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August 25, 2021

VIA ELECTRONIC FILING

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor North
P.O. Box 3265
Harrisburg, PA 17105-3265

Re: Petition of UGI Utilities, Inc. - Electric Division for Approval of Phase III of its Energy Efficiency and Conservation Plan - Docket No. M-2018-3004144

Dear Secretary Chiavetta:

Enclosed for filing on behalf of UGI Utilities, Inc. – Electric Division ("UGI Electric" or the "Company") is the Report for UGI Electric's Program Year 9 (June 1, 2020 through May 31, 2021) of its Phase III Energy Efficiency and Conservation Plan.

Copies of this filing will be provided as indicated on the Certificate of Service.

Respectfully submitted,

Devin Ryan

DTR/dc
Enclosures

cc: Certificate of Service
Cornelia R. Schneck, Bureau of Technical Utility Services

CERTIFICATE OF SERVICE

Docket No. M-2018-3004144

I hereby certify that a true and correct copy of the foregoing has been served upon the following persons, in the manner indicated, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

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Date: August 25, 2021

Devin T. Ryan

Report to the
Pennsylvania Public Utility Commission

UGI Utilities, Inc. – Electric Division
Energy Efficiency and Conservation Plan Program Year 9
(June 1, 2020-May 31, 2021)

Prepared by UGI Electric
Filing Date: August 25, 2021

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1 INTRODUCTION

Act 129 of 2008, P.L. 1592 ("Act 129") amended the Pennsylvania Public Utility Code, 66 Pa. C.S. §§ 101 et seq., to, *inter alia*, require the Pennsylvania Public Utility Commission ("PUC" or "Commission") to develop and adopt an Energy Efficiency and Conservation ("EE&C") program by January 15, 2009. The Commission's EE&C program requires electric distribution companies ("EDCs") serving at least 100,000 customers to adopt and implement cost-effective EE&C Plans, which reduce energy demand and energy consumption according to specific targets[1] within the service territory of each EDC. UGI Electric, which serves approximately 62,000 electric customers, is not mandated under Act 129 to implement an EE&C Plan.

In December 2009, a Secretarial Letter was issued by the PUC at Docket No. M-2009-2142851 directing EDCs with fewer than 100,000 customers to consider the voluntary adoption of EE&C Plans similar to those mandated by Act 129 ("EE&C Secretarial Letter"). In November 2010, UGI Utilities, Inc. – Electric Division ("UGI Electric" or the "Company") filed a voluntary Phase I EE&C Plan with the PUC in response to the EE&C Secretarial Letter. Because UGI Electric's EE&C Plan was voluntary, it was not subject to Act 129's energy and demand savings requirements. However, UGI Electric did use the Act 129 requirements as a guide when developing its Phase I EE&C Plan.

On April 9, 2015, UGI Electric filed a Petition at Docket No. M-2010-2210316 to continue its Phase I EE&C Plan until its Phase II EE&C Plan was approved ("Phase I Continuation Petition"). On April 16, 2015, UGI Electric filed its Phase II EE&C Plan for approval by the PUC at Docket No. M-2015-2477174. The Phase II EE&C Plan was designed to expend no more than 2% of UGI Electric's total annual revenue on EE&C programs for the 12-month period ended May 31, 2008, on an annual basis, which totaled approximately $7.5 million for the duration of Phase II. By Order entered May 19, 2015, the PUC approved the Company's Phase I Continuation Petition. The Commission approved the Company's Phase II EE&C Plan (as amended by settlement in the proceeding) by Order entered June 9, 2016. UGI Electric filed its Phase II EE&C Compliance Plan with the PUC on August 9, 2016.

On March 21, 2017, UGI Electric filed a Petition to extend its Phase II EE&C Plan for one year ("Extension Petition").[2] There were no changes to the overall or Residential and Commercial/Industrial budget caps. However, UGI Electric proposed to move funding between programs within the same customer class based on participation levels. The PUC approved the Extension Petition on May 4, 2017. Accordingly, UGI Electric's Phase II EE&C Plan ran from June 1, 2016 to May 31, 2019.[3]

[1] 66 Pa. C.S. § 2806.1(c) and (d).

[2] UGI Electric filed the Extension Petition because the Phase II EE&C Plan began in earnest much later than originally anticipated. Phase II was slated to begin on June 1, 2015, but the Phase II EE&C Plan was not formally approved until June 9, 2016. This effectively reduced the Phase II EE&C Plan's term from three years to about two years. As a result, the Extension Petition sought to restore the three-year term of the Phase II EE&C Plan and allow the Company's Phase II EE&C programs to ramp up fully.

[3] In approving the Company's petition to extend Phase I of the EE&C Plan, the Commission approved the Company's proposal to count the costs of continuing the Phase I EE&C programs toward the budgets established for Plan Year 1 of the Company's Phase II EE&C Plan.

On August 21, 2018, UGI Electric filed a Petition at Docket No. M-2018-3004144 for approval of its voluntary Phase III EE&C Plan, effective from June 1, 2019, through May 31, 2024. The Phase III EE&C Plan is designed to expend no more than 2% of UGI Electric's total annual revenue on EE&C programs for the 12-month period ended May 31, 2008, on an annual basis, which totals approximately $7.5 million for the duration of Phase III. However, UGI Electric's budget for the five-year Phase III Plan is approximately $6.4 million. On January 31, 2019, a Joint Petition for Approval of Settlement was filed. On March 14, 2019, the PUC entered an Order approving the Company's Phase III EE&C Plan (as modified by the settlement). UGI Electric filed its Phase III EE&C Compliance Plan with the PUC on April 12, 2019.

UGI Electric respectfully submits this report documenting the results of its EE&C Plan for cumulative Program Year 9 (June 1, 2020 through May 31, 2021, "PY9"), which is also the second year of the Phase III EE&C Plan. The results set forth below represent a portfolio of cost-effective energy efficiency programs that benefit customers through decreased energy costs while maintaining a cost-effective Total Resource Cost ("TRC") Benefit to Cost Ratio ("BCR"). Program Year 9 resulted in a TRC value of 2.88 for residential customers and 1.79 for Commercial/Industrial customers. When accounting for administrative overhead, the overall portfolio TRC value was 1.68.

1.1 Program Year Highlights

Customer participation and energy savings in the residential sector were the most impacted by the disruptions stemming from the Coronavirus Disease 2019 ("COVID-19") pandemic. Despite this, UGI Electric was able to maintain a cost-effective portfolio and reach 139% of its PY9 savings goal, primarily due to the strong performance of its Commercial and Industrial ("C&I") Custom Program. Specific highlights include:

- The C&I Custom Program achieved 206% of its energy savings goal primarily due to the completion of large lighting projects.
- The School Energy Education Program pivoted to virtual presentations and achieved 183% of its energy savings goal.
- The Appliance Rebate Program achieved 80% of its annual savings projections and continued to see strong demand for ductless mini split heat pumps, which were the highest performing measure in the program.
- On or about mid-July 2020, UGI Electric became aware that the Appliance Recycling Program's Conservation Service Provider ("CSP") was failing to perform appliance collections. Accordingly, in September 2020, UGI Electric terminated its relationship with that CSP. After terminating that contract, UGI Electric temporarily utilized the services of a sub-contractor to assist customers who were not being serviced by the Appliance Recycling Program's previous CSP. The Appliance Recycling Program was not marketed during this time period. On or about July 6, 2021, UGI Electric contracted with a new CSP, ARCA Recycling, Inc. ("ARCA"), to serve as the Appliance Recycling Program's CSP and handle appliance collections starting in Program Year 10. These events, along with the COVID-19

pandemic, had a substantial impact on the Appliance Recycling Program's customer participation and energy savings.

- UGI Electric launched a new Residential Low-Income Program beginning on June 1, 2020. The program covers the full cost of a direct installation of a Heat Pump Water Heater ("HPWH") and/or ENERGY STAR smart thermostats for low-income customers. In PY9, the program installed six HPWHs and four smart thermostats.
- UGI Electric continued to engage customers with a wide range of activities through the two CBOs (Scranton-Lackawanna Human Development Agency, Inc. ("SLHDA") and Commission on Economic Opportunity ("CEO")) in its CBO Marketing Program.

2 OVERVIEW

UGI Electric constructed its Phase III EE&C Plan in accordance with the EE&C Secretarial Letter. The Company's Phase III EE&C Plan included a portfolio of energy efficiency, conservation, and consumption reduction measures, programs, and education initiatives. During Program Year 9, the Company's EE&C portfolio included the following programs:

1. Appliance Rebate Program (Residential/Low Income Customers)
2. School Energy Education Program (Residential/Low Income Customers)
3. Residential Low-Income Program (Low Income Customers)
4. Appliance Recycling Program (Residential/Low Income Customers)
5. CBO Marketing Program (Residential/Low Income Customers)
6. Custom Incentive Program (Commercial/Industrial/Governmental Customers)

These six programs were designed to meet the goals and guidelines established in the EE&C Secretarial Letter. In PY9, UGI Electric designed and received approval for a Residential Low-Income Program that delivers energy savings to low-income customers. All the EE&C programs were voluntary and offered UGI Electric customers a wide range of EE&C measures to decrease electric consumption and, in turn, their annual energy costs. In Program Year 9, the combined portfolio of residential and commercial/industrial programs maintained a positive TRC BCR.

2.1 Portfolio Summary

2.1.1 Program Year 9 Portfolio Summary

In summary, UGI Electric offered six energy efficiency programs to approximately 62,000 customers within its service territory. The combined portfolio of programs had TRC Net Benefits of $1,253,707, TRC BCR of 1.68, and total spending of $1,283,084 (as shown in Tables 1-3 below).

Table 1. Portfolio Savings and Costs:

Benefits/Cost Component	Residential	Commercial/ Industrial	Portfolio Wide	Portfolio Total
Savings (MWh)	**1,059**	**3,406**	**N/A**	**4,465**
Capacity Savings (MW)	**0.159**	**0.481**	**N/A**	**0.639**
Total Resource Cost	$377,818	$1,507,949	$352,169	$2,237,937
Direct Participant Costs	$72,963	$881,889	$0	$954,852
Direct Utility Costs	**$304,856**	**$626,060**	**$352,169**	**$1,283,084**
Customer Incentives	$212,836	$286,012	$0	$498,848
Marketing	$40,825	$825	$0	$41,650
Administration	$51,195	$339,223	$352,169	$742,587

Table 2. Program Year Performance to Plan:

Program	PY9 Spending ($000)			PY9 First Year Savings (MWh)		
	Actual	Goal	% of Goal	Actual	Goal	% of Goal
Appliance Rebate Program	$152	$250	61%	524	656	80%
Appliance Recycling Program	$10	$140	7%	69	635	11%
School Energy Education Program	$113	$125	91%	451	246	183%
Low-Income Program	$21	$35	59%	15	31	48%
CBO Outreach Program	$9	$10	90%	N/A	N/A	N/A
Residential Total	**$305**	**$560**	**54%**	**1,059**	**1,568**	**68%**
C&I Custom Incentive	$626	$348	180%	3,406	1,650	206%
C&I Total	**$626**	**$348**	**180%**	**3,406**	**1,650**	**206%**
Portfolio-wide Costs[4]	$352	$270	130%	N/A	N/A	N/A
Portfolio Total	**$1,283**	**$1,178**	**109%**	**4,465**	**3,218**	**139%**

Table 3. Portfolio Cost-Effectiveness:

Benefits/Cost Component (2018$)	Residential	Commercial/ Industrial	Portfolio Wide	Portfolio Total
TRC NPV Benefits	$806,593	$2,287,591	$0	$3,094,184
TRC NPV Costs	$280,120	$1,277,191	$283,166	$1,840,477
TRC Net Benefits	$526,473	$1,010,400	($283,166)	$1,253,707
TRC Benefit/Cost Ratio	2.88	1.79	0.00	1.68

[4] Includes administrative costs to manage the UGI Electric EE&C Plan.

2.1.2 Phase III Portfolio Summary (Inception to Date)

Table 4 summarizes the Phase III performance compared to budget, in this case, for Program Year 8 and Program Year 9. When comparing actual results against budget for Phase III, UGI Electric spent approximately 48% of the budget while achieving approximately 83% of the first-year MWh savings goals.

Table 4. Phase III Performance to Plan:

Program	Cumulative Spending ($000)			Cumulative First Year Savings (MWh)		
	Actual	Phase Goal	% of Goal	Actual	Phase Goal	% of Goal
Appliance Rebate Program	$292	$1,244	24%	884	3,258	27%
School Energy Education Program	$237	$638	37%	1,067	1,355	79%
Energy Efficient Lighting Program	$255	$141	181%	2,246	1,423	158%
Appliance Recycling Program	$62	$702	9%	332	3,174	10%
Low-Income Program	$21	$140	15%	15	124	12%
CBO Outreach Program	$19	$50	38%	N/A	N/A	N/A
Residential Total	**$886**	**$2,915**	**30%**	**4,544**	**9,334**	**49%**
C&I Custom Incentive	$1,453	$1,871	78%	10,590	8,910	119%
C&I Total	**$1,453**	**$1,871**	**78%**	**10,590**	**8,910**	**119%**
Portfolio-wide Costs	$718	$1,600	45%	N/A	N/A	N/A
Portfolio Total	**$3,057**	**$6,386**	**48%**	**15,134**	**18,244**	**83%**

2.2 Residential Program Summary

During Program Year 9, the UGI Electric EE&C Portfolio offered five different programs to residential and low-income customers. As outlined below (in Tables 5-7), UGI Electric's residential sector programs were cost-effective, with a TRC BCR of 2.88 and $526,473 in net benefits.

Spending on the residential portfolio was $304,856, which was $255,544 below the PY9 budget, while achieving 1,059 MWh.

Table 5. Residential Program Participation and Energy Savings:

Program	Participation	Energy Savings MWh	NPV Benefits (2018$)	NPV Costs (2018$)	TRC BCR
Appliance Rebate Program	945	524	$296,173	$191,109	1.55
School Energy Education Program	1,286	451	$471,734	$56,690	8.32
Low-Income Program	10	15	$14,902	$16,657	0.89
Appliance Recycling Program	77	69	$23,783	$8,441	2.82
CBO Outreach Program	0	0	$0	$7,223	0.00
TOTAL	**2,318**	**1,059**	**$806,593**	**$280,120**	**2.88**

Table 6. Residential Program Savings and Costs:

Benefits/Cost Component	Appliance Rebate	School Energy Education	Low-Income	Appliance Recycling	CBO Outreach	Residential Total
Savings (MWh)	524	451	15	69	0	1,059
Capacity Savings (MW)	0.096	0.039	0.011	0.013	0	0.159
Total Resource Cost	$225,048	$113,155	$20,680	$9,953	$8,983	$377,818
Direct Participant Costs	$72,963	$0	$0	$0	$0	$72,963
Direct Utility Costs	$152,085	$113,155	$20,680	$9,953	$8,983	$304,856
Customer Incentives	$99,200	$88,261	$20,200	$5,175	$0	$212,836
Marketing	$29,089	$2,263	$480	$10	$8,983	$40,825
Administration	$23,796	$22,631	$0	$4,768	$0	$51,195

Table 7. Residential Program Cost-Effectiveness:

Benefits/Cost Component (2018$)	PY9 Actual
TRC NPV Benefits	**$806,593**
TRC NPV Costs	**$280,120**
TRC Net Benefits	**$526,473**
TRC Benefit/Cost Ratio	**2.88**

2.3 Commercial/Industrial Program Summary

During Program Year 9, the UGI Electric EE&C portfolio offered the C&I Custom Incentive Program to commercial and industrial customers. This program was cost-effective, with a TRC BCR of 1.79 and $1,010,400 in net benefits.

Spending on the commercial portfolio was $626,060, which was $278,079 above the PY9 budget while achieving 3,406 MWh (as shown in Tables 8-10 below).

Table 8. Commercial/Industrial Program Actuals:

Program	Projects	Energy Savings MWh	NPV Benefits (2018$)	NPV Costs (2018$)	TRC Value
C&I Custom Incentive	29	3,406	$2,287,591	$1,277,191	1.79
Total	**29**	**3,406**	**$2,287,591**	**$1,277,191**	**1.79**

Table 9. Commercial Savings and Program Costs:

Benefits/Cost Component	C&I Custom Incentive	C&I Total
Savings (MWh)	**3,406**	**3,406**
Capacity Savings (MW)	**0.481**	**0.481**
Total Resource Cost	$1,507,949	$1,507,949
Direct Participant Costs	$881,889	$881,889
Direct Utility Costs	**$626,060**	**$626,060**
Customer Incentives	$286,012	$286,012
Marketing	$825	$825
Administration	$339,223	$339,223

Table 10. Commercial/Industrial Program Cost-Effectiveness:

Benefits/Cost Component (2018$)	C&I Custom Incentive	C&I Total
TRC NPV Benefits	$2,287,591	$2,287,591
TRC NPV Costs	$1,277,191	$1,277,191
TRC Net Benefits	$1,010,400	$1,010,400
TRC Benefit/Cost Ratio	1.79	1.79

3 RESIDENTIAL PROGRAMS

3.1 Appliance Rebate Program

(Residential/Low Income Customers)

Program Objectives:
The objectives of the Residential Appliance Rebate Program included:

1. Providing customers with opportunities to reduce their energy costs and increase their energy efficiency.
2. Encouraging customers to install high-efficiency HVAC and electric appliances or to switch from less efficient electric appliances to more efficient natural gas appliances.
3. Encouraging the use of high-efficiency/ENERGY STAR-rated equipment.
4. Promoting strategies that encourage and support market transformation for high-efficiency appliances and equipment.
5. Achieving 5,579 installed measures through May 2024, with total savings of approximately 3,258 MWh.

Program Description:
The Appliance Rebate Program promoted the purchase and installation of a wide range of ENERGY STAR equipment and provided customers with financial incentives to offset the higher purchase costs of energy-efficient equipment. Targeted equipment included electric heating, cooling, and various other appliances.

Program Review:
As part of this program, customers were required to submit an application with documentation of the equipment purchase(s) and installation(s) for verification and rebate processing. UGI Electric provided overall strategic direction and program management for the program, as well as promotional, educational, trade ally support, and other administrative functions.

Marketing to residential customers was managed through various marketing channels to increase customer awareness in targeted areas. UGI Electric utilized bill inserts and social media to encourage residential customers to purchase energy efficient appliances. The Appliance Rebate Program achieved a TRC BCR of 1.55 and provided $105,064 in net benefits in Program Year 9 (as shown in Tables 11-13 below).

Table 11. Program Participation:

Total Measures		
Measure	**PY9 Actual**	**PY9 Budget**
Central Air Conditioner	7	37
Room AC Unit	101	178
Wi-Fi-enabled Thermostat	30	100
Ductless Mini Split Heat Pump	238	85
Clothes Washer	89	178
Dishwasher	206	182
Refrigerator	155	247
Dehumidifier	103	82
Pool Pump (in-ground)	9	8
Gas high efficiency central heat (from electric heating)	7	20
Total	**945**	**1,119**

Table 12. Program Savings and Costs:

Benefits/Cost Component	**PY9 Actual**	**PY9 Budget**
Savings (MWh)	524	656
Capacity Savings (MW)	0.096	0.047
Total Resource Cost	**$225,048**	**$361,951**
Direct Participant Costs	$72,963	$111,801
Direct Utility Costs	**$152,085**	**$250,150**
Customer Incentives	$99,200	$87,550
Marketing	$29,089	$24,000
Administration	$23,796	$138,600

Table 13. Program Cost-Effectiveness:

TRC Test (2018$)	**PY9 Actual**
TRC NPV Benefits	$296,173
TRC NPV Costs	$191,109
TRC Net Benefits	$105,064
TRC Benefit/Cost Ratio	1.55

3.2 School Energy Education Program

(Residential/Low Income Customers)

Program Objectives:
The objectives of the School Energy Education Program included:

1. Educating students on various energy types, generation and consumption, home energy use, and ways to increase energy efficiency in a home.
2. Providing customers with opportunities to reduce their energy costs and increase their energy efficiency.
3. Encouraging customers to improve the efficiency of their homes by providing an energy efficiency toolkit.
4. Obtaining participation of approximately 7,250 students, teachers and families through May 2024, with a total reduction of approximately 1,355 MWh.

Program Description:
The School Energy Education Program was designed to educate 4th through 12th grade students on various energy types, energy consumption and generation, home energy use, and ways to save energy.

The School Energy Education Program is delivered through school presentations. Teachers and schools were recruited throughout UGI Electric's service territory. In consultation with the Pennsylvania Department of Education, presentations were scheduled to avoid testing schedule conflicts, vacation periods and other school activities.

Students and teachers attended a one-hour presentation on energy efficiency. Under the direction of two National Energy Foundation ("NEF") professional instructors, students learned how to "Think!" about energy, then "Talk" with others about what they have learned, and ultimately "Take Action!" in their own homes to use energy more efficiently. A customized PowerPoint presentation guided the discussion, and hands-on learning activities were employed to build understanding among students.

Program Review:
NEF, the CSP for this program, registered participating schools, facilitated a presentation to students, and distributed energy efficiency toolkits that contained various energy efficient measures. All participating students were asked to return a *Household Report Card* providing data on household behaviors and device installations. NEF compiled the information from the Household Report Card Scantron forms or online Report Card submissions to create a customized report with program results for UGI Electric.

For Phase III, NEF expanded the program offering to high school students partnering with 44 teachers while presenting to ten different schools (grades 4th-12th) within the UGI Electric territory. Once the presentations were completed, 1,286 energy efficiency toolkits were distributed to the students, including students who participated virtually. The School Energy Education Program continued to be very cost-effective with a TRC BCR of 8.32 and net benefits of $415,044, including gas and water savings in addition to the electric savings. The Program Year 9 savings outperformed expectations by 205 MWh.

Due to COVID-19, the program offered virtual, pre-recorded presentations focused on behaviors and technologies to improve energy efficiency. The presentations took place either in the classroom or online. Despite the challenges, the program participation was 89% of the goal and the energy savings achieved were 183% of the goal, driven, in part, by increased low-flow showerhead installation rates and specialty lighting BR30 lamps.

Table 14. Program Participation:

Total Measures		
Measure	**PY9 Actual**	**PY9 Budget**
Innovation Kit (High School)	450	450
Take Action Kit (Middle School)	836	1,000
Total Kits	**1,286**	**1,450**

Table 15. Program Savings and Costs:

	School Energy Education Program	
Benefits/Cost Component	**PY9 Actual**	**PY9 Budget**
Savings (MWh)	451	246
Capacity Savings (MW)	0.039	0.031
Total Resource Cost	**$113,155**	**$124,850**
Direct Participant Costs	$0	$0
Direct Utility Costs	**$113,155**	**$124,850**
Customer Incentives	$88,261	$94,850
Marketing	$2,263	$5,000
Administration	$22,631	$25,000

Table 16. Program Cost-Effectiveness:

TRC Test (2018$)	**PY9 Actual**
TRC NPV Benefits	$471,734
TRC NPV Costs	$56,690
TRC Net Benefits	$415,044
TRC Benefit/Cost Ratio	8.32

3.3 Residential Low-Income Program

(Low-Income Customers)

Program Objectives:
The objectives of the Residential Low-Income Program included:

1. Providing UGI Electric's confirmed low-income customers with an array of no-cost energy-saving equipment and/or education to help reduce their energy costs, such as the direct installation of HPWHs, ENERGY STAR smart thermostats, and additional and/or different measures than those offered through the Company's Low-Income Usage Reduction Program ("LIURP");
2. Achieving high customer satisfaction through impactful program offerings; and
3. Achieving a total reduction in energy use of 124 MWh over the life of the Phase III EE&C Plan.

Program Description:
Through the Residential Low-Income Program, UGI Electric offers a direct installation, at no cost to the participant, of an ENERGY STAR HPWH, smart thermostats, and additional and/or different measures than those offered through the Company's LIURP to eligible low-income customer residents.

Program Review:
The Residential Low-Income Program launched on June 1, 2020. The UGI Electric EE&C team partnered with CBOs (SLHDA and CEO) to identify eligible participants and perform customer installations. The program completed six HPWHs and four smart thermostat installations. However, the program was not cost-effective, as the TRC BCR was 0.89 and net benefits were ($1,755). See Tables 17-19 below.

Table 17. Program Participation:

Total Measures		
Measure	**PY9 Actual**	**PY9 Budget**
ENERGY STAR Smart Thermostat	4	9
Heat Pump Water Heater	6	9
Total LEDs	**10**	**18**

Table 18. Program Savings and Costs:

	Residential Low-Income Program	
Benefits/Cost Component	**PY9 Actual**	**PY9 Budget**
Savings (MWh)	15	31
Capacity Savings (MW)	0.011	0.016
Total Resource Cost	**$20,680**	**$35,000**
Direct Participant Costs	$0	$0
Direct Utility Costs	**$20,680**	**$35,000**
Customer Incentives	$20,200	$31,500
Marketing	$480	$1,000
Administration	$0	$2,500

Table 19. Program Cost-Effectiveness:

TRC Test (2018$)	**PY9 Actual**
TRC NPV Benefits	$14,902
TRC NPV Costs	$16,657
TRC Net Benefits	($1,755)
TRC Benefit/Cost Ratio	0.89

3.4 Appliance Recycling Program

(Residential/Low-Income Customers)

Program Objectives:
The objectives of the Appliance Recycling Program included:

1. Encouraging customers to dispose of their existing, inefficient appliances when they purchase a new appliance or eliminate a second unit that may not be needed.
2. Reducing the use of secondary, inefficient appliances.
3. Ensuring appliances are disposed of in an environmentally responsible manner.
4. Decommissioning to ensure appliances are not resold in a secondary market.
5. Recycling approximately 2,725 refrigerators and freezers, 275 window air conditioning units, and 125 dehumidifiers through May 2024, with a total reduction of approximately 3,174 MWh.

Program Description:
This program provided free pick-up and disposal of old, inefficient refrigerators, freezers, dehumidifiers, and room air conditioners. Refrigerators were required to be between 10 and 30 cubic feet, plugged in, and functioning when picked up in order to be eligible. Incentives of $75 were paid to customers who recycled eligible refrigerators and freezers, and $50 for eligible room air conditioners and dehumidifiers.

All units were disposed of in an environmentally responsible manner. This involved safely disposing of hazardous materials such as chlorofluorocarbon gases found in foam insulation, preparing refrigerant for reclamation, and recycling other materials such as metal and plastic.

Program Review:
On or about mid-July 2020, UGI Electric became aware that the Appliance Recycling Program's CSP was not performing appliance collections. Accordingly, in September 2020, UGI Electric terminated its relationship with that CSP. After terminating that contract, UGI Electric temporarily utilized the services of a sub-contractor to assist customers who were stranded by the Appliance Recycling Program's previous CSP. The Appliance Recycling Program was not marketed during this time period. On or about July 6, 2021, UGI Electric contracted with ARCA to serve as the Appliance Recycling Program's new CSP and handle appliance collections starting in Program Year 10. These events, along with the COVID-19 pandemic, had a substantial impact on the program's customer participation and energy savings. While the program achieved net benefits of $15,342, the program was cost-effective with a TRC BCR of 2.82 (as shown in Tables 20-22 below).

Table 20. Program Participation:

Total Measures		
Measure	**PY9 Actual**	**PY9 Budget**
Fridge Recycling	50	435
Freezer Recycling	3	110
Room AC Recycling	18	55
Dehumidifier Recycling	6	25
Total	**77**	**625**

Table 21. Program Savings and Costs:

	Appliance Recycling Program	
Benefits/Cost Component	**PY9 Actual**	**PY9 Budget**
Savings (MWh)	69	635
Capacity Savings (MW)	0.013	0.087
Total Resource Cost	**$9,953**	**$140,400**
Direct Participant Costs	$0	$0
Direct Utility Costs	**$9,953**	**$140,400**
Customer Incentives	$5,175	$28,850
Marketing	$10	$50,000
Administration	$4,768	$61,550

Table 22. Program Cost-Effectiveness:

TRC Test (2018$)	PY9 Actual
TRC NPV Benefits	$23,783
TRC NPV Costs	$8,441
TRC Net Benefits	$15,342
TRC Benefit/Cost Ratio	2.82

3.5 Community Based Organization (CBO) Marketing Program

(Residential/Low Income Customers)

Program Objectives:
The objectives of the CBO Marketing Program included:

1. Communicating and cross promoting EE&C programs, such as the Appliance Recycling and Appliance Rebate Programs.
2. Communicating conservation programs and energy-saving tips to UGI Electric customers.
3. Emphasizing that there are many simple low-cost products to help customers' homes become more energy efficient.

Program Description:
This program focused on marketing efforts facilitated by CBOs, who partner with UGI Electric to administer the Company's low-income universal service programs, to cross-promote EE&C programs with the intent of driving increased customer awareness and participation to the communities they serve. The marketing strategy included the CBOs developing and distributing specific UGI Electric EE&C materials and attending various community events and/or trade shows to further promote the availability of EE&C programs.

Program Review:
SLHDA and CEO were the identified CBOs for this program due to their location within the UGI Electric service territory and their administration of the Company's universal-service LIURP. The marketing to residential customers was managed through various channels to increase customer awareness in targeted areas, which included attending community events, outbound calls, in-home education, and printing marketing material for customers. In PY9, the CBOs made 385 outbound calls, 37 site visits, sent over 3,000 emails, and placed flyers at a local retail establishment. The CBO Marketing Program spent $8,983 on marketing related activities compared to a budget of $10,000 (as shown in Tables 23 and 24 below).

Table 23. Program Savings and Costs:

	CBO Outreach Program	
Benefits/Cost Component	**PY9 Actual**	**PY9 Budget**
Savings (MWh)	0	0
Capacity Savings (MW)	0.000	0.000
Total Resource Cost	**$8,983**	**$10,000**
Direct Participant Costs	$0	$0
Direct Utility Costs	**$8,983**	**$10,000**
Customer Incentives	$0	$0
Marketing	**$8,983**	$10,000
Administration	$0	$0

Table 24. Program Cost-Effectiveness:

TRC Test (2018$)	**PY9 Actual**
TRC NPV Benefits	$0
TRC NPV Costs	$7,223
TRC Net Benefits	($7,223)
TRC Benefit/Cost Ratio	0.00

4 COMMERCIAL PROGRAMS

4.1 C&I Custom Incentive Program

(Commercial/Industrial Customers)

Program Objectives:
The objectives of the C&I Custom Incentive Program included:

1. Encouraging the installation of high-efficiency equipment by UGI Electric's C&I customers in new and existing facilities.
2. Encouraging equipment repairs, optimization and operational or process changes that reduce electricity consumption.
3. Encouraging a "whole facility" approach to energy-efficiency.
4. Increasing customer awareness of the features and benefits of energy-efficient equipment.
5. Increasing the market penetration of high-efficiency equipment.
6. Supporting emerging technologies and non-typical efficiency solutions in cost-effective applications, including Combined Heat and Power ("CHP") applications.
7. Obtaining approximately 189 projects through May 2024, with a total energy reduction of approximately 8,910 MWh.

Program Description:
The Custom Incentive Program provided a delivery channel and financial incentives to customers installing a variety of custom measures suited to their business needs. To qualify for financial incentives, eligible customers were required to provide documentation that their proposed efficiency upgrades passed the TRC test for cost-effectiveness.

Program Review:
Franklin Energy, the CSP for this program, provided customer intake, eligibility verification, rebate processing, program participation tracking, verification, and auditing of customer projects. In total, 29 projects were completed, 20 of them by Class 2 (small commercial) customers, and the remaining 9 projects from Class 3 (rate LP) customers.

Program Year 9 energy savings were 3,406 MWh, or 206% of goal. This overperformance was mainly due to lighting retrofit projects for Class 3 customers, including one project that received the near maximum incentive possible. Due to the average project savings (kWh) being significantly higher than forecasted leading to higher than anticipated program spending, on March 27, 2020, UGI filed a Petition for Approval of Modifications to its Phase III EE&C Plan to revise incentive rates downward for the C&I Custom Program. This petition was approved by the Commission by its Opinion and Order entered on August 27, 2020. As such, the incentive rate for customers who participate in the C&I Custom Program was changed from $0.10 per kWh, on average, over the lifetime of the Plan to *up to* $0.10 per kWh, on average, over the lifetime of the Plan. With that new incentive range in place, the C&I incentives were then adjusted to $0.05/kWh (large C&I) and $0.10/kWh (small C&I) for all new applications submitted after September 30, 2020. Based on current projections, and since the program has already spent 78% of its five-year phase budget, UGI

Electric anticipates program funding for the phase will be depleted by March 2022, which would require the program to close early if additional funding is not secured.

The program was cost-effective with a TRC BCR of 1.79, and net benefits of $1,010,400. None of the custom projects that were completed in PY9 involved CHP (as shown in Tables 25-27 below).

Table 25. Program Budget and Actuals:

Total Measures		
Projects	**PY9 Actual**	**PY9 Budget**
Large CI Project	9	10
Small CI Project	20	25
Total	**29**	**35**

Table 26. Program Savings and Costs:

	C&I Custom Incentive Program	
Benefits/Cost Component	**PY9 Actual**	**PY9 Budget**
Savings (MWh)	3,406	1,650
Capacity Savings (MW)	0.481	0.196
Total Resource Cost	**$1,507,949**	**$781,411**
Direct Participant Costs	$881,889	$433,430
Direct Utility Costs	**$626,060**	**$347,981**
Customer Incentives	$286,012	$165,000
Marketing	$825	$20,000
Administration	$339,223	$162,981

Table 27. Program Cost-Effectiveness:

TRC Test (2018$)	**PY9 Actual**
TRC NPV Benefits	$2,287,591
TRC NPV Costs	$1,277,191
TRC Net Benefits	$1,010,400
TRC Benefit/Cost Ratio	1.79