

PUBLIC UTILITIES COMMISSION

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Date: July 30, 2018

To: Southern California Gas Company (SCG)

From: Peter Lai, Commission staff

Cc: R.12-01-005 and R.13-11-005 Service Lists

Subject: Mid-year Feedback- 2018 Efficiency Savings and Performance Incentive (ESPI) Ex Ante Review

Table of Contents

I. Commission Staff Findings 2018 Midyear Ex Ante Activities..... 2

 A. Custom Projects Review Overview..... 2

 B. Deemed Workpapers Review Overview 2

III. Discussion..... 3

 A. Custom Projects Ex Ante Review Discussion..... 3

 B. Deemed Workpapers Ex Ante Review Discussion 4

Attachment A: Workpaper Scores and Feedback 7

Pursuant to Decision (D).13-09-023, D.15-10-028 and D16-08-019, California Public Utilities Commission (Commission) staff and consultants are providing mid-year feedback on the program administrators' (PA) respective ex ante activities for as of June 30, 2018. The mid-year feedback focuses on specific issues and concerns identified so far during 2018 in ongoing workpaper and custom project ex ante reviews to give the PAs a sense of how each can improve its respective activities.

I. Commission Staff Findings 2018 Midyear Ex Ante Activities

The following sections provide a description of the findings, including areas of achievement and areas requiring improvement for both custom projects and workpapers.

A. Custom Projects Review Overview

1. Summary of 2018 Achievements

SCG continues to demonstrate efforts to improve its performance. Commission staff's observations include:

- The commitment of SCG's program administration staff to improve its internal quality assurance and quality control processes.
- SCG staff continues to collaborate, hold productive discussions to clarify various Commission staff guidance.
SCG made a good effort to provide data requested by Commission staff related to the statewide project with a CPUC ID number 0017.

2. Summary of Areas Requiring Improvement

Areas in need of improvement include similar concerns that Commission staff have highlighted in prior years:

- For the systematic errors in the EnergyPro™ calculation tool, SCG must take more care to review the results provided by the tool and not rely only on vendors or other agency's reviews to ensure the accuracy of the tool. Additionally, SCG should respond quickly to complying with Commission staff disposition and communicating to the program implementation staff and customers of the systematic errors.

B. Deemed Workpapers Review Overview

1. Summary of 2018 Achievements

Commission staff note that SCG continues to demonstrate efforts to improve its performance.

Commission Staff's observations include:

- SCG submitted many workpapers for both Phase 1 and Phase 2 in a timely manner.
- SCG continues its efforts to collaborate with CPUC staff on development of revised and new measures.

2. Summary of Areas Requiring Improvement

Commission staff encourages SCG to review the 2017 annual ESPI memo and continue to focus on improvements noted in that memo. Commission staff also highlights the following additional recommendations for improvement:

- SCG should review 2017 preliminary reviews and final dispositions and revise workpapers and internal processes to reflect the CPUC staff direction in those reviews.
- SCG should increase its efforts to respond to Federal code updates in updating its measures, such as residential and small commercial water heaters
- Where new measures are planned, such as pool covers or behavioral, retro-commissioning and operational (BRO), SCG should perform a greater level of due diligence and review of available research and evaluations before reaching out for collaboration with CPUC staff.

III. Discussion

A. Custom Projects Ex Ante Review Discussion

Commission staff issued three project waivers and no new dispositions to SCG during the first six months of 2018. No new projects were selected for ex ante review during this period. Most of the custom project review activities were focused on meetings between SCG and Commission staff where various ongoing projects and policy issues were discussed. The Commission is in the process of selecting a new contractor to assist staff with the custom projects ex ante review and expects an increase in ex ante review activity to occur starting in the fourth quarter of 2018.

1. Issues Related to Gross Savings Impacts

In 2017 Commission staff selected two Savings by Design projects from PG&E and two Savings by Design projects from SDG&E which used the EnergyPro™ software tool for their savings impact analysis. The ex ante review determined that the EnergyPro™ tool is flawed. It became evident that SCG and the Statewide team for this program had not vetted this tool before using it in this program. When accepting analysis tools for use in estimating savings for custom projects, PAs must take more care to review the results provided by the tool and not rely on vendor's or other agency's reviews to ensure the accuracy of the tool under the range of uses expected in the PA programs. Commission staff also note that many of the errors identified in the dispositions are user input errors in the EnergyPro™ software. User input errors are a sign that the software users may not have the expertise to perform the modelling and that the technical reviewers may not have the expertise to review the simulation models created by the implementation teams. These issues must be addressed by the Statewide team.

2. Issues Related to Net Impacts

Commission staff continue to be concerned about issues related to net savings impacts. For each project, SCG should provide documentation that demonstrates what the customer was planning to do prior to the energy efficiency program intervened in the project. The documentation needs to demonstrate how the program enabled the customer to adopt an alternative action that improves final efficiency and provides incremental savings benefits to ratepayers over what the customer was otherwise planning to implement.

Net Impacts should be based on real and convincing evidence of program influence included in the documentation submitted for every project. The evidence of program influence should outweigh evidence that suggests the customer would have chosen the efficient alternative absent the program information or financial support. It is important that SCG make significant progress in reducing free ridership since as of January 1, 2018 all portfolio goals are based on net savings impacts.

3. Contracting issue- Third-Party Implementer Contract Structure:

The 2016 and 2017 ESPI memoranda noted several issues with third party contracts including some projects that seemed to have unexpectedly large performance payment rates, a lack of meaningful third-party performance payment caps, and a contract structure based solely on first year claimed gross savings impacts with no consideration for net impacts. Pursuit of large performance payments can create an environment in which implementers maximize the ex ante savings estimates at the expense of compliance with Commission policy, appropriate and accurate assessment of program influence, measure eligibility or classification and savings impacts. The upcoming third-party contract solicitation must address these issues.

4. Potential Reviewer-Program Implementer Conflicts of Interest Issue:

Commission staff understands that SCG currently does not generally rely on third party technical reviewers and third-party implementers for custom projects. However, as the implementation work shifts to third parties a directed by the CPUC, Commission staff have concern that some third-party implementer firms also perform technical review of program applications. Commission staff believes, that a conflict of interest may exist for several technical review contractors that are also third-party implementers for other PA's. While Commission staff understand that implementers do not in most cases review projects which their firm is also implementing, there is an inherent conflict related to being on the both the enforcement and user side of rules and policies that has contributed to the lack of progress on many of the issues discussed above. CPUC Staff expect this issue to be resolved on a statewide basis and require SCG to be a party to the solution.

B. Deemed Workpapers Ex Ante Review Discussion

SCG's deemed submission continues at a similar pace with previous years. As of this mid-year review, Commission staff completed three Phase 1 reviews. The comments below are organized by the 5 metric areas of scoring. A table of all submitted and reviewed workpapers, along with feedback of each reviewed workpaper is included in Attachment A **Error! Reference source not found.**

1. Timeliness

As in the past, SCG generally follows direction regarding timelines for submission of workpapers. Furthermore, SCG continues to be proactive in providing early information on proposed workpapers prior to formal submission of the workpaper. SCG obviously sets a high priority on meeting the scheduled deadlines and was successful in this area in 2018.

For this year's Phase 1 submission, however, Commission staff was expecting an update submission of water heating workpapers for the 2018 Phase 1 review period. Federal regulations require residential and small commercial water heaters to be rated under a revised testing and reporting standard as of December 2017. Commission staff was expecting revised workpapers to be submitted as part of Phase 1

that reflected these code changes. Instead, Commission staff had to issue a uniform disposition covering all PAs' water heating workpapers, regardless of whether revisions were submitted as part of Phase 1.

PAs are responsible for updating workpapers for code changes and where changes in DEER would cause changes in non-DEER measures. PAs with SCE as the lead, have been submitting a consolidated workpaper plan that includes, for a subset of currently active workpapers, the workpaper lead PA and anticipated submission dates of revisions. . At this time, this workpaper plan contains little information about the underlying reasons for updating workpapers or carrying them over into an upcoming program year without revisions. This makes it difficult for Commission staff to form a complete picture of the timeliness of SCG's Phase 1 submissions. Commission staff recommends adding a brief analysis to the consolidated workpaper plan that summarizes, for each workpaper any code changes, previous direction from Commission staff, resolutions or Commission decisions, DEER revisions and EM&V findings that would necessitate Phase 1 workpaper revisions.

2. Content, Completeness, and Quality of Submissions

To date in 2018, Commission staff has not reviewed any workpaper submitted in 2018. As discussed under metric 1, Commission staff issued a Phase 1 disposition that updated savings values for residential and small commercial water heaters. However, that disposition was issued as a result of PAs not submitting workpapers when they should have due to changes in Federal regulations covering these workpapers.

For 2018, Commission staff encourages SCG to review and address concerns discussed in the 2017 annual ESPI scoring memo including: establishing preponderance of evidence of program influence for accelerated replacement of shower heads; and investigating industry standard practice for commercial service water heating circulation systems.

3. Proactive Initiative of Collaboration

SCG continues to seek out collaboration on updates to current measures as well as potential new program offerings. Last year, SCG notified Commission staff that they would be planning an industry standard practice study for commercial pool covers. SCG has also taken the statewide PA lead role in collaboration with Commission staff to develop revised measure definitions for residential and small commercial water heaters in response to a change in Federal standards that took effect in December of 2017. SCG has also notified and requested early feedback from Commission staff on incorporating a group of behavioral, retro-commissioning and operational measures (BRO) into deemed program offerings.

Commission staff encourages SCG to continue focusing on additional research and development of measures that are significant contributors to its overall portfolio energy efficiency savings. Commission staff notes that SCG's efforts in this area appear to have slowed. There has been no update on the industry standard practice study for pool covers. At this time, PAs, including SCG, appear to continue to define water heater measures using expired Federal standards values that have not been allowed as a rating method since December of 2017. As part of the Phase 1 disposition, Commission staff defined water heater measures using the new standard, with an effective date of January 1, 2018, but PAs have yet to introduce these measures into their programs.

4. PA's Due Diligence, Quality Assurance, and Quality Control

Similar to other feedback in this memo, Commission staff encourages SCG to support the development of measure revisions and incorporating new measures. Commission staff have a specific concern related to SCG's recent inquiry about incorporating a new BRO measure for an on-line audit tool into its deemed program and claims. Commission staff reviewed the most recent EM&V findings and report. The billing analysis indicates some reductions in energy use after participation in the on-line audit tool, however, the report also notes that savings due to other programs such as Home Energy Reports and upstream incentives were also likely contributors to the observed energy use reductions and that savings cannot be entirely attributed to the on-line audit tool. Thus, at this time it is premature to include this measure in any programs and Commission staff encourages SCG to increase its efforts in identifying these issues prior to requesting input from staff.

5. PA's Responsiveness

Commission staff encourages SCG to review the feedback from the 2017 final memo and consider further revisions to workpapers and programs. For example, Commission staff noted that SCG did not adequately respond to preliminary reviews for water heating fixtures and commercial water heating circulation pumps. Commission staff also pointed out that SCG was not providing information required in the detailed review for smart thermostats. Furthermore, Commission staff encourages SCG to revise its water heater measures as soon as possible to reflect federal standards that took effect in December 2017.

[Attachment A](#) contains the workpaper summary tables showing the qualitative components for each metric. Each reviewed workpaper was first determined to have components either applicable or not applicable to a metric. If an item was determined to have activity applicable to a metric, the item was then assigned a qualitative rating as to the level of due diligence applied to the item as either deficient (or "-"), apparent but minimal (or "yes"), or superior (or "+").

Questions or comments about the feedback should be directed to Peter Lai (peter.lai@cpuc.ca.gov). Note that pursuant to D.13-09-023, Commission staff will schedule a conference call meeting with SCG staff to answer clarifying questions of this memo.

Attachment A: Workpaper Scores and Feedback

The table below lists the ID numbers associated with each workpaper submission or disposition and the workpaper review process “score enhancements” scoring area. The listed weight is used in the combining all the individual rows together into a single score for all the rows in the two scoring components (“direct review” and “process issues”); then each category total score gets equal weighting in the final total score for the metric. The PA may refer to the individual dispositions for more detailed descriptions of the specific actions staff required for each workpaper. The qualitative ESPI scoring feedbacks are designated as follows:

- ‘+’ indicates a positive (from midpoint) scoring impact on a metric,
- ‘-’ indicates a negative (from midpoint) scoring impact on a metric,
- ‘Yes’ indicates meeting expectation; neutral (midpoint) scoring impact on a metric,
- ‘No’ indicates the review feedback is not applicable to a metric.

Workpaper Detailed Reviews				ESPI Metrics					
WP ID	Rev	Title	Comments	Weight	1	2	3	4	5
WPSCGNRWH120206A	9	Storage Tank Water Heaters for Commercial and Industrial Applications	Opportunities: Starting 2018, residential and small commercial water heaters are required by Federal standards to be tested and rated with an Uniform Energy Factor (UEF). However, it appears that all IOU programs are still defining measures using the outdated Energy Factor (EF). As part of the Phase 1 disposition, CPUC staff developed measure definitions using UEF, but no workpapers have been submitted following this direction.		-	no	no	no	no
WPSCGNRWH120206B	6	Tankless Water Heaters For Commercial Applications	See comment for WPSCGNRWH120206A		-	no	no	no	no
WPSCGREWH120919A	3	Tankless Water Heaters for Singles Family and Multifamily Applications	See comment for WPSCGNRWH120206A		-	no	no	no	no

Workpaper Submissions				ESPI Metrics					
WP ID	Rev	Title	Submission Status: EAR Team Comments	Weight	1	2	3	4	5
WPSCGREWH120919A	3	Tankless Water Heaters for Single Family and Multifamily Applications	Detailed review – resubmit - scored in detailed review section		no	no	no	no	no

Workpaper Submissions				ESPI Metrics					
WP ID	Rev	Title	Submission Status: EAR Team Comments	Weight	1	2	3	4	5
WPSCGNRWH120206B	6	Tankless Water Heaters For Commercial Applications	Detailed review – resubmit - scored in detailed review section		no	no	no	no	no
WPSCGNRWH120206A	9	Storage Tank Water Heaters for Commercial and Industrial Applications	Detailed review – resubmit - scored in detailed review section		no	no	no	no	no
WPSCGREAP170726A	0	Res High Efficiency Dishwasher	Review waived - interim approval		+	no	no	no	no
WPSCGNRWH170412A	1	Low Flow Showerheads for Non-Residential	Review waived - interim approval		+	no	no	no	no
WPSCGWP110812A	4	Pipe insulation (Non-Space Conditioning)	Review waived - interim approval		+	no	no	no	no
WPSCGNRWH161128B	1	Central Water Heating Variable Speed Pump for Commercial	Review waived - interim approval		+	no	no	no	no
WPSCGNRWH170313A	0	Recirculation Pump Time Clock	Review waived - interim approval		+	no	no	no	no
WPSCGNRCC171226A	0	Conveyor Broiler	Review waived - interim approval		+	no	no	no	no
WPSCGCCWH180504A	0	FlowControlValves	Review waived – Interim approval		+	no	no	no	no
WPSCGREHC161128A	1	Efficient Fan Controller for Residential Furnaces	Review waived – Interim approval		+	no	no	no	no