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**SOUTHWEST GAS CORPORATION**

September 30, 2016

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Arizona Corporation Commission  
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Phoenix, AZ 85007-2996

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Re: **Docket No. G-00000G-16-0100**

Pursuant to the Gas Utility Energy Efficiency Standards of the Arizona Administrative Code, Section R14-2-2509(B), which requires affected utilities to file a status report with the Arizona Corporation Commission by October 1 of each year, Southwest Gas Corporation respectfully submits an original and thirteen copies of its Arizona Energy Efficiency and Renewable Energy Resource Technology Portfolio Implementation Plan Annual Status Report.

If you have any questions or require additional information, please contact me directly at 602-395-4058.

Respectfully submitted,

Matthew D. Derr  
Regulatory Manager/Arizona

Cc: Barbara Keene, ACC Utilities Division  
Julie McNeely-Kirwan, ACC Utilities Division

Arizona Corporation Commission  
**DOCKETED**

SEP 30 2016

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# **Southwest Gas Corporation**

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## **Energy Efficiency and Renewable Energy Resource Technology Portfolio Implementaion Plan**

**Program Year Four  
Annual Status Report  
June 1, 2015-June 30, 2016**

**September 30, 2016**

**Docket No. G-00000G-16-0100**



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# ARIZONA ENERGY EFFICIENCY AND RENEWABLE ENERGY RESOURCE TECHNOLOGY PORTFOLIO IMPLEMENTATION PLAN

## Overview

Pursuant to Arizona Administrative Code (AAC) Section R14-2-2509(B) - referred to as the Gas Utility Energy Efficiency Standards (Gas EE Standards), Southwest Gas Corporation (Southwest Gas or Company) submits its annual status report (Report) for the Company's Energy Efficiency (EE) and Renewable Energy Resource Technology (RET) portfolio (EE & RET Plan). Southwest Gas' EE & RET Plans, including the EE & RET Plan for Program Year Four (PY4), have historically been implemented from June through May, rather than January through December. With the approval of the Company's EE & RET Plan for Program Years 5 and 6 in Decision No. 75592, PY4 was extended through June 30, 2016. Consequently, this Report contains a full program year of data for Program Year Four (PY4) covering the period from June 1, 2015 through June 30, 2016.

The *Smarter Greener Better*<sup>®</sup> (SGB) Low Income Energy Conservation (LIEC) program year operates on a fiscal year from July through June; therefore, the Report includes expenditures and participation rates for the period covering July 1, 2015 through June 30, 2016 for PY4.

Pursuant to Decision No. 73229 (Docket No. G-01551A-11-0344), the Company includes an evaluation of cost-effectiveness for each applicable program and measure in this Report, listing any measures that have ceased to be cost-effective and indicating why they are no longer cost-effective.

Additionally, pursuant to Decision No. 74300 (Docket No. G-01551A-13-0170), Southwest Gas includes tables that list the following information:

- All Arizona Corporation Commission (Commission) approved programs and measures, and budgeted expenditures by program
- Actual annual expenditures by program
- Plan cost-effectiveness ratio per measure (last calculated by the Commission's Utilities Division Staff (Staff))
- Actual cost-effectiveness ratio per measure (using the Staff-approved method with all criteria updated to reflect the most recent data available)
- Program annual therm savings and lifetime therm savings (plan and actual data)
- Program cost-effectiveness test benefits, costs, and net benefits (plan and actual data)

## Program Summary – PY4

Southwest Gas submitted its EE & RET Plan for PY3 and PY4 on May 31, 2013, requesting approval of its existing seven programs with a total budget of \$7.5 million. On January 29, 2014, the Commission issued Decision No. 74300 approving five programs with a budget of \$4.7 million.

### Residential Energy Management Programs

1. *Smarter Greener Better Homes*

### Non-Residential Energy Management Programs

2. *Smarter Greener Better Custom Commercial Rebates*
3. *Smarter Greener Better Distributed Generation*

### Low Income Program

4. *Smarter Greener Better Low Income Energy Conservation*

### Renewable Energy Resource Technology Program

5. *Smarter Greener Better Solar Thermal Rebates*

Below is a brief summary of each program implemented during PY4 of the reporting period:

SGB Homes: Tiered rebates were offered to homebuilders for ENERGY STAR certified homes. Homes that received ENERGY STAR certification were eligible for a Tier 1 rebate and homes that received ENERGY STAR certification and achieved a Home Energy Rating System (HERS) score of 65 or below were eligible for a Tier 2 rebate. The program was available to all builders of new single-family subdivision and custom homes and multi-family homes featuring natural gas water and/or space heating.

SGB Custom Commercial Rebates: Rebates were offered to non-residential customers based on achieved annual energy savings. The program does not specify eligible measures in order to provide participants maximum flexibility in identifying potential projects. Participants may propose any measure that produces a verifiable natural gas usage reduction, is installed in either existing or new construction applications and exceeds code, has a minimum useful life of seven years, and exceeds minimum cost-effectiveness requirements. Qualifying measures include those that target cost-effective natural gas savings, such as retrofits of existing systems, improvements to existing systems, and first time installations where the system's efficiency exceeds applicable codes or standard industry practices.

SGB Distributed Generation: The program provided rebates to non-residential customers to achieve significant fuel savings by promoting high-efficiency electric

generation with waste heat recovery, providing financial benefits during peak electrical demand periods, and demonstrating the use of new technologies that are being brought to market. The rebates were based upon the size and efficiency of the system being installed.

SGB LIEC: The LIEC program was available to households with annual incomes less than 150 percent of the federal poverty income guidelines and is comprised of two components: a weatherization program that provides various energy-efficient home improvements such as insulation, duct repairs, weather-stripping and HVAC replacement, which was administered by Southwest Gas in conjunction with the Arizona Department of Housing (ADOH); and an emergency bill assistance program to help customers pay household natural gas bills, which was administered by Southwest Gas in conjunction with the Arizona Community Action Association (ACAA).

SGB Solar Thermal Rebates: Rebates were offered to residential and non-residential customers on qualified solar thermal systems used for water heating or pool heating with a natural gas back-up, upon proof-of-purchase and installation. The program objective was to increase public awareness of the benefits of solar thermal systems and to reduce customer natural gas usage by providing economically beneficial rebates to install the systems. Long-term customer energy savings are realized throughout the life of the solar thermal systems.

Southwest Gas continually monitors and evaluates each program and measure included in its EE & RET Plan, and implements program and process improvements as needed. The Company may utilize in-house staff for its measurement and evaluation activities, resulting in no direct costs charged to the measurement, verification, and evaluation (MV&E) budget category under each program. For programs that are administered by a third-party, MV&E costs are accumulated under the Delivery budget category.

## **Energy Efficiency Standards**

Pursuant to Section R14-2-2504 of the Gas EE Standards, Southwest Gas is required to achieve cumulative annual energy savings, expressed as therms or therm equivalents, equal to at least six percent of the Company's retail gas energy sales for calendar year 2019.

For PY4, the Company is required to achieve cumulative annual energy savings of at least 2.4 percent. Using Southwest Gas' 2013 retail sales of 643,952,120, the Company's PY4 cumulative energy savings goal of 2.4 percent is 15,454,851 therms. In PY4, Southwest Gas expended approximately \$4.5 million of its \$4.7 million budget and achieved 3,247,692 annual therm savings as indicated in **Tables 1** and **5**. With cumulative savings of 12,413,112 therms achieved in PY1 through PY3, Southwest Gas' cumulative annual energy savings of 15,660,804 therms exceeds its year four goal set forth in the Gas EE Standards.

**Table 1 – Cumulative and Annual Energy Savings**

Year	Retail Sales Volumes Used	Cumulative Energy Savings Goal (%)	Cumulative Energy Savings Goal (therms)	Annual Energy Savings Achieved (therms)	Cumulative Energy Savings Achieved (%)	Cumulative Energy Savings Achieved (therms)
1	617,174,760	0.50%	3,085,874	3,146,127	0.51%	3,146,127
2	634,605,252	1.20%	7,615,263	5,230,962	1.32%	8,377,089
3	603,223,751	1.80%	10,858,028	4,036,023	2.06%	12,413,112
4	643,952,120*	2.40%	15,454,851	3,247,692	2.43%	15,660,804

\* In Southwest Gas' AZ EE & RET Plan for PY3 and PY4, which was filed on May 31, 2013, the Company used its most current retail sales volumes from 2012 to calculate its fourth-year cumulative energy savings goal. The Company has re-calculated its fourth-year cumulative energy savings goal using 2013 retail sales volumes as shown above.

## Status Report

Pursuant to Decision No. 73229, Southwest Gas performed its biannual review of the performance of available measures and has included the actual cost-effectiveness ratios for each program and measure with participation during the reporting period. In addition, pursuant to Decision No. 74300, the actual cost-effectiveness ratios for PY4 were calculated using the Staff-approved method (including methodology for calculating electric line losses) and with all criteria updated to reflect the most recent data available.

Overall participation and energy savings during PY4 has increased compared to PY3 and is consistent with levels experienced in PY1 and PY2. Southwest Gas expects participation and energy savings to continue to increase as the Company offers additional programs as approved in Decision No. 75592. Southwest Gas' program performance for June 1, 2015 through June 30, 2016 is set forth in **Tables 2 through 10** below. Tables 2 through 5 summarize Southwest Gas' program activity. Tables 6 through 10 present detailed information on each available program.

**Table 2** shows the total PY4 approved annual budget of \$4.7 million and the expenditures between June 1, 2015 and June 30, 2016 identified by program and budget category.

**Table 2 – PY4: Budget and Expenditures**

Program	Annual Budget	Expenditures (June 1, 2015 – June 30, 2016) <sup>1</sup>					Program Total Cost
		Rebates	Administration	Outreach	Delivery	MV&E	
<b>Residential</b>							
SGB Homes	\$2,880,000	\$3,833,600	\$8,750	\$3,955	\$29,873	\$0	\$3,876,178
<b>Total Residential</b>	<b>\$2,880,000</b>	<b>\$3,833,600</b>	<b>\$8,750</b>	<b>\$3,955</b>	<b>\$29,873</b>	<b>\$0</b>	<b>\$3,876,178</b>
<b>Non-Residential</b>							
SGB Custom Commercial Rebates	\$330,000	\$107,763	\$5,005	\$3,574	\$45,844	\$0	\$162,185
SGB Distributed Generation	\$300,000	\$0	\$5,346	\$3,565	\$38,623	\$0	\$47,533
<b>Total Non-Residential</b>	<b>\$630,000</b>	<b>\$107,763</b>	<b>\$10,350</b>	<b>\$7,138</b>	<b>\$84,467</b>	<b>\$0</b>	<b>\$209,718</b>
<b>Low Income<sup>2</sup></b>							
SGB LIEC: Weatherization <sup>3</sup>	\$450,000	\$115,796	\$0	\$0	N/A	N/A	\$115,796
SGB LIEC: Bill Assistance	\$200,000	\$172,740	\$15,000	N/A	N/A	N/A	\$187,740
<b>Total Low Income</b>	<b>\$650,000</b>	<b>\$288,535</b>	<b>\$15,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$303,535</b>
<b>Total Energy Efficiency</b>	<b>\$4,160,000</b>	<b>\$4,229,898</b>	<b>\$34,100</b>	<b>\$11,093</b>	<b>\$114,340</b>	<b>\$0</b>	<b>\$4,389,431</b>
<b>Renewable Energy Resource Technology</b>							
SGB Solar Thermal Rebates	\$540,000	\$19,297	\$2,854	\$14,970	\$51,405	\$0	\$88,527
<b>Total EE &amp; RET Plan</b>	<b>\$4,700,000</b>	<b>\$4,249,195</b>	<b>\$36,954</b>	<b>\$26,063</b>	<b>\$165,745</b>	<b>\$0</b>	<b>\$4,477,958</b>

<sup>1</sup> Totals, which are rounded to the nearest dollar, may not add due to rounding.

<sup>2</sup> Low income expenditures are included for the full program year, which is July 1, 2015 to June 30, 2016.

<sup>3</sup> Pursuant to Decision No. 72723, total expenditures for the SGB LIEC: Weatherization program including the additional \$200,000 shareholder funds added to the program budget are \$315,796 - with \$265,446 allocated to rebates, \$40,312 to administration, and \$10,038 to outreach. The rebates budget category includes non-energy benefits related to health and safety improvements. Program delivery and evaluation are performed by the ADOH and community agencies and therefore, the associated costs are incorporated into the administration budget category.

**Table 3** shows the PY4 estimated and actual participation numbers for the period June 1, 2015 through June 30, 2016 for each program.

**Table 3 – PY4: Participation**

<b>Program</b>	<b>Estimated Participation</b>	<b>Actual Participation (June 1, 2015 – June 30, 2016)</b>
<b>Residential</b>		
SGB Homes	7,805	10,103
<i>Total Residential</i>	<i>7,805</i>	<i>10,103</i>
<b>Non-Residential</b>		
SGB Custom Commercial Rebates	3	2
SGB Distributed Generation	2	0
<i>Total Non-Residential</i>	<i>5</i>	<i>2</i>
<b>Low Income<sup>1</sup></b>		
SGB LIEC: Weatherization	300	113
SGB LIEC: Bill Assistance	700	981
<i>Total Low Income</i>	<i>1,000</i>	<i>1,094</i>
<b>Total Energy Efficiency</b>	<b>8,810</b>	<b>11,199</b>
<b>Renewable Energy Resource Technology</b>		
SGB Solar Thermal Rebates	215	8
<b>Total EE &amp; RET Plan</b>	<b>9,025</b>	<b>11,207</b>

<sup>1</sup> Participation for the SGB LIEC: Weatherization and Bill Assistance programs is included for the period covering July 1, 2015 through June 30, 2016.

Pursuant to Decision No. 74300, **Table 4** is included to capture plan data for PY4.

**Table 4 – PY4: Annual and Lifetime Therm Savings; Lifetime Societal Benefits, Costs and Net Benefits; and Cost-Effectiveness (Plan Data)**

<b>Program</b>	<b>Annual Therm Savings<sup>1</sup></b>	<b>Lifetime Therm Savings<sup>1</sup></b>	<b>Societal Benefits<sup>2</sup></b>	<b>Societal Costs<sup>2</sup></b>	<b>Net Benefits<sup>2</sup></b>	<b>Cost-Effectiveness Ratio</b>
<b>Residential</b>						
SGB Homes	5,220,697	156,620,902	\$118,551,256	\$19,286,726	\$99,264,530	6.15
<i>Total Residential</i>	<i>5,220,697</i>	<i>156,620,902</i>	<i>\$118,551,256</i>	<i>\$19,286,726</i>	<i>\$99,264,530</i>	<i>6.15</i>
<b>Non-Residential</b>						
SGB Custom Commercial Rebates	1,027,503	15,070,037	\$10,123,897	\$547,480	\$9,576,418	18.49
SGB Distributed Generation	79,390	1,587,800	\$1,159,603	\$507,966	\$651,637	2.28
<i>Total Non-Residential</i>	<i>1,106,893</i>	<i>16,657,837</i>	<i>\$11,283,500</i>	<i>\$1,055,446</i>	<i>\$10,228,055</i>	<i>10.69</i>
<b>Low Income</b>						
SGB LIEC: Weatherization <sup>3</sup>	92,984	2,092,146	\$1,752,420	\$665,399	\$1,087,020	2.63
SGB LIEC: Bill Assistance <sup>4</sup>	N/A	N/A	N/A	N/A	N/A	N/A
<i>Total Low Income</i>	<i>92,984</i>	<i>2,092,146</i>	<i>\$1,752,420</i>	<i>\$665,399</i>	<i>\$1,087,020</i>	<i>2.63</i>
<b>Total Energy Efficiency</b>	<b>6,420,573</b>	<b>175,370,884</b>	<b>\$131,587,176</b>	<b>\$21,007,571</b>	<b>\$110,579,605</b>	<b>6.26</b>
<b>Renewable Energy Resource Technology</b>						
SGB Solar Thermal Rebates	32,332	646,640	\$472,254	\$1,060,379	(\$588,125)	N/A <sup>5</sup>
<b>Total EE &amp; RET Plan</b>	<b>6,452,905</b>	<b>176,017,524</b>	<b>\$132,059,430</b>	<b>\$22,067,950</b>	<b>\$109,991,480</b>	<b>5.98</b>

<sup>1</sup> These values, which are rounded to the nearest whole number, represent a combination of therms and therm equivalents from electric savings. The kWh savings are converted into therm equivalents for the annual and total lifetime energy savings reported. The therm equivalent value is calculated as the source fuel feeding the electric generation power plant. Due to inefficiencies in the generation, transmission and distribution of electricity, at the time Southwest Gas' EE & RET Plan was filed for PY3 and PY4, the kWh saved at the point of consumption was estimated to be 30 percent of the total energy that is required to provide the electric power. Therefore, to calculate

the total value of energy saved per kWh of electricity, Southwest Gas multiplied the kWh savings by a factor of 3.340<sup>a</sup> for reporting annual and lifetime savings.

<sup>2</sup> Totals, which are rounded to the nearest dollar, may not add due to rounding.

<sup>3</sup> Savings for the SGB LIEC: Weatherization program includes estimated savings for the additional \$200,000 shareholder funds.

<sup>4</sup> There are no therm savings attributable to the SGB LIEC: Bill Assistance program.

<sup>5</sup> Pursuant to the Gas EE Standards, cost-effectiveness is not required for RET programs.

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<sup>a</sup> ENERGY STAR Performance Ratings Methodology for Incorporating Source Energy Use, March 2011

Pursuant to Decision No. 74300, **Table 5** is included to capture actual data for PY4. Please note data reported in the column titled Societal Benefits is limited (per the current Staff-approved method) to only natural gas savings associated with each EE & RET program.

**Table 5 – PY4: Annual and Lifetime Therm Savings; Lifetime Societal Benefits, Costs and Net Benefits; and Cost-Effectiveness (Actual Data)**

<b>Program</b>	<b>Annual Therm Savings<sup>1</sup></b>	<b>Lifetime Therm Savings<sup>1</sup></b>	<b>Societal Benefits<sup>2</sup></b>	<b>Societal Costs<sup>2</sup></b>	<b>Net Benefits<sup>2</sup></b>	<b>Cost-Effectiveness Ratio</b>
<b>Residential</b>						
SGB Homes	3,016,462	90,493,854	\$131,639,530	\$26,217,628	\$105,421,903	5.02
<i>Total Residential</i>	<i>3,016,462</i>	<i>90,493,854</i>	<i>\$131,639,530</i>	<i>\$26,217,628</i>	<i>\$105,421,903</i>	<i>5.02</i>
<b>Non-Residential</b>						
SGB Custom Commercial Rebates	217,133	4,342,657	\$2,514,780	\$274,391	\$2,240,389	9.16
SGB Distributed Generation	0	0	\$0	\$47,533	(\$47,533)	0.00
<i>Total Non-Residential</i>	<i>217,133</i>	<i>4,342,657</i>	<i>\$2,514,780</i>	<i>\$321,924</i>	<i>\$2,192,856</i>	<i>7.81</i>
<b>Low Income</b>						
SGB LIEC: Weatherization	12,419	279,437	\$499,558	\$292,872	\$206,686	1.71
SGB LIEC: Bill Assistance	N/A	N/A	N/A	N/A	N/A	N/A
<i>Total Low Income</i>	<i>12,419</i>	<i>279,437</i>	<i>\$499,558</i>	<i>\$292,872</i>	<i>\$206,686</i>	<i>1.71</i>
<b>Total Energy Efficiency</b>	<b>3,246,014</b>	<b>95,115,948</b>	<b>\$134,653,867</b>	<b>\$26,832,423</b>	<b>\$107,821,444</b>	<b>5.02</b>
<b>Renewable Energy Resource Technology</b>						
SGB Solar Thermal Rebates	1,678	33,560	\$19,434	\$88,527	(\$69,093)	N/A <sup>3</sup>
<b>Total EE &amp; RET Plan</b>	<b>3,247,692</b>	<b>95,149,508</b>	<b>\$134,673,301</b>	<b>\$26,920,950</b>	<b>\$107,752,352</b>	<b>5.00</b>

<sup>1</sup> These values, which are rounded to the nearest whole number, represent a combination of therms and therm equivalents from electric savings. The kWh savings are converted into therm equivalents for the annual and total lifetime energy savings reported.

<sup>2</sup> Totals, which are rounded to the nearest dollar, may not add due to rounding.

<sup>3</sup> Pursuant to the Gas EE Standards, cost-effectiveness is not required for RET programs.

The estimated and actual participation and therm and kWh savings needed to calculate therm equivalent savings for the PY4 period June 1, 2015 through June 30, 2016 for each Commission-approved program and measure are shown below in **Tables 6 through 10**. The plan cost-effectiveness ratio per measure calculated by Southwest Gas, and the actual cost-effectiveness ratio are also included in the tables based on program participation through June 30, 2016.

The plan cost-effectiveness ratio per measure as last calculated by Staff pursuant to Decision No. 74300 is included in Staff's report dated May 30, 2014 in Docket No. G-01551A-13-0170.

**Table 6 – PY4: SGB Homes**

The SGB Homes program experienced high participation for the entire program year and has been very cost-effective. There were 10,103 PY4 incentives paid under the program with a greater participation in tier 2; meaning that more homes are built to lower HERs scores and are achieving higher energy savings.

Measure	Estimated Participation	Paid	Savings		Cost-Effectiveness Ratio	
			therms	kWh	Plan	Actual
ENERGY STAR Home Certification – Tier 1	2,849	2,851	335,114	9,934,791	7.23	6.79
ENERGY STAR Home Certification – Tier 2	4,956	7,252	1,224,210	32,771,478	5.82	4.66
<b>Total Homes</b>	<b>7,805</b>	<b>10,103</b>	<b>1,559,324</b>	<b>42,706,269</b>	<b>6.15</b>	<b>5.02</b>

**Table 7 – PY4: SGB Custom Commercial Rebates**

In December 2015, the Company approved one project under the SGB Custom Commercial Rebates program, which is estimated to save over 200,000 therms annually for twenty years. This is the third rebate for high-efficiency regenerative thermal oxidizers (RTO) in Arizona. As with the other two RTO projects (in PY1 and PY2), the rebate amount was capped at 50 percent of the incremental cost.

In May 2016, a previously pending boiler system upgrade at a Phoenix hospital was approved. That project is estimated to save over 10,000 therms annually for twenty years.

Measure	Estimated Participation	Paid	Savings		Cost-Effectiveness Ratio	
			therms	kWh	Plan	Actual
Custom Rebates	3	2	217,133	N/A	18.49	9.16

**Table 8 – PY4: SGB Distributed Generation**

Similar to the SGB Custom Commercial Rebates program, the SGB Distributed Generation program is directed primarily toward large projects, which require significant financial investment and extended lead times from planning to completion. There is currently one pending project in the early stages of review.

Measure	Estimated Participation	Paid	Savings		Cost-Effectiveness Ratio	
			therms	kWh	Plan	Actual
Fuel efficiency $\geq$ 60%	0	0	0	0	0.00	0.00
Fuel efficiency $\geq$ 65%	0	0	0	0	0.00	0.00
Fuel efficiency $\geq$ 70%	2	0	0	0	2.28	0.00
<b>Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2.28</b>	<b>0.00</b>

**Table 9 – PY4: SGB Low Income Energy Conservation**

Southwest Gas exceeded its participation goals with its SGB LIEC Bill Assistance program, as shown in the table below.

Participation in the SGB LIEC Weatherization program during PY4 was less than projected and Southwest Gas is continuing to work with the ADOH and other agencies partners to increase program participation. Southwest Gas, ADOH, and its agency

partners anticipate that the Commission's approval, in Decision No. 75592, for increased qualifying income levels for the program from 150 percent to 200 percent of federal poverty will have a positive effect on program participation during PY5 and PY6. However, increases in the cost of weatherization measures, and the Low Income Home Energy Assistance Program requirement that homes weatherized after September 1994 cannot be revisited remain as potential barriers to achieving greater program participation.

Measure	Estimated Participation	Actual Participaton <sup>1</sup>	Savings <sup>1</sup>		Cost-Effectiveness Ratio	
			therms	kWh	Plan	Actual
Weatherization – Homes Assisted	300	113	3,729	254,702	2.63	1.71
Bill Assistance – Households Served	700	981	N/A	N/A	N/A	N/A
<b>Total</b>	<b>1,000</b>	<b>1,094</b>	<b>3,729</b>	<b>254,702</b>	<b>2.63</b>	<b>1.71</b>

<sup>1</sup> Participation and savings are included for the period covering July 1, 2015 through June 30, 2016.

**Table 10 – PY4: SGB Solar Thermal Rebates**

Southwest Gas continued to promote the SGB Solar Thermal Rebates program by sending out bill inserts in September 2015 and February 2016 as well as developing an outreach campaign, which was targeted to charitable organizations, fire stations, facilities with pools and religious/education facilities. The outreach campaign included personalized/segmented messaging through direct mail postcards with follow-up calls. The reserved commercial project referenced in the last report was completed and included in the table below. In addition, a new commercial project for pool heating has been reserved and is expected to be completed during the next program year.

Measure	Estimated Participation	Paid	Savings	
			therms	kWh
Residential Solar Water Heating System	211	7	985	N/A
Non-Residential Solar Water Heating System	3	1	693	N/A
Non-Residential Solar Pool Heating System	1	0	0	N/A
<b>Total</b>	<b>215</b>	<b>8</b>	<b>1,678</b>	<b>N/A</b>

### Smarter Greener Better Schools Pilot Program

Though not required as part of this filing, the Company is providing an update to the Commission on the Smarter Greener Better Schools Pilot Program (Schools Program)

approved in Decision No. 75592. The Schools Program is modeled on the Schools programs approved for Arizona Public Service Company (APS) and Tucson Electric Power Company (TEP) whereby Southwest Gas would assist schools that have previously been unable to participate in energy efficiency upgrades due to funding constraints. Incentives will be capped initially at \$50,000 per school and combined with the Company's Commercial Rebates Program, Custom Commercial Program and CHP Rebate Program, qualifying schools could have up to 100 percent of the costs for energy efficient measures covered.

In the Company's supplemental application filed on May 10, 2016 in Docket No. G-01551A-15-0168, the Company proposed the Schools Program with a requirement that a participating school must be a participant in either APS' or TEP's Schools programs and have completed an American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Level II energy audit under the respective APS or TEP programs. In recent discussions with APS and TEP, Southwest Gas was informed that they are not intending to conduct ASHRAE Level II energy audits, but, rather, they intend to perform broad level energy audits that include on-site reviews to identify energy efficient measures. To be consistent with APS' and TEP's Schools programs, Southwest Gas will conduct similar energy audits but not require participating schools to complete the AHSRAE Level II audit. In doing so, schools will receive the full benefit of the program – funding for energy efficient natural gas measures.

The Company will provide updates to the Commission on this program in its April 2017 progress report.

## **Conclusion**

As shown in Table 2, Southwest Gas used \$4.5 million of its authorized EE & RET budget of \$4.7 million during PY4. With the reinstatement of its Residential Rebate and Commercial Rebate programs, Southwest Gas anticipates continued strong performance under its EE & RET Plan during PY5 and PY6.

Southwest Gas looks forward to working with Staff to ensure its EE & RET efforts address customer interests and help achieve the broader energy and water related saving goals of the state.