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December 28, 2023

Via Electronic Filing

Rosemary Chiavetta, Secretary
PA Public Utility Commission
P.O. Box 3265
Harrisburg, PA 17105-3265

Re: Petition of Philadelphia Gas Works for Approval of Demand-Side Management Plan for FY 2016-2020 and Philadelphia Gas Works Universal Service and Energy Conservation Plan for 2014-2016; 52 Pa. Code § 62.4 – Request for Waivers –
Docket No. P-2014-2459362

Dear Secretary Chiavetta:

On behalf of Philadelphia Gas Works enclosed please find its Demand Side Management (“DSM”) Program Annual Report for Fiscal Year 2023 Results with regard to the above referenced matter. This document is being submitted consistent with the Commission’s Final Opinion and Order entered May 6, 2021, and PGW’s Revised DSM Portfolio Implementation Plan filed June 4, 2021 in this docket. Copies to be served in accordance with the attached Certificate of Service.

Sincerely,

/s/ Karen O. Moury

Karen O. Moury

cc: Hon. F. Joseph Brady w/enc.
Certificate of Service w/enc.

CERTIFICATE OF SERVICE

I hereby certify that this day I served a copy of PGW's Annual DSM Report upon the persons listed below in the manner indicated in accordance with the requirements of 52 Pa. Code Section 1.54.

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/s/ Karen O. Moury

Dated: December 28, 2023

Karen O. Moury, Esq.



Demand Side Management Program Annual Report

FY 2023 Results

December 2023

Prepared by Philadelphia Gas Works (PGW) with assistance from Green Energy Economics Group, Inc. (GEEG)

TABLE OF CONTENTS

1. Portfolio Overview.....	1
2. Residential Equipment Rebate Program.....	6
3. Commercial Equipment Rebates	9
4. Residential Construction Grants.....	12
5. Smart Thermostat Marketplace	14
6. Low Income Smart Thermostat.....	16
7. Appendix A. Cost Recovery Reconciliation.....	18

LIST OF TABLES

Table 2. DSM Costs and Budgets by Program (Nominal).....	3
Table 3. DSM Costs and Budgets by Category (Nominal).....	3
Table 4. Portfolio-wide Incremental First Year Gas Savings (MMBtu).....	3
Table 5. Portfolio-wide Incremental Lifetime Gas Savings (MMBtu).....	4
Table 6. Non-Gas Benefits	5
Table 7. Total Annual Savings FY 2011 Through FY 2023	5
Table 8. Total Resource Cost (TRC) Test Results for FY 2023 (2020\$) Base Avoided Cost Scenario.....	5
Table 9. Residential Equipment Rebates Results for FY 2023.....	7
Table 10. TRC Test Cost-effectiveness Results for Residential Equipment Rebates for FY 2023 (2020\$).....	7
Table 11. Source of Residential Equipment Rebates Referrals in FY 2023	8
Table 12. Commercial Equipment Rebates Results for FY 2023.....	10
Table 13. TRC Test Cost-Effectiveness Results for Commercial Equipment Rebates for FY 2023 (2020\$).....	10
Table 14. Customer Incentives as Percentage of Total Costs	11
Table 15. Residential Construction Grants Program Results for FY 2023.....	12
Table 16. TRC Test Cost-Effectiveness Results for Residential Construction Grants for FY 2023 (2020\$).....	13

Table 17. Smart Thermostat Marketplace Program Results for FY 2023 14

Table 18. TRC Test Cost-Effectiveness Results for Smart Thermostat Marketplace for FY
2023 (2020\$)..... 14

Table 19. Low Income Smart Thermostat Program Results for FY 2023..... 16

Table 20. TRC Test Cost-Effectiveness Results for Low income Smart Thermostat for FY
2023 (2020\$)..... 17

Table 21. Efficiency Cost Recovery Surcharge Residential and PHA GS Customers
(September 2021 Through August 2022)..... 18

Table 22. Efficiency Cost Recovery Surcharge Commercial and PHA Customers (September
2021 Through August 2022)..... 18

Table 23. Efficiency Cost Recovery Surcharge Industrial Customers (September 2021
Through August 2022)..... 20

1. Portfolio Overview

1.1. Introduction

This report presents and discusses the results from PGW’s implementation of its Demand Side Management (“DSM”) portfolio of energy-efficiency programs in Fiscal Year 2023 (September 1, 2022 – August 31, 2023)(“FY 2023”).¹

PGW’s FY 2023 DSM program budget was approved by Commission Order entered on May 6, 2021, at Docket Number P-2014-2459362. The programs were implemented in accordance with the EnergySense Demand Side Management Portfolio Implementation Plan for Fiscal Years 2021-2023 (“FY 2021-2023 Implementation Plan”) originally filed on May 6, 2020 and revised on June 4, 2021 at Docket Number P-2014-2459362.

PGW committed to filing its annual report four months after the end of the program year to report on program outcomes to date. This report provides quantitative tables of portfolio operations and outcomes for FY 2023 for five DSM programs:

- Residential Equipment Rebates (“RER”);
- Commercial Equipment Rebates (“CER”);
- Residential Construction Grants (“RCG”);
- Smart Thermostat Marketplace (“Marketplace”); and
- Low Income Smart Thermostat (“LIST”)

1.2. Portfolio-Level Updates

In FY 2023, PGW continued to implement a more prescriptive and accessible program approach with a revised incentive structure, as described in the FY 2021-2023 Revised Implementation Plan. Among the changes outlined in the Plan were:

- PGW performed program evaluations for the CER, Marketplace, and LIST programs in FY 2023.
- In FY 2023, PGW increased rebate amounts to account for rising inflation, and to adapt to changing market conditions. The changes are outlined in the table below:

¹ September 1, 2022 through August 31, 2023.

TABLE 1. FY 2023 DSM INCENTIVE UPDATES²

Measure	FY 2023			
	Previous Incentive	Revised Incentive	Low-Income Tier Previous Incentive	Low-Income Tier Revised Incentive
Residential Furnace	\$350	\$400	\$700	\$800
Residential Boiler	\$900	\$1,000	\$1,225	\$1,400
Residential Combination Boiler	\$1,300	\$1,400	\$1,800	\$2,000
Residential Tankless Water Heater	\$350	\$400	\$625	\$700
Commercial Boiler	\$2,500 - \$8400	\$2,700 - \$9,000	-	-
Commercial Water Heater	\$4/MBH	\$4.25/MBH	-	-
Commercial Roof Insulation	\$0.55/sf	\$0.60/sf	-	-
Low-Flow Showerhead	\$16/showerhead	\$18/showerhead	-	-
Low-Flow Aerator	\$4/aerator	\$5/aerator	-	-
Steam Trap	\$45 - \$140	\$50 - \$150	-	-
Fryers	\$400 - \$600	\$425 - \$625	-	-
Steam Cookers	\$150 - \$480	\$175 - \$510	-	-
Unit Heater	\$250	\$300	-	-
Commercial Outdoor Boiler Reset	\$350	\$400	-	-

FY 2023 marked the sixth year in which the program’s management, administration, rebate processing, marketing, and technical review were administered with the assistance of one vendor (herein called the “program administrator”). The program administrator’s familiarity with PGW’s DSM programming and operations facilitated a smooth implementation of those changes described above.

² Revised rebates went into effect January 1, 2023.

1.3. Summary of Results

In FY 2023, PGW spent \$1,321,833 on DSM programming, approximately 55 percent of the FY 2023 budget filed by PGW in its FY 2021-2023 Implementation Plan. PGW achieved estimated first year gas savings of 19.6 Billion Btu (“BBtu”) and 353 BBtu over the lifetime of the measures installed. The FY 2023 DSM activities have resulted in present value total resource net benefits of \$823,108(2020\$).

TABLE 1. DSM COSTS AND BUDGETS BY PROGRAM (NOMINAL)³

Program	FY 2023		
	Actual	Goal	%
Residential Equipment Rebates (RER)	\$293,027	\$786,579	37%
Commercial Equipment Rebates (CER)	\$176,190	\$342,582	51%
Residential Construction Grants (RCG)	\$133,204	\$229,464	58%
Smart Thermostat Marketplace	\$99,088	\$235,639	42%
Low Income Smart Thermostat (LIST)	\$121,161	\$75,000	162%
Portfolio-wide Costs	\$499,212	\$731,414	68%
Utility Total	\$1,321,883	\$2,400,678	55%
Participant Costs	\$708,094		
Total	\$2,029,977		

TABLE 2. DSM COSTS AND BUDGETS BY CATEGORY (NOMINAL)

Category	FY 2023		
	Actual	Goal	%
Customer Incentives	\$703,412	\$1,359,550	52%
Administration	\$410,875	\$562,671	73%
Marketing	\$119,162	\$360,000	33%
Inspection	\$19,028	\$68,457	28%
Evaluation	\$69,407	\$50,000	139%
Utility Total	\$1,321,883	\$2,400,678	55%
Participant Costs	\$708,094		
Total	\$2,029,977		

TABLE 3. PORTFOLIO-WIDE INCREMENTAL FIRST YEAR GAS SAVINGS (MMBTU)

Program	FY 2023		
	Actual	Goal	%
Residential Equipment Rebates (RER)	6,249	13,099	48%
Commercial Equipment Rebates (CER)	6,474	24,015	27%

³ All PGW Efficiency Cost Recovery Surcharge collections are shown in Appendix A.

Residential Construction Grants (RCG)	1,989	1,910	104%
Smart Thermostat Marketplace	3,276	11,699	28%
Low Income Smart Thermostat (LIST)	1,636	1,986	82%
Portfolio Total	19,628	52,708	37%

TABLE 4. PORTFOLIO-WIDE INCREMENTAL LIFETIME GAS SAVINGS (MMBTU)

Program	FY 2023		
	Actual	Goal	%
Residential Equipment Rebates (RER)	126,712	271,388	58%
Commercial Equipment Rebates (CER)	132,549	438,311	30%
Residential Construction Grants (RCG)	39,771	38,200	104%
Smart Thermostat Marketplace	36,090	128,685	28%
Low Income Smart Thermostat (LIST)	17,996	21,848	82%
Portfolio Total	353,118	844,432	42%

TABLE 5. NON-GAS BENEFITS

Category	FY 2023		
	Actual	Goal	%
First Year Energy Savings Installed (kWh)	126,903	359,717	35%
Lifetime Energy Savings Installed (kWh)	2,059,499	4,075,052	51%
First Year Water Savings Installed (million gallons)	2.6	9	28%
Lifetime Water Savings Installed (million gallons)	26.7		

TABLE 6. TOTAL ANNUAL SAVINGS FY 2011 THROUGH FY 2023

Cumulative EnergySense Portfolio Savings ⁴	
Natural Gas (MMBtu)	616,760
Energy Savings (kWh)	4,953,994
Summer Peak Demand Savings (kW)	1,340
Water Savings (million gallons)	51.2

TABLE 7. TOTAL RESOURCE COST (TRC) TEST RESULTS FOR FY 2023 (2020\$) BASE AVOIDED COST SCENARIO

Program	FY 2023			
	PV of Benefits	PV of Costs	PV of Net Benefits	BCR
Residential Equipment Rebates (RER)	\$783,513	\$544,608	\$238,905	1.44
Commercial Equipment Rebates (CER)	\$1,038,775	\$432,019	\$606,756	2.40
Residential Construction Grants (RCG)	\$328,796	\$136,012	\$192,784	2.42
Smart Thermostat Marketplace	\$296,702	\$117,970	\$178,732	2.52
Low Income Smart Thermostat (LIST)	\$150,011	\$106,870	\$43,141	1.40
All Programs	\$2,597,797	\$1,337,479	\$1,260,318	1.94
Portfolio Wide Costs	\$0	\$437,210	(\$437,210)	-
Portfolio Total	\$2,597,797	\$1,774,689	\$823,108	1.46

⁴ Savings include DSM portfolio savings from January 1, 2011 through August 31, 2023. These figures include savings for PGW's LIURP from January 1, 2011 through August 31, 2016, at which point LIURP was moved to PGW's USECP pursuant to PUC Order.

2. Residential Equipment Rebate Program

The Residential Equipment Rebate program offers prescriptive rebates on premium efficiency heating and hot water equipment to increase the penetration of these efficient technologies in the homes of PGW's customers. The program has the following objectives:

- Promote the selection of premium efficiency furnaces, boilers, combination boilers, and tankless water heaters at the time of purchase of residential-sized gas heating and hot water equipment.
- Increase consumers' awareness of the breadth of energy efficiency opportunities in their homes.
- Strengthen PGW's relationship with customers as a partner in energy efficiency.
- Encourage market actors throughout the supply chain to provide and promote high efficiency options.
- Align incentives with other programs.
- Aid in market transformation towards highest-efficiency options.

TABLE 8. RESIDENTIAL EQUIPMENT REBATES RESULTS FOR FY 2023

	FY 2023		
	Actual	Goal	%
PARTICIPATION			
Completed Applications	557	1,095	51%
COSTS (Nominal)			
Non-Incentive Spending	\$19,377	\$53,589	36%
Administration	\$8,713		
Inspections	\$10,665		
Customer Incentives	\$273,650	\$732,990	37%
Total Program Spending	\$293,027	\$786,579	37%
Participant Costs	\$330,579		
Total Costs	\$623,606		
SAVINGS			
First Year MMBtus	6,249	13,099	48%
Lifetime MMBtus	126,712	271,388	58%
Measures			
Furnaces	372		
Boilers	33		
Combi Boilers	67		
Tankless Water Heaters	80		
Income			
Low Income Rebates	2		
Non-Low Income Rebates	555		

TABLE 9. TRC TEST COST-EFFECTIVENESS RESULTS FOR RESIDENTIAL EQUIPMENT REBATES FOR FY 2023 (2020\$)

Metric	Result
PV of Benefits	\$783,513
PV of Costs	\$544,608
PV of Net Benefits	\$238,905
BCR	1.44

2.1. Notable Program Activities in FY 2023

In FY 2023, there were three hundred seventy-two (372) residential furnaces and one hundred (100) residential boilers installed, including combi boilers. PGW also incentivized the installation of eighty (80) residential tankless water heaters. The number of furnaces and tankless water heaters incentivized increased compared to the previous year, but the number of boilers decreased. PGW also issued two rebates to low-income customers at the

Affordable EnergySense rebate rates. Customers are eligible for larger rebate amounts through Affordable EnergySense rebates if, within the last year, they have been enrolled in CRP, have received a UESF grant, or have received LIHEAP and assigned it to PGW. Overall, the program continued to be cost-effective.

In FY 2023, the greatest sources of applications continued to be HVAC contractors and supply houses, as shown in Table 11. PGW continued its outreach to these trade allies through activities similar to those conducted in previous program years, and as a result nearly three-quarters of applications were referrals from this source.

TABLE 10. SOURCE OF RESIDENTIAL EQUIPMENT REBATES REFERRALS IN FY 2023

Source	Percent
Family / Friend	5%
Contractor / Supply House	54%
Website	20%
Gas Bill	15%
Other	6%

Quality Assurance and Verifications

There were 68 rebate verifications performed in FY 2023, accounting for twelve percent (12%) of all rebate projects. All of the verifications were performed virtually.

Projects were selected at random for verification, with verifications performed prior to issuing the rebate check. None of the projects selected for verification failed the process.

3. Commercial Equipment Rebates

The Commercial Equipment Rebates program issues prescriptive rebates on premium efficiency gas appliances, heating and hot water equipment, and other building improvements, to increase the penetration of these measures in the facilities of PGW's commercial, industrial, and multifamily customers. The program has the following objectives:

- Promote the selection of premium efficiency models at the time of purchase of commercial- and industrial-sized gas heating and hot water equipment; as well as other gas appliances, building control and distribution upgrades, and building envelope improvements.
- Strengthen PGW's relationship with customers as a partner in energy efficiency.
- Encourage market actors throughout the supply chain to provide and promote high efficiency options.
- Aid in market transformation towards highest-efficiency options.

Eligible customers use certified contractors to install the premium efficiency equipment and other building improvements and receive cash rebates to offset most of the incremental cost of the higher efficiency equipment and building improvements.

TABLE 11. COMMERCIAL EQUIPMENT REBATES RESULTS FOR FY 2023

	FY 2023		
	Actual	Goal	%
PARTICIPATION			
Completed Applications	43	228	19%
COSTS (Nominal)			
Non-Incentive Spending	\$29,603	\$39,737	74%
Administration	\$919		
Inspections	\$1,149		
Evaluation	\$27,535		
Customer Incentives	\$146,587	\$302,845	48%
Total Program Spending	\$176,190	\$342,582	51%
Participant Costs	\$319,459		
Total Costs	\$495,649		
SAVINGS			
First Year MMBtus	6,474	24,015	27%
Lifetime MMBtus	133,142	438,311	30%
First Year Water (Gallons)	2,580,358		
Lifetime Water (Gallons)	26,656,619		
Measures			
Commercial Boilers	21		
Commercial Water Heaters	9		
Roof Insulation	1		
Low-Flow Faucet Aerators	1,141		
Low-Flow Showerheads	727		
Gas Fryers (Large)	6		
Participation by Classification			
Small Business	4		
Non-Small Business	39		

TABLE 12. TRC TEST COST-EFFECTIVENESS RESULTS FOR COMMERCIAL EQUIPMENT REBATES FOR FY 2023 (2020\$)

Metric	Result
PV of Benefits	\$1,038,775
PV of Costs	\$432,019
PV of Net Benefits	\$606,756
BCR	2.40

TABLE 13. CUSTOMER INCENTIVES AS PERCENTAGE OF TOTAL COSTS

Metric	FY 2021	FY 2022	FY 2023	FY '21-'23
Customer Incentives	\$ 118,964	\$ 150,142	\$ 146,587	\$ 269,106
PV of Total Costs	\$ 307,518	\$ 421,849	\$ 432,019	\$ 729,367
Customer Incentives % of Total Costs	38.7%	35.6%	33.9%	36.9%

3.1. Notable Program Activities in FY 2023

The Commercial Equipment Rebates program successfully issued rebates to 43 customers for 1,905 pieces of equipment in FY 2023. Spending for customer incentives totaled \$146,587, which accounted for 48% of the program incentive budget. The program also achieved 30% of its lifetime savings goal.

Four rebates were issued to small businesses, which are defined as a person, sole proprietorship, partnership, corporation, association or other business whose annual gas consumption does not exceed 300 Mcf. These included rebates for two commercial water heaters and two commercial boilers, totaling \$6,592. Overall, CER continues to be a highly cost-effective program for PGW ratepayers.

Pursuant to the most recent settlement agreement, incentive spending for CER is required to be below 55% of the TRC costs for the DSM continuation period. PGW has met this requirement. For FY 2023, incentive spending represented 33.9% of TRC present value costs. In FY 2022, customer incentives were 35.6% of TRC present value costs.

Quality Assurance and Verifications

There were 10 rebate verifications performed in FY 2023, accounting for 23% of rebate projects. All of the verifications were completed in-person.

Projects were selected at random for verification, with verifications performed prior to issuing the rebate check. None of the projects selected for verification failed the process.

4. Residential Construction Grants

The Residential Construction Grants program promotes natural gas energy efficiency in the new construction and gut rehab markets for single-family residential projects. The program provides financial incentives for projects that exceed energy code design requirements. Program participants demonstrate the savings by completing an energy model and also submitting a Home Energy Rating System (HERS) report. The program has the following objectives:

- Save natural gas through cost-effective energy efficiency new construction and gut rehabilitation projects.
- Promote a better understanding of energy efficiency options available in the new construction and gut rehabilitation markets.

TABLE 14. RESIDENTIAL CONSTRUCTION GRANTS PROGRAM RESULTS FOR FY 2023

	FY 2023		
	Actual	Goal	%
PARTICIPATION			
Completed Projects	83	100	83%
COSTS (Nominal)			
Non-Incentive Spending	\$404	\$89,464	1%
Administration	\$404		
Inspections	\$0		
Customer Incentives	\$132,800	\$140,000	95%
Total Program Spending	\$133,204	\$229,464	58%
Participant Costs	\$24,247		
Total Costs	\$157,451		
SAVINGS			
First Year MMBtus	1,989	1,910	104%
Lifetime MMBtus	39,771	38,200	104%
First Year kWh	73,730		
Lifetime kWh	1,474,600		
First Year Peak Demand kW	44		

TABLE 15. TRC TEST COST-EFFECTIVENESS RESULTS FOR RESIDENTIAL CONSTRUCTION GRANTS FOR FY 2023 (2020\$)

Metric	Result
PV of Benefits	\$328,796
PV of Costs	\$136,012
PV of Net Benefits	\$192,784
BC	2.42

4.1. Notable Program Activities in FY 2023

The Residential Construction Grants program issued \$132,800 in grants for 83 homes across two development projects during FY 2023. In FY23, the program experienced a strong level of participation relative to projections. Non-incentive spending for the program was much lower than projected. Since applicants are required to submit a HERS rating by an independent rater, the program administrator does not need to perform as much analysis as part of approving the project. The fact that all incentives were issued for homes in just two development projects also contributed to the high incentive-to-administration ratio.

Quality Assurance and Verifications

A HERS rating completed by a certified third-party rater was submitted and reviewed for each of the 83 projects incentivized in FY 2023, and PGW performed its own HERS rating on one home in each of the two development projects, which verified the fidelity of the third-party rating.

5. Smart Thermostat Marketplace

The Smart Thermostat Marketplace program provides instant rebates on ENERGY STAR® certified smart thermostats to eligible PGW customers. The program promotes natural gas energy efficiency in the retrofit market by offering rebate-discounted thermostats to PGW firm-rate residential and commercial customers seeking to retrofit an existing heating system with a smart thermostat. Thermostats must be purchased from the PGW Marketplace. The program has the following objectives:

- Provide PGW customers access to a low-cost efficiency measure that can be installed in most properties.
- Promote a better understanding of energy efficiency options available in the retrofit market.

TABLE 16. SMART THERMOSTAT MARKETPLACE PROGRAM RESULTS FOR FY 2023

	FY 2023		
	Actual	Goal	%
PARTICIPATION			
Completed Projects	702	1,332	53%
COSTS (Nominal)			
Non-Incentive Spending	\$41,038	\$110,434	37%
Administration	\$14,156		
Inspections	\$7,214		
Evaluation	\$19,668		
Customer Incentives	\$58,050	\$125,205	46%
Total Program Spending	\$99,088	\$235,639	42%
Participant Costs	\$33,599		
Total Costs	\$132,687		
SAVINGS			
First Year MMBtus	3,276	11,699	28%
Lifetime MMBtus	36,038	128,685	28%
First Year kWh	33,600		
Lifetime kWh	369,600		

TABLE 17. TRC TEST COST-EFFECTIVENESS RESULTS FOR SMART THERMOSTAT MARKETPLACE FOR FY 2023 (2020\$)

Metric	Result
PV of Benefits	\$296,702
PV of Costs	\$117,970
PV of Net Benefits	\$178,732
BCR	2.52

5.1. Notable Program Activities in FY 2023

The Smart Thermostat Marketplace program issued \$58,050 in instant rebates for 702 thermostats purchased on PGW's Marketplace platform during FY 2023. Although participation was lower than projected, FY 2023 saw a significant increase from the 333 purchased in 2022, which was the program's second year. Moreover, PGW implemented marketing campaigns over the course of the FY that resulted in increased participation relative to the monthly average of the program. Notably, a limited time offer was available from Thanksgiving Eve through the end of January, during which the instant rebate was increased from \$70 to \$90. Social media, postcard, and email marketing campaigns were conducted simultaneously, resulting in a significant surge in participation. Additionally, during FY2023 PGW collaborated with its third-party vendor to add two new models of smart thermostats to the Marketplace in order to stay current with the latest technology available to customers.

Quality Assurance and Verifications

There were forty-six (46) rebate verifications performed in FY 2023, accounting for 7% of rebate projects. All of the verifications were completed virtually, and none of the projects selected for verification failed the process.

6. Low Income Smart Thermostat

The Low Income Smart Thermostat program provides and installs ENERGY STAR certified smart thermostats in the homes of income-qualified PGW customers. The program promotes natural gas energy efficiency by offering free thermostats to PGW firm-rate low-income residential customers seeking to retrofit an existing heating system with a smart thermostat. For eligibility purposes, PGW customers on a residential firm-rate who are at or below 150% of the Federal Poverty Level (“FPL”) are considered low income. Customers must apply for the program and meet its requirements in order to qualify for a free installation. The program has the following objectives:

- Provide PGW customers access to an efficiency measure that can be installed in most properties.
- Promote a better understanding of energy efficiency options available to this customer segment.

TABLE 18. LOW INCOME SMART THERMOSTAT PROGRAM RESULTS FOR FY 2023

	FY 2023		
	Actual	Goal	%
PARTICIPATION			
Completed Projects	244	488	50%
COSTS (Nominal)			
Non-Incentive Spending	\$28,836	\$16,490	175%
Administration	\$6,632		
Evaluation	\$22,204		
Customer Incentives	\$92,325	\$58,527	158%
Total Program Spending	\$121,161	\$75,017	162%
Participant Costs	\$0		
Total Costs	\$121,161		
SAVINGS			
First Year MMBtus	1,636	1,986	82%
Lifetime MMBtus	17,996	21,848	82%
First Year kWh	19,381		
Lifetime kWh	213,187		
INSTALLATION SCENARIO			
Vendor-Installed Thermostats	244		
Customer Installed Thermostats	0		

TABLE 19. TRC TEST COST-EFFECTIVENESS RESULTS FOR LOW INCOME SMART THERMOSTAT FOR FY 2023 (2020\$)

Metric	Result
PV of Benefits	\$150,011
PV of Costs	\$106,870
PV of Net Benefits	\$43,141
BCR	1.40

6.1. Notable Program Activities in FY 2023

The Low Income Smart Thermostat program installed 244 thermostats in the homes of eligible PGW customers in FY 2023. All installations were performed by the program vendor. Just prior to the start of FY 2023, PGW changed the third-party vendor that was used for most of FY 2022. The previous vendor was unable to deliver the program at the costs they had proposed when bidding for the program, and had failed to understand real program delivery costs. The new vendor's pricing is slightly higher, and a fair market value for the services, which accounts for lower cost-effectiveness. PGW exceeded its 2023 budget because a number of customers who applied in 2022 were treated in 2023.

7. Appendix A. Cost Recovery Reconciliation

TABLE 20. EFFICIENCY COST RECOVERY SURCHARGE RESIDENTIAL AND PHA GS CUSTOMERS (SEPTEMBER 2022 THROUGH AUGUST 2023)

Residential & PHA GS

RESIDENTIAL & PHA GS		Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Total
		Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	FY 2023
FY 2022 Over-Collection	\$ 299,342													
Volume Billed		596,333	1,117,339	1,959,652	4,429,596	5,780,656	4,931,319	4,585,367	2,783,710	1,417,310	804,846	645,917	564,663	29,616,708
ECR Surcharge		\$ 0.0119	\$ 0.0057	\$ 0.0057	\$ 0.0091	\$ 0.0125	\$ 0.0125	\$ 0.0121	\$ 0.0116	\$ 0.0116	\$ 0.0222	\$ 0.0327	\$ 0.0327	
Revenue Billed		\$ 7,067	\$ 6,369	\$ 11,170	\$ 40,309	\$ 72,258	\$ 61,641	\$ 55,254	\$ 32,291	\$ 16,441	\$ 17,827	\$ 21,121	\$ 18,464	
RHER	Expense	\$ 961	\$ 684	\$ 54,204	\$ 6,134	\$ 65,414	\$ (10,493)	\$ 97,817	\$ 9,562	\$ 76,840	\$ 13,534	\$ 64,705	\$ 69,476	\$ 448,837
RHER	Labor	\$ 3,534	\$ 2,318	\$ 2,035	\$ 4,063	\$ 3,392	\$ (2,315)	\$ 5,320	\$ 4,559	\$ 1,276	\$ 6,895	\$ 5,535	\$ (1,717)	\$ 34,894
HECI	Expense	\$ 99	\$ 297	\$ (200)	\$ 634	\$ 3,701	\$ (4,335)	\$ 78,110	\$ 1,208	\$ 11,382	\$ 69,935	\$ 4,728	\$ 28,554	\$ 194,113
HECI	Labor	\$ 365	\$ 1,005	\$ (702)	\$ 420	\$ 351	\$ (771)	\$ 439	\$ 377	\$ 8,240	\$ 571	\$ 457	\$ 7,409	\$ 18,161
LITSTAT	Expense	\$ 71	\$ 99	\$ 51,562	\$ 452	\$ 30,743	\$ 28,787	\$ 19,164	\$ 7,373	\$ 15,552	\$ 5,584	\$ 14,480	\$ 61,833	\$ 235,699
LITSTAT	Labor	\$ 261	\$ 336	\$ 7,624	\$ 300	\$ 250	\$ 4,634	\$ 313	\$ 269	\$ (3,838)	\$ 407	\$ 326	\$ 5,205	\$ 16,086
CIER	Expense	\$ 10	\$ 8	\$ (20)	\$ 62	\$ 750	\$ (812)	\$ 560	\$ 197	\$ (741)	\$ 113	\$ 235	\$ (396)	\$ (34)
CIER	Labor	\$ 36	\$ 26	\$ (69)	\$ 41	\$ 34	\$ (76)	\$ 43	\$ 37	\$ (80)	\$ 56	\$ 45	\$ (101)	\$ (7)
TSTAT	Expense	\$ 23	\$ 280	\$ 15,435	\$ 150	\$ 38,599	\$ 43,672	\$ 14,117	\$ 6,779	\$ 31,014	\$ 6,311	\$ 9,717	\$ (33,039)	\$ 133,057
TSTAT	Labor	\$ 89	\$ 948	\$ 2,356	\$ 99	\$ 83	\$ 8,333	\$ 106	\$ 89	\$ (573)	\$ 135	\$ 111	\$ (234)	\$ 11,541
Total		\$ 5,450	\$ 6,000	\$ 132,225	\$ 12,355	\$ 143,316	\$ 66,623	\$ 215,988	\$ 30,449	\$ 139,071	\$ 103,541	\$ 100,338	\$ 136,990	\$ 1,092,347
Monthly Over/(Under)		\$ 1,617	\$ 369	\$ (121,055)	\$ 27,954	\$ (71,058)	\$ (4,982)	\$ (160,735)	\$ 1,842	\$ (122,630)	\$ (85,714)	\$ (79,217)	\$ (118,526)	
Cumulative Over/(Under)		\$ 300,958	\$ 301,327	\$ 180,273	\$ 208,227	\$ 137,168	\$ 132,187	\$ (28,548)	\$ (26,706)	\$ (149,336)	\$ (235,050)	\$ (314,267)	\$ (432,792)	

TABLE 21. EFFICIENCY COST RECOVERY SURCHARGE COMMERCIAL AND PHA CUSTOMERS (SEPTEMBER 2022 THROUGH AUGUST 2023)

Commercial & PHA

COMMERCIAL & PHA		Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Total
		Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	FY 2023
FY 2022 Under-Collection \$ (131,379)														
Volume Billed		355,022	559,947	841,058	1,484,849	1,615,504	1,420,718	1,442,259	861,352	594,387	491,464	364,213	282,933	10,313,707
ECR Surcharge		\$ 0.0168	\$ 0.0153	\$ 0.0153	\$ 0.0282	\$ 0.0410	\$ 0.0410	\$ 0.0348	\$ 0.0285	\$ 0.0285	\$ 0.0235	\$ 0.0184	\$ 0.0184	
Revenue Billed		\$ 5,964	\$ 8,567	\$ 12,868	\$ 41,799	\$ 66,236	\$ 58,249	\$ 50,119	\$ 24,549	\$ 16,940	\$ 11,525	\$ 6,702	\$ 5,206	
RHER	Expense	\$ 320	\$ 228	\$ (645)	\$ 2,045	\$ 21,805	\$ (23,849)	\$ 6,244	\$ 637	\$ 7,220	\$ 902	\$ 4,130	\$ (2,692)	\$ 16,344
RHER	Labor	\$ 1,178	\$ 773	\$ (2,262)	\$ 1,354	\$ 1,131	\$ (2,485)	\$ 340	\$ 304	\$ 779	\$ 459	\$ 353	\$ (682)	\$ 1,241
CIER	Expense	\$ 541	\$ 421	\$ 10,194	\$ 3,458	\$ 41,604	\$ (6,309)	\$ 31,040	\$ 10,927	\$ 70,213	\$ 6,275	\$ 13,063	\$ 90,280	\$ 271,707
CIER	Labor	\$ 1,992	\$ 1,426	\$ (2,052)	\$ 2,290	\$ 1,912	\$ (59)	\$ 2,393	\$ 2,057	\$ 3,573	\$ 3,112	\$ 2,489	\$ 2,238	\$ 21,371
TSTAT	Expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TSTAT	Labor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total		\$ 4,032	\$ 2,847	\$ 5,235	\$ 9,147	\$ 66,451	\$ (32,702)	\$ 40,015	\$ 13,925	\$ 81,785	\$ 10,748	\$ 20,036	\$ 89,144	\$ 310,662
Monthly Over/(Under)		\$ 1,932	\$ 5,720	\$ 7,634	\$ 32,652	\$ (215)	\$ 90,951	\$ 10,103	\$ 10,624	\$ (64,845)	\$ 777	\$ (13,335)	\$ (83,938)	
Cumulative Over/(Under)		\$ (129,447)	\$ (123,727)	\$ (116,093)	\$ (83,441)	\$ (83,656)	\$ 7,295	\$ 17,398	\$ 28,022	\$ (36,823)	\$ (36,045)	\$ (49,380)	\$ (133,318)	

TABLE 22. EFFICIENCY COST RECOVERY SURCHARGE INDUSTRIAL CUSTOMERS (SEPTEMBER 2022 THROUGH AUGUST 2023)

Industrial

INDUSTRIAL		Actual Sep-22	Actual Oct-22	Actual Nov-22	Actual Dec-22	Actual Jan-23	Actual Feb-23	Actual Mar-23	Actual Apr-23	Actual May-23	Actual Jun-23	Actual Jul-23	Actual Aug-23	Total FY 2023
FY 2022 Over-Collection	\$ 7,620													
Volume Billed		25,989	45,088	71,261	124,138	121,541	95,958	114,233	55,349	40,693	36,899	30,758	37,066	798,974
ECR Surcharge		\$ (0.0053)	\$ (0.0051)	\$ (0.0051)	\$ (0.0054)	\$ (0.0056)	\$ (0.0056)	\$ (0.0040)	\$ (0.0023)	\$ (0.0023)	\$ (0.0018)	\$ (0.0013)	\$ (0.0013)	
Revenue Billed		\$ (138)	\$ (230)	\$ (363)	\$ (664)	\$ (681)	\$ (537)	\$ (451)	\$ (127)	\$ (94)	\$ (66)	\$ (40)	\$ (48)	
RHER Expense		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8	\$ (8)	\$ 12	\$ -	\$ (13)	\$ (2)
RHER Labor		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4	\$ (4)	\$ 6	\$ -	\$ (6)	\$ -
CIER Expense		\$ 6	\$ 5	\$ (12)	\$ 37	\$ 446	\$ (483)	\$ 333	\$ 117	\$ (441)	\$ 67	\$ 140	\$ (235)	\$ (20)
CIER Labor		\$ 21	\$ 15	\$ (41)	\$ 25	\$ 20	\$ (45)	\$ 26	\$ 22	\$ (48)	\$ 33	\$ 27	\$ (60)	\$ (4)
Total		\$ 27	\$ 20	\$ (53)	\$ 62	\$ 466	\$ (528)	\$ 358	\$ 151	\$ (500)	\$ 118	\$ 167	\$ (314)	\$ (26)
Monthly Over/(Under)		\$ (165)	\$ (250)	\$ (311)	\$ (726)	\$ (1,147)	\$ (9)	\$ (810)	\$ (279)	\$ 407	\$ (184)	\$ (207)	\$ 266	
Cumulative Over/(Under)		\$ 7,455	\$ 7,205	\$ 6,894	\$ 6,169	\$ 5,022	\$ 5,012	\$ 4,203	\$ 3,924	\$ 4,331	\$ 4,146	\$ 3,940	\$ 4,206	