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January 29, 2021

**VIA ELECTRONIC FILING**

Rosemary Chiavetta, Secretary  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

**Re: Pennsylvania Public Utility Commission et al. v. UGI Utilities Inc. – Gas Division,  
Docket Nos. R-2018-3006814 et al.**

Dear Secretary Chiavetta:

Enclosed for filing on behalf of UGI Utilities, Inc. – Gas Division (“UGI Gas” or “the Company”) is the Annual Report for the period October 1, 2019 through September 30, 2020, which is Program Year 1 of Phase II of the Energy Efficiency and Conservation Plan (“EE&C”) for UGI Gas. Phase II of UGI Gas’s EE&C was approved by the Pennsylvania Public Utility Commission in an order approving the Settlement of the Company’s 2019 base rate proceeding at Docket No. R-2018-3006814. The Phase II PY1 Annual Report is being submitted to the Commission and the parties to the 2019 base rate proceeding.

Please contact me if you have any questions regarding this filing.

Very truly yours,

DocuSigned by:  
*Danielle Jouenne*

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Enclosure:

cc: Certificate of Service  
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**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Pennsylvania Public Utility Commission  
et al. v. UGI Utilities Inc.**

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**Docket No. R-2018-3006814**

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CERTIFICATE OF SERVICE

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I hereby certify that I have, this 29<sup>th</sup> day of January 2021, served a true and correct copy of the foregoing document in the manner and upon the persons listed below in accordance with requirements of 52 Pa. Code § 1.54 (relating to service by a participant). Due to the continuing remote work environment in the Commonwealth, service is being effectuated via electronic mail where possible.

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

**UGI Utilities, Inc. – Gas Division  
Energy Efficiency and Conservation Plan  
Phase II Program Year 1 (FY2020)  
October 1, 2019 - September 30, 2020**

Prepared by UGI Utilities, Inc. - Gas Division  
Filing Date: January 29, 2021

## Table of Contents

<b>1</b>	<b>EXECUTIVE SUMMARY .....</b>	<b>3</b>
<b>2</b>	<b>PORTFOLIO OVERVIEW .....</b>	<b>4</b>
2.1	Background.....	4
2.2	Summary of Activity .....	4
2.3	Progress in Support of Commitments.....	8
<b>3</b>	<b>PROGRAM RESULTS .....</b>	<b>11</b>
3.1	Residential Prescriptive Program .....	11
3.2	Nonresidential Prescriptive Program .....	14
3.3	Residential New Construction Program.....	17
3.4	Residential Retrofit Program.....	20
3.5	Nonresidential Custom Program.....	24
3.6	Combined Heat and Power .....	27
<b>4</b>	<b>Attachments.....</b>	<b>29</b>
4.1	Technical Reference Manual.....	29

# 1 EXECUTIVE SUMMARY

This Annual Report covers the first year of Phase II of the UGI Utilities, Inc.– Gas Division’s (UGI Gas or the Company) Energy Efficiency and Conservation (EE&C) Plan, which was approved as part of UGI Gas’s 2019 Rate Case (Docket No. R-2018-3006814). Phase II Program Year 1 (FY2020) covers the period of October 1, 2019, through September 30, 2020. As highlighted below, the EE&C Plan continued the success of last year into and throughout FY2020:

- Costs in FY2020 for the EE&C Portfolio were \$8.6 million, which equaled 84% of budgeted costs.
- FY2020 savings for the Energy Efficiency (EE) programs were 182,580 MMBtus, which equaled 89% of projections.
- The EE programs also resulted in electric savings of 4,147 MWh in FY2020 (258% of projections).
- The total EE&C Portfolio provided \$19.2 million in net benefits to customers with a benefit-to-cost ratio (BCR) of 2.46 as calculated under the Total Resource Cost (TRC) Test, including Demand Reduction Induced Price Effect (DRIPE) and the market price for CO<sub>2</sub>. Under the TRC Test without DRIPE and CO<sub>2</sub>, the Portfolio provided \$11.9 million in net benefits to customers with a BCR of 1.90.
- The Combined Heat and Power (CHP) program initiated the evaluation, measurement, and verification (EM&V) process for one completed CHP project. UGI Gas anticipates the rebate will be paid to the customer in FY2021. UGI Gas spent \$16,863 on administration and evaluation activity for the CHP Program in FY2020.
- Despite the COVID-19 pandemic, the Residential Prescriptive, Residential New Construction, and Nonresidential Custom programs all exceeded savings projections. The COVID-19 shutdown had a more negative impact on the Residential Retrofit and Nonresidential Prescriptive programs.
- Evaluation costs were higher than budgeted for four programs in FY2020 (*i.e.*, Residential Prescriptive, Residential Retrofit, Nonresidential Prescriptive, and Nonresidential Custom) due to a combination of carryover costs from FY2019 and shifts in the evaluation schedule (*i.e.*, evaluations budgeted for FY2021 were performed in FY2020).

## 2 PORTFOLIO OVERVIEW

### 2.1 Background

In January 2016, UGI Gas proposed a voluntary, five-year EE&C Plan as part of its Rate Case (Docket No. R-2015-2518438). By its order entered October 14, 2016, the Pennsylvania Public Utility Commission (Commission) approved the EE&C Plan (as amended by settlement in the proceeding). On October 4, 2019, the Commission entered an order at Docket No. R-2018-3006814 approving the settlement of UGI Gas's base rate proceeding and approving a new unified five-year UGI Gas EE&C Plan for UGI Gas's fiscal years 2020-2024. The new plan launched on November 1, 2019. Eligible rate classes for commercial customers were expanded to include Rates DS and LFD.

UGI Gas respectfully submits this report documenting the FY2020 EE&C Plan results for the consolidated UGI Gas Territory. The results set forth below represent a portfolio of cost-effective EE&C programs that benefit the customer through decreased energy costs while maintaining cost-effectiveness under the TRC Test.

In FY2020, UGI Gas had six natural gas programs in its EE&C Portfolio, including one program focused on CHP. These programs were:

- Residential Prescriptive (RP) Program
- Nonresidential Prescriptive (NP) Program
- Residential New Construction (RNC) Program
- Nonresidential Custom (NC) Program
- Residential Retrofit (RR) Program
- Combined Heat and Power (CHP) Program

These programs followed the designs and goals established in UGI Gas's 2019 Rate Case. All the EE&C programs were voluntary and offered UGI Gas customers in Pennsylvania a wide range of EE&C measures to decrease natural gas consumption and annual customer energy costs.

### 2.2 Summary of Activity

Portfolio spending of \$8.6 million was 84% of projected FY2020 spending, while annual savings of 182,580 MMBtus were 89% of FY2020 projections. The savings were primarily driven by the continued success of the Residential Prescriptive and Residential New Construction programs. There were no CHP projects completed in FY2020, however, the Company anticipates issuing an incentive in FY2021 for a completed project. The EE&C Portfolio had present value TRC net benefits of \$19.2 million, with a BCR of 2.46 where the market price of CO<sub>2</sub> and DRIPE were counted. Where DRIPE

and CO<sub>2</sub> were excluded from the calculation, the EE&C Portfolio had a present value TRC net benefit of \$11.9 million, with a BCR of 1.90. The following tables provide a high-level overview of the EE&C Portfolio's spending and savings for FY2020.

<b>Table 1. EE&amp;C PORTFOLIO SUMMARY - FY2020</b>			
<b>Component (Nominal \$)</b>	<b>Actual</b>	<b>Budget</b>	<b>%</b>
<b>Portfolio Spending</b>	<b>\$8,645,905</b>	<b>\$10,349,050</b>	<b>84 %</b>
EE Program	\$8,629,042	\$9,714,050	89 %
CHP Program	\$16,863	\$635,000	3 %
<b>EE Program Natural Gas Savings</b>			
Annual (MMBtus)	182,580	204,703	89 %
Lifetime (MMBtus)	3,569,497	4,057,021	88 %
<b>CHP Net Primary Energy Savings</b>			
Annual (MMBtus)	0	339,710	0 %
Lifetime (MMBtus)	0	5,095,657	0 %

<b>Table 2. EE&amp;C PORTFOLIO SUMMARY - PHASE II</b>			
<b>Component (Nominal \$)</b>	<b>Actual</b>	<b>Budget</b>	<b>%</b>
<b>Portfolio Spending</b>	<b>\$8,645,905</b>	<b>\$63,370,800</b>	<b>14 %</b>
EE Program	\$8,629,042	\$59,928,300	14 %
CHP Program	\$16,863	\$3,442,500	0 %
<b>EE Program Natural Gas Savings</b>			
Annual (MMBtus)	182,580	1,252,420	15 %
Lifetime (MMBtus)	3,569,497	24,745,452	14 %
<b>CHP Net Primary Energy Savings</b>			
Annual (MMBtus)	0	1,755,747	0 %
Lifetime (MMBtus)	0	26,336,204	0 %



### 2.2.1 Summary of Program Costs

<b>Table 3. PORTFOLIO COSTS AND PARTICIPATION BY PROGRAM - FY2020</b>				
<b>Program</b>	<b>Total</b>	<b>Incentive</b>	<b>Non-Incentive</b>	<b>Customers*</b>
Residential Prescriptive (RP)	\$5,495,511	\$5,177,000	\$318,511	10,577
Nonresidential Prescriptive (NP)	\$244,353	\$119,998	\$124,355	77
Residential Retrofit (RR)	\$384,179	\$123,472	\$260,707	179
Residential New Construction (RNC)	\$1,203,486	\$809,336	\$394,150	641
Nonresidential Custom (NC)	\$617,365	\$325,706	\$291,659	21
Portfolio Wide (PW)	\$684,149	\$0	\$684,149	0
<b>Energy Efficiency Total</b>	<b>\$8,629,042</b>	<b>\$6,555,512</b>	<b>\$2,073,530</b>	<b>11,495</b>
Combined Heat and Power (CHP)	\$16,863	\$0	\$16,863	0
<b>Portfolio Total</b>	<b>\$8,645,905</b>	<b>\$6,555,512</b>	<b>\$2,090,393</b>	<b>11,495</b>

\*Represents unique customers who have received a rebate.

### 2.2.2 Summary of Program Savings

<b>Table 4. ENERGY EFFICIENCY PROGRAM SAVINGS - FY2020</b>							
<b>Program</b>	<b>Natural Gas (MMBtu)</b>		<b>Electric Energy (MWh)</b>		<b>Capacity</b>	<b>Water Savings (Gal)</b>	
	<b>Annual</b>	<b>Lifetime</b>	<b>Annual</b>	<b>Lifetime</b>	<b>MW-yr.</b>	<b>Annual</b>	<b>Lifetime</b>
Residential Prescriptive (RP)	125,157	2,289,519	2,289.6	37,392.2	0.319	0	0
Nonresidential Prescriptive (NP)	7,954	146,250	0.0	0.0	0.000	2,679,115	13,395,575
Residential Retrofit (RR)	1,692	50,870	22.8	622.9	0.012	79,616	784,564
Residential New Construction (RNC)	33,064	760,483	1,696.6	39,021.8	0.887	1,306,369	30,046,487
Nonresidential Custom (NC)	14,712	322,375	138.4	1,642.2	0.004	26,862	268,616
<b>Energy Efficiency Total</b>	<b>182,580</b>	<b>3,569,497</b>	<b>4,147.4</b>	<b>78,679.1</b>	<b>1.222</b>	<b>4,091,962</b>	<b>44,495,242</b>

**Table 5. CHP PROGRAM SAVINGS**

Savings	FY2020		Phase II	
	Annual	Lifetime	Annual	Lifetime
Net Primary Fuel Savings (MMBtus)	0	0	0	0

### 2.2.3 Summary of Program Cost-Effectiveness

**Table 6. PORTFOLIO COST-EFFECTIVENESS BY PROGRAM - FY2020 - PV Year (2018)**

Program	TRC Test - Base Case				TRC Test - Base Case + DRIPE & CO2			
	NPV Benefits	NPV Costs	NPV Net	BCR	NPV Benefits	NPV Costs	NPV Net	BCR
Residential Prescriptive (RP)	\$15,451,145	\$9,120,257	\$6,330,888	1.69	\$19,844,759	\$9,120,257	\$10,724,503	2.18
Nonresidential Prescriptive (NP)	\$923,480	\$268,154	\$655,326	3.44	\$1,140,775	\$268,154	\$872,621	4.25
Residential Retrofit (RR)	\$290,168	\$484,046	(\$193,877)	0.60	\$376,835	\$484,046	(\$107,210)	0.78
Residential New Construction (RNC)	\$6,680,045	\$1,594,443	\$5,085,602	4.19	\$8,809,794	\$1,594,443	\$7,215,351	5.53
Nonresidential Custom (NC)	\$1,756,623	\$1,129,875	\$626,748	1.55	\$2,256,102	\$1,129,875	\$1,126,227	2.00
Portfolio Wide (PW)	\$0	\$591,576	(\$591,576)	0.00	\$0	\$591,576	(\$591,576)	0.00
<b>Energy Efficiency Total</b>	<b>\$25,101,461</b>	<b>\$13,188,351</b>	<b>\$11,913,110</b>	<b>1.90</b>	<b>\$32,428,266</b>	<b>\$13,188,351</b>	<b>\$19,239,915</b>	<b>2.46</b>
Combined Heat and Power (CHP)	\$0	\$14,968	(\$14,968)	0.00	\$0	\$14,968	(\$14,968)	0.00
<b>Portfolio Total</b>	<b>\$25,101,461</b>	<b>\$13,203,318</b>	<b>\$11,898,142</b>	<b>1.90</b>	<b>\$32,428,266</b>	<b>\$13,203,318</b>	<b>\$19,224,948</b>	<b>2.46</b>

### 2.3 Progress in Support of Commitments

UGI Gas made significant progress toward its savings goals, achieving 89% of its FY2020 annual MMBtu projections, while keeping administration costs to only 66% of projections. The success of FY2020 can be largely attributed to the success of the RP Program, for which customer incentives were 111% higher than projected, and the RNC Program, for which customer incentives were 141% higher than projected. Overall, UGI Gas spent \$8,645,905 phase-to-date, or approximately 14% of the approved five-year budget of \$63.4 million.

UGI Gas kept the commitments it made in the settlement of its 2016 Base Rate Case. One of the settlement provisions requires the Company to limit the percentage of costs spent by the utility on the NP and NC Programs to 55% or less of the total cost to the utility and customer over the five-year life of the plan. The following table shows that for the phase-to-date, this value is 54%.

<b>Program</b>	<b>Utility Cost</b>	<b>Incremental Participant Cost</b>	<b>Total Cost</b>	<b>%Utility</b>
Nonresidential Prescriptive (NP)	\$244,353	\$51,047	\$295,400	83 %
Nonresidential Custom (NC)	\$617,365	\$677,241	\$1,294,606	48 %
<b>Total</b>	<b>\$861,717</b>	<b>\$728,288</b>	<b>\$1,590,006</b>	<b>54 %</b>

Additionally, the Company agreed to: (1) develop targeted marketing materials for existing residential multi-family customers and new multi-family residential construction, including master-metered multi-family residences; (2) coordinate with the Pennsylvania Housing Alliance (PHA) and the Pennsylvania Housing Finance Authority (PHFA); and (3) track participation for buildings with more than one unit.

UGI Gas developed email marketing campaigns to focus on multi-family stakeholders. The emails were sent in July and September 2020, with one email sent to builders and developers and another sent to customers living in multi-family buildings.

UGI Gas communicated with the PHA early in the program year and had representation at the Homes within Reach conference in Harrisburg, PA from November 18-20, 2019.

In FY2020, UGI Gas identified 462 rebates in the RP and NP program that were tied to buildings with more than one unit, which represented \$99,298 in total rebates. Additionally, there were five multi-family projects processed through the NC program comprising \$139,700 in total rebates.

Finally, UGI Gas continued to be compliant with settlement provisions which required the Company to: (1) inform customers who contact UGI Gas or its Community Service Providers (“CSPs”) with

interest in participating in the EE&C Plan that they might qualify for the Company's Low Income Usage Reduction Program (LIURP), if they are income qualified; (2) refer such customers to LIURP; and (3) refer confirmed low-income customers to LIURP. In FY2020, UGI Gas referred 5 customers to the Company's LIURP Team.

### 2.3.1 Portfolio Costs

<b>Table 8. EE PORTFOLIO COSTS BY CATEGORY - FY2020</b>			
<b>Component (Nominal \$)</b>	<b>Actual</b>	<b>Budget</b>	<b>%</b>
<b>Direct Utility Costs</b>	<b>\$8,645,905</b>	<b>\$10,349,050</b>	<b>84 %</b>
Customer Incentives	\$6,555,512	\$7,272,050	90 %
Administration	\$1,630,452	\$2,462,000	66 %
Marketing	\$143,594	\$385,000	37 %
Inspections	\$101,292	\$160,000	63 %
Evaluations	\$215,055	\$70,000	307 %
<b>Incremental Participant Costs</b>	<b>\$6,078,953</b>	<b>\$18,190,423</b>	<b>33 %</b>

<b>Table 9. EE&amp;C PORTFOLIO COSTS BY CATEGORY - PHASE II</b>			
<b>Component (Nominal \$)</b>	<b>Actual</b>	<b>Budget</b>	<b>%</b>
<b>Direct Utility Costs</b>	<b>\$8,645,905</b>	<b>\$63,370,800</b>	<b>14 %</b>
Customer Incentives	\$6,555,512	\$44,981,300	15 %
Administration	\$1,630,452	\$14,571,000	11 %
Marketing	\$143,594	\$2,106,000	7 %
Inspections	\$101,292	\$1,017,500	10 %
Evaluations	\$215,055	\$695,000	31 %
<b>Incremental Participant Costs</b>	<b>\$6,078,953</b>	<b>\$109,327,605</b>	<b>6 %</b>

### 2.3.2 Portfolio Savings

<b>Table 10. EE&amp;C PROGRAM SAVINGS - FY2020</b>			
<b>Type</b>	<b>Actual</b>	<b>Projected</b>	<b>%</b>
<b>EE Programs</b>			
<b>Natural Gas (MMBtus)</b>			
Annual	182,580	204,703	89 %
Lifetime	3,569,497	4,057,021	88 %
<b>Electric Energy (MWh)</b>			
Annual	4,147.4	1,607.1	258 %
Lifetime	78,679.1	30,848.5	255 %
<b>Capacity Savings (MW)</b>	1.222	0.647	189 %
<b>Water Savings (Gallons)</b>			
Annual	4,091,962	4,615,105	89 %
Lifetime	44,495,242	60,955,502	73 %
<b>CHP Program</b>			
<b>Net Primary Energy Savings</b>			
Annual (MMBtus)	0	339,710	0 %
Lifetime (MMBtus)	0	5,095,657	0 %

<b>Table 11. EE&amp;C PROGRAM SAVINGS - PHASE II</b>			
<b>Type</b>	<b>Actual</b>	<b>Projected</b>	<b>%</b>
<b>EE Programs</b>			
<b>Natural Gas (MMBtus)</b>			
Annual	182,580	1,252,420	15 %
Lifetime	3,569,497	24,745,452	14 %
<b>Electric Energy (MWh)</b>			
Annual	4,147.4	4,280.2	97 %
Lifetime	78,679.1	77,716.9	101 %
<b>Capacity Savings (MW)</b>	1.222	1.243	98 %
<b>Water Savings (Gallons)</b>			
Annual	4,091,962	27,316,316	15 %
Lifetime	44,495,242	353,220,937	13 %
<b>CHP Program</b>			
<b>Net Primary Energy Savings</b>			
Annual (MMBtus)	0	1,755,747	0 %
Lifetime (MMBtus)	0	26,336,204	0 %

## 3 PROGRAM RESULTS

### 3.1 Residential Prescriptive Program

(Rate Classes R/RT, N/NT)

#### 3.1.1 Program Description

The Residential Prescriptive (RP) Program was designed to overcome market barriers to energy efficient space and water heating equipment in the residential sector through rebates and customer awareness. The objective of the program was to avoid lost opportunities by encouraging consumers to install the most efficient gas heating technologies available when replacing older, less efficient equipment. The program also aimed to strengthen UGI Gas's relationship with heating, ventilation and air conditioning (HVAC) contractors, suppliers, and other trade allies.

#### 3.1.2 Program Highlights

The RP Program spent \$5,495,511 in FY2020, of which \$5,177,000 were customer incentives. The program provided first year gas savings of 125,157 MMBtus (116% of plan projections) and lifetime gas savings of 2,289,519 MMBtus (110% of plan projections). Under the TRC Test, including DRIPE and CO<sub>2</sub>, the RP Program provided \$19.8 million in present value of net benefits (2018\$) with a BCR of 2.18. Without DRIPE or CO<sub>2</sub>, the RP Program provided \$15.5 million in present value of net benefits (2018\$) with a BCR of 1.69. The annual and lifetime MWh savings significantly exceeded projections due to the overperformance of smart thermostats which accounted for 7,861 rebates issued.

The RP Program saw participation remain higher than forecast for FY2020. The steady customer participation went hand in hand with contractor participation, and the program exceeded its FY2020 participation and savings targets. In total, 10,577 customers participated in the RP Program in FY2020, with 1,571 customers receiving multiple rebates. For example, customers installing heating equipment also may have decided to install a smart thermostat. Below is a table that highlights rebates issued by equipment type.

<b>Table 12. RP PROGRAM PARTICIPATION</b>	
<b>Equipment</b>	<b>Rebates Issued</b>
Smart Thermostat	7,861
Residential Furnace	3,041
Combi Boiler	1,316
Tankless Water Heater	576
Residential Boiler	367
<b>Total</b>	<b>13,161</b>

### *3.1.2.1 Marketing Activity*

Due to the success of the RP Program in FY2019, much of the same marketing strategy was continued into FY2020. The strategy continued to include outreach to HVAC contractors, customer bill inserts, digital advertising on social media, email marketing, a successful Black Friday promotion, and energy efficiency content on the UGI website. Marketing content focused on educating customers on the various energy efficiency options available, along with providing energy saving tips.

During the start of the 2019 Holiday season, a limited-time promotion was implemented to encourage the purchase of an Energy Star® smart thermostat via the UGI Marketplace. During this week-long promotion (11/28-12/6), 3,861 thermostats were purchased, an increase of 1,342 over last year's promo. During the purchase, customers were given an instant rebate at the point of sale, making it an easy and convenient process. Most of the marketing focus for the RP Program was spent on digital advertising.

### *3.1.2.2 Inspection and Evaluation Activity*

Energy Federation, Inc. (EFI), the CSP responsible for processing rebates, also was retained to provide inspections on a subset of applications. The purpose of these inspections was to confirm that the equipment on the rebate application matched the equipment that was installed in the customer's home. Payment of the rebate was withheld from applications flagged for inspection until such activity was completed. In FY2020, 513 inspections were performed, with four inspections failing. The main cause for failed inspections was the model number on the application not matching the installed equipment. In cases where the installed equipment still qualified, rebates were paid; where the installed equipment did not qualify, rebates were not issued. Due to COVID-19, in-person inspections were paused and replaced with virtual inspections. In August 2020, in-person inspections resumed, but customers were given the option to utilize virtual inspections.

In FY2020, \$68,878 was spent on evaluation costs, of which, \$53,179 were carryover costs from FY2019. This included the conclusion of evaluation activity started in the previous phase. The Company will continue to manage the evaluation budget on a five-year timeframe as the timing of evaluation activity may vary slightly compared to the original assumptions from the Plan filing.

### **3.1.3 Program Updates for FY2021**

There are no program updates at this time.

### 3.1.4 Residential Prescriptive Program Results

<b>Component (Nominal \$)</b>	<b>FY2020 - Actual</b>	<b>FY2020 - Budget</b>	<b>%</b>
<b>Direct Utility Costs</b>	<b>\$5,495,511</b>	<b>\$5,030,900</b>	<b>109 %</b>
Customer Incentives	\$5,177,000	\$4,675,900	111 %
Administration	\$96,064	\$151,000	64 %
Marketing	\$110,113	\$123,000	90 %
Inspections	\$43,456	\$81,000	54 %
Evaluations	\$68,878	\$0	0 %
<b>Incremental Participant Costs</b>	<b>\$4,599,378</b>	<b>\$2,716,204</b>	<b>169 %</b>

<b>Type</b>	<b>FY2020 - Actual</b>	<b>FY2020 - Projected</b>	<b>%</b>
<b>Natural Gas (MMBtus)</b>			
Annual	125,157	107,515	116 %
Lifetime	2,289,519	2,081,972	110 %
<b>Electric Energy (MWh)</b>			
Annual	2,289.6	64.8	3534 %
Lifetime	37,392.2	712.6	5247 %
<b>Capacity Savings (MW)</b>	0.319	0.000	0 %
<b>Water Savings (Gallons)</b>			
Annual	0	0	0 %
Lifetime	0	0	0 %

<b>Benefits/Cost Component</b>	<b>FY2020</b>	<b>Phase II</b>
TRC NPV Benefits	<b>\$19,844,759</b>	<b>\$19,844,759</b>
TRC NPV Costs	\$9,120,257	\$9,120,257
TRC Net Benefits	\$10,724,503	\$10,724,503
TRC Benefit/Cost Ratio	<b>2.18</b>	<b>2.18</b>

<b>Benefits/Cost Component</b>	<b>FY2020</b>	<b>Phase II</b>
TRC NPV Benefits	<b>\$15,451,145</b>	<b>\$15,451,145</b>
TRC NPV Costs	\$9,120,257	\$9,120,257
TRC Net Benefits	\$6,330,888	\$6,330,888
TRC Benefit/Cost Ratio	<b>1.69</b>	<b>1.69</b>



## 3.2 Nonresidential Prescriptive Program

(Rate Classes N/NT, DS, LFD)

### 3.2.1 Program Description

The Nonresidential Prescriptive (NP) Program was designed to overcome market barriers to energy efficient equipment in the business and commercial sector through rebates and customer outreach. The objective of the program was to encourage business owners to install the most efficient gas heating technologies available to replace older, less efficient equipment. The program also aimed to strengthen UGI Gas's relationships with HVAC contractors, suppliers, and other trade allies. Addressing traditional challenges in engaging this market, a midstream incentive pathway (Distributor Instant Discount Program) was added to the program for FY2020. This allowed customers or their contractors to obtain incentives at the point of sale. Incentive levels are the same in the downstream and midstream pathways. Also, for FY2020, these incentives were made available to rate classes DS and LFD.

### 3.2.2 Program Highlights

The NP Program spent \$244,353 in FY2020, of which \$119,998 were customer incentives. The program provided first year gas savings of 7,954 MMBtus (16% of plan projections) and lifetime gas savings of 146,250 MMBtus (14% of plan projections). Under the TRC Test, including DRIPE and CO<sub>2</sub>, the NP Program provided \$1.1 million in present value of net benefits (2018\$) with a BCR of 4.25. Without factoring in DRIPE or CO<sub>2</sub>, the NP Program provided \$923,480 in present value of net benefits (2018\$) with a BCR of 3.44.

UGI Gas utilized the services of Energy Federation, Inc. (EFI) to process rebates, provide customer service, and perform quality assurance inspections. UGI Gas also retained Performance Systems Development (PSD) to design and manage the midstream application portal and process. Below is a chart that summarizes rebate activity for FY2020.

<b>Table 17. NP PROGRAM PARTICIPATION</b>	
<b>Equipment</b>	<b>Rebates Issued</b>
Pre-Rinse Spray Valve <sup>1</sup>	43
Commercial Water Heater	38
Commercial Boiler	24
Commercial Fryer	10
<b>Total</b>	<b>115</b>

<sup>1</sup> Equipment was installed in FY2019, but rebates were issued and accounted for in FY2020. UGI Gas no longer offers rebates for this measure.

### *3.2.2.1 Marketing Activity*

Marketing activity for the NP Program was conducted in conjunction with the marketing activity for the RP Program, including contractor outreach, newsletters, bill inserts, and digital advertising. For the midstream component of NP, marketing was primarily through direct outreach to recruit and train participating distributors. A separate landing page for the midstream component was created which lists participating distributors and how to participate. Messaging directed customers and contractors to the webpage to learn more about the program. Distributors were also provided with point-of-purchase displays and co-branded promotional flyers for use in their stores. Marketing and outreach activities for NP were paused during the COVID-19 shutdown from March through June 2020. Though email and newsletter marketing resumed in June, the face-to-face outreach, networking and event attendance vital for building this program remained impossible for the remainder of the fiscal year.

In an effort to reach the restaurant and food service market, UGI Gas continued its membership with the Pennsylvania Restaurant and Lodging Association, exhibiting at an event in December 2019. Additional outreach events were cancelled due to COVID-19, with this market segment disproportionately impacted by the pandemic.

### *3.2.2.2 Inspection and Evaluation Activity*

EFI, the CSP responsible for processing rebates, also was retained to provide inspections on a subset of applications. The purpose of these inspections was to confirm that the equipment on the rebate application matched the equipment that was installed in the customer's business. Payment of the rebate was withheld from applications flagged for inspection until such activity was completed. In FY2020, seven inspections were performed on NP Program rebates, with zero inspections failing.

In FY2020, \$41,057 was spent on evaluation costs, of which, \$24,854 were carryover costs from FY2019. This included the conclusion of evaluation activity started in the previous phase. The Company will continue to manage the evaluation budget on a five-year timeframe as the timing of evaluation activity may vary slightly compared to the original assumptions from the Plan filing.

### **3.2.3 Program Updates for FY2021**

There are no program updates at this time.

### 3.2.4 Nonresidential Prescriptive Program Results

<b>Component (Nominal \$)</b>	<b>FY2020 - Actual</b>	<b>FY2020 - Budget</b>	<b>%</b>
<b>Direct Utility Costs</b>	<b>\$244,353</b>	<b>\$848,350</b>	<b>29 %</b>
Customer Incentives	\$119,998	\$708,350	17 %
Administration	\$74,791	\$76,000	98 %
Marketing	\$7,653	\$54,000	14 %
Inspections	\$854	\$10,000	9 %
Evaluations	\$41,057	\$0	0 %
<b>Incremental Participant Costs</b>	<b>\$51,047</b>	<b>\$942,140</b>	<b>5 %</b>

<b>Type</b>	<b>FY2020 - Actual</b>	<b>FY2020 - Projected</b>	<b>%</b>
<b>Natural Gas (MMBtus)</b>			
Annual	7,954	48,350	16 %
Lifetime	146,250	1,047,823	14 %
<b>Electric Energy (MWh)</b>			
Annual	0.0	49.3	0 %
Lifetime	0.0	644.1	0 %
<b>Capacity Savings (MW)</b>	0.000	0.006	0 %
<b>Water Savings (Gallons)</b>			
Annual	2,679,115	3,026,890	89 %
Lifetime	13,395,575	45,047,023	30 %

<b>Benefits/Cost Component</b>	<b>FY2020</b>	<b>Phase II</b>
TRC NPV Benefits	<b>\$1,140,775</b>	<b>\$1,140,775</b>
TRC NPV Costs	\$268,154	\$268,154
TRC Net Benefits	\$872,621	\$872,621
TRC Benefit/Cost Ratio	<b>4.25</b>	<b>4.25</b>

<b>Benefits/Cost Component</b>	<b>FY2020</b>	<b>Phase II</b>
TRC NPV Benefits	<b>\$923,480</b>	<b>\$923,480</b>
TRC NPV Costs	\$268,154	\$268,154
TRC Net Benefits	\$655,326	\$655,326
TRC Benefit/Cost Ratio	<b>3.44</b>	<b>3.44</b>

### 3.3 Residential New Construction Program

(Rate Classes R/RT)

#### 3.3.1 Program Description

The Residential New Construction (RNC) Program was designed to overcome market barriers to energy efficient space and water heating equipment, as well as high efficiency thermal envelopes, in the residential new construction sector. This was accomplished through rebates offered to builders and developers. The objective of the program was to avoid lost opportunities by encouraging builders and developers to install the most efficient gas heating technologies available instead of less efficient baseline equipment, as well as promote thermal envelope best practices. The program also aimed to strengthen UGI Gas's relationship with builders, HVAC contractors, suppliers, and other trade allies.

For the residential new construction track, the program required builders to work with a Home Energy Rating System (HERS) rater on their home. An incentive of \$25 per annual MMBtu saved was paid to a new home, heated with natural gas, that achieved savings of 30% over 2009 IECC or greater. A \$30 per annual MMBtu incentive was paid to homes that achieved savings of 30% over code and achieved Energy Star® certification. The increase in incentive was designed to move the market towards more homes being Energy Star® certified and to leverage the HERS rating approach taken by the electric distribution companies (EDCs) under their Act 129 new construction programs.

#### 3.3.2 Program Highlights

The RNC Program spent \$1,203,486, of which \$809,336 was customer incentives. The program provided first year gas savings of 33,064 MMBtus, 160% of plan projections. Under the TRC Test, including DRIPE and CO<sub>2</sub>, the RNC Program provided \$8.8 million in present value of net benefits (2018\$) with a BCR of 5.53. Without DRIPE or CO<sub>2</sub>, the RNC Program provided \$6.7 million in present value of net benefits (2018\$) with a BCR of 4.19.

UGI Gas utilized the services of Performance Systems Development (PSD) as the program implementer for the RNC Program. Below is a chart of participation by rebate type in the RNC program:

<b>Rebate Level</b>	<b>Rebate Count</b>
30% Above Code	582
30% Above Code + Energy STAR	59
<b>Total</b>	<b>641</b>

### 3.3.2.1 Marketing Activity

In 2020, marketing was conducted through established builders and HERS raters who have been participants in the programs mandated for large EDCs by Act 129 of 2008, P.L. 1592 (Act 129). Also, emails and/or newsletters with program updates were periodically distributed to all participating builders and raters that participated in the program.

### 3.3.2.2 Inspection and Evaluation Activity

There was a total of 37 HERS ratings reviewed by PSD. Only one of those ratings failed to qualify for a rebate due to not achieving 30% above code. Evaluation costs came in at 58% of FY2020 projections.

### 3.3.3 Program Updates for FY2021

The savings threshold will change in FY2021 from 30% above 2009 IECC baseline to 10% above 2015 IECC baseline. Incentives will increase by \$10/MMBtu saved.

### 3.3.4 Residential New Construction Program Results

Component (Nominal \$)	FY2020 - Actual	FY2020 - Budget	%
<b>Direct Utility Costs</b>	<b>\$1,203,486</b>	<b>\$837,800</b>	<b>144 %</b>
Customer Incentives	\$809,336	\$573,800	141 %
Administration	\$322,950	\$153,000	211 %
Marketing	\$0	\$55,000	0 %
Inspections	\$47,975	\$16,000	300 %
Evaluations	\$23,224	\$40,000	58 %
<b>Incremental Participant Costs</b>	<b>\$588,213</b>	<b>\$512,995</b>	<b>115 %</b>

Type	FY2020 - Actual	FY2020 - Projected	%
<b>Natural Gas (MMBtus)</b>			
Annual	33,064	20,623	160 %
Lifetime	760,483	412,451	184 %
<b>Electric Energy (MWh)</b>			
Annual	1,696.6	1,426.5	119 %
Lifetime	39,021.8	28,529.7	137 %
<b>Capacity Savings (MW)</b>	0.887	0.616	144 %
<b>Water Savings (Gallons)</b>			
Annual	1,306,369	0	0 %
Lifetime	30,046,487	0	0 %

**Table 25. PROGRAM COST-EFFECTIVENESS (BASE CASE + DRIPE & CO2) PV Year (2018)**

<b>Benefits/Cost Component</b>	<b>FY2020</b>	<b>Phase II</b>
TRC NPV Benefits	<b>\$8,809,794</b>	<b>\$8,809,794</b>
TRC NPV Costs	\$1,594,443	\$1,594,443
TRC Net Benefits	\$7,215,351	\$7,215,351
TRC Benefit/Cost Ratio	<b>5.53</b>	<b>5.53</b>

**Table 26. PROGRAM COST-EFFECTIVENESS (BASE CASE) PV Year (2018)**

<b>Benefits/Cost Component</b>	<b>FY2020</b>	<b>Phase II</b>
TRC NPV Benefits	<b>\$6,680,045</b>	<b>\$6,680,045</b>
TRC NPV Costs	\$1,594,443	\$1,594,443
TRC Net Benefits	\$5,085,602	\$5,085,602
TRC Benefit/Cost Ratio	<b>4.19</b>	<b>4.19</b>

### **3.4 Residential Retrofit Program**

(Rate Class R/RT)

#### **3.4.1 Program Description**

The Residential Retrofit (RR) Program was designed to overcome market barriers to energy efficiency in the existing residential sector through rebates offered either to customers undergoing a retrofit project or to their installation contractor(s). The program encouraged improvements to the thermal envelope of the structure, particularly reductions in building air leakage and increases in insulation levels, as well as installation of the most efficient gas heating technologies. The program also aimed to strengthen UGI Gas's relationship with HVAC contractors, suppliers, and other trade allies.

Due to the program redesign, the updated RR Program did not launch until February. There was an uptick in program participation in February and early March. However, just as the program was gaining traction, COVID-19 forced the program to temporarily pause activity for the month of April. In May 2020, contractors resumed work only after agreeing to follow all UGI Utilities, state, and federal guidelines given for contractors working within residential homes during the COVID-19 pandemic.

The redesigned RR Program incentivized customers to have an in-home energy evaluation performed by a Building Performance Institute, Inc. (BPI) certified auditor. The customer charge for the evaluation, from the contractor, was \$50. In addition to the \$50 from the customer, the contractor received a \$150 payment from UGI Gas for each evaluation completed. The customer fee could be waived for verified low-income customers that are not eligible for LIURP services due to usage levels. The evaluation included the direct installation of energy-saving measures as well as a visual inspection of the thermal envelope and HVAC equipment in the home. Direct-install measures included an Energy Star® smart thermostat, low-flow devices, water heater tank temperature turn down, and other energy-saving measures.

After the evaluation, the customer received a report that included a list of recommended cost-effective measures with corresponding incentive levels. After the completion of a job, the customer was required to have a test-out evaluation performed by the contractor, and a rebate was issued for the measures that were installed. Efficiency measures and incentives are listed below.

<b>Improvement Type</b>	<b>Incentive to Customer</b>
Efficient Space Heating System	\$500 - \$1,800
Heating Pipe Insulation	\$5 - \$15 per ft.
Air Infiltration Reduction	\$150 - \$500
Roof/Ceiling Insulation	\$0.35 - \$2 per sq. ft.
Wall Insulation	\$0.30 - \$1.50 per sq. ft.
Duct Insulation	\$5 per ft.
Duct Sealing	\$75 - \$300
Smart Thermostat Installation	\$100
Low-Flow Fixtures	\$5 - \$30
Efficient Water Heater	\$300 - \$400
Water Heater Pipe Insulation	\$15 per ft.
Tank Temperature Turn-Down	\$5

### **3.4.2 Program Highlights**

UGI Gas utilized the services of Performance Systems Development (PSD) as the program implementer for the RR Program. The RR Program spent \$384,179 in FY20, of which \$123,472 were customer incentives. The program provided first-year gas savings of 1,692 MMBtus, 10% of plan projections. The program provided lifetime gas savings of 50,870 MMBtus, 17% of plan projections. Under the TRC Test, including DRIPE and CO<sub>2</sub>, the RR Program provided \$376,835 in present value of net benefits (2018\$) with a BCR of 0.78. Without DRIPE or CO<sub>2</sub>, the RR Program provided \$290,168 in present value of net benefits (2018\$) with a BCR of 0.60. Below is a chart of participation by rebate type in the RR program:

<b>Measure</b>	<b>Rebate Count</b>
Home Energy – Assessments	165
Home Energy – Jobs	72
Ceiling Insulation	71
Energy Star® Smart Thermostat	48
Air Sealing	44
Low-Flow Fixtures	39
CO Detector	33
Wall Insulation	25
Tank Temperature Turn-Down	8
Duct Sealing	4
Water Heater Pipe Insulation	3
Heating Pipe Insulation	3
Energy Star® Furnace	1
<b>Total</b>	<b>516</b>



### 3.4.2.1 Marketing Activity

Marketing for this program was designed to drive traffic to the program website [www.ugisavesmart.com](http://www.ugisavesmart.com). The website outlined the customer participation process, the potential rebates, benefits to customer participation, and a list of participating contractors. UGI Gas continued to market the program through bill inserts, social media advertising and email. Due to the COVID-19 pandemic, UGI Gas paused all marketing efforts starting in March 2020 and resumed in June 2020. UGI Gas focused on simple messaging that highlighted the benefits of the program that a customer could experience. UGI Gas provided contractors with marketing collateral and yard signs to place in their customers' yards as they were working on projects.

### 3.4.2.2 Inspection and Evaluation Activity

A total of 15 field inspections were conducted in the RR Program with only one inspection failing due to the contractor not installing the thermostat measure.

Evaluation costs of \$41,427 were incurred for evaluation activity that was originally planned for FY2022. The Company will continue to manage the evaluation budget on a five-year timeframe as the timing of evaluation activity may vary slightly compared to the original assumptions from the Plan filing.

### 3.4.3 Program Updates for FY2021

There are no program updates at this time.

### 3.4.4 Residential Retrofit Program Results

<b>Component (Nominal \$)</b>	<b>FY2020 - Actual</b>	<b>FY2020 - Budget</b>	<b>%</b>
<b>Direct Utility Costs</b>	<b>\$384,179</b>	<b>\$1,521,000</b>	<b>25 %</b>
Customer Incentives	\$123,472	\$468,000	26 %
Administration	\$196,467	\$933,000	21 %
Marketing	\$15,927	\$80,000	20 %
Inspections	\$6,886	\$40,000	17 %
Evaluations	\$41,427	\$0	0 %
<b>Incremental Participant Costs</b>	<b>\$163,074</b>	<b>\$443,612</b>	<b>37 %</b>

**Table 30. PROGRAM SAVINGS**

Type	FY2020 - Actual	FY2020 - Projected	%
<b>Natural Gas (MMBtus)</b>			
Annual	1,692	17,325	10 %
Lifetime	50,870	296,969	17 %
<b>Electric Energy (MWh)</b>			
Annual	22.8	55.1	41 %
Lifetime	622.9	734.9	85 %
<b>Capacity Savings (MW)</b>			
	0.012	0.013	94 %
<b>Water Savings (Gallons)</b>			
Annual	79,616	1,588,215	5 %
Lifetime	784,564	15,908,479	5 %

**Table 31. PROGRAM COST-EFFECTIVENESS (BASE CASE + DRIPE & CO2) PV Year (2018)**

Benefits/Cost Component	FY2020	Phase II
TRC NPV Benefits	<b>\$376,835</b>	<b>\$376,835</b>
TRC NPV Costs	\$484,046	\$484,046
TRC Net Benefits	(\$107,210)	(\$107,210)
TRC Benefit/Cost Ratio	<b>0.78</b>	<b>0.78</b>

**Table 32. PROGRAM COST-EFFECTIVENESS (BASE CASE) PV Year (2018)**

Benefits/Cost Component	FY2020	Phase II
TRC NPV Benefits	<b>\$290,168</b>	<b>\$290,168</b>
TRC NPV Costs	\$484,046	\$484,046
TRC Net Benefits	(\$193,877)	(\$193,877)
TRC Benefit/Cost Ratio	<b>0.60</b>	<b>0.60</b>

## **3.5 Nonresidential Custom Program**

(Rate Classes N/NT, DS, LFD)

### **3.5.1 Program Description**

The Nonresidential Custom (NC) Program was designed to overcome market barriers for natural gas efficiency retrofits in existing commercial and master-metered multi-family buildings. The NC Program combined the former Nonresidential Retrofit and Nonresidential New Construction programs as of November 1, 2019.

### **3.5.2 Program Highlights**

In December 2019, UGI Gas awarded the implementation contract for the NC Program to Performance Systems Development (PSD). Despite the COVID-19 pandemic, the program was able to exceed its savings goal. The program spent \$617,365 in FY2020 (103% of budget), of which \$325,706 were customer incentives (94% of budget). The program provided first year gas savings of 14,712 MMBtus (135% of budget) and lifetime gas savings of 322,375 MMBtus (148% of budget). Under the TRC Test, including DRIPE and CO<sub>2</sub>, the NC Program provided \$2,256,102 in present value of net benefits (2018\$) with a BCR of 2.00. Without DRIPE or CO<sub>2</sub>, the program provided \$1,756,623 in present value of net benefits (2018\$) with a BCR of 1.55.

The NC Program provided incentives to 11 projects in FY2020. The projects were completed at colleges, schools, multi-family developments, commercial/industrial facilities, and one religious organization. These projects provided cost-effective incentives to help overcome the large incremental cost of installing high-efficiency measures versus low or baseline-efficiency equipment. The rebates were issued for custom space and water heating measures, as well as building envelope upgrades and smart thermostats.

#### *3.5.2.1 Marketing Activity*

UGI Gas utilized PSD to market the NC Program in FY2020. Due to the complex nature of many custom projects, marketing efforts initially focused on larger customers and utilized UGI Gas's major account representatives (relationship managers) to identify project opportunities. PSD also built on existing relationships with two regional engineering firms, both to bring in prospects and to provide engineering support for technical projects.

Externally, PSD's marketing strategy centered on targeted outreach to vertical market segments including education, healthcare, breweries, industrial, car washes, laundromats/drycleaners, agriculture, and others. Emails were sent to customer lists and identified vertical associations. UGI Gas supported these tactics with emails and newsletter promotion to commercial customers. Event attendance, a key element of PSD's outreach strategy, was curtailed by the COVID-19 pandemic, which affected seven out of the ten months that PSD worked on the program in FY2020.

### 3.5.2.2 Inspection and Evaluation Activity

In FY2020, six of the 11 completed projects were inspected by PSD or UGI staff and passed prior to being paid. Evaluation costs of \$31,914 were incurred for evaluation activity that was originally planned for FY2021. The Company will continue to manage the evaluation budget on a five-year timeframe as the timing of evaluation activity may vary slightly compared to the original assumptions from the Plan filing.

### 3.5.3 Program Updates for FY2021

There are no program updates at this time.

### 3.5.4 Nonresidential Custom Program Results

Component (Nominal \$)	FY2020 - Actual	FY2020 - Budget	%
<b>Direct Utility Costs</b>	<b>\$617,365</b>	<b>\$601,000</b>	<b>103 %</b>
Customer Incentives	\$325,706	\$346,000	94 %
Administration	\$247,724	\$214,000	116 %
Marketing	\$9,901	\$33,000	30 %
Inspections	\$2,120	\$8,000	27 %
Evaluations	\$31,914	\$0	0 %
<b>Incremental Participant Costs</b>	<b>\$677,241</b>	<b>\$663,935</b>	<b>102 %</b>

Type	FY2020 - Actual	FY2020 - Projected	%
<b>Natural Gas (MMBtus)</b>			
Annual	14,712	10,890	135 %
Lifetime	322,375	217,806	148 %
<b>Electric Energy (MWh)</b>			
Annual	138.4	11.4	1218 %
Lifetime	1,642.2	227.2	723 %
<b>Capacity Savings (MW)</b>	0.004	0.012	31 %
<b>Water Savings (Gallons)</b>			
Annual	26,862	0	0 %
Lifetime	268,616	0	0 %

Benefits/Cost Component	FY2020	Phase II
TRC NPV Benefits	<b>\$2,256,102</b>	<b>\$2,256,102</b>
TRC NPV Costs	\$1,129,875	\$1,129,875
TRC Net Benefits	\$1,126,227	\$1,126,227
TRC Benefit/Cost Ratio	<b>2.00</b>	<b>2.00</b>

<b>Table 36. PROGRAM COST-EFFECTIVENESS (BASE CASE) PV Year (2018)</b>		
<b>Benefits/Cost Component</b>	<b>FY2020</b>	<b>Phase II</b>
TRC NPV Benefits	<b>\$1,756,623</b>	<b>\$1,756,623</b>
TRC NPV Costs	\$1,129,875	\$1,129,875
TRC Net Benefits	\$626,748	\$626,748
TRC Benefit/Cost Ratio	<b>1.55</b>	<b>1.55</b>

## 3.6 Combined Heat and Power

(Rate Classes DS, LFD)

### 3.6.1 Program Description

The Combined Heat and Power (CHP) Program sought to promote the installation of cost-effective and net-primary-energy-saving CHP projects and provide meaningful CO<sub>2</sub> emission reductions. A CHP plant produces electricity at a commercial or industrial site while at the same time using the waste heat from the production of the electricity to serve a thermal load. Net efficiencies come from the recovered heat that is typically wasted in grid electricity production. Efficiencies also stem from avoided transmission and distribution losses from delivering the electricity from the generator to the customer site.

### 3.6.2 Program Highlights

The CHP Program spent \$16,863 on administrative and evaluation costs in FY2020. One project was completed during the program year, but the final evaluation extended into FY2021. UGI Gas anticipates paying the incentive for this project in the subsequent fiscal year.

#### 3.6.2.1 *Marketing Activity*

UGI Gas leveraged customer outreach via relationship managers who educate customers on the potential benefits of CHP installations.

#### 3.6.2.2 *Inspection and Evaluation Activity*

One inspection was performed in August for a project that is expected to close in FY2021. Evaluation costs of \$8,555 were below the budget of \$30,000.

### 3.6.3 Program Updates for FY2021

There are no program updates at this time.

### 3.6.4 Combined Heat and Power Program Results

<b>Table 37. PROGRAM COSTS</b>			
<b>Component (Nominal \$)</b>	<b>FY2020 - Actual</b>	<b>FY2020 - Budget</b>	<b>%</b>
<b>Direct Utility Costs</b>	<b>\$16,863</b>	<b>\$635,000</b>	<b>3 %</b>
Customer Incentives	\$0	\$500,000	0 %
Administration	\$8,308	\$60,000	14 %
Marketing	\$0	\$40,000	0 %
Inspections	\$0	\$5,000	0 %
Evaluations	\$8,555	\$30,000	29 %
<b>Incremental Participant Costs</b>	<b>\$0</b>	<b>\$12,911,537</b>	<b>0 %</b>

**Table 38. CHP PROGRAM SAVINGS**

Savings	Program Year		Inception to Date	
	Annual	Lifetime	Annual	Lifetime
Net Primary Fuel Savings (MMBtus)	0.00	0.00	0.00	0.00

**Table 39. PROGRAM COST-EFFECTIVENESS (BASE CASE + DRIPE & CO2) PV Year (2018)**

Benefits/Cost Component	FY2020	Phase II
TRC NPV Benefits	\$0	\$0
TRC NPV Costs	\$14,968	\$14,968
TRC Net Benefits	(\$14,968)	(\$14,968)
TRC Benefit/Cost Ratio	<b>0.00</b>	<b>0.00</b>

**Table 40. PROGRAM COST-EFFECTIVENESS (BASE CASE) PV Year (2018)**

Benefits/Cost Component	FY2020	Phase II
TRC NPV Benefits	\$0	\$0
TRC NPV Costs	\$14,968	\$14,968
TRC Net Benefits	(\$14,968)	(\$14,968)
TRC Benefit/Cost Ratio	<b>0.00</b>	<b>0.00</b>

## **4 Attachments**

### **4.1 Technical Reference Manual**

In FY2020, there were no changes made to the Technical Reference Manual (TRM) used to calculate savings for the UGI Gas Consolidated Energy Efficiency and Conservation Plan.