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Deanne M. O'Dell 717.255.3744 dodell@eckertseamans.com

December 27, 2018

## Via Hand Delivery

Rosemary Chiavetta, Secretary
PA Public Utility Commission
PO 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 ("PGW") enclosed for filing please its Demand Side Management Program Annual Report Fiscal Year 2018 Results with regard to the above-referenced matter. This document is being submitted consistent with the directives of the Commission in its tentative opinion and order entered August 4, 2016 and its final opinion and order entered November 1, 2016 at this docket. Copies to be served in accordance with the attached Certificate of Service.

Sincerely,


Deanne M. O'Dell
DMO/lww
Enclosure
cc: Hon. Christopher Pell w/enc.
Hon. Marta Gull w/enc.
Cert. of Service w/enc.
Cornelia Schneck, TUS w/enc. (via email only) - cschneck@pa.gov


# Demand Side Management <br> Program Annual Report 

FY 2018 Results

Prepared by Philadelphia Gas Works (PGW) with assistance from Green Energy Economics Group, Inc. (GEEG)
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## 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 2018 ("FY 2018"). ${ }^{1}$

PGW's FY 2018 DSM program budget was approved by Commission Order entered on November 1, 2016 at Docket Number P-2014-2459362. The programs were implemented in accordance with the EnergySense Demand Side Management Portfolio Phase II Compliance Plan for Fiscal Years 2017-2020 filed on December 27, 2016 at Docket Number P-2014$2459362 .{ }^{2}$

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 all four DSM programs: ${ }^{3}$

- Residential Equipment Rebates ("RER");
- Efficient Building Grants ("EBG");
- Commercial Equipment Rebates ("CER"); and
- Efficient Construction Grants ("ECG").


### 1.2. Portfolio-Level Updates

PGW made a strategic decision to hire one vendor to manage the administration, rebate processing, marketing and technical review for the full EnergySense portfolio (RER, CER, EBG, and ECG), ensuring better integration between programs and improved customer experience. During the 2018 program year, PGW on-boarded the new administrator and implemented various program updates and improvements. Improvements launched in 2018 included an updated website that is more user-friendly and includes online applications for residential and commercial rebates and grants. These online applications have resulted in shorter check payment times and fewer rejections. Customers are required

[^0]to fill all application fields, which helps prevent errors and incomplete applications. The program administrator also increased marketing outreach to civic associations, equipment supply houses and other trade allies.
PGW has focused on building the project lead pipeline, including for projects that will close in 2019, and saw a considerable growth in interest among large projects. In response to the lead activity, PGW established new policies to manage potential oversubscription. For the first time, PGW established rebate caps of $\$ 25,000$ per prescriptive rebates per building for the RER and CER programs. These caps are likely to apply only to very large projects that install numerous pieces of rebate-eligible equipment.

PGW continues to apply incentive caps of $\$ 60,000$ for the ECG program and $\$ 75,000$ for the EBG program, but updated how it applies the caps in 2018 in relation to the RER and CER change listed above. In previous years customers could earn up to the capped amounts of $\$ 60,000$ or $\$ 75,000$ respectively for custom measures in a building, though could exceed the caps with prescriptive rebates for heating equipment. Now, the caps are firm so that customers cannot earn more than the assigned capped amount for the building. This creates an incentive for customers with larger projects to pursue the comprehensive grant programs. We expect this update will allow PGW to distribute rebates and grants to as many participants as possible, better track leads, and manage the program within budget as we enter 2019.

### 1.3. Summary of Results

In FY 2018, PGW spent $\$ 1,390,310$ on DSM programming, approximately 54 percent of the FY 2018 budget filed by PGW in its FY 2017-2020 Compliance Plan. PGW achieved estimated first year gas savings of 22.3 Billion Btu ("BBtu") and 403 BBtu over the lifetime of the measures installed. The FY 2018 DSM activities have resulted in present value total resource net benefits of $\$ 1,068,935$ (2014\$).

Table 1. DSM Costs and Budgets by Program (Nominal) ${ }^{4}$

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| \% | Actual: | Goal | $0 \%$ |
| Residential Equipment Rebates (RER) | \$354,324 | \$727,000 | 49\% |
| Efficient Construction Grants (ECG) | \$76,794 | \$232,000 | 33\% |
| Commercial Equipment Rebates (CER) | \$407,297 | \$392,650 | 104\% |
| Efficient Building Grants (EBG) | \$57,090 | \$394,850 | 14\% |
| Portfolio-wide Costs | \$494,805 | \$844,000 | 59\% |
| Utility Total | \$1,390,310 | \$2,590,500 | 54\% |
| Participant Costs | \$812,279 | \$1,574,925 | 52\% |
| Total | \$2,202,589 | \$4,165,425 | 53\% |

[^1]Table 2. DSM Cosits and Budgets by Category (Nominal)

| Category | FY 2018 |  |  |
| :--- | ---: | ---: | ---: |
|  | Actual | Goal | \% |
| Customer Incentives | $\$ 781,283$ | $\$ 1,294,550$ | $60 \%$ |
| Administration and Management | $\$ 93,144$ | $\$ 694,000$ | $13 \%$ |
| Marketing and Business Development | $\$ 134,160$ | $\$ 150,000$ | $89 \%$ |
| Contractor Costs | $\$ 352,445$ | $\$ 210,800$ | $167 \%$ |
| Inspection and Verification | $\$ 27,776$ | $\$ 46,150$ | $60 \%$ |
| Evaluation | $\$ 1,502$ | $\$ 245,000$ | $1 \%$ |
| Utility Total | $\$ 1,390,310$ | $\$ 2,640,500$ | $\mathbf{5 3 \%}$ |
| Participant Costs | $\$ 812,279$ | $\$ 1,574,925$ | $\mathbf{5 2 \%}$ |
| Total | $\$ 2,202,589$ | $\$ 4,215,425$ | $\mathbf{5 2 \%}$ |

Table 3. Portfolio-wide Incremental First Year Gas Savings (MMBtu)

| Program | FY 2018 |  |  |
| :---: | :---: | :---: | :---: |
|  | Actual | Goal | \% |
| Residential Equipment Rebates (RER) | 5,843 | 13,558 | 43\% |
| Efficient Construction Grants (ECG) | 1,019 | 2,778 | 37\% |
| Commercial Equipment Rebates (CER) | 14,295 | 10,056 | 142\% |
| Efficient Building Grants (EBG) | 1,100 | 5,399 | 20\% |
| Portfolio Total | 22,257 | 31,791 | 70\% |

Table 4. Portfolio-wide Incremental Lifetime Gas Savings (MMBTu)

| Program | FY 2018 |  |  |
| :--- | ---: | ---: | ---: |
|  | Actual | Goal | $\%$ |
| Residential Equipment Rebates (RER) | 126,663 | 296,175 | $43 \%$ |
| Efficient Construction Grants (ECG) | 23,750 | 50,586 | $47 \%$ |
| Commercial Equipment Rebates (CER) | 234,996 | 156,427 | $150 \%$ |
| Efficient Building Grants (EBG) | 17,731 | 100,628 | $18 \%$ |
| Portfolio Total | 403,140 | 603,816 | $67 \%$ |

Table 5. Non-Gas Benefits

| Category | FY 2018 |  |  |
| :--- | ---: | ---: | ---: |
|  | Actual | Goal | $\%$ |
| First Year Energy Savings Installed (kWh) | 135,602 | 136,803 | $99 \%$ |
| Lifetime Energy Savings Installed (kWh) | $1,703,391$ | $2,900,278$ | $59 \%$ |
| Summer Peak Demand Savings Installed (kW) | 1 |  |  |
| First Year Water Savings Installed (million gallons) | 6 |  |  |
| Lifetime Water Savings Installed (million gallons) | 65 |  |  |

Table 6. Total Annual Savings FY2011 Through FY 2018

| Cumulative EnergySense Portfolio Savings |  |
| :--- | ---: |
| Natural Gas (MMBtu) | 501,209 |
| Energy Savings (kWh) | $4,375,991$ |
| Summer Peak Demand Savings (kW) | 1,214 |
| Water Savings (million gallons) | 39 |

Table 7. Total Resource Cost Test Results for FY 2018 (2014\$) Base Avoided Cost Scenario

|  |  | Program |  |
| :--- | ---: | ---: | ---: |

Table 8. Total Resource Cost Test Results for FY 2018 (2014\$) Avoided Cost Scenario including CO2

| Program | FY 2018 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | TVof Benefits | PVof Costs | PV of Net Benefits | BGR |
| Residential Equipment Rebates (RER) | \$1,090,148 | \$736,812 | \$353,336 | 1.48 |
| Efficient Construction Grants (ECG) | \$175,086 | \$93,245 | \$81,841 | 1.88 |
| Commercial Equipment Rebates (CER) | \$1,845,189 | \$519,143 | \$1,326,046 | 3.55 |
| Efficient Building Grants (EBG) | \$244,653 | \$81,822 | \$162,832 | 2.99 |
| All Programs | \$3,355,076 | \$1,431,021 | \$1,924,055 | 2.34 |
| Portfolio Wide Costs |  | \$416,666 | $(\$ 416,666)$ |  |
| Portfolio Total | \$3,355,076 | \$1,847,687 | \$1,507,389 | 1.82 |

[^2]
## 2. Residential Equipment Rebate Program

The Residential Equipment Rebate ("RER") program offers prescriptive rebates on premium efficiency heating equipment to increase the penetration of these technologies in the homes of PGW's customers. The program has the following objectives:

- Promote the selection of premium efficiency furnaces and boilers at the time of purchase of residentially-sized gas heating 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 9. Residential Equipment Rebates Results for FY 2018

|  |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Actual | Goall |  |
| PARTICIPATION |  |  |  |
| Rebates Awarded | 365 | 1,030 | 35\% |
| COSTS (Nominal) |  |  |  |
| Non-Incentive Spending | \$41,124 | \$56,000 | 73\% |
| Contractor Costs | \$27,651 |  |  |
| Inspection and Verification | \$13,473 |  |  |
| Customer Incentives | \$313,200 | \$671,000 | 47\% |
| Total Program Spending | \$354,324 | \$727,000 | 49\% |
| Participant Costs | \$524,933 |  |  |
| Total Costs | \$879,257 |  |  |
| SAVINGS |  |  |  |
| First Year MMBtus | 5,843 | 13,558 | 43\% |
| Lifetime MMBtus | 126,663 | 296,175 | 43\% |
| First Year kWh | 76,300 |  |  |
| Lifetime kWh | 1,526,000 |  |  |
| Measures |  |  |  |
| Furnaces | 289 |  |  |
| Boilers | 76 |  |  |

Table 10. TRC Cost-effectiveness Results for Residential Equipment Rebates FOR FY 2018 (2014\$)

| Present Value (2014\$) | Actual |
| :--- | ---: |
| Benefits | $\$ 896,391$ |
| Costs | $\$ 736,812$ |
| Net Benefits | $\$ 159,580$ |
| BCR | 1.22 |

### 2.1. Notable Program Activities in FY 2018

In FY 2018, there were two hundred eighty nine (289) residential furnaces installed and seventy six (76) residential boilers installed. The majority of these landlord/developer claims were for small to medium sized buildings and small townhouse projects. PGW attributes lower than expected participation rates to the transition to the new program administrator during the fall and winter which resulted in reduced marketing during the onboarding of the new vendor. Despite the lower participation, the program continued to be cost-effective.

In FY 2018, 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 more than half of applications were referrals from this source.

Table 11. Source of Residential Equipment Rebates Referrals From Inception Through FY 2018

| Source | Percent |
| :--- | ---: |
| Family / Friend | $2 \%$ |
| Contractor / Supply House | $72 \%$ |
| Website | $13 \%$ |
| Gas Bill | $6 \%$ |
| Other | $7 \%$ |

## Quality Assurance and Verifications

There were 39 on-site rebate verifications performed in 2018, accounting for 11 percent of all rebate projects. Projects were selected at random for verification. Projects in which the rebate awarded was greater than $\$ 5,000$ were given special attention. No discrepancies were found through verifications.

## 3. Efficient Building Grants

The Efficient Building Grants program promotes natural gas energy efficiency retrofit investments by PGW's multi-family residential, commercial, and industrial customers. The program provides technical assistance and customized financial incentives for cost-effective gas-saving investments including high-efficiency heating system replacements, improved system controls, and building thermal performance enhancements. The program has the following objectives:

- Save natural gas through cost-effective energy efficiency retrofit projects.
- Make comprehensive energy-efficiency retrofits affordable by combining customized financial incentives with third-party financing to provide participating customers with immediate positive cash flow.
- Promote a better understanding of energy efficiency options available to PGW's nonresidential customers.

Table 12. Efficient Building Grants Program Activity for FY 2018

|  | O 4 EY 2018, |  |  |
| :---: | :---: | :---: | :---: |
|  | Actual | Coal 3 | \% |
| PARTICIPATION |  |  |  |
| Applications | 4 |  |  |
| Incentive Agreements Issued | 4 |  |  |
| Customers with Installations | 3 |  |  |
| COSTS (Nominal) |  |  |  |
| Non-Incentive Spending | \$16,262 | \$166,950 | 10\% |
| Contractor Costs | \$15,746 |  |  |
| Inspection and Verification | \$516 |  |  |
| Customer Incentives | \$40,828 | \$227,900 | 18\% |
| Total Program Spending | \$57,090 | \$394,850 | 14\% |
| Participant Costs | \$38,238 |  |  |
| Total Costs | \$95,327 |  |  |
| SAVINGS |  |  |  |
| First Year MMBtus | 1,100 | 5,399 | 20\% |
| Lifetime MMBtus | 10,568 | 100,628 | 11\% |
| First Year kWh | 54,928 |  |  |
| Lifetime kWh | 1,082,925 |  |  |
| First Year Water Gallons (Million Gallons) | 0.5 |  |  |
| Lifetime Water (Million Gallons) | 5.1 |  |  |

## Table 13. Cost-effectiveness Results for Efficient Building Grants for FY 2018 (2014\$)

| Present value (2014 $)$ | Actual |
| :--- | ---: |
| Benefits | $\$ 204,955$ |
| Costs | $\$ 81,822$ |
| Net Benefits | $\$ 123,134$ |
| BCR | 2.50 |

### 3.1. Notable Program Activities in FY 2018

## Project Timelines

In 2018, PGW completed three projects in the Efficient Building Grants Program, and maintained program cost-effectiveness. Efficient Building Grants projects are typically discretionary and can take a significant amount of lead time for the customer to plan the project and obtain all necessary approvals. PGW focused in 2018 on increasing marketing efforts to build the lead pipeline. As a result of our outreach to building owners and trade allies, PGW has six Efficient Building Grants projects in the pipeline with at least two expected to close in 2019.

## 4. Commercial Equipment Rebates

The Commercial Equipment Rebates Program ("CER") issues prescriptive rebates on premium efficiency gas appliances and heating equipment to increase the penetration of these measures in the facilities of PGW nonresidential 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 equipment.
- Increase business customers' awareness of the breadth of energy efficiency opportunities in their properties.
- Strengthen PGW's relationship with business customers as partners 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.

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

Table 14. Commercial Equipment Rebates Results for FY 2018

|  | $\therefore$ FY2018 |  |  |
| :---: | :---: | :---: | :---: |
|  | Actual | Goal ${ }^{1}$ | \% |
| PARTICIPATION |  |  |  |
| Rebates Awarded | 120 | 144 | 83\% |
| COSTS (Nominal) |  |  |  |
| Non-Incentive Spending | \$34,333 | \$154,000 | 22\% |
| Contractor Costs | \$26,698 |  |  |
| Inspection and Verification | \$6,827 |  |  |
| Evaluation | \$809 |  |  |
| Customer Incentives | \$372,964 | \$238,650 | 156\% |
| Total Program Spending | \$407,297 | \$392,650 | 104\% |
| Participant Costs | \$142,913 |  |  |
| Total Costs | \$550,210 |  |  |
| SAVINGS |  |  |  |
| First Year MMBtus | 14,295 | 10,056 |  |
| Lifetime MMBtus | 234,996 | 156,427 | 150\% |
| First Year kWh | 1,302 |  |  |
| Lifetime kWh | 35,263 |  |  |
| Summer Peak Demand kW | 1 |  |  |
| First Year Water (Million Gallons) | 5.4 |  |  |
| Lifetime Water (Million Gallons) | 56 |  |  |

Annual Report: FY 2018

|  | ormotho |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Measures |  |  |  |
| Commercial Boilers | 13 |  |  |
| Commercial Cooking Equipment | 24 |  |  |
| Commercial Water Heater | 17 |  |  |
| Steam Traps | 54 |  |  |
| Custom Projects | 12 |  |  |

Table 15. Cost-Effectiveness Results for CER for FY 2018 (2014\$)

| Present value (2014 $\$$ Petual |  |
| :--- | ---: |
| Benefits | $\$ 1,667,236$ |
| Costs | $\$ 519,143$ |
| Net Benefits | $\$ 1,148,093$ |
| BCR | 3.21 |

### 4.1. Notable Program Activities in FY 2018

The CER program was successful in FY 2018, with 120 rebates issued, including 108 for prescriptive pieces of equipment and 12 custom projects. Spending for customer incentives totaled $\$ 372,963$ which exceeded the program goal of $\$ 238,650$. The program had a high level of participation compared to other programs, which PGW attributes to several factors including increased marketing by our third party vendor and several larger rebate projects for commercial water heaters, commercial boilers, and custom projects.

Commercial boilers, which contribute greater savings and have longer measure lifetimes than other measures in CER, accounted for a significant amount of the program's costeffective benefits, with 13 installations and $\$ 81,400$ in rebates. This resulted in CER gas savings exceeding projections. Customer participating in CER had a range of building types, including multifamily, religious, education healthcare, lodging, and office buildings.

Commercial food service equipment accounted for 24 pieces of equipment and $\$ 35,100$ in rebates. After several years of engagement with restaurant supply houses and manufacturers, this equipment is more readily available. Supply houses now carry models that can be purchased and picked up that day rather than as custom orders, making it easier for businesses with short timelines to select high efficiency.

Seventeen rebates were issued for Commercial Hot Water Heaters, totaling \$168,388 Commercial Water Heaters were installed in a variety of buildings ranging from smaller multifamily buildings, up to a rebate of $\$ 54,000$ for equipment installed at a stadium in Philadelphia. There were fifty-four steam trap rebates issued, totaling $\$ 2,700$.

[^3]
## 5. Efficient Construction Grants

The Efficient Construction Grants program promotes natural gas energy efficiency in the construction and gut rehab markets, both for residential and non-residential construction projects. The program provides technical assistance and prescriptive financial incentives for projects that exceed energy code design requirements. 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 16. Efficient Construction Grants Program Results for Fy 2018

|  |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Actual | Goal | \% |
| PARTICIPATION |  |  |  |
| Completed Projects | 56 | 42 | 133\% |
| Residential Single Family Buildings | 52 | 30 |  |
| Residential Multifamily Buildings | 4 | 10 |  |
| Commercial | 0 | 2 |  |
| COSTS (Nominal) |  |  |  |
| Non-Incentive Spending | \$22,503 | \$75,000 | 30\% |
| Contractor Costs | \$14,334 |  |  |
| Inspection and Verification | \$7,476 |  |  |
| Evaluation | \$693 |  |  |
| Customer Incentives | \$54,291 | \$157,000 | 57\% |
| Total Program Spending | \$76,794 | \$232,000 | 56\% |
| Participant Costs | \$36,223 |  |  |
| Total Costs | \$113,017 |  |  |
| SAVINGS |  |  |  |
| First Year MMBtus | 1,019 | 2,778 | 37\% |
| Lifetime MMBtus | 23,750 | 50,586 | 47\% |
| First Year kWh | 3,072 |  |  |
| Lifetime kWh | 87,200 |  |  |
| First Year Water Gallons (Million Gallons) | 0.2 |  |  |
| Lifetime Water (Million Gallons) | 3.8 |  |  |

Table 17. Cost-effectiveness Results for Efficient Construction Grants for FY 2018 (2014\$)

| Tresenta Value $(2014 \$)$ | Actual |
| :--- | ---: |
| Benefits | $\$ 148,040$ |
| Costs | $\$ 93,245$ |
| Net Benefits | $\$ 54,795$ |
| BCR | 1.59 |

The Efficient Construction Grants program issued $\$ 54,291$ in grants for 56 projects during FY 2018, and spent 57\% percent of the incentive budget goal. Although lower than last year, several projects that entered the program as leads have closed or are projected to close in FY2019, including a 60 townhouse development. PGW has also been successful at cultivating relationships with builders of single family or small multi-family properties, which require a shorter lead and completion time.

Interest in the program continues to grow among residential and multifamily builders and developers who have had successful installations. PGW has engaged with more commercial, educational and institutional customers, and will continue these efforts to improve participation among these customers.

PGW often sees builders who participate in the program for the first time will proceed to complete multiple projects within the program. There are also synergies between ECG, RER and CER. PGW works with builders who first participate in the prescriptive rebate programs and then encourages them to consider ECG for future projects. This strategy has worked for several projects.

Table 18. Efficiency Cost Recovery Surcharge Residential and PHA GS Customers (September 2017 Through August 2018)

## Residential \& PHA GS

| RESIPENTIAL \& PHA GS |  | \$ | 423,608 | Actual <br> Sep-17 |  | Actual Oct-17 |  | Actual Nov-17 |  | Actual <br> Dec-17 |  | $\begin{aligned} & \text { Actual } \\ & \text { Jan-18 } \end{aligned}$ |  | Actual <br> Feb-18 |  |  | Actual Mar-18 | Actual Apr-18 |  | Actual <br> May-18 |  | Actual Jun-18 |  | Actual . Jub-18 |  | Actual <br> Aug-18 |  | $\begin{aligned} & \text { Total } \\ & \text { FY } 2018 \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FY 2047 Over-Collection |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Volume Billed |  |  |  |  | 741.149 |  | 774,207 |  | 2,072,645 |  | 4,741,689 |  | 8,580,658 |  | 5,886,716 |  | 5,027,436 ${ }^{\circ}$ |  | 4,524,624 |  | 1,774.058 |  | 855,824 |  | 690,326 |  | 628,898 |  | 36,298,230. |
| ECR Surcharge |  |  |  | 5 | 0.0175 | 5 | 0.0198 | s | 0.0196 | S | 0.0211 | \$ | 0.0225 | \$ | 0.0225 | s. | . 0.0199 | \$ | -0.0173 | 5 | -0.0173 | 5 | 0.0176 | 5 | 0.0179 | \$ | 0.0179 |  |  |
| Revenue Billed |  |  |  | \$ | 12,970 | s | 15,174 | 5 | 40,624 | \$ | 99.813 | \$ | 193,065 | 5 | 132.451 | \$ | 100,046 | \$ | 78,276 | s | 30,691 | 5 | 15,083 | \$ | 12,357 | 5 | 11,257 | \$ | 741.787 |
| RHER |  | Expense |  | 5 | - | \$ | 73,271 | \$ | 88,391 | \$ | 18,813 | \$ | 57,321. | \$ | 89,579 | \$ | 11,077 | \$ | (17,047) | \$ | 31.153 | 5 | 81,765 | \$ | 9,357 | 5 | 48,284. | \$ | 497.964 |
| RHER |  | Labor |  | 5 | 1,393 | \$ | 1,349 | s | 3,656 | \$ | 1,693 | \$ | 1,379 | \$ | 6,501 | \$ | 1,812 | \$ | 1.453 | \$ | 2.413 | \$ | 1,810 | \$ | 1,430 | \$ | (9,761) | \$ | 15,128 |
| HECI |  | Expense |  | \$ | - | \$ | 11.587 |  | 13,873 | \$ | 55 | \$ | 2,679 | \$ | 37,948 | \$ | 1,377 |  | (913) | \$ | 9,353 | \$ | 19.630 | 5 | 2,800 | \$ | 34,771 |  | 133,160 |
| HECI |  | Labor |  | 5 | 220 | 5 | 213 | \$ | 389 | 5 | 268 | 5 | 218 | \$ | 1,755 | \$ | 287 | S | 230 | 5 | 593 | s | 286 | + | 226 | \$ | (605) | S | 4,080 |
| CRRA |  | Expense |  | s | - | S | - | 5 | - | \$ | - | \$ | - | \$ | - | 5 | - | S | - | \$ | - | \$ | - | \$ | - | s | - | \$ | - |
| CRRA |  | Labor |  | 5 | - | S | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | 5 | - | \$ | - | \$ | - | \$ | - |
| CIR |  | Expense |  | \$ | - | \$ | 15,653 | \$ | 9.894 | \$ | 75 | \$ | 18,778 | \$ | 81,349 | \$ | 1.827 | 5 | $(2,226)$ | \$ | (676) | \$ | 7.289 | 5 | 2,480 | \$ | (19,113) | \$ | 115,331 |
| CIR |  | Labor |  | \$ | 298 | \$ | 288 | \$ | 144 | \$ | 362 | 5 | 295 | S | 5,716 | \$ | 387 | \$ | 310 | \$ | (282) | \$ | 387 | \$ | 306 | \$ | (4,868) | \$ | 3,342 |
| CIER |  | Expense |  | \$ | - | \$ | 695 | \$ | 4,617 | \$ | 543 | \$ | 473 | \$ | 404 | 5 | 107 | 5 | 450 | \$ | 1,851 | \$ | 1.223 | 5 | (153) | \$ | $(10,467)$ | \$ | (257) |
| CIER |  | Labor |  | 5 | 13 | S | 13 | 5 | 255 | S | 16 | S | 13 | 5 | 62 | \$ | 17 | S | 14 | \$ | 80 | 5 | 17 | \$ | 14 | 5 | (523) | \$ | (10) |
| Total |  |  |  | 5 | 1.924. | \$ | 103,070 | 5 | 121.220 | \$ | 21,823 | \$ | 81,156 | \$ | 223,314 | \$ | 16,890 | \$ | (17,729). | \$ | 44,483 | \$ | 112,408 | , | 16,459 | \$ | 37.720 | \$ | 762,738. |
| Monthly Overf(Under) |  |  |  | 5 | 11,046 | \$ | $(87,895)$ | \$ | (80.596) | \$ | 77,989 | \$ | 111,909 | \$ | $(90,863)$ | \$ | 83.156 | \$ | 96,005 | \$ | $(13,792)$ |  | $(97,345)$ | \$ | $(4,103)$ | \$ | $(26,463)$ |  |  |
| Cumulative Overf(Under) |  |  |  | 5 | 434,653 | \$ | 346,758 | 5 | 266,162 | \$ | 344,151 | \$ | 456,060 | S | 365,197 | \$ | 448,353 | S | 544,358 | \$ | 530,566 | 5 | 433,221 | 5 | 429,119 | \$ | 402,656 |  |  |

Table 19. Efficiency Cost Recovery Surcharge Commercial and PHA Customers (September 2017 Through August 2018)

## Commercial \& PHA

| COMMERCLAL APPA FY 2017 Over-Collection Volume Billed | \$ | 479,880 |  | Actual $\frac{\text { Sep-17 }}{377,480}$ |  | $\begin{aligned} & \text { Actual } \\ & \frac{\text { Oct-17 }}{409,934} \end{aligned}$ |  | Actual <br> Nov-17 <br> 845,153 |  | Actual <br> Dec-17 <br> 1,352,842 |  | $\begin{aligned} & \text { Actual } \\ & \text { Jan-18 } \\ & \frac{2,238,880}{} \end{aligned}$ |  | $\begin{aligned} & \text { Actual } \\ & \text { Feb-18 } \\ & \hline 1,582,385 \end{aligned}$ |  | $\begin{aligned} & \text { Actual } \\ & \frac{\text { Mer- }-18}{1.484,817} \end{aligned}$ |  | Actual <br> Apr-18 <br> 1.231,192 |  |  |  | $\begin{aligned} & \text { Actual } \\ & \frac{\text { Jun-18 }}{385,045} \end{aligned}$ |  | $\begin{aligned} & \text { Actual } \\ & \text { Jul-10 } \\ & \hline 353.539 \end{aligned}$ |  | $\begin{gathered} \text { Actual } \\ \text { Aug-18 } \\ 344,963 \end{gathered}$ |  | $\begin{aligned} & \text { Total } \\ & \text { FY 2018 } \\ & 11,194,633 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ECR Surcharge |  |  | \$ | 0.0494 | \$ | 0.0407 | S | 0.0407 | 5 | 0.0440 | 5 | 0.0472 | + | 0.0472 | 5 | 0.0441 | \$ | 0.0410 | S | 0.0410 | \$ | 0.0444 | \$ | 0.0477 | \$ | 0.0477 |  |  |
| Revenue Billed |  |  | \$ | 18,628 | 5 | 16,684 | \$ | 34,398 | \$ | 59.457 | \$ | 105,585 | \$ | 74,689 | 5 | 65,480 | \$ | 50,479 | 5 | 24,203 | \$ | 17,077 | \$ | 16,864 | \$ | 16,455 | \$ | 499,999 |
| RHER | Expense |  | \$ | - | \$ | 7.520 | S | 8,830 | 5 | 1,931 | \$ | 5,883 | \$ | $(11,056)$ | 5 | 1.137 | \$ | $(1,750)$ | 5 | $(3,056)$ | \$ | 8,392 | 5 | 960 | \$ | (13,455) |  | 5,336 |
| RHER | Labor |  | \$ | 143 | s | 138 | 5 | 368 | \$ | 174 | \$ | 142 | \$ | (323) | 5 | 188 | \$ | 149 | \$ | (395) | \$ | 186 | \$ | 147 | \$ | (587) | \$ | 326 |
| CRRI | Expense |  | 5 | - | 5 | - | 5 | . | 5 | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | . |
| CRRd | Labor |  | \$ | - | 5 | - | \$ | - | \$ | - | \$ | - | 5 | - | \$ |  | \$ | - | 5 | - | \$ | - | \$ | - | 5 | - | \$ |  |
| CIR | Expense |  | \$ | - | 5 | 28,255 | S | 17,880 | 5 | 135 | \$ | 33,896 | \$ | $(80,145)$ | 5 | 3,297 | S | $(4,018)$ | \$ | 721 | \$ | 13,157 | \$ | 4,477 | \$ | $(25,340)$ | \$ | $(7,705)$ |
| CIRI | Labor |  | \$ | 537 | 5 | 520 | \$ | 260 | 5 | 653 | \$ | 532 | \$ | $(2,502)$ | \$ | 699 | \$ | 560 | \$ | $(1,259)$ | \$ | 698 | \$ | 552 | 5 | $(1,250)$. | \$ | - |
| CIER | Expense |  | \$ | - | 5 | 36,890 | \$ | 114,227 | \$ | 28,825 | S | 25,089 | S | 44,751 | \$ | 5.673 | \$ | 23,912 | s | 103,434 | \$ | 64,935 | \$ | $(8.124)$ | \$ | 169,482 | 5 | 609,098 |
| CIER | Labor |  | 5 | 701 | \$ | 679 | \$ | 6.608 | \$ | 852 | \$ | 694 | \$ | 4.262 | \$ | 912 | \$ | 731 | 5 | 4,761 | \$ | 911 | \$ | 720 | \$ | (2,970) | \$ | 18,863 |
| HECI | Expense |  | \$ | + | 5 | 14,211 | 5 | 6.281 | 5 | 68 | s | 3.285 | \$ | $(23,846)$ | \$ | 1,689 | \$ | (1,120) | \$ | (569) | \$ | 24,076 | \$ | 3.434 | \$ | $(29,272)$ | \$ | $(1,763)$ |
| HECI | Labor |  | \$ | 270 | S | 262 | s | 131 | 5 | 328 | 5 | 288 | 5 | $(1,258)$ | 5 | 351 | \$ | 282 | 5 | (633) | 5 | 351 | S | 277 | 5 | (628) | 5 | - |
| Total |  |  | \$ | 1,652 | \$ | 88.476 | 5 | 154.582 | 5 | 32,865 | 5 | 69,789 | \$ | $(70,117)$ | \$ | 13.944 | \$ | 18,748 | \$ | 103,006 | \$ | 112,706 | \$ | 2,443 | S | 95,980 | 5 | 624,152 |
| Monthly Overf(Under) |  |  | \$ | 16,976 | S | $(71,792)$ | 5 | (120.164) | 5 | 26,493 | \$ | 35,796 | \$ | 144,805 | \$ | 51,537 | \$ | 31,732 | \$ | $(78,802)$ | \$ | $(95,630)$ | 5 | 14,421 | 5 | (79,525) |  |  |
| Cumulative Over/(Under) |  |  | 5 | 496,858 | \$ | 425,064 | 5 | 304,900 | 5 | 331,393 | s | 367,189 | \$ | 511,995 | \$ | 563,531 | \$ | 595,284 | s | 516,461 | \$ | 420,832 | \$ | 435,253 | + | 355,727 |  |  |

Table 20. Efficiency Cost Recovery Surcharge Industrial Customers (September 2017 Through August 2018)

## Industrial

| InDUSTRIAL. <br> FY 2017 Over-Collection | \$ | 51,029 | Actual Sep-17 |  | Actual Oct-17 |  | Actual Nov-17 |  | $\begin{aligned} & \text { Actual } \\ & \frac{\text { Dec. }-17}{113,515} \end{aligned}$ |  | $\begin{aligned} & \text { Actual } \\ & \frac{\tan -18}{190,026} \end{aligned}$ |  | $\begin{aligned} & \begin{array}{l} \text { Actuai } \\ \text { Feb }-18 \end{array} \\ & 116,542 \end{aligned}$ |  | $\begin{aligned} & \text { Actual } \\ & \frac{\text { Mar-18 }}{116,906} \end{aligned}$ |  | Actual App-18 81,866 |  | Actual May-18 |  | Actual <br> Jun-18 |  | $\begin{aligned} & \text { Actual } \\ & \frac{\text { Jut } 18}{30,987} \end{aligned}$ |  | Actual Aus-18 |  | $\begin{aligned} & \begin{array}{c} \text { Total } \\ \text { FY } 2018 \end{array} \\ & 890,084 \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Volume Bllled .. |  |  |  | 28,842. |  | 30,282 |  | 69,559 |  |  |  | 45,459 |  |  |  | 33,662 |  |  |  | 32,438 |  |  |  |  |
| ECR Surcharge |  |  | S | 0.0507 | s | 0.0419 | 5 | 0.0419 | 5 | 0.0338 . |  |  | 5 | 0.0256 |  |  | \$ | 0.0256 | S | 0.0235 | \$ | 0.0213 | \$ | 0.0213 | \$ | 0.0355 | \$ | 0.0498 | 5 | 0.0486 |  |  |
| Revenue Billed |  |  | \$ | 1,461 | \$ | 1,269 | S | 2.915 | \$ | 3.831 | 5 | 4,865 | \$ | 2,983 | \$ | 2.741 | \$ | 1,744 | \$ | 968 | \$ | 1.193 | \$ | 1,537 | \$ | 1,609 | \$ | 27.116 |
| RHER | Expense |  | \$ | - | \$ | 52 | \$ | $11^{\text {' }}$ | \$ | 13 | \$ | 41 | \$ | 2,505 | \$ | 8 | \$ | (12) | \$ | (730) | \$ | 58 | \$ | 7 | \$ | 488 | \$ | 2,440 |
| RHER | Labor |  | \$ | 1 | s | 1 | S | 1 | S | 1 | 5 | 1 | \$ | 123 | \$ | 1 | \$ | 1 | \$ | (14) | \$ | 1 | S | 1 | \$ | (54) | s | 65 |
| CIR | Expense |  | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | 5 | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| CIR | Labor |  | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | S | - | \$ | - | \$ | - | \$ | - |  | - | 5 | - | S | - | S | - |
| CIER | Expense |  | \$ |  | 5 | 6.078 | \$ | $(4,278)$ | 5 | 4.749 | \$ | 4,134 | \$ | $(13,684)$ | 5 | 935 | \$ | 3.940 | \$ | $(4,875)$ | \$ | 10.699 | \$ | (1.339) | \$ | $(11,070)$ | \$ | $(1,709)$ |
| CIER | Labor |  | \$ | 116 | 5 | 112 | 5 | 26 | $s$ | 140 | 5 | 114 | s | (509) | \$ | 150 | \$ | 120 | \$ | (271) | $\leqslant$ | 150 | S | 119 | 5 | (269) | \$ | - |
| Total |  |  | \$ | 117 | \$ | 6.243 | 5 | $(1,240)$ | \$ | 4.904 | \$ | 4,290 | \$ | (11,565) | 5 | 1,094 | \$ | 4.049 | \$ | $(5.889)$ | \$ | 10.909 | 5 | (1,212) | 5 | $(10,904)$ | s | 796 |
| Monthly Over/(Under) |  |  | \$ | 1,344 | 5 | $(4,975)$ |  | 4,155 |  | (1.073) | s | 575 | - | 14,548 | \$ | 1,847 | \$ | $(2,308)$ |  | 6,858 | \$ | (9,716) | S | 2.749 | \$ | 12,513 |  |  |
| Cumulative Overf(Under) |  |  | \$ | 52.373 | \$ | 47,399 | \$ | 51,554 | \$ | 50.480 | \$ | 51,055 | \$ | 65.603 | \$ | 67,250 | \$ | 64,944 | \$ | 71.802 | \$ | 62.086 | \$ | 64,836 | \$ | 77,349 |  |  |

## CERTIFICATE OF SERVICE

I hereby certify that this day I served a copy of PGW's Demand Side Management
Program Annual Report FY 2018 Results upon the parties and persons listed below in the
manner indicated in accordance with the requirements of 52 Pa . Code Section 1.54.

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[^0]:    ${ }^{1}$ September 1, 2017 through August 31, 2018.
    2 In its Final Order approving PGW's DSM program, the PUC directed PGW to submit an amendment to its then pending Universal Service and Energy Conservation Plan 2017-2020 ("USECP") regarding the low income usage reduction program ("LIURP") budget and return of the LIURP to USECP. See Petition of Philadelphia Gas Works for Approval of Demand-Side Management Plan, Docket No. P-2014-245936 Order entered November 1, 2016 ("Final DSM Order"). Pursuant to this (and other directives), PGW filed two amendments to its Universal Service and Energy Conservation Plan 2017-2020 at Docket No. M-2016-2542415. Ultimately, the Commission approved PGW's proposal that the administrative costs of the LIURP budget remain combined with the DSM Plan and allocated proportionally across all programs as done historically given the cost efficiencies that can be achieved. See Second Amended Universal Service and Energy Conservation Plan 2017-2020 dated August 31, 2017 at 27-28. The Commission entered a Final Order approving PGW's Second Amended USECP for the period of 2017-2020 on October 5, 2017.
    3 PGW's LIRUP program was an included program in the DSM portfolio from January 1, 2011 through August 31, 2018 at which point it was moved to PGW's USECP as directed by the Commission. See Final DSM Order at 2627.

[^1]:    ${ }^{4}$ All PGW Efficiency Cost Recovery Surcharge collections are shown in Appendix A. FY 2017 over-collections were refunded to the appropriate customer classes in FY 2018.

[^2]:    5 Savings includes DSM portfolio savings from January 1, 2011 through August 31, 2018. These figures include savings for PGW's LIURP from January 1, 2011 through August 31, 2016, at which point it was moved to PGW's USECP.

[^3]:    PGW has continued to offer Commercial Custom Rebates for cost-effective measures that show significant savings but do not constitute a comprehensive project or can be incentivized through the prescriptive rebates. In 2018, these included projects for steam processing equipment and low-flow devices in multifamily buildings.

    PGW implemented rebate caps of $\$ 25,000$ per project in the spring of 2018, as described above in Section 1.2. This was done to help manage the program budget and manage leads. There were no large projects submitted after this update in 2018 that were capped at \$25,000, though we expect that it will impact CER projects in 2019.

