSIC, which is billed at a levelized amount, equating to 7.5% of PGW's applicable revenues.</p> <p>(Exhibit JFG-1, Cash Flow, line 27)</p>	<b>(\$36,150)</b>
<p><b>(6) GASB 87/96 Principal Payments</b></p> <p>Cash payments are required for PGW's long-term commitments for leases of tangible assets (GASB 87) and subscriptions for IT services (GASB 96).</p>	<b>(\$4,256)</b>

(Exhibit JFG-1, Cash Flow, line 15)	
<p><b>(7) Working Capital</b></p> <p>Working capital changes are a cash requirement over and above the above listed items to account for large cash outlays for increases in storage inventory, including materials and supplies, when the receipt of cash from billings is lagging. Working capital increases also include the large growth in accounts receivable in the winter months. This occurs when payment for customer usage slows due to the winter moratorium and payments made on a PAR or equal monthly payment plan that is less than the customer's actual usage.</p>	<b>(\$20,665)</b>
<b>Total of the Above-Described Cash Needs</b>	<b>(\$189,776)</b>

1

2

3

Comparing the funds available to the above-described cash needs shows that, as present rates, PGW's FPFTY will have a year-end cash balance as a deficit:

<b>Ending Cash Balance</b>	<b>(\$112,481)</b>
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4

5

The ending cash balance (shown in Table 1 above) is inadequate because it is **negative**.

6

The table shows that PGW needs to increase base rates to have non-borrowed year-end

7

cash sufficient to pay the above cash obligations. PGW is proposing a modest level of

8

non-borrowed year-end cash of \$54.1 million. But that level of year-end cash equates to

9

only 37 DCOH and would leave little to respond to contingencies such as lower than *pro*

10

*forma* sales, lower collection rates on billed sales, increases in working capital, or other

11

unanticipated expenditures.

12 **Q.**

**PLEASE EXPLAIN WHY FOUR OF THE CASH OBLIGATIONS IN TABLE 1 ARE NOT SHOWN AS LINE ITEMS IN EXHIBITS JFG-1 AND JFG-2.**

13

14 **A.**

To begin, I need to emphasize that Exhibits JFG-1 and Exhibit JFG-2 are PGW's

15

principal accounting exhibits. They are prepared following the formal published

1 Statements of the GASB and as explained below, they do not completely show PGW's  
2 cash needs.

3 **OPEB.** There are two components of PGW's total OPEB obligation: the accounting  
4 expense and the cash outlay. Implementation of GASB 75 changed how OPEB expense is  
5 shown in the Income Statement. Under GASB 75, the Income Statement only shows the  
6 accounting expense (actuarial obligation) for OPEBs. The Income Statement does not  
7 show the actual cash outlay. The additional cash outlay by PGW is not separately shown  
8 on the Income Statement or Cash Flow Statement, consistent with GASB's standards.

9 **Pension.** There are two components of PGW's total Pension obligation: the accounting  
10 expense and the cash outlay. The Pension Plan for PGW is called the "Gas Works Plan."  
11 The City maintains the Gas Works Plan, which is a defined benefit plan for PGW's  
12 employees. The City is required by the Philadelphia Home Rule Charter to maintain an  
13 actuarially sound pension and retirement system.<sup>13</sup> Each year the Gas Works Plan  
14 requires both actuarially determined contributions and an additional amount determined  
15 by the Director of Finance (who is the chief financial officer of the City) to be  
16 appropriate to fund future benefit obligations with respect to such Participants. The  
17 accounting expense (actuarially determined contributions) are shown in the Income  
18 Statement, line 27. The additional "cash" outlay by PGW is not separately shown on the  
19 Income Statement or Cash Flow Statement, consistent with GASB's standards.

20 **Retiree Benefits.** There are two components of PGW's total Pension obligation. The  
21 accounting expense and the cash outlay. The Income Statement only shows the

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<sup>13</sup> See Philadelphia City Charter at § 6-600.

1 accounting expense (actuarially determined contributions) for Retiree Benefits. It shows  
2 three pieces on Exhibit JFG-2, Income Statement, line 30: 1) Annual required  
3 contribution; 2) Additional contribution as mandated by the Director of Finance; and 3)  
4 GASB 68. (). It does not show the additional “cash” outlay by PGW. The cash outlay is  
5 not separately shown on the Income Statement or Cash Flow Statement, consistent with  
6 GASB’s standards.

7 **Working Capital.** Working capital changes are a cash requirement to account for large  
8 cash outlays for increases in storage inventory, including materials and supplies, when  
9 the receipt of cash from billings is lagging. Working capital increases also include the  
10 large growth in accounts receivable in the winter months. This occurs when payment for  
11 customer usage slows due to the winter moratorium and payments made on a PAR or  
12 equal monthly payment plan that is less than the customer’s actual usage. It is also used  
13 as a cushion for construction and capital projects, as noted. PGW plans to have 9.9% of  
14 its total projected capital budget for the FPFTY as cash working capital. That is a  
15 reasonable amount to account for lags in receipt of cash compared to billings. That  
16 amount will earn interest until it is used by PGW. That interest accrues to the benefit of  
17 ratepayers. Having a reasonable amount of working capital in hand mitigates the need to  
18 rely on short-term borrowing, which would have higher overall costs for ratepayer – since  
19 the ratepayers would be required to pay for principal and interest on borrowed working  
20 capital.

1 **Q. HAS PGW DEVELOPED OTHER SCHEDULES TO FURTHER ILLUSTRATE**  
2 **AND SUPPORT THE CASH NEEDS OF PGW AND THE NEED FOR A BASE**  
3 **RATE INCREASE?**

4 A. Yes, we have prepared Exhibit JFG-3 and Exhibit JFG-4. Exhibit JFG-3 is a *pro forma*  
5 presentation of base rate cash for the FPFTY (at present rates). Exhibit JFG-4 is a *pro*  
6 *forma* presentation of base rate cash for the FPFTY (at proposed rates).

7 Exhibits JFG-3 and JFG-4 are modified versions of Exhibits JFG-1 and JFG-2 for the  
8 FPFTY. They provide greater detail on PGW's revenues and differentiate the base rate  
9 component from the surcharge and other revenue that is included in Gas Revenues in the  
10 Statement of Income and Exhibits JFG-1 and JFG-2, as the surcharge revenue is  
11 dedicated to specific purposes and is not available for general operations and cash needs.

12 Exhibits JFG-3 and JFG-4 also allocate the adjustments that are combined into Line 5 of  
13 the Cash Flow Statement of Exhibits JFG-1 and JFG-2, Increased / (Decreased) Other  
14 Assets/Liabilities, to the individual expense items on the Income Statement, so that the  
15 cash expenditure for each item is clear. Several other adjustments were made as noted  
16 below in order to isolate the base rate cash revenue, expense, and operating surplus or  
17 deficit.

18 A list of reconciling items is provided at the bottom of Exhibits JFG-3 and JFG-4 so that  
19 they can be reconciled back to the Statement of Income in Exhibits JFG-1 and JFG-2.

20 **Q. WHAT IS THE PURPOSE OF EXHIBITS JFG-3 AND JFG-4?**

21 A. PGW's intent in presenting these exhibits is to provide increased visibility and clarity on  
22 cash base rate revenues and expenses for cash flow ratemaking purposes.

1 A total of \$310.8 million and \$312.3 million of revenue is included on Exhibits JFG-1  
 2 and JFG-2, respectively, and is restricted for specific purposes, notably, \$36.3 million for  
 3 DSIC, \$16.0 million of Other Post-Employment Benefits (“OPEB”) Surcharge revenue,  
 4 and \$21.2 million of Universal Service Charge revenue passed to customers to fund the  
 5 CRP discount and other programs for low-income customers. The base rate revenue of  
 6 \$418.2 million and \$523.2 million on Exhibits JFG-3 and JFG-4, respectively, is the  
 7 amount available to fund general operations and capital expenditures.

8 **Q. PLEASE SUMMARIZE WHAT IS PRESENTED IN EXHIBITS JFG-3 AND JFG-**  
 9 **4.**

10 A. Exhibits JFG-3 and JFG-4 highlight several key factors related to cash needs and PGW’s  
 11 request for rate relief:

- 12 • Base rate revenue of \$418.2 in JFG-3 is \$213.0 million less than the Total Gas  
 13 Revenues of \$631.2 million on Line 8 of Exhibit JFG-1. This base rate revenue is  
 14 the basis of PGW’s request for FPFTY and reflects the amount available to fund  
 15 base rate expenses. It conforms to the revenue presented in the proof of revenue  
 16 (filing requirement at 52 Pa. Code § 53.52 (a)(4)). The presentation of Total Gas  
 17 Revenues on Exhibits JFG-1 and JFG-2 implies a larger base of revenue to fund  
 18 cash needs than is actually available to PGW.
- 19 • Base rate cash operating expenses in FPFTY are \$65.4 million higher (on Balance  
 20 Sheet Column, Line 30 of JFG-3 and JFG-4) than the Statement of Income  
 21 expenses listed on Line 31 of JFG-1 and JFG-2. As I described in Table 1, the  
 22 cash expense and need for Pension and OPEB is \$76.3 million, compared to \$52.4  
 23 million in accounting expense. In addition, capitalizing expenses creates a credit  
 24 on the Statement of Income, but this does not save PGW the cash expenditure on  
 25 these items, reflecting a \$32.3 million adjustment to the base rate cash expense.
- 26 • The net earnings after distribution to the City on JFG-3 in the FPFTY are negative  
 27 \$110.1 million, compared to the \$72.4 million on JFG-1, showing the significant  
 28 need for the \$105.0 million rate increase.
- 29 • The net earnings after distribution to the City on JFG-4 in the FPFTY (with the  
 30 rate increase) are negative \$4.9 million even with the requested revenue  
 31 adjustment of \$105.0 million, on a base rate cash basis, compared to \$174.8  
 32 million on JFG-2. Base rate revenue is significantly lower than the total revenue  
 33 presented in the Statement of Income, and base rate cash expenses are higher.

1 PGW relies on Other Operating Revenue generated, as well as the offsets to some  
2 portions of expenses from the OPEB and USC surcharges, in order to fund IGF  
3 capital and have a cash surplus.

4  
5 Exhibit JFG-3 shows the current deficiency in base rate cash projected for the FPFTY;  
6 Exhibit JFG-4 shows the amount of base rate cash with the requested \$105.0 million rate  
7 increase. This supplements the presentation of Table 1, above, in describing why the  
8 proposed rate increase produces levels of Debt Service Coverage and Days of Cash on  
9 Hand identified by the expert witnesses are necessary for PGW to adequately fund safe  
10 and reliable operations.

11 **Q. WHAT CONCLUSIONS SHOULD THE COMMISSION DRAW FROM THIS**  
12 **ANALYSIS?**

13 A. The Commission should recognize that, even with the full increase granted, PGW is  
14 operating with extremely limited base rate cash that is available over and above paying  
15 for operating expenses and its capital program. Any adjustment to PGW's claimed rate  
16 increase should show that PGW is projected to have base rate cash that is sufficient to  
17 permit the Company to deal with contingencies and emergencies, especially since its use  
18 of the commercial paper program is fairly restricted.

19 **Q. PLEASE EXPLAIN HOW THE CASH NEEDS YOU HAVE IDENTIFIED IS**  
20 **SUPPORTED BY EXAMINATION OF PGW'S PRO FORMA FINANCIAL**  
21 **METRICS.**

22 A. I have calculated PGW's *pro forma* results at present rates for the FPFTY in each of  
23 several categories. Those results are displayed on Exhibit JFG-1. Below, I explain how  
24 those financial metrics are inadequate in light of PGW's cash obligations and rating  
25 agency requirements and how, if realized, they would threaten the maintenance of PGW's  
26 current "A" level bond rating. I then calculate PGW's *pro forma* results including the

1 requested rate increase (Exhibit JFG-2) and explain how those results are necessary to  
2 maintain PGW's financial viability and to maintain or improve its current bond rating.

3  
4 **(B) Financial Results at Present Rates**

5 *Debt Service Coverage*

6 **Q. WHY IS IT IMPORTANT TO MAINTAIN OR IMPROVE DEBT SERVICE**  
7 **COVERAGE?**

8 A. The fundamental ratemaking philosophy for most financially stable municipal utilities is  
9 to provide safe and reliable service at rates that recover all current costs, plus a margin in  
10 excess of current costs. This margin, also referred to as debt service coverage, is a  
11 municipal utility's only real alternative to issuing debt to fund capital program costs.  
12 Coverage above debt service requirements also provides funds for cash obligations that  
13 are not shown in the debt service coverage calculations and provides assurance to  
14 investors that the utility will be able to make timely debt service payments. The recent  
15 rating agency reports have emphasized the need for PGW to improve its debt service  
16 coverage.

17 Accordingly, PGW must maintain debt service coverage levels that are sufficient to: 1)  
18 allow it to bill rates that result in the minimum debt service coverage required by PGW's  
19 Bond Ordinances (1.5x); and 2) produce sufficient additional revenues to pay for cash  
20 items that are not included in the debt service coverage calculation but for which PGW is  
21 committed or required to pay. Examples of these committed payments are the City Fee,  
22 pension fund contributions not on the income statement, and DSIC costs. In addition,  
23 PGW must fund the portion of its capital improvements funded by internally generated  
24 funds by this excess over debt service. PGW must also have funds on hand to support the



1 need for working capital throughout the fiscal year. Finally, it is crucially important that  
 2 PGW's realized debt service coverage ratio provides a cushion to cover unforeseen  
 3 emergencies. In addition, maintaining or improving debt service coverage is critically  
 4 necessary to maintain PGW's "A" level bond rating which, in turn, is crucial to it  
 5 continuing to have access to the capital markets on acceptable terms.

6 **Q. PLEASE DEMONSTRATE HOW PGW'S MINIMUM REQUIRED DEBT**  
 7 **SERVICE COVERAGE RATIO IS INSUFFICIENT TO PROVIDE THE LEVEL**  
 8 **OF CASH NEEDED TO MEET ALL OF PGW'S CASH OBLIGATIONS.**

9 A. Under the Bond Ordinance,<sup>14</sup> PGW has a mandatory debt service coverage ratio of 1.5x  
 10 the debt service. The Bond Ordinance calculates the coverage ratio by subtracting  
 11 operating expenses from total funds available to calculate total funds available to cover  
 12 debt service. Importantly, and as explained above, calculation under the Bond Ordinance  
 13 does not include the (\$18.0 million) payment to the City as a fixed obligation of PGW.  
 14 The cash generated by this ratio (funds available to cover debt service) is used to pay  
 15 other expenses that do not appear on the Statement of Income and are excluded from the  
 16 calculation by the Bond Ordinance or because they are not in base rates. These payments  
 17 include the \$18.0 million City Payment, the internally generated funds needed for PGW  
 18 to continue to meet its IGF goals and an adequate level of working capital.

19 **Q. WOULD THE RATING AGENCIES VIEW A DEBT SERVICE COVERAGE**  
 20 **LEVEL AT OR JUST ABOVE 1.5X AS CAUSE FOR A DOWNGRADE?**

21 A. In my opinion, yes, most definitely. And, without rate relief, PGW would experience debt  
 22 service coverage at these unacceptably low levels. In fact, Exhibit JFG-1 shows that, on a

---

<sup>14</sup> General Gas Works Revenue Bond Ordinance of 1975 (the "1975 General Ordinance") and the General Gas Works Revenue Bond Ordinance of 1998 (the "1998 General Ordinance") (collectively, the "Bond Ordinance").

1 Bond “Ordinance” basis, debt service coverage is projected to fall to a level that barely  
 2 passes the statutory bond covenant:

HTY FY 2024	FTY FY 2025	FPFTY FY 2026
2.05x	1.78x	1.68x

3 Again, coverages below 1.5x constitutes a default on PGW’s bonds. When the  
 4 Company’s debt service coverage is calculated to include the \$18.0 million as a fixed  
 5 obligation (which it is), PGW’s debt service coverage decreases to a level that is barely  
 6 passing the minimum level:

HTY FY 2024	FTY FY 2025	FPFTY FY 2026
1.88x	1.61x	<b>1.52x</b>

7  
 8 Moreover, and as Mr. Lover explains,<sup>15</sup> PGW’s debt service coverage needs to be  
 9 consistent with similarly rated entities in order to maintain PGW’s current favorable “A”  
 10 level bond rating.

11 *Non-Borrowed Year-End Cash; Days of Cash*

12 **Q. AT PRESENT RATES, WHAT LEVELS OF YEAR END CASH IS PGW**  
 13 **PROJECTING IT WILL EXPERIENCE IN THE FPFTY?**

14 A. PGW’s year-end days of cash at present rates are as follows:

HTY FY 2024	FTY FY 2025	FPFTY FY 2026
90.6 days	17 days	<b>(33)</b> days

15  
 16 As can be seen, at present rates, and for the FPFTY (FY 2026), PGW is projecting that it  
 17 will end the year without any Ending Cash and in fact will have a cash deficit. Exhibit

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<sup>15</sup> PGW St. No. 3.

1 JFG-1, Cash Flow, line 24 shows a **negative \$48.4 million**. That level of cash in the  
2 FPPTY (FY 2026) equates to a **negative 33** days cash on hand.

3 As more fully explained by Mr. Lover,<sup>16</sup> in his opinion, the bond rating agencies that  
4 closely follow PGW's financial performance have indicated that a cash balance of  
5 between 90 and 150 days of cash on hand is necessary for PGW to maintain its existing  
6 bond rating and not be downgraded. Moreover, based on his analysis of the financial  
7 results of comparable companies, Mr. Walker recommends that PGW's DCOH should be  
8 at least 120 days of unrestricted cash. Therefore, a cash deficit and negative DCOH  
9 would not only be extremely concerning to the rating agencies, but it would also pose real  
10 challenges to the Company's ability to meet all of its obligations when they came due  
11 (and, in all likelihood, would cause PGW to have to file for emergency rate relief).

12 It is also important to understand that the measurement of days cash on hand is being  
13 presented as of the end of the FPPTY (i.e., August 31, 2026), PGW's fiscal year-end.  
14 PGW's cash balance changes throughout the fiscal year and is at a low point in the  
15 middle of the fiscal year. For example, the cash balance at December 31, 2024 was only \$32.2  
16 million. Therefore, a negative cash balance at the end of the fiscal year masks an even  
17 more dire situation during the fiscal year.

18 **Q. WHAT LEVEL OF CASH IS PGW PROJECTED TO EXPERIENCE IF THE**  
19 **RATE INCREASE IS GRANTED?**

20 A. PGW's level of year-end cash will be as follows: \$54.1 million for 37 DCOH. I would  
21 observe that the very modest level of DCOH is below the DCOH shown in the  
22 Commission Tables Calculating Allowed Revenue Increase, which show 54.1 DCOH. To

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<sup>16</sup> PGW St. No. 3.

1 reach that level of DCOH deemed reasonable by the PUC in the last case, PGW would  
2 need to request and receive about \$45.5 million more than the \$105.0 million that it is  
3 actually requesting.

4 **Q. ISN'T 37 DAYS OF CASH CONSIDERABLY BELOW THE LEVELS THAT**  
5 **WOULD BE REASONABLE BASED ON A REVIEW OF COMPARABLE**  
6 **COMPANIES OR RATING AGENCY REQUIREMENTS?**

7 A. Yes, it is. PGW would have had to request a far larger rate increase to achieve levels of  
8 days of cash similar to the levels recommended by Mr. Walker and Mr. Lover. But PGW  
9 has chosen to base its rate increase request on its cash needs and base rate cash analyses,  
10 which calculates the minimum additional cash it needs to meet all its obligations and  
11 have a small amount of cash working capital over and above those levels.

12 **Q. DOES PGW HAVE ANY SHORT-TERM BORROWING FACILITIES?**

13 A. Yes, it has a commercial paper facility; but that borrowing facility is only available in  
14 very limited circumstances.

15 **Q. PLEASE DESCRIBE PGW'S CURRENT COMMERCIAL PAPER PROGRAM.**

16 A. The Program has two aspects: a capital financing program and an emergency cash  
17 working capital program limited to increases in inventory and receivables. The total  
18 program is capped at \$120.0 million.

19 The Capital Financing Program may only be used for "bridge" capital financing. This  
20 strategy allows PGW to delay the issuance of long-term debt, thus putting off the  
21 associated costs, and also so that it can issue bonds at the optimal time relative to the  
22 long-term bond market. Such optimal market timing can also reduce the costs of long-  
23 term borrowing.

1 PGW utilized this short-term borrowing capability at the end of FY 2024 in order to  
2 better time its bond issuance with the goal of reducing its overall cost.

3 PGW also has a Working Capital Program. But Working Capital Notes can only be  
4 issued in relatively dire emergencies. By law, those notes may only be issued: (1) to fund  
5 a project solely consisting of the financing of inventory and receivables; (2) the principal  
6 amount of the commercial paper notes outstanding cannot exceed the aggregate of project  
7 costs (consisting solely of inventory and receivables on the date of issuance of the  
8 commercial paper notes); (3) for federal tax purposes, in order to issue the notes on a tax-  
9 exempt basis, PGW must project negative cash flow for the period in which the notes will  
10 be outstanding; and (4) spend 90% of the amount of the notes within 6 months. Thus,  
11 these notes would only be available to stave off the financial disaster of PGW not being  
12 able to meet its obligations as a going concern, such as paying gas bills, and only where  
13 PGW projects a negative cash flow.

14 Thus, neither Capital Notes nor Working Capital Notes are available for non-gas  
15 operating expenses, and it is not reasonable to view PGW's Commercial Paper program  
16 as the equivalent of non-borrowed cash. In any event, the Commission's Policy Statement  
17 on Cash Flow ratemaking specifically directs that PGW's cash flow revenue requirement  
18 must consider, in addition to any short-term borrowing capability, "PGW's test year-end  
19 and (as a check) projected future levels of non-borrowed year-end cash."

20 **Q. PLEASE DESCRIBE THE DISTINCTION IN THE YEAR-END DAYS OF CASH**  
21 **FIGURES ON EXHIBITS JFG-1 AND JFG-2.**

22 A. Line 30 below the Cash Flow Statement on JFG-1 and JFG-2 calculates the Days of  
23 Unrestricted Cash for operations based on the expenses in the Statement of Income,

1 adjusted for non-cash items. This is what we consider the primary liquidity metric for our  
2 needs and under the cash flow ratemaking guidance - non-borrowed cash from base rates  
3 available at year-end.

4 Although we do not consider the commercial paper program as an equivalent replacement  
5 for non-borrowed cash, since it is temporary, must be repaid with interest, is accessed for  
6 working capital conditions only when PGW is projecting a cash deficit, and contains  
7 restrictions under local ordinance and federal regulations (as detailed above), we do  
8 acknowledge that it is available to supplement cash in unusual circumstances. The rating  
9 agencies also factor the commercial paper into their liquidity analysis. Therefore, we  
10 have also listed in Line 31 a calculation for Contingency Days of Cash that reflects the  
11 maximum \$120.0 million of borrowing capacity for working capital purposes, which if  
12 used would reduce the amount available for capital construction financing.

13 The distinction between these two measures is analogous to the criteria used by Fitch  
14 Ratings for Public Power issuers.<sup>17</sup> Fitch's liquidity criteria states that:

15 A liquidity cushion above 90 days is neutral to ratings, as long [as]  
16 unrestricted cash is above 30 days. A liquidity cushion below 90  
17 days or unrestricted cash below 30 days is considered "weak" and  
18 risk additive.  
19

20 The projected Days of Unrestricted Cash on Exhibit JFG-2 for the FPFTY is 37, and  
21 Contingency Days of Cash plus non-borrowed cash is 119. This will be viewed at the  
22 bottom end of rating-neutral according to the criteria. Mr. Lover's statement stresses that

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<sup>17</sup> The most recent Fitch Ratings news release on its August 2024 rating of PGW noted that both the U.S. Public Sector Revenue-Supported Entities Rating Criteria and U.S. Public Power Rating Criteria were applied. [https://www.fitchratings.com/research/us-public-finance/fitch-rates-philadelphia-gas-works-revs-a-outlook-revised-to-positive-28-08-2024#:~:text=Fitch%20Ratings%20%2D%20New%20York%20%2D%2028,PGW%2C%20or%20the%20system\)%3A](https://www.fitchratings.com/research/us-public-finance/fitch-rates-philadelphia-gas-works-revs-a-outlook-revised-to-positive-28-08-2024#:~:text=Fitch%20Ratings%20%2D%20New%20York%20%2D%2028,PGW%2C%20or%20the%20system)%3A)

1 considering relative weaknesses in other ratings criteria, above-average levels of liquidity  
2 are needed to maintain PGW's A rating. Even with the rate increase granted in full,  
3 PGW will not have "above-average" levels of liquidity.

4 I note that in Mr. Walker's testimony where he benchmarks days of cash, his analysis is  
5 based on the Unrestricted (non-borrowed) Cash for both PGW and other utilities and  
6 should be read as such. His recommended Days of Cash of 120 to 140 days based on the  
7 comparable group analysis refers to the unrestricted cash. Mr. Lover's "view that PGW  
8 needs to maintain 90-150 days of direct cash on hand" also refers to unrestricted cash.

9  
10 Debt To Equity Ratio

11 **Q. AT PRESENT RATES, WHAT IS PGW'S PROJECTED DEBT TO EQUITY**  
12 **RATIO FOR THE FULLY PROJECTED FUTURE TEST YEAR?**

13 A. At present rates, PGW's debt to equity capitalization ratio in the FPFTY (FY 2026) is  
14 approximately 54.33%. That percentage is higher than the ratio in the HTY, 53.92%.  
15 (Exhibit JFG-1, Balance Sheet, line 47). With the rate increase, PGW's ratio is projected  
16 to go to 52%, moving in the right direction.

17 PGW's goal is to have a debt-to-equity level under 60% of total capitalization. These  
18 ratios are substantially affected by two factors. First, changes in municipal accounting  
19 rules, as directed by GASB, have resulted in an increase in total capitalization. Second,  
20 PGW's policy of attempting to balance its capital structure by funding approximately  
21 50% of its annual capital spending from internally generated funds has reduced its  
22 percentage of debt relative to that total capitalization. While the second factor is a sign of

1 financial health, the first factor creates an artificial decrease in PGW's debt to total  
2 capitalization ratios.

3 PGW's ratio remains higher than PGW's peers, as Mr. Walker explains in his testimony  
4 (PGW Statement No. 4).

5 Bond Ratings

6 **Q. WHY IS IT IMPORTANT FOR PGW TO MAINTAIN ITS CURRENT BOND**  
7 **RATINGS?**

8 A. Credit ratings are important because PGW, like most utilities, is required to make  
9 significant capital infrastructure improvements each year for new and replacement assets.  
10 As explained by Mr. Lover, credit ratings are a critical component in determining the cost  
11 of debt as the ratings signal PGW's ability and willingness to meet financial obligations  
12 in full and on time. The impacts of a downgrade of the credit ratings for PGW's bonds  
13 are discussed by Mr. Lover, PGW Statement No. 3.

14 However, bond rating is far more important to PGW as a municipal utility that must place  
15 substantial reliance on issuing long term debt to fund capital improvements. As Mr.  
16 Lover discusses in more depth, a bond downgrade would raise PGW's cost of borrowing  
17 materially and that effect would be experienced for decades.

18 PGW's proposed rate increase is designed to keep PGW at its present bond rating and is  
19 therefore reasonable.



1 **Q. IS IT YOUR OPINION THAT IF PGW WERE TO EXPERIENCE THE**  
 2 **FINANCIAL RESULTS, AT PRESENT RATES, PROJECTED FOR THE FY 2026**  
 3 **FPFTY IT WOULD THREATEN PGW’S PRESENT BOND RATING?**

4 A. I believe that a bond downgrade would certainly be a concern. The bond rating agencies  
 5 have made clear that they expect PGW to perform at levels consistent with other  
 6 companies that are similarly rated. PGW’s financial results at present rates, as projected  
 7 for the FPFTY, FY 2026, are well away from that standard to ensure that its financial  
 8 plan would maintain or improve its bond ratings.

9

10 **(C) Rate Increase Request**

11 **Q. WHAT ARE YOUR CONCLUSIONS BASED ON THE FINANCIAL RESULTS**  
 12 **AT PRESENT RATES FOR THE FPFTY AND THE FORECAST PERIOD?**

13 A. As demonstrated, it is crucially important that PGW obtain rate relief to have sufficient  
 14 cash in order to prudently operate the Company as well as to maintain its financial  
 15 indicators at minimally adequate levels. A failure to improve these results with  
 16 additional revenues would almost certainly result in a bond rating downgrade, which  
 17 would raise the costs of borrowing and limit PGW’s access to capital markets, and would  
 18 force PGW to almost immediately file for another rate increase.

19 **V. FINANCIAL IMPACTS FROM PGW’S ADDITIONAL PROPOSALS**

20 **(A) Financial Impacts from Decoupling Proposal**

21 **Q. DOES THE RATE INCREASE REQUEST TAKE INTO ACCOUNT PGW’S**  
 22 **DECOUPLING PROPOSAL?**

23 A. Yes. But there is not an immediate impact on rates or bills. Florian Teme (PGW  
 24 Statement No. 6) discusses PGW’s decoupling proposal. The revised tariff pages are part  
 25 of Exhibit FT-1.

1 All things equal, PGW's decoupling proposal would not impact PGW's expenses. The  
2 decoupling proposal would not have an immediate impact on bills or revenues. As  
3 proposed, the decoupling charge would be billed or credited only if billed revenues were  
4 below (or above) the approved level of billed revenues.

5 **Q. PLEASE DISCUSS THE FINANCIAL IMPACTS OF DECOUPLING.**

6 A. Decoupling is protecting ratepayers by ensuring the financial strength of PGW. If the  
7 Commission does not approve PGW's decoupling proposal, PGW will continue to face  
8 the risk of running out of cash. That risk increases when PGW has less than 90 – 120  
9 days of cash on hand, since PGW might not be able to secure emergency rate relief and  
10 implement new rates before it depleted its available cash and borrowed cash working  
11 capital. Decoupling will not materially affect the affordability of gas because its purpose  
12 is to assure that PGW is actually able to bill the level of revenues determined by the PUC  
13 to be reasonable and consistent with affordability goals.

14  
15 **(B) Financial Impacts from Revisions to DSIC**

16 **Q. DOES THE RATE INCREASE REQUEST TAKE INTO ACCOUNT PGW'S DSIC**  
17 **PROPOSAL?**

18 A. Yes. But there is not an immediate impact on rates or bills. PGW's DSIC proposal would  
19 only effect bills, if as part of the annual reconciliation, it was determined that an under  
20 collection occurred. The impacts of PGW's DSIC proposal are discussed in the Petition  
21 filed to support that proposal.

22  
23 **VI. CONCLUSION**


24 **Q. DOES THAT COMPLETE YOUR DIRECT TESTIMONY?**

25 A. Yes, however, I do reserve the right to supplement this testimony as may be appropriate.

**VERIFICATION**

I, Joseph F. Golden, Jr., hereby state that: (1) I am the Executive Vice President and Acting Chief Financial Officer for Philadelphia Gas Works (“PGW”); (2) the facts set forth in my testimony are true and correct (or are true and correct to the best of my knowledge, information and belief); and, (3) I expect to be able to prove the same at a hearing held in this matter. I understand that statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: February 27, 2025

  
\_\_\_\_\_  
Joseph F. Golden, Jr.  
Executive Vice President and Acting Chief  
Financial Officer  
Philadelphia Gas Works

# Exhibit JFG-1

**PHILADELPHIA GAS WORKS**  
**STATEMENT OF INCOME**  
(Dollars in Thousands)

<b>LINE NO.</b>	<b>HTY <u>2023-24</u></b>	<b>FTY <u>2024-25</u></b>	<b>FPFTY <u>2025-26</u></b>	<b>LINE NO.</b>
<b>OPERATING REVENUES</b>				
1. Non-Heating	\$ 21,231	\$ 21,472	\$ 22,348	1.
2. Gas Transport Service	79,622	86,296	88,382	2.
3. Heating	530,661	537,242	554,063	3.
4. Revenue Enhancement / Cost Reduction	-	-	-	4.
5. Weather Normalization Adjustment	25,560	4,667	-	5.
6. Appropriation for Uncollectible Reserve	(29,897)	(32,272)	(34,216)	6.
7. Unbilled Adjustment	312	(3,647)	622	7.
8. Total Gas Revenues	<u>627,489</u>	<u>613,758</u>	<u>631,199</u>	8.
9. Appliance Repair & Other Revenues	7,019	6,439	6,498	9.
10. Other Operating Revenues	<u>29,561</u>	<u>28,924</u>	<u>29,662</u>	10.
11. Total Other Operating Revenues	<u>36,580</u>	<u>35,363</u>	<u>36,160</u>	11.
12. <b>Total Operating Revenues</b>	<u>664,069</u>	<u>649,121</u>	<u>667,359</u>	12.
<b>OPERATING EXPENSES</b>				
13. Natural Gas	164,164	161,146	173,132	13.
14. Other Raw Material	28	31	31	14.
15. Sub-Total Fuel	<u>164,192</u>	<u>161,177</u>	<u>173,163</u>	15.
16. <b>CONTRIBUTION MARGINS</b>	<b>499,877</b>	<b>487,944</b>	<b>494,196</b>	16.
17. Gas Processing	25,576	22,909	26,929	17.
18. Field Operations	96,588	102,925	108,598	18.
19. Collection	3,630	4,998	5,575	19.
20. Customer Service	15,995	18,578	20,721	20.
21. Account Management	8,853	10,439	10,801	21.
22. Marketing	3,765	4,610	4,728	22.
23. Administrative & General	85,407	94,693	101,830	23.
24. Health Insurance	25,448	27,782	29,988	24.
25. Capitalized Fringe Benefits	(11,835)	(12,569)	(10,152)	25.
26. Capitalized Administrative Charges	(17,702)	(28,216)	(32,214)	26.
27. Pensions	25,345	20,827	41,412	27.
28. Taxes	9,830	10,432	10,884	28.
29. Other Post Employment Benefits	1,075	8,716	11,006	29.
30. Retirement Payout / Labor Savings	-	(98)	(434)	30.
31. Sub-Total Other Operating & Maintenance	<u>271,975</u>	<u>286,026</u>	<u>329,672</u>	31.
32. Depreciation	62,075	62,494	65,061	32.
33. GASB 87 Depreciation	3,767	3,767	3,993	33.
34. GASB 96 Depreciation	2,221	2,350	2,492	34.
35. Cost of Removal	<u>7,230</u>	<u>9,879</u>	<u>5,879</u>	35.
36. Net Depreciation	<u>75,293</u>	<u>78,490</u>	<u>77,424</u>	36.
37. <b>Sub-Total Other Operating Expenses</b>	<u>347,268</u>	<u>364,516</u>	<u>407,096</u>	37.

38.	<b>TOTAL OPERATING EXPENSES</b>	511,460	525,693	580,259	38.
39.	OPERATING INCOME	152,609	123,427	87,100	39.
40.	<b>Interest Gain / (Loss) and Other Income</b>	14,467	26,721	21,831	40.
41.	INCOME BEFORE INTEREST	<u>167,076</u>	<u>150,148</u>	<u>108,931</u>	41.
42.	<b>INTEREST</b>				42.
43.	Long-Term Debt	43,283	55,638	54,108	43.
44.	Other	(7,090)	(10,558)	(9,634)	44.
	AFUDC	-	-	-	
45.	Loss From Extinguishment of Debt	3,314	2,686	2,080	45.
46.	<b>Total Interest</b>	<u>39,507</u>	<u>47,766</u>	<u>46,554</u>	46.
	<b>NON-OPERATING REVENUE</b>				
47.	Federal Grant Revenue (PHMSA)	-	15,506	27,987	47.
48.	<b>NET INCOME</b>	<u>127,569</u>	<u>117,888</u>	<u>90,364</u>	48.
49.	City Payment	18,000	18,000	18,000	49.
50.	<b>NET EARNINGS</b>	<u>\$ 109,569</u>	<u>\$ 99,888</u>	<u>\$ 72,364</u>	50.

**PHILADELPHIA GAS WORKS  
CASH FLOW STATEMENT  
(Dollars in Thousands)**

<u>LINE NO.</u>	<u>HTY 2023-24</u>	<u>FTY 2024-25</u>	<u>FPFTY 2025-26</u>	<u>LINE NO.</u>
<b>SOURCES</b>				
1. Net Income	\$ 127,569	\$ 117,888	\$ 90,364	1.
2. Depreciation & Amortization	61,565	58,927	62,251	2.
3. Earnings on Restricted Funds Withdrawal/(No Withdrawal)	(4,988)	(19,809)	(16,907)	3.
4. Proceeds from Bond Refunding to Pay Cost of Issuance	-	-	-	4.
5. Increased/(Decreased) Other Assets/Liabilities	(37,886)	(28,323)	(25,724)	5.
6. Available From Operations	<u>146,260</u>	<u>128,684</u>	<u>109,984</u>	6.
7. Drawdown of Bond Proceeds	42,004	106,000	104,500	7.
8. Release of Bond Proceeds to Pay Temporary Financing	-	35,000	-	8.
9. Temporary Financing	35,000	-	-	9.
10. TOTAL SOURCES	<u><u>223,264</u></u>	<u><u>269,684</u></u>	<u><u>214,484</u></u>	10.
<b>USES</b>				
11. Net Construction Expenditures: Bond / CP/ DSIC	112,007	141,910	140,650	11.
12. Net Construction Expenditures: IGF	37,103	70,090	68,350	12.
13. Revenue Bonds	60,255	56,480	58,445	13.
14. Temporary Financing Repayment	-	35,000	-	14.
15. GASB Lease Principal Payments	7,360	4,099	4,256	15.
16. Changes in City Equity	-	-	-	16.
17. Distribution of Earnings	18,000	18,000	18,000	17.
18. Non-Cash Working Capital	<u>12,228</u>	<u>36,198</u>	<u>(3,285)</u>	18.
19. Cash Needs	\$246,953	361,777	286,417	19.
20. Cash Surplus (Shortfall)	(23,689)	(92,093)	(71,933)	20.
21. TOTAL USES	<u><u>\$223,264</u></u>	<u><u>269,684</u></u>	<u><u>214,484</u></u>	21.
22. Cash - Beginning of Period	139,302	115,613	23,520	22.
23. Cash - Surplus (Shortfall)	(23,689)	(92,093)	(71,933)	23.
24. <b>ENDING CASH</b>	<u><u>\$ 115,613</u></u>	<u><u>\$ 23,520</u></u>	<u><u>\$ (48,413)</u></u>	24.
<b>END CASH FLOW STATEMENT</b>				
<b>ADDITIONAL METRICS - NOT PART OF CASH FLOW STATEMENT</b>				
25. Outstanding Commercial Paper	-	-	-	25.
26. Outstanding Commercial Paper - Capital	35,000	-	-	26.
27. DSIC Spending	35,003	35,910	36,150	27.
28. Internally Generated Funds	37,103	70,090	68,350	28.
29. TOTAL IGF + Incremental DSIC Spending	72,106	106,000	104,500	29.
30. Days of Unrestricted Cash	90	17	(33)	30.
31. Contingency Days of Cash (incl Commercial Paper)	183	105	49	31.

**PHILADELPHIA GAS WORKS  
DEBT SERVICE COVERAGE  
(Dollars in Thousands)**

<u>LINE NO.</u>	<u>HTY 2023-24</u>	<u>FTY 2024-25</u>	<u>FPFTY 2025-26</u>	<u>LINE NO.</u>
<b>FUNDS PROVIDED</b>				
1. Total Gas Revenues	\$ 627,489	\$ 613,758	\$ 631,199	1.
2. Other Operating Revenues	36,580	35,363	36,160	2.
3. Total Operating Revenues	<u>664,069</u>	<u>649,121</u>	<u>667,359</u>	3.
4. Other Income Incr. / (Decr.) Restricted Funds	9,479	6,912	4,924	4.
5. Non Operating Revenue	-	15,506	27,987	5.
6. AFUDC (Interest)	-	-	-	6.
7. TOTAL FUNDS PROVIDED	<u>673,548</u>	<u>671,539</u>	<u>700,270</u>	7.
<b>FUNDS APPLIED</b>				
8. Fuel Costs	164,192	161,177	173,163	8.
9. Other Operating Costs	<u>347,268</u>	<u>364,516</u>	<u>407,096</u>	9.
10. Total Operating Expenses	511,460	525,693	580,259	10.
11. Less: Non-Cash Expenses	<u>50,771</u>	<u>50,856</u>	<u>70,257</u>	11.
12. TOTAL FUNDS APPLIED	460,689	474,837	510,002	12.
13. Funds Available to Cover Debt Service	212,859	196,701	190,268	13.
14. Net Available after Prior Debt Service	212,859	196,701	190,268	14.
15. Leasing Debt Service	-	-	-	15.
16. Net Available after Prior Capital Leases	<u>212,859</u>	<u>196,701</u>	<u>190,268</u>	16.
17. 1998 Ordinance Bonds Debt Service	103,704	110,714	112,973	17.
18. 1999 Ordinance Subordinate Bonds Debt Service - (TXCP)	-	-	-	18.
19. Total 1998 Ordinance Debt Service	<u>103,704</u>	<u>110,714</u>	<u>112,973</u>	19.
20. <b>Debt Service Coverage 1998 Bonds</b>	<b>2.05</b>	<b>1.78</b>	<b>1.68</b>	20.
21. Net Available after 1998 Debt Service	109,155	85,987	77,295	21.
22. Aggregate Debt Service	103,704	110,714	112,973	22.
23. Debt Service Coverage (Combined liens)	2.05	1.78	1.68	23.
24. Debt Service Coverage (Combined liens with \$18.0 City Fee)	<b>1.88</b>	<b>1.61</b>	<b>1.52</b>	24.



**PHILADELPHIA GAS WORKS**  
**BALANCE SHEET**  
(Dollars in Thousands)

<b>LINE NO.</b>	<b>HTY 2023-24</b>	<b>FTY 2024-25</b>	<b>FPFTY 2025-26</b>	<b>LINE NO.</b>
<b><u>ASSETS</u></b>				
1.	\$ 1,821,459	\$ 1,970,965	\$ 2,114,904	1.
2.	74,793	71,896	68,791	2.
3.	3,791	4,682	5,498	3.
4.	116,145	121,820	127,772	4.
5.	-	223,289	129,700	5.
6.	2,929	2,973	3,018	6.
7.	115,612	23,520	(48,413)	7.
8.				8.
9.	167,821	171,727	171,703	9.
10.	2,013	2,063	2,088	10.
11.	8,898	5,251	5,873	11.
12.	(89,594)	(89,550)	(88,966)	12.
13.	89,138	89,491	90,697	13.
14.	67,390	69,756	72,795	14.
15.	6,272	6,276	6,280	15.
16.	8,657	8,908	9,082	16.
17.	639	808	756	17.
18.	16,449	13,764	11,684	18.
19.	28,228	26,686	24,852	19.
20.	11,113	33,465	6,943	20.
21.	91,583	59,323	33,462	21.
22.	31,233	25,418	17,748	22.
23.	<b><u>\$ 2,485,431</u></b>	<b><u>\$ 2,753,039</u></b>	<b><u>\$ 2,675,568</u></b>	23.
<b><u>EQUITY &amp; LIABILITIES</u></b>				
24.	\$ 837,851	\$ 937,739	\$ 1,010,103	24.
25.	882,995	1,135,890	1,077,445	25.
26.	(40)	-	-	26.
27.	97,627	135,510	124,084	27.
28.	980,578	1,271,400	1,201,529	28.
29.	59,239	58,537	57,696	29.
30.	1,489	2,203	2,981	30.
31.	35,000	-	-	31.
32.	73,357	80,569	83,285	32.
33.	2,396	2,296	2,201	33.
34.	2,669	1,424	1,582	34.
35.	186,671	181,867	177,701	35.
36.	113,707	82,050	46,917	36.
37.	40,523	2,458	2,712	37.
38.	145	1,840	1,486	38.
39.	20,160	38,143	27,200	39.
40.	82,154	45,283	19,276	40.
41.	6,754	5,350	5,769	41.
42.	5,078	5,457	5,713	42.
43.	3,000	3,000	3,000	43.
44.	34,662	33,424	26,413	44.
	<b><u>\$ 2,485,431</u></b>	<b><u>\$ 2,753,039</u></b>	<b><u>\$ 2,675,568</u></b>	
<b><u>CAPITALIZATION</u></b>				
45.	1,818,433	2,209,139	2,211,632	45.
46.	980,582	1,271,400	1,201,529	46.
47.	53.92%	57.55%	54.33%	47.
48.	1.17	1.36	1.19	48.

# Exhibit JFG-2

**PHILADELPHIA GAS WORKS**  
**STATEMENT OF INCOME**  
(Dollars in Thousands)

<b>LINE NO.</b>	<b>HTY <u>2023-24</u></b>	<b>FTY <u>2024-25</u></b>	<b>FPFTY <u>2025-26</u></b>	<b>LINE NO.</b>
<b>OPERATING REVENUES</b>				
1. Non-Heating	\$ 21,231	\$ 21,472	\$ 22,348	1.
2. Gas Transport Service	79,622	86,296	88,382	2.
3. Heating	530,661	537,242	554,063	3.
4. Revenue Enhancement / Cost Reduction	-	-	105,000	4.
5. Weather Normalization Adjustment	25,560	4,667	-	5.
6. Appropriation for Uncollectible Reserve	(29,897)	(32,272)	(38,626)	6.
7. Unbilled Adjustment	312	(3,647)	622	7.
8. Total Gas Revenues	<u>627,489</u>	<u>613,758</u>	<u>731,789</u>	8.
9. Appliance Repair & Other Revenues	7,019	6,439	6,498	9.
10. Other Operating Revenues	<u>29,561</u>	<u>28,924</u>	<u>31,336</u>	10.
11. Total Other Operating Revenues	<u>36,580</u>	<u>35,363</u>	<u>37,834</u>	11.
12. <b>Total Operating Revenues</b>	<u>664,069</u>	<u>649,121</u>	<u>769,623</u>	12.
<b>OPERATING EXPENSES</b>				
13. Natural Gas	164,164	161,146	173,132	13.
14. Other Raw Material	28	31	31	14.
15. Sub-Total Fuel	<u>164,192</u>	<u>161,177</u>	<u>173,163</u>	15.
16. <b>CONTRIBUTION MARGINS</b>	<b>499,877</b>	<b>487,944</b>	<b>596,460</b>	16.
17. Gas Processing	25,576	22,909	26,929	17.
18. Field Operations	96,588	102,925	108,598	18.
19. Collection	3,630	4,998	5,575	19.
20. Customer Service	15,995	18,578	20,721	20.
21. Account Management	8,853	10,439	10,801	21.
22. Marketing	3,765	4,610	4,728	22.
23. Administrative & General	85,407	94,693	101,830	23.
24. Health Insurance	25,448	27,782	29,988	24.
25. Capitalized Fringe Benefits	(11,835)	(12,569)	(10,152)	25.
26. Capitalized Administrative Charges	(17,702)	(28,216)	(32,214)	26.
27. Pensions	25,345	20,827	41,412	27.
28. Taxes	9,830	10,432	10,884	28.
29. Other Post Employment Benefits	1,075	8,716	11,006	29.
30. Retirement Payout / Labor Savings	-	(98)	(434)	30.
31. Sub-Total Other Operating & Maintenance	<u>271,975</u>	<u>286,026</u>	<u>329,672</u>	31.
32. Depreciation	62,075	62,494	65,061	32.
33. GASB 87 Depreciation	3,767	3,767	3,993	33.
34. GASB 96 Depreciation	2,221	2,350	2,492	34.
35. Cost of Removal	<u>7,230</u>	<u>9,879</u>	<u>5,879</u>	35.
36. Net Depreciation	<u>75,293</u>	<u>78,490</u>	<u>77,424</u>	36.
37. <b>Sub-Total Other Operating Expenses</b>	<u>347,268</u>	<u>364,516</u>	<u>407,096</u>	37.

38.	<b>TOTAL OPERATING EXPENSES</b>	511,460	525,693	580,259	38.
39.	OPERATING INCOME	152,609	123,427	189,364	39.
40.	<b>Interest Gain / (Loss) and Other Income</b>	14,467	26,721	22,001	40.
41.	INCOME BEFORE INTEREST	<u>167,076</u>	<u>150,148</u>	<u>211,365</u>	41.
42.	<b>INTEREST</b>				42.
43.	Long-Term Debt	43,283	55,638	54,108	43.
44.	Other	(7,090)	(10,558)	(9,634)	44.
45.	Loss From Extinguishment of Debt	3,314	2,686	2,080	45.
46.	<b>Total Interest</b>	<u>39,507</u>	<u>47,766</u>	<u>46,554</u>	46.
	<b>NON-OPERATING REVENUE</b>				
47.	Federal Grant Revenue (PHMSA)	-	15,506	27,987	47.
48.	<b>NET INCOME</b>	<u><b>127,569</b></u>	<u><b>117,888</b></u>	<u><b>192,798</b></u>	48.
49.	City Payment	18,000	18,000	18,000	49.
50.	<b>NET EARNINGS</b>	<u><b>\$ 109,569</b></u>	<u><b>\$ 99,888</b></u>	<u><b>\$ 174,798</b></u>	50.

**PHILADELPHIA GAS WORKS  
CASH FLOW STATEMENT  
(Dollars in Thousands)**

<b>LINE NO.</b>		<b>HTY 2023-24</b>	<b>FTY 2024-25</b>	<b>FPFTY 2025-26</b>	<b>LINE NO.</b>
<b>SOURCES</b>					
1.	Net Income	\$ 127,569	\$ 117,888	\$ 192,798	1.
2.	Depreciation & Amortization	61,565	58,927	62,251	2.
3.	Earnings on Restricted Funds Withdrawal/(No Withdrawal)	(4,988)	(19,809)	(16,907)	3.
4.	Proceeds from Bond Refunding to Pay Cost of Issuance	-	-	-	4.
5.	Increased/(Decreased) Other Assets/Liabilities	(37,886)	(28,323)	(25,724)	5.
6.	Available From Operations	<u>146,260</u>	<u>128,684</u>	<u>212,418</u>	6.
7.	Drawdown of Bond Proceeds	42,004	106,000	104,500	7.
8.	Release of Bond Proceeds to Pay Temporary Financing	-	35,000	-	8.
9.	Temporary Financing	35,000	-	-	9.
10.	<b>TOTAL SOURCES</b>	<u><u>223,264</u></u>	<u><u>269,684</u></u>	<u><u>316,918</u></u>	10.
<b>USES</b>					
11.	Net Construction Expenditures: Bond / CP/ DSIC	112,007	141,910	140,650	11.
12.	Net Construction Expenditures: IGF	37,103	70,090	68,350	12.
13.	Revenue Bonds	60,255	56,480	58,445	13.
14.	Temporary Financing Repayment	-	35,000	-	14.
15.	GASB Lease Principal Payments	7,360	4,099	4,256	15.
16.	Changes in City Equity	-	-	-	16.
17.	Distribution of Earnings	18,000	18,000	18,000	17.
18.	Non-Cash Working Capital	<u>12,228</u>	<u>36,198</u>	<u>(3,358)</u>	18.
19.	Cash Needs	\$246,953	361,777	286,343	19.
20.	Cash Surplus (Shortfall)	(23,689)	(92,093)	30,575	20.
21.	<b>TOTAL USES</b>	<u><u>\$223,264</u></u>	<u><u>269,684</u></u>	<u><u>316,918</u></u>	21.
22.	Cash - Beginning of Period	139,302	115,613	23,520	22.
23.	Cash - Surplus (Shortfall)	(23,689)	(92,093)	30,575	23.
24.	<b>ENDING CASH</b>	<u><u>\$ 115,613</u></u>	<u><u>\$ 23,520</u></u>	<u><u>\$ 54,094</u></u>	24.
<b>END CASH FLOW STATEMENT</b>					
<b>ADDITIONAL METRICS - NOT PART OF CASH FLOW STATEMENT</b>					
25.	Outstanding Commercial Paper	-	-	-	25.
26.	Outstanding Commercial Paper - Capital	35,000	-	-	26.
27.	DSIC Spending	35,003	35,910	36,150	27.
28.	Internally Generated Funds	37,103	70,090	68,350	28.
29.	<b>TOTAL IGF + Incremental DSIC Spending</b>	72,106	106,000	104,500	29.
30.	Days of Unrestricted Cash	90	17	37	30.
31.	Contingency Days of Cash (incl Commercial Paper)	183	105	119	31.

**PHILADELPHIA GAS WORKS  
DEBT SERVICE COVERAGE  
(Dollars in Thousands)**

<u>LINE NO.</u>	<u>HTY 2023-24</u>	<u>FTY 2024-25</u>	<u>FPFTY 2025-26</u>	<u>LINE NO.</u>
<b>FUNDS PROVIDED</b>				
1. Total Gas Revenues	\$ 627,489	\$ 613,758	\$ 731,789	1.
2. Other Operating Revenues	36,580	35,363	37,834	2.
3. Total Operating Revenues	<u>664,069</u>	<u>649,121</u>	<u>769,623</u>	3.
4. Other Income Incr. / (Decr.) Restricted Funds	9,479	6,912	5,094	4.
5. Non Operating Revenue	-	15,506	27,987	5.
6. AFUDC (Interest)	-	-	-	6.
7. TOTAL FUNDS PROVIDED	<u>673,548</u>	<u>671,539</u>	<u>802,704</u>	7.
<b>FUNDS APPLIED</b>				
8. Fuel Costs	164,192	161,177	173,163	8.
9. Other Operating Costs	<u>347,268</u>	<u>364,516</u>	<u>407,096</u>	9.
10. Total Operating Expenses	511,460	525,693	580,259	10.
11. Less: Non-Cash Expenses	<u>50,771</u>	<u>50,856</u>	<u>70,257</u>	11.
12. TOTAL FUNDS APPLIED	460,689	474,837	510,002	12.
13. Funds Available to Cover Debt Service	212,859	196,701	292,702	13.
14. Net Available after Prior Debt Service	212,859	196,701	292,702	14.
15. Leasing Debt Service	-	-	-	15.
16. Net Available after Prior Capital Leases	<u>212,859</u>	<u>196,701</u>	<u>292,702</u>	16.
17. 1998 Ordinance Bonds Debt Service	103,704	110,714	112,973	17.
18. 1999 Ordinance Subordinate Bonds Debt Service - (TXCP)	-	-	-	18.
19. Total 1998 Ordinance Debt Service	<u>103,704</u>	<u>110,714</u>	<u>112,973</u>	19.
20. <b>Debt Service Coverage 1998 Bonds</b>	<b>2.05</b>	<b>1.78</b>	<b>2.59</b>	20.
21. Net Available after 1998 Debt Service	109,155	85,987	179,729	21.
22. Aggregate Debt Service	103,704	110,714	112,973	22.
23. Debt Service Coverage (Combined liens)	2.05	1.78	2.59	23.
24. Debt Service Coverage (Combined liens with \$18.0 City Fee)	<b>1.88</b>	<b>1.61</b>	<b>2.43</b>	24.

**PHILADELPHIA GAS WORKS**  
**BALANCE SHEET**  
(Dollars in Thousands)

<u>LINE NO.</u>	<u>HTY</u> <u>2023-24</u>	<u>FTY</u> <u>2024-25</u>	<u>FPFTY</u> <u>2025-26</u>	<u>LINE NO.</u>
<b><u>ASSETS</u></b>				
1.	\$ 1,821,459	\$ 1,970,965	\$ 2,114,904	1.
2.	74,793	71,896	68,791	2.
3.	3,791	4,682	5,498	3.
4.	116,145	121,820	127,772	4.
5.	-	223,289	129,700	5.
6.	2,929	2,973	3,018	6.
7.	115,612	23,520	54,094	7.
8.				8.
9.	167,821	171,727	171,703	9.
10.	2,013	2,063	2,088	10.
11.	8,898	5,251	5,873	11.
12.	(89,594)	(89,550)	(89,040)	12.
13.	89,138	89,491	90,624	13.
14.	67,390	69,756	72,795	14.
15.	6,272	6,276	6,280	15.
16.	8,657	8,908	9,082	16.
17.	639	808	756	17.
18.	16,449	13,764	11,684	18.
19.	28,228	26,686	24,852	19.
20.	11,113	33,465	6,943	20.
21.	91,583	59,323	33,462	21.
22.	31,233	25,418	17,748	22.
23.	<b><u>\$ 2,485,431</u></b>	<b><u>\$ 2,753,039</u></b>	<b><u>\$ 2,778,002</u></b>	23.
<b><u>EQUITY &amp; LIABILITIES</u></b>				
24.	\$ 837,851	\$ 937,739	\$ 1,112,537	24.
25.	882,995	1,135,890	1,077,445	25.
26.	(40)	-	-	26.
27.	97,627	135,510	124,084	27.
28.	980,578	1,271,400	1,201,529	28.
29.	59,239	58,537	57,696	29.
30.	1,489	2,203	2,981	30.
31.	35,000	-	-	31.
32.	73,357	80,569	83,285	32.
33.	2,396	2,296	2,201	33.
34.	2,669	1,424	1,582	34.
35.	186,671	181,867	177,701	35.
36.	113,707	82,050	46,917	36.
37.	40,523	2,458	2,712	37.
38.	145	1,840	1,486	38.
39.	20,160	38,143	27,200	39.
40.	82,154	45,283	19,276	40.
41.	6,754	5,350	5,769	41.
42.	5,078	5,457	5,713	42.
43.	3,000	3,000	3,000	43.
44.	34,662	33,424	26,413	44.
	<b><u>\$ 2,485,431</u></b>	<b><u>\$ 2,753,039</u></b>	<b><u>\$ 2,778,002</u></b>	
<b><u>CAPITALIZATION</u></b>				
45.	1,818,433	2,209,139	2,314,066	45.
46.	980,582	1,271,400	1,201,529	46.
47.	53.92%	57.55%	51.92%	47.
48.	1.17	1.36	1.08	48.

# Exhibit JFG-3



**PHILADELPHIA GAS WORKS**  
**ADJUSTED SUPPLEMENTAL STATEMENT OF INCOME**  
(Dollars in Thousands)  
**FISCAL YEAR 2026**

LINE NO.	PGW EXHIBIT	DSIC	GCR	Other Non-Base Rate	Balance Sheet	Base Rate Cash Basis	LINE NO.	
<b>Operating revenues</b>								
1.	Non-heating	\$ 22,348				\$ 22,348	1.	
2.	Gas transport service	88,382				88,382	2.	
3.	Heating	554,063	(36,331)	(173,132)	(37,170)	307,430	3.	
4.	Unbilled gas adjustment	622				14	4.	
5.	Revenue Enhancement	-			(608)	-	5.	
6.	Appropriation for uncollectible reserve	(34,216)				-	6.	
7.	<b>Total gas revenues</b>	<u>631,199</u>	<u>(36,331)</u>	<u>(173,132)</u>	<u>(37,170)</u>	<u>33,608</u>	<u>418,174</u>	7.
8.	Appliance & other revenues	6,498			(6,498)	-	8.	
9.	Other operating revenues	29,662			(29,662)	-	9.	
10.	<b>Total operating revenues</b>	<u>667,359</u>	<u>(36,331)</u>	<u>(173,132)</u>	<u>(73,330)</u>	<u>33,608</u>	<u>418,174</u>	10.
<b>Operating expenses</b>								
11.	Natural gas	173,132		(173,132)		-	11.	
12.	Other raw material	31				(31)	12.	
13.	Sub-total fuel	<u>173,163</u>	<u>-</u>	<u>(173,132)</u>	<u>-</u>	<u>(31)</u>	<u>-</u>	13.
14.	<b>CONTRIBUTION MARGIN</b>	<b>494,196</b>	<b>(36,331)</b>	<b>-</b>	<b>(73,330)</b>	<b>33,639</b>	<b>418,174</b>	14.
15.	Gas processing	26,929				26,929	15.	
16.	Field operations	108,598				(880)	107,718	16.
17.	Collection	5,575				5,575	5,575	17.
18.	Customer services	20,721				20,721	20,721	18.
19.	Account management	10,801				10,801	10,801	19.
20.	Marketing	4,728				4,728	4,728	20.
21.	Administrative & general	101,830				101,830	101,830	21.
22.	Health insurance	29,988				29,988	29,988	22.
23.	Capitalized fringe benefits	(10,152)				10,152	-	23.
24.	Capitalized administrative charges	(32,214)				32,214	-	24.
25.	Pensions	41,412				(11,412)	30,000	25.
26.	Other post-employment benefits	11,006				35,280	46,286	26.
27.	Taxes	10,884				10,884	10,884	27.
29.	Cost savings	(434)					(434)	29.
30.	<b>Total operating expenses</b>	<u>329,672</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>65,354</u>	<u>395,026</u>	30.
31.	<b>Operating income before depreciation</b>	<b>164,524</b>	<b>(36,331)</b>	<b>-</b>	<b>(73,330)</b>	<b>(31,715)</b>	<b>23,148</b>	31.
32.	Net depreciation	77,424				(71,545)	5,879	32.
33.	<b>Total operating expenses</b>	<u>580,259</u>	<u>-</u>	<u>(173,132)</u>	<u>-</u>	<u>(6,222)</u>	<u>400,905</u>	33.
34.	<b>Operating income (loss)</b>	<b>87,100</b>	<b>(36,331)</b>	<b>-</b>	<b>(73,330)</b>	<b>39,830</b>	<b>17,269</b>	34.
35.	Investments gain (loss) and other income	21,831				(16,907)	4,924	35.
36.	<b>Income before interest</b>	<u>108,931</u>	<u>(36,331)</u>	<u>-</u>	<u>(73,330)</u>	<u>22,923</u>	<u>22,193</u>	36.
<b>Interest</b>								
37.	Long-term debt	54,108				58,445	112,553	37.
38.	Other	(7,554)				9,294	1,740	38.
39.	Allowance for funds used during construction							39.
40.	<b>Net interest expense</b>	<u>46,554</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>67,739</u>	<u>114,293</u>	40.
<b>Non-Operating Revenue</b>								
41.	Federal Grant Revenue (PHMSA)	27,987			(27,987)		-	41.
42.	<b>Net income (loss)</b>	<u>90,364</u>	<u>(36,331)</u>	<u>-</u>	<u>(101,317)</u>	<u>(44,816)</u>	<u>(92,100)</u>	42.
43.	Distribution to the City	\$ (18,000)				\$ (18,000)		43.
44.	<b>Net earnings (loss) after distribution to the City</b>	<u>\$ 72,364</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>\$ (110,100)</u>	<u>-</u>	44.

**RECONCILIATION TO CASH FLOW STATEMENT**

	Sub-Total	Credits /	Adjustment to		
	Credits/ (Debits)	(Debits)	Cash		
45.	Capital Spending (IGF)		(68,350)	(68,350)	45.
46.	Capital Spending (DSIC)		(36,150)	(36,150)	46.
47.	GASB Principal Payments		(4,256)	(4,256)	47.
48.	Inc/Dec Other Assets & Liabilities (From Cash Flow)	(25,724)			48.
49.	Unbilled gas adjustment	608			49.
50.	Other raw material (Inventory)	(31)			50.
51.	Field operations (Net change LNG Overhead)	(880)			51.
52.	Capitalized fringe benefits (Net Assets)	10,152			52.
53.	Capitalized administrative charges (Net Assets)	32,214			53.
54.	Pensions (Pension Liability, Def Outflows, Inflows)	(11,412)			54.
55.	Other post-employment benefits (OPEB Liab, Def Outflows, Inflows)	35,280			55.
56.	Total Increase / (Decrease) Other Assets & Liabilities		40,207	40,207	56.
57.	Non-Cash Working Cap (From Cash Flow)	3,285			57.
58.	Adjustment for appropriate for uncollectable reserve	(34,216)			58.
59.	Total Non-Cash Working Cap		(30,931)	(30,931)	59.
60.	Non Base Rate Cash Items		137,648	137,648	60.
61.	<b>TOTAL</b>		<u>38,168</u>	<u>38,168</u>	61.
62.	Cash - Beginning of Period	23,520		23,520	62.
63.	Cash - Surplus (Shortfall) Line 44 + Line 61		(71,932)	(71,932)	63.
64.	<b>ENDING CASH</b>	<u>\$ (48,413)</u>		<u>\$ (48,413)</u>	64.

# Exhibit JFG-4

**PHILADELPHIA GAS WORKS  
ADJUSTED SUPPLEMENTAL STATEMENT OF INCOME  
(Dollars in Thousands)  
FISCAL YEAR 2026**

PGW EXHIBIT JFG-4

LINE NO.	PGW EXHIBIT JFG-2	DSIC	GCR	Other Non-Base Rate	Balance Sheet	Base Rate Cash Basis	LINE NO.	
<b>Operating revenues</b>								
1.	Non-heating	\$ 22,348				\$ 22,348	1.	
2.	Gas transport service	88,382				88,382	2.	
3.	Heating	554,063	(36,331)	(173,132)	(37,156)	307,444	3.	
4.	Unbilled gas adjustment	622			(622)	-	4.	
5.	Revenue Enhancement	105,000				105,000	5.	
6.	Appropriation for uncollectible reserve	(38,626)			38,626	-	6.	
7.	<b>Total gas revenues</b>	<u>731,789</u>	<u>(36,331)</u>	<u>(173,132)</u>	<u>(37,156)</u>	<u>38,004</u>	<u>523,174</u>	7.
8.	Appliance & other revenues	6,498			(6,498)	-	8.	
9.	Other operating revenues	31,336			(31,336)	-	9.	
10.	<b>Total operating revenues</b>	<u>769,623</u>	<u>(36,331)</u>	<u>(173,132)</u>	<u>(74,990)</u>	<u>38,004</u>	<u>523,174</u>	10.
<b>Operating expenses</b>								
11.	Natural gas	173,132		(173,132)		-	11.	
12.	Other raw material	31			(31)	-	12.	
13.	Sub-total fuel	<u>173,163</u>	<u>-</u>	<u>(173,132)</u>	<u>-</u>	<u>(31)</u>	<u>-</u>	13.
14.	<b>CONTRIBUTION MARGIN</b>	<u>596,460</u>	<u>(36,331)</u>	<u>-</u>	<u>(74,990)</u>	<u>38,035</u>	<u>523,174</u>	14.
15.	Gas processing	26,929			(880)	26,049	15.	
16.	Field operations	108,598				108,598	16.	
17.	Collection	5,575				5,575	17.	
18.	Customer services	20,721				20,721	18.	
19.	Account management	10,801				10,801	19.	
20.	Marketing	4,728				4,728	20.	
21.	Administrative & general	101,830				101,830	21.	
22.	Health insurance	29,988				29,988	22.	
23.	Capitalized fringe benefits	(10,152)			10,152	-	23.	
24.	Capitalized administrative charges	(32,214)			32,214	-	24.	
25.	Pensions	41,412			(11,412)	30,000	25.	
26.	Other post-employment benefits	11,006			35,280	46,286	26.	
27.	Taxes	10,884				10,884	27.	
29.	Cost savings	(434)				(434)	29.	
30.	<b>Total operating expenses</b>	<u>329,672</u>	<u>-</u>	<u>-</u>	<u>65,354</u>	<u>395,026</u>	<u>-</u>	30.
31.	<b>Operating income before depreciation</b>	<u>266,788</u>	<u>(36,331)</u>	<u>-</u>	<u>(74,990)</u>	<u>(27,319)</u>	<u>128,148</u>	31.
32.	Net depreciation	77,424				(71,545)	5,879	32.
33.	<b>Total operating expenses</b>	<u>580,259</u>	<u>-</u>	<u>(173,132)</u>	<u>-</u>	<u>(6,222)</u>	<u>400,905</u>	33.
34.	<b>Operating income</b>	<u>189,364</u>	<u>(36,331)</u>	<u>-</u>	<u>(74,990)</u>	<u>44,226</u>	<u>122,269</u>	34.
35.	Investments gain and other income	22,001				(16,907)	5,094	35.
36.	<b>Income before interest</b>	<u>211,365</u>	<u>(36,331)</u>	<u>-</u>	<u>(74,990)</u>	<u>27,319</u>	<u>127,363</u>	36.
<b>Interest</b>								
37.	Long-term debt	54,108				58,445	112,553	37.
38.	Other	(7,554)				9,294	1,740	38.
39.	Allowance for funds used during construction							39.
40.	<b>Net interest expense</b>	<u>46,554</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>67,739</u>	<u>114,293</u>	40.
<b>Non-Operating Revenue</b>								
41.	Federal Grant Revenue (PHMSA)	27,987			(27,987)		-	41.
42.	<b>Net income</b>	<u>192,798</u>	<u>(36,331)</u>	<u>-</u>	<u>(102,977)</u>	<u>(40,420)</u>	<u>13,070</u>	42.
43.	Distribution to the City	\$ (18,000)				\$ (18,000)		43.
44.	<b>Net earnings after distribution to the City</b>	<u>\$ 174,798</u>				<u>\$ (4,930)</u>		44.

**RECONCILIATION TO CASH FLOW STATEMENT**

	Sub-Total Credits/ (Debits)	Credits / (Debits)	Adjustment to Cash	
45.	Capital Spending (IGF)		(68,350)	(68,350)
46.	Capital Spending (DSIC)		(36,150)	(36,150)
47.	GasB Principal Payments		(4,256)	(4,256)
48.	Inc/Dec Other Assets & Liabilities (From Cash Flow)	(25,724)		
49.	Unbilled gas adjustment	622		
50.	Other raw material (Inventory)	(31)		
51.	Field operations (Net change LNG Overhead)	(880)		
52.	Capitalized fringe benefits (Net Assets)	10,152		
53.	Capitalized administrative charges (Net Assets)	32,214		
54.	Pensions (Pension Liability, Def Outflows, Inflows)	(11,412)		
55.	Other post-employment benefits (OPEB Liab, Def Outflows/ Inflows)	<u>35,280</u>		
56.	Total Increase / (Decrease) Other Assets & Liabilities		40,221	40,221
57.	Non-Cash Working Cap (From Cash Flow)	3,358		
58.	Adjustment for appropriate for uncollectable reserve	<u>(38,626)</u>		
59.	Total Non-Cash Working Cap		(35,268)	(35,268)
60.	Non-Base Rate Cash Items		139,308	139,308
61.	<b>TOTAL</b>		<u>35,505</u>	<u>35,505</u>
62.	Cash - Beginning of Period	23,520		23,520
63.	Cash - Surplus (Shortfall) Line 44 + Line 61			30,575
64.	<b>ENDING CASH</b>	<u>\$ 54,094</u>		<u>\$ 54,094</u>

# Exhibit JFG-5

**COMPARATIVE BASE RATE REVENUE: ACTUAL TO PUC OPINION  
AND ORDER**

(Dollars in Thousands)

**FY24 Actual Gas Revenue Billed**

<u>LINE NO.</u>			<u>LINE NO.</u>
1.	Base Rate Revenue	\$ 410,800	1.
2.	WNA	<u>25,561</u>	2.
2.	Sub-Total Base Rate	436,361	2.
3.	GCR	135,680	3.
3.	USC	62,071	3.
4.	DSIC	35,003	4.
4.	OPEB Surcharge	17,130	4.
5.	ECR	1,313	5.
5.	GCR Adjustments	13,474	5.
6.	CRP Discount	(43,647)	6.
6.	Appropriation for Uncollectible Reserve	<u>(29,897)</u>	6.
7.	Total Gas Revenues	<u>\$ 627,489</u>	7.
			.
	<b>R-2023-3037933 Commission Total Allowable</b>		.
8.	Revenue Enhancement	\$26,201	8.
9.	Base Rate Revenue at Present Rates	<u>441,995</u>	9.
10.	Total Authorized Base Rate Revenue	468,196	10.
			.
11.	Surplus / (Shortfall) Base Rate Revenue Line 1 - Line 10	(57,396)	11.
12.	WNA	<u>25,561</u>	12.
13.	Surplus / (Shortfall) Base Rate Revenue incl WNA	<u><b>\$ (31,835)</b></u>	13.

# Tab 3

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

**JAMES C. LOVER**

ON BEHALF OF PHILADELPHIA GAS WORKS

Docket No. R-2025-3053112

Philadelphia Gas Works General Rate Increase Request

TOPICS:

Performance In Municipal Capital Markets  
Financial Support for Revenue Requirement

February 27, 2025

**Table of Contents**

<b>I.</b>	<b>INTRODUCTION.....</b>	<b>1</b>
<b>II.</b>	<b>PURPOSE OF TESTIMONY .....</b>	<b>4</b>
<b>III.</b>	<b>PGW’S PERFORMANCE IN MUNICIPAL FINANCIAL MARKETS.....</b>	<b>4</b>
<b>IV.</b>	<b>FINANCIAL SUPPORT FOR REVENUE REQUIREMENT .....</b>	<b>23</b>
<b>V.</b>	<b>CONCLUSION .....</b>	<b>30</b>



1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.**

3 A. James C. Lover, Managing Director, PFM Financial Advisors LLC, 11605 North  
4 Community House Road, Charlotte North Carolina 28227, Suite 500. I am a financial  
5 advisor primarily to utilities, as well as state and local governments, agencies, and  
6 authorities.

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

8 A. I am employed by PFM Financial Advisors, LLC and work in its municipal advisory  
9 practice ("PFM"). I am a Managing Director in our national Public Utilities practice. I am  
10 also a partner and shareholder in the firm.

11 **Q. PLEASE SUMMARIZE YOUR PROFESSIONAL QUALIFICATIONS.**

12 A. At PFM, I currently am one of the Managing Directors in PFM's national Public Utilities  
13 group, which assists our clients on all aspects of capital markets transactions – debt  
14 structuring and management, rating agency and investor communication, and transaction  
15 execution. PFM is the nation's largest independent financial advisor to state and local  
16 governments, and we are a registered Municipal Advisor with the Securities and  
17 Exchange Commission and Municipal Securities Rulemaking Board ("MSRB"). PFM is  
18 the leading financial advisor to public utility clients (gas, power, water and sewer) and  
19 participates in a greater share of capital markets transactions for public utility clients than  
20 compared to any other firm in the municipal capital markets. I joined PFM in 2010 after  
21 retiring from the U.S. Army at the rank of Lieutenant Colonel. The last 10 years of my  
22 Army career were focused on economic analysis, financial planning and financial  
23 forecasting. This decade was spent primarily in the Pentagon working on budget

1 formulation and financial forecasting for both the Army staff as well as the Department  
2 of Defense Staff. I also had a one-year fellowship on the White House staff as a member  
3 of the Office of Management and Budget's National Security division.

4 As a Managing Director in PFM's national Public Utilities group, I have been involved in  
5 over \$40 billion of debt transactions, many for the largest utility systems throughout the  
6 United States. These include advisory roles to the Northern California Energy Authority,  
7 Bonneville Power Administration, Gainesville (FL) Regional Utilities, City Utilities of  
8 Springfield (MO), Sacramento Municipal Utility District (CA), Lansing Board of Water  
9 & Light (MI) and many others. Several billion dollars of these financings have been  
10 undertaken to finance gas distribution system improvements and natural gas supply. As a  
11 municipal advisor, I also have certain professional qualifications through the MSRB –  
12 including the Series 50 (Municipal Advisor Representative) and Series 54 (Municipal  
13 Advisor Principal). I am also a Chartered Financial Analyst charter-holder.

14 In addition to my general expertise on public utility capital markets transactions, I have  
15 extensive experience working on debt structuring, credit structuring and rating/investor  
16 issues for utility systems that have similar characteristics as PGW's system. PFM has  
17 particular expertise in providing advisory services for capital markets transactions and  
18 routinely works on several billion dollars of municipal utility financings at any point in  
19 time that provide direct interface with rating analysts from the three major rating  
20 agencies. PFM also has an Investor Relations department that enables the firm and our  
21 clients to interface with large institutional investors active in the municipal bond market,  
22 in general, and with investors focused on utility credits, specifically.

1 **Q. DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

2 A. I have a Bachelor of Science degree from the Georgetown University with a  
3 concentration in Finance. I also have a Master's in Business Administration from  
4 Columbia University with a concentration in Economics and Finance. In 2003, I received  
5 my Chartered Financial Analyst charter, a three-year certification program with a focus  
6 on economics, statistics, accounting and capital markets. While in the Army, I was a  
7 professor at West Point's Social Sciences Department, teaching Economics, Accounting  
8 and Corporate Finance to the cadets during my 3-year tenure.

9 **Q. HAVE YOU EVER TESTIFIED BEFORE ANY REGULATORY AGENCIES OR**  
10 **LEGAL PROCEEDINGS?**

11 A. Yes, I provided testimony for the previous PGW rate case in 2023. Last year, my most  
12 significant testimony was supporting Gainesville Regional Utilities. This case involved  
13 expert testimony about the impact of a change in the governance structure of the utility  
14 and the potential impact on ratings and investor appetite for the utilities' bonds.  
15 Additionally, I was asked to quantify the impact of a potential ratings downgrade and the  
16 overall increase in cost given the change in governance. This case is proceeding with  
17 expected resolution later in 2025. Additionally, in 2021, expert testimony was provided  
18 to Independence (MO) Power and Light Department and the City of Independence (MO).  
19 The City and Utility were being sued by local ratepayers with the primary issue being a  
20 complaint about the levels of cash at the utility. The ratepayers felt that the cash levels  
21 were excessive and should be rebated back to customers of the utility. After initial  
22 testimony was completed, the suit was dismissed before coming to trial.

1 **II. PURPOSE OF TESTIMONY**

2 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

3 A. The purpose my testimony is: 1) to provide an update on PGW’s standing in the  
4 municipal capital markets and the critical role of maintaining its financial standing with  
5 rating agencies, credit providers and investors; 2) to explain why it is very important that  
6 the Pennsylvania Public Utility Commission (the "Commission" or “PUC”) grant PGW’s  
7 requested rate increase in order to maintain PGW’s financial metrics, such as debt service  
8 coverage and days liquidity, at levels necessary to ensure cost effective access to the  
9 municipal capital markets; and 3) to identify the financial impacts, both positive and  
10 negative, of the Commission’s actions in response to PGW’s requested rate increase.

11 **III. PGW’S PERFORMANCE IN MUNICIPAL FINANCIAL MARKETS**

12 **Q. PLEASE PROVIDE AN OVERVIEW OF KEY FINANCIAL EVENTS FOR PGW**  
13 **SINCE THE COMMISSION GRANTED PGW RATE RELIEF IN 2023.**

14 A. Over the past several years and with the clear backing of the Commission, PGW was able  
15 to stave off the potential for an event of default on its debt and the acceleration of certain  
16 financial obligations as it worked its way back from a “BBB” rating in the 2013  
17 timeframe to its current rating level of “A3” (Moody’s), “A-” (Fitch), and “A” (Standard  
18 & Poor’s). In the aggregate, the Commission’s approved rate increases over the past  
19 decade have stabilized PGW’s finances and afforded PGW the ability to slowly improve  
20 the trajectory of its credit ratings. These stabilizing actions by the Commission also  
21 allowed PGW to improve its financial performance, resulting in metrics somewhat  
22 consistent with its “A” rated municipal utility peers. So, this has been a long way to say,  
23 the financial footing of PGW is in a much better spot today than a decade ago, and the  
24 support of the Commission has been helpful to the financial improvement of PGW over

1 this timeframe. Specifically, debt service coverage (combined liens) improved to 3.04x  
2 in 2022. However, this momentum has shifted since the PUC's decisions in 2023. The  
3 debt service coverage metric is materially weaker. The Historical Test Year has coverage  
4 at 2.05, a significant and rapid reduction (compared to 2022's 3.0x) and a drop not  
5 frequently seen in the municipal utility space. This weakening trend continues in the  
6 Future Test Year with debt service coverage (combined liens) falling to 1.78. We note  
7 this combined lien level is 0.28% above the level required by the indenture's 1.50 times  
8 and a 44% reduction in this metric comparing 2022 to the Future Test Year.

9 Some specific financial and other recent events affecting the Company's financial  
10 standing are detailed below:

- 11 • Due to project timing and financial constraints, PGW required the use of \$35  
12 million in commercial paper capacity in FY2024 to address immediate capital  
13 program needs. Proceeds from the Seventeenth Series bond transaction in the  
14 fall of 2024 effectively paid-off the earlier commercial paper draws. As one  
15 can see, while the use of the commercial paper program can address the  
16 immediate needs of PGW, this short-term form of debt has to be paid off by  
17 bond proceeds, when available, and amortized over the longer-term life of the  
18 funded projects. A benefit of the pay-off of the commercial paper debt is that  
19 it effectively restored the full capacity of the program back to \$120 million.  
20 This full capacity serves as a valued source of contingency liquidity, when  
21 viewed by the rating agencies.
- 22 • In September 2024, the City issued Gas Works Revenue Bonds, Seventeenth  
23 Series (1998 General Ordinance) in the par amount of \$424.25 million. In

1 addition to paying-off the \$35 million in the commercial paper program, this  
2 transaction also refunded the Thirteenth Series Refunded Bonds. Additionally,  
3 the Seventeenth Series also had a new money component to fund a portion of  
4 PGW's ongoing Capital Improvement Program. Finally, proceeds were also used  
5 to pay the cost of issuing the bonds.

- 6 • Weather patterns in 2020-2024 were generally warmer than historical years. FY  
7 2023 weather reflected a 13.7% warmer than normal winter and 2.9% warmer  
8 than the prior year. This warmer trend continued in 2024 with the peak heating  
9 degree days in 2024 being lower compared to 2023. The warmer 2024 resulted in  
10 a ~13% reduction in the overall natural gas volume sold to customers resulting in  
11 \$35 million in Weather Normalization Adjustment ("WNA") charges to  
12 customers to offset the lower volume of sales. PGW experienced a total drop off  
13 in sales such that PGW's billed revenues were down \$56.8 million compared to  
14 the authorized revenue projection in PGW's 2023 rate proceeding.
- 15 • Based on business initiatives that pertain to improving collections, PGW was able  
16 to secure a higher collection rate from customers. The collection rate exceeded  
17 96% in years 2021-2023 with 2023 topping out at 97.8%. PGW expects a  
18 collection rate of 96% to be achieved through FY2030.
- 19 • The FY 2024 budget was approved and continued the implementation of an  
20 expedited Cast Iron Main Replacement ("CIMR") program. PGW  
21 experienced a further reduction of 32.25 miles of cast iron main in FY2024.

1 **Q. WHAT WAS THE RESPONSE FROM THE CAPITAL MARKETS,**  
 2 **PARTICULARLY BOND INVESTORS AND RATING AGENCIES?**

3 A. In September 2024, the City issued Gas Works Revenue Bonds, Seventeenth Series (1998  
 4 General Ordinance) (“the Bonds”) in the par amount of \$424.25 million. As required for  
 5 this transaction, PGW's engaged the major bond rating agencies of Moody's Investor  
 6 Service (Moody's), Standard & Poor's Global Ratings (S&P) and Fitch Ratings (Fitch).  
 7 Based primarily on the financial metrics from 2022-2024, the ratings were affirmed by  
 8 the three agencies. So, no change in ratings. PGW’s ratings are currently “A3” with  
 9 Moody’s, “A” with S&P and “A-” with Fitch. Moody’s and S&P also affirmed PGW’s  
 10 “Stable” outlook while Fitch changed their outlook of PGW from “Stable” to “Positive.”  
 11 The change in the Fitch outlook to “Positive” typically means that over the next 18  
 12 months, if positive financial trends continue, an upgrade of the credit rating from “A-” to  
 13 “A” could be warranted. Fitch states in its late August 2024 report that this potential  
 14 change reflects Fitch’s expectation that “PGW will continue to maintain its improved  
 15 financial profile amid increased near-term capital investments and planned debt  
 16 financings.” Fitch continued, “While Fitch does view the capex program as extensive,  
 17 PGW’s intended base rate increase in FY26 should buffer the effect of financings and  
 18 result in forward-looking financial metrics that are consistent with...a higher rating.”  
 19 PFM does note that the presentation packet provided to Fitch as part of this rating process  
 20 illustrated the following for combined debt service coverage – levels that are significantly  
 21 higher than the Future Test Year, which is estimated to be 1.78 times coverage:

Fiscal Years Ending August 31 (\$000's)					
	2019	2020	2021	2022	2023
Combined Debt Service Coverage (x)	2.33	2.13	2.7	2.98	2.54

1 Additionally, all of the ratings reports discussed the important role the PUC plays in the  
2 financial condition of the utility.

3 **Fitch:** “Rates that are subject to regulatory approval often lead to a lag in potential  
4 revenue recovery and limits overall financial flexibility in Fitch's view.”

5 **S&P:** “We also view PGW's rate-setting, which is governed by the [PAPUC], as a  
6 credit limitation. On Feb. 27, 2023, PGW filed a request to increase rate revenues by  
7 about 10% or \$85.8 million (distribution base rate) per year in part to fund the  
8 acceleration of the cast-iron main replacement program; in December 2023, it got  
9 approval for 31% of the requested amount. Future financial metrics could be  
10 pressured, depending on the amount approved for future base rates.”

11 **Moody’s:** For what could cause a potential credit rating downgrade, they state,  
12 “Increased leverage without sufficient cost recovery or a material decline in  
13 liquidity.”

14 The current ratings of PGW are a long way from a 2010 when PGW had ratings of  
15 Baa2/BBB+/BBB for their senior lien rating, a few notches from "junk" status (below  
16 Baa3 or BBB-). While still at rating levels below most of PGW's municipal utility  
17 peers, the improvement of the Company's bond ratings over time and the recent  
18 outlook change by Fitch reflect the positive momentum seen in the income statement  
19 and balance sheet, primarily from 2019–2023.

20 In terms of the Investors’ response to the PGW Bond offering, the sale of \$424.25 million  
21 in Gas Works Revenue Bonds, Seventeenth Series was completed in September of 2024;  
22 investors recently have a preference for utility system bonds, an essential service, compared to  
23 tax-backed municipal bonds issued, for example, by a city or state. Given this preference, the



bonds were sold to investors with no significant issues. PFM does note that these Bonds were sold as “Insured Bonds,” backed by an insurance policy provided by Assured Guaranty (“Assured”). This policy serves to protect investors in the event that PGW cannot meet its debt service obligations. In this event, Assured would provide payment and then likely seek financial recourse from PGW. So, in many respects, the insurance policy provides investors with additional security for the Bonds, but does not insulate ratepayers from the cost of downgrade or default.

**Q. WHAT HAS HAPPENED IN THE TIME PERIOD OF 2020 TO TODAY RELATING TO PGW’S STATUS IN THE MUNICIPAL CAPITAL MARKETS?**

A. As a result of demonstrating an ongoing constructive relationship with the Commission, and the momentum of improved financial metrics, PGW has seen slow but steady progress in either its rating or the rating outlook:

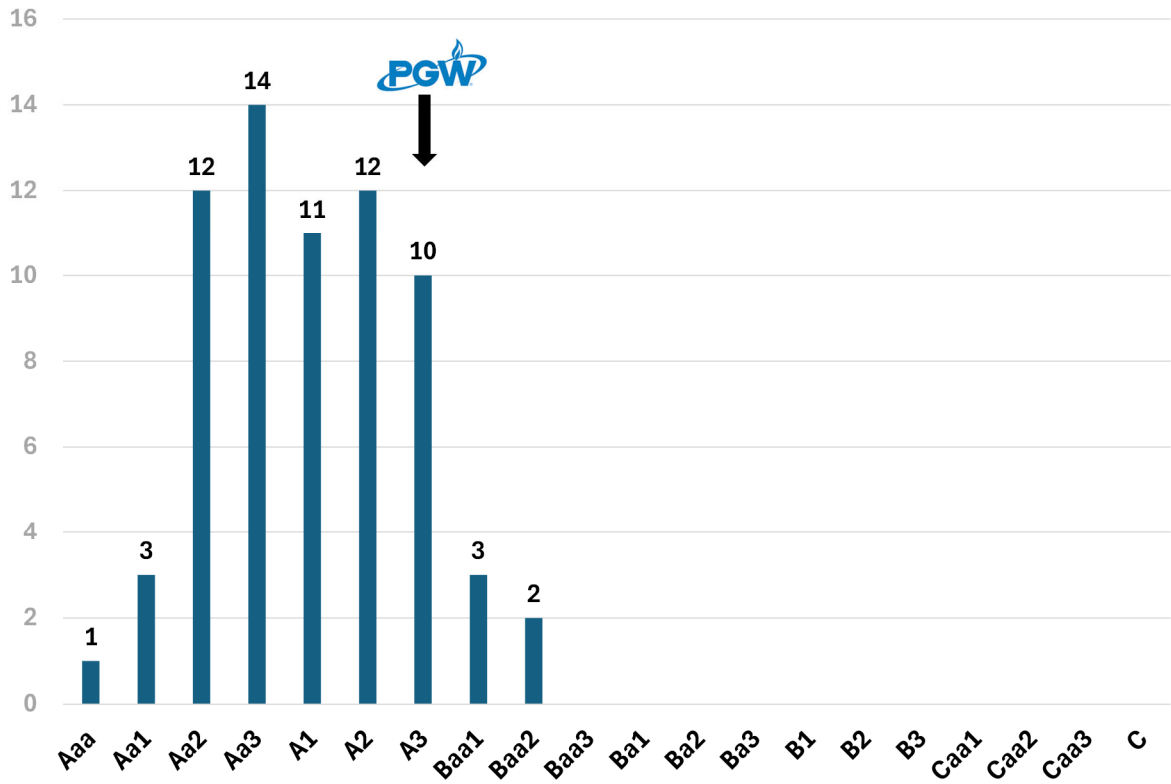
	Moody's		Fitch		S&P	
	Rating	Outlook	Rating	Outlook	Rating	Outlook
2020	A3	Stable	BBB+	Positive	A	Stable
2021	A3	Stable	BBB+	Positive	A	Stable
2022	A3	Stable	A-	Stable	A	Stable
2023	A3	Stable	A-	Stable	A	Stable
2024	A3	Stable	A-	Positive	A	Stable

We note that there has been no movement in the rating over the last 5 years. Fitch is a different story. There has been rating movement from “BBB+” to “A-”. Additionally, Fitch recently changed the outlook of PGW’s bonds to “Positive” from “Stable,” meaning that with continued support from the PUC for rate increases, an upgrade to “A” could happen within the next 12-18 months as long as the financial metrics remain strong and rate increases are approved. When looking at the most recent Fitch report, they cite the significance of the PUC. Fitch states in their report that this change reflects their expectation that “PGW will continue to maintain its improved financial profile amid

1 increased near-term capital investments and planned debt financings.” Fitch continues,  
2 “While Fitch does view the capex program as extensive, PGW’s intended base rate  
3 increase in FY26 should buffer the effect of financings and result in forward-looking  
4 financial metrics that are consistent with...a higher rating.” We do note that the Future  
5 Test Year combined debt service coverage ratio is significantly lower, 1.78 times,  
6 compared to what Fitch saw at the time of the rating agency presentation, where the 2023  
7 coverage level was calculated at 2.54 times (see table in prior question for additional  
8 details). This will likely erode Fitch’s optimism of the “Positive” outlook, eliminate the  
9 potential upgrade to “A” and see PGW return to a “Stable” outlook.

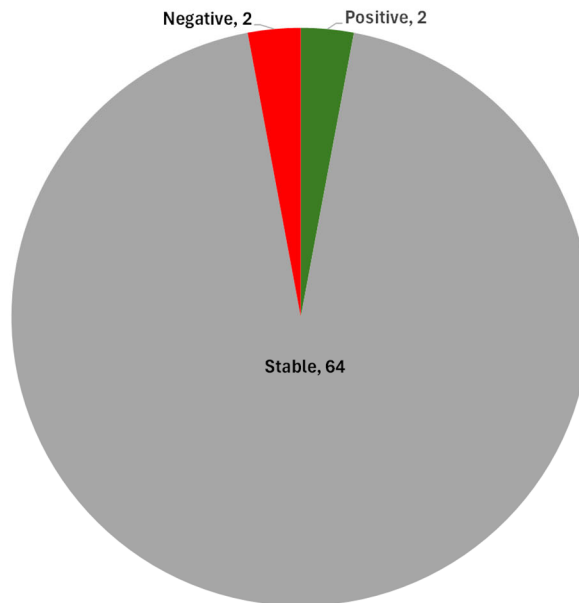
10 I do note that PGW’s ratings are below those of peer utilities. Below is a distribution of  
11 the Moody’s ratings for utility infrastructure and project finance systems (from Moody’s  
12 2024 Outlook) as well as the respective outlook distribution:

### Moody's Rating Distribution By Number of Issuers



Source: Moody's 2024 Outlook – Stable as Utilities Remain Positioned to Weather Economic Challenges

1



2

3

1 While PGW’s ratings are below peer utilities, given the reception of PGW’s offerings in  
 2 the recent past and the use of bond insurance, one would anticipate the capital markets  
 3 and investors will support PGW’s next transaction at borrowing levels reflecting the  
 4 current ratings, financial condition and the expectation of rate relief support from the  
 5 PUC.

6 **Q. WHAT WOULD RESULT IF THE COMMISSION DID NOT CONTINUE TO**  
 7 **EVIDENCE ITS SUPPORT FOR PGW?**

8 A. The Commission’s rate support has helped improve the financial condition of PGW.  
 9 Evidence of this rate support can be seen in the improvement in the debt service coverage  
 10 ratio. The table below details this metric and is from the rating agency presentation in the  
 11 summer of 2024:

Fiscal Years Ending August 31 (\$000's)					
	2019	2020	2021	2022	2023
Combined Debt Service Coverage (x)	2.33	2.13	2.7	2.98	2.54

12 In 2022, the DSC improved to 2.98x. However, when the PUC did not fully approve  
 13 PGW’s 2023 request, the momentum shifted. Now, this critical metric, in the Historical  
 14 Test Year (FY 2024), has been reduced to 1.78x, a significant reduction. We note this  
 15 1.78x is only 0.28% above the level required by the Indenture and a 40% reduction in this  
 16 metric, comparing 2022 to the Future Test Year.

17 Additionally, when looking at other “fixed costs,” the rating agencies generally look at  
 18 PGW’s \$18 million transfer to the City of Philadelphia as “debt-like” and they make  
 19 adjustments to their debt service coverage calculation. When considering the impacts of  
 20 the annual transfer, PGW’s coverage levels fall even lower, to 1.61x. Again,  
 21 precipitously close to the mandated level of 1.50x.  
 22

1 So, there is little room for error, even if the PUC approves the full request as, even with  
2 the full request, the DSC is significantly lower than in 2022 – 2.59x.

3 There is also the potential for a rating agency negative action if PGW’s request is wholly  
4 or significantly denied. When one looks at the ratings criteria for rating agencies, an  
5 important factor considered is the willingness and ability to raise rates when needed. As  
6 an example, the table below, from Moody’s, illustrates the ratemaking environment’s  
7 influence. “Rate Management” is a part of the “Management” discussion for Moody’s  
8 and Moody’s attributes 10% of the overall rating to the willingness and ability to raise  
9 rates:

Moody’s Methodology Factor: Management							
Sub-Factor	Weighting	Aaa 1	Aa 2	A 3	Baa 4	Ba 5	<B 6
Rate Management	10.0%	Excellent rate-setting record, no material political, practical or regulatory limits on rate increases	Strong rate-setting record, little political, practical or regulatory limits on rate increases	Average rate-setting record, some political, practical or regulatory limits on rate increases	Adequate rate-setting record, political, practical or regulatory impediments place material limits on rate increases	Below average rate-setting record, political, practical or regulatory impediments place substantial limits on rate increases	Record of insufficiently adjusting rates, political, practical or regulatory obstacles prevent implementation of necessary rate increases

10  
11 PFM estimates that PGW currently sits in the “Baa” level for this criteria. Not approving  
12 the requested rate relief could shift the level from “Baa” to “Ba”.

13 However, the impact does not stop with this Management Factor. The reality is that a  
14 lower than expected level of rate relief will impact PGW’s financials, as we have seen in  
15 2024. In the aggregate, PGW could see a further weakening of the Debt Service  
16 Coverage ratio, a reduced level of cash and the need to borrow additional debt given less  
17 than full support of the PUC. Using the financial metrics lens, we see that the “rate

1 decision” impacts an *additional* 40% of PGW’s credit rating when we look at this section  
 2 of the Moody’s criteria:

3

Moody’s Methodology Factor: Financial Strength (40%)							
Sub-Factor	Weighting	Aaa	Aa	A	Baa	Ba	<B
		1	2	3	4	5	6
Annual Debt Service Coverage	15.0%	>2.0x	2.0x > N > 1.7x	1.7x > N > 1.25x	1.25x > N > 1.0x	1.0x > N > 0.7x	<0.7x
Days Cash on Hand	15.0%	>250	250 > N > 150	150 > N > 35	35 > N > 15	15 > N > 7	<7
Debt to Operating Revenue	10.0%	<2.0x	2.0x < N < 4.0x	4.0x < N < 7.0x	7.0x < N < 8.0x	8.0x < N < 9.0x	<9.0x

4  
5

6 So, these decisions about rate approvals are significant and they impact the operational  
 7 and financial condition of PGW. As illustrated in this Moody’s example, rate relief can  
 8 influence, in some manner, 50% of the scoring metrics that this particular rating agency  
 9 uses. The other two agencies have relatively similar criteria and there should be a similar  
 10 expectation for S&P and Fitch.

11 Any wavering of the Commission’s support for PGW’s necessary rate increases will be  
 12 met with a decisively negative reaction. Often in the area of municipal utility ratings, the  
 13 minute that a regulatory body fails to objectively review and support a necessary rate  
 14 increase, credit ratings and access to capital markets can quickly deteriorate. Fitch speaks  
 15 to its expectations in their August 2024, report when they state, "While rate changes are  
 16 ultimately approved by the PUC, a generally supportive regulatory regime has provided  
 17 the system with sufficient support to maintain a stable financial profile." Moody’s, in  
 18 their report from the same time period, provides a stronger assessment of the role the  
 19 Commission plays in the rating process stating, when discussing factors that could lead to

1 a downgrade, “a less credit supportive rate regulatory environment, including any notable  
2 changes to the recently announced base rate settlement by the PAPUC” would be, in their  
3 view, detrimental to PGW’s credit. The third rating agency, S&P, echoed the  
4 significance of the PUC’s role in PGW’s financial footing when they stated, “we view  
5 PGW’s rate-setting, which is governed by the Pennsylvania Public Utility Commission as  
6 a credit limitation...future financial metrics could be pressured, depending on the amount  
7 approved for future base rates.”

8 Clearly, the rating agencies are interested in the PUC’s support of PGW’s rate case and  
9 do not hesitate to inform governing bodies, the issuer as well as the investing public of  
10 their thoughts on the matter.

11 **Q. WHAT, IN YOUR VIEW, WOULD BE THE CONSEQUENCES FOR**  
12 **RATEPAYERS IF THE COMMISSION DID NOT SUPPORT PGW’S NEED**  
13 **FOR RATE RELIEF?**

14 Most directly, a significant lack of support could result in a downgrade of PGW’s  
15 long term bonds. A downgrade would lead to additional costs to PGW, further  
16 pressuring their financial metrics. There are multiple areas where PGW would  
17 experience increased costs. Annual debt service costs, for new debt issuances would  
18 be higher for the life of the bonds. Secondly, the cost of liquidity and credit facilities  
19 would likely increase as ratings fell since many banks have higher fees for lower-  
20 rated entities. Additionally, PGW could have collateral posting requirements, a use  
21 of cash, for some of the derivative transactions. Also, a lower rating for PGW means  
22 that refinancing transactions would have less savings, or none at all, compared to a  
23 refinancing at a higher rating. Finally, there is some counterparty risk as PGW  
24 would be viewed as lower-rated and a potential risk in terms of business partnerships.  
25 The frequency with which PGW must access the bond market and/or renew its credit

1 facilities emphasizes the criticality of maintaining investor and credit provider confidence  
2 in the rate setting function of the utility.

3 **Q. HOW HAVE THE PRIOR COMMISSION ACTIONS TRANSLATED TO PGW'S**  
4 **FINANCIAL METRICS AND CURRENT FINANCIAL POSITION?**

5 As discussed in detail above, PGW's ongoing inability to fully obtain the requested  
6 regulatory approval from the Commission for its necessary rate increases creates risk and  
7 will result in weaker financial metrics. If we look at the actions of 2023's rate case, we  
8 can see an impact on PGW's financial performance in 2024. Days cash have deteriorated  
9 from a recent (2020) high of 255 to 2024's value of 173 days. Using the Future Test  
10 Year, the days cash level drops precipitously to 25 days. When thinking about a "safe"  
11 level of days cash, one can examine the billing cycle to determine a level of days cash.  
12 Conceptually, PGW delivers gas to a customer on Day 1. PGW bills 30 days after  
13 delivering the gas. The customer then can pay their bill around 30 days after receiving  
14 the bill. So, in total, this payment cycle can come close to 60 days. Therefore, if the days  
15 cash levels are around 60, there is barely enough cash on hand to address any disruptions  
16 in the payment cycle let alone other, unexpected economic event or commodity price  
17 shock.

18 Turning our attention to the recent rating reports, examining the PGW's cash and  
19 liquidity levels discussed in the rating agency reports, reveals an additional concern. For  
20 example, the S&P report details that PGW's "A" credit rating incorporates 196 days of  
21 cash and liquidity (2023). While this seems robust, the reality is S&P includes the \$120  
22 million of available capacity with PGW's commercial paper program in this  
23 calculation. The reality is that the commercial paper programs artificially inflate the  
24 days cash and liquidity level, providing a false sense of security. Mr. Golden



1 illustrates that is his testimony and the data is replicated below for the FTY:

	FTY 2024-25
Days of Unrestricted Cash	17 days
Contingency Days of Cash (incl Commercial Paper)	105 days
<b>Total days of cash and liquidity</b>	<b>123 days</b>

2  
3 So, using this data, PGW relies on its commercial paper program for 86% of its  
4 liquidity needs. The reality with commercial paper programs is that Cash Working  
5 Capital notes can only be issued in very limited circumstances.<sup>1</sup> Moreover, the  
6 process to issue commercial paper can take months for necessary approvals and  
7 disclosures and there are “outs” for the bank providing the commercial paper loan in  
8 which, if the financial conditions of PGW are materially weakened, then the bank  
9 can elect to not support the issuance of commercial paper. So, in times of need, the  
10 commercial paper program can be hindered by time and the ability of the bank to say  
11 “no.”

12 The debt service coverage ratio is defined as net revenues of PGW divided by debt  
13 service. This ratio represents the measure of protection that bondholders have to  
14 changes in net revenues over the course of the year. PGW's debt service coverage in  
15 the last few years (2021-2023) has been somewhat varied but consistently above  
16 2.0x, and is detailed below:

Fiscal Years Ending August 31 (\$000's)					
	2019	2020	2021	2022	2023
Combined Debt Service Coverage (x)	2.33	2.13	2.7	2.98	2.54

18 However, the apparent strength of this credit metric does not reflect PGW's

<sup>1</sup> See PGW St. No. 2, Direct Testimony of Joseph F. Golden, Jr., at 42-45.

1 financial commitment to other “debt-like” recurring obligations – so while the debt  
2 service coverage may appear robust, the reality is that coverage is more on the “thin”  
3 side. Some of the specific debt-like recurring obligations include the transfer of \$18  
4 million of net revenue to the City of Philadelphia General Fund. Just examining this  
5 additional obligation and incorporating this into the DSC calculation, the Debt  
6 Service Coverage falls further to 1.61x in the Future Test Year. We could take this a  
7 step further and incorporate the obligation to fund PGW’s OPEB Trust’s annual  
8 contribution of \$18.5 million, payment of pension and retiree benefits of \$45.0  
9 million, and resourcing \$53 million of cash funded annual capital improvement  
10 from the dedicated DSIC. In total, all of the cash requirements not included in the  
11 debt service calculation total over \$199 million. These obligations, all of which have  
12 been approved by the Commission, effectively use much of the current financial  
13 margin in the debt service coverage calculation, let alone stress the minimum 1.50x in  
14 the legal covenants that the Commission methodology explicitly allows.

15 Next, we need to examine the PUC’s impact to the overall leverage (debt) of PGW.  
16 PGW has intentionally tried to reduce its total debt in recent years primarily with the  
17 policy goal of using internally generated funds to resource ~50% of the Capital  
18 Improvement Plan. A key metric used for comparing debt levels is debt to total  
19 capitalization. Based on the efforts and decisions of the Commission over the past  
20 several years, PGW has seen a steady decline in the debt to capitalization ratio from a  
21 level of 84% in 2019 to a low of 59% in 2023. We would anticipate that not approving  
22 the full request would mean PGW would utilize all or a portion of the \$120 million  
23 commercial paper program, a form of debt, to address the shortfall *not* approved. As we

1 saw in the 2024 Bond transaction, PGW would then retire the used capacity in the facility  
2 in a future bond transaction – effectively substituting long-term debt for the short-term  
3 debt. This potentiality would further move the Debt to Capitalization ratio away from  
4 PGW’s target.

5 We do note one item associated with the debt to capitalization ratio. Even if attaining a  
6 target of 60% debt to capitalization, this target is well above that of PGW’s peer utilities  
7 from the benchmarking study. Examining this study, both the municipal and  
8 investor owned peers’ average debt to capitalization ratios are noticeably stronger  
9 than PGW’s metrics. In fact, there are only two utilities out of 20 peers, Gainesville  
10 Regional Utilities and CPS Energy, in the peer list that have a weaker debt to  
11 capitalization ratio. In summary, without the support of the Commission and the  
12 requested rate relief, we would anticipate the debt to capitalization rate to move much  
13 higher, with PGW requiring the use and then eventual fix-out of the commercial paper  
14 program. The rating agencies have all cited the high debt burden as a limiting factor in  
15 the ratings, since a high debt burden minimizes the ability to fund necessary  
16 programs especially if pay as you go (called “IGF” by PGW) funding (from current  
17 operations) is not viable moving forward. In other words, PGW cannot simply keep  
18 borrowing an ever increasing amount of dollars, whether through issuing bonds or  
19 commercial paper, if the corresponding rate support is not there. To the extent that a  
20 material portion of PGW's requested rates are not received, it will force substantial  
21 additional leverage back on the system, quickly reversing the favorable trend and the  
22 flexibility that PGW would have obtained moving forward.

23 A third financial metric that has shown improvement for PGW, but that remains

1 financially susceptible if approved rates do not provide substantial cost recovery, is its  
 2 liquidity or days cash on hand. To determine a prudent day's cash level for PGW's dys  
 3 cash target, we previously discussed the 60-day billing cycle as the absolute minimum.  
 4 We can also look at the ratings criteria as well as the operating environment of PGW to  
 5 determine a recommended level of days cash. Specifically, the rating agencies, primarily  
 6 Moody's and S&P, review the days cash calculation and "bin" the result into several  
 7 categories ranging from "AAA" to "BB". The days cash rating generally is  
 8 aggregated into the financial profile for PGW which drives the overall rating of the utility.  
 9 The following tables illustrate the days Cash/days Liquidity "bins" for the agencies:

10 Moody's:

Moody's Methodology						
Factor: Financial Strength (40%)						
Sub-Factor	Aaa	Aa	A	Baa	Ba	<B
	1	2	3	4	5	6
Days Cash on Hand	>250	250 > N > 150	150 > N > 35	35 > N > 15	15 > N > 7	<7

12 S&P:

S&P: Financial Profile							
		1	2	3	4	5	6
Description	Metric	Extremely Strong (AAA)	Very Strong (AA)	Strong (A)	Adequate (BBB)	Vulnerable (BB)	Highly Vulnerable (B)
Liquidity and Reserves	Total days' liquidity (days)	>= 270	150-270	90-150	45-90	15-45	<= 15
	Available reserves (Mil \$)	>= 250	100-250	50-100	10-50	2-10	<= 2

14 Given some of the weaker credit characteristics of PGW, namely weaker economic  
 15 fundamentals in the customer base, large capital needs and exposure to the commodity

1 markets, it would be prudent to aim toward the higher end of this range – closer to 150  
2 days for the “A” bin for both S&P and Moody’s. For a measure of liquidity, as  
3 opposed to days cash, certain rating agency metrics calculations could include  
4 PGW’s authorized \$120 million line of credit. As detailed above, the line of credit is not  
5 meant to be a permanent financing vehicle but rather a financial management tool that is  
6 applied in a deliberate manner and then redeemed with permanent, long-term financing  
7 when appropriate. As Mr. Golden explains, the cash working capital notes available  
8 under the Program can only be issued when there is a projected cash deficiency.

9 Additionally, PGW should be concerned that, if there were low levels of cash or a low  
10 debt service coverage ratio, the bank supporting the commercial paper program would  
11 likely not fund or support the short-term loan given the poor financial performance of the  
12 utility and the concern that the utility would not be able to pay off the amount borrowed  
13 from the bank. Given the ability of the bank to not loan to PGW under the terms of the  
14 program, the rating agencies would generally be hesitant to include this source of  
15 liquidity in the days cash calculation. At current cash and liquidity levels, there is very  
16 little margin of error in PGW's financing plan. Additionally, PGW has a Budget Bill plan  
17 ("Budget"). The Budget allows customers to smooth out their payments over the year. The  
18 intent of the Budget is to provide cost certainty and monthly affordability to PGW's  
19 customers. A consequence of the Budget, however, is that, in the winter months, this  
20 payment is generally below the real bill of the customer. This creates a working capital  
21 requirement to address this shortfall. It is certainly my view that PGW needs to try to  
22 maintain 90-150 days of direct cash on hand to address the reality of the billing cycle,  
23 seasonality and the Budget program, among other things, let alone to maintain its

1 current bond rating. Further, PGW average days cash, compared to peer municipal  
2 gas utilities, is significantly below the peer's collective average. PGW should strive to  
3 move to higher levels of cash in the Moody's and S&P "A" buckets, which has a  
4 level of 150 days.

5 To the extent that PGW does not get the rate recovery that it is seeking currently, it would  
6 put high pressure on liquidity to cover shortfalls in operations and the capital improvement  
7 program. Additionally, it would be hard to imagine that PGW could keep the  
8 improvements in its bond ratings and outlooks without the Commission's reasonable  
9 rate support. In fact, each of the three rating agencies have specifically noted likely  
10 downgrades. Fitch details that "Lower than expected rate relief could drive the  
11 Outlook back to Stable" – erasing years of effort and positive momentum. Moody's  
12 adds that a factor that could lead to a downgrade would be "a less credit supportive  
13 rate regulatory environment, including any notable changes to the recently  
14 announced base rate settlement by the PAPUC."

15 As detailed above, using the Moody's criteria, the rate-approval decision influences 50%  
16 of the overall rating criteria. So, a significant impact can be felt immediately in the  
17 ratings factor for Management's "willingness to adjust rates" and also through the  
18 resulting impact on the three key financial metrics in the ratings criteria. In addition, it  
19 should be noted that any significant deterioration in the Commission's constructive  
20 support of PGW will likely erase the positive momentum that PGW has developed with  
21 the rating agencies. We can expect for Fitch to remove the "Positive" outlook and return  
22 PGW to a "Stable" or "Negative" outlook. So, lack of or less than adequate rate relief  
23 action would have the effect of making any future credit rating improvements even more

1 difficult to achieve.  
2 Failure to get approval of requested cost recovery certainly entails much greater scrutiny  
3 from investors given that there will be an overall concern that financial margins and  
4 liquidity will not be maintained. This is particularly true for PGW. Investors have  
5 choices of where they place their dollars and many large utilities that are outside the  
6 Commonwealth of Pennsylvania are not rate regulated (DC Water and Sewer Authority,  
7 Sacramento Municipal Utility District, Lansing Board of Water & Light, Gainesville  
8 Regional Utilities, JEA Utilities, for example). So, investors make an informed choice  
9 and assume more risk when investing in a PGW bond compared to a non-regulated  
10 utility. When looking at PGW's bonds, investors realize they are also relying on the  
11 PUC's continued support to ensure payment of the interest and principal on the bonds  
12 through the maturity of that debt.

13 IV. **FINANCIAL SUPPORT FOR REVENUE REQUIREMENT**

14 **Q. WHAT ARE THE POTENTIAL POSITIVE IMPACTS OF PGW'S ABILITY TO**  
15 **GAIN APPROVAL OF ITS FULL REQUESTED RATE INCREASE?**

16 The most immediate positive impact is that the financial metric improvements would  
17 increase debt service coverage as well as days cash and lower the leverage ratios.  
18 Incorporating the requested rate increase sees debt service coverage move back over  
19 2.0x in the Fully Projected Future Test Year. Similarly, cash levels increase to  
20 Historical Test Year amounts in the Fully Projected Future Test Year based on the  
21 PUC providing full approval of PGW's request. These positive metrics would be  
22 viewed as fulsome support for PGW and would allow the rating agencies to continue  
23 to view PGW positively. This would, in turn, at least maintain PGW's favorable  
24 bond rating and the Fitch outlook. Beyond financial metrics, there would be positive

1 operational impacts. The full requested rate increase is needed to ensure sufficient  
2 cash for the day to day operational needs of PGW and to fund its ongoing capital  
3 improvement program, including the ongoing cast iron main replacement program,  
4 the accelerated pipeline replacement program and other needed infrastructure  
5 improvements. As such, the approval of the requested rate increase ensures funding  
6 for the safety and reliability of the system. Secondly, with the proposed rate increase,  
7 PGW expects to continue its improvement with the customer service experience.

8 **Q. WHAT ARE THE CONSEQUENCES OF LIMITING OR REDUCING PGW'S**  
9 **REQUESTED RATE INCREASE?**

10 A. Without the supportive cost recovery that PGW is seeking in this rate case, I  
11 reasonably foresee such consequences as rating outlook changes or downgrades of  
12 PGW that impose immediate financial costs to PGW in the form of higher borrowing  
13 costs, limited opportunities for PGW to refinance its existing debt costs, an increase in  
14 reputational risk (and the opportunities lost given the increase in this risk), the  
15 imposition of higher credit facility fees as well as greater scrutiny from the rating  
16 agency and investor community. The costs of rating downgrades are certain to ripple  
17 across all aspects of PGW's operations, but the most certain and immediate costs will  
18 be recognized in its planned revenue bond issuance to fund PGW's capital  
19 improvement program. PGW has identified a bond transaction of approximately  
20 \$400 million in FY2028. The expectation is that PGW's failure to get positive  
21 regulatory rate support could lead to downgrades from the rating agencies, from the  
22 "A" level to the "BBB" level. Examining the Bloomberg index for "A" rated utilities  
23 and "BBB" rated utilities at today's levels (February 2025), PFM estimates that the



1 difference in debt service would be approximately \$14 million higher if PGW were  
2 downgraded.

3 However, looking historically, today's rates in 2025 are low. When we do a review  
4 of interest rates with a broader time horizon, specifically 1981 – 2025, we see that  
5 rates have been higher ~70% of the time and is likely more reflective of what PGW  
6 will see in the near future with the borrowing. The chart below highlights this  
7 statistic when we use the average life of the expected new money transaction, ~20  
8 years. While we have structured this transaction to have shorter (i.e., 1 year) and  
9 longer (i.e., 30 year) maturities, the “average” maturity is ~20 years based on the  
10 timing of principal and interest payments.

Summary of Current “AAA” Tax-exempt Rates vs. Historical Tax-Exempt “AAA” Rates (1981 – Present)											
Statistic	1-Year	2-Year	3-Year	4-Year	5-Year	7-Year	10-Year	15-Year	20-Year	25-Year	30-Year
February 21, 2025	2.56%	2.62%	2.66%	2.69%	2.71%	2.81%	2.96%	3.28%	3.63%	3.84%	3.92%
Historical Average	2.82%	3.10%	3.30%	3.48%	3.65%	3.96%	4.33%	4.79%	5.04%	5.17%	5.21%
Spread to Average	-0.26%	-0.47%	-0.64%	-0.80%	-0.94%	-1.15%	-1.37%	-1.51%	-1.41%	-1.33%	-1.29%
Minimum	0.01%	0.03%	0.07%	0.12%	0.16%	0.34%	0.54%	0.88%	1.06%	1.22%	1.28%
Maximum	9.65%	9.85%	10.05%	10.30%	10.65%	11.05%	11.50%	12.40%	12.70%	12.80%	12.90%
→ % of Time Higher	55.78%	57.41%	58.17%	59.60%	60.94%	64.28%	67.35%	70.75%	70.63%	70.64%	70.69%

Source: Thomson Reuters  
BVAL data beginning on a 1/3/2011 with MMD data on dates prior to that

11  
12 Additionally, in an elevated, “more normal” market, we have illustrated that interest  
13 rates are higher but credit spreads between “A” versus “BBB” rated issuers also  
14 widen, further increasing the cost of debt service to PGW. The following table uses a  
15 Bloomberg index to represent both an “A” rated utility rate compared to a municipal  
16 “BBB” rate. Again, we are utilizing the 20 year rate based on the average life of  
17 PGW’s planned bond transaction to calculate the minimum, maximum and average  
18 credit spread between these “bins” over time:

Comparing "A" Rated Credit Spreads to "BBB" Rated Credit Spreads (2016 - 2025)	
Minimum Credit Spread	0.02%
Maximum Credit Spread	1.83%
Average Credit Spread	0.70%

\* Source: Bloomberg

1  
2 Utilizing the average credit spread of 0.70% between "A" and "BBB"-rated  
3 transaction, there is a much larger difference in debt service. The total debt service  
4 differential would be ~\$39 million. If we assume an even higher rate environment,  
5 when credit spreads approach the maximum, the debt service differential increases  
6 substantially to over \$105 million:

Comparing "A" Rated Debt Service to "BBB" Rated Debt Service		
	Difference (%)	Debt Service Difference (\$)
Average Credit Spread	0.70%	+ \$38.9 million
Maximum Credit Spread	1.83%	+ \$105.8 million

\* For the Maximum credit spread, 1.50% was applied to "A" rated yields

7  
8 Beyond increases in debt service, it should be noted that this higher debt service cost  
9 is not the only additional cashflow burden. We need to account for other costs that  
10 will likely increase. There will be foregone debt service savings from potential  
11 refinancing transactions that may not even be economically feasible if PGW's credit  
12 rating deteriorates. PGW already has some near-term refinancing opportunities (as the  
13 bonds approach their call dates for tax-exempt refinancing), and such savings would  
14 certainly be diminished, if not fully lost due to a decline in credit ratings.

15 The cost of credit facilities would also increase with a downgrade. PGW has utilized  
16 a number of credit facilities historically, including various letters of credit on its variable  
17 rate bonds and its commercial paper program. These include the Series 8B, Series 8C,  
18 Series 8D, and Series 8E, which currently total ~\$131.6 million outstanding. PGW also

1 maintains a \$120 million commercial paper program as a revolving Line of Credit (as  
2 discussed previously). Based on review of the associated fee letters for these  
3 facilities, almost all of these agreements have termination clauses and cost escalation  
4 clauses should PGW's ratings fall below certain ratings thresholds. To the extent that  
5 PGW's credit rating is downgraded as a result of the inability to get rate approvals,  
6 PGW could face a sizeable problem with these facilities. Not only would the cost go  
7 up but there is also the possibility that PGW may not be able to extend the credit  
8 facility supporting the commercial paper program. In such a scenario, there is the  
9 potential for all of the outstanding principal amounts to be accelerated over two to five  
10 years in equal semi-annual installments. These "term out" options would force  
11 enormous, accelerated debt costs of up to \$50 million annually once the "term out" is  
12 requested. This acceleration would fully erode PGW's liquidity position. While other  
13 debt options may exist to refinance the bonds, it underscores the importance of  
14 maintaining strong investment grade ratings.

15 **Q. ARE YOU AWARE THAT PGW IS PROPOSING A REVENUE**  
16 **NORMALIZATION ADJUSTMENT IN THIS PROCEEDING?**

17 A. Yes, I am.

18 **Q. CAN YOU EXPLAIN WHAT AN RNA DOES?**

19 A. Yes, PGW is proposing a Revenue Normalization Adjustment ("RNA") that is essentially  
20 a full decoupling mechanism that will be used in conjunction with PGW's existing  
21 Weather Normalization Adjustment. Decoupling refers to a rate adjustment mechanism  
22 designed to separate, or "decouple," a utility's revenue from the volume of the  
23 commodity it sells to its customers. In PGW's case, it would decouple the revenue target  
24 from the volume of natural gas sold to its customers. Typically, decoupling mechanisms

1 accomplish this objective through an adjustment (either a credit or a surcharge) to the  
2 customer's monthly bill, or, after the fact, on a yearly basis when the total impact of the  
3 year is known with certainty. This adjustment trues up a utility's revenues to a pre-  
4 determined level. This pre-determined level could be designated by a regulatory  
5 commission, such as the PUC, or to a specific target or goal approved by the governing  
6 body of that utility. In the case of PGW, the RNA would stabilize revenues by  
7 eliminating or reducing the revenue exposure and risk caused by changes in the demand  
8 for natural gas volumes. The demand for natural gas is driven by multiple factors  
9 (weather, commodity prices, personal preference, etc.) that are out of PGW's control.  
10 Basically, the RNA can ensure the utility is neither rewarded nor penalized for changes in  
11 the volumetric consumption of natural gas.

12 **Q. HOW WOULD THE RATING AGENCIES RESPOND IF PGW WERE TO**  
13 **IMPLEMENT AN RNA IN THEIR RATE STRUCTURE?**

14 A. I believe this would be viewed very favorably by the rating agencies. Mechanisms that  
15 are designed and implemented that reduce the reliance on "volumetric" sales are seen as a  
16 credit positive. Basically, these adjustment mechanisms stabilize revenues for the utility  
17 caused by factors generally out of the utility's control. In terms of rates and charges, the  
18 more "fixed" the charge compared to a "variable" (volumetric) charge is preferred by the  
19 rating agencies since it provides better assurance that coverage and cash targets will be  
20 met while also allowing the utility to execute the approved capital plan. Simply, it  
21 provides more confidence to the rating agencies about the financial footing of the utility.  
22 Some of the highest rated utilities that I work with have restructured rates and added  
23 decoupling mechanisms to shift more charges to a "fixed basis" and away from a  
24 "volume basis." Examples of these utilities are DC Water & Sewer ("DC Water") and

1 the Sacramento Municipal Utility District (“SMUD”). DC Water incorporated more fixed  
2 fees and charges into its monthly bills and is rated “AAA” by Standard & Poor’s, “Aa1”  
3 by Moody’s and “AA+” by Fitch Ratings. SMUD incorporated multiple adjustment  
4 mechanisms to address weather (temperature and moisture levels) and is rated “AA” by  
5 Standard & Poor’s, “Aa2” by Moody’s and “AA” by Fitch Ratings. While there are other  
6 factors that contributed to these lofty ratings, a key component for both utilities was the  
7 implementation of new rate structures and strategies that eliminate the variability in the  
8 revenue stream caused by external events.

9 **Q. HOW WOULD THE RATING AGENCIES RESPOND IF PGW WERE TO**  
10 **IMPLEMENT SOMETHING SHORT OF A FULL DECOUPLING MECHANISM**  
11 **A PARTIAL RNA IN THEIR RATE STRUCTURE?**

12 A. While not the preferred option for PGW, some lesser version of the proposed RNA (or a  
13 partial RNA) could be approved. For example, a lesser version of the proposed RNA  
14 might include approval of cost recovery associated with declining use that can be directly  
15 tied to energy efficiency programs. When combined with PGW’s WNA, this would  
16 provide better cost recovery for PGW than it currently has (when combined with its  
17 Weather Normalization Mechanism) but less than the full RNA proposed in this  
18 proceeding. I believe this would still be viewed in a favorable manner by the rating  
19 agencies compared to the current rate structure. Also, but not to the extent if a more  
20 robust RNA was approved and implemented, I believe they would more closely review  
21 the mechanics of the RNA to see how effective the RNA would be when sales volumes  
22 are down compared to forecast and how well the mechanism maintains a level of days  
23 cash and debt service coverage. A partial RNA would show the rating agencies some  
24 progress, but I don’t believe the agencies would give PGW full “credit” compared to a  
25 more robust mechanism. Mechanisms that are designed and implemented that reduce the

1 reliance on “volumetric” sales are seen as a credit positive. Basically, these are a means  
2 to stabilize revenues for the utility caused by factors generally out of the utility’s control.  
3 In terms of rates and charges, the more “fixed” the charge compared to a “variable”  
4 (volumetric) charge is preferred by the rating agencies since it provides better assurance  
5 that coverage and cash targets will be met while also allowing the utility to execute the  
6 approved capital plan.

7 **V. CONCLUSION**

8 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

9 A. While PGW has made financial progress in the last several years with appropriate rate  
10 support from the Commission, PGW still has limited financial flexibility. The past few  
11 years have seen a significant reduction in the debt service coverage ratio. In 2022, this  
12 coverage approached 3.0 times, hitting a high of 2.98x. The Future Test Year’s  
13 calculation is 1.78 times. This represents a 40% reduction compared to 2022 and will  
14 surely get the attention of the rating agencies in the coming months when they see the  
15 weakened financial metrics from 2024. PGW requires the requested rate increase in  
16 order to reverse course and improve its financial metrics at a level needed to: (1) hold on  
17 the recently affirmed ratings by Moody’s and S&P; (2) provide Fitch evidence of support  
18 so that that can move in an upward direction on PGW’s rating given the recent outlook  
19 change to “Positive”; (3) improve access to capital markets (potentially without the use  
20 and cost of bond insurance); and (4) reduce the costs of debt and debt service to  
21 ratepayers. The continued inability of PGW to obtain the requested and necessary rate relief  
22 for its operating and capital requirements would cause rapid financial damage – as we  
23 have seen in 2024’s weakening of PGW’s metrics. This potentiality would breach the

1 most critical component of municipal utility rating criteria in the current environment -  
2 that being the ability and willingness to increase rates when warranted. The likely results  
3 of such inaction or less-than-requested action are substantially greater financing costs, an  
4 erosion of financial metrics and the elimination of the positive momentum that PGW was  
5 experienced in its financial foundation in the past few years.

6 **Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY?**

7 A. Yes, however, I reserve the right to supplement this testimony as may be appropriate.

**VERIFICATION**

I, James Christopher Lover, hereby state that: (1) I am employed by PFM Financial Advisors, LLC ("PFM") as Managing Director, Public Utilities Practice; (2) I have been retained by Philadelphia Gas Works ("PGW") and am authorized to present testimony on its behalf; (3) the facts set forth in my testimony are true and correct (or are true and correct to the best of my knowledge, information and belief); and, (4) I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: 26 February 2025

  
\_\_\_\_\_  
James Christopher Lover  
Managing Director, Public Utilities Practice  
PFM Financial Advisors, LLC



# Tab 4

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

**HAROLD WALKER, III**

ON BEHALF OF  
PHILADELPHIA GAS WORKS

Docket No. R-2025-3053112

Philadelphia Gas Works

General Rate Increase Request

TOPIC:

Benchmarking

February 27, 2025

## TABLE OF CONTENTS

INTRODUCTION .....	1
SUMMARY OF RECOMMENDATION .....	1
DESCRIPTION OF THE PHILADELPHIA GAS WORKS .....	5
THE INDUSTRY .....	6
INVESTMENT RISK.....	7
PEER GROUPS .....	8
DIFFERENCES BETWEEN MUNICIPAL AND INVESTOR-OWNED UTILITIES .....	13
CHARACTERISTICS .....	16
BOND RATINGS.....	19
BENCHMARK METRICS.....	27
RECOMMENDED BENCHMARK METRICS .....	51
RATE SUPPORT IMPACT ON BENCHMARK METRICS.....	56
SUMMARY AND OVERALL RECOMMENDATION .....	59
APPENDIX A.....	A-1

## TABLE OF EXHIBITS

**HW-1      Benchmarking**

**INTRODUCTION**

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
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23

**Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

A. My name is Harold Walker, III. My business address is 1010 Adams Avenue, Audubon, Pennsylvania.

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

A. I am employed by Gannett Fleming Valuation and Rate Consultants, LLC as Manager, Financial Studies.

**Q. WHAT IS YOUR EDUCATIONAL BACKGROUND AND EMPLOYMENT EXPERIENCE?**

A. My educational background, business experience and qualifications are provided in Appendix A.

**SCOPE OF TESTIMONY**

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

A. The purpose of my testimony is to measure the financial performance of Philadelphia Gas Works (“PGW” or “Company”) from 2019 through 2023, via benchmarks, and compare those results to peer companies. The period reviewed includes the years since PGW’s last rate case to the most recent year for which comparable financial data exists. My testimony is supported by Exhibit HW-1, which is composed of 7 Schedules.

**SUMMARY OF RECOMMENDATION**

**Q. WHAT IS YOUR RECOMMENDATION?**

A. My recommendation is based on the results of my benchmark study and my recommendation is that PGW be afforded a timely rate increase to cover its costs and at least maintain its financial stability. The benchmark study shows that PGW’s financial

1 performance improved in some years since 2019 based on both average performance over  
2 the 2019 to 2023 time period, and the trend from 2019 through 2023. I note however that  
3 the benchmarking study also shows that PGW lags its peers on the key benchmarks, or  
4 metrics, such as days of cash on hand to cover operating expenses (“Days Cash”)<sup>1</sup>, Debt  
5 Service Coverage (P & I)<sup>2</sup>, and debt to total capitalization (“Debt/Capitalization”)<sup>3</sup>.  
6 Further, my recommendations are shown to be reasonable when they are compared to the  
7 same key benchmarks of S&P’s MUNI LDCs that have credit profiles which range from  
8 A- to A+.<sup>4</sup>

9 The benchmark study also reviews the fully projected future test year (“FPFTY”)  
10 benchmarking metrics of PGW’s financial performance that were estimated reflecting the  
11 proposed \$105 million rate increase. The FPFTY benchmark analysis shows that there is a  
12 need to support PGW’s financial stability with a timely rate increase in this amount to  
13 enable PGW to strengthen its credit profile and to lessen the gap between itself and its  
14 peers.

15 **Q. PLEASE EXPLAIN THE PURPOSE OF YOUR BENCHMARKING STUDY.**

16 A. The price of service of PGW’s gas rates is regulated by the Pennsylvania Public Utility  
17 Commission (“Commission” or “PUC”). For PGW, the Commission employs the “cash  
18 flow” method of determining just and reasonable rates. Under the cash flow method the  
19 Commission establishes rates at levels that permit the cash flow regulated utility to have

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<sup>1</sup> Where “Days Cash” is cash and cash equivalents divided by the quotient of the sum of operating expenses minus depreciation and amortization expenses divided by 365.

<sup>2</sup> Where “Debt Service Coverage (P & I)” is operating income plus depreciation and amortization expenses, divided by the sum of principal paid on long-term debt plus interest. Debt service is the sum of principal paid on long-term debt and interest.

<sup>3</sup> Where “Debt/Capitalization” is total debt divided by total capital, and where total capital is the sum of total debt and equity capital.

<sup>4</sup> See the Recommended Benchmark Metrics and Rate Support Impact on Benchmark Metrics sections of this report for a further discussion.

1 sufficient cash to pay all of its operating expenditures, debt service, and debt service  
2 coverage, generate appropriate levels of internally generated funds, and maintain financial  
3 metrics that not only satisfy the utility’s bond covenants but also are sufficient to maintain  
4 or improve the utility’s credit rating so that it can access the credit markets at the lowest  
5 cost possible. In determining just and reasonable rate levels for PGW under the cash flow  
6 method, therefore, the Commission must consider, among other relevant factors: PGW’s  
7 internal generation of funds to fund construction; the debt-to-equity ratios<sup>5</sup> and financial  
8 performance of similarly situated utility enterprises; the level of operating and other  
9 expenses in comparison to similarly situated utility enterprises; and the level of financial  
10 performance needed to maintain or improve PGW’s bond rating, thereby permitting PGW  
11 to access the capital markets at the lowest reasonable costs to customers over time.<sup>6</sup>

12 The purpose of the financial benchmarking study is to compare PGW’s key metrics  
13 to other businesses in the same general industry as PGW (i.e., peer groups). Specifically,  
14 the benchmarking study measures the financial performance of PGW and comparison  
15 companies, or peer company groups, from 2019 through 2023, via benchmarks. My study  
16 benchmarks specific information such as fiscal year-end cash levels,<sup>7</sup> days of cash, debt-  
17 to-equity ratios, credit ratings, non-gas operating expenses, and other financial  
18 performance metrics covering the most recent five-year period. The other financial  
19 performance metrics benchmarks include credit rating criteria measures, and various ratios

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<sup>5</sup> The debt-to-equity ratio and the debt-to-capitalization (i.e., Debt/Capitalization) ratio are similar measures of leverage. The debt-to-equity ratio is always 2-times the reported debt-to-capitalization. For example, a debt-to-capitalization of 60% is equal to a debt-to-equity ratio of 1.2-times (60% x 2 = 120% or 1.2).

<sup>6</sup> Pennsylvania Public Utility Commission, “Application of PGW Cash Flow Ratemaking Method—Final Statement of Policy,” 52 Pa. Code § 69.2703, in Docket No. P-2009-2136508.

<sup>7</sup> It should be noted that PGW’s fiscal year ends in August when cash needs are at their lowest compared to their needs during the heating season. Accordingly, PGW’s August cash balance is rapidly “spent down” during the winter months.

1 calculated from information contained on PGW's and peer company groups' balance  
2 sheets, statements of revenues and expense and changes in net position (e.g., income  
3 statements), statement of cash flows, and operating statistics.

4 **Q. PLEASE SUMMARIZE THE INFORMATION CONTAINED IN YOUR**  
5 **BENCHMARK STUDY.**

6 A. The benchmark study is attached as Exhibit HW-1 and is composed of 7 Schedules. The  
7 benchmark study includes results for PGW and three peer company groups: municipally  
8 owned utilities; Pennsylvania investor-owned utilities; and investor-owned utilities that  
9 operate outside of Pennsylvania. The peer company groups include the results of 20  
10 utilities. The benchmark study compares PGW's benchmarked statistics against those of  
11 the benchmark utilities (e.g., Peer Groups) as well as other municipally owned gas utilities  
12 that have credit profiles which range from A- to A+. The benchmark study also reviews  
13 FPFTY benchmarking metrics of PGW's financial performance that were estimated  
14 reflecting the proposed rate increase.

15 I believe that operating and financial benchmarks are useful but also recognize their  
16 limitations. When utilizing benchmarks, it must be recognized that no comparison  
17 group(s) or individual utility will have the exact operating and financial composition as the  
18 company being studied. For example, PGW is not exempt from PUC regulation as most  
19 other municipal ("MUNI") gas utilities are. Most MUNI gas utilities' rate requirements  
20 are established by the needed funds to run the system. Further, most MUNIs, including  
21 PGW, use a Government Accounting Standards Board ("GASB") process of accounting  
22 versus Financial Accounting Standards Board ("FASB") method of accounting used by

1 investor-owned utilities (“IOU”). I explain some of the differences between GASB and  
2 FASB later in my testimony.

3 Therefore, an individual company’s characteristics and operating requirements  
4 should be considered when viewing the results of a benchmark analysis to any peer group  
5 company(s). That is, a conclusion regarding any single benchmark data or ratio should  
6 only be reached after considering the individual company’s characteristics and operating  
7 requirements. Moreover, individual benchmark results should also be viewed in the  
8 context of the range of the results for a peer group(s), not just an average for a peer group(s).

9 **DESCRIPTION OF THE PHILADELPHIA GAS WORKS**

10 **Q. PLEASE GIVE A BRIEF DESCRIPTION OF PGW.**

11 A. PGW is owned by the City of Philadelphia (“City”) and is accounted for in the City’s  
12 audited financial statements as a component unit of the City. However, PGW is legally  
13 separate from the City. PGW is the largest municipally owned gas utility in the nation.  
14 The price of service of PGW’s rates is regulated by the PUC. PGW sells natural gas within  
15 the City, its service territory, and is the exclusive distributor of natural gas within the limits  
16 of the City. PGW maintains a distribution system with approximately 3,047 miles of gas  
17 mains and approximately 473,700 service lines serving approximately 514,600 customers  
18 at year-end 2023. PGW’s customer base is largest at the end of the peak heating season  
19 and decreases afterwards as customers terminate their service until the next heating season  
20 begins.

21 In addition to an extensive distribution system, PGW operates facilities for the  
22 liquefaction, storage, and vaporization of natural gas to supplement gas supply taken  
23 directly from interstate pipeline and storage companies chiefly for peak shaving purposes.



1 PGW's service area consists of an urban area of 134 square miles, the limits of the City,  
2 located in southeast Pennsylvania along the Delaware River. According to the United  
3 States Census Bureau's 2023 American Community Survey, Philadelphia had a population  
4 of approximately 1,550,542.

### 5 **THE INDUSTRY**

6 **Q. PLEASE GIVE A BRIEF OVERVIEW OF THE INDUSTRY IN WHICH THE**  
7 **COMPANY OPERATES.**

8 A. PGW operates in the natural gas industry in the gas distribution segment. The natural gas  
9 industry includes entities involved in the ownership and operation of industry segments  
10 consisting of production; gathering and processing; transmission; and distribution. The  
11 natural gas distribution industry segment, or local distributing companies ("LDCs"),  
12 includes businesses Standard Industrial Classification ("SIC") code of 4923 which are  
13 "engaged in both the transmission and distribution of natural gas for sale" and "engaged in  
14 the distribution of natural gas for sale" (SIC Code 4924).<sup>8</sup>

15 Approximately 1,400 LDCs distribute natural gas to end-use customers across the  
16 United States through over 1.2 million miles of distribution pipe. Each LDC has a unique  
17 combination of scale, load profile, and climatic attributes. IOUs dominate the gas  
18 distribution segment industry and MUNIs are also active LDCs. Investor-owned LDCs  
19 are subject to price regulation by state public utility commissions while most MUNIs are  
20 not. Uniquely, even though PGW is a MUNI, it is price regulated by the PUC.  
21 "Moreover, PGW's state rate regulation constrains its cost recovery framework compared  
22 to the majority of municipally owned gas utilities in the US that benefit from local

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<sup>8</sup> See <https://siccode.com/sic-code/4923/natural-gas-transmission-distribution>, 12/23/24 and <https://siccode.com/sic-code/4924/natural-gas-distribution>, 12/23/24.

1 unregulated rate setting authority.”<sup>9</sup> In setting rates, state public utility commissions  
2 balance the different interests of consumers, who want low rates, and company investors,  
3 who seek adequate returns on their investments.

4 The “[d]emand for natural gas is driven by energy use, which in turn is influenced  
5 by overall economic activity. The profitability of natural gas distributors depends largely  
6 on the efficiency of their operations, because prices typically are fixed by public utility  
7 commissions (PUCs). Companies that operate multiple distribution networks may enjoy  
8 economies of scale in purchasing. Small companies can compete effectively through a  
9 strong regional presence. The US industry is highly concentrated: the 50 largest companies  
10 account for about 90% of revenue.”<sup>10</sup>

### 11 **INVESTMENT RISK**

#### 12 **Q. PLEASE DEFINE THE TERM RISK.**

13 A. Risk is the uncertainty associated with a particular action; the greater the uncertainty of a  
14 particular outcome, the greater the risk. Investors who invest in risky assets expose  
15 themselves to investment risk particular to that investment. Investment risk is the sum of  
16 business risk and financial risk. Business risk is the risk inherent in the operations of a  
17 business. Assuming that a business is financed with 100% common equity, business risk  
18 includes all operating factors that affect the probability of receiving expected future income  
19 such as: sales volatility, management actions, availability of product substitutes,  
20 technological obsolescence, regulation, raw materials, labor, size and growth of the market

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<sup>9</sup> *Moody's Investors Services*, Credit Opinion, “Philadelphia (City of) PA Gas Works - Update to Credit Analysis,” 9/16/24, pg. 1.

<sup>10</sup> Market Research, Inc., “Natural Gas Distribution & Marketing,” <https://www.marketresearch.com/First-Research-Inc-v3470/Natural-Gas-Distribution-39300394/>, 1/23/2025.

1 served, diversity of the customer base, economic activity of the area served, and other  
2 similar factors.

3 **Q. WHAT IS FINANCIAL RISK?**

4 A. Financial risk reflects the way an enterprise is financed. Financial risk arises from the use  
5 of fixed cost capital (leverage), such as debt and/or preferred stock, because of the  
6 contractual obligations associated with the use of such capital. Because the fixed  
7 contractual obligations must be serviced before earnings are available for common  
8 stockholders (fund equity), the introduction of leverage increases the potential volatility of  
9 the earnings available for common shareholders (fund equity) and therefore increases  
10 common shareholder (fund equity) risks.

11 Although financial risk and business risk are separate and distinct, they are  
12 interrelated. In order for a business to maintain a given level of investment risk, business  
13 risk and financial risk should complement one another to the extent possible. For  
14 example, two firms may have similar investment risks while having different levels of  
15 business risk if the business risk differences are compensated for by using more or less  
16 leverage (financial risk) thereby resulting in similar investment risk.

17 **PEER GROUPS**

18 **Q. WHAT PROCESS DID YOU FOLLOW IN SELECTING THE PEER GROUP**  
19 **COMPANIES USED IN THE BENCHMARK STUDY?**

20 A. Since no companies are perfectly identical to PGW, I considered the financial and  
21 operating statistics of PGW when I selected the companies used for comparison purposes.  
22 This process resulted in the selection of 20 “peer” utilities companies which operate in the  
23 same basic industry as PGW. The 20 “peer” utilities companies were separated into three

1 peer groups including: municipally owned utilities; Pennsylvania investor-owned utilities;  
2 and investor-owned utilities that operate outside of Pennsylvania. It should be noted that  
3 the three peer groups are collectively referred to as the “Peer Groups.” Further, the  
4 individual companies which comprise the Peer Groups are collectively referred to as  
5 “ALLCOS.” After selecting the Peer Groups, I considered the investment risk differences  
6 between PGW and the Peer Groups when evaluating the benchmark metrics.

7 **Q. WHAT CHARACTERISTICS OF PGW DID YOU CONSIDER IN SELECTING**  
8 **THE PEER GROUP COMPANIES USED IN THE BENCHMARK STUDY?**

9 A. I believe that similar economic, industry and business risks affect PGW as other entities  
10 also operating in the natural gas distribution industry segment and accordingly, I attempted  
11 to consider only US natural gas LDCs for inclusion in the Peer Groups.<sup>11</sup> Next, I consider  
12 system density (customers per mile of main), amount of revenue and volume of throughput  
13 (MCF), type of infrastructure (percentage cast iron mains), location of operations,  
14 residential volumes as a percentage of total volumes (percentage of residential sendout),  
15 and ownership characteristics (IOU or MUNI).<sup>12</sup> Finally, the availability of five-years  
16 (2019 to 2023) of financial operating statistics for the gas operations, and coverage by a  
17 major credit rating services was required.<sup>13</sup>

18 **Q. HOW DID YOU SELECT THE PEER GROUP COMPANIES USED IN THE**  
19 **BENCHMARK STUDY?**

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<sup>11</sup> The small number of municipal LDCs resulted in the inclusion of one municipal utility with electric operations.

<sup>12</sup> I relied primarily on information from the American Gas Association (“AGA”) found at <https://www.aga.org/research-policy/resource-library/annual-report-of-volumes-revenues-and-customers-by-company-2002-2020/> and <https://www.aga.org/research-policy/resource-library/distribution-pipe-by-company-data-1990-2020/> for screening.

<sup>13</sup> Based on information available from S&P Capital IQ, PA PUC Annual Reports, Audited Annual Reports obtained from entities’ websites, and AGA Statistics.

1 A. I selected the Peer Groups based on PGW’s characteristics previously discussed. I believe  
2 that similar economic, industry and business risks have affected the Peer Groups as those  
3 faced by PGW. However, consideration must be given to the fact that no two companies  
4 are exactly alike. Accordingly, the Peer Groups were selected based on subsets of PGW’s  
5 characteristics. This required a broadening of the range of characteristics to produce Peer  
6 Groups large enough to provide meaningful comparisons with PGW. This process  
7 resulted in the selection of the Peer Groups that operate in the same basic industry as PGW  
8 and share many of PGW’s characteristics. The range of metrics (characteristics) used and  
9 relaxed to produce the Peer Groups were generally attributable to ownership, regulation  
10 (or lack thereof), and location of service.

11 I selected a group of municipally owned utilities (“MUNI Group”) since PGW is a  
12 MUNI. The composition of the MUNI Group includes mainly LDCs from across the  
13 country. The group’s composition reflects the fact that there are only a relatively small  
14 number of large MUNI LDCs existing in PGW’s general region,<sup>14</sup> coupled with  
15 consideration of PGW’s other characteristics. Some MUNI LDCs were found to have an  
16 abnormally low amount of debt, and/or negative net income, producing unusable metrics  
17 for comparison purposes. Additionally, only a limited number of large MUNI LDCs had  
18 financial information for just gas operations. As a result, I included two MUNIs with  
19 electric operations in the MUNI Group. The names of the entities that comprise the MUNI  
20 Group are:

- 21 ➤ Citizens Energy Group - Gas Segment
- 22 ➤ CPS Energy (Gas & Electric)
- 23 ➤ Gainesville Regional Utilities - Gas Utility System

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<sup>14</sup> See “Utility Rankings by Volumes, Revenues and Customers 2023,” at <https://www.aga.org/research-policy/resource-library/utility-rankings-by-volumes-revenues-and-customers-2021/>, 12/23/24.

- 1           ➤ Greenville - Gas Fund, City of
- 2           ➤ Jackson Energy Authority - Gas Fund
- 3           ➤ JEA Utilities - Electric Fund
- 4           ➤ Knoxville Utilities Board - Gas Division
- 5           ➤ Richmond - Gas Fund, City of
- 6

7           PGW is the only gas MUNI regulated by the PUC. Since PGW’s service is price  
 8 regulated by the PUC, a group comprised of investor-owned gas utilities operating in  
 9 Pennsylvania (“IOUPA Group”) was selected. In selecting the companies for the IOUPA  
 10 Group, I considered all 15 natural gas distribution companies with natural gas tariffs listed  
 11 on the PUC’s website and then excluded those utilities that were not comparable due to  
 12 size and/or lacked five-years of required financial and operating information.<sup>15</sup> The  
 13 names of the LDCs that comprise the IOUPA Group are:

- 14           ➤ Columbia Gas of Pennsylvania, Inc.
- 15           ➤ National Fuel Gas Distribution Corp (PA Operation)
- 16           ➤ PECO Gas (Exelon Corporation)
- 17           ➤ Peoples Natural Gas Company LLC
- 18           ➤ UGI Utilities Inc. (Gas)
- 19

20           In forming a third peer group I selected investor-owned LDCs that operate outside  
 21 of Pennsylvania (“IOU Group”). In selecting the companies for the IOU Group, I  
 22 considered all IOU natural gas distribution companies having five-years of required  
 23 financial and operating information, that operate in the North Atlantic region from the  
 24 District of Columbia to Massachusetts, excluding Pennsylvania, after considering PGW’s  
 25 other characteristics. The names of the LDCs that comprise the IOU Group are:

- 26           ➤ Brooklyn Union Gas Co.
- 27           ➤ Connecticut Natural Gas Corp.
- 28           ➤ Corning Natural Gas Corp.
- 29           ➤ New Jersey Natural Gas Co.

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<sup>15</sup> See <https://www.puc.pa.gov/filing-resources/tariffs/natural-gas-tariffs/> for natural gas tariffs listed on the PUC’s website.

- 1                   ➤ Southern Connecticut Gas Co.
- 2                   ➤ Washington Gas Light Co.
- 3                   ➤ Yankee Gas Services Co.
- 4

5   **Q.    UNDER 52 PA. CODE § 69.2703, RATEMAKING PROCEDURES AND**  
 6   **CONSIDERATIONS, IN DETERMINING PGW’S RATES, THE COMMISSION IS**  
 7   **REQUIRED TO CONSIDER “[D]EBT TO EQUITY RATIOS AND FINANCIAL**  
 8   **PERFORMANCE OF SIMILARLY SITUATED UTILITY ENTERPRISES”**  
 9   **AMONG OTHER FACTORS.  ARE THE PEER GROUPS “SIMILARLY**  
 10 **SITUATED UTILITY ENTERPRISES” TO PGW?**

11   **A.**    Yes.  In selecting my Peer Groups I selected a MUNI group since PGW is a MUNI.  
 12            However, PGW is unique when compared with a traditional MUNI utility because PGW  
 13            rates are price regulated by the Commission.  Consequently, I included a second peer group,  
 14            the IOUPA Group, comprised of price-regulated gas utilities operating in Pennsylvania.  In  
 15            forming a third peer group, the IOU Group, I selected price-regulated gas utilities that  
 16            operate outside of Pennsylvania.  Accordingly, I believe my three Peer Groups enable the  
 17            Commission to consider the, “[d]ebt to equity ratios and financial performance of similarly  
 18            situated utility enterprises” among other factors as they are required to do so.  
 19            Additionally, my recommendations are shown to be reasonable when they are compared to  
 20            the same key benchmarks<sup>16</sup> of S&P’s MUNI LDCs that have credit profiles which range  
 21            from A- to A+.

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<sup>16</sup> The key benchmarks include: Debt/Capitalization; Days Cash; and Debt Service Coverage (P & I). See page 2, footnotes 1-3, for the definitions of the key benchmarks.

**DIFFERENCES BETWEEN MUNICIPAL AND INVESTOR-OWNED UTILITIES****Q. WHAT DIFFERENCES ARE THERE BETWEEN MUNICIPAL AND INVESTOR-OWNED UTILITIES?**

A. The main differences between MUNIs and IOUs are financial in nature and involve a combination of accounting, regulation, ownership, and taxation. As explained previously, most MUNIs, including PGW, follow the standards of accounting and financial reporting established by GASB versus the standards established by FASB used by IOUs. Differences in accounting practices exist between GASB and FASB because there are differences in their purpose. That is, the GASB's motivations are to make sure government entities are accountable for the money they receive from the public or taxpayers, while the FASB's focus is to help investors and creditors make decisions.

MUNIs are not typically focused on the return on and the return of their investments in their utility systems as IOUs are since they (MUNIs) deem that they are providing a public service to their taxpayers and are more attentive to having adequate cash flow to service debt and satisfy financial obligations. Further, MUNIs typically expense some expenditures which are capitalized by IOUs and many MUNIs do not typically fully account for the replacement of all capital assets which are all typically capitalized (i.e., construction of capital assets, construction expenditures, etc.) and "booked" at original cost by IOUs. These differences in accounting objectives between GASB and FASB can present a problem when it comes to comparing the financial statements of IOUs with MUNIs, such as PGW and the MUNI Group, and vice versa.

The majority of MUNIs are not price regulated by a utility commission but rather have rates approved locally by an unregulated rate setting board. The determination of



1 reasonable gas rates for IOUs and PGW is subject to rate regulation. For IOUs, rate  
2 regulation serves as a substitute for competition in the marketplace since utility companies  
3 are precluded from exercising complete control over the price to be charged to their  
4 customers. Under rate regulation, a cost of service formula is used to set the price for  
5 service charged to IOUs' customers. The cost of service formula equates the revenue  
6 requirement to the sum of annual operating expenses, taxes other than income, depreciation  
7 expense, income taxes, and the product of the rate base times a fair rate of return. PGW's  
8 ratemaking process is based on a Cash Flow Ratemaking Method, where revenue  
9 requirement includes, among other things, having adequate cash flow rather than using a  
10 rate base rate of return method used for IOUs.<sup>17</sup>

11 IOUs pay local, state and federal taxes while MUNIs are exempt from these taxes.<sup>18</sup>  
12 Moreover, IOU investors pay income taxes on their dividends and interest payments while  
13 MUNI investors are exempt. Since the majority of MUNI bond interest is tax-exempt to  
14 the investor, it lowers MUNIs' cost of borrowing vis-à-vis IOUs. As a result, MUNI  
15 customers benefit from the tax-exemption of the interest paid to MUNI investors in the  
16 form of lower rates for service.

17 It is the responsibility of price regulated IOUs seeking changes in rates to present  
18 sufficient evidence, including a fair rate of return, to their regulators in support of their  
19 request. Historically, PGW and other MUNIs' rates have not considered a fair rate of  
20 return nor taxes. That is, PGW and other MUNIs' rates would have been higher, and their

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<sup>17</sup> See pages 54-55 for a discussion of the differences between the rate base rate of return method the cash flow method.

<sup>18</sup> Some entities in the MUNI Group make a "payment in lieu of taxes."

1 financial results would have been improved, if they included a provision for a fair rate of  
2 return and taxes.

3 **Q. DO PGW AND THE PEER GROUPS HAVE SIMILAR OPERATING RISKS?**

4 A. Yes. From an operations standpoint, PGW and the Peer Groups have similar risks and are  
5 indistinguishable. PGW and the Peer Groups are required to meet safety and  
6 environmental requirements and are also required to provide safe and reliable services to  
7 their customers and comply with utility commission regulations and/or federal and state  
8 safety and reliability requirements. Further, MUNIs and IOUs have similar investment  
9 risks as is evident by the fact that their bonds are often rated similarly. However, PGW is  
10 unique when compared with a traditional MUNI utility because PGW is not able to increase  
11 rates for service at the discretion of municipal officials. Rather, PGW's rates fall under  
12 the jurisdiction of the PUC. Accordingly, PGW must comply with the same regulatory  
13 requirements for increasing rates as IOUs require. PGW experiences attrition and  
14 regulatory lag similar to an IOU, but lacks the benefits that income taxes provide an IOU  
15 for two reasons. First, deferred income taxes provide IOUs a cash flow advantage that  
16 PGW does not enjoy. Second, current income taxes included in IOUs' revenue  
17 requirement provide a margin or cushion against an unanticipated drop in sales or increase  
18 in operating expenses. PGW and other MUNIs do not have this margin of protection nor  
19 the cash flow advantage which IOUs have.

**CHARACTERISTICS**

**Q. HOW DO PGW'S CHARACTERISTICS COMPARE WITH THOSE OF THE PEER GROUPS?**

A. Schedule 1 of Exhibit HW-1 is a three-page schedule that provides a comparison between PGW's and the Peer Groups' characteristics. As discussed previously, the Peer Groups were selected based on subsets of PGW's characteristics. This required a broadening of the range of metrics or characteristics to produce Peer Groups large enough to provide meaningful comparisons with PGW.

As shown on page 1 of Schedule 1, PGW's system density (customers per mile of main) is considerably greater than the Peer Groups'. Only Brooklyn in the IOU Group has density exceeding PGW's. PGW's density is a function of servicing primarily an urban territory. PGW also has a higher percentage of cast iron mains than the Peer Groups (Schedule 1, page 1), reflecting its older infrastructure. State of operation, utility service provided, and asset ownership are also shown on page 1 of Schedule 1. As shown, PGW's operating revenues are generally similar to the Peer Groups' revenues (Schedule 1, page 1).

From comparing PGW's volume of throughput (MCF) to the Peer Groups' averages it is evident that PGW's throughput (MCF) is about 70% more than the MUNI Group, about 50% less than the IOUPA Group, and about 25% more than the IOU Group (Schedule 1, page 2).<sup>19</sup> PGW has about 23% more miles of mains than the MUNI Group, about 66% less than the IOUPA Group, and about 39% less than the IOU Group (Schedule 1, page 2). PGW's number of customers served is about 70% more than the MUNI Group

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<sup>19</sup> MUNI Group members CPS Energy and JEA Utilities' electric sales (KWh) were converted to MCF.

1 and about the same as the IOUPA and IOU groups (Schedule 1, page 2). PGW's  
 2 residential volume as a percentage of total volumes (percentage of residential sendout) is  
 3 generally more than the Peer Groups' sendout (Schedule 1, page 2). PGW's average  
 4 residential use (MCF) is more than the MUNI Group's but about 20% less than both the  
 5 IOUPA Group's and the IOU Group's (Schedule 1, page 2).

6 Page 3 of Schedule 1 shows the periods (decades) when PGW's and the Peer  
 7 Groups' mains were installed. As is evident from the information shown, PGW's system  
 8 of mains is older than the Peer Groups'. The Muni Group has the newest system, followed  
 9 by the IOUPA and IOU groups. Age of the system is generally an indication of the need  
 10 for more capital expenditures.

11 Table 1 summarizes the PGW's general characteristics relative to the Peer Groups'.

Characteristic	PGW's Characteristics Relative To:		
	Muni Group	IOUPA Group	IOU Group
Density			Closest
% Cast Iron			Closest
State of Operation		Yes	
Service Provided	Mixed	Yes	Yes
Asset Ownership	Yes		
Operating Revenues	Yes	Yes	Yes
Total Volume	Less	More	Yes
Miles of Main	Yes	More	More
Customers		Closest	Close
% Residential Sendout		Close	Closest
Avg Residential Use (MCF)	Less	More	More
Age of Installation	Newest	New	New

Table 1

1 **Q. WHY DO YOU BELIEVE PGW'S AVERAGE RESIDENTIAL USE (MCF) IS**  
 2 **ABOUT 20% LESS THAN THE IOUPA GROUP'S AVERAGE RESIDENTIAL**  
 3 **USE (MCF)?**

4 A. Besides the differences in economic demographics, which will be discussed on pages 26-  
 5 27, I believe the difference in the average residential use (MCF) is attributable to the size  
 6 of the residential dwellings in PGW's service area. For example, 3.8% of the occupied  
 7 housing units in PGW's service area only have one room and 18.3% have two or three  
 8 rooms, while only 1.7% of Pennsylvania's occupied housing units have one room and only  
 9 9.2% have two or three rooms.<sup>20</sup>

10 **Q. WHAT PGW CHARACTERISTICS DIFFERENTIATE IT FROM THE PEER**  
 11 **GROUPS?**

12 A. I previously discussed several characteristics that differentiate PGW from the Peer Groups.  
 13 In addition to those, PGW's structure of rates is quite unique. Figure 1 shows a  
 14 comparison between PGW's and the IOUPA Group's recent structure, or composite, of  
 15 residential rates. As shown in Figure 1, PGW's rates have a much larger percentage, at  
 16 10.45%, devoted to the rate support of low-income customers than the IOUPA Group as  
 17 measured by the Universal Service and Energy Conservation charge ("USEC"). The  
 18 IOUPA Group's USEC ranges from a low of 0.36% to a high of 6.60% and averages  
 19 3.96%.<sup>21</sup> PGW also has an OPEB component of 2.53%, while most of the IOUPA Group  
 20 does not.<sup>22</sup> PGW's distribution system improvement charge, or DSIC, rate of 6.04% is

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<sup>20</sup> Similarly, 27.6% of Pennsylvania's occupied housing units have eight or more rooms, while only 13.4% of the occupied housing units in PGW's service area have eight or more rooms. (Source: Census Bureau's American Community Survey 2023 ACS 1-Year Estimate)

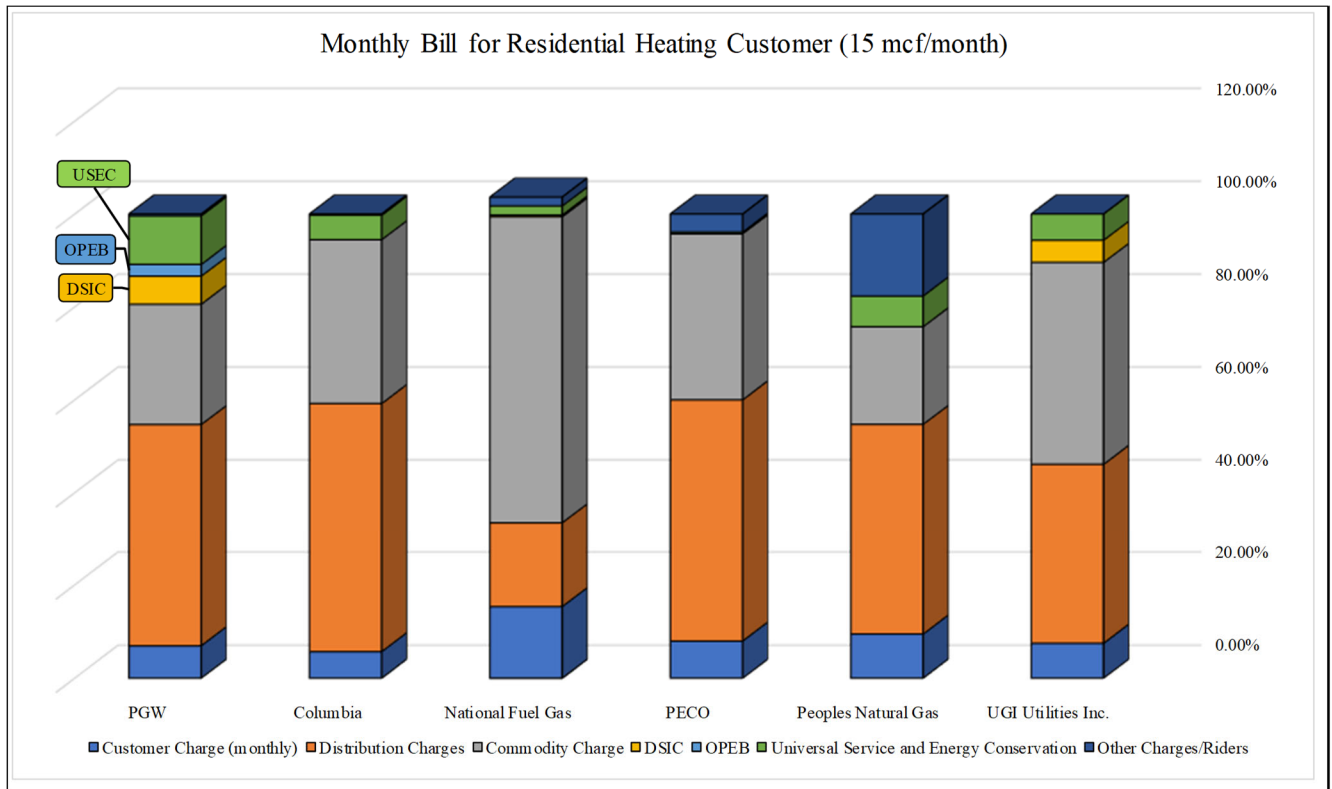
<sup>21</sup> Figure 1 shows that PECO does not have a USEC charge because their USEC component is embedded in their variable distribution charge.

<sup>22</sup> National Fuel Gas has an OPEB credit that it is flowing back to customers over 5-years.

1 also much larger on a percentage basis. The IOUPA Group’s DSIC ranges from a low of  
 2 0.00% to a high of 4.76% and averages 1.03%. PGW’s DSIC also differs from the IOUPA  
 3 Group’s in that it is a cash-basis DSIC, charged on a pay-as-you-go basis.

4

**Figure 1**



5

6

7

**BOND RATINGS**

8 **Q. WHAT IS A BOND RATING AND WHY IS IT IMPORTANT?**

9 A. A bond rating is a credit profile and provides an evaluation of credit risk. A bond rating is  
 10 usually the most important factor affecting the interest cost on bonds other than the term  
 11 (life) of the bond issue. The major credit rating services such as S&P Global Ratings  
 12 (“S&P”), Moody’s Investors Service (“Moody’s”), and Fitch Ratings Inc. (“Fitch”) assess

1 a bond issuer's financial strength<sup>23</sup> using letter grades. These credit rating agencies  
2 append modifiers, such as + or - for S&P and Fitch and 1, 2, and 3 for Moody's, to each  
3 generic rating classification. For example, an "A" credit profile is comprised of three  
4 subsets such as A+, A, A- for S&P and Fitch, and A1, A2 or A3 for Moody's. The modifier  
5 of either "+" or "1" indicates that the obligation ranks in the higher end of its generic rating  
6 category; the modifier "2" indicates a mid-range ranking; and the modifier of "-" or "3"  
7 indicates a ranking in the lower end of that generic rating category.

8 S&P, Moody's and Fitch publish financial benchmark criteria necessary to obtain  
9 a bond rating for different types of bonds and utilities. As a generalization, the higher the  
10 perceived business risk, the more stringent the financial criteria, so the sum of the two,  
11 business risk and financial criteria, remains the same.

12 The debt rating process generally provides a good measure of investment risk for  
13 all types of investors because the factors considered in the debt rating process are usually  
14 relevant factors that other investors (common stock) would consider in assessing the risk  
15 of an investment. Credit rating agencies, such as S&P, assess the credit risk of both MUNI  
16 revenue bonds and IOU bonds by separating risk into two categories.

17 For MUNI revenue bonds, the risk of an investment is separated between enterprise  
18 and financial risk profiles. The enterprise risk profile includes the operating environment  
19 or industry factors, and organization-specific factors such as: economic fundamentals,  
20 industry risk, market position, and operational management. The financial profile assesses

---

<sup>23</sup> Ability to pay principal and interest, in a timely fashion.

1 the financial strength with three factors: coverage metrics, liquidity and reserves, and debt  
2 and liabilities.<sup>24</sup>

3 For IOU bonds, the risk of an investment is separated between fundamental  
4 business analysis and financial analysis.<sup>25</sup> The business risk analysis includes assessing:  
5 Country risk; industry risk; competitive position; and profitability/peer group comparisons.  
6 The financial risk analysis includes assessing: accounting; financial governance and  
7 policies/risk tolerance; cash flow adequacy; capital structure/asset protection; and  
8 liquidity/short-term factors.

9 **Q. WHAT IS THE BOND RATING OF PGW AND THE PEER GROUPS?**

10 A. Page 1 of Schedule 2 shows the average bond/credit rating for PGW and the Peer Groups.  
11 PGW's bond rating is A by S&P, A3 by Moody's, and A- by Fitch. Based on these ratings  
12 I calculated PGW's average credit profile to be A-. As shown, I calculated the average  
13 credit profile for the MUNI Group's as AA-, the IOUPA Group's as BBB+, and the IOU  
14 Group to be BBB+. The weightings used to calculate the average credit profile are shown  
15 on page 2 of Schedule 2.

16 The bond/credit ratings (Schedule 2, page 1) show that PGW and the Peer Groups  
17 have similar credit but PGW's credit profile is slightly lower than the Peer Groups (i.e., A-  
18 versus A). Prospectively, based upon PGW's construction program and OPEB  
19 obligations, PGW's credit profile is likely to be strained and may result in a larger  
20 difference with the Peer Groups' profile. Without regulatory support, PGW's credit

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<sup>24</sup> *S&P Global Ratings, Criteria - Governments - U.S. Public Finance: U.S. Municipal Retail Electric and Gas Utilities: Methodology and Assumptions*, September 27, 2018.

<sup>25</sup> *S&P Global Ratings, Corporate Ratings Criteria*, General: Criteria Methodology: Business Risk/Financial Risk Matrix Expanded, September 18, 2012, and *S&P Global Ratings, Criteria Corporates General: Corporate Methodology*, July 1, 2019, and *Standard & Poor's, Criteria - Corporates - Utilities: Key Credit Factors for the Regulated Utilities Industry*, November 19, 2013.



1 profile will rapidly deteriorate. I will discuss the possibility of PGW’s credit profile  
 2 rapidly deteriorating later in my testimony.

3 **Q. HAS PGW’S BOND RATING IMPROVED AS A RESULT OF THE REVENUE**  
 4 **INCREASES GRANTED IN PRIOR RATE CASES?**

5 A. Yes. Helpful regulatory support from PUC-authorized rate increases in the 2020 rate case  
 6 enabled PGW to present an improved credit profile. Table 2 shows PGW’s bond/credit  
 7 rating since their last two rate cases to date. As shown in Table 2, PGW’s Fitch bond  
 8 rating increased one level during this time period. I believe regulatory support can play a  
 9 key role in PGW being able to present a better credit profile resulting in improved bond  
 10 ratings and ultimately lowering costs to customers as a result of having the ability to finance  
 11 at lower interest rates than otherwise would be the case.

	PGW's Long-Term Debt Ratings				Weightings Assigned to Credit Ratings			
	S&P	Moody's	Fitch	Overall	S&P	Moody's	Fitch	Overall
				Average				Weighting
				Credit				
2020 Rate Case	A	A3	BBB+	A-	6.0	7.0	8.0	7.0
2023 Rate Case	A	A3	A-	A-	6.0	7.0	7.0	6.7
Current Rating (2025)	A	A3	A-	A-	6.0	7.0	7.0	6.7

12 **Table 2**

13  
 14 **Q. BESIDES THE FACT THAT PGW’S BOND RATING IMPROVED SINCE PRIOR**  
 15 **RATE CASES, WHAT OTHER EVIDENCE DO YOU HAVE THAT PROVES**  
 16 **PGW’S IMPROVED BOND RATING IS A RESULT OF REGULATORY**  
 17 **SUPPORT?**

18 A. S&P, Moody’s, and Fitch have cited regulatory support in their recent assessments of PGW  
 19 credit quality. For example, S&P stated:

1 We view PGW's governance factors to be constraining to credit quality,  
2 demonstrated by its need to obtain PAPUC approval for base-rate,  
3 distribution system improvement charge (DSIC), other postemployment  
4 benefits and the weather normalization adjustment increases and its  
5 inability to enter into financial hedges. **In the past, the PAPUC has been**  
6 **supportive of surcharge rate approvals**, but in recent years has approved  
7 50% or less than the requested base rate. However, we believe that the  
8 utility's robust financial metrics and **numerous well-funded dedicated**  
9 **surcharges are credit supportive.**<sup>26</sup> (*Emphasis added.*)  
10

11 Moody's specified:

12 The **PAPUC has historically supported PGW's rate requests** to fund its  
13 long-term strategy to accelerate its main line replacement program, to  
14 reduce its unfunded OPEB liability, and to fund other ongoing needed  
15 capital investments. These actions along with the PAPUCs approval of  
16 PGW's weather normalization adjustment (WNA) are key drivers of PGW's  
17 credit profile. **We expect the PAPUC to maintain a supportive stance to**  
18 **PGW's future rate requests as it has in the past.**<sup>27</sup> (*Emphasis added.*)  
19

20 Further, Fitch detailed:

21 Rates that are subject to regulatory approval often lead to a lag in potential  
22 revenue recovery and limits overall financial flexibility in Fitch's view.  
23 Positively, while rate changes are ultimately approved by the **PUC**, a  
24 **generally supportive regulatory regime** has provided the system with  
25 sufficient **support to maintain a stable financial profile.**<sup>28</sup> (*Emphasis*  
26 *added.*)  
27

---

<sup>26</sup> *S&P Global Ratings*, "Philadelphia; Philadelphia Gas Works; Gas; Joint Criteria," August 27, 2024, pg. 4.

<sup>27</sup> *Moody's Investors Services*, Credit Opinion, "Philadelphia (City of) PA Gas Works - Update to Credit Analysis," September 16, 2024, pg. 4.

<sup>28</sup> *Fitch Ratings*, "Philadelphia (PA) [Gas]," August 28, 2024, pg. 2.

1 **Q. WHAT FACTORS HAVE THE MAJOR CREDIT RATING AGENCIES**  
2 **MENTIONED AS BEING POSITIVE CREDIT ATTRIBUTES AND AS BEING**  
3 **NEGATIVE CREDIT CONCERNS?**

4 A. In the aforementioned credit review, S&P referenced the following positives which support  
5 PGW's credit ratings:<sup>29</sup>

- 6 ➤ A diverse customer base with minimal customer concentration.
- 7 ➤ Credit-supportive planning and policies, which include a number of dedicated  
8 surcharges that support capital improvements and other postemployment benefits  
9 (OPEB), a weather-normalization adjustment that insulates margins from weather  
10 variability, and a gas cost rate adjustor that automatically passes on gas costs to  
11 ratepayers on a quarterly basis.
- 12 ➤ Extremely strong coverage of fixed costs (debt service payments after the annual  
13 transfer to the city of Philadelphia's general fund) at 2.3x and robust liquidity and  
14 reserves, reflecting \$139 million in unrestricted cash and \$259 million when  
15 including the \$120 million CP in fiscal 2023.

16

17 S&P also stated the following negatives that could prospectively impact PGW's  
18 credit rating:<sup>30</sup>

- 19 ➤ We could lower the rating if future approved rate increases are substantially lower  
20 than requested, or inflationary pressures or volatile gas prices stress operations and  
21 demand, resulting in materially weaker financial performance.
- 22 ➤ PAPUC approvals have been sufficient for PGW to maintain robust financial  
23 metrics; however, if the PAPUC continues to approve a lower percentage of the  
24 requested amount, financial performance could be pressured.
- 25 ➤ Vulnerable market position, due to very high rates versus those of other regional  
26 providers and PGW's dependence on the Pennsylvania Public Utility Commission  
27 (the "PUC") for approval for base-rate increases, with a mixed history of support  
28 for filings, although this has improved recently.

29

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<sup>29</sup> S&P Global Ratings, August 27, 2024.

<sup>30</sup> Ibid.

1 In the former cited credit review, Moody's referenced the following positives which  
 2 support PGW's credit ratings:<sup>31</sup>

- 3 ➤ The PAPUC has historically supported PGW's rate requests to fund its long-term  
 4 strategy to accelerate its main line replacement program, to reduce its unfunded  
 5 OPEB liability, and to fund other ongoing needed capital investments. These  
 6 actions along with the PAPUCs approval of PGW's weather normalization  
 7 adjustment (WNA) are key drivers of PGW's credit profile. We expect the PAPUC  
 8 to maintain a supportive stance to PGW's future rate requests as it has in the past.  
 9
- 10 ➤ Philadelphia Gas Works' ("PGW", A3, stable) credit profile reflects the historically  
 11 credit supportive regulatory environment that has grown the utility's asset base,  
 12 accelerated funding for both its cast iron main replacement program and its  
 13 unfunded OPEB liability, and reduced borrowing needs by allowing for more cash  
 14 funded capital investments.  
 15
- 16 ➤ Thus, our credit view heavily factors in the historically constructive relationship  
 17 PGW has with the Pennsylvania Public Utility Commission (PAPUC) and the fact  
 18 that the PAPUC must approve rates sufficient for PGW to satisfy its indenture  
 19 required 1.5 times debt service coverage ratio (DSCR) rate covenant.

20  
 21 Moody's identified the following possible negatives that could impact PGW's  
 22 credit rating:<sup>32</sup>

- 23 ➤ Credit quality remains constrained by PGW's sizeable low income and modestly  
 24 growing customer base that is pressured during economic downturns, as well as  
 25 the utility's position as a supplier of last resort, which yields consistently above  
 26 average retail rates. Moreover, PGW's state rate regulation constrains its cost  
 27 recovery framework compared to the majority of municipally owned gas utilities  
 28 in the US that benefit from local unregulated rate setting authority.
- 29 ➤ Sizable low-income residential population contributes to delinquencies increasing  
 30 during times of economic weakness or when affordability is pressured like in the  
 31 currently high inflationary environment.
- 32 ➤ Increased leverage without sufficient cost recovery or a material decline in  
 33 liquidity.

---

<sup>31</sup> *Moody's Investors Service*, September 16, 2024.

<sup>32</sup> *Ibid.*

1 Fitch referenced the following positives in the previously cited credit review which  
2 support PGW's credit ratings:<sup>33</sup>

- 3 ➤ Positively, while rate changes are ultimately approved by the PUC, a generally  
4 supportive regulatory regime has provided the system with sufficient support to  
5 maintain a stable financial profile.
- 6  
7 ➤ PGW's revenue source characteristics are considered to be strong given a  
8 significant portion of the utility's revenues are derived from the provision of  
9 monopolistic gas distribution services.
- 10  
11 ➤ The strong revenue defensibility assessment is underpinned by strong revenue  
12 source characteristics, a stable demand profile including a stable service territory  
13 with improving economic and demographic indicators.

14  
15 Fitch acknowledged the following possible negatives that could impact PGW's  
16 credit rating:<sup>34</sup>

- 17 ➤ Rates that are subject to regulatory approval often lead to a lag in potential revenue  
18 recovery and limits overall financial flexibility in Fitch's view.
- 19  
20 ➤ Sustained leverage exceeding 8x in Fitch's rating case.
- 21  
22 ➤ An increase in competitive pressures or weakening service area demographics that  
23 leads to a weaker assessment for revenue defensibility.

24 **Q. ARE THERE OTHER ASPECTS OF PGW'S SERVICE AREA WHICH MAY**  
25 **CAUSE CONCERN TO THE MAJOR CREDIT RATING AGENCIES AND HAVE**  
26 **NEGATIVE CREDIT TRAITS?**

27 A. Yes. The major credit rating agencies evaluate the economy of the area served as part of  
28 their credit assessment. In particular, the major credit rating agencies look at median  
29 household income ("MHI") and poverty rates of the service area as compared to the nation  
30 as a whole. The MHI of PGW's service area is about 78% (2023) of the national average

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<sup>33</sup> *Fitch Ratings*, August 28, 2024.

<sup>34</sup> *Ibid.*

1 and PGW’s poverty rate is about 162% (2023) of the national average according to the  
 2 Census Bureau’s American Community Survey (ACS).<sup>35</sup> Neither of these demographic  
 3 statistics is supportive of credit quality and suggests PGW’s other attributes and metrics  
 4 must be higher than otherwise to counterbalance the negative demographic statistics.

### **BENCHMARK METRICS**

6 **Q. PLEASE EXPLAIN THE PURPOSE OF THE BENCHMARK METRICS.**

7 A. In determining just and reasonable rate levels for PGW using the cash flow method, the  
 8 Commission must consider, among other relevant factors: PGW’s internal generation of  
 9 funds to fund construction; the debt-to-equity ratios and financial performance of similarly  
 10 situated utility enterprises; the level of operating and other expenses in comparison to  
 11 similarly situated utility enterprises; and the level of financial performance needed to  
 12 maintain or improve PGW’s bond rating, thereby permitting PGW to access the capital  
 13 markets at the lowest reasonable costs to customers over time.<sup>36</sup>

14 The purpose of the benchmark metrics is to compare PGW’s key metrics to the Peer  
 15 Groups’. The benchmark metrics measure the financial performance of PGW and the Peer  
 16 Groups from 2019 through 2023.

17 **Q. HOW DID YOU DETERMINE WHICH BENCHMARK METRICS TO MEASURE**  
 18 **AND WHY DID YOU SELECT THEM?**

19 A. I selected the benchmark metrics based on the needs of PGW to provide the Commission  
 20 the measures necessary to satisfy the Commission’s requirements in meeting the  
 21 Commission’s “Application of PGW Cash Flow Ratemaking Method—Final Statement of

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<sup>35</sup> Pennsylvania’s MHI is about 95% (2023) of the national average and Pennsylvania’s poverty rate is 96% (2023) of the national average.

<sup>36</sup> Pennsylvania Public Utility Commission, “Application of PGW Cash Flow Ratemaking Method—Final Statement of Policy,” 52 Pa. Code § 69.2703, in Docket No. P-2009-2136508.

1 Policy” referenced previously. In addition to providing the specific metrics stated in the  
2 Commission’s “Application of PGW Cash Flow Ratemaking Method—Final Statement of  
3 Policy,” I calculated the financial performance metrics used by the major credit rating  
4 agencies (S&P, Moody’s and Fitch) and referenced in their credit rating criteria measures.

5 The benchmark metrics I used include metrics used to assess both MUNI and IOU  
6 debt. The three most important metrics the major rating agencies use for evaluating  
7 MUNI debt include debt total capitalization ratios, debt service coverage, and Days Cash,  
8 and each of these metrics is included in my analysis.<sup>37</sup> As a generalization, the financial  
9 performance metrics used by the major credit rating agencies during their credit rating  
10 process of MUNI and IOU debt fall into four categories: Leverage & Risk; Liquidity;  
11 Solvency; and Efficiency.

12 In gathering the data required to calculate the benchmark metrics I found some  
13 entities lacked certain financial information (gross plant) required for a specific metric.  
14 As a result, I expanded the number of benchmark metrics to include similar data (net plant  
15 or total capitalization) to provide similar measures while also providing the original  
16 measure. That is, I did not substitute data; rather, I provided complementary metrics in  
17 addition to the original metric.

18 For consistency I used the same “generic” data reported on financial statements for  
19 all entities when I calculated the benchmark metrics, thus making the metrics comparable  
20 across all entities. As a result, the benchmark metrics I calculated for PGW may differ  
21 from benchmark metrics determined by other PGW witnesses who utilized more detailed  
22 information.

---

<sup>37</sup> See page 2, footnotes 1-3, for the definitions of debt total capitalization ratios, debt service coverage, and Days Cash.

1 **Q. WHAT BENCHMARK METRICS DID YOU USE IN YOUR ANALYSIS?**

2 A. I used 22 benchmark metrics for comparative purposes. Schedule 3 defines the inputs  
3 used in calculating each benchmark metric. As stated, the metrics fall into four categories:  
4 Leverage & Risk; Liquidity; Solvency; and Efficiency. Of the 22 benchmark metrics, six  
5 metrics provide measures of Leverage & Risk, three metrics appraise Liquidity, five  
6 metrics assess Solvency, and eight metrics evaluate Efficiency.<sup>38</sup> The 22 benchmark  
7 metrics are shown on pages 1 through 22 of Schedule 4 and are listed in Table 3.

---

<sup>38</sup> It should be noted that the larger number of metrics devoted to gauging Efficiency, relative to the other three categories, is due to the repetitive nature of some metrics as a result of the lack of required data (gross plant) for some entities and the creation of substitute comparable metrics.



Category	Metric	Schedule 4 Page Number
Leverage & Risk	Debt/Capitalization	1
Leverage & Risk	Operating Margin	2
Leverage & Risk	Debt Service/Cash OpEx	3
Leverage & Risk	Debt/Customer	4
Leverage & Risk	Debt/Revenues	5
Leverage & Risk	Debt/Equity	6
Liquidity	EBITDA/Revenues	7
Liquidity	FFO/CapEx	8
Liquidity	Days Cash	9
Solvency	FFO/Avg Debt	10
Solvency	FFO Coverage	11
Solvency	EBIT Coverage	12
Solvency	Interest-Only Debt Service Coverage	13
Solvency	Debt Service Coverage (P & I)	14
Efficiency	CapEx/DA	15
Efficiency	Net Plant/Gross Plant	16
Efficiency	CapEx/Net Plant	17
Efficiency	CapEx/Gross Plant	18
Efficiency	CapEx/Capitalization	19
Efficiency	Net Plant/Capitalization	20
Efficiency	Gas Revenue/MCF	21
Efficiency	Non-Commodity Revenue/Revenue	22

**Table 3**

1           As is evident by viewing the information shown on Schedule 4, each metric was  
2           measured annually over the five-year period (2019-2023), averaged across the five-year  
3           period, and then, at the bottom of each page of Schedule 4, PGW's metric was ranked  
4           within the range of each Peer Groups' metric for comparison purposes. That is, for  
5           comparative ranking purposes, PGW was arrayed within the result of each Peer Group and  
6           within all 20 Peer Group entities (ALLCOS). For example, the MUNI Group contains

1 eight entities but after PGW's results were measured relative to the range of the eight  
2 entities, PGW's ranking is shown relative to nine MUNI Group entities since PGW became  
3 the ninth entity (i.e.,  $n + 1$ ). A similar process was used for all Peer Groups and the  
4 ALLCOS.

5 For descriptive purposes, when describing the results of the rankings relative to the  
6 Peer Groups, the term "favorably" (denoted by a "+" on Schedule 4) is used for the lowest  
7 two ranks (i.e., a rank of 1 or 2), the term "neutral" (denoted by a "=" on Schedule 4) is  
8 used for the more central ranks, and the term "unfavorably" (denoted by a "-" on Schedule  
9 4) is used for the highest two ranks.<sup>39</sup> A similar process was used for ranking the  
10 ALLCOS except the lower (favorably) and upper (unfavorably) "tails" were expanded  
11 from two ranks to six ranks each because 20 entities were ranked as part of ALLCOS.<sup>40</sup>

12 The numerical ranking of each metric is relative to the metric being measured and  
13 the metric's implication on credit quality. For example, a higher Debt/Capitalization  
14 metric is riskier, less favorable and should have a higher numerical rank, while a higher  
15 Debt Service Coverage metric is less risky, more favorable and should have a lower  
16 numerical rank. This method enabled the least risky, most favorable metric to always be  
17 ranked 1 and vice versa. Table 4 illustrates the rankings and the descriptive terms.

---

<sup>39</sup> Both the MUNI Group and the IOU Group follow this procedure. However, since the IOUPA Group is comprised of five entities, the descriptive ranking terms of "favorably" and "unfavorably" were given only to the highest and lowest rankings.

<sup>40</sup> As stated, PGW's ranking is shown relative to the number of entities in each group plus PGW. This process resulted in the rankings being based on group size plus PGW (i.e.,  $n + 1$ ). In the instance that PGW's metric resulted in their ranking being greater than the actual number of entities in each group (unfavorably), or outside the range found for the group, the term "OUT" is shown in the "Interpretation of Rankings" section on Schedule 4. For descriptive purposes, when describing the results of the rankings relative to the Peer Groups, the term "outside" is used in this Report.

<u>Key to Ranking</u>				
	<u>Symbol Used on Schedule 4</u>		<u>Term Used in Report</u>	
	+	↔	Favorable	
	=	↔	Neutral	
	-	↔	Unfavorably	

<u>Rankings Numbers and Descriptive Term Used in the Report</u>				
<i>n</i> =	8	5	7	20
<u>Rank Number of</u>	<u>MUNI Group</u>	<u>IOUPA Group</u>	<u>IOU Group</u>	<u>ALLCOS</u>
1	Favorable	Favorable	Favorable	Favorable
2	Favorable	Neutral	Favorable	Favorable
3	Neutral	Neutral	Neutral	Favorable
4	Neutral	Neutral	Neutral	Favorable
5	Neutral	Unfavorably	Neutral	Favorable
6	Neutral	Outside	Unfavorably	Favorable
7	Unfavorably		Unfavorably	Neutral
8	Unfavorably		Outside	Neutral
9	Outside			Neutral
10				Neutral
11				Neutral
12				Neutral
13				Neutral
14				Neutral
15				Unfavorably
16				Unfavorably
17				Unfavorably
18				Unfavorably
19				Unfavorably
20				Unfavorably
21				Outside

1  
2

**Table 4**

1 **Q. PLEASE DESCRIBE THE RESULTS OF THE LEVERAGE & RISK**  
2 **BENCHMARK METRICS SHOWN ON SCHEDULE 4.**

3 A. I used six benchmark metrics to assess Leverage & Risk (Schedule 4, pages 1 through 6).

4 The Debt/Capitalization<sup>41</sup> (page 1) - PGW's metric trended downward (improved)  
5 during the entire study period. Debt/Capitalization is the most common measure of  
6 leverage. PGW's Debt/Capitalization metric ranged from a low of 59% to a high of 84%  
7 from 2019 to 2023, averaged 71% during this period, and was 59% in 2023. The MUNI  
8 Group's average metric ranged from a low of 43% to a high of 53% from 2019 to 2023,  
9 averaged 47% during this period, and was 43% in 2023. The IOUPA Group's metric was  
10 45% in 2023 and also averaged 45% from 2019 to 2023, while the IOU Group's metric  
11 was 44% in 2023 and also averaged 44% from 2019 to 2023.

12 PGW's metric was positioned unfavorably relative to the five-year average and for  
13 2023 when compared to the Peer Groups. The Debt/Capitalization metric has been similar  
14 for the MUNIs compared to the IOUPA Group's and IOU Group's metric after 2020.

15

---

<sup>41</sup> Where "Debt/Capitalization" is total debt divided by total capital, and total capital is the sum of total debt and equity capital.

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Figure 2

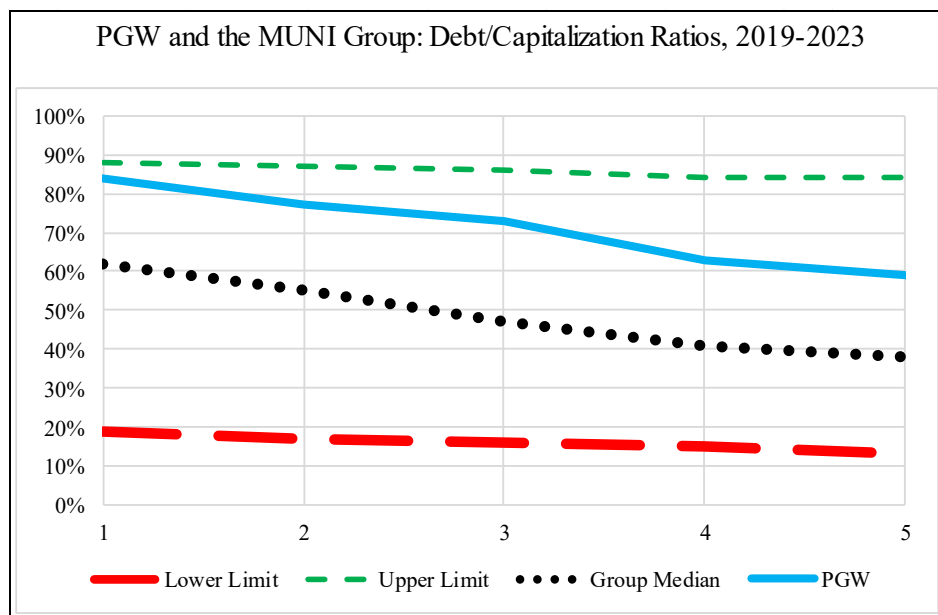


Figure 2 shows a comparison between PGW’s metric and the MUNI Group’s metric. As shown, PGW’s metric has been within the upper range of the MUNI Group’s metric since 2019 and trended in a similar direction.

The Operating Margin<sup>42</sup> (page 2) - PGW’s metric trended upward (improved) through 2022 before falling in 2023. A higher Operating Margin indicates more cash flow produced by revenues and hence, a lower risk profile. PGW’s metric was positioned neutral relative to the five-year average and 2023 when compared to all Peer Groups.

<sup>42</sup> Where “Operating Margin” is operating income divided by operating revenues minus purchased gas/power expense.

Figure 3

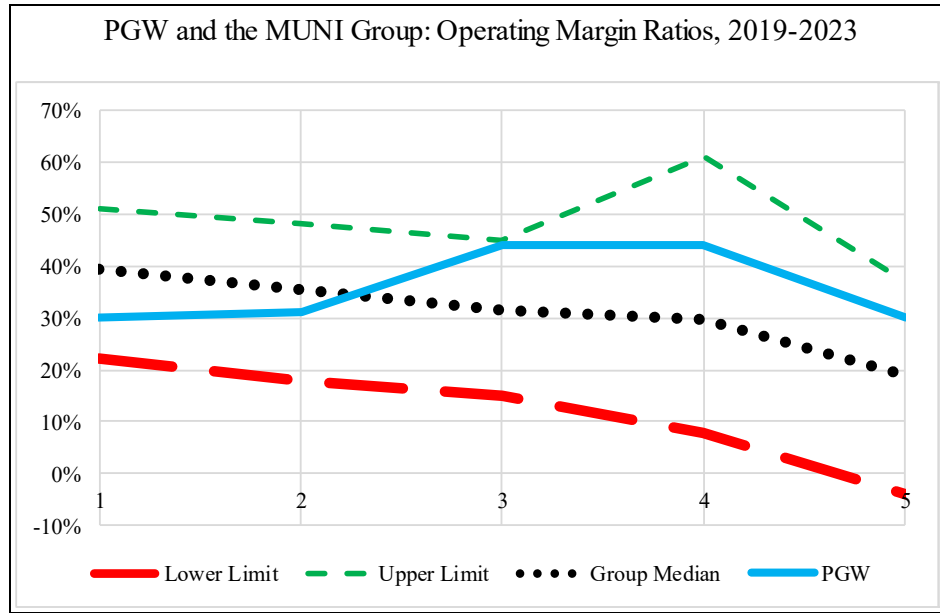


Figure 3 shows a comparison between PGW’s metric and the MUNI Group’s metric. As shown, PGW’s metric has generally been within the range of the MUNI Group’s metric and has trended in a similar direction.

The Debt Service/Cash OpEx<sup>43</sup> (page 3) - PGW’s metric trended slightly upwards (negative) through 2021 before decreasing in 2022 while the Peer Groups’ metric trend was generally flat. PGW’s metric has been above the MUNI Group’s, the IOU Group’s and the IOUPA Group’s median metric.<sup>44</sup> PGW’s metric was positioned unfavorably to the Peer Groups’ five-year average and for 2023.

<sup>43</sup> Where “Debt Service/Cash OpEx” is the sum of principal paid on long-term debt plus interest, divided by Cash OpEx. Also where debt service is the sum of principal paid on long-term debt and interest, and where Cash OpEx is operating expenses minus the sum of depreciation and amortization expenses.

<sup>44</sup> Debt repayment was not reported for the IOUPA Group in their annual reports filed with the PUC (source of information).

Figure 4

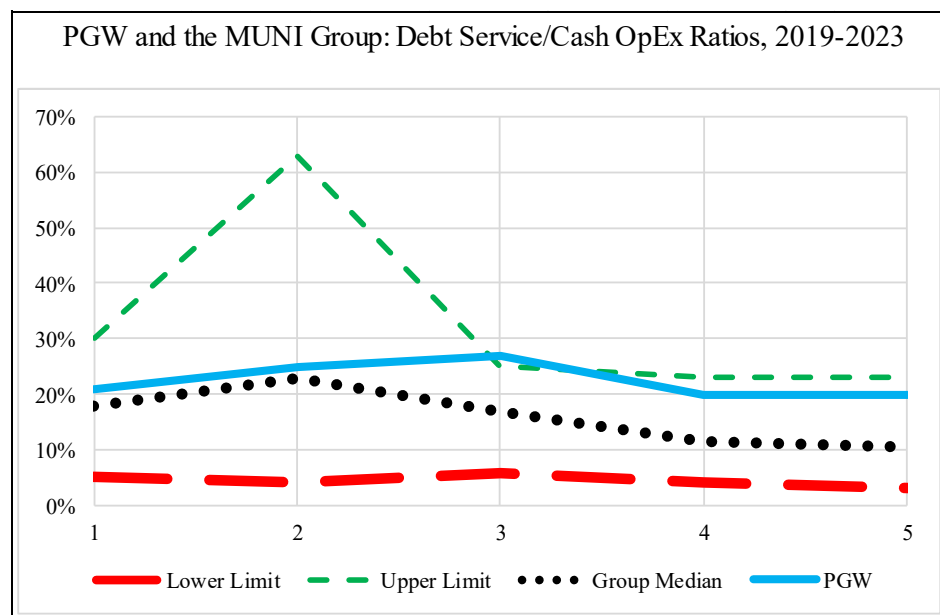


Figure 4 shows a comparison between PGW’s metric and the MUNI Group’s metric. As shown, PGW’s metric has generally been within the range of the MUNI Group’s metric and has trended in a similar direction.

The Debt/Customer<sup>45</sup> (page 4) - PGW’s metric trended slightly down over the five-year period as did the Peer Groups’ metric. PGW’s metric has generally been higher than the MUNI Group’s and the IOUPA Group’s metric, and similar to the IOU Group’s metric. PGW’s metric was positioned neutral relative to both the five-year average and for 2023 when compared to all Peer Groups.

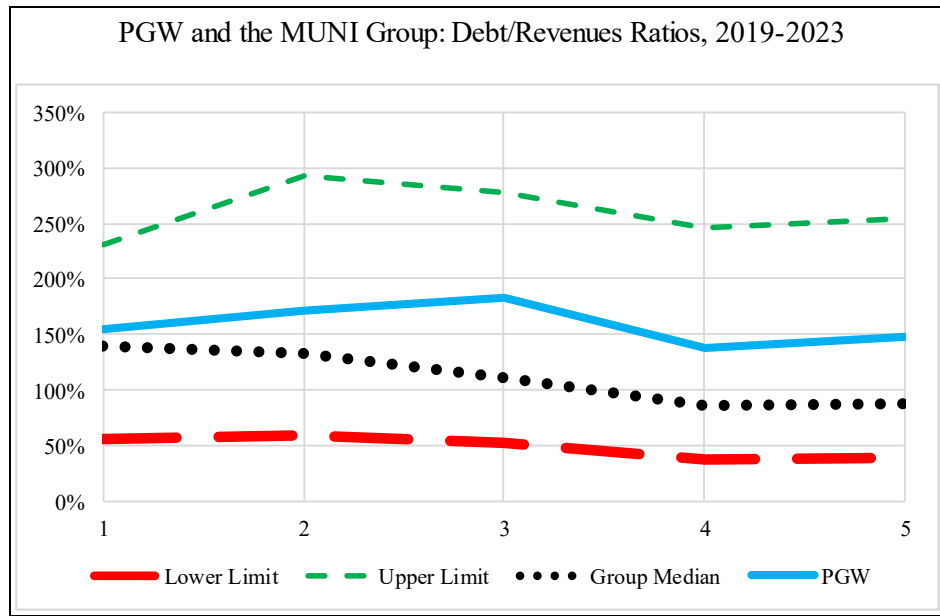
The Debt/Revenues<sup>46</sup> (page 5) - PGW’s metric trended up through 2021 and then trended down to 2023. PGW’s metric has generally been higher than the MUNI Group’s,

<sup>45</sup> Where “Debt/Customer” is total debt divided by the number of gas customers.

<sup>46</sup> Where “Debt/Revenues” is total debt divided by operating revenues.

1 the IOUPA Group’s and the IOU Group’s metric.<sup>47</sup> PGW’s metric was positioned  
 2 unfavorably relative to the five-year average and neutral for 2023 when compared to the  
 3 Peer Groups.

4 **Figure 5**



14 Figure 5 shows a comparison between PGW’s metric and the MUNI Group’s  
 15 metric. As shown, PGW’s metric has generally been within the upper range of the MUNI  
 16 Group’s metric and has trended in a similar direction.

17 The Debt/Equity<sup>48</sup> (page 6) - PGW’s metric trended downward (improved) over  
 18 the five-year period ended 2023. PGW’s metric was positioned unfavorably compared to  
 19 the Peer Groups’ five-year average and 2023. The Debt/Equity metric was higher for  
 20 MUNIs compared to IOUs.

<sup>47</sup> The balance sheet for PECO Gas (IOUPA Group) is reported on a consolidated basis while their other financial statements are reported for gas operation only. Therefore, the metrics which include variables from the balance sheet and other financial statements have been excluded.

<sup>48</sup> Where “Debt/Equity” is total debt divided by fund equity (e.g., common equity).



1 Overall, PGW's Leverage & Risk metrics trended similar to the Peer Groups'  
2 metrics and were positioned neutral to unfavorably relative to both the five-year average  
3 and for 2023 when compared to all Peer Groups.

4 **Q. PLEASE DESCRIBE THE RESULTS OF THE LIQUIDITY BENCHMARK**  
5 **METRICS SHOWN ON SCHEDULE 4.**

6 A. I used three benchmark metrics to assess Liquidity (Schedule 4, pages 7 through 9).

7 The EBITDA/Revenues<sup>49</sup> (page 7) - PGW's metric trended upward (improved)  
8 through 2021 before trending downward to 2023. A higher EBITDA/Revenues indicates  
9 more cash flow produced by revenues available to service capital and hence, a lower risk  
10 profile. PGW's metric has trended similar to the MUNI Group's metrics. PGW's metric  
11 was positioned neutral relative to the five-year average and favorably for 2023 relative to  
12 the MUNI Group's, unfavorably relative to the IOUPA Group's five-year average but  
13 positioned neutral for 2023, and positioned outside relative to the IOU Group's five-year  
14 average and for 2023.

15 The FFO/CapEx<sup>50</sup> (page 8) - PGW's metric trended upward (improved) through  
16 2022 but dropped substantially in 2023. A higher FFO/CapEx indicates more cash flow  
17 available to finance construction and hence, a lower risk profile. PGW's metric has been  
18 similar to the MUNI Group's but more than the IOUPA Group's metric and IOU Group's  
19 metric for the five-years ended 2023.<sup>51</sup> PGW's metric was positioned neutral relative to

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<sup>49</sup> Where "EBITDA/Revenues" is operating income plus depreciation and amortization expenses, divided by operating revenues. Also where EBITDA, or Earnings Before Interest, Taxes, Depreciation, and Amortization, is operating income plus depreciation and amortization expenses.

<sup>50</sup> Where "FFO/CapEx" is net income plus depreciation and amortization expenses, divided by capital expenditures. Also, where FFO, or Funds From Operations, is net income plus depreciation and amortization expenses, and where CapEx, or Cap "X," is capital expenditures.

<sup>51</sup> The IOUPA Group's and IOU Group's FFO metric's do not include deferred taxes for comparison purposes. Had deferred taxes been included, their FFO would be higher.

1 the five-year average and 2023 relative to the MUNI Group's and positioned neutral to  
2 favorably relative to both the IOUPA Group's metric and the IOU Group's metric.

3 The Days Cash<sup>52</sup> (page 9) - PGW's metric generally trended upwards (improved)  
4 through 2021 before dropping substantially in 2022. A higher Days Cash indicates more  
5 cash available to pay for operating expenses, hence a lower risk profile. PGW's metric  
6 has been lower than the MUNI Group's metric.<sup>53</sup> PGW's Days Cash metric ranged from  
7 a low of 84 days to a high of 163 days from 2019 to 2023, averaged 121 days during this  
8 period, was 105 days in 2023 and fell to 91 days in 2024. The MUNI Group's Days Cash  
9 metric ranged from a low of 166 days to a high of 248 days from 2019 to 2023, averaged  
10 210 days during this period, and was 166 days in 2023. The IOUPA Group's metric was  
11 86 days in 2023 and averaged 79 days from 2019 to 2023, while the IOU Group's metric  
12 was 6 days in 2023 and averaged 4 days from 2019 to 2023. The Days Cash metric is not  
13 a useful metric to compare MUNIs and IOUs since IOUs usually have unique arrangements  
14 which allows them to access cash through cash pooling of affiliated companies that is not  
15 available for MUNIs. PGW's metric relative to the MUNI Group's metric was positioned  
16 neutral for the five-year average and for 2023.

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<sup>52</sup> Where "Days Cash" is cash and cash equivalents divided by the quotient of the sum of operating expenses minus depreciation and amortization expenses divided by 365.

<sup>53</sup> As noted previously, PGW's fiscal year ends in August when cash needs are at their lowest compared to their cash needs during the heating season. Accordingly, PGW's August cash balance is rapidly "spent down" during the winter months.

Figure 6

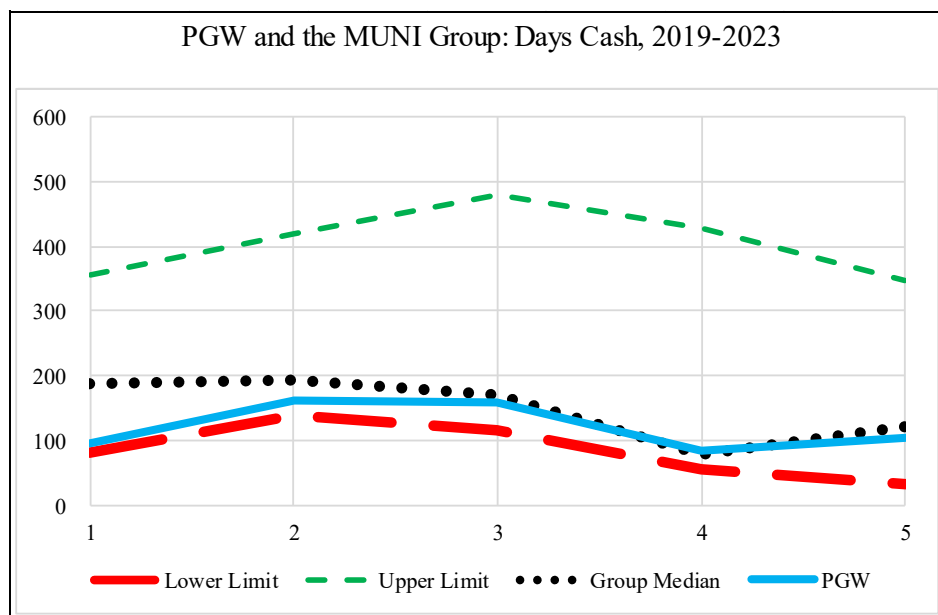


Figure 6 displays a comparison between PGW's metric and the MUNI Group's metric. As shown, PGW's metric has generally been in the lower portion of the range of the MUNI Group's metric and trended in a similar direction.

Overall, PGW's Liquidity metrics trended similar to the Peer Groups' metrics and were positioned neutral relative to both the five-year average and for 2023 when compared to all Peer Groups.

**Q. PLEASE DESCRIBE THE RESULTS OF THE SOLVENCY BENCHMARK METRICS SHOWN ON SCHEDULE 4.**

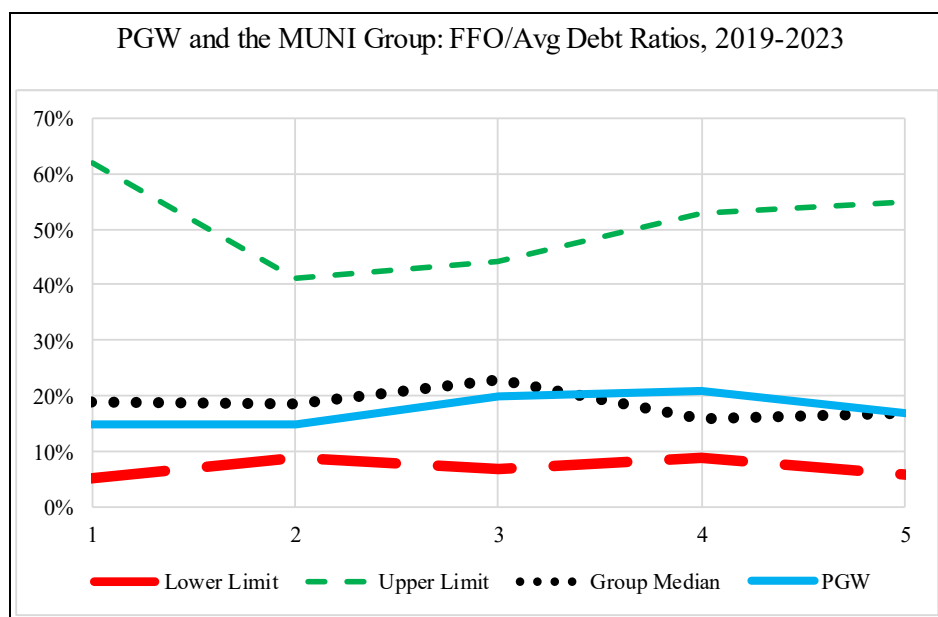
A. I used five benchmark metrics to assess Solvency (Schedule 4, pages 10 through 14).

The FFO/Avg Debt<sup>54</sup> (page 10) - PGW's metric trended upward (improved) through 2022 before dropping in 2023. A higher FFO/Avg Debt indicates more cash flow available to service debt and hence, a lower risk profile. PGW's metric has been lower

<sup>54</sup> Where "FFO/Avg Debt" is net income plus depreciation and amortization expenses, divided by average total debt. Also where FFO, or Funds From Operations, is net income plus depreciation and amortization expenses.

1 than all Peer Groups' metric. PGW's metric relative to the Peer Groups' metric was  
 2 positioned neutral for the five-year average and for 2023.

3 **Figure 7**



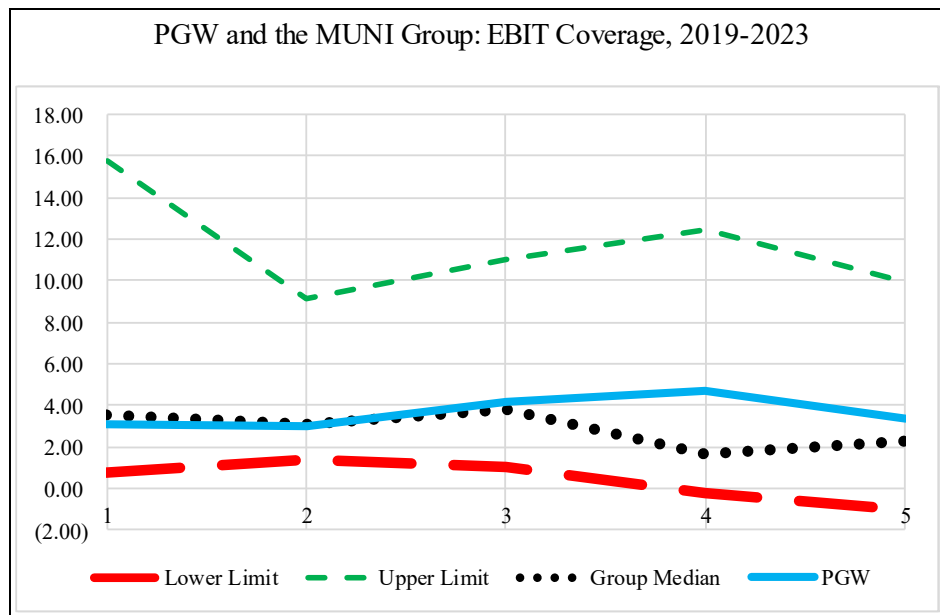
13 Figure 7 shows a comparison between PGW's metric and the MUNI Group's  
 14 metric. As shown, PGW's metric has generally been within the lower portion of the range  
 15 of the MUNI Group's metric and trended in a similar direction.

16 The FFO Coverage<sup>55</sup> (page 11) - PGW's metric generally trended upward  
 17 (improved) through 2023. A higher FFO Coverage indicates more cash flow available to  
 18 pay interest and hence, a lower risk profile. PGW's metric has been lower than all Peer  
 19 Groups' metric. PGW's metric was positioned neutral relative to the Peer Groups' five-  
 20 year average and for 2023.

<sup>55</sup> Where "FFO Coverage" is net income plus depreciation and amortization expenses plus interest, divided by interest. Also where FFO, or Funds From Operations, is net income plus depreciation and amortization expenses.

1 The EBIT Coverage<sup>56</sup> (page 12) - PGW's metric trended upward (improved)  
 2 through 2023. A higher EBIT Coverage indicates the ability of a company to pay the  
 3 interest on its outstanding debt with pre-tax dollars and therefore, is a lower risk profile.  
 4 PGW's metric has been similar to the MUNI Group's metric but lower than the IOUPA  
 5 and the IOU Group's metric. However, since both the IOUPA Group and the IOU Group  
 6 pay income taxes, their metrics should be higher than MUNIs. PGW's metric was  
 7 positioned neutral relative to the MUNI Group's metric for the five-year average and for  
 8 2023 and was positioned unfavorably relative to the IOUPA Group's and IOU Group's  
 9 metric for the five-year average and for 2023.

Figure 8



20 Figure 8 shows a comparison between PGW's metric and the MUNI Group's  
 21 metric. As revealed, PGW's metric has generally been within the middle portion of the  
 22 range of the MUNI Group's metric and trended in a similar direction.

<sup>56</sup> Where "EBIT Coverage" is net income plus interest plus income taxes, all divided by interest. Also, where EBIT, or Earnings Before Interest and Taxes, is the sum of net income, interest and income taxes.

1           The Interest-Only Debt Service Coverage<sup>57</sup> (page 13) - PGW's metric trended  
2 upwards (strengthened) over the five-year period. A higher Interest-Only Debt Service  
3 Coverage indicates the ability to pay the interest on its outstanding debt and consequently,  
4 is a lower risk profile. PGW's metric has been lower than all Peer Groups' metric.  
5 PGW's metric was generally positioned unfavorably relative to the Peer Groups' metric  
6 for the five-year average and neutral for 2023.

7           The Debt Service Coverage (P & I)<sup>58</sup> (page 14) - PGW's metric trended upwards  
8 (improved) over the five-year period. A higher Debt Service Coverage (P & I) indicates  
9 the ability to service or pay the interest and principal on outstanding debt and accordingly,  
10 is a lower risk profile. PGW's metric has generally been lower than all Peer Groups'  
11 metric. PGW's Debt Service Coverage (P & I) metric ranged from a low of 2.08-times to  
12 a high of 3.13-times from 2019 to 2023, averaged 2.51-times during this period, was 2.32-  
13 times in 2023, and dropped to 2.20-times in 2024. The MUNI Group's metric ranged from  
14 a low of 3.00-times to a high of 3.84-times from 2019 to 2023, averaged 3.49-times during  
15 this period, and was 3.00-times in 2023. The IOU Group's metric was 11.66-times in  
16 2023 and averaged 7.14-times from 2019 to 2023.<sup>59</sup>

17           PGW's metric was positioned neutral for 2023 relative to the MUNI Group's metric  
18 and unfavorably compared with the IOU Group's metric. PGW's metric was positioned  
19 unfavorably relative to all Peer Groups for the five-year average but neutral for 2023.  
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<sup>57</sup> Where "Interest-Only Debt Service Coverage" is operating income plus depreciation and amortization expenses, divided by interest.

<sup>58</sup> Where "Debt Service Coverage (P & I)" is operating income plus depreciation and amortization expenses, divided by the sum of principal paid on long-term debt plus interest. Also where debt service is the sum of principal paid on long-term debt and interest.

<sup>59</sup> Debt repayment was not reported for the IOUPA Group in their annual reports filed with the PUC (source of information) and therefore, this metric is not shown for the IOUPA Group.

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Figure 9

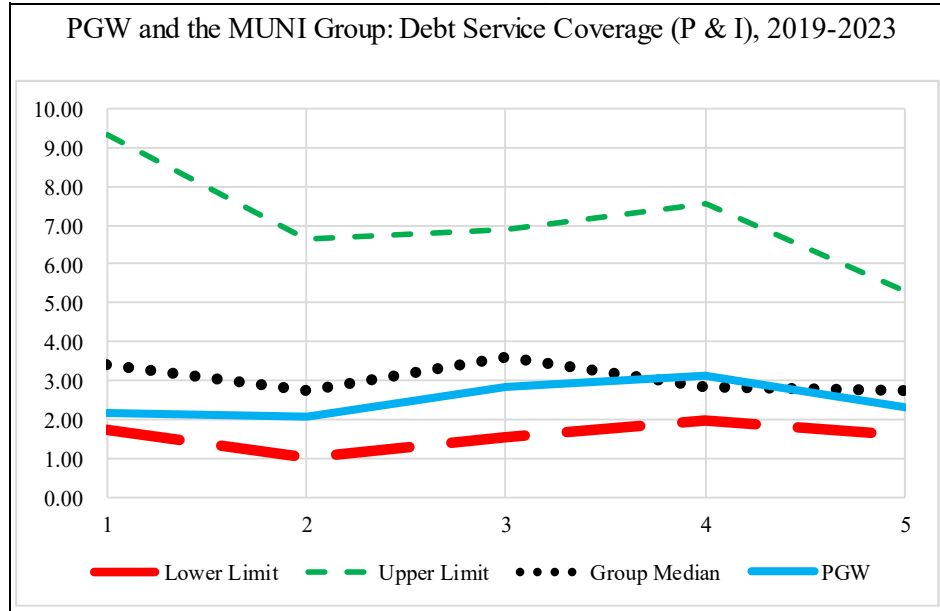


Figure 9 displays a comparison between PGW’s metric and the MUNI Group’s metric. As shown, PGW’s metric has improved and trended around the central range of the MUNI Group’s metric.

Overall, PGW’s Solvency metrics trended upwards, similar to the Peer Groups’ metrics trend. PGW’s Solvency metrics were generally positioned unfavorably to neutral relative to both the five-year average and for 2023 when compared to all Peer Groups.

**Q. WERE THE DEBT SERVICE COVERAGES YOU JUST DISCUSSED CALCULATED CONSISTENT WITH EACH ENTITY’S BOND ORDINANCE?**

A. No. Each entity’s bond ordinance is unique to a particular bond or seniority of bond. The debt service coverage ratios shown on Schedule 4 are generic measures of aggregated debt service coverage. Schedule 5 shows a comparison between the benchmark ratios (Schedule 4) and bond ordinance debt service coverages reported by PGW and the MUNI

1 Group. As shown on Schedule 5, PGW's bond ordinance debt service coverages are about  
2 5% higher than the aggregate debt service coverage shown on Schedule 4.

3 **Q. PLEASE DESCRIBE THE RESULTS OF THE EFFICIENCY BENCHMARK**  
4 **METRICS SHOWN ON SCHEDULE 4.**

5 A. I used eight benchmark metrics to assess Efficiency (Schedule 4, pages 15 through 22).

6 The CapEx/DA<sup>60</sup> (page 15) - PGW's metric trended down (improved) slightly over  
7 the five-year period. A higher CapEx/DA indicates the need for more external financing,  
8 and consequently, is a higher risk profile. PGW's metric has been higher than the MUNI  
9 Group's metric but lower than the IOUPA Group's and IOU Group's metrics. PGW's  
10 metric was positioned unfavorably relative to the MUNI Group's for the five-year average  
11 and for 2023. PGW's metric was positioned favorably relative to the IOUPA Group's for  
12 the five-year average and for 2023 but was positioned neutral relative to the IOU Group's  
13 for the five-year average and for 2023.

14 The Net Plant/Gross Plant<sup>61</sup> (page 16) – PGW's metric's trend was flat across the  
15 time period as was the Peer Groups' trend. A higher Net Plant/Gross Plant indicates the  
16 age of assets and the need for less capital expenditures, and consequently, is a lower risk  
17 profile. PGW's metric has been similar to the MUNI Group's metric and lower than the  
18 IOUPA Group's and IOU Group's metrics. PGW's metric was positioned neutral relative  
19 to the MUNI Group's for the five-year average and favorably for 2023. PGW's metric  
20 was generally positioned outside (unfavorably) compared with both the IOUPA Group's  
21 and IOU Group's metrics for the five-year average and for 2023.

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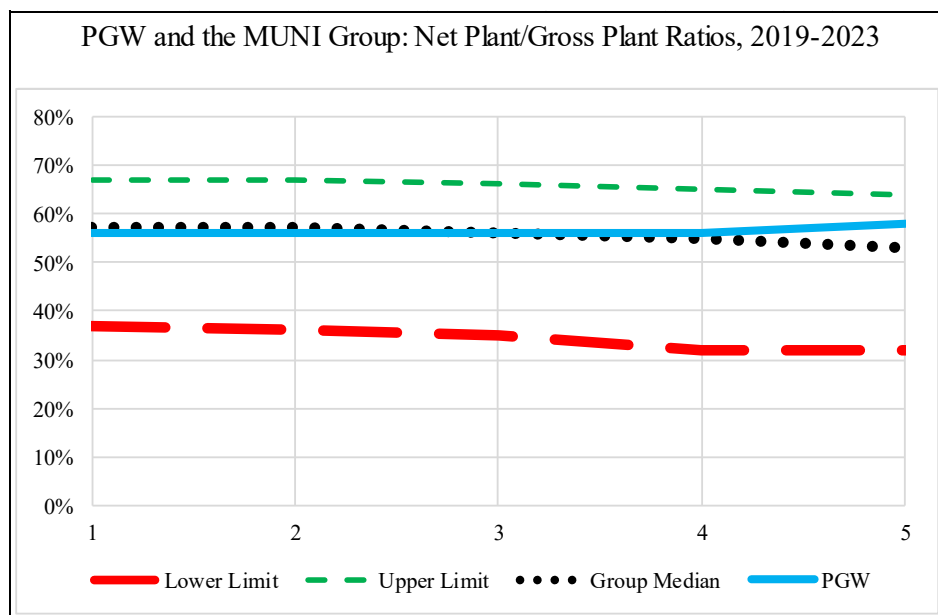
<sup>60</sup> Where "CapEx/DA" is capital expenditures divided by depreciation and amortization expenses. Also, where CapEx, or Cap "X", is capital expenditures, and where DA is the sum of depreciation and amortization expenses.

<sup>61</sup> Where "Net Plant/Gross Plant" is net plant divided by gross plant.



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**Figure 10**



11 Figure 10 shows a comparison between PGW’s metric and the MUNI Group’s  
12 metric. As shown, PGW’s metric has generally been in the middle range of the MUNI  
13 Group’s metric.

14 The CapEx/Net Plant<sup>62</sup> (page 17) – PGW’s metric’s trend was flat across the time  
15 period. A higher CapEx/Net Plant indicates the reinvestment rate of plant and the possible  
16 need for more external financing; and consequently, is a higher risk profile. PGW’s metric  
17 has been about the same as the MUNI Group’s metric but less than the IOUPA Group’s  
18 and IOU Group’s metrics.<sup>63</sup> PGW’s metric was positioned neutral relative to the MUNI  
19 Group’s for the five-year average and for 2023. PGW’s metric was generally positioned

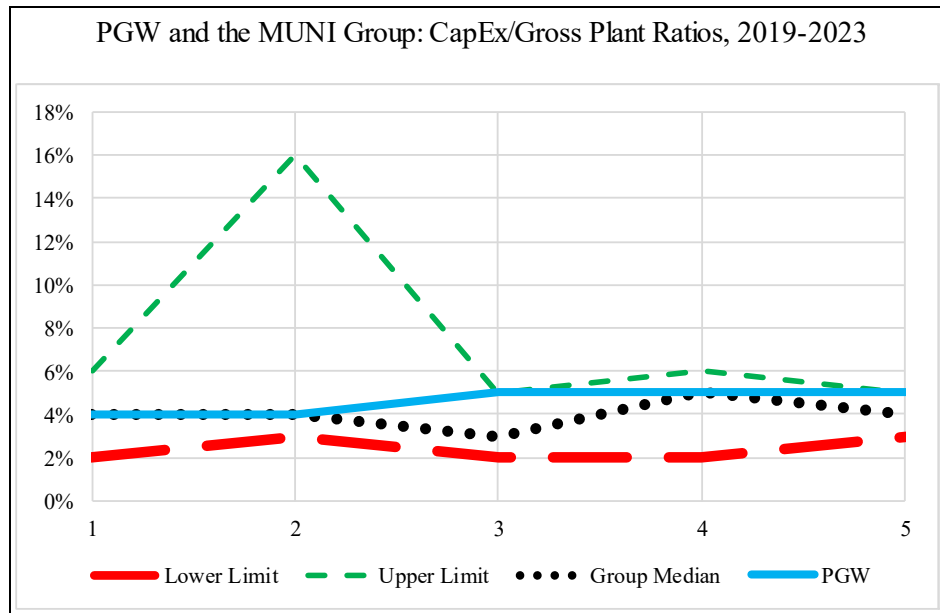
<sup>62</sup> Where “CapEx/Net Plant” is capital expenditures divided by net plant. Also, where CapEx, or Cap “X,” is capital expenditures.

<sup>63</sup> The balance sheet for PECO Gas (IOUPA Group) is reported on a consolidated basis while their other financial statements are reported for gas operation only. Therefore, the metrics which include variables from the balance sheet and other financial statements have been excluded.

1 favorably compared with the IOUPA Group’s the IOU Group’s metrics for the five-year  
 2 average and for 2023.

3 The CapEx/Gross Plant<sup>64</sup> (page 18) – PGW’s metric’s trend was flat across the  
 4 time period as was the Peer Groups’ trend. A higher CapEx/Gross Plant indicates the  
 5 reinvestment rate of plant and the possible need for more external financing; and therefore,  
 6 is a higher risk profile. PGW’s metric has been about the same as the MUNI Group’s  
 7 metric but less than the IOUPA Group’s and IOU Group’s metrics.<sup>65</sup> PGW’s metric was  
 8 positioned neutral relative to the MUNI Group’s, and neutral compared with both the  
 9 IOUPA Group’s and the IOU Group’s metrics for the five-year average and for 2023.

10 **Figure 11**



<sup>64</sup> Where “CapEx/Gross Plant” is capital expenditures divided by gross plant. Also where CapEx, or Cap “X,” is capital expenditures.

<sup>65</sup> The balance sheet for PECO Gas (IOUPA Group) is reported on a consolidated basis while their other financial statements are reported for gas operation only. Therefore, the metrics which include variables from the balance sheet and other financial statements have been excluded.

1           Figure 11 shows a comparison between PGW’s metric and the MUNI Group’s  
2           metric. As shown, PGW’s metric has generally been in the middle range of the MUNI  
3           Group’s metric.

4           The CapEx/Capitalization<sup>66</sup> (page 19) - PGW’s metric trended flat across the five-  
5           year period. A higher CapEx/Capitalization indicates the turnover rate of investor  
6           provided capital and the possible need for more external financing; and accordingly, is a  
7           higher risk profile. PGW’s metric has been higher than the MUNI Group’s metric but  
8           lower than both the IOUPA Group’s and IOU Group’s metrics.<sup>67</sup> PGW’s metric was  
9           positioned outside (unfavorably) relative to the MUNI Group’s metrics, and favorably  
10          compared with the IOUPA Group’s five-year average and neutral for 2023, and neutral  
11          relative to the IOU Group’s metrics for the five-year average and for 2023.

12          The Net Plant/Capitalization<sup>68</sup> (page 20) - PGW’s metric trended down  
13          (diminished) over the five-year period. A higher Net Plant/Capitalization indicates the  
14          efficiency with which capital is raised and then invested, and therefore, is a lower risk  
15          profile. PGW’s metric has been higher than the MUNI Group’s metric but lower than the  
16          IOUPA Group’s and the IOU Group’s metrics. PGW’s metric was positioned favorably  
17          relative to the MUNI Group’s, unfavorably for the five-year average compared with the  
18          IOUPA Group’s, and neutral to the IOU Group’s metrics for the five-year average and for  
19          2023.

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<sup>66</sup> Where “CapEx/Capitalization” is capital expenditures divided by total capital (sum of total debt and equity capital). Also where CapEx, or Cap “X,” is capital expenditures.

<sup>67</sup> The balance sheet for PECO Gas (IOUPA Group) is reported on a consolidated basis while their other financial statements are reported for gas operation only. Therefore, the metrics which include variables from the balance sheet and other financial statements have been excluded.

<sup>68</sup> Where “Net Plant/Capitalization” is net plant divided by total capital (i.e., sum of total debt and equity capital).

Figure 12

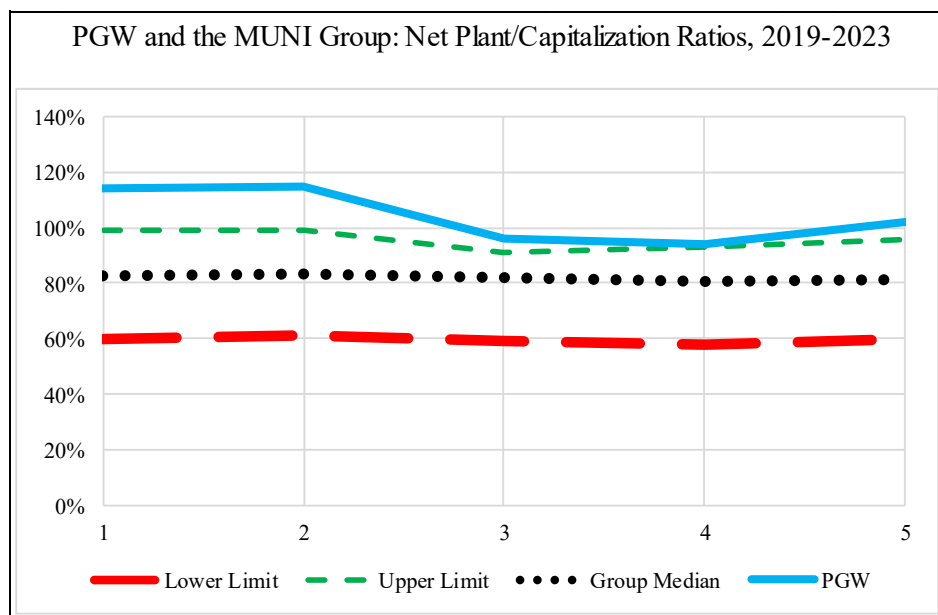


Figure 12 shows a comparison between PGW’s metric and the MUNI Group’s metric. As shown, PGW’s metric has been above the range of the MUNI Group’s metric for most years.

The Gas Revenue/MCF<sup>69</sup> (page 21) - PGW’s metric’s trend was upwards across the time period as was the MUNI Group’s trend. A higher Gas Revenue/MCF invites possible load loss; and therefore, is a higher risk profile. However, this metric is impacted by customer mix (% residential) and the volume (MCF) of transport only customers. PGW’s metric has been higher than the Peer Groups’ metric. The Peer Groups’ lower percentage of residential sendout impacts this metric. PGW’s metric was positioned neutral relative to the MUNI Group’s metrics, neutral to favorably relative to the IOUPA Group’s metrics, and neutral compared to the IOU Group’s for the five-year average and for 2023.

<sup>69</sup> Where “Gas Revenue/MCF” is total gas revenues divided by total gas (volumes) throughput.

The Non-Commodity Revenue/Revenue<sup>70</sup> (page 22) – PGW’s metric trended downwards (weakened) over the five-year period. A higher Non-Commodity Revenue/Revenue measures efficiency; and therefore, is a lower risk profile. However, this metric may be impacted by commodity (gas) prices. PGW’s metric has been higher than the Peer Groups’ metric. PGW’s metric was positioned favorably relative to the MUNI Group’s metrics, neutral to unfavorably relative to the IOUPA Group’s metrics, and favorably to neutral compared to the IOU Group’s for the five-year average and for 2023.

Figure 13

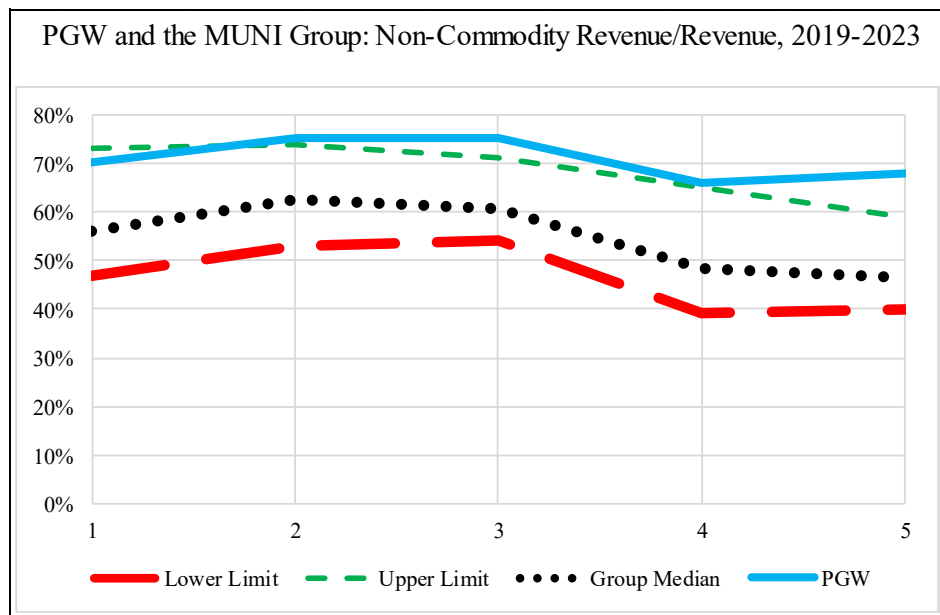


Figure 13 shows a comparison between PGW’s metric and the MUNI Group’s metric. As shown, PGW’s metric has generally been above or in the upper range of the MUNI Group’s metric.

<sup>70</sup> Where “Non-Commodity Revenue/Revenue” is operating revenues minus purchased gas/power expenses, divided by operating revenues. Also where Non-Commodity Revenue is operating revenues minus purchased gas/power expenses.

1 Overall, PGW's Efficiency metrics trended in a similar direction as the Peer  
 2 Groups' metrics. PGW's Efficiency metrics were generally positioned neutral to relative  
 3 to both the five-year average and for 2023 when compared to all Peer Groups.

4 Based upon all the benchmark metrics (Schedule 4) reviewed, coupled with my  
 5 review of PGW's operating requirements, I conclude that PGW's financial and operating  
 6 results were positioned neutral to unfavorably when compared to the Peer Groups' metrics.  
 7 Given the difference between PGW and the Peer Groups' credit quality (Schedule 2), I  
 8 believe the benchmark metrics support the need for additional rate support.

9 **RECOMMENDED BENCHMARK METRICS**

10 **Q. EARLIER IN YOUR TESTIMONY YOU SAID, "THE THREE MOST**  
 11 **IMPORTANT METRICS THE MAJOR RATING AGENCIES USE FOR**  
 12 **EVALUATING MUNI DEBT INCLUDE DEBT TO TOTAL CAPITALIZATION**  
 13 **RATIOS, DEBT SERVICE COVERAGE, AND DAYS CASH." WHAT ARE THE**  
 14 **BENCHMARK METRICS YOU RECOMMEND FOR PGW?**

15 A. I recommend PGW decrease their debt to total capitalization<sup>71</sup> ratio to achieve no more  
 16 than a 55% debt to total capitalization ratio, with a goal of reaching and maintaining at  
 17 most a 50% ratio. I also recommend PGW increase their days cash<sup>72</sup> ratio to a range of  
 18 120 days to 140 days. Finally, I recommend a 2.40-times debt service coverage<sup>73</sup> for  
 19 PGW. My recommendations are not absolute because I understand that each  
 20 recommended ratio may not be specifically compatible with another given PGW's financial

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<sup>71</sup> Where "Debt/Capitalization" is total debt divided by total capital, and where total capital is the sum of total debt and equity capital.

<sup>72</sup> Where "Days Cash" is cash and cash equivalents divided by the quotient of the sum of operating expenses minus depreciation and amortization expenses divided by 365.

<sup>73</sup> Where "Debt Service Coverage" is operating income plus depreciation and amortization expenses, divided by the sum of principal paid on long-term debt plus interest. Debt service is the sum of principal paid on long-term debt and interest.

1 requirements and PGW's concern with their impact on customer rates. However, my  
2 recommendations are what I believe PGW should achieve based on the metrics achieved  
3 by similar risk enterprises.

4 **Q. HOW DID YOU DETERMINE YOUR RECOMMENDED DEBT TO TOTAL**  
5 **CAPITALIZATION RATIO, DEBT SERVICE COVERAGE, AND DAYS CASH**  
6 **FOR PGW?**

7 A. To determine the recommended debt to total capitalization ratio, debt service coverage, and  
8 days cash for PGW, I used the recent 2-year and 3-year averages achieved by the MUNI  
9 Group after adjusting for credit rating differences. The recent 2-year and 3-year averages  
10 achieved by the MUNI Group, shown on page 1 of Schedule 6, encompass the years 2022  
11 to 2023 and 2021 to 2023, respectively. To check my recommendations, I reviewed  
12 S&P's published metrics of MUNI LDCs that have credit profiles similar to PGW's credit  
13 profile.<sup>74</sup> The S&P published metrics, shown on page 2 of Schedule 6, cover the years  
14 2021 to 2023.

15 The MUNI Group's Debt/Capitalization metric averaged 45% over 2021 to 2023  
16 and averaged 44% over 2022 to 2023 (Schedule 6, page 1).<sup>75</sup> After considering credit  
17 rating differences, and considering the impact on customers' rates, I recommend PGW  
18 decrease their Debt/Capitalization metric to achieve no more than a 55%  
19 Debt/Capitalization metric, with a goal of reaching and maintaining at most a 50% ratio.  
20 My recommendation is shown to be moderate when it is compared to S&P's actual 2022

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<sup>74</sup> See: *S&P Global Ratings*, "U.S. Not-For-Profit Natural Gas Utilities Medians Remained Stable In 2022 Amid Substantial Rise In Natural Gas Costs," November 9, 2023; and *S&P Global Ratings*, "U.S. Rated Not-For-Profit Retail Electric And Natural Gas Utilities; Sector Update And 2023 Medians," December 9, 2024.

<sup>75</sup> See Schedule 4 page 1 where similar averages of 45% and 44%, respectively, can be determined for the IOUPA Group and the IOU Group over the same period.

1 Debt/Capitalization metric of 30% shown for MUNI LDCs that have credit profiles which  
2 range from A- to A+ (Schedule 6, page 2).

3 The MUNI Group’s Days Cash metric averaged 197 days over 2021 to 2023 and  
4 averaged 172 days over 2022 to 2023 (Schedule 6, page 1). After considering credit rating  
5 differences, and considering the impact on customers’ rates, I recommend PGW increase  
6 their Days Cash metric to a range of 120 days to 140 days, or about 70% of MUNI Group’s  
7 metric. My recommendation is shown to be equitable when it is compared to S&P’s actual  
8 2021 to 2023 average of 206 days and the 2022 to 2023 average of 170 days shown for  
9 MUNI LDCs that have credit profiles which range from A- to A+ (Schedule 6, page 2).

10 The MUNI Group’s Debt Service Coverage (P & I) metric averaged 3.48-times  
11 over 2021 to 2023 and averaged 3.38-times over 2022 to 2023 (Schedule 6, page 1). After  
12 considering credit rating differences, and considering the impact on customers’ rates, I  
13 recommend a 2.40-times Debt Service Coverage (P & I), or about 70% of MUNI Group’s  
14 metric for PGW. My recommendation is shown to be reasonable when it is compared to  
15 S&P’s actual 2021 to 2023 average Fixed Charge Coverage of 2.41-times and 2022 to 2023  
16 average of 2.37-times shown for MUNI LDCs that have credit profiles which range from  
17 A- to A+ (Schedule 6, page 2).<sup>76</sup>

18 My recommendations are based on “the **financial performance of similarly**  
19 **situated utility enterprises**” and “the level of financial performance needed to maintain  
20 or improve PGW’s bond rating thereby permitting PGW to access the capital markets at  
21 the lowest reasonable costs to customers over time.”<sup>77</sup>

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<sup>76</sup> S&P’s Fixed Charge Coverage is calculated as debt service coverage after transfers.

<sup>77</sup> Pennsylvania Public Utility Commission, “Application of PGW Cash Flow Ratemaking Method—Final Statement of Policy,” 52 Pa. Code § 69.2703, in Docket No. P-2009-2136508. (*Emphasis added.*)



1 **Q. IS THE RATE BASE RATE OF RETURN METHOD USED IN DETERMINING**  
 2 **THE RATES OF IOUS SIMILAR TO THE CASH FLOW METHOD USED IN**  
 3 **DETERMINING PGW RATES?**

4 A. No. The rate base rate of return methodology uses an asset-based equation where the  
 5 earnings levels are based upon the value of capital deployed,<sup>78</sup> whereas cash flow  
 6 regulation focuses on liabilities and is a debt service coverage-based ratemaking method.<sup>79</sup>  
 7 For PGW, their debt service coverage is not simply coverage of debt interest and debt  
 8 repayment because it must also exceed their bonds covenant's minimum 1.5-times debt  
 9 service coverage and provide funding for their other cash obligations including: City lease  
 10 payment; pension fund contributions that are not on the income statement; Distribution  
 11 System Improvement Charge (DSIC) related costs; Other Post-Employment Benefits  
 12 (OPEB) surcharges; funding for the portion of its capital improvements that is funded  
 13 through internally generated funds ("IGF");<sup>80</sup> and also must produce a reasonable amount  
 14 of working capital.

15 Under rate base rate of return regulation the phrase *useful life of the capital asset*  
 16 (i.e., value of capital deployed) is a cornerstone but is not applicable under cash flow  
 17 regulation because cash flow regulation focuses on liabilities (i.e., debt), not capital assets.

18 Capital assets may be essential in the provision of service under cash flow regulation, but

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<sup>78</sup> James H. Cawley and Norman J. Kennard, A Guide to Utility Ratemaking, Pennsylvania Public utility Commission, 2018, 155.

<sup>79</sup> See 52 Pa. Code § 69.2702(b), "The Commission is obligated under law to use the cash flow methodology to determine PGW's just and reasonable rates. Included in that requirement is the subsidiary obligation to provide revenue allowances from rates adequate to cover its reasonable and prudent operating expenses, depreciation allowances and debt service, as well as sufficient margins to meet bond coverage requirements and other internally generated funds over and above its bond coverage requirements, as the Commission deems appropriate and in the public interest for purposes such as capital improvements, retirement of debt and working capital."

<sup>80</sup> IGF is the same as FFO, or Funds From Operations, and is calculated as net income plus depreciation and amortization expenses.

1 capital assets play no part in the pricing of its service. The axiom *useful life of the capital*  
2 *asset* has practical meaning under rate base rate of return regulation but must be  
3 reconfigured to *life of the debt liability* to be relevant to cash flow regulation. The reason  
4 this distinction is important to understand is that PGW's average life of their debt liability  
5 was only 10.8 years at fiscal year-end 2024, which was far less than the useful life of their  
6 capital assets (depreciated at a composite life of 50 years).<sup>81</sup>

7 Consequently, PGW's debt is the lynchpin of their cash flow regulation because  
8 additional debt requires more debt service, more debt service requires additional dollars  
9 for debt service coverage, and more debt service also reduces the balance of cash and  
10 related Cash Days, just to maintain or improve PGW bond rating.<sup>82</sup> Accordingly, I believe  
11 it is paramount that PGW decrease their Debt/Capitalization metric to achieve no more  
12 than a 55% Debt/Capitalization metric, with a goal of reaching and maintaining at most a  
13 50% ratio.

14 PGW can reduce their Debt/Capitalization metric by using cash generated from  
15 rates (i.e., internally generated funds) to partially fund construction and capital  
16 improvements. PGW's policy of partially funding construction and capital improvements  
17 attempts to balance its capital structure by funding its annual capital spending from  
18 internally generated funds (approximately 50%) and long-term borrowing (approximately  
19 50%). This policy ultimately lowers the cost to customers as a result of PGW having the  
20 ability to finance at lower interest rates than otherwise would be the case.

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<sup>81</sup> See Schedule 7 for the determination of PGW's average life of their debt liability of 10.8 years.

<sup>82</sup> See 52 Pa. Code § 69.2703(a), "Level of financial performance **needed to maintain or improve PGW's bond rating** thereby permitting PGW to access the capital markets at the lowest reasonable costs to customers over time." (*Emphasis added*).

**RATE SUPPORT IMPACT ON BENCHMARK METRICS**

**Q. PREVIOUSLY WHEN DISCUSSING CREDIT RATINGS, YOU STATED, “I BELIEVE REGULATORY SUPPORT CAN PLAY A KEY ROLE IN PGW BEING ABLE TO PRESENT A BETTER CREDIT PROFILE RESULTING IN IMPROVED BOND RATINGS.” WHAT IS THE BASIS OF YOUR BELIEF?**

**A.** To begin, I previously discussed Table 2 (see page 22 *et seq.*), which showed that PGW’s bond rating improved following the 2020 rate case. To clarify, the regulatory support provided to PGW in the 2020 rate case did not in itself result in a bond rating increase. Rather, the regulatory support provided PGW the wherewithal, or the ability to present a better credit profile, which resulted in an improved bond rating from Fitch.

The major credit rating agencies review a number of metrics as part of their credit assessment. However, there are three key metrics which the major credit rating agencies give strong consideration to: Debt/Capitalization; Days Cash; and Debt Service Coverage (P & I).<sup>83</sup> Each metric measures a unique type of risk: Leverage & Risk (Debt/Capitalization); Liquidity (Days Cash); and Solvency (Debt Service Coverage (P & I)). Table 5 shows these three key metrics for PGW just prior to their last two rate cases and for the current rate case based upon the most recent financial information available when each rate case was filed (i.e. financial information for 2018, 2021 and 2024).<sup>84</sup> Table 5 also shows similar key metrics calculated for the FPFTY, with and without the requested rate increase granted.<sup>85</sup>

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<sup>83</sup> See page 51, footnotes 71-73, for the definitions of debt total capitalization ratios, debt service coverage, and Days Cash.

<sup>84</sup> All metrics shown in Tables 5 and 6 were calculated using the same methodologies used to calculate similar metrics shown on Schedule 4. Therefore, the metrics use “generic” formulas used for benchmarking that may vary from PGW’s covenant calculations and/or Schedules JFG-1 and JFG-2. PGW’s covenant calculations require specific information that was not available for all entities used in the benchmarking analysis.

<sup>85</sup> The financial information for the FPFTY period was taken from PGW’s Schedules JFG-1 and JFG-2.

	Historical			Projected	
	Aug-31 2018	Aug-31 2021	Aug-31 2024	FPFTY Aug-31 2026	FPFTY Aug-31 2026
Rate Increase Granted				\$0 MM	\$105 MM
Debt/Capitalization	91%	73%	56%	55%	53%
Days Cash	101	158	91	-32	36
Debt Service Coverage (P & I)	2.00	2.86	2.20	1.46	2.37

**Table 5**

When viewing the three key metrics shown in Table 5 it is important to understand the metrics are not isolated metrics, rather they work in tandem with one another so that the sum of their implications (risk) must offset one another if investment risk is to remain unchanged. For example, if the risk of Leverage is high, as is the case of PGW, then the risk measured for Liquidity and Solvency must offset Leverage's higher risk in order for the total risk (investment risk) to remain unchanged. It is also important to recall that PGW's three key metrics lag the Peer Groups' metrics as was discussed regarding Schedule 4 and two of PGW's three key metrics deteriorated further in 2024.

Table 5 shows PGW's three key metrics (investment risk) generally improved following the 2020 rate case, as did their Fitch credit rating (Table 2). Table 5 also shows PGW's three key metrics are projected to rapidly deteriorate without rate relief to levels below 2018 and 2021. Without sufficient rate relief, PGW's "net capital expenditure" program could get delayed as PGW balances approved rates with its financial needs and required metrics.<sup>86</sup> Conversely, with PGW's proposed rate increase, shown in the right-hand column of Table 5, PGW's three key metrics are projected to be healthier and suggest

<sup>86</sup> PGW's "net capital expenditure" program excludes DSIC related investment and cast iron pipe replacement.

1 a better risk profile or credit profile. I believe regulatory support can play a key role in  
2 PGW being able to present a better credit profile resulting in improved bond ratings and  
3 ultimately lowering cost to customers as a result of having ability to finance at lower  
4 interest rates than otherwise would be the case. Table 5 demonstrates the need for  
5 regulatory support in order for PGW to improve, or at least maintain, their credit profile.

6 **Q. HOW WOULD THE PROPOSED RATE INCREASE IMPACT PGW'S CREDIT**  
7 **PROFILE?**

8 A. Table 6 shows the three key metrics for PGW calculated for the historic test year ("HTY"),  
9 future test year ("FTY"), FPFTY. The three key metrics shown in Table 6 were calculated  
10 both without and with the requested rate increase granted. As shown in Table 6, PGW's  
11 Debt/Capitalization will improve as a result of the requested rate increase being granted  
12 and move closer to the Peer Groups'. PGW's Days Cash will move closer to the HTY  
13 level and Debt Service Coverage (P & I) will resemble the historical periods as a result of  
14 the requested rate increase being granted.<sup>87</sup> Table 6 also shows PGW's three key metrics  
15 will rapidly weaken without the proposed rate increase to levels preceding HTY.

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<sup>87</sup> All metrics shown in the Tables 5 and 6 were calculated using the same methodologies used to calculate similar metrics shown on Schedule 4. Therefore, the metrics use "generic" formulas used for benchmarking that may vary from PGW's covenant calculations and/or Schedules JFG-1 and JFG-2. PGW's covenant calculations require specific information that was not available for all entities used in the benchmarking analysis.

Metric	Rate	HTY	FTY	FPFTY
	Increase (\$MM)	Aug-31 2024	Aug-31 2025	Aug-31 2026
Debt/Capitalization {	0	56%	59%	55%
	105	56%	59%	53%
Days Cash {	0	91	18	-32
	105	91	18	36
Debt Service Coverage (P & I)	0	2.20	1.80	1.46
	105	2.20	1.80	2.37

Table 6

Regulatory support can play a key role in PGW being able to present a healthier credit profile, maintain or improve their bonds ratings, and ultimately lower the cost to customers as a result of PGW having the ability to finance at lower interest rates than otherwise would be the case.

### **SUMMARY AND OVERALL RECOMMENDATION**

#### **Q. PLEASE SUMMARIZE YOUR ANALYSIS AND RECOMMENDATION.**

A. My recommendation is based on the results of my benchmark study and my recommendation is that PGW be afforded a timely rate increase to cover its costs and at least maintain its financial stability. Authorizing the full rate increase requested would send a strong positive signal of support to credit rating agencies, enable PGW to at least maintain their credit profile, minimize borrowing costs and ultimately save customers money in the long run. The benchmark study shows that PGW's financial performance was positioned neutral to unfavorably when compared to the Peer Groups' metrics from 2019 through 2023. The benchmarking study also shows that PGW lags its peers on the

1 key benchmarks, or metrics, such as Debt/Capitalization, Debt Service Coverage (P & I),  
2 and Days Cash. Further, my recommendations are shown to be conservative when they  
3 are compared to the key benchmarks of S&P's MUNI LDCs that have credit profiles which  
4 range from A- to A+.

5 The benchmark study also reviewed FPFTY benchmarking metrics of PGW's  
6 financial performance based on the proposed rate increase. The FPFTY benchmark  
7 analysis shows that there is a need to support PGW's financial stability with a timely rate  
8 increase to enable PGW to further strengthen its credit profile and to lessen the gap between  
9 itself and its peers of "similarly situated utility enterprises."

10 **Q. DOES THAT CONCLUDE YOUR DIRECT TESTIMONY?**

11 A. Yes, it does.

**APPENDIX A**

Professional Qualifications  
of  
Harold Walker, III  
Manager, Financial Studies  
Gannett Fleming Valuation and Rate Consultants, LLC.

**EDUCATION**

Mr. Walker graduated from Pennsylvania State University in 1984 with a Bachelor of Science Degree in Finance. His studies concentrated on securities analysis and portfolio management with an emphasis on economics and quantitative business analysis. He has also completed the regulation and the rate-making process courses presented by the College of Business Administration and Economics Center for Public Utilities at New Mexico State University. Additionally, he has attended programs presented by The Institute of Chartered Financial Analysts (CFA).

Mr. Walker was awarded the professional designation "Certified Rate of Return Analyst" (CRRRA) by the Society of Utility and Regulatory Financial Analysts. This designation is based upon education, experience and the successful completion of a comprehensive examination. He is also a member of the Society of Utility and Regulatory Financial Analysts (SURFA) and has attended numerous financial forums sponsored by the Society. The SURFA forums are recognized by the Association for Investment Management and Research (AIMR) and the National Association of State Boards of Accountancy for continuing education credits.

Mr. Walker also obtained a license as a Municipal Advisor Representative (Series 50) by Municipal Securities Rulemaking Board (MSRB) and Financial Industry Regulatory Authority (FINRA).

**BUSINESS EXPERIENCE**

Prior to joining Gannett Fleming Valuation and Rate Consultants, LLC., Mr. Walker was employed by AUS Consultants - Utility Services. He held various positions during his eleven years with AUS, concluding his employment there as a Vice President. His duties included providing and supervising financial and economic studies on behalf of investor-owned and municipally owned water, wastewater, electric, natural gas distribution and transmission, oil pipeline and telephone utilities as well as resource recovery companies.

In 1996, Mr. Walker joined Gannett Fleming Valuation and Rate Consultants, LLC. In his capacity as Manager, Financial Studies and for the past twenty-five years, he has continuously studied rates of return requirements for regulated firms. In this regard, he supervised the preparation of rate of return studies in connection with his testimony and in the past, for other



individuals. He also assisted and/or developed dividend policy studies, nuclear prudence studies, calculated fixed charge rates for avoided costs involving cogeneration projects, financial decision studies for capital budgeting purposes and developed financial models for determining future capital requirements and the effect of those requirements on investors and ratepayers, valued utility property for acquisition and divestiture, and assisted in the private placement of fixed capital securities for public utilities.

Head, Gannett Fleming GASB 34 Task Force responsible for developing Governmental Accounting Standards Board (GASB) 34 services, and educating Gannett Fleming personnel and Gannett Fleming clients on GASB 34 and how it may affect them. The GASB 34 related services include inventory of assets, valuation of assets, salvage estimation, annual depreciation rate determination, estimation of depreciation reserve, asset service life determination, asset condition assessment, condition assessment documentation, maintenance estimate for asset preservation, establishment of condition level index, geographic information system (GIS) and data management services, management discussion and analysis (MD&A) reporting, required supplemental information (RSI) reporting, auditor interface, and GASB 34 compliance review.

In 2004, Mr. Walker was elected to serve on the Board of Directors of SURFA. Previously, he served as an ex officio director as an advisor to SURFA's existing President. In 2000, Mr. Walker was elected President of SURFA for the 2001-2002 term. Prior to that, he was elected to serve on the Board of Directors of SURFA during the period 1997-1998 and 1999-2000. He also previously served on the Pennsylvania Municipal Authorities Association, Electric Deregulation Committee.

## **EXPERT TESTIMONY**

Mr. Walker has submitted testimony or been deposed on various topics before regulatory commissions and courts in 29 states including: Alaska, Arizona, California, Colorado, Connecticut, Delaware, Hawaii, Idaho, Illinois, Indiana, Iowa, Kentucky, Maryland, Massachusetts, Michigan, Missouri, New Hampshire, Nevada, New Jersey, New York, North Carolina, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, and West Virginia. His testimonies covered various subjects including lead-lag studies, fair rate of return, fair market value, the taking of natural resources, benchmarking, appropriate capital structure and fixed capital cost rates, depreciation, purchased water adjustments, synchronization of interest charges for income tax purposes, valuation, cash working capital, financial analyses of investment alternatives, and fair value. The following tabulation provides a listing of the electric power, natural gas distribution, telephone, wastewater, and water service utility cases in which he has been involved as a witness.

<u>Client</u>	<u>Docket No.</u>
Alpena Power Company	U-10020
Armstrong Telephone Company - Northern Division	92-0884-T-42T
Armstrong Telephone Company - Northern Division	95-0571-T-42T
Artesian Water Company, Inc.	90 10
Artesian Water Company, Inc.	06 158
Aqua Illinois Consolidated Water Divisions and Consolidated Sewer Divisions	11-0436
Aqua Illinois Hawthorn Woods Wastewater Division	07 0620/07 0621/08 0067
Aqua Illinois Hawthorn Woods Water Division	07 0620/07 0621/08 0067
Aqua Illinois Kankakee Water Division	10-0194
Aqua Illinois Kankakee Water Division	14-0419
Aqua Illinois Vermilion Division	07 0620/07 0621/08 0067
Aqua Illinois Willowbrook Wastewater Division	07 0620/07 0621/08 0067
Aqua Illinois Willowbrook Water Division	07 0620/07 0621/08 0067
Aqua Illinois, Inc.	24-0044
Aqua Pennsylvania, Inc	A-2022-3034143
Aqua Pennsylvania, Inc	R-2024-3047822
Aqua Pennsylvania, Inc	R-2024-3047824
Aqua Pennsylvania Wastewater Inc	A-2016-2580061
Aqua Pennsylvania Wastewater Inc	A-2017-2605434
Aqua Pennsylvania Wastewater Inc	A-2018-3001582
Aqua Pennsylvania Wastewater Inc	A-2019-3008491
Aqua Pennsylvania Wastewater Inc	A-2019-3009052
Aqua Pennsylvania Wastewater Inc	A-2019-3015173
Aqua Pennsylvania Wastewater Inc	A-2021-3024267
Aqua Pennsylvania Wastewater Inc	A-2021-3026132
Aqua Pennsylvania Wastewater Inc	A-2021-3027268
Aqua Pennsylvania Wastewater Inc	A-2023-3041695
Aqua Virginia - Alpha Water Corporation	Pue-2009-00059
Aqua Virginia - Blue Ridge Utility Company, Inc.	Pue-2009-00059
Aqua Virginia - Caroline Utilities, Inc. (Wastewater)	Pue-2009-00059

Aqua Virginia - Caroline Utilities, Inc. (Water)	Pue-2009-00059
Aqua Virginia - Earlysville Forest Water Company	Pue-2009-00059
Aqua Virginia - Heritage Homes of Virginia	Pue-2009-00059
Aqua Virginia - Indian River Water Company	Pue-2009-00059
Aqua Virginia - James River Service Corp.	Pue-2009-00059
Aqua Virginia - Lake Holiday Utilities, Inc. (Wastewater)	Pue-2009-00059
Aqua Virginia - Lake Holiday Utilities, Inc. (Water)	Pue-2009-00059
Aqua Virginia - Lake Monticello Services Co. (Wastewater)	Pue-2009-00059
Aqua Virginia - Lake Monticello Services Co. (Water)	Pue-2009-00059
Aqua Virginia - Lake Shawnee	Pue-2009-00059
Aqua Virginia - Land'or Utility Company (Wastewater)	Pue-2009-00059
Aqua Virginia - Land'or Utility Company (Water)	Pue-2009-00059
Aqua Virginia - Mountainview Water Company, Inc.	Pue-2009-00059
Aqua Virginia - Powhatan Water Works, Inc.	Pue-2009-00059
Aqua Virginia - Rainbow Forest Water Corporation	Pue-2009-00059
Aqua Virginia - Shawnee Land	Pue-2009-00059
Aqua Virginia - Sydnor Water Corporation	Pue-2009-00059
Aqua Virginia - Water Distributors, Inc.	Pue-2009-00059
Atlantic City Sewerage Company	WR21071006
Berkshire Gas Company	18-40
Berkshire Gas Company	22-20
Bermuda Water Company, Inc	W-01812A-22-0256
Borough of Brentwood	A-2021-3024058
Borough of Hanover	R-2009-2106908
Borough of Hanover	R-2012-2311725
Borough of Hanover	R-2014-242830
Borough of Hanover	R-2021-3026116
Borough of Hanover	P-2021-3026854
Borough of Royersford	A-2020-3019634
Butler Area Sewer Authority	A-2020-3019634
Chaparral City Water Company	W 02113a 04 0616
California-American Water Company	CIVCV156413
Citizens Utilities Company	
Colorado Gas Division	-

Citizens Utilities Company	
Vermont Electric Division	5426
Citizens Utilities Home Water Company	R 901664
Citizens Utilities Water Company	
of Pennsylvania	R 901663
City of Beaver Falls	A-2022-3033138
City of Bethlehem - Bureau of Water	R-00984375
City of Bethlehem - Bureau of Water	R 00072492
City of Bethlehem - Bureau of Water	R-2013-2390244
City of Bethlehem - Bureau of Water	R-2020-3020256
City of Dubois – Bureau of Water	R-2013-2350509
City of Dubois – Bureau of Water	R-2016-2554150
City of Lancaster Sewer Fund	R-00005109
City of Lancaster Sewer Fund	R-00049862
City of Lancaster Sewer Fund	R-2012-2310366
City of Lancaster Sewer Fund	R-2019-3010955
City of Lancaster Water Fund	R-00984567
City of Lancaster Water Fund	R-00016114
City of Lancaster Water Fund	R 00051167
City of Lancaster Water Fund	R-2010-2179103
City of Lancaster Water Fund	R-2014-2418872
City of Lancaster Water Fund	R-2021-3026682
City of Lancaster Water Fund	P-2022-3035591
Coastland Corporation	15-cvs-216
Commonwealth Edison Company	23-0728
Commonwealth Edison Company	24-0087
Community Utilities of Pennsylvania-Water	R-2023-3042804
Community Utilities of Pennsylvania-Wastewater	R-2023-3042805
Connecticut-American Water Company	99-08-32
Connecticut Water Company	06 07 08
Consumers Pennsylvania Water Company	
Roaring Creek Division	R-00973869
Consumers Pennsylvania Water Company	
Shenango Valley Division	R-00973972
Country Knolls Water Works, Inc.	90 W 0458
East Resources, Inc. - West Virginia Utility	06 0445 G 42T
Elizabeth Borough Municipal Authority	A-2023-3038717

Elizabethtown Water Company	WR06030257
ENSTAR Natural Gas Company	U-22-081
Falls Water Company, Inc.	FLS-W-23-01
Forest Park, Inc.	19-W-0168 & 19-W-0269
Hampton Water Works Company	DW 99-057
Hidden Valley Utility Services, LP	R-2018-3001306
Hidden Valley Utility Services, LP	R-2018-3001307
Illinois American Water Company	16-0093
Illinois American Water Company	22-0210
Illinois American Water Company	24-0097
Indian Rock Water Company	R-911971
Indiana Natural Gas Corporation	38891
Iowa American Water Company	RPU-2024-0002
Jamaica Water Supply Company	-
Kane Borough Authority	A-2019-3014248
Kentucky American Water Company, Inc.	2007 00134
Kentucky American Water Company, Inc.	2023-00191
Middlesex Water Company	WR 89030266J
Millcreek Township Water Authority	55 198 Y 00021 11
Missouri-American Water Company	WR 2000-281
Missouri-American Water Company	SR 2000-282
Missouri-American Water Company	WR-2022-0303
Missouri-American Water Company	SR-2022-0304
Mount Holly Water Company	WR06030257
Nevada Power Company d/b/a NV Energy	20-06003
Nevada Power Company d/b/a NV Energy	23-06007
New Jersey American Water Company	WR 89080702J
New Jersey American Water Company	WR 90090950J
New Jersey American Water Company	WR 03070511
New Jersey American Water Company	WR-06030257
New Jersey American Water Company	WR08010020
New Jersey American Water Company	WR10040260
New Jersey American Water Company	WR11070460
New Jersey American Water Company	WR15010035
New Jersey American Water Company	WR17090985
New Jersey American Water Company	WR19121516
New Jersey American Water Company	WR22010019

New Jersey American Water Company	WR24010056
New Jersey Natural Gas Company	GR19030420
New Jersey Natural Gas Company	GR21030679
New Jersey Natural Gas Company	GR24010071
Newtown Artesian Water Company	R-911977
Newtown Artesian Water Company	R-00943157
Newtown Artesian Water Company	R-2009-2117550
Newtown Artesian Water Company	R-2011-2230259
Newtown Artesian Water Company	R-2017-2624240
Newtown Artesian Water Company	R-2019-3006904
Newtown Artesian Water Company	R-2024-3050208
North Maine Utilities	14-0396
Northern Indiana Fuel & Light Company	38770
Oklahoma Natural Gas Company	PUD-940000477
Palmetto Utilities, Inc.	2020-281-S
Palmetto Wastewater Reclamation, LLC	2018-82-S
Pennichuck Water Works, Inc.	DW 04 048
Pennichuck Water Works, Inc.	DW 06 073
Pennichuck Water Works, Inc.	DW 08 073
Pennsylvania-American Water Company	A-2023-3039900
Pennsylvania Gas & Water Company (Gas)	R-891261
Pennsylvania Gas & Water Co. (Water)	R 901726
Pennsylvania Gas & Water Co. (Water)	R-911966
Pennsylvania Gas & Water Co. (Water)	R-22404
Pennsylvania Gas & Water Co. (Water)	R-00922482
Pennsylvania Gas & Water Co. (Water)	R-00932667
Philadelphia Gas Works	R-2020-3017206
Philadelphia Gas Works	R-2023-3037933
Public Service Company of North Carolina, Inc.	G-5, Sub 565
Public Service Electric and Gas Company	ER181010029
Public Service Electric and Gas Company	GR18010030
Presque Isle Harbor Water Company	U-9702
Sierra Pacific Power Company d/b/a NV Energy	19-06002
Sierra Pacific Power Company d/b/a NV Energy	22-06014
Sierra Pacific Power Company d/b/a NV Energy	24-02026
Sierra Pacific Power Company d/b/a NV Energy	24-02027
St. Louis County Water Company	WR-2000-844

Suez Water Delaware, Inc.	19-0615
Suez Water Idaho, Inc.	SUZ-W-20-02
Suez Water New Jersey, Inc.	WR18050593
Suez Water New Jersey, Inc.	WR20110729
Suez Water Owego-Nichols, Inc.	17-W-0528
Suez Water Pennsylvania, Inc.	R-2018-3000834
Suez Water Pennsylvania, Inc.	A-2018-3003519
Suez Water Pennsylvania, Inc.	A-2018-3003517
Suez Water Rhode Island, Inc.	Docket No. 4800
Suez Water Owego-Nichols, Inc.	19-W-0168 & 19-W-0269
Suez Water New York, Inc.	19-W-0168 & 19-W-0269
Suez Westchester, Inc.	19-W-0168 & 19-W-0269
Tennessee American Water Company	24-00032
Town of North East Water Fund	9190
Township of Exeter	A-2018-3004933
United Water New Rochelle	W-95-W-1168
United Water Toms River	WR-95050219
Upper Pottsgrove Township	A-2020-3021460
Valley Township (water)	A-2020-3019859
Valley Township (wastewater)	A-2020-3020178
Valley Water Systems, Inc.	06 10 07
Veolia Water Idaho, Inc.	VEO-W-22-02
Veolia Water Delaware, Inc.	23-0598
Veolia Water New Jersey, Inc.	WR23110790
Veolia Water New York, Inc.	23-W-0111
Veolia Water Pennsylvania, Inc.	R-2024-3045192
Veolia Water Pennsylvania, Inc.	R-2024-3045193
Virginia American Water Company	PUR-2018-00175
Virginia American Water Company	PUR-2021-00255
Virginia American Water Company	PUR-2023-00194
West Virginia-American Water Company	15-0676-W-42T
West Virginia-American Water Company	15-0675-S-42T
Wilmington Suburban Water Corporation	94-149
York Water Company	R-901813
York Water Company	R-922168
York Water Company	R-943053
York Water Company	R-963619

York Water Company  
York Water Company  
Young Brothers, LLC

R-994605  
R-00016236  
2019-0117




**VERIFICATION**

I, Harold Walker, III, hereby state that: (1) I am employed by Gannett Fleming Valuation and Rate Consultants, LLC as Manager, Financial Studies; (2) I have been retained by Philadelphia Gas Works (“PGW”) and am authorized to present testimony on its behalf; (3) the facts set forth in my testimony are true and correct to the best of my knowledge, information and belief; and (4) I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

February 27, 2025

\_\_\_\_\_  
Dated



\_\_\_\_\_  
Harold Walker, III  
Manager, Financial Studies  
Gannett Fleming Valuation and Rate Consultants, LLC

**PHILADELPHIA GAS WORKS  
PHILADELPHIA, PA**

**BENCHMARKING**

**EXHIBIT**

**TO ACCOMPANY THE  
DIRECT TESTIMONY**

**FEBRUARY 2025**

Prepared by:



PHILADELPHIA GAS WORKS  
 COMPARATIVE STATISTICS AND BENCHMARK DATA  
 FOR THE YEAR 2023

	Customers to Main Miles	% Cast Iron	State of Operation	Service Provided	Asset Ownership	Operating Revenues (Millions \$)
Philadelphia Gas Works	169	39%	PA	Natural Gas	Municipal	711.026
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	68	0%	IN	Natural Gas	Municipal	309.187
CPS Energy	62	0%	TX	Gas & Electric	Municipal	3,383.403
Gainesville Regional Utilities	44	0%	FL	Natural Gas	Municipal	29.382
Greenville, City of	33	0%	NC	Natural Gas	Municipal	46.623
Jackson Energy Authority	38	0%	TN	Natural Gas	Municipal	42.759
JEA Utilities	NA	NA	FL	Electric	Municipal	1,324.028
Knoxville Utilities Board	42	0%	TN	Natural Gas	Municipal	146.698
Richmond, City of	62	6%	VA	Natural Gas	Municipal	218.098
MUNI Average	50	1%				687.522
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	58	0%	PA	Natural Gas	Investor	821.140
National Fuel Gas Distribution Corp	44	2%	PA	Natural Gas	Investor	243.321
PECO Gas (Exelon Corporation)	75	6%	PA	Natural Gas	Investor	691.854
Peoples Natural Gas Company LLC	53	0%	PA	Natural Gas	Investor	779.885
UGI Utilities Inc. (Gas)	55	1%	PA	Natural Gas	Investor	1,308.196
IOUPA Average	57	2%				768.879
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	275	25%	NY	Natural Gas	Investor	1,937.323
Connecticut Natural Gas Corp	84	11%	CT	Natural Gas	Investor	426.242
Corning Natural Gas Corp	35	0%	NY	Natural Gas	Investor	28.632
New Jersey Natural Gas Co	72	0%	NJ	Natural Gas	Investor	1,001.454
Southern Connecticut Gas Co	83	21%	CT	Natural Gas	Investor	434.983
Washington Gas Light Co	86	3%	DC, MD, VA	Natural Gas	Investor	1,566.077
Yankee Gas Services Co	71	5%	CT	Natural Gas	Investor	698.990
IOU Average	101	9%				870.529

Range of Results:

MUNI Group

High 68 6% 3,383.403

Low 33 0% Nation Wide Gas & Electric Municipal 29.382

IOUPA Group

High 75 6% 1,308.196

Low 44 0% PA Natural Gas Investor 243.321

IOU Group

High 275 25% 1,937.323

Low 35 0% Northeast Natural Gas Investor 28.632

ALLCOS

High 275 25% 3,383.403

Low 33 0% Nation Wide Natural Gas Investor 28.632

Source of Information: S&P Capital IQ, PUC Annual Reports, Audited Annual Reports, and AGA Statistics

PHILADELPHIA GAS WORKS  
COMPARATIVE STATISTICS AND BENCHMARK DATA  
FOR THE YEAR 2023

	Total Volume (MCF)	Gas Revenues (Millions \$)	Miles of Main	Customers	% Residential Sendout	Avg Residential Use (MCF)
Philadelphia Gas Works	67,538,000	671.533	3,047	514,640	41%	61
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	84,566,000	309.187	4,177	283,103	22%	73
CPS Energy	125,480,997	3,396.899	6,062	1,298,217	39%	42
Gainesville Regional Utilities	19,787,800	155.005	831	36,577	3%	20
Greenville, City of	3,245,554	45.318	755	24,695	22%	33
Jackson Energy Authority	7,510,043	44.127	890	34,005	21%	58
JEA Utilities	42,194,368	1,486.580	NA	515,514	46%	42
Knoxville Utilities Board	13,200,000	148.197	2,590	108,698	39%	52
Richmond, City of	19,997,155	218.099	1,973	122,508	29%	52
MUNI Average	39,497,740	725.427	2,468	302,915	28%	47
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	77,863,867	821.141	7,752	445,875	32%	69
National Fuel Gas Distribution Corp	42,916,961	243.322	4,832	213,416	36%	87
PECO Gas (Exelon Corporation)	81,338,784	691.855	7,309	550,701	44%	71
Peoples Natural Gas Company LLC	152,995,298	779.886	13,113	700,532	28%	77
UGI Utilities Inc. (Gas)	328,158,568	1,308.196	12,414	688,443	12%	73
IOUPA Average	136,654,696	768.880	9,084	519,793	30%	75
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	101,288,757	1,937.323	4,330	1,191,169	79%	70
Connecticut Natural Gas Corp	28,407,758	426.242	2,209	185,878	57%	95
Corning Natural Gas Corp	1,385,481	28.632	421	14,915	84%	84
New Jersey Natural Gas Co	95,331,494	1,002.285	7,635	551,465	47%	87
Southern Connecticut Gas Co	31,278,241	434.983	2,499	208,065	48%	79
Washington Gas Light Co	79,856,670	1,562.315	14,223	1,222,149	76%	61
Yankee Gas Services Co	38,453,017	698.990	3,528	249,223	37%	65
IOU Average	53,714,488	870.110	4,978	517,552	61%	77

Range of Results:

MUNI Group

High	125,480,997	3,396.899	6,062	1,298,217	46%	73
Low	3,245,554	44.127	755	24,695	3%	20

IOUPA Group

High	328,158,568	1,308.196	13,113	700,532	44%	87
Low	42,916,961	243.322	4,832	213,416	12%	69

IOU Group

High	101,288,757	1,937.323	14,223	1,222,149	84%	95
Low	1,385,481	28.632	421	14,915	37%	61

ALLCOS

High	328,158,568	3,396.899	14,223	1,298,217	84%	95
Low	1,385,481	28.632	421	14,915	3%	20

Comment: CPS Energy electric sales (KWh) and JEA Utilities electric sales (megawatt hours) were converted to MCF.

Source of Information: S&P Capital IQ, PUC Annual Reports, Audited Annual Reports, and AGA Statistics

PHILADELPHIA GAS WORKS  
 COMPARATIVE STATISTICS AND BENCHMARK DATA  
 FOR THE YEAR 2023

Miles of Main	% Cast Iron	Period Mains Where Installed				
		Pre-1940 or Unknown	1940-1969	1970-1999	2000s	
Philadelphia Gas Works	3,047	39%	30%	32%	17%	22%
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	4,177	0%	0%	27%	48%	25%
CPS Energy	6,062	0%	1%	28%	37%	34%
Gainesville Regional Utilities	831	0%	0%	11%	49%	34%
Greenville, City of	755	0%	0%	2%	60%	36%
Jackson Energy Authority	890	0%	3%	14%	44%	39%
JEA Utilities	NA	NA	NA	NA	NA	NA
Knoxville Utilities Board	2,590	0%	0%	3%	53%	44%
Richmond, City of	1,973	6%	0%	11%	37%	50%
MUNI Average	2,468	1%	1%	14%	47%	37%
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	7,752	0%	3%	20%	31%	42%
National Fuel Gas Distribution Corp	4,832	2%	6%	20%	47%	24%
PECO Gas (Exelon Corporation)	7,309	6%	5%	24%	43%	26%
Peoples Natural Gas Company LLC	13,113	0%	6%	25%	37%	27%
UGI Utilities Inc. (Gas)	12,414	1%	5%	19%	41%	32%
IOUPA Average	9,084	2%	5%	22%	40%	30%
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	4,330	25%	23%	19%	24%	35%
Connecticut Natural Gas Corp	2,209	11%	11%	25%	34%	30%
Corning Natural Gas Corp	421	0%	0%	25%	25%	47%
New Jersey Natural Gas Co	7,635	0%	0%	20%	41%	39%
Southern Connecticut Gas Co	2,499	21%	21%	20%	31%	27%
Washington Gas Light Co	14,223	3%	3%	25%	41%	31%
Yankee Gas Services Co	3,528	5%	5%	21%	34%	34%
IOU Average	4,978	9%	9%	22%	33%	35%

Range of Results:

MUNI Group

High	6,062	6%	3%	28%	60%	50%
Low	755	0%	0%	2%	37%	25%

IOUPA Group

High	13,113	6%	6%	25%	47%	42%
Low	4,832	0%	3%	19%	31%	24%

IOU Group

High	14,223	25%	23%	25%	41%	47%
Low	421	0%	0%	19%	24%	27%

ALLCOS

High	14,223	25%	23%	28%	60%	50%
Low	421	0%	0%	2%	24%	24%

PHILADELPHIA GAS WORKS  
CREDIT RATINGS  
CURRENT LONG-TERM DEBT RATINGS

	Current Long-Term Debt Ratings				Weightings Assigned to Credit Ratings			
	S&P	Moody's	Fitch	Overall Average Credit	S&P	Moody's	Fitch	Overall Average Weighting
Philadelphia Gas Works	A	A3	A-	A-	6.0	7.0	7.0	6.7
<u>Municipally Owned Natural Gas Utilities</u>								
Citizens Energy Group	AA	Aa3	AA-	AA-	3.0	4.0	4.0	3.7
CPS Energy	AA-	Aa2	AA-	AA-	4.0	3.0	4.0	3.7
Gainesville Regional Utilities	A	Aa3	A+	A+	6.0	4.0	5.0	5.0
Greenville, City of	AA	Aa1	AA-	AA	3.0	2.0	4.0	3.0
Jackson Energy Authority	AA-	Aa2	N/A	AA-	4.0	3.0	-	3.5
JEA Utilities	A+	A1	AA	AA-	5.0	5.0	3.0	4.3
Knoxville Utilities Board	AA-	Aa2	N/A	AA-	4.0	3.0	-	3.5
Richmond, City of	AA	Aa1	AA	AA	3.0	2.0	3.0	2.7
MUNI Average	AA-	Aa2	AA-	AA-	4.0	3.3	3.8	3.7
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>								
Columbia Gas of Pennsylvania, Inc.	BBB+	Baa2	BBB	BBB	8.0	9.0	9.0	8.7
National Fuel Gas Distribution Corp	BBB-	Baa3	BBB	BBB-	10.0	10.0	9.0	9.7
PECO Gas (Exelon Corporation)	A	Aa3	A+	A+	6.0	4.0	5.0	5.0
Peoples Natural Gas Company LLC	A-	Baa2	N/A	BBB+	7.0	9.0	-	8.0
UGI Utilities Inc. (Gas)	BBB+	A3	A-	A-	8.0	7.0	7.0	7.3
IOUPA Average	BBB+	Baa1	BBB+	BBB+	7.8	7.8	7.5	7.7
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>								
Brooklyn Union Gas Co	BBB+	Baa2	BBB+	BBB+	8.0	9.0	8.0	8.3
Connecticut Natural Gas Corp	BBB+	A3	A-	A-	8.0	7.0	7.0	7.3
Corning Natural Gas Corp	BBB+	N/A	N/A	BBB+	8.0	-	-	8.0
New Jersey Natural Gas Co	N/A	A1	A-	A	-	5.0	7.0	6.0
Southern Connecticut Gas Co	BBB+	Baa1	A-	BBB+	8.0	8.0	7.0	7.7
Washington Gas Light Co	A-	N/A	BBB	BBB+	7.0	-	9.0	8.0
Yankee Gas Services Co	BBB	Baa1	BBB	BBB	9.0	8.0	9.0	8.7
IOU Average	BBB+	Baa1	BBB+	BBB+	8.0	8.0	8.3	8.1
<u>Range of Results:</u>								
<u>MUNI Group</u>								
Lowest Bond Rating	A	A1	A+	A+	6.0	5.0	5.0	5.0
Highest Bond Rating	AA	Aa1	AA	AA	3.0	2.0	3.0	2.7
<u>IOUPA Group</u>								
Lowest Bond Rating	BBB-	Baa3	BBB	BBB-	10.0	10.0	9.0	9.7
Highest Bond Rating	A	Aa3	A+	A+	6.0	4.0	5.0	5.0
<u>IOU Group</u>								
Lowest Bond Rating	BBB	Baa2	BBB	BBB	9.0	9.0	9.0	8.7
Highest Bond Rating	A-	A1	A-	A	7.0	5.0	7.0	6.0
<u>ALLCOS</u>								
Lowest Bond Rating	BBB-	Baa3	BBB	BBB-	10.0	10.0	9.0	9.7
Highest Bond Rating	AA	Aa1	AA	AA	3.0	2.0	3.0	2.7

Source of Information: S&P, Moody's and Fitch

PHILADELPHIA GAS WORKS  
CREDIT RATINGS  
CURRENT LONG-TERM DEBT RATINGS

Weightings Assigned to Credit Ratings			
S&P	Moody's	Fitch	Assigned Weighting
AAA	Aaa	AAA	1
AA+	Aa1	AA+	2
AA	Aa2	AA	3
AA-	Aa3	AA-	4
A+	A1	A+	5
A	A2	A	6
A-	A3	A-	7
BBB+	Baa1	BBB+	8
BBB	Baa2	BBB	9
BBB-	Baa3	BBB-	10
BB+	Ba1	BB+	11
BB	Ba2	BB	12
BB-	Ba3	BB-	13
B+	B1	B+	14
B	B2	B	15
B-	B3	B-	16
CCC+	Caa1	CCC+	17
CCC	Caa2	CCC	18
CCC-	Caa3	CCC-	19
WD	WD	WD	-
N/A	N/A	N/A	-

PHILADELPHIA GAS WORKS  
DEFINITIONS OF BENCHMARK METRICS

**Leverage & Risk**

1. Debt/Capitalization - Total debt divided by total capital (sum of total debt and equity capital).
2. Operating Margin - Operating income divided by operating revenues minus purchased gas/power expense.
3. Debt Service/Cash OpEx - The sum of principal paid on long-term debt plus interest, divided by Cash OpEx. Where debt service is the sum of principal paid on long-term debt and interest, and where Cash OpEx is operating expenses minus the sum of depreciation and amortization expenses.
4. Debt/Customer - Total debt divided by the number of gas customers.
5. Debt/Revenues - Total debt divided by operating revenues.
6. Debt/Equity - Total debt divided by fund equity (e.g., common equity).

**Liquidity**

7. EBITDA/Revenues - Operating income plus depreciation and amortization expenses, divided by operating revenues. Where EBITDA, or Earnings Before Interest, Taxes, Depreciation, and Amortization, is operating income plus depreciation and amortization expenses.
8. FFO/CapEx - Net income plus depreciation and amortization expenses, divided by capital expenditures. Where FFO, or Funds From Operations, is net income plus depreciation and amortization expenses, and where CapEx, or Cap "X," is capital expenditures.
9. Days Cash - Cash and cash equivalents divided by the quotient of the sum of operating expenses minus depreciation and amortization expenses divided by 365.

**Solvency**

10. FFO/Avg Debt - Net income plus depreciation and amortization expenses, divided by average total debt. Where FFO, or Funds From Operations, is net income plus depreciation and amortization expenses.
11. FFO Coverage – Net income plus depreciation and amortization expenses plus interest, divided by interest. Where FFO, or Funds From Operations, is net income plus depreciation and amortization expenses.
12. EBIT Coverage – Net income plus interest plus income taxes, all divided by interest. Where EBIT, or Earnings Before Interest and Taxes, is the sum of net income, interest and income taxes.



PHILADELPHIA GAS WORKS  
DEFINITIONS OF BENCHMARK METRICS

13. Interest-Only Debt Service Coverage - Operating income plus depreciation and amortization expenses, divided by interest.
14. Debt Service Coverage (P & I) - Operating income plus depreciation and amortization expenses, divided by the sum of principal paid on long-term debt plus interest. Where debt service is the sum of principal paid on long-term debt and interest.

**Efficiency**

15. CapEx/DA - Capital expenditures divided by depreciation and amortization expenses. Where CapEx, or Cap “X”, is capital expenditures, and where DA is the sum of depreciation and amortization expenses.
16. Net Plant/Gross Plant - Net plant divided by gross plant.
17. CapEx/Net Plant - Capital expenditures divided by net plant. Where CapEx, or Cap “X,” is capital expenditures.
18. CapEx/Gross Plant - Capital expenditures divided by gross plant. Where CapEx, or Cap “X,” is capital expenditures.
19. CapEx/Capitalization - Capital expenditures divided by total capital (sum of total debt and equity capital). Where CapEx, or Cap “X,” is capital expenditures.
20. Net Plant/Capitalization - Net plant divided by total capital (sum of total debt and equity capital).
21. Gas Revenue/MCF – Total gas revenues divided by total gas (volumes) throughput.
22. Non-Commodity Revenue/Revenue - Operating revenues minus purchased gas/power expenses, divided by operating revenues. Where Non-Commodity Revenue is operating revenues minus purchased gas/power expenses.

PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	Debt/Capitalization					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	84%	77%	73%	63%	59%	71%
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	61%	52%	41%	32%	25%	42%
CPS Energy	63%	62%	62%	64%	64%	63%
Gainesville Regional Utilities	88%	87%	86%	84%	84%	86%
Greenville, City of	30%	28%	26%	26%	25%	27%
Jackson Energy Authority	19%	17%	16%	15%	13%	16%
JEA Utilities	63%	58%	53%	50%	51%	55%
Knoxville Utilities Board	34%	31%	28%	25%	22%	28%
Richmond, City of	65%	65%	63%	61%	59%	63%
MUNI Average	53%	50%	47%	45%	43%	47%
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	44%	44%	44%	43%	44%	44%
National Fuel Gas Distribution Corp	32%	33%	36%	42%	38%	36%
PECO Gas (Exelon Corporation)	46%	47%	46%	48%	48%	47%
Peoples Natural Gas Company LLC	46%	46%	46%	45%	44%	45%
UGI Utilities Inc. (Gas)	50%	52%	51%	51%	51%	51%
IOUPA Average	44%	44%	45%	46%	45%	45%
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	50%	53%	47%	49%	49%	50%
Connecticut Natural Gas Corp	26%	31%	32%	31%	35%	31%
Corning Natural Gas Corp	51%	53%	54%	52%	47%	51%
New Jersey Natural Gas Co	42%	45%	48%	48%	46%	46%
Southern Connecticut Gas Co	36%	38%	37%	36%	38%	37%
Washington Gas Light Co	53%	48%	48%	51%	49%	50%
Yankee Gas Services Co	43%	44%	43%	42%	45%	43%
IOU Average	43%	45%	44%	44%	44%	44%
<u>PGW's Ranking Within the:</u>						
MUNI Group (n=8)	8	8	8	7	6	8
IOUPA Group (n=5)	6	6	6	6	6	6
IOU Group (n=7)	8	8	8	8	8	8
ALLCOS (n=20)	20	20	20	19	18	20
<u>Interpretation of Rankings:</u>						
MUNI Group	-	-	-	-	=	-
IOUPA Group	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>
IOU Group	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>
ALLCOS	-	-	-	-	-	-

Source of Information: S&P Capital IQ, PUC Annual Reports, Audited Annual Reports, and AGA Statistics

PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	Operating Margin					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	30%	31%	44%	44%	30%	36%
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	44%	48%	43%	61%	37%	47%
CPS Energy	35%	34%	28%	32%	32%	32%
Gainesville Regional Utilities	51%	40%	35%	37%	28%	38%
Greenville, City of	24%	18%	26%	11%	15%	19%
Jackson Energy Authority	45%	27%	27%	27%	12%	28%
JEA Utilities	34%	37%	36%	8%	-4%	22%
Knoxville Utilities Board	45%	44%	45%	32%	23%	38%
Richmond, City of	22%	20%	15%	20%	14%	18%
MUNI Average	38%	34%	32%	29%	20%	30%
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	38%	36%	38%	68%	37%	43%
National Fuel Gas Distribution Corp	18%	21%	32%	22%	20%	23%
PECO Gas (Exelon Corporation)	42%	35%	35%	52%	33%	39%
Peoples Natural Gas Company LLC	34%	32%	33%	66%	31%	39%
UGI Utilities Inc. (Gas)	42%	40%	43%	47%	37%	42%
IOUPA Average	35%	33%	36%	51%	32%	37%
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	21%	21%	19%	32%	30%	25%
Connecticut Natural Gas Corp	23%	22%	22%	63%	150%	56%
Corning Natural Gas Corp	46%	33%	42%	35%	60%	43%
New Jersey Natural Gas Co	28%	32%	30%	35%	32%	31%
Southern Connecticut Gas Co	40%	25%	30%	111%	118%	65%
Washington Gas Light Co	49%	43%	70%	51%	63%	55%
Yankee Gas Services Co	41%	47%	52%	45%	48%	47%
IOU Average	35%	32%	38%	53%	72%	46%
<u>PGW's Ranking Within the:</u>						
MUNI Group (n=8)	7	6	2	2	3	4
IOUPA Group (n=5)	5	5	1	5	5	5
IOU Group (n=7)	5	5	3	5	7	6
ALLCOS (n=20)	15	14	4	10	13	13
<u>Interpretation of Rankings:</u>						
MUNI Group	-	=	+	+	=	=
IOUPA Group	-	-	+	-	-	-
IOU Group	-	-	=	-	<b>OUT</b>	<b>OUT</b>
ALLCOS	-	=	+	=	=	=

Source of Information: S&P Capital IQ, PUC Annual Reports, Audited Annual Reports, and AGA Statistics

PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	Debt Service/Cash OpEx					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	21%	25%	27%	20%	20%	23%
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	15%	63%	14%	11%	10%	23%
CPS Energy	26%	26%	25%	23%	19%	24%
Gainesville Regional Utilities	29%	33%	25%	20%	23%	26%
Greenville, City of	5%	4%	6%	4%	3%	4%
Jackson Energy Authority	6%	6%	6%	5%	4%	5%
JEA Utilities	30%	31%	20%	13%	11%	21%
Knoxville Utilities Board	16%	20%	15%	11%	9%	14%
Richmond, City of	20%	20%	19%	12%	12%	17%
MUNI Average	18%	25%	16%	12%	11%	17%
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	11%	13%	12%	12%	12%	12%
National Fuel Gas Distribution Corp	4%	4%	5%	4%	5%	4%
PECO Gas (Exelon Corporation)	35%	47%	49%	37%	49%	43%
Peoples Natural Gas Company LLC	9%	9%	8%	6%	9%	8%
UGI Utilities Inc. (Gas)	8%	9%	8%	7%	9%	8%
IOUPA Average	13%	16%	16%	13%	17%	15%
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	9%	9%	8%	7%	13%	9%
Connecticut Natural Gas Corp	3%	3%	3%	3%	94%	21%
Corning Natural Gas Corp	9%	31%	34%	30%	50%	31%
New Jersey Natural Gas Co	24%	10%	8%	12%	9%	13%
Southern Connecticut Gas Co	6%	7%	13%	8%	18%	10%
Washington Gas Light Co	15%	10%	10%	7%	20%	12%
Yankee Gas Services Co	20%	23%	7%	10%	8%	14%
IOU Average	12%	13%	12%	11%	30%	16%
<u>PGW's Ranking Within the:</u>						
MUNI Group (n=8)	6	5	9	7	8	6
IOUPA Group (n=5)	5	5	5	5	5	5
IOU Group (n=7)	7	7	7	7	5	7
ALLCOS (n=20)	16	15	19	17	16	16
<u>Interpretation of Rankings:</u>						
MUNI Group	=	=	<b>OUT</b>	-	-	=
IOUPA Group	-	-	-	-	-	-
IOU Group	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	-	<b>OUT</b>
ALLCOS	-	-	-	-	-	-

Source of Information: S&P Capital IQ, PUC Annual Reports, Audited Annual Reports, and AGA Statistics

PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	Debt/Customer					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	\$2,089	\$1,951	\$2,295	\$2,156	\$2,042	\$2,107
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	\$729	\$655	\$582	\$511	\$444	\$584
CPS Energy	\$5,100	\$4,922	\$4,920	\$5,365	\$5,463	\$5,154
Gainesville Regional Utilities	\$1,964	\$1,922	\$1,943	\$2,035	\$2,050	\$1,983
Greenville, City of	\$906	\$867	\$815	\$771	\$739	\$820
Jackson Energy Authority	\$609	\$586	\$541	\$518	\$486	\$548
JEA Utilities	\$4,620	\$4,047	\$3,562	\$3,226	\$2,983	\$3,688
Knoxville Utilities Board	\$1,152	\$1,057	\$957	\$872	\$792	\$966
Richmond, City of	\$2,544	\$2,548	\$2,374	\$2,239	\$2,111	\$2,363
MUNI Average	\$2,203	\$2,076	\$1,962	\$1,942	\$1,884	\$2,013
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	\$1,799	\$2,043	\$2,350	\$2,551	\$2,883	\$2,325
National Fuel Gas Distribution Corp	\$559	\$615	\$749	\$954	\$851	\$746
Peoples Natural Gas Company LLC	\$1,593	\$1,535	\$1,759	\$1,938	\$2,107	\$1,786
UGI Utilities Inc. (Gas)	\$1,891	\$2,055	\$2,262	\$2,542	\$2,734	\$2,297
IOUPA Average	\$1,461	\$1,562	\$1,780	\$1,996	\$2,144	\$1,789
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	\$2,152	\$2,466	\$2,410	\$2,828	\$3,232	\$2,618
Connecticut Natural Gas Corp	\$881	\$1,035	\$1,074	\$1,157	\$1,318	\$1,093
Corning Natural Gas Corp	\$2,345	\$2,694	\$2,839	\$2,995	\$2,907	\$2,756
New Jersey Natural Gas Co	\$1,707	\$1,979	\$2,409	\$2,672	\$2,940	\$2,341
Southern Connecticut Gas Co	\$1,338	\$1,452	\$1,489	\$1,595	\$1,763	\$1,527
Washington Gas Light Co	\$1,465	\$1,452	\$1,561	\$1,779	\$1,829	\$1,617
Yankee Gas Services Co	\$3,006	\$3,365	\$3,590	\$3,849	\$4,474	\$3,657
IOU Average	\$1,842	\$2,063	\$2,196	\$2,411	\$2,638	\$2,230
<u>PGW's Ranking Within the:</u>						
MUNI Group (n=8)	6	6	6	6	5	6
IOUPA Group (n=5)	5	3	4	3	2	3
IOU Group (n=7)	5	4	4	4	4	4
ALLCOS (n=20)	14	11	12	11	9	11
<u>Interpretation of Rankings:</u>						
MUNI Group	=	=	=	=	=	=
IOUPA Group	-	=	=	=	=	=
IOU Group	-	=	=	=	=	=
ALLCOS	=	=	=	=	=	=

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PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	Debt/Revenues					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	155%	171%	184%	138%	148%	159%
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	78%	82%	70%	37%	41%	62%
CPS Energy	220%	231%	242%	246%	210%	230%
Gainesville Regional Utilities	231%	292%	277%	224%	255%	256%
Greenville, City of	59%	65%	59%	47%	39%	54%
Jackson Energy Authority	56%	59%	52%	41%	39%	49%
JEA Utilities	169%	158%	135%	106%	116%	137%
Knoxville Utilities Board	110%	108%	88%	66%	59%	86%
Richmond, City of	187%	200%	175%	125%	119%	161%
MUNI Average	139%	149%	137%	112%	110%	129%
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	130%	161%	155%	131%	157%	147%
National Fuel Gas Distribution Corp	58%	70%	78%	74%	75%	71%
Peoples Natural Gas Company LLC	135%	148%	155%	129%	189%	151%
UGI Utilities Inc. (Gas)	130%	153%	152%	128%	144%	141%
IOUPA Average	113%	133%	135%	116%	141%	128%
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	151%	183%	164%	146%	199%	169%
Connecticut Natural Gas Corp	40%	53%	48%	41%	57%	48%
Corning Natural Gas Corp	139%	170%	173%	153%	151%	157%
New Jersey Natural Gas Co	122%	148%	160%	120%	162%	142%
Southern Connecticut Gas Co	71%	86%	75%	63%	84%	76%
Washington Gas Light Co	131%	141%	130%	124%	143%	134%
Yankee Gas Services Co	129%	157%	148%	134%	160%	146%
IOU Average	112%	134%	128%	112%	137%	124%
<u>PGW's Ranking Within the:</u>						
MUNI Group (n=8)	5	6	7	7	7	6
IOUPA Group (n=5)	5	5	5	5	3	5
IOU Group (n=7)	8	7	8	6	4	7
ALLCOS (n=20)	16	16	18	16	12	16
<u>Interpretation of Rankings:</u>						
MUNI Group	=	=	-	-	-	=
IOUPA Group	-	-	-	-	=	-
IOU Group	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	=	<b>OUT</b>
ALLCOS	-	-	-	-	=	-

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PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	Debt/Equity					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	5.12	3.38	2.64	1.73	1.44	2.86
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	1.59	1.10	0.70	0.48	0.34	0.84
CPS Energy	1.72	1.60	1.62	1.75	1.76	1.69
Gainesville Regional Utilities	7.55	6.57	6.09	5.40	5.33	6.19
Greenville, City of	0.42	0.39	0.36	0.35	0.33	0.37
Jackson Energy Authority	0.23	0.21	0.19	0.17	0.15	0.19
JEA Utilities	1.72	1.36	1.11	1.00	1.03	1.24
Knoxville Utilities Board	0.51	0.44	0.38	0.33	0.29	0.39
Richmond, City of	1.86	1.83	1.72	1.57	1.46	1.69
MUNI Average	1.95	1.69	1.52	1.38	1.34	1.58
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	0.80	0.80	0.78	0.77	0.79	0.79
National Fuel Gas Distribution Corp	0.47	0.50	0.57	0.72	0.61	0.57
PECO Gas (Exelon Corporation)	0.86	0.87	0.86	0.91	0.91	0.88
Peoples Natural Gas Company LLC	0.86	0.85	0.87	0.83	0.79	0.84
UGI Utilities Inc. (Gas)	1.01	1.07	1.06	1.02	1.05	1.04
IOUPA Average	0.80	0.82	0.83	0.85	0.83	0.83
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	1.01	1.12	0.88	0.96	0.97	0.99
Connecticut Natural Gas Corp	0.35	0.45	0.46	0.46	0.53	0.45
Corning Natural Gas Corp	1.04	1.13	1.19	1.09	0.90	1.07
New Jersey Natural Gas Co	0.74	0.81	0.93	0.92	0.87	0.85
Southern Connecticut Gas Co	0.56	0.61	0.59	0.57	0.61	0.59
Washington Gas Light Co	1.11	0.94	0.93	1.03	0.95	0.99
Yankee Gas Services Co	0.75	0.79	0.74	0.71	0.81	0.76
IOU Average	0.79	0.84	0.82	0.82	0.81	0.81
<u>PGW's Ranking Within the:</u>						
MUNI Group (n=8)	8	8	8	7	6	8
IOUPA Group (n=5)	6	6	6	6	6	6
IOU Group (n=7)	8	8	8	8	8	8
ALLCOS (n=20)	20	20	20	19	18	20
<u>Interpretation of Rankings:</u>						
MUNI Group	-	-	-	-	=	-
IOUPA Group	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>
IOU Group	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>
ALLCOS	-	-	-	-	-	-

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PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	EBITDA/Revenues					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	31%	34%	44%	38%	32%	36%
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	32%	39%	35%	45%	24%	35%
CPS Energy	41%	41%	37%	37%	34%	38%
Gainesville Regional Utilities	51%	48%	39%	32%	29%	40%
Greenville, City of	18%	17%	22%	11%	12%	16%
Jackson Energy Authority	37%	29%	28%	23%	17%	27%
JEA Utilities	38%	42%	39%	25%	15%	32%
Knoxville Utilities Board	36%	38%	38%	25%	21%	32%
Richmond, City of	26%	27%	22%	19%	17%	22%
MUNI Average	35%	35%	33%	27%	21%	30%
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	39%	41%	41%	50%	41%	42%
National Fuel Gas Distribution Corp	20%	25%	31%	18%	20%	23%
PECO Gas (Exelon Corporation)	35%	36%	37%	32%	35%	35%
Peoples Natural Gas Company LLC	35%	38%	35%	38%	36%	36%
UGI Utilities Inc. (Gas)	33%	35%	35%	32%	36%	34%
IOUPA Average	32%	35%	36%	34%	34%	34%
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	21%	24%	20%	24%	31%	24%
Connecticut Natural Gas Corp	23%	25%	22%	34%	97%	40%
Corning Natural Gas Corp	41%	35%	39%	30%	54%	40%
New Jersey Natural Gas Co	24%	31%	28%	26%	31%	28%
Southern Connecticut Gas Co	31%	27%	23%	51%	74%	41%
Washington Gas Light Co	43%	44%	53%	37%	61%	48%
Yankee Gas Services Co	32%	39%	42%	35%	37%	37%
IOU Average	31%	32%	32%	34%	55%	37%
<u>PGW's Ranking Within the:</u>						
MUNI Group (n=8)	7	6	1	2	2	3
IOUPA Group (n=5)	5	5	1	2	5	3
IOU Group (n=7)	4	4	2	2	6	6
ALLCOS (n=20)	14	13	2	4	11	10
<u>Interpretation of Rankings:</u>						
MUNI Group	-	=	+	+	+	=
IOUPA Group	-	-	+	=	-	=
IOU Group	=	=	=	=	<b>OUT</b>	<b>OUT</b>
ALLCOS	=	=	+	+	=	=

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PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	FFO/CapEx					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	142%	146%	156%	157%	117%	144%
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	202%	203%	206%	327%	179%	223%
CPS Energy	100%	81%	69%	75%	68%	79%
Gainesville Regional Utilities	55%	143%	197%	100%	111%	121%
Greenville, City of	139%	29%	118%	35%	112%	87%
Jackson Energy Authority	377%	147%	285%	121%	102%	206%
JEA Utilities	123%	176%	238%	192%	42%	154%
Knoxville Utilities Board	102%	94%	130%	111%	126%	113%
Richmond, City of	135%	107%	97%	121%	102%	112%
MUNI Average	154%	123%	168%	135%	105%	137%
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	61%	53%	62%	71%	56%	61%
National Fuel Gas Distribution Corp	130%	137%	154%	238%	86%	149%
PECO Gas (Exelon Corporation)	47%	40%	36%	13%	30%	33%
Peoples Natural Gas Company LLC	80%	87%	79%	918%	52%	243%
UGI Utilities Inc. (Gas)	61%	63%	68%	73%	72%	67%
IOUPA Average	76%	76%	80%	263%	59%	111%
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	33%	33%	37%	53%	53%	42%
Connecticut Natural Gas Corp	134%	133%	112%	121%	128%	126%
Corning Natural Gas Corp	93%	86%	51%	45%	37%	62%
New Jersey Natural Gas Co	47%	61%	58%	82%	58%	61%
Southern Connecticut Gas Co	91%	72%	82%	85%	74%	81%
Washington Gas Light Co	55%	72%	65%	64%	73%	66%
Yankee Gas Services Co	46%	56%	63%	67%	49%	56%
IOU Average	71%	73%	67%	74%	67%	71%
<u>PGW's Ranking Within the:</u>						
MUNI Group (n=8)	3	4	5	3	3	4
IOUPA Group (n=5)	1	1	1	3	1	3
IOU Group (n=7)	1	1	1	1	2	1
ALLCOS (n=20)	3	4	5	5	4	6
<u>Interpretation of Rankings:</u>						
MUNI Group	=	=	=	=	=	=
IOUPA Group	+	+	+	=	+	=
IOU Group	+	+	+	+	=	+
ALLCOS	+	+	+	+	+	+

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PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	Days Cash					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	96	163	158	84	105	121
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	82	145	194	73	72	113
CPS Energy	328	281	371	428	337	349
Gainesville Regional Utilities	213	225	146	78	124	157
Greenville, City of	315	405	427	257	219	325
Jackson Energy Authority	357	419	480	386	346	398
JEA Utilities	158	163	128	56	119	125
Knoxville Utilities Board	165	139	123	78	82	117
Richmond, City of	130	151	115	61	32	98
MUNI Average	219	241	248	177	166	210
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	2	2	1	3	3	2
National Fuel Gas Distribution Corp	234	306	408	272	329	310
Peoples Natural Gas Company LLC	2	1	1	2	2	2
UGI Utilities Inc. (Gas)	2	2	0	4	8	3
IOUPA Average	60	78	103	70	86	79
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	3	4	2	13	5	5
Connecticut Natural Gas Corp	1	1	0	1	20	5
Corning Natural Gas Corp	0	0	0	0	0	0
New Jersey Natural Gas Co	(1)	2	1	1	2	1
Southern Connecticut Gas Co	0	4	1	2	1	2
Washington Gas Light Co	30	12	8	3	14	13
Yankee Gas Services Co	3	0	2	1	0	1
IOU Average	5	3	2	3	6	4
<u>PGW's Ranking Within the:</u>						
MUNI Group (n=8)	8	5	5	4	6	6
IOUPA Group (n=5)	2	2	2	2	2	2
IOU Group (n=7)	1	1	1	1	1	1
ALLCOS (n=20)	9	6	6	5	7	7
<u>Interpretation of Rankings:</u>						
MUNI Group	-	=	=	=	=	=
IOUPA Group	=	=	=	=	=	=
IOU Group	+	+	+	+	+	+
ALLCOS	=	+	+	+	=	=

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**PHILADELPHIA GAS WORKS**  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	FFO/Avg Debt					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	15%	15%	20%	21%	17%	18%
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	32%	35%	38%	47%	55%	41%
CPS Energy	10%	10%	7%	9%	9%	9%
Gainesville Regional Utilities	5%	9%	7%	9%	6%	7%
Greenville, City of	23%	19%	26%	11%	23%	20%
Jackson Energy Authority	62%	41%	44%	53%	46%	49%
JEA Utilities	15%	18%	20%	21%	6%	16%
Knoxville Utilities Board	24%	25%	31%	33%	32%	29%
Richmond, City of	11%	9%	8%	11%	11%	10%
MUNI Average	23%	21%	23%	24%	24%	23%
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	22%	20%	21%	23%	20%	21%
National Fuel Gas Distribution Corp	35%	29%	35%	20%	21%	28%
Peoples Natural Gas Company LLC	18%	21%	23%	25%	25%	22%
UGI Utilities Inc. (Gas)	18%	17%	18%	19%	18%	18%
IOUPA Average	23%	22%	24%	22%	21%	22%
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	11%	8%	9%	13%	11%	10%
Connecticut Natural Gas Corp	43%	40%	39%	38%	33%	39%
Corning Natural Gas Corp	13%	14%	11%	7%	8%	11%
New Jersey Natural Gas Co	16%	20%	16%	17%	15%	17%
Southern Connecticut Gas Co	25%	23%	23%	25%	20%	23%
Washington Gas Light Co	14%	16%	17%	17%	18%	16%
Yankee Gas Services Co	14%	15%	15%	16%	13%	15%
IOU Average	19%	19%	19%	19%	17%	19%
<b>PGW's Ranking Within the:</b>						
MUNI Group (n=8)	5	6	5	4	5	5
IOUPA Group (n=5)	5	5	4	3	5	5
IOU Group (n=7)	4	5	3	3	4	3
ALLCOS (n=20)	12	14	10	8	12	11
<b>Interpretation of Rankings:</b>						
MUNI Group	=	=	=	=	=	=
IOUPA Group	-	-	=	=	-	-
IOU Group	=	-	=	=	=	=
ALLCOS	=	=	=	=	=	=

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PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	FFO Coverage					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	4.56	4.49	5.61	6.25	5.15	5.21
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	6.99	8.68	12.80	10.41	11.82	10.14
CPS Energy	3.45	3.26	2.92	3.39	3.37	3.28
Gainesville Regional Utilities	2.07	2.95	2.58	2.99	2.33	2.58
Greenville, City of	8.73	6.77	8.51	4.26	7.85	7.22
Jackson Energy Authority	20.38	13.78	14.78	17.52	15.09	16.31
JEA Utilities	3.89	5.16	5.87	5.83	2.58	4.67
Knoxville Utilities Board	7.30	7.87	9.58	8.24	7.89	8.18
Richmond, City of	3.88	3.61	3.29	4.10	4.07	3.79
MUNI Average	7.09	6.51	7.54	7.09	6.88	7.02
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	5.32	4.93	5.30	5.95	5.01	5.30
National Fuel Gas Distribution Corp	7.40	6.65	8.76	5.47	5.01	6.66
PECO Gas (Exelon Corporation)	1.74	1.56	1.55	1.22	1.43	1.50
Peoples Natural Gas Company LLC	5.09	6.68	7.85	8.95	8.71	7.46
UGI Utilities Inc. (Gas)	5.39	5.28	6.00	6.24	5.55	5.69
IOUPA Average	4.99	5.02	5.89	5.57	5.14	5.32
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	3.25	2.83	3.17	3.99	3.34	3.32
Connecticut Natural Gas Corp	8.20	8.55	8.79	9.00	8.23	8.55
Corning Natural Gas Corp	4.32	5.00	3.40	2.73	2.49	3.59
New Jersey Natural Gas Co	5.77	6.48	5.45	5.65	4.77	5.62
Southern Connecticut Gas Co	5.31	5.16	5.17	5.06	4.59	5.06
Washington Gas Light Co	4.67	5.24	5.70	5.43	4.96	5.20
Yankee Gas Services Co	4.77	5.82	6.11	6.04	4.65	5.48
IOU Average	5.18	5.58	5.40	5.41	4.72	5.26
<u>PGW's Ranking Within the:</u>						
MUNI Group (n=8)	5	6	6	4	5	5
IOUPA Group (n=5)	5	5	4	2	3	5
IOU Group (n=7)	6	7	4	2	2	4
ALLCOS (n=20)	14	16	12	6	8	12
<u>Interpretation of Rankings:</u>						
MUNI Group	=	=	=	=	=	=
IOUPA Group	-	-	=	=	=	-
IOU Group	<b>OUT</b>	<b>OUT</b>	=	=	=	=
ALLCOS	=	-	=	+	=	=

Source of Information: S&P Capital IQ, PUC Annual Reports, Audited Annual Reports, and AGA Statistics

PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	EBIT Coverage					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	3.08	3.02	4.19	4.71	3.32	3.66
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	6.11	7.65	11.02	9.15	9.89	8.76
CPS Energy	1.67	1.63	1.05	1.46	1.44	1.45
Gainesville Regional Utilities	0.73	1.63	1.22	1.66	1.09	1.27
Greenville, City of	5.01	3.38	4.63	(0.22)	3.10	3.18
Jackson Energy Authority	15.78	9.15	9.93	12.44	9.58	11.38
JEA Utilities	2.01	2.86	3.01	1.37	(1.02)	1.65
Knoxville Utilities Board	6.19	6.60	7.63	6.62	6.05	6.62
Richmond, City of	1.91	1.40	1.06	1.64	1.44	1.49
MUNI Average	4.93	4.29	4.94	4.27	3.95	4.47
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	4.18	3.59	4.06	5.05	4.09	4.19
National Fuel Gas Distribution Corp	6.40	5.30	7.35	4.13	3.33	5.30
PECO Gas (Exelon Corporation)	1.24	0.98	0.98	0.78	1.00	1.00
Peoples Natural Gas Company LLC	4.05	4.43	5.00	5.15	3.66	4.46
UGI Utilities Inc. (Gas)	4.48	4.23	4.93	5.46	4.86	4.79
IOUPA Average	4.07	3.71	4.46	4.11	3.39	3.95
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	2.74	2.11	1.94	3.35	2.70	2.57
Connecticut Natural Gas Corp	5.35	5.15	5.20	13.89	34.79	12.88
Corning Natural Gas Corp	6.04	4.77	4.69	3.26	4.78	4.71
New Jersey Natural Gas Co	4.22	4.84	4.07	4.58	3.55	4.25
Southern Connecticut Gas Co	5.45	3.39	3.88	12.46	14.58	7.95
Washington Gas Light Co	6.47	5.79	9.14	6.23	7.98	7.12
Yankee Gas Services Co	5.32	6.52	7.62	6.76	5.52	6.35
IOU Average	5.08	4.65	5.22	7.22	10.56	6.55
<u>PGW's Ranking Within the:</u>						
MUNI Group (n=8)	5	5	5	4	4	4
IOUPA Group (n=5)	5	5	4	4	5	5
IOU Group (n=7)	7	7	5	5	7	7
ALLCOS (n=20)	15	15	12	11	14	14
<u>Interpretation of Rankings:</u>						
MUNI Group	=	=	=	=	=	=
IOUPA Group	-	-	=	=	-	-
IOU Group	<b>OUT</b>	<b>OUT</b>	-	-	<b>OUT</b>	<b>OUT</b>
ALLCOS	-	-	=	=	=	=

Source of Information: S&P Capital IQ, PUC Annual Reports, Audited Annual Reports, and AGA Statistics

PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	Interest-Only Debt Service Coverage					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	4.57	4.60	5.80	6.50	5.11	5.32
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	7.87	9.92	14.60	22.88	11.01	13.26
CPS Energy	4.47	4.09	4.02	4.37	4.43	4.28
Gainesville Regional Utilities	5.06	3.48	3.22	3.34	2.63	3.55
Greenville, City of	10.28	7.74	10.44	7.14	9.26	8.97
Jackson Energy Authority	20.82	15.13	16.59	17.10	12.75	16.48
JEA Utilities	4.40	5.93	6.78	5.35	3.17	5.13
Knoxville Utilities Board	8.72	9.41	11.58	7.98	7.21	8.98
Richmond, City of	3.77	3.92	3.58	4.30	4.11	3.94
MUNI Average	8.17	7.45	8.85	9.06	6.82	8.07
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	6.01	5.45	5.95	8.56	5.66	6.33
National Fuel Gas Distribution Corp	6.44	7.36	9.78	6.14	4.88	6.92
PECO Gas (Exelon Corporation)	1.50	1.21	1.16	1.25	1.11	1.25
Peoples Natural Gas Company LLC	5.92	6.93	7.14	9.84	6.08	7.18
UGI Utilities Inc. (Gas)	6.19	6.10	6.89	7.11	6.36	6.53
IOUPA Average	5.21	5.41	6.18	6.58	4.82	5.64
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	2.76	3.31	3.06	4.26	3.48	3.37
Connecticut Natural Gas Corp	9.73	9.74	9.48	18.38	39.19	17.30
Corning Natural Gas Corp	7.55	6.44	5.22	4.68	6.34	6.05
New Jersey Natural Gas Co	5.77	6.23	5.59	6.28	5.03	5.78
Southern Connecticut Gas Co	7.60	5.83	5.63	14.03	16.39	9.90
Washington Gas Light Co	8.98	8.25	11.54	8.19	9.69	9.33
Yankee Gas Services Co	6.81	8.46	9.75	8.72	7.08	8.16
IOU Average	7.03	6.89	7.18	9.22	12.46	8.56
<u>PGW's Ranking Within the:</u>						
MUNI Group (n=8)	6	6	6	5	5	5
IOUPA Group (n=5)	5	5	5	4	4	5
IOU Group (n=7)	7	7	4	5	6	7
ALLCOS (n=20)	16	16	13	12	13	15
<u>Interpretation of Rankings:</u>						
MUNI Group	=	=	=	=	=	=
IOUPA Group	-	-	-	=	=	-
IOU Group	<b>OUT</b>	<b>OUT</b>	=	-	<b>OUT</b>	<b>OUT</b>
ALLCOS	-	-	=	=	=	-

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PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	Debt Service Coverage (P & I)					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	2.15	2.08	2.86	3.13	2.32	2.51
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	3.21	1.03	3.89	7.55	3.27	3.79
CPS Energy	2.66	2.68	2.38	2.56	2.67	2.59
Gainesville Regional Utilities	3.64	2.83	2.59	2.43	1.80	2.66
Greenville, City of	4.50	4.93	4.73	3.17	5.30	4.53
Jackson Energy Authority	9.31	6.63	6.87	6.74	4.75	6.86
JEA Utilities	2.01	2.33	3.28	2.54	1.59	2.35
Knoxville Utilities Board	3.63	3.10	4.17	3.15	2.78	3.37
Richmond, City of	1.75	1.77	1.53	1.96	1.80	1.76
MUNI Average	3.84	3.16	3.68	3.76	3.00	3.49
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	2.76	3.31	3.06	4.26	3.48	3.37
Connecticut Natural Gas Corp	9.73	9.74	9.48	18.38	39.19	17.30
Corning Natural Gas Corp	7.55	1.79	1.87	1.42	2.37	3.00
New Jersey Natural Gas Co	1.30	4.80	4.67	2.77	5.03	3.71
Southern Connecticut Gas Co	7.17	5.51	2.28	14.03	16.39	9.08
Washington Gas Light Co	5.05	7.57	11.54	8.19	8.06	8.08
Yankee Gas Services Co	2.35	2.76	9.75	5.14	7.08	5.42
IOU Average	5.13	5.07	6.09	7.74	11.66	7.14
<u>PGW's Ranking Within the:</u>						
MUNI Group (n=8)	7	7	6	5	6	7
IOU Group (n=7)	7	7	6	6	8	8
ALLCOS (n=20)	13	13	11	10	13	14
<u>Interpretation of Rankings:</u>						
MUNI Group	-	-	=	=	=	-
IOU Group	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>

Source of Information: S&P Capital IQ, PUC Annual Reports, Audited Annual Reports, and AGA Statistics

PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	CapEx/DA					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	170%	162%	208%	217%	194%	190%
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	166%	179%	169%	114%	209%	167%
CPS Energy	138%	171%	149%	165%	181%	161%
Gainesville Regional Utilities	146%	104%	59%	149%	96%	111%
Greenville, City of	149%	585%	164%	207%	129%	247%
Jackson Energy Authority	74%	127%	67%	175%	163%	121%
JEA Utilities	125%	103%	72%	57%	104%	92%
Knoxville Utilities Board	216%	238%	163%	191%	146%	191%
Richmond, City of	108%	110%	106%	104%	114%	108%
MUNI Average	140%	202%	119%	145%	143%	150%
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	388%	393%	366%	405%	449%	400%
National Fuel Gas Distribution Corp	222%	174%	204%	96%	278%	195%
PECO Gas (Exelon Corporation)	345%	314%	354%	444%	419%	375%
Peoples Natural Gas Company LLC	301%	289%	398%	33%	602%	325%
UGI Utilities Inc. (Gas)	413%	345%	343%	374%	368%	369%
IOUPA Average	334%	303%	333%	270%	423%	333%
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	819%	510%	527%	530%	469%	571%
Connecticut Natural Gas Corp	120%	123%	157%	146%	126%	134%
Corning Natural Gas Corp	262%	310%	446%	316%	331%	333%
New Jersey Natural Gas Co	532%	456%	396%	305%	382%	414%
Southern Connecticut Gas Co	201%	231%	257%	258%	244%	238%
Washington Gas Light Co	301%	264%	306%	339%	322%	306%
Yankee Gas Services Co	521%	440%	380%	372%	448%	432%
IOU Average	394%	333%	353%	324%	332%	347%

PGW's Ranking Within the:						
MUNI Group (n=8)	8	5	9	9	8	7
IOUPA Group (n=5)	1	1	2	3	1	1
IOU Group (n=7)	2	2	2	2	2	2
ALLCOS (n=20)	9	6	11	12	9	8

Interpretation of Rankings:						
MUNI Group	-	=	<b>OUT</b>	<b>OUT</b>	-	-
IOUPA Group	+	+	=	=	+	+
IOU Group	=	=	=	=	=	=
ALLCOS	=	+	=	=	=	=

Source of Information: S&P Capital IQ, PUC Annual Reports, Audited Annual Reports, and AGA Statistics



PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	Net Plant/Gross Plant					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	56%	56%	56%	56%	58%	56%
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	NA	NA	NA	NA	NA	NA
CPS Energy	55%	54%	54%	54%	53%	54%
Gainesville Regional Utilities	46%	44%	43%	42%	42%	43%
Greenville, City of	57%	57%	56%	56%	55%	56%
Jackson Energy Authority	59%	57%	56%	57%	57%	57%
JEA Utilities	37%	36%	35%	32%	32%	34%
Knoxville Utilities Board	67%	67%	66%	65%	64%	66%
Richmond, City of	60%	58%	56%	55%	53%	56%
MUNI Average	54%	53%	52%	52%	51%	52%
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	83%	83%	83%	83%	83%	83%
National Fuel Gas Distribution Corp	64%	64%	64%	63%	64%	64%
PECO Gas (Exelon Corporation)	71%	73%	74%	75%	76%	74%
Peoples Natural Gas Company LLC	70%	69%	70%	71%	73%	71%
UGI Utilities Inc. (Gas)	73%	73%	74%	74%	74%	74%
IOUPA Average	72%	72%	73%	73%	74%	73%
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	82%	83%	83%	84%	84%	83%
Connecticut Natural Gas Corp	53%	52%	51%	51%	50%	51%
Corning Natural Gas Corp	72%	72%	73%	73%	73%	73%
New Jersey Natural Gas Co	83%	84%	85%	85%	85%	84%
Southern Connecticut Gas Co	68%	68%	67%	67%	68%	68%
Washington Gas Light Co	69%	70%	71%	72%	72%	71%
Yankee Gas Services Co	78%	79%	81%	83%	85%	81%
IOU Average	72%	73%	73%	74%	74%	73%
<u>PGW's Ranking Within the:</u>						
MUNI Group (n=8)	5	5	2	3	2	3
IOUPA Group (n=5)	6	6	6	6	6	6
IOU Group (n=7)	7	7	7	7	7	7
ALLCOS (n=20)	16	16	13	14	13	14
<u>Interpretation of Rankings:</u>						
MUNI Group	=	=	+	=	+	=
IOUPA Group	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>
IOU Group	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>
ALLCOS	-	-	=	=	=	=

Source of Information: S&P Capital IQ, PUC Annual Reports, Audited Annual Reports, and AGA Statistics

PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	CapEx/Net Plant					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	8%	7%	9%	9%	9%	8%
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	10%	10%	9%	6%	10%	9%
CPS Energy	8%	8%	8%	8%	10%	8%
Gainesville Regional Utilities	13%	9%	5%	13%	7%	9%
Greenville, City of	8%	28%	9%	11%	7%	13%
Jackson Energy Authority	4%	6%	3%	8%	8%	6%
JEA Utilities	10%	8%	6%	7%	9%	8%
Knoxville Utilities Board	10%	10%	8%	9%	7%	9%
Richmond, City of	6%	6%	6%	6%	7%	6%
MUNI Average	9%	11%	7%	9%	8%	9%
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	12%	12%	11%	11%	12%	12%
National Fuel Gas Distribution Corp	8%	6%	7%	3%	10%	7%
PECO Gas (Exelon Corporation)	NA	NA	NA	NA	NA	NA
Peoples Natural Gas Company LLC	9%	10%	12%	1%	19%	10%
UGI Utilities Inc. (Gas)	12%	11%	11%	11%	11%	11%
IOUPA Average	10%	10%	10%	7%	13%	10%
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	16%	11%	10%	10%	9%	11%
Connecticut Natural Gas Corp	8%	9%	11%	10%	9%	9%
Corning Natural Gas Corp	7%	8%	11%	9%	11%	9%
New Jersey Natural Gas Co	14%	12%	11%	9%	11%	11%
Southern Connecticut Gas Co	9%	11%	9%	9%	9%	9%
Washington Gas Light Co	10%	9%	10%	10%	10%	10%
Yankee Gas Services Co	13%	11%	10%	9%	11%	11%
IOU Average	11%	10%	10%	9%	10%	10%
<u>PGW's Ranking Within the:</u>						
MUNI Group (n=8)	3	3	7	6	6	4
IOUPA Group (n=5)	1	2	2	3	1	2
IOU Group (n=7)	2	1	1	1	1	1
ALLCOS (n=20)	4	4	8	8	6	5
<u>Interpretation of Rankings:</u>						
MUNI Group	=	=	-	=	=	=
IOUPA Group	+	=	=	=	+	=
IOU Group	=	+	+	+	+	+
ALLCOS	+	+	=	=	+	+

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PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	CapEx/Gross Plant					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	4%	4%	5%	5%	5%	5%
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	NA	NA	NA	NA	NA	NA
CPS Energy	4%	5%	4%	4%	5%	4%
Gainesville Regional Utilities	6%	4%	2%	5%	3%	4%
Greenville, City of	4%	16%	5%	6%	4%	7%
Jackson Energy Authority	2%	4%	2%	5%	4%	3%
JEA Utilities	4%	3%	2%	2%	3%	3%
Knoxville Utilities Board	6%	7%	5%	6%	4%	6%
Richmond, City of	3%	3%	3%	3%	4%	3%
MUNI Average	4%	6%	3%	4%	4%	4%
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	10%	10%	9%	9%	10%	10%
National Fuel Gas Distribution Corp	5%	4%	5%	2%	6%	4%
PECO Gas (Exelon Corporation)	NA	NA	NA	NA	NA	NA
Peoples Natural Gas Company LLC	7%	7%	8%	1%	14%	7%
UGI Utilities Inc. (Gas)	9%	8%	8%	8%	8%	8%
IOUPA Average	8%	7%	8%	5%	10%	7%
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	13%	9%	9%	9%	8%	10%
Connecticut Natural Gas Corp	4%	4%	5%	5%	4%	4%
Corning Natural Gas Corp	5%	6%	8%	6%	8%	7%
New Jersey Natural Gas Co	11%	10%	9%	8%	10%	10%
Southern Connecticut Gas Co	6%	7%	6%	6%	6%	6%
Washington Gas Light Co	7%	6%	7%	7%	7%	7%
Yankee Gas Services Co	10%	9%	8%	8%	9%	9%
IOU Average	8%	7%	7%	7%	7%	7%
<u>PGW's Ranking Within the:</u>						
MUNI Group (n=8)	3	3	6	4	7	6
IOUPA Group (n=5)	1	1	1	3	1	2
IOU Group (n=7)	1	1	1	1	2	2
ALLCOS (n=20)	3	3	6	6	8	8
<u>Interpretation of Rankings:</u>						
MUNI Group	=	=	=	=	-	=
IOUPA Group	+	+	+	=	+	=
IOU Group	+	+	+	+	=	=
ALLCOS	+	+	+	+	=	=

Source of Information: S&P Capital IQ, PUC Annual Reports, Audited Annual Reports, and AGA Statistics

PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	CapEx/Capitalization					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	9%	8%	9%	9%	9%	9%
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	10%	10%	8%	5%	8%	8%
CPS Energy	6%	7%	7%	7%	8%	7%
Gainesville Regional Utilities	8%	6%	3%	7%	4%	6%
Greenville, City of	5%	19%	6%	8%	5%	9%
Jackson Energy Authority	3%	5%	3%	7%	6%	5%
JEA Utilities	7%	6%	5%	6%	8%	6%
Knoxville Utilities Board	8%	9%	7%	8%	6%	8%
Richmond, City of	5%	5%	5%	6%	6%	5%
MUNI Average	7%	8%	6%	7%	6%	7%
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	16%	15%	14%	13%	15%	15%
National Fuel Gas Distribution Corp	9%	7%	8%	3%	10%	7%
PECO Gas (Exelon Corporation)	NA	NA	NA	NA	NA	NA
Peoples Natural Gas Company LLC	10%	11%	13%	1%	20%	11%
UGI Utilities Inc. (Gas)	15%	13%	13%	13%	13%	13%
IOUPA Average	13%	12%	12%	8%	15%	12%
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	17%	12%	11%	11%	10%	12%
Connecticut Natural Gas Corp	8%	9%	11%	10%	8%	9%
Corning Natural Gas Corp	7%	8%	11%	8%	11%	9%
New Jersey Natural Gas Co	15%	14%	12%	9%	11%	12%
Southern Connecticut Gas Co	10%	12%	10%	10%	10%	10%
Washington Gas Light Co	13%	11%	12%	13%	12%	12%
Yankee Gas Services Co	13%	11%	10%	9%	11%	11%
IOU Average	12%	11%	11%	10%	10%	11%
<u>PGW's Ranking Within the:</u>						
MUNI Group (n=8)	8	6	9	9	9	9
IOUPA Group (n=5)	1	2	2	3	1	2
IOU Group (n=7)	3	1	1	2	2	1
ALLCOS (n=20)	10	7	10	12	10	10
<u>Interpretation of Rankings:</u>						
MUNI Group	-	=	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>	<b>OUT</b>
IOUPA Group	+	=	=	=	+	=
IOU Group	=	+	+	=	=	+
ALLCOS	=	=	=	=	=	=

Source of Information: S&P Capital IQ, PUC Annual Reports, Audited Annual Reports, and AGA Statistics

PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	Net Plant/Capitalization					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	114%	115%	96%	94%	102%	104%
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	99%	99%	91%	82%	80%	90%
CPS Energy	85%	88%	88%	84%	83%	86%
Gainesville Regional Utilities	60%	61%	59%	58%	60%	60%
Greenville, City of	64%	68%	69%	74%	75%	70%
Jackson Energy Authority	82%	80%	78%	79%	80%	80%
JEA Utilities	77%	79%	78%	76%	86%	79%
Knoxville Utilities Board	83%	86%	86%	87%	87%	86%
Richmond, City of	90%	89%	91%	93%	96%	92%
MUNI Average	80%	81%	80%	79%	81%	80%
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	131%	126%	120%	119%	119%	123%
National Fuel Gas Distribution Corp	109%	108%	100%	93%	102%	102%
PECO Gas (Exelon Corporation)	119%	120%	117%	114%	113%	117%
Peoples Natural Gas Company LLC	108%	109%	106%	104%	105%	106%
UGI Utilities Inc. (Gas)	123%	123%	120%	115%	117%	120%
IOUPA Average	118%	117%	113%	109%	111%	114%
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	108%	108%	107%	105%	106%	107%
Connecticut Natural Gas Corp	100%	101%	102%	97%	97%	99%
Corning Natural Gas Corp	103%	101%	101%	98%	101%	101%
New Jersey Natural Gas Co	108%	110%	106%	101%	101%	105%
Southern Connecticut Gas Co	109%	109%	111%	107%	108%	109%
Washington Gas Light Co	126%	125%	124%	123%	123%	124%
Yankee Gas Services Co	102%	102%	99%	99%	102%	101%
IOU Average	108%	108%	107%	104%	105%	107%
<u>PGW's Ranking Within the:</u>						
MUNI Group (n=8)	1	1	1	1	1	1
IOUPA Group (n=5)	4	4	6	5	5	5
IOU Group (n=7)	2	2	8	8	4	5
ALLCOS (n=20)	5	5	13	12	8	9
<u>Interpretation of Rankings:</u>						
MUNI Group	+	+	+	+	+	+
IOUPA Group	=	=	<b>OUT</b>	-	-	-
IOU Group	=	=	<b>OUT</b>	<b>OUT</b>	=	-
ALLCOS	+	+	=	=	=	=

Source of Information: S&P Capital IQ, PUC Annual Reports, Audited Annual Reports, and AGA Statistics

PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	Gas Revenue/MCF					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	\$8.61	\$8.26	\$8.49	\$10.40	\$9.94	\$9.14
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	\$3.82	\$3.13	\$3.42	\$3.60	\$3.66	\$3.53
CPS Energy	NA	NA	NA	NA	NA	NA
Gainesville Regional Utilities	\$3.86	\$3.10	\$4.75	\$7.83	\$7.83	\$5.47
Greenville, City of	\$9.99	\$9.14	\$10.38	\$13.42	\$13.96	\$11.38
Jackson Energy Authority	\$4.50	\$4.02	\$4.40	\$5.72	\$5.88	\$4.90
JEA Utilities	NA	NA	NA	NA	NA	NA
Knoxville Utilities Board	\$8.41	\$8.28	\$9.67	\$10.98	\$11.23	\$9.71
Richmond, City of	\$9.85	\$7.81	\$8.59	\$10.32	\$10.91	\$9.50
MUNI Average	\$6.74	\$5.91	\$6.87	\$8.65	\$8.91	\$7.42
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	\$7.55	\$7.64	\$8.75	\$10.71	\$10.55	\$9.04
National Fuel Gas Distribution Corp	\$4.24	\$4.33	\$4.51	\$5.72	\$5.67	\$4.89
PECO Gas (Exelon Corporation)	\$6.73	\$6.21	\$6.14	\$8.02	\$8.51	\$7.12
Peoples Natural Gas Company LLC	\$5.54	\$5.38	\$5.89	\$7.43	\$5.10	\$5.87
UGI Utilities Inc. (Gas)	\$2.65	\$2.66	\$2.90	\$3.46	\$3.99	\$3.13
IOUPA Average	\$5.34	\$5.24	\$5.64	\$7.07	\$6.76	\$6.01
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	\$9.06	\$9.12	\$9.36	\$10.99	\$19.13	\$11.53
Connecticut Natural Gas Corp	\$9.89	\$9.52	\$10.70	\$13.22	\$15.00	\$11.67
Corning Natural Gas Corp	\$2.96	\$3.19	\$2.91	\$3.00	\$20.67	\$6.55
New Jersey Natural Gas Co	\$6.34	\$7.98	\$8.62	\$10.13	\$10.51	\$8.72
Southern Connecticut Gas Co	\$4.10	\$9.97	\$11.05	\$13.65	\$13.91	\$10.54
Washington Gas Light Co	\$7.40	\$6.93	\$7.92	\$9.08	\$19.56	\$10.18
Yankee Gas Services Co	\$9.47	\$9.56	\$10.72	\$12.32	\$18.18	\$12.05
IOU Average	\$7.03	\$8.04	\$8.75	\$10.34	\$16.71	\$10.17
<u>PGW's Ranking Within the:</u>						
MUNI Group (n=8)	5	5	4	5	4	4
IOUPA Group (n=5)	6	6	5	5	5	6
IOU Group (n=7)	5	4	3	4	1	3
ALLCOS (n=20)	14	13	10	12	8	11
<u>Interpretation of Rankings:</u>						
MUNI Group	=	=	=	=	=	=
IOUPA Group	<b>OUT</b>	<b>OUT</b>	-	-	-	<b>OUT</b>
IOU Group	-	=	=	=	+	=
ALLCOS	=	=	=	=	=	=

Source of Information: S&P Capital IQ, PUC Annual Reports, Audited Annual Reports, and AGA Statistics

PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	Non-Commodity Revenue/Revenue					
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
Philadelphia Gas Works	70%	75%	75%	66%	68%	71%
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	57%	65%	63%	65%	49%	60%
CPS Energy	70%	73%	71%	64%	59%	67%
Gainesville Regional Utilities	73%	74%	64%	52%	56%	64%
Greenville, City of	47%	53%	54%	39%	40%	47%
Jackson Energy Authority	55%	60%	58%	47%	47%	53%
JEA Utilities	64%	70%	64%	50%	46%	59%
Knoxville Utilities Board	54%	58%	55%	45%	43%	51%
Richmond, City of	55%	59%	54%	42%	43%	51%
MUNI Average	59%	64%	60%	51%	48%	56%
<u>PUC Jurisdictional Investor Owned Natural Gas Utilities</u>						
Columbia Gas of Pennsylvania, Inc.	72%	76%	73%	59%	80%	72%
National Fuel Gas Distribution Corp	72%	80%	73%	56%	64%	69%
PECO Gas (Exelon Corporation)	57%	64%	65%	43%	75%	61%
Peoples Natural Gas Company LLC	73%	81%	75%	43%	69%	68%
UGI Utilities Inc. (Gas)	56%	58%	57%	49%	69%	58%
IOUPA Average	66%	72%	69%	50%	71%	66%
<u>Non-Jurisdictional Investor Owned Natural Gas Utilities</u>						
Brooklyn Union Gas Co	69%	76%	68%	57%	75%	69%
Connecticut Natural Gas Corp	55%	61%	54%	41%	57%	54%
Corning Natural Gas Corp	74%	82%	74%	64%	73%	73%
New Jersey Natural Gas Co	56%	66%	62%	51%	64%	60%
Southern Connecticut Gas Co	52%	60%	50%	40%	55%	51%
Washington Gas Light Co	67%	75%	59%	54%	80%	67%
Yankee Gas Services Co	60%	64%	62%	60%	59%	61%
IOU Average	62%	69%	61%	52%	66%	62%
<u>PGW's Ranking Within the:</u>						
MUNI Group (n=8)	2	1	1	1	1	1
IOUPA Group (n=5)	4	4	1	1	5	2
IOU Group (n=7)	2	3	1	1	4	2
ALLCOS (n=20)	6	6	1	1	8	3
<u>Interpretation of Rankings:</u>						
MUNI Group	+	+	+	+	+	+
IOUPA Group	=	=	+	+	-	=
IOU Group	=	=	+	+	=	=
ALLCOS	+	+	+	+	=	+

Source of Information: S&P Capital IQ, PUC Annual Reports, Audited Annual Reports, and AGA Statistics

PHILADELPHIA GAS WORKS  
COMPARISONS BETWEEN  
BENCHMARK RATIOS AND BOND ORDINANCE DEBT SERVICE COVERAGES  
FOR THE FISCAL YEARS ENDED 2019 - 2023

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Average</u>
<b><u>Benchmark Ratios Debt Service Coverage (P &amp; I) (1)</u></b>						
Philadelphia Gas Works	2.15	2.08	2.86	3.13	2.32	2.51
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group	3.21	1.03	3.89	7.55	3.27	3.79
CPS Energy	2.66	2.68	2.38	2.56	2.67	2.59
Gainesville Regional Utilities	3.64	2.83	2.59	2.43	1.80	2.66
Greenville, City of	4.50	4.93	4.73	3.17	5.30	4.53
Jackson Energy Authority	9.31	6.63	6.87	6.74	4.75	6.86
JEA Utilities	2.01	2.33	3.28	2.54	1.59	2.35
Knoxville Utilities Board	3.63	3.10	4.17	3.15	2.78	3.37
Richmond, City of	1.75	1.77	1.53	1.96	1.80	1.76
MUNI Average	3.84	3.16	3.68	3.76	3.00	3.49
<b><u>Bond Ordinance Debt Service Coverage (P &amp; I)</u></b>						
Philadelphia Gas Works						
Debt Service Coverage Senior 1998 Ordinance Bonds	2.33	2.20	2.70	3.04	2.52	2.56
Debt Service Coverage (Combined liens with \$18.0M City Fee)	2.15	2.01	2.51	2.86	2.33	2.37
<u>Municipally Owned Natural Gas Utilities</u>						
Citizens Energy Group (Gas Fund)	2.87	3.05	3.29	3.31	3.43	3.19
CPS Energy						
Senior Lien (with BABS)	4.62	4.95	2.92	3.09	3.60	3.84
Senior and Junior Lien (with BABS)	2.94	2.97	2.45	2.62	2.94	2.78
Gainsville (Gas Fund)	4.16	3.20	2.65	2.64	2.10	2.95
Greenville, City of (2)	3.10	3.75	3.29	3.36	3.09	3.32
Jackson Energy Authority	8.90	6.52	6.53	7.31	5.99	7.05
JEA Utilities						
Senior	6.51	10.68	11.80	10.03	6.50	9.10
Senior and Subordinate	2.81	4.79	5.17	5.55	3.72	4.41
Knoxville Utilities Board	3.68	3.61	4.02	4.17	3.84	3.86
Richmond, City of (3)	2.01	2.11	1.57	2.13	2.21	2.01
MUNI Average	4.16	4.56	4.37	4.42	3.74	4.25

Notes: (1) From Schedule 4 page 14.

(2) Reported for combined electric, water, sewer and gas funds.

(3) Reported for combined gas, water and wastewater operations.



PHILADELPHIA GAS WORKS  
COMPARATIVE BENCHMARK DATA AND RATIOS  
FOR THE FISCAL YEARS ENDED 2021 - 2023

	<u>2021</u>	<u>2022</u>	<u>2023</u>	Average <u>2021-2023</u>	Average <u>2022-2023</u>
<b>Debt/Capitalization</b>					
<u>Municipally Owned Natural Gas Utilities</u>					
Citizens Energy Group	41%	32%	25%	33%	29%
CPS Energy	62%	64%	64%	63%	64%
Gainesville Regional Utilities	86%	84%	84%	85%	84%
Greenville, City of	26%	26%	25%	26%	26%
Jackson Energy Authority	16%	15%	13%	15%	14%
JEA Utilities	53%	50%	51%	51%	51%
Knoxville Utilities Board	28%	25%	22%	25%	24%
Richmond, City of	63%	61%	59%	61%	60%
MUNI Average	47%	45%	43%	45%	44%

<b>Days Cash</b>					
<u>Municipally Owned Natural Gas Utilities</u>					
Citizens Energy Group	194	73	72	113	73
CPS Energy	371	428	337	379	383
Gainesville Regional Utilities	146	78	124	116	101
Greenville, City of	427	257	219	301	238
Jackson Energy Authority	480	386	346	404	366
JEA Utilities	128	56	119	101	88
Knoxville Utilities Board	123	78	82	94	80
Richmond, City of	115	61	32	69	47
MUNI Average	248	177	166	197	172

<b>Debt Service Coverage (P &amp; I)</b>					
<u>Municipally Owned Natural Gas Utilities</u>					
Citizens Energy Group	3.89	7.55	3.27	4.90	5.41
CPS Energy	2.38	2.56	2.67	2.54	2.62
Gainesville Regional Utilities	2.59	2.43	1.80	2.27	2.12
Greenville, City of	4.73	3.17	5.30	4.40	4.24
Jackson Energy Authority	6.87	6.74	4.75	6.12	5.75
JEA Utilities	3.28	2.54	1.59	2.47	2.07
Knoxville Utilities Board	4.17	3.15	2.78	3.37	2.97
Richmond, City of	1.53	1.96	1.80	1.76	1.88
MUNI Average	3.68	3.76	3.00	3.48	3.38

Municipal Retail Natural Gas Utilities  
Average Median Metrics for 2021 - 2023

Debt to Capitalization				
	AA	A	BBB	All Credits
Sample Size (N=)	17	17	2	36
2022	25%	<b>30%</b>	33%	28%

Days Cash				
	AA	A	BBB	All Credits
Sample Size (N=)	8	12	3	23
2021	319	280	304	297
2022	220	190	129	192
2023	272	149	85	183
<b>3-Year Average (2021-2023)</b>	<b>206</b>			
<b>2-Year Average (2022-2023)</b>	<b>170</b>			

Fixed Charge Coverage *				
	AA	A	BBB	All Credits
Sample Size (N=)	8	12	3	23
2021	13.72	2.48	3.17	6.48
2022	7.67	2.59	0.60	4.10
2023	4.91	2.15	2.24	3.12
<b>3-Year Average (2021-2023)</b>	<b>2.41</b>			
<b>2-Year Average (2022-2023)</b>	<b>2.37</b>			

\* Fixed charge coverage is calculated as debt service coverage after transfers.

Source of Information: *S&P Global Ratings*, "U.S. Not-For-Profit Natural Gas Utilities Medians Remained Stable In 2022 Amid Substantial Rise In Natural Gas Costs," November 9, 2023.

*S&P Global Ratings*, "U.S. Rated Not-For-Profit Retail Electric And Natural Gas Utilities; Sector Update And 2023 Medians," December 9, 2024.

Philadelphia Gas Works  
Average Remaining Life of Revenue Bonds  
At Fiscal Year End 2024

<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>
Fiscal Years Ending August 31:		Principal	Average Year (1)	2024 Average Remaining Life (2)	Weighted Amount (3)
2025		\$56,480	2025	1.0	\$56,480
2026		58,975	2026	2.0	117,950
2027		59,850	2027	3.0	179,550
2028		62,570	2028	4.0	250,280
2029		36,400	2029	5.0	182,000
2030 - 2034		186,065	2032	8.0	1,488,520
2035 - 2039		189,805	2037	13.0	2,467,465
2040 - 2044		118,475	2042	18.0	2,132,550
2045 - 2049		101,750	2047	23.0	2,340,250
2050		<u>12,625</u>	2050	<u>26.0</u>	<u>328,250</u>
Totals		<u>\$882,995</u>		<u><b>10.8</b></u>	<u>\$9,543,295</u>

- Notes: (1) (Column A + column B) ÷ 2  
(2) Column D - 2024  
(3) Column C × column E

Source of Information : Annual Report

# Tab 5

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

**GREGORY R. HERBERT**

ON BEHALF OF  
PHILADELPHIA GAS WORKS

Docket No. R-2025-3053112

TOPIC:

Cost of Service

February 27, 2025

**TABLE OF CONTENTS**

**I. INTRODUCTION..... 1**  
**II. COST OF SERVICE ..... 3**  
**III. CONCLUSION ..... 11**

**TABLE OF EXHIBITS**

GRH-1	Cost of Service Study
-------	-----------------------

1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME FOR THE RECORD.**

3 A. Gregory R. Herbert.

4 **Q. BY WHOM ARE YOU EMPLOYED?**

5 A. I am employed by Gannett Fleming Valuation and Rate Consultants, LLC (Gannett  
6 Fleming).

7 **Q. PLEASE DESCRIBE YOUR POSITION WITH GANNETT FLEMING  
8 VALUATION AND RATE CONSULTANTS, LLC AND BRIEFLY STATE YOUR  
9 GENERAL DUTIES AND RESPONSIBILITIES.**

10 A. My title is Assistant Project Manager, Rate Studies. My duties and responsibilities  
11 include the preparation of accounting and financial data for revenue requirement and cash  
12 working capital claims, the allocation of cost of service to customer classifications, and  
13 the design of customer rates in support of public utility rate filings.

14 **Q. HAVE YOU PRESENTED TESTIMONY IN RATE PROCEEDINGS BEFORE A  
15 REGULATORY AGENCY?**

16 A. Yes. I have testified before the Pennsylvania Public Utility Commission, the Virginia  
17 State Corporation Commission, the New Jersey Board of Public Utilities, and the Illinois  
18 Commerce Commission. A list of cases in which I have testified or assisted other  
19 Gannett Fleming staff is attached to my testimony as Appendix A. Furthermore, I assisted  
20 former Gannett Fleming staff with the preparation of the cost of service allocation study  
21 in PGW's prior two cases.

22 **Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?**

23 A. I have a Bachelor of Science Degree in Economics from the Pennsylvania State  
24 University, State College, Pennsylvania.

1 **Q. WOULD YOU PLEASE DESCRIBE YOUR PROFESSIONAL AFFILIATIONS?**

2 A. I am a member of the American Water Works Association, the Pennsylvania Municipal  
3 Authorities Association, and the National Association of Water Companies.

4 **Q. BRIEFLY DESCRIBE YOUR WORK EXPERIENCE.**

5 A. I joined the Gannett Fleming Valuation and Rate Consultants, LLC in May 2017, as a  
6 Rate Analyst. I was recently promoted to my current position as Assistant Project  
7 Manager, Rate Studies, where I assist utilities with the preparation of accounting and  
8 financial data regarding revenues under present and proposed rates, including pro forma  
9 adjustments to the historic test year (“HTY”), Future Test Year (“FTY”) and Fully  
10 Projected Future Test Year (“FPFTY”) revenues, and the design of customer rates. I also  
11 develop pro forma revenue requirements, and conduct cost allocations by customer class,  
12 capital recovery fee, lead-lag, and depreciation studies for investor-owned and municipal-  
13 owned utilities. Prior to my employment at Gannett Fleming, I was a Senior Analyst, in  
14 the Performance Reporting Group of Cambridge Associates, LLC where I oversaw the  
15 financial preparation of monthly and annual performance and benchmarking reports for  
16 public and private endowment clients.

17 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING?**

18 A. I am testifying on behalf of Philadelphia Gas Works (“PGW” or the “Company”) in  
19 support of its base rate case filing with the Pennsylvania Public Utility Commission  
20 (“Commission”).

21 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

22 A. The purpose of my testimony is to present and explain PGW’s cost of service allocation  
23 study, sometimes called class cost of service study (“CCOS”). Exhibit GRH-1 sets forth  
24 the cost of service and the revenues under present and proposed rates for the Company’s



1 operations. In addition, the exhibit shows on Schedule H, the calculation of the Merchant  
2 Function Charge, and on Schedule I, the calculation of the Gas Procurement Charge.

3 **Q. WAS EXHIBIT GRH-1 PREPARED BY YOU OR UNDER YOUR DIRECTION**  
4 **AND SUPERVISION?**

5 A. Yes, it was.

6 **II. COST OF SERVICE**

7 **Q. WHAT IS THE PURPOSE OF A COST OF SERVICE ALLOCATION STUDY?**

8 A. The purpose of the study is to allocate PGW's full revenue requirement or total cost of  
9 service to the various customer classes. The study allocates costs to the Residential,  
10 Commercial, Industrial, Municipal, Philadelphia Housing Authority General Service  
11 ("PHA-GS"), PHA-Rate 8, Developmental Natural Gas Vehicle Service ("NGVS"), the  
12 Interruptible ("IT") classes and Grays Ferry/VEPI ("GFCP/VEPI"). Customers under  
13 contract or non-tariff rates are excluded from the allocation of costs as this is a base rate  
14 proceeding. The revenues from the contract customers are included as a source of  
15 revenue to reduce the overall cost of service to be allocated to the other classes.

16 **Q. WHAT METHOD OF ALLOCATION WAS USED IN THE STUDY?**

17 A. The study uses the Average and Extra Demand Method (or Average/Excess) as that term  
18 is defined in the text "Gas Rate Fundamentals," published by the American Gas  
19 Association's Rate Committee.

20 **Q. PLEASE DESCRIBE EXHIBIT GRH-1.**

21 A. Philadelphia Gas Works, Exhibit GRH-1, Cost of Service Allocation Study as of  
22 August 31, 2026 (Exhibit GRH-1) is a cost of service allocation that supports PGW's  
23 revenue distribution under proposed rates in this proceeding. The results of the study are  
24 set forth in Schedule A. The results are based on the projected costs for the fully

1 projected future test year ending August 31, 2026, as provided by PGW. The exhibit  
2 includes a description of the methods of allocation, the actual allocation of the cost of  
3 service and the measure of value, including the factors used for the allocation to PGW's  
4 customer classes.

5 **Q. YOU ALSO SUPPLIED IN YOUR EXHIBIT AN ADDITIONAL SCHEDULE**  
6 **NAMED SCHEDULE A-1. PLEASE DESCRIBE.**

7 A. Schedule A-1 is provided for comparison purposes. Unlike Schedule A that compares the  
8 results of the cost of service study with revenues under proposed rates, Schedule A-1  
9 shows the effect on the individual class increases if revenues were brought to each class's  
10 full cost of service. For example, in Exhibit GRH-1, Schedule A-1, the Interruptible class  
11 would require an increase of over 173% to bring revenues equal to the cost of service.  
12 Applying the concept of gradualism, PGW opted not to move all classes fully to their cost  
13 of service.

14 **Q. PLEASE OUTLINE IN DETAIL YOUR COST ALLOCATION PROCEDURES.**

15 A. The allocation of costs to cost functions and customer classifications is presented in  
16 Schedule E of Exhibit GRH-1. Since this is a base rate proceeding, we have excluded  
17 gas costs from the cost of service in Schedule E to develop costs by function and  
18 classification only for the costs related to the delivery of gas.

19 In Schedule E, the items of cost including operation and maintenance expenses,  
20 depreciation expense, interest expense, City payment and net income (labeled in Column 1)  
21 are presented in Column 3. These costs are allocated to the functions and customer  
22 classifications as follows: Residential, Commercial, Industrial, Municipal, PHA-GS, PHA-  
23 Rate 8, NGVS, Interruptible and Grays Ferry classes.

1           Column 2 shows the allocation factor used for each item of cost. The description  
2 of the factors used is presented in Schedule F of Exhibit GRH-1.

3 **Q. PLEASE EXPLAIN THE ALLOCATION OF COST ITEMS IN EXHIBIT GRH-1.**

4 A. Each cost was allocated based on individual factors, both on a volumetric basis and  
5 customer cost basis. For example, production expenses are allocated volumetrically to  
6 classes using Factor 1 which is based on the average day demand for firm sales, excluding  
7 transportation sales. Storage expenses are incurred to provide gas service during peak  
8 times. As a result, these costs are allocated volumetrically on Factor 2A, the peak extra  
9 capacity by class, excluding the Interruptible and Grays Ferry classes.

10           Distribution costs are allocated based on the type of cost. Costs related to meters  
11 are allocated to customer costs using Factor 4, which is based on the historic cost of meters  
12 by class. Costs related to services are allocated to customer costs based on Factor 6, which  
13 is also based on the historic cost of services by class. Costs related to distribution load  
14 dispatching, M&R Station, mains, and measuring station expenses (except industrial  
15 measuring station expenses which were directly assigned to the industrial class) are  
16 allocated volumetrically based on Factor 3, which is the average and excess capacity for  
17 each classification. The weighting of the factors was based on precedence of 50% allocated  
18 on average daily usage and 50% allocated to excess above average daily usage. See Factor  
19 2 for the calculation of the load factor. The Interruptible customer class average and excess  
20 usage is included in the calculation as these customers have only been interrupted once (in  
21 2004) in over 20 years. Therefore, they use the portion of the distribution system that is  
22 associated with peak demand to the same extent as firm customers. The alternative would  
23 be to assign costs using PGW's "design day" on which the interruptible customers are

1 assumed to be interrupted. But, while PGW's design day is a reasonable planning tool to  
2 assure that PGW can meet demand in the "worst case scenario," it does not, in my opinion,  
3 accurately reflect how peak demand costs are currently being incurred on its system.  
4 Accordingly, I have used each class's contribution to historic peak demand (on which the  
5 Interruptible Class has received service) to allocate peak demand costs.

6 Customer Accounting Expenses and Customer Service and Information Expenses,  
7 other than Uncollectible Accounts, are allocated to customer costs based on Factor 7,  
8 number of customers by class. Uncollectible Account costs are split between those  
9 recovered through the Merchant Function Charge ("MFC"), those related to CRP  
10 Forgiveness and those collected through the customer charge. The costs recovered through  
11 the MFC are calculated in Schedule H and are directly assigned. The costs related to CRP  
12 Forgiveness are recovered through a volumetric surcharge, so the costs are allocated based  
13 on Factor 1A, or Pro Forma Average Daily Firm Sales. The costs recovered through the  
14 customer charge are allocated to customer costs based on Factor 14 which uses a three-  
15 year average of uncollectibles to develop the factors.

16 Administrative and General Expenses, which are not labor related or related to  
17 LIURP costs, are allocated on a composite Factor 10. Factor 10 is based on the allocation  
18 of all other operation and maintenance expenses other than Administrative and General  
19 Expenses. Labor related costs such as Injuries and Damages, Employee Pension and  
20 Benefits and OPEB Funding are allocated on Factor 11, which is a composite allocation of  
21 labor expense. The calculation is shown in Schedule F, Factor 11 and the pages following.  
22 LIURP costs are recovered through a volumetric surcharge, so the costs are allocated based  
23 on Factor 1A, or Pro Forma Average Daily Firm Sales.

1 Depreciation Expense is allocated based on the specific cost, similar to the  
2 allocation of operation and maintenance expense. For example, depreciation expense  
3 related to Production Plant is allocated on Factor 1. Expense related to Storage Plant is  
4 allocated on Factor 2A, etc.

5 Interest and Other Expense, City Payment and Net Income, as these are all capital  
6 related, are allocated based on Factor 12, which is a composite factor based on the  
7 allocation of Utility Plant in Service Net of Accumulated Depreciation and Cash Working  
8 Capital. Cash Working Capital for the exhibit was calculated based on the rule of thumb  
9 method of 1/8 of Operation and Maintenance Expense.

10 **Q. IS PGW INVOLVED IN ANY OTHER OUTSTANDING MATTERS THAT**  
11 **WOULD IMPACT THE ALLOCATION OF PROPOSED RATES FOR THE**  
12 **RATE INTERRUPTIBLE TRANSPORTATION CUSTOMER CLASS?**

13 A. Yes. As stated in PGW Witness Teme's direct testimony, Statement No. 6, the  
14 Philadelphia Industrial and Commercial Gas Users Group ("PICGUG") filed an appeal  
15 challenging the Commission's Order entered on November 9, 2023 that approved PGW's  
16 allocation of peak demand related distribution mains costs to Rate Interruptible  
17 Transportation customers ("IT"). PICGUG's primary request, before the Commonwealth  
18 Court, is that PGW be required to modify its cost of allocation study to remove a portion  
19 of the peak demand related distribution mains costs from being allocated to Rate IT  
20 customers. Exhibit GRH-1 (as-filed) reflects the Commission's Order entered on  
21 November 9, 2023, which allocates peak demand related distribution mains costs to the  
22 IT class. Exhibit GRH-1 reflects a total cost of service of \$34,211 (000's). If the  
23 Commonwealth Court rules that the cost allocation study should exclude the portion of  
24 the peak demand costs related to distribution mains assigned to the IT Class, as shown in

1 Table 1 below, the total cost of service for the IT class would be reduced to  
2 \$25,321 (000's).

3 PGW's proposed rate design, utilizing Exhibit GRH-1 as a guideline, applies a 40%  
4 overall revenue increase under proposed rates, as PGW is considering the concept of  
5 gradualism for rate design. Thus, the IT Class's cost of service is already being subsidized  
6 by the other customer classes. If the Commonwealth Court would rule in favor of  
7 PICGUG's request, it is my recommendation that the Commission should allow PGW to  
8 move the IT Class's revenues under proposed rates to its full cost of service of \$25,321,  
9 which would result in a 102.4% overall revenue increase instead of the 40% overall  
10 increase PGW is requesting under the IT Class's total cost of service of \$34,211 in  
11 Exhibit GRH-1.

**Table 1. Results of Cost Allocation by Class – Removing Peak Demand Related to Distribution Mains Costs Allocated to Rate IT Customers**

Service Classification	Pro Forma		Pro Forma Margin Revenues,				Revenue Increase	
	Cost of Service (in 000's)		Under Present Rates		Under Parity		Amount	Percent Increase
	Amount	Percent	Amount (in 000's)	Percent	Amount (in 000's)	Percent		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Residential	\$391,190	75.19%	\$323,013	77.79%	\$391,190	75.19%	\$68,176	21.1%
Commercial	81,741	15.71%	64,260	15.48%	81,741	15.71%	17,481	27.2%
Industrial	6,478	1.25%	4,827	1.16%	6,478	1.25%	1,651	34.2%
Municipal	8,021	1.54%	5,123	1.23%	8,021	1.54%	2,897	56.6%
PHA - GS	2,178	0.42%	1,609	0.39%	2,178	0.42%	569	35.4%
PHA - Rate 8	3,515	0.68%	2,358	0.57%	3,515	0.68%	1,157	49.1%
NGVS	84	0.02%	29	0.01%	84	0.02%	55	192.0%
Interruptible	25,321	4.87%	12,524	3.02%	25,321	4.87%	12,798	102.2%
GFCP/VEPI	<u>1,718</u>	0.33%	<u>1,504</u>	0.36%	<u>1,718</u>	0.33%	<u>214</u>	14.2%
<b>Total</b>	<u>\$520,246</u>	<u>100.0%</u>	<u>\$415,246</u>	<u>100.0%</u>	<u>\$520,246</u>	<u>100.0%</u>	<u>\$105,000</u>	25.3%
Contract/NGS/LNG	2,928		2,928		2,928		0	
Surcharges	74,811		74,811		74,811		0	
Oth. Op. Rev.	<u>-170</u>		<u>2,566</u>		<u>-170</u>		<u>-2,736</u>	
Total Other Rev.	77,569		80,305		77,569		-2,736	
<b>Total</b>	<u>\$597,815</u>		<u>\$495,551</u>		<u>\$597,815</u>		<u>\$102,264</u>	20.6%

1 **Q. PLEASE EXPLAIN THE ALLOCATION OF COST ITEMS ATTRIBUTED TO**  
2 **THE GFCP/VEPI CUSTOMER CLASS IN EXHIBIT GRH-1.**

3 A. PGW's prior case, Docket No. R-2023-3037933, was the first cost study presented, other  
4 than the Complaint Proceeding, Docket No. C-2021-3029259, where the proposed rates  
5 applicable to GFCP/VEPI were established pursuant to cost of service principles. The  
6 customers were previously under a contract rate, however the contract expired before  
7 PGW's prior rate case and the establishment of new cost based rates was presented. As a  
8 result of the Final Order and Settlement Terms in the prior case related to cost allocations  
9 for GFCP/VEPI, the GFCP/VEPI class has costs allocated similarly to PGW's

1 Interruptible class for the current rate case. For Factor 1, which allocates costs that vary  
2 directly with the sale of gas, no volumes were included for GFCP/VEPI as PGW only  
3 provides transportation service to GFCP/VEPI. For Factors 2, 2A, and 3 volumes for  
4 GFCP/VEPI were also excluded from the allocation calculation, as GFCP/VEPI receives  
5 service via dedicated facilities that were financed by GFCP/VEPI and are not currently  
6 used by other customers. Factor 3A is the only factor that uses the full volumes for  
7 GFCP/VEPI as Factor 3A is used to allocate costs associated with distribution other than  
8 mains.

9 **Q. WHAT ARE THE RESULTS OF THE COST OF SERVICE ALLOCATION**  
10 **STUDY?**

11 A. The results of cost of service study as calculated on Schedule E are summarized in  
12 Schedule D. The total cost of service by classification in Schedule D is brought forward  
13 to Schedule A, columns 2 and 3. These results are then compared to the pro forma  
14 revenues under present rates (columns 3 and 5) and proposed rates (columns 6 and 7).  
15 The proposed increases in revenue under proposed rates and the percent increase are  
16 shown in columns 8 and 9 of Schedule A. Please refer to the direct testimony of Florian  
17 Teme (PGW St. No. 6) for a description of the proposed rate design and revenue  
18 distribution.

19 **Q. PLEASE EXPLAIN SCHEDULE B AND C OF EXHIBIT GRH-1.**

20 A. Schedule B shows the rate of return by customer class under present rates and Schedule C  
21 shows the rate of return by customer class under proposed rates. These schedules show  
22 that PGW is moving toward unity in its proposed rate design.



1 **Q. PLEASE DESCRIBE YOUR ANALYSIS OF CUSTOMER COSTS.**

2 A. Schedule G shows the calculation of customer costs by customer class, showing both the  
3 results of a fully allocated customer cost of service and a direct customer cost analysis.

4 The costs in Schedule G are developed from the allocation to customer costs in  
5 Schedule E.

6 **Q. PLEASE DESCRIBE THE CALCULATION OF THE MERCHANT FUNCTION**  
7 **CHARGE (MFC) ON SCHEDULE H.**

8 A. The MFC is applied to the firm sales service customer and is designed to recover the  
9 uncollectible expenses related to gas purchases. In Schedule H, the uncollectible expense  
10 (in 1000 dollars) is allocated by class based on a three-year average of collectible expense  
11 shown in the calculation of Factor 14. These amounts are then prorated by the amount of  
12 GCR revenue to total revenue by class shown on Line 4. The proration of Uncollectible  
13 expense is shown on Line 6 and converted to dollars on line 7. Line 9 develops the MCF  
14 by dividing the result on Line 7 by the Annual Firm Volume Sales in MCF in line 8.

15 **Q. PLEASE DESCRIBE THE CALCULATION OF THE GAS PROCUREMENT**  
16 **CHARGE IN SCHEDULE I.**

17 A. The Gas Procurement Charge (GPC) is calculated by adding the cost of natural gas  
18 supply service including acquisition, management and benefits to the cost of cash  
19 working capital related to storage of gas for a total of \$3,254,827. This total is divided by  
20 annual firm sales service volumes of 41,231,182 for a calculated charge of \$0.0789 per  
21 MCF.

22 **III. CONCLUSION**

23 **Q. DOES THAT COMPLETE YOUR DIRECT TESTIMONY?**

24 A. Yes.

**APPENDIX A**

<b>Year</b>	<b>Jurisdiction</b>	<b>Docket No.</b>	<b>Client Utility</b>	<b>Subject</b>
2017	MO PSC	SR-2017-0286	Missouri-American Water Company	Cost of Service/Rate Design
2018	PA PUC	2018-200208	SUEZ Water Pennsylvania	Revenue Requirements
2018	NJ BPU	WR18050593	SUEZ Water New Jersey, Inc	Cost Allocation/Rate Design
2019	PA PUC	2018-3006814	UGI Utilities Inc. - Gas Division	Cost of Service Allocation Studies
2019	PA PUC	2019-3006904	Newtown Artesian Water Co.	Revenue Req./Rate Design
2019	PA PUC	2019-3010955	City of Lancaster – Sewer Fund	Rev. Req./Cost of Service/Rates
2020	PA PUC	2020-3017206	Philadelphia Gas Works	Cost of Service
2020	PA PUC	2020-3019369	Pennsylvania American Water	Cost of Service
2020	PA PUC	2020-3019371	Pennsylvania American Water	Cost of Service
2020	PA PUC	2020-3020256	City of Bethlehem	Rev. Req./Cost of Service/Rates
2020	CA PUC	A2101003	San Jose Water Company	Rate Design
2021	PA PUC	2021-3026116	Borough of Hanover	Revenue and Revenue Requirements
2021	PA PUC	2021-3026682	City of Lancaster – Water Fund	Revenue and Revenue Requirements
2021	PA PUC	2021-3027385	Aqua Pennsylvania, Inc.	Cost of Service/Rate Design
2021	PA PUC	2021-3027386	Aqua Pennsylvania Wastewater, Inc.	Cost of Service/Rate Design
2022	PA-PUC	2022-3031704	Borough of Ambler	Rev. Req./Rate Design
2022	PA-PUC	2022-3031673	Pennsylvania American Water	Cost of Service
2022	PA-PUC	2022-3031340	York Water Company	Cost of Service/Rate Design
2022	PA-PUC	2022-3032806	York Water Company	Cost of Service/Rate Design
2022	KY-PSC	2022-00161	Northern Kentucky Water District	Cost of Service/Rate Design
2022	PUCO	22-1094-WW-AIR	Aqua Ohio Inc.	Cost of Service
2022	PUCO	22-1096-ST-AIR	Aqua Ohio Inc.	Cost of Service
2023	PA-PUC	2023-3037933	Philadelphia Gas Works	Cost of Service
2023	VA-SCC	PUR-2023-00073	Aqua Virginia, Inc.	Bill Analysis/Rate Design
2024	NJ-BPU	WR24010057	Aqua New Jersey, Inc.	Bill Analysis/Rate Design
2024	IL-CC	24-0044	Aqua Illinois, Inc.	Bill Analysis/Rate Design
2024	PA-PUC	R-2024-3045192	Veolia Water Pennsylvania	Rev. Req./Rate Design
2024	PA-PUC	R-2024-3045193	Veolia Wastewater Pennsylvania	Rev. Req./Rate Design
2024	PA-PUC	R-2024-3047822	Aqua Pennsylvania, Inc. (Water)	Bill Analysis
2024	PA-PUC	R-2024-3047824	Aqua Pennsylvania, Inc. (Wastewater)	Bill Analysis
2024	PA-PUC	R-2024-3050208	Newtown Artesian Water Co.	Rev. Reg./Rate Design

**VERIFICATION**

I, Gregory R. Herbert, hereby state that: (1) I am employed by Gannett Fleming Valuation and Rate Consultants, LLC as Assistant Project Manager, Rate Studies; (2) I have been retained by Philadelphia Gas Works (“PGW”) and am authorized to present testimony on its behalf; (3) the facts set forth in my testimony are true and correct to the best of my knowledge, information and belief; and (4) I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

February 27, 2025

Dated



---

Gregory R. Herbert  
Assistant Project Manager, Rate Studies  
Gannett Fleming Valuation and Rate Consultants, LLC

# **Exhibit GRH-1**

PHILADELPHIA GAS WORKS

COST OF SERVICE ALLOCATION STUDY

AS OF AUGUST 31, 2026

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC  
Camp Hill, Pennsylvania



**Gannett Fleming**  
**Valuation and Rate Consultants, LLC**

Corporate Headquarters  
207 Senate Avenue  
Camp Hill, PA 17011  
P 717.763.7211 | F 717.763.8150

[gannettfleming.com](http://gannettfleming.com)

February 27, 2025

Philadelphia Gas Works  
800 W. Montgomery Avenue  
Philadelphia, PA 19122

Attention: Mike Artuso  
Director, Regulatory Strategy

Pursuant to your request, we have prepared a cost of service allocation study based on pro forma revenue requirements for the twelve months ended August 31, 2026, for Philadelphia Gas Works.

The attached report presents the results of the study, as well as supporting schedules which set forth the detailed allocation calculations. Schedule A, on page 5, presents a comparison of the cost of service by service classification with the revenues produced by each classification under present and proposed rates.

Respectfully submitted,

GANNETT FLEMING VALUATION  
AND RATE CONSULTANTS, LLC

A handwritten signature in blue ink, appearing to read "Gregory R. Herbert".

GREGORY R. HERBERT  
Assistant Project Manager, Rate Studies

GRH:mle  
073353.000

# CONTENTS

## PART I. INTRODUCTION

Plan of Report .....	2
Basis of the Study .....	2
Allocation Procedures .....	2
Results of Study .....	4
Schedule A. Comparison of Cost of Service with Revenues Under Present and Proposed Rates by Service Classification for the Twelve Months Ended August 31, 2026 - Without Gas Costs.....	5

## PART II. COST OF SERVICE BY SERVICE CLASSIFICATION

Schedule A-1. Comparison of Cost of Service with Revenues Under Present Rates and Parity Revenue by Service Classification for the Twelve Months Ended August 31, 2026 - Without Gas Costs.....	7
Schedule B. Development of Rate of Return by Service Classification Under Present Rates.....	8
Schedule C. Development of Rate of Return by Service Classification Under Proposed Rates.....	9
Schedule D. Summary of Cost of Service by Service Classification .....	10
Schedule E. Cost of Service as of August 31, 2026, at Proposed Revenue Level Allocated to Customer Class Service Classifications.....	11
Schedule F. Factors for Allocating Cost of Service to Service Classifications .....	17
Schedule G. Calculation of Customer Costs per Bill by Service Classification .....	33
Schedule H. Calculation of Merchant Function Charge.....	35
Schedule I. Calculation of Gas Procurement Charge.....	36

## PART I. INTRODUCTION



PHILADELPHIA GAS WORKS  
COST OF SERVICE ALLOCATION STUDY  
AS OF AUGUST 31, 2026

PART I. INTRODUCTION

PLAN OF REPORT

The report sets forth the results of the cost of service allocation study prepared for Philadelphia Gas Works, based on the twelve months ended August 31, 2026 (FPFTY). Part I, Introduction, includes statements with respect to the basis of the study, the procedures employed, and a summary of the results of the study. Part II, Cost of Service by Service Classification, presents the detailed schedules of the allocation of costs to service classifications, the bases for the allocations, and the development of certain customer and demand costs.

BASIS OF THE STUDY

The purpose of the study was to allocate costs of Philadelphia Gas Works to the several customer classifications based on considerations of quantity of gas consumed; sales and transportation; demand characteristics; and costs associated with metering, billing, and accounting. The allocation study was based on recognized procedures for allocating costs to customer classifications in proportion to each classification's use of the facilities, commodity, and services which entail the total cost of providing gas service.

ALLOCATION PROCEDURES

The allocation study was based on the Average and Extra Demand Method for allocating costs to service classifications. The method is identified as the "Average and

Excess Demand Method" in "Gas Rate Fundamentals," (published in 1987 by the American Gas Association's Rate Committee) in which it is described. The three basic categories of cost responsibility are commodity, capacity, and customer costs. In the Average and Extra Demand Method, the capacity costs are allocated to service classifications on a combined basis of average use and use above average at peak demands. The following presents a brief discussion of costs and the manner in which they were allocated.

Commodity Costs are the costs that tend to vary with the quantity of gas used. Commodity costs in this study include production plant expenses and associated costs. Commodity costs were allocated to service classifications on the basis of average daily sales volumes.

Capacity Costs are costs associated with meeting the peak demands of the system. Capacity costs attributable to sales and transportation service include Distribution expenses and capital costs not associated with the customer costs category. The capacity costs were allocated to service classifications on a combined basis of average use and extra demand (demand in excess of average use). For presentation purposes, the commodity and capacity costs are combined into the volumetric function for each classification.

Customer Costs are costs associated with serving customers regardless of their usage or demand characteristics. Customer costs include the expenses and capital costs related to meters, regulators, and services and expenses related to meter reading and billing. The customer costs were allocated to service classifications on the bases of the number of meters, services and customers.

The allocation of costs to service classifications and the bases for the allocations are presented in Part II, Cost of Service by Service Classification.

## RESULTS OF STUDY

The data summarized in Schedule A, "Comparison of Cost of Service with Revenues Under Present and Proposed Rates by Service Classification for the Twelve Months Ended August 31, 2026," constitute the principal results of the allocation study. Schedules B through F in Part II of the report present the details of the allocation of costs of service, including the return based on the allocated measure of value, by service classification as well as the bases for the allocation factors. Schedule G presents the development of customer costs per bill by service classification. Schedule H presents the calculation of the Merchant Function charge. Schedule I presents the calculation of the Gas Procurement charge.

PHILADELPHIA GAS WORKS

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES  
BY SERVICE CLASSIFICATION FOR THE TWELVE MONTHS ENDED AUGUST 31, 2026  
WITHOUT GAS COSTS

Service Classification (1)	Pro Forma Cost of Service (in 000's)		Pro Forma Margin Revenues,		Under Proposed Rates		Revenue Increase	
	Amount (2)	Percent (3)	Under Present Rates Amount (in 000's) (4)	Percent (5)	Under Proposed Rates Amount (in 000's) (6)	Percent (7)	Amount (8)	Percent Increase (9)
Residential	\$ 384,836	73.97%	\$ 323,013	77.79%	\$ 397,176	76.34%	\$ 74,163	22.96%
Commercial	79,790	15.34%	64,260	15.48%	82,963	15.95%	18,704	29.11%
Industrial	6,300	1.21%	4,827	1.16%	6,602	1.27%	1,775	36.77%
Municipal	7,778	1.50%	5,123	1.23%	8,316	1.60%	3,193	62.32%
PHA - GS	2,143	0.41%	1,609	0.39%	2,312	0.44%	703	43.70%
PHA - Rate 8	3,402	0.65%	2,358	0.57%	3,561	0.68%	1,203	51.05%
NGVS	82	0.02%	29	0.01%	92	0.02%	64	221.30%
Interruptible	34,211	6.58%	12,524	3.02%	17,529	3.37%	5,005	39.97%
GFCP/VEPI	1,704	0.33%	1,504	0.36%	1,694	0.33%	190	12.65%
Total	\$ 520,246	100.00%	\$ 415,246	100.00%	\$ 520,246	100.00%	\$ 105,000	25.29%
NGS/LNG and Contract Revenue	2,928		2,928		2,928		-	
Surcharges	74,811		74,811		74,811		-	
Other Operating Revenues	(170)		2,566		(170)		(2,736)	
Total Other Revenues	77,569		80,305		77,569		(2,736)	
Total	\$ 597,815		\$ 495,551		\$ 597,815		\$ 102,264	20.6%

PART II. COST OF SERVICE  
BY SERVICE CLASSIFICATION

PHILADELPHIA GAS WORKS

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT RATES AND PARITY REVENUE  
BY SERVICE CLASSIFICATION FOR THE TWELVE MONTHS ENDED AUGUST 31, 2026  
WITHOUT GAS COSTS

Service Classification (1)	Pro Forma Cost of Service (in 000's)		Pro Forma Present Rates		Pro Forma Margin Revenues,		Under Parity		Revenue Increase	
	Amount (2)	Percent (3)	Amount (in 000's) (4)	Percent (5)	Amount (in 000's) (6)	Percent (7)	Amount (8)	Percent (9)	Amount (8)	Percent (9)
Residential	\$ 384,836	73.97%	\$ 323,013	77.79%	\$ 384,836	73.97%	\$ 61,823	19.1%	\$ 61,823	19.1%
Commercial	79,790	15.34%	64,260	15.48%	79,790	15.34%	15,531	24.2%	15,531	24.2%
Industrial	6,300	1.21%	4,827	1.16%	6,300	1.21%	1,472	30.5%	1,472	30.5%
Municipal	7,778	1.50%	5,123	1.23%	7,778	1.50%	2,655	51.8%	2,655	51.8%
PHA - GS	2,143	0.41%	1,609	0.39%	2,143	0.41%	534	33.2%	534	33.2%
PHA - Rate 8	3,402	0.65%	2,358	0.57%	3,402	0.65%	1,044	44.3%	1,044	44.3%
NGVS	82	0.02%	29	0.01%	82	0.02%	53	185.9%	53	185.9%
Interruptible	34,211	6.58%	12,524	3.02%	34,211	6.58%	21,687	173.2%	21,687	173.2%
GFCEP/VEPI	1,704	0.33%	1,504	0.36%	1,704	0.33%	200	13.3%	200	13.3%
Total	\$ 520,246	100.0%	\$ 415,246	100.0%	\$ 520,246	100.0%	\$ 105,000	25.3%	\$ 105,000	25.3%
NGS/LNG and Contract Revenue	2,928		2,928		2,928		-		-	
Surcharges	74,811		74,811		74,811		-		-	
Other Operating Revenues	(170)		2,566		(170)		(2,736)		(2,736)	
Total Other Revenues	77,569		80,305		77,569		(2,736)		(2,736)	
Total	\$ 597,815		\$ 495,551		\$ 597,815		\$ 102,264	20.6%	\$ 102,264	20.6%

PHILADELPHIA GAS WORKS

DEVELOPMENT OF RATE OF RETURN BY SERVICE CLASSIFICATION  
UNDER PRESENT RATES

Item (1)	Total (2)	Residential (3)	Commercial (4)	Industrial (5)	Municipal (6)	PHA - GS (7)	PHA -Rate 8 (8)	NGVS (9)	Interruptible (10)	GFCP/VEPI (11)
1. Revenues From Tariff Sales and Transportation	\$ 415,246	\$ 323,013	\$ 64,260	\$ 4,827	\$ 5,123	\$ 1,609	\$ 2,358	\$ 29	\$ 12,524	\$ 1,504
2. Other Revenues	80,305	54,933	20,335	1,565	1,972	392	879	28	191	11
3. Total Operating Revenues	495,551	377,946	84,594	6,392	7,095	2,000	3,237	56	12,715	1,515
4. Less: Operating Expenses and City Contribution	376,463	278,969	63,154	5,029	6,035	1,556	2,642	69	17,555	1,454
5. Income Before Interest and Surplus	119,088	98,977	21,441	1,363	1,060	445	595	(13)	(4,840)	61
6. Less: Interest	46,554	33,261	7,755	595	783	206	345	9	3,546	55
7. Current Revenue Over/Under Requirements	72,534	65,716	13,686	768	277	239	250	(22)	(8,386)	6
8. Original Cost Measure of Value (Factor 15.)	1,942,855	1,388,078	323,658	24,839	32,658	8,580	14,414	358	147,991	2,279
9. Rate of Return before Interest and Surplus, Percent	6.13%	7.13%	6.62%	5.49%	3.25%	5.18%	4.12%	-3.55%	-3.27%	2.66%
10. Relative Rate of Return	1.00	1.16	1.08	0.90	0.53	0.85	0.67	-0.58	-0.53	0.43

PHILADELPHIA GAS WORKS

DEVELOPMENT OF RATE OF RETURN BY SERVICE CLASSIFICATION  
UNDER PROPOSED RATES

Item (1)	Total (2)	Residential (3)	Commercial (4)	Industrial (5)	Municipal (6)	PHA - GS (7)	PHA -Rate 8 (8)	NGVS (9)	Interruptible (10)	GFCP/VEPI (11)
1. Revenues From Tariff Sales and Transportation	\$ 520,246	\$ 397,176	\$ 82,963	\$ 6,602	\$ 8,316	\$ 2,312	\$ 3,561	\$ 92	\$ 17,529	\$ 1,694
2. Other Revenues	77,569	52,278	20,238	1,559	1,978	391	882	28	204	10
3. Total Operating Revenues	597,815	449,454	103,202	8,162	10,294	2,702	4,443	120	17,734	1,704
4. Less: Operating Expenses and City Contribution	376,463	278,969	63,154	5,029	6,035	1,556	2,642	69	17,555	1,454
5. Income Before Interest and Surplus	221,352	170,485	40,048	3,133	4,259	1,146	1,801	51	179	250
6. Less: Interest	46,554	33,261	7,755	595	783	206	345	9	3,546	55
7. Current Revenue Over/Under Requirements	174,798	137,224	32,293	2,538	3,476	940	1,456	42	(3,367)	195
8. Original Cost Measure of Value (Factor 15.)	1,942,855	1,388,078	323,658	24,839	32,658	8,580	14,414	358	147,991	2,279
9. Rate of Return before Interest and Surplus, Percent	11.39%	12.28%	12.37%	12.61%	13.04%	13.36%	12.50%	14.24%	0.12%	10.95%
10. Relative Rate of Return	1.00	1.08	1.09	1.11	1.14	1.17	1.10	1.25	0.01	0.96



PHILADELPHIA GAS WORKS  
SUMMARY COST OF SERVICE BY SERVICE CLASSIFICATION

Cost Function (1)	Cost of Service (Schedule E) (2)	Residential (3)	Commercial (4)	Industrial (5)	Municipal (6)	PHA-GS (7)	PHA - Rate 8 (8)	NGVS (9)	Interruptible (10)	GFCP/VEPI (11)
<b>Volumetric Costs</b>										
Residential	\$ 172,934	\$ 172,934								
Commercial	53,565		53,565							
Industrial	4,570			4,570						
Municipal	5,904				5,904					
PHA GS	872					872				
PHA R8	2,585						2,585			
NGVS	65							65		
Interruptible	33,930								33,930	
GFCP/VEPI	1,704									1,704
<b>Total Volumetric Costs</b>	<b>276,128</b>	<b>172,934</b>	<b>53,565</b>	<b>4,570</b>	<b>5,904</b>	<b>872</b>	<b>2,585</b>	<b>65</b>	<b>33,930</b>	<b>1,704</b>
<b>Customer Costs</b>										
Residential	211,903	211,903								
Commercial	26,225		\$ 26,225							
Industrial	1,729			\$ 1,729						
Municipal	1,874				\$ 1,874					
PHA GS	1,271					\$ 1,271				
PHA R8	817						\$ 817			
NGVS	17							\$ 17		
Interruptible	281								\$ 281	
GFCP/VEPI	-									-
<b>Total Customer Costs</b>	<b>244,118</b>	<b>211,903</b>	<b>26,225</b>	<b>1,729</b>	<b>1,874</b>	<b>1,271</b>	<b>817</b>	<b>17</b>	<b>281</b>	<b>-</b>
<b>Total Excluding Gas Costs</b>	<b>\$ 520,246</b>	<b>\$ 384,836</b>	<b>\$ 79,790</b>	<b>\$ 6,300</b>	<b>\$ 7,778</b>	<b>\$ 2,143</b>	<b>\$ 3,402</b>	<b>\$ 82</b>	<b>\$ 34,211</b>	<b>\$ 1,704</b>

PHILADELPHIA GAS WORKS  
COST OF SERVICE AS OF AUGUST 31, 2026, AT PROPOSED REVENUE LEVEL ALLOCATED TO  
CUSTOMER CLASS SERVICE CLASSIFICATIONS

Factor Ref.	Account	Cost of Service in '000's (3)	Volumetric Costs										Customer Costs						
			Residential (4)	Commercial (5)	Industrial (6)	Municipal (7)	PHA - GS (8)	PHA - R8 (9)	NGVS (10)	Interruptible (11)	GFCR/VEPI (12)	Res (13)	Com (14)	Ind (15)	Muni (16)	PHA - GS (17)	PHA - R8 (18)	NGVS (19)	Interruptible (20)
<b>OPERATION AND MAINTENANCE EXPENSES</b>																			
<b>PRODUCTION EXPENSES</b>																			
1	701	\$ 341	\$ 288	\$ 59	\$ 4	\$ 4	\$ 5	\$ 1	\$ 3	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
1	703	382	301	66	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0
1	705	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	706	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	707	36	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	712	444	350	52	5	6	2	2	4	0	0	0	0	0	0	0	0	0	0
1	724	(180)	(142)	(31)	(2)	(3)	(1)	(1)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	735	1,900	1,496	328	22	27	8	19	19	0	0	0	0	0	0	0	0	0	0
1	740	526	414	91	6	7	2	5	5	0	0	0	0	0	0	0	0	0	0
1	741	19	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	742	523	451	99	7	8	2	6	6	0	0	0	0	0	0	0	0	0	0
		<b>4,459</b>	<b>3,510</b>	<b>769</b>	<b>53</b>	<b>62</b>	<b>19</b>	<b>45</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
1	807	31	24	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	812	86	66	16	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
1	813	3,062	2,493	527	38	43	13	31	31	0	0	0	0	0	0	0	0	0	0
		<b>3,953</b>	<b>3,120</b>	<b>684</b>	<b>47</b>	<b>55</b>	<b>17</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
		<b>8,421</b>	<b>6,630</b>	<b>1,454</b>	<b>99</b>	<b>118</b>	<b>36</b>	<b>85</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Natural Gas Production Expenses</b>																			
2A	840	1,713	1,219	382	35	48	7	22	0	0	0	0	0	0	0	0	0	0	0
2A	841	4,421	3,147	985	90	124	17	57	1	1	1	1	1	1	1	1	1	1	1
2A	842	801	72	23	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0
2A	843	1,874	6,372	1,979	163	245	56	113	1	1	1	1	1	1	1	1	1	1	1
2A	850	1,604	1,142	357	33	45	8	20	0	0	0	0	0	0	0	0	0	0	0
		<b>16,720</b>	<b>11,903</b>	<b>3,726</b>	<b>340</b>	<b>470</b>	<b>86</b>	<b>214</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>OTHER STORAGE EXPENSE</b>																			
840	Operating Supervision and Engineering																		
841	Operation Labor and Expenses																		
842	Rents																		
843	Maintenance																		
850	Operating Supervision and Engineering																		
	<b>Total Natural Gas Storage Expense</b>																		

PHILADELPHIA GAS WORKS  
COST OF SERVICE AS OF AUGUST 31, 2025, AT PROPOSED REVENUE LEVEL ALLOCATED TO  
CUSTOMER CLASS SERVICE CLASSIFICATIONS

Account	Factory Ref.	Cost of Service in 1000's	Volumetric Costs										Customer Costs						
			Residential	Commercial	Industrial	Municipal	PHA - GS	PHA - R8	NGVS	Interruptible	GFCI/WEP1	Ros	Com	Ind	Muni	PHA - GS	PHA - R8	NGVS	Interruptible
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
<b>DISTRIBUTION EXPENSES</b>																			
870 Supervision And Engineering	8	\$ 2,873	\$ 883	\$ 292	\$ 25	\$ 32	\$ 5	\$ 14	\$ 0	\$ 183	\$ 28	1,006	287	26	24	7	8	0	1
871 Meter Reading Expenses	3A	2,352	1,297	423	36	47	7	20	1	267	255	-	-	-	-	-	-	-	-
874 Maintenance Expenses																			
875 Services	3	3,886	2,393	781	66	85	13	37	1	520	-	3,595	-	-	5	14	8	0	10
876 M & R Station Expenses - General	3A	2,432	1,341	437	37	48	7	21	1	276	284	-	-	-	-	-	-	-	-
877 M & R Station Expenses - Industrial Station	3A	274	145	115	12	16	2	7	0	92	87	-	-	274	-	-	-	-	-
878 Meter and House Regulator Expenses	4	18,939	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
879 Customer Installations Expenses	4	11,788	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
880 Other Expenses	8	18,662	5,803	1,899	162	208	31	90	2	1,255	185	8,099	3,121	154	270	54	87	3	4
881 Rents	8	10	3	1	0	0	0	0	0	0	0	146	41	0	0	0	0	0	0
882 Metering Expenses	3	11,115	20,413	6,886	568	729	108	315	9	4,464	4	-	-	-	-	-	-	-	-
887 Maint. Of Meters	3A	34,292	6,886	304	28	34	5	15	0	192	183	-	-	-	-	-	-	-	-
889 Maintenance, Super. And Engineering	5	1,692	933	304	28	34	5	15	0	192	183	-	-	-	-	-	-	-	-
890 Maint. Of Measuring Station Expenses - General	5	108	384	125	11	14	2	6	0	79	76	-	-	108	-	-	-	-	-
891 Maint. Of Measuring Station Expenses - Industrial	3A	687	-	-	-	-	-	-	-	-	-	-	-	178	4	11	23	7	0
892 Maint. Of Services	6	3,076	-	-	-	-	-	-	-	-	-	2,846	-	4	4	11	7	0	8
893 Maint. Of Meters and House Regulators	7	4,626	-	-	-	-	-	-	-	-	-	3,954	210	7	7	16	0	0	3
<b>Total Distribution Expenses</b>		<b>109,411</b>	<b>34,023</b>	<b>11,136</b>	<b>947</b>	<b>1,218</b>	<b>180</b>	<b>528</b>	<b>15</b>	<b>7,356</b>	<b>1,082</b>	<b>39,453</b>	<b>10,944</b>	<b>997</b>	<b>921</b>	<b>263</b>	<b>313</b>	<b>11</b>	<b>26</b>
<b>CUSTOMER ACCOUNTING EXPENSES</b>																			
901 Supervision	7	2,503	-	-	-	-	-	-	-	-	-	2,354	124	2	4	11	5	0	2
902 Meter Reading Expenses	7	896	-	-	-	-	-	-	-	-	-	843	44	1	2	4	2	0	1
903 Customer Accounting Expenses	7	42,128	-	-	-	-	-	-	-	-	-	38,152	1,044	34	66	146	85	0	29
<b>Total Customer Accounting Expenses</b>		<b>42,128</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>39,029</b>	<b>2,012</b>	<b>37</b>	<b>72</b>	<b>183</b>	<b>90</b>	<b>0</b>	<b>32</b>
<b>CUSTOMER SERVICE AND INFORMATION EXPENSES</b>																			
908 Operation Assistance Expenses	7	6,510	-	-	-	-	-	-	-	-	-	6,450	343	6	12	30	15	0	5
<b>Total Customer Service &amp; Info Expenses</b>		<b>6,510</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6,450</b>	<b>343</b>	<b>6</b>	<b>12</b>	<b>30</b>	<b>15</b>	<b>0</b>	<b>5</b>

PHILADELPHIA GAS WORKS  
COST OF SERVICE AS OF AUGUST 31, 2025, AT PROPOSED REVENUE LEVEL ALLOCATED TO  
CUSTOMER CLASS SERVICE CLASSIFICATIONS

Factory Ref.	Account	Cost of Sales in '000's	Volumetric Costs										Customer Costs						
			Residential	Commercial	Industrial	Municipal	PHA - GS	PHA - R8	NGVS	Interruptible	GFCP/VEPI	Ros	Com	Ind	Muni	PHA - GS	PHA - R8	NGVS	Interruptible
(2)	(1)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
920	Administrative & General Salaries	24,692	7,088	2,194	186	243	38	111	2	989	146	11,509	1,799	140	135	64	56	1	9
921	Medical Salaries and Benefits	15,578	5,389	421	488	78	104	19	2	104	104	8,194	1,261	100	96	46	40	1	6
922	Administrative Expenses Transferred-Credit: Benefits	11,006	1,720	144	183	28	28	79	2	904	16	2,372	254	16	17	12	9	-	2
923	Outside Service Employed - Other	3,133	887	24	31	5	5	14	0	(2,156)	(317)	(25,079)	(3,921)	(305)	(294)	(140)	(122)	(3)	(19)
925	Injuries and Damages	10,101	5,103	160	178	27	27	76	2	126	18	1,460	228	18	17	8	7	0	1
926	Professional Fees and Benefits	7,000	1,872	160	178	27	27	76	2	126	18	2,306	247	10	16	12	12	0	2
927	Operating Expenses	11,006	5,248	144	183	28	28	79	2	904	16	2,372	254	16	17	12	9	-	2
928	Property Insurance	2,437	688	217	24	4	4	11	0	98	14	1,136	178	14	13	6	0	0	1
929	Regulatory/Commission Expense	4,312	383	33	42	7	7	19	0	173	25	2,010	314	24	24	11	10	0	1
930	Duplicate Charges	(623)	(284)	(82)	(9)	(1)	(1)	(4)	(0)	(37)	(5)	(450)	(67)	(5)	(5)	(2)	(2)	(0)	(0)
931	General Accounting Expenses	10,884	5,190	67	81	13	13	33	2	884	15	2,343	282	16	16	12	9	1	2
932	General Accounting Expenses	10,884	5,190	67	81	13	13	33	2	884	15	2,343	282	16	16	12	9	1	2
933	Total Administrative & General Expenses	146,112	73,351	24,268	2,007	143	181	27	2	9,889	207	28,487	3,218	213	216	143	108	0	22
	Total Operation and Maintenance Expenses	329,703	125,907	40,653	3,393	4,304	664	1,885	53	17,245	1,230	114,060	16,697	1,254	1,220	625	526	12	86

DEPRECIATION AND AMORTIZATION EXPENSE

Factory Ref.	Account	Cost of Sales in '000's	Volumetric Costs										Customer Costs						
			Residential	Commercial	Industrial	Municipal	PHA - GS	PHA - R8	NGVS	Interruptible	GFCP/VEPI	Ros	Com	Ind	Muni	PHA - GS	PHA - R8	NGVS	Interruptible
(2)	(1)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
305	Production Plant	345	271	60	4	5	1	3	0	-	-	-	-	-	-	-	-	-	-
306	Structures and Improvements	14	10	3	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
307	Boiler Plant Equipment	7	6	1	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
311	LPG Equipment	29	23	5	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
312	Oil Gas Equipment	3	2	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
313	Other Equipment	6	5	1	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
320	Other Equipment	1,068	841	184	13	15	5	11	0	-	-	-	-	-	-	-	-	-	-
381	Structures and Improvements	330	235	74	7	9	1	4	0	-	-	-	-	-	-	-	-	-	-
382	Gas Holders	14	10	3	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
383	Purification Equipment	805	570	179	10	12	0	0	0	-	-	-	-	-	-	-	-	-	-
384	Compressor Equipment	328	233	73	9	1	1	4	0	-	-	-	-	-	-	-	-	-	-
385	Vaporizing Equipment	251	179	56	5	7	1	3	0	-	-	-	-	-	-	-	-	-	-
386	Compressor Equipment	74	52	16	1	2	0	1	0	-	-	-	-	-	-	-	-	-	-
387	Measuring and Regulating Equipment	668	476	149	14	19	3	9	0	-	-	-	-	-	-	-	-	-	-
388	Other Equipment	1,334	533	175	15	19	3	8	0	-	-	-	-	-	-	-	-	-	-
389	Structures and Improvements	20,457	12,547	4,110	349	448	65	194	5	116	1	407	46	2	3	3	1	0	1
376	Mains	321	177	58	5	6	1	3	0	2,728	35	0	0	0	0	0	0	0	0
377	Compression Station Equipment	19,551	11,951	3,921	349	448	65	194	5	116	1	407	46	2	3	3	1	0	1
378	Measuring & Regulating Equipment - General	2,649	1,820	599	44	54	8	36	0	36	0	18,088	1,130	27	68	145	42	0	50
379	Measuring & Regulating Equipment - Residential	2,649	1,820	599	44	54	8	36	0	36	0	18,088	1,130	27	68	145	42	0	50
382	Meter Installations	384	249	84	7	9	1	4	0	-	-	-	-	-	-	-	-	-	-
383	House Regulators	36	25	8	0	1	0	0	0	-	-	-	-	-	-	-	-	-	-
384	House Regulator Installations	13	9	3	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
385	Industrial Measuring & Regulating Equipment	145	88	30	2	2	0	1	0	13	0	44	5	0	0	0	0	0	0
387	Other Equipment	145	88	30	2	2	0	1	0	13	0	44	5	0	0	0	0	0	0

PHILADELPHIA GAS WORKS  
COST OF SERVICE AS OF AUGUST 31, 2025, AT PROPOSED REVENUE LEVEL ALLOCATED TO  
CUSTOMER CLASS SERVICE CLASSIFICATIONS

Factory Ref.	Account (1)	Cost of Service in '000's (3)	Volumetric Costs							Customer Costs									
			Residential (4)	Commercial (5)	Industrial (6)	Municipal (7)	PHA - GS (8)	PHA - R8 (9)	NGVS (10)	Interruptible (11)	GFCPI/VEPI (12)	Ros (13)	Com (14)	Ind (15)	Muni (16)	PHA - GS (17)	PHA - R8 (18)	NGVS (19)	Interruptible (20)
10	390 Structures And Improvements	2,631	753	234	20	26	4	12	0	105	16	1226	192	15	14	7	6	0	1
10	391 Structures - Equipment	3,174	1,013	1,163	10	11	15	0	0	37	1	1,889	314	16	16	17	11	0	2
10	392 Transmission Equipment	3,069	976	26	34	5	15	0	0	137	20	1,389	248	10	10	6	0	0	4
10	393 Stores Equipment	48	14	4	0	0	0	0	0	2	0	0	3	0	0	0	0	0	0
10	384 Tools, Shop And Garage Equipment	720	206	5	7	1	3	0	0	29	4	335	52	4	4	2	2	0	0
10	396 Power Operated Equipment	46	13	4	0	0	0	0	0	0	0	22	3	0	0	0	0	0	0
10	397 Communication Equipment	654	170	4	1	0	0	0	0	19	0	22	3	0	0	0	0	0	0
10	388 Software - GASB 87	1,500	450	13	17	3	10	0	0	130	10	624	130	10	10	5	4	0	0
10	Schumer Lease - GASB 87	3,993	1,143	355	30	39	18	0	0	160	24	1,883	291	23	22	10	9	0	1
10	Schumer Software Subscriptions - GASB 86	2,492	713	221	19	24	4	11	0	100	15	1,161	182	14	14	6	6	0	1
	Total Depreciation & Amortization Expense	71,545	22,022	6,993	591	785	117	343	8	3,714	155	31,808	4,106	228	308	226	130	3	58
12	Cost of Removal	5,879	2,266	754	64	82	13	36	1	444	7	1,835	225	11	17	13	7	0	4
10	Adj. Factor to Reconcile POW Income Stmt. to Proof of Revenue	1,324	379	118	10	13	2	6	0	63	8	617	96	8	7	3	3	0	0
	Total Operating Expenses	468,451	150,674	48,417	4,057	5,163	796	2,270	83	21,456	1,459	148,320	21,026	1,907	1,952	863	686	15	148
12	Interest Gain/Loss and Other Income	(22,001)	(8,853)	(2,821)	(239)	(307)	(47)	(156)	(3)	(1,682)	(26)	(6,866)	(644)	(43)	(63)	(50)	(27)	(1)	(14)
12	INTEREST AND OTHER EXPENSE	54,108	21,771	6,939	586	755	116	335	8	4,088	63	16,886	2,075	105	155	123	66	1	33
12	Interest on Long Term Debt	(9,634)	(3,876)	(1,235)	(104)	(134)	(21)	(60)	(2)	(728)	(11)	(3,007)	(369)	(19)	(28)	(22)	(12)	(0)	(6)
12	Loss From Extinguishment of Debt	2,880	837	267	23	29	4	13	0	157	2	(3,049)	80	4	6	5	3	0	1
	Total Interest and Other Expense	46,554	18,732	5,970	505	649	100	289	7	3,517	85	14,529	1,758	91	133	106	57	1	29
3	FEDERAL GRANT REVENUE	(27,887)	(17,186)	(5,623)	(479)	(613)	(91)	(265)	(7)	(3,748)	(21)	(5,618)	(690)	(35)	(51)	(41)	(22)	(0)	(11)
12	CITY PAYMENT	16,800	7,243	2,266	195	251	36	112	3	1,380	21	5,618	690	35	51	41	22	0	11
12	NET INCOME	174,798	70,333	22,415	1,895	2,438	374	1,084	27	13,207	205	54,552	6,704	340	500	398	213	5	108
	TOTAL COST OF SERVICE	597,615	220,962	70,667	5,935	7,582	1,170	3,853	89	34,133	1,714	216,152	29,382	1,924	2,174	1,363	932	21	283
DA	Less: Other Revenues	(9,959)	(3,551)	(423)	(15)	-	-	-	-	-	-	(27,327)	(1,183)	(48)	(7)	(61)	-	-	-
14	Uncollectible Accounts - MEC	(28,827)	-	-	-	-	-	-	-	-	-	4,464	1,720	85	149	30	48	2	-
4	Appliance Repair and Other Revenues	6,488	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2A	Other Revenues - LNG Sales	5,060	3,602	1,127	103	142	20	65	1	-	-	-	-	-	-	-	-	-	-
1	Other Revenues - Cap Release	14,007	11,027	2,418	165	196	59	141	0	-	-	-	-	-	-	-	-	-	-
14	Other Revenues - Finance Charges	12,269	8,055	2,776	218	252	40	100	5	-	-	11,712	507	21	3	26	-	-	-
1B	CRP Forgiveness	11,447	6,955	2,776	218	252	40	100	5	-	-	-	-	-	-	-	-	-	-
1B	Senior Discount	10,113	713	240	19	22	4	9	0	-	-	-	-	-	-	-	-	-	-
13A	DSIC Surcharge at 7.50%	36,663	14,431	4,615	388	485	76	219	6	-	-	14,117	1,918	126	142	89	61	1	-
1B	OP&B Surcharge	15,980	11,252	3,678	304	353	56	140	8	-	-	-	-	-	-	-	-	-	-
1B	EURP	7,833	5,512	1,900	149	173	27	69	4	-	-	-	-	-	-	-	-	-	-
DA	Efficiency Cost Recovery ECR	1,945	1,986	146	6	8	9	5	0	36	2	225	31	2	2	1	1	0	0
13	NGSUN/GARS and Contract Revenues	2,928	1,082	346	29	37	6	16	0	1,082	8	1,059	144	6	11	7	5	0	0
	Subtotal	77,569	49,029	17,102	1,365	1,679	288	768	24	203	10	4,250	3,136	194	300	92	114	3	2
	TOTAL COST OF SERVICE RELATED TO TARIFF SALES AND TRANSPORTATION	520,246	172,934	53,965	4,570	5,994	872	2,985	65	33,890	1,704	211,903	26,226	1,729	1,874	1,271	817	17	281



PHILADELPHIA GAS WORKS  
COST OF SERVICE AS OF AUGUST 31, 2025, AT PROPOSED REVENUE LEVEL ALLOCATED TO  
CUSTOMER CLASS SERVICE CLASSIFICATIONS

Factory Ref.	Account	Cost of Service in '000's	Volumetric Costs										Customer Costs						
			Residential	Commercial	Industrial	Municipal	PHA-GS	PHA-R8	NGVS	Interruptible	GFCP/VEPI	Ros	Com	Ind	Muni	PHA-GS	PHA-R8	NGVS	Interruptible
(2)	(1)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
<b>GENERAL PLANT</b>																			
389	Land and Land Rights	3,713	1,063	330	28	37	6	17	0	149	22	1,731	271	21	20	10	8	0	1
390	Structures And Improvements	25,984	8,038	683	683	889	139	406	9	3,624	533	42,161	6,592	513	495	235	206	5	31
391	Office Furniture And Equipment	1,315	5,038	437	437	642	117	22	0	2,074	320	3,920	4,529	370	327	13	119	4	22
392	Tools, Shop And Garage Equipment	4,892	1,396	97	97	146	2	22	0	1,084	290	2,250	4,353	27	26	3	3	0	0
393	Stores Equipment	1,132	1,103	101	9	11	2	5	0	45	7	528	82	6	6	3	3	0	0
384	Tools, Shop And Garage Equipment	12,407	3,552	1,103	94	122	19	58	1	487	73	5,763	904	70	68	32	28	1	4
396	Power Operated Equipment	2,365	74	2	0	0	0	0	0	1	0	11	2	0	0	0	0	0	0
397	Communication Equipment	1,754	74	19	0	25	4	12	0	103	15	1,195	419	5	4	7	6	0	1
398	Construction Equipment	13,172	1,172	15,229	437	65	67	212	0	2,522	37	29,376	4,772	325	314	165	146	4	21
	<b>Total General Plant</b>	<b>243,282</b>	<b>69,815</b>	<b>21,672</b>	<b>1,841</b>	<b>2,388</b>	<b>374</b>	<b>1,098</b>	<b>23</b>	<b>9,772</b>	<b>1,438</b>	<b>113,675</b>	<b>17,773</b>	<b>1,393</b>	<b>1,335</b>	<b>633</b>	<b>556</b>	<b>16</b>	<b>85</b>
	<b>Total Plant</b>	<b>1,901,642</b>	<b>769,939</b>	<b>245,481</b>	<b>20,748</b>	<b>26,688</b>	<b>4,091</b>	<b>11,688</b>	<b>300</b>	<b>145,137</b>	<b>2,036</b>	<b>587,132</b>	<b>71,511</b>	<b>3,546</b>	<b>5,330</b>	<b>4,319</b>	<b>2,277</b>	<b>61</b>	<b>1,188</b>
<b>OTHER RATE BASE ELEMENTS</b>																			
10	Cash Working Capital	4,123	11,788	3,662	311	405	63	165	4	1,651	243	19,210	3,003	234	226	107	94	2	14
	<b>Total Other Rate Base Elements</b>	<b>41,213</b>	<b>117,390</b>	<b>3,662</b>	<b>311</b>	<b>405</b>	<b>63</b>	<b>165</b>	<b>4</b>	<b>1,651</b>	<b>243</b>	<b>19,210</b>	<b>3,003</b>	<b>234</b>	<b>226</b>	<b>107</b>	<b>94</b>	<b>2</b>	<b>14</b>
	<b>Total Measure of Value</b>	<b>\$ 1,942,855</b>	<b>\$ 781,737</b>	<b>\$ 249,144</b>	<b>\$ 21,059</b>	<b>\$ 27,103</b>	<b>\$ 4,154</b>	<b>\$ 12,843</b>	<b>\$ 304</b>	<b>\$ 146,789</b>	<b>\$ 2,279</b>	<b>\$ 606,341</b>	<b>\$ 74,514</b>	<b>\$ 3,780</b>	<b>\$ 5,555</b>	<b>\$ 4,426</b>	<b>\$ 2,370</b>	<b>\$ 63</b>	<b>\$ 1,202</b>

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 1, 1A AND 1B. ALLOCATION OF COSTS WHICH VARY DIRECTLY WITH SALE OF GAS

Factors are based on the pro forma average daily sales volumes for each service classification.

Service Classification	Pro Forma Average Daily PGC Volumes (Mcf)	Allocation Factor 1	Pro Forma Average Daily Firm Sales (Mcf)	Allocation Factor 1A	Pro Forma Average Daily Firm Sales For Surcharges (Mcf)	Allocation Factor 1B
(1)	(2)	(3)	(4)	(5)	(4)	(5)
<u>Volumetric Costs</u>						
Residential	74,986	0.78726	81,097	0.70368	81,097	0.70368
Commercial	16,441	0.17261	27,949	0.24251	27,949	0.24251
Industrial	1,122	0.01178	2,190	0.01900	2,190	0.01900
Municipal	1,333	0.01399	2,542	0.02206	2,542	0.02206
PHA GS	404	0.00424	404	0.00351	404	0.00351
PHA R8	962	0.01010	1,010	0.00876	1,010	0.00876
NGVS	1	0.00001	54	0.00047	54	0.00047
Interruptible	-	-	-	-	-	-
GFCP/VEPI	-	-	-	-	-	-
<b>Total</b>	<b>95,249</b>	<b>1.00000</b>	<b>115,247</b>	<b>1.00000</b>	<b>115,247</b>	<b>1.00000</b>



PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTORS 2 AND 2A. CALCULATION OF MAXIMUM DAY EXTRA DEMAND FACTORS.

Factors are based on the maximum day extra demand throughput for each classification.

Service Classification	Pro Forma Average Daily Throughput Volumes (Mcf)	Peak Day Capacity (Mcf)	Extra Capacity (Mcf)	Allocation Factor 2	Allocation Factor 2A*
(1)	(2)	(3)	(4)=(3)-(2)	(5)	(6)
<u>Volumetric Costs</u>					
Residential	81,097	345,747	264,650	0.66239	0.71190
Commercial	27,949	110,782	82,833	0.20732	0.22282
Industrial	2,190	9,739	7,549	0.01889	0.02031
Municipal	2,542	12,982	10,440	0.02613	0.02808
PHA GS	404	1,872	1,468	0.00367	0.00395
PHA R8	1,010	5,761	4,751	0.01189	0.01278
NGVS	54	116	61	0.00015	0.00017
Interruptible	28,469	56,255	27,786	0.06954	
GFCP/VEPI	-	-	-	-	
Total	143,716	543,254	399,538	1.00000	1.00000

\* Factor 2A excludes Interruptible volumes.

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTORS 2B. CALCULATION OF MAXIMUM DAY EXTRA DEMAND FACTORS.

Factors are based on the maximum day extra demand throughput for each classification.

Service Classification	Pro Forma Average Daily Throughput Volumes (Mcf)	Peak Day Capacity (Mcf)	Extra Capacity (Mcf)	Allocation Factor 2B
(1)	(2)	(3)	(4)=(3)-(2)	(5)
<u>Volumetric Costs</u>				
Residential	81,097	345,747	264,650	0.65018
Commercial	27,949	110,782	82,833	0.20350
Industrial	2,190	9,739	7,549	0.01855
Municipal	2,542	12,982	10,440	0.02565
PHA GS	404	1,872	1,468	0.00361
PHA R8	1,010	5,761	4,751	0.01167
NGVS	54	116	61	0.00015
Interruptible	28,469	56,255	27,786	0.06826
GFCP/VEPI	35,573	43,074	7,501	0.01843
Total	<u>179,289</u>	<u>586,328</u>	<u>407,039</u>	<u>1.00000</u>

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 3. ALLOCATION OF COSTS ASSOCIATED WITH DISTRIBUTION

Factors are based on the weighting of the factors derived from average daily throughput volumes and from maximum day extra capacity demand for each service classification, as follows:

Service Classification	Average Daily Throughput			Maximum Day Extra Demand		Allocation Factor 3
	MCF/Day	Allocation Factor	Weighted Factor*	Allocation Factor 2	Weighted Factor*	
(1)	(2)	(3)	(4)=(3)x 0.50000	(5)	(6)=(5)x 0.50000	(7)=(4)+(6)
<u>Volumetric Costs</u>						
Residential	81,097	0.56429	0.28214	0.66239	0.33120	0.61334
Commercial	27,949	0.19447	0.09724	0.20732	0.10366	0.20090
Industrial	2,190	0.01524	0.00762	0.01889	0.00945	0.01707
Municipal	2,542	0.01769	0.00884	0.02613	0.01306	0.02191
PHA GS	404	0.00281	0.00141	0.00367	0.00184	0.00324
PHA R8	1,010	0.00703	0.00351	0.01189	0.00595	0.00946
NGVS	54	0.00038	0.00019	0.00015	0.00008	0.00027
Interruptible	28,469	0.19809	0.09905	0.06954	0.03477	0.13382
GFCP/VEPI	-	-	-	-	-	-
<b>Total</b>	<b>143,716</b>	<b>1.00000</b>	<b>0.50000</b>	<b>1.00000</b>	<b>0.50000</b>	<b>1.00000</b>

\* The weighting of the factors is based on the percentage of average daily throughput.

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 3A. ALLOCATION OF COSTS ASSOCIATED WITH DISTRIBUTION, OTHER THAN MAINS

Factors are based on the weighting of the factors derived from average daily throughput volumes and from maximum day extra capacity demand for each service classification, as follows:

Service Classification	Average Daily Throughput			Maximum Day Extra Demand		Allocation Factor 3A (7)=(4)+(6)
	MCF/Day (2)	Allocation Factor (3)	Weighted Factor* (4)=(3)x 0.50000	Allocation Factor 2B (5)	Weighted Factor* (6)=(5)x 0.50000	
<u>Volumetric Costs</u>						
Residential	81,097	0.45233	0.22616	0.65018	0.32509	0.55126
Commercial	27,949	0.15589	0.07794	0.20350	0.10175	0.17969
Industrial	2,190	0.01221	0.00611	0.01855	0.00927	0.01538
Municipal	2,542	0.01418	0.00709	0.02565	0.01282	0.01991
PHA GS	404	0.00226	0.00113	0.00361	0.00180	0.00293
PHA R8	1,010	0.00563	0.00282	0.01167	0.00584	0.00865
NGVS	54	0.00030	0.00015	0.00015	0.00008	0.00023
Interruptible	28,469	0.15879	0.07940	0.06826	0.03413	0.11353
GFCP/VEPI	35,573	0.19841	0.09920	0.01843	0.00921	0.10842
Total	179,289	1.00000	0.50000	1.00000	0.50000	1.00000

\* The weighting of the factors is based on the percentage of average daily throughput.

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 4. ALLOCATION OF COSTS ASSOCIATED WITH METERS AND ACCOUNTS 381

Factors are based on the cost of meters by class included in Accounts 381 Meters and M&R Equipment.

<u>Service Classification</u> (1)	<u>Original Cost of Meters</u> (2)	<u>Allocation Factor</u> (3)
<u>Customer Costs</u>		
Residential	\$ 47,210,351	0.68703
Commercial	18,193,374	0.26476
Industrial	898,287	0.01307
Municipal	1,575,547	0.02293
PHA - GS	314,037	0.00457
PHA - Rate 8	505,933	0.00736
NGVS	19,206	0.00028
Interruptible	-	-
	<hr/>	<hr/>
Total	<u><u>\$ 68,716,735</u></u>	<u><u>1.00000</u></u>

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 5. ALLOCATION OF COSTS ASSOCIATED WITH INDUSTRIAL MEASURING AND REGULATING EQUIPMENT.

Directly assigned to the Industrial Class

<u>Service Classification</u> (1)	<u>Allocation Factor</u> (1)
<u>Volumetric</u> Industrial	1.0000

FACTOR 6. ALLOCATION OF COSTS ASSOCIATED WITH SERVICES AND HOUSE REGULATORS.

Factors are based on the cost of services by class included in Account 380, Service Lines.

<u>Service Classification</u> (1)	<u>Original Cost of Service Lines</u> (2)	<u>Allocation Factor</u> (3)
<u>Customer Costs</u>		
Residential	\$ 765,157,484	0.92520
Commercial	47,813,190	0.05781
Industrial	1,155,739	0.00140
Municipal	2,876,657	0.00348
PHA - GS	6,119,882	0.00740
PHA - Rate 8	1,764,528	0.00213
NGVS	11,150	0.00001
Interruptible	2,118,184	0.00256
 Total	 <u>\$ 827,016,814</u>	 <u>1.00000</u>

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 7. ALLOCATION OF COSTS ASSOCIATED WITH CUSTOMER ACCOUNTING AND METER READING.

Factors are based on the number of customers for each classification, as follows.

<u>Service Classification</u> (1)	<u>Number of Customers</u> (2)	<u>Allocation Factor 7</u> (3)
<u>Customer Costs</u>		
Residential	481,142	0.94049
Commercial	25,403	0.04965
Industrial	454	0.00089
Municipal	875	0.00171
PHA - GS	2,224	0.00435
PHA - Rate 8	1,098	0.00215
NGVS	2	0.00000
Interruptible	389	0.00076
	<hr/>	<hr/>
Total	<u>511,587</u>	<u>1.00000</u>

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 8. ALLOCATION OF DISTRIBUTION OPERATION OTHER EXPENSES AND RENT.

Factors are based on distribution operation expenses other than those being allocated.

<u>Service Classification</u> (1)	<u>Operation Expenses</u> (2)	<u>Allocation Factor</u> (3)
<u>Volumetric Costs</u>		
Residential	\$ 27,196	0.31097
Commercial	8,901	0.10178
Industrial	757	0.00866
Municipal	973	0.01113
PHA GS	144	0.00165
PHA R8	421	0.00481
NGVS	12	0.00013
Interruptible	5,880	0.06723
GFCP/VEPI	865	0.00989
<u>Customer Costs</u>		
Residential	31,535	0.36059
Commercial	8,748	0.10003
Industrial	797	0.00912
Municipal	736	0.00842
PHA GS	210	0.00241
PHA R8	250	0.00286
NGVS	9	0.00010
Interruptible	21	0.00024
 Total	 <u>\$ 87,455</u>	 <u>1.00000</u>



PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 9. ALLOCATION OF DISTRIBUTION ASSETS

Factors are based on distribution assets other than those being allocated.

<u>Service Classification</u> (1)	<u>Rate Base Costs</u> (2)	<u>Allocation Factor</u> (3)
<u>Volumetric Costs</u>		
Residential	\$ 589,799	0.39979
Commercial	193,183	0.13095
Industrial	16,411	0.01112
Municipal	21,069	0.01428
PHA GS	3,120	0.00211
PHA R8	9,097	0.00617
NGVS	256	0.00017
Interruptible	128,648	0.08720
GFCP/VEPI	569	0.00039
<u>Customer Costs</u>		
Residential	449,961	0.30500
Commercial	51,071	0.03462
Industrial	2,056	0.00139
Municipal	3,797	0.00257
PHA GS	3,503	0.00237
PHA R8	1,636	0.00111
NGVS	34	0.00002
Interruptible	1,049	0.00071
Total	<u>\$ 1,475,259</u>	<u>1.00000</u>

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 10. ALLOCATION OF ADMINISTRATIVE AND GENERAL EXPENSES.

Factors are based on the allocation of operation and maintenance expenses.

Service Classification <u>(1)</u>	Operation & Maintenance Expenses <u>(2)</u>	Allocation Factor <u>(3)</u>
<u>Volumetric Costs</u>		
Residential	\$ 52,556	0.28626
Commercial	16,315	0.08886
Industrial	1,386	0.00755
Municipal	1,805	0.00983
PHA GS	282	0.00154
PHA R8	825	0.00449
NGVS	17	0.00010
Interruptible	7,356	0.04007
GFCP/VEPI	1,082	0.00590
<u>Customer Costs</u>		
Residential	85,573	0.46611
Commercial	13,379	0.07288
Industrial	1,041	0.00567
Municipal	1,005	0.00547
PHA GS	476	0.00259
PHA R8	418	0.00228
NGVS	11	0.00006
Interruptible	64	0.00035
 Total	 <u>\$ 183,591</u>	 <u>1.0000</u>

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 11. ALLOCATION OF LABOR RELATED TAXES AND BENEFITS.

Factors are based on the allocation of total operation and maintenance direct labor expense to service classifications as shown on the following page.

Service Classification <u>(1)</u>	Total Labor Expense <u>(2)</u>	Allocation Factor <u>(3)</u>
<u>Volumetric Costs</u>		
Residential	\$ 78,784	0.47687
Commercial	25,820	0.15629
Industrial	2,166	0.01311
Municipal	2,743	0.01660
PHA GS	415	0.00251
PHA R8	1,179	0.00714
NGVS	35	0.00021
Interruptible	13,575	0.08217
GFCP/VEPI	234	0.00142
<u>Customer Costs</u>		
Residential	35,603	0.21550
Commercial	3,820	0.02312
Industrial	244	0.00148
Municipal	250	0.00151
PHA GS	184	0.00111
PHA R8	130	0.00079
NGVS	-	-
Interruptible	28	0.00017
 Total	 <u>\$ 165,210</u>	 <u>1.00000</u>

PHILADELPHIA GAS WORKS  
FACTOR 11 - ALLOCATION OF LABOR COSTS TO  
CUSTOMER CLASS SERVICE CLASSIFICATIONS

Factor Ref	Account	Labor Costs (3)			Volumetric Costs							Customer Costs						
		Residential (4)	Commercial (5)	Industrial (6)	Municipal (7)	PHA GS (8)	PHA - R8 (9)	NGVS (10)	Interruptible (11)	GFCP/VEPI (12)	Res (13)	Com (14)	Ind (15)	Muni (16)	PHA - GS (17)	PHA - Rate 8 (18)	NGVS (19)	Interruptible (20)
02	TOTAL PAYROLL - 2022	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
03	President & CEO	27	8	1	1	3	8	-	4	1	1	7	1	1	-	-	-	-
04	Corporate Communications	1,821	594	43	16	9	25	-	227	33	11	135	10	15	-	-	-	-
05	Office Salaries	509	158	13	56	3	8	1	71	10	10	413	31	15	4	-	-	-
07	Legal	1,117	774	61	17	3	8	-	1,051	-	1	55	1	5	4	-	-	-
09	Commercial Resource Center	2,245	774	61	70	11	28	2	-	-	-	402	31	14	13	-	-	-
10	Gas Control & Acquisition	5,512	490	42	54	8	25	1	221	32	32	2,569	30	14	13	-	-	-
11	VP Reg. Compliance & Customer Programs	1,578	490	42	10	2	5	-	40	6	6	488	5	3	2	-	-	-
10	Human Resources	287	89	8	10	2	5	-	-	-	-	73	6	5	-	-	-	-
14	Chief Operating Officer	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	SVP Regulatory & Legislative Affairs	275	25	2	3	-	1	-	11	2	2	20	2	1	1	-	-	-
15	VP Supply Chain	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	VP Budget & Strategic Development	666	68	6	8	1	3	-	-	-	-	56	4	2	2	-	-	-
17	Gas Planning & Rates	208	64	5	7	1	3	-	29	4	4	53	4	2	2	-	-	-
20	Customer Review	-	-	-	-	-	-	-	-	-	-	48	1	2	4	-	-	-
21	By-Price Businesses	7	2	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
30	Chemical Services	783	257	22	28	4	12	-	171	-	-	-	-	-	-	-	-	-
31	SVP Technical Compliance	156	48	4	5	1	2	-	22	3	3	40	3	1	1	-	-	-
38	SVP HRD, Labor, & Corp Comm	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	Chief Financial Officer	477	148	13	16	3	7	-	67	10	10	121	9	4	4	-	-	-
40	Risk Management	-	-	-	-	-	-	-	-	-	-	2,777	9	9	4	-	-	-
43	Account Management	-	-	-	-	-	-	-	-	-	-	495	3	5	13	-	-	-
44	Customer Marketing	-	-	-	-	-	-	-	-	-	-	449	3	4	16	-	-	-
45	Accounting & Reporting	510	158	13	17	3	8	-	71	10	10	630	10	10	38	4	-	-
46	Treasury	283	88	7	10	2	4	-	40	6	6	172	6	5	3	2	-	-
47	Information Services	2,348	729	62	81	13	37	1	329	48	48	598	46	21	19	-	-	-
49	Collections	-	-	-	-	-	-	-	-	-	-	154	5	14	7	-	-	-
50	Field Services	18,629	6,168	524	673	100	290	8	4,108	-	-	-	-	-	-	-	-	-
52	Distribution	28,300	9,289	790	1,014	150	438	12	6,184	-	-	-	-	-	-	-	-	-
53	Gas Processing	10,196	3,514	275	320	51	127	7	-	-	-	-	-	-	-	-	-	-
1A	Internal Auditing	30	9	1	1	-	-	-	-	-	-	8	1	-	-	-	-	-
54	SVP Operations & Supply Chain	86	17	1	2	-	1	-	4	1	1	48	1	-	-	-	-	-
56	SVP Gas Management	312	102	9	11	2	5	-	68	-	-	-	-	-	-	-	-	-

PHILADELPHIA GAS WORKS  
FACTOR 11 - ALLOCATION OF LABOR COSTS TO  
CUSTOMER CLASS SERVICE CLASSIFICATIONS

Factor Ref.	Account	Labor Costs (3)	Volumetric Costs										Customer Costs						
			Residential (4)	Commercial (5)	Industrial (6)	Municipal (7)	PHA-GS (8)	PHA-R8 (9)	NGVS (10)	Interruptible (11)	GFCP/VEPI (12)	Res (13)	Com (14)	Ind (15)	Muni (16)	PHA-GS (17)	PHA-Rate 8 (18)	NGVS (19)	Interruptible (20)
58	VP Marketing	78	22	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
59	Organizational Development	1,487	426	132	11	15	15	2	2	2	2	2	2	2	2	2	2	2	2
60	Marketing	2,383	682	212	18	23	23	4	4	4	4	4	4	4	4	4	4	4	4
63	Data & Analytics	0																	
64	CIS	134	64	20	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
65	Labor Relations	1,225	353	109	9	12	12	2	2	2	2	2	2	2	2	2	2	2	2
67	Customer Billing	1,224	353	109	9	12	12	2	2	2	2	2	2	2	2	2	2	2	2
68	Customer Programs	854	248	77	6	8	8	1	1	1	1	1	1	1	1	1	1	1	1
71	Supply Chain	7,155	4,388	1,437	122	157	157	23	23	23	23	23	23	23	23	23	23	23	23
72	Facilities Management	2,330	1,429	468	40	51	51	8	8	8	8	8	8	8	8	8	8	8	8
73	Fleet Operations	3,792	1,086	337	29	37	37	6	6	6	6	6	6	6	6	6	6	6	6
77	Resource Management and Technology	1,067	655	214	18	22	22	3	3	3	3	3	3	3	3	3	3	3	3
	<b>TOTAL LABOR RELATED COST FOR ALLOCATION</b>	<b>\$ 165,347</b>	<b>\$ 78,764</b>	<b>\$ 25,820</b>	<b>\$ 2,186</b>	<b>\$ 2,743</b>	<b>\$ 415</b>	<b>\$ 1,179</b>	<b>\$ 35</b>	<b>\$ 13,575</b>	<b>\$ 234</b>	<b>\$ 35,603</b>	<b>\$ 3,820</b>	<b>\$ 244</b>	<b>\$ 250</b>	<b>\$ 184</b>	<b>\$ 130</b>	<b>\$ -</b>	<b>\$ 28</b>

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 12. ALLOCATION OF SURPLUS AND INTEREST EXPENSE.

Factors are based on the result of allocating the original cost measure of value, as presented on the following pages.

Service Classification <u>(1)</u>	Original Cost Less Depreciation <u>(2)</u>	Allocation Factor <u>(3)</u>
<u>Volumetric Costs</u>		
Residential	\$ 781,737	0.40237
Commercial	249,144	0.12824
Industrial	21,059	0.01084
Municipal	27,103	0.01395
PHA GS	4,154	0.00214
PHA R8	12,043	0.00620
NGVS	304	0.00016
Interruptible	146,789	0.07555
GFCP/VEPI	2,279	0.00117
<u>Customer Costs</u>		
Residential	606,341	0.31209
Commercial	74,514	0.03835
Industrial	3,780	0.00195
Municipal	5,555	0.00286
PHA GS	4,426	0.00228
PHA R8	2,370	0.00122
NGVS	53	0.00003
Interruptible	1,202	0.00062
 Total	 <u>\$ 1,942,855</u>	 <u>1.00000</u>

FACTOR 13. ALLOCATION OF REGULATORY COMMISSION EXPENSES, ASSESSMENTS AND OTHER REVENUES.

Factors are based on the allocated cost of service excluding those items being allocated.

Service Classification <u>(1)</u>	Total Cost of Service <u>(2)</u>	Allocation Factor <u>(3)</u>
<u>Volumetric Costs</u>		
Residential	\$ 220,962	0.36962
Commercial	70,667	0.11821
Industrial	5,935	0.00993
Municipal	7,582	0.01268
PHA GS	1,170	0.00196
PHA R8	3,353	0.00561
NGVS	89	0.00015
Interruptible	34,133	0.05710
GFCP/VEPI	1,714	0.00287
<u>Customer Costs</u>		
Residential	216,152	0.36157
Commercial	29,362	0.04911
Industrial	1,924	0.00322
Municipal	2,174	0.00364
PHA GS	1,363	0.00228
PHA R8	932	0.00156
NGVS	21	0.00003
Interruptible	283	0.00047
 Total	 <u>\$ 597,815</u>	 <u>1.00000</u>

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 13A. ALLOCATION OF OPEB SURCHARGE

Factors are based on the allocated cost of service excluding those items being allocated, excluding IT and GFCP/VEPI cost of service,

Service Classification (1)	Total Cost of Service (2)	Allocation Factor (3)
<u>Volumetric Costs</u>		
Residential	\$ 220,962	0.39339
Commercial	70,667	0.12581
Industrial	5,935	0.01057
Municipal	7,582	0.01350
PHA GS	1,170	0.00208
PHA R8	3,353	0.00597
NGVS	89	0.00016
Interruptible	-	-
GFCP/VEPI	-	-
<u>Customer Costs</u>		
Residential	216,152	0.38483
Commercial	29,362	0.05227
Industrial	1,924	0.00342
Municipal	2,174	0.00387
PHA GS	1,363	0.00243
PHA R8	932	0.00166
NGVS	21	0.00004
Interruptible	-	-
 Total	 \$ 561,685	 1.00000

FACTOR 14. ALLOCATION OF UNCOLLECTIBLES NOT RECOVERED FROM MFC

Factors are based on 3-year average of uncollectibles.

Service Classification (1)	3-Year Average Uncollectibles (2)	Allocation Factor (3)
<u>Customer Costs</u>		
Residential	\$ 38,625,219	0.95461
Commercial	1,672,418	0.04133
Industrial	68,039	0.00168
Municipal	10,543	0.00026
PHA GS	85,604	0.00212
PHA R8	-	-
 Total	 40,461,824	 1.00000

PHILADELPHIA GAS WORKS

CALCULATION OF CUSTOMER COSTS PER BILL BY SERVICE CLASSIFICATION

	Cost of Service (1)	Residential (2)	Commercial (3)	Industrial (4)	Municipal (5)	PHA - GS (6)	PHA - R8 (7)	NGVS (8)	Interruptible (9)
<b>Fully Allocated Customer Costs</b>									
Customer Costs (in 1,000's)	252,209	\$ 216,152	\$ 29,362	\$ 1,924	\$ 2,174	\$ 1,363	\$ 932	\$ 21	\$ 283
Number of Customers	511,587	481,142	25,403	454	875	2,224	1,098	2	389
<b>Customer Cost per bill</b>		<b>\$ 37.44</b>	<b>\$ 96.32</b>	<b>\$ 353.07</b>	<b>\$ 207.02</b>	<b>\$ 51.08</b>	<b>\$ 70.70</b>	<b>\$ 865.19</b>	<b>\$ 60.60</b>
<b>Direct Customer Costs (in 1000's)</b>									
<b>O &amp; M Expenses:</b>									
874 Mains And Services Expenses									
Mains									
Services	3,886	3,595	225	5	14	29	8	0	10
M & R Station Expenses - Industrial	274	274		274					
Meter and House Regulator Expenses	18,939	13,012	5,014	248	434	87	139	5	-
Customer Installations Expenses	11,788	8,099	3,121	154	270	54	87	3	-
Maintenance of Services	3,076	2,846	178	4	11	23	7	0	8
Maintenance of Meters & House Regulators	4,236	3,984	210	4	7	18	9	0	3
Supervision	2,503	2,354	124	2	4	11	5	0	2
Meter Reading Expenses	896	843	44	1	2	4	2	0	1
Customer Records & Coll Expenses	38,730	36,425	1,923	34	66	168	83	0	29
Uncollectible Accounts	28,627	27,327	1,183	48	7	61	-	-	-
Customer Assistance Expenses	6,910	6,499	343	6	12	30	15	0	5
Subtotal O & M Expenses	119,865	104,963	12,366	781	827	484	355	9	58



PHILADELPHIA GAS WORKS

CALCULATION OF CUSTOMER COSTS PER BILL BY SERVICE CLASSIFICATION

	Cost of Service (1)	Residential (2)	Commercial (3)	Industrial (4)	Municipal (5)	PHA - GS (6)	PHA - R8 (7)	NGVS (8)	Interruptible (9)
<b>Depreciation Expense</b>									
380 Services	19,551	18,088	1,130	27	68	145	42	0	50
381 Meters	2,771	1,904	734	36	64	13	20	1	-
382 Meter Installations	2,649	1,820	701	35	61	12	20	1	-
383 House Regulators	94	87	5	0	0	1	0	0	0
384 House Regulator Installations	36	25	9	0	1	0	0	0	-
385 Industrial M & R Equipment	13	-	-	13	-	-	-	-	-
390 Structures and Improvements	-	-	-	-	-	-	-	-	-
391 Office Furniture And Equipment	-	-	-	-	-	-	-	-	-
Subtotal Depreciation	25,113	31,808	4,106	228	308	226	130	3	58
<b>Rate Base</b>									
380 Services	405,320	375,003	23,433	566	1,410	2,999	865	5	1,038
381 Meters	57,683	39,630	15,272	754	1,323	264	425	16	-
382 Meter Installations	45,792	31,461	12,124	599	1,050	209	337	13	-
383 House Regulators	3,835	3,548	222	5	13	28	8	0	10
384 House Regulator Installations	345	319	20	0	1	3	1	0	1
385 Industrial M & R Equipment	131	-	-	131	-	-	-	-	-
390 Structures And Improvements	50,239 *	42,161	6,592	513	495	235	206	5	31
391 Office Furniture and Equipment	36,272 *	30,440	4,759	370	357	169	149	4	23
Subtotal Rate Base	599,618	522,563	62,422	2,939	4,649	3,907	1,990	44	1,103
Surplus and Interest @ 11.4%	68,315	59,536	7,112	335	530	445	227	5	126
Total Direct Customer Costs	\$ 225,047	\$ 196,327	\$ 23,584	\$ 1,344	\$ 1,665	\$ 1,156	\$ 712	\$ 17	\$ 242
Number of Customers	511,587	481,142	25,403	454	875	2,224	1,098	2	389
<b>Direct Costs per bill</b>		\$ 34.00	\$ 77.37	\$ 246.67	\$ 158.57	\$ 43.30	\$ 54.04	\$ 705.40	\$ 51.92

\* Customer cost portion of account.

PHILADELPHIA GAS WORKS

CALCULATION OF MERCHANT FUNCTION CHARGE

Line No.		Residential	Commercial	Industrial	Municipal	PHA - GS	PHA - Rate 8	NGVS	Interruptible	Total
(1)	Non-Gas Revenue - Proposed Rates	\$ 397,176	\$ 82,963	\$ 6,602	\$ 8,316	\$ 2,312	\$ 3,561	\$ 92	\$ 17,529	\$ 518,552
(2)	GCR Revenue	139,035	29,907	2,035	2,427	734	1,746	2	-	175,886
(3)	Total Revenue - Lines (1)+(2)	\$ 536,211	\$ 112,870	\$ 8,637	\$ 10,743	\$ 3,046	\$ 5,307	\$ 94	\$ 17,529	\$ 694,438
(4)	Percent of GCR to Total Revenue - Lines (2)/(3)	25.93%	26.50%	23.56%						
(5)	Uncollectible Account 904 (000's)	36,873	1,597	65	10	82	-	-	-	38,626
(6)	Uncollectible Account 904 to GCR (000's) - Line (4) X (5)	9,561	423	15						
(7)	Uncollectible Share of Revenue, % - Line (6)/(2)	6.88%	1.41%	0.75%						
(8)	Uncollectible Account 904 to GCR - Line (6) X 1000	9,561,098	423,083	15,303						
(9)	Annual Firm Sales Service Volumes	27,369,753	6,000,869	409,544						
(10)	Merchant Function Charge per MCF - Line (8)/(9)	0.3493	0.0705	0.0374						

PHILADELPHIA GAS WORKS

CALCULATION OF GAS PROCUREMENT CHARGE

Natural Gas Supply Service, Acquisition and Management and Benefits	\$ 531,474
Storage Gas Working Capital Plus Cash Working Capital - Cost	<u>3,519,447</u>
Total GPC Costs	\$ 4,050,921
Annual Firm Sales Service Volumes - MCF	34,766,037
Gas Procurement Charge	0.1165

# Tab 6

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

**FLORIAN TEME**

ON BEHALF OF  
PHILADELPHIA GAS WORKS

Docket Nos. R-2025-3053112

TOPICS:

Test Year Sales and Revenues  
Revenue Allocation  
Decoupling Mechanism  
Proposed Tariff Revisions

February 27, 2025

**Table of Contents**

	<b>Page</b>
<b>I. INTRODUCTION.....</b>	<b>1</b>
<b>II. SALES FORECAST PROCEDURES.....</b>	<b>3</b>
<b>III. DECOUPLING PROPOSAL.....</b>	<b>8</b>
<b>IV. ALLOCATION OF PROPOSED RATE INCREASE BY CUSTOMER CLASS.....</b>	<b>9</b>
<b>V. PROPOSED TARIFF REVISIONS.....</b>	<b>14</b>
<b>VI. CONCLUSION .....</b>	<b>22</b>

**TABLE OF EXHIBITS**

FT-1	Proposed Supplement No. 176 to PGW Gas Service Tariff-Pa P.U.C. No. 2 (Clean and Redlined Versions) & Current Gas Service Tariff
FT-2	Proposed Supplement No. 119 to PGW Gas Supplier Tariff-Pa P.U.C. No. 1 (Clean and Redlined Versions) & Current Supplier Tariff

1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND CURRENT POSITION.**

3 A. My name is Florian Teme. My position is Vice President, Marketing, Sales and Energy  
4 Planning.

5 **Q. HOW LONG HAVE YOU HELD THIS POSITION?**

6 A. I assumed my present position in December 2020. Prior to this position, I was Vice  
7 President, Marketing and Sales.

8 **Q. WHAT ARE YOUR VARIOUS JOB RESPONSIBILITIES?**

9 A. In my present position, I am responsible for the direction of the marketing sales efforts  
10 and new business development, while continuing to strengthen business relations and  
11 increase customer service initiatives. I am also responsible for Energy Planning which  
12 includes calculation of rates for quarterly and 1307(f) filings, among others.

13 **Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.**

14 A. I have been employed with PGW since August 2003. I became PGW's Vice President,  
15 Marketing and Sales in September 2016. Prior to that, I had various positions with PGW:  
16 Director, Marketing and Sales (April 2013 – September 2016), Manager, Residential and  
17 Commercial Sales, Marketing (March 2012 – April 2013); Manager, Controls and  
18 Analytics, Supply Chain (January 2010 – March 2012); Project Manager, Information  
19 Services (January 2007 – January 2010); Supply Analyst, Gas Planning (April 2005 –  
20 January 2007); and Technical Project Administrator, Marketing (August 2003 – March  
21 2005).

22 I received my Bachelor of Business Administration (Management Information  
23 Systems) from Temple University – Fox School of Business and Management in 2003

1 and my Master of Business Administration (Business Intelligence, Six Sigma) from Saint  
2 Joseph's University - Erivan K. Haub School of Business in 2011.

3 **Q. HAVE YOU EVER PROVIDED TESTIMONY BEFORE THIS COMMISSION?**

4 A. Yes, I have provided testimony in PGW's three most recent base rate cases (Docket Nos.  
5 R-2017-2586783, R-2020-3017206, and R-2023-3037933) and in several recent PGW  
6 Gas Cost Rate proceedings (Docket Nos. R-2019-3007636, R-2021-3023970, R-2022-  
7 3030686, R-2023-3037933, and R-2024-3045966).

8 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

9 A. The purpose of my testimony is to describe and support:

- 10 (1) the process used to develop the sales forecast for the Fully Projected Future Test Year  
11 ("FPFTY");  
12 (2) an analysis of the Heating Degree Days ("HDD") used to calculate pro forma sales  
13 for the FPFTY; and  
14 (3) the allocation of the proposed base rate increase by customer class as well as PGW's  
15 proposed customer charges.

16 My testimony will also explain and provide support for the Company's proposed: (1)  
17 PGW's sales forecast for the FPFTY and historical trends in PGW's gas sales; and (2)  
18 modifications to PGW's Service and Supplier Tariffs to (a) change the Merchant  
19 Function Charge and the Gas Procurement Charge; (b) propose a new rate schedule for  
20 Prepaid Rate Interruptible Service; (c) modify the incentives to customers for the  
21 installation of Micro-CHP projects in PGW's TED Rider; (d) clarify that PGW may use  
22 advanced or "smart" metering equipment; (e) eliminate Rate GTS-Firm and Rate GTS-  
23 Interruptible; (f) delete references to the Restructuring and Consumer Education  
24 Surcharge; (g) revise the DSIC provisions of the Tariff to remove the "e" factor, used to



1 recover prior years' undercollections from the DSIC cap; and (h) establish a Purchase of  
2 Receivables ("POR") Choice Supplier Bill Charge.

3 **Q. ARE YOU SPONSORING ANY EXHIBITS?**

4 A. Yes. The exhibits I am proposing are set forth in the Table of Exhibits following the  
5 Table of Contents of this testimony.

6 **II. SALES FORECAST PROCEDURES**

7 **Q. WHAT PROCEDURES DID PGW EMPLOY WHEN FORECASTING SALES**  
8 **FOR THE TEST YEAR?**

9 A. PGW's total system-wide demand is a function of the projected gas demand per customer  
10 and the anticipated number of customers in each class. In determining customer demand,  
11 PGW projects customer usage, giving consideration to significant gains or losses in  
12 numerous homogeneous rate groups for the period being projected. PGW's Gas Planning  
13 & Rates Department estimates for each customer class the level of demand related to  
14 experienced temperatures and the level of demand that is not affected by changes in  
15 temperature. Within each class the most recent summer and winter usage patterns are  
16 established from historical records. Summer data provides each class of customer's non-  
17 temperature sensitive load requirements (baseload) which can be expressed in terms of  
18 thousands of cubic feet (Mcf) per day, per customer. Similarly, winter data, after removal  
19 of the daily baseload level, determines the temperature sensitive load requirements for  
20 each class of customer.

21 This temperature sensitive usage primarily reflects space heating but also includes  
22 such other temperature sensitive usage as water heating, which can be affected by ground  
23 temperatures, and similar process variations, as well as supplementary heating. This  
24 overall heating requirement can be expressed in terms of the cubic feet of gas utilized per

1 degree of temperature change on a per customer basis for each separate customer  
2 classification. In addition, consideration is given to the variation of customer utilization  
3 patterns for space heating over the year, recognizing the transitional fall start-up of  
4 heaters, the deep winter period needs and the tapering off and shutdown which occurs in  
5 the late spring. These usage patterns, taken in conjunction with anticipated customer  
6 counts and average temperature and “normal” degree day levels, form the basis of  
7 determining customer class and total system demands.

8 **Q. WHAT IS A DEGREE DAY?**

9 A. The term “degree days” quantifies the daily average degrees of temperature below a base  
10 level of 65 degrees Fahrenheit and is used as a tool to measure heating or cooling  
11 requirements. For example, on a day experiencing an average temperature of 40 degrees  
12 Fahrenheit, there would be 25 heating degree days.

13 **Q. PLEASE EXPLAIN THE USE OF “NORMAL” TEMPERATURES.**

14 A. Due to the inconsistencies of weather and weather forecasting techniques, and because  
15 test year data are required to reflect “normal” conditions, no attempt is made to predict  
16 the specific daily temperatures of the projection period. Instead, PGW has developed a  
17 normal monthly temperature pattern by analyzing statistical records of actual temperature  
18 patterns over a 20-year period ending in FY 2024. This pattern reflects 3,860 degree-  
19 days. See Table 1 below.

<b>Table 1</b>			
<b>PGW 20 YEAR DEGREE DAY HISTORY</b>			
<b>HEATING</b>		<b>HEATING</b>	
<b>YEAR</b>	<b>SEASON</b>	<b>YEAR</b>	<b>SEASON</b>
	<b>2004-05</b>	4,327	
	<b>2005-06</b>	3,819	
	<b>2006-07</b>	3,773	
	<b>2007-08</b>	3,746	
	<b>2008-09</b>	4,181	
	<b>2009-10</b>	3,730	
	<b>2010-11</b>	4,005	
	<b>2011-12</b>	3,034	
	<b>2012-13</b>	3,889	
	<b>2013-14</b>	4,405	
	<b>2014-15</b>	4,431	
	<b>2015-16</b>	3,354	
	<b>2016-17</b>	3,546	
	<b>2017-18</b>	3,981	
	<b>2018-19</b>	3,995	
	<b>2019-20</b>	3,353	
	<b>2020-21</b>	3,734	
	<b>2021-22</b>	4,079	
	<b>2022-23</b>	3,894	
	<b>2023-24</b>	3,931	
	<b>10 Year Ave. (2015-2024)</b>	3,830	
	<b>20 Year Ave. (2005-2024)</b>	3,860	

1 **Q. PLEASE DISCUSS THE HISTORICAL TRENDS IN PGW'S GAS SALES.**

2 A. PGW has been experiencing a gradual decrease in sales from 2004 to the present. For  
3 example, in its last case, PGW projected that typical residential customers would use  
4 approximately 71 Mcf/yr in FY 2024; in fact, usage fell to approximately 63 Mcf/yr in  
5 FY 2024, and usage is falling towards 62 Mcf/yr in FY 2025. PGW projects that  
6 residential customer demand for natural gas will decrease by approximately 1% in the  
7 FPFTY from FY 2025, which is reflected in the *pro forma* revenues shown in PGW's  
8 financial schedules (Exhibits JFG-1 – 4) and in Schedule F of the cost of service study.  
9 See Table 2 below.

10

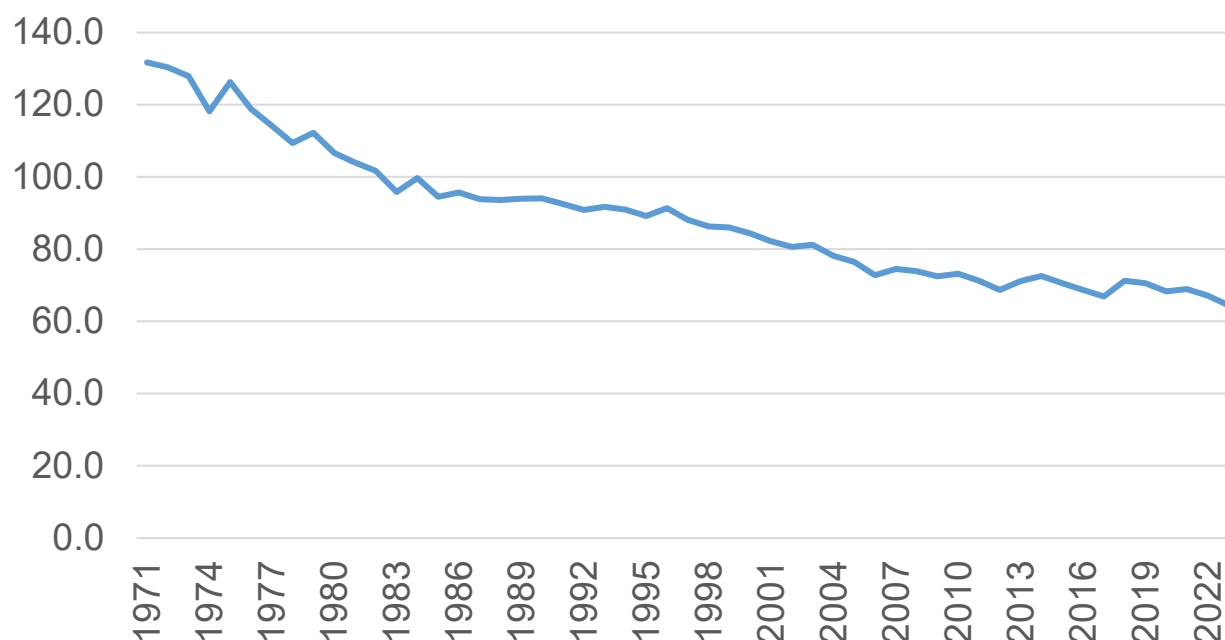
<b>Table 2</b>	
<b>Year</b>	<b>Residential Heating Average Usage Mcf</b>
2004	100
2005	95
2006	88
2007	95
2008	90.3
2009	89
2010	89.4
2011	91
2012	87
2013	85
2014	82
2015	83
2016	81
2017	76
2018	80
2019	75
2020	75
2021	77
2022	71
2023	64
2024	63
2025 (Projected)	62
2026 (Projected)	61

1 Lower demand for natural gas is a developing trend driven by a combination of factors,  
2 including improved energy efficiency and fewer heating degree days. The American Gas  
3 Association has reported that “normalized natural gas use per residential gas customer

1 fell 51% between 1971 and 2023, or 1.34% per year for 54 years,” as demonstrated in  
 2 Table 3 below.<sup>1</sup>

**Table 3**

**Normalized Use per Residential Gas Customer  
(Mcf per Year)**



Based on AGA calculations of weather-normalized residential gas consumption per customer

3 **Q. WHY HAS PGW USED A 20-YEAR AVERAGE TO DETERMINE NORMAL**  
 4 **WEATHER FOR ITS SERVICE TERRITORY?**

5 A. The Settlement of PGW’s 2017 base rate proceeding at Docket No. R-2017-2586783  
 6 required PGW to utilize the 20-year average of degree days experienced in its service  
 7 territory as “normal” weather. Since then, PGW has continued to utilize a 20-year  
 8 average of degree days as shown in Table 1.

<sup>1</sup> American Gas Association, *Average Usage per Residential Natural Gas Customer*, available at <https://www.aga.org/research-policy/resource-library/average-use-per-residential-natural-gas-consumer/>.

1 **Q. HOW IS THE 20-YEAR AVERAGE LEVEL OF DEGREE DAYS USED IN THE**  
2 **SALES FORECAST?**

3 A. The annual 3,860 degree-days (which compose the PGW normal monthly temperature  
4 patterns) form the basis of the calculation of the temperature sensitive component of  
5 demand for the FPFTY. Table 1 documents Philadelphia’s 20-year day history ending in  
6 FY 2025. The application of the above-described baseload and space heating factors and  
7 customer counts, when applied to a calendar-based daily temperature pattern, produces a  
8 daily total of customer requirements, identified as sendout.

9 **Q. HOW WILL THIS DETERMINATION OF NORMAL WEATHER AFFECT**  
10 **PGW’S EXISTING “WEATHER NORMALIZATION ADJUSTMENT CLAUSE”?**

11 A. It is consistent with it. The Weather Normalization Adjustment (“WNA”) clause, found  
12 in PGW’s Gas Service Tariff, Pages 149-150, is based on a normal weather  
13 determination, currently a twenty-year average, using the degree day data provided by the  
14 National Weather Service and measured at the Philadelphia International Airport.

15 **III. DECOUPLING PROPOSAL**

16 **Q. PLEASE DESCRIBE PGW’S PROPOSED DECOUPLING MECHANISM.**

17 A. PGW is proposing a Revenue Normalization Adjustment (“RNA”) which will be used in  
18 conjunction with PGW’s existing WNA. The proposed RNA will recover/refund the  
19 difference between the annual authorized revenue the Commission has allowed, and the  
20 revenues received through customer billings and the WNA charges/credits for each  
21 eligible rate class. The RNA is explained in greater detail in Ronald Amen’s testimony.

22 **Q. WHY IS PGW PROPOSING THE RNA?**

23 A. The RNA would ensure more predictable and stable base rate revenue levels for PGW.  
24 The RNA would enable PGW to have the cash it requires to prudently maintain the  
25 distribution system despite increasing volatility in demand and weather, as described in

1 the testimony PGW Witness Golden. It will also enable PGW to continue to expand its  
 2 demand reduction programs and not be adversely affected financially when those  
 3 programs reduce demand and, correspondingly, revenues.

4 **Q. HOW WILL THE RNA BE CALCULATED?**

5 A. The RNA will be calculated as set forth in PGW Witness Amen’s testimony.

6 **Q. HOW WILL THE RNA BE APPLIED TO CUSTOMER BILLS?**

7 A. The RNA will be included under distribution charges on customer bills.

8 **IV. ALLOCATION OF PROPOSED RATE INCREASE BY CUSTOMER CLASS**

9 **Q. WHAT ARE THE GOALS OF THE COMPANY’S PROPOSED REVENUE**  
 10 **ALLOCATION AND RATE DESIGN?**

- 11 A. The Company’s goals in its proposed revenue allocation and rate design are:
- 12 • To implement an increase in each class’s customer charge (with the exception of IT  
 13 and IT-XLT) to the extent that the results of the Class Cost of Service Study  
 14 (“CCOSS”) justifies such an increase, that sets the customer charge at a level that  
 15 covers a greater portion of the fixed customer costs associated with providing service  
 16 to each class of customer;
  - 17 • To allocate the remainder of the increase to each class in a way that moves the  
 18 various rate classes closer to their full cost of service while avoiding applying an  
 19 unreasonably large portion of the increases to any one of the customer classes; and
  - 20 • To appropriately recognize the principles of gradualism to restrain increases for some  
 21 classes verses their cost of service.

22 **Q. DESCRIBE THE DATA SUPPLIED BY GANNETT FLEMING THAT ASSISTED**  
 23 **PGW IN DETERMINING HOW TO IMPLEMENT THESE GOALS.**

24 A. With respect to customer charges, Mr. Herbert of Gannett Fleming provided a Class Cost  
 25 of Service Study (“CCOSS”) that details the Company’s proposals in Exhibit GRH-1.

1 Mr. Herbert's CCOSS provided the revenues relative to cost of service for each rate class  
 2 under existing rates. That study also provided "customer cost" results that determined the  
 3 actual fixed customer cost per customer by class. These results show the level of monthly  
 4 customer charge that would be required if the Company were to recover 100% of its fixed  
 5 customer related costs in a monthly customer charge.

6 **Q. WHAT ARE PGW'S PROPOSED CUSTOMER CHARGES?**

7 A. The proposed customer charges are shown below. For each customer class, PGW  
 8 attempted to move the charge closer to the full cost of service while keeping the  
 9 percentage increases at about the same level. See Table 4 below.

**Table 4**

<b>Customer Charge</b>					
<b>Customer Group*</b>	<b>Current Charge (Per Meter)</b>	<b>% Increase (Calculated)</b>	<b>Proposed Charge (As Filed)</b>	<b>Direct Customer Costs Per Bill (Cost of Service Study)</b>	<b>Proposed Charge as % of Customer-Related Costs</b>
Rate GS – Residential	\$16.25	20%	\$19.50	\$37.44	52%
Rate GS – Commercial Customers	\$27.65	23%	\$34.00	\$96.32	35%
Rate GS – Industrial Customers	\$82.80	21%	\$100.00	\$353.07	28%
Rate GS – Public Housing Authority Customers	\$16.25	20%	\$19.50	\$51.08	38%
Rate MS	\$27.65	23%	\$34.00	\$207.02	16%
PHA (Rate 8)	\$27.65	23%	\$34.00	\$70.70	48%
NGVS	\$38.15	22%	\$46.50	\$865.19	5%



1 **Q. DOES INCREASING THE CUSTOMER CHARGE IN THE MANNER**  
2 **PROPOSED PROVIDE ANY BENEFITS?**

3 A. Yes. Charging rates that better reflect the customer-related costs for each customer more  
4 properly aligns rates with costs and provides more revenue stability. Currently, PGW is  
5 still recovering a majority of its fixed customer costs in its variable delivery charges. This  
6 makes the recovery of these costs contingent upon achieving PGW's projected normal  
7 sales volumes. Since these costs, by definition, do not vary by volume, cost recovery in  
8 this way is inefficient and distorts the price signals to customers. Greater revenue stability  
9 will also improve PGW's cash flow, something that is viewed favorably by rating  
10 agencies allowing PGW to borrow at lower costs and more favorable terms ultimately  
11 benefiting all customers.

12 **Q. HOW IS PGW PROPOSING TO ALLOCATE THE OVERALL RATE**  
13 **INCREASE TO EACH CUSTOMER CLASS?**

14 A. Based on the guidance provided by the results of the cost of service study completed by  
15 Mr. Herbert, PGW allocated the increase as set forth in the proposed tariff and Table 5  
16 below. Table 5 reflects the concepts of gradualism, as a 173.4% rate increase would be  
17 required to move the IT class to full cost of service. However, PGW has proposed that the  
18 IT class's overall revenue increase be limited to 40%.

Table 5

<b>Allocation Of Proposed Rate Increase</b>		
<b>Rate Class</b>	<b>Proposed Increase (\$)</b>	<b>Share of Proposed Increase (%)</b>
Residential	74,162,644	71%
Commercial	18,703,739	18%
Industrial	1,775,160	1.7%
PHA GS	702,933	0.6%
Municipal	3,192,518	3%
PHA (Rate 8)	1,203,462	1.1%
NGVS	63,596	0%
IT (Consolidated)	5,005,271	5%
IT-XLT	190,255	0%
<b>TOTAL</b>	<b>104,999,702</b>	<b>100%</b>

- 1 The delivery rates and percentage increases for each class are provided in Table 6 as
- 2 follows:

Table 6

<b>Delivery Charge</b>			
<b>Rate Class</b>	<b>Current (\$/MCF)</b>	<b>% Increase from Current</b>	<b>Proposed (\$/MCF)*</b>
Residential	7.4624	23%	9.1761
Commercial	5.4086	30%	7.0055
Industrial	5.4459	38%	7.5000
PHA GS	6.8523	52%	10.4356
Municipal	5.1883	64%	8.5175
PHA (Rate 8)	5.6340	55%	8.7450
NGVS	1.4022	228%	4.5975
IT-XLT	0.1054	13%	0.1192
IT-A	3.0038	45%	4.3408
IT-B	1.4539	45%	2.1010
IT-C	1.1345	45%	1.6395
IT-D	1.0066	45%	1.4547
IT-E	0.9747	45%	1.4086
* The proposed delivery charge (\$/MCF) does <u>not</u> include the Merchant Function Charge (“MFC”) and the Gas Procurement Charge (“GPC”)			

1 I believe that these allocations of the proposed rate increase are a reasonable application  
2 of the rate allocation guidelines I articulated above.

3 **Q. IS PGW INVOLVED IN ANY OTHER OUTSTANDING MATTERS THAT**  
4 **WOULD IMPACT THE ALLOCATION OF PROPOSED RATES?**

5 A. Yes. The Philadelphia Industrial and Commercial Gas Users Group (“PICGUG”) filed an  
6 appeal (at Commonwealth Court Docket No. 128 CD 2024) challenging the  
7 Commission’s Order entered on November 9, 2023 (“Nov. 9 Order”) that approved  
8 PGW’s allocation of peak demand related distribution mains costs to Rate Interruptible  
9 Transportation (“IT” or “interruptible”) customers. PICGUG’s primary request before the  
10 Commonwealth Court is that PGW be required to modify its cost of allocation study to

1 remove a portion of the peak demand related distribution main costs from being allocated  
2 to Rate IT customers.

3 **Q. WHAT IS THE CURRENT PROCEDURAL POSTURE OF PICGUG’S APPEAL**  
4 **BEFORE THE COMMONWEALTH COURT?**

5 A. It is under consideration by the Commonwealth Court. Oral argument was held before a  
6 panel of the Commonwealth Court in December 2024. It is not clear when the  
7 Commonwealth Court will issue its decision.

8 **Q. HOW COULD PICGUG’S APPEAL IMPACT THE ALLOCATION OF**  
9 **PROPOSED RATES IN THIS CASE?**

10 A. PGW’s cost of allocation study for this proceeding allocates a portion of the peak demand  
11 related distribution main costs to Rate IT customers, as was done in PGW’s 2023 base  
12 rate proceeding. If the appellate courts determine that a portion of the distribution main  
13 costs should not be allocated to Rate IT customers, then PGW may be required to modify  
14 its CCOSS to eliminate the allocation of peak demand related distribution main cost to  
15 Rate IT customers, and the allocation of distribution main costs to other customer classes  
16 will need to be increased.

17 **V. PROPOSED TARIFF REVISIONS**

18 **Q. IS PGW PROPOSING REVISIONS TO PGW’S GAS SERVICE TARIFF AS**  
19 **WELL AS PGW’S GAS SUPPLIER TARIFF?**

20 A. Yes.

21 **Q. WHAT ARE THE PROPOSED RATE SCHEDULE CHANGES?**

22 A. PGW is proposing changes to the Merchant Function Charge and the Gas Procurement  
23 Charge. PGW is also proposing a new rate class – Rate P-IT.

1 **Q. WHAT IS THE MERCHANT FUNCTION CHARGE?**

2 A. The Merchant Function Charge (“MFC”) is a volumetric charge applied to firm sales  
3 service customers and is designed to recover the uncollectible expenses related to gas  
4 purchases.

5 **Q. HOW IS PGW PLANNING TO CHANGE ITS MERCHANT FUNCTION**  
6 **CHARGE?**

7 A. PGW is planning to increase its merchant function charge as indicated below:

Rate Class	Current MFC	Proposed MFC
Residential GS/ PHA GS	5.27%	7.04%
Commercial GS	1.39%	1.46%
Industrial GS	0.36%	0.78%

8

9 **Q. WHAT IS PGW’S GAS PROCUREMENT CHARGE?**

10 A. The Gas Procurement Charge (“GPC”) is a volumetric charge applied to firm sales  
11 service customers that is included in the Price to Compare. PGW’s current GPC is  
12 \$0.0400 Mcf.

13 **Q. WHAT IS PGW’S PROPOSED GAS PROCUREMENT CHARGE?**

14 A. PGW is proposing that its GPC be set at \$0.1165/Mcf. PGW has not increased its GPC  
15 since its initial GPC was established at \$0.0400 Mcf in 2013.<sup>2</sup>

16 **Q. WHY IS PGW PROPOSING TO INCREASE ITS MFC AND GPC?**

17 A. Mr. Herbert’s calculations in Schedules H and I reflect that costs support an increase to  
18 the MFC and GPC. The MFC calculations in Schedule H show that the uncollectible  
19 share of revenue as a percentage has increased from the current MFC due to uncollectible

<sup>2</sup> See Supplement No. 68 to PGW Gas Service Tariff – Pa P.U.C. No. 2, Third Revised Page No. 78, effective October 1, 2013, available at [https://www.pgworks.com/uploads/pdfs/GServTariff\\_Suppl-68\\_EffctvOct1-2013.pdf](https://www.pgworks.com/uploads/pdfs/GServTariff_Suppl-68_EffctvOct1-2013.pdf).

1 amounts increasing and annual firm sales service volumes decreasing since the prior rate  
2 case. The total GPC costs shown in Schedule I have increased since the Company's prior  
3 rate case from \$3,254,827 to \$4,050,921, and at the same time, the annual firm sales  
4 service volumes have decreased since the Company's prior rate case. The proposed rates  
5 reflect these updated cost calculations.

6 **Prepaid Rate Interruptible Service ("Rate P-IT")**

7 **Q. WHAT NEW RATE SCHEDULE IS PGW PROPOSING IN THIS RATE CASE?**

8 A. As described in detail in the testimony of PGW Witness Reeves (PGW St. No. 9), PGW  
9 is proposing a new rate schedule for Prepaid Rate Interruptible Service (Rate P-IT).

10 **Q. WHAT IS THE PURPOSE OF THE NEW RATE SCHEDULE?**

11 A. PGW's Rate P-IT will allow IT customers to procure some of their natural gas supply via  
12 prepaid gas deals.

13 **Q. IS PGW'S PROPOSED RATE PREPAID-IT REASONABLE AND IN THE**  
14 **PUBLIC INTEREST?**

15 A. Yes. PGW's proposed Rate P-IT will allow IT customers that purchase gas through  
16 prepaid transactions to receive a discount on their gas. This will provide an additional  
17 incentive for these customers to continue to use natural gas as their source of energy. The  
18 new rate will also generate revenue for PGW that will be put towards its base rates.

19 **Q. WHAT OTHER REVISIONS TO PGW'S GAS SERVICE TARIFF ARE BEING**  
20 **PROPOSED IN THIS CASE?**

21 A. A complete list of tariff modifications can be found in the List of Changes Made by this  
22 Tariff Supplement section in Proposed Tariff Supplement No. 176 to PGW Gas Service  
23 Tariff – Pa P.U.C. No. 2 provided in Exhibit FT-1. The proposed effective date of the  
24 tariff changes is April 28, 2025. The proposed rate schedule changes are discussed above.

25 Apart from the proposed rate schedule changes, PGW is proposing: (1) modification of

1 PGW’s Gas Service Tariff related to PGW’s Technology and Economic Development  
 2 (TED) Rider to increase the incentive available for combined heat and power (“CHP”)  
 3 projects; (2) clarification of Section 11.1 of PGW’s Gas Service Tariff related to metering  
 4 as discussed below; (3) removal of Gas Transportation – Rate GTS - Firm Service (Rate  
 5 GTS-F) and Rate GTS - Interruptible Service (Rate GTS-I) from PGW’s Gas Service  
 6 Tariff; (4) deletion of references to the Restructuring and Consumer Education  
 7 Surcharge; and (5) as described further in the testimony of Mr. Smith and in a separate  
 8 Petition PGW is filing, revision of the DSIC provisions of the Tariff to remove the “e”  
 9 factor, used to recover prior years’ undercollections from the DSIC cap.

10 **Changes to PGW’s TED Rider**

11 **Q. WHAT TYPE OF CHP INCENTIVES ARE PROVIDED IN PGW’S CURRENT**  
 12 **GAS SERVICE TARIFF?**

13 A. The TED Rider in PGW’s Gas Service Tariff currently provides incentives to customers  
 14 for the installation of Micro-CHP projects not larger than 50 kW.

15 **Q. PLEASE EXPLAIN WHY YOU ARE PROPOSING CHANGES TO PGW’S TED**  
 16 **RIDER IN PGW’S GAS SERVICE TARIFF.**

17 A. PGW is proposing changes to its TED Rider to offer incentives for CHP projects that are  
 18 larger than 50 kW. For CHP units larger than 50 kW, PGW is seeking to offer \$750 per  
 19 kW installed up to 50% of the project cost with a maximum incentive of \$250,000 per  
 20 qualifying project. The proposed incentive for CHP projects that are larger than 50 kW  
 21 will help offset capital costs for qualifying projects.

22 **Q. HOW DOES PGW’S PROPOSED CHANGE TO ITS TED RIDER BENEFIT**  
 23 **PGW AND ITS CUSTOMERS?**

24 A. The proposed change will benefit PGW as CHP projects generate revenue that PGW  
 25 would not receive if the customer had utilized alternative equipment. PGW’s customers

1 will also benefit from the proposed change as revenue from TED Rider customers will  
2 contribute to the cost of operating the distribution system. In addition, CHP projects offer  
3 reliability benefits in PGW's service territory.

4 **Q. IS THIS PROPOSAL REASONABLE AND IN THE PUBLIC INTEREST?**

5 A. Yes. The proposed change to the TED Rider benefits customers seeking to install CHP  
6 projects larger than 50 kW and PGW's other customers. Furthermore, the proposed  
7 change will incentivize the installation of projects that improve system reliability.

8 **Metering Equipment**

9 **Q. PLEASE EXPLAIN PGW'S PROPOSED CHANGE TO SECTION 11.1 OF ITS**  
10 **GAS SERVICE TARIFF.**

11 A. PGW proposes to clarify language in Section 11.1 of its Gas Service Tariff (Page No. 53)  
12 to reflect that PGW may use advanced or "smart" metering equipment.

13 **Q. WHAT IS THE INTENDED PURPOSE OF THE PROPOSED CHANGE TO**  
14 **SECTION 11.1?**

15 A. While the current language in Section 11.1 of PGW's Gas Service Tariff provides PGW  
16 broad discretion in selecting the type of meters to be installed, the proposed language  
17 makes abundantly clear that PGW may install advanced metering infrastructure or  
18 "smart" meter equipment in its discretion.

19 **Q. EXPLAIN THE JUSTIFICATION FOR MODIFYING SECTION 11.1 OF PGW'S**  
20 **CURRENT GAS SERVICE TARIFF.**

21 A. Smart metering equipment has safety and other potential customer improvements, as  
22 described further in the testimony of PGW witness Robert Smith. The modification  
23 assures that there will be no question about PGW's right to employ this technology.

24 **Q. WHAT IS YOUR RECOMMENDATION?**

25 A. I propose adding language to Section 11.1 as indicated in **bold** below:



1 11.1. METERS. The measurement of Gas usage shall be by meters furnished and  
 2 installed by the Company. The Company will select the type and make of metering  
 3 equipment (**including, but not limited to, advanced or “smart” metering equipment**),  
 4 and may, from time to time, change or alter the equipment, its sole obligation being to  
 5 supply meters that will accurately and adequately furnish records for billing purposes.

6  
 7 **Elimination of Rate GTS-Firm and Rate GTS-I**

8 **Q. PLEASE DESCRIBE PGW’S GAS TRANSPORTATION SERVICE, RATE GTS**  
 9 **FIRM SERVICE AND RATE GTS INTERRUPTIBLE SERVICE.**

10 A. Transportation services under Rate GTS-Firm<sup>3</sup> (“GTS-F”) and Rate GTS-Interruptible<sup>4</sup>  
 11 (“GTS-I”) were closed, as part of PGW’s 2003 restructuring plan (PUC Docket No. M-  
 12 00021612). Those rate schedules and the related service contracts were grandfathered  
 13 until the expiration of their then-existing service contracts. No customers have received  
 14 service under Rate GTS-I since May 2017. The last customers receiving service under  
 15 Rate GTS-F transitioned to Interruptible Service Extra Large Transportation, Rate IT-  
 16 XLT, in 2023.

17 **Q. PLEASE DESCRIBE PGW’S RATE IT-XLT.**

18 A. PGW was directed by the Commission in a complaint proceeding initiated by Grays  
 19 Ferry Cogeneration Partnership and Vicinity Energy Philadelphia, Inc. (collectively  
 20 “Vicinity”) to establish a rate applicable to PGW’s service to Vicinity upon expiration of  
 21 a 1996 contract for service between the parties.<sup>5</sup> PGW proposed in its last base rate  
 22 proceeding that Vicinity be served under its own separate rate schedule that incorporates  
 23 services that PGW had historically provided to Vicinity: transportation service and

<sup>3</sup> PGW Gas Service Tariff at Original Pages 118 to 123 (“Rate GTS-Firm”).

<sup>4</sup> PGW Gas Service Tariff at Original Pages 124 to 129 (“Rate GTS-Interruptible”).

<sup>5</sup> See, *Grays Ferry Cogeneration Partnership and Vicinity Energy Philadelphia, Inc. v. Philadelphia Gas Works*, Docket No. C-2021-3029259 at 35-36, 40 (Order entered April 20, 2023) (“*Complaint Proceeding Order*”).

1 Alternative Receipt Service (“ARS”).<sup>6</sup> The Commission approved a rate schedule for  
 2 Vicinity,<sup>7</sup> which was ultimately named Interruptible Service Extra Large Transportation –  
 3 Rate IT-XLT.<sup>8</sup>

4 **Q. WHAT RATE CLASS WERE VICINITY PREVIOUSLY SERVED UNDER?**

5 A. Vicinity were previously served under Rate GTS-F. Vicinity were the only customers that  
 6 PGW served under Rate GTS-F,<sup>9</sup> since May 2017.<sup>10</sup>

7 **Q. WHY ARE YOU PROPOSING REMOVAL OF RATE GTS-F AND RATE GTS-I**  
 8 **FROM PGW’S GAS SERVICE TARIFF?**

9 A. I am proposing removal of Rate GTS-F from PGW’s Gas Service Tariff as PGW does not  
 10 currently serve any customers under Rate GTS-F and the rate is only available to  
 11 customers who utilized the service on or before September 1, 2003, pursuant to a then-  
 12 valid agreement. No customer (including Vicinity) has a current valid agreement that is  
 13 grandfathered under Rate GTS-F. As such, Rate GTS-F should be eliminated from the  
 14 tariff.

15 I am proposing the removal of Rate GTS-I from PGW’s Gas Service Tariff for  
 16 similar reasons: PGW does not service any customers under Rate GTS-I. The rate is  
 17 available only to customers who utilized the service on or before September 1, 2003,  
 18 pursuant to a then-valid agreement. No customer has a current valid agreement that is  
 19 grandfathered under Rate GTS-I. As such, Rate GTS-I should be eliminated from the  
 20 tariff.

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<sup>6</sup> *PaPUC et al. v. PGW*, Docket No. R-2023-3037933, PGW St. 6-SD at 2-3.

<sup>7</sup> Initially, PGW proposed that the rate be labeled Rate GS-XLT.

<sup>8</sup> PGW Gas Service Tariff – Pa P.U.C. No. 2 – Original Page No. 157.

<sup>9</sup> *Complaint Proceeding Order* at 2, n. 3.

<sup>10</sup> Docket No. R-2017-2586783: PGW St. 5-R (Hanser) at 10-11 (June 2017).

1 **Q. WHAT IS THE PURPOSE OF REMOVING RATE GTS-F AND RATE GTS-I**  
 2 **FROM PGW’S GAS SERVICE TARIFF?**

3 A. The purpose is to ensure that PGW’s Gas Service Tariff accurately reflects rates and  
 4 services that currently available.

5 **Q. ARE THERE ANY OTHER PROVISIONS IN THE TARIFF RELATED TO**  
 6 **RATE GTS-F AND GTS-I THAT PGW PROPOSES TO CHANGE?**

7 A. Yes. There are various references to Rate GTS-F and GTS-I in PGW’s Gas Service Tariff  
 8 that PGW proposes to delete, as comprehensively identified in the List of Changes Made  
 9 by this Tariff Supplement section in Proposed Tariff Supplement No. 176 to PGW Gas  
 10 Service Tariff – Pa P.U.C. No. 2.

11 **Restructuring and Consumer Education Surcharge**

12 **Q. PLEASE EXPLAIN WHY YOU ARE PROPOSING DELETION OF**  
 13 **REFERENCES IN THE GAS SERVICE TARIFF TO THE RESTRUCTURING**  
 14 **AND CONSUMER EDUCATION SURCHARGE.**

15 A. PGW withdrew its Restructuring and Consumer Education Surcharge effective  
 16 September 1, 2022. Several references to the surcharge remain in the Gas Service Tariff  
 17 on Revised Page Nos. 83, 87, 90, 135. PGW proposes deletion of those references for  
 18 clarity.

19 **Changes to PGW’s Gas Supplier Tariff**

20 **Q. WHAT REVISIONS TO PGW’S GAS SUPPLIER TARIFF ARE BEING**  
 21 **PROPOSED IN THIS CASE?**

22 A. A complete list of tariff modifications can be found in the List of Changes Made by this  
 23 Tariff Supplement section in Proposed Tariff Supplement No. 119 to PGW Gas Supplier  
 24 Tariff – Pa P.U.C. No. 1 provided in Exhibit FT-2. The proposed effective date of the  
 25 tariff changes is April 28, 2025. I am proposing modifications to PGW’s Gas Supplier  
 26 Tariff to establish a Purchase of Receivables (“POR”) Choice Supplier Bill Charge.

1 **Q. WHAT SUPPLIER TARIFF MODIFICATION IS PGW PROPOSING TO**  
2 **ESTABLISH A POR CHOICE SUPPLIER BILL CHARGE?**

3 A. PGW is proposing that PGW Gas Supplier Tariff Page No. 50 be modified to establish a  
4 charge to Choice Suppliers to reimburse PGW ratepayers for the Supplier's share of the  
5 marginal cost to create and send a bill to the customer. PGW Witness Adamucci (PGW  
6 St. No. 1) describes the various rates that will be charged to Choice Suppliers based on  
7 the method of delivery of the customer bill.

8 **Q. IS THE PROPOSED CHOICE SUPPLIER BILL CHARGE REASONABLE AND**  
9 **IN THE PUBLIC INTEREST?**

10 A. Yes.

11 **VI. CONCLUSION**


12 **Q. DOES THAT COMPLETE YOUR DIRECT TESTIMONY?**

13 A. Yes, however, I do reserve the right to supplement this testimony as may be appropriate.

**VERIFICATION**

I, Florian Teme, hereby state that: (1) I am Vice President, Marketing, Sales and Energy Planning for Philadelphia Gas Works (“PGW”); (2) the facts set forth in my testimony are true and correct (or are true and correct to the best of my knowledge, information and belief); and, (3) I expect to be able to prove the same at a hearing held in this matter. I understand that statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: February 27, 2025

  
\_\_\_\_\_  
Florian Teme  
Vice President, Marketing, Sales and Energy  
Planning  
Philadelphia Gas Works

# **Exhibit FT-1**

Proposed Gas Service  
Tariff Supp. No. 176  
(Redlined)

**PHILADELPHIA GAS WORKS**  
**GAS SERVICE TARIFF**



Issued by: Seth Shapiro  
President and CEO

PHILADELPHIA GAS WORKS  
800 West Montgomery Avenue  
Philadelphia, PA 19122

~~Rates effective March 1, 2025 in accordance with the Commission's Order entered  
July 11, 2024 at R-2024-3045966 approving PGW's 2024-2025 Gas Cost Rate.~~

**List of Changes Made by this Tariff Supplement****TABLE OF CONTENTS (PAGE Nos. 6-7)**

Updated to reflect revised page numbers for each of the changes listed below on this page.

**METERS (Page No. 53)**

Added language to clarify the use of advanced or “smart” metering equipment.

**MERCHANT FUNCTION CHARGE (Page No. 78)**

Changed the Merchant Function Charge percentages.

**GAS PROCUREMENT CHARGE (Page No. 78)**

Changed the Gas Procurement Charge.

**PRICE TO COMPARE (Page No. 78)**

Changed the Price to Compare.

**EFFICIENCY COST RECOVERY SURCHARGE (Page No. 80)**

Added language to clarify the cost recovery of energy efficiency programs.

**GENERAL SERVICE – RATE GS (Page No. 83)**

Changed the customer charges and delivery charges effective April 28, 2025, as follows. For Residential Customers, the customer charge increases from \$16.25 to \$19.50 and the delivery charge increases from \$0.74624 to \$0.91761. For Public Housing customers, the customer charge increases from \$16.25 to \$19.50 and the delivery charge increases from \$0.68523 to \$1.04356. For Commercial, the customer charge increases from \$27.65 to \$34.00 and the delivery charge increases from \$0.54086 to \$0.70055. For Industrial customers, the customer charge increases from \$82.80 to \$100.00 and the delivery charge increases from \$0.54459 to \$0.75000. Surcharges updated to remove Restructuring and Consumer Education Surcharge and add Revenue Normalization Adjustment Surcharge.

**MUNICIPAL SERVICE - RATE MS (Page No. 87)**

Effective April 28, 2025, the customer charge increases from \$27.65 to \$34.00 and the delivery charge increases from \$0.51883 to \$0.85175. Surcharges updated to remove Restructuring and Consumer Education Surcharge and add Revenue Normalization Adjustment Surcharge.

**PHILADELPHIA HOUSING AUTHORITY SERVICE - RATE PHA (Page No. 90)**

Effective April 28, 2025, the customer charge increases from \$27.65 to \$34.00 and the delivery charge increases from \$0.56340 to \$0.87450. Surcharges updated to remove Restructuring and Consumer Education Surcharge and add Revenue Normalization Adjustment Surcharge.

**INTERRUPTIBLE TRANSPORTATION - RATE IT (Page No. 115)**

Effective April 28, 2025, changed the rates for distribution charges for existing customers as follows. For existing IT-A customers the rate per Mcf per / Dth delivered changes from \$3.0038 / 2.9051 to \$4.3408 / 4.1900. For existing IT-B customers, the rate per Mcf per Dth delivered changes from \$1.4539 / 1.4061 to \$2.1010 / 2.0280. For existing IT-C customers, the rate per Mcf per Dth delivered changes from \$1.1345 / 1.0972 to \$1.6395 / 1.5825. For existing IT-D customers, the rate per Mcf per Dth delivered changes from \$1.0066 / 0.9735 to \$1.4547 / 1.4042. For existing IT-E customers, the rate per Mcf per Dth delivered changes from \$0.9747 / 0.9426 to \$1.4086 / 1.3597.

**OPTIONAL SALES SERVICE FOR PREPAID GAS ARRANGEMENT (Page No. 117A)**

Added Optional Sales Service Agreement for Prepaid Gas Arrangements for Rate IT.



**REMOVAL OF RATE GTS-FIRM AND RATE GTS-INTERRUPTIBLE (Page Nos. 118-129)**

Removed Rate GTS-Firm and Rate GTS-Interruptible no longer available to customers.

**DEVELOPMENTAL NATURAL GAS VEHICLE SVC - RATE NGVS FIRM SERVICE (Page No. 135)**

Effective April 28, 2025, the customer charge increases from \$38.15 to \$46.50 and the delivery charge increases from \$0.14022 to \$0.45975. Surcharges updated to remove Restructuring and Consumer Education Surcharge.

**SPECIAL PROVISION – EMERGENCY/UNAUTHORIZED USE GAS RIDER (Page No. 147)**

Removed reference to Rate GTS-I and GTS-F.

**DISTRIBUTION SYSTEM IMPROVEMENT CHARGE (DSIC) (Page No. 152-153)**

Added language to address under collections in DSIC.

**TED RIDER, COMBINED HEAT AND POWER INCENTIVES (Page No. 155)**

Clarified applicability to Combined heat and Power projects. Added incentive for units larger than 50 kW.

**INTERRUPTIBLE SERVICE EXTRA LARGE TRANSPORTATION - RATE IT-XLT (Page No. 158)**

Effective April 28, 2025, the local gas transportation charge increases from \$0.1054/Mcf at \$0.10193/Dth to \$0.1192 /Mcf at \$0.11504 /Dth.

**OPTIONAL SALES SERVICE FOR PREPAID GAS ARRANGEMENT (Page No. 161A)**

Added Optional Sales Service Agreement for Prepaid Gas Arrangements for Rate IT-XLT.

**REVENUE NORMALIZATION ADJUSTMENT (RNA) (Page No. 162-163)**

Added Revenue Normalization Adjustment.

## TABLE OF CONTENTS

	<u>Page Number</u>
List of Changes Made By This Tariff_____	<del>165</del> <sup>th</sup> - <del>166</del> <sup>th</sup> Revised 2
Description of Territory Served_____	5
Table of Contents_____	<del>164</del> <sup>th</sup> - <del>165</del> <sup>th</sup> Revised 6
Definitions_____	Second Revised 10
<b><u>RULES and REGULATIONS:</u></b>	
1. The Gas Service Tariff_____	First Revised 15
2. Application and Contract for Gas Service_____	Sixth Revised 17
3. Credit and Deposit_____	4 <sup>th</sup> Revised 21
4. Billing and Payment_____	Second Revised 26
5. Termination and/or Discontinuance of Gas Service_____	Second Revised 30
6. Termination of Service for Safety Reasons and Curtailment of Service/ Service Continuity_____	First Revised 38
7. Inquiry, Review, Dispute, and Appeals Process_____	First Revised 41
8. Customer's Responsibility for Company's Property_____	First Revised 44
9. Conditions of Service, Point of Delivery, and Application of Rates_____	4 <sup>th</sup> Revised 47
10. Extensions and Rights-Of-Way_____	First Revised 50
11. Meters: Measurements, Readings, Errors, and Tests_____	<del>First</del> <sup>2</sup> <sup>nd</sup> Revised 53
12. Service Charges and Miscellaneous Fees and Provisions_____	Second Revised 57
13. Universal Service And Energy Conservation Programs_____	Second Revised 59
14. Gas Choice Enrollment and Switching_____	First Revised 63
15. Supplier of Last Resort_____	First Revised 63

PHILADELPHIA GAS WORKS

	<u>Page Number</u>
RATES (Cover Page)_____	66
Gas Cost Rate_____	105th Revised 67
Revenue Reconciliation Adjustment (RAA) Rider_____	70
Senior Citizen Discount_____	First Revised 72
Exit Fee Rider_____	77
Merchant Function & Gas Procurement Charges; Price to Compare_____	<del>64<sup>th</sup>-65<sup>th</sup></del> Revised 78
Efficiency Cost Recovery Mechanism_____	72 <sup>nd</sup> Revised 80
Universal Services Surcharge_____	109 <sup>th</sup> Revised 81
Other Post Employment Benefit Surcharge_____	23 <sup>rd</sup> Revised 82
General Service – Rate GS_____	<del>123<sup>rd</sup>122<sup>nd</sup></del> Revised 83
Municipal Service – Rate MS_____	<del>123<sup>rd</sup>122<sup>nd</sup></del> Revised 87
Philadelphia Housing Authority Service – Rate PHA_____	<del>123<sup>rd</sup>122<sup>nd</sup></del> Revised 90
Daily Balancing Service – Rate DB_____	101
Interruptible Transportation Service – Rate IT_____	111
<del>Gas Transportation Service – Rate GTS – Firm Service_____</del>	<del>First Revised 418</del>
<del>Gas Transportation Service – Rate GTS – Interruptible_____</del>	<del>424</del>
Cogeneration Service – Rate CG_____	Fifth Revised 131
Developmental Natural Gas Vehicle Service – Rate NGVS Firm Service_____	<del>90<sup>th</sup>-91<sup>st</sup></del> Revised 135
Developmental Natural Gas Vehicle Service – Rate NGVS Interruptible Service_____	139
SPECIAL PROVISION – Air Conditioning Rider_____	1 <sup>st</sup> Revised 143
SPECIAL PROVISION – Compressed Natural Gas Rider_____	145
SPECIAL PROVISION – Emergency/Unauthorized Use Gas Rider_____	<del>1<sup>st</sup> Revised</del> 147
Weather Normalization Adjustment Clause_____	Ninth Revised 149
Distribution System Improvement Charge_____	Twenty Fourth Revised 151
Backup Service – Rate BUS_____	First Revised 154
Technology and Economic Development Rider and Micro-Combined Heat and Power Incentives_____	<del>First 2<sup>nd</sup></del> Revised 155
Negotiated Liquefied Natural Gas Service – Rate LNG-N_____	First Revised 156
Interruptible Service Extra Large Transportation – Rate IT-XLT_____	157
<del>Revenue Normalization Adjustment (RNA)_____</del>	<del>162</del>

## 11. Meters: Measurements, Readings, Errors, and Tests.

11.1. METERS. The measurement of Gas usage shall be by meters furnished and installed by the Company. The Company will select the type and make of metering equipment including but not limited to advanced or “smart” metering equipment, and may, from time to time, change or alter the equipment, its sole obligation being to supply meters that will accurately and adequately furnish records for billing purposes.

(C)  
I

### 11.2. QUANTITY MEASUREMENTS.

11.2.A. Measurement at Standard Service Pressure. For the purpose of measurement, standard service pressure shall be 8.5 inches or less of water column. A cubic foot of Gas at standard service pressure means the amount of Gas which occupies a volume of one cubic foot at the time metered and under the conditions existing at the Customer's meter.

11.2.B. Measurement at Pressure Above Standard Service Pressure. For the purpose of measurement, where Gas is ordinarily supplied to Customers at pressure above standard pressure, the measurement shall be a cubic foot at an absolute pressure of 14.73 pounds per square inch and under conditions existing at the Customer's meter unless otherwise provided for by the Company. A cubic foot of Gas at above standard service pressure shall mean the amount of Gas that occupies a volume of one cubic foot.

### 11.3 METER READINGS.

11.3.A. Meter Reading Intervals. The Company will read its meters at scheduled regular intervals of two months or less and will render standard bills for the recorded Gas usage based upon the time interval between meter readings.

11.3.B. Estimated Usage. The Company may estimate the amount of Gas usage at the premises where access to the meter is not available, an electronic meter reading device is not installed or functioning, or to installations at remote locations, for such number of months as the type of installation, normal regularity of usage, or other circumstances may warrant, and will render bills in standard form based on such estimate and so marked. Actual Meter Readings will be secured from time to time and billing will be revised when such reads disclose that the estimate failed to approximate the actual usage. For Residential Customers, an Actual Meter Reading will be obtained in accordance with Applicable Law .

**MERCHANT FUNCTION CHARGE (“MFC”)**

The MFC is a volumetric charge, applied to firm sales service customers, which will be included in the Price to Compare. The MFC is based on Gas Cost Rate multiplied by a fixed uncollectible percentage established in the Company’s last general base rate proceeding. The MFC will not be reconciled to reflect actual results. The MFC is intended to make the Company’s Price to Compare more comparable to the gas supply services price offers of other Natural Gas Suppliers that presumably reflect anticipated uncollectible expenses. The following percentages will be applied to the quarterly Gas Cost Rate in order to calculate the quarterly MFC: ~~5.277.04~~% - GS Residential (“GS RES”); ~~5.277.04~~% - GS Public Housing (“GS PHA”); ~~4.391.46~~% - GS Commercial (“GS COM”); and ~~0.3678~~% - GS Industrial (“GS IND”). The current MFC is set forth below in the Price to Compare table.

(I)  
↓

**GAS PROCUREMENT CHARGE (“GPC”)**

The GPC is a volumetric charge, applied to firm sales service customers, which will be included in the Price to Compare. The GPC will remain in effect until reviewed and updated in the Company’s next general base rate proceeding.

Current Gas Procurement Charge = \$~~0.004000~~1165/Ccf

(I)

**PRICE TO COMPARE (“PTC”)**

The PTC is composed of the Sales Service Charge (“SSC”), Gas Adjustment Charge (“GAC”), the Merchant Function Charge and the Gas Procurement Charge. The PTC will change whenever any of the components of the PTC change. The current PTC is (per Ccf):

	GS-RES	GS-PH	GS-COM	GS-IND	MS	PHA	NGVS
SSC	\$0.54802	\$0.54802	\$0.54802	\$0.54802	\$0.54802	\$0.54802	\$0.54802
GAC	\$(0.03372)	\$(0.03372)	\$(0.03372)	\$(0.03372)	\$(0.03372)	\$(0.03372)	\$(0.03372)
MFC	<del>\$0.00270403</del> 612	<del>\$0.00270403</del> 612	<del>\$0.00528007</del> 49	<del>\$0.00048500</del> 400	\$0.00000	\$0.00000	\$0.00000
GPC	<del>\$0.00400011</del> 65	<del>\$0.01165904</del> 00	<del>\$0.01165904</del> 00	<del>\$0.01165904</del> 00	<del>\$0.01165904</del> 00	<del>\$0.01165904</del> 00	<del>\$0.01165904</del> 00
<b>PTC</b>	<del>\$0.5453556</del> 207	<del>\$0.54534</del> 56207	<del>\$0.52543</del> 53344	<del>\$0.52015</del> 52995	<del>\$0.51830</del> 52595	<del>\$0.52595</del> 51830	<del>\$0.52595</del> 51830

(I)  
↓  
↓  
↓

(C) – Change (I) Increase (D) - Decrease

**EFFICIENCY COST RECOVERY SURCHARGE**

The cost of the energy efficiency programs (i.e. the demand side management programs) for the firm customer rate classes listed below will be recovered by an Efficiency Cost Recovery Surcharge applicable to all volumes of Gas delivered.

- 1) The Surcharge will recover the program costs and the administrative costs of the energy efficiency program including the non-LIURP Health and Safety Program, Efficient Home Program and Repair and Renew Program consistent with the compliance plan approved at Docket No. R-2025-3053112. (C)  
↓
- 2) Computation of the Efficiency Cost Recovery Surcharge factors will be in accordance with the automatic adjustment procedures utilized under Section 1307(f) of the Public Utility Code and will be filed and approved in conjunction with the Company's annual Section 1307(f)-GCR filing.
- 3) Once the surcharge is in place, it will be automatically adjusted effective March 1, June 1, September 1, and December 1 of each year in accordance with Section 1307(f) quarterly adjustment procedures. No interest will be included in such surcharge computations. The basic component of the surcharge will be determined by dividing the total energy efficiency program costs approved for annual recovery plus (or minus) any over (or under) recovery from the prior period by the estimated applicable throughput in Mcfs. The costs related to customers other than low income residential customers are tracked and will be recovered separately from each of the following firm customer rate classes if the customer class is served by the energy efficiency program:
  - a) Residential and Public Housing Customers on Rate GS;
  - b) Commercial Customers on Rate GS;
  - c) Industrial Customers on Rate GS and Rate IT-XLT;
  - d) Municipal Customers on Rate MS; and
  - e) The Philadelphia Housing Authority on Rate PHA.

The surcharge shall be a cents per Ccf charge calculated to the nearest one-thousandth of a cent (0.00001) which shall be added to the distribution rates for billing purposes for all customers in each of the above rate classes. The rate shall be calculated separately for each rate class as follows:

- a) \$0.00768 per Ccf for Residential and Public Housing Customers on Rate GS; (D)
- b) \$0.00341 per Ccf for Commercial Customers on Rate GS; (D)
- c) \$0.00001 per Ccf for Industrial Customers on Rate GS and Rate IT-XLT; (I)
- d) \$0.00000 per Ccf for Municipal Customers on Rate MS; and (NC)
- e) \$0.00341 per Ccf for The Philadelphia Housing Authority on Rate PHA. (D)

The Enhanced Low Income Retrofit Program costs shall be recovered through the Universal Services Surcharge beginning on September 1, 2010.

**(D) – Decrease; (I) – Increase; (NC) – No Change**

**GENERAL SERVICE - RATE GS**

Rate: Applicable to all Retail Sales Service or Transportation Service rendered pursuant to this Rate Schedule on or after ~~March 1, 2025~~ April 28, 2025. (C)

AVAILABILITY

Available for any purpose where the Company's distribution mains adjacent to the proposed Gas Service location are, or can economically be made, suitable to supply the quantities of Gas or Transportation Services required. Not available for back-up service, refer to Rate BUS.

RATES

CUSTOMER CHARGE (per Meter (except parallel meters)):

\$ <del>16.25</del> <u>19.50</u>	per month for Residential and Public Housing Authority Customers.	(D)
\$ <del>27.65</del> <u>34.00</u>	per month for Commercial Customers	(D)
\$ <del>82.80</del> <u>100.00</u>	per month for Industrial Customers	(D)

Surcharge: Distribution System Improvement Charge.

Plus,

GCR (not applicable to GS Customers who transport gas through a qualified NGS):

\$0.51308	per Ccf for Residential and Public Housing	(#)
\$0.51308	per Ccf for Commercial Customers	(#)
\$0.51308	per Ccf for Industrial Customers	(#)

Plus,

DISTRIBUTION CHARGE (consisting of items (A) and (B), below):

(A) Delivery Charge:

\$0. <del>746</del> <u>249</u> <del>1761</del>	per Ccf for Residential	(D)
\$0. <del>685</del> <u>231</u> <del>04356</del>	per Ccf for Public Housing	(D)
\$0. <del>540</del> <u>86</u> <del>70055</del>	per Ccf for Commercial Customers	(D)
\$0. <del>544</del> <u>59</u> <del>75000</del>	per Ccf for Industrial Customers	(D)

(B) Surcharges:

Universal Service and Energy Conservation Surcharge; ~~Restructuring and Consumer Education Surcharge~~; Efficiency Cost Recovery Surcharge; Other Post Employment Benefit Surcharge; ~~and~~ Distribution System Improvement Charge; and Revenue Normalization Adjustment Surcharge. (C)

Note: The Commodity Charge includes the Sales Service Charge, the Merchant Function Charge and the Gas Procurement Charge.

(I) – Increase; (C) – Change (D) - Decrease

**MUNICIPAL SERVICE - RATE MS**

Rate: Applicable to all Retail Sales Service or Transportation Service rendered pursuant to this Rate Schedule on or after ~~March 1, 2024~~ April 28, 2025.

(C)

AVAILABILITY

Available to properties owned or occupied by the City of Philadelphia or the Board of Education, or any of their respective agencies or instrumentalities, for any type of Gas Service, unless purchased for resale to others, and where the Company's distribution mains adjacent to the proposed Gas Service locations are, or can economically be made, suitable to supply the quantities of Gas required; provided, however, that the rate shall not be available to Commercial Tenants of any such property.

RATES

CUSTOMER CHARGE (per Meter (except parallel meters):

\$ ~~27.65~~ 34.00 per month

(I)

Surcharge: Distribution System Improvement Charge.

Plus,

GCR (not applicable to MS Customers who transport Gas through a qualified NGS):

\$0.51308 per Ccf

(+)

Plus,

DISTRIBUTION CHARGE (consisting of items (A) and (B), below):

(A) Delivery Charge:

\$0. ~~54883~~ 85175 per Ccf

(I)

(B) Surcharges:

Universal Service and Energy Conservation Surcharge; ~~and The Restructuring and Consumer Education Surcharge~~; the Efficiency Cost Recovery Surcharge; Other Post Employment Benefit Surcharge; ~~and~~ Distribution System Improvement Charge; ~~and Revenue Normalization Adjustment Surcharge~~.

(C)

Note: The Commodity Charge includes the Sales Service Charge, the Merchant Function Charge and the Gas Procurement Charge.

(I) – Increase, (C) – Change, (D) - Decrease



**PHILADELPHIA HOUSING AUTHORITY SERVICE - RATE PHA**

Rate: Applicable to all Retail Sales Service or Transportation Services rendered pursuant to this Rate Schedule on or after ~~March 1~~April 28, 2025.

**(C)**

AVAILABILITY

Available for all Gas usage in multiple dwelling Residential buildings containing 10 or more dwelling units, owned and operated by the Philadelphia Housing Authority, where cooking shall be performed exclusively with Gas and where Gas Service shall be supplied through one or more single point metering arrangements at locations where the Company's distribution mains adjacent to the proposed Gas Service locations are, or can economically be made, suitable to supply the quantities of Gas required.

This rate is also available for all Gas usage in single and multiple dwelling Residential buildings, containing less than 10 dwelling units, provided, and only so long as, Gas is used exclusively for cooking, water heating and space heating for all such Residential buildings owned and operated by the Philadelphia Housing Authority, except (a) buildings operated by the Philadelphia Housing Authority, prior to the original effective date of this rate (January 1, 1969), and (b) buildings for which, in the judgment of the Company, such Gas Service cannot be provided economically.

RATES

CUSTOMER CHARGE (per Meter (except parallel meters);

~~\$27.6534.00~~ per month

**(I)**

Surcharge: Distribution System Improvement Charge.

Plus,

GCR (not applicable to PHA customers who transport gas through a qualified NGS):

\$0.51308 per Ccf

**(+)**

Plus

DISTRIBUTION CHARGE (consisting of item (A) and (B), below):

(A) Delivery Charge:

\$0.~~56340-87450~~ per Ccf

**(I)**

(B) Surcharges:

Universal Service and Energy Conservation Surcharge; ~~and The Restructuring and Consumer Education Surcharge;~~ the Efficiency Cost Recovery Surcharge; Other Post Employment Benefit Surcharge; ~~and~~ Distribution System Improvement Charge; ~~;~~ and Revenue Normalization Adjustment Surcharge.

**(C)**

**—**

Note: The Commodity Charge includes the Sales Service Charge, the Merchant Function Charge and the Gas Procurement Charge.

**(I) – Increase, (C) – Change, (D) - Decrease**

CHARGES

1. MONTHLY BILL

The monthly bill shall consist of the sum of the monthly Customer charge and the Distribution Charge as detailed below:

<u>CUSTOMER CHARGE</u>	<u>(\$ Per Meter Per Month</u> <u>(Parallel Meters are considered one meter)</u>
IT-A:	152.16
IT-B:	273.89
IT-C:	273.89
IT-D:	273.89
IT-E:	426.06
<u>DISTRIBUTION CHARGE</u>	<u>Rate (\$) Per Mcf / Dth Delivered*</u>
IT-A:	<del>4.34083.0038</del> / <del>2.90514.1900</del>
IT-B:	<del>2.10104.4539</del> / <del>1.40642.0280</del>
IT-C:	<del>1.63951.1345</del> / <del>1.09721.5825</del>
IT-D:	<del>1.45471.0066</del> / <del>0.97351.4042</del>
IT-E:	<del>1.40860.9747</del> / <del>0.94261.3597</del>

(I)  
(I)  
(I)  
(I)  
(I)

\*The distribution charge may be the product of a negotiated rate and may include long-term contracts of up to five years as mutually agreed to by the Company and the Customer. This negotiated rate may be higher than, but not lower than, the distribution charges set forth above and may include additional minimum take requirements.

**(I) – Increase**

**Optional Sales Service Agreement for Prepaid Gas Arrangement**

(C)

- A. Customer receiving Rate IT has the option to request an additional sales service agreement with the Company for prepaid gas at a rates, terms and conditions to be negotiated between the Customer and the Company. The Optional Sales Service Agreement will be in the form provided by the Company to ensure that it satisfies all legal requirement applicable to prepaid gas arrangements (“Prepaid Gas Arrangement”). PGW retains sole discretion as to whether it will permit the Optional Sales Service Agreement when prepaid gas is available to PGW to purchase. PGW also retains sole discretion regarding the terms and conditions that must be included to permit the arrangement.
- B. In addition to any other terms and conditions required by Company at its sole discretion, the Optional Sales Service Agreement shall contain the following:
- (i) A requirement that the facilities of the customer utilizing prepaid gas supply must be located in the Company’s service area;
  - (ii) Minimum and maximum monthly purchases, with the customer being responsible for the monthly minimum amounts whether or not those amounts were used by the customer;
  - (iii) Surety requirements or guarantees acceptable to the Company at its sole discretion; and,
  - (iv) Provisions that eliminate any obligation on the Company to deliver such gas to customer if: (a) such is not delivered to PGW’s city gate, or (b) PGW exercises its right to interrupt the customer pursuant to this Tariff.

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**GAS TRANSPORTATION SERVICE – RATE GTS**  
**FIRM SERVICE**

~~Rate: Applicable to all Transportation Services rendered pursuant to this Rate Schedule on or after September 1, 2003.\*~~

**AVAILABILITY**

~~This rate is only available to those customers who utilized this service on or before September 1, 2003 pursuant to a currently valid agreement with the Company.~~

**CHARACTER OF SERVICE**

~~Transportation Service under this rate schedule is firm and shall be interrupted only in cases of operating emergencies experienced by the Company. Company assumes no liability for interruptions caused by failure of supply sources or by third parties such as Suppliers and shall not be obligated to deliver Gas under this rate schedule on any day that Gas is not received at its gate station for the Customer's account except as specified under provisions for Standby Service contained herein.~~

**MONTHLY RATE**

The Monthly Charge shall be the sum of the following:

~~1. **CUSTOMER CHARGE:** \$250.00 per month.~~

~~2. **DELIVERY CHARGE:**~~

~~The Delivery Charge applicable for each Customer shall be specified in the individual Transportation Service Agreement.~~

~~3. **TRANSPORTATION SURCHARGE:**~~

~~The Customer shall reimburse Company for any expense actually incurred for Customer's benefit from third party sources in the provision of this Service, such as directly assignable taxes, pipeline balancing penalties, governmentally imposed charges, and contingent liability for external transportation charges and fuel requirements. Additionally, for existing Customers, any unavoidable Gas supply costs (e.g., pipeline demand charges) incurred on the Customer's behalf, may be recovered under this surcharge. Such surcharge is in addition to charges specified elsewhere in this rate schedule. Such potential charges are to be specifically defined and identified in the individual Transportation Service agreement.~~

~~4. **STANDBY SERVICE CHARGES, IF APPLICABLE:**~~

~~See Standby Service Provision.~~

~~5. **MINIMUM MONTHLY CHARGE:**~~

PHILADELPHIA GAS WORKS

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~~\_\_\_\_\_ The minimum monthly charge shall be the Customer Charge.~~

~~\* Existing terms and conditions are extended for all customers taking service as of December 31, 2022 on this rate until the earlier of April 30, 2023 or the Pennsylvania Public Utility Commission issues a final decision in Docket No. C-2021-3029259. All rates and charges incurred after January 1, 2023 are subject to being rebilled as directed by the Pennsylvania Public Utility Commission so as to effectuate the final decision in Docket No. C-2021-3029259 on January 1, 2023.~~

~~(C) Change~~

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#### **GAS COST RATE**

~~The GCR shall not apply to transported volumes. Similarly, such transported volumes and any expenses related to such volumes shall be excluded from all calculations determining such GCR.~~

#### **CONTRACT TERM**

~~The duration of the transportation contract shall be as specified in the required individual Service Agreement. In no event shall the contract term be for a period of less than one year.~~

#### **STANDBY SERVICE**

~~Contingent upon the Company's ability to arrange the required supply contracts, a transportation Customer may contract for Standby Service to purchase Gas from the Company under a specified retail Rate Schedule, in the event that the customer experiences an interruption or curtailment in Transportation Service by a Supplier. The contract term for Standby Service shall be a minimum of one year. The maximum volume of Gas that the Company is obligated to provide under the Standby Service on any day shall be specified in the individual Service Agreement. Volumes taken in excess of the specified daily limits, except for those volumes authorized and supplied by the Company under an applicable retail rate, may be subject to a charge of \$10 per Mcf if arrangements have been made for Emergency Service or \$20 per Mcf for all unauthorized volumes.~~

~~Under this Standby Service, upon proper notice, and as soon as operations permit, the Customer may convert some or all of their firm Transportation Service to the specified equivalent retail sales service during the effective period of this Standby Service agreement. The Company is not obligated to provide retail sales service to a transportation Customer if the Customer has not contracted for Standby Service. Eligibility for such a Customer to receive retail Gas Service shall be no different than any other person or entity who is at the time making application for service as a new Customer.~~

~~A Customer contracting for Standby Service shall pay a monthly reservation charge that is equivalent to the demand charge paid by the Company to its highest cost pipeline supplier applied to the Customer's maximum Daily Contract Quantity as specified in the individual service agreement. The Company may revise the Reservation Charge no more frequently than monthly to reflect changes in the pipeline demand and related charges. The reservation charge prorated on a daily basis will be credited to all volumes purchased under the Standby Service. In addition, at the end of each contract year, the Customer will be assessed those minimum bill or take-or-pay charges actually paid by the Company to Suppliers, which are attributable to the volume reserved but not taken under this Standby Service.~~

PHILADELPHIA GAS WORKS

Gas Tariff – Pa P.U.C. No. 2  
Original Pg. No. 119

Supplement No. 176 to  
Gas Tariff – Pa P.U.C. No. 2  
1<sup>st</sup> Revised Pg. No. 119

PHILADELPHIA GAS WORKS

Canceling Original Pg. No. 119

**STANDBY SERVICE – SPECIAL PROVISION**

~~For Customers contracting for delivery by the Company of 10,000 Mcf per day or more of transportation Gas, the terms and conditions under which Standby Service will be provided will be as specified in their individual service agreements, in lieu of the above.~~

**TERMS OF PAYMENT**

~~Bills will be rendered and payment terms applied in accordance with this Tariff.~~

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**CONDITIONS OF USE**

1. ~~The Company shall not be obligated to incur the cost of additional facilities to provide Transportation Service hereunder for existing load. Nonetheless, in the event the Company elects to provide additional facilities, which in the Company's sole judgment are required to provide Transportation Service, the cost of such facilities shall be the responsibility of the Customer. Customers may appeal the Company's judgment to the Commission. The Company shall provide, install, own and maintain such facilities. Where applicable, extensions and enlargements of Gas supply facilities for qualifying new load shall be in accordance with Section 10.~~
2. ~~The Customer warrants and will provide satisfactory documentation, upon request, that it has good and merchantable title for all Gas delivered to the Company for transportation hereunder. Title shall be free and clear of all liens, encumbrances and claims whatsoever. Customer will indemnify Company and hold the Company harmless from all suits, actions, debts, accounts, damages, costs, losses and expenses arising out of the adverse claims of any or all persons to said Gas and/or to royalties, taxes, license fees or charges thereon, including pipeline transportation and service charges, which are applicable to such Gas and/or the delivery of such Gas to the Company.~~
3. ~~The Company may retain for line loss and unaccounted for Gas a percentage of the total volume of Gas delivered into its system for Customer's account. The percentage of Gas to be retained by the Company shall be equivalent to the percentage for total system line loss and unaccounted for, as utilized in the Company's annual operating budget. This condition may be revised as appropriate, by the individual service agreement, where the transported Gas can be delivered directly to the Customer without commingling with other distribution system supplies.~~
4. ~~In the event that the Company declares an emergency situation it may, at its discretion, divert Customer's Gas for such purposes as Company deems appropriate and Customer will be compensated for such Gas at the cost at which the Customer acquired the Gas, at the Customer's cost of the alternate fuel utilized or at the Company's avoided cost of Gas during the billing month, whichever is highest. The Customer shall demonstrate its cost of Natural Gas or replacement fuel by making a copy of its purchase contract available to Company upon request. All Gas purchased by the Company will be credited to the Customer's account.~~

5. **NOTICE AND BALANCING**

The Notice and Balancing conditions shall be the following, except as otherwise provided in the individual service agreement.



PHILADELPHIA GAS WORKS

Gas Tariff – Pa P.U.C. No. 2

Original Pg. No. 120

Supplement No. 176 to

Gas Tariff – Pa P.U.C. No. 2

1<sup>st</sup> Revised Pg. No. 120

Canceling Original Pg. No. 120

PHILADELPHIA GAS WORKS

~~The Company shall not be obligated to deliver or accept for delivery volumes in excess of the maximum hourly, daily or monthly volumes specified in the service agreement.~~

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~~It is the intent of the Company that the Customer so manage his arrangements for daily deliveries of Gas that they approximately equal his combined daily Gas usage and that volume retained for line loss and unaccounted for adjustment. To facilitate this management and to avoid or correct imbalances, Customer may modify the quantities it intends to have delivered to Company's city gate in accordance with the monthly and daily nomination procedure of the delivering pipeline. All delivery arrangements must be coordinated with the Company in a manner deemed acceptable by Company. Company shall, within the limitations of its system, assist in the balancing effort.~~

~~The quantities of Gas received on Customer's behalf will be balanced monthly on a thermally equivalent basis with those quantities re-delivered or retained for line loss and unaccounted for adjustment. For this thermal correction quantities will be multiplied by a fraction; the numerator of which is the weighted average Btu content per cubic foot of either the Company's system (if commingled) or the individual transporting pipeline (if not commingled), and the denominator is a reference Btu content of 1,000 Btu per cubic foot.~~

~~Notice will be provided by the Company, at the time of each individual Customer's daily nominations, as to the availability of retail Gas backup in accordance with operating conditions and their contractual service obligations. On any day when retail backup is declared unavailable, all volumes used (including adjustment for line loss and unaccounted for Gas) in excess of that delivered on such Customer's behalf that day, will be excluded from their daily and monthly balancing provisions. Such Gas will be billed for at the rate of \$10 per Mcf if emergency Gas was initially requested and approved or at the rate of \$20 per Mcf if Unauthorized.~~

Allowable Imbalances

~~Imbalances except as noted above, may be permitted within a range of  $\pm 10\%$  on a daily basis if adjusted within  $\pm 5\%$  by month's end. Company will advise Customer of potential imbalance conditions periodically to facilitate correction. But repeated excessive overruns or underruns of the hourly and daily Gas volumes received for Customer's account may be considered grounds for termination of service under this rate. Monthly imbalances within the allowable limits shall be resolved through mutual adjustment of initial deliveries in the subsequent month of service.~~

Correction For Quantities Outside Range Of Allowable Imbalances

PHILADELPHIA GAS WORKS

Gas Tariff – Pa P.U.C. No. 2

Original Pg. No. 121

Supplement No. 176 to

Gas Tariff – Pa P.U.C. No. 2

1<sup>st</sup> Revised Pg. No. 121

Canceling Original Pg. No. 121

PHILADELPHIA GAS WORKS

All volumes utilized in excess of the allowable monthly overrun, where retail sales backup had been authorized, will be considered sold to the Customer under the applicable equivalent retail rate.

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All volumes delivered to the Company that remain unaccepted by the Customer, in excess of the allowable monthly underrun may be offered for sale to the Company or stored at the Customer's option. Gas may be purchased by the Company at a rate not to exceed the Company's avoided cost of Gas for the month of delivery. In the event that the Company does not elect to purchase volumes in excess of the allowable underrun, a service charge for all such volumes carried forward by the Company will be made. These volumes will be the first deliveries in the subsequent month. The unit rate for this service charge will be the volumetrically weighted average of the 100% load factor unit cost of the Company's pipeline storage contracts as utilized in the Company's annual operating budget. Upon temporary suspension of deliveries or termination of Rate GTS service, any existing underrun imbalance shall be corrected within 60 days of the end of the month in which final deliveries are made. Otherwise they become the property of the Company at no cost to the Company.

6. ~~EMERGENCY GAS~~

~~Emergency Gas is defined as a service to be offered by the Company when Gas is not available under the otherwise applicable retail sales service, provided certain conditions apply and terms are met, and that the quantities of Gas available to the Company and the distribution facilities are adequate to provide this service without jeopardizing the physical or economic operation of the Company. The cost of providing this emergency service is \$10.00 for each thousand cubic feet of Gas used. The minimum charge for this service is \$100.00 per occurrence.~~

~~Customers who feel they may have to avail themselves of this service should send for a copy of the terms and conditions of availability under which this emergency service may be obtained.~~

7. ~~UNAUTHORIZED USE~~

~~If a Customer uses this service after being notified that service under this schedule is not available, or uses this service in excess of authorized limitations when established and duly notified, all such unauthorized usage shall be billed at the rate of \$20.00 for each Mcf. In addition, Company may, at its discretion, refuse to accept delivery from the Customer's Supplier, and physically shut off Customer to ensure compliance.~~

8. ~~LIABILITY~~

PHILADELPHIA GAS WORKS

Gas Tariff – Pa P.U.C. No. 2  
Original Pg. No. 122

Supplement No. 176 to  
Gas Tariff – Pa P.U.C. No. 2  
1<sup>st</sup> Revised Pg. No. 122

PHILADELPHIA GAS WORKS

Canceling Original Pg. No. 122

~~The Company shall not be liable for curtailment of service under this rate schedule or loss of Gas of the Customer as a result of any steps taken to comply with any law, regulation or order of any governmental agency with jurisdiction to regulate, allocate or control Gas supplies or the rendering of service hereunder, and regardless of any defect in such law, regulation or order.~~

~~The Company reserves the right to commingle transport Gas with its other supplies but Gas is and remains the property of the Customer while being transported and delivered by the Company. The Customer shall be responsible for maintaining all insurance it deems necessary to protect its property interest in such Gas before, during and after receipt by the Company.~~

PHILADELPHIA GAS WORKS

~~Gas Tariff – Pa P.U.C. No. 2~~

~~Original Pg. No. 123~~

~~Supplement No. 176 to~~

~~Gas Tariff – Pa P.U.C. No. 2~~

~~1<sup>st</sup> Revised Pg. No. 123~~

~~Canceling Original Pg. No. 123~~

PHILADELPHIA GAS WORKS

~~The Company shall not be liable for any loss to the Customer or any other entity or person(s) arising from or out of service under this rate schedule, including loss of Gas in the possession of the Company or any other cause.~~

**COMPANY RULES**

~~————The provisions of this Tariff shall govern the service under this classification except where noted herein~~

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~~PHILADELPHIA GAS WORKS~~

~~Gas Tariff—Pa P.U.C. No. 2  
Original Pg. No. 130~~

~~Supplement No. 176 to  
Gas Tariff – Pa P.U.C. No. 2~~

~~1<sup>st</sup> Revised Pg. No. 124~~

~~PHILADELPHIA GAS WORKS~~

~~Canceling Original Pg. No. 124~~

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~~**GAS TRANSPORTATION SERVICE – RATE GTS  
INTERRUPTIBLE SERVICE**~~

~~Rate: Applicable to all Transportation Services rendered pursuant to this Rate schedule on or after  
September 1, 2003~~

~~**AVAILABILITY**~~

~~This rate is only available to those customers who utilized this service on or before September 1, 2003  
pursuant to a currently valid agreement with the Company.~~

~~**CHARACTER OF SERVICE**~~

~~Transportation service under this rate schedule is interruptible, paralleling the character of service of the  
otherwise applicable retail sales tariff. Service under this rate schedule shall be subordinate to all firm retail  
sales services and firm Transportation Services provided by the Company. The Company, at its sole discretion  
and on a best efforts basis, will endeavor to transport volumes received at the Company's city gate for the  
Customer's account during periods when the otherwise applicable retail service is not available.~~

~~Company assumes no liability for interruptions caused by failure of supply sources or by third parties such as  
Suppliers and shall not be obligated to deliver Gas under this rate schedule on any day that Gas is not received  
at its gate station for the Customer's account except as specified under provisions for Standby Service  
contained herein.~~

~~**MONTHLY RATE**~~

~~The Monthly Charge shall be the sum of the following:~~

~~1. **CUSTOMER CHARGE:** \$250.00 per month.~~

~~2. **DELIVERY CHARGE:**~~

~~\_\_\_\_\_ The Customer may elect either (i) a fixed annual Delivery Charge based on the annual interruptible~~

~~Issued: November 1, 2022~~ February 27, 2025

~~Effective: April 28, 2025~~ January 1, 2023

~~margin in effect for the Company's operating fiscal year (currently September through August), or (ii) a variable monthly Delivery Charge. This variable charge shall be the monthly interruptible margin as experienced by the Company during the month of delivery. The Delivery Charge for volumes transported during periods when the otherwise applicable retail service is not available shall be as specified in the individual service agreement.~~

~~— The Customer shall make an election of either the fixed or variable Delivery Charge pricing methodology prior to the initiation of service hereunder and at each subsequent September 1st thereafter, to be effective for the following twelve months, or portion thereof, of the contract period.~~

~~— The Delivery Charge applicable for each Customer shall be specified in the individual Transportation Service agreement and is subject to revision from time to time as authorized by the Commission.~~

~~3. **TRANSPORTATION SURCHARGE:**~~

~~— The Customer shall reimburse Company for any expense actually incurred for Customer's benefit from third party sources in the provision of this service, such as directly assignable taxes, pipeline balancing penalties, governmentally imposed charges, and contingent liability for external~~



~~transportation charges and fuel requirements. Such surcharge is in addition to charges specified elsewhere in this Rate Schedule. Such potential charges are to be specifically defined and identified in the individual Transportation Service agreement.~~

~~4. **STANDBY SERVICE CHARGES, IF APPLICABLE:**~~

~~See Standby Service Provisions.~~

~~5. **MINIMUM MONTHLY DELIVERY CHARGE:**~~

~~Except as otherwise provided in the individual service agreement, the minimum monthly delivery charge shall be the daily contract quantity (DCQ) times one half the number of days Transportation Service is available in the billing month, times the applicable transportation delivery charge. The minimum monthly delivery charge shall be inapplicable when any of the following conditions occur:~~

- ~~a) When the otherwise applicable firm or interruptible sales service is not subject to a corresponding minimum charge; or~~
- ~~b) When, for reasons beyond the Customer's control, the Customer's Gas burning equipment is temporarily inoperative; or~~
- ~~c) When for reasons beyond the Customer's control, the Customer cannot obtain transportation from its Supplier(s) to the point of receipt; or~~
- ~~d) In emergency situations where the Company diverts the Customer's transportation Gas to meet the requirements of its firm Customers.~~

~~During periods when the minimum monthly delivery charge is inapplicable, the Customer Charge shall be the minimum monthly charge.~~

**GAS COST RATE**

~~The GCR as provided for in this Tariff shall not apply to transported volumes. Similarly, such transported volumes and any expenses related to such volumes shall be excluded from all calculations determining such GCR.~~

**CONTRACT TERM**

~~The duration of the transportation contract shall be as specified in the required individual service agreement. In no event shall the contract term be for a period of less than one year.~~

**STANDBY SERVICE**

**Contingent upon the Company's ability to arrange the required supply contracts, a transportation**

PHILADELPHIA GAS WORKS

Gas Tariff—Pa P.U.C. No. 2  
Original Pg. No. 133

Supplement No. 176 to  
Gas Tariff – Pa P.U.C. No. 2  
1<sup>st</sup> Revised Pg. No. 125

PHILADELPHIA GAS WORKS

Canceling Original Pg. No. 125

~~Customer may contract for Standby Service to purchase Gas from the Company under a specified retail Rate Schedule, in the event that the Customer experiences an interruption or curtailment in Transportation Service by a Supplier during the availability period of such equivalent firm or interruptible sales service. The contract term for Standby Service shall be a minimum of one year. The maximum volume of Gas that the Company~~

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~~is obligated to provide under the Standby Service on any day shall be specified in the individual service~~

~~agreement. Volumes taken in excess of the specified daily limits, except for those volumes authorized and supplied by the Company under an applicable retail rate, may be subject to a charge of \$10 per Mcf if arrangements have been made for Emergency Service or \$20 per Mcf for all unauthorized volumes.~~

~~Under this Standby Service, upon proper notice to the Company, and as soon as operations permit, the Customer may convert some or all of their interruptible Transportation Service to the specified equivalent firm or interruptible sales service during the effective period of this Standby Service agreement. The Company is not obligated to provide firm or interruptible sales service to a transportation Customer if the Customer has not contracted for Standby Service. Eligibility for such a Customer to receive firm or interruptible sales service shall be no different than any other person or entity who is, at the time, making application for service as a new Customer.~~

~~A Customer contracting for Standby Service shall pay a monthly reservation charge. This charge shall be based on the demand charge paid by the Company to its highest cost pipeline supplier adjusted to reflect the limitation on the availability of Standby Service for interruptible Customers, and then applied to the Customer's maximum Daily Contract Quantity as specified in the individual service agreement. The Company may revise the reservation charge no more frequently than monthly to reflect changes in the pipeline demand and related charges. The reservation charge prorated on a daily basis will be credited to all volumes purchased under the Standby Service. In addition, at the end of each contract year, the Customer will be assessed those minimum bill or take or pay charges actually paid by the Company to suppliers, which are attributable to the volume reserved but not taken under this Standby Service.~~

### **STANDBY SERVICE – SPECIAL PROVISION**

~~For Customers contracting for delivery by the Company of 10,000 Mcf per day or more of transportation Gas, the terms and conditions under which Standby Service will be provided will be as specified in their individual service agreements, in lieu of the above.~~

### **TERMS OF PAYMENT**

~~Bills shall be rendered and payment terms applied in accordance with the provisions of this Tariff.~~

### **CONDITIONS OF USE**

- ~~1. The Company shall not be obligated to incur the cost of additional facilities to provide Transportation Service hereunder for existing load. Nonetheless, in the event the Company elects to provide additional facilities, which in the Company's sole judgment are required to provide Transportation Service, the cost of such facilities shall be the responsibility of the Customer. Customers may appeal the Company's judgment to the Commission. The Company shall provide, install, own and maintain such facilities. Where applicable, extensions and enlargements of Gas supply facilities for qualifying new load shall be in accordance with Section 10.~~
- ~~2. The Customer warrants and will provide satisfactory documentation, upon request, that it has good and merchantable title for all Gas delivered to the Company for transportation hereunder. Title shall be free and clear of all liens, encumbrances and claims whatsoever. Customer will indemnify Company and hold the Company harmless from all suits, actions, debts, accounts, damages, costs, losses and expenses arising out of the adverse claims of any or all persons to said Gas and/or to royalties, taxes,~~

PHILADELPHIA GAS WORKS

Gas Tariff – Pa P.U.C. No. 2  
Original Pg. No. 135

Supplement No. 176 to  
Gas Tariff – Pa P.U.C. No. 2  
1<sup>st</sup> Revised Pg. No. 126

PHILADELPHIA GAS WORKS

Canceling Original Pg. No. 126

~~license fees or charges thereon, including pipeline transportation and service charges, which are applicable to such Gas and/or the delivery of such Gas to the Company.~~

- ~~3. The Company may retain for line loss and unaccounted for Gas a percentage of the total volume of Gas delivered into its system for Customer's account. The percentage of Gas to be retained by the~~

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~~Company shall be equivalent to the percentage for total system line loss and unaccounted for, as utilized in the Company's annual operating budget. This condition may be revised as appropriate, by the individual service agreement, where the transported Gas can be delivered directly to the Customer without commingling with other distribution system supplies.~~

~~4. In the event that the Company declares an emergency situation" it may, at its discretion, divert Customer's Gas for such purposes as Company deems appropriate and Customer will be compensated for such Gas at the cost at which the Customer acquired the Gas, at the Customer's cost of the alternate fuel utilized or at the Company's avoided cost of Gas during the billing month, whichever is highest. The Customer shall demonstrate its cost of Natural Gas or replacement fuel by making a copy of its purchase contract available to Company upon request. All Gas purchased by the Company will be credited to the Customer's account.~~

~~5. NOTICE AND BALANCING~~

~~The notice and balancing conditions shall be the following, except as otherwise provided in the individual service agreement.~~

~~The Company shall not be obligated to deliver or accept for delivery volumes in excess of the maximum hourly, daily or monthly volumes specified in the service agreement.~~

~~It is the intent of the Company that the Customer so manage his arrangements for daily deliveries of Gas that they approximately equal his combined daily Gas usage and that volume retained for line loss and unaccounted for adjustment. To facilitate this management and to avoid or correct imbalances, Customer may modify the quantities it intends to have delivered to Company's city gate in accordance with the monthly and daily nomination procedure of the delivering pipeline. All delivery arrangements must be coordinated with the Company in a manner deemed acceptable by Company. The Company shall, within the limitations of its system, assist in the balancing effort.~~

~~The quantities of Gas received on Customer's behalf will be balanced monthly on a thermally equivalent basis with those quantities re-delivered or retained for line loss and unaccounted for adjustment. For this thermal correction quantities will be multiplied by a fraction; the numerator of which is the weighted average Btu content per cubic foot of either the Company's system (if commingled) or the individual transporting pipeline (if not commingled), and the denominator is a reference Btu content of 1,000 Btu per cubic foot.~~

PHILADELPHIA GAS WORKS

Gas Tariff – Pa P.U.C. No. 2

Original Pg. No. 137

Supplement No. 176 to

Gas Tariff – Pa P.U.C. No. 2

1<sup>st</sup> Revised Pg. No. 127

Canceling Original Pg. No. 127

PHILADELPHIA GAS WORKS

———— Notice will be provided by the Company', at the time of each individual Customer's daily nominations, as to the availability of retail Gas backup in accordance with operating conditions and their contractual service obligations. On any day when retail backup is declared unavailable, all volumes used (including adjustment for line loss and unaccounted for Gas) in excess of that delivered on such Customer's behalf that day, will be excluded from their daily and monthly balancing provisions. Such Gas will be billed for at the rate of \$10 per Mcf if emergency Gas was initially requested and approved or at the rate of \$20 per Mcf if Unauthorized.

———— Allowable Imbalances

———— Imbalances except as noted above, may be permitted within a range of  $\pm 10\%$  on a daily basis if adjusted within  $\pm 5\%$  by month's end. Company will advise Customer of potential imbalance conditions periodically to facilitate correction. But repeated excessive overruns or underruns of the hourly and daily Gas volumes received for Customer's account may be considered grounds for termination of service under this rate. Monthly imbalances within the allowable limits shall be resolved through mutual adjustment of initial deliveries in the subsequent month of service.

PHILADELPHIA GAS WORKS

Gas Tariff – Pa P.U.C. No. 2

Original Pg. No. 138

Supplement No. 176 to

Gas Tariff – Pa P.U.C. No. 2

1<sup>st</sup> Revised Pg. No. 128

Canceling Original Pg. No. 128

PHILADELPHIA GAS WORKS

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Correction For Quantities Outside Range Of Allowable Imbalances

~~\_\_\_\_\_ All volumes utilized in excess of the allowable monthly overrun, where retail sales backup had been authorized, will be considered sold to the Customer under the applicable equivalent retail rate.~~

~~\_\_\_\_\_ All volumes delivered to the Company that remain unaccepted by the Customer, in excess of the allowable monthly underrun may be offered for sale to the Company or stored at the Customer's option. Gas may be purchased by the Company at a rate not to exceed the Company's avoided cost of Gas for the month of delivery. In the event that the Company does not elect to purchase volumes in excess of the allowable underrun, a service charge for all such volumes carried forward by the Company will be made. These volumes will be the first deliveries in the subsequent month. The unit rate for this service charge will be the volumetrically weighted average of the 100% load factor unit cost of the Company's pipeline storage contracts as utilized in the Company's annual operating budget. Upon temporary suspension of deliveries or termination of Rate GTS service, any existing underrun imbalance shall be corrected within 60 days of the end of the month in which final deliveries are made. Otherwise they become the property of the Company at no cost to the Company.~~

6. ~~\_\_\_\_\_~~ EMERGENCY GAS

~~\_\_\_\_\_ Emergency Gas is defined as a service to be offered by the Company when Gas is not available under the otherwise applicable firm or interruptible sales service, provided certain conditions apply and terms are met, and that the quantities of Gas available to the Company and the distribution facilities are adequate to provide this service without jeopardizing the physical or economic operation of the Company. The cost of providing this emergency service is \$10.00 for each thousand cubic feet of Gas used. The minimum charge for this service is \$100.00 per occurrence.~~

~~\_\_\_\_\_ Customers who feel they may have to avail themselves of this service should send for a copy of the Terms and Conditions of Availability under which this emergency service may be obtained.~~

7. ~~\_\_\_\_\_~~ UNAUTHORIZED USE

~~\_\_\_\_\_ If a Customer uses this service after being notified that service under this schedule is not available, or uses this service in excess of authorized limitations when established and duly notified, all such unauthorized usage shall be billed at the rate of \$20.00 for each Mcf. In addition, Company may, at its discretion, refuse to accept delivery from the Customer's Supplier, and physically shut off Customer to ensure compliance.~~

8. ~~\_\_\_\_\_~~ LIABILITY

~~The Company shall not be liable for curtailment of service under this Rate Schedule or loss of Gas of the~~



PHILADELPHIA GAS WORKS

Gas Tariff – Pa P.U.C. No. 2

Original Pg. No. 140

Supplement No. 176 to

Gas Tariff – Pa P.U.C. No. 2

1<sup>st</sup> Revised Pg. No. 128

Canceling Original Pg. No. 128

PHILADELPHIA GAS WORKS

~~Customer as a result of any steps taken to comply with any law, regulation or order of any governmental agency with jurisdiction to regulate, allocate or control Gas supplies or the rendering of service hereunder, and regardless of any defect in such law, regulation or order.~~

~~The Company reserves the right to commingle transport Gas with its other supplies but Gas is and remains the property of the Customer while being transported and delivered by the Company. The Customer shall be responsible for maintaining all insurance it deems necessary to protect its property interest in such Gas before, during and after receipt by the Company.~~

~~The Company shall not be liable for any loss to the Customer or any other entity or person(s) arising from or out of service under this Rate Schedule, including loss of Gas in the possession of the Company or any other cause.~~

PHILADELPHIA GAS WORKS

Gas Tariff – Pa P.U.C. No. 2

Original Pg. No. 141

Supplement No. 176 to

Gas Tariff – Pa P.U.C. No. 2

1<sup>st</sup> Revised Pg. No. 129

Canceling Original Pg. No. 129

PHILADELPHIA GAS WORKS

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**COMPANY RULES**

The provisions this Tariff shall govern the service under this classification except where noted herein.

**DEVELOPMENTAL NATURAL GAS VEHICLE SERVICE - RATE NGVS  
FIRM SERVICE**

Rate: Applicable to all Retail Sales Service rendered pursuant to this Rate Schedule on or after **(C)**  
~~March 1, 2025~~ April 28, 2025.

AVAILABILITY

This service is available to provide uncompressed Natural Gas to any Customer for the exclusive purpose of compressing such Gas for use as fuel for motor vehicles. The compression of the Natural Gas to the pressure required for use as a motor vehicle fuel will be conducted by the Customer, at the Customer's designated premises. Service shall only be available where the Company's distribution system is, or can economically be made available to supply the service. Each Customer will be required to execute a service agreement which will specify terms and conditions of service.

CHARACTER OF SERVICE

Service under this rate schedule is firm and shall only be interrupted in the case of operating emergencies experienced by the Company.

MONTHLY RATE

CUSTOMER CHARGE:

~~\$38.1546.50~~ per month **(I)**

Surcharge: Distribution System Improvement Charge.

Plus,

GCR (not applicable to NGVS customers who transport gas through a qualified NGS):

\$0.51308 per Ccf **(+)**

Plus

DISTRIBUTION CHARGE (consisting of item (A) and (B), below):

(A) Delivery Charge:

\$0.~~14022~~45975 per Ccf **(I)**

(B) Surcharges:

Universal Service and Energy Conversation Surcharge; ~~The Restructuring and Consumer Education Surcharge~~; Other Post Employment Benefit Surcharge; and Distribution System Improvement Charge. **(C)**

Note: The Commodity Charge includes the Sales Service Charge, the Merchant Function Charge and the Gas Procurement Charge.

**(I) – Increase, (C) – Change, (D) - Decrease**

## **SPECIAL PROVISION – Emergency/Unauthorized Use Gas Rider**

### Emergency Gas.

Emergency Gas as set forth in this rider is defined as a service to be offered by the Company to interruptible Retail Sales Service ~~and Rate GTS-I and GTS-F~~ Customers when Gas would otherwise not be available under their respective Rate Schedules and provided certain conditions apply and terms are met. A Customer may request emergency Gas pursuant to this rider when he experiences interference with the use of his alternate energy and when the quantities of Gas available to the Company and the distribution facilities are adequate to provide this service without jeopardizing the physical or economic operation of the Company. PGW reserves the right to limit or curtail emergency Gas at any time. The cost of providing this emergency service is \$10.00 for each thousand cubic feet of Gas used above the current prevailing GCR. The minimum charge for this service is \$100.00 per occurrence.

In order to be eligible for emergency Gas, a Customer must register annually according to Company policy.

### Unauthorized Use.

If a Customer uses Gas after he has been notified that Gas otherwise provided pursuant to his or her respective Rate Schedule or as emergency Gas is not available, or uses Gas in excess of his authorized limitation when established and duly notified, all such unauthorized usage shall be billed at the rate of \$25.00 for each thousand cubic feet of Gas used above the current prevailing GCR or the average of the highest two days of the monthly index, whichever is higher. Company may, in addition, at its discretion, shut off Customer to ensure compliance.

The dates and types of changes in the DSIC rate will occur as follows:

Effective Date of Change	Rate Change That Will Occur
January 1	Annual levelized C-factor rate adjustments
April 1	Adjustment prior year over/under collection
July 1	Optional rate adjustment
October 1	Adjustment for +/- 2% over / under collection

**B. Recoverable Costs:** The recoverable costs shall be amounts reasonably expended or incurred to purchase and install eligible property and associated financing costs, if any, including debt service, debt service coverage, and issuance costs.

**C. Application of DSIC:** The DSIC will be expressed as a percentage carried to two decimal places and will be applied to the total amount billed to each customer for distribution service under the Utility’s otherwise applicable rates and charges. To calculate the DSIC, the annual recoverable costs to be placed into service during the calendar year in which the DSIC is being charged will be divided by the Utility’s projected revenues for distribution services (including all applicable clauses and riders) for the annual period during which the charge will be collected.

**D. Formula:** The formula for calculation of the DSIC is as follows:

$$DSIC = \frac{DSI + e}{PAR}$$

Where:

- DSI = The projected annual level of recoverable costs (defined in Section B. directly above)
- e = the amount calculated under the annual reconciliation feature or Commission audit, as described below.
- PAR = Projected annual revenues for distribution service (including all applicable clauses and riders) including any revenue from existing customers plus netted revenue from any customers which will be gained or lost by the beginning of the applicable service period.

**3. Quarterly Updates:** Supporting data for each quarterly update will be filed with the Commission and served upon the Commission’s Bureau of Investigation and Enforcement, the Office of Consumer Advocate, the Office of Small Business Advocate and the Bureau of Audits at least ten (10) days prior to the effective date of the update.

**4. Customer Safeguards**

**A. Cap:** The DSIC is capped at 7.50% of the amount billed to customers for distribution service (including all applicable clauses and riders), ~~inclusive of amounts billed for annual reconciliation pursuant to the “e” factor set forth above, as determined on an annualized basis.~~ (C)

**(C) - Change**

**B. Audit/Reconciliation:** The DSIC is subject to audit at intervals determined by the Commission. Any cost determined by the Commission not to comply with any provision of 66 Pa C.S. §§ 1350, *et seq.*, shall be credited to customer accounts. The DSIC is subject to annual reconciliation based on a reconciliation period consisting of the twelve months ending December 31 of each year. The annual reconciliation shall be filed on January 31 of the next year. The revenue received under the DSIC for the reconciliation period will be compared to the Company's eligible costs for that period. The difference between revenue and costs will be recouped or refunded, as appropriate, in accordance with Section 1307(e), over a one-year period commencing on April 1 of each year. If DSIC revenues exceed DSIC-eligible costs for the reconciliation period, such over collections will be refunded with interest. Interest on over-collections and credits will be calculated at the residential mortgage lending specified by the Secretary of Banking in accordance with the Loan Interest and Protection Law (41 P.S. §§ 101, *et seq.*) and will be refunded in the same manner as an over-collection. Under collections shall be considered a separate adjustment and not subject to the limitation in Section (4)(A) above.

(C)

**C. New Base Rates:** The DSIC will be reset at zero upon application of new base rates to customer billings that provide for prospective recovery of the remaining costs (if any) that had previously been recovered under the DSIC. Thereafter, only the costs of new eligible plant additions that have not previously been reflected in the Utility's rates will be reflected in the quarterly updates of the DSIC.

**D. Customer Notice:** Customers shall be notified of changes in the DSIC by including appropriate information on the first bill they receive following any change. An explanatory bill insert shall also be included with the first billing.

**E. All customer classes:** The DSIC shall be applied equally to all customer classes, except that the Company may reduce or eliminate the DSIC to any customer with competitive alternatives and customers having negotiated contracts with the Company, if it is reasonably necessary to do so.

(C) – Change

**TECHNOLOGY AND ECONOMIC DEVELOPMENT RIDER  
~~MICRO~~-COMBINED HEAT AND POWER INCENTIVES**

(C)

AVAILABILITY

**TECHNOLOGY AND ECONOMIC DEVELOPMENT RIDER:** The Technology and Economic Development (TED) Rider is a negotiated rider available that will be utilized to support the expansion of new technologies such as, but not limited to, combined heat and power (CHP), natural gas vehicles, and fuel cells, to develop brownfields, and support economic development in Pennsylvania by facilitating business retention and attraction, as well as other gas distribution system expansion activities. The TED Rider is available to those Customers served by the Company that the Company determines, in its sole discretion, have prospective additional gas usage applicable to service for firm service non-residential customers on Tariff Rate Schedules for General Service (Rate GS), Municipal Service (Rate MS), Philadelphia Housing Authority Service (Rate PHA) and Developmental Natural Gas Vehicle Service (Rate NGVS) at the time of execution or renewal of a service agreement. The TED Rider is established for the purpose of adjusting the customer's overall distribution charge to address project-specific or competitive issues to gain access to and expand use of natural gas within the Commonwealth of Pennsylvania. The negotiated TED Rider may be either a surcharge or credit depending on project-specific customer and Company economic requirements, such that the overall economics must meet the requirements of Section 10 of this Tariff. As part of its Gas Cost Rate (GCR) filings, PGW will provide data on sales and costs for TED customers.

(C)

GENERAL TERMS

The Customer must execute a TED Rider service agreement.

RATES

Customer Charge: Negotiable  
Plus  
Delivery Charge (per ccf): Negotiable

AVAILABILITY

**~~MICRO~~-COMBINED HEAT AND POWER INCENTIVES:** For projects involving micro-CHP units no larger than 50 kW, the following Micro-CHP Incentives may be available for qualifying projects: (1) \$1,000 per kW installed up to 20 kW; and (2) \$750 per kW installed greater than 20 kW and less than or equal to 50 kW. For CHP units larger than 50 kW, the following CHP Incentives may be available for qualifying projects: \$750 per kW installed up to 50% of the project cost with a \$250,000 maximum per project. -The Incentive is available to those Customers served by the Company that the Company determines, in its sole discretion, have prospective additional gas usage applicable to service for Rate GS Commercial/Industrial customers, Rate MS customers and Rate PHA customers on a pilot basis for a three-year period beginning on the effective date of this tariff supplement. The economic test that will be utilized by the Company to determine eligibility for participation will include the costs of the incentives.

(C)

(C)

(C) - Change

### MONTHLY RATE

The Monthly Charge shall be the sum of the following:

1. **CUSTOMER CHARGE:** \$1,100.00 per month per meter.
2. **LOCAL GAS TRANSPORTATION SERVICE:**

"Local Gas Transportation Service" shall mean the local Gas transportation service provided by the Company, pursuant to this Rate IT-XLT, from Gate Station 060 to the Facility metering station.

PGW will provide interruptible Local Gas Transportation Service to the Customer's Facility for up to 50,000 Dekatherms per Day. Customer, at PGW discretion, may balance its daily purchases, nominations, and deliveries in the interstate pipeline(s) and PGW shall have no responsibility for banking or balancing Customer's transportation deliveries.

The Local Gas Transportation Charge shall be an amount equal to \$0.~~40493~~40541192/Mcf billed at \$0.~~40493~~405411504 per Dth, as measured by PGW at the Customer's metering station(s).

(C)

The Customer shall reimburse Company for any expense actually incurred for Customer's benefit from third party sources in the provision of this Service, such as directly assignable taxes, pipeline balancing penalties, governmentally imposed charges, and contingent liability for external transportation charges and fuel requirements. Additionally, for existing Customers, any unavoidable Gas supply costs (e.g., pipeline demand charges) incurred on the Customer's behalf. Such charges shall be in addition to charges specified elsewhere in this Rate IT-XLT. Minimum annual quantity is 9 Bcf.

3. **ALTERNATIVE RECEIPT SERVICE**

Rate IT-XLT Customers shall pay PGW a rate per Dth equal to the greater of (1) average revenue per Dth received by the Company from all releases, excluding choice capacity releases and asset management agreement associated release, of recallable capacity on Texas Eastern Transmission ("TETCO") during PGW's prior fiscal year, which shall be annually updated by PGW with the Commission by September 15 of each year following; or (2) the max TETCO tariff rate. The Minimum ARS Quantity provided by the Company shall be 5,000 Dth per day. The minimum monthly charge shall be the above rate times 5,000 Dth times the number of days in the month regardless of whether the Customer uses less. The Maximum ARS Quantity provided by the Company shall be 21,000 Dth/day.

(I) Increase; (C) - Change



**Optional Sales Service Agreement for Prepaid Gas Arrangement**

(C)

- A. Customer receiving Rate IT-XLT has the option to request an additional sales service agreement with the Company for prepaid gas at a rates, terms and conditions to be negotiated between the Customer and the Company. The Optional Sales Service Agreement will be in the form provided by the Company to ensure that it satisfies all legal requirement applicable to prepaid gas arrangements (“Prepaid Gas Arrangement”). PGW retains sole discretion as to whether it will permit the Optional Sales Service Agreement when prepaid gas is available to PGW to purchase. PGW also retains sole discretion regarding the terms and conditions that must be included to permit the arrangement.
- B. In addition to any other terms and conditions required by Company at its sole discretion, the Optional Sales Service Agreement shall contain the following:
- (i) A requirement that the facilities of the customer utilizing prepaid gas supply must be located in the Company’s service area;
  - (ii) Minimum and maximum monthly purchases, with the customer being responsible for the monthly minimum amounts whether or not those amounts were used by the customer;
  - (iii) Surety requirements or guarantees acceptable to the Company at its sole discretion; and,
  - (iv) Provisions that eliminate any obligation on the Company to deliver such gas to customer if: (a) such is not delivered to PGW’s city gate, or (b) PGW exercises its right to interrupt the customer pursuant to this Tariff.

## REVENUE NORMALIZATION ADJUSTMENT (RNA)

(C)

### 1. General Description

**A. Purpose:** To recover the Commission-approved base rate distribution revenues needed to provide the Company with the resources needed to provide safe and reliable gas distribution service. The RNA will reconcile the revenue from each rate class compared to the amounts approved in the most recent base rate cases (see section 2.D).

If billed revenue for the period at issue is greater than the Commission-approved revenues applicable to that period, the Company will credit the over recovery back to ratepayers. Likewise, if the billed revenue for the period is lower than the Commission approved revenue for the period, the Company will recover the difference from ratepayers.

**B. Eligible Rate Classes:** The following rate classes will be eligible for the RNA: Residential, Commercial, Industrial, Municipal, and PHA customers.

### 2. Computation of the RNA

#### A. Definitions

- i. RNA is the Revenue Normalization Adjustment for the applicable period. (\$/MCF)
- ii. ADR is the Approved Distribution Revenue for the applicable period.
- iii. BDR is the Billed Distribution Revenue for the applicable period. BDR includes WNA adjustments in the applicable months.
- iv. pRNA is the prior period's RNA over or under recovery.
- v. FT is the Forecasted Throughput for the 12-month period that the RNA will be applied divided by 12.
- vi. AT is the Actual Throughput (MCF) in the period the RNA is being recovered.

**B. Calculation:** The Revenue Normalization Adjustment (RNA) shall be calculated by rate class, determined by the difference between the Approved Distribution Revenue (ADR) and the Billed Distribution Revenue (BDR). At the end of the fiscal 12-month period, an annual reconciliation will occur that will compute the RNA rate.

The RNA rate will calculate the annual over or under between ADR and BDR. That amount, plus or minus any Prior Period RNA Recovery (pRNA), will be the amount needed to be charged or credited to the customer. This amount will subsequently be divided by the Forecasted Throughput (FT) for the following period. This will determine the RNA rate in dollars per MCF.

$$\text{RNA} = \frac{\text{BDR} - \text{ADR} + \text{pRNA}}{\text{FT}}$$

pRNA will be calculated by multiplying the RNA rate by the difference between Forecasted Throughput (FT) and Actual Throughput (AT) for the recovery period. This amount will subsequently be rolled into the current period's RNA. The formula is below:

$$\text{pRNA} = \text{RNA} \times (\text{FT} - \text{AT})$$

PHILADELPHIA GAS WORKS

**C. Timing:** The RNA is computed at the conclusion of the Company's fiscal year spanning a period from September through August. The updated RNA will be effective November 1<sup>st</sup> of each year.

**D. Approved Revenue Levels:** Shall be computed as the Fully Projected Future Test Year Base Revenue consistent with the compliance plan approved at Docket No. R-2025-3053112. Breakout by class is below.

<u>Rate Class</u>	<u>Approved Distribution Revenue</u>
Residential	\$386,444,428
Commercial	\$81,829,203
Industrial	\$6,538,836
Municipal	\$8,258,983
PHA	\$3,520,173

**E. Currently Effective RNA:** The currently effective RNA rates are below:

<u>Rate Class</u>	<u>RNA (\$/MCF)</u>
Residential	
Commercial	
Industrial	
Municipal	
PHA	

Initial RNA rates will be effective the November 1<sup>st</sup> following final approval in this rate case.

- 3. Annual Updates:** Supporting data for each annual update will be filed with the Commission and served upon the Commission's Bureau of Investigation and Enforcement, the Office of Consumer Advocate, the Office of Small Business Advocate and the Bureau of Audits at least ten (10) days prior to the effective date of the update.
- 4. New Base Rates:** The Approved Distribution Revenue will be reset to the newly approved levels with the final Order of future base rate cases. The existing over or under recovery of the RNA will continue to be recovered and rolled into the new RNA calculations.

# **Exhibit FT-1**

Proposed Gas Service  
Tariff Supp. No. 176  
(Clean)

**PHILADELPHIA GAS WORKS**  
**GAS SERVICE TARIFF**



Issued by: Seth Shapiro  
President and CEO

PHILADELPHIA GAS WORKS  
800 West Montgomery Avenue  
Philadelphia, PA 19122

**List of Changes Made by this Tariff Supplement**

**TABLE OF CONTENTS (PAGE Nos. 6-7)**

Updated to reflect revised page numbers for each of the changes listed below on this page.

**METERS (Page No. 53)**

Added language to clarify the use of advanced or “smart” metering equipment.

**MERCHANT FUNCTION CHARGE (Page No. 78)**

Changed the Merchant Function Charge percentages.

**GAS PROCUREMENT CHARGE (Page No. 78)**

Changed the Gas Procurement Charge.

**PRICE TO COMPARE (Page No. 78)**

Changed the Price to Compare.

**EFFICIENCY COST RECOVERY SURCHARGE (Page No. 80)**

Added language to clarify the cost recovery of energy efficiency programs.

**GENERAL SERVICE – RATE GS (Page No. 83)**

Changed the customer charges and delivery charges effective April 28, 2025, as follows. For Residential Customers, the customer charge increases from \$16.25 to \$19.50 and the delivery charge increases from \$0.74624 to \$0.91761. For Public Housing customers, the customer charge increases from \$16.25 to \$19.50 and the delivery charge increases from \$0.68523 to \$1.04356. For Commercial, the customer charge increases from \$27.65 to \$34.00 and the delivery charge increases from \$0.54086 to \$0.70055. For Industrial customers, the customer charge increases from \$82.80 to \$100.00 and the delivery charge increases from \$0.54459 to \$0.75000. Surcharges updated to remove Restructuring and Consumer Education Surcharge and add Revenue Normalization Adjustment Surcharge.

**MUNICIPAL SERVICE - RATE MS (Page No. 87)**

Effective April 28, 2025, the customer charge increases from \$27.65 to \$34.00 and the delivery charge increases from \$0.51883 to \$0.85175. Surcharges updated to remove Restructuring and Consumer Education Surcharge and add Revenue Normalization Adjustment Surcharge.

**PHILADELPHIA HOUSING AUTHORITY SERVICE - RATE PHA (Page No. 90)**

Effective April 28, 2025, the customer charge increases from \$27.65 to \$34.00 and the delivery charge increases from \$0.56340 to \$0.87450. Surcharges updated to remove Restructuring and Consumer Education Surcharge and add Revenue Normalization Adjustment Surcharge.

**INTERRUPTIBLE TRANSPORTATION - RATE IT (Page No. 115)**

Effective April 28, 2025, changed the rates for distribution charges for existing customers as follows. For existing IT-A customers the rate per Mcf per / Dth delivered changes from \$3.0038 / 2.9051 to \$4.3408 / 4.1900. For existing IT-B customers, the rate per Mcf per Dth delivered changes from \$1.4539 / 1.4061 to \$2.1010 / 2.0280. For existing IT-C customers, the rate per Mcf per Dth delivered changes from \$1.1345 / 1.0972 to \$1.6395 / 1.5825. For existing IT-D customers, the rate per Mcf per Dth delivered changes from \$1.0066 / 0.9735 to \$1.4547 / 1.4042. For existing IT-E customers, the rate per Mcf per Dth delivered changes from \$0.9747 / 0.9426 to \$1.4086 / 1.3597.

**OPTIONAL SALES SERVICE FOR PREPAID GAS ARRANGEMENT (Page No. 117A)**

Added Optional Sales Service Agreement for Prepaid Gas Arrangements for Rate IT.

**REMOVAL OF RATE GTS-FIRM AND RATE GTS-INTERRUPTIBLE (Page Nos. 118-129)**

Removed Rate GTS-Firm and Rate GTS-Interruptible no longer available to customers.

**DEVELOPMENTAL NATURAL GAS VEHICLE SVC - RATE NGVS FIRM SERVICE (Page No. 135)**

Effective April 28, 2025, the customer charge increases from \$38.15 to \$46.50 and the delivery charge increases from \$0.14022 to \$0.45975. Surcharges updated to remove Restructuring and Consumer Education Surcharge.

**SPECIAL PROVISION – EMERGENCY/UNAUTHORIZED USE GAS RIDER (Page No. 147)**

Removed reference to Rate GTS-I and GTS-F.

**DISTRIBUTION SYSTEM IMPROVEMENT CHARGE (DSIC) (Page No. 152-153)**

Added language to address under collections in DSIC.

**TED RIDER, COMBINED HEAT AND POWER INCENTIVES (Page No. 155)**

Clarified applicability to Combined heat and Power projects. Added incentive for units larger than 50 kW.

**INTERRUPTIBLE SERVICE EXTRA LARGE TRANSPORTATION - RATE IT-XLT (Page No. 158)**

Effective April 28, 2025, the local gas transportation charge increases from \$0.1054/Mcf at \$0.10193/Dth to \$0.1192 /Mcf at \$0.11504 /Dth.

**OPTIONAL SALES SERVICE FOR PREPAID GAS ARRANGEMENT (Page No. 161A)**

Added Optional Sales Service Agreement for Prepaid Gas Arrangements for Rate IT-XLT.

**REVENUE NORMALIZATION ADJUSTMENT (RNA) (Page No. 162-163)**

Added Revenue Normalization Adjustment.

**TABLE OF CONTENTS**

	<u>Page Number</u>
List of Changes Made By This Tariff_____	166 <sup>th</sup> Revised 2
Description of Territory Served_____	5
Table of Contents_____	165 <sup>th</sup> Revised 6
Definitions_____	Second Revised 10
 <b><u>RULES and REGULATIONS:</u></b>	
1. The Gas Service Tariff_____	First Revised 15
2. Application and Contract for Gas Service_____	Sixth Revised 17
3. Credit and Deposit_____	4 <sup>th</sup> Revised 21
4. Billing and Payment_____	Second Revised 26
5. Termination and/or Discontinuance of Gas Service_____	Second Revised 30
6. Termination of Service for Safety Reasons and Curtailment of Service/ Service Continuity_____	First Revised 38
7. Inquiry, Review, Dispute, and Appeals Process_____	First Revised 41
8. Customer’s Responsibility for Company’s Property_____	First Revised 44
9. Conditions of Service, Point of Delivery, and Application of Rates_____	4 <sup>th</sup> Revised 47
10. Extensions and Rights-Of-Way_____	First Revised 50
11. Meters: Measurements, Readings, Errors, and Tests_____	2 <sup>nd</sup> Revised 53
12. Service Charges and Miscellaneous Fees and Provisions_____	Second Revised 57
13. Universal Service And Energy Conservation Programs_____	Second Revised 59
14. Gas Choice Enrollment and Switching_____	First Revised 63
15. Supplier of Last Resort_____	First Revised 63



PHILADELPHIA GAS WORKS

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	<u>Page Number</u>
<b>RATES (Cover Page)</b> _____	<b>66</b>
<b>Gas Cost Rate</b> _____	<b>105th Revised 67</b>
<b>Revenue Reconciliation Adjustment (RAA) Rider</b> _____	<b>70</b>
<b>Senior Citizen Discount</b> _____	<b>First Revised 72</b>
<b>Exit Fee Rider</b> _____	<b>77</b>
<b>Merchant Function &amp; Gas Procurement Charges; Price to Compare</b> _____	<b>65<sup>th</sup> Revised 78</b>
<b>Efficiency Cost Recovery Mechanism</b> _____	<b>72<sup>nd</sup> Revised 80</b>
<b>Universal Services Surcharge</b> _____	<b>109<sup>th</sup> Revised 81</b>
<b>Other Post Employment Benefit Surcharge</b> _____	<b>23<sup>rd</sup> Revised 82</b>
<b>General Service – Rate GS</b> _____	<b>123<sup>rd</sup> Revised 83</b>
<b>Municipal Service – Rate MS</b> _____	<b>123<sup>rd</sup> Revised 87</b>
<b>Philadelphia Housing Authority Service – Rate PHA</b> _____	<b>123<sup>rd</sup> Revised 90</b>
<b>Daily Balancing Service – Rate DB</b> _____	<b>101</b>
<b>Interruptible Transportation Service – Rate IT</b> _____	<b>111</b>
<b>Cogeneration Service – Rate CG</b> _____	<b>Fifth Revised 131</b>
<b>Developmental Natural Gas Vehicle Service – Rate NGVS Firm Service</b> _____	<b>91<sup>st</sup> Revised 135</b>
<b>Developmental Natural Gas Vehicle Service – Rate NGVS Interruptible Service</b> _____	<b>139</b>
<b>SPECIAL PROVISION – Air Conditioning Rider</b> _____	<b>1<sup>st</sup> Revised 143</b>
<b>SPECIAL PROVISION – Compressed Natural Gas Rider</b> _____	<b>145</b>
<b>SPECIAL PROVISION – Emergency/Unauthorized Use Gas Rider</b> _____	<b>1<sup>st</sup> Revised 147</b>
<b>Weather Normalization Adjustment Clause</b> _____	<b>Ninth Revised 149</b>
<b>Distribution System Improvement Charge</b> _____	<b>Twenty Fourth Revised 151</b>
<b>Backup Service – Rate BUS</b> _____	<b>First Revised 154</b>
<b>Technology and Economic Development Rider and Micro-Combined Heat and Power Incentives</b> _____	<b>2<sup>nd</sup> Revised 155</b>
<b>Negotiated Liquefied Natural Gas Service – Rate LNG-N</b> _____	<b>First Revised 156</b>
<b>Interruptible Service Extra Large Transportation – Rate IT-XLT</b> _____	<b>157</b>
<b>Revenue Normalization Adjustment (RNA)</b> _____	<b>162</b>

## **11. Meters: Measurements, Readings, Errors, and Tests.**

11.1. METERS. The measurement of Gas usage shall be by meters furnished and installed by the Company. The Company will select the type and make of metering equipment including but not limited to advanced or “smart” metering equipment, and may, from time to time, change or alter the equipment, its sole obligation being to supply meters that will accurately and adequately furnish records for billing purposes.

(C)  
|

### 11.2. QUANTITY MEASUREMENTS.

11.2.A. Measurement at Standard Service Pressure. For the purpose of measurement, standard service pressure shall be 8.5 inches or less of water column. A cubic foot of Gas at standard service pressure means the amount of Gas which occupies a volume of one cubic foot at the time metered and under the conditions existing at the Customer's meter.

11.2.B. Measurement at Pressure Above Standard Service Pressure. For the purpose of measurement, where Gas is ordinarily supplied to Customers at pressure above standard pressure, the measurement shall be a cubic foot at an absolute pressure of 14.73 pounds per square inch and under conditions existing at the Customer's meter unless otherwise provided for by the Company. A cubic foot of Gas at above standard service pressure shall mean the amount of Gas that occupies a volume of one cubic foot.

### 11.3 METER READINGS.

11.3.A. Meter Reading Intervals. The Company will read its meters at scheduled regular intervals of two months or less and will render standard bills for the recorded Gas usage based upon the time interval between meter readings.

11.3.B. Estimated Usage. The Company may estimate the amount of Gas usage at the premises where access to the meter is not available, an electronic meter reading device is not installed or functioning, or to installations at remote locations, for such number of months as the type of installation, normal regularity of usage, or other circumstances may warrant, and will render bills in standard form based on such estimate and so marked. Actual Meter Readings will be secured from time to time and billing will be revised when such reads disclose that the estimate failed to approximate the actual usage. For Residential Customers, an Actual Meter Reading will be obtained in accordance with Applicable Law .

### MERCHANT FUNCTION CHARGE (“MFC”)

The MFC is a volumetric charge, applied to firm sales service customers, which will be included in the Price to Compare. The MFC is based on Gas Cost Rate multiplied by a fixed uncollectible percentage established in the Company’s last general base rate proceeding. The MFC will not be reconciled to reflect actual results. The MFC is intended to make the Company’s Price to Compare more comparable to the gas supply services price offers of other Natural Gas Suppliers that presumably reflect anticipated uncollectible expenses. The following percentages will be applied to the quarterly Gas Cost Rate in order to calculate the quarterly MFC: 7.04% - GS Residential (“GS RES”); 7.04% - GS Public Housing (“GS PHA”); 1.46% - GS Commercial (“GS COM”); and 0.78% - GS Industrial (“GS IND”). The current MFC is set forth below in the Price to Compare table.

(I)  
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### GAS PROCUREMENT CHARGE (“GPC”)

The GPC is a volumetric charge, applied to firm sales service customers, which will be included in the Price to Compare. The GPC will remain in effect until reviewed and updated in the Company’s next general base rate proceeding.

Current Gas Procurement Charge = \$0.01165/Ccf

(I)

### PRICE TO COMPARE (“PTC”)

The PTC is composed of the Sales Service Charge (“SSC”), Gas Adjustment Charge (“GAC”), the Merchant Function Charge and the Gas Procurement Charge. The PTC will change whenever any of the components of the PTC change. The current PTC is (per Ccf):

	GS-RES	GS-PH	GS-COM	GS-IND	MS	PHA	NGVS
<b>SSC</b>	<b>\$0.54802</b>	<b>\$0.54802</b>	<b>\$0.54802</b>	<b>\$0.54802</b>	<b>\$0.54802</b>	<b>\$0.54802</b>	<b>\$0.54802</b>
<b>GAC</b>	<b>\$(0.03372)</b>	<b>\$(0.03372)</b>	<b>\$(0.03372)</b>	<b>\$(0.03372)</b>	<b>\$(0.03372)</b>	<b>\$(0.03372)</b>	<b>\$(0.03372)</b>
<b>MFC</b>	<b>\$0.03612</b>	<b>\$0.03612</b>	<b>\$0.00749</b>	<b>\$0.00400</b>	<b>\$0.00000</b>	<b>\$0.00000</b>	<b>\$0.00000</b>
<b>GPC</b>	<b>\$0.01165</b>	<b>\$0.01165</b>	<b>\$0.01165</b>	<b>\$0.01165</b>	<b>\$0.01165</b>	<b>\$0.01165</b>	<b>\$0.01165</b>
<b>PTC</b>	<b>\$0.56207</b>	<b>\$0.56207</b>	<b>\$0.53344</b>	<b>\$0.52995</b>	<b>\$0.52595</b>	<b>\$0.52595</b>	<b>\$0.52595</b>

(I)

(C) – Change (I) Increase (D) - Decrease

## EFFICIENCY COST RECOVERY SURCHARGE

The cost of the energy efficiency programs (i.e. the demand side management programs) for the firm customer rate classes listed below will be recovered by an Efficiency Cost Recovery Surcharge applicable to all volumes of Gas delivered.

- 1) The Surcharge will recover the program costs and the administrative costs of the energy efficiency program including the non-LIURP Health and Safety Program, Efficient Home Program and Repair and Renew Program consistent with the compliance plan approved at Docket No. R-2025-3053112. (C)  
|
- 2) Computation of the Efficiency Cost Recovery Surcharge factors will be in accordance with the automatic adjustment procedures utilized under Section 1307(f) of the Public Utility Code and will be filed and approved in conjunction with the Company's annual Section 1307(f)-GCR filing.
- 3) Once the surcharge is in place, it will be automatically adjusted effective March 1, June 1, September 1, and December 1 of each year in accordance with Section 1307(f) quarterly adjustment procedures. No interest will be included in such surcharge computations. The basic component of the surcharge will be determined by dividing the total energy efficiency program costs approved for annual recovery plus (or minus) any over (or under) recovery from the prior period by the estimated applicable throughput in Mcfs. The costs related to customers other than low income residential customers are tracked and will be recovered separately from each of the following firm customer rate classes if the customer class is served by the energy efficiency program:
  - a) Residential and Public Housing Customers on Rate GS;
  - b) Commercial Customers on Rate GS;
  - c) Industrial Customers on Rate GS and Rate IT-XLT;
  - d) Municipal Customers on Rate MS; and
  - e) The Philadelphia Housing Authority on Rate PHA.

The surcharge shall be a cents per Ccf charge calculated to the nearest one-thousandth of a cent (0.00001) which shall be added to the distribution rates for billing purposes for all customers in each of the above rate classes. The rate shall be calculated separately for each rate class as follows:

- a) \$0.00768 per Ccf for Residential and Public Housing Customers on Rate GS;
- b) \$0.00341 per Ccf for Commercial Customers on Rate GS;
- c) \$0.00001 per Ccf for Industrial Customers on Rate GS and Rate IT-XLT;
- d) \$0.00000 per Ccf for Municipal Customers on Rate MS; and
- e) \$0.00341 per Ccf for The Philadelphia Housing Authority on Rate PHA.

The Enhanced Low Income Retrofit Program costs shall be recovered through the Universal Services Surcharge beginning on September 1, 2010.

**(D) – Decrease; (I) – Increase; (NC) – No Change**

**GENERAL SERVICE - RATE GS**

Rate: Applicable to all Retail Sales Service or Transportation Service rendered pursuant to this Rate Schedule on or after April 28, 2025. **(C)**

AVAILABILITY

Available for any purpose where the Company's distribution mains adjacent to the proposed Gas Service location are, or can economically be made, suitable to supply the quantities of Gas or Transportation Services required. Not available for back-up service, refer to Rate BUS.

RATES

CUSTOMER CHARGE (per Meter (except parallel meters)):

\$ 19.50	per month for Residential and Public Housing Authority Customers.	<b>(I)</b>
\$ 34.00	per month for Commercial Customers	<b>(I)</b>
\$ 100.00	per month for Industrial Customers	<b>(I)</b>

Surcharge: Distribution System Improvement Charge.

Plus,

GCR (not applicable to GS Customers who transport gas through a qualified NGS):

\$0.51308	per Ccf for Residential and Public Housing
\$0.51308	per Ccf for Commercial Customers
\$0.51308	per Ccf for Industrial Customers

Plus,

DISTRIBUTION CHARGE (consisting of items (A) and (B), below):

(A) Delivery Charge:

\$0.91761	per Ccf for Residential	<b>(I)</b>
\$1.04356	per Ccf for Public Housing	<b>(I)</b>
\$0.70055	per Ccf for Commercial Customers	<b>(I)</b>
\$0.75000	per Ccf for Industrial Customers	<b>(I)</b>

(B) Surcharges:

Universal Service and Energy Conservation Surcharge; Efficiency Cost Recovery Surcharge; Other Post Employment Benefit Surcharge; Distribution System Improvement Charge; and Revenue Normalization Adjustment Surcharge. **(C)**

Note: The Commodity Charge includes the Sales Service Charge, the Merchant Function Charge and the Gas Procurement Charge.

**(I) – Increase; (C) – Change (D) - Decrease**

**MUNICIPAL SERVICE - RATE MS**

Rate: Applicable to all Retail Sales Service or Transportation Service rendered pursuant to this Rate Schedule on or after April 28, 2025.

**(C)**

AVAILABILITY

Available to properties owned or occupied by the City of Philadelphia or the Board of Education, or any of their respective agencies or instrumentalities, for any type of Gas Service, unless purchased for resale to others, and where the Company's distribution mains adjacent to the proposed Gas Service locations are, or can economically be made, suitable to supply the quantities of Gas required; provided, however, that the rate shall not be available to Commercial Tenants of any such property.

RATES

CUSTOMER CHARGE (per Meter (except parallel meters):

\$ 34.00 per month

**(I)**

Surcharge: Distribution System Improvement Charge.

Plus,

GCR (not applicable to MS Customers who transport Gas through a qualified NGS):

\$0.51308 per Ccf

Plus,

DISTRIBUTION CHARGE (consisting of items (A) and (B), below):

(A) Delivery Charge:

\$0.85175 per Ccf

**(I)**

(B) Surcharges:

Universal Service and Energy Conservation Surcharge; the Efficiency Cost Recovery Surcharge; Other Post Employment Benefit Surcharge; Distribution System Improvement Charge; and Revenue Normalization Adjustment Surcharge.

**(C)**  
|  
|

Note: The Commodity Charge includes the Sales Service Charge, the Merchant Function Charge and the Gas Procurement Charge.

**(I) – Increase, (C) – Change, (D) - Decrease**

**PHILADELPHIA HOUSING AUTHORITY SERVICE - RATE PHA**

Rate: Applicable to all Retail Sales Service or Transportation Services rendered pursuant to this Rate Schedule on or after April 28, 2025.

**(C)**

AVAILABILITY

Available for all Gas usage in multiple dwelling Residential buildings containing 10 or more dwelling units, owned and operated by the Philadelphia Housing Authority, where cooking shall be performed exclusively with Gas and where Gas Service shall be supplied through one or more single point metering arrangements at locations where the Company's distribution mains adjacent to the proposed Gas Service locations are, or can economically be made, suitable to supply the quantities of Gas required.

This rate is also available for all Gas usage in single and multiple dwelling Residential buildings, containing less than 10 dwelling units, provided, and only so long as, Gas is used exclusively for cooking, water heating and space heating for all such Residential buildings owned and operated by the Philadelphia Housing Authority, except (a) buildings operated by the Philadelphia Housing Authority, prior to the original effective date of this rate (January 1, 1969), and (b) buildings for which, in the judgment of the Company, such Gas Service cannot be provided economically.

RATES

CUSTOMER CHARGE (per Meter (except parallel meters);

\$34.00 per month

**(I)**

Surcharge: Distribution System Improvement Charge.

Plus,

GCR (not applicable to PHA customers who transport gas through a qualified NGS):

\$0.51308 per Ccf

Plus

DISTRIBUTION CHARGE (consisting of item (A) and (B), below):

(A) Delivery Charge:

\$0.87450 per Ccf

**(I)**

(B) Surcharges:

Universal Service and Energy Conservation Surcharge; the Efficiency Cost Recovery Surcharge; Other Post Employment Benefit Surcharge; Distribution System Improvement Charge; ; and Revenue Normalization Adjustment Surcharge.

**(C)**  
|  
|

Note: The Commodity Charge includes the Sales Service Charge, the Merchant Function Charge and the Gas Procurement Charge.

**(I) – Increase, (C) – Change, (D) - Decrease**

CHARGES

1. MONTHLY BILL

The monthly bill shall consist of the sum of the monthly Customer charge and the Distribution Charge as detailed below:

<u>CUSTOMER CHARGE</u>	<u>(\$ Per Meter Per Month</u> <u>(Parallel Meters are considered one meter)</u>	
IT-A:	152.16	
IT-B:	273.89	
IT-C:	273.89	
IT-D:	273.89	
IT-E:	426.06	
<u>DISTRIBUTION CHARGE</u>	<u>Rate (\$) Per Mcf / Dth Delivered*</u>	
IT-A:	4.3408 / 4.1900	(I)
IT-B:	2.1010 / 2.0280	(I)
IT-C:	1.6395 / 1.5825	(I)
IT-D:	1.4547 / 1.4042	(I)
IT-E:	1.4086 / 1.3597	(I)

\*The distribution charge may be the product of a negotiated rate and may include long-term contracts of up to five years as mutually agreed to by the Company and the Customer. This negotiated rate may be higher than, but not lower than, the distribution charges set forth above and may include additional minimum take requirements.

**(I) – Increase**



**Optional Sales Service Agreement for Prepaid Gas Arrangement**

(C)

- A. Customer receiving Rate IT has the option to request an additional sales service agreement with the Company for prepaid gas at a rates, terms and conditions to be negotiated between the Customer and the Company. The Optional Sales Service Agreement will be in the form provided by the Company to ensure that it satisfies all legal requirement applicable to prepaid gas arrangements (“Prepaid Gas Arrangement”). PGW retains sole discretion as to whether it will permit the Optional Sales Service Agreement when prepaid gas is available to PGW to purchase. PGW also retains sole discretion regarding the terms and conditions that must be included to permit the arrangement.
  
- B. In addition to any other terms and conditions required by Company at its sole discretion, the Optional Sales Service Agreement shall contain the following:
  - (i) A requirement that the facilities of the customer utilizing prepaid gas supply must be located in the Company’s service area;
  - (ii) Minimum and maximum monthly purchases, with the customer being responsible for the monthly minimum amounts whether or not those amounts were used by the customer;
  - (iii) Surety requirements or guarantees acceptable to the Company at its sole discretion; and,
  - (iv) Provisions that eliminate any obligation on the Company to deliver such gas to customer if: (a) such is not delivered to PGW’s city gate, or (b) PGW exercises its right to interrupt the customer pursuant to this Tariff.

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**DEVELOPMENTAL NATURAL GAS VEHICLE SERVICE - RATE NGVS  
FIRM SERVICE**

Rate: Applicable to all Retail Sales Service rendered pursuant to this Rate Schedule on or after April 28, 2025. (C)

**AVAILABILITY**

This service is available to provide uncompressed Natural Gas to any Customer for the exclusive purpose of compressing such Gas for use as fuel for motor vehicles. The compression of the Natural Gas to the pressure required for use as a motor vehicle fuel will be conducted by the Customer, at the Customer's designated premises. Service shall only be available where the Company's distribution system is, or can economically be made available to supply the service. Each Customer will be required to execute a service agreement which will specify terms and conditions of service.

**CHARACTER OF SERVICE**

Service under this rate schedule is firm and shall only be interrupted in the case of operating emergencies experienced by the Company.

**MONTHLY RATE**

**CUSTOMER CHARGE:**

\$46.50 per month (I)

Surcharge: Distribution System Improvement Charge.

Plus,

GCR (not applicable to NGVS customers who transport gas through a qualified NGS):

\$0.51308 per Ccf

Plus

**DISTRIBUTION CHARGE (consisting of item (A) and (B), below):**

(A) Delivery Charge:

\$0.45975 per Ccf (I)

(B) Surcharges:

Universal Service and Energy Conversation Surcharge; Other Post Employment Benefit Surcharge; and Distribution System Improvement Charge. (C)

Note: The Commodity Charge includes the Sales Service Charge, the Merchant Function Charge and the Gas Procurement Charge.

**(I) – Increase, (C) – Change, (D) - Decrease**

**SPECIAL PROVISION – Emergency/Unauthorized Use Gas Rider**

Emergency Gas.

Emergency Gas as set forth in this rider is defined as a service to be offered by the Company to interruptible Retail Sales Service Customers when Gas would otherwise not be available under their respective Rate Schedules and provided certain conditions apply and terms are met. A Customer may request emergency Gas pursuant to this rider when he experiences interference with the use of his alternate energy and when the quantities of Gas available to the Company and the distribution facilities are adequate to provide this service without jeopardizing the physical or economic operation of the Company. PGW reserves the right to limit or curtail emergency Gas at any time. The cost of providing this emergency service is \$10.00 for each thousand cubic feet of Gas used above the current prevailing GCR. The minimum charge for this service is \$100.00 per occurrence.

(C)

In order to be eligible for emergency Gas, a Customer must register annually according to Company policy.

Unauthorized Use.

If a Customer uses Gas after he has been notified that Gas otherwise provided pursuant to his or her respective Rate Schedule or as emergency Gas is not available, or uses Gas in excess of his authorized limitation when established and duly notified, all such unauthorized usage shall be billed at the rate of \$25.00 for each thousand cubic feet of Gas used above the current prevailing GCR or the average of the highest two days of the monthly index, whichever is higher. Company may, in addition, at its discretion, shut off Customer to ensure compliance.

PHILADELPHIA GAS WORKS

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The dates and types of changes in the DSIC rate will occur as follows:

Effective Date of Change	Rate Change That Will Occur
January 1	Annual levelized C-factor rate adjustments
April 1	Adjustment prior year over/under collection
July 1	Optional rate adjustment
October 1	Adjustment for +/- 2% over / under collection

**B. Recoverable Costs:** The recoverable costs shall be amounts reasonably expended or incurred to purchase and install eligible property and associated financing costs, if any, including debt service, debt service coverage, and issuance costs.

**C. Application of DSIC:** The DSIC will be expressed as a percentage carried to two decimal places and will be applied to the total amount billed to each customer for distribution service under the Utility’s otherwise applicable rates and charges. To calculate the DSIC, the annual recoverable costs to be placed into service during the calendar year in which the DSIC is being charged will be divided by the Utility’s projected revenues for distribution services (including all applicable clauses and riders) for the annual period during which the charge will be collected.

**D. Formula:** The formula for calculation of the DSIC is as follows:

$$DSIC = \frac{DSI + e}{PAR}$$

Where:

- DSI = The projected annual level of recoverable costs (defined in Section B. directly above)
- e = the amount calculated under the annual reconciliation feature or Commission audit, as described below.
- PAR = Projected annual revenues for distribution service (including all applicable clauses and riders) including any revenue from existing customers plus netted revenue from any customers which will be gained or lost by the beginning of the applicable service period.

**3. Quarterly Updates:** Supporting data for each quarterly update will be filed with the Commission and served upon the Commission’s Bureau of Investigation and Enforcement, the Office of Consumer Advocate, the Office of Small Business Advocate and the Bureau of Audits at least ten (10) days prior to the effective date of the update.

**4. Customer Safeguards**

**A. Cap:** The DSIC is capped at 7.50% of the amount billed to customers for distribution service (including all applicable clauses and riders)..

(C)

(C) - Change



**B. Audit/Reconciliation:** The DSIC is subject to audit at intervals determined by the Commission. Any cost determined by the Commission not to comply with any provision of 66 Pa C.S. §§ 1350, *et seq.*, shall be credited to customer accounts. The DSIC is subject to annual reconciliation based on a reconciliation period consisting of the twelve months ending December 31 of each year. The annual reconciliation shall be filed on January 31 of the next year. The revenue received under the DSIC for the reconciliation period will be compared to the Company's eligible costs for that period. The difference between revenue and costs will be recouped or refunded, as appropriate, in accordance with Section 1307(e), over a one-year period commencing on April 1 of each year. If DSIC revenues exceed DSIC-eligible costs for the reconciliation period, such over collections will be refunded with interest. Interest on over-collections and credits will be calculated at the residential mortgage lending specified by the Secretary of Banking in accordance with the Loan Interest and Protection Law (41 P.S. §§ 101, *et seq.*) and will be refunded in the same manner as an over-collection. Under collections shall be considered a separate adjustment and not subject to the limitation in Section (4)(A) above. (C)

**C. New Base Rates:** The DSIC will be reset at zero upon application of new base rates to customer billings that provide for prospective recovery of the remaining costs (if any) that had previously been recovered under the DSIC. Thereafter, only the costs of new eligible plant additions that have not previously been reflected in the Utility's rates will be reflected in the quarterly updates of the DSIC.

**D. Customer Notice:** Customers shall be notified of changes in the DSIC by including appropriate information on the first bill they receive following any change. An explanatory bill insert shall also be included with the first billing.

**E. All customer classes:** The DSIC shall be applied equally to all customer classes, except that the Company may reduce or eliminate the DSIC to any customer with competitive alternatives and customers having negotiated contracts with the Company, if it is reasonably necessary to do so.

(C) – Change

**TECHNOLOGY AND ECONOMIC DEVELOPMENT RIDER  
COMBINED HEAT AND POWER INCENTIVES**

(C)

AVAILABILITY

**TECHNOLOGY AND ECONOMIC DEVELOPMENT RIDER:** The Technology and Economic Development (TED) Rider is a negotiated rider available that will be utilized to support the expansion of new technologies such as, but not limited to, combined heat and power (CHP), natural gas vehicles, and fuel cells, to develop brownfields, and support economic development in Pennsylvania by facilitating business retention and attraction, as well as other gas distribution system expansion activities. The TED Rider is available to those Customers served by the Company that the Company determines, in its sole discretion, have prospective additional gas usage applicable to service for firm service non-residential customers on Tariff Rate Schedules for General Service (Rate GS), Municipal Service (Rate MS), Philadelphia Housing Authority Service (Rate PHA) and Developmental Natural Gas Vehicle Service (Rate NGVS) at the time of execution or renewal of a service agreement. The TED Rider is established for the purpose of adjusting the customer's overall distribution charge to address project-specific or competitive issues to gain access to and expand use of natural gas within the Commonwealth of Pennsylvania. The negotiated TED Rider may be either a surcharge or credit depending on project-specific customer and Company economic requirements, such that the overall economics must meet the requirements of Section 10 of this Tariff. As part of its Gas Cost Rate (GCR) filings, PGW will provide data on sales and costs for TED customers.

GENERAL TERMS

The Customer must execute a TED Rider service agreement.

RATES

Customer Charge: Negotiable  
Plus  
Delivery Charge (per ccf): Negotiable

AVAILABILITY

**COMBINED HEAT AND POWER INCENTIVES:** For projects involving micro-CHP units no larger than 50 kW, the following Micro-CHP Incentives may be available for qualifying projects: (1) \$1,000 per kW installed up to 20 kW; and (2) \$750 per kW installed greater than 20 kW and less than or equal to 50 kW. For CHP units larger than 50 kW, the following CHP Incentives may be available for qualifying projects: \$750 per kW installed up to 50% of the project cost with a \$250,000 maximum per project. The Incentive is available to those Customers served by the Company that the Company determines, in its sole discretion, have prospective additional gas usage applicable to service for Rate GS Commercial/Industrial customers, Rate MS customers and Rate PHA customers on a pilot basis for a three-year period beginning on the effective date of this tariff supplement. The economic test that will be utilized by the Company to determine eligibility for participation will include the costs of the incentives.

(C)

(C)

(C) - Change

**MONTHLY RATE**

The Monthly Charge shall be the sum of the following:

1. **CUSTOMER CHARGE:** \$1,100.00 per month per meter.
2. **LOCAL GAS TRANSPORTATION SERVICE:**

"Local Gas Transportation Service" shall mean the local Gas transportation service provided by the Company, pursuant to this Rate IT-XLT, from Gate Station 060 to the Facility metering station.

PGW will provide interruptible Local Gas Transportation Service to the Customer's Facility for up to 50,000 Dekatherms per Day. Customer, at PGW discretion, may balance its daily purchases, nominations, and deliveries in the interstate pipeline(s) and PGW shall have no responsibility for banking or balancing Customer's transportation deliveries.

The Local Gas Transportation Charge shall be an amount equal to \$0.1192/Mcf billed at \$0.11504 per Dth, as measured by PGW at the Customer's metering station(s). (I)

The Customer shall reimburse Company for any expense actually incurred for Customer's benefit from third party sources in the provision of this Service, such as directly assignable taxes, pipeline balancing penalties, governmentally imposed charges, and contingent liability for external transportation charges and fuel requirements. Additionally, for existing Customers, any unavoidable Gas supply costs (e.g., pipeline demand charges) incurred on the Customer's behalf. Such charges shall be in addition to charges specified elsewhere in this Rate IT-XLT. Minimum annual quantity is 9 Bcf.

3. **ALTERNATIVE RECEIPT SERVICE**

Rate IT-XLT Customers shall pay PGW a rate per Dth equal to the greater of (1) average revenue per Dth received by the Company from all releases, excluding choice capacity releases and asset management agreement associated release, of recallable capacity on Texas Eastern Transmission ("TETCO") during PGW's prior fiscal year, which shall be annually updated by PGW with the Commission by September 15 of each year following; or (2) the max TETCO tariff rate. The Minimum ARS Quantity provided by the Company shall be 5,000 Dth per day. The minimum monthly charge shall be the above rate times 5,000 Dth times the number of days in the month regardless of whether the Customer uses less. The Maximum ARS Quantity provided by the Company shall be 21,000 Dth/day.

**(I) Increase; (C) - Change**

**Optional Sales Service Agreement for Prepaid Gas Arrangement**

(C)

- A. Customer receiving Rate IT-XLT has the option to request an additional sales service agreement with the Company for prepaid gas at a rates, terms and conditions to be negotiated between the Customer and the Company. The Optional Sales Service Agreement will be in the form provided by the Company to ensure that it satisfies all legal requirement applicable to prepaid gas arrangements (“Prepaid Gas Arrangement”). PGW retains sole discretion as to whether it will permit the Optional Sales Service Agreement when prepaid gas is available to PGW to purchase. PGW also retains sole discretion regarding the terms and conditions that must be included to permit the arrangement.
- B. In addition to any other terms and conditions required by Company at its sole discretion, the Optional Sales Service Agreement shall contain the following:
- (i) A requirement that the facilities of the customer utilizing prepaid gas supply must be located in the Company’s service area;
  - (ii) Minimum and maximum monthly purchases, with the customer being responsible for the monthly minimum amounts whether or not those amounts were used by the customer;
  - (iii) Surety requirements or guarantees acceptable to the Company at its sole discretion; and,
  - (iv) Provisions that eliminate any obligation on the Company to deliver such gas to customer if: (a) such is not delivered to PGW’s city gate, or (b) PGW exercises its right to interrupt the customer pursuant to this Tariff.

## REVENUE NORMALIZATION ADJUSTMENT (RNA)

(C)

### 1. General Description

**A. Purpose:** To recover the Commission-approved base rate distribution revenues needed to provide the Company with the resources needed to provide safe and reliable gas distribution service. The RNA will reconcile the revenue from each rate class compared to the amounts approved in the most recent base rate cases (see section 2.D).

If billed revenue for the period at issue is greater than the Commission-approved revenues applicable to that period, the Company will credit the over recovery back to ratepayers. Likewise, if the billed revenue for the period is lower than the Commission approved revenue for the period, the Company will recover the difference from ratepayers.

**B. Eligible Rate Classes:** The following rate classes will be eligible for the RNA: Residential, Commercial, Industrial, Municipal, and PHA customers.

### 2. Computation of the RNA

#### A. Definitions

- i. **RNA** is the Revenue Normalization Adjustment for the applicable period. (\$/MCF)
- ii. **ADR** is the Approved Distribution Revenue for the applicable period.
- iii. **BDR** is the Billed Distribution Revenue for the applicable period. BDR includes WNA adjustments in the applicable months.
- iv. **pRNA** is the prior period's RNA over or under recovery.
- v. **FT** is the Forecasted Throughput for the 12-month period that the RNA will be applied divided by 12.
- vi. **AT** is the Actual Throughput (MCF) in the period the RNA is being recovered.

**B. Calculation:** The Revenue Normalization Adjustment (RNA) shall be calculated by rate class, determined by the difference between the Approved Distribution Revenue (ADR) and the Billed Distribution Revenue (BDR). At the end of the fiscal 12-month period, an annual reconciliation will occur that will compute the RNA rate.

The RNA rate will calculate the annual over or under between ADR and BDR. That amount, plus or minus any Prior Period RNA Recovery (pRNA), will be the amount needed to be charged or credited to the customer. This amount will subsequently be divided by the Forecasted Throughput (FT) for the following period. This will determine the RNA rate in dollars per MCF.

$$\text{RNA} = \frac{\text{BDR} - \text{ADR} + \text{pRNA}}{\text{FT}}$$

pRNA will be calculated by multiplying the RNA rate by the difference between Forecasted Throughput (FT) and Actual Throughput (AT) for the recovery period. This amount will subsequently be rolled into the current period's RNA. The formula is below:

$$\text{pRNA} = \text{RNA} \times (\text{FT} - \text{AT})$$

- C. Timing:** The RNA is computed at the conclusion of the Company's fiscal year spanning a period from September through August. The updated RNA will be effective November 1<sup>st</sup> of each year.
- D. Approved Revenue Levels:** Shall be computed as the Fully Projected Future Test Year Base Revenue consistent with the compliance plan approved at Docket No. R-2025-3053112. Breakout by class is below.

Rate Class	Approved Distribution Revenue
Residential	\$386,444,428
Commercial	\$81,829,203
Industrial	\$6,538,836
Municipal	\$8,258,983
PHA	\$3,520,173

- E. Currently Effective RNA:** The currently effective RNA rates are below:

Rate Class	RNA (\$/MCF)
Residential	
Commercial	
Industrial	
Municipal	
PHA	

Initial RNA rates will be effective the November 1<sup>st</sup> following final approval in this rate case.

- 3. Annual Updates:** Supporting data for each annual update will be filed with the Commission and served upon the Commission's Bureau of Investigation and Enforcement, the Office of Consumer Advocate, the Office of Small Business Advocate and the Bureau of Audits at least ten (10) days prior to the effective date of the update.
- 4. New Base Rates:** The Approved Distribution Revenue will be reset to the newly approved levels with the final Order of future base rate cases. The existing over or under recovery of the RNA will continue to be recovered and rolled into the new RNA calculations.

# **Exhibit FT-1**

Current Gas Service Tariff

**PHILADELPHIA GAS WORKS**  
**GAS SERVICE TARIFF**



Issued by: Seth Shapiro  
President and CEO

PHILADELPHIA GAS WORKS  
800 West Montgomery Avenue  
Philadelphia, PA 19122

Rates effective March 1, 2025 in accordance with the Commission's Order entered July 11, 2024 at R-2024-3045966 approving PGW's 2024-2025 Gas Cost Rate.



**List of Changes Made by this Tariff Supplement**

**TABLE OF CONTENTS (PAGE Nos. 6-7)**

Updated to reflect revised page numbers for each of the changes listed below on this page.

**GAS COST RATE (GCR) – SECTION 1307f, II DEFINITIONS (PAGE No. 67)**

In the definition of “GAC,” the GAC value effective March 1, 2025 increases to \$(0.03372).

**GAS COST RATE (GCR) – SECTION 1307f, II DEFINITIONS (PAGE No. 67A)**

In the definition of “IRC,” the IRC value effective March 1, 2025 is \$0.00122 per Ccf. In the definition of “SSC,” the SSC value effective March 1, 2025 increases to \$0.54802.

**GAS COST RATE (GCR) – SECTION 1307f, III COMPUTATION OF GCR (PAGE No. 68)**

The Gas Cost Rate (GCR) effective March 1, 2025 increases to \$0.51308.

**PRICE TO COMPARE (PAGE No. 78)**

The Prices to Compare effective March 1, 2025 are: (a) \$0.54534 per Ccf for Residential (GS-RES); (b) \$0.54534 per Ccf for Public Housing Customers (GS-PH); (c) \$0.52543 Ccf for Commercial (GS-COM); (d) \$0.52015 per Ccf for Industrial (GS-IND); (e) \$0.51830 per Ccf for Municipal Service (MS); (f) \$0.51830 per Ccf for Philadelphia Housing Authority (PHA); and (g) \$0.51830 per Ccf for Natural Gas Vehicle Service (NGVS).

**EFFICIENCY COST RECOVERY SURCHARGE (PAGE No. 80)**

The Efficiency Cost Recovery Surcharge rates effective March 1, 2025 are: (a) \$0.00768 per Ccf for Residential and Public Housing Customers on Rate GS; (b) \$0.00341 per Ccf for Commercial Customers on Rate GS and the Philadelphia Housing Authority on Rate PHA; and, (c) \$0.00000 per Ccf for Industrial Customers on Rate GS and Rate IT-XLT.

**UNIVERSAL SERVICE AND ENERGY CONSERVATION SURCHARGE (PAGE No. 81)**

The Universal Service and Energy Conservation Surcharge effective March 1, 2025 is \$0.21620 per Ccf.

**GENERAL SERVICE – RATE GS (PAGE No. 83); MUNICIPAL SERVICE – RATE MS (PAGE No. 87); PHILADELPHIA HOUSING AUTHORITY SERVICE – RATE PHA (PAGE No. 90); and, DEVELOPMENTAL NATURAL GAS VEHICLE SVC - RATE NGVS FIRM SERVICE (Page No. 135)**

The Gas Cost Rate (GCR) effective March 1, 2025 increases to \$0.51308.

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Please see Supplement No. 21 for the Supplement No. 21 check sheet.

Description of Territory Served

The company's service territory is defined as the City of Philadelphia in the *AGREEMENT BETWEEN THE CITY OF PHILADELPHIA AND THE PHILADELPHIA FACILITIES MANAGEMENT CORPORATION FOR THE MANAGEMENT AND OPERATION OF THE PHILADELPHIA GAS WORKS.*

**TABLE OF CONTENTS**

	<u>Page Number</u>
List of Changes Made By This Tariff_____	165 <sup>th</sup> Revised 2
Description of Territory Served_____	5
Table of Contents_____	164 <sup>th</sup> Revised 6
Definitions_____	Second Revised 10
 <b><u>RULES and REGULATIONS:</u></b>	
1. The Gas Service Tariff_____	First Revised 15
2. Application and Contract for Gas Service_____	Sixth Revised 17
3. Credit and Deposit_____	4 <sup>th</sup> Revised 21
4. Billing and Payment_____	Second Revised 26
5. Termination and/or Discontinuance of Gas Service_____	Second Revised 30
6. Termination of Service for Safety Reasons and Curtailment of Service/ Service Continuity_____	First Revised 38
7. Inquiry, Review, Dispute, and Appeals Process_____	First Revised 41
8. Customer’s Responsibility for Company’s Property_____	First Revised 44
9. Conditions of Service, Point of Delivery, and Application of Rates_____	4 <sup>th</sup> Revised 47
10. Extensions and Rights-Of-Way_____	First Revised 50
11. Meters: Measurements, Readings, Errors, and Tests_____	First Revised 53
12. Service Charges and Miscellaneous Fees and Provisions_____	Second Revised 57
13. Universal Service And Energy Conservation Programs_____	Second Revised 59
14. Gas Choice Enrollment and Switching_____	First Revised 63
15. Supplier of Last Resort_____	First Revised 63

PHILADELPHIA GAS WORKS

	<u>Page Number</u>
<b>RATES (Cover Page)</b> _____	<b>66</b>
<b>Gas Cost Rate</b> _____	<b>105th Revised 67</b>
<b>Revenue Reconciliation Adjustment (RAA) Rider</b> _____	<b>70</b>
<b>Senior Citizen Discount</b> _____	<b>First Revised 72</b>
<b>Exit Fee Rider</b> _____	<b>77</b>
<b>Merchant Function &amp; Gas Procurement Charges; Price to Compare</b> _____	<b>64<sup>th</sup> Revised 78</b>
<b>Efficiency Cost Recovery Mechanism</b> _____	<b>72<sup>nd</sup> Revised 80</b>
<b>Universal Services Surcharge</b> _____	<b>109<sup>th</sup> Revised 81</b>
<b>Other Post Employment Benefit Surcharge</b> _____	<b>23<sup>rd</sup> Revised 82</b>
<b>General Service – Rate GS</b> _____	<b>122<sup>nd</sup> Revised 83</b>
<b>Municipal Service – Rate MS</b> _____	<b>122<sup>nd</sup> Revised 87</b>
<b>Philadelphia Housing Authority Service – Rate PHA</b> _____	<b>122<sup>nd</sup> Revised 90</b>
<b>Daily Balancing Service – Rate DB</b> _____	<b>101</b>
<b>Interruptible Transportation Service – Rate IT</b> _____	<b>111</b>
<b>Gas Transportation Service – Rate GTS – Firm Service</b> _____	<b>First Revised 118</b>
<b>Gas Transportation Service – Rate GTS – Interruptible</b> _____	<b>124</b>
<b>Cogeneration Service – Rate CG</b> _____	<b>Fifth Revised 131</b>
<b>Developmental Natural Gas Vehicle Service – Rate NGVS Firm Service</b> _____	<b>90<sup>th</sup> Revised 135</b>
<b>Developmental Natural Gas Vehicle Service – Rate NGVS Interruptible Service</b> _____	<b>139</b>
<b>SPECIAL PROVISION – Air Conditioning Rider</b> _____	<b>1<sup>st</sup> Revised 143</b>
<b>SPECIAL PROVISION – Compressed Natural Gas Rider</b> _____	<b>145</b>
<b>SPECIAL PROVISION – Emergency/Unauthorized Use Gas Rider</b> _____	<b>147</b>
<b>Weather Normalization Adjustment Clause</b> _____	<b>Ninth Revised 149</b>
<b>Distribution System Improvement Charge</b> _____	<b>Twenty Fourth Revised 151</b>
<b>Backup Service – Rate BUS</b> _____	<b>First Revised 154</b>
<b>Technology and Economic Development Rider and Micro-Combined Heat and Power Incentives</b> _____	<b>First Revised 155</b>
<b>Negotiated Liquefied Natural Gas Service – Rate LNG-N</b> _____	<b>First Revised 156</b>
<b>Interruptible Service Extra Large Transportation – Rate IT-XLT</b> _____	<b>157</b>

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## DEFINITIONS

**ACTUAL METER READ (or READING)** - The reading from a gas meter, taken either by a Physical Meter Read, telemetering or an Automatic Meter Reading (AMR) device.

**ALTERNATE FUEL CAPABILITY** – The ability to meet energy needs with an energy source other than Natural Gas.

**APPEAL** - The process under Applicable Law by which a Customer or the Company challenges a Bureau Of Consumer Services (BCS) resolution of or decision on an Informal Complaint.

**APPLICABLE LAW** - The provisions of this Tariff, the rules and regulations promulgated by the PUC and published at Title 52 Pennsylvania Code, the Public Utility Code and all legally binding decisions of the Public Utility Commission interpreting those rules, regulations and law, and all other applicable current and future laws, ordinances, executive orders and legally binding interpretations, all of them as amended from time to time.

**APPLICANT** - Any person, corporation or other entity that (i) desires to receive from the Company Natural Gas or any other service provided for in this Tariff at a specific location, (ii) complies completely with all Company requirements for obtaining Natural Gas or any other service provided for in this Tariff, (iii) has filed and is awaiting Company approval of its application for service, and (iv) is not yet actually receiving from the Company any service provided for in this Tariff at such location. An applicant shall become a Customer for purposes of this Tariff only after the Applicant actually starts receiving the applicable service(s) from the Company under this Tariff on a permanent basis. An applicant for residential Gas Service shall also include any adult occupant whose name appears on the mortgage, deed or lease of the property for which residential utility service is requested.

**ARREARAGE**- Amounts owed by a Customer including but not limited to Competitive Natural Gas Supply receivables purchased from the NGS, specifically where charges have not been paid in full by the current bill due date, unless the said Arrearage is covered by a payment agreement or equal payment plan (budget payment plan) under which the Customer is current on his/her installment payments. (C)

**AUTOMATIC METER READING DEVICE (AMR)** - A device which by electrical impulse or otherwise transmits readings from a meter without a Physical Meter Read.

**BASIC UTILITY SERVICE (or Gas Service)** - The provision of Retail Sales Service or Transportation Service to a Customer and all associated fees and charges that are essential to the provision of Retail Sales Service or Transportation Service. Basic Utility Service is also referred to as Gas Service in this tariff.

**BRITISH THERMAL UNIT - (Btu)** – The amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

**BUREAU OF CONSUMER SERVICES (BCS)** - The division of the Public Utility Commission that oversees consumer issues.

**Ccf** - 100 cubic feet of gas.

COMPETITIVE NATURAL GAS SUPPLY - unbundled, firm natural gas provided by an NGS to Transportation Customers under the PGW's Gas Choice program. (C)

CONSOLIDATED NGDC BILLING - Billing provided by the Company that contains both PGW's charges for its services and the NGS's separate charges for gas supply services. (C)

CUSTOMER - A person, partnership, association, corporation or other entity that purchases Gas Service from the Company. The term shall include a Customer who transfers service to another address in the Company's service territory. A Customer may fall into one or more of the following categories:

(i) Residential Customer - Any Customer in a dwelling (including an apartment) whose primary use of Gas Service is for household purposes such as space heating, air conditioning, cooking, water heating. The term "Residential Customer" shall be used interchangeably with the term "Customer with Residential service". A Residential Customer shall include any adult occupant whose name appears on the mortgage, deed or lease of the property, and any adult occupant who is a tenant in a Residential Building pursuant to an oral agreement for which the residential utility service is provided.

(ii) Low-Income Customer - A Residential Customer whose gross household income is at or below 150% of the federal poverty level.

(iii) Non-Residential Customer - A party other than a Residential Customer or Landlord-Customer as set forth herein.

(iv) Commercial Customer - Any Customer who is a non-manufacturing establishment or agency primarily engaged in the sale of goods and services (including local, state, and federal agencies engaged in non-manufacturing activities) or a Landlord-Customer whose meter serves three (3) or more Residential units.

(v) Industrial Customer - Any Customer who is engaged in a process which creates or changes raw or unfinished materials into another form or product. Generation of electricity (other than by electric utilities) is included.

(vi) Heating Customer - Any Customer whose primary use of Gas is for space heating.

(vii) Non-Heating Customer - Any Customer whose primary use of Gas is for purposes other than for space heating.

(viii) Landlord-Customer - Any individual, organization or entity who is the party responsible for payment of Gas Service provided to one or more Tenants in a Residential building.

(ix) Small Business Customer - A person, sole proprietorship, partnership, corporation, association or other business whose annual gas consumption does not exceed 300 Mcf.

CUSTOMER READING - A meter reading made by the Customer that is given to the Company.

CUSTOMER RESPONSIBILITY PROGRAM (CRP) - PGW's Low-Income Customer assistance program which is designed to be consistent with the Public Utility Commission's rules, regulations, and policies regarding Customer Assistance Programs (CAP).

CUSTOMER RESPONSIBILITY PROGRAM PARTICIPANT (Participant) - PGW Residential Customer who enrolls in the Customer Responsibility Program.

CUSTOMER SERVICE CALL CHARGE – The charge as set forth in Section 12 of this Gas Service Tariff

**DISPUTE** - An unresolved grievance raised by a Customer with PGW about PGW's application of a provision covered by 52 Pa. Code Chapter 56, as amended or supplemented. If, at the conclusion of an initial contact, or when applicable, a follow-up response, the Customer, Applicant or occupant indicates satisfaction with the resulting resolution or explanation, the contact will not be considered a dispute.

**DISTRIBUTION CHARGE** – The charge for Transportation Service provided by PGW.

**ESTIMATED READING** - During the months when the Company does not read the Customer's meter, gas usage is projected based on previous gas usage, gas rates, and the weather.

**FOREIGN LOAD** - A situation where a Customer's meter registers usage for utility service provided to another person or other persons, or for use in a common area shared by others, for example, hallway lighting, furnace fan, or laundry room appliances.

**GAS CHOICE PROGRAM** - The firm gas transportation program offered by the Company pursuant to the Gas Choice Act, 66 Pa.C.S. §§ 2201 et seq.

**GAS SERVICE** - See definition for Basic Utility Service.

**GAS SERVICE TARIFF (TARIFF)** is PGW Gas Tariff - Pa P.U.C. No. 2 as supplemented or superseded from time to time in accordance with law.

**HOUSEHOLD INCOME** – The combined gross annual income of all adults in a residential household and those who benefit from the Gas Service.

**INFORMAL COMPLAINT** - A complaint filed with the PUC by a Customer that does not involve a formal proceeding before a PUC administrative law judge or mediation under the direction of a PUC administrative law judge.

**LATE PAYMENT CHARGE** - A charge placed on any bill not paid by the due date.

**LOW INCOME HOME ENERGY ASSISTANCE PROGRAM (LIHEAP)** - A federally funded program, administered by the Pennsylvania Department of Public Welfare that assists low income households with payment of their heating bills through energy assistance grants. For eligible households, the grants include crisis grants for household energy related emergencies, cash benefits for home heating fuel, and energy conservation and weatherization solutions.

**Mcf** - 1,000 cubic feet of gas; this is a measure of gas usage.

**NATURAL GAS (GAS)** - Includes natural gas, liquified natural gas, synthetic natural gas and any natural gas substitutes including, but not limited to, liquified propane, renewable natural gas, and naphtha. (C)

**NATURAL GAS CHOICE AND COMPETITION ACT** - (Gas Choice Act or the Act) - 66 Pa.C.S. §§ 2201 et seq.

**(C) - Change**

**NATURAL GAS DISTRIBUTION COMPANY (NGDC)** - A public utility that owns and/or operates natural gas distribution facilities. The term is used in this Tariff to refer to requirements which are placed on NGDCs and PGW, as a distributor of Natural Gas, pursuant to the Gas Choice Program.

**NATURAL GAS SUPPLIER (NGS or Supplier)** – A natural gas supplier, as defined in the Competition Act, that has been licensed by the Pennsylvania Public Utility Commission (“PUC”) to sell Natural Gas Supply Services on the Company’s system.

**NATURAL GAS SUPPLY SERVICES** – As defined in 66 Pa.C.S. § 2202.

**NON-BASIC UTILITY SERVICE** – Leased or purchased merchandise, appliances or special services including but not limited to merchandise and appliance installation fees, rental and repair costs, meter testing fees, special construction charges and other nonrecurring charges that are not essential to delivery or metering of Gas Service.

"PGW" or "Company" - refers to Philadelphia Gas Works.

**PGW CHARGES** - The portion of the consolidated PGW bill that itemizes the charges for the Basic Utility Service provided by PGW. The PGW Charges are separate and apart from the Natural Gas Supplier charges that may be itemized on a consolidated PGW bill. (C)

**PARTICIPANT** – See definition of Customer Responsibility Program Participant.

**PHYSICAL METER READ (or READING)** - A meter read where a PGW service person takes an actual Meter Read of a Customer’s meter. A reading taken by an Automatic Meter Reading device shall be deemed a Physical Meter Read.

**PUBLIC UTILITY CODE** - Title 66 of Pennsylvania Consolidated Statutes which establishes the powers and duties of the PUC.

**PUBLIC UTILITY COMMISSION (PUC or Commission)** - The agency that is empowered by the Public Utility Code to regulate public utilities and Natural Gas Suppliers.

**RESIDENT** - An owner, Tenant, or occupant who makes the dwelling unit his/her residence.

**RESIDENTIAL BUILDING** - A building containing one or more dwelling units occupied by one or more Tenants, but excluding nursing homes, hotels and motels.

**RETAIL SALES SERVICE** - Service to a Customer whereby the Customer receives firm or interruptible gas supply as well as transportation from the Company.

**SUPPLIER OF LAST RESORT (SOLR)** - The Company in its role of providing Natural Gas Supply Services to Customers that do not elect another Supplier or choose to be served by the Supplier of Last Resort, Customers that are refused service from another Natural Gas Supplier, or Customers whose Natural Gas Supplier fails to deliver the required gas supplies, in accordance with this Tariff. Each Customer may only have one Supplier of Last Resort.

**TENANT** - Any person or group of persons whose dwelling unit in a Residential Building is provided gas pursuant to an oral or written rental arrangement for such dwelling unit, but who is not the Customer of record of PGW for such Gas Service.

**TRANSPORTATION SERVICE** - Service to a Customer whereby the Customer receives transportation, but not firm or interruptible gas supply from the Company.

UNACCOUNTED FOR GAS (for the purpose of calculating retainage) – Unaccounted for gas is the difference in the amount of gas delivered to the Company’s distribution system and the amount billed to customers. The current Lost and Unaccounted for Gas and Retainage Rate percentage is 2.5%. The percentage changes annually on December 1<sup>st</sup> and is based upon actual data for the preceding 12 months ending August 31<sup>st</sup>.

**(I)**

**(D) – Decrease (I) - Increase**

## **Rules and Regulations for Residential and Non-Residential Gas Service**

### **1. The Gas Service Tariff**

1.1. FILING AND POSTING. A copy of this Tariff, under which Gas Service will be supplied, is on file with the Commission and is available for inspection at any CSC and at the main offices of PGW. The Tariff is also available on PGW's website at [www.pgworks.com](http://www.pgworks.com).

1.2. APPLICATION. The Tariff provisions apply to anyone receiving Gas Service from PGW. Such receipt of Gas Service shall deem the receiver a Customer of the Company as the term is used herein, whether service is based upon a written contract, an agreement, an accepted, signed application or otherwise.

1.3. APPLICABLE LAW, RULES AND REGULATIONS. All Applicable Law is incorporated herein by reference, made a part hereof and is a part of every contract for Gas Service made by the Company and govern all classes of service where applicable, unless specifically modified by a rate or rider provision.

1.4. BILINGUAL FORMS. All notices and forms referred to in this Tariff shall be in English and Spanish.

1.5. USE OF RIDERS. The terms governing the provision of service under a particular rate may be modified or amended only by the application of standard riders, filed as part of this tariff.

1.6. STATEMENT BY AGENTS. No representative has authority to modify a Tariff rule or provision, or to bind the Company by any contrary promise or representation.

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## **2. Application and Contract for Gas Service**

### 2.1. APPLICATION FOR GAS SERVICE.

2.1.A. How to Apply. Application for Gas Service shall be made by telephone, mail, on-line and/or by personal visit to one of PGW's Customer Service Centers, provided however that, an in-person application interview may be required for any Applicant at the discretion of the Company. Gas Service will be provided as soon as possible upon completion of an application. Applications will be considered completed only upon compliance with all PGW requirements. When the Applicant is a person who resided at the same premises for which application for service is requested, the Company may require payment of the portion of the outstanding balances which accrued during the time that the Applicant resided at those premises. The Company may establish that an Applicant previously resided at those premises through the use of any of the following:

- (i) mortgage, deed or lease information
- (ii) a commercially available consumer credit reporting service
- (iii) a driver's license or Pennsylvania Department of Transportation issued Identification Card

Nothing herein waives the right of the Customer or Applicant to file a complaint with the Commission disputing the PGW determination.

### 2.1.B. Documentation Required.

2.1.B.1. Application. An Applicant applying for Residential Gas Service shall identify the Applicant's name, and the names of all occupants who appear on the mortgage, deed or lease of the property and the names of all occupants who are tenants in the premises pursuant to an oral agreement, for which Gas Service is to be provided. All Applicants applying for Residential Gas Service shall provide identification, information, and documentation as required by the Company. All applications shall be subject to credit history investigation by PGW.

2.1.B.2. Identification of the Applications. Applicants for Gas Service shall provide for properties occupied pursuant to an oral or written agreement for such dwelling unit, the name and mailing address of the Landlord and the Landlord's agent, if any.

2.1.B.3. In-person Application Interviews. An in-person application interview may be required for any Applicant who (1) is a former Customer whose Gas Service was terminated for unauthorized usage and/or tampering with the meter or other utility equipment, or (2) is applying for service at a service address at which service was terminated for non-payment within the preceding 120 days or where the home telephone number supplied by the Applicant is the same as the home telephone number for a previously terminated account at the same address.

2.1.B.4. Designation by Landlord Applicants as Tenant-Occupied. Each Applicant for Gas Service who is a Landlord for the property for which Gas Service has been requested shall designate, in written form to PGW, whether the application is for Residential service to a Tenant-occupied property. If the property is Tenant-occupied, a written list of all occupants residing at the location, regardless of whether their name(s) appear on a lease, shall, at the request of PGW, be submitted by the Landlord-Customer to PGW on an annual basis.

2.2. STANDARD SERVICE CONTRACT. Any application for Gas Service, upon acceptance by the Company, constitutes a contract between the Company and the Customer.



2.3. OTHER CONTRACTS. Contracts stipulating the negotiated non-scheduled rates and/or terms of Gas Service may also be entered into between the Company and Customer when the Company, in its sole discretion, deems such offerings to be economically advantageous to the Company.

2.4. RIGHT TO REJECT.

2.4.A. Rejection to Protect Supply. PGW may limit the amount and character of Gas Service it shall supply or may reject requests for initial or increased service if this is necessary to protect the supply of service to any Customer.

2.4.B. Other Reasons for Rejecting Application. PGW may reject requests for Gas Service in accordance with any right set forth in Applicable Law including but not limited to the failure to comply with the application of this Tariff or if PGW can demonstrate that the Applicant has tampered with the meter or other utility equipment or used Gas Service without PGW authorization.

2.4.C. Notification of Rejection. Where PGW rejects an application for Gas Service, PGW shall inform the Applicant as required by Applicable Law.

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### 3. Credit and Deposit

#### 3.1. CREDIT AND DEPOSIT STANDARDS AND PROCEDURES.

3.1.A. Conditions Where Applicant or Customer Needs to Provide a Security Deposit. PGW will require a deposit for Gas Service, in accordance with Applicable Law.

3.1.B. Payment of the Security Deposit. If the full amount of the security deposit or the portion due and payable pursuant to Applicable Law is not received, PGW shall not be required to provide or, as relevant, continue to provide service. For Non-Residential and Landlord-Customers, payment of 100% of the security deposit will be required before service will be provided. A Residential, Non-Landlord Customer may pay a security deposit in installments if allowed under Applicable Law. A deposit may be required for continued Gas Service when the Customer has been delinquent in the payment of any two consecutive bills or three or more bills within the preceding 12 months.

3.2. Refund or Credit of Security Deposit when Timely Payment History has been established. Once a Customer establishes a timely payment history for 12 consecutive months, PGW shall deduct the outstanding balance from the deposit, if any and, at PGW's discretion, either return or credit any positive difference to the Customer.

3.3. Interest on Residential Customers' deposits, and any deposits required for temporary heat during construction, shall be calculated in accordance with 52 Pa. Code § 53.82 and any Applicable Law. (C)

3.4. Interest earned on deposits shall be returned or credited to the Customer at the time that the deposit is returned or credited in accordance with 52 Pa. Code § 53.82 and any Applicable Law. (C)

3.5 Credit Scoring Methodology. When a credit scoring methodology is used in connection with this Tariff, the Company will use a generally accepted scoring methodology, with standards that fall within the range of general industry practice, provided by one of the three major credit reporting agencies (i.e. Equifax, Experian, Trans Union). This scoring methodology will be one that has been designed to predict risk on energy accounts and which provides scoring based on actual payment history of the Customer or Applicant.

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## 4. Billing and Payment.

4.1. BILLING PRACTICES. PGW's billing practices shall be in accordance with Applicable Law. (C)

4.1.A. Billing Period. PGW shall render a bill once every month to Residential Customers. A period not less than 26 and not more than 35 days shall be taken as one month for billing purposes with the exception of the initial bill, final bill, or rebilling to correct a billing problem. If the initial meter reading period covers less than 26 days (with the exception of a final bill), the Gas usage may be included in the following month's billing.

4.1.B. Incomplete Month. In the event that the meter reading period for a Customer's final bill shall be less than one month, it shall be taken as one month, for billing purposes.

4.1.C. Inexact Billing Intervals. Whenever billings are prepared for meter readings that do not cover exact one or two-month intervals, charges for Gas shall be calculated on the basis of the actual rate(s) for the period(s) covered by the bill.

4.2. FINANCE CHARGE ON LATE PAYMENTS. PGW will assess a late penalty for any overdue bill, in an amount which does not exceed 1.5% interest per month on the full unpaid and overdue balance of the bill. These charges are to be calculated on the overdue portions of PGW Charges only. The interest rate, when annualized, may not exceed 18% simple interest per annum. Late Payment Charges will not be imposed on disputed estimated bills, unless the estimated bill was required because utility personnel were unable to access the affected premises to obtain an Actual Meter Reading.

4.3. DISHONORED PAYMENTS. If a Customer tenders payment which is subsequently dishonored under 13 Pa.C.S. § 3502 (relating to dishonor) or a Customer tenders payment with an access device, as defined in 18 Pa.C.S. § 4106(d) (relating to access device fraud) which is unauthorized, revoked or canceled, the Customer shall be deemed as not having made a payment on the account. A Customer who tenders a dishonored, unauthorized, revoked or canceled payment may be required to make future payments by money order, bank check, or cash for a period of one year. A charge will be assessed to the Customer's account by PGW for each dishonored payment.

4.4. PAYMENT AGREEMENTS-MAKE-UP BILLS. PGW will negotiate payment agreements with Residential Customers on the portion of the past due amount attributable to PGW Charges in accordance with Applicable Law.

4.5. BUDGET BILLINGS. PGW shall offer a budget-billing plan to Residential Customers averaging the cost of Gas Service over a 12-month period. The Company shall review accounts at least three times during the 12-month period and make adjustments, if necessary, to keep monthly payments in line with projected and actual charges. The Company shall review accounts at least once yearly to bill for actual usage, pursuant to a true up bill.

4.6. STATEMENT OF ACCOUNT. Residential and Small Business Customers are entitled to receive a statement of account of PGW charges annually upon request. Any additional requests, and requests by all other classes of Customers, shall be assessed a \$10 service charge, except in those instances where such requests are part of a bill Inquiry Dispute, or Appeal.

4.7. BILLING ERRORS WITH NATURAL GAS SUPPLIER. Any Disputes pertaining to NGS bills or NGS charges on a PGW bill related to firm Natural Gas Supply Service pursuant to PGW's Supplier Tariff must be corrected with the NGS, pursuant to the Company's Supplier Tariff and Applicable Law. (C)

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## 5. Termination and/or Discontinuance of Gas Service.

5.1. GAS SERVICE TERMINATION AND PROCEDURES. PGW may terminate Gas Service to any dwelling or account in accordance with Applicable Law. (C)

5.2. TERMINATION PROCEDURES AND NOTICES TO TENANTS. Subject to Section 2.1, where the mailing or billing address or apartment designation of a Customer with Residential Gas Service is different from the service address or apartment designation, PGW shall assume that such Customer is a Landlord-Customer and that the residents at the service address or apartment designation are Tenants unless PGW has actual knowledge to the contrary.

5.2.A Before terminating Gas Service to a Residential dwelling in which the Customer billed is a Landlord-Customer, but the Gas has been or is being delivered to and used by a Tenant, PGW shall make reasonable efforts to seek collection from the Landlord-Customer.

5.2.B Prior to termination of any Tenant-occupied property with Residential Gas Service, PGW will comply with the provisions of 66 Pa.C.S. § 1521 et seq., Discontinuance of Service to Leased Premises.

5.2.C PGW will provide a notice to the Tenant-occupants with Residential Gas Service informing them of the following:

5.2.D That there exists an outstanding bill for the property and that collection activity is being pursued against the Landlord-Customer.

5.2.E That the initial payment by Tenants on the delinquent balance shall not exceed one month's rental. Thereafter, all current bills shall be paid in full.

5.2.F The phone number to call for further information and/or an explanation of the procedure to be followed for continued service.

5.2.G The locations and business hours of PGW's Customer Service Centers.

5.2.H The telephone number of the Philadelphia Department of Licenses and Inspections.

5.3. TERMINATION OF GAS SERVICE – NON-RESIDENTIAL CUSTOMERS. PGW may terminate service to a Non-Residential Customer in accordance with Applicable Law.

5.4. UNAUTHORIZED CONNECTION OF APPLIANCES TO CUSTOMER'S METER. When PGW determines that high Gas bills may be caused by Foreign Load, PGW shall fully and promptly investigate such high bills, and shall, upon verifying such unauthorized connection(s), notify the building owner and place the utility account for that dwelling unit in the building owner's name consistent with Applicable Law.

*Some of the Material on this Page was originally located on pages 32, 33 & 35*

5.5. DISCONTINUANCE BY CUSTOMER - GENERALLY.

5.5.A. Notice of discontinuance. Except where the provisions of Discontinuance of Service to Leased Premises, 66 Pa.C.S. § 1521 et seq. apply, the Customer is required to give the Company at least seven days notice to discontinue the supply of Gas specifying the date on which it is desired that service be discontinued. In the absence of notice, the Customer shall be responsible for services rendered.

5.5.B. Final Meter Read. In the event that the Company's authorized agent is not able to gain access to the premises during the seven-day notice interval, the Customer's liability for Gas that may pass through the meter shall continue in force until such time as a final meter reading can be obtained by an authorized agent of the Company or the account is otherwise closed in accordance with Applicable Law.

5.6. TEMPORARY DISCONTINUANCE OF GAS SERVICE BY THE CUSTOMER'S REQUEST.

5.6.A. Temporary Discontinuance. Except where the provisions of 66 Pa.C.S. § 1521 et seq. apply, a Customer may have his/her Gas Service temporarily discontinued by giving PGW advance notice of at least 10 days.

5.6.B. Temporary Service Payments. For a period of discontinuance of less than 12 months, PGW will provide a Customer a temporary discontinuance of Gas Service upon request. PGW will require a payment of an amount equal to the Company's service charge for one hour, plus payment of Customer charges for each month the service has been discontinued, in order to restore disconnected service.

5.7. CUSTOMER REQUEST FOR TEMPORARY HEAT.

5.7.A. Construction or Remodeling. PGW will provide temporary heat, upon request for the completion of construction or remodeling as long as there is Gas Service present and all fuel lines have been installed and tested.

5.7.B. Charge. Customers will be assessed an amount equal to the Customer Service Call Charge for  $7/10$  hours.

5.8. RESIDENTIAL SERVICE RESTORATION.

5.8.A. Restoration. Gas Service will be restored to Residential Customers in accordance Applicable Law.

5.9. RECONNECTION CHARGE.

5.9.A. Tariff Violations. If a Customer's meter is removed or Gas Service is otherwise terminated because of any violation of Applicable Law, the reconnection of service will be subject to a reconnection charge, equal to the Customer Service Call Charge for  $7/10$  of an hour, plus any excavation charges. If during the reconnection, it becomes necessary to remove the service pipe or connection to discontinue service, the service will be reconnected only when advanced payment of the costs of discontinuance and reconnection are received by the Company.

5.9.B. Non-Residential Customers. Reconnection charges on a Non-Residential and Landlord Customer Gas account must be paid in full prior to PGW's restoration of the service. Prior to reconnection, non-Residential and Landlord Customers must pay all charges associated with non-payment terminations and restoration, including but not limited to charges for unpaid Gas Service. Such charges will be calculated and assessed on an individual basis.

5.9.C. Excavation. Where excavation is necessary to terminate or restore service, PGW will charge the Customer or Applicant based on the actual cost required to complete the work plus any additional applicable charges set forth in this Tariff.

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## **6. Termination of Service for Safety And Other Reasons and Curtailment of Service/Service Continuity.**

**6.1. TERMINATION WITHOUT NOTIFICATION FOR SAFETY-RELATED REASONS OR FOR UNAUTHORIZED USE.** Gas Service to any dwelling or account may be terminated by PGW without prior notice upon PGW's knowledge or reasonable belief that termination is necessary for safety-related reasons, to prevent or stop actions which are harmful to the gas delivery system, or for unauthorized use. Reasons for termination shall include those permitted by Applicable Law including the following:

**6.1.A. Hazardous Conditions.** A Gas leak on the Customer's premises, or other condition which the Company finds potentially hazardous, in which event Gas Service shall not be restored until the necessary repairs and alterations have been made.

**6.1.B. Unauthorized Use.** Unauthorized use of the Gas Service delivered on or about the affected dwelling or account, including but not limited to the use of Gas Service at a location where Gas Service had been previously turned off and had not been reconnected by the Company.

**6.1.B.1. Unauthorized Use - Exception.** A residential occupant who has taken or accepted utility service without knowledge or approval of the utility (without self-turn-on, a meter bypass or meter tampering) is not a person who has committed "unauthorized use" or "used Gas Service without PGW authorization" within the meaning of this Tariff.

**6.1.C. Fraud.** Fraud or material misrepresentation of the Customer's identity for the purpose of obtaining service.

**6.1.D. Unauthorized Equipment or Equipment Tampering.** Installation of equipment which is unauthorized or prohibited by the Company or tampering with meters or other utility equipment or violations of any tariff provisions on file with the Commission so as to endanger the safety of a person or the integrity of the energy delivery system to the utility.

**6.2. COMPANY'S RIGHT TO DISCONTINUE, INTERRUPT, CURTAIL OR DENY GAS SERVICE.** The Company, in the event of an emergency, a shortage or insufficient supply of Gas, or any other contingency which threatens its ability to continue or meet the total demand of its Customers or prospective Customers, or where necessary to effect repairs or maintenance, shall have the right to terminate, interrupt, curtail or deny Gas Service, or alternatively establish priorities in furnishing Gas.

**6.3. PRIORITY OF CURTAILMENT.** Priorities will be dictated by giving primary consideration to human necessity and the public welfare, beyond which it will be the Company's policy to give priority to firm Customers, classified as to type of service in accordance with the Company's policy to give priority to firm Customers, classified as to type of service in accordance with the Company's rate schedules and by the Customer classifications of Residential, Commercial, and Industrial. The Company will endeavor to apportion its available supply of Gas among the demands of firm Customers within a particular classification in the most reasonable and practicable manner possible, but reserves the right to terminate, interrupt, curtail, deny service, reestablish, continue, or discontinue service irrespective of such classifications if, in the Company's judgment, the interest of Gas users generally so requires.

**6.4. COMPANY'S LIABILITY.** The Company will use reasonable diligence to provide a continuous, regular and uninterrupted supply of Gas Service; however, in the event of refusal, curtailment, or discontinuance of service, the Company shall not incur any liability for loss, damages, or expense which any Customer may sustain by reason of such refusal, curtailment or discontinuance of service. Should the supply of service be interrupted, or fail, by reason of accident, strike, legal process, state or municipal interference, or any cause whatsoever, beyond its control, the Company also shall not be liable for loss, expenses, or damages resulting from such interruption or failure.

**6.5. NOTICE OF CURTAILMENT.**

**6.5.A. Prior Notice.** Where the Company knows in advance of the circumstances requiring the Gas Service interruption, prior notice of the cause and expected duration of the interruption shall be given to Customers and occupants who may be affected.

**6.5.B. Unforeseen Circumstances.** Where the Company interrupts Gas Service due to unforeseen circumstances, notice of the cause and expected duration of the interruption shall be given as soon as possible to Customers and occupants who may be affected.

**6.5.C. Type of Contact.** Where Customers and occupants are to be notified under this section, the Company shall take reasonable steps -- such as personal contact, phone contact, and use of the mass media -- to notify affected Customers and occupants of the cause and expected duration of the interruption.

**6.5.D. Public Health and Safety.** Gas service may be interrupted for only the periods of time as are necessary to protect the health and safety of the public, to protect property or to remedy the situation which necessitated the interruption. Service shall be resumed as soon as possible thereafter.

## **7. Inquiry, Review, Dispute, and Appeals Process**

7.1 INQUIRIES OR DISPUTES – PGW will handle Disputes in accordance with Applicable Law.

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## **8. Customer's Responsibility for Company's Property.**

**8.1. PROTECTION BY CUSTOMER.** The Customer shall be responsible for the protection of the Company's property on his/her premises, and shall not permit any unauthorized person to disturb or tamper with such property. In the event of damage, destruction or loss of the Company's property, the Customer may be required to pay the costs of repairs and/or replacement.

**8.2. COMPANY HAS SOLE RIGHT OF ACCESS.** The Customer shall not allow anyone, except employees of the Company presenting proper credentials, to turn on the Gas supply at any premises, to do any work on any meter, service supply pipe or other equipment of the Company located on the Customer's premises.

**8.3. TAMPERING.** In the event of the Company's meters or other property being tampered or interfered with, the Customer being supplied through such equipment shall pay the amount which the Company may estimate is due for service used even if such usage is not registered on the Company's meter, and for any repairs or replacements required, as well as for costs of inspections, investigations, damages and protective equipment and installations prior to reconnection.

**8.3.A. Removal of Property.** The Company reserves the right to remove any of its property which has been damaged or which, in its judgment, appears to be in reasonable prospect of being damaged or where there is evidence that such property has been tampered with, or there has been unauthorized interference with or diversion, or use, of the utility service.

**8.3.B. Replacement of Property.** The Company shall be under no obligation to replace any property until the damage has been paid for, the value of the Gas used has been paid for, and satisfactory assurance, has been given that no damage or unauthorized interference or diversion or use will be caused in the future.

**8.3.C. Service.** The Company shall not refuse to provide Gas Service to an Applicant who is not responsible for the damage or for the unauthorized use of Gas.

8.4. ACCESS TO PREMISES.

8.4.A. Agents of the Company. PGW, or its authorized agents, shall have access to the premises of the Customer at all reasonable times for the purpose of reading meters, disconnecting service, installing, testing, inspecting, repairing, removing, or changing any or all equipment belonging to the Company; and taking whatever remedial action the Company may deem appropriate to avoid or abate hazardous conditions or unauthorized usage; and under emergency conditions to gain entry to the premises by forcible means.

8.4.B. Proper Identification. All employees of the Company who are authorized to enter upon the Customer's premises shall display appropriate PGW identification on their person.

8.4.C. Prosecution. Instances of tampering or unauthorized interference with or diversion or theft of Gas or other Company property may be subject to prosecution.

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## 9. Conditions of Service, Point of Delivery, and Application of Rates

9.1. TYPE OF SERVICE. The gas delivered will be Natural Gas with a heating value and other characteristics as provided for in the Tariffs covering the Company's purchases of Natural Gas from its suppliers. The Company may, however, where and when it deems necessary, supplement and/or substitute one type of Natural Gas with some other type of compatible gas. Such gas shall have a heating value and other characteristics satisfactory for the proper operation of gas-burning appliances that have been approved for Customer's use, except for certain special Industrial or Commercial gas applications where little or no leeway in gas characteristics may be tolerated. It is the Company's policy to notify Customers who request such notice of any change in the burning characteristics of the gas to be supplied, but failure by the Company to give such notification shall not subject the Company to liability for any damages resulting from a change in the characteristics of the gas furnished. The supply pressures will be in accordance with Section 11. (C)

9.2. INFORMATION FROM APPLICANT. Anyone desiring to equip his/her premises for the use of Gas should communicate with the Company directly, or through his/her contractor, preferably in writing, giving the exact location of the premises and the quantity and type of all gas-consuming devices which are to be installed. Where the conditions of the use of any of the gas-consuming devices would not be readily apparent to the Company, a description of such use, as it affects the delivery of gas to it, should be included.

9.3. POINT OF DELIVERY. Upon request, subsequent to compliance with Section 9.1, the Company will designate a point at which the Applicant shall terminate his/her piping for connection to the meter, but such information does not constitute an agreement or obligation on the part of the Company to furnish Gas Service.

9.4. DIVISION OF RESPONSIBILITY. As used herein, the term "Gas Delivery Facilities" includes all equipment, piping, meters, regulators, connections, or other equipment required to deliver gas to the Company designated point of delivery. Such equipment will be provided, installed, owned and maintained by Company, subject to such contributions to cost by Customer as set forth in this Tariff. All piping, fixtures and appliances on the Customer's side of such delivery point must be installed and maintained by and at the expense of the Customer or Owner of the property, unless in the Company's judgment the Customers generally would benefit from some other arrangement.

9.5. LOCATION OF METER AND ACCESSIBILITY OF COMPANY OWNED GAS DELIVERY FACILITIES. The meter(s) or other equipment of the Company which may be necessary for the fulfillment of contracts for Gas should normally be installed at an outside, above ground meter location when suitable protection from outside forces, availability of space and other conditions permit. A meter cover or housing is required if, in PGW's judgment, conditions require physical protection for the meter installation. Where, in PGW's judgment, it is physically and economically unfeasible to do so, PGW may choose to install the meter inside a building in a dry, well-ventilated location not subject to excessive heat and not less than three feet from any source of ignition and/or otherwise suitable place which shall be conveniently accessible; the Gas Service entrance shall also be accessible to PGW. The meter shall also be as near as possible to the point where the service supply pipe enters the Customer's premises: except when, in PGW's judgment, this is not practical or desirable. If PGW discovers that the meter has been tampered with, interfered with, or bypassed two or more times within a twelve month time period, PGW may, in its sole judgment and where physically feasible, elect to move the meter from inside a building to an outside, above ground meter location and may charge the Customer being supplied through such equipment the labor costs of moving the meter. Nothing herein waives the right of the Customer to file a complaint with the Commission disputing the PGW determination.

**(C) = Change**

9.6. NON-STANDARD GAS DELIVERY FACILITIES. The Customer will ordinarily be required to pay the cost of any special installations when, in the judgment of the Company, his/her requirements for Gas delivery facilities cause a departure from the Company's usual installation regulations.

9.7. RELOCATION OF GAS DELIVERY FACILITIES.

9.7.A. Customer Charge. A charge will ordinarily be made to cover the cost of relocating the Gas delivery facilities for a Customer who alters or plans to alter his/her building, who constructs a new building over the Gas Service pipe location on his/her building, or who makes any other alterations to his/her property requiring the relocation of the Gas delivery facilities. Relocation of the Gas delivery facilities shall be required when, in the judgment of the Company, the changes to the Customer's property cause a need for such relocation. Any charges assessed by the Company shall be equal to the Company's cost incurred as a result of the relocation. The Customer must give the Company reasonable advance notice of any plans for such construction or alterations. The Company may require payment in advance for its costs in association herewith.

9.7.B. Company Relocation of Meter. Where, in the judgment of the Company, it is physically and economically feasible, the alteration or relocation of any Residential Gas meter will be allowed at an outside, above ground meter location when suitable protection from outside forces, availability of space and other conditions permit, also allowing the meter to be read from outside the Residential structure.

9.7.C. Customer Relocation of Meter. PGW will relocate a Customer's Gas meter, upon Customer request, to a mutually agreed upon location which meets all applicable codes and regulations. Customers will be assessed an amount equal to the Customer Service Call Charge for 1<sup>3</sup>/<sub>10</sub> hours.

9.8. TRANSFER OF GAS ALLOCATION. Where the Company has authorized the transfer of Customer's Gas allocation from one location to another, a charge will ordinarily be made to cover any costs associated with such transfer. Payment of this charge may be required in advance.

9.9. REFUSAL TO SERVE APPLICANTS OR CUSTOMERS. PGW may initially decline to serve an Applicant or Customer, if, in PGW's judgment, any of the following conditions are present:

9.9.A. The Applicant or Customer has not complied with Commonwealth or Municipal regulations governing Gas Service, appropriate piping installation codes or with the rules and regulations of the Company.

9.9.B. The installation or condition of piping or Gas equipment of the Applicant or Customer is hazardous or improperly installed and/or maintained.

9.9.C. The service requested by the Applicant or Customer is unreasonable and improper under the circumstances.

9.10. APPLICATION OF RATES.

9.10.A. Single-Point Delivery. The rates included in this Tariff contemplate the delivery of Gas Service under the appropriate rate classification to a single consumer unit at a single premises through one delivery and metering point.

9.10.B. Gas Delivered Under More Than One Rate Classification. Where Gas is delivered through a common service under more than one rate classification, the Customer will arrange his/her piping to separate the usage and the Company will install separate metering facilities, at a location acceptable to the Company, and provide for separate billing.

9.10.C. Gas Delivered at Separate Delivery Points/Combined Billing. Gas delivered at separate delivery points shall be billed for separately; except that when, in the judgment of the Company, Customers generally would benefit. The total amount of Gas delivered under the same rate classification through multiple delivery points for the same premises may be added for billing purposes (such billing to be known as "combined billing"). In those cases where combined billing is permitted, the Customer may be required to pay PGW's cost of providing the Gas delivery facilities to the additional delivery points.

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## **10. Extensions and Rights-of-Way**

### 10.1. EXTENSIONS OR ENLARGEMENTS FOR PERMANENT CUSTOMERS.

10.1.A. Residential Gas Service - Upon written application, and under normal conditions of construction and installation, the Company will extend its main and service for permanent residential Customers or developers within its service territory provided the requested extension will not adversely affect the availability or deliverability of Gas to existing Customers. The Company will furnish and install at no cost to the Customer or developer, delivery main and service-delivery pipe of an amount up to five times the anticipated annual Delivery Charge, as set forth in this Gas Service Tariff, and the Customer or developer shall pay a customer contribution for any costs in excess of this allowance. Included in the calculation of such costs may be an appropriate allowance for transmission and distribution main extensions required to deliver the Gas supply to local areas where Gas Service is needed. Permanent residential Customers or developers making use of new facilities which required a customer contribution from an original Customer or developer within the previous three years shall be deemed to have made application at the same time as the original contributing Customer or developer and shall pay a pro rata customer contribution for such facilities to be determined by the Company.

10.1.B. Commercial And Industrial Gas Service - For permanent commercial and industrial Customers or developers making application for extensions or enlargements, where the Company in its sole judgment anticipates long-term, continuous usage at projected volumes of Gas: (a) where the combined estimated cost of delivery-main and service-delivery pipe is less than \$10,000, the Company will furnish and install, at no cost to the Customer or developer, service-delivery pipe and delivery-main of an amount up to three times the anticipated annual base rate revenue less the fuel cost component included therein, and the Customer or developer shall pay for any costs in excess of this allowance; or (b) where the combined estimated cost of delivery-main and service-delivery pipe installation is \$10,000 or more, the Customer or developer shall pay a customer contribution for the amount of the estimated cost in excess of the investment determined by the Company to be warranted by the anticipated revenue to be derived from the extension. Included in the calculation of the above cost may be an appropriate allowance for transmission and distribution main extensions required to furnish the Gas supply to local areas where Gas Service is needed. Permanent commercial and industrial Customers or developers making use of new facilities which required a customer contribution from an original Customer or developer within the previous three years shall be deemed to have made application at the same time as the original contributing Customer or developer and shall pay a pro rata customer contribution for such facilities to be determined by the Company. Section 10.1.B. is not applicable to Interruptible Transportation customers (Rate IT). Interruptible Transportation customers shall pay for 100% of the combined estimated cost of delivery-main and service-delivery pipe installation.

10.2. EXTENSIONS OR ENLARGEMENTS FOR TEMPORARY CUSTOMERS. For Customers other than those deemed by the Company to be permanent Customers, Gas delivery facilities shall be installed and removed at the expense of the Customer.

10.3. DELAYS REGARDING RIGHTS-OF-WAY. Applications for service relying on an extension to be constructed where a right-of-way is not owned by the Company will only be accepted subject to delays incident to obtaining a satisfactory right-of-way.

10.4. PROCUREMENT BY CUSTOMER. Customers applying for the construction of an extension may be required to secure to, and for, the Company, all necessary and convenient rights-of-way and to pay the costs incident thereto.

10.5. TERMS AND RENTALS. When the premises of a Customer is so located that the Customer can be served only by facilities extending over the property of another, the Customer shall accept service for such term as is provided in the permit or agreement covering the location and the maintenance of service equipment, and the Customer shall reimburse Company for any and all special or rental charges that may be made for such rights by said permit or agreement.

10.6. EXTENSION OR ENLARGEMENT REFUNDS. A pro-rata portion of a Customer or developer's contributions made pursuant to Section 10.1, above, may be refunded by the Company without interest if, within three years of the commencement date of the original Customer or developer's service agreement, new Customer loads are added to such new facilities. For purposes of making refund computations, the original and new loads will be deemed to have been installed at the same time. Refunds will be paid only to a contributing Customer or developer, and the original contribution shall be the maximum aggregate refund. Upon receipt of a written request by a Customer or developer made no earlier than the end of the third year following the date of the original agreement for new Gas Service, and no later than the end of the fourth year following the date of the original agreement for new Gas Service, PGW will: (a) review its records to determine if a refund is due the Customer or the developer for additional Customers that attached to the facilities paid for by the Customer or the developer within three years after the execution date of the agreement for new Gas Service, and (b) within 120 days of receipt of such request, (i) make payment to the Customer or developer of any refund due and (ii) provide the Customer or developer with documentation substantiating the refund calculations and identifying the attached loads for which the Customer or developer was credited.



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## **11. Meters: Measurements, Readings, Errors, and Tests.**

11.1. METERS. The measurement of Gas usage shall be by meters furnished and installed by the Company. The Company will select the type and make of metering equipment, and may, from time to time, change or alter the equipment, its sole obligation being to supply meters that will accurately and adequately furnish records for billing purposes.

### 11.2. QUANTITY MEASUREMENTS.

11.2.A. Measurement at Standard Service Pressure. For the purpose of measurement, standard service pressure shall be 8.5 inches or less of water column. A cubic foot of Gas at standard service pressure means the amount of Gas which occupies a volume of one cubic foot at the time metered and under the conditions existing at the Customer's meter.

11.2.B. Measurement at Pressure Above Standard Service Pressure. For the purpose of measurement, where Gas is ordinarily supplied to Customers at pressure above standard pressure, the measurement shall be a cubic foot at an absolute pressure of 14.73 pounds per square inch and under conditions existing at the Customer's meter unless otherwise provided for by the Company. A cubic foot of Gas at above standard service pressure shall mean the amount of Gas that occupies a volume of one cubic foot.

### 11.3 METER READINGS.

11.3.A. Meter Reading Intervals. The Company will read its meters at scheduled regular intervals of two months or less and will render standard bills for the recorded Gas usage based upon the time interval between meter readings.

11.3.B. Estimated Usage. The Company may estimate the amount of Gas usage at the premises where access to the meter is not available, an electronic meter reading device is not installed or functioning, or to installations at remote locations, for such number of months as the type of installation, normal regularity of usage, or other circumstances may warrant, and will render bills in standard form based on such estimate and so marked. Actual Meter Readings will be secured from time to time and billing will be revised when such reads disclose that the estimate failed to approximate the actual usage. For Residential Customers, an Actual Meter Reading will be obtained in accordance with Applicable Law .

11.3.C. Automatic Meter Reading (AMR) Device.

11.3.C.1. The installation and periodic inspection and maintenance of an Automatic Meter Reading Device, will be a condition to continued Gas Service. Customers must assist PGW in all reasonable attempts to secure information about or approval from Landlords for AMR installation purposes. Customers may be required to contact the Landlord or obtain access for PGW to install an AMR and/or information which assists PGW in making contact with the Landlord. PGW will neither hold the Tenant responsible for the Landlord's actions nor exact any penalty against the Tenant for the Landlord's actions or failure to act. When a Customer unreasonably refuses to provide access to the meter, PGW may commence termination procedures, unless the Customer is a lessee who is unable to provide access to the meter.

11.3.D. Customer Readings. PGW will provide Customers with a telephone number that they may use to report their meter readings. PGW will also provide, at the Customer's request, preaddressed postcards on which the Customer may note their meter reading. PGW will use Customer Readings for billing purposes when appropriate. PGW may establish due dates by which such telephone calls or postcards must be received in order for a bill to be based upon the meter reading of the Customer or occupant. If the reading is not received by the due date, PGW will estimate the quantity of usage.

11.3.E. Industrial/Commercial Customers. Where, in the judgment of the Company, it is not feasible to install a remote AMR device, PGW may choose to install a meter that requires a dedicated telephone line and appropriate power supply to send the meter read to the company. The Company will require the Industrial/Commercial Customers to supply and maintain this dedicated telephone line. The Customer will install and terminate the telephone line not less than three feet from the meter location and the telephone line shall be tagged and accessible to the Company.

11.4. DEFECTIVE METERS. Gas shall be supplied through a meter provided by the Company. Should a meter become defective or fail to register correctly, it shall be replaced. If the quantity of Gas recorded by a meter is in question, the quantity of Gas which passed through the meter may be determined by a test of the meter, or by comparison with subsequent Gas consumption recorded by the replacement meter, or by the amount of Gas metered during the corresponding period of the previous year if the circumstances of usage and the Gas-consuming equipment are comparable.

11.5 CUSTOMER REQUESTED METER TESTS. Meter tests, if requested by the Customer, shall conform to all of the following:

11.5.A. Test Request. If a Customer requests a test of the accuracy of the meter through which Gas Service is supplied, PGW shall notify the Customer of the conditions under which the test will be made. If the Customer then requests PGW to proceed with the test and remits an amount equal to the fee as set forth in Section 11.6, PGW shall conduct the test promptly. If, when tested, the meter is found to be more than 2.0% fast or slow, the testing fee shall be promptly refunded to the Customer.

11.5.B. Test Observation. A Customer or his representative may be present when PGW conducts the test on the meter.

11.5.C. Report. A report giving the name of the Customer requesting the test, the date of the request, the location of the premises where the meter had been installed, the type, make, size, and serial number of the meter, the date of removal, the date of the test, the result of the test and the amount of refund if the meter was found more than 2.0% fast, shall be supplied to the Customer within 10 days after the completion of the test.

11.6. FEE SCHEDULE FOR METER TESTS. The following schedule of fees applies for meter testing:

11.6.A. 500 Cubic Feet or Less. Meters having a rated capacity of 500 cubic feet per hour or less - \$10.

11.6.B. More than 500 Cubic Feet. Meters having a rated capacity of over 500 cubic feet per hours and not more than 1,500 cubic feet per hour - \$20.

11.6.C. More than 1500 Cubic Feet. Meters having a rate capacity of over 1,500 cubic feet per hour, orifice meters, and any meters not a displacement type - \$30.

11.7. ADJUSTMENTS OF BILLS FOR METER ERROR.

11.7.A. Fast Meters. If, upon test of a meter, it is found to have an average error of more than 2.0% fast, the Company shall refund to or credit the Customer for the overcharge of PGW Charges, based upon what the meter would have registered had it not been fast or slow for a period equal to  $\frac{1}{2}$  the time elapsed since the last previous test, but not to exceed 12 months or  $\frac{1}{2}$  the period of occupancy of the premises by the Customer, whichever is less. If the period of registration error may be definitely fixed, the overcharge shall be computed for the period.

11.7.B. Slow Meters. If, upon a test of a Gas meter it is found to have an average error of more than 2.0% slow, the Company may render a bill for the Gas consumed but not covered by bills for PGW Charges which were previously rendered, for a period equal to  $\frac{1}{2}$  of the time elapsed since the last previous test, but not to exceed three months. If the period of registration error may be definitely fixed, the charge may be computed for the period.

11.7.C. Non-registering meters. If a meter has failed to register for a period, the Company may compute the Gas used by taking the average of the Gas used for the nearest meter-reading period preceding and the meter-reading period immediately following the date when the meter was found to be not registering, which amount shall be assumed to be the amount of Gas used by the Customer during the billing period in which the meter was found not to have registered. Exceptions will be made only if the facts clearly show that the stated method does not give the correct consumption for the period.

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## 12. Service Charges and Miscellaneous Fees and Provisions.

12.1 CUSTOMER SERVICE CALL CHARGE The following charge applies to Customers requesting service. Exempted from the Customer Service Call Charge will be calls for leaks and other safety related conditions, and all appliances covered under any currently effective Parts and Labor Plan contract.

Residential, Commercial and Industrial

\$72.05 plus \$8.53 for each additional 1/10 of an hour after the first 6 minutes.

12.2. CUSTOMER REQUESTED TURN ON TO A COMMERCIAL/INDUSTRIAL ACCOUNT WHERE GAS EQUIPMENT HAS NOT BEEN INSTALLED. PGW will turn on Gas Service for a Commercial or Industrial Applicant if all the Gas equipment has not been installed provided the Customer installs or pays PGW to install shut off valves that PGW can lock in place. PGW will return to remove the locks and inspect equipment. PGW will charge for materials required as well as assessing the Customer an amount equal to the Customer Service Call Charge for 1½ hours for services provided after the initial two visits.

12.3. INSPECTION OF GAS FUEL LINE FOR COMMERCIAL/INDUSTRIAL CUSTOMERS. PGW will inspect a new commercial/industrial Gas fuel line prior to turn on. The Customer will be assessed an amount equal to the Customer Service Call Charge for 1½ hours if more than one test is required.

12.4. GRATUITY TO EMPLOYEES. The Company's employees are strictly forbidden to demand or accept any personal compensation, or gifts, for service rendered by them while working for the Company on the Company's time.

12.5. OTHER CHARGES. Except as where otherwise provided in this Tariff, the Company may, where feasible, provide and charge for services requested by the Customer or his agent. The Company is not obligated to provide such services. The Company will, if possible, give the Customer an advance written estimate of the costs to provide the service.

12.6. NO PREJUDICE OF RIGHTS. The failure by the Company to enforce any of the terms of this Tariff shall not be deemed a waiver of its right to do so.

12.7. EXCESS FLOW VALVES. If a Customer requests that the Company install an excess flow valve at the Customer's service location, the Customer will be required to pay all costs associated with such installation if the Customer's service location had not been scheduled by the Company for a service line replacement or a new service line prior to the Customer's installation request. Installation will not be undertaken until the required payment has been made by the Customer. This section applies to Customers as detailed in 49 CFR § 192.381, *et seq.*

(C)

(C) – Change

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### **13. Universal Service And Energy Conservation Programs**

#### **13.1 CUSTOMER RESPONSIBILITY PROGRAM.**

**13.1.A. Eligibility and Enrollment.** A Customer is eligible for the Customer Responsibility Program if it is determined at the time of application (or recertification) that the Customer's annual household gross income is at or below 150% of the federal poverty level. The Customer shall provide all documentation necessary for PGW to determine the household income including but not limited to proof of household income, verification of family size, and character of service requested (Heating or Non-Heating). PGW has the right to verify a Customer's income by means including but not limited to verification through governmental agency and checking credit reports. Enrollment shall be ongoing and open year-round. Customers selecting Transportation Service will no longer qualify for the CRP Program and will be responsible for the tariffed rates under General Service - Rate GS.

**13.1.B. Requirements.** A Participant must abide by the following provisions. The failure of a Participant to comply with one of the following could result in dismissal from the CRP Program:

13.1.B.1. A Participant shall make regular monthly Customer Responsibility Payments. Failure to do so may lead to termination of service.

13.1.B.2. A Participant shall recertify annually, based upon the Participant's anniversary date of enrollment.

13.1.B.3. It is the Participant's responsibility to notify PGW when there is a change in the household's income or size. Adjustments to a Participant's bill will be made anytime there is a change in income or family size.

13.1.B.4. When eligible, a Participant must apply for and assign at least one energy assistance grant, such as a LIHEAP grant, to PGW annually.

13.1.B.5. Participants must take the necessary actions to participate in the Conservation Works Program (CWP), the Enhanced Low Income Retrofit Program (ELIRP) or other conservation programs and to abide by established consumption limits.

13.1.B.6. A Participant must allow access to their property for meter readings or for the installation of an AMR. Failure to allow access for four consecutive months will result in dismissal from CRP.

13.1.B.7. A Participant shall be responsible for seeking assistance and guidance from PGW, including budget counseling, in the event that the Participant is unable to meet the above responsibilities.

**13.1.C. Applicable Rates.** A Participant's CRP Payments will be based upon the Participant's family size and gross household income. A Participant will pay a percentage of his/her gross household income depending on where that Participant falls within the Federal Poverty Guidelines (FPL). Rates are calculated under rate schedule GS, including riders.

13.1.C.1. For payment purposes CRP Participants will be defined as follows:

13.1.C.1.a. Group A: Participants whose gross household income has been verified as being from 0 – and up to and including 50% of FPL.

13.1.C.1.b. Group B: Participants whose gross household income has been verified as being greater than 50% and up to and including – 100% of FPL.



13.1.C.1.c. Group C: Participants whose gross household income has been verified as being greater than 100% – and up to and including 150% of FPL.

13.1.C.2. A CRP Participant will be responsible for paying the following rates for service or \$25 per month, whichever is greater. (C)

13.1.C.2.a. Group A: 8% of gross income.

13.1.C.2.b. Group B: 9% of gross income.

13.1.C.2.c. Group C: 10% of gross income

13.1.D. Arrearages. Participants making regular monthly Customer Responsibility Payments will earn forgiveness on their pre-program Arrearages. The amount of and criteria applicable to Arrearage forgiveness shall be consistent with applicable Commission Orders. Participants choosing an NGS are responsible for all outstanding balances owed to PGW.

13.2. ENHANCED LOW INCOME REDUCTION PROGRAM (ELIRP). PGW shall establish fair, effective and efficient Gas usage reduction programs for low-Income Customers. Such programs are intended to maintain affordable Gas Service and to reduce uncollectible accounts and the collection and termination expenses of PGW by enabling low income Customers to conserve energy and reduce their Gas usage. The Conservation Works Program (CWP) is superceded by and referenced herein as the Enhanced Low Income Reduction Program (ELIRP).

(C) - Change

13.2.A. Eligibility. This program is available to Residential Heating CRP Participants with high usage. PGW shall have access to the Residential Building to determine the most appropriate usage reduction measures. An eligible Customer who is a Tenant shall have an equal opportunity to secure program services if the Landlord has granted written permission to the Tenant for the installation of program measures, and the Landlord agrees, in writing, that rents will not be raised unless the increase is related to matters other than the installation of the usage reduction measures, and the Tenant is not evicted for a stated period of time at least 12 months after the installation of the program measures, if the Tenant complies with ongoing obligations and responsibilities owed the Landlord. A covered utility may seek Landlord contributions as long as the contributions do not prevent an eligible Customer from receiving program services. Contributions from Landlords shall be used by the utility as supplemental to its approved Enhanced Low Income Reduction Program budget.

13.2.B. Enhanced Low Income Reduction Program Funding. Funding for the Enhanced Low Income Reduction Program shall be at least .2% of jurisdictional revenues during each year of operation. In the event that PGW employs independent contractor(s) to manage such program(s), said contractor(s) may spend not more than 15% of program funding for administrative costs and PGW shall not charge any of its expenses for such program(s) to program administration. In all other circumstances, PGW shall spend not more than 15% of its Enhanced Low Income Reduction Program funding for administrative costs.

13.2.C. Integration. PGW shall coordinate its Enhanced Low Income Reduction Program with existing resources in the community, and operate in conjunction with the relevant public or private programs so that Customers experiencing ability-to-pay problems are made aware of the usage reduction program and are referred to public, private, or utility programs that may enhance their ability to pay their utility bills.

13.2.D. Dwelling Repairs. Expenditures on program measures may include energy-related repairs to the dwelling necessary to permit measures that are needed to reduce usage effectively. The cost-effectiveness of such expenditures shall be measured in the same manner as all other expenditures under this program.

13.3. CARES. PGW's CARES is a program designed to assist Customers experiencing temporary hardships affecting their ability to pay his/her Gas bills. Through this program, PGW will assist Customers with referrals to appropriate social service agencies, engage in community outreach as well as consumer education.

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## 14. Gas Choice Enrollment and Switching

In accordance with all applicable final Commission Orders:

14.1. EFFECTIVE DATE OF CUSTOMER CHOICE. All GS, MS, and PHA Customers with an AMR will be eligible to purchase Natural Gas Supply Service from an NGS starting with their first regularly scheduled meter reading after September 1, 2003.

14.2. RELEASE OF CUSTOMER INFORMATION. PGW will send its GS, MS and PHA Customers notification that they have 15 days from the date PGW sends the Gas Choice Release Form to restrict release of their information to alternative suppliers. PGW's Customers will have three methods for restricting the release of their information: 1.) mailing a response card, 2.) calling PGW, or 3.) making an online selection. If no response is received within the 15 days then PGW will release a Customer's name, billing address, service address, rate class, account number and load data. A Customer who responds within 15 days may restrict release of all of his/her account information or just his/her load data. (C)

14.3. SELECTION OF A NATURAL GAS SUPPLIER. A Customer shall have the opportunity to select a Supplier in accordance with Commission Orders and the procedures contained in this Tariff and in the Supplier Tariff. A Customer or his/her authorized agent must contact the NGS directly to switch Suppliers. The NGS must maintain recorded or written evidence of the Customer's authorization.

14.4. CONFIRMATION NOTICE. Once an NGS notifies PGW that a Customer has selected them as their alternative supplier, PGW will send a confirmation notice to the Customer. Included in this notice shall be notification of a 10 day waiting period in which the Customer may cancel its selection of an NGS. The waiting period shall begin on the day the notice is mailed to the Customer. If applicable, the Company will notify the Customer's prior NGS of the intended discontinuance of service of the Customer. (C)

14.5. FAILURE TO RESPOND TO THE CONFIRMATION NOTICE. If the 10-day waiting period expires, and the Customer has not contacted the Company to dispute the NGS selection, the NGS will become the Customer's NGS of record. If the Customer elects to rescind its NGS selection, the Company will notify the rejected NGS and the reinstated NGS electronically. In the event the Customer rescinds its NGS selection after the 10 day waiting period, the Customer will be required to remain with the selected NGS for a minimum of one billing month. (C)

14.6. EFFECTIVE DATE OF ENROLLMENT. For enrollments received on or before the 15th of any calendar month, the Customer will be switched on the Customer's regularly scheduled meter reading date in the calendar month following the calendar month in which the enrollment was received. For enrollments received after the 15th of the calendar month, the Customer will be switched on the Customer's regularly scheduled meter reading date in the second calendar month following the calendar month in which the enrollment was received. If, in any month, a Customer selects more than one NGS, the NGS that submitted to the Company the latest valid NGS enrollment transaction before the end of the applicable NGS selection period, will become the Customer's NGS of record beginning on the Customer's next regularly scheduled meter read date. No fee will be charged for initial enrollment.

14.7. CHANGE OF ADDRESS. If a Customer contacts the Company to discontinue natural Gas Service at the Customer's then current location, the Company will notify the current NGS of the Customer's discontinuance of service for the account at the Customer's old location. If available, the Company will provide the NGS that served the Customer at the old location with the Customer's new mailing address or forwarding address.

14.8. CHANGE OF ACCOUNT NUMBER. If the Company elects to change the account number for a Customer receiving Natural Gas Supply from an NGS, the Company will notify the NGS of the change in account number at the same Customer location.

14.9. SUPPLIER DISCONTINUANCE OR DEFAULT. If a NGS terminates sales to a Customer prior to the end of the Customer's contract with the NGS because of a default of the supplier or if the supplier discontinues service in the territory, the Customer will continue to pay the NGS' contract rate through the end of the applicable billing cycle. After that time, the Customer will be charged at the Supplier of Last Resort rate. (C)

14.10. ADDITIONAL LIMITATIONS OF LIABILITY IN CONNECTION WITH CUSTOMER CHOICE. Other than its duty to deliver Natural Gas, the Company shall have no other duty or liability to a Customer receiving Natural Gas Supply Service arising out of or relating to a contract or other relationship between such Customer and an NGS. The Company shall implement Customer selection of an NGS consistent with applicable rules of the Commission and shall have no liability to a Customer receiving Natural Gas Supply Service arising out of or relating to switching NGSs unless the Company is negligent in switching or failing to switch a Customer. The Company shall have no duty or liability with respect to Natural Gas delivered by an NGS to a point of delivery on the Company's distribution system. After its receipt of Natural Gas at the point of delivery the Company shall have the same duty and liability for distribution service to Customers receiving Natural Gas Supply Service as to those purchasing Natural Gas from the Company.

14.11.A. Control and Possession of Gas. The Customer or its NGS shall be deemed to be in control and possession of the Gas to be transported hereunder until it shall have been delivered to the Company at the receipt point, after which the company shall be deemed to be in control and possession thereof. The Customer or its NGS assumes the full cost and expense, as well as full and complete liability and responsibility, for collecting, gathering and transporting the Gas to the receipt point hereunder at the quality herein before specified.

14.11.B. Title to Gas. Notwithstanding the transfer of control and possession of the Gas at the receipt point, receipt of Gas by the Company shall not vest title to the Gas in the Company. Title to such Gas shall remain vested in either the Supplier or the Customer(s) for whom Gas was received for redelivery. The Company's furnishing of transportation service shall be complete upon delivery to the Customer(s) of Gas received. The Customer warrants and will provide satisfactory documentation, upon request, that it has good and merchantable title for all Gas delivered to the Company for transportation hereunder. Title shall be free and clear of all liens, encumbrances and claims whatsoever. Customer will indemnify Company and hold the Company harmless from all suits, actions, debts, accounts, damages, costs, losses and expenses arising out of the adverse claims of any or all persons to said Gas and/or to royalties, taxes, license fees or charges thereon, including pipeline transportation and service charges, which are applicable to such Gas and/or the delivery of such Gas to the Company. The Customer or its NGS shall be responsible for maintaining all insurance it deems necessary to protect its property interest in such Gas before, during and after receipt by the Company.

14.12. PURCHASE OF RECEIVABLES. PGW will offer a purchase of receivables program with respect to eligible GS residential customers and GS commercial and industrial customers using no more than 5,000 MCF annually with an AMR. (C)

## **15. Supplier of Last Resort (SOLR)**

15.1 SOLR SERVICE. Existing Retail Sales Service Customers may elect to continue to receive Retail Sales Service pursuant to their existing Rate Schedules or elect to choose an NGS to serve them. PGW will act as the SOLR for Customers who have not chosen an alternative NGS, who choose to be serviced by their SOLR, who are refused service from a NGS, or whose NGS has failed to deliver its requirements and who have annual usage not greater than 4,000 Mcf per year.

15.2 RETURN TO PGW. Customers with annual usage greater than 4,000 Mcf per year may return to receiving Retail Sales Service, if, in PGW's sole discretion, PGW determines that it can provide service to such Customers without threatening system reliability or burdening other Customers. For a Customer who has usage greater than 4,000 Mcf per year, PGW shall provide service to such Customers for a period not to exceed 90 days if the NGS fails to deliver Gas or exits the market. In any event, the rate charged to a returning Customer whose usage is greater than 4,000 Mcf per year will be the applicable retail rate plus any incremental costs associated to serve the returning Customer, to be determined on a case by case basis by PGW.

## **PGW - Gas Service Tariff**

### Currently Effective Rates and Riders

**GAS COST RATE (GCR) -- SECTION 1307(f)**

I. PROVISION FOR ADJUSTMENT

The Gas Cost Rate shall be applied to each Mcf (1,000 cubic feet) for Firm Retail Sales Service Gas supplied under Rates Schedules GS, MS, PHA, and NGVS-Firm, except for Gas usage under the Special Provisions – Air Conditioning of those rates calculated in a manner set forth below, pursuant to 66 Pa.C.S. §1307(f). Such rates for Firm Sales Service Gas may be increased or decreased from time to time under the procedures set forth in Section II.B. below to reflect changes in the level of Gas costs incurred or projected to be incurred by PGW related to Sales Service.

II. DEFINITIONS

C - The current cost of Natural Gas and other raw materials determined as follows: (a) for all types of Gas, project the cost for each purchase (adjusted for net current Gas stored) for the computation year plus (b) the of (1) the projected book value of non-current Gas at the beginning of the computation year minus (2) the projected book value of non-current Gas at the end of the computation year. In addition to any cost authorized by the Commission, the cost of Natural Gas may include any item included in the definition of Natural Gas costs set forth in 66 Pa.C.S. § 1307(h) ("Definition"). The Factor "C" includes two components -- Commodity Costs and Demand Costs which are defined as follows: Commodity Costs - the actual cost of natural gas and purchased electric for firm customers that does not include the fixed costs associated with the transportation and storage of natural gas; and Demand Costs - the fixed costs associated with the transportation and storage of natural gas for firm customers.

Effective 9/1/08, 75% of off system sales margin and capacity release credits will be allocated to the Factor "C" and 25% to the Company. Effective 9/1/09, 75% of storage asset management fees will be allocated to the Factor "C" and 25% to the Company.

Computation Year - The 12-month forecast period as identified in the Company's annual 1307(f) filing and each quarterly GCR filing.

E - Experienced net over billing (or under billing) of the cost of Natural Gas and other raw materials applicable to the GCR reported in the most recent Section 1307(f) proceeding. Such over billings (or under billings) will be made with interest at the rate and method set forth by the Pennsylvania Public Utility Commission. Additionally, supplier refunds received prior to the end of the August billing period will be included in the Factor "E." The Factor "E" includes two components -- Commodity Costs and Demand Costs which are defined above in the Factor "C" definition. Credit or recovery of the factor "E" is completed over the Company's Fiscal Year.

Firm Sales Service - The service provided to Customers who receive firm supply service from PGW. The term does not include the service provided to Customers who receive interruptible supply service from PGW.

(Gas Adjustment Charge) - The "E" factor component of the GCR, representing the net overcollection or undercollection of Natural Gas and other raw materials costs. The currently effective GAC is \$(0.04717) per Ccf for Commodity Costs and \$0.01345 per Ccf for Demand Costs, for service on or after March 1, 2025. The total GAC is \$(0.03372) per Ccf. (I)

GCR - Gas Cost Rate determined to the nearest one-hundredth cent (\$0.0001) to be applied to each Mcf of Gas supplied under Rates GS, MS, PHA, and NGVS-Firm, except for Gas usage under the Special Provisions – Air Conditioning of those rates and is equal to the SSC plus the GAC minus the IRC.

**(I) – Increase (D) - Decrease**



PHILADELPHIA GAS WORKS

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IRC - Interruptible Revenue Credit - The credit defined in Subsection VI below. The currently effective IRC is \$0.00122 per Ccf for service on or after March 1, 2025.

**(I)**

Natural Gas or Gas - The volumes of gas purchased or manufactured by the Company that is delivered to the Company's Customers, plus such portion of the Company-used and unaccounted-for gas as the Commission permits, including, but not limited to, natural gas, liquefied natural gas, synthetic gas, liquefied propane and naphtha.

S - Projected applicable Mcf of Gas to be billed to Customers during the computation year.

SSC - Sales Service Charge - The purchased Gas costs determined to the nearest  $\frac{1}{100}$  of a cent (\$0.0001). The currently effective SSC is \$0.38257 per Ccf for Commodity Costs and \$0.16545 per Ccf for Demand Costs, for service on or after March 1, 2025. The total SSC is \$0.54802 per Ccf.

**(D)**

**(I) – Increase (D) - Decrease**

PHILADELPHIA GAS WORKS

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III. COMPUTATION OF GAS COST RATE

A. The GCR shall be computed to the nearest one-thousandth cent (\$0.00001) in accordance with the formula set forth below as the terms are defined in Section II:

$$\begin{aligned} \text{SSC} &= \text{C/S} \\ \text{GAC} &= \text{E/S} \\ \text{GCR} &= \text{SSC} + \text{GAC} - \text{IRC} \end{aligned}$$

B. Each Gas Cost Rate so computed shall be applied to Customers' bills for twelve monthly billing periods commencing with September.

The currently effective Gas Cost Rate is \$0.51308 per Ccf, for service on or after March 1, 2025. **(I)**

IV. REPORTING REQUIREMENTS

A. The Company's rates are subject to quarterly adjustments for recovery of the Gas Cost Rate under procedures set forth in Section 1307(f) of the Public Utility Code.

B. The filing of the Company's annual Section 1307(f) filing, annual Gas Cost Rate, effective during the billing period of September through August, shall be submitted to the Commission by March 1 of each year, with a February 1 pre-filing date.

C. The application of the Gas Cost Rate shall be subject to review and audit by the Commission at such intervals as the Commission shall determine.

D. If it shall be determined, from audit by the Commission, or by final order entered after notice and hearing, that the application of this clause has resulted in the overcollection or undercollection of revenues, then the Company shall apply such over/undercollection as a credit or debit against future Gas Cost Rates.

V. PROVISION FOR INCLUSION OF SPECIFIC NON-GAS EXPENSES

The computation of the Gas Cost Rate may include such Non-Gas expenses as may be authorized by this tariff and annually authorized by the Commission.

VI. INTERRUPTIBLE REVENUE CREDIT (IRC)

A. The GCR rate shall be credited with an Interruptible Revenue Credit (IRC) equal to the margin realized from interruptible sales under PGW's Interruptible Sales Tariff Rates: BPS, LBS; and CG (Total Margin Revenue).

B. The IRC shall be set each year in the Company's 1307(f) proceeding to reflect the Total Margin Revenue. The rate per Mcf shall be calculated by dividing the Total Margin Revenue by total applicable firm sales. For the period September 1, 2003 through August 31, 2004 the IRC shall be initially set to reflect the Total Margin Revenue authorized by the Commission in its final order at M-00021612 (entered March 31, 2003).

**(I) – Increase (D) - Decrease**

C. The 2003-04 IRC and all subsequent IRCs shall be reconciled to actual Total Margin Revenue realized in each 1307(f) proceeding. The IRC shall be included in the GCR rate and shall not be shown separately on the Customer's bill

**REVENUE RECONCILIATION ADJUSTMENT (RRA) RIDER**

I. PROVISION FOR REVENUE RECONCILIATION ADJUSTMENT

A. A Revenue Reconciliation Adjustment (RRA) is included in the Delivery Charge of all firm service rates. The RRA shall be the annual margin in excess of the cost of Natural Gas to provide the service projected to be realized from interruptible sales under rate schedules BPS, LBS and CG in the period September 1, 2002 – August 31, 2003 and the Transportation charge revenue from Transportation Service provided pursuant to the Pilot rate schedule IT-P (the Total Margin Revenue). This rate per Mcf is calculated by dividing the Total Margin Revenue by total applicable firm sales.

B. The rate so calculated is included in the billed Distribution Rate and shall not be shown separately on the Customer bill.

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## SENIOR CITIZEN DISCOUNT\*

### I. PROVISION FOR SENIOR CITIZEN DISCOUNT

- A. A Customer or Applicant shall be granted a reduction in monthly charges for Gas Service provided by the Company for Residential purposes if said person satisfies the conditions set forth below: (C)
1. Is a PGW firm sales or a firm transportation customer. (C)
  2. Is 65 years of age or older; (C)
  3. Resides in the City of Philadelphia; (C)
  4. Does or will directly make payment to the Company for Gas Service at his or her residence; (C)
  5. Completes an acceptable application; (C)
  6. Maintains his or her qualification for same. (C)
- B. The Senior Citizen Discount, as set forth in this Tariff, shall only apply to the Gas which is consumed for Heating and Non-Heating purposes in that portion of the building in which the senior citizen resides. Therefore, if the senior citizen resides in a building that is part Residential and part Commercial or rental (to someone other than the senior citizen), only that portion of the building that is occupied by the senior citizen as a residence will be eligible for the Senior Citizen Discount.

### II. COMPUTATION OF SENIOR CITIZEN DISCOUNT

- A. For eligible Retail Sales Service Customers, Gas Service provided by the Company will be priced at the full rate then in effect, as authorized by the Commission, and 80% of this amount will be billed to the Customer. For Competitive Natural Gas Supply Customers participating in NGDC Consolidated Billing, Gas Service provided by the Company will be priced at the full rate then in effect, as authorized by the Commission; 80% of the PGW charges will be billed to the Customer; Supplier commodity charges will be billed at 100%. (C)
- B. In the event taxes or other charges become applicable after the effective date hereof, which charges cannot lawfully or in equity be treated as herein provided, the application of the Senior Citizen Discount affecting such charges will be limited accordingly, so as to provide a result which, in the Company's opinion, is reasonably consistent with the intention of providing a discount of the type here authorized.

### III. APPLICATION FOR SENIOR CITIZEN DISCOUNT

An application for Senior Citizen discount must be completed by the Applicant in person at any one of the Company's offices or at such other place as the Company provides.

\* As of September 1, 2003 enrollment in the Senior Citizens Program will be closed. Customers who are properly receiving discounted rates will continue to do so under these terms and conditions unless and until the program is modified in accordance with 66 Pa. C.S. § 2212. All affected and eligible low income Customers may apply to participate in the Customer Responsibility Program (CRP).

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IV. DOCUMENTARY EVIDENCE REQUIRED FOR SENIOR CITIZEN DISCOUNT

A. An Applicant must present:

1. Legal proof of age acceptable to the Company; and
2. Documentary evidence acceptable to the Company authenticating Applicant's residence at the address where Gas consumption will be subject to the discount.

B. The Company may from time to time require production of documentary evidence or other information deemed satisfactory by the Company so as to review a Customer's continued eligibility for the Senior Citizen Discount.

V. EFFECTIVE DATE OF THE INITIAL SENIOR CITIZEN DISCOUNT BILLING

A. Applications made at least 30 days prior to the Applicant's next billing period, and which in that 30-day period are fully documented and accepted by the Company, will result in the initial application of the Senior Citizen Discount to the cost of the Gas consumed in such next billing period.

B. Improper or incomplete applications causing the extension of the above 30-day period, and which delay in the Company's opinion is occasioned by the Applicant, will delay the initial use of the discount until the succeeding billing period next following the acceptance of the application.

C. The Senior Citizen Discount, after its initial application, will continue in force thereafter so long as it is authorized and the original Applicant, in the opinion of the Company, continues to qualify for it.

VI. CUSTOMER'S GAS PIPING

A. In order for the Company to quantify the amount of Gas to which the Senior Citizen Discount applies in the event that such Gas quantity cannot ordinarily be determined, arrangements acceptable to the Company must be made by the Customer.

B. In cases where, at the time of making application, the Customer lives in only a portion of the structure to which Gas is also being supplied to others but through a single meter, and where the Discount does not apply to the others, and, in the opinion of the Company, the Customer's Gas piping can reasonably be changed, the Customer, at his or her expense, shall make the necessary piping rearrangement and the Company will install a separate meter.

C. When the Customer's Gas piping, in the opinion of the Company, cannot reasonably be changed, the Company, for billing purposes, will estimate the quantity of Gas used by the Customer to which the Senior Citizen Discount will apply. In all other cases, the Customer should make Gas piping rearrangements to allow the Company to directly meter Gas used exclusively for such Customer's account.

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## EXIT FEE RIDER

1. PROVISION OF EXIT FEE

A. An exit fee may be applied to those Customers moving from Firm to interruptible Service. This fee is charged for the portion of Firm pipeline assets reserved on the Customer's behalf.

2. COMPUTATION OF EXIT FEE.

A. The exit fee shall be calculated as the Customer's allocated share of FT and storage demand costs, as filed in PGW's last approved 1307(f) proceeding, less an allocated share of capacity release credits actually realized in the exit fee period. The Customer's share shall be the Customer's contribution to design day demand calculated as the Customer's highest usage month out of the last 36 months, divided by the number of days in that month, adjusted for design degree days.

1. The Customer's exit fee will be in place for 5 years and will be adjusted each year to take account of changes in capacity and storage costs and capacity release credits.

**MERCHANT FUNCTION CHARGE (“MFC”)**

The MFC is a volumetric charge, applied to firm sales service customers, which will be included in the Price to Compare. The MFC is based on Gas Cost Rate multiplied by a fixed uncollectible percentage established in the Company’s last general base rate proceeding. The MFC will not be reconciled to reflect actual results. The MFC is intended to make the Company’s Price to Compare more comparable to the gas supply services price offers of other Natural Gas Suppliers that presumably reflect anticipated uncollectible expenses. The following percentages will be applied to the quarterly Gas Cost Rate in order to calculate the quarterly MFC: 5.27% - GS Residential (“GS RES”); 5.27% - GS Public Housing (“GS PHA”); 1.39% - GS Commercial (“GS COM”); and 0.36% - GS Industrial (“GS IND”). The current MFC is set forth below in the Price to Compare table.

**GAS PROCUREMENT CHARGE (“GPC”)**

The GPC is a volumetric charge, applied to firm sales service customers, which will be included in the Price to Compare. The GPC will remain in effect until reviewed and updated in the Company’s next general base rate proceeding.

Current Gas Procurement Charge = \$0.00400/Ccf

**PRICE TO COMPARE (“PTC”)**

The PTC is composed of the Sales Service Charge (“SSC”), Gas Adjustment Charge (“GAC”), the Merchant Function Charge and the Gas Procurement Charge. The PTC will change whenever any of the components of the PTC change. The current PTC is (per Ccf):

	GS-RES	GS-PH	GS-COM	GS-IND	MS	PHA	NGVS	
<b>SSC</b>	<b>\$0.54802</b>	<b>\$0.54802</b>	<b>\$0.54802</b>	<b>\$0.54802</b>	<b>\$0.54802</b>	<b>\$0.54802</b>	<b>\$0.54802</b>	(I)
<b>GAC</b>	<b>\$(0.03372)</b>	<b>\$(0.03372)</b>	<b>\$(0.03372)</b>	<b>\$(0.03372)</b>	<b>\$(0.03372)</b>	<b>\$(0.03372)</b>	<b>\$(0.03372)</b>	(D)
<b>MFC</b>	<b>\$0.02704</b>	<b>\$0.02704</b>	<b>\$0.00713</b>	<b>\$0.00185</b>	<b>\$0.00000</b>	<b>\$0.00000</b>	<b>\$0.00000</b>	(C)
<b>GPC</b>	<b>\$0.00400</b>	<b>\$0.00400</b>	<b>\$0.00400</b>	<b>\$0.00400</b>	<b>\$0.00400</b>	<b>\$0.00400</b>	<b>\$0.00400</b>	
<b>PTC</b>	<b>\$0.54535</b>	<b>\$0.54534</b>	<b>\$0.52543</b>	<b>\$0.52015</b>	<b>\$0.51830</b>	<b>\$0.51830</b>	<b>\$0.51830</b>	(I)

(C) – Change (I) Increase (D) - Decrease

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## EFFICIENCY COST RECOVERY SURCHARGE

The cost of the energy efficiency programs (i.e. the demand side management programs) for the firm customer rate classes listed below will be recovered by an Efficiency Cost Recovery Surcharge applicable to all volumes of Gas delivered.

- 1) The Surcharge will recover the program costs and the administrative costs of the energy efficiency program.
- 2) Computation of the Efficiency Cost Recovery Surcharge factors will be in accordance with the automatic adjustment procedures utilized under Section 1307(f) of the Public Utility Code and will be filed and approved in conjunction with the Company's annual Section 1307(f)-GCR filing.
- 3) Once the surcharge is in place, it will be automatically adjusted effective March 1, June 1, September 1, and December 1 of each year in accordance with Section 1307(f) quarterly adjustment procedures. No interest will be included in such surcharge computations. The basic component of the surcharge will be determined by dividing the total energy efficiency program costs approved for annual recovery plus (or minus) any over (or under) recovery from the prior period by the estimated applicable throughput in Mcfs. The costs related to customers other than low income residential customers are tracked and will be recovered separately from each of the following firm customer rate classes if the customer class is served by the energy efficiency program:
  - a) Residential and Public Housing Customers on Rate GS;
  - b) Commercial Customers on Rate GS;
  - c) Industrial Customers on Rate GS and Rate IT-XLT;
  - d) Municipal Customers on Rate MS; and
  - e) The Philadelphia Housing Authority on Rate PHA.

The surcharge shall be a cents per Ccf charge calculated to the nearest one-thousandth of a cent (0.00001) which shall be added to the distribution rates for billing purposes for all customers in each of the above rate classes. The rate shall be calculated separately for each rate class as follows:

- |   |      |
|---|------|
| a) \$0.00768 per Ccf for Residential and Public Housing Customers on Rate GS; | (D)  |
| b) \$0.00341 per Ccf for Commercial Customers on Rate GS;                     | (D)  |
| c) \$0.00001 per Ccf for Industrial Customers on Rate GS and Rate IT-XLT;     | (I)  |
| d) \$0.00000 per Ccf for Municipal Customers on Rate MS; and                  | (NC) |
| e) \$0.00341 per Ccf for The Philadelphia Housing Authority on Rate PHA.      | (D)  |

The Enhanced Low Income Retrofit Program costs shall be recovered through the Universal Services Surcharge beginning on September 1, 2010.

**(D) – Decrease; (I) – Increase; (NC) – No Change**

## UNIVERSAL SERVICE AND ENERGY CONSERVATION SURCHARGE

Universal service and energy conservation program and related costs will be recovered by a Universal Service and Energy Conservation Surcharge applicable to all volumes of Gas delivered. Rate IT-XLT will be charged for USEC costs in the same percentage as Rate IT-XLT revenues bear to PGW's total base rate revenues (including DSIC). The current charge will be \$290,000.

1. The Surcharge will recover: 1) the discounts provided to Customers pursuant to the Customer Responsibility Program (CRP); 2) the discounts provided to Customers pursuant to the Senior Citizen Discount; 3) the costs of PGW's Low Income Usage Reduction Program (LIRUP), known as the Home Comfort Program (previously known as the Conservation Works Program (CWP), the Enhanced Low Income Retrofit Program (ELIRP) and the CRP Home Comfort Program); 4) the costs of the pilot Conservation Incentive Credit program; and, 5) for Customers entering the CRP program on or after September 1, 2003, past due arrearages forgiven pursuant to paragraph A (6) of the CRP/CAP Program Design Stipulation approved by the Commission by its order at M-00021612 (entered March 31, 2003).
2. Computation of the Universal Service and Energy Conservation Surcharge factors will be in accordance with the automatic adjustment procedures utilized under Section 1307(f) of the Public Utility Code and will be filed and approved in conjunction with the Company's annual Section 1307(f)-GCR filing.
3. Once the surcharge is in place it will be automatically adjusted effective March 1, June 1, September 1, and December 1 of each year in accordance with Section 1307(f) quarterly adjustment procedures. No interest will be included in such surcharge computations. The basic component of the surcharge will be determined by dividing the total universal service and energy conservation program costs approved for annual recovery by the estimated applicable throughput in Mcfs.
4. The Universal Service and Energy Conservation Surcharge shall take effect upon the effective date of this Tariff.

Current Universal Service and Energy Conservation Surcharge = \$0.21620/Ccf

**(I)**

**(I) – Increase (D) – Decrease (C) - Change**

### **OTHER POST EMPLOYMENT BENEFIT (“OPEB”) SURCHARGE**

The amounts necessary to fund PGW's Other Post Employment Benefit obligations will be recovered by an Other Post Employment Benefit Surcharge applicable to all volumes of Gas delivered.

1. Computation of the Other Post Employment Benefit Rider Surcharge factors will be in accordance with the automatic adjustment procedures utilized under Section 1307(f) of the Public Utility Code and will be filed and approved in conjunction with the Company's annual Section 1307(f)-GCR filing.
2. Once the surcharge is in place it will be automatically adjusted effective September 1 of each year to account for over (under) recoveries in accordance with Section 1307(f) adjustment procedures. No interest will be included in such surcharge computations. The basic component of the surcharge will be determined plus (or minus) any over (or under) recovery from the prior period by dividing the total OPEB funding amounts approved for annual recovery by the estimated applicable throughput in Mcfs.
3. The Other Post Employment Benefit Rider Surcharge shall take effect upon the effective date of this Tariff.

Current Other Post Employment Benefit Rider Surcharge = \$0.03950/Ccf

**(D)**

**(I) – Increase (D) - Decrease**



## GENERAL SERVICE - RATE GS

Rate: Applicable to all Retail Sales Service or Transportation Service rendered pursuant to this Rate Schedule on or after March 1, 2025.

(C)

### AVAILABILITY

Available for any purpose where the Company's distribution mains adjacent to the proposed Gas Service location are, or can economically be made, suitable to supply the quantities of Gas or Transportation Services required. Not available for back-up service, refer to Rate BUS.

### RATES

CUSTOMER CHARGE (per Meter (except parallel meters)):

\$ 16.25 per month for Residential and Public Housing Authority Customers.  
\$ 27.65 per month for Commercial Customers  
\$ 82.80 per month for Industrial Customers

Surcharge: Distribution System Improvement Charge.

Plus,

GCR (not applicable to GS Customers who transport gas through a qualified NGS):

\$0.51308 per Ccf for Residential and Public Housing (I)  
\$0.51308 per Ccf for Commercial Customers (I)  
\$0.51308 per Ccf for Industrial Customers (I)

Plus,

DISTRIBUTION CHARGE (consisting of items (A) and (B), below):

(A) Delivery Charge:

\$0.74624 per Ccf for Residential  
\$0.68523 per Ccf for Public Housing  
\$0.54086 per Ccf for Commercial Customers  
\$0.54459 per Ccf for Industrial Customers

(B) Surcharges:

Universal Service and Energy Conservation Surcharge; Restructuring and Consumer Education Surcharge; Efficiency Cost Recovery Surcharge; Other Post Employment Benefit Surcharge; and Distribution System Improvement Charge.

Note: The Commodity Charge includes the Sales Service Charge, the Merchant Function Charge and the Gas Procurement Charge.

(I) – Increase; (C) – Change (D) - Decrease

PHILADELPHIA GAS WORKS

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Also,

The following may apply:

(C)

SPECIAL PROVISION – Air Conditioning Rider

SPECIAL PROVISION – Compressed Natural Gas (CNG) Rider

EXIT FEE

SENIOR CITIZEN DISCOUNT – to the extent authorized by this Gas Service Tariff.

**(C) – Change**

MINIMUM CHARGE

The monthly Minimum Charge is the Customer Charge set forth above.

CONTRACT

Standard service agreements, where applicable, are for a period to be determined by the Company.

COMPANY RULES

The provisions of this Tariff shall govern the supply of services under this Rate Schedule.

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## MUNICIPAL SERVICE - RATE MS

Rate: Applicable to all Retail Sales Service or Transportation Service rendered pursuant to this Rate Schedule on or after March 1, 2024.

(C)

### AVAILABILITY

Available to properties owned or occupied by the City of Philadelphia or the Board of Education, or any of their respective agencies or instrumentalities, for any type of Gas Service, unless purchased for resale to others, and where the Company's distribution mains adjacent to the proposed Gas Service locations are, or can economically be made, suitable to supply the quantities of Gas required; provided, however, that the rate shall not be available to Commercial Tenants of any such property.

### RATES

CUSTOMER CHARGE (per Meter (except parallel meters):

\$ 27.65 per month

Surcharge: Distribution System Improvement Charge.

Plus,

GCR (not applicable to MS Customers who transport Gas through a qualified NGS):

\$0.51308 per Ccf

(I)

Plus,

DISTRIBUTION CHARGE (consisting of items (A) and (B), below):

(A) Delivery Charge:

\$0.51883 per Ccf

(B) Surcharges:

Universal Service and Energy Conservation Surcharge; and The Restructuring and Consumer Education Surcharge; the Efficiency Cost Recovery Surcharge; Other Post Employment Benefit Surcharge; and Distribution System Improvement Charge.

Note: The Commodity Charge includes the Sales Service Charge, the Merchant Function Charge and the Gas Procurement Charge.

(I) – Increase, (C) – Change, (D) - Decrease

Also,

The following Riders may apply:

**(C)**

SPECIAL PROVISION – Air Conditioning Rider

SPECIAL PROVISION – Compressed Natural Gas (CNG) Rider

EXIT FEE

### CONTRACT

Standard service agreements are for a one year period.

### COMPANY RULES

The provisions of this Tariff shall govern the supply of services under this Rate Schedule.

**(C) – Change**

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## PHILADELPHIA HOUSING AUTHORITY SERVICE - RATE PHA

Rate: Applicable to all Retail Sales Service or Transportation Services rendered pursuant to this Rate Schedule on or after March 1, 2025.

(C)

### AVAILABILITY

Available for all Gas usage in multiple dwelling Residential buildings containing 10 or more dwelling units, owned and operated by the Philadelphia Housing Authority, where cooking shall be performed exclusively with Gas and where Gas Service shall be supplied through one or more single point metering arrangements at locations where the Company's distribution mains adjacent to the proposed Gas Service locations are, or can economically be made, suitable to supply the quantities of Gas required.

This rate is also available for all Gas usage in single and multiple dwelling Residential buildings, containing less than 10 dwelling units, provided, and only so long as, Gas is used exclusively for cooking, water heating and space heating for all such Residential buildings owned and operated by the Philadelphia Housing Authority, except (a) buildings operated by the Philadelphia Housing Authority, prior to the original effective date of this rate (January 1, 1969), and (b) buildings for which, in the judgment of the Company, such Gas Service cannot be provided economically.

### RATES

CUSTOMER CHARGE (per Meter (except parallel meters);

\$27.65 per month

Surcharge: Distribution System Improvement Charge.

Plus,

GCR (not applicable to PHA customers who transport gas through a qualified NGS):

\$0.51308 per Ccf

(I)

Plus

DISTRIBUTION CHARGE (consisting of item (A) and (B), below):

(A) Delivery Charge:

\$0.56340 per Ccf

(B) Surcharges:

Universal Service and Energy Conservation Surcharge; and The Restructuring and Consumer Education Surcharge; the Efficiency Cost Recovery Surcharge; Other Post Employment Benefit Surcharge; and Distribution System Improvement Charge.

Note: The Commodity Charge includes the Sales Service Charge, the Merchant Function Charge and the Gas Procurement Charge.

(I) – Increase, (C) – Change, (D) - Decrease



PHILADELPHIA GAS WORKS

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Also,

The following Riders may apply:

(C)

SPECIAL PROVISION – Air Conditioning Rider  
EXIT FEE

CONTRACT

Standard service agreements are for a one year period.

COMPANY RULES

The provisions of this Tariff shall govern the supply of Gas under this classification.

**(C) – Change**

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**DAILY BALANCING SERVICE - RATE DB**

Rate: Applicable to all services rendered pursuant to this Rate Schedule on or after September 1, 2003

Subject to the requirements of this Rate Schedule, service will be offered to Suppliers serving Rate IT Customers who can, in the sole judgment of the Company, manage their businesses without the use of Gas during periods of curtailment or interruption. Rate IT Customers who acquire Natural Gas supplies on an individual basis for their own use shall also be subject to all of the Supplier provisions of this Rate Schedule, except for those provisions related to licensing and bonding requirements. The Company will limit the number of Rate IT Customers in any single supply pool to 10. At the sole discretion of PGW, a supply pool of greater than 10 Rate IT Customers will be considered, operating conditions permitting.

**AVAILABILITY**

This service is available to self-transporters or Suppliers licensed by the Commission who meet the credit qualification described below. Daily balancing is provided only for the inadvertent fluctuations between the daily receipts by the Company from a Gas supplier and actual Gas usage by a Rate IT Customer or pool of Rate IT Customers. It is not intended to be used for speculation as to energy prices, to borrow Gas for later replacement, or to store Gas for future use during periods of supply shortfall. A Gas Supplier shall use its best efforts, including ongoing communication with its Rate IT Customers, to balance its daily purchases, nominations and deliveries with daily Rate IT Customer usage at all times.

**CHARACTER OF SERVICE**

Company assumes no liability for interruptions caused by failure of supply sources or by third parties and shall not be obligated to deliver Gas under this rate schedule on any day that Gas is not received at its gate station. Suppliers are advised that the Company may curtail (reduce) or interrupt deliveries to the Rate IT Customer whenever, at the Company's sole discretion, it determines that the available capacity in all or a portion of its system is projected to be insufficient to meet the requirements of all Rate IT Customers or in the event a NGS fails to meet delivery obligations.

### CREDIT QUALIFICATION

Suppliers must meet the credit requirement for the quantity of Gas proposed to be supplied. The company will determine credit required to be equal to 30 days of average daily usage for each Rate IT Customer served multiplied by the applicable Distribution Charge. Applications for service under this rate schedule can be obtained on the Company's bulletin board or from the Marketing Department representative. Completed credit applications must be signed by a responsible corporate officer, and must include a current audited financial statement, annual report, 10-K reports or other filings with regulatory agencies which discuss the supplier's financial status, a list of corporate affiliates, parent companies and subsidiaries, and any available reports from credit reporting and bond rating agencies. Financial data from a corporate parent will be acceptable from a supplier in order to satisfy credit worthiness criteria. A non-refundable credit investigation fee of \$400.00 must accompany the application.

Suppliers who do not meet the Company's standard for creditworthiness will be required to provide: (a) a parent guaranty in a form acceptable to the Company; or (b) security in the form of a cash deposit, a standby irrevocable letter of credit drawn upon a bank acceptable to the Company, or a performance bond issued by a surety company acceptable to the Company. Suppliers with limited credit qualification may be restricted as to the quantity of Gas that the Company is obligated to accept for delivery to Rate IT Customers on any day.

Supplier is responsible for providing updated financial credit information to the Company: (a) upon the occasion of any significant change to the supplier's financial condition; or (b) routinely not less than sixty (60) days prior to the annual rollover of the supplier's service agreement. At that time, all credit qualification criteria will be reviewed, and reevaluated if necessary.

### SERVICE AGREEMENT

Supplier must execute a service agreement in the form prepared by the Company. The standard agreement shall have an initial term of one year, and shall continue from month to month thereafter, subject to continued credit qualification and licensing, unless terminated by the supplier or the Company upon written notice to the other not less than 60 days prior to the end of a term. The Company may also terminate a service agreement at any time as provided by law or by provisions of this Tariff. Agreements will become effective only on the first day of a calendar month.

### SUPPLY POOLS

Supplier shall provide to the Company, electronically or in other format specified by the Company, a listing of all Customer accounts to be included in its supply pool(s) no later than 12:00 noon on the fifth (5th) business day prior to the start of each calendar month. The Company shall not be obligated to add or delete accounts at any time other than the start of a calendar month.

BALANCING

1. QUANTITIES

The maximum daily quantity that the Company is obligated to receive into its system shall be the sum of the total daily transportation quantities of the Rate IT Customers in a supply pool. The Company may, however, upon notice to the supplier, refuse to accept daily quantities in excess of projected Rate IT Customer usage when required by system operating conditions.

2. GAS DAY

Each Gas day shall begin and end at 10:00 AM Eastern standard or daylight-saving time, as applicable.

3. NOMINATIONS

Supplier shall provide to the Company, electronically or in other format specified by the Company, nominations for flowing Gas no later than 12:30 the day prior to Gas day for the interstate pipeline on which Gas is being shipped to the Company's system.

4. VOLUME ADJUSTMENT

The quantity of Gas received into the Company's system for the supplier's account shall be based on the final interstate pipeline nomination for each Gas day, as confirmed by the Company, adjusted for the unaccounted-for Gas as percentage of the total volume of Gas delivered into its system for Rate IT Customers' account. The percentage of Gas to be retained by the Company shall be equivalent to the percentage for total system line loss and unaccounted-for, as utilized in the Company's currently effective GCR.

5. USAGE DATA

The Company shall provide supplier with applicable usage data (the "Daily Usage Quantity" below) for each Rate IT Customer in a supply pool, and for the supply pool as a whole. This information will be available electronically or in other format specified by the Company within 24 hours of the end of each Gas day.

6. BALANCING LIMITS AND CHARGES

Daily balancing, and the reconciliation of end-of-month imbalances, shall be governed by the definitions, limits and charges set forth below:

- (a) Daily Receipt Quantity. The supplier’s confirmed pipeline nomination quantity, adjusted for unaccounted for Gas, for the Gas day.
- (b) Daily Usage Quantity. Gas used by the Rate IT Customer(s) in a supply pool during the 24-hour Gas day as recorded by the Company’s meter(s) at the Rate IT Customer location(s).
- (c) Allowable Daily Variation. The daily usage quantity must be within plus or minus ten percent (+/-10%) of the daily receipt quantity.
- (d) Daily Imbalance Surcharge. Supplier shall be charged \$0.50 for each Dth outside the applicable allowable daily variation.
- (e) Daily Market Index Price. The prices published each day in Gas Daily (or successor publication or where none exists a publication selected by the Company) under the heading “Citygate Prices” for deliveries at “Texas Eastern M-3” and “Transco Z6 [non-NY]” (or applicable headings of a successor publication.) Whenever a price is published as a range, the value used for that day would be the midpoint of the range.
- (f) Monthly Imbalance Reconciliation. Imbalances remaining at the end of a month in each supply pool shall be reconciled to zero in accordance with the following schedule. All cost calculations shall reflect the appropriate adjustment for unaccounted for Gas, and for average heating value where applicable.

- 1. Monthly usage quantities that exceed monthly receipts by up to 3.5% shall be purchased by the Supplier at the monthly average of the Daily Market Index Price; provided, however, that if Supplier shall cease to be a Supplier pursuant to this Rate Schedule, then, usage quantities that exceed monthly receipts by up to 3.5% during the Supplier’s last month on PGW’s system shall be purchased by the Supplier at the higher of: (a) 100% of the average of the two highest Daily Market Index Prices for the monthly period beginning on the first day of the month; or (b) 100% of the Company’s highest incremental supply cost for the month. (C)
- 2. Monthly usage quantities that exceed monthly receipts by more than 3.5% shall be purchased by the supplier at the higher of: (a) 125% of the average of the five (5) highest Daily Market Index Prices for the monthly period beginning on the first day of the month; or (b) 150% of the Company’s highest incremental supply cost for the month. (C)
- 3. Monthly receipt quantities that exceed monthly usage by up to 3.5% shall be purchased by the Company at the monthly average of the Daily Market Index Price; provided, however, that if Supplier shall cease to be a Supplier pursuant to this Rate Schedule, then, receipt quantities that exceed monthly usage by up to 3.5% during the Supplier’s last month on PGW’s system shall be purchased by Company at the lower of: (a) 100% of the average of the two (2) lowest Daily Market Index Price for the monthly period beginning on the first day of the month; or (b) 100% of the Company’s lowest incremental supply cost for the month.. (C)
- 4. Monthly receipt quantities that exceed monthly usage by more than 3.5% shall be purchased by the Company at the lower of: (a) 75% of the average of the five(5) lowest Daily Market Index Price for the monthly period beginning on the first day of the month; or (b) 75% of the Company’s lowest incremental supply cost for the month. (C)

**(C) - Change**

5. In the event that erroneous or inaccurate data is posted to PGW's EBB or changes occur to the data following the initial posting, PGW and the Suppliers agree to exercise good faith effort in attempting to resolve imbalances before the month's end. If the monthly imbalance cannot be brought into the monthly +/- 3.5% cashout band, the erroneous, inaccurate or changed data will be excluded from the Monthly Imbalance Reconciliation calculation and that volume shall be cashed out at the monthly average of the Daily Market Index Price. (C)

6. To facilitate this management and to avoid or correct imbalances, Rate IT Customer may modify the quantities it intends to have delivered to Company's City Gate in accordance with the nomination procedure of the delivering pipeline. All delivery arrangements must be coordinated with Company's representative in a manner deemed acceptable by Company. The Company may decline a revised nomination for specific operating reasons, where granting such would threaten the reliability of firm supply.

7. For the purpose of this section, the term "supplier" shall refer to both directly transporting Customers and supplier pools. To facilitate this management and to avoid or correct imbalances, a Rate IT supplier may reduce its imbalance by arranging a trade of quantities with another Rate IT supplier. Suppliers shall be permitted to trade IT imbalances on both a daily and monthly basis in accordance with the provisions below in order to reduce an imbalance to zero. Such trade will be arranged separately from PGW's electronic bulletin board systems. Within five (5) business days after month end, the Company shall provide by e-mail to each supplier who has previously agreed to have its data shared, a spreadsheet listing each supplier and whether the supplier had positive or negative daily imbalances (supplier imbalance data). Verification of any trade shall be provided to PGW via e-mail by both suppliers involved in the trade and submitted within five (5) business days of receipt from the Company of the supplier imbalance data. A supplier may offset daily or monthly imbalances in its FT service pool imposed pursuant to section 9.12 of PGW's Supplier Tariff. Such pool-to-pool netting of imbalances between a supplier's FT and IT pools are permitted only to the extent that the offset reduces to zero any positive imbalance in the supplier's IT pool. Any such pool-to-pool imbalance netting shall be communicated via e-mail to the Company within seven (7) business days from the end of the billing month.

Any misconduct by a supplier may terminate or suspend imbalance trading rights. In such event, PGW shall provide written notice of such proposed action to the affected supplier. The supplier or the Company may elect to address the alleged misconduct through the Company's informal dispute resolution procedures, 52 Pa. Code Section § 62.142(b). Either the supplier or the Company may file a complaint with the Commission regarding the alleged misconduct at any time. No action to suspend or terminate a supplier's imbalance trading rights shall occur prior to commission authorization.

**(C) - Change**

OPERATIONAL FLOW ORDERS (OFOs)

## 1. NOTICE

In order to alleviate operating conditions which threaten the integrity or safe operation of the Company's distribution system or interfere with the Company's ability to provide reliable firm service, the Company shall notify the supplier, electronically or in other format specified by the Company, of the issuance of an Operational Flow Order (OFO). The Company will endeavor to provide notice of the commencement of an OFO to the supplier not less than four hours in advance. Notice of the termination of an OFO may be made at any time, and shall specify the date and time of the termination.

## 2. ACTION REQUIRED

OFO notices will contain specific instructions as to the action(s) required of the supplier. The normal daily balancing tolerances specified in this Tariff may be reduced or eliminated for the duration of the OFO. The supplier shall be responsible for any communication with Rate IT Customers in the supply pool that may be necessary for the supplier's compliance with OFO requirements.



PHILADELPHIA GAS WORKS

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3. OFO ISSUANCE

The Company may issue OFOs that apply to Rate IT Customers receiving service under this rate schedule as follows:

(a) OFOs may be issued in the Company's sole judgment to:

1. Protect the integrity of the Company's Gas system;
2. Assure deliveries of Gas supplies to all of the Company's sales Rate IT Customers;
3. Adhere to the various interstate pipeline companies' balancing or delivery requirements; or
4. Provide adequate storage levels.

(b) OFOs may be issued concerning an individual Rate IT Customer, an aggregation pool, or an entire rate class of Rate IT Customers.

(c) In order to address operational reliability or to prevent undue cost shifting the Company will have the authority to require Supplier to direct a Rate IT Customer, or where the Rate IT Customer is part of an aggregation pool, the Rate IT Customer's Pool Administrator, to adjust daily scheduled volumes to a specified level or to deliver Gas to specified receipt point(s) into the Company's distribution system or to receipt points prescribed by upstream pipelines.

(d) Failure to comply with an OFO will result in the billing of the following charges when the actual daily usage exceeds the daily flowing volume:

1. Penalties as defined in the tariff on the difference, and
2. Payment of all other charges incurred by the Company on the date of the OFO that result from the Shipper's failure to comply with the OFO, including a proportionate share of any pipeline penalties that are incurred by the Company.

(e) Types of circumstances under which the Company may determine to issue an OFO include, but are not limited to:

1. Responding to an event of force majeure;
2. Accommodating capacity limitations resulting from the need to perform maintenance and/or repairs;
3. Ensuring current and future storage capabilities and levels;
4. Maintaining operational pressures, adequate Gas supplies and line pack required to provide an efficient and reliable service;
5. Responding to any event which the Company believes in its sole judgment may jeopardize the integrity of its system.

(f) The requirements of OFOs shall be as localized as possible. If only discrete segments of the Company's system are affected by operational difficulties, then OFOs shall be limited to those segments of the system. The Company shall lift any effective OFO promptly upon the remedy or cessation of the operating conditions that caused the issuance of the OFO.

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PHILADELPHIA GAS WORKS

#### 4. PENALTIES

Penalty charges to Suppliers for Gas used by Rate IT Customers in excess of the limits or conditions stated in an OFO shall be the greater of: (a) the applicable daily market index price plus \$25.00 per Dth; or (b) the actual cost or penalty incurred by the Company as a result of the violation by the supplier and/or the Rate IT Customers in the supply pool. Penalty charges for Gas received into the Company's system in excess of the conditions stated in an OFO shall be the greater of: (a) \$25.00 per Dth plus the acquisition of the excess Gas by the Company at no cost; or (b) the actual cost or penalty incurred by the Company as a result of the violation by the supplier and/or the Rate IT Customers in the supply pool plus the acquisition of the excess Gas by the Company at no cost.

#### COMMUNICATION REQUIREMENTS

Supplier is responsible for providing to the Company updated mailing and electronic addresses, as well as fax and voice telephone numbers, for communication of administrative and operational information on a 24-hour per day, seven-day per week basis. When curtailment or interruption of Rate IT Customers is required pursuant to rate schedule IT, the Company will provide notice to the supplier, electronically or in other format specified by the Company, as soon as practicable after notice is given to the affected interruptible Rate IT Customers of the imposition or lifting of such curtailment or interruption. Communication with interruptible Rate IT Customers that may be required in conjunction with the supplier's OFO obligations is the responsibility of the supplier.

#### CHARGES AND PAYMENTS

##### 1. MONTHLY BILL

The monthly billing statement shall include the charges and/or credits related to balancing and OFOs, plus a monthly administrative charge of \$150.00 per supply pool per month.

2. Standby Service charges if applicable shall apply to this rate.

#### SPECIAL PROVISIONS

##### 1. TITLE

Receipt of Gas by the Company shall not vest title to the Gas in the Company. Title to such Gas shall remain vested in either the supplier or the Rate IT Customer(s) for whom Gas was received for redelivery. The Company's furnishing of Transportation Service shall be complete upon delivery to the Rate IT Customer(s) of Gas received.

##### 2. COMPANY LIABILITY

The Company shall not be liable, under any circumstances or in any respect, to a Rate IT Customer, to a producer of Gas, to a supplier, or to any other person or entity for damages arising either directly or indirectly from curtailment, interruption or termination of Transportation Service that is consistent with this Tariff, the applicable sections of the Public Utility Code, and/or the regulations of the Commission.

3. SUPPLIER LIABILITY

The penalty provisions of this rate schedule apply only to the specific services rendered hereunder. They do not absolve supplier from liability in the event of a civil suit or any other claim of damages by producers, pipelines, Rate IT Customers or the Company in conjunction with the supplier's failure to deliver Gas.

COMPANY RULES

The provisions of this Tariff shall govern the service under this classification except where noted herein.

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**INTERRUPTIBLE TRANSPORTATION - RATE IT**

Rate: Applicable to all Gas transported on or after September 1, 2003

For service under this rate, each meter shall be considered a separate Customer. Parallel meters that serve a single Customer fuel line will be considered as one meter. PGW will transport Gas to a Customer through one meter at one premise. Subject to the above limitations and the requirements of this rate schedule, service will be offered to interruptible Customers, who can in the sole judgment of the Company, manage its business without the use of Gas during periods of curtailment or interruption. Each Customer must contract for a minimum of 15,000 Dth/year or up to 10 Customers may aggregate their loads into a supplier pool that meets the 15,000 Dth/year requirement.

**AVAILABILITY**

This service is available to any Commercial or Industrial Gas user, subject to the specific requirements set forth in this section. It consists of the receipt of a daily quantity of Gas by the Company from a Gas Supplier under Rate DB, the transportation of Gas through the Company's facilities, and the delivery of an equivalent quantity of Gas to the Customer, adjusted for unaccounted-for Gas. Customers are subject to curtailment or interruption at any times. Customers served under this rate schedule who acquire gas supplies on an individual basis for their own use shall also be subject to all of the Gas Supplier provisions of rate schedule DB (Daily Balancing), except for those provisions related to licensing and bonding requirements.

**SPECIAL METERING EQUIPMENT**

This service requires the electronic transmission of metering data from the Customer's meter location to the Company on a daily basis. The metering equipment requires electric power supply compatible with the Company's equipment and a dedicated telephone line, both of which shall be provided by the Customer. Each Customer, prior to the initiation of service, shall pay the Company in full for facilities to record and transmit metering data, which payment shall not be subject to refund under any circumstances. Customer shall be responsible for ongoing maintenance of the electric power supply and dedicated telephone line, and shall reimburse the Company for expenses incurred to obtain daily metered usage during periods when the electric power and/or the telephone line is unavailable.

**SERVICE AGREEMENT**

Customer must execute a service agreement in the form prepared by the Company. Such agreement shall specify, among other things, the maximum daily interruptible transportation quantity or the total daily capacity of the Customer's equipment. The standard agreement shall have a term of not less than one year, and shall continue from month to month thereafter unless terminated by the Customer or the Company upon written notice to the other not less than 60 days prior to the end of a term. The Company may terminate a service agreement at any time as provided by law or by provisions of this Tariff. A service agreement for a period of more or less than one year may be executed only upon the mutual agreement of the Company and the Customer. Service initiation cannot take place until the special metering equipment is installed and operating to the Company's satisfaction. Service will be initiated only on the first day of a calendar month.

## INTERRUPTIBLE SERVICE

### 1. QUALITY OF SERVICE

Company assumes no liability for interruptions caused by failure of supply sources or by third parties such as Suppliers and shall not be obligated to deliver Gas under this rate schedule on any day that Gas is not received at its gate station for the Customer's account except as specified under provisions for Standby Service contained herein. The Company may curtail (reduce) or interrupt deliveries to the Customer whenever, at the Company's sole discretion, it determines that the available capacity in all or a portion of its system is projected to be insufficient to meet the requirements of all Customers or in the event a NGS fails to meet delivery obligations. Although the Company will endeavor to provide as much notice as is reasonable and practical, the Customer shall maintain the ability to curtail or interrupt usage upon eight hours notice. In the event of a system emergency, upon notice by the Company, the Customer shall use its best efforts to curtail or interrupt usage upon less than eight hours notice.

### 2. INTERRUPTIBLE CAPABILITY

In order to qualify for interruptible daily Transportation Service under this Rate Schedule, a Customer must: (1) have installed and operable alternate fuel equipment, including appropriate fuel storage capacity, capable of displacing the daily quantity of Gas subject to curtailment or interruption; or (2) or in the alternative demonstrate to the Company's sole satisfaction the ability to manage its business without the use of Gas during periods of curtailment or interruption.

### 3. REQUIREMENTS

Customer is responsible for providing to the Company continuously updated mailing and electronic addresses, as well as fax and voice telephone numbers, for communication of interruption notices on a 24-hour per day, seven-day per week basis. Interruption notices shall be considered received by the Customer upon transmission by the Company to the electronic address and/or telephone number provided by the Customer.

### 4. PENALTIES FOR UNAUTHORIZED USAGE

During any period of curtailment or interruption, the Company shall have the right to immediate access, without prior notice to the Customer, to inspect the Company's Gas measurement equipment and all Gas-using facilities at the Customer's premises. If the Company determines that the Customer is using or has used a quantity of Gas in excess of the quantity authorized by the notice of curtailment or interruption, the Company shall have the right to impose the following penalties: (a) to take measures to physically restrict the flow of Gas into the Customer's premises, or, if flow restriction is not practical, to terminate service; and, (b) to impose a penalty equal to the greater of any actual cost incurred or penalty imposed upon the Company as a result of the violation by the Customer, or \$25.00/Dth, in addition to the Company's cost of the Gas used, for each Dth taken in excess of the quantity authorized in the notice. In addition to the foregoing, the Customer shall hold the Company harmless and defend the Company against any and all claims against the Company arising from service problems caused or materially contributed to by the Customer's violation of the notice of curtailment or interruption.

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LEVELS OF SERVICE

Customers will be placed into their corresponding rate class. The Company at its sole discretion will determine the level of service.

An Applicant for service under this rate shall be required to execute a service agreement in which maximum and minimum quantities of Gas to be delivered shall be defined. An Applicant shall not be eligible for an Interruptible Gas Transportation Service rate class unless the minimum volumes set forth directly below are met on an annual basis.

Rate class:	Annual volumes (Dth) – not less than:
IT-A:	2,500
IT-B:	5,000
IT-C:	10,000
IT-D:	25,000
IT-E:	80,000

Customers electing service under this rate shall have and maintain complete and adequate standby non-natural gas energy (e.g., oil, propane, electric, steam) and equipment for alternate operation in the event of interruption of Gas Service.

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CHARGES

1. MONTHLY BILL

The monthly bill shall consist of the sum of the monthly Customer charge and the Distribution Charge as detailed below:

<u>CUSTOMER CHARGE</u>	<u>(\$ Per Meter Per Month</u> <u>(Parallel Meters are considered one meter)</u>	
IT-A:	152.16	
IT-B:	273.89	
IT-C:	273.89	
IT-D:	273.89	
IT-E:	426.06	
<u>DISTRIBUTION CHARGE</u>	<u>Rate (\$) Per Mcf / Dth Delivered*</u>	
IT-A:	3.0038 / 2.9051	(I)
IT-B:	1.4539 / 1.4061	(I)
IT-C:	1.1345 / 1.0972	(I)
IT-D:	1.0066 / 0.9735	(I)
IT-E:	0.9747 / 0.9426	(I)

\*The distribution charge may be the product of a negotiated rate and may include long-term contracts of up to five years as mutually agreed to by the Company and the Customer. This negotiated rate may be higher than, but not lower than, the distribution charges set forth above and may include additional minimum take requirements.

**(I) – Increase**

CONDITIONS OF USE

1. The Company shall not be obligated to incur the cost of additional facilities to provide Transportation Service hereunder for existing load. Nonetheless, in the event the Company elects to provide additional facilities, which in the Company's sole judgment are required to provide Transportation Service, the cost of such facilities shall be the responsibility of the Customer. Customers may Appeal the Company's judgment to the Commission. The Company shall provide, install, own and maintain such facilities. Where applicable, extensions and enlargements of Gas supply facilities for qualifying new load shall be in accordance with Section 10 of this Tariff.
2. The Customer warrants and will provide satisfactory documentation, upon request, that it has good and merchantable title for all Gas delivered to the Company for transportation hereunder. Title shall be free and clear of all liens, encumbrances and claims whatsoever. Customer will indemnify Company and hold the Company harmless from all suits, actions, debts, accounts, damages, costs, losses and expenses arising out of the adverse claims of any or all persons to said Gas and/or to royalties, taxes, license fees or charges thereon, including pipeline transportation and service charges, which are applicable to such Gas and/or the delivery of such Gas to the Company.
3. The Company may retain for unaccounted-for Gas a percentage of the total volume of gas delivered into its system for Customer's account. The percentage of Gas to be retained by the Company shall be equivalent to the percentage of unaccounted-for Gas, as utilized in the Company's currently effective GCR. This condition may be revised as appropriate, by the individual service agreement, where the transported Gas can be delivered directly to the Customer without commingling with other distribution system supplies.
4. In the event that the Company declares an emergency situation it may, at its discretion, divert Customer's Gas for such purposes as Company deems appropriate and Customer will be compensated for such Gas at the cost at which the Customer acquired the Gas, at the Customer's cost of the alternate fuel utilized or at the Company's avoided cost of Gas during the billing month, whichever is highest. The Customer shall demonstrate its cost of Natural Gas or replacement fuel by making a copy of its purchase contract available to Company upon request. All Gas purchased by the Company will be credited to the Customer's account.

DELIVERY QUANTITIES

The Company shall not be obligated to deliver or accept for delivery volumes in excess of the maximum hourly, daily or monthly volumes specified in the service agreement. It is the intent of the Company that the Customer so manage his arrangements for daily deliveries of Gas that they approximately equal his combined daily Gas usage and that volume retained for unaccounted-for Gas adjustment. The quantities of Gas received on Customer's behalf will be balanced monthly and daily on a thermally equivalent basis with those quantities re-delivered or retained for line loss and unaccounted for adjustment. For this thermal correction quantities will be multiplied by a fraction; the numerator of which is the weighted average Btu content per cubic foot of either the Company's system (if commingled) or the individual transporting pipeline (if not commingled), and the denominator is a reference Btu content of 1,000 Btu per cubic foot.

STANDBY SERVICE

Contingent upon the Company's ability to arrange the required supply contracts, a Customer may contract for Standby Service to purchase Gas from the Company under a specified Retail Rate Schedule, in the event that the Customer experiences an interruption or curtailment in Transportation Service by a Supplier. The contract term for Standby Service shall be a minimum of one year. The maximum volume of Gas that the Company is obligated to provide under Standby Service on any Gas day shall be specified in the individual service agreement. Volumes taken in excess of the specified daily standby limits, except for those volumes authorized and supplied by the Company under an applicable retail rate, shall be purchased by the Customer at the higher of: (a) 150% of the average of the two highest Daily Market Index Prices for the monthly period beginning on the first day of the month; or (b) 150% of the Company's highest incremental supply cost for the month.

A Customer contracting for Standby Service shall pay a monthly reservation charge. This charge shall be based on the demand charge paid by the Company to its highest cost pipeline and then applied to the supplier's Standby Service Quantity as specified in the individual Service agreement. The Company may revise the reservation charge no more frequently than monthly to reflect changes in the pipeline demand and related charges. The reservation charge prorated on a daily basis will be credited to all volumes purchased under the standby service. In addition, at the end of each contract year, the Customer will be assessed those minimum bill or take-or-pay charges actually paid by the Company to its own suppliers, which are attributable to the volume reserved but not taken under this Standby Service.

LIABILITY

The Company shall not be liable for curtailment of service under this rate schedule or loss of Gas of the Customer as a result of any steps taken to comply with any law, regulation or order of any governmental agency with jurisdiction to regulate, allocate or control Gas supplies or the rendering of service hereunder, and regardless of any defect in such law, regulation or order.

The Company reserves the right to commingle transport Gas with its other supplies but Gas is and remains the property of the Customer while being transported and delivered by the Company. The Customer shall be responsible for maintaining all insurance it deems necessary to protect its property interest in such Gas before, during and after receipt by the Company. The Company shall not be liable for any loss to the Customer or any other entity or person(s) arising from or out of service under this rate schedule, including loss of Gas in the possession of the Company or any other cause.

COMPANY RULES

The provisions this Tariff shall govern the service under this classification except where noted herein.

The following Riders may apply:

**(C)**

**(C) – Change**

**GAS TRANSPORTATION SERVICE - RATE GTS  
FIRM SERVICE**

Rate: Applicable to all Transportation Services rendered pursuant to this Rate Schedule on or after September 1, 2003.\*

C

**AVAILABILITY**

This rate is only available to those customers who utilized this service on or before September 1, 2003 pursuant to a currently valid agreement with the Company.

**CHARACTER OF SERVICE**

Transportation Service under this rate schedule is firm and shall be interrupted only in cases of operating emergencies experienced by the Company. Company assumes no liability for interruptions caused by failure of supply sources or by third parties such as Suppliers and shall not be obligated to deliver Gas under this rate schedule on any day that Gas is not received at its gate station for the Customer's account except as specified under provisions for Standby Service contained herein.

**MONTHLY RATE**

The Monthly Charge shall be the sum of the following:

1. **CUSTOMER CHARGE:** \$250.00 per month.

2. **DELIVERY CHARGE:**

The Delivery Charge applicable for each Customer shall be specified in the individual Transportation Service Agreement.

3. **TRANSPORTATION SURCHARGE:**

The Customer shall reimburse Company for any expense actually incurred for Customer's benefit from third party sources in the provision of this Service, such as directly assignable taxes, pipeline balancing penalties, governmentally imposed charges, and contingent liability for external transportation charges and fuel requirements. Additionally, for existing Customers, any unavoidable Gas supply costs (e.g., pipeline demand charges) incurred on the Customer's behalf, may be recovered under this surcharge. Such surcharge is in addition to charges specified elsewhere in this rate schedule. Such potential charges are to be specifically defined and identified in the individual Transportation Service agreement.

4. **STANDBY SERVICE CHARGES, IF APPLICABLE:**

See Standby Service Provision.

5. **MINIMUM MONTHLY CHARGE:**

The minimum monthly charge shall be the Customer Charge.

\* Existing terms and conditions are extended for all customers taking service as of December 31, 2022 on this rate until the earlier of April 30, 2023 or the Pennsylvania Public Utility Commission issues a final decision in Docket No. C-2021-3029259. All rates and charges incurred after January 1, 2023 are subject to being rebilled as directed by the Pennsylvania Public Utility Commission so as to effectuate the final decision in Docket No. C-2021-3029259 on January 1, 2023.

C

**(C) Change**

**GAS COST RATE**

The GCR shall not apply to transported volumes. Similarly, such transported volumes and any expenses related to such volumes shall be excluded from all calculations determining such GCR.

**CONTRACT TERM**

The duration of the transportation contract shall be as specified in the required individual Service Agreement. In no event shall the contract term be for a period of less than one year.

**STANDBY SERVICE**

Contingent upon the Company's ability to arrange the required supply contracts, a transportation Customer may contract for Standby Service to purchase Gas from the Company under a specified retail Rate Schedule, in the event that the customer experiences an interruption or curtailment in Transportation Service by a Supplier. The contract term for Standby Service shall be a minimum of one year. The maximum volume of Gas that the Company is obligated to provide under the Standby Service on any day shall be specified in the individual Service Agreement. Volumes taken in excess of the specified daily limits, except for those volumes authorized and supplied by the Company under an applicable retail rate, may be subject to a charge of \$10 per Mcf if arrangements have been made for Emergency Service or \$20 per Mcf for all unauthorized volumes.

Under this Standby Service, upon proper notice, and as soon as operations permit, the Customer may convert some or all of their firm Transportation Service to the specified equivalent retail sales service during the effective period of this Standby Service agreement. The Company is not obligated to provide retail sales service to a transportation Customer if the Customer has not contracted for Standby Service. Eligibility for such a Customer to receive retail Gas Service shall be no different than any other person or entity who is at the time making application for service as a new Customer.

A Customer contracting for Standby Service shall pay a monthly reservation charge that is equivalent to the demand charge paid by the Company to its highest cost pipeline supplier applied to the Customer's maximum Daily Contract Quantity as specified in the individual service agreement. The Company may revise the Reservation Charge no more frequently than monthly to reflect changes in the pipeline demand and related charges. The reservation charge prorated on a daily basis will be credited to all volumes purchased under the Standby Service. In addition, at the end of each contract year, the Customer will be assessed those minimum bill or take-or-pay charges actually paid by the Company to Suppliers, which are attributable to the volume reserved but not taken under this Standby Service.

**STANDBY SERVICE - SPECIAL PROVISION**

For Customers contracting for delivery by the Company of 10,000 Mcf per day or more of transportation Gas, the terms and conditions under which Standby Service will be provided will be as specified in their individual service agreements, in lieu of the above.

**TERMS OF PAYMENT**

Bills will be rendered and payment terms applied in accordance with this Tariff.

**CONDITIONS OF USE**

1. The Company shall not be obligated to incur the cost of additional facilities to provide Transportation Service hereunder for existing load. Nonetheless, in the event the Company elects to provide additional facilities, which in the Company's sole judgment are required to provide Transportation Service, the cost of such facilities shall be the responsibility of the Customer. Customers may appeal the Company's judgment to the Commission. The Company shall provide, install, own and maintain such facilities. Where applicable, extensions and enlargements of Gas supply facilities for qualifying new load shall be in accordance with Section 10.
2. The Customer warrants and will provide satisfactory documentation, upon request, that it has good and merchantable title for all Gas delivered to the Company for transportation hereunder. Title shall be free and clear of all liens, encumbrances and claims whatsoever. Customer will indemnify Company and hold the Company harmless from all suits, actions, debts, accounts, damages, costs, losses and expenses arising out of the adverse claims of any or all persons to said Gas and/or to royalties, taxes, license fees or charges thereon, including pipeline transportation and service charges, which are applicable to such Gas and/or the delivery of such Gas to the Company.
3. The Company may retain for line loss and unaccounted-for Gas a percentage of the total volume of Gas delivered into its system for Customer's account. The percentage of Gas to be retained by the Company shall be equivalent to the percentage for total system line loss and unaccounted-for, as utilized in the Company's annual operating budget. This condition may be revised as appropriate, by the individual service agreement, where the transported Gas can be delivered directly to the Customer without commingling with other distribution system supplies.
4. In the event that the Company declares an emergency situation it may, at its discretion, divert Customer's Gas for such purposes as Company deems appropriate and Customer will be compensated for such Gas at the cost at which the Customer acquired the Gas, at the Customer's cost of the alternate fuel utilized or at the Company's avoided cost of Gas during the billing month, whichever is highest. The Customer shall demonstrate its cost of Natural Gas or replacement fuel by making a copy of its purchase contract available to Company upon request. All Gas purchased by the Company will be credited to the Customer's account.
5. NOTICE AND BALANCING

The Notice and Balancing conditions shall be the following, except as otherwise provided in the individual service agreement.

The Company shall not be obligated to deliver or accept for delivery volumes in excess of the maximum hourly, daily or monthly volumes specified in the service agreement.

It is the intent of the Company that the Customer so manage his arrangements for daily deliveries of Gas that they approximately equal his combined daily Gas usage and that volume retained for line loss and unaccounted for adjustment. To facilitate this management and to avoid or correct imbalances, Customer may modify the quantities it intends to have delivered to Company's city gate in accordance with the monthly and daily nomination procedure of the delivering pipeline. All delivery arrangements must be coordinated with the Company in a manner deemed acceptable by Company. Company shall, within the limitations of its system, assist in the balancing effort.

The quantities of Gas received on Customer's behalf will be balanced monthly on a thermally equivalent basis with those quantities re-delivered or retained for line loss and unaccounted for adjustment. For this thermal correction quantities will be multiplied by a fraction; the numerator of which is the weighted average Btu content per cubic foot of either the Company's system (if commingled) or the individual transporting pipeline (if not commingled), and the denominator is a reference Btu content of 1,000 Btu per cubic foot.

Notice will be provided by the Company, at the time of each individual Customer's daily nominations, as to the availability of retail Gas backup in accordance with operating conditions and their contractual service obligations. On any day when retail backup is declared unavailable, all volumes used (including adjustment for line loss and unaccounted for Gas) in excess of that delivered on such Customer's behalf that day, will be excluded from their daily and monthly balancing provisions. Such Gas will be billed for at the rate of \$10 per Mcf if emergency Gas was initially requested and approved or at the rate of \$20 per Mcf if Unauthorized.

#### Allowable Imbalances

Imbalances except as noted above, may be permitted within a range of  $\pm 10\%$  on a daily basis if adjusted within  $\pm 5\%$  by month's end. Company will advise Customer of potential imbalance conditions periodically to facilitate correction. But repeated excessive overruns or underruns of the hourly and daily Gas volumes received for Customer's account may be considered grounds for termination of service under this rate. Monthly imbalances within the allowable limits shall be resolved through mutual adjustment of initial deliveries in the subsequent month of service.

#### Correction For Quantities Outside Range Of Allowable Imbalances

All volumes utilized in excess of the allowable monthly overrun, where retail sales backup had been authorized, will be considered sold to the Customer under the applicable equivalent retail rate.

All volumes delivered to the Company that remain unaccepted by the Customer, in excess of the allowable monthly underrun may be offered for sale to the Company or stored at the Customer's option. Gas may be purchased by the Company at a rate not to exceed the Company's avoided cost of Gas for the month of delivery. In the event that the Company does not elect to purchase volumes in excess of the allowable underrun, a service charge for all such volumes carried forward by the Company will be made. These volumes will be the first deliveries in the subsequent month. The unit rate for this service charge will be the volumetrically weighted average of the 100% load factor unit cost of the Company's pipeline storage contracts as utilized in the Company's annual operating budget. Upon temporary suspension of deliveries or termination of Rate GTS service, any existing underrun imbalance shall be corrected within 60 days of the end of the month in which final deliveries are made. Otherwise they become the property of the Company at no cost to the Company.

6. EMERGENCY GAS

Emergency Gas is defined as a service to be offered by the Company when Gas is not available under the otherwise applicable retail sales service, provided certain conditions apply and terms are met, and that the quantities of Gas available to the Company and the distribution facilities are adequate to provide this service without jeopardizing the physical or economic operation of the Company. The cost of providing this emergency service is \$10.00 for each thousand cubic feet of Gas used. The minimum charge for this service is \$100.00 per occurrence.

Customers who feel they may have to avail themselves of this service should send for a copy of the terms and conditions of availability under which this emergency service may be obtained.

7. UNAUTHORIZED USE

If a Customer uses this service after being notified that service under this schedule is not available, or uses this service in excess of authorized limitations when established and duly notified, all such unauthorized usage shall be billed at the rate of \$20.00 for each Mcf. In addition, Company may, at its discretion, refuse to accept delivery from the Customer's Supplier, and physically shut off Customer to ensure compliance.

8. LIABILITY

The Company shall not be liable for curtailment of service under this rate schedule or loss of Gas of the Customer as a result of any steps taken to comply with any law, regulation or order of any governmental agency with jurisdiction to regulate, allocate or control Gas supplies or the rendering of service hereunder, and regardless of any defect in such law, regulation or order.

The Company reserves the right to commingle transport Gas with its other supplies but Gas is and remains the property of the Customer while being transported and delivered by the Company. The Customer shall be responsible for maintaining all insurance it deems necessary to protect its property interest in such Gas before, during and after receipt by the Company.



The Company shall not be liable for any loss to the Customer or any other entity or person(s) arising from or out of service under this rate schedule, including loss of Gas in the possession of the Company or any other cause.

**COMPANY RULES**

The provisions of this Tariff shall govern the service under this classification except where noted herein.

**GAS TRANSPORTATION SERVICE - RATE GTS  
INTERRUPTIBLE SERVICE**

Rate: Applicable to all Transportation Services rendered pursuant to this Rate schedule on or after September 1, 2003

**AVAILABILITY**

This rate is only available to those customers who utilized this service on or before September 1, 2003 pursuant to a currently valid agreement with the Company.

**CHARACTER OF SERVICE**

Transportation service under this rate schedule is interruptible, paralleling the character of service of the otherwise applicable retail sales tariff. Service under this rate schedule shall be subordinate to all firm retail sales services and firm Transportation Services provided by the Company. The Company, at its sole discretion and on a best efforts basis, will endeavor to transport volumes received at the Company's city gate for the Customer's account during periods when the otherwise applicable retail service is not available.

Company assumes no liability for interruptions caused by failure of supply sources or by third parties such as Suppliers and shall not be obligated to deliver Gas under this rate schedule on any day that Gas is not received at its gate station for the Customer's account except as specified under provisions for Standby Service contained herein.

**MONTHLY RATE**

The Monthly Charge shall be the sum of the following:

1. **CUSTOMER CHARGE:** \$250.00 per month.
2. **DELIVERY CHARGE:**

The Customer may elect either (i) a fixed annual Delivery Charge based on the annual interruptible margin in effect for the Company's operating fiscal year (currently September through August), or (ii) a variable monthly Delivery Charge. This variable charge shall be the monthly interruptible margin as experienced by the Company during the month of delivery. The Delivery Charge for volumes transported during periods when the otherwise applicable retail service is not available shall be as specified in the individual service agreement.

The Customer shall make an election of either the fixed or variable Delivery Charge pricing methodology prior to the initiation of service hereunder and at each subsequent September 1st thereafter, to be effective for the following twelve months, or portion thereof, of the contract period.

The Delivery Charge applicable for each Customer shall be specified in the individual Transportation Service agreement and is subject to revision from time to time as authorized by the Commission.

3. **TRANSPORTATION SURCHARGE:**

The Customer shall reimburse Company for any expense actually incurred for Customer's benefit from third party sources in the provision of this service, such as directly assignable taxes, pipeline balancing penalties, governmentally imposed charges, and contingent liability for external

transportation charges and fuel requirements. Such surcharge is in addition to charges specified elsewhere in this Rate Schedule. Such potential charges are to be specifically defined and identified in the individual Transportation Service agreement.

4. **STANDBY SERVICE CHARGES, IF APPLICABLE:**

See Standby Service Provisions.

5. **MINIMUM MONTHLY DELIVERY CHARGE:**

Except as otherwise provided in the individual service agreement, the minimum monthly delivery charge shall be the daily contract quantity (DCQ) times one half the number of days Transportation Service is available in the billing month, times the applicable transportation delivery charge. The minimum monthly delivery charge shall be inapplicable when any of the following conditions occur:

- a) When the otherwise applicable firm or interruptible sales service is not subject to a corresponding minimum charge; or
- b) When, for reasons, beyond the Customer's control, the Customer's Gas burning equipment is temporarily inoperative; or
- c) When for reasons beyond the Customer's control, the Customer cannot obtain transportation from its Supplier(s) to the point of receipt; or
- d) In emergency situations where the Company diverts the Customer's transportation Gas to meet the requirements of its firm Customers.

During periods when the minimum monthly delivery charge is inapplicable, the Customer Charge shall be the minimum monthly charge.

### **GAS COST RATE**

The GCR as provided for in this Tariff shall not apply to transported volumes. Similarly, such transported volumes and any expenses related to such volumes shall be excluded from all calculations determining such GCR.

### **CONTRACT TERM**

The duration of the transportation contract shall be as specified in the required individual service agreement. In no event shall the contract term be for a period of less than one year.

### **STANDBY SERVICE**

Contingent upon the Company's ability to arrange the required supply contracts, a transportation Customer may contract for Standby Service to purchase Gas from the Company under a specified retail Rate Schedule, in the event that the Customer experiences an interruption or curtailment in Transportation Service by a Supplier during the availability period of such equivalent firm or interruptible sales service. The contract term for Standby Service shall be a minimum of one year. The maximum volume of Gas that the Company is obligated to provide under the Standby Service on any day shall be specified in the individual service

agreement. Volumes taken in excess of the specified daily limits, except for those volumes authorized and supplied by the Company under an applicable retail rate, may be subject to a charge of \$10 per Mcf if arrangements have been made for Emergency Service or \$20 per Mcf for all unauthorized volumes.

Under this Standby Service, upon proper notice to the Company, and as soon as operations permit, the Customer may convert some or all of their interruptible Transportation Service to the specified equivalent firm or interruptible sales service during the effective period of this Standby Service agreement. The Company is not obligated to provide firm or interruptible sales service to a transportation Customer if the Customer has not contracted for Standby Service. Eligibility for such a Customer to receive firm or interruptible sales service shall be no different than any other person or entity who is, at the time, making application for service as a new Customer.

A Customer contracting for Standby Service shall pay a monthly reservation charge. This charge shall be based on the demand charge paid by the Company to its highest cost pipeline supplier adjusted to reflect the limitation on the availability of Standby Service for interruptible Customers, and then applied to the Customer's maximum Daily Contract Quantity as specified in the individual service agreement. The Company may revise the reservation charge no more frequently than monthly to reflect changes in the pipeline demand and related charges. The reservation charge prorated on a daily basis will be credited to all volumes purchased under the Standby Service. In addition, at the end of each contract year, the Customer will be assessed those minimum bill or take-or-pay charges actually paid by the Company to suppliers, which are attributable to the volume reserved but not taken under this Standby Service.

#### **STANDBY SERVICE - SPECIAL PROVISION**

For Customers contracting for delivery by the Company of 10,000 Mcf per day or more of transportation Gas, the terms and conditions under which Standby Service will be provided will be as specified in their individual service agreements, in lieu of the above.

#### **TERMS OF PAYMENT**

Bills shall be rendered and payment terms applied in accordance with the provisions of this Tariff.

#### **CONDITIONS OF USE**

1. The Company shall not be obligated to incur the cost of additional facilities to provide Transportation Service hereunder for existing load. Nonetheless, in the event the Company elects to provide additional facilities, which in the Company's sole judgment are required to provide Transportation Service, the cost of such facilities shall be the responsibility of the Customer. Customers may appeal the Company's judgment to the Commission. The Company shall provide, install, own and maintain such facilities. Where applicable, extensions and enlargements of Gas supply facilities for qualifying new load shall be in accordance with Section 10.
2. The Customer warrants and will provide satisfactory documentation, upon request, that it has good and merchantable title for all Gas delivered to the Company for transportation hereunder. Title shall be free and clear of all liens, encumbrances and claims whatsoever. Customer will indemnify Company and hold the Company harmless from all suits, actions, debts, accounts, damages, costs, losses and expenses arising out of the adverse claims of any or all persons to said Gas and/or to royalties, taxes, license fees or charges thereon, including pipeline transportation and service charges, which are applicable to such Gas and/or the delivery of such Gas to the Company.
3. The Company may retain for line loss and unaccounted-for Gas a percentage of the total volume of Gas delivered into its system for Customer's account. The percentage of Gas to be retained by the

Company shall be equivalent to the percentage for total system line loss and unaccounted-for, as utilized in the Company's annual operating budget. This condition may be revised as appropriate, by the individual service agreement, where the transported Gas can be delivered directly to the Customer without commingling with other distribution system supplies.

4. In the event that the Company declares an emergency situation" it may, at its discretion, divert Customer's Gas for such purposes as Company deems appropriate and Customer will be compensated for such Gas at the cost at which the Customer acquired the Gas, at the Customer's cost of the alternate fuel utilized or at the Company's avoided cost of Gas during the billing month, whichever is highest. The Customer shall demonstrate its cost of Natural Gas or replacement fuel by making a copy of its purchase contract available to Company upon request. All Gas purchased by the Company will be credited to the Customer's account.

5. NOTICE AND BALANCING

The notice and balancing conditions shall be the following, except as otherwise provided in the individual service agreement.

The Company shall not be obligated to deliver or accept for delivery volumes in excess of the maximum hourly, daily or monthly volumes specified in the service agreement.

It is the intent of the Company that the Customer so manage his arrangements for daily deliveries of Gas that they approximately equal his combined daily Gas usage and that volume retained for line loss and unaccounted for adjustment. To facilitate this management and to avoid or correct imbalances, Customer may modify the quantities it intends to have delivered to Company's city gate in accordance with the monthly and daily nomination procedure of the delivering pipeline. All delivery arrangements must be coordinated with the Company in a manner deemed acceptable by Company. The Company shall, within the limitations of its system, assist in the balancing effort.

The quantities of Gas received on Customer's behalf will be balanced monthly on a thermally equivalent basis with those quantities re-delivered or retained for line loss and unaccounted for adjustment. For this thermal correction quantities will be multiplied by a fraction; the numerator of which is the weighted average Btu content per cubic foot of either the Company's system (if commingled) or the individual transporting pipeline (if not commingled), and the denominator is a reference Btu content of 1,000 Btu per cubic foot.

Notice will be provided by the Company', at the time of each individual Customer's daily nominations, as to the availability of retail Gas backup in accordance with operating conditions and their contractual service obligations. On any day when retail backup is declared unavailable, all volumes used (including adjustment for line loss and unaccounted for Gas) in excess of that delivered on such Customer's behalf that day, will be excluded from their daily and monthly balancing provisions. Such Gas will be billed for at the rate of \$10 per Mcf if emergency Gas was initially requested and approved or at the rate of \$20 per Mcf if Unauthorized.

Allowable Imbalances

Imbalances except as noted above, may be permitted within a range of  $\pm 10\%$  on a daily basis if adjusted within  $\pm 5\%$  by month's end. Company will advise Customer of potential imbalance conditions periodically to facilitate correction. But repeated excessive overruns or underruns of the hourly and daily Gas volumes received for Customer's account may be considered grounds for termination of service under this rate. Monthly imbalances within the allowable limits shall be resolved through mutual adjustment of initial deliveries in the subsequent month of service.

Correction For Quantities Outside Range Of Allowable Imbalances

All volumes utilized in excess of the allowable monthly overrun, where retail sales backup had been authorized, will be considered sold to the Customer under the applicable equivalent retail rate.

All volumes delivered to the Company that remain unaccepted by the Customer, in excess of the allowable monthly underrun may be offered for sale to the Company or stored at the Customer's option. Gas may be purchased by the Company at a rate not to exceed the Company's avoided cost of Gas for the month of delivery. In the event that the Company does not elect to purchase volumes in excess of the allowable underrun, a service charge for all such volumes carried forward by the Company will be made. These volumes will be the first deliveries in the subsequent month. The unit rate for this service charge will be the volumetrically weighted average of the 100% load factor unit cost of the Company's pipeline storage contracts as utilized in the Company's annual operating budget. Upon temporary suspension of deliveries or termination of Rate GTS service, any existing underrun imbalance shall be corrected within 60 days of the end of the month in which final deliveries are made. Otherwise they become the property of the Company at no cost to the Company.

**6. EMERGENCY GAS**

Emergency Gas is defined as a service to be offered by the Company when Gas is not available under the otherwise applicable firm or interruptible sales service, provided certain conditions apply and terms are met, and that the quantities of Gas available to the Company and the distribution facilities are adequate to provide this service without jeopardizing the physical or economic operation of the Company. The cost of providing this emergency service is \$10.00 for each thousand cubic feet of Gas used. The minimum charge for this service is \$100.00 per occurrence.

Customers who feel they may have to avail themselves of this service should send for a copy of the Terms and Conditions of Availability under which this emergency service may be obtained.

**7. UNAUTHORIZED USE**

If a Customer uses this service after being notified that service under this schedule is not available, or uses this service in excess of authorized limitations when established and duly notified, all such unauthorized usage shall be billed at the rate of \$20.00 for each Mcf. In addition, Company may, at its discretion, refuse to accept delivery from the Customer's Supplier, and physically shut off Customer to ensure compliance.

**8. LIABILITY**

The Company shall not be liable for curtailment of service under this Rate Schedule or loss of Gas of the Customer as a result of any steps taken to comply with any law, regulation or order of any governmental agency with jurisdiction to regulate, allocate or control Gas supplies or the rendering of service hereunder, and regardless of any defect in such law, regulation or order.

The Company reserves the right to commingle transport Gas with its other supplies but Gas is and remains the property of the Customer while being transported and delivered by the Company. The Customer shall be responsible for maintaining all insurance it deems necessary to protect its property interest in such Gas before, during and after receipt by the Company.

The Company shall not be liable for any loss to the Customer or any other entity or person(s) arising from or out of service under this Rate Schedule, including loss of Gas in the possession of the Company or any other cause.

**COMPANY RULES**

The provisions this Tariff shall govern the service under this classification except where noted herein.

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**COGENERATION SERVICE – RATE CG\***

Rate: Applicable to all Retail Sales Service rendered pursuant to this Rate Schedule on or after September 1, 2003

**AVAILABILITY**

This service is available to any new or existing Commercial or Industrial Customer for Gas use in any form of combined cooling, heating and power production where there is a sequential production of energy and useful thermal energy from the same fuel source or in the sequential production of electrical energy and useful thermal energy from the same fuel source by a qualifying facility as defined in Section 201 of the Public Utility Regulatory Policies Act of 1978, regularly meeting the efficiency standards set forth in Chapter 18 of the Federal Regulations, Sections 292.205 (a) and (b). The Customer must certify that qualifying status has been granted by the Federal Energy Regulatory Commission or must demonstrate to the Company its ability to utilize waste heat created from one process by using Natural Gas in a second process. The waste heat may be generated from any form, such as power production, heating, cooling, or process applications. The waste heat recovered may be used for any domestic, Commercial or Industrial applications. The determination by the Company as to the Customer's ability to co-generate will be final. This service will be available where the Company's facilities are, or can economically be made, available to supply the service; but Gas Service under this rate shall not be a replacement of Gas Service under any rate providing for uninterruptible Gas Service. The Company's determination as to whether the service would amount to such a replacement shall be final. An Applicant for service under this rate shall be required to execute a service agreement in which shall be defined maximum and minimum quantities of Gas to be delivered. The number of Customers to receive service under this rate, at any single time, may be limited by the Company in order to maintain adequate and efficient Gas Service generally.

**CHARACTER OF SERVICE**

Service under this rate schedule is interruptible, and shall be subordinate to all firm services. Customer is advised of their responsibility to maintain capability of satisfying their requirements during any period when service is interrupted. Interruptions may occur for economic or operational considerations at any time.

**RATES****CUSTOMER CHARGE:**

\$362.00 per month.

Plus

**COMMODITY And DISTRIBUTION CHARGE:**

The monthly Commodity Charge for each one hundred cubic feet of Gas used shall be set equal to the average commodity cost of Gas purchased and delivered to PGW's gate stations, including an allowance for Unaccounted for losses where applicable, plus a fixed Distribution Charge of 7.5 cents per Ccf.

**(C) = Change**

**\*As of the effective date of this Tariff Supplement, enrollment in Rate CG will be closed. Customers that are properly receiving service under this rate shall continue to do so under their current service agreement(s) until the end of the current term of the service agreement(s). Customers shall then migrate to the most appropriate rate schedule given their size and load profile.**

**(C)**

PHILADELPHIA GAS WORKS

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For Customers contracting under this service for over 1,000,000 Mcf of Gas per year, the above fixed contribution shall be determined by negotiation between the Customer and the Company provided, however, that the contribution, so determined, shall not be less than 10% of the above computed cost of Gas.

This commodity charge shall be applicable so long as the facility is operating in accordance with this rate. In the event of operations otherwise, the Gas utilized will be billed at the appropriate rate.

The following Riders may apply:

**(C)**

SPECIAL PROVISION – Emergency/Unauthorized Use Rider

MINIMUM CHARGE

The monthly Minimum Charge is the Customer Charge.

GAS COST RATE

The Gas Cost Rate does not apply to this service.

CONTRACT TERM

The duration of the Gas Service contract shall be as specified in the required individual Service Agreement. In no event shall the contract term be for a period of less than one year.

GAS MEASUREMENT

The quantity of Gas consumed will be corrected for billing purposes to conditions of 14.73 pounds per square inch absolute pressure and 60 degrees Fahrenheit.

CONDITIONS OF USE

The Customer will be required to pay for the investment in facilities which PGW installs to provide service under this rate schedule. The Company shall own and maintain such facilities. Gas used for cogeneration purposes shall be separately metered, where in the Company's judgment, separate metering is practicable. If the Company determines that separate metering is not appropriate, cogeneration use shall be estimated by the Company for billing purposes. For existing Customers qualifying for service under this rate schedule, monthly base period usage levels will be defined in the individual service agreement. Monthly usage up to these specified levels will continue to be billed as the first Gas through the meter each month at the then current level of the rate schedule under which the Customer is now receiving service, followed by all qualifying volumes billed under this cogeneration service.

**(C) – Change**

COMPANY RULES

The provisions of this Tariff shall govern the supply of Gas under this classification except where noted herein. The Company requests the right to require Customers served under this rate to forecast usage.

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**DEVELOPMENTAL NATURAL GAS VEHICLE SERVICE - RATE NGVS  
FIRM SERVICE**

Rate: Applicable to all Retail Sales Service rendered pursuant to this Rate Schedule on or after March 1, 2025. (C)

**AVAILABILITY**

This service is available to provide uncompressed Natural Gas to any Customer for the exclusive purpose of compressing such Gas for use as fuel for motor vehicles. The compression of the Natural Gas to the pressure required for use as a motor vehicle fuel will be conducted by the Customer, at the Customer's designated premises. Service shall only be available where the Company's distribution system is, or can economically be made available to supply the service. Each Customer will be required to execute a service agreement which will specify terms and conditions of service.

**CHARACTER OF SERVICE**

Service under this rate schedule is firm and shall only be interrupted in the case of operating emergencies experienced by the Company.

**MONTHLY RATE**

**CUSTOMER CHARGE:**

\$38.15 per month

Surcharge: Distribution System Improvement Charge.

Plus,

GCR (not applicable to NGVS customers who transport gas through a qualified NGS):

\$0.51308 per Ccf

Plus

DISTRIBUTION CHARGE (consisting of item (A) and (B), below):

(A) Delivery Charge:

\$0.14022 per Ccf

(B) Surcharges:

Universal Service and Energy Conversation Surcharge; The Restructuring and Consumer Education Surcharge; Other Post Employment Benefit Surcharge; and Distribution System Improvement Charge.

Note: The Commodity Charge includes the Sales Service Charge, the Merchant Function Charge and the Gas Procurement Charge.

**(I) – Increase, (C) – Change, (D) - Decrease**

### APPLICABLE TAXES

The Customer will reimburse the Company for all taxes payable by the Company to any governmental body on sales of Gas and/or for services rendered under this rate schedule.

### GAS COST RATE

The Gas Cost Rate applies to this service.

### CONTRACT TERM

The duration of the contract for service under this rate schedule shall be as specified in the required individual service agreement. In no event shall the contract term be for a period of less than one (1) year.

### GAS MEASUREMENT

The quantity of Gas consumed will be corrected for billing purposes to conditions of 14.73 pounds per square inch absolute pressure and 60 degrees Fahrenheit.

### CONDITIONS OF USE

All Gas volumes received under this rate schedule shall be separately metered. The use of such Gas for any purpose other than as a fuel for motor vehicles is prohibited. The Company reserves the right to inspect the facilities and equipment of Customer to ensure compliance. Violation of this provision may be grounds for termination of service, and may subject the Customer to penalty charges for unauthorized Gas usage.

The Company is not obligated to construct compressor stations for dispensing Gas under this rate schedule. However, if the Company in its sole judgment, elects to construct or acquire such facilities, and establishes public access to these facilities, the charge for compression of Natural Gas and refueling at the company station, will be set forth in the service agreement with Customers contracting for such service.

The Company agrees to provide uncompressed Natural Gas to the Customer under this service for the exclusive purpose of compressing such Gas for use as a fuel for motor vehicles. Customer assumes the responsibility for the operation and maintenance of the compressor station in compliance with all local, state and federal laws regulating such facilities.

Customer will, therefore, indemnify and hold harmless the Company, and its respective officers, employees, agents and representatives from any and all causes of action of any kind arising from or related to any event subsequent to the Company's delivery of Natural Gas under this rate to the designated delivery point.

COMPANY RULES

The provisions of this Tariff shall govern the supply of Gas under this classification except where noted herein.

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**DEVELOPMENTAL NATURAL GAS VEHICLE SERVICE - RATE NGVS**  
**Interruptible Service**

Rate: Applicable to all Retail Sales Service rendered pursuant to this Rate Schedule on or after  
September 1, 2003

AVAILABILITY

This service is available to provide uncompressed Natural Gas to any Customer for the exclusive purpose of compressing such Gas for use as fuel for motor vehicles. The compression of the Natural Gas to the pressure required for use as a motor vehicle fuel will be conducted by the Customer, at the Customer's designated premises. Service shall only be available where the Company's distribution system is, or can economically be made available to supply the service. Each Customer will be required to execute a service agreement which will specify terms and conditions of service.

CHARACTER OF SERVICE

Service under this rate schedule shall be provided as long as the Company has sufficient supplies to meet the requirements of the Customers within this class, in addition to the requirements of the firm Customer classes, as determined by the Company.

MONTHLY RATE

CUSTOMER CHARGE: \$35.00 per month

COMMODITY CHARGE:

The monthly rate per Mcf shall be set at a level not greater than fifty percent of the reference gasoline price, as defined below. Except that, in no event, will the rate for the volumes delivered hereunder be set at a level less than 110% of the incremental cost of the Natural Gas to provide service, plus an adjustment for all applicable taxes, as determined by the Company.

REFERENCE GASOLINE

The reference gasoline shall be either unleaded regular gasoline or its oxygenated/reformulated gasoline substitute, as determined by the Company. The reference price for such fuel shall be the average price for the regular grade, in Philadelphia, as published in the "PAD 1 Report" in the third weekly issue of the Oil Price Information Service for the calculation month. The gasoline price shall be adjusted for Btu equivalence. (One cent per gallon being equivalent to 8.1 cents per Mcf for unleaded regular gasoline, and 8.3 cents per Mcf for the reformulated substitute.)

The Commodity Charge, so calculated, will be available by the eighteenth (18) working day of that month, and will be applicable for the subsequent calendar month, to the extent that service under this rate can be made available.

Should market conditions warrant, the Commodity Charge may be modified to reflect a more appropriate reference fuel, which shall be specified in individual Service Agreements. Sixty days notice of any such modification will be provided to Customers, if applicable generally to this class.

PHILADELPHIA GAS WORKS

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The following Riders may apply:

**(C)**

SPECIAL PROVISION – Emergency/Unauthorized Use Gas Rider

MINIMUM CHARGE

The monthly Minimum Charge is the Customer charge set forth above.

APPLICABLE TAXES

The Customer will reimburse the Company for all taxes payable by the Company to any governmental body on sales of Gas and/or for services rendered under this rate schedule.

GAS COST RATE

The Gas Cost Rate does not apply to this service.

CONTRACT TERM

The duration of the contract for service under this rate schedule shall be as specified in the required individual service agreement. In no event shall the contract term be for a period of less than one year.

GAS MEASUREMENT

The quantity of Gas consumed will be corrected for billing purposes to conditions of 14.73 pounds per square inch absolute pressure and 60 degrees Fahrenheit.

CONDITIONS OF USE

All Gas volumes received under this rate schedule shall be separately metered. The use of such Gas for any purpose other than as a fuel for motor vehicles is prohibited. The Company reserves the right to inspect the facilities and equipment of Customer to ensure compliance. Violation of this provision may be grounds for termination of service, and may subject the Customer to penalty charges for unauthorized Gas usage.

The Company is not obligated to construct compressor stations for dispensing Gas under this rate schedule. However, if the Company in its sole judgment, elects to construct or acquire such facilities, and establishes public access to these facilities, the charge for compression of Natural Gas and refueling at the company station, will be set forth in the service agreement with Customers contracting for such service.

**(C) – Change**

The Company agrees to provide uncompressed Natural Gas to the Customer under this service for exclusive purpose of compressing such Gas for use as a fuel for motor vehicles. Customer assumes the responsibility for the operation and maintenance of the compressor station in compliance with all local, state and federal laws regulating such facilities.

Customer will, therefore, indemnify and hold harmless the Company, and its respective officers, employees, agents and representatives from any and all causes of action of any kind arising from or related to any event subsequent to the Company's delivery of Natural Gas under this rate to the designated delivery point.

#### COMPANY RULES

The provisions of this Tariff shall govern the supply of Gas under this classification except where noted herein.

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(C)

(C) - Change

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## **SPECIAL PROVISION – Air Conditioning Rider**

### Generally.

Applicable to Retail Sales Service Customers with directly and indirectly fired Gas cooling equipment of minimum cooling capacity of 3 tons, installed on or after September 1, 1990. Where practicable, such equipment must be separately metered and the cost for any additional metering, related equipment and installation shall be subject to Section 10 of this tariff. Where separate metering is impracticable for directly or indirectly fired Gas cooling and heating equipment, one meter shall be installed for the heating/cooling equipment and such Gas rendered to the Customer through such meter will be charged at the standard rate for the billing months October through April. Under no circumstances will Customers be permitted to use Gas rendered through such meter for any purpose other than cooling or heating.

### For GS, MS and PHA:

The GCR plus Distribution Charge for all Gas used for the billing months May through September for cooling purposes shall become the greater of; (i) 40.00 cents per Ccf or (ii) one hundred and ten percent (110%) of the Weighted Average Cost of Gas (WACOG) for the prior month for Gas sold under said Rate Schedules, not to exceed the currently effective GCR plus Distribution Charge, plus an adjustment for all applicable taxes determined applicable by the Company.

**(C)**

*[text deleted]*

**(C) = Change**

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**SPECIAL PROVISION – Compressed Natural Gas (CNG) Rider**

Generally.

Retail Sales Service provided under this rate schedule for purposes of fueling CNG vehicles shall be dispensed on a liquid gallon basis but billed on an Mcf basis.

For Rate GS and MS .

Except as set forth herein, the rate for Natural Gas provided to Customers for purposes of fueling CNG vehicles shall be the Rate GS charges applicable to commercial customers. Service may also be provided to occasional Customers when it is feasible for the Company to do so. The Delivery Charge for such occasional Customers shall be \$10.00 per Mcf and the Customer Charge shall be \$10.00 for each day in which such Customer purchases Rate GS Gas to fuel CNG vehicles.

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**SPECIAL PROVISION – Emergency/Unauthorized Use Gas Rider**Emergency Gas.

Emergency Gas as set forth in this rider is defined as a service to be offered by the Company to interruptible Retail Sales Service and Rate GTS-I and GTS-F Customers when Gas would otherwise not be available under their respective Rate Schedules and provided certain conditions apply and terms are met. A Customer may request emergency Gas pursuant to this rider when he experiences interference with the use of his alternate energy and when the quantities of Gas available to the Company and the distribution facilities are adequate to provide this service without jeopardizing the physical or economic operation of the Company. PGW reserves the right to limit or curtail emergency Gas at any time. The cost of providing this emergency service is \$10.00 for each thousand cubic feet of Gas used above the current prevailing GCR. The minimum charge for this service is \$100.00 per occurrence.

In order to be eligible for emergency Gas, a Customer must register annually according to Company policy.

Unauthorized Use.

If a Customer uses Gas after he has been notified that Gas otherwise provided pursuant to his or her respective Rate Schedule or as emergency Gas is not available, or uses Gas in excess of his authorized limitation when established and duly notified, all such unauthorized usage shall be billed at the rate of \$25.00 for each thousand cubic feet of Gas used above the current prevailing GCR or the average of the highest two days of the monthly index, whichever is higher. Company may, in addition, at its discretion, shut off Customer to ensure compliance.

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## WEATHER NORMALIZATION ADJUSTMENT CLAUSE

### Provision For Adjustment

The Weather Normalization Adjustment shall be applied to each Mcf (1,000 cubic feet) used for heating purposes under Rate Schedules GS, MS, and PHA (“heating” and “heating only” customers), except for Gas usage under the Special Provisions – Air Conditioning of those rates. The Weather Normalization Adjustment will be applied to customer usage during the period of October 1 through April 30 of each year for each billing cycle. (C)

### Computation of Weather Normalization Adjustment

The Weather Normalization Adjustment surcharge or credit shall be computed to the nearest one-hundredth cent (0.01cent) in accordance with the formulas set forth below:

$$HL = TU - (BL * BC)$$

$$WNA = DC * [ ( HL * \frac{NHDD +/- (NHDD * 1\%)}{AHDD} ) - HL ]$$

### Definitions

TU – Total Usage for the billing cycle. TU measured in Mcf.

BL – base load Mcf per billing day is the number of Mcf per Customer used per day for non-heating purposes based on usage by Customers to which this adjustment applies. It is determined separately for each individual customer and will be revised annually to reflect the non-temperature sensitive usage of Customers to which the adjustment applies reflected in the prior heating season’s sales. If an individual customer base load is not available, the base load for the related customer class will be applied.

BC – billing cycle is the actual number of days shown on the bill that the Customer receives for service.

DC – Delivery Charge.

NHDD – normal heating degree days for any given calendar day within a month are based on the normal weather determination applied in the Company’s most recent base rate case, currently twenty years, as approved at Docket No. R-2017-2586783. The NHDD provided for in the formula are the total number of NHDD for the billing cycle. The degree day data is provided by the National Weather Service and measured at the Philadelphia International Airport.

AHDD – actual experienced heating degree days for the billing cycle. The degree day data is provided by the National Weather Service and measured at the Philadelphia International Airport.

### Operation of Weather Normalization Adjustment

The Weather Normalization Adjustment will be applied to a Customer’s bill on a cents per Mcf basis when actual heating degree days vary from normal heating degree days during the period for which the Customer is billed. The Weather Normalization Adjustment will be applied to the Customer’s space

**(C) - Change**

heating consumption except for air conditioning usage billed under the air conditioning rate. The Weather Normalization Adjustment for a billing cycle will apply only if the actual heating degree days (AHDD) for the billing cycle are lower than 99 percent or higher than 101 percent of the normal heating degree days (NHDD) for the billing cycle and will only apply to the extent that the variation is lower than 99 percent or higher than 101 percent of the normal heating degree days for that billing cycle. A new weather adjustment will be calculated for each billing cycle.

Under the formulas, the Weather Normalization Adjustment surcharge or credit is calculated by:

- 1) Normal HDD are calculated for each day of the fiscal year based upon the normal weather determination applied in the Company's most recent base rate case, currently twenty years as approved at Docket No. R-2017-2586783.
- 2) At the start of the fiscal year, an average daily base load (non-heating) usage is calculated for each individual customer based upon actual base load usage.
- 3) The average daily base load (non-heating) amount is multiplied by the number of days in the billing cycle.
- 4) The total billing cycle base load amount is subtracted from the actual cycle usage of the customer in order to derive the usage applicable to heating.
- 5) The WNA factor is multiplied times the heating usage in order to derive the normalized heating usage.
  - a) The WNA factor is calculated by first adjusting the Normal HDD (NHDD) for the billing cycle by the deadband percentage (1 %). The deadband percentage is multiplied by the NHDD and then added to NHDD for the billing period when the weather is colder than normal (i.e., AHDD > NHDD) or subtracted from NHDD for the billing period when the weather is warmer than normal (i.e., AHDD < NHDD).
  - b) The adjusted NHDD are then divided by the AHDD.
- 6) The actual heating usage is subtracted from the normalized heating usage and then multiplied by the delivery charge. The result is a surcharge or credit.

#### Reporting Requirements

The Company will file all Weather Normalization Adjustments with the Commission on an annual basis. On or about January 10 of each year beginning in 2018, the Company shall submit an annual report for the most recent fiscal year ending August 31 detailing the actual charges or credits that resulted from the application of this clause and the actual number of heating degree days (HDDs).

## DISTRIBUTION SYSTEM IMPROVEMENT CHARGE (DSIC)

In addition to the net charges provided for in this Tariff, for service rendered on or after July 1, 2021, a charge of 7.50% will apply consistent with the Commission Order dated May 9, 2013, at Docket No. P-2012-2337737 approving the DSIC and the Commission Orders dated January 28, 2016, and July 6, 2016, at Docket No. P-2015-2501500 modifying the terms and conditions of the DSIC.

(I)

### 1. General Description

**A. Purpose:** To recover the reasonable and prudent costs incurred to repair, improve, or replace eligible property which is completed and placed in service and recorded in the individual accounts, as noted below, between base rate cases and to provide the Utility with the resources to accelerate the replacement of aging infrastructure, to comply with evolving regulatory requirements. The costs of extending facilities to serve new customers are not recoverable through the DSIC.

**B. Eligible Property:** The DSIC-eligible property will consist of the following:

- Piping (account 376);
- Couplings (account 376);
- Gas services lines (account 380) and insulated and non-insulated fittings (account 378);
- Valves (account 376);
- Excess flow valves (account 376);
- Risers (account 376);
- Meter bars (account 382);
- Meters (account 381);
- Unreimbursed costs related to highway relocation projects where a natural gas distribution company or city natural gas distribution operation must relocate its facilities; and
- Other related capitalized costs.

**C. Effective Date:** The initial DSIC will become effective upon one (1) day notice after submission of a compliance tariff in compliance with commission order.

### 2. Computation of the DSIC

**A. Calculation:** The initial DSIC shall be calculated to recover the fixed costs of eligible plant additions that have not previously been reflected in the Utility's rates and have been or are projected to be placed in service in the calendar year in which the DSIC is charged. The DSIC charge shall be leveled so that, on an annual basis, it will collect the recoverable costs for eligible plant additions that have been or are anticipated to be placed in service during the calendar year. DSIC charges shall be reconciled and may be adjusted on a calendar quarter basis for: 1) actual experienced sales volumes; and 2) revisions to projected DSIC eligible capital expenditures.

(I) – Increase

The dates and types of changes in the DSIC rate will occur as follows:

Effective Date of Change	Rate Change That Will Occur
January 1	Annual levelized C-factor rate adjustments
April 1	Adjustment prior year over/under collection
July 1	Optional rate adjustment
October 1	Adjustment for +/- 2% over / under collection

**B. Recoverable Costs:** The recoverable costs shall be amounts reasonably expended or incurred to purchase and install eligible property and associated financing costs, if any, including debt service, debt service coverage, and issuance costs.

**C. Application of DSIC:** The DSIC will be expressed as a percentage carried to two decimal places and will be applied to the total amount billed to each customer for distribution service under the Utility's otherwise applicable rates and charges. To calculate the DSIC, the annual recoverable costs to be placed into service during the calendar year in which the DSIC is being charged will be divided by the Utility's projected revenues for distribution services (including all applicable clauses and riders) for the annual period during which the charge will be collected.

**D. Formula:** The formula for calculation of the DSIC is as follows:

$$DSIC = \frac{DSI + e}{PAR}$$

Where:

DSI = The projected annual level of recoverable costs (defined in Section B. directly above)

e = the amount calculated under the annual reconciliation feature or Commission audit, as described below.

PAR = Projected annual revenues for distribution service (including all applicable clauses and riders) including any revenue from existing customers plus netted revenue from any customers which will be gained or lost by the beginning of the applicable service period.

**3. Quarterly Updates:** Supporting data for each quarterly update will be filed with the Commission and served upon the Commission's Bureau of Investigation and Enforcement, the Office of Consumer Advocate, the Office of Small Business Advocate and the Bureau of Audits at least ten (10) days prior to the effective date of the update.

**4. Customer Safeguards**

**A. Cap:** The DSIC is capped at 7.50% of the amount billed to customers for distribution service (including all applicable clauses and riders), inclusive of amounts billed for annual reconciliation pursuant to the "e" factor set forth above, as determined on an annualized basis.

(C)

**(C) - Change**

**B. Audit/Reconciliation:** The DSIC is subject to audit at intervals determined by the Commission. Any cost determined by the Commission not to comply with any provision of 66 Pa C.S. §§ 1350, *et seq.*, shall be credited to customer accounts. The DSIC is subject to annual reconciliation based on a reconciliation period consisting of the twelve months ending December 31 of each year. The annual reconciliation shall be filed on January 31 of the next year. The revenue received under the DSIC for the reconciliation period will be compared to the Company's eligible costs for that period. The difference between revenue and costs will be recouped or refunded, as appropriate, in accordance with Section 1307(e), over a one-year period commencing on April 1 of each year. If DSIC revenues exceed DSIC-eligible costs for the reconciliation period, such over collections will be refunded with interest. Interest on over-collections and credits will be calculated at the residential mortgage lending specified by the Secretary of Banking in accordance with the Loan Interest and Protection Law (41 P.S. §§ 101, *et seq.*) and will be refunded in the same manner as an over-collection.

(C)

**C. New Base Rates:** The DSIC will be reset at zero upon application of new base rates to customer billings that provide for prospective recovery of the remaining costs (if any) that had previously been recovered under the DSIC. Thereafter, only the costs of new eligible plant additions that have not previously been reflected in the Utility's rates will be reflected in the quarterly updates of the DSIC.

**D. Customer Notice:** Customers shall be notified of changes in the DSIC by including appropriate information on the first bill they receive following any change. An explanatory bill insert shall also be included with the first billing.

**E. All customer classes:** The DSIC shall be applied equally to all customer classes, except that the Company may reduce or eliminate the DSIC to any customer with competitive alternatives and customers having negotiated contracts with the Company, if it is reasonably necessary to do so.

(C) – Change

## BACK-UP SERVICE – RATE BUS

Rate Applicable to: Back-Up Service as described below.

### AVAILABILITY

Available at the Company's sole discretion where the Customer has installed any type of operable back-up, supplementary, standby, emergency, electric or heat generation equipment and who from, time to time, will require Gas from the Company for the Customer's operation of that equipment. This rate shall also apply to gas service for any system for which natural gas is not the primary fuel. (C)

If a Customer is seeking interruptible back-up service, the Customer may take interruptible service at IT rates if the Customer meets all requirements of Rate IT, including that the Customer must: (1) have installed and operable alternative fuel equipment, including appropriate fuel storage capacity, capable of displacing the daily quantity of Gas subject to curtailment or interruption; or, in the alternative, (2) demonstrate to the Company's sole satisfaction the ability to manage its business without the use of Gas during periods of curtailment or interruption. (C)

### RATES and TERMS OF SERVICE

Contracts stipulating the negotiated rate and negotiated terms of Back-up Service may be entered into between the Company and Customer when the Company, in its sole discretion, deems such offering to be economically advantageous to the Company. Service under this rate is firm.

Back-up Service shall be separately metered subject to the Company's technical determination that more than one meter is required to correctly measure the total gas service rendered. Should the Company determine that this service be separately metered, the Company will issue a separate bill pursuant to a rate schedule applicable for the usage on the separate meter. Otherwise, if so determined by the Company to be technically feasible, the Company shall allow gas usage for such equipment to be measured by the customer's existing meter. (C)

As part of its annual Gas Cost Rate (GCR) filings, PGW will provide the number of customers, sales levels and costs incurred for these customers. (C)

(C) - Change



**TECHNOLOGY AND ECONOMIC DEVELOPMENT RIDER  
MICRO-COMBINED HEAT AND POWER INCENTIVES**

AVAILABILITY

**TECHNOLOGY AND ECONOMIC DEVELOPMENT RIDER:** The Technology and Economic Development (TED) Rider is a negotiated rider available that will be utilized to support the expansion of new technologies such as, but not limited to, combined heat and power (CHP), natural gas vehicles, and fuel cells, to develop brownfields, and support economic development in Pennsylvania by facilitating business retention and attraction, as well as other gas distribution system expansion activities. The TED Rider is available to those Customers served by the Company that the Company determines, in its sole discretion, have prospective additional gas usage applicable to service for firm service non-residential customers on Tariff Rate Schedules for General Service (Rate GS), Municipal Service (Rate MS), Philadelphia Housing Authority Service (Rate PHA) and Developmental Natural Gas Vehicle Service (Rate NGVS) at the time of execution or renewal of a service agreement. The TED Rider is established for the purpose of adjusting the customer's overall distribution charge to address project-specific or competitive issues to gain access to and expand use of natural gas within the Commonwealth of Pennsylvania. The negotiated TED Rider may be either a surcharge or credit depending on project-specific customer and Company economic requirements, such that the overall economics must meet the requirements of Section 10 of this Tariff. As part of its Gas Cost Rate (GCR) filings, PGW will provide data on sales and costs for TED customers.

(C)

(C)

GENERAL TERMS

The Customer must execute a TED Rider service agreement.

RATES

Customer Charge: Negotiable  
Plus  
Delivery Charge (per ccf): Negotiable

AVAILABILITY

**MICRO-COMBINED HEAT AND POWER INCENTIVES:** For projects involving micro-CHP units no larger than 50 kW, the following Micro-CHP Incentives may be available for qualifying projects: (1) \$1,000 per kW installed up to 20 kW; and (2) \$750 per kW installed greater than 20 kW and less than or equal to 50 kW. The Incentive is available to those Customers served by the Company that the Company determines, in its sole discretion, have prospective additional gas usage applicable to service for Rate GS Commercial/Industrial customers, Rate MS customers and Rate PHA customers on a pilot basis for a three-year period beginning on the effective date of this tariff supplement. The economic test that will be utilized by the Company to determine eligibility for participation will include the costs of the incentives.

(C)

(C) - Change

**NEGOTIATED LIQUEFIED NATURAL GAS SERVICE - RATE LNG-N**

(C)

Rate: Applicable to all Negotiated Liquefied Natural Gas Services rendered pursuant to this Rate Schedule as described below.

**AVAILABILITY**

Available at the Company's sole discretion when Customer and Company have executed a customer agreement ("Customer Agreement") for service under this Rate Schedule. The Customer must be able to arrange for the withdrawal/delivery of the commodity (via pipeline, transport vehicle, exchange services, or other delivery mechanisms agreed to by the parties) from the Company's Liquefied Natural Gas facilities. If the Customer is providing the commodity, then the Customer must also be able to arrange for the transportation of the commodity (via pipeline to Company's City Gate or via transport vehicle or pipeline) to the Company's Liquefied Natural Gas facilities.

**RATES and TERMS OF SERVICE**

Service under this schedule is for Negotiated Liquefied Natural Gas services and may include, but is not limited to: 1) the provision of the commodity; 2) transportation of natural gas from the Company's City Gate to the Company's Liquefied Natural Gas facilities; 3) the liquefaction of the natural gas by the Company's Liquefied Natural Gas facilities; 4) the injection of the Customer's liquefied natural gas into the Company's Liquefied Natural Gas facilities; 5) the storage of liquefied natural gas; 6) the vaporization of liquefied natural gas; 7) the withdrawal of the liquefied natural gas via transport vehicle; and 8) the delivery of commodity from the Company's Liquefied Natural Gas facilities via pipeline, exchange services, or other delivery mechanism.

A Customer Agreement stipulating the negotiated rate(s) and negotiated terms of service shall be entered into between the Company and Customer when the Company, in its sole discretion, deems such offering to be economically advantageous to the Company. Depending on the negotiated terms, service under this rate will be either on a firm basis, which shall be interrupted only in cases of operating emergencies determined by the Company in its sole discretion, or on an interruptible basis in which case the Company reserves the right to interrupt service at Company's discretion pursuant to criteria set forth in the Customer Agreement. The negotiated rate(s) shall be in excess of the Company's incremental costs to provide service to the Customer.

(C) - Change

## **INTERRUPTIBLE SERVICE EXTRA LARGE TRANSPORTATION - RATE IT-XLT**

### **AVAILABILITY**

This Rate IT-XLT is only available to Customer(s) who share a common point of interconnection that collectively consumes gas and whose natural gas throughput to its Facilities on the PGW system is greater than 9 Bcf annually or, if a new customer, that can demonstrate to the Company's satisfaction such future use and throughput.

The term "Facilities" means the gas burning equipment of the Customers. Facilities that operate in a coordinated fashion among affiliated (commonly owned) entities on a contiguous parcel of land and receive service through a common point of interconnection shall be treated as a single customer for purposes of this rate schedule.

### **CHARACTER OF SERVICE**

Transportation Service under this rate schedule is interruptible and Customers are subject to curtailment or interruption at any time. Company assumes no liability for interruptions caused by failure of supply sources or by third parties such as Suppliers and shall not be obligated to deliver Gas under this rate schedule on any day that Gas is not received at its gate station for the Customer's account except as specified under provisions for Standby Service contained herein. The Company may curtail (reduce) or interrupt deliveries to the Customer whenever, at the Company's sole discretion, it determines that the available capacity in all or a portion of its system is projected to be insufficient to meet the requirements of all Customers or in the event the Customer fails to meet delivery obligations. Although the Company will endeavor to provide as much notice as is reasonable and practical, the Customer shall maintain the ability to curtail or interrupt usage upon eight hours' notice. In the event of a system emergency, upon notice by the Company, the Customer shall use its best efforts to curtail or interrupt usage upon less than eight hours' notice. The Company assumes no liability for interruptions caused by failure of supply sources or upstream transportation by third parties and shall not be obligated to deliver Gas under this rate schedule on any day that Gas is not received at its gate station for the Customer's account.

**MONTHLY RATE**

The Monthly Charge shall be the sum of the following:

1. **CUSTOMER CHARGE:** \$1,100.00 per month per meter.
2. **LOCAL GAS TRANSPORTATION SERVICE:**

"Local Gas Transportation Service" shall mean the local Gas transportation service provided by the Company, pursuant to this Rate IT-XLT, from Gate Station 060 to the Facility metering station.

PGW will provide interruptible Local Gas Transportation Service to the Customer's Facility for up to 50,000 Dekatherms per Day. Customer, at PGW discretion, may balance its daily purchases, nominations, and deliveries in the interstate pipeline(s) and PGW shall have no responsibility for banking or balancing Customer's transportation deliveries.

The Local Gas Transportation Charge shall be an amount equal to \$0.1054/Mcf billed at \$0.10193 per Dth, as measured by PGW at the Customer's metering station(s). (C)

The Customer shall reimburse Company for any expense actually incurred for Customer's benefit from third party sources in the provision of this Service, such as directly assignable taxes, pipeline balancing penalties, governmentally imposed charges, and contingent liability for external transportation charges and fuel requirements. Additionally, for existing Customers, any unavoidable Gas supply costs (e.g., pipeline demand charges) incurred on the Customer's behalf. Such charges shall be in addition to charges specified elsewhere in this Rate IT-XLT. Minimum annual quantity is 9 Bcf.

3. **ALTERNATIVE RECEIPT SERVICE**

Rate IT-XLT Customers shall pay PGW a rate per Dth equal to the greater of (1) average revenue per Dth received by the Company from all releases, excluding choice capacity releases and asset management agreement associated release, of recallable capacity on Texas Eastern Transmission ("TETCO") during PGW's prior fiscal year, which shall be annually updated by PGW with the Commission by September 15 of each year following; or (2) the max TETCO tariff rate. The Minimum ARS Quantity provided by the Company shall be 5,000 Dth per day. The minimum monthly charge shall be the above rate times 5,000 Dth times the number of days in the month regardless of whether the Customer uses less. The Maximum ARS Quantity provided by the Company shall be 21,000 Dth/day.

**(C) - Change**

PHILADELPHIA GAS WORKS

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Definitions Relevant to ARS

"Day" shall mean a period of time consisting of twenty-four hours and including the solar day and the night.

"Gate Station 060" shall mean the new gate station, referred to by TETCO as Point of Delivery No. 73060, to be installed pursuant to the TETCO Precedent Agreement near the interconnection of the PGW Liquids Pipeline and the TETCO Philadelphia Lateral.

"Gate Station 034" shall mean the gate station, referred to by TETCO as Point of Delivery No. 70034, located at an interconnection of PGW's distribution system and TETCO's pipeline system in Montgomery County, Pennsylvania.

"Maximum ARS Quantity" shall mean 21,000 Dth of gas daily; provided.

Description of ARS

PGW will, (i) accept at PGW's facilities at the outlet of Gate Station 034 delivery of a quantity in Dth of Gas nominated by the Rate IT-XLT Customer and actually delivered by TETCO (the "ARS Quantity") for such Day up to the Maximum ARS Quantity for such Day, and (ii) in exchange for such Gas, deliver to PGW's facilities at the outlet of Gate Station 060 on such Day a quantity of Gas in Dth equal to the ARS Quantity for such Day; provided however, that at its election, PGW shall be excused from its ARS obligations on any Day.

ARS, as described above, is a displacement service. Rate IT-XL Customers are obligated to notify PGW thirty (30) days in advance of the first of every month they will accept ARS service of the volume of ARS they are accepting for the entire month up to the Maximum ARS Quantity without adjustment throughout the month. PGW, at its discretion, may use such unclaimed ARS volume's up to the Maximum ARS Quantity, at its discretion, for another purpose.

The Alternative Receipt Service rights granted to Rate IT-XLT Customers pursuant to the Service shall not be assignable by Rate IT-XLT Customers, and any Gas delivered by PGW to the Facility pursuant to ARS shall be used only in the Facility.

4. **SALES SERVICE:**

PGW will make Sales Service available to the Customer on a "best efforts" basis solely for use at the Customer's Facility, Rate IT-XLT Customers acknowledge that, from time to time on any given day, a request for Sales Service may be denied or limited by PGW in its sole judgment for economic or operational reasons.

The rate for such service shall be composed of a transportation component and a commodity component, as follows:

Transportation component:	The lowest applicable Interruptible Service Rate
Commodity component:	The current GCR Rate per Dth

For purposes of calculating Sales Service and transportation quantities, the first Gas recorded through the meters at the Facility Delivery Point on each Day for which Sales Service Gas has been nominated shall be considered Sales Service Gas.

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5. **SURCHARGES**

The Universal Service and Energy Conservation Surcharge; the Efficiency Cost Recovery Surcharge; and Distribution System Improvement Charge shall apply to the Local Gas Transportation Service applied under this Rate IT-XLT. The annual charge for the Universal Service and Energy Conservation Surcharge to Rate IT-XLT shall be as set forth on page 81 of this tariff

7. **MINIMUM MONTHLY CHARGE:**

The minimum monthly charge shall be the Customer Charge per meter, and the minimum monthly ARS charge.

**TERMS OF PAYMENT**

Bills will be rendered and payment terms applied in accordance with this Tariff.

**CONDITIONS OF USE**

1. The Company shall not be obligated to incur the cost of additional facilities to provide Transportation Service hereunder for existing load. Nonetheless, in the event the Company elects to provide additional facilities, which in the Company's sole judgment are required to provide Transportation Service, the cost of such facilities shall be the responsibility of the Customer. Customers may appeal the Company's judgment to the Commission. The Company shall provide, install, own and maintain such facilities. Where applicable, extensions and enlargements of Gas supply facilities for qualifying new load shall be in accordance with Section 10.
2. The Customer warrants and will provide satisfactory documentation, upon request, that it has good and merchantable title for all Gas delivered to the Company for transportation hereunder. Title shall be free and clear of all liens, encumbrances and claims whatsoever. Customer will indemnify Company and hold the Company harmless from all suits, actions, debts, accounts, damages, costs, losses and expenses arising out of the adverse claims of any or all persons to said Gas and/or to royalties, taxes, license fees or charges thereon, including pipeline transportation and service charges, which are applicable to such Gas and/or the delivery of such Gas to the Company.
3. The Company may retain for line loss and unaccounted-for Gas a percentage of the total volume of Gas delivered into its system for Customer's account. The percentage of Gas to be retained by the Company shall be equivalent to the percentage for total system line loss and unaccounted-for, as utilized in the Company's annual operating budget. This condition may, at the Company's discretion, be revised as appropriate, where the transported Gas can be delivered directly to the Customer without commingling with other distribution system supplies. If circumstances change, the Company will notify the Customer in writing thirty (30) days prior to any change.
4. In the event that the Company declares an emergency situation it may, at its discretion, divert Customer's Gas for such purposes as Company deems appropriate and Customer will be compensated for such Gas at the cost at which the Customer acquired the Gas, at the Customer's cost of the alternate fuel utilized or at the Company's avoided cost of Gas during the billing month, whichever is highest. The Customer shall demonstrate its cost of Natural Gas or replacement fuel by making a copy of its purchase contract available to Company upon request. All Gas purchased by the Company will be credited to the Customer's account.

5. Rate IT-XLT is subject to the provisions of the Daily Balancing Service – Rate DB in this Tariff (pgs. 101-109). For purposes of Rate DB, Rate IT-XLT customers with a common point of interconnection will be deemed by the Company to meet the qualifications for Rate DB regardless of how they structure their natural gas purchases. This condition may, at the Company's discretion, be waived or revised as appropriate, where the transported Gas can be delivered directly to the Customer without commingling with other distribution system supplies. If circumstances change, the Company will notify the Customer in writing thirty (30) days prior to any change.

#### **UNAUTHORIZED USE**

If a Customer uses Rate IT-XLT service after being notified that service under this schedule is not available, uses gas at other than the specified Facilities allowed under this tariff or uses this service in excess of authorized limitations when established and duly notified, all such unauthorized usage shall be billed a penalty charge of seventy five dollars (\$75.00) per Dth on the positive difference between the amount consumed by Customer and the amount delivered to the Company. Failure to comply with an Operational Flow Order (OFO) will result in a penalty charge of seventy-five dollars (\$75.00) per Dth plus all incremental costs incurred by the Company as a result of the failure to comply with the OFO.

#### **LIABILITY**

The Company shall not be liable for curtailment of service under this rate schedule or loss of Gas of the Customer as a result of any steps taken to comply with any law, regulation or order of any governmental agency with jurisdiction to regulate, allocate or control Gas supplies or the rendering of service hereunder, and regardless of any defect in such law, regulation or order. The Company reserves the right to commingle transport Gas with its other supplies but Gas is and remains the property of the Customer while being transported and delivered by the Company. The Customer shall be responsible for maintaining all insurance it deems necessary to protect its property interest in such Gas before, during and after receipt by the Company.

The Company shall not be liable for any loss to the Customer or any other entity or person(s) arising from or out of service under this rate schedule, including loss of Gas in the possession of the Company or any other cause.

#### **COMPANY RULES**

The provisions of this Tariff IT-XLT shall govern the service under this classification except where noted herein.

# **Exhibit FT-2**

Proposed Supplier Tariff  
Supp. No. 119 (Redlined)



# PHILADELPHIA GAS WORKS

## GAS SUPPLIER TARIFF



Issued by: Seth Shapiro  
President and CEO

PHILADELPHIA GAS WORKS  
800 West Montgomery Avenue  
Philadelphia, PA 19122

~~Rates effective March 1, 2025 in accordance with the Commission's Order entered July 11, 2024 at R-2024-3045966 approving PGW's 2024-2025 Gas Cost Rate.~~

**List of Changes Made by this Tariff**

**TABLE OF CONTENTS (PAGE No. 6)**

Updated to reflect revised page numbers.

**12.9.B.2.c – Consolidated Billing (PAGE No. 48)**

Added billing fee to calculation as part of existing POR program.

**12.9.E.1 - -BILLING FEE \$ /BILL (PAGE No. 50)**

Added supplier bill charge for suppliers that elect to have the Company bill for supplier chargers on the consolidated bill.

**TABLE OF CONTENTS**

	<u>Page Number</u>
List of Changes Made By This Tariff _____	<a href="#">415<sup>th</sup>-116<sup>th</sup></a> Revised 2
Checksheet _____	First Revised 4
Description of Territory Served _____	5
Table of Contents _____	<a href="#">414<sup>th</sup>-115<sup>th</sup></a> Revised 6
Table of Contents (continued) _____	1 <sup>st</sup> Revised 7
Definitions _____	Second Revised 10
<b><u>RULES and REGULATIONS:</u></b>	
1. The Supplier Tariff _____	14
2. Availability _____	16
3. Character of Service _____	18
4. Supplier Qualification _____	20
5. Customer List _____	First Revised 23
6. Supplier Selection Procedures _____	First Revised 26
7. Supplier Obligations _____	First Revised 28
8. Operational Requirements _____	33
9. Special Provisions _____	35
10. Nomination Procedure _____	42
11. Financial Security _____	44
12. Supplier Billing and Payment _____	First Revised 46
13. Supplier Exit Procedures _____	First Revised 52
14. Breach of Obligations _____	55
15. Standards of Conduct _____	60

PHILADELPHIA GAS WORKS

12.9.B.2.b. Within the time frame and via the transaction protocol, approved by the PUC pursuant to the PUC’s Final Order in Docket Nos. R-2008-2073938 and R-2009-2139884, or as otherwise ordered by the Commission, the Company will transmit Meter Data (e.g., meter reads, consumption, dates and type of reading) to the Supplier.

(e)

12.9.B.2.c. The Supplier shall provide to PGW the relevant rates at which enrolled customers should be billed by the 25<sup>th</sup> of each month and such rates shall be effective the first day of the following month. PGW will calculate and provide Supplier charges, including date of billing period, consumption, usage, Supplier rate, and any applicable Choice Supplier Bill Charge per Section 12.9.E.1 and with the resulting calculation (collectively referred to as “Supplier Charges”).

(c)

12.9.B.2.d. The Company will provide the Supplier up to four (4) lines, each one hundred (100) characters in length (a blank line counts as 100 characters), on its standard bill for messages directly related to the calculation of the Supplier portion of the bill.

(e)

12.9.B.2.e. Any transaction with Supplier charges sent to the Company after the time period, or not in the format specified above, will be rejected and the Firm Transportation Customer’s bill for the current billing period will state that the Supplier charges for the current billing period are not available or the customer will be billed at the current Supplier rate. Supplier must submit to the Company any charges not supplied.

(e)

12.9.B.2.f. The Company will collect and process Firm Transportation Customer’s payments in accordance with Section 2205 (c)(5) of the Gas Choice Act and the PUC’s applicable payment priority requirements. The Company shall pay the Supplier amounts pursuant to POR program stipulations as described in section 12.9.C below.

(e)

12.9.B.2.f.1 The Company will make payments to the Supplier by Automatic Clearing House (“ACH”), with remittance advice to a bank designated by the Supplier.

(e)

12.9.B.2.f.2 In the event the Company fails to pay Supplier within the agreed upon payment period, the Company will pay the Supplier ten percent (10%) interest per annum on the unpaid amount.

(e)

12.9.B.3. Within the time frame and via the transaction format approved by the PUC, the Company will transmit meter data (e.g. meter reads, consumption, dates and type of reading) to the Supplier.

(e)

12.9.C. Purchase of Receivables Program

(e)

12.9.C.1. POR. PGW will offer a POR program pursuant to the Commission’s Final Order in Docket Nos. R-2008-2073938 and R-2009-2139884, or as otherwise ordered by the Commission.

(e)

PHILADELPHIA GAS WORKS

12.9.C.6. Dispute Resolution. To the extent that disputes arise, Supplier and Company shall attempt to resolve such disputes according to the dispute resolution procedures described in Section **12.9.D.** of this Supplier Tariff. Parties have the right to resolve such disagreements through PUC dispute resolution process.

(e)

12.9.D. Dispute Process.

(e)

12.9.D.1. The Company shall process all disputes in accordance with the Public Utility Code and the PUC's applicable orders and regulations (52 Pa. Code 56.1 et. seq.). In the event the dispute relates to the Company's charges or actions, or to both Company's and the Supplier's Charges or actions, the Company will coordinate with the Supplier so that a proper investigation to a Customer dispute is conducted and completed within the time period prescribed by 52 Pa Code 56.151(5) and so that the Customer and the Supplier (if the Supplier is involved in the dispute) are informed of the results of the investigation. The Supplier will designate specific personnel for responding to complaints and disputes under this process. The Supplier shall provide all information needed by the Company relating to the Customer's dispute within five (5) business days of the Company's request, unless the gas service is off, in which even the information shall be provided within three (3) business days of the Company's request. In the event, however, the dispute relates solely to the Supplier's Charges or actions the Company shall refer the Customer directly to the Supplier for resolution of the dispute.

(e)

12.9.D.2. The Supplier shall hold PGW harmless for the results of any regulatory count or other action arising from a dispute related to a Supplier charge.

(e)

12.9.D.3. The Company shall process all informal complaints in accordance with the Public Utility Code and the PUC's applicable orders and regulations. In the event the informal complaint relates to the Company's charges or actions, or to both the Company's and the Supplier's Charges or actions, the Company will coordinate with the Customer's Supplier so that the proper information is submitted to the PUC's Bureau of Consumer Services within the time period required by the PUC. In the event, however, the informal complaint relates only to the Supplier's Charges or actions, the Supplier shall have the sole responsibility to submit the proper information.

(e)

12.9.E. Supplier shall pay to Company the following fees for billing services:

12.9.E.1. Billing Fee \$ /Bill. ~~(reserved)~~ Suppliers who elect to have the Company bill for Supplier Charges will be required to pay a Choice Supplier Bill Charge of \$0.35 per customer per month. For customers who receive a physical bill, suppliers will be required to pay a fee of \$0.50 per customer per month.

(C)

↓  
↓

12.9.E.2. Supplier POR cancel/re-bills. To the extent the NGS has provided the Company with inaccurate or erroneous information which requires an adjustment to ratepayer's bills, the NGS agrees to pay the Company billing error fees based upon the following schedule:

(e)

the per premise fee will be set at \$45.57 per incident per premise adjusted beginning in PGW's Fiscal Year 2016, and increasing by 2.4% annually thereafter

(e)

12.10. In the event a Supplier wants the Company to provide a billing service other than the standard billing service, the fee for such service shall be negotiated between the Company and the Supplier.

(e)

(e)

# **Exhibit FT-2**

Proposed Supplier  
Tariff Supp. No. 119  
(Clean)

**PHILADELPHIA GAS WORKS**  
**GAS SUPPLIER TARIFF**



Issued by: Seth Shapiro  
President and CEO

PHILADELPHIA GAS WORKS  
800 West Montgomery Avenue  
Philadelphia, PA 19122

**List of Changes Made by this Tariff**

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**TABLE OF CONTENTS**

	<u>Page Number</u>
List of Changes Made By This Tariff _____	116 <sup>th</sup> Revised 2
Checksheet _____	First Revised 4
Description of Territory Served _____	5
Table of Contents _____	115 <sup>th</sup> Revised 6
Table of Contents (continued) _____	1 <sup>st</sup> Revised 7
Definitions _____	Second Revised 10
<b><u>RULES and REGULATIONS:</u></b>	
1. The Supplier Tariff _____	14
2. Availability _____	16
3. Character of Service _____	18
4. Supplier Qualification _____	20
5. Customer List _____	First Revised 23
6. Supplier Selection Procedures _____	First Revised 26
7. Supplier Obligations _____	First Revised 28
8. Operational Requirements _____	33
9. Special Provisions _____	35
10. Nomination Procedure _____	42
11. Financial Security _____	44
12. Supplier Billing and Payment _____	First Revised 46
13. Supplier Exit Procedures _____	First Revised 52
14. Breach of Obligations _____	55
15. Standards of Conduct _____	60

12.9.B.2.b. Within the time frame and via the transaction protocol, approved by the PUC pursuant to the PUC's Final Order in Docket Nos. R-2008-2073938 and R-2009-2139884, or as otherwise ordered by the Commission, the Company will transmit Meter Data (e.g., meter reads, consumption, dates and type of reading) to the Supplier.

12.9.B.2.c. The Supplier shall provide to PGW the relevant rates at which enrolled customers should be billed by the 25<sup>th</sup> of each month and such rates shall be effective the first day of the following month. PGW will calculate and provide Supplier charges, including date of billing period, consumption, usage, Supplier rate, and any applicable Choice Supplier Bill Charge per Section 12.9.E.1 with the resulting calculation (collectively referred to as "Supplier Charges").

(c)

12.9.B.2.d. The Company will provide the Supplier up to four (4) lines, each one hundred (100) characters in length (a blank line counts as 100 characters), on its standard bill for messages directly related to the calculation of the Supplier portion of the bill.

12.9.B.2.e. Any transaction with Supplier charges sent to the Company after the time period, or not in the format specified above, will be rejected and the Firm Transportation Customer's bill for the current billing period will state that the Supplier charges for the current billing period are not available or the customer will be billed at the current Supplier rate. Supplier must submit to the Company any charges not supplied.

12.9.B.2.f. The Company will collect and process Firm Transportation Customer's payments in accordance with Section 2205 (c)(5) of the Gas Choice Act and the PUC's applicable payment priority requirements. The Company shall pay the Supplier amounts pursuant to POR program stipulations as described in section 12.9.C below.

12.9.B.2.f.1 The Company will make payments to the Supplier by Automatic Clearing House ("ACH"), with remittance advice to a bank designated by the Supplier.

12.9.B.2.f.2 In the event the Company fails to pay Supplier within the agreed upon payment period, the Company will pay the Supplier ten percent (10%) interest per annum on the unpaid amount.

12.9.B.3. Within the time frame and via the transaction format approved by the PUC, the Company will transmit meter data (e.g. meter reads, consumption, dates and type of reading) to the Supplier.

#### 12.9.C. Purchase of Receivables Program

12.9.C.1. POR. PGW will offer a POR program pursuant to the Commission's Final Order in Docket Nos. R-2008-2073938 and R-2009-2139884, or as otherwise ordered by the Commission.

12.9.C.6. Dispute Resolution. To the extent that disputes arise, Supplier and Company shall attempt to resolve such disputes according to the dispute resolution procedures described in Section **12.9.D.** of this Supplier Tariff. Parties have the right to resolve such disagreements through PUC dispute resolution process.

12.9.D. Dispute Process.

12.9.D.1. The Company shall process all disputes in accordance with the Public Utility Code and the PUC's applicable orders and regulations (52 Pa. Code 56.1 et. seq.). In the event the dispute relates to the Company's charges or actions, or to both Company's and the Supplier's Charges or actions, the Company will coordinate with the Supplier so that a proper investigation to a Customer dispute is conducted and completed within the time period prescribed by 52 Pa Code 56.151(5) and so that the Customer and the Supplier (if the Supplier is involved in the dispute) are informed of the results of the investigation. The Supplier will designate specific personnel for responding to complaints and disputes under this process. The Supplier shall provide all information needed by the Company relating to the Customer's dispute within five (5) business days of the Company's request, unless the gas service is off, in which even the information shall be provided within three (3) business days of the Company's request. In the event, however, the dispute relates solely to the Supplier's Charges or actions the Company shall refer the Customer directly to the Supplier for resolution of the dispute.

12.9.D.2. The Supplier shall hold PGW harmless for the results of any regulatory count or other action arising from a dispute related to a Supplier charge.

12.9.D.3. The Company shall process all informal complaints in accordance with the Public Utility Code and the PUC's applicable orders and regulations. In the event the informal complaint relates to the Company's charges or actions, or to both the Company's and the Supplier's Charges or actions, the Company will coordinate with the Customer's Supplier so that the proper information is submitted to the PUC's Bureau of Consumer Services within the time period required by the PUC. In the event, however, the informal complaint relates only to the Supplier's Charges or actions, the Supplier shall have the sole responsibility to submit the proper information.

12.9.E. Supplier shall pay to Company the following fees for billing services:

12.9.E.1. Billing Fee \$ /Bill. Suppliers who elect to have the Company bill for Supplier Charges will be required to pay a Choice Supplier Bill Charge of \$0.35 per customer per month. For customers who receive a physical bill, suppliers will be required to pay a fee of \$0.50 per customer per month.

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12.9.E.2. Supplier POR cancel/re-bills. To the extent the NGS has provided the Company with inaccurate or erroneous information which requires an adjustment to ratepayer's bills, the NGS agrees to pay the Company billing error fees based upon the following schedule:

the per premise fee will be set at \$45.57 per incident per premise adjusted beginning in PGW's Fiscal Year 2016, and increasing by 2.4% annually thereafter

12.10. In the event a Supplier wants the Company to provide a billing service other than the standard billing service, the fee for such service shall be negotiated between the Company and the Supplier.

# **Exhibit FT-2**

Current Supplier Tariff

**PHILADELPHIA GAS WORKS**  
**GAS SUPPLIER TARIFF**



Issued by: Seth Shapiro  
President and CEO

PHILADELPHIA GAS WORKS  
800 West Montgomery Avenue  
Philadelphia, PA 19122

Rates effective March 1, 2025 in accordance with the Commission's Order entered July 11, 2024 at R-2024-3045966 approving PGW's 2024-2025 Gas Cost Rate.

**List of Changes Made by this Tariff**

**TABLE OF CONTENTS (PAGE No. 6)**

Updated to reflect revised page numbers.

**9.14 LOAD BALANCING CHARGE, 9.14.A. (PAGE No. 39)**

Increases the Load Balancing Charge effective March 1, 2025 to \$67.6053 per design day Mcf.

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Please see Supplement No. 19 for the Supplement No. 19 check sheet.

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**Description of Territory Served**

The company's service territory is the City of Philadelphia as defined in the  
*"AGREEMENT BETWEEN THE CITY OF PHILADELPHIA AND THE PHILADELPHIA  
FACILITIES MANAGEMENT CORPORATION FOR THE MANAGEMENT AND  
OPERATION OF THE PHILADELPHIA GAS WORKS."*

**TABLE OF CONTENTS**

	<u>Page Number</u>
List of Changes Made By This Tariff _____	115 <sup>th</sup> Revised 2
Checksheet _____	First Revised 4
Description of Territory Served _____	5
Table of Contents _____	115 <sup>th</sup> Revised 6
Table of Contents (continued) _____	1 <sup>st</sup> Revised 7
Definitions _____	Second Revised 10

**RULES and REGULATIONS:**

1. The Supplier Tariff _____	14
2. Availability _____	16
3. Character of Service _____	18
4. Supplier Qualification _____	20
5. Customer List _____	First Revised 23
6. Supplier Selection Procedures _____	First Revised 26
7. Supplier Obligations _____	First Revised 28
8. Operational Requirements _____	33
9. Special Provisions _____	35
10. Nomination Procedure _____	42
11. Financial Security _____	44
12. Supplier Billing and Payment _____	First Revised 46
13. Supplier Exit Procedures _____	First Revised 52
14. Breach of Obligations _____	55
15. Standards of Conduct _____	60

	<b>Page Number</b>
<b>Firm Pooling Agreement</b> _____	<b>Appendix</b>

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## Definitions

For the purposes of this Supplier Tariff, in addition to any definitions set forth in Company's Gas Service Tariff (except as set forth below) the following definitions apply:

**APPLICABLE LAW** - The provisions of this Tariff, the rules and regulations promulgated by the PUC and published at Title 52 Pennsylvania Code, the Public Utility Code and all legally binding decisions of the Public Utility Commission interpreting those rules, regulations and law, and all other applicable current and future laws, ordinances, executive orders and legally binding interpretations, all of them as amended from time to time.

**BALANCING** - Services provided by Company to cover differences between a Supplier's Daily Delivery Requirement and the actual usage of the Supplier's Firm Pool.

**CUSTOMER** - A recipient of Firm Transportation Service from the Company, except for customers receiving service under Rate GTS-Firm.

**DAILY CONTRACT QUANTITY ("DCQ")** - The firm transportation capacity ("Pipeline FT Capacity") in Dths assigned by the Company to the Supplier and required to deliver Natural Gas Supply to Supplier's Firm Transportation Customers.

**DAILY DELIVERY QUANTITY ("DDQ")** - The daily quantities of natural gas supplies a Supplier is required to deliver in Dths for a Firm Pool, as forecasted and communicated by Company, and may specify the required points of delivery. Such forecast shall be calculated to include volumes needed for end-use requirements, prior imbalances and provide return of balancing service quantities and unaccounted for gas, which amount shall not exceed the DCQ. This quantity will include corrections for Volume Adjustments. (C)

**DAILY OPERATIONAL BULLETIN ("DOB")** - A bulletin issued by the Company to address system management issues on a non-critical day, including actions necessary to comply with statutory directives and obligations.

**DELIVERY POINT** - A point specified by Company where Supplier would deliver natural gas supplies for subsequent redelivery by Company to Supplier's Firm Transportation customers.

**DESIGN DAY** – A 24-hour period of usage which is used as a basis for planning gas capacity requirements.

**FIRM POOLING SERVICE** - Services provided by Company to Supplier to facilitate the delivery of gas supplies to Customers receiving service under Firm Transportation Rates.

**FIRM TRANSPORTATION** – Transportation Service offered to Customers under schedules or contracts that anticipate no interruptions, regardless of class of service, except for force majeure.

**GAS SUPPLIER TARIFF (or Supplier Tariff)** - PGW Supplier Tariff Pa PUC No. 1, as supplemented or amended from time to time in accordance with law.

**LIQUEFIED NATURAL GAS ("LNG")** – Natural gas that has been liquified by reducing the temperature to minus two hundred and sixty degrees Fahrenheit (-260°F) at atmospheric pressure.

**METER READ DATE** - The date on which the Company schedules a meter to be read for purposes of producing a Customer bill in accordance with the regularly scheduled billing cycles of the Company.

**NATURAL GAS SUPPLY SERVICE** – Services provided by a Natural Gas Supplier as defined in section 2202 of the Gas Choice Act, 66 Pa. C.S. sec 2202.

**OPERATIONAL FLOW ORDER ("OFO")** - A directive issued by Company to Supplier, which is reasonably necessary to alleviate conditions that threaten the operational integrity of the Company's system on a critical day.

**PURCHASE OF RECEIVABLES ("POR")** – The program (and all relevant stipulations) addressed within the PUC approved Joint Petition for Settlement of Philadelphia Gas Works' Supplier of Last Resort Collaborative at Docket No. R-2008-2073938 and Philadelphia Gas Works' Purchase of Receivables Collaborative at Docket No. R-2009-2139884 as amended, modified other otherwise revised under Applicable Law.

**UNACCOUNTED FOR GAS** (for the purpose of calculating retainage) – Unaccounted for gas is the difference in the amount of gas delivered to the Company's distribution system and the amount billed to customers. The current Lost and Unaccounted for Gas and Retainage Rate percentage is 3.2%. The percentage changes annually on December 1<sup>st</sup> and is based upon actual data for the preceding 12 months ending August 31<sup>st</sup>. (I)

**UPSTREAM CAPACITY ASSIGNMENT, RELEASE OR TRANSFER** – The process to provide access to interstate pipeline capacity and storage contracts owned by Company to Supplier pursuant to Company's tariff and any applicable regulatory rules.

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**RULES AND REGULATIONS****1. THE GAS SUPPLIER TARIFF**

1.1 Filing and Posting. A copy of this Gas Supplier Tariff (hereinafter "Supplier Tariff"), under which the Company will supply service to Company Suppliers, is on file with the Commission and is available for inspection at any Customer Service Center ("CSC") and at the main offices of the Company. The Tariff is also available on the Company's website at [www.pgworks.com](http://www.pgworks.com).

1.2 Revisions. This Supplier Tariff may be revised, amended, supplemented or otherwise changed from time to time in accordance with applicable law, with the approval of the PUC. Such changes, when effective, shall have the same force as the present Supplier Tariff.

1.3 Application. The provisions of the Supplier Tariff apply to all Suppliers serving Customers receiving Firm Transportation Service, except for customers receiving service under Rate GTS-Firm.

1.4 Rules and Regulations. The Rules and Regulations, as part of this Supplier Tariff, are included in every Firm Pooling Agreement entered into by the Company pursuant to this Supplier Tariff.

1.5 Statement by Company Representatives. No representative has authority to modify a Supplier Tariff rule or provision, or to bind the Company by any contrary promise or representation.

1.6 Use of Riders. The terms governing the provision of service under this Supplier Tariff may be modified or amended only by the application of standard riders, filed as part of this Tariff.

1.7 Purpose of Tariff. This Supplier Tariff sets forth the basic requirements for interactions and coordination between the Company in its role as a Natural Gas Distribution Company ("NGDC") and Suppliers, and includes rules necessary for maintaining the delivery of sufficient volume of gas to customers served.

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## 2. AVAILABILITY

2.1 Service hereunder is available to any Supplier qualified pursuant to the Supplier Tariff that enrolls: (1) a group of at least fifty (50) eligible Customers; or (2) a group of such eligible Customers whose quantities total at least 5,000 Mcf on an annual basis, and that agrees to assume the primary responsibility for the Natural Gas Supply Service obligations for that group of Customers.

2.2 The provisions of this Supplier Tariff are applicable to Suppliers that deliver gas supply via interstate pipeline or via private, direct connection to Company's distribution system. For Suppliers delivering via direct connection, all provisions of this Supplier Tariff that reference interstate pipeline rules or requirements shall not apply and the Company, in its sole discretion, shall promulgate rules applicable to such delivery which rules and requirements shall be reflected in an Interconnection Agreement between the Company and Supplier. Execution of such Agreement shall be a precondition to delivering gas onto Company's system. Direct Suppliers shall also be required to enter into a Pooling Agreement consistent with the Pro Forma Agreement set forth in the Appendix to this Supplier Tariff, but modified to reflect the use of direct supply by Supplier.

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### 3. CHARACTER OF SERVICE

3.1 Services furnished by a Supplier pursuant to this Supplier Tariff shall be considered firm service. Through the procedures and provisions of this Tariff, qualified Suppliers will contract for service with Customers and shall serve such Customers for an established minimum period of at least one (1) billing month, with the term of service commencing with the Customer's first regularly-scheduled meter reading pursuant to the Tariff.

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#### 4. SUPPLIER QUALIFICATION

4.1 Service under this Supplier Tariff is contingent upon the Supplier completion of the Company's Supplier Application Form ("Application") to Serve Customers and Company's approval of such Application. The Company is the sole judge of a Supplier's Application and the Supplier's ability to safely and reliably serve the Company's Customers.

4.2 If a Supplier is delivering gas via an interstate pipeline, the Supplier must meet all pipeline credit standards and prove it is qualified by the pipeline to receive an assignment, release or transfer of pipeline capacity. If the Supplier is delivering gas to the Company's system via a direct connection, the Supplier must meet credit standards and be qualified by the Company to meet operational delivery standards as promulgated by the Company.

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4.3 A Supplier shall include with its returned Application, payment of a non-refundable enrollment fee of four hundred dollars (\$400.00).

4.4 Incomplete Applications. In the event the Supplier submits an incomplete Application, the Company shall provide written notice to the Supplier of the Application's deficiencies. The Company will not process an incomplete Application until it is fully completed by the Supplier and received by the Company. Failure to submit a fully completed Application within thirty (30) calendar days following notice that the Application was incomplete will result in a rejection of the Application.

4.5 Processing of Application. The Company shall, on a best effort basis, complete the processing of each Application within ten (10) days after receipt of the Application and notify the Supplier of the results of the Company's review of such Application.

4.6 Rejection of Application. The Company may reject any Application for any appropriate reason including, but not limited to the following:

4.6.A The Supplier has undisputed, outstanding past due debts to the Company;

4.6.B The Supplier has failed to comply with Financial Security requirements specified in Section 11 of this Supplier Tariff;

4.6.C The Supplier has failed to meet the Company's technical, operational, and/or billing standards, as applicable;

4.6.D Any material fact set forth in the registration or Application is false or misleading at the time the application is delivered to the Company or becomes false or misleading at a later date.

. For Suppliers engaging or intending to engage in door-to-door sales to residential customers, the Supplier has failed to produce evidence that it has notified the Commission and the Pennsylvania Office of Consumer Advocate (OCA) that it intends to engage in such door-to-door sales and has supplied the Commission and the OCA with copies of the Supplier's contracts, sales literature and agent training material associated with the door-to-door sales activity.

4.7 Approval of Application. Upon approval of Supplier's Application, Company shall execute the duplicate originals of the Firm Pooling Agreement tendered by the Supplier and return one (1) copy to the Supplier.

4.8. The Company may require additional periodic credit evaluations to ensure ongoing financial fitness as set forth in Section 11 of this Supplier Tariff. The Supplier will be assessed a two hundred fifty dollars (\$250.00) fee for all credit evaluations performed by the Company. The evaluation will be based on standard credit factors such as previous Supplier's customer service record, Dun & Bradstreet or similar financial and credit ratings, trade references, bank information, an unused line of credit, and financial

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information. The Company shall have sole discretion to determine creditworthiness based on the above criteria, but will not deny creditworthiness without reasonable cause.

## 5. CUSTOMER LIST

5.1. Eligible Customer List. The Company will provide Suppliers with a list of POR eligible Customers, pursuant to Applicable Law, including residential customers, and small business/industrial customers with annual usage less than 5,000 Mcf per year. The list shall be updated monthly and shall include individual monthly gas billing data (if authorized by the customer) for the most recent twelve (12) month period for which data is available. The lag time for this data will not exceed two (2) billing cycles. Customers who opt out of the release of all of their information shall not be included in the above described Customer List. (c)

5.2. Eligible Customer List Confidentiality. Such list shall only be accessible by Suppliers that have been authorized to access PGW's electronic bulletin board and are otherwise qualified to serve Firm Transportation Customers under this Supplier Tariff. (c)

5.3. Data Exchange. The list of Customers that the Company provides to all Suppliers pursuant to Rule 5.1 above, will include the following:

5.3.A. As to Customers who have authorized the release of all of their Customer information:

5.3.A.1 PGW Account Number and Service Point Number (c)

5.3.A.2 Customer Name

5.3.A.3 Service Address

5.3.A.4 Billing Address

5.3.A.5 Tariff Rate Class (c)

5.3.A.6 Next Meter Read date (c)

5.3.A.7 Customer class (c)

5.3.A.8 Shopping status (c)

5.3.A.9 Monthly consumption data for 12 months (c)

5.3.B. As to Customers who have not authorized the release of their usage data: (c)

5.3.B.1 PGW Account Number and Service Point Number (c)

5.3.B.2 Customer Name (c)

5.3.B.3 Service Address (c)

5.3.B.4 Billing Address (c)

5.3.B.5 Tariff Rate Class (c)

5.3.B.6 Next Meter Read date (c)

5.3.B.7 Customer class (c)

5.3.B.8 Shopping status

## 6. Supplier Selection Procedures.

6.1. Customers shall have the opportunity to select a Supplier in accordance with PUC Orders and the procedures contained in this Supplier Tariff and the Gas Service Tariff.

6.1.A. If a Customer or person authorized to act on the Customer's behalf contacts the Company via telephone to select a Supplier, the Company will advise the Customer to contact that Supplier.

6.1.B. A Supplier enrolling a Customer for its Natural Gas Supply service must first obtain appropriate authorization from the Customer, or from the person authorized to act on the Customer's behalf, indicating the Customer's choice of a Supplier. This authorization may be obtained through written or direct oral confirmation. The Supplier must maintain recorded or written evidence of the Customer's authorization to provide documented evidence of authorization to the PUC in the event of a dispute.

6.1.C. The Supplier shall provide an electronic file to the Company which shall comply with the Company's electronic data interchange requirements. The Company will confirm receipt of the file and within three (3) business days of receipt will provide Supplier an electronic validation of the records contained therein.

6.1.D. For enrollments received on or before the 15th of any calendar month, the Customer will be switched, on the date of the Customer's regularly scheduled meter reading in the calendar month immediately following the month the enrollment information was received. For enrollments received after the 15th of any calendar month, the Customer will be switched on the date of the Customer's regularly scheduled meter reading in the second (2<sup>nd</sup>) calendar month following the month the enrollment information was received.

6.1.E. If, in any month, a Customer selects more than one (1) Supplier, the Supplier that submitted to the Company the latest valid Supplier contract, before the end of the applicable Supplier selection period, will become the Customer's Supplier of record beginning on the Customer's switch date. No fee will be charged for the initial enrollment.

6.1.F. The Company will send a confirmation notice to all Customers who have made a Supplier selection by the next business day after receiving the request from the Supplier. Included in this notice will be notification of a waiting period in compliance with Applicable Law which the Customer may cancel its selection of a Supplier. The confirmation notice will include the Customer's name, address, the Company account number, selected Supplier, service effective date and Billing Date. The waiting period will begin on the day the notice is mailed to the Customer. The Company will notify the Customer's prior Supplier of the intended discontinuance of service to the Customer from that prior Supplier.

6.1.G. If the waiting period expires, and the Customer has not contacted the Company to dispute the Supplier selection, the Supplier will become the Customer's Supplier of record.

6.1.H. If the Customer elects to rescind its Supplier selection, the Company will notify the rejected Supplier and the reinstated Supplier electronically. In the event the Customer rescinds its

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Supplier selection after the waiting period, the Customer will be required to remain with the selected Supplier for a minimum of one (1) billing month.

6.2. If a Supplier requests from the Company, Customer usage information (12 individual months of historic usage) that is electronically available for a Customer with whom it is discussing the possibility of providing Natural Gas Supply, and who has not authorized the release of customer information pursuant to section 14.2 of the Gas Service Tariff, the Company will only furnish such information if the Supplier provides to the Company evidence of such authorization, including but not limited to a completed copy of the Company's authorization form signed by the Customer, indicating that the Customer has authorized the release of Customer usage information to the Supplier.

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6.3. If a Customer contacts the Company to request a switch from the Natural Gas Supply Service of a Supplier to the Company's SOLR Sales Service, on or before the 15th of any calendar month, the Customer will be switched, on the date of the Customer's regularly scheduled meter reading in the calendar month immediately following the month the enrollment information was received. For requests received after the 15th of any calendar month, the Customer will be switched, on the date of the Customer's regularly scheduled meter reading in the second calendar month following the month the enrollment information was received.

6.4. Discontinuance

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6.4.A. If a Customer contacts the Company to discontinue Natural Gas Service at the Customer's then current location, and initiates a request for service at a new location, the Company will notify the current Supplier of the Customer's discontinuance of service for the account at the Customer's old location. The Company will also send an electronic transaction to the Customer's selected Supplier for its new location, which may or may not be the current Supplier. If the selected Supplier is not the same Supplier that served the Customer at the old location, the Company will provide the Supplier that served the Customer at the old location with the Customer's new mailing or forwarding address.

6.4.B. If a Customer contacts the Company to discontinue natural gas service and indicates that the Customer will be relocating outside of the Company's service territory, the Company will notify the current Supplier of the Customer's discontinuance of service for the account at the Customer's location. If available, the Company will provide the Supplier that served the Customer at the old location with the Customer's new mailing or forwarding address.

6.5. If the Company elects to change the account number for a Customer receiving its Natural Gas Supply from a Supplier, the Company will notify the Supplier of the change in account number at the same Customer location.

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## 7. SUPPLIER OBLIGATIONS

### 7.1 Confidentiality of Information.

7.1.A. General. Without the Company's consent, the Supplier shall not disclose to any third party any Company information made available to a Supplier in connection with the provision of the Firm Pooling Agreement, including, but not limited to, usage data, and information regarding the Company's computer and communications systems. Subject to applicable law, the Company shall not disclose to any third party any Supplier information made available to the Company in connection with the provision of the Firm Pooling Agreement, including, but not limited to, usage data and information regarding the Supplier's computer and communications systems, without the Supplier's consent.

7.1.B. Customer Information. The Supplier shall keep all Customer-specific information supplied by the Company confidential unless the Supplier has the Customer's written authorization to do otherwise.

7.2. Suppliers must accept a release, assignment or transfer on a recallable basis of a pro rata share of Company's applicable interstate pipeline firm transportation at the applicable contract rate, or if authorized by Company, obtain firm pipeline transportation capacity assignable to the Company for delivery of gas supply to delivery point(s) determined by Company in an amount sufficient to meet the peak requirements of Firm Transportation customers being served with this capacity. Suppliers are required to accept released capacity through the pipeline electronic bulletin boards before the beginning of each month. If a Supplier fails to do so, PGW reserves the right to bill the Supplier directly for the capacity plus a penalty charge (\$50 per day per release).

7.3. A Supplier must provide and maintain a bond or other financial guarantee in a form and amount as set forth in Section 11 that is acceptable to Company.

7.4. A Supplier must acquire or agree to acquire an adequate supply of natural gas on a firm basis to serve Supplier's Firm Transportation Customer pool and make or cause to be made arrangements by which such gas supplies can be transported to Company's city gates, as directed by Company. To the extent that Supplier's gas supply is delivered via interstate pipeline, such supplies must be ranked on the transporting pipeline at the pipeline's Predetermined Allocation ranking which guarantees firm delivery. To the extent that Suppliers gas supply is delivered by direct connection to the Company's system, Supplier's supply must be certified as satisfying firm delivery standards as determined by the Company.

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7.5. A Supplier must enter into a Firm Pooling Agreement, in a form substantially similar to the form set forth in the Appendix to this Supplier Tariff to serve Customers under Firm Transportation. Company, in its sole discretion, may alter or revise the terms and conditions set forth in the Pro Forma Pooling Agreement.

7.6. A Supplier participating in PGW's POR program must enter into a POR agreement acceptable to the Company. The Company, in its sole discretion, may alter or revise the terms and conditions set forth in the form agreement.

7.7. A Supplier must comply with the Company system reliability requirements, including Daily Operational Bulletins (DOBs), Operational Flow Orders (OFOs), and notice requirements as set forth in this Supplier Tariff.

7.8. A Supplier must comply with applicable communications standards, including approved Internet based procedures.

7.9. A Supplier must cooperate with Company in the preparation of an annual reliability plan presented to the PUC.

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7.10. A Supplier (including its nominating agents, if applicable) who nominates gas for delivery to the Company's system must have and maintain Internet access. The Supplier shall also provide the Company with a valid e-mail address, a 24-hour a day contact person, a 24-hour a day phone and a 24-hour a day fax number for contact purposes. (c)

7.11. The NGS must maintain a twenty-four (24) hour answering service or a telephone answering machine which informs all callers that if they smell gas or there is any other emergency regarding their gas service, the callers should call PGW immediately. If the NGS receives a telephone call from a ratepayer which should be directed to the Company, the NGS shall direct the ratepayer to the appropriate contact within the Company. The NGS shall handle all calls regarding NGS commodity charges and associated rates. NGSs must coordinate with the Company in resolving ratepayer inquiries, disputes or complaints which involve services provided by both the Company and NGSs. (c)

7.12. The Company's provision of a Firm Pooling Agreement is contingent upon the Supplier paying all charges and amounts billed to it by the Company in a timely manner. (c)

7.13. Failure to comply with all Supplier obligations will result in the Company disqualifying the Supplier from serving Customers. In the event the Company disqualifies a Supplier, the Supplier may appeal the disqualification to the Commission. If the Commission does not reverse the disqualification within forty-five (45) days, the Supplier will be disqualified at the end of the 45-day period and its Customers will be returned to SOLR service or switched to another Supplier. Any Company disqualification will be on a nondiscriminatory basis. (c)

7.14. A Supplier will satisfy all applicable reliability requirements. (c)

7.15. A Supplier and the Company will provide to the other in a thorough and timely manner all data, materials or information specified in this Tariff, or otherwise reasonably required by the Supplier or Company in connection with the provision of the Firm Pooling Agreement. (c)

7.15.A A Supplier must have and maintain the software, hardware and technical acumen identified by the Company as necessary to access the Company's web sites. In addition, Suppliers who are assigned pipeline firm transportation capacity must have the hardware, software, and user competencies necessary to access pipeline electronic bulletin boards. (c)

7.16. A Supplier shall comply with all applicable laws and Commission rules and regulations for record retention.

7.16A. Suppliers are required to create and maintain a file containing at a minimum the following billing data: Supplier name, Customer's Company account number, service point number, rate class, Supplier rate, effective period of such rate and any other information required to properly bill Customer at the Supplier's rate. Such data will be updated monthly by the Supplier and will be released to the Company only in the event of default by a Supplier which requires the Company to comply with Section 2207(k) of the Natural Gas Choice Act.

7.17. The Supplier shall maintain the surety required by the Company and shall maintain an acceptable credit rating in accordance with the requirements of the Supplier evaluation form. The Company reserves the right to conduct financial evaluations during the course of the year when information has been received by the Company that indicates the creditworthiness of the Supplier has deteriorated. The Company will bill the Supplier a two hundred fifty dollar (\$250.00) fee for such evaluations. The Company will limit evaluations at Supplier expense to two (2) evaluations in any twelve (12) month period. (c)

7.18. Suppliers shall each comply with all applicable Commission Orders regarding Gas Choice, including, but not limited to, PUC standards for credit determination, deposits, initiation and disconnection of service to Customers as set forth in Maintaining Service Quality Guidelines at Docket No. M-00991249F0003, Customer Information Disclosure Requirements at Docket No. M-00991249F0005 regarding Supplier disclosure of terms of service, marketing, advertising and sales practices, and privacy of customer information, and Procedures to Ensure Customer Consent to a Change of Supplier at Docket No. M00991249F0006.

7.19.A. Force Majeure. In the event that a Supplier or the Company is rendered unable, wholly or in part, by a Force Majeure event to carry out its obligations under this Tariff, it is agreed that upon notice of such Force Majeure given in writing or by telephone to the other party as soon as reasonably possible after the occurrence of the cause relied on, the obligation of the party giving such notice, insofar as its is affected by such Force Majeure event, shall be suspended during the continuation of any inability so caused, but for no longer period, and such cause shall be remedied by such party with all reasonable dispatch.

7.19.B. Telephone notices given under the provisions of this Section shall be confirmed in writing as soon as reasonably possible, and all notices hereunder shall specifically state the time and date when the Force Majeure became effective.

7.19.C The term “Force Majeure” as used in this Supplier Tariff, shall mean any natural catastrophe, fire, explosion, accident or other casualty, law or governmental regulation or order (including, without limitation, any such law, regulation or order which curtails or interrupts, directly or indirectly, a Customer’s right to receive the gas supplied hereunder), strike or other labor dispute and any consequences thereof and other causes beyond the reasonable control of either the Supplier or the Company, and shall also include any change in order of the Commission which alters or affects the Customer’s right to take or retain the gas supplied hereunder. A change in economic circumstances shall not be deemed in and of itself, a Force Majeure event hereunder, and no event shall excuse Supplier’s obligation to promptly make payments required under this Tariff.

7.19.D. Notwithstanding the provisions of Section 7.19.C, for a Supplier that delivers gas via interstate pipeline, a Force Majeure event that excuses a Supplier from delivering the required DDQ on any given day shall be limited solely to those instances when the applicable interstate pipeline has curtailed the pipeline FT capacity assigned to a Supplier, such curtailment directly and substantially affects a Supplier’s ability to deliver its DDQ, and no alternative natural gas supply is available. During such period of curtailment, a Supplier claiming excuse from performing due to force majeure must schedule all available pipeline FT capacity to satisfy its DDQ obligation. The Supplier is responsible for providing the Company complete information and verifiable proof of all the particulars requested by the Company related to any such force majeure event. As requested by the Company, quantities not delivered by a Supplier pursuant to this Force Majeure provision must be made up by Supplier as soon as possible pursuant to a delivery schedule to be established by the Company. Any requested quantities which are not made-up pursuant to that schedule will be sold to Supplier at a rate of fifty dollars (\$50.00) per Dth, plus the replacement cost of such gas including, but not limited to, the purchase price of the gas and any applicable interstate pipeline charges. Force Majeure provisions for Suppliers that deliver gas directly to Company’s system shall be set forth in Supplier’s Interconnection Agreement.

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## 8. OPERATIONAL REQUIREMENTS

### 8.1. Critical Day Planning.

8.1.A. As events occur that could develop into system emergencies or lead to a threatening of system integrity, the Company may request and/or require Suppliers or Customers to take certain actions to protect, maintain, or reestablish the safe operation of the system in the form of:

8.1.A.1. Daily Operational Bulletin (DOB);

8.1.A.2. Operational Flow Order (OFO).

8.2. The Company shall have the right to issue Daily Operational Bulletins (DOBs). A DOB may request a specific action on the part of an individual Supplier or all Suppliers. Failure to comply with a DOB will result in the Supplier being assessed the penalty charge set forth within this Supplier Tariff. DOBs will be communicated to affected Suppliers either electronically, by telephone, facsimile or other method agreed upon between Company and Supplier. Suppliers must provide the Company with a 24-hour contact for DOBs.

8.3. Operational Flow Orders. The Company shall have the right to issue Operational Flow Orders (OFOs) on a daily or intraday basis. Failure to comply with a properly communicated OFO will result in the Supplier being assessed the penalty charge set forth within this Supplier Tariff. OFOs will be communicated as soon as reasonably practical to Suppliers either electronically, by telephone, facsimile or other method agreed upon between Company and Supplier. Suppliers must provide the Company with a 24-hour contact for OFOs.

8.3.A. In order to alleviate operating conditions which threaten the integrity or safe operation of the Company's distribution system or interfere with the Company's ability to provide reliable firm service, the Company shall notify the Supplier, of the issuance of an OFO. The Company will endeavor to provide notice of the commencement of an OFO to the Supplier not less than four (4) hours in advance. Notice of the termination of an OFO may be made at any time, and shall specify the date and time of the termination.

8.3.B. OFO notices will contain specific instructions as to the action(s) required of the Supplier. The Supplier shall be responsible for any communication with Customers in the supply pool that may be necessary for the Supplier's compliance with OFO requirements.

8.3.C. The Company, in its sole judgment, may issue OFOs for reasons, including but not limited to the following :

8.3.C.1.a. Protect the integrity of the Company's gas system;

8.3.C.1.b. Assure deliveries of gas supplies to all of the Company's sales customers;

8.3.C.1.c. Adhere to the various interstate pipeline companies' balancing or delivery requirements; or

8.3.C.1.d. Provide adequate storage levels.

8.3.C.2. Consistent with the standards set forth, types of circumstances under which the Company may determine to issue an OFO include, but are not limited to:

8.3.C.2.a. Responding to an event of Force Majeure;

8.3.C.2.b. Accommodating capacity limitations resulting from the need to perform maintenance and/or repairs;

8.3.C.2.c. Ensuring current and future storage capabilities and levels;

8.3.C.2.d. Maintaining operational pressures, adequate gas supplies and line pack required to provide an efficient and reliable service;

8.3.C.2.e. Responding to any event, which the Company believes in its sole judgment, may jeopardize the integrity of its system.

8.3.C.3. OFOs may be issued with respect to an individual Customer, an aggregation pool or an entire rate class (or classes) of Customers.

8.3.C.4. In order to address operational reliability or to prevent undue cost shifting the Company will have the authority to direct a Customer, or where the Customer is part of an aggregation pool, the Customer's Pool Administrator, to adjust daily scheduled volumes to a specified level or to deliver gas to specified receipt point(s) into the Company's distribution system or to receipt points prescribed by upstream pipelines.

8.3.C.5. Failure to comply with an OFO will result in the billing of the following charges when the actual daily usage exceeds the daily flowing volume:

8.3.C.5.a. Penalties as defined in the tariff on the difference, and

8.3.C.5.b. Payment of all other charges incurred by the Company on the date of the OFO that result from the Supplier's failure to comply with the OFO, including a proportionate share of any pipeline penalties that are incurred by the Company.

8.3.D. The requirements of OFOs shall be as localized as possible. If only discrete segments of the Company's system are affected by operational difficulties, then OFOs shall be limited to those segments of the system. The Company shall lift any effective OFO promptly upon the remedy or cessation of the operating conditions that caused the issuance of the OFO.

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## 9. SPECIAL PROVISIONS

9.1. Supplier warrants and will provide satisfactory documentation, upon request, that it has good and merchantable title for all gas delivered to the Company for transportation hereunder. Title shall be free and clear of all liens, encumbrances and claims whatsoever. Supplier will indemnify the Company and hold the Company harmless from all suits, actions, debts, accounts, damages, costs, losses and expenses arising out of the adverse claims of any or all persons to said gas and/or to royalties, taxes, license fees or charges thereon, including pipeline transportation and service charges, which are applicable to such gas and/or the delivery of such gas to the Company.

9.2. The Supplier shall be deemed to be in control and possession of the gas to be transported hereunder until it shall have been delivered to the Company at the receipt point, after which the Company shall be deemed to be in control and possession thereof. The Company shall have no responsibility with respect to any gas until it is delivered to the Company at the specified receipt point or because of anything which may be done, happen or arise with respect to said gas before such delivery. The Supplier assumes the full cost and expense, as well as full and complete liability and responsibility, for collecting, gathering and transporting the gas to the receipt point hereunder at the quality herein before specified. Notwithstanding the transfer of control and possession of the gas at the receipt point, as aforesaid, the Customer or its NGS shall retain title of the gas while it is being transported and delivered by the Company. The Supplier shall be responsible for maintaining all insurance it deems necessary to protect its property interest in such gas before, during and after receipt by the Company.

9.3. Natural gas delivered or caused to be delivered by the Supplier must satisfy the quality specifications of the pipelines used to transport Supplier's natural gas.

9.4. Additional Limitations of Liability in Connection with Customer Choice. Other than its duty to deliver natural gas, the Company shall have no other duty or liability to a Customer receiving Natural Gas Supply Service arising out of or relating to a contract or other relationship between such Customer and a Supplier. The Company shall implement Customer selection of a Supplier consistent with applicable rules of the Commission and shall have no liability to a Customer receiving Natural Gas Supply Service arising out of or relating to switching Suppliers unless the Company is negligent in switching or failing to switch a Customer. The Company shall have no duty or liability with respect to natural gas before it is delivered by a Supplier to a point of delivery on the Company's distribution system. After its receipt of natural gas at the point of delivery the Company shall have the same duty and liability for distribution service to Customers receiving Natural Gas Supply Service as to those purchasing natural gas from the Company.

### 9.5. UPSTREAM CAPACITY.

9.5.A. Each Supplier delivering gas via interstate pipeline shall receive an assignment of the Company's pipeline FT capacity at the applicable maximum rate charged by the pipeline. The amount of pipeline FT capacity assigned to a Supplier shall be based on the Supplier's Daily Contract Quantity ("DCQ") in Dth/day. The DCQ shall be determined each quarter in accordance with the allocation methodology approved by the Commission's Order at M-00021612 (entered March 31, 2003). The DCQ shall be adjusted, at the Company's discretion, to reflect increases or decreases in a Supplier's Firm Transportation Customer group. Pipeline FT capacity will be assigned by the Company in proportions equal to the amount of pipeline FT capacity held by the Company on each interstate. The pipeline FT capacity shall be the existing total capacity obligation as modified from time to time in accordance with applicable law.

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9.5.B. Pipeline FT capacity will be assigned to the Supplier on a recallable basis. Assignment of such capacity will be reviewed on a monthly basis. Pipeline FT capacity may be recalled from a Supplier by the Company in the event of Supplier's unexcused failure to deliver its Daily Delivery Quantity ("DDQ"), upon exit by the Supplier from the Company's Gas Choice Program, loss of Supplier's Customers, or due to Supplier's failure to pay pipeline demand charges.

9.6. The Company will communicate to each Supplier a DDQ. The DDQ will be the required amount of gas to be delivered for the indicated date for each Supplier's pool of Customers served under Firm Transportation, and will specify the required points of delivery. Suppliers who fail to deliver their DDQ will be subject to penalties and imbalance charges as outlined in the Supplier Tariff.

9.7. Upon assignment of pipeline FT capacity, Suppliers must deliver the DDQ to the Company's city gate, or as specified by the Company. Specification of a delivery point other than a PGW city gate shall not increase the transportation cost to the Supplier. Except in the case of a Force Majeure event, all assigned pipeline FT capacity shall be presumed to be available to the Supplier for the purpose of delivery of DDQ. Rule 9.10 and Rule 9.11 penalties shall apply to all excessive or deficient deliveries of a Supplier.

9.8. Suppliers will receive their DCQ, their DDQ, DOBs, and OFO's, as well as send and receive nomination information, via a secure, individualized web site and will receive Customer account information electronically. Each Supplier nomination transmission must include: name of pipeline, pipeline contract number, pipeline activity number, package/downstream identifier, PGW or other designated delivery meter, volume of delivered quantities, and effective dates. The Company reserves the right to change the type of information required as well as the nomination deadline to comply with the requirements of the interstate pipelines. Nominations will be confirmed in a manner consistent with the procedures established by the Company. However, the Company reserves the right to not confirm supply nominations if, in the Company's sole judgment, acceptance of such supplies would affect the integrity of the Company's distribution system. The Company also reserves the right to not confirm supply nominations that are received beyond the Company's deadline or otherwise improperly nominated.

9.9. Each month, the Company shall determine the DDQ applicable to each Supplier's Firm Transportation Customer profile based on projected normalized weather consumption and based on application of the reconciliation procedures set forth in Rule 9.13. Each DDQ shall be made available to the applicable Supplier via web site, by nine (9) o'clock in the morning of the day prior to the first (1<sup>st</sup>) day of each calendar month. A Supplier's DDQ shall remain unchanged throughout the applicable calendar month unless, as determined by the Company, operating conditions dictate that the DDQ should be modified. Operating conditions shall include variation in customer consumption from projected weather, imposition of an Operational Flow Order (OFO), imposition of a Daily Operational Bulletin (DOB) or curtailment order of an interstate pipeline company, management of the Company's storage deliverability and inventories at appropriate levels or avoiding interstate pipeline company penalties. The monthly determination of a DDQ, and changes thereto shall be applied to each Supplier on a not unduly discriminatory basis.



9.10. The Company is not obligated to accept any quantities nominated by a Supplier in excess of its DDQ. As to quantities exceeding the DDQ, the Company may either refuse to confirm said quantities, in conjunction with appropriate interstate pipeline confirmation protocol. The Company will not be liable for any cost incurred by the Suppliers, resulting from pipeline nominations in excess of the DDQ. In the event the Company is unable to reduce the Supplier's deliveries to the DDQ level, the Supplier shall pay the Company a penalty equal to the greater of fifty dollars (\$50.00) per Dth or two hundred percent (200%) of the highest of the prices for delivered gas supplies published in Gas Daily for points located in Texas Eastern M-3 and Transco Z6 (non-NY), which are applicable to the calendar day in which the excess deliveries were made on the positive difference between the amount delivered by the Supplier and the DDQ, plus all costs incurred by the Company as a result of the Supplier's over-delivery. Over-deliveries in one (1) day do not satisfy under-deliveries in another day, nor will under-deliveries correct previous over-delivery of supply.

9.11. To maintain system reliability and integrity, the following penalty charges will apply for Supplier's failure to deliver the entire DDQ to the Company. This reconciliation is done on a daily basis. Suppliers who fail to deliver the DDQ established by the Company will be subject to a penalty equal to the greater of fifty dollars (\$50.00) or two hundred percent (200%) of the higher of the prices for delivered gas supplies published in Gas Daily for Texas Eastern M-3 and Transco Z6 (non-NY), which are applicable to the calendar day in which the deficient deliveries were made. The Supplier will also pay all costs incurred by the Company to obtain gas volumes needed to rectify the deficiency.

9.12. PENALTIES DURING A DAILY OPERATIONAL BULLETIN OR OPERATIONAL FLOW ORDER (OFO).

9.12.A. A Supplier that fails to deliver the DDQ while a DOB is in effect will be subject to a penalty charge of seventy five dollars (\$75.00) per Dth, on the positive difference between the DDQ and the amount delivered to the Company during the DOB. The Supplier will also pay all other costs incurred by the Company to satisfy the deficiency.

9.12.B. A Supplier that fails to deliver the DDQ while an OFO is in effect will be subject to a penalty charge of seventy-five dollars (\$75.00) per Dth, on the positive difference between the DDQ and the amount delivered to the Company during the OFO. The Supplier will also pay all other costs incurred by the Company to satisfy the deficiency.

9.12.C. Failure to comply with a DOB or OFO will result in a penalty charge of seventy-five dollars (\$75.00) per Dth plus all incremental costs incurred by the Company as a result of the failure to comply with the DOB or OFO.

9.13. RECONCILIATION PROCEDURES.

9.13.A. Meter data collected by the Company shall be utilized to calculate the quantity of natural gas consumed by a Supplier's Firm Transportation Customer group in Dths. Data from monthly metered Customers shall be collected in subsets corresponding to Customer billing cycles (billing routes) which close on different days of the month. To estimate usage on a daily basis, the Company shall convert such metered data for Customers to equivalent daily usage base and the applicable volume adjustment. For the purposes of Rule 9.13.B, equivalent daily usage will be aggregated on a calendar month basis and compared to total gas received by the Company from the Supplier expressed in Dths.

**9.13.B. Reconciliation of Deliveries Using the Company's Retained Pipeline FT Capacity or Storage Capacity.**

9.13.B.1. Suppliers shall be responsible for returning natural gas volumes forwarded by the Company using pipeline FT capacity. Aggregate equivalent daily usages determined pursuant to Rule 9.12.A shall be used to calculate the net amount of gas delivered by the Company using such delivery assets. The difference between the aggregate equivalent daily usage and Supplier's DDQ for each day of the calendar month shall be deemed to have been delivered by the Company to the extent aggregate equivalent daily usage exceeds the DDQ.

9.13.B.2. Where a Supplier's aggregate equivalent daily usage does not exceed the Supplier's DCQ, the difference shall be deemed to have been delivered using the Company's retained pipeline FT capacity and netted against volumes deemed to have been delivered by the Supplier on days where aggregate equivalent daily usage is less than Supplier's DDQ. To the extent such netting shows an imbalance of deliveries over an entire calendar month, the Supplier's DDQ shall be adjusted to the extent operationally feasible pursuant to Rule 9.9.

9.13.B.3. Where a Supplier's aggregate equivalent daily usage exceeds the Supplier's DCQ, the difference shall be deemed to have been delivered using the Company's storage and peaking capacity. The aggregate of volumes deemed to have been delivered each month using such delivery assets during November-March (Winter Season) shall be carried forward to the extent operationally feasible and the Supplier's DDQ during the subsequent April-October (Summer Season) shall be adjusted pursuant to Rule 9.9 to eliminate the forwarded amount. These carried forwarded volumes will be reimbursed back to the company in kind through this adjustment process rather than being reimbursed in dollars as a cash out mechanism.

9.14. LOAD BALANCING CHARGE.

9.14.A. Suppliers delivering gas via interstate pipeline, for all gas delivered under Firm Transportation Rates, of this Suppliers Tariff shall be charged at \$67.6053 per design day Mcf that is fulfilled by PGW storage and peaking assets, for recovery of those costs for Balancing Service, calculated in the manner set forth in the Commission's Order at M-00021612 (entered March 31, 2003) and as set forth below. Such rate for Balancing Service shall be increased or decreased, from time to time, in accordance with applicable law and procedures. Company shall determine the nature and amount (if any) of load balancing charge applicable to Suppliers delivering gas via direct connection and reflect it in Supplier's Interconnection Agreement. (I)

9.14.B. Computation of Balancing Service Costs per Dth.

9.14.B.1. Formula. Balancing Service Costs, per design day Mcf, that is fulfilled by PGW storage and peaking assets, shall be computed to the nearest one-hundredth cent (\$0.0001) in accordance with the formula set forth below:

$$\text{BSC} = (C / S_1) - (E / S_2)$$

Projected Balancing Service Costs, so computed, shall be charged to Suppliers of Firm Transportation Rates per Customer per design day Mcf that is fulfilled by PGW storage and peaking assets, for an enrollment month. The amount of those costs, per Mcf, will vary, if appropriate, based upon annual filings by the Company pursuant to Section 1307(f) of the Public Utility Code and such supplemental filings as may be required or be appropriate under Section 1307(f) or the PUC's regulations adopted pursuant thereto.

9.14.B.2. Definitions. In computing the Balancing Service Costs, per Dth, pursuant to the formula above, the following definitions shall apply:

"BSC" - Balancing Service Costs determined to the nearest one-hundredth cent (\$0.0001) to be charged to each design day Mcf that is fulfilled by PGW storage and peaking assets, under Rate Schedule Firm.

"C" - Cost in dollars: for all types of storage and related services, the fixed and variable costs for the projected period when rates will be in effect.

"E" - the net overcollection or undercollection of Balancing Service Costs.

The net overcollection or undercollection shall be determined for the most recent period permitted under law, which shall begin with the month following the last month which was included in the previous overcollection or undercollection calculation reflected in rates. The annual filing date shall be the date specified by the PUC for the Company's Section 1307(f) Tariff filing.

Each overcollection or undercollection statement shall also provide for refund or recovery of amounts necessary to adjust for overrecovery or underrecovery of "E" factor amounts under the previous Balancing Service Costs Rate. Interest shall be computed monthly at the rate as provided for in Section 1307(f) of the Public Utility Code from the month that the overcollection or undercollection occurs to the effective month such overcollection is refunded or undercollection is recouped. Such over billings (or under billings) will be made with interest at the statutory rate.

"S<sub>1</sub>" – projected Mcf of storage gas/LNG to be delivered to Customers to meet design day needs during the projected period when rates will be in effect.

"S<sub>2</sub>" – forecasted Mcf of load balancing volumes during the projected period when rates will be in effect.

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9.14.C. Quarterly Updates. The Company's rates for recovery of Balancing Service Costs are also subject to quarterly adjustments under procedures set forth in the PUC's regulations at 52.Pa. Code 53.64 (1) (5). Such updates shall reflect adjustments for under or over collections and adjustments to the projected cost of Balancing Services based upon more current versions of the same sources of data and using the same methods to project the Balancing Service Costs approved by the PUC in the Company's most recent annual proceeding for recovery of Balancing Service Costs under section 1307 (f) of the Public Utility Code.

9.15. Suppliers will be required to reimburse PGW for the carrying costs for the amount of storage gas/LNG forwarded to the Suppliers pursuant to section 9.13.B.3. Such carrying costs will be computed by PGW on a periodic basis using the FERC declared interest rate.

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## 10. NOMINATION PROCEDURE

10.1. The nomination procedure specifies requirements for nominating, scheduling, balancing, and communicating information relating to Supplier's gas deliveries for customers served under Firm Transportation Rates.

10.2. A list of Company contact persons will be posted on the Company's Web Site, located at <http://www.PGWORKS.com>, or its successor, along with their department affiliation, telephone number, and fax number.

10.3. Where applicable, upstream pipeline firm transportation and storage capacity held by Company shall be released, assigned or otherwise transferred to the Supplier to serve Customers under Firm Transportation rates. The Company will determine the term of the assignment, release or transfer.

10.4. Capacity Recall. All capacity assigned, released or transferred by Company is subject to recall, in the event:

10.4.A. A Supplier is disqualified as an approved Supplier on Company's system; or

10.4.B. The amount of capacity assigned, released or otherwise transferred is no longer required to serve the Supplier's Pool; or

10.4.C. The Supplier fails to comply with Section 7 of this Supplier Tariff (Supplier Obligations) and the capacity is required by the Company to meet its firm commitments.

10.5. A Supplier may have an agent who performs one (1) or more supply obligations under this Supplier Tariff. In the event such an agent is utilized, Supplier shall notify Company of the responsibilities of the agent, and shall provide Company with the agent's valid e-mail address, 24-hour contact, fax number and phone number for contact purpose. Suppliers using an agent shall remain liable for all charges and penalties, as well as the actions or omissions of their agents, including, without limitation, with respect to confidential information and use of PGW's systems.

10.6. Assignments, releases or transfers of upstream pipeline firm transportation capacity shall be made on the basis of and in accordance with the supply portfolio held by Company at the time of assignment and the composition of the Supplier's Pool. Company will evaluate and adjust the capacity assignments, releases or transfers made to the Supplier from time to time, as required.

10.7. For nomination purposes, all transportation volumes received on behalf of Customers served under Firm Transportation Rates shall be nominated to the Company's city gate receipt points. Company reserves the right to specify delivery receipt points.

10.8. Suppliers serving Customers shall submit daily nominations equal to the DDQ, consistent with the Company's requirements.

10.9. All Company Customers must provide consent to any Supplier nominating on their behalf. Enrollments by Suppliers are deemed to constitute confirmations that the Customer has provided such consent. For transportation Customers served under Firm Transportation rates, the Supplier must maintain and produce upon request by Company evidence of Customer consent within one (1) business day notice.

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## 11. FINANCIAL SECURITY

11.1. The purpose of the security requirement is to ensure a Natural Gas Supplier's ("NGS") financial responsibility.

11.2. The amount and the form of the security, if not mutually agreed upon by PGW and the NGS, shall be based on criteria in accordance with Applicable Law.



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## 12. Supplier Billing and Payment

12.1. Each month, the Company shall submit an invoice to the Supplier for all service charges and other charges provided under this Tariff. Such invoice may include charges related to adjustments for prior periods. The invoice may be transmitted to the Supplier by any method requested by the Supplier that PGW can reasonably accommodate. On or before the due date shown on the bill, a Supplier shall make payment for charges incurred. The due date shall be determined by the Company and shall not be less than fifteen (15) days from the date of transmittal of the bill.

12.2. Supplier shall make payment to the Company of invoiced amount by wire transfer to the bank and account specified on the invoice. If the invoiced amount is less than \$1,000, payment can be made by check, payable to the Company. Unpaid balances shall accrue interest at the rate of 0.83% per month or 10% per annum. Unpaid balances may result in the Company accessing the financial security posted by the Supplier and / or the Supplier being disqualified from providing Firm Pooling Service. The Company may require that a Supplier that is not creditworthy tender payment by means of a certified, cashier's, teller's, or bank check, or by wire transfer, or other immediately available funds. If disputes arise regarding a Supplier bill, the Supplier must pay the undisputed portion of disputed bills under investigation. There shall be a returned check fee of twenty dollars (\$20.00) payable by the Supplier for each returned check.

12.3. If Supplier asserts a good faith billing dispute, the Supplier shall inform the Company in writing of such dispute and pay the undisputed amount. The disputed amount shall accrue interest at the effective prime rate of interest as published under "Money Rates" by "The Wall Street Journal", or the maximum contract rate permitted by law, whichever is less. The Supplier and the Company shall endeavor to resolve any disputes promptly and the amount determined to be properly invoiced, plus accrued interest on such amount shall be paid to the Company within fifteen (15) days following such resolution. Unpaid amounts not subject to dispute shall accrue interest at the rate of 0.83% per month or 10% per annum.

12.4. Notwithstanding anything stated herein to the contrary:

12.4.A. Invoices shall be subject to adjustment for any errors in arithmetic, computation, meter readings, estimating or other errors for a period of 6 months after the rendering of the invoice; and

12.4.B. The Company shall be entitled to submit estimated bills (subject to correction) in the event circumstances limit the timely availability of necessary data.

12.5. This section reserved.

12.6. In the event the Supplier fails, for any reason other than a good faith billing dispute, to make payment to the Company on or before the due date, and such failure of payment is not corrected within fifteen (15) calendar days after said due date, Supplier shall be deemed to be in Default under the Firm Pooling Agreement.

12.7. The Company will assume no responsibility for billing other parties except as stated otherwise in this Tariff or upon mutual agreement.

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12.8. Before the Supplier can render service, or continue to render service under this Supplier Tariff, the Company shall require any Supplier applying for Firm Pooling Services, or a Supplier currently receiving such services, as applicable, to provide the Surety described in Section 11.1 through 11.3. The Company will hold any Surety for the Supplier's delivery of gas and for payment of undisputed charges due from a Supplier under this Tariff. In addition, the Company at any time may require a Supplier to post a cash deposit if the Company determines that the Supplier is no longer creditworthy. In the event the PUC establishes an additional amount to be included in the Surety to cover fines or obligations of a Supplier to its Customers, such amount shall be payable on the same terms as the Surety to the Company; provided, however, that the Company shall not be required to execute on the Surety for any amounts owed by the Supplier to its Customers unless such amounts are not in dispute or the PUC directs the Company to do so in a final order.

12.8.A. In addition to any information otherwise required hereunder, a Supplier shall be required to provide to the Company such credit information as the Company may reasonably request. The Company will report the Supplier's credit history with the Company to a national credit bureau.

12.9. SUPPLIER BILLING.

12.9.A. The Customer Billing Specifications. A Supplier who intends to deliver Natural Gas Supply to Customers must satisfactorily complete the appropriate interface testing with the Company prior to being able to deliver.

12.9.B. Billing Service Options.

12.9.B.1. Separate NGS Billing.

12.9.B.1.a. If by notifying the Supplier, a Firm Transportation Customer elects to have a Supplier separately bill its Supplier Charges, the Company and the Supplier will separately send their bills directly to the Customer.

12.9.B.1.b. Within the time frame and via the transaction format approved by the PUC, the Company will transmit meter data (e.g. meter reads, consumption, dates and type of reading) to the Supplier.

12.9.B.2. Consolidated Billing.

12.9.B.2.a. If a Firm Transportation Customer elects Consolidated Billing, the Company will render a consolidated bill monthly, including both the Company's charges for distribution service and the Supplier's basic charges for its gas supply service, in accordance with the Public Utility Code and the PUC's applicable regulations (e.g. 52 Pa. Code §56.1 et seq.) and orders. NGDC Consolidated Billing will only be available to NGS participating in PGW's POR program, pursuant to this Tariff and Applicable Law, and will only be available for those customers eligible and included within the POR program.

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12.9.B.2.b. Within the time frame and via the transaction protocol, approved by the PUC pursuant to the PUC’s Final Order in Docket Nos. R-2008-2073938 and R-2009-2139884, or as otherwise ordered by the Commission, the Company will transmit Meter Data (e.g., meter reads, consumption, dates and type of reading) to the Supplier. (c)

12.9.B.2.c. The Supplier shall provide to PGW the relevant rates at which enrolled customers should be billed by the 25<sup>th</sup> of each month and such rates shall be effective the first day of the following month. PGW will calculate and provide Supplier charges, including date of billing period, consumption, usage, Supplier rate, and resulting calculation (collectively referred to as “Supplier Charges”). (c)

12.9.B.2.d. The Company will provide the Supplier up to four (4) lines, each one hundred (100) characters in length (a blank line counts as 100 characters), on its standard bill for messages directly related to the calculation of the Supplier portion of the bill. (c)

12.9.B.2.e. Any transaction with Supplier charges sent to the Company after the time period, or not in the format specified above, will be rejected and the Firm Transportation Customer’s bill for the current billing period will state that the Supplier charges for the current billing period are not available or the customer will be billed at the current Supplier rate. Supplier must submit to the Company any charges not supplied. (c)

12.9.B.2.f. The Company will collect and process Firm Transportation Customer’s payments in accordance with Section 2205 (c)(5) of the Gas Choice Act and the PUC’s applicable payment priority requirements. The Company shall pay the Supplier amounts pursuant to POR program stipulations as described in section 12.9.C below. (c)

12.9.B.2.f.1 The Company will make payments to the Supplier by Automatic Clearing House (“ACH”), with remittance advice to a bank designated by the Supplier. (c)

12.9.B.2.f.2 In the event the Company fails to pay Supplier within the agreed upon payment period, the Company will pay the Supplier ten percent (10%) interest per annum on the unpaid amount. (c)

12.9.B.3. Within the time frame and via the transaction format approved by the PUC, the Company will transmit meter data (e.g. meter reads, consumption, dates and type of reading) to the Supplier. (c)

12.9.C. Purchase of Receivables Program (c)

12.9.C.1. POR. PGW will offer a POR program pursuant to the Commission’s Final Order in Docket Nos. R-2008-2073938 and R-2009-2139884, or as otherwise ordered by the Commission. (c)

12.9.C.2. Customer Eligibility. GS Residential customers and GS Commercial and Industrial customers with annual usage of 5,000 Mcf or less will be eligible for inclusion into a POR program. Eligible GS Customer accounts will be reviewed on an annual basis to determine if they are eligible to be included in the next 12 month period. The review will be based on the previous 12 months actual usage.

12.9.C.3. NGS Participation. All of the NGS' customer accounts within the elected Rate Classes must be POR eligible accounts. To be eligible for the POR program, an NGS must choose consolidated billing for all of their eligible customer accounts and must sell all associated customer accounts receivable to PGW.

12.9.C.4. Billing Options. PGW shall support rate-ready billing, and all NGS rates must conform to supported rate designs.

12.9.C.5. POR Payments. The Company will purchase each POR Customer's accounts receivable, provided, however, that PGW shall discount payments consistent with the settlement agreement and the PUC's Final Order in Docket No. R-2017-2586783, or as otherwise ordered by the Commission. (c)

12.9.C.5.a. PGW will owe the Supplier all legitimate Supplier charges for basic gas supply services and applicable taxes subject to the discount, regardless of whether the customer has paid the Company. The ownership of each POR Customer's accounts receivable will transfer from the Supplier to the Company upon Customer billing.

12.9.C.5.b. The Company will pay the Supplier in accordance with the following schedule:

1. The Company will remit payment for the receivable on the 25<sup>th</sup> day of the month following the billing month.
2. Payment will not be made to the Supplier when Supplier Charges are not received by the Company within the required time period, as explained in paragraph 12.9.B.2.(e) above. Payment for these charges will be made according to the applicable schedule in the following month, if they are received within the appropriate time period along with the current month charges.

12.9.C.5.c. The Company may purchase accounts receivable based upon an estimated bill. The Company shall add or deduct from any future payments due to the Supplier amounts that may result from reconciliations, adjustments, or recalculations, estimated readings, cancel and rebills, or any applicable billing adjustment.

12.9.C.5.d. Upon request, a Supplier shall provide a written certification to the Company that the Supplier is providing only basic gas supply to POR Customers billed under Consolidated NGDC Billing. Basic gas supply does not include a non-gas supply product (e.g., service contract for appliances, or payment for usage reductions, early contract cancellation fees or late fees, or other similar charges).

12.9.C.5.e. Supplier acknowledges and agrees that the Company is (a) entitled to receive and retain all payments from Supplier's customers for Purchased Receivables, and (b) authorized to conduct collection activities and, if necessary, terminate its delivery service and Supplier's supply services to customers whose accounts receivables were purchased and who fail to make payment of amounts due on the Consolidated NGDC Bill, including the purchased Supplier receivables or other authorized reasons. Any customer whose service is terminated shall be reconnected to SOLR service upon compliance with PGW requirements.

12.9.C.6. Dispute Resolution. To the extent that disputes arise, Supplier and Company shall attempt to resolve such disputes according to the dispute resolution procedures described in Section **12.9.D.** of this Supplier Tariff. Parties have the right to resolve such disagreements through PUC dispute resolution process. (c)

12.9.D. Dispute Process. (c)

12.9.D.1. The Company shall process all disputes in accordance with the Public Utility Code and the PUC's applicable orders and regulations (52 Pa. Code 56.1 et. seq.). In the event the dispute relates to the Company's charges or actions, or to both Company's and the Supplier's Charges or actions, the Company will coordinate with the Supplier so that a proper investigation to a Customer dispute is conducted and completed within the time period prescribed by 52 Pa Code 56.151(5) and so that the Customer and the Supplier (if the Supplier is involved in the dispute) are informed of the results of the investigation. The Supplier will designate specific personnel for responding to complaints and disputes under this process. The Supplier shall provide all information needed by the Company relating to the Customer's dispute within five (5) business days of the Company's request, unless the gas service is off, in which even the information shall be provided within three (3) business days of the Company's request. In the event, however, the dispute relates solely to the Supplier's Charges or actions the Company shall refer the Customer directly to the Supplier for resolution of the dispute. (c)

12.9.D.2. The Supplier shall hold PGW harmless for the results of any regulatory count or other action arising from a dispute related to a Supplier charge. (c)

12.9.D.3. The Company shall process all informal complaints in accordance with the Public Utility Code and the PUC's applicable orders and regulations. In the event the informal complaint relates to the Company's charges or actions, or to both the Company's and the Supplier's Charges or actions, the Company will coordinate with the Customer's Supplier so that the proper information is submitted to the PUC's Bureau of Consumer Services within the time period required by the PUC. In the event, however, the informal complaint relates only to the Supplier's Charges or actions, the Supplier shall have the sole responsibility to submit the proper information. (c)

12.9.E. Supplier shall pay to Company the following fees for billing services: (c)

12.9.E.1. Billing Fee \$ /Bill. (reserved)

12.9.E.2. Supplier POR cancel/re-bills. To the extent the NGS has provided the Company with inaccurate or erroneous information which requires an adjustment to ratepayer's bills, the NGS agrees to pay the Company billing error fees based upon the following schedule: (c)

the per premise fee will be set at \$45.57 per incident per premise adjusted beginning in PGW's Fiscal Year 2016, and increasing by 2.4% annually thereafter (c)

12.10. In the event a Supplier wants the Company to provide a billing service other than the standard billing service, the fee for such service shall be negotiated between the Company and the Supplier. (c)

(c)

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### **13. Supplier Exit Procedures**

#### **13.1. WITHDRAWAL BY SUPPLIER FROM GAS CHOICE.**

13.1.A. In compliance with all applicable PUC rules and regulations, and at least ninety (90) days before withdrawal, a Supplier shall provide to the Company electronic notice, in a form specified by the Company, of withdrawal by the Supplier from the Gas Choice Program, meaning withdrawal from supplying, under this Supplier Tariff, Natural Gas Supply on the Company's system to Customers.

13.1.B. In compliance with all applicable PUC rules and regulations, and at least ninety (90) days prior to said withdrawal, a Supplier shall also provide written notice to its Customers of its withdrawal from the Gas Choice Program.

13.1.C. A Supplier that withdraws from the Gas Choice Program without providing timely notice of withdrawal to the Company and to its Customers shall reimburse the Company for any costs incurred by Company associated with the withdrawal:

13.1.C.1. Mailings by the Company to the Supplier's Customers to inform them of the withdrawal and their options;

13.1.C.2. Non-standard/manual bill calculation and production performed by the Company

13.1.C.3. Supplier data transfer responsibilities that must be performed by the Company; and

13.1.C.4. Charges or penalties imposed on the Company by other third parties resulting from Supplier nonperformance.

13.1.C.5. In the event of a mid-cycle withdrawal, any differences between the NGS's rates that customers are billed for the remainder of the cycle and the Company's SOLR rates shall be recovered as Purchased Gas Costs.

#### **13.2. SUPPLIER'S DISCONTINUANCE OF CUSTOMERS.**

13.2.A. At least thirty (30) days in advance of any intended discontinuance of service to any of its Firm Transportation Customer classes, a Supplier shall provide electronic notice to the Company of any such discontinuance in a form specified by the Company, and in a manner consistent with applicable PUC rules.

13.2.B. A Supplier shall provide a minimum of thirty (30) days advance notice to all members of any Firm Transportation Customer class it intends to stop serving in a manner consistent with applicable PUC rules.

13.2.C. A discontinuance will be effective on a Meter Read Date and in accordance with the Supplier switching rules contained in this Tariff and in the Gas Service Tariff.

#### **13.3. TERMINATION OF FIRM POOLING SERVICES AGREEMENT.**

13.3.A. In the event the Supplier ceases to participate in, or otherwise withdraws from, the Company's Gas Choice Program, the Firm Pooling Agreement and any Interconnection Agreement between the Supplier and the Company shall terminate thirty (30) days following the date on which the Supplier has no more active Customers.

**(C) - Change**

**(C)**



PHILADELPHIA GAS WORKS

13.3.B. In the event of a Default by the Supplier, the Company may terminate the Firm Pooling Agreement and Interconnection Agreement between the Supplier and the Company by providing written notice to the Supplier, without prejudice to any remedies at law or in equity available to the Company by reason of the Default. (C)

13.3.C. If a Customer of a terminated Supplier has not switched to another Supplier prior to termination, said Customer will receive SOLR Sales Service as provided in the Company's Gas Service Tariff.

13.3.D. Termination of the Firm Pooling Agreement or Interconnection Agreement for any reason shall not relieve the Supplier of any obligation accrued or accruing prior to such termination, including, but not limited to, full financial responsibility for the assigned pipeline FT capacity at maximum pipeline rates. Only the Company, in its sole discretion, may relieve the Supplier of its obligations accrued as of the time of termination of service. (C)

13.4. SUPPLIER EXIT AND RETURN OF ASSIGNED CAPACITY.

13.4.A. Within ten (10) days of notifying the Company of withdrawal from the Company's Gas Choice Program, the Supplier shall, at the Company's option, release, assign or transfer to the Company any capacity which was assigned to the Supplier to serve the Supplier's Customers. Any such release, assignment or transfer shall be at the applicable contract rate, not to exceed the FERC-approved pipeline recourse rate for such capacity.

13.4.B. Within ten (10) days of receiving notice from the Company of termination from the Gas Choice Program, the Supplier shall, at the Company's option, release, assign or transfer to the Company any capacity which was assigned to the Supplier to serve the Supplier's Customers. Any such release, assignment or transfer shall be at the applicable contract rate, not to exceed the FERC-approved pipeline recourse rate for such capacity.

13.5. SUPPLIER EXIT AND ASSIGNMENT OF NEW/RENEWED CAPACITY.

13.5.A. Within ten (10) days of providing the Company notice of withdrawal from the Company's Gas Choice Program, the Supplier shall, at the Company's option, release, assign or transfer to the Company any new or replacement capacity which was approved to serve the Supplier's Customers. Any such release, assignment or transfer shall be at the applicable contract rate, not to exceed the FERC-approved pipeline recourse rate for such capacity. The amount released, assigned or transferred shall be sufficient to serve the level of the Customers' requirements for which the Supplier had procured such capacity. Release, assignment or transfer shall be for a term of sufficient length to allow for the Company to secure replacement capacity of like quantity and quality.

13.5.B. Within ten (10) days of receiving notice from the Company of termination from the Gas Choice Program, the Supplier, at the Company's option, shall release, assign or transfer to the Company any new or replacement capacity which was approved to serve the Supplier's Customers. Any such release, assignment or transfer shall be at the applicable contract rate, not to exceed the FERC-approved pipeline recourse rate for such capacity. The amount released, assigned or transferred shall be sufficient to serve the level of the Customers' requirements for which the Supplier had procured such capacity. Release, assignment or transfer shall be for a term of sufficient length to allow for the Company to secure replacement capacity of like price, quantity and quality.

**(C) - Change**

13.6. SUPPLIER EXIT AND POOL BALANCE SETTLEMENT

When a supplier has officially exited the market and no longer serves any customers in the Philadelphia Gas Works Service Area, the Supplier's pool balance must be settled. If the Supplier owes the Company gas, the Supplier must purchase the gas from the Company at a 12-month average of the Daily Market Index Price. If the Company owes the Supplier gas, the Company must purchase the gas from the Supplier at a 12-month average of the Daily Market Index Price.

(C)

(C) - Change

## 14. BREACH OF OBLIGATIONS

14.1. The Company or a Supplier shall be deemed to be in material breach of its obligations under the Firm Pooling Agreement, any Interconnection Agreement and under this Supplier Tariff, upon its failure to observe any material term or condition of this Supplier Tariff, including any rule and regulation, charge or rider thereof. (C)

14.2. A material breach of obligations hereunder, as described in Rule 14.1, shall include, but is not limited to, the following:

14.2.A. Supplier's failure to maintain its PUC Supplier license.

14.2.B. Supplier's failure to maintain the required Surety;

14.2.C. Supplier's failure to make full payment of any undisputed charges in the time prescribed, including any payments due to pipeline transporters or other demand or similar charges.

14.2.D. The involuntary bankruptcy/insolvency of the Supplier, including, but not limited to, the appointment of a receiver, liquidator or trustee of the Supplier, or a decree by such a court adjudging the Supplier bankrupt or insolvent or sequestering any substantial part of its property or a petition to declare bankruptcy so as to reorganize the Supplier;

14.2.E. Supplier's filing of a voluntary petition in bankruptcy under any provision of any federal or state bankruptcy law, or its consent to the filing of any bankruptcy or reorganization petition against it under any similar law or, without limiting the generality of the foregoing, a Supplier's admission in writing of its inability to pay its debts generally as they become due or a Supplier's consent to the appointment of a receiver, trustee or liquidator of it, or of all, or any part of, its property; or

14.2.F. Supplier's unexcused failure to deliver its DDQ for two (2) or more days within any thirty (30) day period.

14.3. In the event that either the Company or a Supplier materially breaches any of its obligations, the other party shall provide the breaching party with notice of the breach. If the breach is not cured or rectified within fifteen (15) days of the receipt of such notice, the breaching party shall be deemed in Default of the Agreement; except that, if a Supplier fails to deliver its DDQ as provided above, or a Supplier fails to restore its required Surety within three (3) business days, each such failure constitutes a Default and the Company may, without further notice, immediately terminate the Firm Pooling Agreement without prejudice to any remedies at law or in equity available to the Company by reason of the Default. Notwithstanding the above, the Supplier shall have the right during said fifteen (15) day cure period to obtain an order from the PUC preventing or staying termination.

14.4. In addition to the Company's rights to terminate the Firm Pooling Agreement as provided in Rule 13.3 and Rule 14.3, upon the occurrence of any Default, the party not in Default shall be entitled to: (i) commence an action to require the party in Default to remedy such Default and specifically perform its duties and obligations hereunder in accordance with the terms and conditions hereof; and (ii) exercise such other rights and remedies as it may have in equity or at law.

**(C) - Change**

14.5. The Company shall not be liable, under any circumstance or in any respect, to a Customer, to a Supplier, to a producer of gas or to any other person or entity for damages arising either directly or indirectly from interruption, curtailment or termination of distribution service.

14.6. A Supplier shall indemnify, save harmless and at Company's option, defend Company from and against any and all losses, claims, demands, damages, costs (including, without limitation, reasonable attorney's fees), expenses, liabilities, proceedings, suits, actions, restrictions, injunctions, fines, judgments, penalties and assessments which Company may suffer for, on account of, by reason of or in connection with service provided under this Tariff, and in connection with any bodily injury, including death to any person or persons (including, without limitation, the Supplier's employees) or any damage to or destruction of any property, including without limitation, loss of use thereof, arising out of, in any manner connection with or resulting from the Natural Gas Supply Service or any other services furnished by the Supplier under this Tariff.

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## **15. Standards of Conduct**

15.1. Company is subject to the Binding Interim Guidelines For Standards of Conduct established by the PUC in Docket No. M-00991249.F0004 regarding standards of conduct and those Guidelines as modified or revised from time to time, are incorporated by reference herein.

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**PGW SUPPLIER TARIFF  
APPENDIX  
PGW FIRM POOLING AGREEMENT  
FOR  
FIRM TRANSPORTATION  
(Pro Forma)**

This PGW Firm Pooling Agreement for Firm Transportation (this "Agreement") is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 200\_\_, by and between by and between the PHILADELPHIA FACILITIES MANAGEMENT CORPORATION, a Pennsylvania non-profit corporation, in its capacity as operator and manager of the municipally owned PHILADELPHIA GAS WORKS, pursuant to an Agreement with the City of Philadelphia dated December 29, 1972, as amended (together "Company"), and \_\_\_\_\_, a \_\_\_\_\_ ("Supplier"), authorized to do business in the Commonwealth of Pennsylvania.,

**WITNESSETH:**

WHEREAS, Company is a City Natural Gas Distribution Company, as defined by section 2202 of the Public Utility Code, that, amongst other things, provides intrastate transportation service to Customers located within its service territory; and

WHEREAS, Supplier is engaged in the business of selling natural gas supply services, and desires to market such services to Customers located within Company's service territory; and

WHEREAS, pursuant to the terms and conditions set forth in this Agreement, Company is willing to receive natural gas or other forms of gas supplies at specified points of interconnection situated between Company's facilities and the facilities of: a) one (1) or more interstate natural gas pipeline companies; b) one or more privately owned pipelines delivering natural or other forms of gas directly to Company's facilities to serve the aggregated load of Customers served by Supplier, and to provide other services to facilitate the provision by Supplier of natural gas supply services to Customers; and

(C)

WHEREAS, pursuant to the terms and conditions set forth in this Agreement, Supplier is willing to deliver natural or other forms of gas supplies for receipt by Company for subsequent transportation and redelivery at specified end-use customer locations, and to acquire firm pooling services from Company.

(C)

WHEREAS, the Company agrees to supply, and the Supplier agrees to have the Company supply, services specified in the then-current Gas Supplier Tariff ("Supplier Tariff"), including, but not limited to, Firm Transportation Customer usage forecasting, gas delivery scheduling, and reconciliation services. Both Parties agree that such services are necessary to coordinate the delivery of competitive natural gas supply to Customers.

NOW THEREFORE, in consideration of the mutual promises and covenants contained herein, and intending to be legally bound, the parties agree as follows:

1. The Supplier Tariff and the Company's Natural Gas Service Tariff, as the same may be amended from time to time, are incorporated herein by reference and made a part hereof, and the parties shall be bound by the obligations and requirements of each set forth therein. All terms used in this Agreement that are not otherwise defined shall have the meaning provided in the Supplier Tariff.

2. The Supplier hereby represents, warrants and covenants as follows:

**(C) - Change**



## Privileged and Confidential

(i) The Supplier is in compliance, and will continue to comply, with all obligations, rules and regulations, as established by the Supplier Tariff and the Company's Natural Gas Service Tariff, that are applicable to Suppliers serving Customers, including, without limitation, the obligation to indemnify Company,; and

(ii) The Supplier is licensed by the Pennsylvania Public Utility Commission ("PUC") to provide Natural Gas Supply to Customers in Pennsylvania and has and will continue to satisfy all other PUC requirements applicable to Suppliers.

3. The Company and the Supplier, individually referred to hereafter as the "Party," each represents, warrants and covenants as follows:

(i) Each Party's performance of its obligations hereunder has been duly authorized by all necessary action on the part of the Party and does not and will not conflict with or result in a breach of the Party's charter documents or bylaws or any indenture, mortgage, other agreement or instrument, or any statute or rule, regulation, order, judgment, or decree of any judicial or administrative body to which the Party is a party or by which the Party or any of its properties is bound or subject; and

(ii) This Agreement shall be for a term of one year unless otherwise agreed by the parties.

(iii) This Agreement is a valid and binding obligation of the Party, enforceable in accordance with its terms, except as such enforceability may be limited by applicable bankruptcy, insolvency or similar laws from time to time in effect that affect creditors' rights generally or by general principles of equity.

4. This Agreement shall be construed under the laws of the Commonwealth of Pennsylvania and shall be subject to all valid applicable State, Federal and local laws, rules, orders, and regulations. Nothing herein shall be construed as divesting or attempting to divest any regulatory body of any of its rights, jurisdiction, powers or authority conferred by law.

5. Notice.

Written notice and correspondence to Company shall be addressed as follows:

Philadelphia Gas Works  
800 W. Montgomery Ave.  
Phila. PA 19122  
Attn.: \_\_\_\_\_

Written notice and correspondence to Supplier shall be addressed as follows:

Name:  
Address:  
Attention:

Either party may change its address for receiving notices effective upon receipt, by written notice to the other party. Notices shall be effective upon receipt or deemed effective upon the third day after mailing. Notices provided by Company by means of its electronic bulletin board shall be deemed effective upon posting.

**Privileged and Confidential**

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the date first above written.

Attest:

**PHILADELPHIA GAS WORKS by  
Philadelphia Facilities Management  
Corporation**

\_\_\_\_\_  
Name:  
Title:

\_\_\_\_\_  
Name:  
Title:

Attest/Corporate Seal:

**SUPPLIER**  
\_\_\_\_\_

By: \_\_\_\_\_  
Name:  
Title:

By: \_\_\_\_\_  
Name:  
Title: President

# Tab 7

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

**ROBERT K. SMITH**

ON BEHALF OF  
PHILADELPHIA GAS WORKS

Docket No. R-2025-3053112

Philadelphia Gas Works

General Rate Increase Request

TOPICS:

Efforts to Improve Safety, Reliability of PGW  
Infrastructure  
DSIC Under-recovery

DATE: February 27, 2025

**TABLE OF CONTENTS**

**I. INTRODUCTION..... 1**

**II. EFFORTS TO IMPROVE SAFETY AND RELIABILITY OF PGW’S  
INFRASTRUCTURE ..... 2**

**III. PHMSA PIPELINE REPLACEMENT GRANT APPLICATION..... 10**

**IV. PGW’S DSIC UNDER-RECOVERY AND PETITION ..... 12**

**V. CONCLUSION ..... 14**

1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND POSITION WITH THE COMPANY.**

3 A. My name is Robert K. Smith. My position is Senior Vice President, Operations, Supply  
4 Chain, & Gas Management for Philadelphia Gas Works (“PGW” or “Company”).

5 **Q. HOW LONG HAVE YOU HELD THIS POSITION?**

6 A. Since January 1, 2025.

7 **Q. WHAT ARE YOUR JOB RESPONSIBILITIES?**

8 A. I am responsible for the Distribution, Field Service, Gas Management, Resource  
9 Management, Supply Chain, Facilities, and Fleet Departments.

10 **Q. PRIOR TO JANUARY 1, 2025, WERE YOU EMPLOYED WITH PGW? IF SO, IN  
11 WHAT CAPACITY?**

12 A. Yes, before January 1, 2025, I was the Senior Vice President, Operations & Supply Chain  
13 since January 1, 2023. Before that, I was Vice President of Operations & Resource  
14 Management from December 2020 through December 2022. Prior to that I was Director  
15 of Employee Relations, Development, and Support Services for Field Operations and  
16 Supply Chain from May 2013 through December 2020. I held the position of Manager of  
17 Labor and Administration, Field Services Department from March 2011 through May  
18 2013. Prior to March 2011, I held various union covered field positions in the Field  
19 Services Department.

20 **Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND.**

21 A. I received a Bachelor of Science degree in Business Administration from Peirce College  
22 in 2018. Also, I received a Master of Business Administration from Gwynedd Mercy  
23 University in 2021.

1 **Q. HAVE YOU EVER PROVIDED TESTIMONY BEFORE THE PENNSYLVANIA**  
2 **PUBLIC UTILITY COMMISSION (“COMMISSION” OR “PUC”)?**

3 A. Yes. I previously testified in PGW’s 2023 rate case at Docket No. R-2023-3037933, as  
4 well as in other gas safety proceedings, including Docket No. C-2022-3033834.

5 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

6 A. My testimony will describe the numerous efforts that PGW has undertaken during the last  
7 several years to improve the safety and reliability of the PGW gas distribution system. I  
8 will also discuss DSIC revenue shortfalls under PGW’s current DSIC funding mechanism  
9 which, if not addressed, will materially impact PGW’s continued DSIC funded  
10 replacement efforts.

11 **II. EFFORTS TO IMPROVE SAFETY AND RELIABILITY OF PGW’S**  
12 **INFRASTRUCTURE**

13 **Q. PLEASE PROVIDE A GENERAL DESCRIPTION OF PGW’S GAS**  
14 **DISTRIBUTION SYSTEM.**

15 A. PGW’s gas distribution system serves approximately 500,000 customers in Southeastern  
16 Pennsylvania in the County and City of Philadelphia, using approximately 6,000 miles of  
17 natural gas mains (“Mains”) and service lines (“Services”).<sup>1</sup> At the end of calendar year  
18 2023, PGW’s mains were comprised of approximately 39% cast iron, 42% plastic and  
19 protected coated steel, and 19% unprotected coated steel and ductile iron. The  
20 Company’s Services are made up of 83% plastic and protected coated steel, 13% bare  
21 steel and 4% unprotected coated steel.

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<sup>1</sup> PGW owns and operates all of the service lines from the mains to the inlet side of the meters. There are no customer-owned service lines in the PGW service territory.

1 **Q. WHAT IS PGW'S CURRENT PROJECTED TIME FRAME FOR REPLACING**  
2 **ITS CAST IRON MAIN INVENTORY?**

3 A. PGW is projecting that it will replace all cast iron main inventory in 38.0 years based on  
4 the assumption that base rates will increase 5% every three years (starting in FY 2029)  
5 along with associated increases in the Distribution System Improvement Charge  
6 ("DSIC") recovery/spending. This assumption does not include the proposed \$105  
7 million rate increase.

8 **Q. WILL THE PROJECTED TIME FRAME CHANGE WITH \$105 MILLION IN**  
9 **RATE RELIEF?**

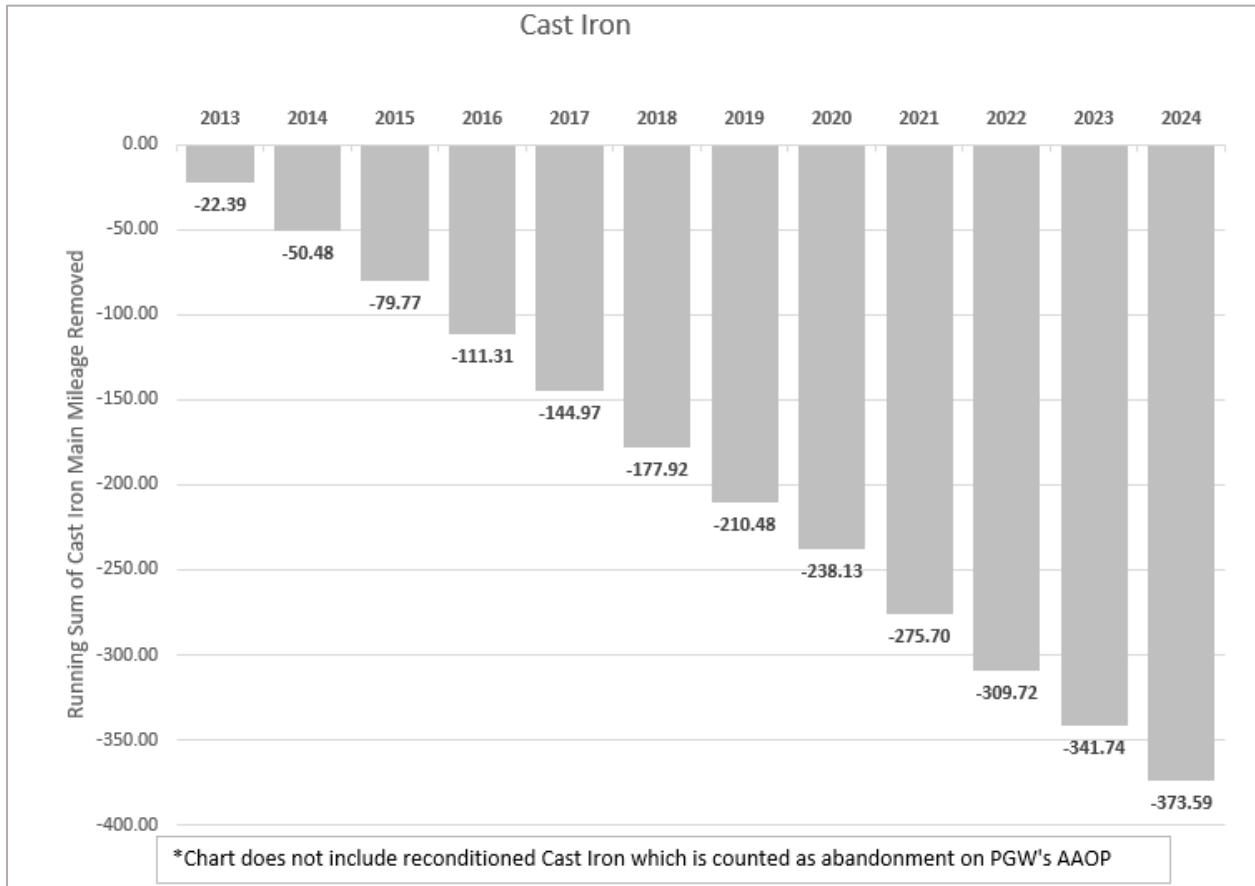
10 A. Yes. When the proposed \$105 million in rate relief is factored into the above  
11 assumptions, the associated increases in DSIC recovery/spending levels will result in the  
12 replacement of all cast iron main inventory in 33.7 years. This reduces the overall  
13 replacement time frame by 11.32%. This is because the \$105 million increase would  
14 correspondingly increase PGW's distribution revenues and, in turn, the amount that PGW  
15 would recover through the DSIC at its 7.5% cap. The proposed \$105 million rate increase  
16 would correspondingly increase the total annual DSIC expenditures by approximately  
17 \$7.875 million compared to current DSIC revenue. PGW is committed to expending  
18 100% of DSIC revenues on cast iron main replacement.

19 **Q. PLEASE DESCRIBE THE EFFORTS PGW HAS MADE IN RECENT YEARS**  
20 **AND SINCE ITS LAST RATE INCREASE IN FY 2023 TO MODERNIZE ITS**  
21 **NATURAL GAS DISTRIBUTION SYSTEM.**

22 A. PGW has continued to make tremendous strides in reducing the amount of cast iron main  
23 in its system and replacing it with modern materials, such as cathodically protected,  
24 coated steel and plastic. In the past twelve (12) fiscal years, PGW has successfully  
25 removed 373.59 miles of this "at-risk" pipe from inventory. The following graphic  
26 shows this.



1



2

Figure 1 – Cumulative Cast Iron Main Removed from Inventory Fiscal Years 2013 – 2024

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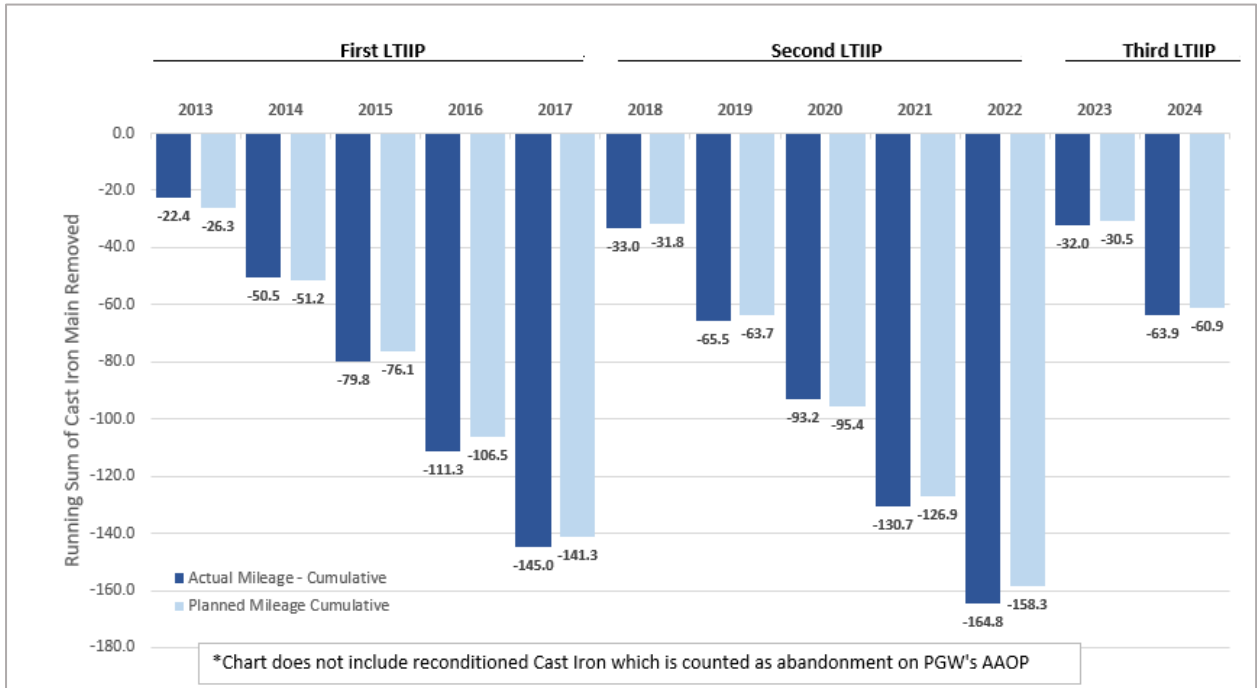
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12

The installation of modern materials and subsequent elimination of “at-risk” pipe has been financed with PGW’s base rates and the DSIC mechanism, currently set at 7.5% of non-fuel (distribution) revenue. This funding combination has allowed PGW to successfully complete its first Long Term Infrastructure Improvement Plan (“LTIIP”) in FY 2017, removing approximately 3% more cast iron main than planned. PGW’s second LTIIP, ending with FY 2022, also had strong results. While PGW’s replacements were impacted during FY 2020 as a direct result of the COVID-19 Pandemic, PGW made up the FY 2020 shortfall in FY 2021 and exceeded its second LTIIP replacement goals from FY 2018 – FY 2022, replacing 164.7 miles, or 4% more cast iron main replaced than

1 planned. Through the first two years of PGW’s third LTIP, PGW has replaced 63.9 miles,  
 2 or 5% more cast iron main than planned.

3



4

5 *Figure 2 – LTIP Cast Iron Main Removal Cumulative Results Fiscal Years 2013 - 2024*

6

7 **Q. PLEASE DESCRIBE PGW’S PROPOSED FUTURE EFFORTS TO MODERNIZE ITS NATURAL GAS DISTRIBUTION SYSTEM.**

8 A. In PGW’s third LTIP, which covers FY 2023 – FY 2027, PGW will eliminate  
 9 approximately 65 miles of cast iron main over the life of the program, which will be done  
 10 concurrently with PGW’s baseline main replacement program which removes 18 miles of  
 11 cast iron main per year and is funded by current base rates. In addition to PGW’s current  
 12 LTIP, PGW plans to replace an additional 66.5 miles of cast iron through the Pipeline  
 13 and Hazardous Materials Safety Administration’s (“PHMSA”) Natural Gas Distribution  
 14 Infrastructure Safety and Modernization Grant Program (“NGDISM”) during FY 2025 –

1 FY 2030. Approximately 120.9 miles of cast iron main are planned for replacement in FY  
2 2025 – FY 2027 which includes replacement funded through base rates, the DSIC  
3 mechanism, and PHMSA NGDISM grant funding.

4 **Q. WHAT OTHER FUTURE EFFORTS HAS PGW PLANNED TO MODERNIZE**  
5 **ITS SYSTEM?**

6 A. Starting in FY 2026, PGW will begin implementing Advanced Metering Infrastructure  
7 (“AMI”) using Smart Metering technology. The AMI initiative, which is expected to span  
8 ten years, will seamlessly integrate with PGW’s existing meter replacement program  
9 allowing PGW to minimize both costs and operational resources required for the meter  
10 replacements. Over the course of the AMI initiative, approximately 277,000 of PGW’s  
11 residential meters will reach the end of their operational lifespan, creating an opportunity  
12 to replace the outdated meters with state-of-the-art AMI smart meters. Meters that have  
13 not yet reached the PUC’s mandated replacement timeline will be upgraded to AMI smart  
14 meters in the later phases of the ten-year program ensuring enhanced safety and  
15 functionality for all residential customer meters.

16 AMI is an integrated system that combines smart meters, communication networks, and  
17 data management platforms, enabling remote control and two-way communication  
18 between the utility and customer meters. By integrating AMI with smart gas meters,  
19 traditional gas meters are transformed into advanced, fully automated safety devices.

20 AMI smart meters are equipped with automated shut-off valves, which significantly  
21 enhance safety. These shut-off valves work in tandem with alarm response systems (e.g.,  
22 sensors), making them one of the most significant safety innovations in the gas industry  
23 in recent years. This integration not only improves safety but also mitigates risk more  
24 effectively.

1 A key benefit of the automated shut-off valve is the utility's ability to remotely control  
 2 the valve, allowing PGW to disconnect gas service to a premise on demand. This feature  
 3 is especially valuable for PGW, as 95% of its meters are located inside customers'  
 4 homes. The ability to disconnect gas services remotely in response to alarms or  
 5 emergency situations such as a gas leak or carbon monoxide detection ensures a faster,  
 6 more efficient response without the need for physical access to the meter.

7 **Q. IS THERE ANY EVIDENCE THAT THE ACCELERATED PIPELINE**  
 8 **REPLACEMENT PROGRAM HAS IMPROVED SAFETY?**

9 A. Yes, PGW continues to make significant strides towards reducing the number of  
 10 hazardous leaks encountered on the distribution system. The graph below depicts  
 11 hazardous leaks repaired on distribution mains from FY 2014 through FY 2024, showing  
 12 a downward trend.

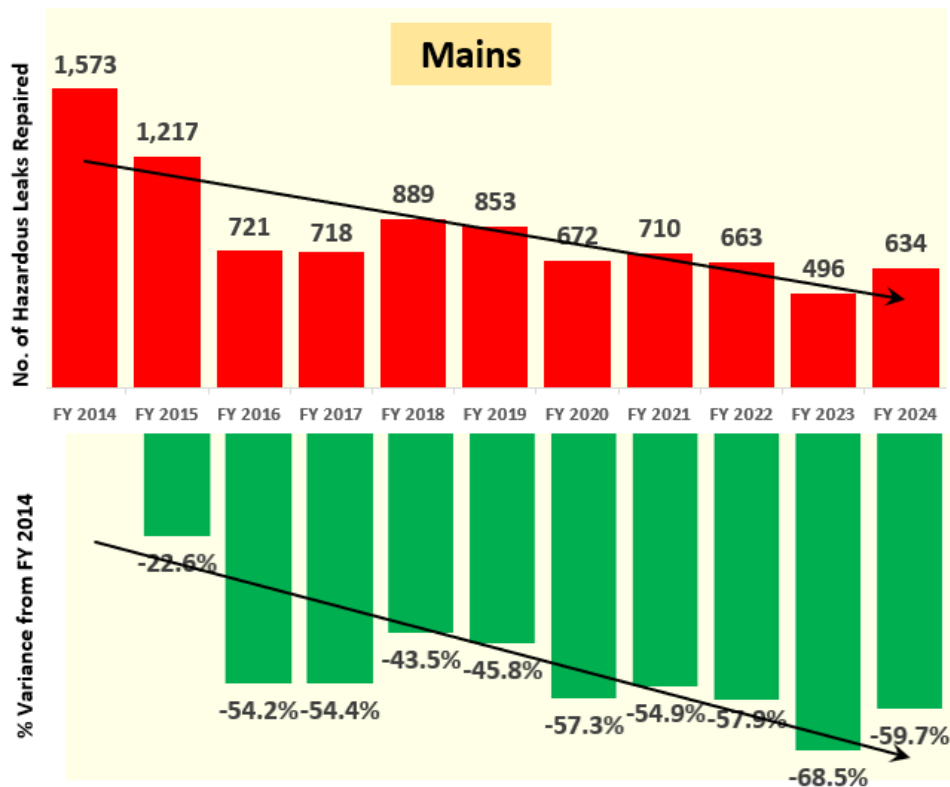
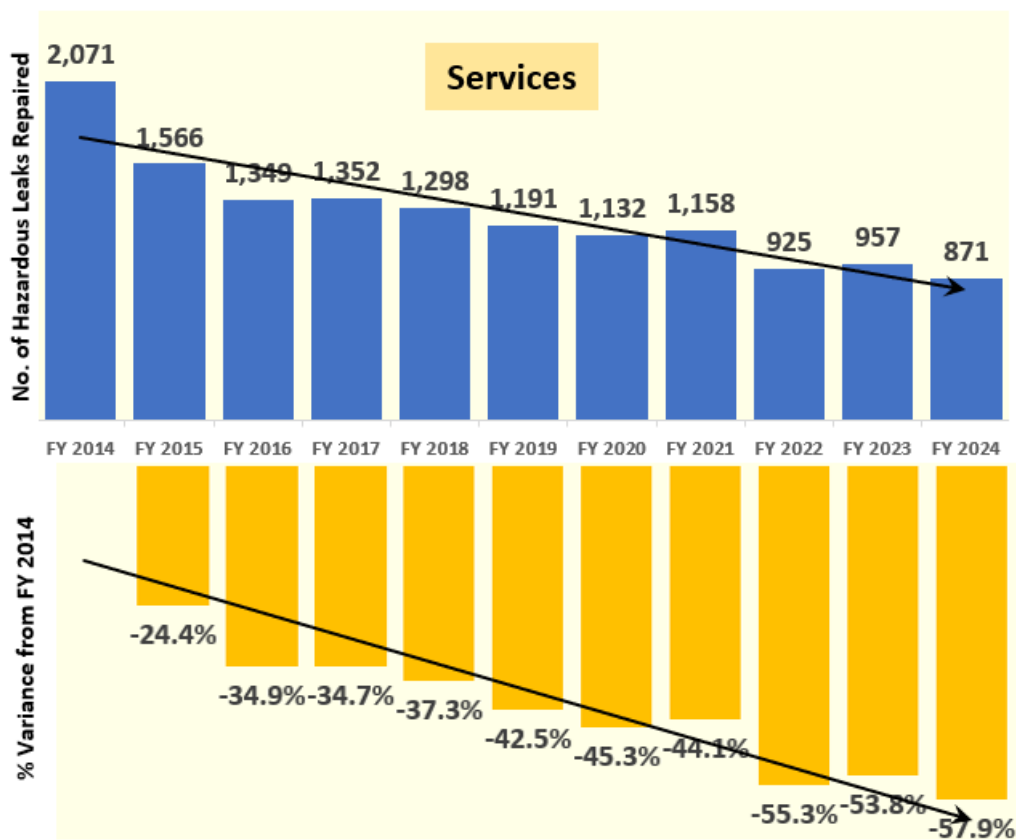


Figure 3 – Hazardous Leaks Repaired on Mains Fiscal Years 2014 – 2024

1 This continued downward trend is attributed to prioritized main selection the accelerated  
 2 pace of PGW’s main replacement program, and recent warmer than average winter  
 3 seasons.

4 PGW has also made substantial gains in the reduction of hazardous leaks repaired on  
 5 Services. The number of hazardous leaks on Services has continually declined since FY  
 6 2014 by approximately 58%.

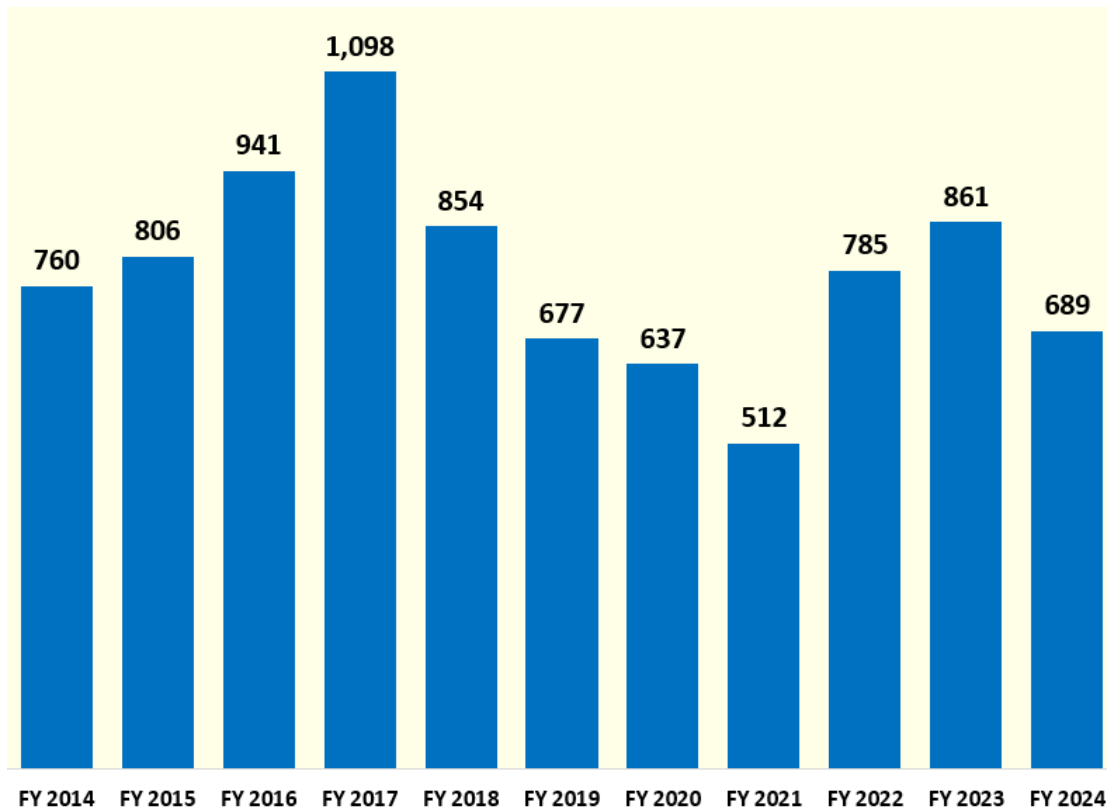


7  
 8 *Figure 4 – Hazardous Leaks Repaired on Services FY 2014 – FY 2024*

9 It is PGW’s practice to replace all bare steel Services encountered on main replacement  
 10 projects regardless of condition. This proactive replacement of aging bare steel Services  
 11 has aided PGW in continuously reducing the number of hazardous leaks caused by  
 12 corrosion on service lines.

1 **Q. WHAT STEPS HAS PGW TAKEN TO ENHANCE ITS EFFORTS TO DETECT**  
 2 **AND APPROPRIATELY RESPOND TO NATURAL GAS LEAKS ON ITS**  
 3 **SYSTEM?**

4 A. PGW continues to make substantial strides in reducing its open leak inventory. PGW has  
 5 an aggressive leak recheck procedure to ensure that lower grade leaks are monitored  
 6 appropriately and are safe. This requires site visits on prescribed timelines to monitor gas  
 7 reading levels and migration patterns. Over the past years, PGW has made a concerted  
 8 effort to repair these open leaks as shown in the graphic below.



10 *Figure 5 – Open Leaks repaired FY 2014 – FY 2024*

11 Because of this focused effort to repair these leaks that are typically monitored, the total  
 12 inventory of open leaks has been reduced by approximately 67% since the start of FY  
 13 2014 until the end of FY 2024 (2,940 down to 967). This eliminates the need to perform  
 14

1 site visits to monitor gas levels thus ensuring the safety of our customers and the public  
2 and reducing the cost and resource requirement of the recheck program.

3 **III. PHMSA PIPELINE REPLACEMENT GRANT APPLICATION**

4 **Q. PLEASE DESCRIBE ANY FEDERAL GRANTS RELATED TO**  
5 **ACCELERATING THE REPLACEMENT OF AGING NATURAL GAS MAINS?**

6 A As part of the Infrastructure Investment and Jobs Act, the Pipeline and Hazardous  
7 Materials Safety Administration (“PHMSA”) created the Natural Gas Distribution  
8 Infrastructure Safety and Modernization Grant Program. This grant is available to  
9 municipally or community owned utilities to repair, rehabilitate, or replace natural gas  
10 distribution pipelines. The grant program will span over five years, and each entity may  
11 receive up to \$125 million over the entire 5-year period.

12 **Q. HAS PGW APPLIED TO THE PHMSA GRANT PROGRAM AND IF SO, WHAT**  
13 **IS THE STATUS OF PGW’S APPLICATION?**

14 A. Yes, on July 22, 2022, PGW submitted an application for \$45 million, the maximum  
15 amount allowed in the 2022 grant year. PGW subsequently submitted applications on  
16 August 3, 2023, and June 19, 2024 in the amounts of \$75 million and \$40 million for  
17 grant years 2023 and 2024. PGW was formally awarded \$10 million for the 2022 grant  
18 year on June 4, 2024. PGW was then provisionally awarded an additional \$75 million on  
19 May 9, 2024, and \$40 million on October 30, 2024 for grant years 2023 and 2024  
20 respectively. PGW was the first utility to be awarded the maximum grant funding of \$125  
21 million. The 2023 provisional award is nearing the final stages of the environmental  
22 assessment, with PGW anticipating formal notification of the award in Q2 of 2025.  
23 Additionally, PGW has begun work on the environmental assessment for the 2024 grant  
24 with expectations to receive formal notice of the award by Q4 of 2025. The first PHMSA

1 funded project officially commenced on November 18, 2024, with several additional  
2 projects currently in progress. The funding received through the PHMSA grant program  
3 will accelerate the cast iron removal program by approximately two years.

4 **Q. WHAT WOULD BE THE RATE IMPACT OF PGW RECEIVING THIS GRANT**  
5 **FOR PIPELINE REPLACEMENT?**

6 A. There is a slight rate impact from PGW receiving this PHMSA grant due to certain  
7 indirect costs that cannot be reimbursed through the grant program. According to 2 CFR  
8 Part 200.1, indirect costs are costs incurred for a common or joint purpose benefitting  
9 more than one cost objective, and not readily assignable to the cost objectives specifically  
10 benefitted, without effort disproportionate to the results achieved. Examples would  
11 include expenses such as rent, utilities, administrative salaries, accounting fees, and  
12 general office supplies. These costs are essential for the organization to function and  
13 carry out its projects, even if they are not directly related to a particular grant project.  
14 PGW will be reimbursed for 10% of its indirect costs through a de minimis indirect cost  
15 rate but will incur any indirect costs above 10% that are associated with the grant  
16 projects. PGW is anticipating incurring an estimated \$21.3 million in indirect costs  
17 spread across six fiscal years in order to maximize the \$125 million grant award. In  
18 budget year 2026, PGW estimates that approximately \$4.2 million in indirect costs will  
19 be spent to maximize funding received based on the miles of pipe planned to be replaced  
20 with PHMSA funding. The cost per mile of replacement for the ratepayer is  
21 approximately \$321,000 which is significantly lower than PGW's average cost per mile  
22 and includes all Service replacements. The grant is intended to fund incremental projects  
23 above a utility's base line level. So, PGW's customers would receive the benefit of the  
24 grant through a shortened pipeline replacement timeframe due to the infusion of



1 additional funds. Any grants PGW receives under the program will be applied to the  
2 replacement of small diameter cast iron mains, PGW's prioritized asset in its Distribution  
3 Integrity Management Program ("DIMP").

4 **IV. PGW'S DSIC UNDER-RECOVERY AND PETITION**

5 **Q. PLEASE EXPLAIN HOW PGW'S CURRENT DSIC REVENUE IS BUDGETED**  
6 **AND FUNDED.**

7 A. Currently, PGW's DSIC is budgeted based on Projected Annual Revenue ("PAR") which  
8 is developed at the start of each calendar year. The PAR is used to project the annual  
9 DSIC revenue as well as to generate PGW's Fiscal Year budget for DSIC main  
10 replacement. PGW must strategically align its cast iron main replacement work plan to  
11 optimize DSIC expenditures, as projected based on the PAR. Also, PGW's current DSIC  
12 is levelized/annualized, permitting PGW to charge a flat 7.5% of distribution revenues  
13 each month, regardless of the amount of DSIC related main replacement in a given month  
14 or quarter. After each year, PGW's charges are reconciled with its actual installation  
15 experienced for that year. Customers are credited for any over-collection and,  
16 theoretically, would be billed for any under-collection PGW experienced. However,  
17 under PGW's current DSIC, PGW charges cannot exceed 7.5% of PAR.

18 **Q. HAS PGW'S DSIC CAP OF 7.5% CAUSED ANY ISSUES FOR PGW'S DSIC**  
19 **RELATED REVENUES?**

20 A. Yes. As I mentioned, PGW cannot exceed its 7.5% DSIC charged to customers. Based on  
21 how PGW's DSIC is set up, this means that PGW cannot actually recover any shortfalls  
22 from its PAR to actual revenues received. This undermines PGW's ability to continue to  
23 accelerate its cast-iron main replacement, and, if left unaddressed, could force PGW to  
24 throttle down the amount of at-risk main it can replace each year. Such a scenario would

1 contradict PGW’s safety objectives, the PUC’s directives to take every possible step to  
2 remove at-risk main, and most importantly the best interests of PGW’s ratepayers. PGW  
3 is unwavering in its commitment to rapidly replace cast iron with DSIC funding if it is  
4 provided the support to do so.

5 **Q. PLEASE EXPLAIN THE CAUSE OF PGW’S DSIC REVENUE SHORTFALLS.**

6 A. The DSIC revenue shortfall is a combination of multiple factors tied to decreased  
7 revenues from gas sales and the current calculation of the DSIC cap that creates an  
8 ongoing problem for PGW. PGW currently bills its DSIC at a level that is projected to  
9 result in 7.5% of its PAR. Since those projections are based on “normal” weather, the  
10 actual amount billed invariably turns out to be higher or lower than the projected  
11 “normal” levels. When the amounts billed exceed “normal” levels, PGW refunds the  
12 excess to customers in a reconciliation charge in the subsequent year.<sup>2</sup> However, when  
13 the actual amount billed is less than the amount originally projected, PGW is left with an  
14 under collection. Currently PGW cannot bill customers for the under-recovery in the  
15 subsequent year following reconciliation because its subsequent year’s billings and  
16 expenditures are set at 7.5% of its projected annual revenue and billing the under-  
17 recovery would result in PGW exceeding the existing DSIC cap of 7.5%.

18 **Q. WHAT IMPACT HAS THIS HAD ON DSIC RELATED REVENUES?**

19 A. PGW has experienced a DSIC under collection \$9.2 million as of end of CY 2023.  
20 Further, projected billed DSIC revenue on average for CY 2020 – CY 2023 has been  
21 \$38.0 million whereas actual billed DSIC revenue has been much lower, averaging \$34.5  
22 million over the same time span.

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<sup>2</sup> PGW Gas Service Tariff at Seventh Revised Pg. No. 153.

1 **Q. WHAT RELIEF HAS PGW REQUESTED FROM THE COMMISSION TO**  
2 **ADDRESS THIS DSIC UNDERCOLLECTION?**

3 A. Simultaneously with the rate filing, PGW is submitting a Petition to modify its existing  
4 DISC. The legal background and basis are discussed therein, but ultimately, PGW is  
5 requesting that in conjunction with this rate case, the Commission permit PGW to adjust  
6 its existing DSIC tariff to either: 1) create an over/under-collection mechanism that is  
7 separate and not included in the calculation of the DSIC cap; or 2) increase the DSIC cap  
8 to a higher level so that the prior year under-collection would be billable while still  
9 billing and expending on at risk main replacement at 7.5% of PAR. If this Petition is  
10 approved, PGW will: (i) file the attached tariff supplement on one day's notice and (ii)  
11 apply the revised DSIC Cap definition to its 2025 DSIC.

12 **V. CONCLUSION**

13 **Q. DOES THAT COMPLETE YOUR DIRECT TESTIMONY?**

14 A. Yes.

**VERIFICATION**

I, Robert K. Smith, hereby state that: (1) I am Senior Vice President, Operations, Supply Chain, & Gas Management for Philadelphia Gas Works (“PGW”); (2) the facts set forth in my testimony are true and correct (or are true and correct to the best of my knowledge, information and belief); and, (3) I expect to be able to prove the same at a hearing held in this matter. I understand that statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: 02/26/2025

**Robert K. Smith** Digitally signed by Robert K. Smith  
Date: 2025.02.26 06:14:30 -05'00'

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Robert K. Smith  
Senior Vice President, Operations, Supply  
Chain, & Gas Management  
Philadelphia Gas Works

# Tab 8

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

DIRECT TESTIMONY OF

**RONALD J. AMEN**

ON BEHALF OF  
PHILADELPHIA GAS WORKS

Docket No. R-2025-3053112

RE: PGW's Weather Normalization Adjustment Mechanism

and

PGW's Proposed Revenue Normalization Mechanism

February 27, 2025

**TABLE OF CONTENTS**

1 **I. INTRODUCTION.....3**  
2 **II. STATEMENT OF QUALIFICATIONS.....3**  
3 **III. PURPOSE OF TESTIMONY .....5**  
4 **IV. WEATHER NORMALIZATION ADJUSTMENT MECHANISM**  
5 **(“WNA”) .....6**  
6 **V. PROPOSED REVENUE NORMALIZATION ADJUSTMENT**  
7 **MECHANISM (“RNA”).....17**  
8

## I. INTRODUCTION

1 **Q. Please state your name and business address.**

2 A. My name is Ronald J. Amen and my business address is 10 Hospital Center Commons,  
3 Suite 400, Hilton Head Island, SC 29926.

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

5 A. I am employed by Atrium Economics, LLC (“Atrium”) as a Managing Partner.

6 **Q. On whose behalf are you testifying?**

7 A. I am testifying on behalf of Philadelphia Gas Works (“PGW” or the “Company”).

## II. STATEMENT OF QUALIFICATIONS

8 **Q. What has been the nature of your work in the energy utility consulting field?**

9 A. I have over 40 years of experience in the utility industry, the last 25 years of which have  
10 been in the field of utility management and economic consulting. I have advised and  
11 assisted utility management, industry trade organizations, and large energy users in matters  
12 pertaining to regulatory policy, strategy, and analysis; cost of service studies (embedded  
13 and marginal cost analyses); rate design and pricing issues including time-of-use rates,  
14 revenue decoupling, weather normalization, and other cost tracking and alternative  
15 ratemaking mechanisms. I have provided expert testimony in numerous state and  
16 provincial regulatory agencies, and the Federal Energy Regulatory Commission.

17 **Q. Please describe your expertise with respect to Weather Normalization Adjustment**  
18 **Mechanisms.**

19 A. I have advised numerous energy utilities with respect to developing an appropriate Weather  
20 Normalization Adjustment (“WNA”) mechanism to correct for the over- and under-  
21 collection of revenues due to weather related fluctuations throughout the year on their



1        respective distribution systems. Such over- or under-recoveries can produce erratic  
2        financial results for natural gas utilities such as PGW, as their rates are designed on the  
3        basis of the expected volume of gas to be sold under normal weather conditions. This means  
4        that the utility will recover its annual fixed costs of providing gas distribution service only  
5        if the level of sales volumes upon which the rates are predicated is achieved. That sales  
6        level is based upon the utility's weather-normalized gas volumes.

7                My experience working with utilities to determine the specific components and  
8        operation of an appropriate WNA mechanism for application to temperature sensitive rate  
9        classes has provided me with the tools to conduct a review and audit of the operation  
10        PGW's WNA.

11    **Q.    Please describe your expertise with respect to revenue decoupling mechanisms.**

12    A.    Similar to WNA mechanisms, I have advised energy utilities since the mid-2000 years with  
13        developing various forms of decoupling mechanisms ("Decoupling") to break the link or  
14        "decouple" a utility's revenue from the volume of energy it sells, from straight-fixed-  
15        variable ("SFV") rate designs to revenue-per-customer, revenue per customer class, and  
16        decoupling mechanisms that include elements of annual inflation adjustments or "K"  
17        factors and certain categories of capital investment growth or "Capex" adjustments. Further  
18        background information summarizing my work experience, presentation of expert  
19        testimony, and other industry-related activities is included as Exhibit RJA-1 to my  
20        testimony.

21    **Q.    Have you previously testified before the Pennsylvania Public Utility Commission?**

22    A.    Yes. I filed Direct, Supplemental, and Rebuttal Testimony in Docket No. R-00061365 on  
23        behalf of Southern Union – PG Energy Division, and Direct Testimony in Docket Nos. R-

1 2022-3034229, P-2022-3034264, and R-2023-3037933 on behalf of Philadelphia Gas  
2 Works.<sup>1</sup>

### III. PURPOSE OF TESTIMONY

3 **Q. What is the purpose of your testimony?**

4 A. The purpose of my testimony is twofold. First, in response to the Commission's directive  
5 to conduct a full examination of PGW's WNA in its next base rate case - the present  
6 proceeding, I introduce and summarize Atrium Economics' Report, Philadelphia Gas  
7 Works: Weather Normalization Adjustment Review, dated February 27, 2025, which is  
8 appended as Exhibit RJA-2 to this testimony. In this Report, Atrium reviews the  
9 mechanical accuracy of PGW's WNA calculations and the importance of the WNA  
10 mechanism to the Company, as a cash basis, non-profit municipal utility. The second  
11 purpose of my testimony is to present and support the Company's proposed Revenue  
12 Normalization Adjustment Mechanism ("RNA"). The RNA is a full revenue decoupling  
13 mechanism intended to separate the Company's revenue from the volume of gas it sells to  
14 provide greater revenue stability for the Company and better align PGW's business  
15 incentives with societal goals of conservation and greenhouse gas emissions reductions in  
16 the state of Pennsylvania.

17 **Q. Are you sponsoring any exhibits to your direct testimony?**

18 A. Yes. I am sponsoring the following three Exhibits, all of which were prepared by me or  
19 under my supervision and direction:

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<sup>1</sup> Though this testimony was filed with the PPUC, it was later stricken from the record due to a procedural matter relating to the proceeding in which the testimony was submitted. Though Mr. Amen's testimony was stricken from the record, he did respond to Discovery by the OCA in Docket No. R-2023-3037933 on the contents of the same stricken Supplemental Direct Testimony and WNA Report.

- 1 • Exhibit RJA-1 – Resume of Ronald J. Amen
- 2 • Exhibit RJA-2 – Atrium Economics, Philadelphia Gas Works: Weather
- 3 Normalization Adjustment Review (February 2025), or the “Report”
- 4 • Exhibit RJA-3 – PGW’s RNA Proposal and Back Cast Analysis

5 I am also co-sponsoring the following Joint Exhibits with PGW witness Denise  
6 Adamucci:

- 7 • Joint Exhibit DA/RJA-1 – 52 Pa. Code § 69.3302 Factors In Support of PGW’s
- 8 Proposed Revenue Normalization Adjustment (RNA)
- 9 • Joint Exhibit DA/RJA-2 – 52 Pa. Code § 69.3302 Factors In Support of PGW’s
- 10 Weather Normalization Adjustment (WNA)

#### IV. WEATHER NORMALIZATION ADJUSTMENT MECHANISM (“WNA”)

11 **Q. Please describe the basic premise of a WNA mechanism.**

12 A. Utility rates are established to allow the utility to recover its authorized level of margin  
13 revenues, based on expected throughput assuming normal weather. When actual weather  
14 deviates from normal weather the rates either over collect or under collect the authorized  
15 level of non-gas revenues. A Weather Normalization Adjustment mechanism adjusts a  
16 customer’s bill due to these variations from normal weather (temperature). For billing  
17 periods that are colder than normal, a credit would be applied to the bill. For billing periods  
18 that are warmer than normal, a surcharge would be applied to the bill. WNA mechanisms  
19 are typically effective for usage during the heating season calendar months (e.g., October  
20 through April). WNAs reduce the amount of variation in both customer bills and utility  
21 revenues by addressing the difference between actual weather and normal weather.

1 **Q. How are weather-normalized gas volumes used to derive a gas utility's base rates?**

2 A. The utility's unit rates and charges for gas service are essentially derived by dividing the  
3 appropriate costs, to be recovered through rates, by the weather-normalized gas volumes.  
4 These rates and charges are designed to provide the utility with an opportunity to recover  
5 the significant level of fixed costs it incurs to provide utility service, at the levels  
6 determined in the utility's last completed rate case. Fixed costs are costs incurred by a  
7 utility that do not vary with the amount of gas delivered to customers. These costs also do  
8 not vary in the short-term with changes in temperature.

9 **Q. Please explain how weather influences the ratemaking process for a gas utility.**

10 A. The process of computing revenue under normal weather conditions consists of either  
11 increasing or decreasing actual gas volumes, in relative terms, based on the difference  
12 between normal temperatures established for the utility's service area and actual  
13 temperatures experienced during the weather normalization period. If actual temperatures  
14 are normal, the utility has a reasonable opportunity to fully recover its fixed costs of service  
15 at established sales levels. Unfortunately, normal temperatures seldom, if ever, occur.  
16 Therefore, because of abnormal weather, the revenues and resulting earnings of a utility  
17 such as PGW can vary widely from the levels authorized by its regulator.

18 **Q. Is it important that a municipal utility such as PGW has a realistic opportunity to**  
19 **collect the revenue that was allowed by the regulator in the utility's most recent rate**  
20 **case?**

21 A. Yes. It is absolutely essential for PGW's continued financial health that it is able to recover  
22 its total cost of service approved by its regulator through the rates it charges to customers.  
23 It is particularly important for PGW as a municipally owned utility that operates entirely

1 on a cash basis. If it doesn't recover its cost of service through rates, PGW must borrow  
2 funds to safely and reliably operate its utility. And, because PGW's rates are set just to  
3 allow enough revenue to satisfy its existing loan covenants, adding additional debt could  
4 push them perilously close to violating those loan covenants. They are entirely dependent  
5 on the cash flow that flows to them through customer billings from the rates the  
6 Commission has approved. Unlike investor-owned utilities that earn equity returns or  
7 margin above their debt rate, PGW is only authorized to earn just enough to satisfy its loan  
8 covenants. Consequently, it has very little financial cushion. The WNA mechanism  
9 allows PGW to recoup the lost revenue from lower-than-expected gas sales due to warmer  
10 than normal weather in the month that they occur. Correspondingly, PGW issues a refund  
11 to customers for higher-than-expected gas sales due to colder than normal weather in the  
12 same month those sales occurred. Indeed, according to the testimony of Ms. Denise  
13 Adamucci, in January 2025, PGW returned close to \$4 million to customers for colder than  
14 normal winter weather. If a utility's rates are set on a representative normal weather  
15 projection, the WNA should benefit the utility and its customers equally, but the cash flow  
16 certainty that is provided to PGW by the WNA is of the utmost importance.

17 **Q. Does the WNA ensure that the Company will recover its cost of utility service?**

18 A. No. The WNA does not ensure that the Company will recover its cost of utility service. It  
19 only allows the Company to receive the revenues that were contemplated when rates were  
20 set without weather related impacts. Of course, the utility is still subject to a host of risks  
21 that could impact its ability to earn its cost of service, such as a changing customer base,  
22 declining use per customer, economic decline, increased costs for labor or operating  
23 expenses, certain taxes, etc., all of which would impact the Company's bottom line. The

1 WNA, and even full decoupling for that matter, provides the Company with a reasonable  
2 opportunity to earn sufficient revenue to recover its cost of service, though there is no  
3 guarantee. A significant decline in volume from what is contemplated when rates were  
4 established forces the Company to find ways to make up for the associated lost revenues.

5 **Q. Do customers benefit from PGW's WNA mechanism?**

6 A. Yes. There are several tangible benefits from the Company's WNA mechanism: (1) it  
7 reduces bill variability due to weather for the month when the variation occurs; (2) the  
8 WNA adjustment is tied to the customer's specific gas usage; (3) it eliminates the  
9 possibility that the customer will be charged more than what was anticipated in rates under  
10 normal weather conditions; (4) customers receive an immediate refund of their distribution  
11 charges that result from colder than normal weather; and (5) individual customers would  
12 still retain the gas savings from their own energy conservation practices.

13 **Q. How does the Company benefit from the WNA?**

14 A. From the Company's standpoint, the WNA reduces revenue recovery volatility attributable  
15 to weather. This will allow the Company a reasonable opportunity to realize its approved  
16 level of revenue and cost recovery. Deviations from normal weather can result in over or  
17 under recovery and produce erratic financial results for the Company. With greater cash  
18 flow stability, the WNA can reduce the need for short-term borrowing and the associated  
19 carrying costs. The WNA mechanism is generally deemed to be credit enhancing by the  
20 credit rating agencies and may result in lower borrowing costs. Lastly, the WNA reduces  
21 the need for frequent base rate proceedings.

22 **Q. Please describe PGW's WNA Mechanism.**

1 A. PGW’s WNA Mechanism applies a WNA adjustment for the months of October through  
 2 April (the “WNA Period”). The WNA Period had previously included May, but as I will  
 3 explain later, May has been removed from the WNA Period. Very simply stated, PGW’s  
 4 WNA Mechanism applies a weather adjustment ratio based on normal to actual heating  
 5 degree days. A heating degree day is equal to the positive difference between the actual  
 6 temperature and 65 degrees Fahrenheit. The ratio is applied to a specific customer’s heating  
 7 load to derive the WNA adjustment. No adjustment is made if the difference between  
 8 NHDD and AHDD is less than 1% of NHDD – the deadband. The formula, inclusive of  
 9 the deadband, is shown below and is discussed in more detail in Atrium’s attached Report.

**Figure 1: PGW’s WNA Formula**

$$WNA = DC \times \left[ \left( HL \times \frac{NHDD \pm (NHDD \times 1\%)}{AHDD} \right) - HL \right]$$

$$HL = TU - (BL \times BC)$$

**BL** = Mcf per Customer used per day for non-heating – calculated each September using most recent July/August average customer use per day (Atrium’s data was provided in Ccf)

**BC** = Actual number of days in the billing cycle (excluding first day)

**HL** = Amount of gas used for heating purposes

**DC** = Delivery charge in \$/Mcf (Atrium’s data required us to convert to \$/Ccf)

**NHDD** = Normal heating degree days (20-year average approved in last rate case)

**AHDD** = Actual heating degree days (National Weather Service – Philadelphia Intl. Airport)

**Deadband %** = 1%

10

11 **Q. Please discuss the purpose of the deadband and whether a deadband of 1 percent is**  
 12 **reasonable.**

13 A. The deadband is employed for administrative efficiency. It is the amount of change in  
 14 weather that is determined to be sufficiently small so as not to warrant a WNA adjustment.  
 15 The smaller the deadband, the less risk is assumed by customers and the Company since  
 16 nearly all but the smallest changes in weather would result in a WNA adjustment. A larger  
 17 deadband would result in fewer WNA adjustments but would pose greater risk of

1 over/under collections for customers and the Company. Since PGW is a cash-based  
2 utility, moving from a 1 percent deadband to a larger deadband, poses greater risk to the  
3 Company's cash flows. In my opinion, a deadband is not necessary and not all gas utilities  
4 employ a deadband with their WNA. If a deadband is employed, it should be set at the level  
5 of indifference between the risk of over/under collection and the administrative burden of  
6 calculating and billing customers for the WNA adjustment.

7 **Q. Can you explain what transpired in June 2022 that led to large WNA rate spikes in**  
8 **June bills?**

9 A. Yes. In June 2022, PGW experienced a significant anomaly in the application of its June  
10 WNA charge, which produced unusually large and unanticipated charges to customers in  
11 several billing cycles with May usage. The unusual charges resulted from actual heating  
12 degree days ("AHDD") that were significantly lower than normal heating degree days  
13 ("NHDD") for the month of May, particularly in billing cycles beginning in the mid to  
14 latter part of the billing month. When AHDD is very small, e.g., 1 or 2, the NHDD/AHDD  
15 ratio in the WNA formula has the potential to produce a large multiplier, which in turn is  
16 applied to an estimate of heating load for the premises. In June 2022, that multiplier reached  
17 as high as 47 (i.e., NHDD was 47 and AHDD was 1). Of course, if the month only contains  
18 1 or 2 HDD (meaning the temperature dipped below 65 degrees by 1 degree on one or two  
19 occasions during the month) there would likely be no heat load at all. But because heat load  
20 is estimated by subtracting an estimated baseload (which may be imperfect) a residual heat  
21 load could result. Even small misestimates of heat load can result in large adjustments with  
22 a multiplier as high as 47. Based on our review of weather data for Philadelphia, there is



1 only one month in the WNA Period that has shown the propensity to be significantly  
2 warmer than normal to the magnitude of what occurred in 2022 – May.

3 **Q. How did PGW rectify the potential for large WNA rate spikes going forward?**

4 A. PGW removed the month of May from its WNA calculation period for 2022 and going  
5 forward.

6 **Q. Do you believe the removal of the month of May from the WNA period effectively  
7 solves the problem?**

8 A. Yes. Atrium’s analysis shows that such a large deviation between NHDD and AHDD in  
9 any other WNA Period month is very improbable, and likely impossible to occur.

10 **Q. What other billing controls could be put in place to ensure that rate spikes such that  
11 occurred in June 2022 WNA charges would never occur again in the future?**

12 A. Since this problem only occurs in May, and the month of May has been removed from the  
13 WNA period, no other billing controls are needed. However, if the company wishes to  
14 reintroduce May into its WNA period, or wishes to further safeguard customers from the  
15 potential for anomalously large spikes in WNA charges, a billing control could be  
16 implemented that would cap WNA charges as a percentage of total distribution charges.<sup>2</sup>

17 **Q. Please describe the analysis you performed to test the mechanical accuracy of PGW’s  
18 WNA charges.**

19 A. First, in order to verify that PGW’s WNA calculations were made in accordance with its  
20 Tariff, Atrium evaluated PGW’s calculations by recalculating the WNA charges for all

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<sup>2</sup> Atrium also considered a cap on the ratio of NHDD/AHDD of 2.5x. An NHDD/AHDD ratio of 2.5 indicates that weather is 60% warmer than normal. Atrium developed analysis that showed that even with an improperly specified heating load, only when weather is 60% warmer than normal do we see the potential for large WNA rate spikes. Atrium understands, however, that this control could be difficult for PGW to implement and would require new coding of its newly installed CIS system, and also may lead to customer confusion. Atrium believes that a cap on WNA charges relative to distribution charges would provide an equally effective billing control.

1 customers that are subject to the WNA for the period from October 2022 – April 2023 and  
2 October 2023 – April 2024. To perform this test, Atrium began with monthly billing data  
3 from PGW, by customer, for all bills sent during the month. The data Atrium was provided  
4 excluded all non-heating rate classes. From these data sets, Atrium removed all bills for  
5 which the number of cycle days were less than 25 or greater than 35, all bills where the  
6 start date was more than two months prior to the first day of the billing month, and all  
7 Choice customers that had returned to PGW service. Atrium recalculated the WNA charges  
8 for residential, PHA, commercial, and industrial customers, noting that in most instances,  
9 calculation differences were within  $\pm$  \$1 dollar.

10 **Q. What were the cause of the calculation differences?**

11 A. Atrium identified that some differences were due to the migration of customers to PGW's  
12 "Choice" shopping program, (due to use of default baseloads in the dataset Atrium was  
13 provided, whereby the WNA was calculated with a historical premises baseload). In  
14 addition, upon further examination with PGW, Atrium did learn that some exceptions were  
15 due to premises that are currently under the control of PGW, where there is no customer,  
16 and some non-WNA eligible customers had been included in the data set, but not actually  
17 billed WNA charges by PGW, which result in differences between Atrium's recalculation  
18 of the WNA and what PGW calculated. Atrium is satisfied that the WNA charges were  
19 correctly calculated and charged, with only minor unexplained differences.

20 **Q. Did you perform stress tests on PGW's WNA formula?**

21 A. Yes. In order to observe the performance of the WNA formula under a range of conditions,  
22 and to identify the conditions that are required to produce abnormally high bills, such as  
23 occurred in June 2022, Atrium stress tested the PGW WNA formula. Specifically, Atrium

1 analyzed performance of the WNA mechanism for January and June 2022 billing months  
2 for the residential class under various weather scenarios ranging from 100% increase in  
3 AHDD over normal to 100% decrease in AHDD from normal, i.e., the lowest possible  
4 HDD that can be used as a factor in the formula or (1 HDD). To provide a base line from  
5 which to measure PGW's WNA formula, Atrium used linear regression to estimate the  
6 responsiveness of heat load to AHDD and compared the performance of PGW's WNA  
7 under the stress test range to what would be predicted by linear regression under the same  
8 range. The stress test scenario held heat load constant regardless of HDD, such that heat  
9 load would be overstated when temperatures were warmer than normal and would be  
10 understated when temperatures were colder than normal.

11 **Q. What did you learn from the stress test analyses?**

12 A. When heat load is large in relation to what the historical linear relationship would predict,  
13 due either to the incorrect derivation of HL or BL, or due to unexplained customer usage  
14 above their BL, the NHDD/AHDD factor in the formula will overestimate the impact of  
15 HDD when NHDD is significantly above AHDD (warmer than normal), and when heat  
16 load is unusually small the NHDD/AHDD factor will underestimate the impact of HDD  
17 when temperatures are colder than normal. However, the impact is much more dramatic  
18 when weather is warmer than normal given the multiplier effect of the ratio once weather  
19 becomes more than 50% warmer than normal (resulting in a NHDD/AHDD ratio of 2.0)  
20 and tends to produce unusually large WNA charges when weather is 60% warmer than  
21 normal (resulting in an NHDD/AHDD ratio of 2.5).

22 **Q. Did you analyze weather trends in Philadelphia?**

23 A. Yes. Atrium reviewed weather trends by month for the period 2003-2022 to assess to what

1 degree those months experienced significant deviations from normal. We also reviewed  
2 monthly weather for major Pennsylvania cities, based on the 20-year average from 2003-  
3 2022. Lastly, we reviewed Philadelphia's HDD trends over the last 20 years; and how  
4 various derivations of normal weather (20-year, 15-year, and 10-year) compared to 2022  
5 actual Philadelphia HDDs.

6 **Q. What did you observe from the weather analyses?**

7 A. Atrium observed that weather in the shoulder months (April, May, and October), and May  
8 in particular, tend to be more dispersed than during the winter months, leading to greater  
9 deviations from normal weather. The winter months were more tightly clustered around  
10 normal weather leading to lesser deviations from normal weather. We also observed that  
11 Philadelphia is the warmest of the major Pennsylvania cities. On average, over the previous  
12 20 years, the months of May, June, July, August, and September have little to no HDD; and  
13 that Philadelphia HDDs have experienced a pronounced downward trajectory over the past  
14 twenty years.

15 **Q. Did you review PGW's billing controls and forecasting processes?**

16 A. Yes. Atrium summarized PGW's billing controls and chronicled its forecasting processes  
17 in the Report.

18 **Q. Is PGW's WNA just and reasonable based on the factors outlined in the policy  
19 statement related to alternative ratemaking mechanisms at 52 Pa. Code § 69.3302?**

20 A. Yes. As shown in Joint Exhibit DA/RJA-2 that I co-sponsor with PGW witness Denise  
21 Adamucci, the WNA meets each of the fourteen factors outlined in Section 69.3302 which  
22 guide the determination of whether an alternative ratemaking mechanism such as the WNA  
23 is just and reasonable.

1 **Q. Please summarize your conclusions with respect to the WNA.**

2 A. Overall, Atrium finds that PGW's WNA operates as it was designed since its inception in  
3 2002, is properly calculated with only minor exceptions and is without material error for  
4 the period reviewed.

5 PGW's WNA mechanism provides distinct benefits to the Company and its  
6 customers. Customers benefit through timely credits for overpayment when weather is  
7 colder than normal, thereby lowering bills in the coldest most expensive weather months.  
8 The Company benefits by stabilizing cash flows, stabilizing cost recovery, reductions in  
9 the need for short term borrowing, less frequent need for rate cases, and a higher credit  
10 standing with the rating agencies.

11 A utility's financial health is directly tied to its ability to recover the total cost of  
12 service approved by its regulator through the revenues upon which its base rates were  
13 previously established. The WNA ensures that the uncontrollable nature of weather does  
14 not impede the utility's ability to realize its approved cost recovery. The WNA mechanism  
15 ensures that the Company is provided a reasonable opportunity to recover its fixed costs  
16 based on normal weather and its customers pay no more or no less for delivery service than  
17 what is supported by the underlying costs. It provides stabilization for the utility and its  
18 customers and lowers the Company's costs of borrowing and rate case expenses. For PGW  
19 – a municipal gas company with no shareholders, and with its only source of revenue from  
20 the rates that it collects from customers (which contain very little margin for unplanned  
21 weather events) and the bonds that it can issue – ensuring revenues are collected based on  
22 normal weather through the WNA is essential. Atrium finds that the WNA provides the  
23 minimum level of decoupling for the utility and should be continued.

**V. PROPOSED REVENUE NORMALIZATION ADJUSTMENT MECHANISM  
("RNA")**

1 **Q. What is the Revenue Normalization Adjustment that PGW is proposing in this**  
2 **proceeding?**

3 A. PGW is proposing a Revenue Normalization Adjustment that is essentially a full  
4 decoupling mechanism that will be used in conjunction with PGW's existing WNA.

5 **Q. What is decoupling?**

6 A. Decoupling refers to a rate adjustment mechanism designed to separate, or "decouple," a  
7 utility's revenue from the volume of energy it sells. Typically, decoupling mechanisms  
8 accomplish this objective through an adjustment (either a credit or a surcharge) that trues  
9 up a utility's revenues to a pre-determined level, which can be the authorized test year  
10 revenue requirement set by the regulatory commission in its rate case, a set amount per  
11 customer, or some modification thereof. Decoupling is frequently used as a mechanism to  
12 stabilize a utility's revenues and better align the utility's interests with certain public policy  
13 goals (such as promoting energy efficiency, conservation, and decarbonization goals), thus  
14 making it easier to achieve those goals. It can also ensure the utility is neither rewarded nor  
15 penalized for factors that affect energy consumption outside its control.

16 **Q. What is the difference between partial decoupling and full decoupling?**

17 A. "Full" decoupling involves completely disconnecting a utility's revenue from its sales  
18 volumes, including the effect of weather, declining use per customer, economic decline,  
19 customers migrating out of the service territory, conservation, and energy efficiency on  
20 sales and revenues. In the "full" decoupling scenario, the utility is guaranteed a specific  
21 level of revenue regardless of the actual amount of energy sold. This model ensures that

1 the utility can cover its fixed costs and maintain financial stability even if there is a decrease  
2 in energy usage, aligning its incentives with public policy goals, such as encouraging  
3 sustainable practices and reducing environmental impact.

4 **Q. How is a utility's financial performance linked to sales?**

5 A. A utility's financial performance is traditionally tied to its sales because revenue is  
6 generated based on the volume of energy it sells to consumers. Most regulated gas utilities  
7 recover a portion of their fixed costs through volumetric charges. To recover those fixed  
8 costs, utilities are incentivized to increase sales volumes, commonly referred to as a  
9 "throughput incentive." On the other hand, the link between the recovery of fixed costs and  
10 sales also means that gas utilities can have a financial disincentive to promote energy  
11 efficiency, conservation, and decarbonization since reduced sales mean that the utility may  
12 not recover its fixed costs and could potentially experience financial strain.

13 **Q. Can decoupling assist in removing the disincentive to promote energy-saving or**  
14 **emissions-reducing public policy initiatives for gas utilities?**

15 A. Yes. Decoupling helps address this disincentive by separating the utility's financial health  
16 from the amount of gas it sells. Decoupling adjusts rates to ensure the utility can recover  
17 its fixed costs while promoting energy efficiency, conservation, and decarbonization goals.  
18 This enables utilities to support energy-saving public policy initiatives without negatively  
19 impacting their financial stability.

20 **Q. Do customers retain the benefit of their own conservation measures?**

21 A. Absolutely. Both the WNA and the RNA mechanisms only address the recovery of fixed  
22 costs, such as infrastructure and distribution system costs. Neither mechanism impacts the  
23 commodity charge for the value of the gas sold to the customer. For PGW and for most

1 other gas utilities across the country, the actual cost of gas is a direct pass through from the  
2 utility to the customer, i.e., the utility does not realize any income from the sale of the  
3 actual gas commodity. For most gas utilities, the commodity portion of the gas bill  
4 represents approximately 50 to 70 percent of total natural gas bill charges. Customers retain  
5 full control of the commodity portion of their gas bill, and their conservation measures will  
6 be met with equivalent reductions in the cost of natural gas provided to them. Customers  
7 pay for the gas they use. If they use less, they will pay less all else being equal.

8 **Q. Please provide a high-level description of the proposed RNA.**

9 A. PGW's proposed RNA mechanism very simply recovers/refunds the difference between  
10 the annual authorized revenue the Commission has allowed (the approved revenue target),  
11 and the combined revenues received through customer billings and the WNA  
12 charges/credits for each eligible PGW rate class. The rate classes that will be eligible for  
13 the RNA are: Residential, Commercial, Industrial, Municipal, and PHA classes. The  
14 proposed RNA will be calculated and trued-up annually to ensure the Company neither  
15 over- nor under-collects the approved revenue target. The proposed RNA is fully  
16 reconciling to ensure that any over or under recoveries are either rolled into the next RNA  
17 true-up.

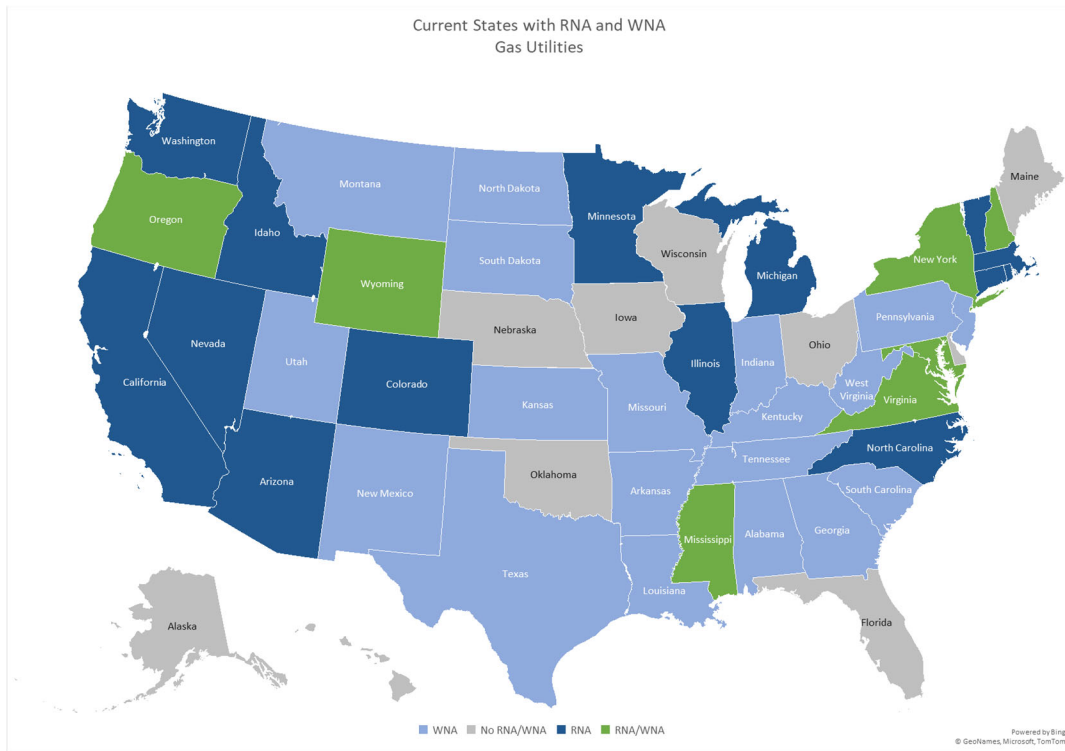
18 **Q. Are Revenue Stability Mechanisms, like the one that PGW is proposing, common**  
19 **across the natural gas industry?**

20 A. Yes, revenue decoupling mechanisms, like the proposed RNA, are common ratemaking  
21 tools throughout the natural gas industry. The chart below shows that many gas utilities  
22 have implemented either an RNA or a WNA (or both). Utilities may have one mechanism  
23 or combine several mechanisms to achieve full decoupling. As the Figure shows, 21 states



1 are fully decoupled, with another 19 states allowing partial decoupling in the form of a  
2 WNA. Only 10 states have no form of decoupling as indicated in light gray.

**Figure 2: Survey of States with Gas Utilities that Employ an RNA and/or WNA**



3

1 **Q. PGW currently has a WNA. Why does it also need a full decoupling mechanism?**

2 A. As indicated previously, PGW operates on a cash basis as a municipal utility. It has very  
3 little margin to withstand reductions in throughput due to declining use per customer,  
4 customer loss, business closures, economic decline, etc. A decoupling mechanism layered  
5 on top of PGW's WNA mechanism would allow the Company to recover its entire  
6 authorized revenue regardless of the level of customer sales, which in turn will allow the  
7 Company to recover its full cost of service, i.e., all of the fixed costs embedded in its  
8 volumetric rates. Both mechanisms are necessary for PGW because the weather-related  
9 volumetric changes would be addressed immediately, while the remaining volumetric  
10 changes due to declining load, business closures, etc., would be adjusted annually and  
11 recovered through a surcharge the following year. As a cash flow entity, PGW does not  
12 wish to lose the cash flow benefits of its WNA mechanism.

13 **Q. Is it true that full and partial decoupling mechanisms, such as the WNA and the  
14 proposed RNA, simply transfer risk from shareholders to customers?**

15 A. No. Both the WNA and the proposed RNA protect both customers and the Company.  
16 Customers are protected from billings that exceed PGW's authorized distribution revenue  
17 requirement; and the Company is protected from billings that are below its authorized  
18 distribution revenue requirement. Though it is true that revenue shortfalls tend to fall on  
19 the shoulders of shareholders, since PGW is a cash-based municipal utility with no  
20 shareholders, it has no allotted equity margin to absorb revenue shortfalls. If the Company  
21 does not realize its allowed revenue, it would most likely need to borrow the deficiency.  
22 The Company, however, is constrained by loan covenants on its outstanding debt service  
23 which limit its ability to increase borrowing. Accordingly, the Company's rates must

1 provide sufficient cash flow for the Company to operate the utility safely and reliably.

2 **Q. Please describe how the RNA will be calculated.**

3 A. The target revenues will consist of the Commission authorized revenues<sup>3</sup> per customer  
 4 class determined in this general rate case for the Residential, Commercial, Municipal,  
 5 Industrial, and PHA customer classes. At the end of each fiscal year, the Company will  
 6 provide a reconciliation of the RNA, comparing the targeted base revenues for each  
 7 customer class with the actual revenues billed to each customer class (inclusive of WNA  
 8 charges and credits) and will calculate the over- or under-collection that resulted for each  
 9 of the rate classes. In the case of an over-collection, this amount will be credited to the  
 10 customers in those classes through an RNA sur-credit over the subsequent 12-month  
 11 period. Alternatively, a surcharge will be assessed over the subsequent 12-month period  
 12 through a positive RNA rate in the case of an under-collection. It is envisioned that the  
 13 RNA rate will be calculated one month following the end of the fiscal year and would be  
 14 billed over a 12-month period, beginning in the third month following the fiscal year end.  
 15 Any over or under recoveries from the prior RNA period would be rolled into the next  
 16 RNA period. The aim is to collect the exact amount of revenues allowed in base rates.  
 17 Mechanically, the RNA Adjustment is determined through the following series of  
 18 calculations:

- 19 1. Targeted Authorized Base Revenue for Month<sub>n</sub> and Rate Class<sub>i</sub> – Actual Billings for  
 20 Month<sub>n</sub> and Rate Class<sub>i</sub> (inclusive of WNA charges or credits) = Over or Under  
 21 Difference for Month<sub>n</sub> and Rate Class<sub>i</sub>.

---

3 For purposes of the RNA, Commission authorized revenue includes only the Customer Charge and the Delivery Charge. All other surcharges that are included in base rates are excluded for purposes of calculating and reconciling the RNA.

- 1           2. Total Over or Under Collection for Year = Sum of Over or Under Collection for each
- 2                   of the Rate Classes for Twelve Months of the Year.
- 3           3. Current Year RNA Adjustment = Total Over or Under Collection for each of the Rate
- 4                   Classes.
- 5           4. Total RNA Adjustment = (Current Year RNA Adjustment + Annual True-Up) /
- 6                   Projected Sales Volume Over 12 Months for each of the Rate Classes.
- 7           5. Annual True-Up = Difference between Projected RNA Collection and Actual RNA
- 8                   Collection for Past 12 Months.

9           I provide an illustrative example of how PGW’s RNA mechanism would have performed  
10           over the last 5 years at Exhibit RJA-3 – PGW’s RNA Proposal and Back Cast Analysis.

11   **Q.   How would the proposed RNA have performed over the last five years according to**  
12           **your Back Cast analysis?**

13   A.   As shown in Exhibit RJA-3, from September 2019 through August 2024, the RNA would  
14           have yielded the following results across all rate classes:

**Table 1: Annual Back Cast Summary**

<b>Back Cast Period</b>	<b>Incremental RNA Adjustment</b>
9/1/2019 – 8/31/2020	\$ 2,141,924
9/1/2020 – 8/31/2021	(902,686)
9/1/2021 – 8/31/2022	(7,717,655)
9/1/2022 – 8/31/2023	10,272,136
9/1/2023 – 8/31/2024	20,355,145
<b>TOTAL</b>	<b>\$ 24,148,864</b>

1 As Table 1 illustrates, the RNA would have returned money to customers in two of the  
2 five years but would have recovered a significant revenue shortfall from its authorized  
3 base revenue requirement in the two most recent periods. This level of revenue shortfall  
4 recovery should not be viewed as a PGW windfall at the expense of customers but the  
5 recovery of the Company's Commission authorized fixed costs to insure its ability to  
6 provide safe and reliable gas distribution service to its customers.

7 **Q. Have you examined the bill impacts of the RNA surcharge in your back cast analysis?**

8 A. Yes. In Table 2 below, I show the back cast surcharges that would have appeared on  
9 customers' bills if the RNA would have been in effect since the fiscal year ending August  
10 2020, with the surcharge commencing in November 2020. As the Table shows, the highest  
11 residential surcharge over the four-year period would have been \$0.0287 per Ccf and the  
12 average residential surcharge would have been \$0.0018 per Ccf. Over the four years, the  
13 surcharges range from a high of \$0.04141 per Ccf for the PHA GS class and a low of  
14 \$0.09243 per Ccf for the PHA class. Further detail can be found in Exhibit RJA-3.

**Table 2: Customer Back Cast Surcharge Summary**

	11/1/20 - 8/31/24				
	RNA Surcharge / Ccf				
	Nov 2020 - Oct 2021	Nov 2021 - Oct 2022	Nov 2022 - Oct 2023	Nov 2023 - Aug 2024	Average
<b>Residential</b>	\$ 0.0004	\$ (0.0066)	\$ (0.0154)	\$ 0.0287	\$ 0.0018
<b>Commercial</b>	\$ 0.0190	\$ 0.0171	\$ (0.0108)	\$ 0.0018	\$ 0.0068
<b>Industrial</b>	\$ 0.0332	\$ 0.0188	\$ (0.0166)	\$ 0.0151	\$ 0.0126
<b>Municipal</b>	\$ 0.0022	\$ (0.0184)	\$ (0.0683)	\$ (0.0685)	\$ (0.0383)
<b>PHA</b>	\$ (0.0438)	\$ (0.0700)	\$ (0.0924)	\$ (0.0739)	\$ (0.0700)
<b>PHA GS</b>	\$ (0.0872)	\$ 0.0326	\$ (0.0270)	\$ 0.0414	\$ (0.0100)
<b>Max</b>	\$ 0.0332	\$ 0.0326	\$ (0.0108)	\$ 0.0414	\$ 0.0126
<b>Min</b>	\$ (0.0872)	\$ (0.0700)	\$ (0.0924)	\$ (0.0739)	\$ (0.0700)

1

2 **Q. What would the monthly bill impact be for PGW's average residential customer who**  
3 **uses 610 Ccf in a billing year?**

4 A. The average Residential RNA charge over the past four surcharge periods (\$0.0018)/Ccf  
5 would have yielded a monthly bill impact of \$0.092 per month ( $(\$0.0018 \times 610)/12$ ). At  
6 the max Residential charge for the 2023/2024 period, the monthly bill impact would have  
7 been \$1.46, calculated as  $(\$0.0287 \times 610)/12$ . The largest Residential bill credit would have  
8 occurred in the 2022/2023 period and would have resulted in a monthly bill credit of \$0.78  
9 per month, calculated as  $(-\$0.0154 \times 610)/12$ .

10 **Q. When does the Company propose to start the RNA?**

11 A. The RNA will become effective concurrent with rates filed in this proceeding.

12 **Q. Please describe the Annual true-up timeline.**

13 A. Once the Commission's decision in this proceeding directs that the RNA will become  
14 effective, it will become effective immediately and will run through the end of the fiscal  
15 year. I assume that the first annual RNA period would be truncated since the Commission's  
16 decision would likely come in the middle of the fiscal year. The first RNA filing would be  
17 submitted to the Commission for review one month following the end of the fiscal year.

1 PGW is estimating that the Commission's review and approval of the decoupling true-up  
2 would take one month, and the Company would begin recovering (or refunding) any under  
3 or over recoveries beginning one month after receiving Commission approval (or two  
4 months post fiscal year end). The RNA charge or credit would be recovered through a  
5 volumetric charge on projected throughput for the following twelve-month recovery  
6 period. Any amounts not recovered in the initial recovery period will be added to or  
7 subtracted from the subsequent annual RNA recovery related to the next fiscal year.

8 **Q. What is the key benefit of the annual true-up?**

9 A. The key benefit is simplicity. Since PGW's WNA would recover the majority of any  
10 over/under collected revenues relative to targeted authorized revenues due to variations in  
11 weather, it is acceptable for the Company and its customers to receive only an annual true-  
12 up of over/under billed revenues; and would only be subject to one RNA rate for the  
13 succeeding year. Another potential benefit of the annual true-up is that the sum of  
14 over/under billed revenues over a twelve-month period should tend to be less variable than  
15 true-ups on shorter intervals that may capture seasonal peaks and troughs, creating more  
16 volatility in the RNA surcharge. The annual true-up will also correct any over or under  
17 collections related to the WNA, such that both the RNA and WNA may be considered fully  
18 reconciling adjustment mechanisms.

19  
20 **Q. Will the RNA extend the period between rate cases?**

21 A. Yes. A full decoupling mechanism can extend the period between base rate proceedings.  
22 Because the decoupling mechanism allows the utility to recover its authorized revenue,  
23 PGW would not need to file rate cases as frequently because its revenue would be adjusted

1 through periodic true-ups rather than relying solely on traditional rate proceedings. This  
2 could reduce regulatory burden and provide greater revenue stability for PGW, potentially  
3 delaying the need for future rate cases. However, the exact impact would depend on the  
4 specific circumstances of PGW with respect to new service initiatives or capital  
5 investments that could also impact rate case timing.

6 **Q. Is PGW's RNA proposal just and reasonable based on the factors outlined in the**  
7 **policy statement related to alternative ratemaking mechanisms at 52 Pa. Code §**  
8 **69.3302?**

9 A. Yes. As shown in Joint Exhibit DA/RJA-1 that I co-sponsor with PGW witness Denise  
10 Adamucci, the RNA meets each of the fourteen factors outlined in Section 69.3302 which  
11 guide the determination of whether an alternative ratemaking mechanism such as the RNA  
12 is just and reasonable.

13 **Q. Please summarize how PGW and its customers' interests are served by implementing**  
14 **the Company's RNA proposal.**

15 A. There are significant benefits to both PGW and its customers from implementing the  
16 Company's proposed RNA, including:

- 17 1. The RNA will break the link between the gas consumption of the Company's  
18 customers and its cost recovery and result in a better alignment of the interests of  
19 PGW and its customers.
- 20 2. Under the RNA, PGW will be more fully able to promote and expand programs  
21 to reduce carbon emissions and promote conservation and energy efficiency,  
22 without experiencing the continual real losses due to declines in gas sales.
- 23 3. With the implementation of the RNA, customers will pay approximately the same



1 amount each year for gas delivery service as if the Company had perfectly  
2 forecasted its customer usage, which is the same basis upon which the Commission  
3 establishes PGW's base rates.

4 4. Ultimately, the RNA will result in a customer's annual bill that more accurately  
5 reflects the recovery amounts approved by the Commission in this rate case, while  
6 still recognizing the results of their energy conservation efforts in the amount they  
7 pay for the gas commodity.

8 5. The RNA will address factors beyond the Company's control that contribute to  
9 under-recovery of costs and the inability to achieve the level of cost recovery that  
10 have been authorized by the Commission.

11 6. The RNA is credit enhancing for PGW's credit risk profile.

12 7. The RNA will extend the time between base rate proceedings and will relieve the  
13 regulatory burden on both the Commission and the Company of frequent base rate  
14 proceedings.

15 **Q. Does this conclude your direct testimony?**

16 **A. Yes.**

**VERIFICATION**

I, Ronald J. Amen, hereby state that: (1) I am employed by Atrium Economics, LLC (“Atrium”), as Managing Partner; (2) I have been retained by Philadelphia Gas Works (“PGW”) and am authorized to present testimony on its behalf; (3) the facts set forth in my testimony are true and correct (or are true and correct to the best of my knowledge, information and belief); and, (4) I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: \_\_\_\_\_

*/s/ Ronald J. Amen*

\_\_\_\_\_  
Ronald J. Amen  
Managing Partner  
Atrium Economics, LLC

# **Exhibit RJA-1**



## Ronald J. Amen

### Managing Partner

Mr. Amen has over 40 years of combined experience in utility management and consulting in the areas of regulatory support, resource planning, organizational development, distribution operations and customer service, marketing, and systems administration.

He has advised gas, electric and water utility clients in the following areas: regulatory policy, strategy, and analysis; cost of service studies (embedded and marginal cost analyses); rate design and pricing issues including time-of-use rates, revenue decoupling, weather normalization and other cost tracking mechanisms; resource strategy, planning and financial analysis; and business process design, evaluation, and organizational structures. Mr. Amen has provided expert testimony in numerous state and provincial regulatory agencies, and the Federal Energy Regulatory Commission. Prior to establishing Atrium Economics in 2020, Mr. Amen's consulting experience included Director Advisory & Planning at Black & Veatch Management Consulting, LLC, Vice President of Concentric Energy Advisors, Inc. and Director with Navigant Consulting, Inc. His prior utility experience includes leadership of State and Federal Regulatory Affairs at two electric and gas utilities, and management positions in Regulatory Affairs, Information Systems and Distribution Operations.

#### EDUCATION

University of Nebraska,  
Bachelor of Science with  
Distinction, Business  
Administration, Finance  
and Economics

#### YEARS EXPERIENCE

45

#### PROFESSIONAL ASSOCIATIONS

American Gas Association  
Southern Gas Association

#### RELEVANT EXPERTISE

Financial Analysis; Litigation  
Support; Regulatory Support;  
Strategy; Utility Operations

## REPRESENTATIVE PROJECT EXPERIENCE

### REGULATORY POLICY, STRATEGY AND ANALYSIS

#### Western Export Group (2019)

In a Nova Gas Transmission, LTD. (NGTL) Rate Design and Service Application before the Canada Energy Regulator (CER), Mr. Amen led a consulting team supporting the interests of the Western Export Group, a group of nine utility companies located in the Western U.S. and British Columbia who are export shippers on the NGTL system. The case resulted in a settlement with all parties.

#### Regulatory Commission of Alaska (2019 – 2020)

Part of a multi-functional team that assisted the Regulatory Commission of Alaska (RCA) in its evaluation of the Chugach Electric Association, Inc's acquisition of the Municipal of Anchorage d/b/a Municipal Light & Power Department. Assisted the RCA with its evaluation of the long-term



benefits of the transaction to ML&P and Chugach customers, the implication of terms and assumptions in various agreements, and the careful balance of the fiscal and regulatory implications for the customers of the combined entity.

#### **CPS Energy (2017 – 2018)**

Provided an overall review of the client's Strategic Roadmap to prioritize its multi-year regulatory initiatives. (e.g., changes in product and service offerings, restructuring of current rate classes, introduction of new rate structures, rate levels, and tariff provisions). Current pricing processes and platforms assessed to identify recommended enhancements to enable the development and implementation of dynamic pricing concepts. Assisted client with preparation of next rate case (e.g., costing and pricing analyses, load forecasting, internal communications, and stakeholder engagement).

#### **FortisBC Energy, Inc. (2016 – 2018, 2021)**

Performed an overall review of the client's Transportation Service Model. Analyzed the client's various midstream transportation and storage capacity resources used in providing balancing of transportation customers' loads. Review included the physical diversity, functionality and flexibility provided by the various capacity resources, and the cost impact caused by transportation customers' imbalance levels. Conducted an industry-wide benchmarking study of current industry-wide best practices, by regulatory jurisdiction, related to transportation balancing tariff provisions. Participated in stakeholder workshops and testified before the BCUC. Retained in 2021 to update quantitative analysis of the operation of the transportation balancing rules for reporting requirements of the BCUC in 2022.

#### **McDowell Rackner & Gibson Law Firm (2015 – 2016)**

Provided due diligence services to the law firm in connection with a state utility commission investigation into the law firm client's gas storage and optimization activities. Provided an independent opinion as to the likely outcome of the Commission's ongoing investigation.

#### **Gulfport Energy Corporation (2016)**

Provided regulatory analysis and support to Gulfport Energy Corporation in the ANR Pipeline Company Natural Gas Act §4 rate proceeding before the Federal Energy Regulatory Commission (FERC). Analyzed as-filed cost of service and rate design to identify key cost of service, cost allocation, rate design and service related/tariff issues. Developed an integrated cost of service and rate design model to prepare studies on client issues. Prepared best/worst case litigation outcomes, discovery, and evaluations of discovery of other parties. Analyzed FERC staff top sheets and settlement offers; and assisted in the preparation of settlement positions.



**Confidential Financial / Energy Partners (2015)**

Provided regulatory due diligence support for client related to a proposed merger with a multijurisdictional gas/electric company including an evaluation of the regulatory landscape in the various applicable state jurisdictions, recent regulatory decisions, and current regulatory issues.

**Confidential International Energy Company (2014)**

Provided regulatory due diligence support for client related to a proposed merger with a multijurisdictional gas company including an evaluation of the regulatory landscape in the various applicable state jurisdictions, recent regulatory decisions, and current regulatory issues.

**Pacific Gas & Electric Company (2014)**

Developed an extensive industrywide benchmarking study to determine the cost allocation and ratemaking treatment utilized by Local Distribution Companies (LDCs) in the United States for recovery of gas transmission costs. Benchmarked cost allocation and rate design utilized by Interstate/Intrastate Pipelines. Benchmarked how Industrial & Electric Generation customers are served with natural gas.

**Public Service Company of New Mexico (2009-2010)**

Provided case management, revenue requirement, cost of service and rate design support for general rate cases in the utility's two state regulatory jurisdictions. Issue management and policy development included an electric fuel and purchased power cost mechanism, recovery of environmental remediation costs for a coal fired power plant, and the valuation of renewable energy credits related to a wind power facility.

**Confidential International Energy Company (2009)**

Provided due diligence on behalf of client related to the purchase of a gas/electric utility, including a review of the regulatory and market-related assumptions underlying the client's valuation model, resulting in the validation of the model and identification of key business risks and opportunities.

Resource Planning, Strategy and Financial Analysis

**Confidential Multi-Jurisdiction Gas Utility (2021-2022)**

Retained by the multi-jurisdiction interstate transmission pipeline and local distribution utility ("client") to assist it in identifying and supporting a natural gas supply solution to satisfy additional deliverability requirements with the goals of minimizing costs, enhancing system resiliency, and introducing renewable fuels into its system. Reviewed the process and analyses that had been conducted to-date (including all underlying assumptions) and provided insight on the best path forward. The goal of the effort was to help prepare client for internal approval of the process and



recommended path forward, and ultimately the development and approval of the necessary regulatory filings at the federal, state, and local levels. Atrium evaluated a broad spectrum of regulatory, economic, market-related, and logistical considerations in order to advise the client on the best path forward in utilizing LNG to meet its future deliverability requirements. Specific components of Atrium's analysis included regulatory approvability, rate design and cost recovery risk, site location (including siting LNG in multiple locations in multiple states), ownership structure, and ability to incorporate RNG and hydrogen into Utility's system to decarbonize the pipeline system.

#### **Great Plains Natural Gas (2021-2022)**

Retained to review the gas supply procurement practices and objectives of Great Plains, the interstate pipeline, storage and supply contracts, and other information available to Great Plains leading up to and throughout the severe weather event that occurred from February 13-17, 2021, and the actions by Great Plains personnel in response to the weather event, as part of a state-wide investigation by the Minnesota Public Utilities Commission. Expert testimony filed on behalf of Great Plains.

#### **Fortis BC Energy, Inc. (2011, 2021)**

Retained to help develop a gas supply incentive mechanism in cooperation with the British Columbia Utilities Commission staff and the company's other stakeholders. Provided an independent analysis of the utility's management of pipeline and storage capacity and supply. Part of this work entailed a review of the major markets in which the utility transacted, reviewing the size of trading activity at the major market hubs and reviewing the price indices for these markets. In 2021, retained to refresh all quantitative analysis of the operation of the GSMIP for reporting requirements of the BCUC in 2022.

#### **Black Hills Colorado Electric Utility (2009)**

Engaged as a member of a consultant team that served as the independent evaluator in a competitive solicitation for non-intermittent generation resources. Jointly recommended by the utility client, the staff of the utility commission and the state attorney general, the consulting team acted as an agent of the public utility commission monitoring and overseeing the solicitation, which included reviewing the request for proposals and solicitation process, including provisions of the power purchase agreement, preliminary review (economic and contractual) of bids received from the request for proposals, initial modeling of bids for screening, selection of bidders with whom to conduct negotiations and oversight of the negotiation process, and the ultimate selection of the winning bid. Provided due diligence review of all input data, preliminary and final model output, and output summaries. The team produced biweekly confidential reports to the commission regarding the process and its results.



### **NW Natural (2007-2008)**

Assisted with the development of its long-term Integrated Resource Plan (IRP) for its Oregon and Washington service territories. The IRP included the evaluation of incremental inter- and intra-state pipeline capacity, underground storage, and two proposed LNG plants under development in the region.

### **Puget Sound Energy (2007)**

Engaged to assist the client with the development of a natural gas resource efficiency and direct end-use strategy, an interdepartmental initiative focused on preparing a natural gas resource efficiency plan that optimizes customers' end-use energy consumption while furthering corporate customer, financial, environmental, and social responsibilities.

### **Puget Sound Energy (2002 – 2003)**

Provided resource planning strategy and analysis for the company's Least Cost Plan, including a review of the company's underlying 20-year electric and gas demand forecasts. As a member of a consulting team, served as the client's financial advisor for the acquisition of new electric power supply resources. Conducted a multitrack solicitation process for evaluation of generation assets and purchase power agreements. Provided regulatory support for the acquisition.

## **COST ALLOCATION, PRICING ISSUES AND RATE DESIGN**

### **Philadelphia Gas Works PGW (2023)**

Mr. Amen led an Atrium team engaged by PGW to review the mechanics, input data, billing controls, and weather trends surrounding PGW's Weather Normalization Adjustment ("WNA") formula to understand the factors that contributed to the abnormally high WNA charges in June 2022. Atrium's review identified structural factors inherent in PGW's WNA mechanism that may have contributed to the anomalous WNA amounts billed to customers in June 2022. Mr. Amen filed testimony with Atrium's findings and recommendation in the pending general rate case before the Pennsylvania Public Utility Commission.

### **Potomac Electric Power Company (PEPCO) (2022-2023)**

Mr. Amen led an Atrium team engaged by PEPCO on behalf of services requested by the Public Service Commission of the District of Columbia ("DC Commission"), for comprehensive evaluation of the processes, procedures, mechanics, and internal controls surrounding PEPCO's Bill Stabilization Adjustment ("BSA"). Atrium provided independent audit services sought by the DC Commission, including a) independently evaluate the timing, impact and magnitude of the billing determinant error that was identified during Formal Case No. 1156; b) independently confirm that current BSA processes and procedures are properly and timely executed as designed; c) independently confirm that current Pepco BSA internal controls are properly and timely executed; d) independently identify any recommended process and procedural





improvements, as well as any recommended changes in existing internal controls or new internal controls; and e) independently conduct a comprehensive review of Pepco's BSA deferral balances by customer class, with an overall determination of the breakdown of BSA deferral balances by key drivers for each customer class. Our audit report and recommendations were filed with the DC Commission in July 2023.

#### **Summit Natural Gas of Maine, Inc. (2022 - 2023)**

Mr. Amen provided revenue requirement, allocated cost of service, class revenue apportionment, rate design, and expert witness testimony support for the utility's gas general rate case and multi-year rate plan before the Maine Public Utilities Commission. Responsibilities included determination of an optimal normal weather period for purposes of normalizing test year billing determinants, followed by the weather normalization process of determining a representative level of gas throughput for the Company's test year. The case resulted in an all-party settlement before the Maine PUC.

#### **Black Hills Energy Arkansas (2021-2022)**

Mr. Amen provided allocated cost of service, class revenue apportionment, rate design for natural gas infrastructure mechanisms, and expert witness support for the utility's gas general rate case before the Arkansas Public Service Commission. The case resulted in a settlement before the Arkansas PSC.

#### **Until Electric System and Northern Utilities, Inc. (2021 - 2022)**

Mr. Amen provided allocated cost of service, marginal cost of service, class revenue apportionment, rate design, and expert witness support for the utility's separate electric and gas general rate cases before the New Hampshire Public Utilities Commission, including expert witness testimony. The cases resulted in settlements before the NHPUC.

#### **Manitoba Hydro – Centra Gas Manitoba (2021-2022)**

Retained to provide an independent review of the cost of service methodologies employed for Centra Gas Manitoba Inc.'s natural gas operations. Atrium prepared a report filed with the Manitoba Public Utility Board documenting and supporting our assessment of Centra's existing COSS methods in conformance with the regulatory requirements of the MPUB. Focusing on the trends of Canadian gas distribution utilities, the COSS method utilized in the current COSS was reviewed against the: (1) cost causative factors identified for each plant and expense element of Centra's total cost of service; and (2) the current range of regulatory practices observed in the North American gas utility market. Centra's 2022 rate application based on the recommendations in our report was approved by the MPUB.

#### **Montana-Dakota Utilities and Great Plains Natural Gas (2020 – 2021, 2022 – 2023, 2024-2025)**

Mr. Amen provided cost of service, class revenue apportionment, rate design, and expert witness support for the gas utilities' general rate cases before the Montana Public Service Commission (MPSC) and North Dakota Public Service Commission (NDPSC). Testimony included theoretical



principals and practical application of cost allocation, and rate design principles or objectives that have broad acceptance in utility regulatory and policy literature. Supported the Straight Fixed-Variable Rate Design (SFV) in North Dakota with analysis showing low-income residential customers would experience lower annual bills under the SFV rate design than a volumetric weighted rate design. Provided a presentation at a public input hearing and oral testimony at Commission hearings in both jurisdictions. SFV rate design was approved by the North Dakota PSC. The cases resulted in settlements approved by the respective Commissions.

Mr. Amen also represented the client's interests (as well as those of neighboring utility clients NW Natural and Puget Sound Energy) in a Washington generic rulemaking proceeding on the subject of electric and gas cost of service methodologies and minimum filing requirements.

Mr. Amen supported MDU electric general rate case filings in Montana and North Dakota (2022), including a marginal cost study in Montana, and allocated cost studies, revenue apportionment and rate design in both jurisdictions.

Mr. Amen recently supported gas general rate case filings in MDU's Idaho affiliate, Intermountain Gas (2022-2023) and Washington affiliate, Cascade Natural Gas (2024). Testimony support included a class level, design day load studies across the two utilities' temperature zones, using a combination of AMI penetration and monthly billing data, class allocated cost of service study, class revenue apportionment, and rate design.

Mr. Amen supported gas and electric general rate case filings in MDU's South Dakota service territory (2023), including gas and electric allocated cost studies, revenue apportionment and rate design, and are currently supporting MDU gas cases in Montana and Wyoming ( both filed August 2024).

### **Chesapeake Utilities Corporation (2020 – 2021, 2024-2025)**

Reviewed and evaluated Chesapeake's Swing Service Rider (SSR), which recovers intrastate pipeline capacity costs directly from all transportation customers, and the application of the current cost allocation methodology underlying the service for its Florida gas utilities, Central Florida Gas and Florida Public Utilities. Supported Chesapeake through three primary tasks; (1) Assessment of the factors influencing the current cost allocation method, its impact on various customer groups, and data collection, (2) Assessment of the appropriateness of alternative cost allocation methods and model the application to and impact on the SSR charges, and (3) Provided a report of the evaluation, modelling results and recommendations in a report and conducted a review session with Chesapeake management personnel.

Mr. Amen is currently provide testimony support for Chesapeake Utility's Delaware general rate case (filed August 2024), including a Lead Lag study supporting cash working capital, determination of normal weather, cost of service and rate design principles, allocated cost of service results, revenue apportionment, and a modified version of a prior weather normalization adjustment (WNA) rider.



### **Kansas City, KS Board of Public Utilities (2019 – 2020)**

Provided expert witness testimony supporting the basis for a Green Energy Program, its objectives, and overall benefits. Provide an assessment of how the program is aligned with best practices in design of Green Energy tariff programs nationally. Testimony also provided an assessment of how the program mitigates potential risks to the Board of Public Utilities and protects against subsidization of other rate classes.

### **NW Natural (2018 – 2019)**

Provided cost of service, class revenue apportionment, rate design, and expert witness support for the gas utility's general rate case before the Washington Utility and Transportation Commission (WUTC), filed in December 2018. Testimony included theoretical principals and practical application of cost allocation, and rate design principles or objectives that have broad acceptance in utility regulatory and policy literature.

### **Chesapeake Utilities Corporation (2018 – 2019)**

Developed a Weather Normalization Adjustment (WNA) mechanism applicable to the monthly billings of Chesapeake's residential and general service customers. Sponsored the WNA mechanism through expert testimony filed with the Delaware Public Service Commission in January 2019. The testimony included a description of the WNA calculations; back-casting performance analyses, with bill impacts; a WNA tariff; and conceptual and evidentiary support for this ratemaking mechanism.

### **Louisville Gas & Electric Company and Kentucky Utilities Company (2018)**

Engaged by LG&E and KU to conduct a study in support of a joint utility and stakeholder collaborative concerning economical deployment of electric bus infrastructure by the transit authorities in the Louisville and Lexington KY areas, as well as possible cost-based rate structures related to charging stations and other infrastructure needed for electric buses.

### **Summit Utilities – Colorado Natural Gas, Inc. (2018)**

Engaged by Summit Utilities to develop and support with expert testimony an appropriate normal weather period for the client's five Colorado temperature zones, resulting normalized billing determinants, and a Weather Normalization Adjustment ("WNA") proposal in conjunction with the filing of a general rate case for its Colorado Natural Gas, Inc. subsidiary.

### **Westar Energy (2018)**

Provided cost of service and expert witness support for the electric utility's general rate case filing before the Kansas Corporation Commission (KCC). The cost of service study determined the cost components for a new Residential Distributed Generation (DG) customer class that provided the basis for recommendations for establishing components of a sound, modern three-part rate design for this new Residential DG (roof-top solar) service, which was approved by the KCC.

### **Florida Public Utilities (Chesapeake Utilities) (2017 – 2018)**



Provided a rate stratification study of the utility's commercial and industrial customer classes to facilitate the reconfiguration of the classes by size of service facilities, annual volume, and load factor. Reviewed the cost allocation bases and recommended alternatives for recovery of capital investments related to the utility's Gas Reliability Investment Program (GRIP).

### **Tacoma Power (2016 – 2018, 2023)**

Provided cost of service and rate design support for the electric utility's general rate case filings, including support for recovery of fixed costs through fixed charges and impacts on low income customers. Provided recommendations as to specifications in the client's cost of service analysis (COSA) model for deriving Open Access Transmission Tariff rates, using FERC approved standards to guide the evaluation. Conducted an electric utility costing and pricing workshop for the PUB in October 2017; and participated with Tacoma Utilities staff in a comprehensive electric and water Rates and Financial Planning workshop in February 2018. Engagement was extended for the 2019 – 2020 rate filing, which incorporated the Black & Veatch municipal COSA model for costing and ratemaking purposes. Currently providing cost of service and rate design for the 2023 – 2024 rate filing. Future project work involves innovative rate programs.

### **Tacoma Power (2017)**

Engaged to review and assess current rates for 3rd Party Pole Attachments (PA), and more specifically, to determine and recommend if any rate adjustments were needed. Performed several tasks:

- Performed a market survey of rates charged by comparable utilities.
- Reviewed current regulations on rate setting and practice for 3<sup>rd</sup> Party Pole Attachments as set forth by the Federal Communications Commission (FCC) and the State of Washington (WA), and the interpretation of such regulations in court decisions.
- Reviewed industry best practices under the FCC, WA, and the American Public Power Association (APPA)
- Collected and reviewed data for cost-based fees including:
  - Application Fees
  - Non-Compliance Fees
- Reviewed cost data supplied by the City of Tacoma as relates to determining pole costs, and
- Performed modeling of rates under the FCC Model, the APPA model, and the State of Washington shared model (50 % FCC Rate/ 50% APPA Rate).

### **BC Hydro (2016)**

Provided research and analysis of the line extension policies of a select group of peer utilities in Canada with similar regulatory regimes as well as U.S. utilities based on their geographic relationship to the client. Conducted interviews with peer utilities to gather comparative



information regarding their line extension policies and related internal procedures. Performed a comparative analysis of the various line extension policies from the selected peer group.

#### **Cascade Natural Gas Corporation (2015 – 2019)**

Provided cost of service and rate design support for several of the company's general rate case filings in its two state jurisdictions, 3 in Oregon and 2 in Washington. Conducted Long-run Incremental Cost Studies in the Oregon jurisdiction and embedded class allocated cost of service studies in the Washington jurisdiction. Performed benchmark analyses to compare each of the client's administrative and general (A&G) and operations and management (O&M) expenses, on a per-customer basis, to various peer groups. Analyses were performed for natural gas utilities and combination utilities with both electric and gas operations. Various iterations of the analyses were prepared to make the peer group of utilities more comparable to the characteristics of the client's utility operations. Represented the client's interests in a Washington generic rulemaking proceeding on the subject of electric and gas cost of service methodologies and minimum filing requirements.

#### **Chesapeake Utilities (2015 – 2016)**

For its Delaware jurisdiction, provided cost of service and rate design support in the client's general rate case proceeding, including expert witness testimony in support of the utility's proposed gas revenue decoupling mechanism.

#### **Homer Electric Association / Alaska Electric and Energy Cooperatives (2015)**

Represented clients in an ENSTAR gas general rate proceeding. Testimony discussed accepted industry principles of revenue allocation and rate design, including the applicability to and alignment with ENSTAR's revenue allocation and rate design proposals for large power and industrial customers. Provided a critique of certain methodological aspects of ENSTAR's Cost of Service study, proposed revenue allocation, and rate design relating to the various large power and industrial customers.

#### **Arkansas Oklahoma Gas Corporation (2002, 2003, 2004, 2007, 2012, 2013)**

Provided cost of service and rate design support for several of the company's general rate case filings in its two state jurisdictions and in support of Section 311 transportation filings (2007, 2010) before the Federal Energy Regulatory Commission. Provided related research, design, and expert witness testimony in support of a Revenue Decoupling mechanism in one jurisdiction and a Weather Normalization Adjustment mechanism in the other jurisdiction, along with a significant increase in fixed charges and the introduction of demand charges for the company's largest customer classes. Conducted a pre-filing "decoupling" workshop for the utility commission staff.

#### **Northern Indiana Public Service Company (NiSource) (2009 – 2010, 2013, 2017, 2021)**

Conducted class allocated cost of service studies for the client's natural gas (including two other affiliate gas utilities) and electric operations. Work included reconfiguring the Company's



commercial and industrial customer classes according to size of load and customer-related facilities. Rate design was modernized to recover a greater portion of fixed costs via fixed monthly customer and demand-based charges, a transition to a “Straight-Fixed Variable” form of rate design. Industry research was provided on alternative rate designs for the electric service, including Time-of-Use rates and Critical Peak Pricing. Served as an expert witness on behalf of the client in five general rate cases before the Indiana Utility Regulatory Commission. The 2021 rate case is currently pending before the IURC.

#### **Southwestern Public Service Company (Xcel) (2012)**

Retained to conduct a study to estimate the conservation effect of replacing its existing electric residential rate design with an alternative rate design such as an inverted block rate design. Reviewed inclining block rate structures that have actively been employed in other jurisdictions and also reviewed technical and academic literature to assess the elasticity of electricity demand for residential customers in the southwestern U.S. Analyzed 2009-2011 residential data to determine what sort of conservation effect the company may expect by implementing an inclining block rate structure. Provided an overview of alternative rate structures which may also promote conservation effects, such as seasonal rates, three-part rates, and time-of-use (TOU) rates, and considered the competing incentives of promoting conservation and cost recovery, without specific rate mechanisms to address this conflict.

#### **Atlantic Wallboard LP and Flakeboard Company Limited (JD Irving) (2012)**

Represented clients in an Enbridge Gas New Brunswick Limited Partnership (“EGNB”) general rate proceeding. Testimony responded to the 2012 allocated cost of service study and rate design that was submitted to the New Brunswick Energy and Utilities Board by EGNB. Testimony also provided benchmark information regarding EGNB’s distribution pipeline infrastructure in New Brunswick. CA.

#### **Western Massachusetts Electric Company (Northeast Utilities) (2010 – 2011)**

Supported utility in its decoupling proposal for the company’s general rate case. Work included: 1) research on the financial implications of decoupling; 2) identification of decoupling mechanism details to address company and regulatory requirements and objectives; 3) identification of rate adjustment mechanisms that would work together with the company’s proposed decoupling mechanism; and 4) preparing pre-filed testimony and testifying at hearings in support of the company’s decoupling and rate adjustment proposals. The proposed rate adjustment mechanisms included an inflation adjustment mechanism based on a statistical analysis, and a capital spending mechanism to recover the costs associated with capital plant investment targeted to improving service reliability.

#### **Interstate Power & Light (Alliant Energy) (2010 – 2011)**

Conducted class allocated cost of service studies for a Midwestern electric utility’s Minnesota electric system. Work included reconfiguring the company’s customer classes for cost of service purposes to collapse end-use based classes with the classes to which they would be eligible. Cost



of service studies were performed on a before-and-after basis for the existing and proposed classes. The cost of service studies included a fixed/variable study for production costs, and a primary/secondary study for poles, transformers, and conductors. Performed a TOU analysis to determine the appropriate rate differentials for its peak and off-peak rates. Served as an expert witness on behalf of the client in a general rate case before the Minnesota Public Service Commission.

#### **National Grid (2010)**

Conducted class allocated cost of service studies for the client's Massachusetts natural gas operations. This task included combined gas cost of service studies for the consolidation of four gas service territories into two gas utility subsidiaries. During interrogatories, performed four separate allocated cost of service studies for each gas service territory. Work included reconfiguring the company's commercial and industrial customer classes according to size of load and customer-related facilities. Served as an expert witness on behalf of the client in consolidated general rate cases before the Massachusetts Department of Public Utilities.

#### **Puget Sound Energy (2001 – 2002, 2006 – 2007, 2019 – 2020)**

In three Washington general rate proceedings, provided cost of service and rate design support, including expert witness testimony in support of the utility's proposed revenue decoupling mechanism. Conducted research on accelerated cost recovery mechanisms for infrastructure replacement, and electric power cost adjustment mechanisms. In the latest general rate case, Mr. Amen sponsored expert testimony on a proposed revenue attrition adjustment to the client's revenue requirement in the 2020 general rate case.

### **UTILITY SYSTEM OPERATIONS AND ORGANIZATIONAL DEVELOPMENT**

#### **Philadelphia Gas Works (2017, 2020)**

Engaged to provide an independent consulting engineer's report to be included as an appendix to the official statement prepared in connection with the issuance of the City of Philadelphia, Pennsylvania Gas Works Revenue Bonds. The evaluation of the PGW system included a discussion of organization, management, and staffing; system service area; supply facilities; distribution facilities; and the utility's Capital Improvement Plan (CIP). Our report also contained: (a) financial feasibility information, including analyses of gas rates and rate methodology; (b) projection of future operation and maintenance expenses; (c) CIP financing plans; (d) projection of revenue requirements as a determinant of future revenues; (e) an assessment of PGW's ability to satisfy the covenants in the General Gas Works Revenue Bond Ordinance of 1998 authorizing the issuance of the Bonds; and (f) information regarding potential liquefied natural gas ("LNG") expansion opportunities.

#### **Puget Sound Energy (2013 – 2014)**

Engaged to perform a review of its project management and capital spending authorization processes (CSA). The overall project objectives were to educate project management (PM) staff



as to the importance and relevance of regulatory prudence standards, evaluate existing PM processes along with newly introduced corporate CSA processes, and propose PM and corporate process and documentation efficiencies. This task was accomplished through 1) a situational assessment and risk review; 2) analysis of project management practices; and 3) development of common documentation for the CSA and PM processes.

#### **Puget Sound Energy (2012 – 2013)**

Engaged to perform a review of how the company compares to similarly situated utilities in the areas of the underlying capitalized costs related to new customer additions (“new business investment”) and the management policies and practices that influence the new business capital investment. Examined the interrelationships of our client’s management policies and practices in the functional areas related to new business investment and developed an understanding of the nature of the costs captured by the new business investment process. Benchmarked those costs relative to peers’ cost factors and management capital expenditure practices and performed targeted peer group interviews on our client’s behalf. The review identified certain trends and/or interrelationships between management policies and practices, as well as other exogenous factors, and the resulting impact on new business investment.

#### **Puget Sound Energy (2011 – 2012)**

Engaged to perform a review of its electric transmission planning and project prioritization process. The emphasis of the review was to determine if the process implemented by the client could be expected to meet the regulatory standard of prudence, as adopted by the state regulatory commission. Reviewed the prudence standard adopted by the commission in several recent regulatory proceedings, supplemented by our knowledge of the prudence standard adopted at a national level and in other states. The engagement included two phases: 1) an initial situation assessment of the existing process employed by the client, and 2) a review of the historic implementation of that process by reviewing a sampling of transmission projects. Compiled and provided examples of capital planning documents and procedures, viewed as “best practices,” from other electric utilities and other relevant transmission entities.

#### **Alliant Energy (2011 – 2012)**

Provided audit support for one of the company’s gas and electric utilities, Interstate Power & Light, during a management audit ordered by one of its two regulatory jurisdictions. Conducted a pre-audit of distribution operations and resource planning processes to provide the client with potential audit issues. Assisted the client throughout the audit process in responding to information requests, preparing company executives and management personnel for audit interviews, and management of preliminary audit issues and findings by the independent audit firm.

#### **Ameren Illinois Utilities (2009 – 2010)**

Performed a number of benchmark analyses to compare each of the client’s A&G and O&M expenses, on a per-customer basis, to various peer groups conducted for the client’s natural gas





and electric operations. Analyses were performed for natural gas, electric and combination utilities with both electric and gas operations. Various iterations of the analyses were prepared to make the peer group of utilities more comparable to the characteristics of the client's utility operations. Served as an expert witness on behalf of the client in a consolidated general rate case proceeding of its three utility subsidiaries before the Illinois Commerce Commission.



## EXPERT WITNESS TESTIMONY PRESENTATION

- Alaska Regulatory Commission
- Arkansas Public Service Commission
- British Columbia Utility Commission (Canada)
- Colorado Public Utility Commission
- Connecticut Department of Public Utility Control
- Delaware Public Service Commission
- Illinois Commerce Commission
- Idaho Public Utilities Commission
- Indiana Utility Regulatory Commission
- Kansas Corporation Commission
- Kentucky Public Service Commission
- Maine Public Utilities Commission
- Manitoba Public Utilities Board (Canada)
- Massachusetts Department of Utilities
- Minnesota Public Utilities Commission
- Missouri Public Service Commission
- Montana Public Service Commission
- New Brunswick Energy and Utilities Board (Canada)
- New Hampshire Public Utilities Commission
- North Dakota Public Service Commission
- Oklahoma Corporation Commission
- Oregon Public Utility Commission
- Pennsylvania Public Utility Commission
- South Dakota Public Utilities Commission
- Washington Utilities and Transportation Commission
- Wyoming Public Service Commission
- Federal Energy Regulatory Commission



## SELECTED PUBLICATIONS / PRESENTATIONS

“Enhancing the Profitability of Growth,” American Gas Association, Rate and Regulatory Issues Seminar, April 4 - 7, 2004

“Regulatory Treatment of New Generation Resource Acquisition: Key Aspects of Resource Policy, Procurement and New Resource Acquisition,” Law Seminars International, Managing the Modern Utility Rate Case, February 17 - 18, 2005

“Managing Regulatory Risk – The Risk Associated with Uncertain Regulatory Outcomes,” Western Energy Institute, Spring Energy Management Meeting, May 18 - 20, 2005

“Capital Asset Optimization – An Integrated Approach to Optimizing Utilization and Return on Utility Assets,” Southern Gas Association, July 18 - 20, 2005

“Resource Planning as a Cost Recovery Tool,” Law Seminars International, Utility Rate Case Issues & Strategies, February 22 - 23, 2007

“Natural Gas Infrastructure Development and Regulatory Challenges,” Southeastern Association of Regulatory Utility Commissioners, Annual Conference, June 4 – 6, 2007

“Resource Planning in a Changing Regulatory Environment,” Law Seminars International, Utility Rate Cases – Current Issues & Strategies, February 7 - 8, 2008

“Natural Gas Distribution Infrastructure Replacement,” American Gas Association, Rate Committee Meeting and Regulatory Issues Seminar, April 11 – 13, 2010

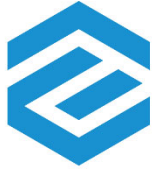
“Building a T&D Investment Program to Satisfy Customers, Regulators and Shareholders,” SNL Webinar, March 27, 2014

“Utility Infrastructure Replacement; Trends in Aging Infrastructure, Replacement Programs and Rate Treatment,” Large Public Power Council, Rates Committee Meeting, August 14, 2014

“Natural Gas in the Decarbonization Era, Gas Resource Planning for Electric Generation,” EUCI, January 22-23, 2020



# **Exhibit RJA-2**



**ATRIUM  
ECONOMICS**  
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Philadelphia Gas Works

# Weather Normalization Adjustment Review

February 27, 2025



## Table of Contents

Acronyms and Key Terms.....	i
Executive Summary.....	1
Introduction .....	3
The Role of a Weather Normalization Mechanism.....	3
The Benefits of a Weather Normalization Mechanism.....	5
Background .....	7
History of PGW’s WNA Mechanism.....	7
PGW’s WNA Formula .....	8
Analysis and Testing of PGW’s WNA Mechanism.....	11
Findings and Recommendations .....	14
Stress Test Analysis .....	15
Stress Test of WNA Formula.....	15
Weather Analysis .....	18
Historical Dispersion between NHDD and AHDD in Philadelphia (2004-2023).....	18
Shoulder Months in Philadelphia .....	18
Winter Months in Philadelphia .....	19
Weather Trends .....	19
Internal Processes and Controls around WNA Mechanism.....	22
Forecasting Process.....	22
Billing Controls .....	22
Conclusions and Recommendations .....	23

## List of Tables

Table 1: Representative Summary of Data Removed from Analysis for a Given Month.....	11
Table 2: Summary of Atrium Testing of WNA for the Residential Class.....	12
Table 3: Summary of Atrium Testing of WNA for the PHA Class .....	13
Table 4: Summary of Atrium Testing of WNA for the Commercial Class .....	13
Table 5: Summary of Atrium Testing of WNA for the Industrial Class .....	14



## Table of Figures

Figure 1: PGW's WNA Formula.....	9
Figure 2: WNA Model Results for January 2022 – HL Held Constant at Average Residential HL of 129 Ccf vs. Regression.....	15
Figure 3: WNA Model Results for June 2022 Billing – HL Held Constant at Average Residential HL of 3 Ccf vs. Regression.....	16
Figure 4: October Variance from Normal 2004-2023 .....	18
Figure 5: April Variance from Normal 2004-2023.....	18
Figure 6: May Variance from Normal 2004-2023 .....	18
Figure 7: November Variance from Normal 2004-2023 .....	19
Figure 8: December Variance from Normal 2004-2023.....	19
Figure 9: January Variance from Normal 2004-2023.....	19
Figure 10: February Variance from Normal 2004-2023.....	19
Figure 11: March Variance from Normal 2004-2023.....	19
Figure 12: 20-Yr Average HDD/Day for Major Pennsylvania Cities .....	20
Figure 13: Philadelphia 20-Year Weather Trend .....	20
Figure 14: Normal Weather under Varying Averaging Scenarios for Philadelphia .....	21



## Acronyms and Key Terms

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**AHDD** – Actual experienced heating degree days for the billing cycle. The degree day data is provided by the National Weather Service and measured at the Philadelphia International Airport.

**BC** – Billing cycle (“BC”) is the actual number of days shown on the bill that the Customer receives for service.

**BL** – Base load (“BL”) per billing day is the number of Mcf per Customer used per day for non-heating purposes based on usage by Customers to which this adjustment applies. It is determined separately for each individual customer and will be revised annually to reflect the non-temperature sensitive usage of Customers to which the adjustment applies reflected in the prior heating season’s sales. If an individual customer base load is not available, the average base load for the related customer class will be applied.

**DC** – Delivery Charge.

**Dead-band** – The deadband percentage is set as 1%, this represents the margin whereby the heating degree days may vary and there would be no WNA charge or credit. When the weather is colder than normal, the deadband is added to NHDD. And when the weather is warmer than normal, the dead-band is subtracted from NHDD.

**DOM** – A domestic factor, or base load calculation, developed by classes of customers for summer months usage in July, August and September, and utilized for purposes of developing sendout forecasts.

**Fictitious Rate Class** – A rate class designed to account for a premises where a customer has moved from the premises and PGW has continued gas service in anticipation of a new customer.

**HDD** - The positive difference between 65 degrees and the actual temperature. If the temperature were 65 degrees or higher, the AHDD would be zero.

**HL** – Normalized amount of gas used for heating purposes or Heating Load (“HL”). HL is the Customer’s total usage (“TU”) minus the normal gas usage for non-heating purposes derived by multiplying each customer’s base load (“BL”) by the number of days in the billing cycle (“BC”).

**NHDD** – Normal heating degree days for any given calendar day within a month are based on the normal weather determination applied in the Company’s most recent base rate case, currently twenty years, as approved at Docket No. R-2017-2586783. The NHDD provided for in the formula are the total number of NHDD for the billing cycle. The degree day data is provided by the National Weather Service and measured at the Philadelphia International Airport.

**SA** – Service Agreement





**TU** – Total usage for the billing cycle. TU is measured in Mcf.

**WNA** – Weather Normalization Adjustment mechanism



## Executive Summary

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Atrium Economics, LLC (“Atrium”) was engaged by Philadelphia Gas Works (“PGW” or “the Company”) to review the assumptions, inputs, calculations, and billings surrounding PGW’s Weather Normalization Adjustment (“WNA”) formula for the 2022- 2023 and 2023-2024 heating seasons. This report serves to review the mechanics of PGW’s WNA to ensure that it is operating as set out in its tariff.

PGW was directed by Commission Order, to “address the Weather Normalization Adjustment portion of its tariff after conclusion of the pending base rate case at Docket No. R-2023-3037933 in PGW’s next base rate proceeding.”<sup>1</sup> That Order found that PGW had appropriately addressed a large rate spike produced by the WNA for June 2022 billings due to substantially warmer than normal temperatures in May 2022, by removing the month of May 2022 from the WNA calculation charges for June 2022, and excluding the month of May from the WNA calculation period in the future.

In our review of the WNA, Atrium finds that the WNA is an essential feature of PGW’s rate framework. Though a WNA mechanism is generally thought to be a neutral regulatory mechanism, it does offer distinct benefits to both the Company and its customers. The WNA provides customers with greater bill stability in the non-gas portion of their utility bills - a benefit during the winter months when gas prices tend to be at their highest, and a particular benefit for customers with high bills during the lengthy heating seasons in PGW’s service areas. The WNA provides the Company with a level of certainty around cash flows and fixed cost recovery by eliminating weather related volumetric volatility. This in turn could reduce the need for short-term borrowing or frequently filed rate cases.

For PGW – a municipal gas company with no shareholders and whose only source of revenue is from the bonds that it can issue and the rates that it collects from customers, which contain very little (if any) margin for unplanned weather events – ensuring revenues are billed based on normal weather through the WNA is essential to PGW’s ability to successfully operate its utility and continue to provide safe and reliable service to its customers.

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<sup>1</sup> PPUC, Opinion and Order, R-2022-3034229, P-2022-3034264 (September 21, 2023) at 37.



Specific to Atrium’s review and analysis, for the 2022-2023 and 2023-2024 WNA periods, Atrium finds that the mechanism is operating as planned and is appropriately calculated with only isolated and minor exceptions. As indicated above, we note that PGW has removed the month of May from its WNA adjustment period, but there were no conditions that occurred in the period Atrium reviewed, that could have produced anomalous charges as that which occurred in June 2022 due to weather conditions that occurred in May 2022. Should PGW wish to reintroduce the month of May into its WNA adjustment period, Atrium would recommend a billing control such as placing a cap on WNA charges as a percentage of total distribution charges as sufficient protection against the reoccurrence of another anomalous billing event due to warmer than normal weather.

Atrium was able to recalculate customer specific WNA charges within \$1.00 for 99% of the Residential Class, 98% of the PHA Class, 93% of the Commercial Class, and 91% of the Industrial Class. The majority of exceptions Atrium encountered in its review and recalculation of WNA charges were attributable to the billing data provided to Atrium for testing and not the WNA charges – therefore, PGW’s application of the WNA is in compliance with its tariff. There were very few unexplained exceptions that were not data related.

Overall, Atrium finds that WNA operates as it was designed since its inception in 2002, is properly calculated with only minor exceptions and is without material error for the period reviewed. Atrium’s analysis is summarized in the Section entitled, “Analysis and Testing of PGW’s WNA Mechanism” of this Report.

# Introduction

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## The Role of a Weather Normalization Mechanism

A Weather Normalization Adjustment (“WNA”) mechanism is a form of Revenue Decoupling. Revenue Decoupling is a regulatory mechanism that separates a utility’s revenues (i.e., non-gas or margin revenues) from its level of sales, thereby “breaking the link” and ensuring that the utility recovers a reasonable level of revenues (regardless of cost increases, weather, customer conservation, etc.) even as sales fluctuate. The WNA mechanism is considered to be a partial decoupling mechanism since it only accounts for the changes in sales that occur due to differences between actual weather and normal weather.

Today approximately 67%<sup>2</sup> of investor-owned gas LDCs have some level of revenue decoupling, with approximately 28%<sup>3</sup> of these gas LDCs fully decoupled to provide recovery for lost revenue due to declining volumetric load for any reason, weather, economic cycles, customer attrition, declining use per customer, energy efficiency, conservation, hybrid heating, electrification, etc.<sup>4</sup> The full decoupling mechanism entirely removes the throughput incentive and aligns the gas utility with efficiency and conservation objectives. The WNA will adjust the customer bill for weather impact (outside of any dead band) but does not insure the Company’s authorized revenue requirement will be achieved. Adding customers or increasing load is still a way to increase revenue between rate cases. Therefore, the WNA does not remove the throughput incentive for the gas company.

The WNA is a revenue-neutral partial decoupling mechanism that contributes to revenue stability for the Company and bill stability for customers. The mechanism works bi-directionally to insulate customers from high bills during extremely cold months, while also limiting the decline in revenue for PGW during unseasonably warm heating months. This stabilizes PGW’s cash flow, and in turn, allows PGW to more acutely focus on operational items within its control. Further, since the WNA mechanism is only applied to the distribution component of the bill, and not the natural gas commodity charge, incentives for conservation and efficient consumption for the customer are maintained.

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<sup>2</sup> S&P Global Market Intelligence, Use of adjustment clauses, as of June 2022.

<sup>3</sup> Ibid.

<sup>4</sup> Though comparable data is not available for municipal gas utilities, the overall trend suggests a high percentage of decoupling across various types of gas utilities in the U.S.



To understand the importance of the WNA to the Company, it is necessary to understand how utility rates are set and how costs are recovered. Utility rates are established to allow the utility to recover its authorized revenues, based on expected throughput assuming normal weather. When actual weather deviates from normal weather the rates either over-collect or under-collect the authorized level of revenues. A WNA mechanism adjusts a customer's bill due to these variations from normal weather. For billing periods that are colder than normal, a credit would be applied to the bill. For billing periods that are warmer than normal, a surcharge would be applied to the bill. WNA mechanisms are typically effective for usage during the heating season calendar months (e.g., October through April). WNAs reduce the amount of variation in both customer bills and utility revenues by addressing the difference between actual weather and normal weather.

The WNA is intended to be revenue neutral such that it equally protects the customer and the utility. If a utility finds that it is consistently surcharging customers for WNA charges, it means that the estimate of normal weather the utility uses to set rates (PGW uses 20-year average) is projecting colder weather than what is actually occurring, i.e., is not representative of actual weather norms. If this is the case, rates are set with higher expectations for throughput – or – said another way, rates are set too low – simply stated,  $\text{Rates} = \text{Cost} / \text{Estimated Throughput}$  (under normal weather conditions). If a company were consistently making surcharges for the WNA – shorter averaging periods of ten to fifteen years may be appropriate for determining an estimate of normal weather.

The utility's unit rates and charges for gas service are essentially derived by dividing the appropriate costs to be recovered through rates by the weather-normalized gas volumes. These rates and charges are designed to provide the utility with an opportunity to recover the significant level of fixed costs it incurs to provide utility service at the levels determined in the utility's last completed rate case. Fixed costs are costs incurred by a utility that do not vary with the amount of gas delivered to customers.

The process of computing revenue under normal weather conditions consists of either increasing or decreasing actual gas volumes, in relative terms, based on the difference between normal temperatures established for the utility's service area and actual temperatures experienced during the weather normalization period. If actual temperatures are normal, the utility has a reasonable opportunity to fully recover its fixed costs of service at established sales levels. Unfortunately, normal temperatures seldom, if ever, occur. Therefore, because of abnormal weather, the revenues and resulting earnings of a utility can vary widely from the levels authorized by its regulator.

Since the bills of gas customers are largely based on the level of gas usage, temperature-sensitive customers' monthly bills can vary widely due to changing weather conditions. Under traditional ratemaking methods, if actual temperatures were colder than normal, the typical gas customer would use more gas, pay more for service, and potentially overpay for its share of

fixed costs. This occurs because the unit rates used to recover fixed costs are not reduced to recognize the higher gas volumes used by customers during colder weather. Since the gas utility's level of fixed costs does not change, the higher gas volumes applied against the same unit rate would generate comparatively higher non-gas revenues than the level of fixed costs established for ratemaking purposes. Conversely, in warmer than normal weather, the reverse situation will occur. Customers' gas usage decreases with warmer temperatures, thus generating comparatively lower non-gas revenues than required to recover the gas utility's total fixed costs that do not decrease due to warm weather.

## The Benefits of a Weather Normalization Mechanism

There are several tangible customer benefits associated with the WNA mechanism: (1) it reduces bill variability due to weather for the month when the variation occurs; (2) the adjustment is tied to each customer's specific gas usage; (3) it eliminates the possibility that the customer will be charged more than what was anticipated in rates under normal weather conditions, and (4) individual customers still retain the gas savings from their own energy conservation practices. Because PGW's WNA adjusts billings on a real-time basis, the customer can more readily link the resulting billing adjustment with the weather causing the adjustment. In a cold winter with high gas bills, customers receive the benefits of WNA bill reductions in the same monthly bills in which the colder weather occurred.

From the Company's standpoint, the WNA reduces revenue recovery volatility attributable to weather. This will stabilize cash flows from year to year and will provide the Company a reasonable opportunity to realize its approved level of revenue and cost recovery. Deviations from normal weather can result in over or under recovery and produce erratic financial results for the Company. With greater cash flow stability, the WNA can reduce the need for short-term borrowing and the associated carrying costs.

A utility's financial health is directly tied to its ability to recover the total cost of service approved by its regulator through the revenues upon which its base rates were previously established. The WNA ensures that the uncontrollable nature of weather does not impede the utility's ability to earn its revenue requirement or realize its approved level of cost recovery. For PGW – a municipal gas company with no shareholders and its only source of revenue is from the rates that it collects from customers (which contain very little margin for unplanned weather events) and the bonds that it can issue; ensuring revenues are collected based on normal weather through the WNA is essential. In addition, the WNA mechanism is generally deemed to be credit enhancing by the credit rating agencies and may reduce the need for frequent base rate proceedings.



The WNA mechanism ensures that the Company is provided a reasonable opportunity to recover its fixed costs, based on normal weather, and its customers pay no more or no less for delivery service than what is supported by the underlying costs.

# Background

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## History of PGW's WNA Mechanism

Philadelphia Gas Works' ("PGW" or "the Company") WNA was proposed and approved in 2002 to neutralize the effects of weather on the Company's revenues. In four of the five years prior to 2002, PGW had experienced significantly warmer than normal winters, and as a result experienced significant financial strain.<sup>5</sup> PGW cited the following primary benefits of the WNA: i) stabilizes cash flow from year to year; ii) can reduce the need for short-term borrowing from year to year; iii) positively affects PGW's credit rating; and iv) reduce the need for costly base rate proceedings.<sup>6</sup>

It was PGW's belief that the WNA mechanism would neither harm nor benefit ratepayers but would allow the Company cash flow stability and the ability to recover its revenue requirement.<sup>7</sup> The WNA was established to apply to firm rate classes for customers classified as Schedules GS, MS, and PHA ("heating" and "heating only" customers), except for Gas usage under the Special Provisions – Air Conditioning of those rates.<sup>8</sup> Prior to the 2021-2022 heating season, the mechanism applied to usage from October 1 through May 31st, with the adjustment occurring contemporaneously in the same billing month the customer's invoice is produced. In 2023, the Pennsylvania Public Utility Commission ("PUC") determined that the month of May should be excluded from the WNA adjustment calculation period, due to anomalous charges that resulted from extreme warmer than normal weather in May of 2022.

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<sup>5</sup> Direct Testimony Bogdonavage, o/b/o Philadelphia Gas Works, Docket No. R-00017034 (February 2002) at 3.

<sup>6</sup> Direct Testimony of Craig E. White, o/b/o Philadelphia Gas Works, Docket No. R-00017034 (February 2002) at 4 (of the pdf).

<sup>7</sup> Id. at 5.

<sup>8</sup> See PGW Tariff Sheet 149, where it states, "The Weather Normalization Adjustment shall be applied to each Mcf (1,000 cubic feet) used for heating purposes under Rate Schedules GS, MS, and PHA ("heating" and "heating only" customers), except for Gas usage under the Special Provisions – Air Conditioning of those rates. The Weather Normalization Adjustment will be applied to customer usage during the period of October 1 through May 31 of each year for each billing cycle (except for the 2021-2022 heating season when the Weather Normalization Adjustment will exclude May 1 through May 31 to the extent that the application would produce a charge to the customer))"





PGW removed May from its WNA adjustment period since it had experienced a significant anomaly in the application of its May WNA adjustment in its June billings, which produced unusually large and unanticipated charges to customers in several billing cycles with May usage. The unusual charges resulted from actual heating degree days (“HDD”) that were significantly lower than “normal” for the month of May, particularly in billing cycles beginning in the mid to latter part of the billing month. As a result, PGW determined that the June charges should be reversed until it had conducted an internal investigation into the WNA formula. It later determined that May should be removed entirely from the WNA adjustment period.

PGW’s WNA was the first in Pennsylvania. It is customer-specific and applies the WNA factor to the actual heating usage of a given customer, which modifies the customer’s usage to what it would have been for warmer or colder weather.<sup>9</sup> The WNA was approved for a three-year pilot, after which the Company was to conduct a review of the costs and benefits of the WNA.<sup>10</sup> The WNA was reviewed by PGW and interveners at the end of the three-year pilot and was stipulated by the parties to continue permanently.<sup>11</sup>

PGW’s WNA operated without significant issue since it was approved in 2002 and affirmed in 2006 until it experienced the forementioned anomalous charges relating to May 2022 usage. Modifications to the structure of the WNA have been infrequent and are limited to modifications in 2017 and 2023, when the Commission allowed PGW to shorten the averaging period it used for the determination of normal weather from 30 years to 20 years pursuant to a rate case settlement,<sup>12</sup> and the month of May was removed from the WNA adjustment period, respectively.<sup>13</sup>

## PGW’s WNA Formula

PGW’s Tariffed Weather Normalization Adjustment (“WNA”) is a charge or credit applied to a customer’s bill that adjusts for warmer or colder than normal weather during a billing cycle. As a general summary, if the weather is warmer than normal, the WNA is a charge on the bill. When the weather is colder than normal, the WNA is a credit on the bill. There is no WNA charge or credit on a customer’s bill if the weather is within 1.0% warmer or colder than normal. The WNA is applied to customer usage from October 1 through April 30. PGW’s WNA formula is as defined in Figure 1. The adjustment is made “real time” or concurrent with the delivery bill covering the same period.

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<sup>9</sup> Id. at 9.

<sup>10</sup> Pennsylvania Public Utility Commission Order, R-00017034 (July 29, 2002) at P. 5.

<sup>11</sup> Stipulation of PGW, OCA and OTS, Docket No. R-00017034 (May 4, 2006)

<sup>12</sup> Pennsylvania Public Utility Commission Opinion and Order, Docket No. R-2017-2586783 (November 8, 2017) at P.16.

<sup>13</sup> Pennsylvania Public Utility Commission Opinion and Order, Docket No. R-2022-3034229 and P-2022-3034264 (September 21, 2023) at p. 38

Figure 1: PGW's WNA Formula

$$WNA = DC \times \left[ (HL \times \frac{NHDD \pm (NHDD \times 1\%) }{AHDD}) - HL \right]$$

$$HL = TU - (BL \times BC)$$

**BL** = Mcf per Customer used per day for non-heating – calculated each September using most recent July/August average customer use per day (Atrium’s data was provided in Ccf)

**BC** = Actual number of days in the billing cycle (excluding first day)

**HL** = Amount of gas used for heating purposes

**DC** = Delivery charge in \$/Mcf (Atrium’s data required us to convert to \$/Ccf)

**NHDD** = Normal heating degree days (20-year average approved in last rate case)

**AHDD** = Actual heating degree days (National Weather Service – Philadelphia Intl. Airport)

**Deadband %** = 1%

The inputs to the WNA are more fully explained below:

- TU – total usage (“TU”) for the Customer-specific billing cycle, measured in Mcf.
- BL – base load (“BL”) Mcf is the Mcf per Customer used per day for non-heating purposes. BL is determined separately for each individual Customer and is revised annually based on non-heating month usage (average daily usage for the preceding July and August). BL represents the gas usage per day for non-heating purposes. If an individual Customer’s BL is not available, the default BL for the related customer class is applied.
- BC – billing cycle (“BC”) is the actual number of days shown on the bill that the Customer receives for service.
- HL – normalized amount of gas used for heating purposes (“HL”). HL is the Customer’s TU minus the normal gas usage for non-heating purposes derived by multiplying BL and BC.
- DC – delivery charge in \$/Mcf (“DC”).
- NHDD – Normal heating degree days for any given calendar day within a month are based on the normal weather determination applied in the Company’s most recent base rate case, currently twenty years. The NHDD provided for in the formula are the total number of NHDD for the billing cycle. The degree day data is provided by the National Weather Service and measured at the Philadelphia International Airport.
- AHDD – actual experienced heating degree days (“AHDD”) for the billing cycle. The degree day data is provided by the National Weather Service and measured at the Philadelphia International Airport.

- Dead-band Percentage – Set as 1%, this represents the margin whereby the heating degree days vary and there would be no WNA. When the weather is colder than normal, the deadband is added to NHDD. And when the weather is warmer than normal, the dead-band is subtracted from NHDD.

The BL is multiplied by the number of days in the BC to calculate the normal gas usage for non-heating purposes. The non-heating gas usage calculated above, BL, is subtracted from TU to derive the normalized amount of gas used for HL. NHDD are divided by AHDD to derive how much the weather has varied from the normal weather. The normalized amount of gas used for heating purposes, HL, is multiplied by the ratio of NHDD to AHDD to calculate the weather normalized gas usage. HL is then subtracted from this to derive the difference between actual and normalized gas usage. This amount is then multiplied by the base rate DC to calculate the WNA. The resulting WNA charge may be prorated for billing cycles that include days that are not subject to the WNA by dividing the total number of WNA-applicable days by the total days in the billing cycle.<sup>14</sup>

PGW's WNA is applied to all firm residential, commercial, and industrial customers that are either classified as "heat only" or "heat and domestic", as well as Residential PHA Tenant and Philadelphia Housing Authority heat-related classes.

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<sup>14</sup> PGW, Weather Normalization Adjustment Report to the Pennsylvania Public Utility Commission, Docket No. P-2022-3033477, (August 12, 2022) at 5-6.

# Analysis and Testing of PGW’s WNA Mechanism

Atrium performed an independent evaluation of whether the WNA, as currently designed, provides appropriate revenue requirement recovery, including a review of the underlying data, structure of the WNA, calculations, and mechanics.

In order to verify that PGW’s WNA calculations were made in accordance with its Tariff, Atrium tested PGW’s calculations by recalculating a broad selection of 2022-2023 and 2023-2024 WNA charges and compared its calculations to those billed by PGW. To perform this test, Atrium began with monthly billing data from PGW covering the period from October 2022 through May of 2024, by customer, for all bills sent during the month. The billing data included the following fields: revenue month/year, the service agreement (“SA”) Type, the SA ID (or customer ID), Customer Responsibility Program (“CRP”) indication, rate class description, billing cycle start date, billing cycle end date, number of days in the billing cycle, base load calculation, usage quantity (in Ccf), and the WNA charge on the customer’s bill.

The data that Atrium was provided excluded all non-heating rate classes. From this data set, Atrium removed all bills for which the number of cycle days were less than 25 or greater than 35, all bills where the start date was more than two months prior to the first day of the billing month, and all Customer Choice customers that returned to PGW service (due to use of default baseloads in the dataset Atrium was provided, whereby the WNA was calculated with a historical premises baseload). For any given month under analysis, the maximum bills removed from Atrium’s analysis, for any one of these reasons are summarized below.

Table 1: Representative Summary of Data Removed from Analysis for a Given Month

	Customer Choice		BC > 35 or < 25		BC Start Date > 60 days prior to Billing Month but BC ≥ 25 and ≤ 35	
	Average	Max	Average	Max	Average	Max
Residential	22,446	27,358	11,082	15,019	131	286
PHA	1	4	95	167	1	7
Commercial	541	633	332	406	12	48
Industrial	14	18	5	15	0	1
TOTAL	23,001	28,007	11,514	15,448	144	303



Atrium calculated the AHDD and NHDD by summing the HDD for all applicable days in the billing cycle, using NOAA weather data provided to Atrium by PGW for the Philadelphia International Airport. Normal HDD was based on a 20-year average through May 2019, as was filed by PGW in its rate case prior to its last rate case. The calculation of Normal HDD was updated in PGW’s most recent rate case and was effective when new rates went into effect in December 2023. Atrium also pulled the applicable distribution rate from a table provided by PGW. Atrium provided an independent calculation of each customer’s weather normalization charge, identifying differences as shown below.

Table 2: Summary of Atrium Testing of WNA for the Residential Class

RESIDENTIAL							
	Customers	No	Within ±	Within ±	Differences	Sum of All	Max Ratio
	Analyzed	difference	\$0.01	\$1.00	> \$1.00	Differences	NHDD/AHDD
		%	%	%		(Under)/Over	
Oct-22	434,249	79%	96%	99%	1%	\$ (5,845.04)	1.44 x
Nov-22	434,063	63%	88%	98%	2%	\$ 13,663.10	1.80 x
Dec-22	435,952	66%	93%	100%	0%	\$ 1,328.82	1.80 x
Jan-23	438,331	63%	88%	99%	1%	\$ 12,081.37	1.46 x
Feb-23	437,681	61%	83%	98%	2%	\$ 22,797.48	1.46 x
Mar-23	437,795	62%	87%	98%	2%	\$ 17,531.08	1.47 x
Apr-23	437,090	66%	91%	99%	1%	\$ 12,112.63	1.60 x
May-23	433,879	82%	97%	100%	0%	\$ 961.75	1.56 x
Oct-23	433,196	83%	98%	100%	0%	\$ 237.11	1.51 x
Nov-23	436,257	66%	93%	99%	1%	\$ 7,350.70	1.56 x
Dec-23	438,798	60%	89%	100%	0%	\$ 3,417.21	1.56 x
Jan-24	462,000	63%	89%	99%	1%	\$ 11,538.27	1.37 x
Feb-24	444,393	63%	88%	98%	2%	\$ 13,535.21	1.44 x
Mar-24	445,601	63%	88%	98%	2%	\$ 19,477.78	1.44 x
Apr-24	445,357	64%	91%	100%	0%	\$ 6,539.45	1.44 x
May-24	443,214	78%	96%	99%	1%	\$ 4,247.94	1.57 x

Table 3: Summary of Atrium Testing of WNA for the PHA Class

		PHA					
	Customers	No difference %	Within ± \$0.01 %	Within ± \$1.00 %	Differences > \$1.00 %	Sum of All Differences (Under)/Over	Max Ratio NHDD/AHDD
Oct-22	4,411	83%	95%	100%	0%	\$ (84.17)	1.19 x
Nov-22	4,426	65%	87%	99%	1%	\$ 174.33	1.60 x
Dec-22	4,434	69%	91%	100%	0%	\$ 21.84	1.56 x
Jan-23	4,432	66%	88%	100%	0%	\$ 172.14	1.46 x
Feb-23	4,423	65%	82%	97%	3%	\$ 401.49	1.45 x
Mar-23	4,445	66%	86%	97%	3%	\$ 365.56	1.42 x
Apr-23	4,430	71%	90%	99%	1%	\$ 139.64	1.56 x
May-23	4,394	78%	93%	99%	1%	\$ 44.83	1.56 x
Oct-23	4,322	86%	98%	100%	0%	\$ 2.00	1.33 x
Nov-23	4,388	71%	92%	99%	1%	\$ 129.78	1.50 x
Dec-23	4,437	33%	46%	96%	4%	\$ 1,081.20	1.33 x
Jan-24	4,471	59%	78%	97%	3%	\$ 415.15	1.19 x
Feb-24	4,505	67%	88%	97%	3%	\$ 207.68	1.26 x
Mar-24	4,660	66%	87%	97%	3%	\$ 338.50	1.44 x
Apr-24	4,842	67%	90%	99%	1%	\$ 209.65	1.34 x
May-24	4,812	77%	93%	99%	1%	\$ 153.69	1.40 x

Table 4: Summary of Atrium Testing of WNA for the Commercial Class

		COMMERCIAL					
	Customers	No difference %	Within ± \$0.01 %	Within ± \$1.00 %	Differences > \$1.00 %	Sum of All Differences (Under)/Over	Max Ratio NHDD/AHDD
Oct-22	19,918	78%	89%	97%	3%	\$ (3,503.37)	1.19 x
Nov-22	19,920	69%	82%	94%	6%	\$ 11,795.59	1.70 x
Dec-22	19,984	70%	86%	94%	6%	\$ 82.57	1.56 x
Jan-23	20,160	67%	82%	91%	9%	\$ 19,407.78	1.46 x
Feb-23	20,081	65%	78%	90%	10%	\$ 34,110.97	1.46 x
Mar-23	20,287	65%	82%	91%	9%	\$ 19,223.07	1.45 x
Apr-23	20,247	70%	84%	93%	7%	\$ 12,605.43	1.47 x
May-23	20,189	82%	91%	98%	2%	\$ 783.92	1.42 x
Oct-23	19,999	83%	93%	99%	1%	\$ 827.74	1.42 x
Nov-23	20,107	71%	87%	95%	5%	\$ 5,506.76	1.48 x
Dec-23	20,213	32%	44%	80%	20%	\$ 3,065.34	1.31 x
Jan-24	20,279	66%	82%	91%	9%	\$ 14,355.95	1.20 x
Feb-24	20,336	66%	81%	91%	9%	\$ 17,786.94	1.27 x
Mar-24	20,474	67%	80%	91%	9%	\$ 22,289.89	1.40 x
Apr-24	20,455	68%	85%	93%	7%	\$ 7,458.69	1.34 x
May-24	20,457	79%	90%	97%	3%	\$ 2,516.31	1.49 x



Table 5: Summary of Atrium Testing of WNA for the Industrial Class

INDUSTRIAL							
Customers	No difference %	Within ± \$0.01 %	Within ± \$1.00 %	Differences > \$1.00 %	Sum of All Differences (Under)/Over	Max Ratio NHDD/AHDD	
Oct-22	414	71%	82%	94%	6%	\$ (334.52)	1.14 x
Nov-22	407	61%	72%	90%	10%	\$ 875.83	1.56 x
Dec-22	405	65%	80%	91%	9%	\$ (152.35)	1.56 x
Jan-23	402	58%	70%	89%	11%	\$ 2,216.25	1.45 x
Feb-23	340	59%	71%	90%	10%	\$ 1,907.53	1.45 x
Mar-23	413	58%	77%	90%	10%	\$ 1,397.42	1.41 x
Apr-23	335	60%	74%	91%	9%	\$ 909.11	1.41 x
May-23	328	77%	89%	97%	3%	\$ (48.22)	1.28 x
Oct-23	339	76%	86%	98%	2%	\$ 98.20	1.33 x
Nov-23	332	65%	80%	91%	9%	\$ 325.41	1.44 x
Dec-23	332	43%	53%	89%	11%	\$ 470.93	1.17 x
Jan-24	331	63%	76%	88%	12%	\$ 913.01	1.18 x
Feb-24	335	56%	71%	88%	12%	\$ 1,453.07	1.26 x
Mar-24	336	56%	70%	89%	11%	\$ 2,028.97	1.34 x
Apr-24	333	59%	76%	89%	11%	\$ 489.98	1.23 x
May-24	333	73%	86%	95%	5%	\$ 134.96	1.40 x

## Findings and Recommendations

Atrium finds that though there are calculation differences, nearly all differences were less than or equal to \$1.00. Though the majority of these minor differences with PGW remain unexplained, one known source of difference is due to customers who were involved in PGW's "Choice" shopping program, where those customers received a new service agreement when switching. The base loads associated with those accounts were transferred in PGW's billing data set at the default baseload, but for WNA billing purposes, PGW calculated a legacy baseload for the premises. Atrium has removed all known Choice customers from the data set, but it is possible that some remain. In addition, upon further examination with PGW, Atrium did learn that some exceptions were due to premises that are currently under the control of PGW, where there is no customer, and some non-WNA eligible customers were included in the data set, but not actually billed, which resulted in differences between Atrium's recalculation of the WNA and what PGW calculated. These latter known differences remain in the dataset and could reasonably explain the low level of differences month to month in excess of \$1. Atrium notes that the vast majority of differences between Atrium's recalculation of WNA charges and those charged to customers by PGW, were determined to be correctly calculated by PGW and were due to unknown limitations of the dataset that was provided to Atrium for testing by PGW.



# Stress Test Analysis

## Stress Test of WNA Formula

Atrium has analyzed performance of the WNA mechanism for January and June 2022 billing months under assumed weather scenarios ranging from 100% increase in AHDD over normal to 100% decrease in AHDD (1 HDD). Atrium is seeking to understand how the WNA performs when the HL calculation is held constant (to exaggerate the impact of an incorrect BL or HL) over the full range of weather deviations. Atrium compared the WNA performance by holding heat load constant at the average heat load generated for all residential customers to what would have been predicted via linear regression for HL. Because HL was held constant regardless of whether HDD was colder than normal or warmer than normal, the Ccf portion of the WNA adjustment would be lower than expected when weather was colder than normal, and higher than expected when weather was warmer than normal.

The results of those analyses are shown in Figure 2 and Figure 3, below, and emphasize the multiplicative effect of significantly warmer than normal temperatures and improperly specified heat loads that are increasingly large relative to the normal heat load/AHDD relationship

Figure 2: WNA Model Results for January 2022 – HL Held Constant at Average Residential HL of 129 Ccf vs. Regression

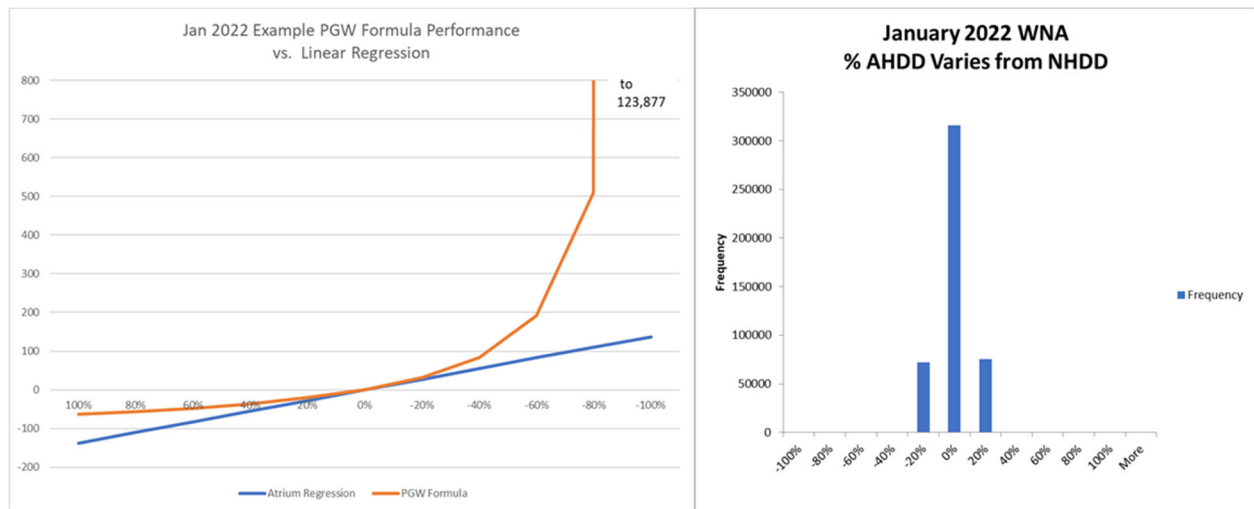
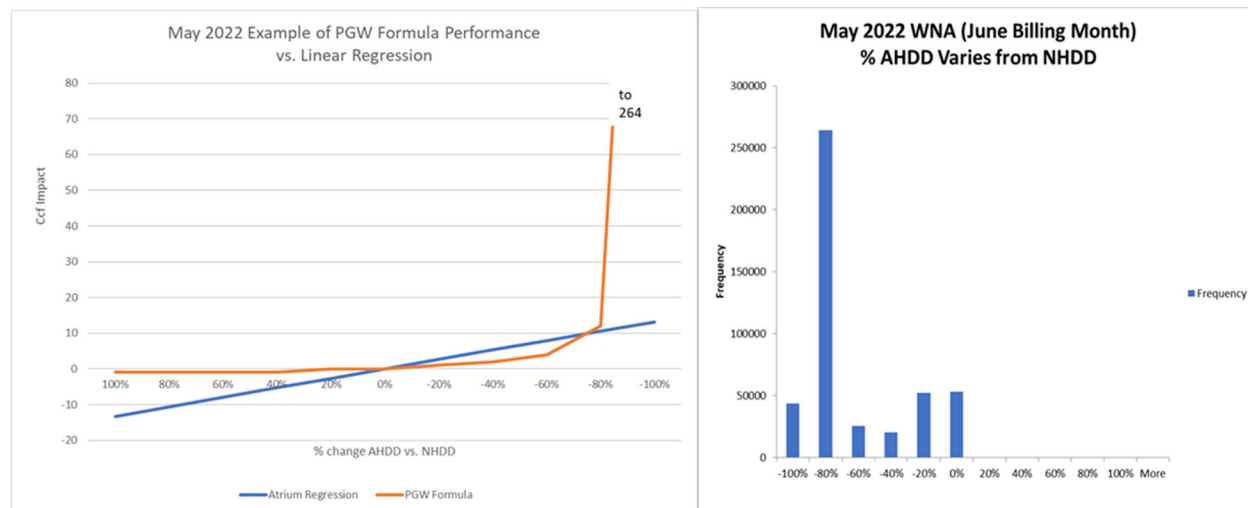




Figure 3: WNA Model Results for June 2022 Billing – HL Held Constant at Average Residential HL of 3 Ccf vs. Regression



The histograms to the right of each line graph, show actual residential bills for the month. It is interesting to note for May 2022, the month when PGW’s WNA produced a large price spike, 50,000 residential customers experienced weather during their billing cycle that was 100% warmer than normal; and an additional 250,000 residential customers experienced weather that was 80% warmer than normal, but on average the month of May 2022 was only 36% warmer than normal. As the above figures indicate, if WNA inputs are not specified correctly, the WNA formula could produce spiked results beyond 50% warmer than normal.

Atrium finds that the WNA performs well when the calculation of heat load for each customer is in line with historical linear relationships. But, when heat load is abnormally large in relation to what the historical linear relationship would predict, due either to the incorrect derivation of HL or BL, or due to unexplained non-heat-related customer usage above their BL, the NHDD/AHDD factor in the formula overestimates the impact of HDD when NHDD is significantly above AHDD (warmer than normal), and when heat load is unusually small the NHDD/AHDD factor underestimates the impact of HDD when temperatures are colder than normal. However, the impact is much more dramatic when weather is warmer than normal given the multiplier effect of the ratio once weather becomes more than 50% warmer than normal.

After having observed this WNA behavior, Atrium considers the removal of the month of May from the WNA period to be a sufficient billing control to mitigate the risk of large price spikes due to significantly warmer than normal weather, predominantly in a month of historically low levels of HDD. Further protection may be offered by establishing a billing control that places a percentage cap on individual WNA charges as a percentage of the distribution bill.<sup>15</sup>

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<sup>15</sup> Atrium also considered a billing control that would cap the NHDD/AHDD ratio in the WNA formula at 2.5x to ensure that the WNA formula would never make a weather adjustment that was greater than 60% warmer than normal. For example, if AHDD was 40 and NHDD was 100, the WNA ratio would be  $100/40 = 2.5$ ; and 40 AHDD is 60% below 100 NHDD, calculated as  $40/100-1$ . However, Atrium understands that PGW would not be able to implement such a proposal in its current billing system.



# Weather Analysis

## Historical Dispersion between NHDD and AHDD in Philadelphia (2004-2023)

Atrium examined AHDD vs. NHDD for each month for the past twenty years to understand how often each calendar month has averaged greater than 60% warmer than normal. The histograms chart the frequency of a given variation from normal weather. Deviation from normal weather is calculated as  $(\text{AHDD}_{\text{month}}/\text{NHDD}_{\text{month}}) - 1$ .

### Shoulder Months in Philadelphia

Figure 4: October Variance from Normal 2004-2023

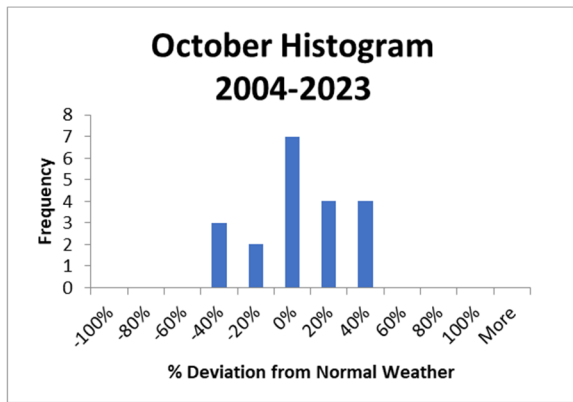


Figure 5: April Variance from Normal 2004-2023

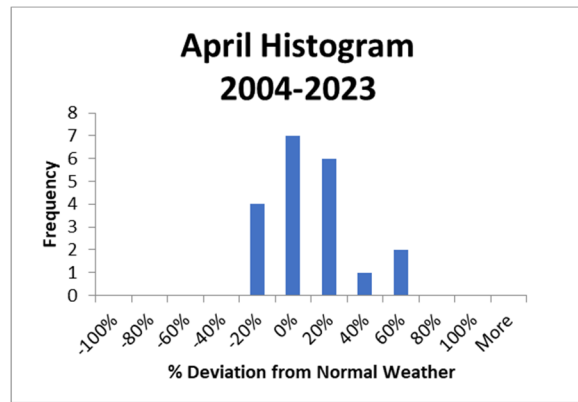
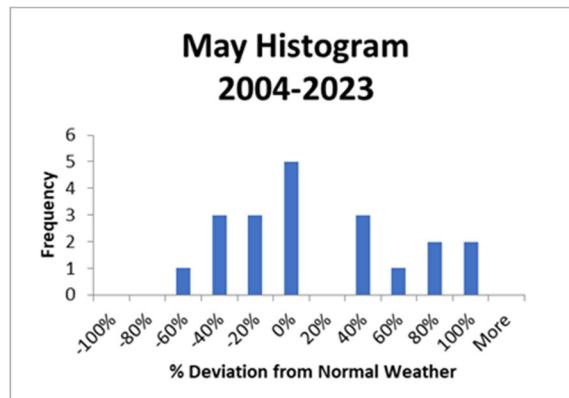


Figure 6: May Variance from Normal 2004-2023



As shown Figure 6, May is outside the typical shoulder months of April and October for heat-related gas usage and has much more variable weather than a typical shoulder month relative to normal weather. Figure 6 shows that only May has the propensity to deviate from normal weather by 100%, which occurred twice since 2004; and has been 60% warmer than normal once since 2004. No other month has experienced warmer than normal weather to that degree (i.e., 60% warmer than normal) during our study period 2004-2023.

### Findings and Observations

Weather in the shoulder months, and May in particular, tend to be more dispersed than during the winter months, leading to greater deviations from normal weather.

### Winter Months in Philadelphia

Figure 7: November Variance from Normal 2004-2023

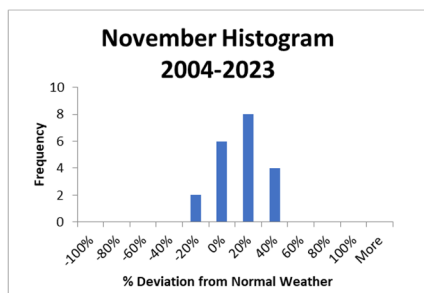


Figure 8: December Variance from Normal 2004-2023

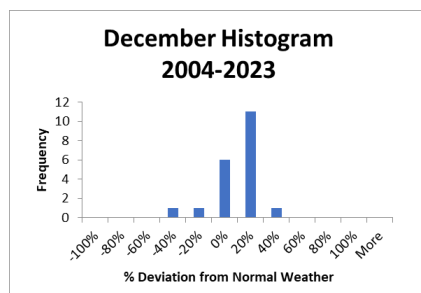


Figure 9: January Variance from Normal 2004-2023

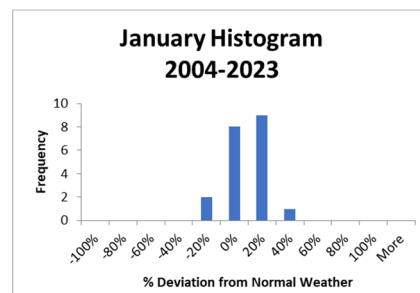


Figure 10: February Variance from Normal 2004-2023

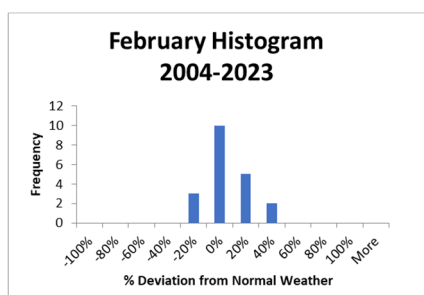
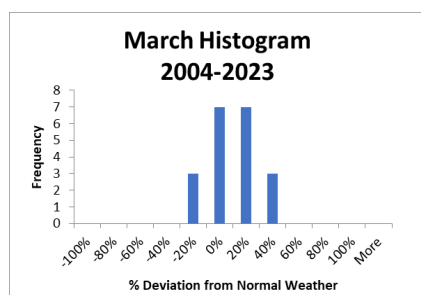


Figure 11: March Variance from Normal 2004-2023



### Weather Trends

Philadelphia is the warmest of the major Pennsylvania cities. On average, over the previous 20 years, the months of May, June, July, August, and September have little to no HDD. July and August provide the lowest possibility for heat-related gas usage, which supports PGW’s practice of looking to July and August usage to determine its daily base load calculation.



Figure 12: 20-Yr Average HDD/Day for Major Pennsylvania Cities

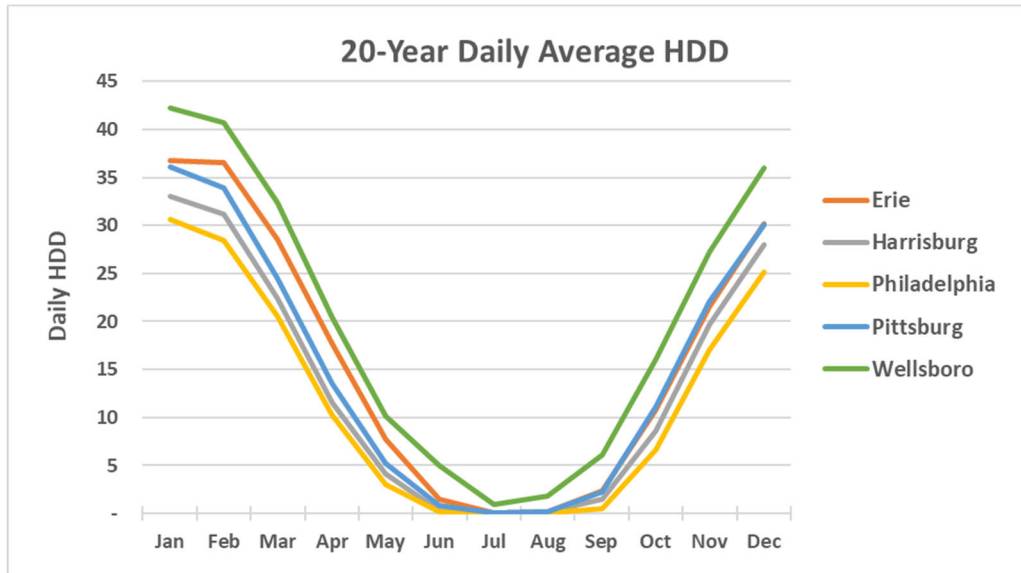


Figure 13: Philadelphia 20-Year Weather Trend

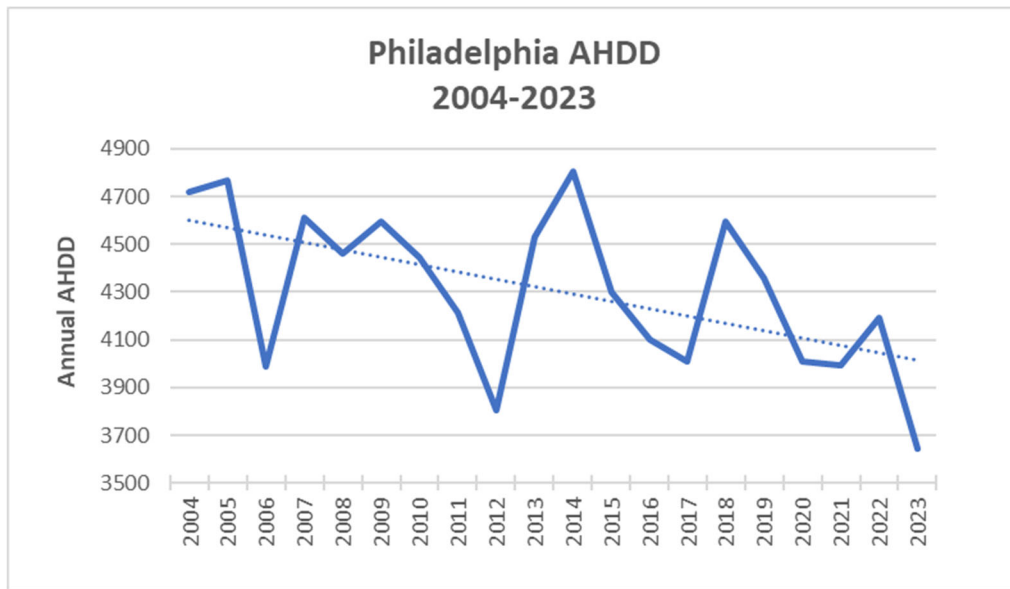
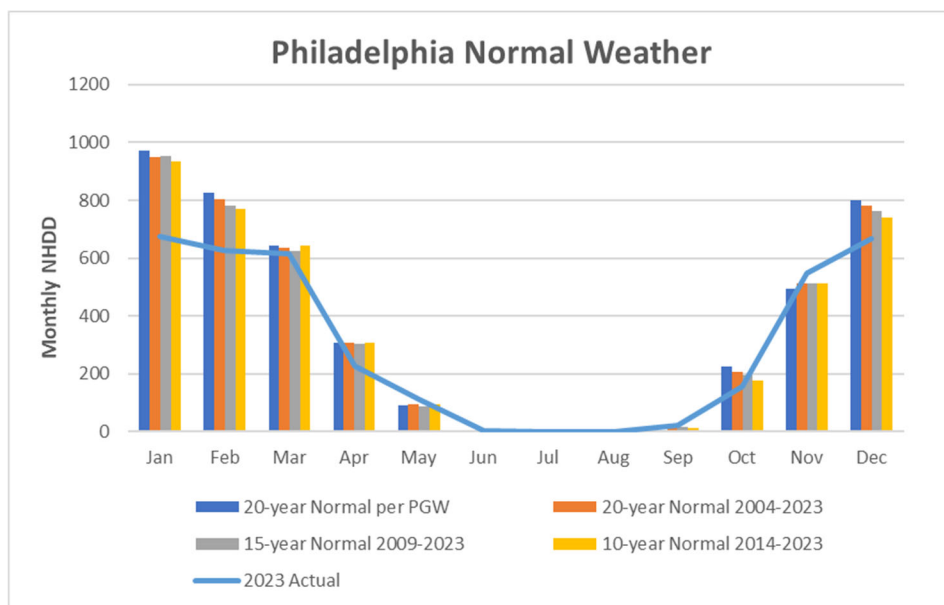


Figure 14: Normal Weather under Varying Averaging Scenarios for Philadelphia



Though, as shown in Figure 13, actual temperatures have been trending lower, Figure 14 shows that PGW’s calculation of normal weather, based on a 20-year average ending May 2019, used in its last rate case (the blue vertical bar), provides a reasonable basis for the WNA calculations as it is comparable to the other time period averages (shown as orange, gray and gold vertical bars representing current 20-year normal calculation, the 15-year normal, and 10-year normal calculations, respectively) despite the overall lowering trend. Overall, the 15-year Normal and the 10-year Normal forecasts call for lower overall HDD, i.e., 4,242 annual HDD for the 15-year forecast and 4,200 HDD for the 10-year forecast, compared to PGW’s forecast for the 20-year average ending May 2019 of 4,357 annual HDD. Note also, that PGW’s forecast does not include forecasted HDD for June and September, which over the periods in question have averaged between 19 and 21 HDD together.

# Internal Processes and Controls around WNA Mechanism

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## Forecasting Process

PGW develops its revenue requirement forecast by first obtaining a trial domestic factor (“DOM”) for each class of customers from sales reported for the summer months in the previous year. This average factor is then utilized in the sendout formula with the customer counts for the months of July, August, and September. A comparison between what the formula calculates and the actual experienced for those three months is ascertained and the trial domestic (base load) factors are finalized to replicate the total sendout experienced.

The finalized DOMs are then utilized in conjunction with the actual sales and customer counts for the months of December, January, and February to determine the average Mcf per degree day for each of the individual months for the remaining temperature sensitive load. The results are weighted by degree-days to give an average value which is utilized as a trial value for the heating factor.

The finalized DOM and the trial heating factor are then applied in the sendout calculations together with customer counts for the months of December, January, and February (the peak winter heating period) to project an estimated sendout for each of these months. The projected sendout is then compared with the actual sendout experienced. Any variation between the projected and actual is adjusted to force the replication of the actual sendout experience, thus resulting in the determination of a finalized heating factor.

Once the final DOM and heating factor have been derived, PGW may predict its class average load, assuming normal weather.

## Billing Controls

PGW performs a regular review of billing cycle charges for each billing cycle to determine if charges appear reasonable. Further, PGW performs an informal annual review of a sampling of WNA charges to ensure that the calculations are in accordance with the Tariff.



## Conclusions and Recommendations

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Overall, Atrium finds that PGW's WNA operates as it was designed since its inception in 2002, is properly calculated with only minor exceptions and is without material error for the period reviewed.

PGW's WNA mechanism provides distinct benefits to the Company and its customers. Customers benefit through timely credits for overpayment when weather is colder than normal, thereby lowering bills in the coldest most expensive weather months. The Company benefits by stabilizing cash flows, stabilizing cost recovery, reductions in the need for short term borrowing, less frequent need for rate cases, and a higher credit standing with the rating agencies.

A utility's financial health is directly tied to its ability to recover the total cost of service approved by its regulator through the revenues upon which its base rates were previously established. The WNA ensures that the uncontrollable nature of weather does not impede the utility's ability to realize its approved cost recovery. The WNA mechanism ensures that the Company is provided a reasonable opportunity to recover its fixed costs based on normal weather and its customers pay no more or no less for delivery service than what is supported by the underlying costs. It provides stabilization for the utility and its customers and lowers the Company's costs of borrowing and rate case expenses. For PGW – a municipal gas company with no shareholders and its only source of revenue is from the rates that it collects from customers (which contain very little margin for unplanned weather events) and the bonds that it can issue; ensuring revenues are collected based on normal weather through the WNA is essential. Atrium finds that the WNA, as currently constructed, provides the weather-related element of decoupling for the utility and should be continued.

The Company is making a proposal for a full decoupling mechanism in the instant proceeding. The full decoupling mechanism would recover any remaining lost revenue due to volumetric load that was not previously recovered through the WNA mechanism. Atrium believes this proposal will better position PGW to manage its existing residential declining use per customer and other load loss due to increasing energy efficiency and electrification in the energy sector.





# **Exhibit RJA-3**

**Backcast Analysis Summary**

**Comparison of Authorized Revenue under the RNA (Revenue per Class Decoupling)  
versus the Status Quo for Period Sept. 2019 - Aug. 2024**

<b>9/1/19 - 8/31/20</b>			
<b>Revenue per Class</b>			
	<b>Authorized RNA</b>		
	<b>Revenue</b>	<b>Status Quo (Billings)</b>	<b>Difference</b>
<b>Residential</b>	308,485,529	308,346,053	139,476
<b>Commercial</b>	57,912,730	55,867,863	2,044,867
<b>Industrial</b>	4,420,263	4,130,892	289,370
<b>Municipal</b>	4,511,283	4,489,160	22,123
<b>PHA</b>	2,753,205	2,952,212	(199,007)
<b>PHA GS</b>	1,256,853	1,411,758	(154,905)
<b>Total</b>	<b>379,339,863</b>	<b>377,197,939</b>	<b>2,141,924</b>

<b>9/1/20 - 8/31/21</b>			
<b>Revenue per Class</b>			
	<b>Authorized RNA</b>		
	<b>Revenue</b>	<b>Status Quo (Billings)</b>	<b>Difference</b>
<b>Residential</b>	318,151,330	320,452,477	(2,301,146)
<b>Commercial</b>	60,146,420	58,438,446	1,707,974
<b>Industrial</b>	4,695,099	4,553,039	142,060
<b>Municipal</b>	4,681,498	4,865,442	(183,943)
<b>PHA</b>	2,710,835	3,050,283	(339,448)
<b>PHA GS</b>	1,375,375	1,303,557	71,818
<b>Total</b>	<b>391,760,558</b>	<b>392,663,243</b>	<b>(902,686)</b>

<b>9/1/21 - 8/31/22</b>			
<b>Revenue per Class</b>			
	<b>Authorized RNA</b>		
	<b>Revenue</b>	<b>Status Quo (Billings)</b>	<b>Difference</b>
<b>Residential</b>	335,977,060	341,240,554	(5,263,494)
<b>Commercial</b>	63,005,440	64,166,327	(1,160,887)
<b>Industrial</b>	4,993,176	5,134,285	(141,109)
<b>Municipal</b>	4,991,809	5,658,801	(666,993)
<b>PHA</b>	2,789,876	3,230,557	(440,681)
<b>PHA GS</b>	1,501,924	1,546,417	(44,493)
<b>Total</b>	<b>413,259,285</b>	<b>420,976,940</b>	<b>(7,717,655)</b>

9/1/22 - 8/31/23			
Revenue per Class			
	Authorized RNA		
	Revenue	Status Quo (Billings)	Difference
Residential	338,912,837	328,060,334	10,852,503
Commercial	63,499,866	63,262,075	237,791
Industrial	5,042,905	4,908,261	134,644
Municipal	5,043,355	5,746,991	(703,636)
PHA	2,820,845	3,150,385	(329,540)
PHA GS	1,521,426	1,441,052	80,374
<b>Total</b>	<b>416,841,235</b>	<b>406,569,099</b>	<b>10,272,136</b>

9/1/23 - 8/31/24			
Revenue per Class			
	Authorized RNA		
	Revenue	Status Quo (Billings)	Difference
Residential	352,635,876	331,596,584	21,039,292
Commercial	64,096,871	64,415,699	(318,828)
Industrial	5,142,242	4,724,474	417,768
Municipal	5,247,011	6,138,308	(891,298)
PHA	2,742,731	2,689,528	53,203
PHA GS	1,660,387	1,605,379	55,008
<b>Total</b>	<b>431,525,117</b>	<b>411,169,972</b>	<b>20,355,145</b>

Grand Total			
9/1/19 - 8/31/24			
Revenue per Class			
	Authorized RNA		
	Revenue	Status Quo (Billings)	Difference
Residential	1,654,162,632	1,629,696,002	24,466,631
Commercial	308,661,328	306,150,411	2,510,917
Industrial	24,293,685	23,450,951	842,734
Municipal	24,474,956	26,898,703	(2,423,747)
PHA	13,817,492	15,072,965	(1,255,472)
PHA GS	7,315,965	7,308,163	7,802
<b>Total</b>	<b>\$ 2,032,726,058</b>	<b>\$ 2,008,577,194</b>	<b>\$ 24,148,864</b>

**Customer Back Cast Surcharge Summary**  
**Nov. 2020 - Aug. 2024**

	<b>11/1/20 - 8/31/24</b>					
	<b>RNA Surcharge / Ccf</b>					
	<b>Nov 2020 - Oct 2021</b>	<b>Nov 2021 - Oct 2022</b>	<b>Nov 2022 - Oct 2023</b>	<b>Nov 2023 - Aug 2024</b>	<b>Average</b>	
<b>Residential</b>	\$ 0.0004	\$ (0.0066)	\$ (0.0154)	\$ 0.0287	\$	0.0018
<b>Commercial</b>	\$ 0.0190	\$ 0.0171	\$ (0.0108)	\$ 0.0018	\$	0.0068
<b>Industrial</b>	\$ 0.0332	\$ 0.0188	\$ (0.0166)	\$ 0.0151	\$	0.0126
<b>Municipal</b>	\$ 0.0022	\$ (0.0184)	\$ (0.0683)	\$ (0.0685)	\$	(0.0383)
<b>PHA</b>	\$ (0.0438)	\$ (0.0700)	\$ (0.0924)	\$ (0.0739)	\$	(0.0700)
<b>PHA GS</b>	\$ (0.0872)	\$ 0.0326	\$ (0.0270)	\$ 0.0414	\$	(0.0100)
<b>Max</b>	\$ 0.0332	\$ 0.0326	\$ (0.0108)	\$ 0.0414	\$	0.0126
<b>Min</b>	\$ (0.0872)	\$ (0.0700)	\$ (0.0924)	\$ (0.0739)	\$	(0.0700)

Residential Class - RNA  
 Backcast Analysis  
 September 2019 - August 2024  
 Revenue per Class Decoupling Mechanism

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)		
	Applicable Rate Case Test Year						Actual Billing Determinants and Billed Revenue						RNA Adjustment	RNA Surcharge Recoveries						
	Test Year	Customer	Volumetric	Authorized	Authorized	Actual	Actual	Revenue before	WNA (Credit)/	Actual	Actual	Authorized	Total Amounts							
	MCF (by	Charge Rate	Rate	Distribution	Distribution	Customers	Actual MCF	Revenue before	WNA (Credit)/	Distribution	Distribution	Revenue to be	Revenue to Be	(Over)/Under -	to be	Estimated	Surcharge	Recovery of		
	Month)			Revenue	Revenue per			WNA	Surcharge	Revenue	Recoveries	recovered through	Recovered	from Prior	Recovered	Throughput	spread out	for 12	Recovery of	
	Customers				Customer					after WNA	after WNA	RNA	under RNA	Decoupling	through	for Surcharge	for 12	months	Surcharge	
				(5) = (1) x (3) +				(9) = (3) x (7) +			(11) = (9) + (10)	(12) = (5) - (11)	(13) = sum FY	(14) = PY(15) -	(15) = (13) +	(17) = (15)	(16) = (8) x			
				(2) x (4)				(4) x (8)					(12)	sum recovery	(14)	(14)	/(16)	(15)		
Sep-19	466,802	645,339	\$ 13.75	\$ 6.6967	\$ 10,740,169	\$ 23.01	475,728	669,309	\$ 11,023,424	(2,935)	\$ 11,020,489	\$ (280,320)								
Oct-19	467,610	881,809	\$ 13.75	\$ 6.6967	\$ 12,334,849	\$ 26.38	476,499	836,097	\$ 12,150,950	370,571	\$ 12,521,521	\$ (186,672)								
Nov-19	470,117	2,261,039	\$ 13.75	\$ 6.6967	\$ 21,605,610	\$ 45.96	477,774	2,630,069	\$ 24,182,173	(921,529)	\$ 23,260,644	\$ (1,655,034)								
Dec-19	473,324	4,185,760	\$ 13.75	\$ 6.6967	\$ 34,538,982	\$ 72.97	482,911	5,200,472	\$ 41,466,027	(2,933,183)	\$ 38,532,843	\$ (3,993,861)								
Jan-20	475,831	7,389,995	\$ 13.75	\$ 6.6967	\$ 56,031,259	\$ 117.75	485,067	6,118,656	\$ 47,644,476	3,890,738	\$ 51,535,214	\$ 4,496,044								
Feb-20	476,839	6,924,944	\$ 13.75	\$ 6.6967	\$ 52,930,811	\$ 111.00	485,788	5,648,663	\$ 44,506,988	7,401,989	\$ 51,908,977	\$ 1,021,834								
Mar-20	476,846	5,159,706	\$ 13.75	\$ 6.6967	\$ 41,109,638	\$ 86.21	487,998	4,145,919	\$ 34,473,947	4,729,333	\$ 39,203,280	\$ 1,906,358								
Apr-20	476,253	3,330,063	\$ 13.75	\$ 6.6967	\$ 28,848,910	\$ 60.57	486,170	3,055,666	\$ 27,147,715	754,874	\$ 27,902,588	\$ 946,321								
May-20	475,060	1,408,035	\$ 13.75	\$ 6.6967	\$ 15,961,261	\$ 33.60	485,029	2,209,594	\$ 21,466,139	(3,986,988)	\$ 17,479,150	\$ (1,517,889)								
Jun-20	473,267	809,645	\$ 13.75	\$ 6.6967	\$ 11,929,369	\$ 25.21	485,552	1,014,989	\$ 13,473,420	(539,816)	\$ 12,933,605	\$ (1,004,235)								
Jul-20	470,874	756,367	\$ 13.75	\$ 6.6967	\$ 11,539,681	\$ 24.51	486,149	691,561	\$ 11,315,728	53	\$ 11,315,782	\$ 223,899								
Aug-20	468,381	668,202	\$ 13.75	\$ 6.6967	\$ 10,914,990	\$ 23.30	483,528	609,813	\$ 10,732,244	(283)	\$ 10,731,960	\$ 183,029								
Sep-20	466,802	645,339	\$ 13.75	\$ 6.6967	\$ 10,740,169	\$ 23.01	483,225	725,892	\$ 11,505,428	595	\$ 11,506,022	\$ (765,853)	\$ 139,476							
Oct-20	467,610	881,809	\$ 13.75	\$ 6.6967	\$ 12,334,849	\$ 26.38	482,657	912,714	\$ 12,748,707	427,058	\$ 13,175,765	\$ (840,915)								
Nov-20	470,117	2,261,039	\$ 13.75	\$ 6.6967	\$ 21,605,610	\$ 45.96	486,549	2,238,575	\$ 21,681,113	2,857,074	\$ 24,538,187	\$ (2,932,578)			\$ 139,476	34,706,866	\$ 0.0040	\$ 8,996		
Dec-20	473,324	4,185,760	\$ 13.75	\$ 6.6967	\$ 34,538,982	\$ 72.97	488,312	4,606,865	\$ 37,565,085	2,206,950	\$ 39,772,035	\$ (5,233,053)					\$ 0.0040	\$ 18,513		
Jan-21	482,759	7,951,378	\$ 14.10	\$ 6.8642	\$ 61,386,750	\$ 127.16	492,094	6,449,029	\$ 51,205,950	1,621,773	\$ 52,827,723	\$ 8,559,026					\$ 0.0040	\$ 25,917		
Feb-21	483,652	6,710,946	\$ 14.10	\$ 6.8642	\$ 52,884,771	\$ 109.34	494,488	7,333,449	\$ 57,310,538	(1,104,492)	\$ 56,206,047	\$ (3,321,276)					\$ 0.0040	\$ 29,471		
Mar-21	483,544	5,045,825	\$ 14.10	\$ 6.8642	\$ 41,453,519	\$ 85.73	491,650	4,985,031	\$ 41,150,517	915,610	\$ 42,066,127	\$ (612,607)					\$ 0.0040	\$ 20,033		
Apr-21	482,837	3,471,090	\$ 14.10	\$ 6.8642	\$ 30,634,258	\$ 63.45	491,336	2,676,058	\$ 25,296,837	3,094,094	\$ 28,390,931	\$ 2,243,327					\$ 0.0040	\$ 10,754		
May-21	481,529	1,496,621	\$ 14.10	\$ 6.8642	\$ 17,062,666	\$ 35.43	489,690	1,430,268	\$ 16,722,276	(105,126)	\$ 16,617,151	\$ 445,515					\$ 0.0040	\$ 5,748		
Jun-21	479,622	802,916	\$ 14.10	\$ 6.8642	\$ 12,274,047	\$ 25.59	489,375	850,441	\$ 12,737,783	(287,588)	\$ 12,450,196	\$ (176,148)					\$ 0.0040	\$ 3,418		
Jul-21	477,114	702,222	\$ 14.45	\$ 7.0318	\$ 11,832,184	\$ 24.80	487,253	655,149	\$ 11,647,681	(1,399)	\$ 11,646,283	\$ 185,901					\$ 0.0040	\$ 2,633		
Aug-21	474,506	646,621	\$ 14.45	\$ 7.0318	\$ 11,403,524	\$ 24.03	486,874	600,567	\$ 11,258,395	(2,385)	\$ 11,256,010	\$ 147,514					\$ 0.0040	\$ 2,413		
Sep-21	474,189	622,712	\$ 14.45	\$ 7.0318	\$ 11,230,818	\$ 23.68	485,478	670,164	\$ 11,727,617	36	\$ 11,727,654	\$ (496,835)	\$ (2,301,146)				\$ 0.0040	\$ 2,693		
Oct-21	474,882	896,989	\$ 14.45	\$ 7.0318	\$ 13,169,492	\$ 27.73	486,125	740,896	\$ 12,234,338	1,679,661	\$ 13,913,999	\$ (744,507)					\$ 0.0040	\$ 2,977		
Nov-21	477,274	2,190,296	\$ 14.45	\$ 7.0318	\$ 22,298,336	\$ 46.72	485,422	2,301,648	\$ 23,199,076	1,224,691	\$ 24,423,767	\$ (2,125,431)		\$ 5,909	\$ (2,295,237)	34,614,283	\$ (0.0663)	\$ (152,620)		
Dec-21	480,367	4,169,248	\$ 14.45	\$ 7.0318	\$ 36,258,624	\$ 75.48	488,756	4,556,768	\$ 39,104,803	3,607,487	\$ 42,712,291	\$ (6,453,667)					\$ (0.0663)	\$ (302,155)		
Jan-22	482,759	7,951,378	\$ 14.90	\$ 7.2955	\$ 65,202,386	\$ 135.06	490,023	6,379,431	\$ 53,842,478	3,595,679	\$ 57,438,157	\$ 7,764,229					\$ (0.0663)	\$ (423,013)		
Feb-22	483,652	6,710,946	\$ 14.90	\$ 7.2955	\$ 56,166,124	\$ 116.13	491,105	6,653,975	\$ 55,861,541	1,598,118	\$ 57,459,660	\$ (1,293,535)					\$ (0.0663)	\$ (441,218)		
Mar-22	483,544	5,045,825	\$ 14.90	\$ 7.2955	\$ 44,016,619	\$ 91.03	492,340	4,611,045	\$ 40,975,745	6,130,787	\$ 47,106,533	\$ (3,089,914)					\$ (0.0663)	\$ (305,754)		
Apr-22	482,837	3,471,090	\$ 14.90	\$ 7.2955	\$ 32,517,609	\$ 67.35	488,601	3,140,661	\$ 30,192,846	1,012,440	\$ 31,205,286	\$ 1,312,322					\$ (0.0663)	\$ (208,254)		
May-22	481,529	1,496,621	\$ 14.90	\$ 7.2955	\$ 18,093,382	\$ 37.57	491,048	1,601,882	\$ 19,003,146	364,147	\$ 19,367,293	\$ (1,273,911)					\$ (0.0663)	\$ (106,219)		
Jun-22	479,622	802,916	\$ 14.90	\$ 7.2955	\$ 13,004,043	\$ 27.11	486,755	783,461	\$ 12,968,391	10,190,197	\$ 23,158,588	\$ (10,154,545)					\$ (0.0663)	\$ (51,951)		
Jul-22	477,114	702,222	\$ 14.90	\$ 7.2955	\$ 12,232,061	\$ 25.64	485,288	653,742	\$ 12,000,167	(10,528,797)	\$ 1,471,370	\$ 10,760,691					\$ (0.0663)	\$ (43,349)		
Aug-22	474,506	646,621	\$ 14.90	\$ 7.2955	\$ 11,787,566	\$ 24.84	484,175	554,268	\$ 11,257,869	(1,913)	\$ 11,255,956	\$ 531,610					\$ (0.0663)	\$ (36,753)		
Sep-22	474,189	622,712	\$ 14.90	\$ 7.2955	\$ 11,608,413	\$ 24.48	483,822	593,061	\$ 11,535,622	(21,452)	\$ 11,514,170	\$ 94,242	\$ (5,263,494)				\$ (0.0663)	\$ (39,325)		

<b>Oct-22</b>	474,882	896,989	\$ 14.90	\$ 7.2955	\$ 13,619,725	\$ 28.68	484,780	1,110,340	\$ 15,323,710	(744,661)	\$ 14,579,049	\$ (959,324)				\$ (0.0663)	\$ (73,626)
<b>Nov-22</b>	477,274	2,190,296	\$ 14.90	\$ 7.2955	\$ 23,090,690	\$ 48.38	483,101	1,948,194	\$ 21,411,256	2,786,838	\$ 24,198,094	\$ (1,107,403)	\$ (111,001)	\$ (5,374,495)	34,832,318	\$ (0.1543)	\$ (300,599)
<b>Dec-22</b>	480,367	4,169,248	\$ 14.90	\$ 7.2955	\$ 37,574,220	\$ 78.22	487,548	4,404,768	\$ 39,399,453	86,753	\$ 39,486,206	\$ (1,911,986)				\$ (0.1543)	\$ (679,639)
<b>Jan-23</b>	482,759	7,951,378	\$ 14.90	\$ 7.2955	\$ 65,202,386	\$ 135.06	489,515	5,746,767	\$ 49,219,313	5,302,272	\$ 54,521,586	\$ 10,680,801				\$ (0.1543)	\$ (886,704)
<b>Feb-23</b>	483,652	6,710,946	\$ 14.90	\$ 7.2955	\$ 56,166,124	\$ 116.13	488,204	4,902,731	\$ 43,042,115	10,339,293	\$ 53,381,408	\$ 2,784,716				\$ (0.1543)	\$ (756,473)
<b>Mar-23</b>	483,544	5,045,825	\$ 14.90	\$ 7.2955	\$ 44,016,619	\$ 91.03	492,121	4,558,754	\$ 40,590,996	5,886,976	\$ 46,477,972	\$ (2,461,353)				\$ (0.1543)	\$ (703,399)
<b>Apr-23</b>	482,837	3,471,090	\$ 14.90	\$ 7.2955	\$ 32,517,609	\$ 67.35	488,891	2,765,580	\$ 27,460,762	2,681,827	\$ 30,142,590	\$ 2,375,019				\$ (0.1543)	\$ (426,718)
<b>May-23</b>	481,529	1,496,621	\$ 14.90	\$ 7.2955	\$ 18,093,382	\$ 37.57	486,085	1,408,212	\$ 17,516,280	129,912	\$ 17,646,192	\$ 447,190				\$ (0.1543)	\$ (217,282)
<b>Jun-23</b>	479,622	802,916	\$ 14.90	\$ 7.2955	\$ 13,004,043	\$ 27.11	483,006	799,988	\$ 13,033,103	(3,947)	\$ 13,029,156	\$ (25,113)				\$ (0.1543)	\$ (123,435)
<b>Jul-23</b>	477,114	702,222	\$ 14.90	\$ 7.2955	\$ 12,232,061	\$ 25.64	482,171	642,488	\$ 11,871,621	(1,602)	\$ 11,870,020	\$ 362,042				\$ (0.1543)	\$ (99,134)
<b>Aug-23</b>	474,506	646,621	\$ 14.90	\$ 7.2955	\$ 11,787,566	\$ 24.84	477,785	561,776	\$ 11,217,436	(3,544)	\$ 11,213,892	\$ 573,674				\$ (0.1543)	\$ (86,680)
<b>Sep-23</b>	474,189	622,712	\$ 14.90	\$ 7.2955	\$ 11,608,413	\$ 24.48	482,377	635,005	\$ 11,820,093	(611)	\$ 11,819,482	\$ (211,070)	\$ 10,852,503			\$ (0.1543)	\$ (97,979)
<b>Oct-23</b>	474,882	896,989	\$ 14.90	\$ 7.2955	\$ 13,619,725	\$ 28.68	480,097	859,894	\$ 13,426,805	78,601	\$ 13,505,406	\$ 114,319				\$ (0.1543)	\$ (132,678)
<b>Nov-23</b>	477,274	2,190,296	\$ 14.90	\$ 7.2955	\$ 23,090,690	\$ 48.38	479,743	2,146,767	\$ 22,809,907	1,280,530	\$ 24,090,437	\$ (999,747)	\$ (863,775)	\$ 9,988,729	34,824,145	\$ 0.2868	\$ 615,764
<b>Dec-23</b>	489,012	4,119,993	\$ 16.25	\$ 7.4624	\$ 38,691,484	\$ 79.12	482,160	4,134,855	\$ 38,691,041	1,067,610	\$ 39,758,651	\$ (1,067,168)				\$ 0.2868	\$ 1,186,015
<b>Jan-24</b>	491,486	8,005,250	\$ 16.25	\$ 7.4624	\$ 67,725,027	\$ 137.80	485,903	5,651,107	\$ 50,066,748	4,182,186	\$ 54,248,934	\$ 13,476,092				\$ 0.2868	\$ 1,620,926
<b>Feb-24</b>	492,460	6,894,435	\$ 16.25	\$ 7.4624	\$ 59,451,507	\$ 120.72	486,247	5,349,331	\$ 47,820,361	5,753,634	\$ 53,573,995	\$ 5,877,512				\$ 0.2868	\$ 1,534,367
<b>Mar-24</b>	492,434	5,211,722	\$ 16.25	\$ 7.4624	\$ 46,894,009	\$ 95.23	485,567	4,163,881	\$ 38,963,010	6,217,204	\$ 45,180,214	\$ 1,713,795				\$ 0.2868	\$ 1,194,340
<b>Apr-24</b>	491,808	3,372,575	\$ 16.25	\$ 7.4624	\$ 33,159,382	\$ 67.42	486,610	3,167,679	\$ 31,545,902	1,706,202	\$ 33,252,104	\$ (92,722)				\$ 0.2868	\$ 908,596
<b>May-24</b>	490,582	1,432,020	\$ 16.25	\$ 7.4624	\$ 18,658,267	\$ 38.03	464,817	1,404,742	\$ 18,036,020	618,984	\$ 18,655,004	\$ 3,263				\$ 0.2868	\$ 402,927
<b>Jun-24</b>	488,757	800,989	\$ 16.25	\$ 7.4624	\$ 13,919,599	\$ 28.48	473,068	782,696	\$ 13,528,144	3,383	\$ 13,531,527	\$ 388,072				\$ 0.2868	\$ 224,503
<b>Jul-24</b>	486,332	690,811	\$ 16.25	\$ 7.4624	\$ 13,058,000	\$ 26.85	480,778	587,655	\$ 12,197,958	472	\$ 12,198,430	\$ 859,571				\$ 0.2868	\$ 168,559
<b>Aug-24</b>	483,807	656,345	\$ 16.25	\$ 7.4624	\$ 12,759,775	\$ 26.37	477,152	540,120	\$ 11,784,314	(1,914)	\$ 11,782,400	\$ 977,374				\$ 0.2868	\$ 154,925

Commercial Class - RNA  
 Backcast Analysis  
 September 2019 - August 2024  
 Revenue per Class Decoupling Mechanism

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
	Applicable Rate Case Test Year						Actual Billing Determinants and Billed Revenue					RNA Adjustment	RNA Surcharge Recoveries					
	Test Year	Customer	Volumetric	Authorized	Authorized	Authorized	Actual	Actual	WNA	Actual	Actual	Authorized	Total Amounts					
Customers	MCF (by Month)	Charge Rate	Rate	Distribution Revenue	Distribution Revenue	Distribution Revenue per Customer	Customers	Actual MCF	Revenue before WNA	(Credit)/Surcharge	Distribution Revenue Recoveries after WNA	Revenue to be recovered through RNA	Revenue to Be Recovered under RNA	(Over)/Under Recoveries from Decoupling Period	to be Recovered through Decoupling Surcharge	Estimated Throughput for Surcharge Recovery Period	Surcharge spread out for 12 months	Recovery of Surcharge
				(5) = (1) x (3) + (2) x (4)					(9) = (3) x (7) + (4) x (8)		(11) = (9) + (10)	(12) = (5) - (11)	(13) = sum FY (12)	(14) = PY(15) - sum recovery period (18)	(15) = (13) + (14)	(17) = (15) / (16)	(16) = (8) x (15)	
Sep-19	24,823	336,815	\$ 23.40	\$ 4.8651	\$ 2,219,499	\$ 89.41	23,954	412,775	\$ 2,568,715	311	\$ 2,569,026	\$ (349,528)						
Oct-19	24,862	463,662	\$ 23.40	\$ 4.8651	\$ 2,837,534	\$ 114.13	23,888	442,463	\$ 2,711,608	163,964	\$ 2,875,572	\$ (38,038)						
Nov-19	24,902	830,868	\$ 23.40	\$ 4.8651	\$ 4,624,963	\$ 185.73	23,910	910,812	\$ 4,990,687	(315,530)	\$ 4,675,157	\$ (50,195)						
Dec-19	24,941	1,284,218	\$ 23.40	\$ 4.8651	\$ 6,831,468	\$ 273.91	24,142	1,500,061	\$ 7,862,868	(434,645)	\$ 7,428,223	\$ (596,755)						
Jan-20	24,983	1,910,838	\$ 23.40	\$ 4.8651	\$ 9,881,018	\$ 395.51	24,201	1,637,105	\$ 8,530,981	847,118	\$ 9,378,099	\$ 502,919						
Feb-20	25,024	1,746,625	\$ 23.40	\$ 4.8651	\$ 9,083,066	\$ 362.97	24,203	1,498,500	\$ 7,856,702	1,145,913	\$ 9,002,615	\$ 80,452						
Mar-20	25,064	1,361,867	\$ 23.40	\$ 4.8651	\$ 7,212,115	\$ 287.75	24,311	1,141,873	\$ 6,124,202	801,021	\$ 6,925,223	\$ 286,893						
Apr-20	25,105	880,265	\$ 23.40	\$ 4.8651	\$ 4,870,036	\$ 193.99	24,280	778,868	\$ 4,357,421	(57,159)	\$ 4,300,262	\$ 569,773						
May-20	25,147	493,525	\$ 23.40	\$ 4.8651	\$ 2,989,489	\$ 118.88	24,145	520,702	\$ 3,098,262	(458,755)	\$ 2,639,507	\$ 349,982						
Jun-20	25,187	408,531	\$ 23.40	\$ 4.8651	\$ 2,576,919	\$ 102.31	24,028	328,102	\$ 2,158,506	(47,147)	\$ 2,111,359	\$ 465,560						
Jul-20	25,227	392,212	\$ 23.40	\$ 4.8651	\$ 2,498,461	\$ 99.04	24,023	291,438	\$ 1,980,011	(479)	\$ 1,979,532	\$ 518,930						
Aug-20	25,267	348,793	\$ 23.40	\$ 4.8651	\$ 2,288,163	\$ 90.56	24,082	291,755	\$ 1,982,938	350	\$ 1,983,288	\$ 304,874						
Sep-20	24,823	336,815	\$ 23.40	\$ 4.8651	\$ 2,219,499	\$ 89.41	24,090	352,326	\$ 2,277,807	(939)	\$ 2,276,868	\$ (57,369)	\$ 2,044,867					
Oct-20	24,862	463,662	\$ 23.40	\$ 4.8651	\$ 2,837,534	\$ 114.13	23,923	416,166	\$ 2,584,489	183,110	\$ 2,767,599	\$ 69,935						
Nov-20	24,902	830,868	\$ 23.40	\$ 4.8651	\$ 4,624,963	\$ 185.73	24,130	737,124	\$ 4,150,823	478,226	\$ 4,629,049	\$ (4,086)		\$ 2,044,867	10,773,036	\$ 0.1898	\$ 139,916	
Dec-20	24,941	1,284,218	\$ 23.40	\$ 4.8651	\$ 6,831,468	\$ 273.91	24,130	1,330,380	\$ 7,037,073	268,951	\$ 7,306,024	\$ (474,556)				\$ 0.1898	\$ 252,524	
Jan-21	24,847	2,043,369	\$ 24.00	\$ 4.9570	\$ 10,725,308	\$ 431.65	24,455	1,612,316	\$ 8,579,173	364,019	\$ 8,943,192	\$ 1,782,116				\$ 0.1898	\$ 306,039	
Feb-21	24,891	1,729,439	\$ 24.00	\$ 4.9570	\$ 9,170,215	\$ 368.41	24,400	1,850,558	\$ 9,758,817	(325,904)	\$ 9,432,913	\$ (262,697)				\$ 0.1898	\$ 351,261	
Mar-21	24,939	1,389,534	\$ 24.00	\$ 4.9570	\$ 7,486,454	\$ 300.19	24,453	1,353,564	\$ 7,296,491	331,550	\$ 7,628,041	\$ (141,587)				\$ 0.1898	\$ 256,925	
Apr-21	24,983	937,926	\$ 24.00	\$ 4.9570	\$ 5,248,893	\$ 210.10	24,339	830,398	\$ 4,700,417	433,178	\$ 5,133,595	\$ 115,299				\$ 0.1898	\$ 157,621	
May-21	25,027	533,772	\$ 24.00	\$ 4.9570	\$ 3,246,553	\$ 129.72	24,053	468,451	\$ 2,899,386	70,662	\$ 2,970,048	\$ 276,505				\$ 0.1898	\$ 88,918	
Jun-21	25,075	426,536	\$ 24.00	\$ 4.9570	\$ 2,716,138	\$ 108.32	23,842	398,029	\$ 2,545,240	(88,685)	\$ 2,456,554	\$ 259,583				\$ 0.1898	\$ 75,551	
Jul-21	25,120	391,093	\$ 24.60	\$ 5.0488	\$ 2,592,501	\$ 103.20	23,923	371,684	\$ 2,465,064	(9,413)	\$ 2,455,651	\$ 136,850				\$ 0.1898	\$ 70,551	
Aug-21	25,165	362,034	\$ 24.60	\$ 5.0488	\$ 2,446,894	\$ 97.23	23,854	365,598	\$ 2,432,640	6,273	\$ 2,438,913	\$ 7,981				\$ 0.1898	\$ 69,395	
Sep-21	24,666	351,713	\$ 24.60	\$ 5.0488	\$ 2,382,511	\$ 96.59	23,776	357,028	\$ 2,387,452	(794)	\$ 2,386,659	\$ (4,148)	\$ 1,707,974			\$ 0.1898	\$ 67,769	
Oct-21	24,711	488,964	\$ 24.60	\$ 5.0488	\$ 3,076,572	\$ 124.50	23,762	423,214	\$ 2,721,270	636,538	\$ 3,357,808	\$ (281,236)				\$ 0.1898	\$ 80,332	
Nov-21	24,755	805,582	\$ 24.60	\$ 5.0488	\$ 4,676,196	\$ 188.90	23,821	865,890	\$ 4,957,704	126,365	\$ 5,084,069	\$ (407,873)		\$ 128,065	\$ 1,836,039	10,752,627	\$ 0.1708	\$ 147,853
Dec-21	24,803	1,313,075	\$ 24.60	\$ 5.0488	\$ 7,239,605	\$ 291.88	24,114	1,341,127	\$ 7,364,288	726,855	\$ 8,091,142	\$ (851,537)				\$ 0.1708	\$ 229,001	
Jan-22	24,847	2,043,369	\$ 25.35	\$ 5.1908	\$ 11,236,591	\$ 452.23	24,174	1,744,378	\$ 9,667,530	447,013	\$ 10,114,543	\$ 1,122,048				\$ 0.1708	\$ 297,857	
Feb-22	24,891	1,729,439	\$ 25.35	\$ 5.1908	\$ 9,608,161	\$ 386.01	24,276	1,716,626	\$ 9,526,057	380,479	\$ 9,906,536	\$ (298,375)				\$ 0.1708	\$ 293,118	
Mar-22	24,939	1,389,534	\$ 25.35	\$ 5.1908	\$ 7,844,994	\$ 314.57	24,286	1,375,488	\$ 7,755,532	1,015,390	\$ 8,770,922	\$ (925,928)				\$ 0.1708	\$ 234,868	
Apr-22	24,983	937,926	\$ 25.35	\$ 5.1908	\$ 5,501,908	\$ 220.23	24,244	936,177	\$ 5,474,092	73,026	\$ 5,547,118	\$ (45,210)				\$ 0.1708	\$ 159,855	
May-22	25,027	533,772	\$ 25.35	\$ 5.1908	\$ 3,405,136	\$ 136.06	24,217	563,471	\$ 3,538,767	101,055	\$ 3,639,822	\$ (234,686)				\$ 0.1708	\$ 96,214	
Jun-22	25,075	426,536	\$ 25.35	\$ 5.1908	\$ 2,849,713	\$ 113.65	24,065	409,079	\$ 2,733,493	1,579,012	\$ 4,312,505	\$ (1,462,792)				\$ 0.1708	\$ 69,851	
Jul-22	25,120	391,093	\$ 25.35	\$ 5.1908	\$ 2,666,876	\$ 106.17	23,949	328,940	\$ 2,314,568	(1,678,801)	\$ 635,767	\$ 2,031,109				\$ 0.1708	\$ 56,167	
Aug-22	25,165	362,034	\$ 25.35	\$ 5.1908	\$ 2,517,177	\$ 100.03	23,978	328,548	\$ 2,313,269	6,166	\$ 2,319,435	\$ 197,741				\$ 0.1708	\$ 56,100	
Sep-22	24,666	351,713	\$ 25.35	\$ 5.1908	\$ 2,450,954	\$ 99.37	23,919	344,757	\$ 2,395,910	(10,581)	\$ 2,385,329	\$ 65,625	\$ (1,160,887)			\$ 0.1708	\$ 58,868	

<b>Oct-22</b>	24,711	488,964	\$ 25.35	\$ 5.1908	\$ 3,164,538	\$ 128.06	23,937	535,433	\$ 3,386,128	(150,892)	\$ 3,235,236	\$ (70,698)				\$ 0.1708	\$ 91,427
<b>Nov-22</b>	24,755	805,582	\$ 25.35	\$ 5.1908	\$ 4,809,155	\$ 194.27	23,870	799,950	\$ 4,757,484	486,615	\$ 5,244,099	\$ (434,944)	\$ 44,859	\$ (1,116,028)	10,316,448	\$ (0.1082)	\$ (86,538)
<b>Dec-22</b>	24,803	1,313,075	\$ 25.35	\$ 5.1908	\$ 7,444,664	\$ 300.15	23,928	1,411,113	\$ 7,931,382	(124,327)	\$ 7,807,056	\$ (362,391)				\$ (0.1082)	\$ (152,653)
<b>Jan-23</b>	24,847	2,043,369	\$ 25.35	\$ 5.1908	\$ 11,236,591	\$ 452.23	24,088	1,544,068	\$ 8,625,578	1,443,319	\$ 10,068,897	\$ 1,167,694				\$ (0.1082)	\$ (167,036)
<b>Feb-23</b>	24,891	1,729,439	\$ 25.35	\$ 5.1908	\$ 9,608,161	\$ 386.01	23,843	1,362,925	\$ 7,679,089	1,784,313	\$ 9,463,402	\$ 144,759				\$ (0.1082)	\$ (147,440)
<b>Mar-23</b>	24,939	1,389,534	\$ 25.35	\$ 5.1908	\$ 7,844,994	\$ 314.57	24,412	1,368,879	\$ 7,724,422	767,947	\$ 8,492,369	\$ (647,375)				\$ (0.1082)	\$ (148,085)
<b>Apr-23</b>	24,983	937,926	\$ 25.35	\$ 5.1908	\$ 5,501,908	\$ 220.23	24,202	824,611	\$ 4,893,909	531,139	\$ 5,425,049	\$ 76,859				\$ (0.1082)	\$ (89,206)
<b>May-23</b>	25,027	533,772	\$ 25.35	\$ 5.1908	\$ 3,405,136	\$ 136.06	24,097	570,897	\$ 3,574,273	30,702	\$ 3,604,975	\$ (199,840)				\$ (0.1082)	\$ (61,759)
<b>Jun-23</b>	25,075	426,536	\$ 25.35	\$ 5.1908	\$ 2,849,713	\$ 113.65	23,974	478,204	\$ 3,090,004	(836)	\$ 3,089,168	\$ (239,455)				\$ (0.1082)	\$ (51,732)
<b>Jul-23</b>	25,120	391,093	\$ 25.35	\$ 5.1908	\$ 2,666,876	\$ 106.17	23,961	354,264	\$ 2,446,324	646	\$ 2,446,970	\$ 219,906				\$ (0.1082)	\$ (38,324)
<b>Aug-23</b>	25,165	362,034	\$ 25.35	\$ 5.1908	\$ 2,517,177	\$ 100.03	23,941	268,388	\$ 2,000,053	(527)	\$ 1,999,526	\$ 517,650				\$ (0.1082)	\$ (29,034)
<b>Sep-23</b>	24,666	351,713	\$ 25.35	\$ 5.1908	\$ 2,450,954	\$ 99.37	23,878	354,856	\$ 2,447,291	(93)	\$ 2,447,198	\$ 3,756	\$ 237,791			\$ (0.1082)	\$ (38,388)
<b>Oct-23</b>	24,711	488,964	\$ 25.35	\$ 5.1908	\$ 3,164,538	\$ 128.06	23,905	464,295	\$ 3,016,052	80,894	\$ 3,096,947	\$ 67,592				\$ (0.1082)	\$ (50,227)
<b>Nov-23</b>	24,755	805,582	\$ 25.35	\$ 5.1908	\$ 4,809,155	\$ 194.27	23,934	854,455	\$ 5,042,034	190,940	\$ 5,232,973	\$ (423,819)	\$ (55,604)	\$ 182,187	10,317,863	\$ 0.0177	\$ 15,087
<b>Dec-23</b>	24,588	1,268,610	\$ 27.65	\$ 5.4086	\$ 7,541,264	\$ 306.71	23,942	1,250,511	\$ 7,425,512	279,460	\$ 7,704,972	\$ (163,708)				\$ 0.0177	\$ 22,081
<b>Jan-24</b>	24,625	1,997,167	\$ 27.65	\$ 5.4086	\$ 11,482,761	\$ 466.30	24,094	1,668,795	\$ 9,692,045	697,746	\$ 10,389,791	\$ 1,092,970				\$ 0.0177	\$ 29,467
<b>Feb-24</b>	24,663	1,732,683	\$ 27.65	\$ 5.4086	\$ 10,053,321	\$ 407.63	23,994	1,703,658	\$ 9,877,839	1,138,941	\$ 11,016,781	\$ (963,460)				\$ 0.0177	\$ 30,082
<b>Mar-24</b>	24,701	1,353,857	\$ 27.65	\$ 5.4086	\$ 8,005,451	\$ 324.09	24,153	1,001,459	\$ 6,084,320	959,045	\$ 7,043,364	\$ 962,087				\$ 0.0177	\$ 17,683
<b>Apr-24</b>	24,738	875,631	\$ 27.65	\$ 5.4086	\$ 5,419,943	\$ 219.09	24,179	1,002,381	\$ 6,090,028	333,424	\$ 6,423,452	\$ (1,003,509)				\$ 0.0177	\$ 17,699
<b>May-24</b>	24,774	486,484	\$ 27.65	\$ 5.4086	\$ 3,316,199	\$ 133.86	24,005	513,723	\$ 3,442,261	60,977	\$ 3,503,237	\$ (187,038)				\$ 0.0177	\$ 9,071
<b>Jun-24</b>	24,810	389,106	\$ 27.65	\$ 5.4086	\$ 2,790,517	\$ 112.48	24,031	373,721	\$ 2,685,764	1,171	\$ 2,686,935	\$ 103,582				\$ 0.0177	\$ 6,599
<b>Jul-24</b>	24,845	348,804	\$ 27.65	\$ 5.4086	\$ 2,573,504	\$ 103.58	23,948	329,451	\$ 2,444,033	327	\$ 2,444,360	\$ 129,144				\$ 0.0177	\$ 5,817
<b>Aug-24</b>	24,882	333,039	\$ 27.65	\$ 5.4086	\$ 2,489,264	\$ 100.04	23,915	326,710	\$ 2,428,293	(2,604)	\$ 2,425,690	\$ 63,574				\$ 0.0177	\$ 5,769



Industrial Class - RNA  
 Backcast Analysis  
 September 2019 - August 2024  
 Revenue per Class Decoupling Mechanism

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)			
	Applicable Rate Case Test Year						Actual Billing Determinants and Billed Revenue						RNA Adjustment	RNA Surcharge Recoveries Total							
	Test Year	Customer	Volumetric	Authorized	Authorized	Authorized	Actual	Actual	Actual	WNA	Actual	Authorized	Revenue to be	Revenue to	(Over)/Under	Recovered	Estimated	Surcharge			
	Customers	MCF (by	Charge Rate	Rate	Distribution	Distribution	Customers	Actual MCF	Revenue	(Credit)/Surc	Revenue	Revenue to be	Recovered	Be	from Prior	through	for	spread out			
	Month)	Rate	Rate	Revenue	Revenue per	Revenue per	Actual	Actual	before WNA	harge	after WNA	recovered through	under RNA	Recovered	Decoupling	Decoupling	Recovery	for 12	Recovery of		
					Customer	Customer	Customers	Actual MCF	before WNA	harge	after WNA	RNA			Period	Surcharge	Period	months	Surcharge		
					(5) = (1) x (3)				(9) = (3) x (7)		(11) = (9) +			(14) = PY(15)							
					+ (2) x (4)				+ (4) x (8)		(10)	(12) = (5) - (11)		(13) = sum	- sum	(15) = (13) +		(17) = (15)	(16) = (8) x		
														FY (12)	recovery	(14)		/(16)	(15)		
Sep-19	633	28,310	\$ 70.00	\$ 4.7698	\$ 179,345	\$ 283.33	590	30,519	\$ 186,870	60	\$ 186,929	\$ (7,585)									
Oct-19	633	41,387	\$ 70.00	\$ 4.7698	\$ 241,717	\$ 381.86	584	37,952	\$ 221,905	8,290	\$ 230,196	\$ 11,521									
Nov-19	633	71,323	\$ 70.00	\$ 4.7698	\$ 384,506	\$ 607.43	582	67,847	\$ 364,359	(21,494)	\$ 342,865	\$ 41,642									
Dec-19	633	104,729	\$ 70.00	\$ 4.7698	\$ 543,845	\$ 859.15	588	113,159	\$ 580,905	(25,864)	\$ 555,041	\$ (11,197)									
Jan-20	633	143,953	\$ 70.00	\$ 4.7698	\$ 730,938	\$ 1,154.72	585	128,501	\$ 653,874	65,537	\$ 719,411	\$ 11,528									
Feb-20	633	129,169	\$ 70.00	\$ 4.7698	\$ 660,420	\$ 1,043.32	588	105,535	\$ 544,541	65,284	\$ 609,825	\$ 50,595									
Mar-20	633	101,297	\$ 70.00	\$ 4.7698	\$ 527,478	\$ 833.30	587	79,570	\$ 420,624	43,289	\$ 463,913	\$ 63,565									
Apr-20	633	62,828	\$ 70.00	\$ 4.7698	\$ 343,989	\$ 543.43	590	55,956	\$ 308,199	(7,229)	\$ 300,970	\$ 43,019									
May-20	633	37,728	\$ 70.00	\$ 4.7698	\$ 224,263	\$ 354.29	593	39,362	\$ 229,257	(20,990)	\$ 208,268	\$ 15,996									
Jun-20	633	33,539	\$ 70.00	\$ 4.7698	\$ 204,283	\$ 322.72	589	30,983	\$ 189,011	(3,617)	\$ 185,395	\$ 18,888									
Jul-20	633	32,299	\$ 70.00	\$ 4.7698	\$ 198,369	\$ 313.38	585	24,117	\$ 155,983	2,646	\$ 158,629	\$ 39,740									
Aug-20	633	28,681	\$ 70.00	\$ 4.7698	\$ 181,111	\$ 286.11	595	26,794	\$ 169,451	-	\$ 169,451	\$ 11,659									
Sep-20	633	28,310	\$ 70.00	\$ 4.7698	\$ 179,345	\$ 283.33	599	31,008	\$ 189,830	-	\$ 189,830	\$ (10,485)									
Oct-20	633	41,387	\$ 70.00	\$ 4.7698	\$ 241,717	\$ 381.86	601	38,199	\$ 224,273	9,219	\$ 233,492	\$ 8,224									
Nov-20	633	71,323	\$ 70.00	\$ 4.7698	\$ 384,506	\$ 607.43	600	55,097	\$ 304,801	24,289	\$ 329,091	\$ 55,416			\$ 289,370	871,311	\$ 0.3321	\$ 18,298			
Dec-20	633	104,729	\$ 70.00	\$ 4.7698	\$ 543,845	\$ 859.15	575	107,575	\$ 553,361	14,839	\$ 568,200	\$ (24,356)						\$ 0.3321	\$ 35,727		
Jan-21	594	160,828	\$ 71.80	\$ 4.8825	\$ 827,890	\$ 1,393.75	592	125,361	\$ 654,579	29,151	\$ 683,730	\$ 144,160						\$ 0.3321	\$ 41,633		
Feb-21	594	135,820	\$ 71.80	\$ 4.8825	\$ 705,790	\$ 1,188.20	581	150,666	\$ 777,344	(30,557)	\$ 746,786	\$ (40,996)						\$ 0.3321	\$ 50,038		
Mar-21	594	111,017	\$ 71.80	\$ 4.8825	\$ 584,692	\$ 984.33	603	112,279	\$ 591,496	29,327	\$ 620,823	\$ (36,132)						\$ 0.3321	\$ 37,289		
Apr-21	594	69,386	\$ 71.80	\$ 4.8825	\$ 381,428	\$ 642.13	591	60,471	\$ 337,685	20,899	\$ 358,584	\$ 22,843						\$ 0.3321	\$ 20,083		
May-21	594	41,020	\$ 71.80	\$ 4.8825	\$ 242,930	\$ 408.97	589	40,859	\$ 241,783	7,320	\$ 249,103	\$ (6,173)						\$ 0.3321	\$ 13,570		
Jun-21	594	34,330	\$ 71.80	\$ 4.8825	\$ 210,263	\$ 353.98	584	32,514	\$ 200,679	(4,778)	\$ 195,901	\$ 14,362						\$ 0.3321	\$ 10,798		
Jul-21	594	31,735	\$ 73.60	\$ 4.9951	\$ 202,236	\$ 340.46	563	26,700	\$ 174,806	(304)	\$ 174,502	\$ 27,734						\$ 0.3321	\$ 8,867		
Aug-21	594	29,377	\$ 73.60	\$ 4.9951	\$ 190,458	\$ 320.64	574	32,180	\$ 202,987	8	\$ 202,995	\$ (12,538)						\$ 0.3321	\$ 10,687		
Sep-21	594	28,757	\$ 73.60	\$ 4.9951	\$ 187,363	\$ 315.43	574	31,390	\$ 199,041	46	\$ 199,087	\$ (11,724)			\$ 142,060			\$ 0.3321	\$ 10,425		
Oct-21	594	44,312	\$ 73.60	\$ 4.9951	\$ 265,063	\$ 446.23	569	32,253	\$ 202,983	28,019	\$ 231,002	\$ 34,062						\$ 0.3321	\$ 10,711		
Nov-21	594	70,784	\$ 73.60	\$ 4.9951	\$ 397,292	\$ 668.84	567	64,683	\$ 364,828	6,831	\$ 371,658	\$ 25,633			\$ 21,244	\$ 163,304	870,423	\$ 0.1876	\$ 12,135		
Dec-21	594	113,945	\$ 73.60	\$ 4.9951	\$ 612,887	\$ 1,031.80	551	103,724	\$ 558,665	45,889	\$ 604,554	\$ 8,332						\$ 0.1876	\$ 19,460		
Jan-22	594	160,828	\$ 75.90	\$ 5.1668	\$ 876,049	\$ 1,474.83	568	147,821	\$ 806,872	28,074	\$ 834,945	\$ 41,103						\$ 0.1876	\$ 27,733		
Feb-22	594	135,820	\$ 75.90	\$ 5.1668	\$ 746,839	\$ 1,257.31	561	146,476	\$ 799,391	33,443	\$ 832,834	\$ (85,995)						\$ 0.1876	\$ 27,481		
Mar-22	594	111,017	\$ 75.90	\$ 5.1668	\$ 618,689	\$ 1,041.56	566	119,709	\$ 661,471	74,171	\$ 735,641	\$ (116,952)						\$ 0.1876	\$ 22,459		
Apr-22	594	69,386	\$ 75.90	\$ 5.1668	\$ 403,590	\$ 679.44	565	75,138	\$ 431,105	1,194	\$ 432,298	\$ (28,709)						\$ 0.1876	\$ 14,097		

<b>May-22</b>	594	41,020	\$	75.90	\$	5.1668	\$	257,028	\$	432.71	571	45,887	\$	280,430	4,498	\$	284,927	\$	(27,900)	\$	0.1876	\$	8,609					
<b>Jun-22</b>	594	34,330	\$	75.90	\$	5.1668	\$	222,458	\$	374.51	562	30,861	\$	202,107	32,051	\$	234,158	\$	(11,700)	\$	0.1876	\$	5,790					
<b>Jul-22</b>	594	31,735	\$	75.90	\$	5.1668	\$	209,051	\$	351.94	561	29,706	\$	196,067	(31,867)	\$	164,200	\$	44,851	\$	0.1876	\$	5,573					
<b>Aug-22</b>	594	29,377	\$	75.90	\$	5.1668	\$	196,868	\$	331.43	635	31,020	\$	208,469	511	\$	208,980	\$	(12,112)	\$	0.1876	\$	5,820					
<b>Sep-22</b>	594	28,757	\$	75.90	\$	5.1668	\$	193,667	\$	326.04	512	25,989	\$	173,139	(724)	\$	172,414	\$	21,253	\$ (141,109)	\$	0.1876	\$	4,876				
<b>Oct-22</b>	594	44,312	\$	75.90	\$	5.1668	\$	274,038	\$	461.34	562	45,088	\$	275,619	(9,882)	\$	265,737	\$	8,301	\$	0.1876	\$	8,459					
<b>Nov-22</b>	594	70,784	\$	75.90	\$	5.1668	\$	410,811	\$	691.60	557	71,261	\$	410,469	33,276	\$	443,744	\$	(32,933)	\$	811	\$ (140,298)	845,241	\$ (0.1660)	\$ (11,828)			
<b>Dec-22</b>	594	113,945	\$	75.90	\$	5.1668	\$	633,817	\$	1,067.03	579	124,138	\$	685,342	(14,254)	\$	671,087	\$	(37,270)	\$	(0.1660)	\$	(20,605)					
<b>Jan-23</b>	594	160,828	\$	75.90	\$	5.1668	\$	876,049	\$	1,474.83	571	121,541	\$	671,318	118,795	\$	790,113	\$	85,935	\$	(0.1660)	\$	(20,174)					
<b>Feb-23</b>	594	135,820	\$	75.90	\$	5.1668	\$	746,839	\$	1,257.31	496	95,958	\$	533,443	100,540	\$	633,983	\$	112,856	\$	(0.1660)	\$	(15,928)					
<b>Mar-23</b>	594	111,017	\$	75.90	\$	5.1668	\$	618,689	\$	1,041.56	533	114,233	\$	630,674	59,066	\$	689,740	\$	(71,051)	\$	(0.1660)	\$	(18,961)					
<b>Apr-23</b>	594	69,386	\$	75.90	\$	5.1668	\$	403,590	\$	679.44	465	55,349	\$	321,271	30,106	\$	351,376	\$	52,213	\$	(0.1660)	\$	(9,187)					
<b>May-23</b>	594	41,020	\$	75.90	\$	5.1668	\$	257,028	\$	432.71	456	40,693	\$	244,863	(1,143)	\$	243,720	\$	13,307	\$	(0.1660)	\$	(6,754)					
<b>Jun-23</b>	594	34,330	\$	75.90	\$	5.1668	\$	222,458	\$	374.51	469	36,899	\$	226,247	168	\$	226,415	\$	(3,957)	\$	(0.1660)	\$	(6,125)					
<b>Jul-23</b>	594	31,735	\$	75.90	\$	5.1668	\$	209,051	\$	351.94	457	30,758	\$	193,607	(28)	\$	193,579	\$	15,472	\$	(0.1660)	\$	(5,105)					
<b>Aug-23</b>	594	29,377	\$	75.90	\$	5.1668	\$	196,868	\$	331.43	459	37,066	\$	226,351	-	\$	226,351	\$	(29,483)	\$	(0.1660)	\$	(6,152)					
<b>Sep-23</b>	594	28,757	\$	75.90	\$	5.1668	\$	193,667	\$	326.04	455	26,017	\$	168,959	-	\$	168,959	\$	24,708	\$ (134,644)	\$	(0.1660)	\$	(4,318)				
<b>Oct-23</b>	594	44,312	\$	75.90	\$	5.1668	\$	274,038	\$	461.34	460	50,198	\$	294,277	4,585	\$	298,862	\$	(24,824)	\$	(0.1660)	\$	(8,332)					
<b>Nov-23</b>	594	70,784	\$	75.90	\$	5.1668	\$	410,811	\$	691.60	449	65,449	\$	372,241	10,163	\$	382,404	\$	28,407	\$	(6,827)	\$	127,817	845,290	\$	0.1512	\$	9,897
<b>Dec-23</b>	571	109,598	\$	82.80	\$	5.4459	\$	644,138	\$	1,128.09	459	109,244	\$	632,937	20,035	\$	652,973	\$	(8,834)	\$	0.1512	\$	16,519					
<b>Jan-24</b>	573	153,533	\$	82.80	\$	5.4459	\$	883,569	\$	1,542.00	451	120,167	\$	691,760	40,426	\$	732,186	\$	151,383	\$	0.1512	\$	18,171					
<b>Feb-24</b>	572	133,804	\$	82.80	\$	5.4459	\$	776,045	\$	1,356.72	451	116,868	\$	673,794	59,380	\$	733,174	\$	42,871	\$	0.1512	\$	17,672					
<b>Mar-24</b>	572	105,393	\$	82.80	\$	5.4459	\$	621,323	\$	1,086.23	460	87,690	\$	515,639	68,358	\$	583,997	\$	37,325	\$	0.1512	\$	13,260					
<b>Apr-24</b>	572	65,733	\$	82.80	\$	5.4459	\$	405,337	\$	708.63	462	72,253	\$	431,736	13,508	\$	445,244	\$	(39,907)	\$	0.1512	\$	10,925					
<b>May-24</b>	572	40,036	\$	82.80	\$	5.4459	\$	265,396	\$	463.98	452	36,966	\$	238,739	3,434	\$	242,172	\$	23,224	\$	0.1512	\$	5,590					
<b>Jun-24</b>	572	34,900	\$	82.80	\$	5.4459	\$	237,422	\$	415.07	452	24,727	\$	172,086	(484)	\$	171,602	\$	65,820	\$	0.1512	\$	3,739					
<b>Jul-24</b>	572	31,548	\$	82.80	\$	5.4459	\$	219,171	\$	383.17	440	23,316	\$	163,409	-	\$	163,409	\$	55,763	\$	0.1512	\$	3,526					
<b>Aug-24</b>	571	30,123	\$	82.80	\$	5.4459	\$	211,323	\$	370.09	447	20,654	\$	149,491	-	\$	149,491	\$	61,832	\$	0.1512	\$	3,123					

Municipal Class - RNA  
 Backcast Analysis  
 September 2019 - August 2024  
 Revenue per Class Decoupling Mechanism

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	
	Applicable Rate Case Test Year						Actual Billing Determinants and Billed Revenue						RNA Adjustment	RNA Surcharge Recoveries					
	Test Year	Customer	Volumetric	Authorized	Authorized		Actual	Actual	WNA	Actual	Actual	Authorized	Revenue to	(Over)/Under	Recovered	Estimated	Surcharge		
	MCF (by	Charge Rate	Rate	Distribution	Distribution	Revenue per	Customers	Distribution	(Credit)/Surc	Distribution	Recoveries	Revenue to be	Recovered	from Prior	through	Throughput	spread out		
	Month)			Revenue	Revenue per	Customer	Actual MCF	Revenue before WNA	harge	Revenue after WNA	after WNA	recovered through	under RNA	Decoupling	Decoupling	Recovery	for 12	Recovery of	
	Customers	Month)	Charge Rate	Revenue	Revenue per	Customer	Customers	Revenue before WNA	harge	Revenue after WNA	after WNA	recovered through	under RNA	Decoupling	Decoupling	Recovery	for 12	Recovery of	
				(5) = (1) x (3) + (2) x (4)				(9) = (3) x (7) + (4) x (8)		(11) = (9) + (10)		(12) = (5) - (11)		(14) = PY(15) - (13) = sum	sum recovery	(15) = (13) + (14)	(17) = (15) /(16)	(16) = (8) x (15)	
Sep-19	866	14,675	\$ 23.40	\$ 4.2723	\$ 82,959	\$ 95.80	857	15,089	\$ 84,519	13	\$ 84,532	\$ (1,573)							
Oct-19	866	21,184	\$ 23.40	\$ 4.2723	\$ 110,768	\$ 127.91	846	17,711	\$ 95,463	4,690	\$ 100,153	\$ 10,615							
Nov-19	866	70,147	\$ 23.40	\$ 4.2723	\$ 319,955	\$ 369.46	877	90,549	\$ 407,375	(24,656)	\$ 382,719	\$ (62,765)							
Dec-19	866	129,446	\$ 23.40	\$ 4.2723	\$ 573,297	\$ 662.01	857	153,076	\$ 674,041	(40,980)	\$ 633,061	\$ (59,765)							
Jan-20	866	241,938	\$ 23.40	\$ 4.2723	\$ 1,053,897	\$ 1,216.97	856	180,516	\$ 791,249	72,102	\$ 863,351	\$ 190,546							
Feb-20	866	209,403	\$ 23.40	\$ 4.2723	\$ 914,895	\$ 1,056.46	855	184,129	\$ 806,660	131,286	\$ 937,946	\$ (23,051)							
Mar-20	866	143,656	\$ 23.40	\$ 4.2723	\$ 634,005	\$ 732.11	860	139,928	\$ 617,937	80,727	\$ 698,665	\$ (64,659)							
Apr-20	866	87,787	\$ 23.40	\$ 4.2723	\$ 395,316	\$ 456.48	868	80,208	\$ 362,986	34,445	\$ 397,430	\$ (2,115)							
May-20	866	30,991	\$ 23.40	\$ 4.2723	\$ 152,667	\$ 176.29	859	54,449	\$ 252,725	(75,156)	\$ 177,569	\$ (24,903)							
Jun-20	866	17,619	\$ 23.40	\$ 4.2723	\$ 95,536	\$ 110.32	861	15,047	\$ 84,432	(209)	\$ 84,224	\$ 11,312							
Jul-20	866	17,042	\$ 23.40	\$ 4.2723	\$ 93,072	\$ 107.47	856	9,868	\$ 62,188	184	\$ 62,372	\$ 30,700							
Aug-20	866	15,133	\$ 23.40	\$ 4.2723	\$ 84,916	\$ 98.06	854	11,037	\$ 67,137	-	\$ 67,137	\$ 17,779							
Sep-20	866	14,675	\$ 23.40	\$ 4.2723	\$ 82,959	\$ 95.80	864	10,373	\$ 64,535	-	\$ 64,535	\$ 18,424							
Oct-20	866	21,184	\$ 23.40	\$ 4.2723	\$ 110,768	\$ 127.91	862	12,496	\$ 73,556	(1,996)	\$ 71,560	\$ 39,209	\$ 22,123						
Nov-20	866	70,147	\$ 23.40	\$ 4.2723	\$ 319,955	\$ 369.46	863	63,586	\$ 291,851	70,784	\$ 362,635	\$ (42,681)			\$ 22,123	1,001,735	\$ 0.0221	\$ 1,404	
Dec-20	866	129,446	\$ 23.40	\$ 4.2723	\$ 573,297	\$ 662.01	882	129,748	\$ 574,959	51,469	\$ 626,429	\$ (53,132)					\$ 0.0221	\$ 2,865	
Jan-21	850	255,861	\$ 24.00	\$ 4.4159	\$ 1,150,255	\$ 1,353.24	864	206,611	\$ 933,110	474	\$ 933,584	\$ 216,671					\$ 0.0221	\$ 4,563	
Feb-21	850	200,398	\$ 24.00	\$ 4.4159	\$ 905,336	\$ 1,065.10	874	234,068	\$ 1,054,599	727	\$ 1,055,326	\$ (149,989)					\$ 0.0221	\$ 5,169	
Mar-21	850	143,515	\$ 24.00	\$ 4.4159	\$ 654,148	\$ 769.59	863	162,014	\$ 736,151	972	\$ 737,123	\$ (82,975)					\$ 0.0221	\$ 3,578	
Apr-21	850	96,007	\$ 24.00	\$ 4.4159	\$ 444,359	\$ 522.77	858	95,153	\$ 440,776	94,303	\$ 535,079	\$ (90,721)					\$ 0.0221	\$ 2,101	
May-21	850	33,928	\$ 24.00	\$ 4.4159	\$ 170,225	\$ 200.26	868	46,275	\$ 225,178	(20,561)	\$ 204,617	\$ (34,392)					\$ 0.0221	\$ 1,022	
Jun-21	850	16,408	\$ 24.00	\$ 4.4159	\$ 92,855	\$ 109.24	866	21,271	\$ 114,713	(3,225)	\$ 111,487	\$ (18,632)					\$ 0.0221	\$ 470	
Jul-21	850	15,496	\$ 24.60	\$ 4.5596	\$ 91,565	\$ 107.72	866	14,308	\$ 86,542	(30)	\$ 86,512	\$ 5,053					\$ 0.0221	\$ 316	
Aug-21	850	14,226	\$ 24.60	\$ 4.5596	\$ 85,777	\$ 100.91	855	12,177	\$ 76,555	-	\$ 76,555	\$ 9,222					\$ 0.0221	\$ 269	
Sep-21	850	13,743	\$ 24.60	\$ 4.5596	\$ 83,575	\$ 98.32	865	13,176	\$ 81,357	-	\$ 81,357	\$ 2,217	\$ (183,943)				\$ 0.0221	\$ 291	
Oct-21	850	21,405	\$ 24.60	\$ 4.5596	\$ 118,506	\$ 139.42	874	15,071	\$ 90,218	44,726	\$ 134,943	\$ (16,437)					\$ 0.0221	\$ 333	
Nov-21	850	63,959	\$ 24.60	\$ 4.5596	\$ 312,538	\$ 367.69	788	62,840	\$ 305,911	37,419	\$ 343,331	\$ (30,792)			\$ (259)	\$ (184,202)	1,001,735	\$ (0.1839)	\$ (11,555)
Dec-21	850	126,788	\$ 24.60	\$ 4.5596	\$ 599,014	\$ 704.72	867	144,235	\$ 678,982	45,118	\$ 724,100	\$ (125,086)					\$ (0.1839)	\$ (26,522)	
Jan-22	850	255,861	\$ 25.35	\$ 4.7765	\$ 1,243,666	\$ 1,463.14	869	198,453	\$ 969,938	107,700	\$ 1,077,638	\$ 166,028					\$ (0.1839)	\$ (36,492)	
Feb-22	850	200,398	\$ 25.35	\$ 4.7765	\$ 978,747	\$ 1,151.47	867	237,572	\$ 1,156,741	1,288	\$ 1,158,029	\$ (179,282)					\$ (0.1839)	\$ (43,686)	
Mar-22	850	143,515	\$ 25.35	\$ 4.7765	\$ 707,047	\$ 831.82	871	157,631	\$ 775,003	107,489	\$ 882,493	\$ (175,445)					\$ (0.1839)	\$ (28,986)	
Apr-22	850	96,007	\$ 25.35	\$ 4.7765	\$ 480,126	\$ 564.85	866	119,343	\$ 591,993	110,709	\$ 702,701	\$ (222,575)					\$ (0.1839)	\$ (21,945)	
May-22	850	33,928	\$ 25.35	\$ 4.7765	\$ 183,607	\$ 216.01	906	61,083	\$ 314,731	(27,517)	\$ 287,214	\$ (103,607)					\$ (0.1839)	\$ (11,232)	

<b>Jun-22</b>	850	16,408	\$	25.35	\$	4.7765	\$	99,919	\$	117.55	860	17,294	\$	104,407	502,098	\$	606,505	\$	(506,585)			\$	(0.1839)	\$	(3,180)					
<b>Jul-22</b>	850	15,496	\$	25.35	\$	4.7765	\$	95,564	\$	112.43	856	13,833	\$	87,774	(511,207)	\$	(423,433)	\$	518,996			\$	(0.1839)	\$	(2,544)					
<b>Aug-22</b>	850	14,226	\$	25.35	\$	4.7765	\$	89,500	\$	105.29	866	12,975	\$	83,926	(2)	\$	83,924	\$	5,576			\$	(0.1839)	\$	(2,386)					
<b>Sep-22</b>	850	13,743	\$	25.35	\$	4.7765	\$	87,193	\$	102.58	869	15,646	\$	96,761	-	\$	96,761	\$	(9,568)			\$ (666,993)	\$	(0.1839)	\$	(2,877)				
<b>Oct-22</b>	850	21,405	\$	25.35	\$	4.7765	\$	123,786	\$	145.63	881	34,213	\$	185,750	(20,183)	\$	165,567	\$	(41,780)				\$	(0.1839)	\$	(6,291)				
<b>Nov-22</b>	850	63,959	\$	25.35	\$	4.7765	\$	327,048	\$	384.76	863	76,301	\$	386,330	114,262	\$	500,592	\$	(173,543)			\$	13,494	\$	(653,499)	957,130	\$	(0.6828)	\$	(52,096)
<b>Dec-22</b>	850	126,788	\$	25.35	\$	4.7765	\$	627,151	\$	737.83	871	165,478	\$	812,486	(12,670)	\$	799,816	\$	(172,665)				\$	(0.6828)	\$	(112,983)				
<b>Jan-23</b>	850	255,861	\$	25.35	\$	4.7765	\$	1,243,666	\$	1,463.14	868	194,064	\$	948,950	84,616	\$	1,033,566	\$	210,100				\$	(0.6828)	\$	(132,501)				
<b>Feb-23</b>	850	200,398	\$	25.35	\$	4.7765	\$	978,747	\$	1,151.47	861	190,444	\$	931,480	245,355	\$	1,176,835	\$	(198,088)				\$	(0.6828)	\$	(130,029)				
<b>Mar-23</b>	850	143,515	\$	25.35	\$	4.7765	\$	707,047	\$	831.82	860	149,418	\$	735,496	99,776	\$	835,272	\$	(128,225)				\$	(0.6828)	\$	(102,018)				
<b>Apr-23</b>	850	96,007	\$	25.35	\$	4.7765	\$	480,126	\$	564.85	863	101,212	\$	505,316	82,382	\$	587,698	\$	(107,572)				\$	(0.6828)	\$	(69,104)				
<b>May-23</b>	850	33,928	\$	25.35	\$	4.7765	\$	183,607	\$	216.01	867	40,770	\$	216,716	(1,014)	\$	215,703	\$	(32,096)				\$	(0.6828)	\$	(27,836)				
<b>Jun-23</b>	850	16,408	\$	25.35	\$	4.7765	\$	99,919	\$	117.55	874	19,770	\$	116,587	54	\$	116,641	\$	(16,722)				\$	(0.6828)	\$	(13,498)				
<b>Jul-23</b>	850	15,496	\$	25.35	\$	4.7765	\$	95,564	\$	112.43	871	17,740	\$	106,815	(0)	\$	106,815	\$	(11,251)				\$	(0.6828)	\$	(12,112)				
<b>Aug-23</b>	850	14,226	\$	25.35	\$	4.7765	\$	89,500	\$	105.29	868	18,784	\$	111,726	-	\$	111,726	\$	(22,226)				\$	(0.6828)	\$	(12,825)				
<b>Sep-23</b>	850	13,743	\$	25.35	\$	4.7765	\$	87,193	\$	102.58	874	19,099	\$	113,382	-	\$	113,382	\$	(26,189)			\$ (703,636)	\$	(0.6828)	\$	(13,040)				
<b>Oct-23</b>	850	21,405	\$	25.35	\$	4.7765	\$	123,786	\$	145.63	848	33,286	\$	180,487	(4,075)	\$	176,412	\$	(52,626)				\$	(0.6828)	\$	(22,727)				
<b>Nov-23</b>	850	63,959	\$	25.35	\$	4.7765	\$	327,048	\$	384.76	897	89,763	\$	451,492	40,572	\$	492,064	\$	(165,016)			\$	47,272	\$	(656,364)	957,523	\$	(0.6855)	\$	(61,531)
<b>Dec-23</b>	863	128,248	\$	27.65	\$	5.1883	\$	689,251	\$	798.67	863	160,675	\$	857,492	20,209	\$	877,701	\$	(188,450)				\$	(0.6855)	\$	(110,140)				
<b>Jan-24</b>	863	251,545	\$	27.65	\$	5.1883	\$	1,328,955	\$	1,539.92	898	181,388	\$	965,925	111,895	\$	1,077,820	\$	251,135				\$	(0.6855)	\$	(124,338)				
<b>Feb-24</b>	863	194,766	\$	27.65	\$	5.1883	\$	1,034,365	\$	1,198.57	876	197,257	\$	1,047,650	139,583	\$	1,187,233	\$	(152,868)				\$	(0.6855)	\$	(135,216)				
<b>Mar-24</b>	863	137,902	\$	27.65	\$	5.1883	\$	739,339	\$	856.71	877	151,004	\$	807,703	158,486	\$	966,189	\$	(226,851)				\$	(0.6855)	\$	(103,510)				
<b>Apr-24</b>	863	85,076	\$	27.65	\$	5.1883	\$	465,261	\$	539.12	877	118,508	\$	639,104	31,497	\$	670,601	\$	(205,340)				\$	(0.6855)	\$	(81,235)				
<b>May-24</b>	863	29,078	\$	27.65	\$	5.1883	\$	174,725	\$	202.46	876	42,784	\$	246,198	(332)	\$	245,865	\$	(71,140)				\$	(0.6855)	\$	(29,328)				
<b>Jun-24</b>	863	14,249	\$	27.65	\$	5.1883	\$	97,792	\$	113.32	870	20,524	\$	130,540	-	\$	130,540	\$	(32,748)				\$	(0.6855)	\$	(14,069)				
<b>Jul-24</b>	863	12,973	\$	27.65	\$	5.1883	\$	91,168	\$	105.64	880	14,198	\$	97,995	44	\$	98,040	\$	(6,872)				\$	(0.6855)	\$	(9,732)				
<b>Aug-24</b>	863	12,386	\$	27.65	\$	5.1883	\$	88,126	\$	102.12	836	15,293	\$	102,460	(0)	\$	102,460	\$	(14,334)				\$	(0.6855)	\$	(10,483)				



May-22	1,129	16,522	\$ 25.35	\$ 5.4534	\$ 118,722	\$ 105.16	1,196	23,456	\$ 158,232	\$ 3,054	\$ 161,285	\$ (42,563)			\$ (0.7003)	\$ (16,426)	
Jun-22	1,129	12,533	\$ 25.35	\$ 5.4534	\$ 96,969	\$ 85.89	1,231	13,443	\$ 104,516	\$ 73,992	\$ 178,508	\$ (81,539)			\$ (0.7003)	\$ (9,414)	
Jul-22	1,129	11,691	\$ 25.35	\$ 5.4534	\$ 92,374	\$ 81.82	1,241	9,380	\$ 82,615	\$ (72,192)	\$ 10,423	\$ 81,951			\$ (0.7003)	\$ (6,569)	
Aug-22	1,129	10,822	\$ 25.35	\$ 5.4534	\$ 87,637	\$ 77.62	1,257	10,047	\$ 86,656	\$ (55)	\$ 86,601	\$ 1,036			\$ (0.7003)	\$ (7,036)	
Sep-22	1,129	10,877	\$ 25.35	\$ 5.4534	\$ 87,938	\$ 77.89	1,269	10,507	\$ 89,468	\$ -	\$ 89,468	\$ (1,531)	\$ (440,681)		\$ (0.7003)	\$ (7,358)	
Oct-22	1,129	23,385	\$ 25.35	\$ 5.4534	\$ 156,148	\$ 138.31	1,275	25,124	\$ 169,330	\$ (9,902)	\$ 159,428	\$ (3,280)			\$ (0.7003)	\$ (17,595)	
Nov-22	1,129	40,869	\$ 25.35	\$ 5.4534	\$ 251,493	\$ 222.76	1,287	42,045	\$ 261,912	\$ 25,118	\$ 287,030	\$ (35,537)	\$ 36,835	\$ (403,845)	436,908	\$ (0.9243)	\$ (38,863)
Dec-22	1,129	69,202	\$ 25.35	\$ 5.4534	\$ 406,005	\$ 359.61	1,279	75,849	\$ 446,058	\$ (8,334)	\$ 437,724	\$ (31,719)			\$ (0.9243)	\$ (70,109)	
Jan-23	1,129	90,216	\$ 25.35	\$ 5.4534	\$ 520,606	\$ 461.12	1,319	74,694	\$ 440,774	\$ 74,698	\$ 515,473	\$ 5,134			\$ (0.9243)	\$ (69,042)	
Feb-23	1,129	75,520	\$ 25.35	\$ 5.4534	\$ 440,460	\$ 390.13	1,313	60,601	\$ 363,766	\$ 68,821	\$ 432,586	\$ 7,874			\$ (0.9243)	\$ (56,015)	
Mar-23	1,129	61,048	\$ 25.35	\$ 5.4534	\$ 361,539	\$ 320.23	1,343	76,022	\$ 448,622	\$ 28,340	\$ 476,963	\$ (115,424)			\$ (0.9243)	\$ (70,269)	
Apr-23	1,129	31,601	\$ 25.35	\$ 5.4534	\$ 200,954	\$ 177.99	1,336	38,593	\$ 244,332	\$ 27,748	\$ 272,081	\$ (71,126)			\$ (0.9243)	\$ (35,673)	
May-23	1,129	16,522	\$ 25.35	\$ 5.4534	\$ 118,722	\$ 105.16	1,356	24,329	\$ 167,049	\$ 3,107	\$ 170,156	\$ (51,434)			\$ (0.9243)	\$ (22,488)	
Jun-23	1,129	12,533	\$ 25.35	\$ 5.4534	\$ 96,969	\$ 85.89	1,320	13,583	\$ 107,535	\$ 3	\$ 107,538	\$ (10,570)			\$ (0.9243)	\$ (12,555)	
Jul-23	1,129	11,691	\$ 25.35	\$ 5.4534	\$ 92,374	\$ 81.82	1,294	10,308	\$ 89,017	\$ -	\$ 89,017	\$ 3,358			\$ (0.9243)	\$ (9,528)	
Aug-23	1,129	10,822	\$ 25.35	\$ 5.4534	\$ 87,637	\$ 77.62	1,275	14,793	\$ 112,996	\$ (74)	\$ 112,921	\$ (25,284)			\$ (0.9243)	\$ (13,674)	
Sep-23	1,129	10,877	\$ 25.35	\$ 5.4534	\$ 87,938	\$ 77.89	1,068	9,210	\$ 77,299	\$ 2,501	\$ 79,800	\$ 8,138	\$ (329,540)		\$ (0.9243)	\$ (8,513)	
Oct-23	1,129	23,385	\$ 25.35	\$ 5.4534	\$ 156,148	\$ 138.31	1,060	18,604	\$ 128,326	\$ 6,351	\$ 134,677	\$ 21,471			\$ (0.9243)	\$ (17,196)	
Nov-23	1,129	40,869	\$ 25.35	\$ 5.4534	\$ 251,493	\$ 222.76	1,000	38,211	\$ 233,728	\$ 7,321	\$ 241,049	\$ 10,444	\$ 20,079	\$ (309,461)	418,601	\$ (0.7393)	\$ (28,248)
Dec-23	1,035	70,510	\$ 27.65	\$ 5.6340	\$ 425,870	\$ 411.47	1,031	53,754	\$ 331,357	\$ 11,116	\$ 342,473	\$ 83,397			\$ (0.7393)	\$ (39,739)	
Jan-24	1,035	88,823	\$ 27.65	\$ 5.6340	\$ 529,047	\$ 511.16	1,513	68,516	\$ 427,854	\$ 21,769	\$ 449,623	\$ 79,424			\$ (0.7393)	\$ (50,652)	
Feb-24	1,035	75,928	\$ 27.65	\$ 5.6340	\$ 456,394	\$ 440.96	1,078	60,176	\$ 368,838	\$ 30,856	\$ 399,694	\$ 56,700			\$ (0.7393)	\$ (44,487)	
Mar-24	1,035	55,534	\$ 27.65	\$ 5.6340	\$ 341,496	\$ 329.95	1,069	47,535	\$ 297,370	\$ 39,174	\$ 336,544	\$ 4,952			\$ (0.7393)	\$ (35,141)	
Apr-24	1,035	26,744	\$ 27.65	\$ 5.6340	\$ 179,293	\$ 173.23	1,071	51,342	\$ 318,874	\$ 14,260	\$ 333,134	\$ (153,841)			\$ (0.7393)	\$ (37,956)	
May-24	1,035	12,440	\$ 27.65	\$ 5.6340	\$ 98,704	\$ 95.37	1,100	17,961	\$ 131,607	\$ 2,430	\$ 134,037	\$ (35,333)			\$ (0.7393)	\$ (13,278)	
Jun-24	1,035	8,333	\$ 27.65	\$ 5.6340	\$ 75,564	\$ 73.01	1,045	4,651	\$ 55,098	\$ (2,836)	\$ 52,262	\$ 23,302			\$ (0.7393)	\$ (3,438)	
Jul-24	1,035	7,586	\$ 27.65	\$ 5.6340	\$ 71,358	\$ 68.94	1,071	13,666	\$ 106,607	\$ 3,422	\$ 110,029	\$ (38,671)			\$ (0.7393)	\$ (10,103)	
Aug-24	1,035	7,243	\$ 27.65	\$ 5.6340	\$ 69,426	\$ 67.08	1,071	8,276	\$ 76,240	\$ (34)	\$ 76,206	\$ (6,780)			\$ (0.7393)	\$ (6,118)	

PHA GS Class - RNA  
 Backcast Analysis  
 September 2019 - August 2024  
 Revenue per Class Decoupling Mechanism

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	
	Applicable Rate Case Test Year						Actual Billing Determinants and Billed Revenue						RNA Adjustment	RNA Surcharge Recoveries					
	Test Year	MCF (by	Customer	Volumetric	Authorized	Authorized	Actual	Actual	WNA	Actual	Actual	Authorized	Revenue to be	Revenue to	Amounts to	Estimated	Surcharge	Recovery of	
	Customers	Month)	Charge Rate	Rate	Distribution	Distribution	Customers	Actual MCF	(Credit)/Surch	Revenue	Recoveries	Revenue to be	Recovered	(Over)/Under	Recovered	Throughput	spread out	Recovery of	
					Revenue	Revenue per			arge	before WNA	after WNA	recovered through	under RNA	Period	through	for	for 12	Recovery of	
						Customer						RNA			Surcharge	Surcharge	months	Surcharge	
					(5) = (1) x (3)				(9) = (3) x (7)		(11) = (9) +			(14) = PY(15)					
					+ (2) x (4)				+ (4) x (8)		(10)	(12) = (5) - (11)		(13) = sum	- sum	(15) = (13) +	(17) = (15)	(16) = (8) x	
														FY (12)	recovery	(14)	/(16)	(15)	
Sep-19	1,863	3,112	\$ 13.75	\$ 5.7105	\$ 43,389	\$ 23.29	2,043	3,582	\$ 48,545	\$ (0)	\$ 48,545	\$ (5,156)							
Oct-19	1,863	5,334	\$ 13.75	\$ 5.7105	\$ 56,075	\$ 30.10	2,148	4,821	\$ 57,063	\$ 3,424	\$ 60,487	\$ (4,411)							
Nov-19	1,863	12,919	\$ 13.75	\$ 5.7105	\$ 99,389	\$ 53.35	2,150	14,627	\$ 113,089	\$ (6,786)	\$ 106,303	\$ (6,915)							
Dec-19	1,863	22,136	\$ 13.75	\$ 5.7105	\$ 152,024	\$ 81.60	2,161	29,245	\$ 196,717	\$ (6,867)	\$ 189,850	\$ (37,827)							
Jan-20	1,863	35,380	\$ 13.75	\$ 5.7105	\$ 227,656	\$ 122.20	2,117	34,046	\$ 223,526	\$ 19,161	\$ 242,687	\$ (15,031)							
Feb-20	1,863	32,433	\$ 13.75	\$ 5.7105	\$ 210,826	\$ 113.16	2,099	30,512	\$ 203,099	\$ 19,568	\$ 222,668	\$ (11,841)							
Mar-20	1,863	24,035	\$ 13.75	\$ 5.7105	\$ 162,866	\$ 87.42	2,139	25,155	\$ 173,059	\$ 14,181	\$ 187,240	\$ (24,374)							
Apr-20	1,863	14,381	\$ 13.75	\$ 5.7105	\$ 107,736	\$ 57.83	1,905	16,873	\$ 122,547	\$ (3,199)	\$ 119,348	\$ (11,612)							
May-20	1,863	6,126	\$ 13.75	\$ 5.7105	\$ 60,598	\$ 32.53	1,884	13,013	\$ 100,217	\$ (10,608)	\$ 89,609	\$ (29,010)							
Jun-20	1,863	3,735	\$ 13.75	\$ 5.7105	\$ 46,944	\$ 25.20	1,910	5,999	\$ 60,520	\$ (852)	\$ 59,668	\$ (12,724)							
Jul-20	1,863	3,535	\$ 13.75	\$ 5.7105	\$ 45,805	\$ 24.59	1,882	3,270	\$ 44,550	\$ 3	\$ 44,552	\$ 1,253							
Aug-20	1,863	3,139	\$ 13.75	\$ 5.7105	\$ 43,544	\$ 23.37	1,863	2,659	\$ 40,798	\$ 2	\$ 40,800	\$ 2,744							
Sep-20	1,863	3,112	\$ 13.75	\$ 5.7105	\$ 43,389	\$ 23.29	1,851	3,163	\$ 43,516	\$ 2	\$ 43,518	\$ (129)							
Oct-20	1,863	5,334	\$ 13.75	\$ 5.7105	\$ 56,075	\$ 30.10	1,857	4,681	\$ 52,263	\$ 3,754	\$ 56,017	\$ 58							
Nov-20	1,863	12,919	\$ 13.75	\$ 5.7105	\$ 99,389	\$ 53.35	1,881	10,865	\$ 87,906	\$ 6,822	\$ 94,728	\$ 4,661			\$ (154,905)	177,673	\$ (0.8719)	\$ (9,472)	
Dec-20	1,863	22,136	\$ 13.75	\$ 5.7105	\$ 152,024	\$ 81.60	1,859	20,845	\$ 144,598	\$ 3,852	\$ 148,450	\$ 3,574					\$ (0.8719)	\$ (18,174)	
Jan-21	2,011	39,935	\$ 14.10	\$ 5.9444	\$ 265,742	\$ 132.14	1,887	30,450	\$ 207,615	\$ 7,321	\$ 214,936	\$ 50,806					\$ (0.8719)	\$ (26,548)	
Feb-21	2,011	33,576	\$ 14.10	\$ 5.9444	\$ 227,942	\$ 113.35	1,845	34,293	\$ 229,867	\$ (7,006)	\$ 222,861	\$ 5,081					\$ (0.8719)	\$ (29,899)	
Mar-21	2,011	25,536	\$ 14.10	\$ 5.9444	\$ 180,150	\$ 89.58	1,869	25,950	\$ 180,612	\$ 7,310	\$ 187,922	\$ (7,772)					\$ (0.8719)	\$ (22,625)	
Apr-21	2,011	16,520	\$ 14.10	\$ 5.9444	\$ 126,559	\$ 62.93	1,852	14,487	\$ 112,227	\$ 6,331	\$ 118,558	\$ 8,001					\$ (0.8719)	\$ (12,630)	
May-21	2,011	7,212	\$ 14.10	\$ 5.9444	\$ 71,227	\$ 35.42	1,868	8,126	\$ 74,643	\$ 2,455	\$ 77,098	\$ (5,871)					\$ (0.8719)	\$ (7,085)	
Jun-21	2,011	4,018	\$ 14.10	\$ 5.9444	\$ 52,239	\$ 25.98	1,840	4,477	\$ 52,559	\$ (898)	\$ 51,662	\$ 577					\$ (0.8719)	\$ (3,904)	
Jul-21	2,011	3,574	\$ 14.45	\$ 6.1783	\$ 51,140	\$ 25.43	1,835	3,068	\$ 45,470	\$ (76)	\$ 45,394	\$ 5,745					\$ (0.8719)	\$ (2,675)	
Aug-21	2,011	3,308	\$ 14.45	\$ 6.1783	\$ 49,499	\$ 24.61	1,793	2,671	\$ 42,413	\$ -	\$ 42,413	\$ 7,086					\$ (0.8719)	\$ (2,329)	
Sep-21	2,011	3,234	\$ 14.45	\$ 6.1783	\$ 49,041	\$ 24.39	1,767	2,883	\$ 43,346	\$ 1	\$ 43,347	\$ 5,694					\$ (0.8719)	\$ (2,514)	
Oct-21	2,011	5,498	\$ 14.45	\$ 6.1783	\$ 63,025	\$ 31.34	1,855	3,684	\$ 49,567	\$ 11,022	\$ 60,589	\$ 2,436	\$ 71,818				\$ (0.8719)	\$ (3,212)	
Nov-21	2,011	12,360	\$ 14.45	\$ 6.1783	\$ 105,424	\$ 52.42	1,844	10,340	\$ 90,528	\$ 1,523	\$ 92,051	\$ 13,373			\$ (13,839)	\$ 57,979	177,673	\$ 0.3263	\$ 3,374
Dec-21	2,011	22,903	\$ 14.45	\$ 6.1783	\$ 170,558	\$ 84.81	1,935	23,614	\$ 173,858	\$ 11,704	\$ 185,562	\$ (15,004)					\$ 0.3263	\$ 7,706	
Jan-22	2,011	39,935	\$ 14.90	\$ 6.5393	\$ 291,108	\$ 144.76	2,065	33,379	\$ 249,047	\$ 6,595	\$ 255,642	\$ 35,467					\$ 0.3263	\$ 10,893	
Feb-22	2,011	33,576	\$ 14.90	\$ 6.5393	\$ 249,524	\$ 124.08	2,063	37,745	\$ 277,566	\$ 8,841	\$ 286,407	\$ (36,883)					\$ 0.3263	\$ 12,317	
Mar-22	2,011	25,536	\$ 14.90	\$ 6.5393	\$ 196,950	\$ 97.94	2,019	26,221	\$ 201,553	\$ 16,337	\$ 217,890	\$ (20,939)					\$ 0.3263	\$ 8,557	
Apr-22	2,011	16,520	\$ 14.90	\$ 6.5393	\$ 137,996	\$ 68.62	2,013	18,063	\$ 148,110	\$ 366	\$ 148,477	\$ (10,481)					\$ 0.3263	\$ 5,894	

May-22	2,011	7,212	\$ 14.90	\$ 6.5393	\$ 77,126	\$ 38.35	2,025	10,514	\$ 98,924	\$ 1,369	\$ 100,293	\$ (23,167)					\$ 0.3263	\$ 3,431
Jun-22	2,011	4,018	\$ 14.90	\$ 6.5393	\$ 56,238	\$ 27.97	1,987	4,472	\$ 58,849	\$ 24,613	\$ 83,463	\$ (27,225)					\$ 0.3263	\$ 1,459
Jul-22	2,011	3,574	\$ 14.90	\$ 6.5393	\$ 53,335	\$ 26.52	1,982	3,384	\$ 51,660	\$ (26,043)	\$ 25,618	\$ 27,717					\$ 0.3263	\$ 1,104
Aug-22	2,011	3,308	\$ 14.90	\$ 6.5393	\$ 51,598	\$ 25.66	1,969	2,716	\$ 47,096	\$ (15)	\$ 47,081	\$ 4,518					\$ 0.3263	\$ 886
Sep-22	2,011	3,234	\$ 14.90	\$ 6.5393	\$ 51,113	\$ 25.42	1,977	2,953	\$ 48,771	\$ -	\$ 48,771	\$ 2,343	\$ (44,493)				\$ 0.3263	\$ 964
Oct-22	2,011	5,498	\$ 14.90	\$ 6.5393	\$ 65,915	\$ 32.78	1,995	6,287	\$ 70,835	\$ (2,478)	\$ 68,358	\$ (2,443)					\$ 0.3263	\$ 2,051
Nov-22	2,011	12,360	\$ 14.90	\$ 6.5393	\$ 110,791	\$ 55.09	1,967	10,284	\$ 96,560	\$ 6,144	\$ 102,704	\$ 8,086	\$ (657)	\$ (45,151)	167,286	\$ (0.2699)	\$ (2,776)	
Dec-22	2,011	22,903	\$ 14.90	\$ 6.5393	\$ 179,730	\$ 89.37	1,985	22,413	\$ 176,143	\$ (2,463)	\$ 173,680	\$ 6,050				\$ (0.2699)	\$ (6,049)	
Jan-23	2,011	39,935	\$ 14.90	\$ 6.5393	\$ 291,108	\$ 144.76	1,934	30,399	\$ 227,606	\$ 30,401	\$ 258,007	\$ 33,101				\$ (0.2699)	\$ (8,205)	
Feb-23	2,011	33,576	\$ 14.90	\$ 6.5393	\$ 249,524	\$ 124.08	1,943	25,474	\$ 195,534	\$ 28,930	\$ 224,464	\$ 25,060				\$ (0.2699)	\$ (6,876)	
Mar-23	2,011	25,536	\$ 14.90	\$ 6.5393	\$ 196,950	\$ 97.94	1,947	23,612	\$ 183,417	\$ 8,802	\$ 192,219	\$ 4,731				\$ (0.2699)	\$ (6,373)	
Apr-23	2,011	16,520	\$ 14.90	\$ 6.5393	\$ 137,996	\$ 68.62	1,891	16,047	\$ 133,112	\$ 11,538	\$ 144,650	\$ (6,654)				\$ (0.2699)	\$ (4,331)	
May-23	2,011	7,212	\$ 14.90	\$ 6.5393	\$ 77,126	\$ 38.35	1,853	8,073	\$ 80,402	\$ 1,031	\$ 81,433	\$ (4,306)				\$ (0.2699)	\$ (2,179)	
Jun-23	2,011	4,018	\$ 14.90	\$ 6.5393	\$ 56,238	\$ 27.97	1,816	4,338	\$ 55,428	\$ 1	\$ 55,429	\$ 809				\$ (0.2699)	\$ (1,171)	
Jul-23	2,011	3,574	\$ 14.90	\$ 6.5393	\$ 53,335	\$ 26.52	1,867	3,003	\$ 47,456	\$ -	\$ 47,456	\$ 5,879				\$ (0.2699)	\$ (811)	
Aug-23	2,011	3,308	\$ 14.90	\$ 6.5393	\$ 51,598	\$ 25.66	1,835	2,531	\$ 43,894	\$ (13)	\$ 43,881	\$ 7,717				\$ (0.2699)	\$ (683)	
Sep-23	2,011	3,234	\$ 14.90	\$ 6.5393	\$ 51,113	\$ 25.42	1,866	3,016	\$ 47,525	\$ 819	\$ 48,344	\$ 2,770	\$ 80,374			\$ (0.2699)	\$ (814)	
Oct-23	2,011	5,498	\$ 14.90	\$ 6.5393	\$ 65,915	\$ 32.78	1,914	4,777	\$ 59,755	\$ 1,631	\$ 61,385	\$ 4,530				\$ (0.2699)	\$ (1,289)	
Nov-23	2,011	12,360	\$ 14.90	\$ 6.5393	\$ 110,791	\$ 55.09	1,876	10,230	\$ 94,852	\$ 1,960	\$ 96,812	\$ 13,979	\$ (3,594)	\$ 76,779	185,405	\$ 0.4141	\$ 4,237	
Dec-23	2,145	24,165	\$ 16.25	\$ 6.8523	\$ 200,440	\$ 93.45	1,908	22,715	\$ 186,655	\$ 4,697	\$ 191,353	\$ 9,088				\$ 0.4141	\$ 9,407	
Jan-24	2,145	41,574	\$ 16.25	\$ 6.8523	\$ 319,732	\$ 149.06	1,840	30,087	\$ 236,062	\$ 9,559	\$ 245,621	\$ 74,110				\$ 0.4141	\$ 12,459	
Feb-24	2,145	35,761	\$ 16.25	\$ 6.8523	\$ 279,904	\$ 130.49	2,058	31,492	\$ 249,237	\$ 16,148	\$ 265,385	\$ 14,519				\$ 0.4141	\$ 13,041	
Mar-24	2,145	26,877	\$ 16.25	\$ 6.8523	\$ 219,028	\$ 102.11	2,135	25,971	\$ 212,654	\$ 21,403	\$ 234,057	\$ (15,029)				\$ 0.4141	\$ 10,755	
Apr-24	2,145	16,380	\$ 16.25	\$ 6.8523	\$ 147,094	\$ 68.58	2,178	20,464	\$ 175,615	\$ 5,684	\$ 181,299	\$ (34,205)				\$ 0.4141	\$ 8,474	
May-24	2,145	7,123	\$ 16.25	\$ 6.8523	\$ 83,666	\$ 39.01	2,157	10,023	\$ 103,735	\$ 1,356	\$ 105,091	\$ (21,425)				\$ 0.4141	\$ 4,151	
Jun-24	2,145	4,199	\$ 16.25	\$ 6.8523	\$ 63,631	\$ 29.66	2,154	5,176	\$ 70,472	\$ (3,157)	\$ 67,315	\$ (3,684)				\$ 0.4141	\$ 2,144	
Jul-24	2,145	3,685	\$ 16.25	\$ 6.8523	\$ 60,107	\$ 28.02	2,052	3,175	\$ 55,100	\$ 795	\$ 55,895	\$ 4,212				\$ 0.4141	\$ 1,315	
Aug-24	2,145	3,518	\$ 16.25	\$ 6.8523	\$ 58,966	\$ 27.49	2,032	2,892	\$ 52,834	\$ (12)	\$ 52,822	\$ 6,143				\$ 0.4141	\$ 1,197	



# Tab 9

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

**RYAN E. REEVES**

ON BEHALF OF  
PHILADELPHIA GAS WORKS

Docket No. R-2025-305312

TOPICS:

Prepaid Gas Purchase Arrangements  
for Rate IT and IT-XLT Customers

February 27, 2025

	<b>Table of Contents</b>	
		<b>Page</b>
1		
2		
3	<b>I. INTRODUCTION.....</b>	<b>1</b>
4	<b>II. PREPAID GAS.....</b>	<b>2</b>
5	<b>III. CONCLUSION .....</b>	<b>7</b>

1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND CURRENT POSITION.**

3 A. My name is Ryan E. Reeves. My position with Philadelphia Gas Works (“PGW” or  
4 “Company”) is Director of Gas Supply, Transportation and Control.

5 **Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.**

6 A. I received a Bachelor of Science degree in Chemical Engineering from Drexel University  
7 in 2009 and a master’s degree in business administration from Villanova University in  
8 2016. I have held the following positions at PGW: Staff Engineer and Operations  
9 Engineer at PGW’s Richmond LNG Plant, and Manager of Special Projects.

10 **Q. PLEASE DESCRIBE YOUR DUTIES IN YOUR PRESENT POSITION.**

11 A. I develop and monitor PGW’s long-term Gas Supply Strategic Plan that ensures PGW  
12 has the financial resources and assets to execute its business strategy. I advance policies,  
13 procedures and practices that ensure safe, reliable, competitively priced gas supplies and  
14 other energy resources to meet current and future demands on PGW’s systems, and I  
15 analyze the overall long-term capital and operating budget plans for Gas Supply.

16 **Q. HAVE YOU EVER PROVIDED TESTIMONY BEFORE THIS COMMISSION?**

17 A. Yes. Among other proceedings, I provided testimony in PGW’s last several Gas Cost  
18 Rate proceedings (2022-2023, Docket No. R-2022-3030686; 2023-2024, Docket No. R-  
19 2023-3038069; 2024-2025, Docket No. R-2024-3045966). I have also testified in PGW’s  
20 last base rate proceeding (Docket No. R-2023-3037933) and in the Formal Complaint of  
21 Grays Ferry Cogeneration Partnership and Vicinity Energy Philadelphia, Inc. (Docket  
22 No. C-2021-3029259).

1 **Q. WHAT IS THE FOCUS OF YOUR TESTIMONY IN THIS PROCEEDING?**

2 A. I will discuss PGW’s proposal to enable PGW’s transportation customers receiving either  
3 Interruptible Transportation – Rate IT or Interruptible Service Extra Large Transportation  
4 – Rate IT-XLT to avail themselves of a prepaid gas purchase arrangement.

5 **Q. ARE YOU SPONSORING ANY EXHIBITS IN SUPPORT OF YOUR**  
6 **TESTIMONY?**

7 A. No, but the revisions to PGW’s tariffs I set forth below are included in the Tariff  
8 Supplement sponsored by PGW Witness Florian Teme.

9 **II. PREPAID GAS**

10 **Q. PLEASE EXPLAIN HOW PGW MAXIMIZES ITS STATUS AS A**  
11 **MUNICIPALLY OWNED UTILITY TO SECURE DISCOUNTED GAS SUPPLY.**

12 A. As explained in prior Gas Cost Rate proceedings,<sup>1</sup> beginning in FY 2020, PGW began to  
13 take advantage of provisions in the Internal Revenue Code<sup>2</sup> that permit municipal gas  
14 companies to use tax exempt bond financed prepaid gas purchase arrangements to obtain  
15 significant discounts on those purchases, the savings from which are passed on to PGW  
16 sales customers.

17 **Q. WHAT IS A PREPAID GAS ARRANGEMENT?**

18 A. A prepaid gas arrangement is an arrangement in which PGW has agreed to purchase gas  
19 from a gas supplier for (typically) 25-30 years. PGW does not pay for the entire 30 years  
20 of purchases up front but receives a monthly invoice for gas received by PGW. The  
21 natural gas is purchased from a gas supplier, through a Government Authority.<sup>3</sup> The

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<sup>1</sup> PGW St. No. 2, Direct Testimony of Ryan Reeves, dated March 1, 2024, at 6, entered into the record at Docket No. R-2024-3045966.

<sup>2</sup> See 26 CFR Part 1; Sections 141 and 148 of the Internal Revenue Code.

<sup>3</sup> PGW has relationships with entities that are established to provide long-term prepaid natural gas to public systems which are used to facilitate the arrangements discussed herein.

1 authority issues a tax-free long-term bond and uses the proceeds to “prepay” for the  
2 natural gas it will purchase on behalf of various municipal gas utilities, including PGW.  
3 The gas supplier sells the natural gas to the authority, which then, in turn, sells it to PGW  
4 at a discount, in recognition of the fact that the supplier is able to invest the prepayment  
5 at taxable rates. The size of the discount is determined based on the spread between non-  
6 taxable and taxable investments. As noted, the gas is purchased on index, but PGW  
7 receives a discount from the current index price due to the investment arbitrage.

8 **Q. HAS THE COMMISSION APPROVED THESE ARRANGEMENTS AND HOW**  
9 **MANY ARE CURRENTLY IN PLACE?**

10 A. Yes, PGW has received approval for its current arrangements as part of its GCR  
11 proceedings. PGW currently has 13 such arrangements in place which it estimates have  
12 saved or will save GCR customers over \$11 million a year.

13 **Q. WHAT IS PGW PROPOSING IN THIS PROCEEDING REGARDING PREPAID**  
14 **GAS ARRANGEMENTS?**

15 A. In addition to the above, PGW is proposing to expand this program by giving  
16 interruptible transportation customers who are currently on PGW’s Rate IT or Rate IT-  
17 XLT the option to participate in new prepaid gas arrangements by entering into an  
18 additional sales service agreement with PGW. The number of customers that will  
19 initially be able to participate will be limited in order to assure that PGW can  
20 accommodate the load and billing requirements.

21 **Q. WHY DOES PGW PROPOSE TO EXPAND THESE PREPAID**  
22 **ARRANGEMENTS TO INTERRUPTIBLE CUSTOMERS?**

23 A. All prepaid participants are required to utilize all the prepaid gas acquired through these  
24 arrangements in their service territory. Thus, while PGW has the technical ability to  
25 purchase more prepaid gas, it is rapidly approaching the limit of what can be used based

1 on its firm service customer demand. Since roughly 40% of all gas used in the city is  
 2 used by IT and IT-XLT customers, they are particularly suited for prepaid gas  
 3 arrangements due to the requirement that the gas must be used within the city (i.e.,  
 4 Qualified Use Gas). Facilitating the ability of IT and IT-XLT customers to participate in  
 5 prepaid gas arrangements is another way for PGW to provide just and reasonable service  
 6 to ratepayers.

7 **Q. HOW WILL THESE PREPAID GAS ARRANGEMENTS BE STRUCTURED?**

8 A. In simple terms, the transaction will flow in the following manner:

- 9 1. An existing PGW IT or IT-XLT customer or its Supplier negotiates terms  
 10 (volume, price, discount) with a government authority that is qualified to  
 11 enter into prepaid gas arrangements (“Government Authority”).
- 12 2. An existing contract between Customer and Supplier is to be passed  
 13 through (in whole or in part) to the Government Authority.
- 14 3. PGW contracts with the IT/XLT Customer for gas supply sales service  
 15 (with the volume and discount conforming to those agreed to between  
 16 Customer/Supplier and the Government Authority).
- 17 4. PGW contracts with the Government Authority for gas supply pursuant to  
 18 the prepaid gas arrangement.
- 19 5. Government Authority delivers gas to PGW at PGW’s city gate.
- 20 6. PGW delivers gas to Customer.

21 **Q. HOW WILL THIS PROPOSED ARRANGEMENT FOR IT AND IT-XLT**  
 22 **CUSTOMERS DIFFER FROM WHAT PGW IS CURRENTLY DOING?**

23 A. There are several differences. First, the IT and IT-XLT customers will be required to  
 24 maintain their existing interruptible rates and will continue to remain subject to all terms  
 25 and conditions regarding those rates. Second, while PGW will be obtaining new  
 26 arrangements with the Government Authority to provide gas to the new customers, the  
 27 Government Authority will need to work with the suppliers to provide the gas to PGW’s  
 28 city gate. The IT or IT-XLT customer will work with the Government Authority to  
 29 identify the selected supplier. As such, the IT or IT-XLT customer will still be required

1 to have a contractual relationship with a supplier to transport the gas to PGW's city gate.  
2 Once the supplier and terms are chosen, the Government Authority will ensure that the  
3 appropriate arrangements are made to enable the arrangement to proceed. Third, the  
4 interruptible customers opting to receive gas supply through the prepaid gas arrangement  
5 will have to agree to all terms and conditions of their new sales service agreement with  
6 PGW which are carefully drafted to ensure that PGW and the customer will be able to  
7 receive the financial benefit of this arrangement.

8 **Q. PLEASE EXPLAIN HOW THE FINANCIAL BENEFIT OF THE PREPAID**  
9 **ARRANGEMENT WILL BE REALIZED FOR PGW'S RATEPAYERS AND**  
10 **INTERRUPTIBLE CUSTOMERS.**

11 A. PGW will receive an invoice from the Government Authority for the gas supply to be  
12 used by the interruptible customers less the total applicable discount resulting from use of  
13 the prepaid arrangement. PGW will invoice the customer for the cost of the gas supply  
14 less the customer's portion of the total discount realized through the prepaid arrangement.  
15 From the customer payment, PGW will retain an amount equal to its portion of the  
16 discount which will be used to offset its cash needs.

17 **Q. WHY DOES PGW PROPOSE TO USE THIS ARRANGEMENT FOR**  
18 **INTERRUPTIBLE CUSTOMERS TO OFFSET ITS CASH NEEDS RATHER**  
19 **THAN THROUGH THE GCR?**

20 A. PGW is not using any of its GCR assets to acquire the supply that PGW will use for the  
21 IT customer. Rather, the customer is arranging for the transportation of the supply  
22 through a third-party supplier that works with the Government Authority. PGW is only  
23 receiving the gas supply that has been pre-arranged between the supplier and the  
24 Government Authority to serve the appropriate customer. Thus, PGW is only utilizing its  
25 distribution system and its status as a Municipal-Owned Entity for this arrangement,



1           thereby supporting the return of revenue received through the discount to all ratepayers  
 2           by using it to offset its cash needs.

3   **Q.   PLEASE DESCRIBE THE TARIFF PROVISIONS WHICH ARE INTENDED TO**  
 4   **MAKE THE PREPAID ARRANGEMENT AVAILABLE TO INTERRUPTIBLE**  
 5   **CUSTOMERS.**

6   A.   PGW proposes to add the below language to its existing tariff:<sup>4</sup>

7                           **Optional Sales Service Agreement for Prepaid Gas Arrangement**  
 8

9   A.   Customer receiving Rate IT or Rate IT-XLT has the option to request an additional sales  
 10   service agreement with the Company for prepaid gas at a rates, terms and conditions to be  
 11   negotiated between the Customer and the Company. The Optional Sales Service Agreement  
 12   will be in the form provided by the Company to ensure that it satisfies all legal requirement  
 13   applicable to prepaid gas arrangements (“Prepaid Gas Arrangement”). PGW retains sole  
 14   discretion as to whether it will permit the Optional Sales Service Agreement when prepaid  
 15   gas is available to PGW to purchase. PGW also retains sole discretion regarding the terms  
 16   and conditions that must be included to permit the arrangement.

17   B.   In addition to any other terms and conditions required by Company at its sole discretion, the  
 18   Optional Sales Service Agreement shall contain the following:

- 19                   (i)   A requirement that the facilities of the customer utilizing prepaid gas supply must be  
 20                   located in the Company’s service area;
- 21                   (ii)   Minimum and maximum monthly purchases, with the customer being responsible for  
 22                   the monthly minimum amounts whether or not those amounts were used by the  
 23                   customer;
- 24                   (iii)   Surety requirements or guarantees acceptable to the Company at its sole discretion;  
 25                   and,
- 26                   (iv)   Provisions that eliminate any obligation on the Company to deliver such gas to  
 27                   customer if: (a) such is not delivered to PGW’s city gate, or (b) PGW exercises its  
 28                   right to interrupt the customer pursuant to this Tariff.

29  
 30   **Q.   PLEASE DISCUSS THE BENEFITS OF THIS ARRANGEMENT FOR PGW**  
 31   **CUSTOMERS.**

32   A.   Adding this provision to PGW’s Tariff will benefit both interruptible customers as well  
 33   as PGW’s customers. Interruptible customers will benefit because they will be able, at  
 34   their discretion, to avail themselves of a discount in natural gas supply prices provided by  
 35   the Internal Revenue Code so as to reduce their overall cost of energy. PGW customers

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<sup>4</sup>   See PGW Gas Service Tariff – Pa P.U.C. No. 2 Page No. 117 and Page No. 161.

1 will benefit because the portion of the discount that PGW proposes that it will retain will  
2 offset its general cash needs and be available to contribute to PGW's operating and  
3 capital budget, just as, for example, sales of Liquefied Natural Gas contribute today.

4 **Q. DOES PGW ANTICIPATE ANY SIGNIFICANT ADDITIONAL COSTS**  
5 **ASSOCIATED WITH PROVIDING THIS ADDITIONAL PREPAID GAS?**

6 A. No. Administrative costs, such as entering into the appropriate contracts, will be  
7 minimal. PGW will not experience any natural gas costs that will not be covered by the  
8 customer payments for natural gas themselves.

9 **III. CONCLUSION**

10 **Q. DOES THAT COMPLETE YOUR DIRECT TESTIMONY?**

11 A. Yes, it does.

**VERIFICATION**

I, Ryan E. Reeves, hereby state that: (1) I am Director of Gas Supply, Transportation and Control for Philadelphia Gas Works (“PGW”); (2) the facts set forth in my testimony are true and correct (or are true and correct to the best of my knowledge, information and belief); and, (3) I expect to be able to prove the same at a hearing held in this matter. I understand that statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: February 27, 2025



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Ryan E. Reeves  
Director of Gas Supply, Transportation and  
Control  
Philadelphia Gas Works