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Southern California Gas Company
Advanced Meter Semiannual Report

Introduction

This is the eighth Semiannual Report (“Report”) regarding the progress of Southern California Gas Company’s (“SoCalGas”) Advanced Meter project. In Decision (“D.”) 10-04-027, the California Public Utilities Commission (“CPUC” or “Commission”) authorized the project. Ordering Paragraph 5 required the following reporting requirements for SoCalGas:

“Southern California Gas Company shall establish a system to track and attribute program costs and projected savings from conservation. Based on this tracking system, Southern California Gas Company shall submit a report to the Director of the Commission’s Energy Division semiannually, tracking the gas conservation impacts of the advanced metering infrastructure project to date. These reports shall serve as a forum to adjust, as necessary the elements laid out in the final outreach plan described above. We expect that customer outreach, education and communications will continue to evolve and improve as SoCalGas conducts customer research, monitors customer reaction to new AMI technology and various customer usage presentation tools, and incorporates feedback from these activities into its AMI outreach and education activities. If the report shows that the company is falling short of its projections, it shall submit revisions to its conservation plan to increase awareness, participation, and durability of conservation actions among its customers. The semiannual reports and any revisions to the advanced metering infrastructure outreach and conservation plan shall be submitted to the director of the Commission’s Energy Division and served on the most recent service list for this proceeding. Additional costs incurred in order to improve conservation response will be funded out of contingency funds, or otherwise subject to the risk sharing mechanism authorized in Ordering Paragraph 2.”

Chapter 1 - Project Overview and Summary

In addition to the specific requirements identified in D.10-04-027, this Report provides overall status of SoCalGas’ Advanced Meter project through December 31, 2016 and builds upon previous Reports by highlighting project changes and activities that have taken place since July 1, 2016. Previous Report filings may be accessed on SoCalGas’ website.¹

The Advanced Meter infrastructure consists of two primary components — a meter transmission unit (“MTU” or “module”) attached to SoCalGas meters, and a communications network consisting of data collection units (“DCU”) installed across the SoCalGas service territory. Data from the modules is communicated to the DCUs and then transmitted to SoCalGas’ back-office systems. Operational highlights as of December 31, 2016 include:

¹ http://www.socalgas.com/regulatory/A0809023.shtml.
• About 246 SoCalGas employees installing modules.
• Nearly 5.8 million meter modules installed representing 96% of the total meters to be upgraded.
• 4,108 data collector units (DCUs) installed and functioning On-Air representing nearly 89% of the estimated 4,600 DCUs planned. These DCUs are fully installed in 176 of the 221 cities and counties located within SoCalGas’ service territory (79% of total).
• Approximately 99 percent of the installed modules have been deemed ‘Billing Ready’ and are now used or ready for billing customers.

In November 2016, SoCalGas launched its fourth targeted heating season conservation campaign leveraging Advanced Meter-enabled usage data. This campaign is the final in the series of four conservation “Test and Learn” campaigns conducted over the course of the Advanced Meter project. It incorporates the lessons learned and key findings from the prior three heating season campaigns.

The goals of these consecutive conservation campaigns are demonstrating how to best meet the one percent energy savings goal\(^2\) associated with the Advanced Meter rollout and tracking the resulting conservation savings. Of significance in the prior 2015-2016 campaign was that every one of the thirteen new conservation treatments tested produced statistically significant gas savings. These new treatments resulted in savings of over 1.4% total during the 2015-2016 fall/winter period.\(^3\) This is an increase in savings vs. savings rates for the successful\(^4\) treatments tested in the two prior heating season campaigns, and shows continued progress towards the conservation goal. Continued savings effects were also realized during 2015-2016 for several of the treatments tested during the prior two fall/winter campaigns. Overall, the new and continued successful treatments tested during the last 2015-2016 campaign produced gas savings of almost 1.5%.

For the final fall/winter conservation campaign, SoCalGas strives to enhance the most successful treatments from prior campaigns with the goal of further optimizing their savings rates, positive customer impact and cost-effectiveness.

A comprehensive evaluation of the results of the fourth campaign currently underway, as well as additional findings from the treatments tested in the prior campaigns, will be provided in the August 2017 report.

The Advanced Meter project is currently meeting its schedule, budget and major project milestones; however, continued permitting and construction challenges may impede completing the network in accordance with D.10-04-027. SoCalGas has implemented a

\(^2\) This energy savings goal specifically refers to 1% of total residential gas usage.
\(^3\) Four out of seven treatments tested during the 2014-2015 heating season campaign generated savings of about one percent total. Four out of eleven treatments tested during the 2013-2014 heating season campaign generated savings of about 1.3 percent.
\(^4\) Successful treatments are comprised of the subset of treatments tested that were successful in producing statistically significant usage reductions.
proactive public outreach strategy to educate and inform impacted residents, businesses, and municipalities of network installation to help mitigate potential concerns. As noted in previous Reports, despite extensive engagement, select municipalities continue to require SoCalGas to secure discretionary permits refuting the CPUC’s preemptory jurisdiction over utility facilities. This discretionary permitting process, which is not agreed to by SoCalGas, could provide municipalities the unilateral right to significantly modify the planned location or design of the DCUs and even preclude the installation of DCUs by the utility.

Although there has been progress in select areas, by continuing to assert their position municipalities are considerably delaying or preventing the network installation timeline for approximately 81 DCUs or 2% of a total of 4,600 planned DCUs. The inability to deploy the necessary infrastructure in these jurisdictions will likely result in SoCalGas having to maintain separate meter reading, communications, data processing and billing systems functions for longer than was anticipated in D.10-04-027 and may negatively impact expected customer operational and conservation benefits pursuant to Sections 3.C, 3.D and 9 of this report.

As communicated to the Commission in the preface to the August 2016 report, SoCalGas discovered a small percentage of Advanced Meter modules producing inaccurate digital reads of gas usage. The problem was limited to approximately 0.15% of the installed population of MTUs. These devices are issuing multiple false alarms and SoCalGas has implemented a plan to replace all defective MTUs, address any authorized billing corrections, and communicate with regulators, customers and stakeholders. During the course of remediation a subsequent issue was identified with MTUs in curb meter vaults. SoCalGas is working with the manufacturer to resolve the issue; until then, these meters will be manually read to minimize any billing impacts to customers. Additionally, SoCalGas is working with the vendor on the feasibility of diagnostic tools to identify malfunctioning modules prior to or at installation. The total financial impact of the issue is unknown at this time, but SoCalGas will be seeking recovery for the full labor cost from the vendor.

Chapter 2 - Module Installation and Network Construction Status

2.A Module Installation Status

SoCalGas has installed 5,796,873 modules through the end of December 2016, with its first installation dating back to October 2012. Table 1 displays the installations performed by Advanced Meter Mass Install personnel and identifies installations completed by other SoCalGas personnel.

Appendix A provides the latest timeline of planned warehouse opening and closings.
Table 1
Module Installations by Personnel Group

<table>
<thead>
<tr>
<th></th>
<th>Module Only</th>
<th>Meter Change w/Module</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Meter Installations</td>
<td>4,186,494</td>
<td>1,202,406</td>
<td>5,388,900</td>
</tr>
<tr>
<td>Other SoCalGas Personnel</td>
<td>407,973</td>
<td>407,973</td>
<td>815,946</td>
</tr>
<tr>
<td><strong>Total Installations</strong></td>
<td>4,186,494</td>
<td>1,610,379</td>
<td>5,796,873</td>
</tr>
</tbody>
</table>

About 93 percent of the modules are being installed by Advanced Meter personnel, with approximately 7 percent being installed by other SoCalGas personnel. Other SoCalGas personnel are involved when the installation requires extensive modifications to the existing meter configuration, such as installing the modules on complex industrial and commercial meters; replacing existing curb meters with new curb meters containing a pre-installed module; and when meters are changed through the normal course of business.

As Table 1 displays, over 72 percent of the modules were installed on existing meters, while nearly 28 percent of the time, the meter was replaced with a new meter with a module already installed.

Installation teams work out of warehouses leased specifically for the Advanced Meter project. As of December 31, 2016, there were 246 installers employed. Table 2 provides an overview of the installation workforce for each of the warehouses open through December 2016.

Table 2
SoCalGas Installation Workforce by Warehouse

<table>
<thead>
<tr>
<th>Warehouse</th>
<th>Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rancho Cucamonga</td>
<td>68</td>
</tr>
<tr>
<td>South Gate</td>
<td>58</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>68</td>
</tr>
<tr>
<td>Anaheim</td>
<td>52</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>246</strong></td>
</tr>
</tbody>
</table>

Throughout the project, the Advanced Meter team has experienced some injuries and incidents. Table 3 displays safety results from January through December 2016. SoCalGas aspires to have zero incidents and has taken a proactive approach in providing its Advanced Meter team with additional safety and training resources. SoCalGas continues to have an additional day dedicated to safety in the installer training curriculum and as part of its “Safe and Sound” Safety Campaign, SoCalGas continues to create and share short safety films to promote safe behavior at the workplace and at home.
Table 3
Advanced Meter Safety Incidents
January 1, 2016 through December 31, 2016

<table>
<thead>
<tr>
<th></th>
<th>Number of Incidents</th>
<th>Rate*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Safety &amp; Health Administration (“OSHA”)</td>
<td>26</td>
<td>5.54</td>
</tr>
<tr>
<td>Controllable Motor Vehicle Incidents (“CMVI”)</td>
<td>23</td>
<td>4.87</td>
</tr>
<tr>
<td>Lost Time Incidents (“LTI”)</td>
<td>6</td>
<td>1.28</td>
</tr>
</tbody>
</table>

*OSHA Rate is the number of incidents per 200,000 hours worked
*CMVI Rate is the number of incidents per million miles driven
*LTI Rate is per 100 workers

2. B Communication Network Construction Status
The communications network of the Advanced Meter system is designed to ensure that SoCalGas customers receive their hourly consumption data. It consists of DCUs deployed across the SoCalGas service territory that receive the meter reading data from the modules installed on each meter. Most modules transmit twelve hourly meter reads four times a day to at least three DCUs. Each module communicates for less than two minutes per year. The data is encrypted and transmitted across a licensed frequency from the module to the DCU.

SoCalGas continues to refine the network to improve system performance and based on the latest propagation study provided by Aclara, the technology vendor, the project plans to install 4,600 DCUs. The actual number of DCUs to be installed is determined by a two-step process:

1. The specific DCU locations, referred to as design points, are determined based on the propagation study which takes into account the location of the modules on the six million meters, the topography of the surrounding area, and the influence of the environment on the transmission of the radio signal. The DCUs can be placed within a 500 foot radius of the design point.

2. After these DCUs are installed, SoCalGas evaluates the performance of the network and identifies gaps in the network. SoCalGas then installs additional DCUs to remediate these deficiencies in performance.

SoCalGas’ plan is to install DCUs prior to the scheduled module installation so that data can be received soon after the module is installed. Overall, SoCalGas has achieved this goal. Table 4 displays the status of the SoCalGas network as of December 31, 2016.
Table 4
Status of DCUs through December 31, 2016

<table>
<thead>
<tr>
<th>DCU Status</th>
<th>Number of DCUs</th>
<th>Percent of DCUs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installed</td>
<td>4,108</td>
<td>89.3%</td>
</tr>
<tr>
<td>On – Air</td>
<td>4,107</td>
<td>89.3%</td>
</tr>
<tr>
<td>Ready to Construct</td>
<td>8</td>
<td>0.2%</td>
</tr>
<tr>
<td>Negotiating with Local Governments/Other Third Parties (^5)</td>
<td>293</td>
<td>6.4%</td>
</tr>
<tr>
<td>Not Started</td>
<td>191</td>
<td>4.1%</td>
</tr>
<tr>
<td><strong>Total Planned Installations</strong></td>
<td><strong>4,600</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Eighty-nine percent of the network has been constructed or is ready to construct. By December 31, 2016, SoCalGas has installed 4,108 DCUs with an additional 8 DCUs ready for construction. Of the 4,108 installed, 4,107 DCUs have been commissioned on-air and are receiving reads from installed MTUs. SoCalGas continues to negotiate with local governments and third parties to install the remaining DCUs in the network. Table 5 displays the locations of installed DCUs to date.

Table 5
Location of Installed DCUs

<table>
<thead>
<tr>
<th>DCU Location</th>
<th>Installed DCUs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SoCalGas Owned Poles in</strong></td>
<td></td>
</tr>
<tr>
<td>SoCalGas Facilities</td>
<td>65</td>
</tr>
<tr>
<td>Public Right of Way</td>
<td>2,602</td>
</tr>
<tr>
<td>Caltrans Right of Way</td>
<td>34</td>
</tr>
<tr>
<td>Private Easement</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>2,724</td>
</tr>
<tr>
<td><strong>Attached to Third Party Assets</strong></td>
<td></td>
</tr>
<tr>
<td>Los Angeles Bureau of Street Lighting</td>
<td>612</td>
</tr>
<tr>
<td>SCE Street Lights</td>
<td>357</td>
</tr>
<tr>
<td>PG&amp;E Street Lights</td>
<td>27</td>
</tr>
<tr>
<td>SDG&amp;E Street Lights</td>
<td>43</td>
</tr>
<tr>
<td>Other Cities Street Lights</td>
<td>285</td>
</tr>
<tr>
<td>Other Public/Private Assets</td>
<td>60</td>
</tr>
<tr>
<td>Total</td>
<td>1,384</td>
</tr>
<tr>
<td><strong>Total DCUs Installed</strong></td>
<td><strong>4,108</strong></td>
</tr>
</tbody>
</table>

\(^5\) Includes municipalities refuting the CPUC's preemptory jurisdiction over utility facilities.
To date SoCalGas has installed DCUs on a SoCalGas owned pole in the public right of way under its franchise 66 percent of the time. The second most common method has been to install DCUs on local government-owned street lights.

When a DCU is attached to a third party owned asset, SoCalGas negotiates a contract with the asset owner which usually includes:

- Fees to lease the space on the asset; and,
- Energy rates for the electricity to power the DCU.

SoCalGas has executed contracts with the City of Los Angeles Bureau of Street Lights (“BSL”), Pacific Gas & Electric Company (“PG&E”), Southern California Edison Company (“SCE”), San Diego Gas & Electric Company (“SDG&E”), and has reached contract agreements with 143 cities and 6 counties.⁶

Of the 12 counties and 211 cities in the SoCalGas service territory, SoCalGas has finished installing DCUs in 7 counties and in 176 cities/communities.⁷ SoCalGas is in active negotiations with several cities and counties to continue installing the remaining DCUs. A limited number of cities and counties have been reopened due to network optimization.⁸ To ensure area coverage, the project has reassessed cities and counties that have been completed with the original design and added DCUs where necessary.

With 4,108 DCUs constructed, SoCalGas has received 182 complaints and 90 inquiries, including concerns about the DCUs aesthetics, glare, or location. In each case, SoCalGas contacted the complaining party to resolve the complaint. As a result of customer concerns, SoCalGas has relocated 83 DCUs. Otherwise, the concerns have been resolved without relocating the DCU.

Where the DCU design point falls entirely within private property, SoCalGas negotiates easements with the private property owner(s). Installations of this type usually require a contract to secure the right to locate on the third party property.

When SoCalGas installs a DCU on its own pole, the DCU is solar-powered. When installed on a street light, the DCU is most often powered by electricity from the street light. Given the preponderance of new poles, most of the DCUs are solar powered. Table 6 shows the breakdown between solar and A/C powered DCUs.

---

⁶ Pursuant to Commission Resolution ESRB-1 dated May 10, 2013 (SCE), Resolution ESRB-2 dated June 27, 2013 (SDG&E) and Resolution ESRB-3 dated June 27, 2013 (PG&E) SoCalGas is able to permanently attach the DCUs to these electric utilities’ street lights.

⁷ Appendix B provides a list of the counties and cities with fully installed DCUs as of December 31, 2016.

⁸ Appendix C provides a list of the counties and cities that have been reopened.
### Chapter 3 - System Performance

Two key indicators of the overall Advanced Meter system performance are the performance of the network with respect to the delivery of hourly data for billing and online presentation purposes, and the resulting billing data-related performance. Additional improvements to SoCalGas’ service delivery are also being realized as a result of meter read automation and enhanced data analytics capabilities enabled by the Advanced Meter system. Extended uses of the Advanced Meter system through a network sharing capability also have the potential to provide additional operational and conservation benefits to water agencies and their customers within SoCalGas’ service territory.

#### 3.A Network Performance

The most basic measure of system performance is to measure the data delivered as a percentage of the expected data to be delivered. This has direct impacts to both billing and the presentation of hourly gas consumption data to customers. In a perfect system, SoCalGas would receive data for every customer for every hour, each day of the year. To provide this data, the modules must communicate with the DCUs and the DCUs must transmit the data to SoCalGas back office systems 100 percent of the time.

Table 7 displays the breakdown of modules that have successfully communicated with SoCalGas’ back office systems.

#### Table 7

<table>
<thead>
<tr>
<th>Module Communication Status</th>
<th>Modules Installed</th>
<th>Percent Installed With Network</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Modules Installed</td>
<td>5,796,873</td>
<td>-</td>
</tr>
<tr>
<td>Modules installed but not yet communicating with HE systems(^9)</td>
<td>18,302</td>
<td>-</td>
</tr>
<tr>
<td>Delivering 100 Percent of Expected Reads</td>
<td>5,478,040</td>
<td>94.8</td>
</tr>
<tr>
<td>Missing 1-12 Reads</td>
<td>175,937</td>
<td>3.0</td>
</tr>
<tr>
<td>Missing More Than 12 Reads(^10)</td>
<td>107,426</td>
<td>1.9</td>
</tr>
<tr>
<td>Missing All Reads</td>
<td>17,168</td>
<td>0.3</td>
</tr>
</tbody>
</table>

---

\(^9\) Newly installed MTUs that have not yet established communication with a DCU and transmitted 24 hours of reads

\(^10\) Missing more than 12 reads but at least one read has been communicated.
SoCalGas generally installs modules where the network is available; however, some exceptions to installing outside of an available network include instances when new business meters are connected and routine meter changes are being performed. Additionally, when a meter fails in the field, it is replaced with an integrated meter and module, regardless of whether the network is installed or not.

As illustrated in Table 7, approximately 95 percent of the installed modules are successfully communicating all of a customer’s hourly data on a monthly basis. About 3 percent of the modules are missing 1-12 reads, which means that they have had only 1 or 2 unsuccessful communications per month. That is, one or two six-hour periods have not been successfully communicated to the SoCalGas back office systems. SoCalGas does not consider a module performing at this level to be problematic for billing as enough hourly data is being received for these purposes.

About 2 percent of the modules are missing more than 12 reads but have communicated at least one read. SoCalGas continues to examine module modifications and network enhancements to improve the performance of these modules.

3.B Billing Data Performance
The Advanced Meter modules replace the manual reads with an automated read, with the expectation that the system will produce more accurate reads (no data entry mistakes) and fewer estimated reads (meter access problems are largely eliminated).

Table 8 displays the progression of modules from installation to actual use for billing.

<table>
<thead>
<tr>
<th>Table 8</th>
<th>Advanced Meters Utilized for Billing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modules Installed as of December 31, 2016</td>
<td>5,796,873</td>
</tr>
<tr>
<td>Modules in ‘Billing Ready’ Status</td>
<td>5,743,983</td>
</tr>
<tr>
<td>Advanced Meter Reads Requested for Billing</td>
<td>5,713,492</td>
</tr>
<tr>
<td>Billing Data Provided by Advanced Meter</td>
<td>5,707,648</td>
</tr>
<tr>
<td>Billing Data Not Provided by Advanced Meter</td>
<td>5,844</td>
</tr>
<tr>
<td>Percent Provided by Advanced Meter – Actual Read</td>
<td>99.84%</td>
</tr>
<tr>
<td>Percent Provided by Advanced Meter – Estimated Read</td>
<td>0.05%</td>
</tr>
<tr>
<td>Percent Not Provided by Advanced Meter</td>
<td>0.11%</td>
</tr>
</tbody>
</table>

Approximately 99 percent of the installed modules have been deemed ‘Billing Ready’ and are now used or ready for billing customers. Of the remaining one percent, most are still in the process of completing one of the test elements needed to become ‘Billing Ready.’ Others are located in areas with incomplete DCU coverage, or are located in areas with insufficient module density to support conversion to Advanced Meter billing.
Modules in areas with network coverage which do not pass the ’Billing Ready’ tests are monitored and, if necessary, replaced. They may also point to insufficient network coverage or DCU problems, which are then remediated.\textsuperscript{11}

For the Billing Ready modules, the system provides a high percentage of actual reads. The system also provided 0.05 percent of reads which were ‘estimated reads’ based substantially on reads received earlier in the month, rather than on a particular designated day. Only about 0.11 percent of the reads could not be provided by the Advanced Meter system.

In July 2013, SoCalGas implemented software that enabled the utilization of automated reads for the initiation of new service. With Advanced Meter automation, a field visit to collect a customer’s starting read was no longer necessary for turn-on orders that did not require entry into the home. SoCalGas’ Customer Service Field organization has seen a reduction of over 2,224,949 orders since the implementation of the automated reads for the initiation of new service.

3.C Service Delivery Enhancements resulting from Enhanced Data Analytics

As the Commission articulated in the AMI decision,\textsuperscript{12} the Advanced Meter system “provides [a] system-wide technology platform with the ability to expand operating benefits as new applications emerge.” In areas where the communications network is fully deployed, SoCalGas is leveraging Advanced Meter-enabled data analytics and technology by integrating data to develop algorithms that support the continued safe and reliable delivery of natural gas to its customers. These enhanced data analytics enable identification of unusual gas consumption patterns at customer facilities.

Though in the exploratory phase, this new and more granular awareness of energy data utilization is uncovering new opportunities and benefits potential. Leveraging the Advanced Meter network could result in faster identification of abnormally high gas usage, which enables SoCalGas to identify, investigate, and respond to potential safety situations quicker. By discovering abnormally high gas usage and notifying customers, SoCalGas can reduce methane emissions at customer facilities saving energy and improving air quality while also reducing the financial burden on customers from higher usage.

The Advanced Meter team assesses unusual consumption patterns on closed accounts using a Per Day Average and in some cases will look at the hourly reads to conduct further research. During the exploratory phase of SoCalGas’ enhanced data analytics, the following results have been achieved. Table 9 summarizes the results of the 4,332 exploratory service orders fielded through December 31, 2016.

\textsuperscript{11} As referenced in Chapter 2, additional DCUs may have to be added to improve system performance.
\textsuperscript{12} D. 10-04-027, page 40.
Table 9
Gas consumption data analytics results through December 31, 2016

<table>
<thead>
<tr>
<th>Findings from completed field visits (project to date)</th>
<th>Number of field visits</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total field visits generated by consumption analytics awareness</td>
<td>4,332</td>
<td></td>
</tr>
<tr>
<td>Gas services closed by SoCalGas field technician due to excessive registration, awaiting resolution. Resolution takes place at the time of the follow-up field visit to reinstate gas service.</td>
<td>1,785</td>
<td>41.20%</td>
</tr>
<tr>
<td>Gas leak found by SoCalGas field technician</td>
<td>736</td>
<td>16.99%</td>
</tr>
<tr>
<td>Hot water leaks where the hot water heater was in continuous demand</td>
<td>725</td>
<td>16.74%</td>
</tr>
<tr>
<td>Gas or hot water leaks corrected by the customer as a result of SoCalGas field visit</td>
<td>691</td>
<td>15.95%</td>
</tr>
<tr>
<td>Abnormal gas usage resulting from an appliance in use for an extended period of time (e.g., appliances unintentionally left on).</td>
<td>395</td>
<td>9.12%</td>
</tr>
</tbody>
</table>

Leveraging Advanced Meter consumption analytics is a component of a more comprehensive set of processes and inspections aimed at ensuring public safety and SoCalGas expects that, as it continues to build out enhanced analytics capabilities enabled by the Advanced Meter system, further customer service and safety benefits will accrue to its customers. More rapid detection and resolution of gas and hot water leaks provides enhanced safety for customers and their communities, as well as provides energy and financial savings, reduced greenhouse gas emissions, and conservation of our scarce water supplies.

3.D Extending the Use of the Advanced Meter Network
As articulated in our AMI Application, SoCalGas recognizes the State’s priority and urgency in encouraging and enabling water conservation and as such included the requirement for an AMI technology capable of reading water meters. This network sharing capability has the potential to provide significant operational and conservation benefits to water agencies and their customers within SoCalGas’ service territory.

In order to operationally evaluate the feasibility of the “Shared Network” concept, SoCalGas has established one-year pilots to be conducted by Aclara and SoCalGas with a limited number of water utilities. Three municipal water utilities are participating in this pilot, and as of December 31, 2016 there were approximately 2,000 water MTUs successfully transmitting data from municipal water utility MTUs over the SoCalGas Advanced Meter network.
SoCalGas, along with the other Energy IOUs in California, were asked to develop pilot proposals\textsuperscript{13} to identify technical issues with a Commission-regulated water corporation “piggybacking” on electric corporation and/or gas corporation AMI infrastructure,\textsuperscript{14} or to structure new pilots to explore different questions if pilots on AMI were already underway.\textsuperscript{15} As part of this effort, SoCalGas submitted a proposal which in addition to network sharing, includes the identification and evaluation of potential hot water leaks based on analytics of both gas and water AMI data, as well a study of the potential benefits associated with hot water leak detection and resolution. This proposal was approved by the CPUC on June 9, 2016 with D.16-06-010, and SoCalGas has begun work with a technology vendor (Aclara), a 3\textsuperscript{rd} party analytics vendor (Valor Water Analytics), and two separate Commission-regulated water utilities (San Gabriel Valley Water Company, California American Water) on this effort\textsuperscript{16}, referred to as the Water Energy Nexus (WEN) AMI Pilots.

As of December 31, 2016, water MTU deployment is complete for both utilities, with a total of approximately 1,800 water MTUs installed between them. The analytics period kicked off in Q4 of 2016 for the San Gabriel Valley Water Company WEN AMI Pilot, and so far one hot water leak has been confirmed in the pilot. The analytics period for the California American Water WEN AMI Pilot will begin in Q1 2017.

In addition to the Advanced Meter network being shared by external water utilities, other groups within SoCalGas are leveraging the network. As part of a pilot project by the Pipeline Safety Enhancement Plan (PSEP) group, data from a sensor device to detect, measure and monitor methane in the area near a transmission pipeline is being transmitted over the Advanced Meter network. As of December 31, 2016, eleven of these methane sensor devices have been installed in the field and are successfully communicating over the Advanced Meter network with the ability to provide remote alarm registration and processing when the methane-in-air concentration, as measured by the sensors, exceeds limits established for our testing period.

\textbf{Chapter 4 - Financial Status}

To track expenses during the project, Ordering Paragraph 7 of the D.10-04-027, stated:

“Southern California Gas Company shall file an advice letter no later than 30 days from the effective date of this decision, establishing a balancing account and detailing the cost recovery mechanism in conformance with this decision. Southern California Gas Company is authorized to recover deployment costs up to $1.0507 billion in this account, plus additional amounts, if any, consistent with the terms and conditions of the Risk Sharing Mechanism approved in Ordering Paragraph 2.”

\textsuperscript{13} D.15-09-023, p. 46.
\textsuperscript{14} D.15-09-023, p. 47.
\textsuperscript{15} D.15-09-023, p. 47.
\textsuperscript{16} Advice No. 5014
On August 4, 2010, the CPUC approved AL 4110, effective April 8, 2010, which established the Advanced Meter Infrastructure Balancing Account.

The CPUC approved budget of $1,050 million for the SoCalGas Advanced Meter project was augmented by re-directing $13.5 million of previously approved General Rate Case funding for a Remote Automated Meter Reading (“RAMR”) project. SoCalGas halted the implementation of its RAMR project, a drive-by meter reading system, when its Advanced Metering Infrastructure (“AMI”) application was submitted, and in the AMI application requested that this funding be re-directed to the Advanced Meter project. In D.10-04-027, the CPUC approved this request.[1] The total budget for the SoCalGas Advanced Meter project is $1,064 million, which included a contingency fund of $68.7 million.

The sequencing of the spending to date is typical of the pattern for many major projects. The early years of the project were spent organizing the large project team; developing new business processes; and building and implementing the information systems that support the construction of the DCUs and installation of the modules. SoCalGas’ plan contemplated that the DCUs would be constructed prior to the installation of the modules so that the modules would be effective in delivering benefits to customers. As indicated in Chapter 2, SoCalGas began installing its DCUs in June 2012 and its modules in October 2012.

Table 10
Financial Results (in $Thousands)
Recorded 2010 through December 2016

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>Project to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Management Office</td>
<td>2,619</td>
<td>6,477</td>
<td>6,634</td>
<td>4,945</td>
<td>4,023</td>
<td>3,415</td>
<td>3,006</td>
<td>31,120</td>
</tr>
<tr>
<td>Meters, Modules &amp; Installation</td>
<td>120</td>
<td>3,718</td>
<td>28,067</td>
<td>116,030</td>
<td>183,117</td>
<td>170,210</td>
<td>58,829</td>
<td>560,092</td>
</tr>
<tr>
<td>Network</td>
<td>777</td>
<td>3,744</td>
<td>14,429</td>
<td>23,805</td>
<td>18,796</td>
<td>15,306</td>
<td>14,572</td>
<td>91,429</td>
</tr>
<tr>
<td>Information Technology</td>
<td>6,011</td>
<td>16,873</td>
<td>21,931</td>
<td>16,015</td>
<td>10,491</td>
<td>11,108</td>
<td>6,248</td>
<td>88,677</td>
</tr>
<tr>
<td>Customer Outreach</td>
<td>324</td>
<td>1,027</td>
<td>2,085</td>
<td>5,502</td>
<td>5,195</td>
<td>4,786</td>
<td>3,999</td>
<td>22,917</td>
</tr>
<tr>
<td>Employee Awareness</td>
<td>65</td>
<td>3,078</td>
<td>3,732</td>
<td>2,088</td>
<td>1,051</td>
<td>1,087</td>
<td>752</td>
<td>11,853</td>
</tr>
<tr>
<td>Support Organizations*</td>
<td>303</td>
<td>-</td>
<td>1,162</td>
<td>3,576</td>
<td>4,517</td>
<td>4,684</td>
<td>13,470</td>
<td>27,711</td>
</tr>
<tr>
<td>Overheads &amp; AFUDC</td>
<td>2,382</td>
<td>10,828</td>
<td>23,663</td>
<td>33,812</td>
<td>40,499</td>
<td>32,135</td>
<td>21,264</td>
<td>164,583</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12,601</td>
<td>45,745</td>
<td>101,594</td>
<td>205,746</td>
<td>268,807</td>
<td>242,732</td>
<td>122,140</td>
<td>998,382</td>
</tr>
</tbody>
</table>

* Support organizations are comprised of SoCalGas departments outside of Advanced Meter that are funded by the project for project related work or for work identified in business case. This includes field work related to advancing our larger meters (primarily commercial and industrial). This work accounts for the large increase in 2016 support organization spend.

Table 10 displays the Advanced Meter spending through December 31, 2016, by the major project activities. The purchase and installation of meters and modules continue to be the primary source of spending at approximately $560 million project to date. The next large areas of spend are in information systems and the construction of the communication network with approximately $89 and $91 million in spend, respectively. Although the project has fully allocated the authorized contingency SoCalGas believes the project will be delivered within the approved budget.

**Chapter 5 - Meter Reading Work Force Impacts**

The Meter Reading work force is the most significantly impacted by the Advanced Meter project as Meter Reading positions will all but be eliminated by the project.17 Both SoCalGas and the CPUC are concerned about these impacts. The Commission specifically addressed this concern. Ordering Paragraph 1 of the D.10-04-027 states:

“Southern California Gas Company shall supplement by $1 million, its funding for workforce retention and retraining. This fund is established to better protect the employment interests of Southern California Gas Company’s meter reading workforce

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17 Some personnel may continue to manually read meters in support of the CPUC authorized Opt-Out program.
and should be used to extend severance, vocational training, and other transitional opportunities to employees affected by the decision to pursue advanced metering infrastructure.”

In response to this direction, SoCalGas set aside funding in its Enhanced Educational Assistance Fund specifically to support the Meter Reading personnel in place in April 2010. As of December 31, 2016, meter readers had been reimbursed approximately $103,400 through this fund.

While meter readers have been active in seeking employment opportunities within SoCalGas the fund has not been heavily utilized, so as part of our continuing efforts to support our employees’ transition to potential job opportunities, SoCalGas has expanded the retention and retraining efforts to include skills orientation workshops. These workshops are designed to familiarize employees with the mechanical and technical skills associated with piping, tools usage, natural gas appliance and distribution system construction work. The workshops are voluntary and are offered on Saturdays.

The orientation workshops offer transitional skills that could be applied toward job opportunities within and outside of SoCalGas. The target employee group has also been expanded to include all current meter reading employees as well as AMI Field Representatives. All of these employees will be affected when Advanced Meter implementation is completed in 2017.

SoCalGas has allocated $42,400 from the authorized funding from 4th Quarter 2014 through 2016 to provide these workshops for employees. SoCalGas will continue to offer enhanced educational assistance reimbursement to the remaining eligible meter reading employees.

Table 11 displays the current status of those Meter Reading personnel who were employed in April 2010, when the project was approved by the CPUC.

### Table 11
**Status of Meter Reading Personnel Employed in April 2010**

<table>
<thead>
<tr>
<th>Meter Reading Personnel</th>
<th>Work Force in April 2010</th>
<th>Remain in Meter Reading December 31, 2016</th>
<th>Left Company</th>
<th>Transition Within Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>166</td>
<td>10</td>
<td>19</td>
<td>731</td>
</tr>
<tr>
<td>Part-time</td>
<td>818</td>
<td>34</td>
<td>190</td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td>46</td>
<td>7</td>
<td>12</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>1,030</td>
<td>51</td>
<td>221</td>
<td>758</td>
</tr>
<tr>
<td>Percent of Work Force</td>
<td>100%</td>
<td>4.95%</td>
<td>21.46%</td>
<td>73.59%</td>
</tr>
</tbody>
</table>
As Table 11 shows, 731 employees (over 73 percent of the Meter Reading personnel from April 2010) have transitioned to another position within SoCalGas. Twenty-one percent of those employed in 2010 have left SoCalGas and 51 employees (4.95 percent) remain in the Meter Reading organization.

SoCalGas continues to encourage Meter Reading employees to explore all company opportunities outside of the Meter Reading organization.

Chapter 6 – Community Education and Outreach
SoCalGas personnel perform an array of outreach activities to inform customers about Advanced Meter project activity. SoCalGas developed a local stakeholder education and community outreach program to ensure every city and county SoCalGas serves is addressed. During the network construction process, outreach is done at the city level with initial city briefings to the city manager and staff including informational presentations to city councils as well as any other sub-committees as necessary. Outreach to the community includes, but is not limited to: one-on-one customer meetings, door knocking, and meetings with homeowner associations, community/neighborhood councils, community groups, and mailings. These efforts include briefing local elected officials, media outreach, community town hall events and local speaking engagements.

6.A Outreach Organizations and Events
To date, we have participated in over 3,091 events. In the time frame of January 1, 2016 through December 31, 2016, SoCalGas completed over 500 public outreach activities, including briefings, presentations, exhibit booths, door-to-door, public service announcements, etc. We also created Advanced Meter ad campaigns with the San Luis Obispo Chamber of Commerce and Malibu Surfside News.

Outreach efforts are complemented by a number of local organizations who simultaneously perform outreach activities under contract to SoCalGas. During the first quarter of 2016 the last group of organizations was brought on board to assist SoCalGas with outreach efforts. SoCalGas continued to partner with GeM Communications (GeM) to manage the solicitation and implementation for local organizations to perform community outreach on behalf of SoCalGas. GeM manages the request for proposal (RFP) process and contracts with community- and faith-based organizations (CBOs, FBOs), disability agencies, Chambers of Commerce, and business organizations that conduct outreach to sensitive communities and customers in specific Advanced Meter installation areas. As of December 2016, nearly 165 organizations have been contracted to support outreach activities for the project with seven active during the time period of this report. Due to the Advanced Meter project ramping down, SoCalGas will no longer be bringing on board organizations through this RFP process. Appendix D provides a list of organizations contracted through GeM.
Chapter 7 - Customer Awareness and Satisfaction

SoCalGas monitors the impact of its outreach activities in the areas of customer awareness and customer satisfaction as it relates to the Advanced Meter project. SoCalGas utilizes a variety of market research diagnostics to monitor the “pulse” of customers pertaining to the Advanced Meter installation process, customer communications, new programs and services, and customer attitudes and motivational drivers to behavioral change.

For purposes of monitoring overall customer awareness and perceptions, SoCalGas uses the Customer Insight Study (“CIS”)\(^{18}\) which is administered by Davis Research. CIS is SoCalGas’ public opinion tracking study. It is a phone survey measuring residential (quarterly) and business (semiannually) customer opinion across several factors: favorability, price and value, safety, reliability and reputation. The survey is administered to a representative sample of SoCalGas’ customer base, including customers for whom an Advanced Meter has not yet been installed.

Beginning in the fourth quarter of 2010, SoCalGas added three Advanced Meter related questions to the tracking survey. The questions were updated slightly in the fourth quarter of 2012, commensurate with the initial deployment of Advanced Meters. Figure 1 displays the CIS results for the general awareness questions about Advanced Meter for residential customers while Figure 2 displays the results for business customers.

\(^{18}\) Formerly called iTracker Customer Perception Study.
Questions:
IM1 (Favorability towards SCG): How would you rate SoCalGas overall on a scale of 1 to 7 where 1 means very unfavorable and 7 means very favorable?
AM1 (Aided Awareness): Are you aware of a new gas meter that transmits natural gas usage information remotely and more frequently from the meter to SoCalGas?
AM2a (Interest/Participation): Having access to your daily natural gas usage (therms/dollars) information would make you interested in viewing it more than once a month? (% Agree)
AM2b (Modify behaviors to conserve): Having access to your daily natural gas usage (therms/dollars) information would cause you to modify your behaviors to conserve natural gas? (% Agree)

Awareness about the Advanced Meter project among SoCalGas residential customers hit record high levels in 2016 and ended the year at 47%, up from 42% in Q4 2015. The general upward trend over the past several years seems to reflect the increased volume of customer communications about the project as well as an increase in installations. Of those customers who were aware of the project in Q4 2016, 27 percent mentioned bill inserts as their source, and 36% mentioned that a meter had been installed at their home.

Customers’ interest in viewing hourly consumption data increased during the first two quarters of 2016, however, interest began to fall in Q3 and dipped down to 48% in Q4 2016. Additionally, interest in conserving natural gas slightly increased throughout the first three quarters of 2016, from 63% in Q4 2015 to 66% in Q3 2016. Similar to interest in viewing consumption data, interest in conserving dropped in Q4 2016 and hit a low of 59%.
Questions:

IM1 (Favorability towards SCG): How would you rate SoCalGas overall on a scale of 1 to 7 where 1 means very unfavorable and 7 means very favorable?

AM1 (Aided Awareness): Are you aware of a new gas meter that transmits natural gas usage information remotely and more frequently from the meter to SoCalGas?

AM2a (Interest/Participation): Having access to your daily natural gas usage (therms/dollars) information would make you interested in viewing it more than once a month? (% Agree)

AM2b (Modify behaviors to conserve): Having access to your daily natural gas usage (therms/dollars) information would cause you to modify your behaviors to conserve natural gas? (% Agree)

Advanced Meter awareness among business customers edged up to 51 percent in the fourth quarter of 2016, reaching its highest level to date. Business customers’ interest in viewing the hourly consumption data increased to 63% in Q4 2016 up from 54% in Q4 2015. Intent to modify behaviors to conserve ended Q4 2016 at 62%.

Chapter 8 – Elevated Customer Inquiries and Deferral/Opt-Out Program Enrollments

SoCalGas customers may inquire about the Advanced Meter project by contacting either the SoCalGas Customer Contact Center (“CCC”) or the Advanced Meter Customer Information Center (“CIC”). The CCC addresses customer inquiries about any subject while the CIC typically
makes appointment arrangements with customers to have their Advanced Meter installed. Advanced Meter “opt-out” requests are processed by the CCC.

Some customer inquiries were not routinely resolved and were escalated to Advanced Meter Customer Experience staff. There have been about 8,202 inquiries since the project’s inception. The number of escalated customer inquiries is very low, considering the volume of Advanced Meter communications that have been distributed to SoCalGas customers. Through December 2016, over five million pre-installation letters were mailed to customers. The most common cause of the escalated inquiries is requests to defer/opt-out of the installation of the Advanced Meter communications module.

Although customers can call either the CCC or the CIC to have their deferral/opt-out requests recorded, some ask to speak to the Advanced Meter Customer Experience staff. Their questions usually revolve around safety and privacy concerns, as well as comments on the Advanced Meter Opt-Out Program fees.

Table 12 displays a breakdown of enrollment status for the Advanced Meter Opt-Out Program as of December 31, 2016.
Table 12
Advanced Meter Opt-Out Program Enrollment

<table>
<thead>
<tr>
<th>Inquiry Type</th>
<th>Number Received</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active customer-requested Opt-Out Program enrollments</td>
<td>7,434</td>
<td>The number of customers actively enrolled and being billed for Opt-Out Program fees and charges.</td>
</tr>
<tr>
<td>Active customers defaulted in to the Opt-Out Program</td>
<td>21,567</td>
<td>The number of customers that have been default enrolled and are being billed for Opt-Out Program fees and charges.</td>
</tr>
<tr>
<td>Total Active Opt-Out Program enrollments</td>
<td>29,001 (0.5%)</td>
<td></td>
</tr>
<tr>
<td>Customer Opt-Out Program requests to “opt back in” to Advanced Meter installation</td>
<td>44,773</td>
<td>The number of customers that requested to be removed from the Opt-Out Program (includes customers in both an “Active” and “Pending Enrollment” Opt-Out Program status).</td>
</tr>
</tbody>
</table>

In March 2014, SoCalGas’ Opt-Out Program became effective and the project team initiated efforts to inform employees of the Opt-Out Program and revised any impacted company communication materials. The interim opt-out fees approved by the Commission were consistent with those previously adopted for the other California Investor-Owned Utilities (“IOUs”). SoCalGas’ Advanced Meter Opt-Out Program interim fees for residential customers were as follows:

- Non-CARE Customers: Initial fee of $75.00 and $10.00/month ongoing cost
- CARE Customers: Initial fee of $10.00 and $5.00/month ongoing cost

In December 2014, the Commission issued D.14-12-078 regarding the Smart Meter Opt-Out Phase 2 proceeding; this decision reiterated approval of the interim opt-out fees and charges and adopted them as permanent opt-out fees and charges for residential customers for each of the California IOUs.

19 “Active” includes only those customers who are enrolled in the Opt-Out Program and are currently being billed associated Opt-Out Program fees. Many customers in a “Pending” status, once presented with final communications regarding Opt-Out Program fees, elect to terminate their prior request for enrollment in the Opt-Out Program. Similarly, customers about to be default-enrolled due to repeated installation/access attempts sometimes contact SoCalGas to schedule an installation prior to being actively enrolled.

20 SoCalGas implemented its Advanced Meter Opt-Out Program effective March 19, 2014, pursuant to D.14-02-019. These customers either requested to defer from an Advanced Meter module installation prior to March 19, 2014, or subsequent to March 19, 2014, requested to enroll in the Advanced Meter Opt-Out Program.

21 These customers were defaulted (automatically enrolled) into the Opt-Out Program due to several unsuccessful attempts by SoCalGas to contact the customers to provide access for the installation of the Advanced Meter.

22 D.12-02-014 (PG&E), D.12-04-018 (SCE), and D.12-04-019 (SDG&E).
In April 2015, pursuant to the Commission’s Phase 1 and Phase 2 Opt-Out decisions, SoCalGas implemented modifications to its billing system to begin charging opt-out fees to Opt-Out Program participants, including customers who were defaulted into the program. Additionally, information regarding key new features introduced in the Phase 2 decision was incorporated into existing customer talking points and all relevant Advanced Meter customer and external communications materials.

SoCalGas still expects the total percentage of customers who will eventually opt-out to be within the planning assumption of 0.5 percent.

Chapter 9 - Conservation Outreach Campaigns

D.10-04-027 set a goal for SoCalGas to reduce residential gas consumption by one percent and placed reporting requirements on SoCalGas which are referenced in the introduction to this report.23

In November 2016, SoCalGas launched its fourth targeted heating season conservation campaign leveraging Advanced Meter-enabled usage data. This campaign is the final in the series of four conservation “Test and Learn” campaigns conducted over the course of the Advanced Meter project. The goal of the Test and Learn approach is that, over the course of the Advanced Meter roll out, the most effective means for encouraging energy savings from information feedback will be identified and offered to customers. Each successive heating season campaign incorporates the lessons learned and key findings from the prior campaigns.

The goals of these consecutive conservation campaigns are demonstrating how to best meet the one percent energy savings goal associated with the Advanced Meter rollout and tracking the resulting conservation savings. Of significance in the prior 2015-2016 campaign was that every one of the thirteen new conservation treatments tested produced statistically significant gas savings. These new treatments resulted in savings of over 1.4% total during the 2015-2016 fall/winter period.24 This is an increase in savings vs. savings rates for the successful treatments tested in the two prior heating season campaigns, and shows continued progress towards the conservation goal. Continued savings effects were also realized during 2015-2016 for several of the treatments tested during the prior two fall/winter campaigns. Overall, the new and continued successful treatments tested during the last 2015-2016 campaign produced gas savings of almost 1.5%.

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23 This energy savings goal specifically refers to 1% of total residential gas usage.
24 Four out of seven treatments tested during the 2014-2015 heating season campaign generated savings of about one percent total. Four out of eleven treatments tested during the 2013-2014 heating season campaign generated savings of about 1.3 percent.
25 Successful treatments are comprised of the subset of treatments tested that were successful in producing statistically significant usage reductions.
For the final fall/winter conservation campaign, SoCalGas strives to enhance the most successful treatments from prior campaigns with the goal of further optimizing their savings rates, positive customer impact and cost-effectiveness.

Please refer to the August SoCalGas Advanced Meter Semiannual Reports for the prior three years for further information, including detailed evaluations, of prior Test and Learn conservation campaigns.

SoCalGas has continued to team with Nexant on several aspects of its conservation campaign implementations and post-campaign evaluations. The primary objectives were as follows:

1) Develop comprehensive conservation outreach plans incorporating a Test and Learn program development strategy with a focus on continuous assessment and improvement in the performance of feedback programs;
2) Perform evaluations of each year’s conservation campaign results, as well as evaluating any continued conservation effects resulting from the prior years’ campaigns; and
3) Provide recommendations and guidance for the next heating season’s proposed “Test and Learn” plan, as well as associated follow-on evaluation of campaign results.

A comprehensive evaluation of the results of the fourth conservation campaign currently underway, as well as additional findings from the treatments tested in the first, second and third campaigns, will be provided in the August 2017 SoCalGas Advanced Meter Semiannual Report.


For the 2016-2017 conservation campaign, high performing program design options from the heating season campaigns conducted during the prior three years were retained and enhanced. New program design alternatives and segmentation approaches are also being tested. The goal is that, over the course of the Advanced Meter roll out, the most effective means for encouraging energy savings from information feedback will be identified and offered to customers.

The major elements of the 2016-2017 campaign are:

- Continue to explore ways to improve the Bill Tracker Alert (BTA), as it has proven to be one of the most cost effective treatments for My Account customers. Develop and test further enhanced versions of the BTA that include additional information and usage information display based on market research findings;
- Continue to track savings for all customers receiving BTAs. Monitor any change in savings that occurred when customers receiving the original BTA were transitioned to receiving the enhanced BTA that was developed in the 2015-2016 campaign;
- Test the BTA with and without seasonal savings tips in the same population to determine whether these tips increase savings;
Continue to test innovative behavioral methods that more fully leverage AM data, such as weather sensitivity-based “Seasonal Energy Update” reports (SEU), targeted to customers identified through AM-enabled analytics as those with gas usage habits most sensitive to colder weather;

Explore how the SEU reports perform with CARE customers;

Test new weatherization-focused SEU with Non-CARE customers;

Compare the Paper SEU treatments against the Opower Paper-only Home Energy Report, ensuring that both treatments are tested on comparable populations;

Retest new and simplified Aclara Paper “Home Energy Update” reports (originally tested in the 2014-2015 campaign);

Develop an in-house developed paper “SoCalGas Usage Report” to test against Aclara and Opower paper energy reports;

Test the impact of providing a Bilingual English-Spanish language paper energy report and welcome materials in lieu of either a single language English or Spanish report for customers in areas with high rates of Latino population;

Test a combination of two different information feedback options, BTA with tips and Opower Paper HER, to see if there are incremental savings relative to other populations that only received the BTA treatment;

Continue to test treatments with the top two usage quartiles since they both produce measurable therm savings; and

Re-test the BTA that was enhanced in the 2015-2016 campaign on Small and Medium Business (SMB) customers.

Figure 3 graphically depicts the overall design of the 2016-2017 conservation outreach campaign. Further details regarding the current campaign design may also be found in the August 2016 Report, “Appendix E - Evaluation of Southern California Gas Company’s 2015-2016 Conservation Campaign, August 2016, Prepared by Nexant.” Additional details regarding the conservation outreach campaigns more broadly, including prior years’ campaigns, may be found in prior Reports as well.
Figure 3: Final Treatment and Control Group Assignments for the 2016-2017 Conservation Campaign

The 2013-2014 conservation campaign tested BTAs with SMB customers on both an opt-in and default basis. However, at the time there were too few SMB customers with AM data to accommodate a randomized controlled trial. SMB customers were excluded from the second and third Conservation Campaigns for this reason.

BTAs are being re-tested with SMB customers again in the 2016–2017 conservation campaign, however, enabled by the larger numbers of SMB customers that have advanced meters at this point.

Following is an update regarding customer engagement metrics and indicators for the 2016-2017 customer conservation campaigns as of December 31, 2016, as well as those for associated Advanced Meter-enabled energy presentation and analysis tools.
9.B Conservation Campaign Update

SoCalGas, in collaboration with Opower and Aclara for some test treatments, is currently executing the conservation campaign treatments outlined in 9.A above. Since the majority of the conservation campaign communications run through March 2017 (with a few test cells including year-round elements), SoCalGas will not have any final energy conservation results for the 2016-2017 heating season available until July 2017.

Figures 4 through 7 show the communications campaign calendars for the Opower Home Energy Reports, the SoCalGas/Aclara-facilitated Seasonal Energy Update and Home Energy Update reports respectively, and the SoCalGas Usage Reports. Samples of the customer communications outlined in these calendars can also be found in Appendix E “2016-2017 Conservation Outreach Campaign Sample Materials.”

**Figure 4.a – Opower “Home Energy Report” (HER) Treatment Descriptions**

<table>
<thead>
<tr>
<th>Treatment and Description</th>
<th>Volume of Participants</th>
<th>Report Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legacy Test Cell from 2015-2016 CARE ESAP (TC 18a)</td>
<td>8,844</td>
<td>1 paper report and 12 email report mailed monthly</td>
</tr>
<tr>
<td>Legacy Test Cell from 2015-2016 CARE Thermostat Campaign (Non ESAP) (TC 18b)</td>
<td>16,656</td>
<td>1 paper report and 12 email report mailed monthly</td>
</tr>
<tr>
<td>Legacy Test Cell from 2015-2016 Non CARE My Account Thermostat Campaign (TC 19)</td>
<td>13,750</td>
<td>1 paper report and 12 email report mailed monthly</td>
</tr>
<tr>
<td>Legacy Test Cell from 2015-2016 Non CARE Non My Account Thermostat Campaign (TC 19)</td>
<td>13,750</td>
<td>1 paper report</td>
</tr>
<tr>
<td>Legacy Test Cell from 2015-2016 Non CARE Non My Account (Opower standard HER) (TC 17)</td>
<td>13,750</td>
<td>1 paper report</td>
</tr>
<tr>
<td>New: CARE Non ESAP (T30 A)</td>
<td>32,835</td>
<td>4 paper and 12 email report mailed monthly</td>
</tr>
<tr>
<td>New: CARE ESAP I eligible (T30B)</td>
<td>7,369</td>
<td>4 paper report and 12 email report mailed monthly</td>
</tr>
<tr>
<td>New: CARE outside ESAP I, previously signed for ESAP (T30C)</td>
<td>12,296</td>
<td>4 paper report and 12 email report</td>
</tr>
<tr>
<td>New: Non CARE, My Account (TC 31)</td>
<td>40,554</td>
<td>4 paper reports and 12 email reports</td>
</tr>
<tr>
<td>New: Non CARE, Non My Account (T32)</td>
<td>53,500</td>
<td>1 paper report</td>
</tr>
</tbody>
</table>
Figure 4.b – Opower “Home Energy Report” Treatment Communications Calendar

|               | 2016   | 2017   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|        |
|               | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug    | Sep    | Oct    | Nov    | Dec    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug    |
| Paper HER     | 12/9   | 12/30  | 2/3    | 3/3    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |

Figure 5 – SoCalGas (Aclara-facilitated) “Seasonal Energy Update” Communications Calendar

<table>
<thead>
<tr>
<th>Test Cell 1 (Paper Only)</th>
<th>Targeted Test Cell Size</th>
<th>Test Cell 2 (Paper Only)</th>
<th>Targeted Test Cell Size</th>
<th>Test Cell 3 (Paper Only)</th>
<th>Targeted Test Cell Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>17,500 Non My Account &amp; My Account / CARE</td>
<td>18,500 Non My Account / Non CARE</td>
<td>18,500 Non My Account / Non CARE</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nov</td>
<td>Dec</td>
<td>Jan</td>
<td>Feb</td>
<td>Nov</td>
<td>Dec</td>
</tr>
<tr>
<td>Paper Report</td>
<td>11/30</td>
<td></td>
<td></td>
<td></td>
<td>11/30</td>
<td></td>
</tr>
<tr>
<td>Frequently Asked Questions Insert</td>
<td>Printed in backside of Welcome Insert</td>
<td>Printed in backside of Welcome Insert</td>
<td>Printed in backside of Welcome Insert</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12/16</td>
<td>1/20</td>
<td>2/17</td>
<td>12/16</td>
<td>1/20</td>
<td>2/17</td>
</tr>
<tr>
<td>Welcome Insert</td>
<td></td>
<td></td>
<td>11/30</td>
<td></td>
<td></td>
<td>11/30</td>
</tr>
<tr>
<td>Thermostat setting reminder Decal</td>
<td></td>
<td>12/16</td>
<td></td>
<td>12/16</td>
<td></td>
<td>12/16</td>
</tr>
<tr>
<td>Customer Satisfaction Survey (Phone and Email Survey)</td>
<td></td>
<td>1/31 thru 2/28</td>
<td></td>
<td>1/31 thru 2/28</td>
<td></td>
<td>1/31 thru 2/28</td>
</tr>
</tbody>
</table>
Figure 6 – Aclara-facilitated “Home Energy Update” Communications Calendar

<table>
<thead>
<tr>
<th>Test Cell 1 (Paper Only)</th>
<th>30,000 Non My Account / NON CARE</th>
<th>Targeted Test Cell Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>2017</td>
<td></td>
</tr>
<tr>
<td>Nov</td>
<td>Dec</td>
<td>Jan</td>
</tr>
<tr>
<td>Paper Report</td>
<td>12/5 &amp; 12/9</td>
<td>12/16 &amp; 12/19</td>
</tr>
<tr>
<td>Welcome Insert</td>
<td>12/5 &amp; 12/9</td>
<td></td>
</tr>
<tr>
<td>Thermostat setting</td>
<td></td>
<td>1/20</td>
</tr>
<tr>
<td>reminder Decal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Survey (Phone and Email</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Survey)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 7 – SoCalGas-developed “SoCalGas Usage Report” Communications Calendar

<table>
<thead>
<tr>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec</td>
<td>Jan</td>
</tr>
<tr>
<td>12/13</td>
<td>1/14</td>
</tr>
<tr>
<td></td>
<td>2/10</td>
</tr>
<tr>
<td></td>
<td>3/10</td>
</tr>
</tbody>
</table>

9.B.1 Opower Home Energy Reports
Given the success of Opower’s Home Energy Reports (HERs) in generating conservation savings for the prior three campaigns, SoCalGas is leveraging Opower’s HER program design again in the final year. SoCalGas contracted with Opower to implement numerous treatments for the 2016-2017 conservation campaign, including continuation into a second heating season for several of the 2015-2016 Opower HER test cell treatments.

The Opower HER contains personalized usage information that is designed to help customers save energy and money. This report engages customers primarily through the “Neighbor Comparison” information. A customer’s current gas usage is compared to approximately 100 nearby occupied homes with similar characteristics—such as square footage and heating system.
These comparisons, along with personalized energy saving tips, can help customers understand how they can conserve natural gas.

A total of 359,858 paper HERs and 396,912 emailed HERs (e-HERs) have been sent from November to December 2016.

**Table 13**

**2016 Opower Home Reports (Continuation + New Test Cells)**

<table>
<thead>
<tr>
<th></th>
<th>November</th>
<th>December</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper HER</td>
<td>213,304</td>
<td>146,554</td>
</tr>
<tr>
<td>e-HERs</td>
<td>132,304</td>
<td>264,608</td>
</tr>
</tbody>
</table>

As of December 2016, 1,271 (0.6 percent) Opower HER program enrollees opted-out of receiving further Opower HERs during the current campaign. A total of 142,888 e-HERs have been opened in November and December 2016. E-HERs delivered an average open rate of 36 percent, and 3.0 percent of all e-HERs opened have resulted in click-through activity.

Customer acceptance of the Opower treatments remains strong as indicated by the low opt-out rate for recipients of these reports.

**9.B.2 SoCalGas (Aclara-facilitated) “Seasonal Energy Update” Reports**

As outlined in section 9.A, in the 2016-2017 campaign, SoCalGas continued testing innovative behavioral methods that more fully leverage AM data. In collaboration with Aclara, SoCalGas continued to develop energy reports targeted to customers based on their individual weather sensitivity, called “Seasonal Energy Update” reports. The Seasonal Energy Update report campaign includes paper reports targeted to customers identified through AM-enabled analytics as those with gas usage habits most sensitive to colder weather.

Three test cells were assigned to these Aclara-facilitated treatments. Two treatment groups received a slightly enhanced version of the report tested in the prior year, with one CARE (low income) customer segment test cell and one Non-CARE customer segment test cell. The third Non-CARE test cell received a new version of the report that focused on building envelope-related messaging. Customers in all three test cells received the following: four paper reports; one Welcome Letter/Frequently Asked Questions; three Frequently Asked Questions inserts; and one Repositionable Thermostat Setting Reminder Decal.

The Aclara-facilitated Seasonal Energy Update reports contain personalized usage information to help customers understand their home energy usage when temperatures get cold and to offer tips on how to save energy. Each monthly report provides three pieces of information: 1) Comparison to Neighbors during cold weather; 2) Normal Day vs Cold Day Usage Comparison; and 3) Savings Tips. Customers are also encouraged to lower their thermostat settings to 58
degrees or lower when they’re asleep, 68 degrees or lower when they’re at home, and 50 degrees or off when away.

A total of 117,568 paper Seasonal Energy Update reports were mailed from November to December 2016.

Table 14
Aclara Seasonal Energy Update Reports

<table>
<thead>
<tr>
<th></th>
<th>November</th>
<th>December</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper Seasonal Energy Updates</td>
<td>58,837</td>
<td>58,731</td>
</tr>
</tbody>
</table>

As of December 31st, 2016, 188 (0.3 percent) of program enrollees opted-out of receiving further Seasonal Energy Update reports.

Customer acceptance of the Seasonal Energy Update report treatments was also strong as indicated by both the very low opt-out rate for recipients of these reports.

9.B.3 Aclara Home Energy Update Reports

As outlined in section 9.A, for the 2016-2017 conservation campaign, SoCalGas also contracted with Aclara to re-test newly enhanced and modified Aclara Home Energy Update (HEU) reports. Aclara HEUs were originally tested in the 2014-2015 campaign. The updated Aclara HEU includes streamlined messaging focused on providing customers with insights around their energy consumption, including AM usage data highlights, and personalized tips for lowering energy consumption. One test cell was assigned to this Aclara HEU treatment. Customers in this test cell received the paper HEU four times over the winter months, as well as an initial Welcome Letter and Repositionable Thermostat Setting Reminder Decal.

The Aclara HEU contains personalized usage information to help customers understand their home energy usage and to offer recommendations on how to save energy and reduce waste. Each monthly report provides three pieces of information: 1) Usage comparison to similar homes; 2) Natural gas usage breakdown; and 3) Personalized savings tips.

A total of 64,182 paper HEUs were mailed from November to December 2016.

Table 14
Aclara Home Energy Update Reports

<table>
<thead>
<tr>
<th></th>
<th>November</th>
<th>December</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper HEUs</td>
<td>32,091</td>
<td>32,091</td>
</tr>
</tbody>
</table>
As of December 2016, 7 customers (0.02 percent) opted out of receiving HEU reports.

9.B.4 SoCalGas-developed “SoCalGas Usage Report”

As outlined in section 9.A, for the current campaign, SoCalGas developed a new paper “SoCalGas Usage Report” to test against Aclara and Opower paper energy reports. The SoCalGas Usage Report was developed completely in-house leveraging SoCalGas internal analytics capabilities to develop the “similar home comparison” information contained the reports. The report also incorporates customized messaging for homeowners and renters.

A key goal for testing this report is to determine if an in-house developed energy report could offer a potentially more cost-effective alternative to energy report programs outsourced to external vendors. Another key goal for the SoCalGas Usage Report is to test the impact of providing a Bilingual English-Spanish language paper energy report and welcome materials in lieu of either a single-language English or Spanish report for customers in areas with high rates of Latino population. (Bi-lingual energy reports are not currently offered by external providers.)

In December 2016, 27,500 customers received a paper SoCalGas Usage Report:
• 13,750 received a bi-lingual Spanish and English report; and
• 13,750 received an English-only report.

As of December 31, 2016, 13 customers had opted out of receiving the reports, or 0.05%.

9.B.5 Bill Tracker Alerts Enrollment

SoCalGas Bill Tracker Alerts (BTAs) offer several key features to help customers maintain a high level of energy usage awareness and engagement with SoCalGas. They help customers maintain “top of mind” awareness of their natural gas consumption which is critical to creating the ongoing behavioral change necessary to achieve energy conservation.

Bill Tracker Alerts provide “Advanced Meter Billed” customers with the following information on a weekly basis and are sent alerts via email and/or mobile phone SMS text message:
• Bill-to-Date ($) 
• Projected Next Bill ($) 
• Last year, Same Month Bill Amount ($) [Seasonal comparison] 
• Days Remaining in the Current Billing Cycle (#) 
• Last Month’s Bill Amount ($)* 
• Days Elapsed in the Current Billing Cycle (#)* 
• Choice of weekly email and/or SMS text messages
  * provided via email only, due to 160 character text limitation

As outlined in section 9.A, given continued proven savings results coupled with the cost-effectiveness of BTA delivery via electronic channels (email and text), the SoCalGas 2016-2017
“Test and Learn” campaign treatments include continued testing of different BTA options and approaches, including a treatment group with small to medium business customers. Samples of the various enhanced weekly Bill Tracker Alert emails being tested in the 2016-2017 campaign may be found in Appendix E “2016-2017 Conservation Outreach Campaign Sample Materials.”

Through December 2016, 446,553 SoCalGas customers were actively enrolled in Bill Tracker Alerts (see Table 16 below, which provides cumulative enrollments-to-date). These enrollments support the Advanced Meter project conservation savings goal as well as SoCalGas’ 2013-2016 Energy Efficiency behavior change program household participation goals.26

<table>
<thead>
<tr>
<th>Item</th>
<th>Count through December 31, 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Subscriptions</td>
<td>537,955</td>
</tr>
<tr>
<td>Auto Enrollment</td>
<td>452,647</td>
</tr>
<tr>
<td>Microsite – Online @ billtracker.socalgas.com</td>
<td>13,516</td>
</tr>
<tr>
<td>Microsite – Business Response Cards</td>
<td>7,611</td>
</tr>
<tr>
<td>Microsite – Hard-to-Reach Events</td>
<td>724</td>
</tr>
<tr>
<td>My Account/CSR – “Manage Alerts”</td>
<td>63,457</td>
</tr>
<tr>
<td>Total Unsubscribes27</td>
<td>91,402</td>
</tr>
<tr>
<td>By Customer (subscribed via Microsite/Auto Enrollment)</td>
<td>21,902</td>
</tr>
<tr>
<td>By Customer (subscribed via My Account)</td>
<td>3,749</td>
</tr>
<tr>
<td>By System (i.e., Account Closed)</td>
<td>65,751</td>
</tr>
<tr>
<td>Total Active Subscriptions</td>
<td>446,553</td>
</tr>
</tbody>
</table>

The BTAs retention rate continues to remain high at 83 percent. Seventy-two percent of the “unsubscribes” are due to system factors, such as customer account closures, which results in a customer-initiated unsubscribe rate of five percent since the program’s inception. This is a strong indicator that customers value weekly email and/or SMS text messages that keep them apprised of their bill-to-date, projected next bill, last month’s bill, last year’s same month bill, and the number of days remaining in their current billing cycle.

26 Pursuant to D.12-11-015, SoCalGas is also utilizing its Advanced Meter project to support its Energy Efficiency non-resource behavior goals, which contain a 5% behavioral target for residential households.

27 The majority of cancelled subscriptions are system-related (e.g., Account closures); currently 5% are due to customers unsubscribing.
Figure 6 displays some of the customer characteristics of customers enrolled in Bill Tracker Alerts as of December 31, 2016.

**Figure 6**

SoCalGas Bill Tracker Alert Characteristics as of December 31, 2016

* As of December 31, 2016, California Alternative Rates for Energy (“CARE”) customers accounted for approximately 27.75% of percent of SoCalGas’ residential customer base.

**9.C My Account “Ways to Save” Tool Utilization**

Another key indicator of enhanced customer engagement enabled or stimulated by Advanced Meter includes customer utilization of the SoCalGas.com, My Account-based “Ways to Save” online tools.

As described in prior Reports, SoCalGas has implemented energy presentation and analysis tools within its My Account customer portal, as well as within the SoCalGas Mobile App. Through December 31, 2016 (project-to-date), a total of 473,259 residential My Account users (both new and returning users) have engaged with the Ways to Save tool “My Savings Plan" web page from which users could view their personal energy use profile and initiate a savings plan, as well as navigate to view their hourly and daily gas usage and other energy usage and
bill-related information. In 2016 alone, there were 88,406 new and returning users of the “Analyze Usage” hourly and daily gas usage section within the Ways to Save tools.

For further details regarding the new Advanced Meter-enabled online energy information feedback options rolled out to customers, please refer to prior Reports.
Appendices
Appendix A - Mass Install Timeline

This timeline represents above ground installation work only. Warehouses assigned to perform curb meter work may require extensions.

Note: Planned warehouse closure dates are subject to change. Advanced Meter deployment will continue into 2017. Warehouse closures may be modified based on project close activities including transition to regular operations and workforce availability amongst Mass Installation and other SoCalGas personnel to perform remaining installations.

### Mass Installation Timeline

**November 2016**

<table>
<thead>
<tr>
<th>Staging Location</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sun Valley</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Completed 10/2014</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Northridge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Completed 10/2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LAX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Completed 08/2016</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bakersfield</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Completed 11/2013</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Visalia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Completed 07/2014</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Valencia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Completed 10/2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statham (Oxnard)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Completed 10/2016</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ward (Goleta)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Completed 06/2016</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oakley (Santa Maria)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Completed 09/2016</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Irwindale</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Completed 12/2014</td>
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<tr>
<td>Rancho Cucamonga</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>South Gate</td>
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<td>Los Angeles</td>
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<tr>
<td>El Centro</td>
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<td></td>
<td></td>
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<td>Completed 05/2013</td>
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<td></td>
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<tr>
<td>Indio</td>
<td></td>
<td></td>
<td></td>
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<td>Completed 11/2013</td>
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<td></td>
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<tr>
<td>Hemet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Completed 08/2014</td>
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<td></td>
<td></td>
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<tr>
<td>Perris</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Completed 02/2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mission Viejo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Completed 07/2016</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anaheim</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Installation Clean Up & Closure**

- Completed 11/2013
- Completed 10/2014
- Completed 08/2014
- Completed 08/2015
- Completed 08/2016
- Completed 05/2013
- Completed 11/2013
- Completed 08/2014
- Completed 02/2015
- Completed 07/2016
- Completed 12/2014

2017:

- Completed 07/2016
- Completed 06/2016
- Completed 12/2014
- Completed 08/2014
- Completed 05/2013
Appendix B - List of Cities and Counties with Fully Installed DCUs

<table>
<thead>
<tr>
<th>City</th>
<th>City</th>
<th>County</th>
<th>City</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelanto</td>
<td>Compton</td>
<td>Indio</td>
<td>Murrieta</td>
<td>Santa Ana</td>
</tr>
<tr>
<td>Agoura Hills</td>
<td>Costa Mesa</td>
<td>Jurupa Valley</td>
<td>Ontario</td>
<td>Santa Maria</td>
</tr>
<tr>
<td>Alhambra</td>
<td>Corona</td>
<td>Kern County</td>
<td>Norco</td>
<td>Santa Clarita</td>
</tr>
<tr>
<td>Aliso Viejo</td>
<td>Covina</td>
<td>Kings County</td>
<td>Norwalk</td>
<td>Santa Fe Springs</td>
</tr>
<tr>
<td>Anaheim</td>
<td>Cudahy</td>
<td>La Canada</td>
<td>Orange</td>
<td>Santa Monica</td>
</tr>
<tr>
<td>Arcadia</td>
<td></td>
<td></td>
<td>Oxnard</td>
<td>Santa Paula</td>
</tr>
<tr>
<td>Arroyo Grande</td>
<td>Culver City</td>
<td>Flintridge</td>
<td>Palm Desert</td>
<td>Shafter</td>
</tr>
<tr>
<td>Artesia</td>
<td>Cypress</td>
<td>La Habra</td>
<td>Palm Springs</td>
<td>Simi Valley</td>
</tr>
<tr>
<td>Atascadero</td>
<td>Dana Point</td>
<td>La Habra Heights</td>
<td>Palmdale</td>
<td>Solvang</td>
</tr>
<tr>
<td>Azusa</td>
<td>Delano</td>
<td>La Mirada</td>
<td>Paramount</td>
<td>South El Monte</td>
</tr>
<tr>
<td>Bakersfield</td>
<td>Desert Hot Springs</td>
<td>La Palma</td>
<td>Pasadena</td>
<td>South Gate</td>
</tr>
<tr>
<td>Baldwin Park</td>
<td>Diamond Bar</td>
<td>La Puente</td>
<td>Paso Robles</td>
<td>South Pasadena</td>
</tr>
<tr>
<td>Banning</td>
<td>Dinuba</td>
<td>La Quinta</td>
<td>Perris</td>
<td>Stanton</td>
</tr>
<tr>
<td>Beaumont</td>
<td>Downey</td>
<td>La Verne</td>
<td>Pico Rivera</td>
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<td>San Jacinto</td>
<td>Yucaipa</td>
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<td>Indian Wells</td>
<td>Moreno Valley</td>
<td>San Luis Obispo</td>
<td>Yucca Valley</td>
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Appendix C - List of Cities and Counties that are no longer Fully Installed due to increased number of sites needed for Network Optimization

Beverly Hills
Gardena
Guadalupe
Hermosa Beach
Seal Beach
Westminster
Appendix D - Community Based Organizations, Business Organizations and Chambers

Active January 1 – December 31, 2016

Caregivers

El Centrito Learning Centers

Manna Conejo Valley Food Distribution Center

Mixteco/Indigena Community Organizing Project (MICOP)

Ojai Chamber of Commerce

United Way of Ventura

Ventura Chamber of Commerce
Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:

Opower “Home Energy Report” (HER) Front – Direct Mail
Appendix E
2016-2017 Conservation Outreach Campaign Sample Materials:
Opower “Home Energy Report” (HER) Back – Direct Mail
Appendix E
2016-2017 Conservation Outreach Campaign Sample Materials:
Opower – HER Welcome Insert (Front and Back)

Say hello to more savings

Your privacy is important to us

We only use your personal information to provide useful insights about your gas use—no one else can see this information.

We’re here to help

- amcic@socalgas.com
- 1-877-959-7188

Welcome to the Home Energy Report program. You’ll learn about your home’s natural gas use, see how you compare with homes like yours and discover ways to save on your monthly bill.

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SOCI_D033_WkC_HERV2
Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:

Opower – HER Welcome Insert (Inside Page)

Millions of households are already using their Home Energy Reports and online tools to reduce their use and save money. And now you can, too.

What's in your report

Neighbor comparison
We compare your natural gas use with approximately 100 nearby homes that share similar size, fuel type, and more. These homes represent your neighbors, but don’t necessarily include the homes on your block.

Efficiency tips and programs
You’ll see personalized energy-efficiency tips based on what we know about your home. From quick and easy tricks to upgrades with big saving potential, these tips can help you save more natural gas and lower your bill.

Discover more online

Insights and tools are waiting for you
Visit our website to learn even more about how you use gas, see seasonal ways to save and enroll in programs that make managing your natural gas use and bills easier and more convenient.

Make your report more accurate
The more we know about your home, the more personalized your insights and tips will be. Go online to update your home profile for a more accurate report.

Get started at SCG.opower.com.
Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:

Opower - Door Hanger
Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:
Opower – Thermostat HER (Front) – Direct Mail
Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:
Opower – Thermostat HER (Back) – Direct Mail

Track your progress

So far this year, you’ve used 9% more than last year.

Winter savings tip

Live in the comfort zone

Set your thermostat to 68° when home and 55° when away.

It’s comfortable and efficient.

*Data, analysis, and recommendations in this report are based on historical and projected data and are presented in chronological order only. No other sources, internal or governmental, were involved in generating the data.

Frequently asked questions

What is a therm? A therm is a way to measure natural gas use. Cooking on a gas stove uses one therm every 10 hours.

How is my comparison calculated? Your natural gas use is compared to homes with a similar size, building type, and heating system. You can view your home information at www.opower.com.

Why does SoCalGas send these reports? When customers save energy, we get closer to meeting our state energy efficiency goals. It’s good for everyone.

How do I stop receiving reports? Call 1-877-659-7168.

We’re here to help

amoi@socalgas.com
1-877-659-7160

Find more energy saving purchases

socalgas.com/rebates

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Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:
Opower – CARE/ESAP (Front) – Direct Mail

Home Energy Report
August 10, 2013
Account number 1000001

We’ve put together this report to help you understand your energy use and what you can do to save.
Find a list of rebates and energy-saving products and services you can buy.
> soccalgas.com/rebates

Here’s how you compare to neighbors

<table>
<thead>
<tr>
<th>Efficient Neighbors</th>
<th>You</th>
<th>Average Neighbors</th>
</tr>
</thead>
<tbody>
<tr>
<td>163 therms</td>
<td>206 therms</td>
<td>405 therms</td>
</tr>
</tbody>
</table>

July 1, 2013 - Aug 9, 2013
This is based on 110 similar homes within 6 mi. Efficient neighbors are the 50% who use the least amount of natural gas. See back for details.

Neighbor comparison over time

Tips from efficient neighbors

Hang laundry to dry
Save up to $15 per year

Raise your thermostat a few degrees in the summer

Turn over
Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:
Opower – CARE/ESAP (Back) – Direct Mail

Track your progress

So far this year, you’ve used 5% less than last year.

Energy Saving Assistance Program

Apply today
You may qualify for energy-efficient home improvement services at no cost.
For more information visit socalgas.com/improvements or call 1-800-351-7593.

Frequently asked questions

What’s a thermon? A thermon is a way to measure natural gas use. Cooking on a gas stove uses one thermon every 10 hours.

How is my comparison calculated? Your natural gas use is compared to homes with a similar size, building type, and heating system. You can view your home information at avg.opowwww.com.

Why does SoCalGas® send these reports? When customers save energy, we get closer to meeting our state energy efficiency goals. It’s good for everyone.

How do I stop receiving reports? Call 1-877-860-7163.

Find more energy saving purchases
socalgas.com/rebates

SoCalGas
Southern California Gas Company

Eligible homeowners may receive repair or replacement service when natural gas use is deemed reasonable or necessary. The program is funded by California utility customers and administered by Southern California Gas Company (SCG) under the oversight of the California Public Utilities Commission. Energy improvements covered under the program are made by third-party providers contracted by SCG. Program funds (including any funds utilized for rebates or incentives) are allocated on a first-come, first-served basis until such funds are no longer available. The program may be modified or terminated without prior notice. The selection, purchase, and ownership of goods and/or services is the sole responsibility of customer. SCG makes no warranty, whether express or implied, including the warranty of merchantability or fitness for a particular purpose, or grade or service satisfaction. Customers who choose to participate in the program are not obligated to purchase any additional products or services other than the products and services that are the subject of the program. SCG does not endorse, qualify, or guarantee the work of any contractor or other third party. Liability requirements apply; see the program conditions for details.

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Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:
Opower – CARE/ESAP (Back) – Direct Mail

Track your progress

So far this year, you’ve used 5% less than last year.

Energy Savings Assistance Program

Keep up the good energy! You may qualify for even more home improvements at no cost to you.

Participated in the Energy Savings Assistance Program before? Now get even more home improvements! If you already made your home more energy efficient, congratulations! Apply at socalgas.com/improvements or call 1-800-331-7593.

Frequently asked questions

What’s a therm? A therm is a way to measure natural gas use. Cooking on a gas stove uses one therm every 10 hours.

How is my comparison calculated? Your natural gas use is compared to homes with a similar size, building type, and heating system. You can view your home information at socalgas.com.

Why does SoCalGas® send these reports? When customers save energy, we get closer to meeting our state energy efficiency goals. It’s good for everyone.

How do I stop receiving reports? Call 1-877-959-7188.

We’re here to help

> amcio@socalgas.com
> 1-877-959-7188

Find more energy saving purchases

> socalgas.com/repbate

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Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:
Opower – CARE/ESAP (Back) – Direct Mail

Track your progress

So far this year, you’ve used 5% less than last year.

Energy Savings Assistance Program¹

Keep up the good energy!

- Set your water heater to 120 degrees for safe and energy-efficient usage.
- Combustible, flammable liquids should not be stored near any gas appliances. Ensure that items such as rags and mops do not interfere with normal appliance airflow.
- When washing clothes, wash full loads. Save up to 10 percent on hot water costs by washing and rinsing full laundry loads in cold water.
- Set your thermostat to 88 degrees or lower, health permitting, when at home. Set it at 58 degrees when away from home.*

*Data, projects and recommendations in this report are based on estimates and projections and are provided for informational purposes only. The visitor information, the U.S. Department of Energy recommends not to adjust your thermostat down to 58 degrees while you are away in the winter to keep pipes from freezing and animals safe.

Frequently asked questions

What’s a theme?
A theme is a way to measure natural gas use. Cooking on a gas stove, for example, is one theme every 10 hours.

How is my comparison calculated?
Your natural gas use is compared to homes with a similar size, building type, and heating system. You can view your home information at socag.opower.com.

Why do SocalGas send these reports?
When customers save energy, we get closer to meeting our state energy efficiency goals, it’s good for everyone.

How do I stop receiving reports?
Call 1-877-952-7188.

We’re here to help
- amcic@socalgas.com
- 1-877-952-7188

Find more energy saving purchases
- socalgas.com/rebates

¹Eligible homeowners may receive repair or replacement services when existing natural gas units are deemed impassable or hazardous. This program is for California utility customers and administered by Southern California Gas Company. Participation under this program may void any existing warranty. For more information, please see the SoCalGas Program Terms and Conditions for details. Not all units are eligible. This program is not available for customers who received or are eligible to receive assistance through a block Grant or other Federal funding program. Customers who receive assistance through this program are not obligated to purchase any additional goods or services offered by contractor or any other third parties. SoCalGas does not endorse, qualify, or guarantee the work of any contractor or other third party. Further requirements apply, see the program terms for details.

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Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:
Opower – HER – email

You used 45% more than your efficient neighbors.

Great

Good

Using more than average

Efficient Neighbors

11 therms

You

16 therms

All Neighbors

18 therms

Sep 4, 2015 - Oct 5, 2015
This comparison is based on approx. 90 nearby homes that are most similar to yours.
Learn more.

Ways to Save

Reduce your water heater’s temperature

Water heating accounts for up to 20% of a typical home’s energy use. Lowering your water heater’s temperature from 140°F to 120°F can result in a 15% savings on water heating costs and help prevent scalding.
Save up to $20 per year.

Install efficient showerheads

Showers account for about 40% of your home’s hot water use, but you can cut costs without sacrificing comfort. To see if you are eligible for no-cost home improvement services, please visit savages.com/search “Energy Savings Assistance Programs”.
Save up to $40 per year.

Get a home energy assessment

Most homes have many opportunities to save energy and money, but it can be hard to know where to start. Schedule a home energy assessment to have a certified energy expert inspect your home for ways to save.
Save up to $35 per year.

See more ways to save
Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:

Opower – Thermostat HER email
Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:
Aclara-facilitated – November “Seasonal Energy Update” – Direct Mail (Front)

Dear [NAME],

Cooler days are coming soon! Get ready with these simple tips to stay warm and lower your natural gas bill.

Last Winter Cold Day Usage Comparison*

<table>
<thead>
<tr>
<th></th>
<th>You</th>
<th>Typical Neighbors</th>
<th>Efficient Neighbors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6 Therms</td>
<td>3 Therms</td>
<td>1 Therm</td>
</tr>
</tbody>
</table>

What is a Therm? A standard unit for measuring test energy. One therm equals approximately 100 cubic feet of natural gas.

Who are your Neighbors?

- Typical Neighbors: Households in your area that experience similar weather.
- Efficient Neighbors: Households in your area that use less natural gas during cold weather.

You used about 2X more natural gas than your typical neighbors.

Set your Thermostat and Save!

- **At Home**: 68° or lower
- **Asleep**: 58° or lower
- **Away**: 50° or turn off

Every two degrees you lower your thermostat, you could reduce your heating costs by up to 4-5 percent.
Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:
Aclara-facilitated – November “Seasonal Energy Update” – Direct Mail (Back)

Your Usage on a Normal Day vs. Cold Day, Last Winter

- Normal Day: 1 Therm*
- Cold Day: 6 Therms*

* Your average daily natural gas usage
What is a Therm? A standard unit for measuring heat energy.
One therm equals approximately 100 cubic feet of natural gas.
- Normal Day: Your average daily gas usage during the cold months.
- Cold Day: Your average daily gas usage on the five coldest days.

You used nearly 6X more on a cold day compared to a normal day.

Here are some simple ways to keep your costs down this winter:

- Lower your thermostat to 68 degrees
- Bundle up
- Close windows and doors on the coldest days

Need Help?
Get more details on how your home uses natural gas and the steps you can take to lower your bills. Log in or register for My Account at socalgas.com and visit the "Ways to Save" section.

Start saving today... Lower your thermostat!

Data, analysis, and recommendations in this report are based on estimates and projections, and are provided for informational purposes only. For colder weather climates, the U.S. Department of Energy recommends that the thermostat should be set to around 50 degrees while you are away in the winter to keep pipes from freezing and animals safe.

For questions regarding this report, please call 888-873-4864, Monday through Friday, from 8 a.m. to 6 p.m. PT or refer to the enclosed "Frequently Asked Questions and Reference Guide".

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Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:
Aclara-facilitated – November “Seasonal Energy Update” – Welcome Letter (Front)

Welcome to
Your Seasonal Energy Update
from SoCalGas®!

Your Seasonal Energy Update will be sent to you throughout the colder months. These personalized updates can help you better understand how your household uses natural gas when temperatures get cold, and how to use energy more wisely to lower your bills.

Each report contains these three features:

1. Comparison to Neighbors
   Learn how your natural gas use compares with households in your area when it gets cold.

2. Normal Day vs. Cold Day Comparison
   See how much more you use on a cold day as compared to a normal day.

3. Savings Tips
   Act now to save energy and money this season.

We hope these reports will help you better understand and manage your natural gas usage during the colder months.
Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:

Aclara-facilitated – November “Seasonal Energy Update” – Welcome Letter (Back)

Q. Why am I receiving this Seasonal Energy Update report?
A. The report you received is part of a pilot program from SoCalGas to help customers like yourself understand your seasonal energy usage patterns through the fall and winter months, and to discover opportunities where you might be able to save energy and reduce your gas bills. These reports are being distributed for a limited time to a select group of SoCalGas customers in the pilot program. The reports will then be evaluated before potentially offering them to subsequent years or expanding the number of customers who will receive them.

Q. How was I selected to be part of this program?
A. You were selected for this program because you may have potential to save energy and money this winter. Based on historical data, your household gas usage has been shown to be sensitive to cold weather and amongst those with highest average gas usage on cold days.

Q. How many reports will I receive and how often will they be sent? What if I’d rather not receive them?
A. Program participants will receive four monthly paper reports provided from November 2016 through February 2017. You may call 888-873-4894, Monday through Friday, from 8 a.m. to 6 p.m. PT, if you would prefer to stop receiving these reports.

Q. Which neighbors/households is my gas usage being compared to in the “Cold Day Usage Comparison” chart on the front side of the Seasonal Energy Update report?
A. Your household’s average daily gas usage for the five coldest days last winter is compared to that of other households in your area that have similar usage levels and experience similar weather. For the first two monthly reports, the comparison period is last winter (December 2015 through February 2016). For the January 2017 and February 2017 monthly reports, the comparison period is the most recent two prior months.

- **Households in your area that experience similar weather**: “Your area” refers to one of six SoCalGas-defined climate zones. These geographically defined climate zones are comprised of High Mountain, High Desert, Low Desert, Coastal, Valley and Inland Valley. They were developed by SoCalGas for purposes of factoring in regional weather conditions to forecast gas supply needs for SoCalGas’ service territory.
- **Households with similar usage levels**: are those households in your area that used average or greater than average gas usage during the comparison period.
- **Typical Neighbors**: The bar shown is approximately the average daily gas usage on the five coldest days during the comparison period for households in your area experiencing similar weather.
- **Efficient Neighbors**: The bar shown is the average daily gas usage for the 20 percent of households in your area that have the lowest average daily gas usage for the five coldest days during the comparison period.

Q. Please provide further details for the “Your Usage on a Normal Day vs. Cold Day” chart on the back side of the Seasonal Energy Update report:
A. The comparison highlighted in this chart — for the November 2016 and December 2016 reports — is a comparison of your average daily gas usage for the five coldest days last December 2015 through February 2016, to your average daily gas usage during this same period. For reports dated January 2017, the comparison period is for the most recent two months, November 2016 through December 2016. For reports dated February 2017, the comparison period is for the most recent two months, December 2016 through January 2017.

Q. Is my information kept confidential?
A. Yes, in accordance with SoCalGas’ Privacy Policy and Privacy Notice, which may be viewed at www.socalgas.com.

For further information or questions regarding the report, please call 888-873-4894, Monday through Friday, from 8 a.m. to 6 p.m. PT, or visit pages.socalgas.aclara.com/WSFAQ

Data, analysis and recommendations in the report are based on estimates and projections, and are provided for informational purposes only. Images and charts shown above are for illustrative purposes only.

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Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:
Aclara-facilitated – “Seasonal Energy Update” – Frequently Asked Questions Insert

Seasonal Energy Update
Frequently Asked Questions & Reference Guide

Q. Why am I receiving this Seasonal Energy Update report?
A. The report you received is part of a pilot program from SoCalGas® to help customers like yourself understand your seasonal energy usage patterns through the fall and winter months, and to discover opportunities where you might be able to save energy and reduce your gas bills. These reports are being distributed for a limited time to a select group of SoCalGas customers in the pilot program. The reports will then be evaluated before potentially offering them in subsequent years or expanding the number of customers who will receive them.

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  - **Households with similar usage levels** are those households in your area that used average or greater than average gas usage during the comparison period.
  - **Typical Neighbors**: The bar shown is approximately the average daily gas usage on the five coldest days during the comparison period for households in your area experiencing similar weather.
  - **Efficient Neighbors**: The bar shown is the average daily gas usage for the 20 percent of households in your area that have the lowest average daily gas usage for the five coldest days during the comparison period.

Q. Please provide further details for the “Your Usage on a Normal Day vs. Cold Day” chart on the back side of the Seasonal Energy Update report:
A. The comparison highlighted in this chart — for the November 2016 and December 2016 reports — is a comparison of your average daily gas usage for the five coldest days last December 2015 through February 2016, to your average daily gas usage during this same period. For reports dated January 2017, the comparison period is for the most recent two months, November 2016 through December 2016. For reports dated February 2017, the comparison period is for the most recent two months, December 2016 through January 2017.

Q. Is my information kept confidential?
A. Yes, in accordance with SoCalGas’ Privacy Policy and Privacy Notice, which may be viewed at www.socalgas.com.

For further information or questions regarding the report, please call 888-873-4894, Monday through Friday, from 8 a.m. to 6 p.m. PT, or visit pages.socalgas.aclara.com/WSFAQ.

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Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:

Aclara-facilitated – “Seasonal Energy Update” – Repositionable Sticker
Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:
Aclara – November “Home Energy Update” – Direct Mail (Front)
Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:

Aclara – November “Home Energy Update” – Direct Mail (Back)
Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:
Aclara – November “Home Energy Update” – Welcome Letter

SoCalGas® is pleased to provide you with a series of four Home Energy Update reports throughout this winter. These personalized updates can help you better understand how your household uses natural gas when temperatures get cold, and how to use energy more wisely to lower your bills.

Each report contains these three features:

1. **Comparison to Similar Homes**
   Learn how your natural gas use compares to homes of similar type and size in your area when it gets cold.

2. **Breakdown of Your Natural Gas Use**
   Uncover insights into how much of your natural gas use goes towards home heating. The calculation is based on the change in your home's natural gas consumption during colder weather.

3. **Savings Tips**
   Act now to save, based on personalized savings tips just for you.

We hope these reports will help you better understand and manage your natural gas usage during the colder months.

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Data, analysis, and recommendations in the reports are based on estimates and projections, and are provided for informational purposes only. For questions regarding the reports, please call 888-873-4994, Monday through Friday, from 8 a.m. to 6 p.m. PT, or visit pages.socalgas.aclara.com/T40. Images and charts shown above are for illustrative purposes only.

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Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:

Aclara – “Home Energy Update” – Repositionable Sticker

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Set Your Thermostat and Save!

- **68° or lower** At Home
- **58° or lower** Asleep
- **50° or turn off** Away

For colder weather climates, the U.S. Department of Energy recommends that the thermostat should be set to around 50 degrees while you are away in the winter to keep pipes from freezing and animals safe.
Appendix E
2016-2017 Conservation Outreach Campaign Sample Materials:
“SoCalGas Usage Report” (Renters English) – Direct Mail
Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:
“SoCalGas Usage Report” (Homeowners English) – Direct Mail

Your SoCalGas® Usage Report
Account Number: ****7890
Report Period: 00/01/16 - 00/01/16

This report summarizes your natural gas usage and offers customized suggestions to help you save energy this winter.

LAST MONTH HOUSEHOLD COMPARISON

Congratulations [name]! Last month you used [xx] percent less natural gas than highly efficient homes.

HOW TO SAVE ENERGY AND MONEY

Here are some easy to follow tips:

- Set your thermostat to 68 degrees when home and turn it off when away. This can save you up to 5 percent on heating cost.*
- Start saving money instantly by lowering your water heater temperature to 120 degrees. Savings may be from 7 to 11 percent on heating cost.*

Take action and follow these simple tips. You can be comfortable and efficient this winter. For more energy saving tips visit socalgas.com/usagereport

Thank you,
SoCalGas®

Data, analysis, and recommendations in this report are based on estimates and projected costs, and are provided for informational purposes only. For colder weather climates, the U.S. Department of Energy recommends that the heat setting should be set at least 750 degrees even you are away in the winter to keep pipes from freezing and animal safe.
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2016-2017 Conservation Outreach Campaign Sample Materials:

“SoCalGas Usage Report” (Bilingual English Front) – Direct Mail

<table>
<thead>
<tr>
<th>October 26, 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roberto Smith</td>
</tr>
<tr>
<td>XXX Main Street</td>
</tr>
<tr>
<td>Anytown, USA, 90000-0000</td>
</tr>
</tbody>
</table>

**CONGRATULATIONS, ROBERTO.**

Way to do your part for the community.

You used [xx] percent less natural gas than highly efficient homes in your neighborhood.

*Numbers are in thousands, a standard unit of measuring fuel energy, and are based upon estimated usage during the reporting period.

Together we live. Together we save.

**HERE ARE A FEW SIMPLE TIPS YOUR FAMILY MAY WANT TO CONSIDER FOR EVEN GREATER ENERGY SAVINGS.**

Get more energy-saving tips today at socalgas.com/usagereport.

- Save up to 10% washing clothes in cold water.
- Save up to 5% by lowering your thermostat at 68°.

Data, analysis, and recommendations in this report are based on estimates and projections, and are provided for informational purposes only. For cooler weather climates, the U.S. Department of Energy recommends that the thermostat should be set at around 65 degrees, while you can lower it to as low as 55 degrees in the daytime hours.
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2016-2017 Conservation Outreach Campaign Sample Materials:
“SoCalGas Usage Report” (Bilingual Spanish Back) – Direct Mail

FELICITACIONES, ROBERTO.

Qué manera de hacer su aporte a la comunidad.
Consumió [pxx] por ciento menos de gas natural que los hogares de alto rendimiento en su barrio.

Estos números se exponen en las lemas que usted encontrará debajo de este hoja, y se basan en el consumo estimado durante los periodos informados.

A CONTINUACIÓN ENCONTRARÁ ALGUNOS CONSEJOS SIMPLES PARA CONSIDERAR EN FAMILIA, A FIN DE LOGRAR AHORROS DE ENERGÍA AÚN MAYORES.

Obtenga hoy más consejos sobre ahorro de energía en so-calgas.com/usage-report/es.

Ahorre hasta un 10% al lavar ropa con agua fría.

Ahorre hasta un 5% manteniendo el termostato en 68°
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2016-2017 Conservation Outreach Campaign Sample Materials:

Door Hanger “SoCalGas Usage Report” (English) – Direct Mail
Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:

“SoCalGas Usage Report” (English) Insert – Direct Mail

WHAT IS THIS REPORT AND WHY ARE YOU RECEIVING IT?
This year, we selected you randomly from our SoCalGas customer database to participate in a pilot program that's geared toward motivating customers to take action and conserve energy. We believe that the information contained on this report will provide you insights and also help guide you to use gas more efficiently.

WHAT TO EXPECT?
In the next few months, you will be receiving personalized letters that will include your previous months’ usage compared to nearby homes. These nearby homes have been identified based on size, age, type of home (e.g., home owner or renter). Aside from these, we also considered your weather zone in the calculation. Information from a third-party data provider was also used. More specific details on the algorithm can be found on socallgas.com/usage-report. Please note that some figures used are estimates only and may not represent actual information.

YOUR INFORMATION AND PRIVACY
SoCalGas is committed to protecting your Energy Usage information and ensuring appropriate protection exists when collecting, storing, using and reporting that information. For more information visit socallgas.com/privacy-notice.

TO OPT OUT
If you do not wish to participate in this pilot program, you can opt out at any time by calling 1-800-467-4400.
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2016-2017 Conservation Outreach Campaign Sample Materials:

“SoCalGas Usage Report” (Spanish/Bilingual) Door Hanger – Direct Mail
Appendix E

2016-2017 Conservation Outreach Campaign Sample Materials:

“SoCalGas Usage Report” (Spanish/Bilingual) Insert Front – Direct Mail
¿QUÉ HAY EN ESTE INFORME Y POR QUÉ LO RECIBE?
La información en este informe tiene varias ideas geniales sobre cómo usar el gas de manera más eficiente. Así que, prepárese para ahorrar. Usted ha sido seleccionado de nuestra base de datos de clientes para participar en un programa piloto diseñado para ayudar a toda la comunidad en conjunto a preservar la energía.

¿QUÉ DEBE ESPERAR?
Recibirá cartas personalizadas en los próximos meses, que incluirán su consumo de meses anteriores en comparación con otros hogares en su área. Estas otras residencias se seleccionaron en función de características, como tamaño, edad y tipo de hogar (propietarios o inquilinos). Además, consideramos la zona climática en nuestros cálculos y recibimos información de nuestro proveedor de datos tercerizado. Podrá encontrar detalles más específicos sobre el algoritmo en socalgas.com/usagereport/es. Tenga en cuenta que algunas cifras utilizadas son únicamente estimadas y es posible que no representen información real.

SU INFORMACIÓN Y PRIVACIDAD
SoCalGas se compromete a mantener la información sobre su consumo de energía y a asegurar que exista una protección adecuada al recopilar, almacenar, usar e informar datos.
Para obtener más información, visite socalgas.com/privacy-notice.

BAJA VOLUNTARIA
Si no desea participar en nuestro programa comunitario piloto, puede optar por la baja voluntaria en cualquier momento, llamando al 1-800-427-4400.

socalgas.com/usagereport/es  1-800-427-4400
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2016-2017 Conservation Outreach Campaign Sample Materials:

SoCalGas “Enhanced Bill Tracker Alert” (BTA) developed in the 2015-2016 campaign

![SoCalGas Bill Tracker Notification](image-url)
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2016-2017 Conservation Outreach Campaign Sample Materials:

New Bill Tracker Alert with a Rotating Energy Tip

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Your Weekly Bill Tracker Update

. here is your update for ******

My Bill to Date:
14 days elapsed: $10.00 Bill to Date
18 days remaining $20.72 Projected Next Bill*

Your Bill Comparison
Projected Next Bill: $20.72
Last Month’s Bill: $61.26
Same Month Last Year: $67.55

Energy Tip
Set your Thermostat and Save! Set it to 68 degrees or lower when you’re home, health permitting.

Log in to My Account and visit “Ways to Save” – to view your daily and hourly natural gas usage and costs, set up a savings plan and more!

Thank you for being a valued customer,

SoCalGas®

Connect with us: 

socalgas.com | Bill Assistance | Rebate Programs

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*Do not reply to this email. For assistance, please visit our Help Center. Southern California Gas Company values your privacy. For more information, view our Privacy Policy and Privacy Notice.

Email notification code: 131A

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2016-2017 Conservation Outreach Campaign Sample Materials:

New Business BTA Welcome Email

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Welcome to SoCalGas® Bill Tracker Alerts

You are now on the path to start saving money and energy. You will be receiving the following important information through weekly SoCalGas Bill Tracker Alert emails:

- Bill to Date
- Projected Next Bill
- Last Month's Bill
- Same Month Last Year's Bill
- Days Elapsed and Remaining in the Current Billing Cycle

Account: $QUICK_NAME ($MASKED_ACCOUNT_NUMBER)

To learn more about how to reduce your gas bill, visit "Ways to Save" within Business My Account.

Log in to Business My Account:

Log In »

Thank you for being a valued customer,

SoCalGas®

$PROMOTION

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Connect with us: 

socalgas.com  |  Ways to Save  |  Pay Bill Online  |  Rebate Programs

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Make sure you receive our emails by adding customerservice@socalgas.com to your address book. Please do not reply to this email. Email sent to this address cannot be answered. For assistance, please visit our Help Center. Southern California Gas Company values your privacy. For more information, view our Privacy Policy and Privacy Notice.

To unsubscribe, log in to Business My Account and select Manage Alerts under the Manage My Account tab, and unlink your email address from Bill Tracker Alerts.

Email notification code: $EMAIL_CODE

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2016-2017 Conservation Outreach Campaign Sample Materials:

New Business Bill Tracker Alert