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September 22, 2015

VIA HAND DELIVERY

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: Report for the Period June 1, 2012 through May 31, 2015, Program Years 1, 2, and 3 of UGI Utilities, Inc. - Electric Division's Energy Efficiency and Conservation Plan Docket No. M-2010-2210316

Dear Secretary Chiavetta:

Enclosed on behalf of UGI Utilities, Inc. – Electric Division ("UGI Electric") is the Report for the period June 1, 2012 through May 31, 2015, Program Years 1, 2, and 3 of UGI Electric's Energy Efficiency and Conservation Plan.

Respectfully submitted,

Devin Ryan

DTR/jl Enclosure

cc: Certificate of Service

Bureau of Technical Utility Services

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Report to the Pennsylvania Public Utility Commission

For the period June 1, 2012 through May 31, 2015 Program Years One, Two, and Three

Energy Efficiency and Conservation Program UGI Utilities, Inc. – Electric Division

Prepared by UGI Electric Filing Date: September 22, 2015

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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. Under Act 129, the Commission's EE&C program requires electric distribution companies ("EDCs") serving 100,000 customers and greater to adopt and implement cost-effective energy efficiency and conservation plans to reduce energy demand and energy consumption within the service territory of each EDC. Act 129's target goal for energy savings was 3% while the target goal for demand reduction was 4.5% over the life of the Act 129 Energy Efficiency and Conservation ("EE&C") Plans for each large 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 EE&C Plan ("Phase I") with the PUC in response to the EE&C Secretarial Letter. Because UGI Electric's EE&C Plan is voluntary, it is not subject to the same Act 129 energy and demand savings requirements as noted above. However, UGI Electric did use the Act 129 requirements as a guide when developing its EE&C Plan. The primary difference in goals between the UGI Electric EE&C Plan and those of the large EDCs is that the UGI Electric Phase I EE&C Plan only targets energy savings and not peak demand savings. However, the Company's Phase I EE&C Plan has a very aggressive energy savings goal of 5% compared to the 3% goal set by Act 129. The 5% goal was set based upon the belief that there was a significant level of demand for energy efficiency opportunities within the UGI Electric service territory. While demand for energy efficiency opportunities was not as great as anticipated, UGI Electric has realized positive TRC values for both the Residential and Commercial Programs.

UGI Electric respectfully submits this report documenting the results of its EE&C Plan for Program Year 1 (June 1, 2012 through May 31, 2013), Program Year 2 (June 1, 2013 through May 31, 2014) and Program Year 3 (June 1, 2014 through May 31, 2015).

Phase I Program Overview

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

- 1. Appliance Rebate Program (Residential Sector/Low Income Customers)²
- 2. School Energy Education Program (Residential Sector/Low Income Customers)
- 3. Compact Fluorescent Lighting Campaign (Residential Sector/Low Income Customers)
- 4. Appliance Recycling Program (Residential Sector/Low Income Customers)
- 5. Home Energy Efficiency Incentives Fuel Switching (Residential Sector/Low Income Customers)
- 6. Appliance Rebate Program (Commercial and Industrial Sector/Governmental Customers)
- 7. Commercial and Industrial Custom Incentive Program (Commercial and Industrial Sector/Governmental Customers)
- 8. HVAC Tune-up Program (Commercial and Industrial Sector/Governmental Customers)
- 9. Combined Heat and Power (Commercial and Industrial Sector/Governmental Customers)
- 10. Customer Energy Education Program (Residential and Small Commercial Customers)³

These ten programs are designed to meet the goals and guidelines established in the Commission's Secretarial Letter. All of the programs are voluntary, at the customer's choice. The programs offer UGI Electric's customers a wide range of energy efficiency and conservation measures to decrease electric consumption and, in turn, customers' electric costs.

As directed by the Commission, the Company's Phase I EE&C Plan will continue in effect until the effective date of a Phase II compliance plan filed in response to a final Commission Order approving the Company's proposed Phase II EE&C Plan. Petition of UGI Utilities, Inc. - Electric Division for Approval of its Energy Efficiency and Conservation Plan. Docket No. M-2010-2210316. pp. 5-6 (Opinion and Order entered May 19, 2015)

Conservation Plan, Docket No. M-2010-2210316, pp. 5-6 (Opinion and Order entered May 19, 2015)

It should be noted that all Residential Sector programs also apply to governmental entities and the following non-profit entities: firehouses, ambulance providers, and senior centers.

³ The Customer Energy Education Program commenced June 1, 2013 at the start of Program Year Two.

RESIDENTIAL PROGRAMS:

1. Appliance Rebate Program (Residential Sector/Low Income Customers)

Program Objectives:

The objectives of the Residential Appliance Rebate Program include:

- 1. Provide customers with opportunities to reduce their energy costs and increase their energy efficiency
- 2. Encourage customers to install high-efficiency HVAC, lighting equipment, and electric appliances
- 3. Encourage the use of high-efficiency/ENERGY STAR-rated equipment
- 4. Promote strategies that encourage and support market transformation for high-efficiency appliances and equipment
- 5. Achieve approximately 6,944 installed measures through 2015, with a total reduction of approximately 1,260 MWh

Program Description:

The Residential Appliance Rebate Program promotes the purchase and installation of a wide range of high-efficiency equipment and provides customers and potential customers with financial incentives to offset the higher purchase costs of energy-efficient equipment and offers information on the features and benefits of energy-efficient equipment. Targeted equipment includes electric heating, cooling, lighting, water heating, appliance, and other measures (ENERGY STAR-labeled equipment is specified where available).

Program Review:

UGI Electric selected Parago, now Blackhawk, a qualified Conservation Service Provider ("CSP"), to provide customer intake, eligibility verification, rebate processing, and tracking for the Appliance Rebate program. Customers are required to submit a program application with documentation of the equipment purchase(s) and installation(s) for verification and rebate processing. UGI Electric provides 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 is managed through various media and marketing channels to increase customer awareness in targeted areas. The marketing campaign includes a mix of social media, direct mail, and newspaper advertising. In addition, UGI Electric uses bill inserts and newsletters to market this program to encourage residential customers to purchase energy efficient appliances.

Cumulative Prog	gram YTD Actuals	
Appliance	Participants	Energy Savings(MWh)
Central Air Conditioners	28	5
Room Air Conditioners	339	31
Programmable Thermostats	122	18
Air-Source Heat Pumps	43	39
Heat Pump Hot Water Heater	53	100
Dishwasher	774	35
Clothes Washer	1126	216
Energy Star Refrigerator	1209	108
Energy Star Dehumidifier	153	31
ENERGY STAR Light Fixtures	64	3
Total	3911	587

Program Budget and Costs:

Program Cost	Actual	Year 1	Actual	Year 2	Actual	Year 3	Budgete	d Total	YTD Actual	Total
Participation		951		2002		958		6944		3911
Energy Savings (MWh)		162		320		105		1260		587
Total Resource Cost	\$	188,938	\$	352,133	\$	132,994	\$	774,407	\$	674,065
Direct Participant Costs	\$	137,461	\$	290,261	\$	62,689	\$	558,407	\$	490,431
Direct Utility Costs	\$	109,039	\$	174,301	\$	145,412	\$!	533,806	\$	428,752
Customer Incentives	\$	57,582	\$	112,429	\$	75,107	\$:	317,806	\$	245,118
CSP Cost	\$	30,042	\$	52,632	\$	68,671	\$	144,000	\$	151,345
Communications/Marketing	\$	21,415	\$	9,240	\$	1,634	\$	72,000	\$	32,289

TRC Test	Actua	Year 1	Actual	Year 2	Actua	l Year 3	Bud	geted Total	YTD	Actual Total
TRC NPV Benefits	\$	129,191	\$	172,819	\$	56,061	\$	1,789,693	\$	358,070
TRC NPV Costs	\$	188,938	\$	334,410	\$	119,943	\$	733,812	\$	643,291
TRC Net Benefits	\$	(59,747)	\$	(161,591)	\$	(63,883)	\$	1,055,881	\$	(285,221)
TRC Benefit/Cost Ratio		0.68		0.52		0.47		2.44		0.56

2. School Energy Education Program (Residential Sector/Low Income Customers)

Program Objectives:

The objectives of the Residential School Energy Education Program include:

- 1. Provide customers with opportunities to reduce their energy costs and increase their energy efficiency
- 2. Encourage customers to weatherize their homes by providing an energy efficiency toolkit
- 3. Educate students on various energy types, energy generation and consumption, home energy use, and ways to increase energy efficiency in a home
- 4. Leverage UGI Electric's School Energy Education Program by giving away the School Energy Education Toolkit to 4th through 7th graders in UGI Electric's service territory
- 5. Obtain participation of approximately 4,500 customers through 2015, with a total reduction of approximately 8,451 MWh

Program Description:

The Residential School Energy Education Program is designed to educate 4th through 7th grade students on various energy types, energy consumption and generation, home energy use, and ways to save energy in a home.

Think! Energy is typically delivered through school presentations. Teachers and schools are recruited throughout UGI Electric's service territory. In consultation with the Pennsylvania Department of Education, presentations are scheduled to avoid testing schedules, vacation periods and other school activities.

Students and teachers at one grade level attend a one-hour presentation on energy literacy and energy efficiency. Under the direction of two National Energy Foundation ("NEF") professional instructors, students learn 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 custom-designed PowerPoint presentation guides the discussion, and hands-on learning activities are employed to build understanding among students.

Program Review:

UGI Electric works with National Energy Foundation ("NEF"), a qualified CSP, to sign schools up for the program, present the PowerPoint to students, and hand out the energy efficient kits. All participating students are asked to return a *Household Report Card* providing data on household behaviors and device installations. NEF compiles the information from the Household Report Card Scantron forms to create a customized report with program results for UGI Electric.

Cumulative Program YTD Actuals										
Measure	Participants	Energy Savings(MWh)								
Energy Education Kit	3,105	806								
Total	3,105	806								

Program Budget and Costs:

Program Cost	Actu	al Year 1	Actua	l Year 2	Actua	l Year 3	Budget	ed Total	YTD	Actual Total
Participation		1,021		1,017		1,067		4,500		3,105
Energy Savings (MWh)		197	ĺ	251		359		8,451		806
Total Resource Cost	\$	72,189	\$	49,213	\$	29,327	\$	300,000	\$	150,729
Direct Participant Costs	\$	29,688	\$	29,630	\$	15,047	\$	270,000	\$	74,365
Direct Utility Costs	\$	68,754	\$	62,706	\$	59,500	\$	300,000	\$	190,960
Customer Incentives	\$	26,253	\$	43,123	\$	45,220	\$	270,000	\$	114,596
CSP Cost	\$	32,630	\$	7,750	\$	13,090	\$	-	\$	53,470
Communications/Marketing	\$	9,871	\$	11,833	\$	1,190	\$	30,000	\$	22,894

TRC Test	A	tual Year 1	Act	ual Year 2	Actua	l Year 3	Bud	dgeted Total	YTD	Actual Total
TRC NPV Benefits	\$	114,423	\$	112,787	\$	108,848	\$	1,819,541	\$	336,057
TRC NPV Costs	\$	72,189	\$	46,736	\$	26,450	\$	286,858	\$	145,374
TRC Net Benefits	\$	42,234	\$	66,051	\$	82,398	\$	1,532,683	5 3	190,683
TRC Benefit/Cost Ratio		1.59		2,41		4.12		6.34		2.31

3. <u>Compact Fluorescent Lighting (CFL) Campaign</u> (Residential Sector/Low Income Customers)

Program Objectives:

The objectives of the Compact Fluorescent Lighting ("CFL") Campaign include:

- Provide a mechanism for customers to easily obtain discounted ENERGY STAR qualified CFLs
- 2. Develop and execute strategies aimed at transforming the market for ENERGY STAR—qualified CFLs with the goal of increasing the number of qualified products purchased and installed in UGI Electric's service territory
- 3. Increase consumer awareness and understanding of the energy-efficiency of CFLs
- 4. Promote consumer awareness and understanding of the ENERGY STAR label
- 5. Distribute approximately 423,860 CFLs through 2015, with a total reduction of approximately 16,531 MWh

Program Description:

The CFL Campaign encourages customers to purchase new ENERGY STAR-rated CFL bulbs.

The program has two components:

- 1. A retail upstream lighting incentive that will significantly reduce the customer cost of ENERGY STAR CFL bulbs
- 2. CFL distribution to UGI Electric's Customer Assistance Program ("CAP") participants; UGI Electric will send a package of CFLs to CAP participants each year at no cost to the customer, utilizing the same CSP as the retail upstream lighting incentive

Program Review:

ECOVA, Inc. ("ECOVA"), the CSP for this measure, manages the upstream CFL Campaign, including negotiating bulk pricing, education, recruitment, and coordination with retail stores, as well as tracking program data and providing monthly and annual program reports to UGI Electric. ECOVA targets a range of retailers throughout UGI Electric's territory. ECOVA also delivers free CFLs to low income residential customers who participate in UGI Electric's CAP.

Marketing to residential customers is managed through various media and marketing channels to increase customer awareness in targeted areas. The marketing campaign includes a mix of social media and outreach events. In addition, UGI Electric uses bill inserts and newsletters to market this program to encourage residential customers to purchase ENERGY STAR-rated CFL bulbs.

Cumulative Program	Cumulative Program YTD Actuals										
Measure	Participants	Energy Savings(MWh)									
CFLs Distributed/Purchased	201,125	7,217									
CFLs Distributed (CAP customers only)	5,999	258									
Total	207,124	7,475									

Program Budget and Costs:

Program Cost	Actu	al Year 1	Actu	al Year 2	Actı	ial Year 3	Buc	Igeted Total	YTD	Actual Total
Participation	1	42,654	1	85,682		78,788		423,860		207,124
Energy Savings (MWh)	1	1,887		3,387		2,201		16,531		7,475
Total Resource Cost	\$	176,608	\$	326,473	\$	387,872	\$	1,388,965	\$	890,953
Direct Participant Costs	\$	104,020	\$	211,402	\$	287,741	\$	847,719	\$	603,163
Direct Utility Costs	\$	91,956	\$	276,958	\$	279,918	\$	1,130,411	\$	648,832
Customer Incentives	\$	19,368	\$	161,887	\$	179,787	\$	589,165	\$	361,042
CSP Cost	8	69,444	\$	107,980	\$	94,304	\$	466,246	\$	271,728
Communications/Marketing	\$	3,144	\$	7,091	\$	5,827	\$	75,000	\$	16,062

TRC Test	Actual	Year 1	Actual	Year 2	Actua	Year 3	Buc	geted Total	YTD Act	ual Total
TRC NPV Benefits	\$	893,236	\$	1,477,167	\$	998,576	s	7,089,162	\$	3,368,979
TRC NPV Costs	\$	176,608	\$	310,041	\$	349,810	\$	1,328,119	\$	836,459
TRC Net Benefits	\$	716,628	\$	1,167,126	\$	648,766	\$	5,761,043	\$	2,532,520
TRC Benefit/Cost Ratio		5.06		4.76		2.85		5.34		4.03

4. Appliance Recycling Program (Residential Sector/Low Income Customers)

Program Objectives:

The objectives of the Appliance Recycling Program include:

- 1. Encourage customers to dispose of their existing, inefficient appliances when they purchase new ones or eliminate a second unit that may not be needed
- 2. Reduce the use of secondary, inefficient appliances
- 3. Ensure appliances are disposed of in an environmentally responsible manner
- 4. Decommissioning to ensure appliances are not resold in a secondary market
- 5. Recycle approximately 3,195 refrigerators and freezers through 2015, with a total reduction of approximately 5,521 MWh

Program Description:

A monetary incentive of \$35 is offered to customers who turn in eligible appliances. The program provides free pick-up and disposal of old, inefficient refrigerators and freezers. Units must be between 10 and 30 cubic feet plugged in and functioning when picked up to be eligible.

All units are disposed of in an environmentally responsible manner. This involves 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:

Through a competitive bidding process, JACO Environmental ("JACO") was selected as the CSP contracted by UGI Electric to administer this program. JACO is responsible for making an appointment with the customer to schedule the appliance pick-up, and collecting the participant and appliance information.

Marketing this program to residential customers is managed through various media and marketing channels to increase customer awareness. The marketing campaign includes a mix of social media and newspaper advertising. In addition, UGI Electric uses bill inserts, newsletters, and customer outreach events to market this program to encourage residential customers to recycle eligible appliances.

Program Actuals:

Cumulative Program YTD Actuals									
Measure		Energy Savings(MWh)							
Refrigerator	879	1194							
Freezer	148	221							
Total	1027	1415							

Program Budget and Costs:

Program Cost	Actua	l Year 1	Actua	l Year 2	Actu	al Year 3	Budg	eted Total	YTD A	ctual Total
Participation		401		375	ĺ	251		3195		1027
Energy Savings (MWh)	1	646	1	571		197		5521		1415
Total Resource Cost	\$	89,833	\$	87,968	\$	59,466	\$	719,250	\$	237,267
Direct Participant Costs	\$	48,120	\$	45,000	\$	30,120	\$	479,250	\$	123,240
Direct Utility Costs	\$	54,450	\$	56,018	\$	38,420	\$	719,250	\$	148,888
Customer Incentives	\$	12,737	\$	13,050	\$	9,074	\$	479,250	\$	34,861
CSP Cost	\$	31,263	\$	31,245	\$	21,738	\$	180,000	\$	84,246
Communications/Marketing	1 \$	10,450	\$	11,723	\$	7,608	\$	60,000	\$	29,781

TRC Test	Actual	Year 1	Actua	l Year 2	Actua	l Year 3	Buo	geted Total	YTD	Actual Total
TRC NPV Benefits	\$	380,376	\$	309,182	\$	99,093	\$	3,439,766	\$	788,651
TRC NPV Costs	\$	89,833	\$	83,540	\$	53,631	\$	680,743	\$	227,004
TRC Net Benefits	\$	290,543	\$	225,641	\$	45,463	\$	2,759,023	\$	561,647
TRC Benefit/Cost Ratio		4.23		3.70		1.85		5.05		3.47

5. <u>Fuel Switching</u> (Residential Sector/Low Income Customers)

Program Objectives:

The Residential Fuel Switching program has several objectives:

- 1. Make significant contribution to UGI Electric's energy savings goals
- 2. Encourage a "full fuel cycle" approach to energy efficiency
- 3. Obtain participation of approximately 2,406 customers through 2015, with a total reduction of approximately 10,222 MWh

Program Description:

UGI Electric will encourage energy efficiency on a total fuel cycle basis by promoting the use of natural gas and solar thermal appliances, where such appliances are more cost-effective under the TRC test than electric counterparts.

Natural gas appliances such as furnaces, water heaters, and clothes dryers use less energy and emit less carbon than electric appliance equivalents on a total fuel cycle basis. In addition, natural gas appliances have an annual operating cost advantage over their electric counterparts.

Fuel Switching Program Components:

- Water heating fuel switching (natural gas and solar thermal)
- Space heating fuel switching
- Clothes dryer fuel switching

Program Review:

UGI Electric staff conducts customer intake, eligibility verification, rebate processing, and tracking. Customers are required to submit a program application with documentation of the equipment purchase(s) and installation(s) for verification and rebate processing. UGI Electric provides overall strategic direction and program management, as well as promotional, educational, trade ally support, and other administrative functions.

Marketing to residential customers is managed through various media and marketing channels to increase customer awareness in targeted areas. The marketing campaign includes a mix of social media, direct mail, and newspaper advertising. In addition, UGI Electric uses bill inserts and newsletters to market this program to encourage residential customers to consider switching to more economical natural gas heating, water heating, and clothes drying options.

Cumulative Pro	ogram YTD Actuals			
Measure	Participants	Energy Savings(MWh)		
Space Heating	50	269		
Dryer	44	39		
Water Heater (Natural Gas)	36	137		
Water Heater (Solar Thermal)	Ö	0		
Total	130	445		

Program Budget and Costs:

Program Cost	Actual	Year 1	Actual	Year 2	Actual	Year 3	Budgeted Total	YTD Actual	Total
Participation		39		49		42	2406		130
Energy Savings (MWh)		123		180		143	10222		445.353
Total Resource Cost	\$	91,932	\$	128,175	\$	98,024	\$ 4,337,400	\$	318,131
Direct Participant Costs	\$	60,980	\$	111,850	\$	95,890	\$ 4,154,400	\$	268,720
Direct Utility Costs	\$	95,521	\$	56,345	\$	30,449	\$ 1,067,700	\$	182,315
Customer Incentives	\$	64,569	\$	40,020	\$	28,315	\$ 884,700	\$	132,904
CSP Cost	\$	-	\$	-	\$	-	\$ -	\$	•
Communications/Marketing	\$	30,952	\$	16,325	\$	2,134	\$ 183,000	\$	49,411

TRC Test	Actua	l Year 1	Actua	al Year 2	Actu	al Year 3	Buc	geted Total	YTD	Actual Total
TRC NPV Benefits	\$	171,428	\$	247,728	\$	200,976	\$	13,914,844	₩	620,131
TRC NPV Costs	\$	146,252	\$	190,820	\$	144,529	\$	7,946,264	\$	481,601
TRC Net Benefits	\$	25,176	\$	56,907	\$	56,447	\$	5,968,580	\$	138,531
TRC Benefit/Cost Ratio		1.17		1.30		1.39		1.75		1.29

6. <u>Customer Energy Education</u>⁴ (Residential Sector/Low Income Customers and Small Commercial Sector/Governmental Customers)

Program Objectives:

The Customer Energy Education program has several objectives:

- Communicate conservation tips to UGI Electric customers; emphasize that there are many simple low-cost or no-cost steps to help residential homes become more energy efficient
- 2. Communicate the prices to compare and how they are calculated so that customers can make an informed choice when shopping for an electric generation supplier
- 3. Communicate programs which help low income customers maintain service and other programs such as budget billing and efficiency rebates to help manage energy usage and bills

Program Description:

UGI Electric creates and distributes bill inserts, newsletters, direct mailings, and social media announcements to inform customers of energy savings tips, energy savings programs, and shopping for electric suppliers. UGI Electric's energy efficiency website, theenergyguyatugi.com, also offers customers energy saving tips and energy use calculators.

Program Review:

UGI Electric's energy efficiency website is effective at providing customers with information on saving energy as well as providing information on the available rebates for qualifying energy efficiency projects.

Program Budget and Costs:

Program Cost	Actual	Year 1	Actual	Year 2	Actual	Year 3	Budgeted	Total	YTD Actual	Total
Participation	1	-	ľ	-		-		-		-
Energy Savings (MWh)	1	•		-		-		-		-
Total Resource Cost	\$	1,273	\$	40,216	\$	41,954	\$	143,000	\$	83,444
Direct Participant Costs	\$	-	\$	•	\$	-	\$	-	\$	-
Direct Utility Costs	\$	1,273	\$	40,216	\$	41,954	\$	143,000	\$	83,444
Customer Incentives				•			\$	-	\$	•
CSP Cost							\$	-	\$	-
Communications/Marketing	\$	1,273	\$	40,216	\$	41,954	\$	143,000	\$	83,444

⁴ Customer Energy Education is available to both Residential and Commercial customers. For this report, the costs are captured under the Residential programs; however, on a monthly basis, costs are allocated to both customer classes.

TRC Test	Actua	l Year 1	Actua	al Year 2	Act	ual Year 3	Ви	idgeted Total	YTD	Actual	Total
TRC NPV Benefits	\$	-	\$	-	\$		\$	-	\$		-
TRC NPV Costs	\$	1,273	\$	38,192	\$	37,837	\$	143,000	\$		77,303
TRC Net Benefits	\$	(1,273)	\$	(38,192)	\$	(37,837)	\$	(143,000)	\$	Ī	(77,303)
TRC Benefit/Cost Ratio		0		0				0.00			0.00

RESIDENTIAL PROGRAMS SUMMARY:

Programs:

- Appliance Recycling
- Appliance Rebate
- Fuel Switching
- CFL Campaign
- School Energy Education
- Customer Energy Education

Residential Program Review:

Although the Residential Program has not achieved the projected MWh energy savings goals developed back in 2012, the program level TRC of 2.27 outlined below indicates the program is cost-effective and has merit even though the very aggressive budget goal of 2.56 was not realized. Additionally, customer engagement and feedback regarding the program has been positive.

Residential Program Actuals:

Cumulative P	rogram YTD Actua	s
Measure	Participants	Energy Savings(MWh)
Appliance Recycling	1,027	1,415
Appliance Rebates	3,911	587
Fuel Switching	130	445
CFL Campaign	207,124	7,475
School Energy Education	3,105	806
Customer Energy Education	-	-
Total	215,297	10,728

Residential Program Budget and Costs:

Program Cost	Α	ctual Year 1	Actua	l Year 2	Actu	al Year 3	Budgeted To	tal YT	D Actual Total
Participation		45,066		89,125		81,106	440,9	905	215,297
Energy Savings (MWh)		3,015		4,709		3,004	41,9	984	10,728
Total Resource Cost	1	619,499	\$	984,179	\$	749,639	\$ 7,520,0)22 \$	2,353,317
Direct Participant Costs	1	380,288	\$	688,143	\$	491,488	\$ 6,309,	776 \$	1,559,919
Direct Utility Costs	- 1	419,720	\$	666,545	\$	595,653	\$ 3,751,	67 \$	1,681,918
Customer Incentives	3	180,509	\$	370,509	\$	337,503	\$ 2,542,	720 \$	888,521
CSP Cost	1	163,379	\$	199,606	\$	197,803	\$ 790,2	246 \$	560,788
Communications/Marketi	ing \$	77,105	S	96,429	\$	60,347	\$ 420,0	000 \$	233,882

Residential Program Cost Effectiveness:

TRC Test	Act	ual Year 1	Act	tual Year 2	Act	tual Year 3	Bud	geted Total	YTD Actual 1	otal
TRC NPV Benefits	\$	1,688,654	\$	2,319,681	\$	1,463,554	\$	28,053,006	\$	5,471,888
TRC NPV Costs	\$	675,092	\$	1,003,739	\$	732,200	\$	10,975,795	\$	2,411,031
TRC Net Benefits	\$	1,013,562	\$	1,315,942	\$	731,354	\$	17,077,211	\$	3,060,858
TRC Benefit/Cost Ratio	1	2.50		2,31		2.00		2.56		2.27

COMMERCIAL PROGRAMS:

1. <u>Commercial Appliance Rebate Program</u> (Commercial and Industrial Sector/Governmental Customers)

Program Objectives:

The objectives of the Commercial Appliance Rebate Program include:

- 1. Provide commercial customers with opportunities to reduce their energy costs and increase their energy efficiency
- 2. Encourage customers to install high-efficiency energy devices and equipment
- 3. Encourage the use of high-efficiency/ENERGY STAR-rated equipment
- 4. Promote strategies that encourage and support market transformation for high-efficiency devices and equipment
- 5. Achieve approximately 4,146 installed measures through 2015, with a total reduction of 808 MWh

Program Description:

The Commercial Appliance Rebate Program promotes the purchase and installation of a wide range of high-efficiency equipment. The Commercial Appliance Rebate Program provides customers and potential customers with financial incentives to offset the higher purchase costs of energy-efficient equipment and offers information on the features and benefits of energy-efficient equipment. Targeted equipment includes electric heating, cooling, lighting, water heating, appliance, and other measures (ENERGY STAR-labeled equipment is specified where available).

Program Review:

UGI Electric selected Parago, now Blackhawk, as the program CSP for this measure. BlackHawk is tasked with providing customer intake, eligibility verification, rebate processing, and tracking. Customers are required to submit a program application with documentation of the equipment purchase(s) and installation(s) for verification and rebate processing. UGI Electric provides overall strategic direction and program management for the program and promotional, education, trade ally support, and other administrative functions.

Marketing to Commercial customers is managed through various media and marketing channels to increase customer awareness in targeted areas. The marketing campaign included a mix of social media, direct mail, and newspaper advertising.

Cumulative Prog	gram YTD Actuals	3
Appliance	Participants	Energy Savings(MWh)
Programmable Thermostat	0	0
Anti-Sweat Heater Controls	0	0
ice Maker	0	0
Faucet Aerators	0	0
Steam Cookers	0	0
Energy Star Office Equipment Printer	1	0
Resident Size Refrigerators	434	43
Energy Star Office Equipment Monitors	175	35
Total	610	79

Program Budget and Costs:

Program Cost	Actu	al Year 1	Actua	l Year 2	Actu	al Year 3	Bud	geted Total	YTD Actua	l Total
Participation		608		2		0		4146		610
Energy Savings (MWh)		78		0.20		0		808		78.6
Total Resource Cost	\$	108,395	\$	47,996	\$	3,535	\$	382,386	\$	159,926
Direct Participant Costs	\$	77,063	\$	179	\$	•	\$	191,886	\$	77,242
Direct Utility Costs	\$	60,214	\$	48,443	\$	3,535	\$	281,213	\$	112,192
Customer Incentives	\$	28,882	\$	626			\$	90,713	\$	29,508
CSP Cost	\$	27,746	\$	47,686	\$	3,535	\$	96,000	\$	78,967
Communications/Marketing	\$	3,586	\$	131			\$	94,500	\$	3,717

TRC Test	Actu	ial Year 1	Actu	al Year 2	Actu	al Year 3	Bud	dgeted Total	YTD	Actual Total
TRC NPV Benefits	\$	50,601	\$	158.10		. 0	\$	758,666	\$	50,759
TRC NPV Costs	\$	108,395	\$	45,580	\$	3,188	\$	394,320	\$	157,163
TRC Net Benefits	\$	(57,794)	\$	(45,422)	\$	(3,188)	\$	364,346	\$	(106,404)
TRC Benefit/Cost Ratio		0.47		0.00		0.00		1.92		0.32

2. <u>Commercial and Industrial Custom Incentive Program</u> (Commercial and Industrial Sector/Governmental Customers)

Program Objectives:

The objectives of the Commercial and Industrial ("C&I") Custom Incentive Program include:

- 1. Encourage the installation of high-efficiency equipment not included in UGI Electric's other EE&C Programs by C&I customers in new and existing facilities
- 2. Encourage equipment repairs and optimization and operational or process changes that reduce electricity consumption and peak demand
- 3. Encourage a "whole facility" approach to energy-efficiency
- 4. Increase customer awareness of the features and benefits of electric energy efficient equipment
- 5. Increase the market penetration of high-efficiency equipment
- 6. Support emerging technologies and non-typical efficiency solutions in cost-effective applications
- 7. Encourage advanced energy efficiency strategies required for certification by national market transformation programs such as Leadership in Energy and Environmental Design ("LEED"), architecture 2030, ENERGY STAR Buildings, or Energy Policy Act of 2005 tax credits
- 8. Obtain approximately 1,479 participants through 2015, with a total reduction of approximately 5,135 MWh

Program Description:

This Custom Incentive Program provides a delivery channel and financial incentives to customers installing a variety of custom measures suited to their particular business needs. To qualify for financial incentives, eligible customers are required to provide documentation that their proposed efficiency upgrades pass UGI Electric's cost-effectiveness threshold and technical criteria.

Program Review:

Custom projects within the C&I Custom Incentive Program have included a few key inputs as part of the energy efficiency process. Customers have provided detailed engineering studies with proposed efficiency ratings, TRM values for proposed measures, and the costs associated with each measure. UGI Electric has reviewed each project and made decisions based on the cost-effectiveness of the total proposal and the TRM values. Customer information has been collected for verification and auditing.

In an effort to continue to develop this program, UGI Electric selected SmartWatt Energy, as the qualified CSP for Program Year 3, to provide customer service with intake, eligibility verification, rebate processing, and tracking for the C&I Custom Incentive Program. SmartWatt Energy's passion for energy efficiency solutions drove increased customer participation and MWh savings for Commercial customers in Program Year 3.

Cumulative Pro	gram YTD Actua	s
Measure	Participants	Energy Savings(MWh)
Custom	44	5560
Non-Solar Thermal Water Heating	0	0
Solar Thermal Water Heating	0	0
Total	44	5560

Program Budget and Costs:

Program Cost	Actual	Year 1	Actual	Year 2	Actu	ual Year 3	Budge	ted Total	Υ	TD Actual Total
Participation		9		9		26		1479	L	44
Energy Savings (MWh)		1063		924		3573		5135	L	5560
Total Resource Cost	\$	319,896	\$	832,262	\$	1,322,606	\$	2,875,515	\$	2,474,764
Direct Participant Costs	\$	308,866	\$	822,110	\$	1,025,704	\$	2,559,015		2,156,680
Direct Utility Costs	\$	77,121	S	42,116	5	542,027	\$	1,550,640	83	661,264
Customer Incentives	\$	66,091	\$	31,964	\$	245,125	\$	1,234,140	\$	394,957
CSP Cost	\$	-	\$	114	\$	296,902	\$	165,000	\$	297,016
Communications/Marketing	\$	11,030	\$	10,038	\$	-	\$	151,500	\$	21,068

TRC Test	Act	ual Year 1	Actua	Year 2	Act	ual Year 3	Buc	dgeted Total	YTD	Actual Total
TRC NPV Benefits	\$	1,028,004	\$	846,456		3102474.3	\$	3,863,200	\$	4,976,935
TRC NPV Costs	\$	319,896	\$	788,619	\$	1,192,817	\$	2,720,890	\$	2,301,332
TRC Net Benefits	\$	708,108	\$	57,837	\$	1,909,658	\$	1,142,310	\$	2,675,603
TRC Benefit/Cost Ratio	1	3.21		1.07		2.60		1,42		2.16

3. <u>HVAC Tune-Up Program</u> (Commercial and Industrial Sector/Governmental Customers) Program Objectives:

The objectives of the Commercial HVAC Tune-up Program include:

- 1. Optimize HVAC unit performance
- 2. Assist commercial customers in lowering their energy bills and operating costs
- 3. Obtain participation by approximately 704 customers through 2015, with a total reduction of approximately 1,120 MWh

Program Description:

The HVAC Tune-Up Program is designed to increase the operating performance of electric HVAC systems in commercial buildings. The program offers financial incentives to HVAC contractors to diagnose performance inefficiencies and make energy-saving retrofits. The efficiency opportunities can be broken into three main areas:

- 1. Refrigeration components
- 2. Air distribution system
- 3. Controls

Program Review:

UGI Electric selected ECOVA, a qualified CSP, to manage and administer this program. Program management includes contractor recruitment, contractor training, providing ongoing contractor field support, education, processing applications and rebates, tracking program data, and reporting to UGI Electric. HVAC Contractors provide technical assessments and install energy efficiency improvements for commercial customers. UGI Electric's energy efficiency staff provides overall strategic direction and program management for the program, and the CSP supports UGI Electric with education, trade ally support, evaluation, and other administrative functions.

Program Actuals:

Cumulative Program YT	D Actuals	
Measure	Participants	Energy Savings(MWh)
Basic Diagnostic Testing (no economizer)	304	513
Basic Diagnostic Testing (economizer is present)	246	415
Refrigerant/Airflow (Single Compressor)	399	345
Refrigerant/Airflow (Multiple Compressor)	134	195
Thermostat Modification	457	312
Economizer Adjustment	225	377
Thermostat Replacement	49	190
Economizer Control Package	3	3
Total	1817	2348

Program Budget and Costs:

Program Cost	Actua	l Year 1	Actua	l Year 2	Actu	al Year 3	Budgeted Total		YTD Actual Total
Participation		42		796		979	70	04	1817
Energy Savings (MWh)		61		998		1289	11	20	2348.363
Total Resource Cost	\$	71,897	\$	205,892	\$	218,485	\$ 337,40)2	\$ 496,274
Direct Participant Costs	\$	5,545	\$	104,810	\$	131,795	\$ 85,40	12	\$ 242,150
Direct Utility Costs	\$	66,352	\$	151,777	\$	157,535	\$ 302,32	:5	\$ 375,664
Customer Incentives	\$	•	\$	50,695	\$	70,845	\$ 50,32	:5	\$ 121,540
CSP Cost	\$	64,320	\$	100,973	\$	86,690	\$ 168,00	0	\$ 251,983
Communications/Marketing	\$	2,032	\$	109		0	\$ 84,00)O	\$ 2,141

TRC Test	Actual	Year 1	Actual	Year 2	Actua	l Year 3	Budget	ted Total	ΥŤD	Actual Total
TRC NPV Benefits	\$	21,436	\$	314,847		384475.9	\$	416,209	\$	720,759
TRC NPV Costs	\$	71,897	\$	195,529	\$	197,045	\$	320,916	\$	464,471
TRC Net Benefits	\$	(50,462)	\$	119,318	\$	187,431	\$	95,293	\$	256,288
TRC Benefit/Cost Ratio		0.30		1.61		1.95		1.30		1.55

4. Combined Heat and Power (Commercial and Industrial Sector/Governmental Customers)

Program Objectives:

The Combined Heat and Power ("CHP") Program has several objectives:

- 1. Increase energy efficiency by using CHP for electricity generation and use of waste heat
- 2. Make significant contribution to UGI Electric's energy savings goals
- 3. Encourage optimization and operational or process changes that reduce electricity consumption and peak demand
- 4. Encourage a "whole facility" approach to energy efficiency
- 5. Increase customer awareness of the features and benefits of electric distributed generation systems
- 6. Support emerging technologies and non-typical efficiency solutions in cost-effective applications
- 7. Obtain participation by approximately 9 customers through 2015, with a total reduction of approximately 3,654 MWh

Program Description:

UGI Electric will encourage energy efficiency on a total fuel cycle basis by promoting the use of natural gas distributed electricity generation where the direct end use of natural gas is more efficient and cost-effective under the TRC test.

Program Review:

The CHP Program has proven to be challenging in terms of acquiring customers. CHP projects require large capital outlays by customers and the projects take a significant amount of planning. Several customers within the UGI Electric service territory have expressed interest in potentially pursuing CHP installations, but none of these businesses have reached the decision point to proceed.

In an effort to continue to develop this program, UGI Electric selected SmartWatt Energy, as the qualified CSP for Program Year 3, to provide customer service with intake, eligibility verification, rebate processing, and tracking for the program.

Program Actuals:

Cum	ulative Program YTD Actu	uals	
Measure	Participants	Energy Savings(MV	Vh)
CHP		0	0
Total		0	0

Program Budget and Costs:

Program Cost	Actual	Year 1	Actua	l Year 2	Actua	I Year 3	Bu	dgeted Total	YTD	Actual Total
Participation		0		0		0		9		0
Energy Savings (MWh)	1			0		0		3654		0
Total Resource Cost	\$	7,118	\$	120	\$	45,955	\$	1,530,000	\$	53,193
Direct Participant Costs	\$	-	\$	•	\$	-	\$	1,440,000	\$	-
Direct Utility Costs	\$	7,118	\$	120	\$	46,782	\$	900,000	\$	54,020
Customer Incentives	\$	-	\$	-	\$	827	\$	810,000	\$	827
CSP Cost	\$	-	\$	-	\$	45,955	\$	-	\$	45,955
Communications/Marketing	\$	7,118	\$	120	\$	-	\$	90,000	\$	7,238

TRC Test	Actua	Year 1	Actual	Year 2	Act	ual Year 3	Вu	dgeted Total	YTD /	Actual Total
TRC NPV Benefits	\$		\$	-	\$	-	₩	4,121,020	\$	-
TRC NPV Costs	\$	7,118	\$	114	\$	41,445	\$	2,761,934	\$	48,677
TRC Net Benefits	\$	(7,118)	\$	(114)	\$	(41,445)	\$	1,359,086	\$	(48,677)
TRC Benefit/Cost Ratio		0.00		0.00		0.00		1.49		0

COMMERCIAL PROGRAMS SUMMARY

Programs:

- Commercial Appliance Rebate Program
- HVAC Tune-Up Program
- C&I Custom Incentive Program
- CHP Program
- Customer Energy Education

Commercial Program Review:

Although the Commercial Program has not achieved the projected MWh energy savings goals developed back in 2012, the program level TRC of 1.93 outlined below indicates the program is cost-effective and has merit particularly when comparing to the program budget goal of 1.48. Additionally, customer engagement and feedback regarding the program has been positive.

Commercial Program Actuals:

Cumulative P	rogram YTD Actual	s
Measure	Participants	Energy Savings(MWh)
Appliance Rebates	610	79
HVAC Tune-Up	1817	2348
Custom	44	5560
CHP	0	Ő
Customer Energy Education	0	0
Total	2471	7987

Commercial Program Budget and Costs:

Program Cost	Actual	Year 1	Actual	Year 2	Actual Y	ear 3	Budgeted Total	YTD	Actual Total
Projected Participation		659		807		1,005	6,338		2,471
Energy Savings (MWh)		1202		1,922		4,862	10,717		7,987
Total Resource Cost	\$	507,306	\$	1,086,270	\$ 1,5	90,581	5,125,303	\$	3,184,157
Direct Participant Costs	\$	391,474	\$	927,099	\$ 1,1	57,499	4,276,303	\$	2,476,072
Direct Utility Costs	\$	210,805	\$	242,456	\$ 7	49,879	3,034,178	\$	1,203,140
Customer Incentives	\$	94,973	\$	83,285	\$ 3	68,574	2,185,178	\$	546,832
CSP Cost	\$	92,066	\$	148,773	\$ 4	33,082	429,000	\$	673,921
Communications/Marketing	\$	23,766	\$	10,398	\$	-	420,000	\$	34,164

Commercial Program Cost Effectiveness:

TRC Test	Actu	al Year 1	Actua	Year 2	Actu	al Year 3	Budgeted Total	YTD A	Actual Total
TRC NPV Benefits	\$	1,100,041	\$	1,161,462	\$	3,486,950	9,159,095	\$	5,748,452
TRC NPV Costs	\$	507,306	\$	1,029,843	\$	1,434,495	6,198,060	\$	2,971,643
TRC Net Benefits	\$	592,735	\$	131,619	\$	2,052,455	2,961,035	\$	2,776,809
TRC Benefit/Cost Ratio		2.17		1.13		2.43	1.48		1.93

CERTIFICATE OF SERVICE

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 & FIRST CLASS MAIL

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Date: September 22, 2015

PA PUC SECRETARY'S BUREAU

Devin T. Ryan