### PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

SAN FRANCISCO, CA 94102-3298

CITICAL TO SERVICE OF THE SERVICE OF

Date: April 4, 2016

To: Southern California Gas Company

From: Commission Ex Ante Review Staff

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

Subject: Final 2015 Efficiency Savings and Performance Incentive Ex Ante Review

Performance Scores

Pursuant to Decision (D).13-09-023 and D.15-10-028 Appendix 5, Commission staff and consultants completed the 2015 Efficiency Savings and Performance Incentive (ESPI) mechanism ex ante review performance scoring as prescribed in Attachment 7 of D.13-09-023. The scores contained in this memo are final and Southern California Gas Company (SoCalGas) shall use the final total score of 41.91 out of 100 to calculate the 2015 ESPI ex ante review component award. The final score is explained in more detail in Attachments A and D to this memo.

The 2015 ex ante review performance score was developed using a detailed scoring by metric for each reviewed workpaper and each reviewed custom project, as well as a scoring of the utility's internal due diligence processes and Quality Assurance/Quality Control (QA/QC) procedures and methods.

This is the first time that the final scores were "built-up" from a detailed assessment of each reviewed work product. Commission staff believes the quantitative scoring utilized for the 2015 review period results in a more accurate assessment of utility performance both comparatively between utilities, and against Commission expectations, but also results in generally lower scores than in previous years. It is Commission staff's expectation that this detailed scoring approach, along with the detailed qualitative workpaper and custom project level feedback, is more consistent with the direction provided in the ESPI D.13-09-023 Attachment A, which defines each metric and provides "benchmarks" for scoring using counts, percentages and fractions of workpapers and custom projects that conform or deviate from Commission and Commission staff guidance<sup>1</sup>. We believe this scoring approach will provide more specific guidance to the utilities on how to improve their ex ante due diligence. However, we acknowledge that this quantitative scoring approach does not correlate with the scoring approaches used in the previous two years of the ESPI, so it would be inappropriate to compare these results with past years'

\_

<sup>&</sup>lt;sup>1</sup> The benchmarks listed for each metric are not presented as a required scoring approach or limiting set of factors in scoring, however, they do provide guidance that the scoring should have a quantitative framework that is transparent and objective such that a pathway to higher scores is clear.

results for the purposes of drawing any conclusions regarding improvements or deterioration in SoCalGas' compliance with the CPUC's Ex Ante Review requirements.

For each metric, each reviewed utility work product was first determined to have components either applicable or not applicable to a metric<sup>2</sup>. If not applicable to a metric that item was not used in the final score development for the 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 "+"). Each of the ratings were then assigned a score percentage level of 0%, 50% and 100%, respectively. The assigned percentage scores were averaged across all the reviewed items. This resulted in a custom review overall percentage metric score and a workpaper process percentage score. Additionally, the workpaper metric benchmarks from D.13-09-023 Attachment 7 were used to calculate a workpaper percentage score and thus workpaper points for each metric. Lastly, utility-specific custom review process "adders" were developed for each applicable metric based on observed QA/QC processes and procedures developed and under implementation in 2015 that are expected to positively impact future selected project reviews. Commission staff believes it is important to provide ESPI points for positive due diligence developments as recognition of the effort and continue encouragement even before a change in project-level results is observed.

To produce final scores, the individual metric scores for the two workpaper contributing areas (benchmarks and processes) were weighted together (35% benchmarks and 65% process) and the three custom review contributing areas (project reviews, QA/QC, and process adders) were summed. The larger weight was given to the workpaper process activities due to the rather small number of workpaper submissions required or received from SoCalGAS such that the QA/QC processes and procedures put into place by SoCalGas becomes more important than the results of the small number of submissions<sup>3</sup>. Attachment D contains tables of the metric components and total scores for each utility. Attachments B and C of this memo provide more specifics on the rationale and project-level issues Commission staff and consultants used in scoring for each metric for SoCalGas.

<sup>&</sup>lt;sup>2</sup> For example, workpapers and custom projects which do not involve measures which in some way are expected to utilize DEER values, assumptions or methods, in the development of new kWh, kW and therm savings values would not receive scoring for metric 9 ("Professional care and expertise in the use and application of adopted DEER values and DEER methods"). Another example would be a minor workpaper or small custom project may not receive a score for metric 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")

<sup>&</sup>lt;sup>3</sup> The guidance on scoring approach provided in D.13-09-023, at 74, provides that when only a small number of submissions are available for scoring and the submissions have varying impacts on the portfolio overall, that appropriate weighting should be allied to the submission and observed performance that should carry across multiple metrics. "Low scores for metrics that assess specific and important quantities (e.g., if the utility only uploads a small percentage of custom projects and receives a low score for Metric 1a), will have a proportional impact on the total score the utility could receive for later metrics that measure the quality of custom project submittals." "For example, doing an outstanding job on a large number of very low-impact, standardized projects will not make up for doing a poor job on a few projects that represent a major portion of portfolio dollars."

In 2015, Commission staff observed continued efforts on the part of SoCalGas to improve their workpaper development processes, increase their level measure and project critical analysis, improve utilization of DEER values and methods, and streamline the ex ante review process.

Overall, the number of SoCalGas custom projects reviewed by Commission staff decreased significantly in 2015. Review activities spanned across only seven projects. Despite the very low activity level, we are disappointed in SoCalGas staff's handling of these Ex Ante Review (EAR) selected custom projects. We remain concerned that SoCalGas program staff and its Third Party implementers set high customer expectations for large incentive awards before any appropriate project review is undertaken.

For the 2015 ex ante activities, Commission staff finds the following:

### **Workpapers:**

On July 15, 2015, Commission staff provided SoCalGas' mid-year feedback on its ex ante activities for 2015. Commission staff noted that SoCalGas submissions were improved compared to 2014; however, future submissions should be improved with respect to descriptive content in the workpapers and ex ante data. The mid-year feedback encouraged SoCalGas to establish a more formal approach for updating Commission staff on its workpaper development activities.

As with previous years, the total number of SoCalGas workpapers submitted in 2015 is limited. The body of SoCalGas workpapers used to support its deemed programs is a mixture of work developed entirely in-house, through the use of subcontractors, by other IOUs and, in limited cases, by the California Technical Forum (CalTF). Internal workpaper development efforts are SoCalGas' strongest area of performance in terms of ESPI workpaper scores. Internal efforts cover a limited number of workpapers, and there are still shortcomings in documentation and ex ante data; however, SoCalGas has shown initiative to work with Commission staff to respond to comments and feedback, and keep workpaper development moving without delay.

On the other hand, SoCalGas has continued to use other utility-developed workpapers, where those utilities have not updated those workpapers in response to previous Commission direction. In cases such as these, SoCalGas must undertake its own update process or work with other utilities to ensure proper updates as completed rather than accepting continued inaction by others. Additionally, the workpaper covering clothes washer recycling (developed by another stakeholder then reviewed by the CalTF and submitted by SoCalGas for approval) contained numerous errors in technical development and interpretation of Commission policy. Neither the third-party development nor a review by the CalTF can serve to release a utility from its due diligence requirements on their submissions. Commission staff also remains concerned that deemed measures are being offered in programs to customers, and then claimed for savings, without an approved workpaper. For example, there are a large group of records for residential duct sealing in the latest 2015 claims database, but SoCalGas has never submitted a workpaper for these measures. Although duct sealing is a measure included in DEER, there are several such DEER measures and measure costs must also be documented; a workpaper submission is needed even if the submission merely references (not restates) the DEER values (UES, NTG and EUL) and provides current costs.

## **Custom Projects:**

In the 2015 mid-year feedback to SoCalGas, Commission staff identified several areas of concern relating to specific custom projects as well as generally for the SoCalGas review process and asked SoCalGas staff to remedy the deficiencies moving forward. Overall, Commission staff continues to find incomplete project documentation (e.g., Projects 5001162468 and 5001169042); problems with M&V plans, incorrect interpretation of Commission policy on incremental measure costs and incentives, lack of documentation that demonstrates program influence on projects (e.g., Project Application 1276-15-2854); and a general lack of due diligence in SoCalGas' internal technical reviews and QA/QC of custom incentive projects.

For SoCalGas Projects 5001169042/5001162468, which involved modifications to crop dryers with a close to \$1 million implementer proposed incentive, Commission Staff identified flaws in the proposed analysis methodology and brought them to the utility's attention in a series of phone calls. Commission staff suggested an alternate approach to analyzing the data for the project. Despite significant input from Commission staff, SoCalGas staff was unable obtain appropriate analysis from the implementer or perform appropriate analysis themselves to arrive at an acceptable savings calculation for this project, leading Commission staff to perform the final project savings analysis.

SoCalGas Project 5001205042 involved replacement of components of the heat recovery steam generator on a co-generation system to reduce boiler gas use and produce the balance of the steam requirements at the facility. This project proposed a over \$1 million proposed incentive. SoCalGas staff failed to follow our guidance to focus the analysis on increased steam generation rather than combustion gas generation even after utility staff initially indicated that the combustion side analysis over-estimated savings by at least 45%. Although SoCalGas reviewers strove to identify and fix problems with their analysis, which resulted in a 40% reduction in proposed savings, in the end, Commission staff analyzed the utility's data using a regression analysis, resulting in an additional substantial reduction in the ex ante savings impacts for the project. Further, SoCalGas staff did not correctly interpret Commission policy on incremental cost and the incentive not exceeding the Total Resource Cost Test (TRC) cost, as Commission staff directed in earlier dispositions for this project. Commission staff had to calculate the TRC cost using data provided by SoCalGas, which resulted in another reduction in the incentive for this project.

Commission staff finds that SoCalGas staff is very passionate about providing the maximum possible incentives to customers and rarely questions whether projects are deserving of the level ratepayer-funded support proposed. For Project 5001181200, SoCalGas staff would not consider and address Commission staff's concerns that the new construction advanced greenhouse project may represent standard practice for the design and appeared more as a load building opportunity for the utility rather than an energy efficiency investment for its ratepayers. SoCalGas staff's position was that the customer is purchasing an energy efficient system and, therefore, is eligible for an incentive. Commission staff disagrees with the SoCalGas staff belief that its statement that "...if it was not for the incentives, [the customer] would not have proceeded on a project" was sufficient evidence to demonstrate program influence.

Commission staff expects SoCalGas staff to more critically assess if a project, especially critical design attributes of a project proposed as energy efficiency measures, might be standard practice for the specific project type under review and, thus, should not receive ratepayers-funded energy efficiency support. We have indicated to SoCalGas staff that it should ask the customer to describe the evolution of the project including options and alternatives considered, note the decision points, including when the project received internal management approval, and how the possibility of energy efficiency incentives was factored into the internal analysis of project options. There should be a difference between the original project plans prior to program intervention and a revised set of plans with energy efficiency augmentations identified. Documentation of program influence should include meetings notes and correspondence that clearly show the program's recommendations and adopted design changes, demonstrating that higher cost, higher efficiency measures were incorporated as a result of the program intervention. Offering incentives to customers for what they are already planning to implement is an inappropriate and cost ineffective use of ratepayer funds. Commission staff has not observed SoCalGas staff taking any action to remedy these deficiencies in its program administration. Rather than addressing this issue, and the Commission direction to improve netto-gross for the custom portfolio, Commission staff finds that SoCalGas' engineering staff often adopts a protective stance in support of the program staff proposals when Commission staff review questions various projects as likely zero net savers. Although some level of a protective response is expected and reasonable, the extent of this experienced during interaction with SoCalGas staff has acted to impede improvements to the SoCalGas internal due diligence and portfolio performance in this area.

Commission staff is concerned that SoCalGas' account executives set customer expectations on the purpose of ratepayer-funded energy efficiency custom project incentives; that the incentive are intended to accomplish savings above what the customer would normally pursue or was planning to pursue in their project independent of the availability of the program incentive offerings. Commission staff has raised the issue of SoCalGas staff and its program implementers setting up customer dissatisfaction issues by promising incentive amounts prior to completion of review. Once a customer's expectation is set by an implied eligibility and/or a specific incentive amount without an appropriate project review, the customer is rightfully angry when the project review finds issues that likely will greatly reduce or eliminate the incentive. SoCalGas staff should take actions in their program design and implementation activities to mitigate this concern.

For Project Application 5001243550, a refinery project with a proposed million dollar incentive, Commission staff believes that SoCalGas staff should have brought this project forward for early opinion discussions before it appeared on the project list for our review selection. The project was selected as a project "ready for review" from SoCalGas' September 15, 2014 Bi-Monthly Projects List. SoCalGas delayed in uploading the initial project documentation to the Custom Measures and Projects Archive (CMPA) until July 21, 2015. Given the proposed incentive level, SoCalGas staff should have collaborated with Commission staff much sooner on this project to address the concerns surrounding measure definitions and classifications, baselines, and program influence. Commission staff observes that SoCalGas staff here too seemed determined to award this large customer an incentive and claim the savings even as Commission staff has indicated that this project appears to be a net zero saver (i.e., free-rider).

During 2015, SoCalGas submitted only Project 1276-15-2854 to Commission staff for an early opinion discussion. Given the number of issues in the small number of projects selected for review, Commission staff believes that SoCalGas staff should utilize the early opinion process more, especially for larger long lead time projects or any project where retrofits or renovation may possibly represent standard practice, to discuss potential project issues with Commission staff.

SoCalGas staff has not uploaded any of their custom project tools to the Custom Tools Archive for Commission staff to review. However, SoCalGas staff did play a role in requesting the lead utility to provide access to new tools planned to be used to estimate savings for the Home Upgrade California program starting during 2016.

Despite the issues discussed above, Commission staff was able to augment a couple ESPI metric scores with added points above those assigned from the detailed review of custom projects. This augmentation was done to acknowledge efforts on the part of the SoCalGas Engineering Team staff that have not yet been observed in projects under review during 2015 due to the lag time in projects moving through the pipeline. For 2016, the internal process activities will need to result observed improvements in selected projects in order to justify continued increases of this type to metric scores.

Commission staff notes that there has been little change in the 2014 ex post gross and net evaluation results for SoCalGas' custom programs from the previous results. The change, although small, has been disappointingly downward. Commission staff recommends that SoCalGas staff focus on developing procedural changes to its custom project implementation and review process which can effectively improve both gross and net ex post realization.

In accordance with D.13-09-023, the IOUs' ex ante activities are assessed against a set of 10 metrics on a rating scale of 1 to 5. Once activities are assessed the ratings for each are converted onto this scale, where 1 is the lowest score assigned and 5 is a highest score assigned. A maximum score on all metrics for both workpapers and custom projects will yield 100 points whereas a minimum score on all metrics would yield 20 points. The 1-5 rating scale is distinguished as follows:

- 1. Consistent underperformer in meeting the basic Commission expectations;
- 2. Makes a minimal effort to meet Commission expectations but needs dramatic improvement;
- 3. Makes effort to meet Commission expectations, however improvement is required;
- 4. Sometimes exceeds Commission expectations while some improvement is expected; and
- 5. Consistently exceeds Commission expectations.

#### SoCalGas' final ESPI ex ante review scores for 2015 are as follows:

Metric	Total Possible	Workpaper	Custom	<b>Total Score</b>
1a	5	1.69	0.50	2.19
<b>1b</b>	5	1.34	0.50	1.84
2	10	2.21	1.00	3.21
3	10	2.36	1.08	3.44
4	10	3.52	3.50	7.02
5	10	2.50	1.00	3.50
6a	5	0.98	0.50	1.48
<b>6b</b>	5	1.29	0.50	1.79
7	10	2.74	1.00	3.74
8	10	3.57	1.00	4.57
9	10	2.72	2.50	5.22
10	10	2.83	1.08	3.91
Total	100	27.75	14.16	41.91

It should be noted that in the preparation of the final 2015 ESPI ex ante review scores, Commission staff did not have all desired data available. For instance, Commission staff did not have enough time to conduct a comprehensive claims review for these scores. For custom projects, Commission staff reviewed the 2015 activities and dispositions issued as discussed above.

The intention of the ESPI ex ante review component is to motivate utilities to employ a superior level of due diligence to their activities and reduce the need for the extensive level of oversight currently undertaken by Commission staff and consultants. The due diligence expectations include complying with the Commission's ex ante review policies and procedures in a manner that results in the development and reporting of reliable, defensible, and accurate ex ante estimates.

While collaboration and information-sharing is always encouraged, Commission staff envisions that, through the feedback provided in this ESPI component and ongoing collaboration, the utilities' internal ex ante review policies and activities will become sufficient such that Commission staff can devote more time and resources towards collaboration and less time to correcting or re-analyzing ex ante values on behalf of the utilities. Commission staff recognizes and commends the progress that has been made to date and encourages the utilities to continue to strive for excellence in this issue area.

If you have any questions or comments about the feedback or final scores, please contact Peter Lai (<a href="mailto:peter.lai@cpuc.ca.gov">peter.lai@cpuc.ca.gov</a>). Note that pursuant to D.13-09-023, Commission staff will schedule a time with the individual utilities to discuss the final scores.

	_		Workpapers			Total		
	Metric	Max Points	Percent Score	Total Points	Max Points	Percent Score	Total Points	
1a	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	2.5	67.6%	1.69	2.5	20%	0.50	2.19
1b	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	2.5	53.6%	1.34	2.5	20%	0.50	1.84
2	Breadth of response of activities that show an intention to operationalize and streamline the ex ante review process	5	44.2%	2.21	5	20%	1.00	3.21
3	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)	5	47.2%	2.36	5	21.6%	1.08	3.44
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	70.4%	3.52	5	70%	3.50	7.02
5	Quality and appropriateness of project documentation (e.g., shows incorporation of Commission policy directives)	5	50%	2.50	5	20%	1.00	3.50
6a	Depth of IOU quality control and technical review of ex ante submittals: Third party oversight	2.5	39.2%	0.98	2.5	20%	0.50	1.48
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	2.5	51.6%	1.29	2.5	20%	0.50	1.79

	Total	50		27.75	50		14.16	41.91
10	Ongoing effort to incorporate cumulative experience from past activities (including prior Commission staff reviews and recommendations) into current and future work products	5	56.6%	2.83	5	21.6%	1.08	3.91
9	Professional care and expertise in the use and application of adopted DEER values and DEER methods	5	54.4%	2.72	5	50%	2.50	5.22
8	Thoughtful consideration, and incorporation, of CPUC comments/inputs. In lieu of incorporation of comments/input, feedback on why comments/input were not incorporated	5	71.4%	3.57	5	20%	1.00	4.57
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	5	54.8%	2.74	5	20%	1.00	3.74

# 2015 Efficiency Savings and Performance Incentive Ex Ante Performance Workpaper Scores

Metric	Description	Workpaper Benchmark	Final 2015 Score	Commission staff Assessment
1a	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	<ol> <li>Fraction of deemed measures for which workpapers have been submitted to Commission prior to measure being offered in the portfolio;</li> <li>Fraction of workpapers disclosed prior to or during work commencement and submitted upon completion rather than withheld and submitted in large quantity;</li> <li>Fraction of workpaper development projects for new technologies submitted for collaboration versus total number of workpapers for new technologies submitted</li> </ol>	3.38	SoCalGas submitted 8 workpapers in 2015, mostly in response to code updates. SoCalGas submitted 3 workpapers covering new technologies or applications and 1 was submitted for collaboration (new applications for pool covers).  SoCalGas informed Commission staff at several times that it is attempting to implement a process that uses a streamlined approach to submitting workpapers using approved ex ante values and calculation methods. This, in turn, would reduce paper work, ensure that all submitted values are consistent with existing policies, and address direction from previous decisions. Several of SoCalGas' ex ante database submissions demonstrate this effort.  There is, however, some indications that some measure are being offered in programs without Commission staff approved ex ante data or workpapers. Policy requires SoCalGas to gain approval for deemed measures via workpaper submission prior to offering them in programs and SoCalGas should review all deemed measures and communicate to Commission staff regarding any gaps between approved workpapers and their offerings. For example, a review of claims shows that deemed duct sealing measures are being offered in manufactured homes programs, but SoCalGas has not submitted a workpaper for this measure. Savings values for duct high and low duct sealing measures are included in DEER, but a workpaper is still required that links the savings, netto-gross, cost and gross savings adjustment values into a single implementation record. This workpaper must include program background information that supports the use of the selected DEER values for the submitted implementation records.
1b	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	Percentage of workpaper reviews which experience significant delay[3] due to slow response to requests for readily available (or commonly requested)[4] additional information (higher percentage = lower score)	2.68	Commission staff reviewed 2 workpapers and none were complete the first time they were reviewed. Of the 2 incomplete workpapers, 1 was resubmitted within 1 month. The other workpaper was just returned to SoCalGas so they have not had time to provide a response. While there is limited activity to assess this metric, SoCalGas is generally responsive to requests for additional information.
2	Breadth of response of activities that show an intention to operationalize and streamline the	Percentage of workpapers that address all aspects of the Uniform Workpaper Template (as described in A.08-07-021,	2.21	Commission staff reviewed and scored 5 SoCalGas workpaper submissions for this metric. Two of these submissions address all (or almost all) of the Uniform Workpaper Template and ex ante database format (typographic issues only). SoCalGas' ex ante data submissions had the following issues:

Metric	Description	Workpaper Benchmark	Final 2015 Score	Commission staff Assessment
	ex ante review process	or any superseding Commission directive)		<ul> <li>Do not follow the 2014 EAR team cost guidance document (June submissions for water heaters – 3 workpapers for commercial measures)</li> <li>Mis-matches between the work paper's implementations and applicability and ex ante data submission. In particular, 3 workpapers for commercial measures specifically added new construction application types and list 3 delivery types (e.g., downstream); however, the ex ante data submission only supports existing /retrofit application types and 1 delivery method.</li> </ul>
3	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)	include appropriate program implementation background as well as analysis of how implementation approach influences development of ex ante values;	2.36	<ul> <li>Commission staff observed the following documentation shortcomings:         <ul> <li>Annual operating hours for additional building types added to the pool cover workpaper (NOTE: SoCalGas addressed this data shortcoming with the final workpaper submittal.)</li> <li>Measure application types and savings calculations were sometimes inconsistent. For example, the hot water boiler workpaper includes new construction application types, but no UES documentation for new construction was included.</li> <li>Cost calculations for high efficiency water heaters do not appear to consider necessary flue and venting modifications needed to accommodate the measure technology.</li> <li>In the disposition of the clothes washer recycling workpaper, Commission staff discussed several issues that seem to indicate a lack of critical internal review by SoCalGas staff (further discussed in 6a below).</li> </ul> </li> <li>The mid-year review noted that full technology costs should be broken down between labor and material costs, and this has been addressed in subsequent submittals.</li> </ul>
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	Percentage of high profile program, or high impact measure, workpapers submitted for collaboration or flagged for review	3.52	<ul> <li>SoCalGas engaged Commission staff on the following:         <ul> <li>The use of a different common unit (kBtuh input capacity) for commercial water heaters instead of "Each" as used in DEER</li> <li>Expansion of pool cover workpaper to include additional building types beyond the already approved school building types</li> </ul> </li> <li>Commission staff observed significant policy level and technical problems with the recently submitted clothes washer recycling workpaper, which could have been easily avoided with a meeting to review the base and measure assumptions. The California Technical Forum had submitted an abstract for this workpaper to Commission staff for review, but the particular areas of concern covered in the workpaper disposition were not included in the workpaper abstract. Commission management and SoCalGas management have met on this issue and SoCalGas management expressed a commitment to improving due diligence with workpapers that are reviewed through the California Technical Forum.</li> </ul>
5	Quality and appropriateness of	Frequency of inappropriate or inferior	2.50	Commission staff reviewed 6 SoCalGas workpaper submissions. Four of the submissions were revisions to

Metric	Description	Workpaper Benchmark	Final 2015 Score	Commission staff Assessment
	project documentation (e.g., shows incorporation of Commission policy directives)	quality at the time of initial Commission staff review (higher frequency = lower score)		previous workpapers which adopt DEER measures and the EAR team found these submissions to be of appropriate, if not perfect, quality.  On the other hand, two submissions were missing necessary information or had significant problems with underlying assumptions. These two submissions are the following:  Pool Covers (WPSoCalGasNRWH150309A): missing field observations or survey data needed to support the workpaper assumptions  Clothes Washer Recycling (WPSoCalGasREAP150604A): The EAR team's detailed review of this workpaper rejected entire portions of the proposed measure's savings calculations and concluded that the proposed savings are about 10 times too high.
6a	Depth of IOU quality control and technical review of ex ante submittals: Third party oversight	Quality of workpapers prepared by consultants, third parties, and local government partners submitted by IOUs	1.96	On initial review, Commission staff identified one workpaper (WPSoCalGasREAP150604A, Clothes Washer Recycling) that was developed by NRDC. CPUC discovered several significant problems with the development of the savings calculations, concluding that the proposed savings are about ten times too high. It appears that SoCalGas accepted the development work of NRDC and outcomes from the CalTF review without any review of its own to ensure the workpaper development approach was reasonable.
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	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;  Percentage change from IOU-proposed values to ED-approved values (higher percentage = lower score)	2.58	Commission staff issued preliminary reviews and dispositions on workpapers that included either revised values or direction for further analysis that will likely result in revised values. Of the 6 workpapers where revisions to ex ante values are required, Commission staff estimate that 4 require changes to at least two values or any one value requires a downward revision by more than 10%.
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	Percentage of workpapers with analysis of existing data and projects that are applicable to technologies covered by workpaper	2.74	Using review comments from 2015 workpaper reviews, Commission staff rated workpaper submissions for whether or not they correctly used recent and relevant data sources. All reviewed submissions (6) were counted for this metric.  Four of the 6 reviewed submissions adopt recent, relevant DEER values and measures. Although some of that data is used incorrectly, the calculations were provided so it was easy for Commission staff to evaluate and provide corrective support. Additionally, SoCalGas was very responsive when Commission staff requested a copy of data supporting the proposed swimming pool cover hours of use. The data was provided within 2

D.C. atuita	Description	Manharana Barahasan	Final 2015	Commission staff Assessment
Metric	Description	Workpaper Benchmark	Score	Commission staff Assessment
				SoCalGas was scored down on this metric for their Clothes Water Recycling workpaper. Commission staff observed several inappropriate applications of recent evaluation data along with a lack of consideration for typical standard practice in the use and replacement of clothes washers.  Given the limited total number of workpapers that SoCalGas submits, Commission staff expects continued interaction with SoCalGas to improve the overall application of data and topic knowledge.
8	Thoughtful consideration, and incorporation, of CPUC comments/inputs. In lieu of incorporation of comments/input, feedback on why comments/input were not incorporated	Frequency of revisions to workpapers in response to (and/or appropriate and well-defended rejection of) CPUC reviewer's recommendations	3.57	SoCalGas did not have much opportunity to incorporate comments or input from EAR team in 2015.  Commission staff reviewed the swimming pool workpaper in May and SoCalGas' response was timely and thoughtful. The next Commission staff comments were provided to SoCalGas in January and February of 2016. SoCalGas has not had enough time to provide comments to the recent workpaper reviews; therefore, those reviews were not considered for this metric.
9	Professional care and expertise in the use and application of adopted DEER values and DEER methods	Percentage of workpapers, including those covering new or modified existing measures, that appropriately incorporate DEER assumptions and methods	2.72	Commission staff used all workpaper reviews for this metric and scored the metric based on the accuracy of SoCalGas' ex ante data submission. Six submissions were scored for this metric and 3 of them appropriately incorporate DEER assumptions and methods including correct (or nearly correct) selection of ex ante database values from the DEER support tables.  Examples from the 3 submissions that were scored down include the following:  The delivery types (DelivType) in the submitted data were either inconsistent with the workpaper or types that are in the workpaper were not included in the ex ante data (3 workpapers)  The clothes washer recycling workpaper needed several corrections with respect to DEER including applying HVAC interactive effects and the correct usage profile for multi-family common laundry facilities.
10	Ongoing effort to incorporate cumulative experience from past activities (including prior Commission staff reviews and recommendations) into current and future work products	Percentage of workpapers including analysis of previous activities, reviews and direction	2.83	With its original workpaper development, SoCalGas continues to improve its quality and overall consideration of previous inputs. Commission staff has concerns about the workpapers SoCalGas uses that are developed by others, such as clothes washer recycling and food service workpapers. Commission staff encourages SoCalGas to work with other utilities in improving those workpapers, which would then result in improvement in scores for the authoring utility as well as all utilities that use the workpapers.

# Final 2015 Efficiency Savings and Performance Incentive Ex Ante Performance Custom Project Scores

Metric	Description	Custom Benchmark	Final 2015 Score	Commission staff Assessment
1a	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 presubmittal/implementation phase: Timing of disclosure in relation to reporting	(1) Percentage of projects in quarterly or annual claims that were reported in the CMPA twicemonthly list submissions; (2) Percentage of projects for which there is a two weeks or less difference between the application date and the date reported in the CMPA; (3) Percentage of tools used for calculations disclosed prior to use	1.0	Commission staff did not conduct a claims review. However, SoCalGas needs improvements in this area. The SoCalGas response to the Phase I EAR disposition for Application 5001181200 (X350) on 2/25/2014 was uploaded to the CMPA on 9/9/2015. Although the Phase I EAR had granted conditional approval, it requested that a number of modeling corrections be completed and submitted to re-estimate the project's energy savings before completion. For Application 5001243550 (X530), the project was selected from the SoCalGas' 9/15/2014 CMPA Listing and SoCalGas did not submit the initial documentation for review until 7/21/15.

Metric	Description	Custom Benchmark	Final 2015 Score	Commission staff Assessment
1b	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	Percentage of projects which experience significant delay due to slow response to requests for readily available (or commonly requested) additional information (higher percentage = lower score)	1.0	Project Application 5001140165 / 5001170783 (X209), a steam trap replacement project at a refinery, was selected from the 10/1/2012 SoCalGas CMPA Listing and received a conditional approval on 2/28/2013 pending post-installation verification and savings true-up. Earlier, in 2011 collaborative effort among the California investor-owned utilities (IOU). The collaborative effort was a response to the CPUC's 2006-2008 EM&V impact analysis of steam trap programs. The collaborative effort established a savings calculation approach agreement between Commission staff and the IOUs to be used in ex ante savings estimates. Commission staff identified in that first review that the SoCalGas submission calculations assumed that all traps which failed in the open position would be stuck fully open commission staff concluded that typically steam traps failing open would be stuck in partially open positions and conditionally approved the SoCalGas projects savings based on a 0.34 leakage factor which was based on a Department of Energy Technical Brief which was the basis of the 2011 disposition. Commission staff did not approve savings for any steam traps in the failed closed position. The first EAR disposition required SoCalGas either to revise their savings estimates to agree with the 2011 disposition or provide additional documentation to support their calculations. Also, the disposition found a high degree of free-ridership for this project (0.35 NTGR). SoCalGas uploaded its reply to the first disposition to the CMPA on 1/12/15, with subsequent post-installation and savings true-up follow-up on 4/14/15, 4/23/15, and 11/11/15. SoCalGas' response included a steam trap tool which included alternative approaches and assumptions to the past disposition from the 2011 collaborative discussions. This was SoCalGas' proposed improvement to the previous required approach. Commission staff's follow-up review of SoCalGas' steam trap tool was posted to the CMPA on 7/17/15 noting the proposed new assumptions were not supported by data that

Metric	Description	Custom Benchmark	Final 2015 Score	Commission staff Assessment
Metric 2	Breadth of response of activities that show an intention to operationalize and streamline the ex ante review process	1) Percentage of custom project submissions that show standardization of custom calculation methods and tools; (2) Development and/or update of comprehensive internal (to IOUs, third parties, and local government partners, as appropriate) process manuals/checklists and QC processes	1.00	For Application 1276-15-2854, a volatile organic compound catalytic converters with heat exchangers for a bakery, it didn't appear that SoCalGas had conducted an internal review. The measure was claimed as a Retrofit Add-on, yet the project documentation claimed Early Retirement, and the project files lacked program influence documentation. As reflected in the ongoing review activities for project Applications 5001181200 (X350) and 5001243550 (X530), SoCalGas needs significant improvements in this area. For Application 5001181200, a new greenhouse project, SoCalGas did not follow the directions Commission staff provided in the first review findings disposition regarding the baseline or the direction to revise and re-submit without deviating from the allowed baseline. For Application 5001243550, a refinery process upgrade project, Commission staff found problems concerning the measure definition and classification as well as establishing the proper baseline.
3	Comprehensiven ess 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)	Number of repeated formal requests for additional documentation for project information and/or reporting claims that support ex ante review activities (fewer requests = higher score).	1.08	Commission staff identified significant deficiencies in project documentation as well as flaws in the both the implementer and SoCalGas ' analysis methodology in Application 5001162468 / 5001169042 (X290), a crop dryer upgrade project. Despite significant input from Commission staff on multiple occasions, SoCalGas staff did not properly determine the final savings leaving Commission staff having to perform the final savings analysis. Likewise, in Application 5001181200 (X350), a hi-tech large greenhouse project with a \$1 million dollar proposed incentive, SoCalGas staff did not follow Commission staff directions regarding the allowed baseline and modeling assumptions nor did SoCalGas perform any appropriate market analysis, thus requiring multiple requests for added information or analysis. For Application 5001243550 (X530), Commission staff found no evidence of SoCalGas' program influence on the project and notes that the product vendor reports there have been no installations with configurations significantly different than built for this customer indicating. Commission staff considers the project a free-rider and the proposed process modifications as Normal Replacement measures. The SoCalGas shortcomings on this project are particularly troublesome as this is the third project related to this greenhouse technology and in the previous project all the same issues were apparent and highly contentious leading Commission staff to issue a moratorium on future similar projects yet SoCalGas failed to either identify this project as being the same technology nor deal with any of the issues identified in the previous project.

Metric	Description	Custom Benchmark	Final 2015 Score	Commission staff Assessment
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.	Percentage of large high impact projects or measures referred to CPUC early or flagged for review	3.50	SoCalGas staff brought forth one project for early opinion discussion, Application 1276-15-2854, during 2015. Due to the small number of projects selected in 2015 Commission staff cannot conclude that there were other projects that should have been brought forward, so the scoring perhaps provides SoCalGas with some benefit based on doubt. However, we believe there are likely more project that should be brought forward earlier for discussion rather than awaiting a possible selection. SoCalGas needs to be more forthcoming and willing to discuss potential issues upfront before a project is placed on the CMPA List as "Ready for Review" for Commission staff review selection.
5	Quality and appropriateness of project documentation (e.g., shows incorporation of Commission policy directives).	Frequency of inappropriate or inferior quality documentation on project eligibility, baseline determination, program influence, use of custom elements in projects, assumptions and data supporting savings, and project costs (higher frequency = lower score)	1.00	In Application 5001140165 / 5001170783 (X209), SoCalGas provided follow-up data that did not support its claims. Commission staff agreed that boiler feedwater temperature should be treated as a default value rather than a locked value in the tool, but required that all changes previously directed be made. In application 5001181200 (X350), SoCalGas deviated from the Commission staff allowed baseline and did not follow the directions given in the first disposition. Project measures must reflect proper baselines as required by CPUC Policy. In the absence of code requirements, SoCalGas must determine whether an industry standard practice (ISP) technical baseline applies as required by CPUC Policy, in particular for large industrial projects such as Application 5001243550 (X530). As submitted, Commission staff found this project's proposed modifications for the refinery process to be a zero saver due to ISP considerations. SoCalGas claimed that refineries are all custom designed and that no standard practice exists. This, unfortunately, leaves the project without a gross savings baseline. Gross savings estimates based upon in-situ conditions are not acceptable as it is not reasonable that the existing refinery design would be replicated in any new or revised construction. As such, Commission staff must assume that the gross savings baseline is the same as the overall process upgrade. In our most recent disposition on this project, Commission staff proposed an alternative approach that divides the overall project into four measures that would ascribe a measure type and potential gross savings baseline to each.

Metric	Description	Custom Benchmark	Final 2015 Score	Commission staff Assessment
6a	Depth of IOU quality control and technical review of ex ante submittals: Third party oversight	Quality of custom project estimates prepared by customers, third parties, and local government partners submitted by IOUs	1.0	SoCalGas did not demonstrate adequate QA/QC control over its internal technical review of projects over the course of the 2015 activities. Commission staff did not discern from SoCalGas a willingness to question third party project assumptions and supporting data.
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	(1) Percentage of Projects requiring three reviews or re-requests for supporting information commonly requested; (2) Percentage of projects for which IOU-proposed savings and ED-approved savings differ by 20% or more (higher percentage = lower score)	1.0	In Application 5001243550, the lack of project clarity and in-depth technical review surrounding the refinery process modifications proposed in the initial documentation impeded the possible discussion of alternatives. In the most recent Commission staff disposition for the Application 5001243550, by separating the overall project into four distinct modifications, we proposed acceptable measure type designations and appropriate technical baselines to each measure that resulted in non-zero savings.

Metric	Description	Custom Benchmark	Final 2015 Score	Commission staff Assessment
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.	Percentage of custom projects that use data sources and methods per standard research and evaluation practices	1.00	As highlighted over the course of discussions and dispositions for Applications 5001181200, 5001140165 5001170783, and 5001181200, SoCalGas scored poorly in this metric representing the due diligence and professional care in preparing and developing project parameters, examining data, discerning standard practice issues, and applying expertise and experience appropriately. As noted under metric 4, several of these projects would have benefited from early opinion discussions with Commission Staff.
8	Thoughtful consideration, and incorporation, of CPUC comments/inputs. In lieu of incorporation of comments/input, feedback on why comments/input were not incorporated.	(1) Frequency of improved engineering/M&V methods and processes resulting from (and/or appropriate and well-defended rejection of) CPUC reviewer's recommendations; (2) Percent of projects in custom reviews that reflect guidance provided in prior reviews	1.00	As detailed in earlier assessment discussions, for Application 5001205042 (X423), SoCalGas failed to follow Commission staff guidance and pursued a calculation methodology which required assumptions for key variables. Commission staff analyzed SoCalGas' data using regression analysis and reduced the ex ante savings impacts. SoCalGas did not correctly interpret CPUC's policies on incremental measure costs and incentives not exceeding the TRC cost and, therefore, Commission staff used SoCalGas' provided data to reduce the allowable incentive for the project.  Commission staff notes that SoCalGas made good efforts to improve their M&V plans and calculation methods for Application 5001162468 / 5001169042 (X290), yet continued to encounter difficulties with the details and execution requiring Commission staff to calculate the final approved savings. For Application 5001140165 / 5001170783 (X209), SoCalGas did not accept or follow all directed changes and provided data that did not support the claims. Likewise, SoCalGas did not follow directions given in the first review findings disposition for Application 5001181200 (X350). Commission staff is disappointed overall in SoCalGas' performance with Application 5001243550 (X530).

Metric	Description	Custom Benchmark	Final 2015 Score	Commission staff Assessment
9	Professional care and expertise in the use and application of adopted DEER values and DEER methods.	Percentage of custom projects including, and not limited to, new or modified existing technologies or project types that appropriately incorporate DEER assumptions and methods	2.50	There were no EAR projects to base a score for this metric. Commission staff gives SoCalGas the half of the full score to encourage the utility to comply with the Commission's direction to follow DEER moving forward.
10	Ongoing effort to incorporate cumulative experience from past activities (including prior Commission staff reviews and recommendation s) into current and future work products.	Percentage of projects identified in claims review that were implemented per CPUC directions in previous reviews	1.08	Commission staff did not conduct a claims review. However, SoCalGas does not appear to incorporate past ex ante review experience in 2015 projects. As seen in X209, SoCalGas did not accept all Commission staff directed changes and provided data that did not support its claims. In X350, SoCalGas did not follow directions given in the first review findings disposition regarding the baseline.

Summary of all IOU custom measure and project ex ante review activities scoring for both the 2015 annual review as well as previously issued 2015 mid-year review:

2015 Annual Ratings	Metric 1a	Metric 1b	Metric 2	Metric 3	Metric 4	Metric 5	Metric 6a	Metric 6b	Metric 7	Metric 8	Metric 9	Metric 10
SCE "-"	15	2	3	11	2	6	10	9	11	8	2	8
SCE "+"	1	2	2	2	4	0	0	1	0	2	2	3
SCE "Yes"	2	2	7	3	1	5	2	1	1	2	2	6
PG&E "-"	15	13	13	18	6	18	20	14	16	13	2	19
PG&E "+"	0	5	3	6	2	4	5	3	2	5	0	6
PG&E "Yes"	1	2	7	5	0	1	2	4	1	1	2	2
SDG&E "-"	4	4	5	4	0	5	4	4	6	4	0	4
SDG&E "+"	3	2	4	2	3	2	1	2	1	2	0	3
SDG&E "Yes"	0	0	0	1	0	0	0	0	1	0	0	1
SCG "-"	2	2	4	5	1	5	3	3	3	5	0	4
SCG "+"	0	0	0	1	1	0	0	0	0	1	0	0
SCG "Yes"	0	1	1	1	0	0	0	1	0	0	0	3
2015 Mid Year Ratings	Metric 1a	Metric 1b	Metric 2	Metric 3	Metric 4	Metric 5	Metric 6a	Metric 6b	Metric 7	Metric 8	Metric 9	Metric 10
SCE "mid -"	3	3	4	8	0	5	5	5	8	8	2	10
SCE "mid +"	1	3	3	0	0	0	0	1	0	3	0	1
SCE "mid m"	0	0	0	1	0	0	0	0	0	0	0	0
SCE "mid n/a"	18	16	15	13	22	17	17	16	14	11	20	11
PG&E "mid -"	6	4	11	10	3	15	10	14	14	12	2	14
PG&E "mid +"	0	2	3	2	0	1	0	1	0	2	0	3
PG&E "mid m"	1	0	0	1	0	1	0	2	1	0	0	1
PG&E "mid n/a"	17	18	10	11	21	7	14	7	9	10	22	6
SDG&E "mid -"	0	1	1	3	0	3	2	4	4	0	0	1
SDG&E "mid +"	2	0	2	1	1	1	0	0	0	1	0	0
SDG&E "mid m"	2	1	0	1	0	1	1	2	0	0	1	0
SDG&E "mid n/a"	6	8	7	5	9	5	7	4	6	9	9	9
SCG "mid -"	0	0	1	4	0	4	1	1	0	2	0	1
SCG "mid +"	0	2	0	0	0	0	0	0	1	1	0	0
SCG "mid m"	0	3	3	1	0	0	3	1	2	2	0	4
SCG "mid n/a"	5	0	1	0	5	1	1	3	2	0	5	0

Summary of all IOU custom measure and project ex ante review activities scoring for both the 2015 annual review as well as previously issued 2015 mid-year review:

2015 Annual Rating	Metric 1a	Metric 1b	Metric 2	Metric 3	Metric 4	Metric 5	Metric 6a	Metric 6b	Metric 7	Metric 8	Metric 9	Metric 10	
SCG "-"	100%	67%	80%	71%	50%	100%	100%	75%	100%	83%		57%	
SCG "+"	0%	0%	0%	14%	50%	0%	0%	0%	0%	17%		0%	
SCG "Yes"	0%	33%	20%	14%	0%	0%	0%	25%	0%	0%		43%	
Overall Score	0%	17%	10%	21%	50%	0%	0%	13%	0%	17%	0%	21%	TOTALS
Metric Points	0.50	0.50	1.00	1.08	2.50	1.00	0.50	0.50	1.00	1.00	1.00	1.08	11.66
QA Adders											1.50		1.50
Process Adders					1.00								1.00
Final Points	0.50	0.50	1.00	1.08	3.50	1.00	0.50	0.50	1.00	1.00	2.50	1.08	14.16

Explanations of scoring tables row entries:

- 1. The row labeled with *IOU* "-" lists the percent of custom project reviews undertaken in 2015 where the Commission staff evaluation of the project materials or information indicated that the IOU performance in this metric for the submission did not meet minimum expectations or requirements relative to the metric.
- 2. The row labeled with *IOU* "+" lists the percent of custom project reviews undertaken in 2015 where the Commission staff evaluation of the project materials or information indicated that the IOU performance in this metric for the submission exceeded minimum expectations or requirements relative to the metric.
- 3. The "Overall Score" row indicates how the combination of the three rows of scores (+, -, and yes) sum into a total points multiplier for each metric. Each row contributes to the total based on the row count over the total count for all three rows.
- 4. The "Metric Points" row provides the point value derived from the three scoring rows and the resulting overall score row with the final score constrained between a maximum score of 5 and a minimum score of 1. Even if the overall goes negative, due to the "-" rows overwhelming the total, a minimum score of 1 is assigned.
- 5. The row labeled with *IOU* "Yes" lists the percent of custom project reviews undertaken in 2015 where the Commission staff evaluation of the project materials or information indicated that the IOU performance in this metric for the submission exceeded met minimum expectations or requirements relative to the metric.
- 6. The row labeled with *QA Adders* lists Commission staff points added to the metric based on an evaluation of the overall IOU performance in putting into place quality assurance and/or quality control methods, documents and/or training for staff and contractors in 2015 related to this metric area that are expected to improve the ability of review personnel to identify and cure issues going forward on projects started during 2015 but not yet seen in the custom review activity.
- 7. The row labeled with *Process Adders* lists Commission staff points added to the metric based on an evaluation of the overall IOU performance in putting into place new internal review processes and procedures in 2015 related to this metric area that are expected to improve performance going forward on projects started during 2015 but not yet seen in the custom review activity.
- 8. The final points row indicated the total score for each metric as a sum of the overall score plus the two types of adder points.

Details of other IOU custom measure and project activities scoring:

2015 Annual Rating	Metric 1a	Metric 1b	Metric 2	Metric 3	Metric 4	Metric 5	Metric 6a	Metric 6b	Metric 7	Metric 8	Metric 9	Metric 10	
SCE "-"	83%	33%	25%	69%	29%	55%	83%	82%	92%	67%	33%	47%	
SCE "+"	6%	33%	17%	13%	57%	0%	0%	9%	0%	17%	33%	18%	
SCE "Yes"	11%	33%	58%	19%	14%	45%	17%	9%	8%	17%	33%	35%	
Overall Score	11%	50%	46%	22%	64%	23%	8%	14%	4%	25%	50%	35%	TOTALS
Metric Points	0.50	1.25	2.30	1.10	3.22	1.14	0.50	0.50	1.00	1.25	2.50	1.77	17.03
QA Adders											0.50		0.50
Process Adders	0.50			0.50	0.50					1.50		2.00	5.00
Final Points	1.00	1.25	2.30	1.60	3.72	1.14	0.50	0.50	1.00	2.75	3.00	3.77	22.53
2015 Annual Rating	Metric 1a	Metric 1b	Metric 2	Metric 3	Metric 4	Metric 5	Metric 6a	Metric 6b	Metric 7	Metric 8	Metric 9	Metric 10	
PG&E "-"	94%	65%	57%	62%	75%	78%	74%	67%	84%	68%	50%	70%	
PG&E "+"	0%	25%	13%	21%	25%	17%	19%	14%	11%	26%	0%	22%	
PG&E "Yes"	6%	10%	30%	17%	0%	4%	7%	19%	5%	5%	50%	7%	
Overall Score	3%	30%	28%	29%	25%	20%	22%	24%	13%	29%	25%	26%	TOTALS
Metric Points	0.50	0.75	1.42	1.47	1.25	1.00	0.56	0.60	1.00	1.45	1.25	1.30	12.55
QA Adders											0.50		0.50
Process Adders			1.00	0.50	3.00					1.00		1.50	7.00
Final Points	0.50	0.75	2.42	1.97	4.25	1.00	0.56	0.60	1.00	2.45	1.75	2.80	20.05
2015 Annual Rating	Metric 1a	Metric 1b	Metric 2	Metric 3	Metric 4	Metric 5	Metric 6a	Metric 6b	Metric 7	Metric 8	Metric 9	Metric 10	
SDG&E "-"	57%	67%	56%	57%	0%	71%	80%	67%	75%	67%	0%	50%	
SDG&E "+"	43%	33%	44%	29%	100%	29%	20%	33%	13%	33%	0%	38%	
SDG&E "Yes"	0%	0%	0%	14%	0%	0%	0%	0%	13%	0%	0%	13%	
Overall Score	43%	33%	44%	36%	100%	29%	20%	33%	19%	33%	0%	44%	TOTALS
Metric Points	1.08	0.84	2.23	1.79	5.00	1.43	0.50	0.84	1.00	1.67	1.00	2.19	19.57
QA Adders									1.00		1.50		2.50
Process Adders	0.50	0.50	1.00	0.50						1.00		1.00	4.50
Final Points	1.58	1.34	3.23	2.29	5.00	1.43	0.50	0.84	2.00	2.67	2.50	3.19	26.57

IOU workpaper review activities scoring details for the 2015 annual review:

2015 SCE Annual Rating	Metric 1a	Metric 1b	Metric 2	Metric 3	Metric 4	Metric 5	Metric 6a	Metric 6b	Metric 7	Metric 8	Metric 9	Metric 10	
Workpapers Score	42%	90%	29%	39%	50%	33%	67%	19%	53%	50%	66%	50%	
Workpapers Points	2.12	4.52	1.45	1.93	2.50	1.67	3.33	0.95	2.00	2.50	3.00	2.50	
Workpaper Process	1.31	1.44	1.60	1.15	1.07	1.51	1.16	1.10	1.05	1.22	1.33	1.04	
Process weight	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	TOTAL
Metric Points	0.92	1.73	1.51	1.66	2.00	1.62	1.29	0.51	1.67	2.06	2.42	1.99	19.38
2015 PG&E Annual Rating	Metric 1a	Metric 1b	Metric 2	Metric 3	Metric 4	Metric 5	Metric 6a	Metric 6b	Metric 7	Metric 8	Metric 9	Metric 10	
Workpapers Score	43%	79%	52%	42%	75%	14%	11%	27%	78%	40%	68%	72%	
<b>Workpapers Points</b>	2.57	3.93	2.62	1.96	3.75	0.71	0.56	1.33	3.91	1.00	3.39	2.50	
Workpaper Process	1.23	1.00	1.19	1.18	1.58	1.30	1.20	1.17	1.12	1.94	2.01	1.44	
Process weight	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	TOTAL
Metric Points	1.06	1.46	2.12	1.70	2.99	1.00	0.50	0.64	2.94	1.33	2.92	2.13	20.79
2015 SDG&E Annual Rating				Metric 3	Metric 4			Metric 6b		Metric 8		Metric 10	
Workpapers Score	43%	5%	44%	42%	25%	68%	17%	36%	58%	4%	23%	37%	
Workpapers Points	2.13	0.23	2.22	2.12	1.25	3.41	0.83	1.82	2.88	0.22	1.17	1.85	
Workpaper Process	1.30	1.28	1.18	1.31	2.03	1.45	1.39	1.42	1.13	1.86	1.83	1.70	
Process weight	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	TOTAL
Metric Points	0.92	0.50	1.86	1.84	1.53	2.73	0.52	0.84	2.28	1.00	1.40	1.80	17.22
2015 SCG Annual Rating	Metric 1a	Metric 1b	Metric 2	Metric 3	Metric 4	Metric 5	Metric 6a	Metric 6b	Metric 7	Metric 8	Metric 9	Metric 10	
Workpapers Score	100%	50%	50%	42%	75%	67%	10%	40%	86%	100%	50%	67%	
Workpapers Points	5.00	2.50	2.50	2.08	3.75	3.33	0.50	2.00	4.29	5.00	2.50	3.33	
Workpaper Process	2.49	2.75	2.05	2.51	3.39	2.04	2.72	2.87	1.89	2.80	2.83	2.55	
Process weight	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%	TOTAL
Metric Points	1.69	1.34	2.21	2.36	3.52	2.50	0.98	1.29	2.74	3.57	2.72	2.83	27.75