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File #: 162080

August 24, 2022

***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 10 (June 1, 2021 through May 31, 2022) 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: Cornelia R. Schneck, Bureau of Technical Utility Services  
Certificate of Service

**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).

**VIA E-MAIL ONLY**

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Date: August 24, 2022



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Devin T. Ryan

# **Report to the Pennsylvania Public Utility Commission**

**UGI Utilities, Inc. – Electric Division  
Energy Efficiency and Conservation Plan Program Year 10  
(June 1, 2021-May 31, 2022)**

Prepared by UGI Electric  
Filing Date: August 24, 2022

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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<sup>1</sup> 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”).<sup>2</sup> 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.<sup>3</sup>

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<sup>1</sup> 66 Pa. C.S. § 2806.1(c) and (d).

<sup>2</sup> 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.

<sup>3</sup>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.

On February 22, 2022, UGI Electric filed a Petition at Docket No. M-2018-3004144<sup>4</sup> to modify its Phase III EE&C Plan by increasing the budget for the Commercial & Industrial (“C&I”) Custom Incentive Program by approximately \$1.63 million (and the overall Phase III EE&C Plan budget by the same amount), due to average project size/cost being higher than anticipated in the C&I Custom Incentive Program. On June 16, 2022, the Commission entered an Opinion and Order approving the Petition.

UGI Electric respectfully submits this report documenting the results of its EE&C Plan for Program Year 10 (June 1, 2021 through May 31, 2022, “PY10”), which is also the third 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 10 resulted in a TRC value of 2.89 for residential customers and 2.05 for Commercial/Industrial customers. When accounting for administrative overhead, the overall portfolio TRC value was 1.98.

## 1.1 Program Year Highlights

UGI Electric spent only 80% of its PY10 budget but was able to achieve a cost-effective portfolio and reach 111% of its PY10 savings goal, primarily due to the strong performance of its Commercial and Industrial (“C&I”) Custom, Residential School Energy Education, and Residential Appliance Rebate programs. Specific highlights include:

- The C&I Custom Incentive Program exhausted its funding for Phase III in January 2022 due to continued higher than anticipated project size resulting in greater energy savings. On February 22, 2022, UGI Electric filed a petition with the PUC requesting \$1.63 million in additional funding to sustain the program through the end of the phase (May 31, 2024). The petition was approved by the PUC on June 16, 2022. Projects submitted after funding depletion were accumulated on a waitlist and will be evaluated for payment in PY11. Thus, the C&I Custom Incentive Program was dormant for nearly five months in PY10. In spite of this, the program still achieved 133% of its energy savings goal, primarily due to the completion of several large new construction and lighting retrofit projects.
- The School Energy Education Program facilitated virtual and in person presentations and achieved 184% of its energy savings goal.

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<sup>4</sup> See *Petition of UGI Utilities, Inc. – Electric Division for Approval of a Modification to its Phase III Energy Efficiency and Conservation Plan*, Docket No. M-2018-3004144 (Opinion and Order entered June 16, 2022).

- The Appliance Rebate Program achieved 102% 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.
- In July of 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. Appliance pickups resumed in October of 2021; however, energy savings were only 29% of the PY10 goal since the program resumed nearly halfway through the program year.

## 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 10, 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. 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 10, the combined portfolio of residential and commercial/industrial programs maintained a positive TRC BCR.

### 2.1 Portfolio Summary

#### 2.1.1 Program Year 10 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 \$1,438,053, TRC BCR of 1.98, and total spending of \$995,051 (as shown in Tables 1-3 below).

**Table 1. Portfolio Savings and Costs:**

Benefits/Cost Component	Residential	Commercial/Industrial	Portfolio Wide	Portfolio Total
<b>Savings (MWh)</b>	<b>1,304</b>	<b>2,631</b>	<b>N/A</b>	<b>3,935</b>
<b>Capacity Savings (MW)</b>	<b>0.129</b>	<b>0.402</b>	<b>N/A</b>	<b>0.530</b>
Total Resource Cost	\$426,182	\$1,184,769	\$243,175	\$1,854,127
Direct Participant Costs	\$76,706	\$787,969	\$0	\$859,075
<b>Direct Utility Costs</b>	<b>\$355,076</b>	<b>\$396,800</b>	<b>\$243,175</b>	<b>\$995,051</b>
Customer Incentives	\$222,705	\$155,165	\$0	\$377,870
Marketing	\$47,658	\$0	\$0	\$47,658
Administration	\$84,713	\$241,636	\$243,175	\$569,524



**Table 2. Program Year Performance to Plan:**

Program	PY10 Spending (\$000)			PY10 First Year Savings (MWh)		
	Actual	Goal	% of Goal	Actual	Goal	% of Goal
Appliance Rebate Program	\$143	\$250	57%	668	656	102%
School Energy Education Program	\$125	\$125	100%	453	246	184%
Appliance Recycling Program	\$74	\$140	53%	181	635	29%
Low-Income Program	\$3	\$35	9%	2	31	7%
CBO Outreach Program	\$10	\$10	96%	N/A	N/A	N/A
<b>Residential Total</b>	<b>\$355</b>	<b>\$560</b>	<b>63%</b>	<b>1,304</b>	<b>1,568</b>	<b>83%</b>
C&I Custom Incentive	\$397	\$414	96%	2,631	1,980	133%
<b>C&amp;I Total</b>	<b>\$397</b>	<b>\$414</b>	<b>96%</b>	<b>2,631</b>	<b>1,980</b>	<b>133%</b>
Portfolio-wide Costs <sup>5</sup>	\$243	\$270	90%	N/A	N/A	N/A
<b>Portfolio Total</b>	<b>\$995</b>	<b>\$1,244</b>	<b>80%</b>	<b>3,935</b>	<b>3,548</b>	<b>111%</b>

**Table 3. Portfolio Cost-Effectiveness:**

Benefits/Cost Component (2018\$)	Residential	Commercial/Industrial	Portfolio Wide	Portfolio Total
TRC NPV Benefits	\$954,982	\$1,948,096	\$0	\$2,903,077
TRC NPV Costs	\$330,903	\$952,302	\$181,819	\$1,465,024
TRC Net Benefits	\$624,078	\$995,794	(\$181,819)	\$1,438,053
TRC Benefit/Cost Ratio	2.89	2.05	0.00	1.98

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<sup>5</sup> 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, 9 and Program Year 10. When comparing actual results against budget for Phase III, UGI Electric spent approximately 51% of the budget while achieving approximately 64% 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	\$436	\$1,244	35%	1,552	3,258	48%
School Energy Education Program	\$362	\$638	57%	1,520	1,355	112%
Energy Efficient Lighting Program	\$255	\$141	181%	2,246	1,423	158%
Appliance Recycling Program	\$136	\$702	19%	513	3,174	16%
Low-Income Program	\$24	\$140	17%	17	125	14%
CBO Outreach Program	\$28	\$50	57%	N/A	N/A	N/A
<b>Residential Total</b>	<b>\$1,241</b>	<b>\$2,915</b>	<b>43%</b>	<b>5,848</b>	<b>9,336</b>	<b>63%</b>
C&I Custom Incentive <sup>1</sup>	\$1,850	\$3,500	53%	13,221	20,250	65%
<b>C&amp;I Total</b>	<b>\$1,850</b>	<b>\$3,500</b>	<b>53%</b>	<b>13,221</b>	<b>20,250</b>	<b>65%</b>
Portfolio-wide Costs	\$961	\$1,600	60%	N/A	N/A	N/A
<b>Portfolio Total</b>	<b>\$4,052</b>	<b>\$8,015</b>	<b>51%</b>	<b>19,069</b>	<b>29,586</b>	<b>64%</b>

<sup>1</sup> The Cumulative Spending Phase Goal figure and the Cumulative First Year Savings Goal figure shown in this table reflect the changes approved by the PUC in its June 16, 2022 Opinion and Order. They were not the goals that were effective during Program Year 10.

## 2.2 Residential Program Summary

During Program Year 10, 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 2.89 and \$624,078 in net benefits.

Spending on the residential portfolio was \$355,076, which was \$205,324 below the PY10 budget, while achieving 1,304 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	746	668	\$334,511	\$174,006	1.92
School Energy Education Program	1,556	453	\$580,483	\$94,524	6.14
Appliance Recycling Program	364	181	\$37,337	\$52,705	0.71
Low-Income Program	1	2	\$2,651	\$2,493	1.06
CBO Outreach Program	N/A	N/A	N/A	\$7,176	N/A
<b>TOTAL</b>	<b>2,667</b>	<b>1,304</b>	<b>\$954,982</b>	<b>\$330,903</b>	<b>2.89</b>

**Table 6. Residential Program Savings and Costs:**

Benefits/Cost Component	Appliance Rebate	School Energy Education	Appliance Recycling	Low Income	CBO Outreach	Residential Total
Savings (MWh)	668	453	181	2	N/A	1,304
Capacity Savings (MW)	0.048	0.047	0.032	0.002	N/A	0.129
Total Resource Cost	\$220,182	\$124,846	\$68,457	\$3,100	\$9,598	\$426,182
Direct Participant Costs	\$76,706	\$0	\$0	\$0	N/A	\$76,706
Direct Utility Costs	\$143,476	\$124,846	\$74,057	\$3,100	\$9,598	\$355,076
Customer Incentives	\$98,425	\$97,380	\$23,800	\$3,100	N/A	\$222,705
Marketing	\$18,227	\$2,497	\$17,337	\$0	\$9,598	\$47,658
Administration	\$26,824	\$24,969	\$32,920	\$0	N/A	\$84,713

**Table 7. Residential Program Cost-Effectiveness:**

Benefits/Cost Component (2018\$)	PY10 Actual
TRC NPV Benefits	<b>\$954,982</b>
TRC NPV Costs	<b>\$330,903</b>
TRC Net Benefits	<b>\$624,078</b>
TRC Benefit/Cost Ratio	<b>2.89</b>

### 2.3 Commercial/Industrial Program Summary

During Program Year 10, 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 2.05 and \$1,948,096 in net benefits.

Spending on the commercial portfolio was \$396,800, which was \$16,778 below the PY10 budget, while achieving 2,631 MWh in savings (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	25	2,631	\$1,948,096	\$952,302	2.05
<b>Total</b>	<b>25</b>	<b>2,631</b>	<b>\$1,948,096</b>	<b>\$952,302</b>	<b>2.05</b>

**Table 9. Commercial Savings and Program Costs:**

Benefits/Cost Component	C&I Custom Incentive
<b>Savings (MWh)</b>	<b>2,631</b>
<b>Capacity Savings (MW)</b>	<b>0.402</b>
Total Resource Cost	\$1,184,769
Direct Participant Costs	\$787,969
<b>Direct Utility Costs</b>	<b>\$396,800</b>
Customer Incentives	\$155,165
Marketing	\$0
Administration	\$241,636

**Table 10. Commercial/Industrial Program Cost-Effectiveness:**

Benefits/Cost Component (2018\$)	C&I Custom Incentive
TRC NPV Benefits	\$1,948,096
TRC NPV Costs	\$952,302
TRC Net Benefits	\$995,794
TRC Benefit/Cost Ratio	2.05

## 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 1.92 and provided \$160,505 in net benefits in Program Year 10 (as shown in Tables 11-13 below).

**Table 11. Program Participation:**

Total Measures		
Measure	PY10 Actual	PY10 Budget
Central Air Conditioner	5	37
Room AC Unit	52	178
Smart Thermostat	26	100
Ductless Mini Split Heat Pump	252	85
Clothes Washer	73	178
Dishwasher	122	182
Refrigerator	110	247
Dehumidifier	94	82
Pool Pump (in-ground)	5	8
Gas high efficiency central heat (from electric heating)	7	20
<b>Total</b>	<b>746</b>	<b>1,117</b>

**Table 12. Program Savings and Costs:**

Benefits/Cost Component	PY10 Actual	PY10 Budget
Savings (MWh)	668	656
Capacity Savings (MW)	0.048	0.047
<b>Total Resource Cost</b>	<b>\$220,182</b>	<b>\$365,644</b>
Direct Participant Costs	\$76,706	\$115,494
<b>Direct Utility Costs</b>	<b>\$143,476</b>	<b>\$250,150</b>
Customer Incentives	\$98,425	\$87,550
Marketing	\$18,227	\$24,000
Administration	\$26,824	\$138,600

**Table 13. Program Cost-Effectiveness:**

TRC Test (2018\$)	PY10 Actual
TRC NPV Benefits	\$334,511
TRC NPV Costs	\$174,006
TRC Net Benefits	\$160,505
TRC Benefit/Cost Ratio	1.92

## 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 4<sup>th</sup> through 12<sup>th</sup> 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:

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 4<sup>th</sup>-12<sup>th</sup>) within the UGI Electric territory. Once the presentations were completed, 1,556 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 6.14 and net benefits of \$485,959, including gas and water savings in addition to the electric savings.

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 107% of the goal and the energy savings achieved were 184% of the goal, driven, in part, by high installation rates for specialty lighting BR30 lamps.

**Table 14. Program Participation:**

<b>Total Measures</b>		
<b>Measure</b>	<b>PY10 Actual</b>	<b>PY10 Budget</b>
Innovation Kit (High School)	484	450
Take Action Kit (Middle School)	1,072	1,000
<b>Total Kits</b>	<b>1,556</b>	<b>1,450</b>

**Table 15. Program Savings and Costs:**

<b>School Energy Education Program</b>		
<b>Benefits/Cost Component</b>	<b>PY10 Actual</b>	<b>PY10 Budget</b>
Savings (MWh)	453	246
Capacity Savings (MW)	0.047	0.031
<b>Total Resource Cost</b>	<b>\$124,846</b>	<b>\$124,850</b>
Direct Participant Costs	\$0	\$0
<b>Direct Utility Costs</b>	<b>\$124,846</b>	<b>\$124,850</b>
Customer Incentives	\$97,380	\$94,850
Marketing	\$2,497	\$5,000
Administration	\$24,969	\$25,000

**Table 16. Program Cost-Effectiveness:**

<b>TRC Test (2018\$)</b>	<b>PY10 Actual</b>
TRC NPV Benefits	\$580,483
TRC NPV Costs	\$94,524
TRC Net Benefits	\$485,959
TRC Benefit/Cost Ratio	6.14



### 3.3 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 Agency for Community EmPOWERment (ACE) of Northeastern PA (NEPA) and the Commission on Economic Opportunity (CEO) to identify eligible participants and perform customer installations. The program completed one HPWH and zero smart thermostat installations. Although there were a limited number of measures installed in PY10, UGI’s CBOs have developed a pipeline of eligible customers for the upcoming program year. The program was cost-effective, as the TRC BCR was 1.06 and net benefits were \$158. See Tables 17-19 below.

**Table 17. Program Participation:**

Total Measures		
Measure	PY10 Actual	PY10 Budget
ENERGY STAR Smart Thermostat	0	9
Heat Pump Water Heater	1	9
<b>Total</b>	<b>1</b>	<b>18</b>

**Table 18. Program Savings and Costs:**

Benefits/Cost Component	Residential Low-Income Program	
	PY10 Actual	PY10 Budget
Savings (MWh)	2	31
Capacity Savings (MW)	0.002	0.016
<b>Total Resource Cost</b>	<b>\$3,100</b>	<b>\$35,000</b>
Direct Participant Costs	\$0	\$0
<b>Direct Utility Costs</b>	<b>\$3,100</b>	<b>\$35,000</b>
Customer Incentives	\$3,100	\$31,500
Marketing	\$0	\$1,000
Administration	\$0	\$2,500

**Table 19. Program Cost-Effectiveness:**

TRC Test (2018\$)	PY10 Actual
TRC NPV Benefits	\$2,651
TRC NPV Costs	\$2,493
TRC Net Benefits	\$158
TRC Benefit/Cost Ratio	1.06

### **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:**

In July of 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. Appliance pickups resumed in October of 2021 and 364 units were collected. However, the TRC BCR was 0.71 and net benefits were (\$15,368). See Tables 20-22 below.

**Table 20. Program Participation:**

Total Measures		
Measure	PY10 Actual	PY10 Budget
Fridge Recycling	190	435
Freezer Recycling	34	110
Room AC Recycling	106	55
Dehumidifier Recycling	34	25
<b>Total</b>	<b>364</b>	<b>625</b>

**Table 21. Program Savings and Costs:**

Benefits/Cost Component	Appliance Recycling Program	
	PY10 Actual	PY10 Budget
Savings (MWh)	181	635
Capacity Savings (MW)	0.032	0.087
<b>Total Resource Cost</b>	<b>\$68,457</b>	<b>\$140,400</b>
Direct Participant Costs	\$0	\$0
<b>Direct Utility Costs</b>	<b>\$74,057</b>	<b>\$140,400</b>
Customer Incentives	\$23,800	\$28,850
Marketing	\$17,337	\$50,000
Administration	\$32,920	\$61,550

**Table 22. Program Cost-Effectiveness:**

TRC Test (2018\$)	PY10 Actual
TRC NPV Benefits	\$37,337
TRC NPV Costs	\$52,705
TRC Net Benefits	(\$15,368)
TRC Benefit/Cost Ratio	0.71

### **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:**

Agency for Community EmPOWERment (ACE) of Northeastern PA (NEPA) and the Commission on Economic Opportunity (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 PY10, the CBOs made 1,750 outbound calls, 36 site visits, and sent out 800 direct mail pieces. The CBO Marketing Program spent \$9,598 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:**

Benefits/Cost Component	CBO Outreach Program	
	PY10 Actual	PY10 Budget
Savings (MWh)	0	0
Capacity Savings (MW)	0.000	0.000
<b>Total Resource Cost</b>	<b>\$9,598</b>	<b>\$10,000</b>
Direct Participant Costs	\$0	\$0
<b>Direct Utility Costs</b>	<b>\$9,598</b>	<b>\$10,000</b>
Customer Incentives	\$0	\$0
Marketing	<b>\$9,598</b>	\$10,000
Administration	\$0	\$0

**Table 24. Program Cost-Effectiveness:**

TRC Test (2018\$)	PY10 Actual
TRC NPV Benefits	\$0
TRC NPV Costs	\$7,176
TRC Net Benefits	(\$7,176)
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.<sup>6</sup>

#### **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.

Following the approval on August 27, 2020 of UGI Electric's Petition for Approval of Modifications to its Phase III EE&C plan, which allowed a reduction in incentive rates for the C&I Custom Program, the rates were reduced to \$0.08 per kWh for small C&I customers and \$0.05 per kWh for large C&I customers. Even with this reduction, higher-than-anticipated average project size led to the exhaustion of all program funding for Phase III by January 2022, nearly five months before the end of PY10, and more than two years before the end of Phase III.

To avoid program shut-down, UGI filed a petition with the PUC requesting an additional \$1.63 million in funding to sustain the C&I Custom Program through the end of Phase III (May 31, 2024). The petition was approved on June 16, 2022, after the completion of PY10. Thus, the program was dormant for nearly five months of PY10. Despite this, PY10 energy savings still achieved 133% of

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<sup>6</sup> These figures were in place during Program Year 10 and have since been updated in the Revised Phase III EE&C Plan approved in the PUC's June 16, 2022 Opinion and Order. Now, UGI Electric's objective is to obtain approximately 225 projects through May 2024, with a total energy reduction of approximately 20,250 MWh.

goal, at 2,631 MWh. In total, 25 projects were completed, 14 of them by small C&I customers and 11 by large C&I customers.

The program was cost-effective with a TRC BCR of 2.05, and net benefits of \$995,794. None of the custom projects that were completed in PY10 involved CHP.

**Table 25. Program Budget and Actuals:**

<b>Total Measures</b>		
<b>Projects</b>	<b>PY10 Actual</b>	<b>PY10 Budget</b>
Large CI Project	11	12
Small CI Project	14	30
<b>Total</b>	<b>25</b>	<b>42</b>

**Table 26. Program Savings and Costs:**

<b>Benefits/Cost Component</b>	<b>C&amp;I Custom Incentive Program</b>	
	<b>PY10 Actual</b>	<b>PY10 Budget</b>
Savings (MWh)	2,631	1,980
Capacity Savings (MW)	0.402	0.235
<b>Total Resource Cost</b>	<b>\$1,184,769</b>	<b>\$947,123</b>
Direct Participant Costs	\$787,969	\$533,545
<b>Direct Utility Costs</b>	<b>\$396,800</b>	<b>\$413,578</b>
Customer Incentives	\$155,165	\$198,000
Marketing	\$0	\$20,000
Administration	\$241,636	\$195,578

**Table 27. Program Cost-Effectiveness:**

<b>TRC Test (2018\$)</b>	<b>PY10 Actual</b>
TRC NPV Benefits	\$1,948,096
TRC NPV Costs	\$952,302
TRC Net Benefits	\$995,794
TRC Benefit/Cost Ratio	2.05