PUBLIC UTILITIES COMMISSION

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Date: August 21, 2017

To: San Diego Gas and Electric Company
From: Commission Ex Ante Review staff

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

Subject: Final 2016 Efficiency Savings and Performance Incentive (ESPI) Ex Ante Review

Performance Scores



The scores¹ contained in this memo are final, and San Diego Gas and Electric Company (SDG&E) shall use the total final ex ante review performance points from the table below together with the weighting² for each category to calculate the 2016 ESPI ex ante review component award.

SD	G&E 2016 ESPI Ex-Ante Review Performance Scores and Points		Workp	apers		Custom							
Metric	Metric Area of Scoring	Max Points	Max Percent of Total Points	2016 Score	2016 Points	Max Points	Max Percent of Total Points	2016 Score	2016 Points				
1	Timing and Timeliness of Submittals	5	10%	3.24	3.24	5	10%	3.34	3.34				
2	Content, Completeness, and Quality of Submittals	15	30%	1.89	5.66	15	30%	2.23	6.69				
3	Proactive Initiative of Collaboration	5	10%	2.72	2.72	5	10%	3.00	3.00				
4	Due Diligence and Quality Assurance/Quality Control Effectiveness	12.5	25%	2.51	6.26	12.5	25%	3.16	7.90				
5	Responsiveness to Needs for Process and Program Improvements	12.5	25%	1.63	4.08	12.5	25%	2.87	7.18				
Total		50	100%		21.95	50	100%		28.11				

The metric scoring area descriptions are expanded in Attachment A. The final category scores are explained in more detail below as well as in Attachments B through D to this memo. The weighting for the custom and deemed savings categories will be published by Commission staff in June 2017 after the utilities' final 2016 savings claims are filed.

Custom Projects

In the area of ex ante review for custom projects, on a positive note SDG&E staff continues to be proactive in bringing forth topics for thoughtful discussion, and communicates a sincere desire to improve its portfolio performance as well as ESPI score. SDG&E's Engineering Department staff includes the program staff in the weekly project discussion calls so that the utility program staff may better understand Commission directions, policies, and staff review expectations. However, areas in need of improvement are those significant concerns that Commission staff highlighted in prior years that still remain. Those concerns include: proper tracking of projects selected for ex ante review, lack of evidence of program influence, inadequate calculation methodologies and analysis approaches, and insufficient measurement and verification plans.

Tackling program influence will require that SDG&E staff, in consultation with Commission staff and its contractors, develop review procedures and eligibility criteria that must be applied during the early project identification and development stages. Program design and rule changes will need to be considered in this process. This requires coordination and collaboration among SDG&E's engineering, product management, and program management staff, as well as third party implementers, to acknowledge the problems, develop a workable solution, and take action to implement the solution.

¹ Pursuant to Decision (D).13-09-023, D.15-10-028 and D16-08-019, Commission staff and consultants completed the 2016 Efficiency Savings and Performance Incentive (ESPI) mechanism ex ante review performance scoring as prescribed in Table 3 of D.16-08-019. D.16-08-019 established a consolidation of categories of metrics on which the utilities are evaluated and further directed in Ordering Paragraph 19 that the ESPI scores "shall be weighted for the utility program administrators based on the proportion of deemed savings and custom measures in each utility's portfolio".

² D16-08-019 Ordering Paragraph 19 specifies that "Energy Savings Performance Incentive scores shall be weighted for the utility program administrators based on the proportion of deemed savings and custom measures in each utility's portfolio." Therefore the final score cannot be determined until the utilities have submitted and Commission staff has compiled their final 2016 savings claims and published for each utility the weights for the custom and deemed categories.

Although Commission staff continued to observe some improvements in SDG&E's 2016 custom ex ante technical review activities, SDG&E's improved efforts must further penetrate the breadth of custom portfolio activities. Commission staff has seen some encouraging indicators in the area by SDG&E implementation staff, however more is needed.

In a related matter, during 2016 Commission staff became aware that some individual third party implementer contracts include very high and insufficiently limited compensation rates based upon first year gross ex ante savings estimates. Although this does not directly factor into the ESPI scoring, the Commission staff believes it to be a significant contributing factor to the lack of improvement observed in both the ex ante review and ex post evaluation over many years. The misalignment between the use of first year claimed gross savings for implementation compensation and net savings for portfolio cost-effectiveness appears to be a primary reason why certain ex ante issues highlighted in past ESPI memos (e.g., baseline, measure eligibility) continue to persist. While SDG&E has fewer third party contractor implemented projects than other utility Program Administrators (PA), staff believes this issue is still relevant.

Workpapers

On a positive note, Commission staff observes SDG&E staff efforts to resolve issues noted during previous ESPI reviews and to support streamlining of the workpaper submission process. We also observe SDG&E staff efforts to directly adopt values within the central ex ante database. SDG&E staff seeks out information, input and clarifications for its deemed measure workpaper development activities although these activities are limited in scope. In general, Commission staff finds that SDG&E staff is receptive to collaboration on their workpaper activities and has worked with Commission staff in good faith. In areas in need of improvement, SDG&E continues to monitor workpaper submissions made by other Program Administrators (PA) and routinely adjusts their measure values to match approved submissions made by other PAs. While this business approach supports Commission staff efforts to create statewide measures and is effective at streamlining SDG&E's level of effort to generate claims savings values, it leads directly to a large time lag between Commission-directed deadlines and the actual submissions made by SDG&E. Additionally, SDG&E is under the mistaken impression that they may retire workpapers for which they continue to claim savings. This effort overreaches the Commission staff guidance to adopt values within the ex ante database by failing to submit workpaper descriptions that justify how the measures are being implemented within programs. Commission staff generally observed that it is difficult to keep track of the current programs and measures in the SDG&E portfolio. To wit, we have not yet received a response to a request we made in December for a list of an active workpapers.

The PAs provide ratepayer funding support to the California Technical Forum (CalTF) as well as invest staff and consulting resources participating on, and presenting to, the CalTF. Over the past two years, the PAs have utilized the CalTF as a resource for the review and input to their workpaper development process. Commission staff supports the PAs'efforts to garner additional input, review and quality assurance feedback on their workpaper activities, such as those available through the CalTF. However, Commission staff also notes that although the CalTF has implemented a process that has the potential to improve the level of due diligence and thus output quality of the PA workpaper efforts coordinated through the CalTF, the new process has yet to provide the expected improvement in terms of addressing primary ex ante development issues. An example of this is provided within this memo below. Note that this is just an observation offered to improve the expenditure of ratepayer funds; it did not influence the ESPI score.

Addressing these concerns will require SDG&E to double their efforts in order to keep up with Commission deadlines. If SDG&E's deemed measure business model continues rely on others to submit and gain approval for measures, then they need to be ready to respond immediately when workpapers are approved. As well, some course correction is needed to align SDG&E's definition of "workpaper retirement" with the Commission's requirements for information regarding deemed program offerings.

2016 ex ante activities, Commission staff findings

Custom Projects Ex Ante Reviews Discussion

In early 2016, Commission staff revised the custom projects ex ante review disposition template to include a categorization of the actions that staff requires the utility to address for the project under review. Table 1 summarizes the 41 action items requested of SDG&E across eight dispositions issued between January 1, 2016 and December 31, 2016. In general, the utility should be applying the findings from Commission staff's ex ante review dispositions to other projects in various stages of development

in the custom portfolio. Thus, the seemingly low number of dispositions belies the more significant portion of the custom portfolio of activities impacted by those dispositions.

Overall, the areas of general categories of issues noted has not changed from the 2016 mid-year ESPI feedback, or ESPI review in previous years. In some cases, the number of action items identified in a specific issue area may seem low even though that issue area remains a significant concern and requires much improved action by SDG&E. For instance, as shown in Table 1, only a small percentage of the issues are associated with the Issues Related to Net Impacts and the Documentation Issues areas; however these areas still require attention from SDG&E.

CPUC staff acknowledges that the projects were not selected at random. Our selections drew upon the type of projects that we had found issues in the past or expected to find deficient for various reasons. We also selected project to determine whether the utility has corrected issues from similar project types that CPUC staff reviews identified in the past.

Commission staff recognizes that SDG&E staff identifies projects with potential issues and actively engages us in discussions such as with SDG&E's self-generation analysis calculator, baseline determinations in the Savings By Design tool, application of appropriate DEER building types, and measure type classifications. Moving forward, Commission staff recommends that SDG&E staff track all of their custom project internal reviews and results. This would better allow SDG&E staff to identify program activities which need closer scrutiny and modification. In addition, this would give SDG&E an opportunity to show Commission staff the results of their internal review processes and procedures, and how they are working to improve and follow our guidance.

Table 1: Summary of Categorized Action Items

Issue Area	Action Category	Quantity	Percent of Total
Issues Related to Gross Savings Impacts	Analysis Assumptions	5	12.2%
	Calculation Method	6	14.6%
	Calculation Tool	0	0.0%
	M&V Plan	3	7.3%
	Revise to Match CPUC Savings Estimate	3	7.3%
	Subtotals	17	41.5%
Process, Policy, Program Rules	Baseline	6	14.6%
	CPUC Policy	0	0.0%
	Did Not Follow Previous CPUC Guidance	0	0.0%
	Eligibility	3	7.3%
	ER Preponderance of Evidence	1	2.4%
	EUL/RUL	4	9.8%
	Fuel Switching	0	0.0%
	Incentive Calculation	3	7.3%
	Maintenance	0	0.0%
	Measure Cost	1	2.4%
	Measure Type	1	2.4%
	PA Program Rules	0	0.0%
	Repair	0	0.0%
	Self-Generation	0	0.0%
	Subtotals	19	46.3%
Documentation Issues	Inadequate Response to Previous EAR	0	0.0%
	Missing Documents	4	9.8%
	Missing Required Information	0	0.0%
	Project Scope Unclear	0	0.0%
	Subtotals	4	9.8%
Issues Related to Net Impacts	NTG	0	0.0%
	Program Influence	1	2.4%
	Subtotals	1	2.4%
	Grand Total	41	100.0%

Project Submittals

Throughout 2016, SDG&E staff made a good effort to comply with the revised Custom Measures and Projects Archive (CMPA) Bi-monthly projects list submission process, although completeness of

information warrants improvements. Commission staff observes that some fields continue be left either empty or marked "unknown." SDG&E needs to ensure that all required fields are populated with the requested information.

Although SDG&E use of the Commission staff checklist has somewhat reduced the issues associated with incomplete project documentation submissions, complete documentation submission continues to be an issue. SDG&E does not provide technical review documents for any new construction project as well as for small custom projects that use scaling of DEER measures for the ex ante impacts. SDG&E provides limited technical reviews that are embedded in their application review and approval workbooks. Going forward, Commission staff expects SDG&E to improve the breadth and depth of its reviews and to follow the outline that Commission staff recently provided as part of the disposition on SDG&E_0144.

In the past, Commission staff expressed concern over SDG&E staff's tracking of projects selected for ex ante review. For example, project SDG&E_0127, a Savings By Design new construction project, was selected from the September 6, 2016 CMPA List from the projects listed as "Ready for Review." After well over half a year since its selection for review, Commission staff is still waiting for the initial documentation upload to the CMPA and suspects that the SDG&E staff has lost track that the project was selected for review. Another example is project SDG&E_0149, an RCX project, that was selected for ex ante review from the November 7, 2016 CMPA List with a status of "construction complete." The project later appeared in the December 19, 2016 CMPA List with a status of "incentives paid." SDG&E failed to flag the project as undergoing an ex ante review and paid the incentives without first obtaining either staff's final approval or review waiver. Other similar instances in prior years are X098, X162, X445, and X539. Project X539 represents an instance where SDG&E staff disagreed with Commission staff's opinion on the project's measure and proceeded to pay incentives and claim the impacts. In 2016, Project X539 was selected as part of the Commission's ex post impact evaluation and the ex ante review opinion regarding the measure was upheld.

Lastly, SDG&E staff provided a timely and detailed response to Commission staff's data request for information on third-party contracts and payments.

Program Influence

Program influence needs to demonstrate that the energy efficiency program caused a net benefit for the ratepayers by motivating the customer to implement a costlier more efficient project than they were otherwise planning to implement absent the program intervention. Program influence may be in the form of either information or financial support or both. The information may be providing suggestions of alternative designs or product not already under consideration, or analysis of alternatives to demonstrate how the customer requirements can be met or exceeding by selecting an alternative. Financial influence is when the availability of incentive support to the customer directly becomes the deciding factor in the selection of a more efficient alternative solution to the one or ones that would otherwise be selected.

Issues related to program influence directly affect the scoring on ESPI Metrics 2, 4, and 5. Commission staff expects that SDG&E staff will make a more substantial effort to provide documentation that demonstrates what the customer was planning to do when 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.

Commission staff expects to find 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. When there are substantial indicators or evidence both for and against a program influence positive determination, Commission staff expects to see a discussion of the evidence and why the evidence for program influence outweighs the evidence against. Too often project documentation provides little or no evidence of program influence beyond either a list of meetings attended or a report with a savings calculation also containing an inventory of contact dates. Most often the submissions either overlook the direct evidence against program influence or fail to discuss the relative importance of the various evidence supplied, and conclude that the case for program influence is established from a one-sided presentation of minimal underwhelming statements attesting to program influence.

For example, the documentation submitted for SDG&E-0086 did not discuss the project's evolution and lacked any supporting information that the program influenced the proposed chiller replacements.

Commission staff found that the documentation appeared to indicate that the project was already underway when the program pre-application was signed.

SDG&E needs to find ways to change program eligibility rules or incentive rates to reduce the dollars paid via incentives to customers for projects planned to be implemented independent of the program activity. For example, Savings By Design program offers incentives for exceeding T24 by a margin and pays the same incentive rate for measures of a similar end use. This program could remove standard practice measures that exceed T24 from the margin and savings calculation and/or offer much reduced incentives for lower efficiency measures compared to higher efficiency. Alternatively, the minimum margin above T24 could be increased to account for standard practice at least by building type or size. For chiller replacements in retrofit projects, a standard or typical practice should be established as the baseline. For packaged HVAC, incentives could be offered only for units at a minimum 20% or more above code. For LED lighting, higher efficacy products should be offered higher incentives with a minimum efficacy requirement that selects the upper half of the market rather than providing incentives for every product available.

Baseline, Industry Standard Practice, and Measure Type Assignments

Commission staff observes that issues with baseline, analysis assumptions, and calculations methods remains a weakness in some of the projects staff examined in 2016. For example, in SDG&E_0063, SDG&E_0064, and SDG&E_0126, the proper code baselines were not recognized and applied. Along this same line in both SDG&E_0126 and SDG&E_0125, SDG&E staff did not recognize mandatory code requirements to determine measure eligibility. This is especially troublesome for SDG&E_0126 as a new construction project where all measures are required to exceed Title 24 requirements. The documentation submitted for SDG&E_0126 failed to demonstrate how the proposed measures and savings calculations exceeded code requirements. For SDG&E_0125, a high profile On Bill Financing project, Commission staff found that the proposed replacement of fractional horsepower motors was improperly classified as a Retrofit Add-on (REA) measure type using an existing conditions baseline and additionally that the EUL values for the REA measures types were not determined following prior Commission staff guidance.

Calculation Methods

For project SDG&E_0077, Commission staff found that the savings calculations did not reflect the existing pump variable frequency drive controls even though the SDG&E submitted SCADA data demonstrated that the pumps operated within four different speed ranges. For SDG&E_0125 Commission staff found that SDG&E staff had not sufficiently scrutinized and questioned the implementer's analysis and M&V plans.

<u>Contracting issue- Third-party Performance Payments:</u>

In 2016, Commission staff became aware that some projects seemed to have unexpectedly large performance payment rates for third-party contractors. Commission staff has concerns that the high payment rates, especially for medium and large projects, may provide negative incentives to solving the problems discussed earlier. Third-party performance payment caps on a per application basis are not included in the current third-party contracts, where the customer incentive is capped. Uncapped thirdparty payment terms, for medium and large projects, can result in performance payments to third-party implementers that exceed incentive payments to customers - in some cases significantly. Commission staff further believes that uncapped per project performance payments using payments rates based on first year gross savings encourages pursuit of overly optimistic savings claims. Commission staff believes that the existing third-party compensation structure has contributed to recurring problems such as incorrect baseline assignments, unrealistic ex ante savings claims and pursuit of projects with little or no evidence of program influence; the very same concerns that we have raised year after year. The Ex Ante review team's observation is that the pursuit of large performance payments has created an environment in which implementers have tended to maximize the ex ante savings estimates at the expense of compliance with CPUC policy and appropriate and accurate assessment of program influence, measure eligibility or classification and savings impacts.

Commission staff believes that the existing third-party contract terms and conditions do not promote net and lifetime savings attainment³. Commission staff also believes that recent policy changes regarding

³ This concern is not exclusive to third-party contracts. Commission staff believes that basing both utility staff's internal goals as well as customer incentives and third-party implementer payments on first year gross savings cannot result in a focus on long term net portfolio performance improvement.

the use of existing conditions baselines may increase the first-year savings impacts significantly for certain measures resulting, under current contract terms, in a directly proportional increase in third-party performance payments and customer incentives with little accompanying increase in net benefit to the ratepayers. Although staff has emphasized these problems with the PAs over the past year and requested action, SDG&E staff has not provided so much as an outline of a plan to address the problem in a timely manner.

Although Commission staff agrees that third-party implementer activities deserve support, many of the payments observed do not appear to be reasonable or commensurate with the effort, cost or contributions made to the projects. In most cases examined, the third-party implementer is not performing the retrofit or projects work but is undertaking marketing activities to identify the project, sometimes design assistance or vendor product analysis, technical analysis to support submitting the project to the PA for an incentive, and pre/post installation analysis and measurements (if required) to estimate savings. Examination of the submitted documents for these projects does not demonstrate levels of effort that justify the levels of payments and, in many cases the quality of the work and customer plans independent of the third-party implementer do not support a payment for "performance."

Workpapers Ex Ante Reviews Discussion

In 2016 Commission staff began to hold regular meetings with each PA, typically every other week, to discuss topics related to development of workpapers and deemed measures. SDG&E staff has been proactive in their preparations for these meetings, typically providing an agenda and meeting notes which contribute to productive discussions. In general, these meetings have focused on very specific questions that show SDG&E staff's attempts to understand Commission staff direction and comply with the minimally acceptable level of effort. For example, apparently based on Commission staff feedback at the mid-year of 2016, SDG&E staff has recently been proactive about identifying low contribution and low savings measures and retiring the workpapers that cover these measures. See the section "Notable Accomplishments" below for some specific examples of areas where SDG&E's efforts are meeting Commission staff expectations as defined in the ESPI metrics. However, Commission staff remains concerned that for several measure groups with large portfolio contributions, the SDG&E staff workpaper submission efforts have been unsuccessful at meeting our expectations. See the section "Areas of Concern" below for some specific examples of areas where SDG&E staff's efforts fall far short of Commission staff expectations as defined the ESPI metrics.

Example Notable Accomplishments:

Commission staff has noted in previous ESPI discussions that SDG&E staff was non-responsive to several "preliminary" workpaper reviews. In response to this, SDG&E staff developed a detailed action plan based on the workpapers that represent the largest claimed savings, set internal deadlines, and worked towards their plan to be responsive. In a similar vein, SDG&E staff created templates for a "short form" workpaper which is tailored to the business model of adopting work that is already approved by Commission staff. SDG&E staff submitted several examples to Commission staff, collaborated with us on revisions, and has started using the approved "short form" submission process to streamline both their work and ours. Another commendable aspect of SDG&E's action plan has been their identification and retirement of four workpapers which are no longer used in programs.

SDG&E has also followed through on CPUC staff direction for additional work and submission for several workpapers on various topics including the July 2016 LED disposition, the commercial evaporator and condenser coil cleaning, the guest room packaged terminal air conditioners & heat pumps, the space heater boilers, the LED refrigeration case lighting, and etc. Several of these workpapers required updates to reflect 2013 Title 24 weather data and/or compliance with previous dispositions. SDG&E staff worked with other PA staff to toward these requirements. Similarly, SDG&E has followed our direction to retire workpapers when their measures are no longer offered. Of particular note is SDG&E staff's work regarding the Residential Efficient Fan Controller workpaper. SDG&E staff submitted a workpaper that includes modelling per DEER methods; although Commission staff chose not to perform a detailed review, our preliminary review showed that SDG&E staff's work complies with Commission staff direction and guidance.

Example Areas of Concern:

There are numerous areas where SDG&E staff's attempts to incorporate CPUC staff direction fall short. Most notably, SDG&E staff has spent effort significant amount of time in 2016 dealing with issues that

were brought up in 2015 or earlier. Commission staff appreciates SDG&E's efforts to improve workpaper submissions as requested in previous ESPI reviews, however, their attempts to "catch up" appears to have impacted SDG&E's ability to complete directed updates required the DEER 2017 rolling portfolio submission deadline on January 1, 2017. In accordance with the rolling portfolio decision, SDG&E was required to submit workpapers updated to reflect DEER2017 prior to January 1, 2017. SDG&E staff submitted a workpaper plan showing that it is offering measures from 12 workpapers that were affected by DEER2017, but only submitted one workpaper by the January 1, 2017 deadline. Other areas in which SDG&E has fallen short on their submissions include implementation data for energy efficient refrigerators, large packaged commercial air conditioners and heat pumps, residential duct testing and sealing, EnergyStar room air conditioners, and low-wattage LED fixtures (LED fixtures were covered by the July 2016 disposition).

As noted in previous ESPI reviews, SDG&E still seems to lack understanding of when a workpaper is required. Workpapers are required for various reasons. In the simplest case, in which all ex ante values have been previously approved, such as through adoption into DEER or through approval of another PA's workpaper, it is not acceptable to simply adopt another PAs workpaper or declare the use of DEER values. The PA must still provide supporting documentation and justification of how measures are implemented in the PA's own (often substantially different) programs. In 2016, SDG&E notified Commission staff that they had retired more than 10 workpapers because they had adopted measures that were available through the ex ante database or were included in other PAs workpapers. However, this also meant that SDG&E did not provide any information to Commission staff about how these measures were being included in their own programs. Commission staff appreciates SDG&E's desire to directly adopt measures in the central ex ante database, but this may not be equated with retiring workpapers. Instead, a "short form" workpaper is required at a minimum.

Finally, there are 11 workpapers with unresolved preliminary reviews remaining from 2015. These 11 workpapers were submitted in April 2015 and Commission staff issued preliminary reviews for them shortly after submission. Furthermore, these 11 reviews were also identified in the 2016 mid-year review. Commission staff emphasizes that these submissions are not approved and the workpapers were not re-submitted in 2016. According to CPUC direction, deemed measures may not be included in programs unless workpapers for those measures have been submitted by the PA and approved by Commission staff.

The PAs have utilized the CalTF as a resource for workpaper development. Commission staff acknowledges that the ESPI process is not an evaluation of the CalTF, however, the PAs have chosen to devote resources to participate in, and provide funding to the CalTF; this costs both ratepayer dollars and PA staff and consultant resources. For this reason Commission staff believes it is incumbent upon the PAs to guide the CalTF process in a manner that results in the desired and expected improvements to the overall workpaper ex ante development activity. Commission staff observes similar problems with workpapers and workpaper development efforts that have utilized the CalTF review process as have been noted over several years of ESPI memos. Commission staff agrees that a separate, collaborative, review and development body, such as the CalTF, could improve and expedite workpaper development and review. For example, SDG&E staff worked with Commission staff ex ante consultants and the CalTF in an effort to develop a workpaper for a newly available, permanent magnet synchronous motors (PMSM) designed for grocery refrigerated cases. After the CalTF review, SDG&E staff submitted a draft of the workpaper to Commission staff for early review. During the review the ex ante team observed that the technologies proposed in the workpaper were not yet readily available from the manufacturer. Furthermore, the workpaper proposed that there was no incremental cost associated with a PMSM compared to a standard practice motor, raising the question of why incentives were needed. The ex ante team suggested that a pilot program might be a better approach given the lack of standing inventory and zero incremental cost. Eventually, SDG&E staff informed Commission staff that they had chosen not to develop the workpaper further and, instead, offer the measure through their custom programs. Commission staff acknowledges that substantial experience and knowledge in both technical and policy subject areas are needed to review proposals for a deemed measures. Ideally, the CalTF would be able to identify programmatic and policy concerns, such as those associated with the draft PMSM workpaper. In order for the CalTF to be successful, PAs should provide guidance to ensure that input and comments from the CalTF are oriented toward addressing the most critical ex ante review issues. This will require that the CalTF undertake a more in-depth review and critique of workpaper assumptions, analysis methods and results. Additionally, as noted in the third-party contracting discussion, the use of CalTF member reviewers who have a financial stake in the outcome of the review presents a potential conflict that may prevent important issues from being addressed by their review. Commission staff suggests that the CalTF may need to institute procedures or rules such that potentially conflicted members neither drive the review process of such workpapers nor should they participate in "voting" relative to such a workpaper.

The Scoring:

The 2016 ex ante review performance score was developed using a detailed scoring by metric for each directly reviewed work product (i.e., workpaper and custom project), as well as a scoring of the utility's internal due diligence processes QA/QC procedures and methods as well as program implementation enhancements to support improved ex ante values. Attachment A summarizes the metrics adopted in D.16-08-019 for 2016 and beyond as well as the Commission staff developed scores and points for 2016. D.16-08-019 also directed that the custom and workpaper scoring be weighted together into a final score based of the PA total claims for custom and deemed activities, respectively. The weights for custom and deemed scores will be developed and published by Commission staff in June 2017 based upon the PAs filed final 2016 savings claims.

In accordance with D.16-08-019, the IOUs' ex ante activities are assessed against a set of five 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 the 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 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.

As with the 2015 ex ante review performance scores, the final scores were "built-up" from a metric-by-metric assessment of each reviewed work product. It is Commission staff's expectation that this detailed scoring approach, along with the detailed qualitative workpaper and custom project level feedback, is consistent with the direction provided in D.16-08-019. We believe this scoring approach provides specific guidance to the utilities on how to improve their ex ante due diligence and scores moving forward.

A "Direct Workproduct Review" portion of each metric score was developed based upon the individual scoring of dispositions issued for custom project or workpapers. Each reviewed utility work product was first determined to have components either applicable or not applicable to a metric. 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 was 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 custom and workpaper work product review scores. Next, utility-specific review process "Review Process Score Enhancements" were developed for each applicable metric based on observed policy and technical review or program implementation processes and procedures developed and under implementation in 2016 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.

Individual custom project level disposition scoring is provided in Attachment B and individual workpaper level disposition scoring as well as related workpaper activities is provided in Attachment C.

In the custom scoring process Commission staff added points as "Enhancements" in the area of Policy/Technical QA/QC for Metrics 2, 3, 4 and 5 to reflect SDG&E staff's positive efforts in these metric areas as discussed earlier. Those initiatives include early project development stage review procedures and processes. Although these efforts have not yet reflected themselves into the dispositions scores Commission staff believes recognition of the efforts of SDG&E technical and policy review staff is warranted.

⁴ 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")

Commission staff has also observed similar efforts in the program implementation area and thus "Review Process Score Enhancements" were assigned as an "Implementation Increase" for metrics 2, 3, 4 and 5. This evidence of improvement on the program implementation side is welcomed and Commission staff commends SDG&E implementation staff for taking such actions and encourages SDG&E implementation staff to continue to enhance efforts in this area so as to allow further improvement in performance and scoring during 2017.

Workpaper scores are also comprised of the two components, "Direct Workproduct Review Score" and "Review Process Score Enhancements." Direct review items include workpaper dispositions, preliminary reviews, reviews of ex ante data submissions and direct interaction between Commission and PA staff on workpaper development issues. Process issues represent critical deemed measure development topics where Commission staff believes improvement is needed or improvement has occurred, but those activities are not necessarily reflected in the areas of direct review.

To produce final scores, the individual metric scores for the two workpaper contributing areas were added together, using a 50% weight for the process issues score. The 50% weight given to the process review has the effect of being a "score enhancement" or increase to the direct review score. The separate process scoring provides an avenue for assessing overall QA/QC processes and procedures put into place by SDG&E.⁵ Furthermore, within each contributing area (direct and process review areas), Commission staff also assigned weights for individual items as a way to reflect greater importance of different individual review items. For example, Commission staff assigned a weight of 1.0 to detailed reviews of workpapers submitted during 2016. On the other hand, Commission staff assigned a weight of 0.5 to reviews of ex ante data submitted during 2016. Full workpaper reviews received a weight of 1.0 to reflect the greater scope of the review compared to only a data review.

Attachment D contains custom and workpaper summary tables showing the components and total scores and points for each metric in each of the two component areas of scoring described above.

If you have any questions or comments about the feedback or final scores, please contact Peter Lai (peter.lai@Commission.ca.gov). Note that pursuant to D.13-09-023, Commission staff will schedule a time with SDG&E staff to discuss its final scores.

⁵ 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."

			Workp	apers			Cust	tom	
Metric		Max Points	Max Percent of Total Points	2016 Score	2016 Points	Max Points	Max Percent of Total Points	2016 Score	2016 Points
1	Timing and Timeliness of Submittals	5	10%	3.24	3.24	5	10%	3.34	3.34
	Timely submittals: all lists, inventories, plans, studies, workpapers and project/measure documentation; timing and advanced announcement of submittals (spreading out submission when available rather than holding and turning in large batches); timely follow-up PA responses to review disposition action items including intention to submit/re-submit with proposed schedule.								
2	Content, Completeness, and Quality of Submittals	15	30%	1.89	5.66	15	30%	2.23	6.69
	Completeness, appropriateness, comprehensiveness, accuracy, and clarity of submittals. Submittal adherence to Commission policies, Decisions, and prior Commission staff dispositions and/or guidance. Do the submittals include all materials required to support the submittal proposed values, methods and results. Is the project or measure clearly articulated. Are proposed or utilized methods clearly explained including step-by-step method or procedure descriptions. Will the proposed or utilized approach provide accurate results. Are all relevant related or past activities and submittals appropriately noted or disclosed, analyzed or discussed. Are the pros/cons of alternate possible approaches or conclusions discussed to support that the chosen one is most appropriate.								
3	Proactive Initiative of Collaboration	5	10%	2.72	2.72	5	10%	3.00	3.00
	PA efforts to bring either measures, projects, studies, questions, and/or savings calculation methods and tools to Commission staff for discussion in the early formative stages, before CPUC staff review selection. In the case of tools, before widespread use in the programs. Commission staff expects collaboration among the PAs to develop common or coordinated submissions and for the PAs to undertake joint or coordinated planning activities and study work. The PAs are expected to engage with CPUC staff in early discussions on unique or high profile, high impact measures or projects before program or customer commitments are made. The PAs are expected to engage with CPUC staff on planning and execution of studies that support proposed offerings, tools, or determination of proposed baselines or other programmatic assumption that can impact ex ante values to be utilized.								

4	Program Administrator's Due Diligence and Quality Assurance/Quality Control Effectiveness	12.5	25%	2.51	6.26	12.5	25%	3.16	7.90
5	Commission staff expects the PA to have effective Quality Control (QC) and Quality Assurance (QA) processes for their programs and measures. The PAs are expected to have a pro-active approach to reviewing existing measure and project assumptions, methods and values and updating those to take into account changes in market offerings, standard practice, updates to DEER methods and assumptions, changes to codes, standards and regulations, and other factors that warrant such updates. The depth and correctness of the PA's technical review of their ex ante parameters and values, for both Core, Local Government and Third Party programs, are included under this metric. The depth and correctness of the PA's technical review of their own staff and subcontractor work related to supporting deemed and custom measure and project submissions are included in this metric. Evidence of review activities is expected to be visible in submissions so that Commission staff can evaluate the effectiveness of the PA internal QA/QC processes. Program Administrator's Responsiveness to Needs for Process and Program Improvements	12.5	25%	1.63	4.08	12.5	25%	2.87	7.18
	This metric reflects the PAs ongoing efforts to improve their internal processes and procedures resulting in increased ex post evaluated gross and net savings impacts. Commission staff looks not only to the PA's internal QC/QA processes, but also whether individual programs and their supporting activities incorporate and comply with CPUC policies and prior Commission staff disposition guidance in their program rules, policies, procedures and reporting. This includes changes to program rules, offerings and internal operations and processes required to improve overall review and evaluation results. A particularly important area for focus is the improvement of net portfolio performance via the removal of measures and or participation with low program attribution (NTG).	12.3	23/6	1.03	4.00	12.5	23/6	2.07	7.10
Total		50	100%		21.95	50	100%		28.11

2016 Efficiency Savings and Performance Incentive Custom Projects Ex Ante Performance Scores

The table below lists the ID numbers associated with each disposition. The PA may refer to the individual dispositions for more detailed descriptions of the specific actions staff required for each application. All custom project were scored using the old metric system since most scoring was completed before the new metrics were adopted, The scores from the old metrics were mapped into the new metric using the relationship provided in Appendix A of the ALJ Ruling dated 8 June 2016 in R.13-11-005 and included at the end of this Attachment. 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,

Summary Count by Old Metric

 2
 3
 4
 5
 6a
 6b
 7

 3
 2
 0
 1
 3
 3
 0

- 'Yes' indicates meeting expectation; neutral (midpoint) scoring impact on a metric,
- 'No' indicates the review feedback is not applicable to a metric.

							⊢ Ŭ		⊢ Ŭ	-		_	-
No	6	7	0	3	7	0	1	2	3	7	3	5	
+	1	0	1	0	0	0	0	0	0	0	1	0	
-	0	0	4	3	1	7	4	3	5	0	3	2	
				Sc	oring	Detail	by Old	d Meti	ric				
CPUC ID	1 a	1b	2	3	4	5	6a	6b	7	8	9	10	CPUC Staff Summary Comments of Disposition
0062 1st	No	No	-	No	No	-	Yes	Yes	No	No	+	No	PA did not provide a completed CPUC Staff Checklist and written PA Technical Review, only notes and corrections in the implementer's savings workbook. PA made appropriate corrections to the implementer's scaling of a DEER measure to determine the project ex ante impacts.
0063 1st	No	No	-	No	No	-	Yes	Yes	-	No	No	No	PA did not provide a completed CPUC Staff Checklist and only notes and corrections in the implementer's savings workbook and along with brief write-ups in the application approval PA workbook, Application & Contract Review tab. PA made an appropriate correction to the implementer's code baseline to determine the project ex ante impacts, but used the full-load performance efficiency in lieu of the annual performance efficiency value (IPLV) and the incorrect Title 24 code Path values. In addition, the peak demand reduction did not use the DEER peak demand period.
0064 1st	No	No	-	No	No	-	No	No	-	No	Yes	No	PA did not provide a completed CPUC Staff Checklist and only a brief technical write-up in the application approval PA workbook, Application & Contract Review tab. PA attempted to develop appropriate savings values from available DEER values (which were not developed for Path B - VSD equipped - chillers) however the methodology did not adjust for the difference between the DEER measure and the Path B code baseline values. After discussions on issues related to the appropriate method to develop Path B results (and the fact that DEER did not contain Path B values) the PA began to take appropriate corrective action by obtaining performance data from the manufacturer so that appropriate performance maps could be developed. Commission staff plans to utilize that data to develop performance maps and appropriate Path

													B values for the PA to use (as well as to add to DEER). PA usually has approached Commission staff earlier on problems like this one where there is a question as to how (if possible) to apply existing DEER values correctly. In this case, once the issue was identified by Commission staff the PA began to take appropriate action.
0077 1st	No	No	Yes	Yes	No	-	-	Yes	No	No	No	ı	Reasonably complete and comprehensive submission. However, proposed an in situ baseline for an ROB measure type that is an inappropriate baseline for the ROB measure type. This leads to incorrect savings calculations. The PA needs to study CPUC accepted measure types, learn the correct baseline associated with each and ensure the project documents are accurate in this respect.
0077 2nd	No	Yes	Yes	Yes	No	Yes	Yes	-	-	Yes	No	Yes	Prompt, comprehensive and generally appropriate response provided to the first EAR. The proposed single point analysis for a VFD driven pump with a variable flow load profile is inappropriate. The PA's statement that waiting for pumps to fail or degrade to a point of non-functionality is ISP is an unfounded statement which cannot be accepted as standard practice without more significant documentation.
0086 1st	No	No	Yes	-	No	-	1	1	No	No	1	No	Comprehensive description of the site's central plant and decision making, EE program influence, to decommission the TES system are lacking. PA appears to argue that the TES has not been operating for years, contrary to what a prior ex post impact found for the same site. PA technical review of the submitted calculations and DEER measure scaling and interpolation was incorrect. Incorrect 2013 Title 24 requirements identified and used. Ineligible backup equipment included.
0125 1st	+	No	+	-	-	-	-	No	-	No	-	No	Initial documents were uploaded to the CMPA 11 days after the project was selected for review. The PA disclosed all proposed demand response and deemed EE measures proposed for the project including the proposed custom EE measures. Adequate descriptions of existing equipment and some of the measures and assumptions were lacking. This project had been in the works with this customer since April 2016 and could have been discussed up front during their preliminary internal reviews instead of waiting until September 2016. Once CPUC staff had selected it, the PA indicated that the project had customer time constraints. Adequate consideration of Title 24 requirements on the SAT Reset measure were dismissed by the PA. The PA technical review presented in their application review lacked depth and the submitted third-party report was the equivalent of a sales proposal with little technical detail. Pre-implementation M&V and data collection was limited to equipment inventories only. The PA technical review did not question key aspects and interactions between the measures and whether the measures may actually work as proposed. The PA did not pursue adequate substantiation of assumed operating hours. The PA did not recognize that one measure that replaced existing equipment could not be classified as an REA measure type. The limitations on EUL values for REA measure types was not recognized and applied. The DEER peak period definition was not applied to a VFD measure.
0126 1st	Yes	No	-	-	No	-	-	-	-	No	1	-	Initial documents were uploaded to the CMPA 23 days after the project was selected for review. The submitted documentation does not reveal that the PA subjected the project to any detailed technical review. There is no Title 24 code baseline documentation among the submitted documents as required for new construction projects. The project documentation lacks a clear and concise narrative that shows how the baseline condition meets Title 24 requirements. The PA did not provide any documentation explaining the bin analysis tools used to estimate the new construction savings, how and where Title 24 requirements are taken into account, and how the tools were vetted by the PA. The PA did not recognize that Title 24 mandates some of the proposed measures. The PA did not provide measure EUL values.

The PA routinely fails to provide a detailed Technical Review for SBD projects.

The table below provides the mapping from pre-2016 ESPI EAR performance scoring metrics to 2016 ESPI EAR performance scoring metrics.

Multiple old metrics when mapped into a single new metric are done so with equal weighting for each of the old metric. Thus, if two old metrics are mapped into a single new metric the scores in the old metrics are each given 50% weight in the new metric. When five old metrics are mapped into a single new metric the scores in the old metrics are each given 20% weight.

	Pre 2016 CUSTOM PROJECTS EX ANTE REVIEW METRICS		2016 CPUC Adopted EX ANTE METRICS
Metric 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.	Metric 1	Timeliness and Timing of Submittals Timely submittals: all lists, inventories, plans, studies, workpapers and project/measure documentation; timing and advanced announcement of submittals (spreading out
Metric 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.	Metric 1	submission when available rather than holding and turning in large batches); timely follow-up PA responses to review disposition action items including intention to submit/re-submit with proposed schedule.
Metric 3	Comprehensiveness of submittals.		
Metric 5	Quality and appropriateness of project documentation (e.g., shows incorporation of Commission policy directives).		Content, Completeness and Quality of Submittals Completeness, appropriateness, comprehensiveness, accuracy, and clarity of submittals.
Metric 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.	Metric 2	Submittal adherence to CPUC policies, Decisions, and prior CPUC Staff dispositions and/or guidance. Do the submittals include all materials required to support the submittal proposed values, methods and results. Is the project or measure clearly articulated. Are proposed or utilized methods clearly explained including step-by-step method or procedure descriptions. Will the proposed or utilized approach provide
Metric 8	Thoughtful consideration, and incorporation, of CPUC comments/inputs. In lieu of incorporation of comments/input, feedback on why comments/input were not incorporated.		accurate results? Are all relevant related or past activities and submittals appropriately noted or disclosed, analyzed or discussed? Are the pros/cons of alternate possible approaches or conclusions discussed to support that the chosen one is most
Metric 9	Professional care and expertise in the use and application of adopted DEER values and DEER methods.		appropriate.

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.	Metric 3	Proactive Initiation of Collaboration PA efforts to bring either measures, projects, studies, questions, and/or savings calculation methods and tools to CPUC Staff for discussion in the early formative stages, before CPUC Staff review selection. In the case of tools, before widespread use in the programs. Commission Staff expects collaboration among the PAs to develop common or coordinated submissions and for the PAs to undertake joint or coordinated planning activities and study work. The PAs are expected to engage with CPUC Staff in early discussions on unique or high profile, high impact measures or projects before program or customer commitments are made. The PAs are expected to engage with CPUC Staff on planning and execution of studies that support proposed offerings, tools, or determination of proposed baselines or other programmatic assumption that can impact ex ante values to be utilized.
Metric 6a	Depth of IOU quality control and technical review of ex ante submittals: Third party oversight.		PA Due Diligence and QA/QC Effectiveness Commission Staff expects the PA to have effective Quality Control (QC) and Quality Assurance (QA) processes for their programs and measures. The PAs are expected to have a pro-active approach to reviewing existing measure and project assumptions, methods and values and updating those to take into account changes in market offerings, standard practice, updates to DEER methods and assumptions, changes to codes, standards and regulations, and other factors that warrant such updates. The
Metric 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.	Metric 4	depth and correctness of the PA's technical review of their ex ante parameters and values, for both Core, Local Government and Third Party programs, are included under this metric. The depth and correctness of the PA's technical review of their own staff and subcontractor work related to supporting deemed and custom measure and project submissions are included in this metric. Evidence of review activities is expected to be visible in submissions so that Commission staff can evaluate the effectiveness of the PA internal QA/QC processes.
Metric 10	Ongoing effort to incorporate cumulative experience from past activities (including prior Commission staff reviews and recommendations) into current and future work products.	Metric 5	PA Responsiveness to Needs for Process & Program Improvements (Course Corrections) This metric reflects the PAs ongoing efforts to improve their internal processes and procedures resulting in increased ex post evaluated gross and net savings impacts. Commission Staff looks not only to the PA's internal QC/QA processes, but also whether

		individual programs and their supporting activities incorporate and comply with CPUC
		policies and prior Commission Staff disposition guidance in their program rules, policies,
Metric 2	Breadth of response of activities that show an intention to	procedures and reporting. This includes changes to program rules, offerings and internal
Wieti ic 2	operationalize and streamline the ex ante review process.	operations and processes required to improve overall review and evaluation results. A
		particularly important area for focus is the improvement of net portfolio performance
		via the removal of measures and or participation with low program attribution (NTG).

2016 Efficiency Savings and Performance Incentive Workpapers Ex Ante Performance Scores

The table below lists the ID numbers associated with each workpaper submission or disposition and the workpaper review process "score emhancements" 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:

^{&#}x27;No' indicates the review feedback is not applicable to a metric.

Direct Review - W	Vorkpa	per Submissions				ESP	ESPI Metrics					
WP ID	Rev	Title	Comments	Weight	1	2	3	4	5			
WPSDGENRHC1051	1	PTAC&PTHP-Adaptive Climate Controller	Response to mid-year ESPI review	0.25	+	no	no	no	no			
WPSDGEREHC1065	1	Residential HVAC Quality Maintenance and Motor Retrofit	Response to mid-year ESPI review	0.25	+	no	no	no	no			
WPSDGENRBS0001	1	Window Film	Response to mid-year ESPI review	0.25	+	no	no	no	no			
			WPA message on 1/24 asked for full data calulcations (they									
WPSDGENRBS0001	2	Window Film	were excluded). As of 3/20/2017, the data has not been	0.25	+	-	no	-	no			
			submitted.									
WPSDGENRWH0012	1	Low-Flow Pre Rinse Spray Valve	Response to mid-year ESPI review	0.25	+	no	no	no	no			
WPSDGENRLG0082	2	LED Refrigeration Case Lighting	Response to mid-year ESPI review	0.25	+	no	no	no	no			
WPSDGENRWH0010	2	Commercial Steam Trap Relacement	Response to mid-year ESPI review	0.25	+	no	no	no	no			
WPSDGEREHE0004	0	Tier II Advanced Power Strip	Response to mid-year ESPI review	0.25	+	yes	yes	no	no			

Direct Review - W	irect Review - Workpaper Detailed Reviews													
WP ID	Rev	Title	Comments	Weight	1	2	3	4	5					
WPSDGENRLG0106	4	MR16, PAR30, PAR38 and A-Type LED Lamps Retrofit		1	+	yes	yes	no	yes					
WPSDGENRLG0181	3	Exterior LED Lighting Outdoor Street and Area	Timely submission; Staff review mainly for data consistency;	1	-	yes	-	-	-					
WPSDGENRLG0198	0	Exterior LED Sports & Athletic Field Lighting Fixtures	some corrections issued to enforce data integrity	1	-	yes	-	-	-					
WPSDGEREWP0002	6	Variable Speed Swimming Pool Pump	The disposition requires a statewide calculation approach and	1	-	yes	yes	-	yes					

^{&#}x27;+' indicates a positive (from midpoint) scoring impact on a metric,

^{&#}x27;-' indicates a negative (from midpoint) scoring impact on a metric,

^{&#}x27;Yes' indicates meeting expectation; neutral (midpoint) scoring impact on a metric,

			rejects SDG&E's January 2017 proposal.						
			Main problem is the use of the same measure and						
			implemenation ID for residential and nonresidential						
WPSDGENRLG0106	3		applications. This is not allowed since res and nonres are	0.25	+	yes	no	yes	no
			required to use different energy impacts record sets that have						
		MR16, PAR30, PAR38 and A-Type LED Lamps Retrofit	different IDs.						

Direct Review - Unresolved Workpaper Preliminary Reviews											
WP ID	Rev	Title	Comments		1	2	3	4	5		
WPSDGENRPR0003	0	Electronic Zero Air Loss Condensate Drains for Compressed Air	Original work paper for Zero-Loss Condensate Drains for	0.25	-	yes	no	yes	yes		
		Systems	Compressed Air Systems developed by Lincus for SCE- WP								
			SCE13PR009 dated May 25, 2015. Workpaper updated with								
			Electronic Drain requirements and SCE Emerging Technology								
			Study Energy and Demand Savings values								

Direct Review -	Complet	ed Ex Ante Data Reviews							
WP ID	Rev	Description	Comments	Weight	1	2	3	4	5
WPSDGENRCC0011	2.1 & 3	Commercial Rack Oven - Gas		0.50	no	-	yes	yes	-
WPSDGENRCC0014	3.1 & 4	Commercial Fryer-Electric and Gas		0.50	no	-	yes	yes	-
WPSDGENRWH0021	2.1	Ozone Laundry Nonresidential		0.50	no	-	yes	yes	-
WPSDGENRRN0009	2	Anti-Sweat Heat (ASH) Controls	Vol. isource for this group of working more.	0.50	no	-	yes	yes	-
WPSDGENRCS0001	1	Beverage Merchandise Controller	Key issues for this group of workpapers:	0.50	no	-	yes	yes	-
WPSDGENRCC0006	4	Commercial Convection Oven	SDG&E renamed and resubmitted data that already existed in	0.50	no	-	yes	yes	-
WPSDGENRCC0004	3	Commercial Ice Machines	the ex ante database.	0.50	no	-	yes	yes	-
WPSDGENRCC0001	4	Commercial Steam Cooker-Electric and Gas		0.50	no	-	yes	yes	-
WPSDGENRCC0005	4	Commercial Combination Ovens-Gas and Electric		0.50	no	-	yes	yes	-
WPSDGENRCC0019	2	Demand Ventilation Controls		0. 50	no	-	yes	yes	-
WPSDGENRCC0016	2	Commercial Griddle-Electric and Gas		0.50	no	-	yes	yes	-
WPSDGENRRN0010	3	Commercial Reach In Refrigerators and Freezers		0. 50	no	-	yes	yes	-

WPSDGEREWH0011	2	Clothes Washers for Residential Applications	Ex Ante data is in the EAdb, up to date, and approved; however, SDG&E failed to adopt the statewide measure IDs.	0.50	no	yes	yes	yes	-
WPSDGENRLG0044	5	Interior Linear Fluorescent Fixture		0. 50	' +	yes	yes	yes	no
WPSDGEREWH1000	1	Temperature-Initiated Shower Flow Restriction Valve with and without an Integrated Low-Flow Showerhead	Key issues for this group of workpapers:	0. 50	no	no	yes	yes	-
WPSDGEREWH1061A	4	Low-Flow Showerheads	In September and October, SDG&E submitted updated ex ante data along with the statement that they were "retiring" their	0. 50	no	no	yes	yes	-
WPSDGEREWH1063	4	Therm Savings Kit	workpapers. While it is commendable that SDG&E is adopting	0. 50	no	no	yes	yes	-
WPSDGENRLG0106 & others	mult	Multiple lighting workpapers	data with "available" status in READI, the Source Description needs to continue to reference a submitted workpaper which	0. 50	no	no	yes	yes	-
WPSDGENRWH1204	1	Outdoor/Indoor Pool Covers	describes the program implementation that SDG&E is using to	0.50	no	no	yes	yes	-
WPSDGENROE0001	1	Network Desktop Computer Power Management Software	claim savings.	0.50	no	no	yes	yes	-
WPSDGENRHC0023	1	Unitary Air Cooled Commercial Air Conditioning and Heat Pump Units Under 65 kBtu/h	At the very least, a "short form" workpaper is needed to confirm the specific program implementation that SDG&E is	0. 50	no	no	yes	yes	-
Water Heaters	mult	Multiple	adopting.	0. 50	no	no	yes	yes	-

Direct Review –	Other Di	irection							
WP ID	Rev	Title	Comments	Weight	1	2	3	4	5
Various			The following workpapers are required to be submitted for DEER 2017 but have not been received from SDG&E as of March 15, 2017:	1	-	-	-	-	-
			 Air-Cooled Commercial AC & HP >65Kbtu/hr Energy Efficiency Refrigerators Duct Test & Seal: Residential Energy Star Room Air Conditioner 						
Various		adopting DEER measures "directly" without workpaper submission	SDG&E need to start submitting descriptions of programs that use DEER energy impacts. SDG&E needs to define measure cost and implementation tables. In September, 2016, they provided	0.5	no	no	yes	yes	-

WPSDGENRHC1061 0	Space Heating Boilers	ex ante data Implementation table which reference costs that are in the PEARdb. Insufficient information is submitted to describe the programs and, therefore, allow for a technical review of the data. SDG&E submitted data in June; however, it adopts that that SCG was in the process of updating. SCG submitted a workpaper in Sept of 2016. A short form workpaper is needed to document how SDG&E is adopting the SCG workpaper.	0.5	-	-	-	no	no
11 workpapers	Preliminary reviews from April 2015 remain unresolved for 11 workpapers. The most recent submission is not approved and no submission was received in 2016.	SDG&E stated that they would resubmit information for 6 of	0.25	-	-	yes	yes	yes
Various (4)	Retiring workpapers for which measures are no longer offered in SDG&E programs.	This is commendable. We appreciate SDG&E's efforts in this regard.	0.5	+	yes	no	yes	no
Process Review								
	Updates to Unreviewed Workpapers Based on Other Reviews: Initiative of the PA to examine previous workpaper preliminary reviews or dispositions and use that information to identify and update other workpapers that may have similar issues.		1	-	yes	no	-	yes
:	Responsiveness to Previous Direction: Efforts to update workpapers where previous direction has been provided, such as 2 through decisions (e.g. D.11-07-030 that required standard practice research on food service equipment) or through CPUC staff direction		1	no	yes	-	yes	yes
	Consideration of Standard Practice and/or Code Baselines: Efforts to research typical standard practice or code baseline where it may not be well understood. For example: What are most		1	no	-	yes	-	-

Attachment C: Workpaper Scores and Feedback

common applications for program VRF and mini-/multi-split HVAC systems? What portion of small wattage LED fixtures are installed where high efficacy fixtures may actually be required by code? (which would reduce the likelihood that an incandescent baseline is reasonable)

Data Gaps in Best Available Information: Appropriateness and adequacy of data to support savings calculations, cost or net-togross assumptions. For example, when energy use information about the baseline technology is not readily available, the PA

limited group of individuals.

Consistency with CPUC Policy and Existing Body of Decision

Language: Ex ante values must be developed in a manner that is consistent with existing CPUC policy and all applicable decision

language.

should perform additional research beyond seeking opinions of a

Completeness of narrative on initial review: On first review, a workpaper should include enough descriptive information so that

6 both the delivery approach, the ex ante values, and the relationships between the two are understood by the EAR team and CPUC staff.

Alignment of workpaper narrative with submitted ex ante data: The descriptions of implementations, measures, technologies and costs should align with the data submitted. A typical observed problem is a description of multiple delivery types in a workpaper

7 without submissions of the implementations in the ex ante data. Since the ex ante data will eventually be the source for cost effectiveness values, CPUC staff will not approve workpapers where ex ante data is not included that matches implementations and measures described in the narrative of the workpaper.

Completeness of ex ante data on initial review: Detailed level of completeness and whether it can be uploaded to the ex ante

1	no	yes	yes	yes	yes
1	yes	-	-	-	yes
1	yes	yes	yes	yes	yes
1	no	yes	yes	-	+
1	yes	-	-	yes	yes

database for successful generation of cost effectiveness values.

016 Annual Custom Ratings		Metric 1	Metric 2	Metric 3	Metric 4	Metric 5	
	SDG&E "-"	0%	75%	100%	54%	55%	
Diverse Wenter and diver	SDG&E "+"	33%	4%	0%	0%	9%	
Direct Workproduct Review Score	SDG&E "Yes"	67%	21%	0%	46%	36%	
Review Score	Dispositions Score %	67%	15%	0%	23%	27%	
	Dispositions Score	3.34	0.73	0.00	1.16	1.37	
Review Process Score	Technical & Policy QC Increase	0.00	0.50	1.50	0.50	0.50	
Enhancements	Implementation Increase	0.00	1.00	1.50	1.50	1.00	
Total Score	Final Metric Score (1-5)	3.34	2.23	3.00	3.16	2.87	Total Points
	Metric points	3.34	6.69	3.00	7.90	7.18	28.11

016 Annual Workpaper Ratings		Metric 1	Metric 2	Metric 3	Metric 4	Metric 5	
	SDG&E "-"	54%	56%	20%	25%	85%	
D'and Wall and at	SDG&E "+"	46%	0%	0%	0%	0%	
Direct Workproduct	SDG&E "Yes"	0%	44%	80%	75%	15%	
Review Score	Dispositions Score %	46%	22%	40%	38%	8%	
	Dispositions Score	2.30	1.10	2.00	1.88	0.38	
	SDG&E "-"	25%	38%	43%	50%	13%	
	SDG&E "+"	0%	0%	0%	0%	13%	
Review Process Score	SDG&E "Yes"	75%	63%	57%	50%	75%	
Enhancements	Process Score %	38%	31%	29%	25%	50%	
	Process Increase Score	1.88	1.57	1.43	1.25	2.50	
	Process Increase Weight	0.50	0.50	0.50	0.50	0.50	
Total Score	Final Metric Score (1-5)	3.24	1.89	2.72	2.51	1.63	Total Points
	Metric points	3.24	5.66	2.72	6.26	4.08	21.95

Explanations of scoring tables row entries:

- 1. The row labeled with *IOU* "-" lists the percent of custom project reviews undertaken in 2016 where the Commission staff evaluation of the 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 2016 where the Commission staff evaluation of the 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 rows labeled with *IOU* "Yes" lists the percent of custom project reviews undertaken in 2016 where the Commission staff evaluation of the materials or information indicated that the IOU performance in this metric for the submission exceeded met minimum expectations or requirements relative to the metric.
- 4. The "Dispositions Score %" row (and "Process Increase Score" for workpapers) 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.
- 5. The "Disposition Score" (and "Process Increase Score" for workpapers) row converts the % score into a numeric value of up to five by directly applying the % to a value of 5.
- 6. The custom row labeled with "Technical & Policy QC Increase" 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 2016 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 2016 but not yet seen in the custom review activity.
- 7. The custom row labeled with "Implementation Increase" lists Commission staff points added to the metric based on an evaluation of the overall IOU performance in putting into place new or changed program rules, eligibility criteria, incentive structures, application and implementation contract processes and procedures in 2016 related to this metric area that are expected to improve performance going forward on projects started during 2016 but not yet seen in the custom review activity.
- 8. The workpaper rows labeled with "Review Process Score Enhancements" lists Commission staff scoring for each 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 2016 that are expected to improve the ability of review personnel to identify and cure issues going forward on workpapers. This score is weighted as an increase to the disposition score based on the fractional weight listed in the "Process Increase Weight" row.
- 9. The "Final Metric Score" row indicates the total score for each metric as a sum of the Direct Workproduct Review Score plus the Review Process Score Enhancements (either as a simple sum for custom or a weighted value sum for workpapers) to provide a final metric score with the final score constrained between a maximum score of 5 and a minimum score of 1.
- 10. The "Metric Points" row provides the point value derived from the Final Metric Score row. If the maximum point value associated with a metric is greater than 5 then the score is multiplied by the max point value divided by 5 to obtain the metric point value related to the final score.