

**PUBLIC UTILITIES COMMISSION**

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**Date:** July 15, 2015  
**To:** Southern California Gas Company (SoCalGas)  
**From:** CPUC Ex Ante Review Staff  
**Cc:** R.12-01-005 and R.13-11-005 Service Lists  
**Subject:** Mid-Year 2015 Efficiency Savings and Performance Incentive Ex Ante Review Performance Feedback

Pursuant to Decision (D).13-09-023, California Public Utilities Commission (CPUC) staff and consultants are providing mid-year feedback on the investor-owned utilities (IOUs) respective ex ante activities for 2015. Qualitative feedback is provided per each of the metrics identified in Attachment 7 of D.13-09-023. The mid-year feedback focuses on specific issues and concerns identified in dispositions issued so far during 2015 and in ongoing workpaper and custom project ex ante reviews. CPUC staff translated the identified review issues and concerns into qualitative feedback for the specified metric to give the IOUs a sense of how each can improve its respective activities.

**Custom Projects**

With regard to custom projects and measures, the CPUC staff Ex Ante review dispositions have touched three projects thus far in 2015. The CPUC staff identified several high-level issues of concern from these projects. A summary of these issues, from the review findings dispositions issued, as they relate to the particular projects is provided in Attachment B of this memo. This attached document is intended to provide the utility with information as to how the issues may potentially translate to upward or downward scoring movement in the ESPI scoring metric. The qualitative feedback are designated as follow:

- ‘+’ indicates a positive scoring impact on a metric,
- ‘-’ indicates a negative scoring impact on a metric
- ‘m’ indicates meeting expectation; no scoring impact on a metric
- ‘n/a’ indicates the review feedback is not applicable to a metric.

Generally, the SoCalGas staff Ex Ante Review activities continue to be insufficient in the areas as identified below.

- Project documentation is not always complete, taking several phone calls or iterations to obtain all information required for a review.
- SoCalGas staff has been making efforts to improve M&V plans and calculation methods for process projects, however, there continues to be problems with the details of the execution leading to unreliable ex ante savings estimates. CPUC staff and consultants have interacted with SoCalGas staff on process projects where SoCalGas staff has made efforts to improve the project calculation methodology and M&V plan documentation to be more concise and comprehensible.
- Correct interpretation has been lacking of CPUC policy on incremental cost and incentive not to exceed the TRC cost. CPUC Staff have issued dispositions to SoCalGas staff outlining the requirement to calculate the TRC cost for Early Replacement projects to ensure that the incentive does not exceed the TRC cost. In recent project documentation provided to CPUC Staff, SoCalGas staff has made efforts to ensure that the TRC cost is calculated for these projects by including the calculation in its review documentation which includes an incentive cap spreadsheet analysis. However, for the example of Heat Recovery with co-generation project (Project 5001205402), SoCalGas staff missed that since the second period baseline was considered ISP with no savings claim, the incremental cost for the project is zero. CPUC Staff corrected this error and this resulted in a reduction of the incentive.
- More diligence is required in SoCalGas staff internal QC review of projects. CPUC Staff identified errors in the SoCalGas staff's final analysis of the Nut Dryer Plenums project (Project 5001162468) indicating insufficient attention to basic detail. CPUC Staff attributes some of the cause of the error to a lack of a written calculation methodology which logically and concisely reveals how the savings impacts are derived for a project. CPUC Staff performed a cell by cell review of the ex ante savings analysis spreadsheet and identified these errors which were not identified by the SoCalGas staff internal reviewer or internal QC staff. CPUC Staff have issued dispositions in the past describing the requirement for all projects to have documentation with written detailed formulae showing precisely how the ex ante savings are derived. SoCalGas staff should review the internal QC procedures to identify areas for improvement.

SoCalGas staff appears to be having difficulty grasping the fine details and nuances complex projects such as in the Nut Dryer Plenums project and the heat recovery steam generator project (Project 5001205042), and devising calculation methods and M&V plans which will provide reliable ex ante savings estimates. CPUC staff's observation is that SoCalGas staff needs to make more effort in gaining a higher level of comprehension of the process that is affected by the proposed project before devising calculation methods and M&V plans. Additionally, SoCalGas staff should not rely on customer's or 3P implementer's proposed methods without a critical examination of the fine details of the

proposed project. SoCalGas staff should also be performing a critical review of process data available for each project when determining the best methods for calculations and M&V plans.

SoCalGas staff should take steps to remedy these deficiencies moving forward.

On positive notes, SoCalGas staff activities continue to demonstrate improvement in the area of custom projects ex ante reviews. However, SoCalGas staff still needs to do better work in demonstrating program influence on projects. One example is the Kiln Project (Project 1276-15-2854) where the project documentation has not provided any indication of program influence that caused the customer to take an energy efficiency action. Also, SoCalGas staff requested Commission staff to provide early feedback through Early Opinions on one project so far in 2015. However, SoCalGas staff must better identify the project issue(s) of concern, their own review findings and interpretations for the project, and state where the grey areas are for which Commissions staff clarification or recommendations are being requested.

SoCalGas staff has not yet uploaded any custom project tools to the Custom Tools Archive for Commission staff to review. Based on the review of one tool in connection with a project review, Commission staff found that for the team trap leakage tool SoCalGas's staff has made numerous adjustments to flow not included in similar tools used by other Program Administrators. Commission staff recommends that custom project tools be uploaded to the CTA as directed in D.11-07-030. Providing tools and their documentation for Commission staff review is an important step to ensuring projects that utilize those tools in the future will not be subject to delay or substantial adjustment in savings due to problems with the tool or its documentation.

### **Workpapers**

With regard to the workpaper assessment for SCG, the CPUC staff has performed one preliminary workpaper review and has also reviewed SCG's ex ante data submittals. The following general areas of concern are identified:

- **Ex Ante Database Submittals (improvement compared to 2014)**

The SCG staff's ex ante data submissions are generally compliant in format and structure and are improving with respect to descriptive content. SCG staff should focus on providing more descriptive content that would enable CPUC staff reviewers to understand more about the measure, the technologies, and delivery approach without having to refer to workpapers.

- **Comprehensiveness of Submittals (to be determined)**

The single initial review resulted in a request for additional information, and SCG staff responded adequately and that workpaper has moved to the detailed review phase. Moving forward, CPUC staff will continue to review workpapers for comprehensiveness of submittals.

- **Incorporation of Previous Direction (to be determined)**

CPUC staff will continue to review workpapers for inclusion of information that address previous workpaper reviews, CPUC staff direction and Commission decisions, particularly D.11-07-030 and D.14-10-04.

- **Collaboration and Staff Involvement (improvement compared to 2014)**

SCG staff engages in an active yet informal effort to keep CPUC staff up-to-date on its workpaper development efforts. While generally positive, CPUC staff encourages SCG staff to develop a more formal status update process related to workpapers. SCG staff also works with CPUC staff and the CPUC staff DEER team to take advantage of the ex ante database scaled measure features, which enable the rapid development of measures that are based on existing DEER measures.

In accordance with D.13-09-023, CPUC staff and consultants will schedule a conference call meeting with SoCalGas staff to discuss the mid-year feedback. CPUC staff will send a Doodle Poll to find an available day and time. If SoCalGas staff has any questions or comments in the meantime, please contact Peter Lai ([Peter.lai@cpuc.ca.gov](mailto:Peter.lai@cpuc.ca.gov)).

Attachment A: Mid-year ESPI Ex ante Review Metric and Metric Descriptions

<b>Metric No.</b>	<b>Metric Description</b>
1a	Timeliness of action in the implementation of ordered ex ante requirements in the pre-submittal/implementation phase: Timing of disclosure in relation to reporting.
1b	Timeliness of action in the implementation of ordered ex ante requirements in the post-submittal/implementation phase: Timing of responses to requests for additional information.
2	Breadth of response of activities that show an intention to operationalize and streamline the ex ante review process.
3	Comprehensiveness of submittals.
4	Efforts to bring high profile, high impact, or existing (with data gaps) projects and/or measures to Commission staff in the formative stage for collaboration or input.
5	Quality and appropriateness of project documentation (e.g., shows incorporation of Commission policy directives).
6a	Depth of IOU quality control and technical review of ex ante submittals: Third party oversight.
6b	Depth of IOU quality control and technical review of ex ante submittals: Clarity of submittals and change in savings from IOU-proposed values not related to M&V.
7	Use of recent and relevant data sources that reflect current knowledge on a topic for industry standard practice studies and parameter development that reflects professional care, expertise, and experience.
8	Thoughtful consideration, and incorporation, of CPUC comments/inputs. In lieu of incorporation of comments/input, feedback on why comments/input were not incorporated.
9	Professional care and expertise in the use and application of adopted DEER values and DEER methods.
10	Ongoing effort to incorporate cumulative experience from past activities (including prior Commission staff reviews and recommendations) into current and future work products.

Attachment B: Custom and Workpaper Performance Feedback

**2015 Ex Ante Review Interim ESPI Performance Feedback — SoCalGas**

**Custom Projects**

Application ID	CMPA Measure Description	Discussion	Rating Feedback	Metric 1a	Metric 1b	Metric 2	Metric 3	Metric 4	Metric 5	Metric 6a	Metric 6b	Metric 7	Metric 8	Metric 9	Metric 10
5001140165	Steam Trap Replacement	CPUC reviewer was not able to follow submittal documents. Additional documentation on the specifics of the submittal document was requested.	Clarity of claims was difficult to follow	n/a	m	-	-	n/a	-	m	n/a	+	m	n/a	-
		Requested clarification not provided in documents as requested, but was provided in follow-on conference call.	Issues with claim values identified in meeting by CPUC staff and outlined in follow-on project memo.	n/a	+	m	-	n/a	-	m	n/a	m	m	n/a	m
		The PA's steam trap leakage tool was found to contain numerous adjustments to flow not used in similar tools used by other PA's.	Issues with calculation tool identified by CPUC staff. Subsequent ruling on changes to align with past decisions forwarded to PA	n/a	+	m	-	n/a	-	m	n/a	m	-	n/a	m
5001162468 5001169042	Nut dryer plenums	The PA seems to be making efforts to improve their M&V plans and calculation methods for process projects but has continued to have problems with the details.  CPUC Staff identified flaws in the PA's analysis methodology and brought them to the PA's attention in a series of phone calls. CPUC Staff suggested an alternate approach to analyzing the data for the project.	Seems to be making efforts to improve their M&V plans and calculation methods for process projects but has continued to have problems with the details. CPUC Staff identified flaws in the PA's analysis methodology and brought them to the PA's attention in a series of phone calls.	n/a	m	m	-	n/a	-	-	-	n/a	+	n/a	m

Attachment B: Custom and Workpaper Performance Feedback

Application ID	CMPA Measure Description	Discussion	Rating Feedback	Metric 1a	Metric 1b	Metric 2	Metric 3	Metric 4	Metric 5	Metric 6a	Metric 6b	Metric 7	Metric 8	Metric 9	Metric 10
		Despite significant input from CPUC Staff the PA was unable to precisely calculate the savings impacts for this project. CPUC Staff performed the final savings analysis.	CPUC Staff suggested an alternate approach to analyzing the data for the project. Despite significant input from CPUC Staff the PA was unable to precisely calculate the savings for this project. CPUC Staff performed the final savings analysis.												
5001205042	Heat Recovery w/ Cogen	Memo on incremental cost and incentive not exceeding the TRC cost issued by CPUC Staff for this project.	PA failed to follow CPUC Staff guidance and pursued a calculation methodology which required assumptions for key variables. CPUC Staff analyzed the PA's data using a regression analysis, which resulted in a substantial reduction in the ex ante savings impacts for the project. The PA did not correctly interpret CPUC policy on incremental cost and incentive not exceeding the TRC cost issued by CPUC Staff for this project. CPUC Staff calculated the TRC cost using data provided by the PA,	n/a	m	n/a	m	n/a	n/a	n/a	m	n/a	-	n/a	m

Attachment B: Custom and Workpaper Performance Feedback

Application ID	CMPA Measure Description	Discussion	Rating Feedback	Metric 1a	Metric 1b	Metric 2	Metric 3	Metric 4	Metric 5	Metric 6a	Metric 6b	Metric 7	Metric 8	Metric 9	Metric 10
			reducing the incentive for this project.												



**Workpapers**

	<b>Metric</b>	<b>Benchmarks</b>
1a	<p>Timeliness of action in the implementation of ordered ex ante requirements (e.g., A.08-07-021, D.11-07-030, D.12-05-015, etc.) in the pre-submittal/ implementation phase: Timing of disclosure in relation to reporting</p>	<p>1) Fraction of deemed measures for which workpapers have been submitted to Commission prior to measure being offered in the portfolio;                      2) Fraction of workpapers disclosed prior to or during work commencement and submitted upon completion rather than withheld and submitted in large quantity;                      3) Fraction of workpaper development projects for new technologies submitted for collaboration versus total number of workpapers for new technologies submitted</p>
<p><b>Noted Progress:</b> SCG has provided advanced notice to the EAR team that they plan to submit workpapers for review.</p>		
<p><b>Needs Improvement:</b> SCG still does not have a formal process for informing CPUC staff of their on-going workpaper development activities.</p>		
<p><b>To Be Determined:</b> Through the end of 2015, the EAR team will be examining claims for the following:                      1) Claims that appear to be deemed measures which were instead claimed as custom measures due to the lack of workpaper submission.                      2) High contributions of new technology measures that should have been subject to early review and collaboration.</p>		
1b	<p>Timeliness of action in the implementation of ordered ex ante requirements (e.g., A.08-07-021, D.11-07-030, D.12-05-015, etc.) in the post-submittal/ implementation phase: Timing of responses to requests for additional information</p>	<p>Percentage of workpaper reviews which experience significant delay<sup>[3]</sup> due to slow response to requests for readily available (or commonly requested)<sup>[4]</sup> additional information (higher percentage = lower score)</p>
<p><b>Noted Progress:</b></p>		
<p><b>Needs Improvement:</b></p>		
<p><b>To Be Determined:</b> Only one workpaper has undergone a preliminary review in 2015. SCG should review comments from the 2014 ESPI final scores for guidance on improvement. An example of an area of improvement is the direction from D.11-07-030 that required additional research into standard practices for commercial food service equipment.</p>		
2	<p>Breadth of response of activities that show an intention to operationalize and streamline the ex ante review process</p>	<p>Percentage of workpapers that address all aspects of the Uniform Workpaper Template (as described in A.08-07-021, or any superseding Commission directive)</p>
<p><b>Noted Progress:</b> SCG has encountered some minor barriers to meeting ex ante data base specifications but has been actively engaged with the EAR team and CPUC staff to implement interim solutions until full integration is accomplished. Incremental improvements are observed with each successive ex ante database submittal.</p>		

Attachment B: Custom and Workpaper Performance Feedback

Metric		Benchmarks
<p><b>Needs Improvement:</b> As discussed under 3 below, there are some shortcomings in SCG’s ex ante data, even though their submittal process and content is clearly transitioning to the required format.</p>		
<p><b>To Be Determined:</b> The critical deadline for full implementation of the ex ante database is 1/1/2016.</p>		
3	<p>Comprehensiveness of submittals (i.e., submittals show that good information exchange and coordination of activities exists, and is maintained, between internal program implementation, engineering, and regulatory staff to ensure common understanding and execution of ex ante processes)</p>	<p>1) Percentage of workpapers that include appropriate program implementation background as well as analysis of how implementation approach influences development of ex ante values;[6] 2) Percentage of workpapers which, on initial submission, were found to include all applicable supporting materials or an adequate[7] description of assumptions or calculation methods</p>
<p><b>Noted Progress:</b> SCG is committed to the transition of including ex ante data with its workpapers that is compatible with the ex ante database accessible via the READI interface. SCG ex ante data submissions are generally compliant in format and structure and are improving with respect to descriptive content. While some improvements are still needed, both in content and format, the EAR team highlights this improvement and hopes that SCG’s data production will continue to improve.</p>		
<p><b>Needs Improvement:</b> As noted above SCG ex ante data submissions are generally compliant in format and structure and are improving with respect to descriptive content. MeasureCost records specify full technology costs as requested by ex ante reviews but do not specify labor versus material costs and do not utilize location cost adjustments. Measure and technology descriptions have improved but are not always adequate to fully describe how a measure is achieving improvements in energy efficiency.</p> <p>For revised workpapers, it is difficult to determine what the actual revisions are from previous versions and how the ex ante values have changed. There typically is no summary in the workpaper of what the nature and magnitude of the revisions. For workpapers that have undergone review, input or development from the CalTF workpapers don’t typically include any discussion of how the final workpaper values have been influenced by the CalTF process.</p>		
<p><b>To Be Determined:</b> Preliminary and detailed reviews will continue throughout the year. Additionally, the EAR team will be continuing to review ex ante database submittals. The EAR team will also be reviewing workpapers and providing feedback to all PAs in terms of how the change documentation for revisions summarizes the basis, nature and magnitude of changes.</p>		
4	<p>Efforts to bring high profile, high impact, or existing (with data gaps) projects and/or measures to Commission staff in the formative stage for collaboration or input</p>	<p>Percentage of high profile program, or high impact measure, workpapers submitted for collaboration or flagged for review</p>
<p><b>Noted Progress:</b></p>		
<p><b>Needs Improvement:</b></p>		
<p><b>To Be Determined:</b> Similar to 1b, above, the EAR team will be reviewing claims for high contributions of new technology measures that should have been subject to early review and collaboration.</p>		
5	<p>Quality and appropriateness of project documentation (e.g., shows incorporation of Commission policy directives)</p>	<p>Frequency of inappropriate or inferior quality at the time of initial Commission staff review (higher frequency = lower score)</p>

Attachment B: Custom and Workpaper Performance Feedback

Metric	Benchmarks
	<p><b>Noted Progress:</b></p>
	<p><b>Needs Improvement:</b></p>
	<p><b>To Be Determined:</b> Preliminary and detailed reviews will continue throughout the year. Additionally, the EAR team will be continuing to review ex ante database submittals.</p>
6a	<p>Depth of IOU quality control and technical review of ex ante submittals: Third party oversight</p> <p>Quality of workpapers prepared by consultants, third parties, and local government partners submitted by IOUs</p>
	<p><b>Noted Progress:</b></p>
	<p><b>Needs Improvement:</b></p>
	<p><b>To Be Determined:</b> The EAR team has not reviewed any workpapers developed by SCE contractors, third parties or local government contractors and will continue to review SCE workpapers and include the results of these reviews in determining the final ESPI scores for 2015.</p>
6b	<p>Depth of IOU quality control and technical review of ex ante submittals: Clarity of submittals and change in savings from IOU-proposed values not related to M&amp;V</p> <p>1) Percentage of workpapers which required changes to parameters of more than 10% or required substantial changes to more than two parameters among UES, EUL/RUL, NTG, impact shape, or costs; 2) Percentage change from IOU-proposed values to ED-approved values (higher percentage = lower score)</p>
	<p><b>Noted Progress:</b></p>
	<p><b>Needs Improvement:</b></p>
	<p><b>To Be Determined:</b> The EAR team will continue with preliminary and detailed reviews with respect for the feedback provided in the 2014 final ESPI memo including development of current costs and consideration for industry standard practice.</p>
7	<p>Use of recent and relevant data sources that reflect current knowledge on a topic for industry standard practice studies and parameter development that reflects professional care, expertise, and experience</p> <p>Percentage of workpapers with analysis of existing data and projects that are applicable to technologies covered by workpaper</p>
	<p><b>Noted Progress:</b></p>
	<p><b>Needs Improvement:</b></p>
	<p><b>To Be Determined:</b> The EAR team will continue with preliminary and detailed reviews with respect for the feedback provided in the 2014 final ESPI memo.</p>
8	<p>Thoughtful consideration, and incorporation, of CPUC comments/inputs. In lieu of incorporation of comments/input, feedback on why comments/input were not incorporated</p> <p>Frequency of revisions to workpapers in response to (and/or appropriate and well-defended rejection of) CPUC reviewer's recommendations</p>

Attachment B: Custom and Workpaper Performance Feedback

Metric	Benchmarks
	<p><b>Noted Progress:</b> Preliminary EAR team feedback on one workpaper (commercial pool covers) requested additional information building operations research an sensitivity analysis of assumptions on savings. SCG provided that information for EAR team review.</p> <p><b>Needs Improvement:</b></p> <p><b>To Be Determined:</b> The EAR team will continue with preliminary and detailed reviews with respect for the feedback provided in the 2014 final ESPI memo</p>
<p>9</p> <p>Professional care and expertise in the use and application of adopted DEER values and DEER methods</p>	<p>Percentage of workpapers, including those covering new or modified existing measures, that appropriately incorporate DEER assumptions and methods</p> <p><b>Noted Progress:</b> SCG is an early collaborator with the DEER team in utilizing readily available scale impacts to develop new DEER measures, such as water heaters and boilers, which greatly reduces review and development time for new measures.</p> <p><b>Needs Improvement:</b></p> <p><b>To Be Determined:</b> The EAR team will continue with preliminary and detailed reviews with respect for the feedback provided in the 2014 final ESPI memo</p>
<p>10</p> <p>Ongoing effort to incorporate cumulative experience from past activities (including prior Commission staff reviews and recommendations) into current and future work products</p>	<p>Percentage of workpapers including analysis of previous activities, reviews and direction[11]</p> <p><b>Noted Progress:</b></p> <p><b>Needs Improvement:</b> As with other metrics, the EAR team urges SCG to review previous direction and ESPI memos for improvement opportunities. One example is the ISP direction for food service measures from D.11-07-030.</p> <p><b>To Be Determined:</b> The EAR team has not yet completed any detailed reviews. EAR team will continue to perform detailed reviews which will help to establish the final score for this metric.</p>