

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



Date: March 27, 2019

To: San Diego Gas & Electric Company (SDG&E)

From: Peter Lai, CPUC

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

Subject: 2018 Efficiency Savings and Performance Incentive (ESPI) Performance Scores

Table of Contents

I. Summary of 2018 ESPI Scores- Custom Projects and Workpapers 2

II. Commission Staff Findings 2018 Activities 3

 A. Custom Projects Review Overview..... 3

 B. Workpapers Review Overview 4

III. Discussion 5

 A. Custom Projects Performance Review 5

 B. Workpapers Performance Review..... 7

IV. The Scoring Methodology 9

Attachment A: Final ESPI Performance Scores 12

Attachment B: Custom Project Scores and Feedback..... 14

Attachment C: Workpaper Scores and Feedback 17

Attachment D: 2018 Performance Annual Ratings 22

I. Summary of 2018 ESPI Scores- Custom Projects and Workpapers

Pursuant to Decision (D).13-09-023, D.15-10-028 and D.16-08-019, Commission Staff and consultants score the investor owned utilities (IOUs) based on their performance during the pre-approval phase (or “ex ante” phase) of developing an energy efficiency project or measure. This performance score is a component of the annual Efficiency Savings and Performance Incentive (ESPI) awarded to each utility. Commission Staff and consultants completed the 2018 ESPI performance review scoring as prescribed in Table 3 of D.16-08-019. Decision D.16-08-019 established consolidated metrics on which the utilities are evaluated. Ordering Paragraph 19 of this decision states that the ESPI scores “shall be weighted for the utility program administrators based on the proportion of deemed¹ savings and custom measures in each utility’s portfolio”. The scores contained in this memo are final, and San Diego Gas & Electric Company (SDG&E) shall use the total final performance points from the table below together with the weighting² for each category to calculate the 2018 ESPI performance review component award.

A breakdown of SDG&E’s 2018 ESPI performance score of 46.67/100 for workpapers and custom projects is shown below in Table 1. SDGE’s 2018 total points decreased from its 2017 total points of 51.55. Scores for 2017 are provided in Table 2 below.

Table 1: 2018 ESPI Scoring for Workpapers and Custom Projects

SDG&E 2018 ESPI Ex-Ante Review Performance Scores and Points		Workpapers				Custom			
Metric	Metric Area of Scoring	2018 Metric Score	Metric Weight Factor	2018 Points	Max Points	2018 Metric Score*	Metric Weight Factor	2018 Points	Max Points
1	Timing and Timeliness of Submittals	2.36	10%	2.36	5	2.50	10%	2.50	5
2	Content, Completeness, and Quality of Submittals	2.00	30%	6.00	15	3.19	30%	9.58	15
3	Proactive Initiative of Collaboration	4.58	10%	4.58	5	2.25	10%	2.25	5
4	Due Diligence and Quality Assurance/Quality Control Effectiveness	1.00	25%	2.50	12.5	1.83	25%	4.58	12.5
5	Responsiveness to Needs for Process and Program Improvements	2.50	25%	6.25	12.5	2.43	25%	6.06	12.5
Total				21.69	50			24.98	50

Table 2: 2017 ESPI Scoring for Workpapers and Custom Projects

SDG&E 2017 ESPI Performance Scores and Points		Workpapers				Custom			
Metric	Metric Area of Scoring	2017 Metric Score	Metric Weight Factor	2017 Points	Max Points	2017 Metric Score	Metric Weight Factor	2017 Points	Max Points
1	Timing and Timeliness of Submittals	2.50	10%	2.50	5	4.19	10%	4.19	5
2	Content, Completeness, and Quality of Submittals	2.08	30%	6.24	15	2.63	30%	7.89	15
3	Proactive Initiative of Collaboration	2.09	10%	2.09	5	2.50	10%	2.50	5
4	Due Diligence and Quality Assurance/Quality Control Effectiveness	2.09	25%	5.23	12.5	2.60	25%	6.50	12.5
5	Responsiveness to Needs for Process and Program Improvements	2.13	25%	5.31	12.5	3.64	25%	9.10	12.5
Total				21.37	50			30.18	50

¹ Deemed are a set of predetermined savings values for efficiency measures that are developed from commonly accepted data sources and analytical methods.

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 2018 savings claims and published for each utility the weights for the custom and deemed categories.

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. As required by the ESPI decision D. 13-09-023, the relative weighting of performance during custom project development versus workpaper (or “deemed”) development of the performance component of the ESPI will be published by Commission Staff in June 2019 after reviewing the utilities’ final 2018 savings claims to be filed on May 1, 2019.

II. Commission Staff Findings 2018 Activities

A. Custom Projects Review Overview

In 2018, Commission Staff issued three custom project dispositions, one project review waiver³, and two project related memoranda. A review of the three dispositions and the Review Process Score Enhancement points resulted in SDG&E’s custom project score decreasing by 5.20 points, from 30.18 in 2017 to 24.98 in 2018. Since relatively few dispositions and waivers were issued in 2018, most of the custom project review activities upon which ESPI scores are based were focused on meetings between SDG&E and Commission Staff where various ongoing projects and policy issues were discussed.

1. Summary of 2018 Achievements

The Commission Staff observed the following positive efforts by SDG&E in 2018:

- SDG&E’s program administration staff commitment to improve its internal quality assurance and quality control (QA/QC) processes.
- SDG&E staff continues to collaborate with Commission Staff to clarify various staff guidance.
- SDG&E Engineering staff took the lead role initiating a statewide conversation with the EnergyPro consultant and the other utilities to discuss and recommend potential solutions to address the identified software and user input issues.
- SDG&E Engineering staff took the lead role in working with another program administrator (IOU) and the program implementer in the development of a measurement and verification plan for a customer’s statewide retro-commissioning project.

2. Summary of Areas Requiring Improvement

Areas in need of improvement include:

- For the systematic errors in the EnergyPro™ calculation tool, SDG&E must take more care to review the results provided by the tool and not rely only on vendors or other agency’s reviews to ensure the accuracy of the tool. Additionally, SDG&E should decrease the time needed to comply with Commission Staff dispositions and to communicate to program implementation staff and customers regarding the systematic errors.
- SDG&E should take more care to review calculation methodology and analysis approaches as discussed in CPUC Project ID number 0126 and X538 below so that the final results are based on a well thought-out and agreed upon methodology that aligns with initial stipulated savings estimates.
- SDG&E should take more care in the development and review of measurement and verification

³ Review waivers are issued where Commission staff have not conducted an in-depth review of all of the submitted project documentation. CPUC staff neither approves nor disapproves any aspects of the project. The project application is directed to proceed without further Commission staff review.

plans as discussed in CPUC Project ID number 0125, 0126, and X421 below. Additionally, an implementer should not have the authority to change the M&V plans for a project without SDG&E staff, and where appropriate Commission Staff, review and approval.

- SDG&E should commit to working with other IOUs to prioritize the development of statewide-standardized documentation process for custom projects.

B. Workpapers Review Overview

1. Summary of 2018 Achievements

SDG&E's workpapers scores have increased slightly compared to last year by 0.31 points, from 21.38 in 2017 to 21.69 in 2018. SDG&E continues to demonstrate efforts to improve its performance.

Commission Staff's observations include:

- SDG&E has systematically reviewed aspects of Database for Energy-Efficient Resources (DEER)⁴ or Preliminary Ex Ante Resource database (PEAR)⁵ and reported back anomalies in a clear succinct manner. The DEER database team finds this helpful and beneficial to all users of the system.
- SDG&E and the other three IOUs have collaborated to develop statewide-consolidated standardized documentation and processes for several deemed measures / workpapers, including the first statewide workpapers for food services.
- SDG&E collaborated with stakeholders to present two workpaper training sessions for third party contractors.
- SDG&E continued to improve its efforts to keep track of other IOUs' approved workpapers prior to submitting workpapers of its own that are based on those IOUs' versions. This improved throughout the year.
- SDG&E continued the practice of submitting short-form workpapers from other IOU's, which streamlines the workpaper review and approval process.

2. Summary of Areas of Improvement

Commission Staff encourage SDG&E to review the 2017 annual ESPI memo and to continue to focus on the areas needing improvement in that memo. Commission Staff also highlight the following additional areas for improvement:

- SDG&E needs to take a leadership role and demonstrate strong commitment to effectively and timely communicate to their program advisors who can meaningfully engage with the implementer community to communicate changes that effect deemed savings estimates. SDG&E's hesitancy to communicate information to implementers is posing a barrier to creative solutions on effective and timely communication with the market stakeholders.
- When adopting another IOUs' workpapers, SDG&E must apply due diligence to ensure that it covers all measures included in SDG&E's programs and claims and that it has conducted a technical review of the workpaper to ensure its quality.
- SDG&E should increase proactive work on appropriate baselines in workpapers for normal replacement measures and remove out-of-dated measures that have likely become standard practice or have been surpassed by more efficient technologies in the market place.

⁴ The [Database for Energy Efficient Resources](#) contains information on selected energy-efficient technologies and measures.

⁵ The Preliminary Ex Ante Resource database contains proposed updates to DEER for vetting before being finalized in DEER.

III. Discussion

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

A. Custom Projects Performance Review

Each year, Commission Staff reviews a selected sample of custom project energy efficiency program applications. The review findings and directions to the program administrators are presented in documents referred to as “dispositions”. Commission Staff acknowledges that the project applications are not selected at random, rather selected based upon the type of projects that had past issues or projects where the CPUC expected to find deficiencies for various reasons. Projects were also selected to determine whether a utility has corrected issues from similar projects that Commission Staff reviews identified in the past.

In 2018, Commission Staff issued three SDG&E dispositions and selected no new SDG&E projects for review. Commission Staff issued one project review waiver and two project related memoranda. Most of the custom project review activities were focused on meetings between SDG&E and Commission Staff where various ongoing projects and policy issues were discussed.

The CPUC has selected a new contractor to assist staff with the custom projects review and expects more significant review activities to start in the second quarter of 2019.

1. Issues Related to Gross Savings Impacts

As highlighted in the 2018 mid-year ESPI memoranda, issued on July 30, 2018, calculation methodologies and measurement and verification (M&V) plans continue to be an area of weakness that have a significant impact on the reliability of the pre-approval, forecasted savings estimates.

- In 2017, Commission Staff selected two PG&E and two SDG&E Savings by Design projects (CPUC Project ID numbers 0061 and 0127) which used EnergyPro™ for their savings impact analysis. The pre-approval, forecasted review determined that the EnergyPro™ tool is flawed. It became evident that SDG&E and the statewide IOU team for this program had not vetted this tool before using it for this program. In January of 2018, the IOUs initiated a contract with the software vendor to undertake required corrections and updates. Between February and May 2018 Commission Staff, staff consultants, and the IOUs had multiple meetings to address the errors, the corrections needed in the software tool, and basic information on the projects impacted by these errors. Of the 22 issues originally identified, seven have been adequately corrected, six have been partially corrected, and nine are still outstanding. When utilizing analysis tools to estimate savings for custom projects, utility staff must take more care to review the tool’s results and not rely on vendor or other agency’s reviews to ensure the accuracy of the results for the range of uses expected within the IOU’s program. Commission Staff also note that many of the errors identified in the dispositions are user input errors in the EnergyPro™ software. User input errors are a sign that the implementation staff who use the EnergyPro™ software may not have the expertise required to perform the modelling and the SDG&E technical reviewers may not have the expertise to review the simulation models created by the implementation teams. Additionally, SDG&E was aware in December 2017 of the errors in the EnergyPro™ tool and thus should have stopped using the tool to estimate savings for new projects, following the

direction given in CPUC Decision 15-10-028 Section 3.2.3.4 on grandfathering of impacted pipeline projects.

- For CPUC Project ID number 0126, which is a complex heating, ventilation, and air-condition project, Commission Staff were disappointed that neither SDG&E nor the project implementer were able to provide a credible savings calculation methodology or M&V plan. Commission Staff have the impression that SDG&E found the implementer's proposed M&V plan inadequate but still passed it onto Commission Staff for review. On more than one occasion this year Commission Staff have explained to SDG&E that Commission Staff's role is to review SDG&E's due diligence efforts including the technical review of individual projects. Commission Staff's role is not to perform the technical review for SDG&E.
- For CPUC Project ID number 0125, which involves multiple measures at a public facility, Commission Staff found that the approved M&V plan was not followed. The largest savings impact measure which involved plug load controls did not have any pre- or post-installation measurements, and the post-installation analysis was based on unverified assumptions. SDG&E must take steps to ensure M&V plans are followed and assumptions must be verified so that the final results are based on a well thought-out and agreed upon methodology that aligns with initial stipulated savings estimates.
- For CPUC Project ID X538, a statewide heating, ventilation, and air-condition project for a single customer that spanned multiple sites and service territories, Commission Staff found that the proposed calculation methodology was flawed, and errors existed in the spreadsheets supporting the analysis. Commission Staff are disappointed that despite having two IOUs reviewing this submittal the errors were not identified.
- For CPUC Project ID X421, an energy management project spanning multiple sites of one customer, Commission Staff found that the post-installation analysis was flawed. Commission Staff provided input to SDG&E during weekly check-in meetings in hopes of expeditiously closing out these projects.

As described above, not providing a complete and concise description of a calculation methodology and the inability to provide an accurate savings estimate remains a weakness of the custom gross savings impacts process. SDG&E must undertake a long-term and ongoing effort to increase the technical skills of its project developers and Quality Assurance/Quality Control (QA/QC) reviewers to ensure that the pre-approval, forecasted savings estimates are accurate and reliable.

2. Documentation Issues

In the first six months of 2018 documentation issues were not significant. Commission Staff note again that no new projects were selected for review in 2018 and documentation issues for ongoing projects under review in this period have been previously resolved.

3. Issues Related to Net Impacts

Commission Staff continue to be concerned about issues related to net savings impacts. As a reminder, for each project, SDG&E should provide documentation that demonstrates what the customer was

planning to do prior to the energy efficiency program intervening in the project. The documentation needs to demonstrate how the program enabled the customer to adopt an alternative action improving the final efficiency of the project and provides incremental savings benefits to ratepayers over what the customer was otherwise planning to implement.

Net Impacts should be based on real and convincing evidence of program influence included in the documentation submitted for every project. The evidence of program influence should outweigh evidence that suggests the customer would have chosen the efficient alternative absent the program information or financial support. It is important that SDG&E make significant progress in reducing free ridership.

B. Workpapers Performance Review

SDG&E submitted 56 workpapers for deemed measures in 2018. The comments below are organized by the 5 metric areas of scoring. SDG&E relies heavily on the workpaper development efforts of other IOUs and did not lead any workpaper development in 2018 and thus observations and recommendations are often based on the level of due diligence SDG&E has applied to their adoption of work done by others. A table of all submitted and reviewed workpapers, along with feedback of each reviewed workpaper, is included in [Attachment C](#) Attachment C: Workpaper Scores and Feedback.

1. Timeliness

SDG&E had a mixed record for timeliness. SDG&E resubmitted workpapers for deemed light-emitting diode (LED) measures in a timely fashion once final interim values were developed in collaboration with PG&E.

However, in another situation, Commission Staff was expecting updates of workpapers for the 2018 Phase 1⁶ review period but SDG&E did not submit any revised LED workpapers, despite direction to do so. Another example of delayed workpaper submittals was for residential and small commercial water heaters which are required by Federal regulations to be rated under a revised testing and reporting standard as of December 2017. Commission Staff was expecting revised workpapers that reflected these code changes to be submitted as part of the Phase 1 workpaper submission period, but they were not received. As a result, Commission Staff had to issue a uniform disposition covering all IOUs' water heating workpapers. IOUs are responsible for updating workpapers for code changes and where changes in DEER result in changes to non-DEER measures.

2. Content, Completeness, and Quality of Submissions

SDG&E is meeting some Commission expectations regarding content and quality. For example, expectations were met within the lighting programs and SDG&E's workpaper submission followed direction for the Phase 1 disposition on screw-in lamps.

SDG&E submits many "short form" workpapers which reference other IOU's workpapers and describes how these measures will be incorporated into SDG&E's programs. Commission Staff generally consider SDG&E's submissions of short form workpapers as positive, however, SDG&E

⁶ The Phase 1 review period is for updated workpapers affected by DEER resolution or for new workpapers to be included in the 2019 and 2020 program year. The Phase 2 review period is for new workpapers or workpaper revisions due to non-DEER/resolution changes.

still has responsibility for the quality of workpaper submission and should play a quality control review role in the workpaper's development.

SDG&E submitted a short form workpaper for the water heater workpapers for 2018 and 2019 at the end of 2018. The reference workpapers used incorrect versions of the water heater calculators. While we applaud the collaboration of the IOUs and for SDG&E adopting the Southern California Edison/Southern California Gas workpapers, SDG&E is still responsible for the quality of the workpaper. SDG&E might have played a quality control role that would have benefited all of the IOUs.

3. Proactive Initiative of Collaboration

Other than regularly scheduled bi-weekly meetings, Commission Staff has not had any collaborations on specific workpapers with SDG&E. However, we commend SDG&E's adoption of other workpapers, with the quality caveats noted elsewhere.

SDG&E has collaborated with other IOUs and the Commission Staff, which is reflected in the process score. SDG&E collaborated with the other IOUs and the Commission Staff to present two successful workpaper training sessions in November 2018 geared to third party contractor bidders. SDG&E has been helpful to Commission Staff as it transitions to a new workpaper consultant. Some of the additional assistance SDG&E have provided has included providing estimates of individual workpaper contributions to portfolio savings and providing a list of high priority measures.

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

Commission Staff observes some examples where SDG&E could improve its performance in this metric, mostly in its efforts to develop short form workpapers that adopt workpapers of other IOUs. SDG&E must apply due diligence reviews to lead workpapers to ensure their quality and completeness.

For example, SDG&E submitted a short form workpapers based on Pacific Gas & Electric Company's (PG&E) LED screw-in lamp approved workpaper. The PG&E workpaper did not include all measures offered by SDG&E. Instead of submitting a revised workpapers that adopted and supplemented PG&E's workpaper with the missing measures, SDG&E requested to Commission Staff to add the missing measures without a workpaper. Commission Staff accommodated SDG&E's request for screw-in lamp additions as those changes were simple and required no additional analysis. However, staff did not accommodate SDG&E's request for multi-family exterior lighting measures and directed SDG&E to complete additional analysis and submit a workpaper.

SDG&E should be engaged with lead workpaper developers well in advance of submission so that SDG&E specific measures can either be incorporated into the lead workpaper or into an SDG&E specific workpaper. SDG&E can also review the workpaper for quality and accuracy at this stage to the benefit of all IOUs.

5. IOU's Responsiveness

SDG&E has been less responsive in submitting workpapers (typically short form adoptions of lead workpapers developed by other IOUs) in time for inclusion in programs. As with the 2017 memorandums, Commission Staff encourages SDG&E to examine its entire catalog of pre-approved savings ("deemed") offerings to ensure deemed savings programs remove out-of-date and standard

technologies. Commission Staff also notes that while we encourage adoption of other IOU workpapers, we also expect IOUs to lead some workpaper development. This leadership is critical to improving the portfolio of workpapers overtime.

SDG&E has been particularly alert to DEER and PEAR database issues. On numerous occasions, SDG&E has systematically reviewed aspects of DEER or PEAR and reported back anomalies in a clear succinct manner. The DEER database team has found this to be most helpful and beneficial to all users of the system.

IV. The Scoring Methodology

The 2018 review performance score was developed using 5 detailed scoring metrics 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 forecasted values.

[Attachment A](#) summarizes the Metrics adopted in D.16-08-019 as well as the Commission Staff developed scores and points for 2018. D.16-08-019 also directed that the custom and workpaper scores be weighted together into a final score based on the IOU 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 2019 based upon the IOUs final 2018 savings claims to be filed on May 1, 2019.

In accordance with D.16-08-019, the IOUs' 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 2017 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 due diligence review and scores moving forward.

A "Direct Work Product 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 metric⁷. If a metric was

⁷ For example, workpapers and custom projects which do not involve measures which in some way are expected to utilize

determined to be not applicable to a given disposition, the metric was identified as not applicable (“N/A”) and the metric was assigned a score equal to the average 1 to 5 score from the remaining applicable metrics. Assigning this average score to any “N/A” metrics essentially normalized the final score so that a disposition neither benefitted or was penalized as a result of a non-applicable metric.

For workpapers, 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 qualitative ratings were then mapped to a quantitative score percentage level of 0%, 50% and 100%, respectively. The assigned percentage scores were averaged across all the reviewed items. Individual workpaper level disposition scoring, as well as related workpaper activities, are provided in [Attachment C](#).

For custom projects, each applicable metric was directly scored using the 1 to 5 rating scale described above. A project by project summary of the custom project scoring is included in [Attachment B](#).

The above process resulted in custom project and workpaper work product review scores. Next, utility-specific “Review Process Score Enhancements” were developed for each applicable metric based on observed policy and technical reviews or program implementation processes/procedures developed and implemented in 2018 in order to positively impact future project reviews. Commission Staff believes it is important to provide ESPI “Enhancement” points for positive due diligence developments to recognize the effort and to provide additional encouragement even before a change in project-level results is observed.

In the custom scoring process Commission Staff added “Enhancement” points in the area of Policy/Technical QA/QC for Metrics 5 to reflect SDG&E staff’s positive efforts in these metric areas as discussed earlier. Those initiatives included:

- SDG&E Engineering staff took the lead role in initiating a statewide conversation with the EnergyPro consultant and the other utilities to discuss and recommend potential solutions to address the identified software and user input issues.
- SDG&E Engineering staff took the lead role in working with another IOU and the program implementer in the development of a measurement and verification plan for a customer’s statewide retro-commissioning project.
- SDG&E took the lead role in contracting and managing a contractor to develop and deliver a redacted dispositions archive website for the CPUC.

Although these efforts may not yet be reflected in project specific disposition scores, Commission Staff believes recognition of the efforts of SDG&E’s technical and policy review staff is warranted. These activities offer promise to improve the overall PG&E performance in the future.

Workpaper scores also include “Review Process Score Enhancements.” 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. These activities, as discussed above, include items such as:

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”)

- SDG&E collaborated with the other IOUs and the CPUC to present two successful workshop training sessions in November 2018 geared to third party contractor bidders.

To produce the final workshop scores, the metric scores for the two workshop 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. 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. The separate process scoring provides an avenue for assessing overall QA/QC processes and procedures put into place by SDG&E.⁸

[Attachment D](#) contains custom and workshop summary tables showing the components and total scores and points for each metric in each of the two component areas of scoring described above.

Questions or comments about the feedback or final scores should be directed to Peter Lai (peter.lai@cpuc.ca.gov). Note that pursuant to D.13-09-023, Commission Staff will schedule a meeting with SDG&E staff to discuss this memorandum and its final scores by April 30, 2019.

⁸ 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.”

Attachment A: Final ESPI Performance Scores

Metric		Workpapers				Custom			
		Max Points	Max Percent of Total Points	2018 Score	2018 Points	Max Points	Max Percent of Total Points	2018 Score	2018 Points
1	Timing and Timeliness of Submittals	5	10%	2.36	2.36	5	10%	2.50	2.50
	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 IOU responses to review disposition action items including intention to submit/re-submit with proposed schedule.								
2	Content, Completeness, and Quality of Submittals	15	30%	2.00	6.00	15	30%	3.19	9.58
	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%	4.58	4.58	5	10%	2.25	2.25
	IOU 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 Commission Staff review selection. In the case of tools, before widespread use in the programs. Commission Staff expects collaboration among the IOUs to develop common or coordinated submissions and for the IOUs to undertake joint or coordinated planning activities and study work. The IOUs are expected to engage with Commission Staff in early discussions on unique or high profile, high impact measures or projects before program or customer								

commitments are made. The IOUs are expected to engage with Commission 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.

<p>4 Program Administrator’s Due Diligence and Quality Assurance/Quality Control Effectiveness</p>	12.5	25%	1.00	2.50	12.5	25%	1.83	4.58
<p>Commission Staff expects the IOU to have effective Quality Control (QC) and Quality Assurance (QA) processes for their programs and measures. The IOUs 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 IOU'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 IOU'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 IOU internal QA/QC processes.</p>								
<p>5 Program Administrator’s Responsiveness to Needs for Process and Program Improvements</p>	12.5	25%	2.50	6.25	12.5	25%	2.43	6.06
<p>This metric reflects the IOUs 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 IOU'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).</p>								
<p>Total</p>	50	100%		21.69	50	100%		24.98

Attachment B: Custom Project Scores and Feedback

The table below lists the identification numbers associated with each disposition. All custom projects were scored using new metrics adopted in 2016. The metrics are shown in the Table below.

Table 3 2016 Adopted Performance Metrics

Metric	2016 CPUC Adopted Performance Metrics	Maximum Points	% of TOTAL POINTS
Metric 1	Timeliness and Timing of Submittals Timely submittal of all documentation and follow-up utility responses to review disposition action items.	5.0	10%
Metric 2	Content, Completeness and Quality of Submittals Completeness, appropriateness, comprehensiveness, accuracy, and clarity of submitted documentation. In addition, this metric is an assessment of the utility's adherence to CPUC policies, Decisions, and prior Commission Staff disposition guidance.	15.0	30%
Metric 3	Proactive Initiation of Collaboration Utility's efforts to bring either measures, questions, and/or savings calculation tools to Commission Staff for discussion in the early formative stages, before Commission Staff review selection. In the case of tools, before widespread use in the programs. Commission Staff expects collaboration among the utilities and for the program administrators to engage with Commission Staff in early discussions on high profile, high impact measures well before customer commitments are made.	5.0	10%
Metric 4	Utility Due Diligence and QA/QC Effectiveness Commission Staff expects the utility to have effective Quality Control (QC) and Quality Assurance (QA) processes for its programs and measures. The depth and correctness of the utility's technical review of its ex ante parameters and values, for both Core and Third Party programs, are included under this metric.	12.5	25%
Metric 5	Utility Responsiveness to Needs for Process & Program Improvements (Course Corrections) This metric reflects the utility's efforts to improve, operationalize, and improve its internal processes which are responsible for the creation and assignment of ex ante parameters and values. Commission Staff looks not only to the utility's internal QC/QA process, but also whether individual programs incorporate and comply with CPUC policies and prior Commission Staff disposition guidance in its program rules, policies, and procedures.	12.5	25%

	126		125	
Metric	SCORE	Commission Staff Specific Comments on Each Metric	SCORE	Commission Staff Specific Comments on Each Metric
Metric 1	0.0	It took SDG&E 123 days to respond to the Commission Staff memo.	5.0	SDG&E quickly responded to the agreement reached in the 5/31/2018 meeting and provided updated documents for Commission Staff review on 6/4/2018.
Metric 2	3.8	Commission Staff have reviewed the proposed M&V plan and calculation methodology and find deficiencies in several key areas. The calculation methodology and M&V plan are not clearly presented. Commission Staff are disappointed that SDG&E is unable to follow guidance previously issued by staff related to M&V plans and calculation methodologies.	10.0	The documentation was clearly presented, however SDG&E did not breakdown the savings claims by measure, and the recalculated incentive was not provided.
Metric 3	N/A	N/A	N/A	N/A
Metric 4	3.8	SDG&E needs to increase its commitment to providing accurate ex ante savings estimates. The savings analysis for this project is complex, and the placeholder calculations have assumptions with a high level of uncertainty which need to be verified through a well-conceived calculation methodology and M&V plan.	4.0	SDG&E needs to improve its QA/QC when reviewing post installation data to ensure that savings estimates are accurate and reliable.
Metric 5	3.1	Commission Staff are disappointed that SDG&E is unable to follow guidance previously issued by staff related to M&V plans and calculation methodologies.	4.0	SDG&E needs to ensure that M&V plans are executed as approved, and if a M&V plan cannot be executed as approved that the project implementer seek guidance and approval for any deviations before proceeding.

X421		
Metric	SCORE	Commission Staff Specific Comments on Each Metric
Metric 1	N/A	N/A
Metric 2	15.0	The IOU followed Commission Staff's recommendations to complete the M&V analysis for this project.
Metric 3	N/A	N/A
Metric 4	6.0	Post-installation analysis was flawed
Metric 5	N/A	N/A

Attachment C: Workpaper Scores and Feedback

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

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

Workpaper Reviews						ESPI Metrics				
WP ID	Rev	Title	Comments	Weight	1	2	3	4	5	
WPSDGENRLG0181	4	LED Outdoor Area and Street Lighting	Positive: SDGE submitted workpaper a new short form workpaper adopting PG&E's approved workpaper in place of this workpaper. Opportunities: CPUC staff was expecting and update to this workpaper to reflect previous direction to update ISP. In February 2017, CPUC staff issued a custom project disposition that directed SCE to collaborate with other IOUs and complete and ISP study for interior and exterior lighting by October 1, 2017 (in time to incorporate results into 2018 deemed and custom savings values). At this time, SCE is still in the planning stages and expects to complete the work by the fall of 2018 (about a year later than directed). Some of the delay appears to be due to an increase in scope to investigate current existing conditions (which would serve as a first baseline only in AR claims).	1	-	no	no	-	-	
WPSDGENRLG0198	0	Exterior LED Sports & Athletic Field Lighting Fixtures	See comment for WPSDGENRLG0181	1	-	no	no	-	-	

WPSDGENRWH1205A	0	Non-Res Storage WH 55 gallons and under (<75kBTU/h)	SCG and SCE were the lead for these measures. A single workpaper spanned multiple years and it was not clear what calculator was used for each year. The 2018 calculator was available in September, but it was not used and the WP was not submitted until late in December 2018. SDG&E has a responsibility for the quality of the workpaper, even if it is adopted.	0.25	no	-	no	no	no
WPSDGENRWH1206	2	Instantaneous WH for Commercial Applications	SCG and SCE were the lead for these measures. A single workpaper spanned multiple years and it was not clear what calculator was used for each year. The 2018 calculator was available in September, but it was not used and the WP was not submitted until late in December 2018. SDG&E has a responsibility for the quality of the workpaper, even if it is adopted.	0.25	no	-	no	no	no
WPSDGEREHC0030	0	Residential Smart Communicating Thermostat	This short form workpaper documents the creation of two new measures, which break out electric only and gas only savings. As a result, new implementation IDs were created for these new measures. The measures are to help assist SDG&E's reporting post processing and databases. SDG&E also updated the ex-ante tables the measure application types and delivery methods for 2019 as well as update the extended date to 3/31/19 addressing the latest memo from the EAR Team titled, "Smart Thermostat Memo_12032018-revised.pdf".	1	yes	yes	yes	yes	no
WPSDGEREHC0032	1	Refrigerant Charge	Revision to address the former EAR Team's guidance on how to apply the incidence factor.	1	yes	yes	no	no	no
WPSDGEREHC1067	1	Res DuctTestSeal	Revision to address the former EAR Team's guidance on how to apply the incidence factor.	1	yes	yes	no	no	no
WPSDGERERN001	4	Res Condenser Coil Cleaning	Revision to address the former EAR Team's guidance on how to apply the incidence factor.	1	yes	yes	no	no	no
WPSDGEREWH0024	1	StorageTank WH	SCG and SCE were the lead for these measures. A single workpaper spanned multiple years and it was not clear what calculator was used for each year. The 2018 calculator was available in September, but it was not used and the WP was not submitted until late in December 2018. SDG&E has a responsibility for the quality of the workpaper, even if it is adopted.	0.25	no	-	no	no	no
WPSDGEREWH0025	1	Res High Efficiency Instantaneous Water Heater	SCG and SCE were the lead for these measures. A single workpaper spanned multiple years and it was not clear what calculator was used for each year. The 2018 calculator was available in September, but it was not used and the WP was not submitted until late in December 2018. SDG&E has a responsibility for the quality of the workpaper, even if it is adopted.	0.25	no	-	no	no	no
WPSDGENRWH1206	1	Instantaneous WH for Commercial Applications	Opportunities: Starting 2018, residential and small commercial water heaters are required by Federal standards to be tested and rated with a Uniform Energy Factor (UEF). However, it appears that all IOU programs are still defining measures using the outdated Energy Factor (EF). As part of the Phase 1 disposition, CPUC staff developed measure definitions using UEF, but no workpapers have been submitted following this direction.	1	-	no	no	no	no
WPSDGEREWH0024	0	StorageTank WH	See comment for WPSDGENRWH1206	1	-	no	no	no	no
WPSDGENRLG0106	5	SF Integral LED Lamps	Positive: SDGE submitted a workpaper based on PG&E's final workpapers in a timely manner. Opportunities: Initial 2018 submissions did not consider that Title 20 requirements would generally prohibit the sale of incandescent A-lamps and MR-16 lamps in California on 1/1/2018.	1	-	no	no	no	no

Workpaper Submissions

WP ID	Rev	Title	Comments
WPSDGENRLG0198	0	Exterior LED Sports & Athletic Field Lighting Fixtures	Detailed review – resubmit - scored in detailed review section
WPSDGENRLG0106	5	MR16, IOUR30, IOUR38 and A-Type LED Lamps Retrofit	Detailed review – resubmit - scored in detailed review section
WPSDGENRPR0004	1	Process Fan VSD	Review waived - interim approval
WPSDGENRLG0028	1	LED Pool and Spa Lighting	Review waived - interim approval
WPSDGENRRN0016	0	High Efficiency Ultra-Low Temperature Freezers	Review waived - interim approval
WPSDGEREHC0031	0	SF Direct Evaporative Coolers	Review waived - interim approval
WPSDGEREMI0006	0	Window Retrofit	Review waived - interim approval
WPSDGEREWH0023	0	Central System Natural Gas Water Heater for Multi-Family	Review waived - interim approval
WPSDGEREWH0022	2	Residential Heat Pump Water Heater	Review waived - interim approval for 2017 but should have been resubmitted for 2018 to consider standards change to UEF
WPSDGEREMI0006	0	Window Retrofit	Review waived - interim approval
WPSDGENRLG0083	0.1	LED Ambient Commercial Fixtures and Retrofit Kits	Review waived - interim approval for 2017 only
WPSDGEREWH1061A	5	Low Flow Showerhead	Review waived - interim approval
WPSDGERERN001	2	Res Condenser Coil Cleaning	Review waived - interim approval
WPSDGEREHC1064	1	Quality Installation Res Split Pkg Units	Review waived - interim approval
WPSDGEREWH0024	0	Storage Tank Water Heaters	Review waived - interim approval for 2017 but should have been resubmitted for 2018 to consider standards change to UEF
WPSDGEREHC1063	0	Residential High Efficiency Furnaces	Review waived - interim approval
WPSDGEREHC1066	0	Attic Insulation	Review waived - interim approval
WPSDGEREWH0011	4	Energy Star Clothes Washer	Review waived - interim approval
WPSDGEREWH1062	0	Water Saving Kit	Review waived - interim approval
WPSDGEREHC0032	0	Res Refrigerant Charge	Review waived - interim approval
WPSDGEREHC1067	0	Duct Seal	Review waived - interim approval
WPSDGERELG1057	1	Residential Outdoor Landscape LED Fixtures (Pathways & Floodlights)	Detailed review – resubmit - scored in detailed review section
WPSDGERERN001	3	Residential Single Family and Multi-Family Condenser Coil Cleaning	Review waived - interim approval
WPSDGEREWH1012	2	Faucet Aerators for Bathroom/Kitchen Sinks in Residential Buildings	Review waived - interim approval
WPSDGEREWP0002	7	Variable Speed Pool Pump	Detailed review – resubmit
WPSDGENRCC0004	4	Commercial Ice Machines	Review waived - interim approval
WPSDGENRLG0083	1	LED Ambient Commercial Fixtures and Retrofit Kits	Review waived - interim approval but very late submission given preliminary review was issued in 2017

WPSDGENRLG0181	4	LED Outdoor Area and Street Lighting	Detailed review – resubmit - scored in detailed review section
WPSDGENRWH0014	0	Low Flow Aerator for Non-Residential	Review waived - interim approval
WPSDGENRWH0015	0	Low Flow Aerator for Hospital and Healthcare	Review waived - interim approval
WPSDGENRHC0023	2	Commercial Air-cooled Unitary Air Conditioners and Heat Pumps <65 kBtu/h	Review waived - interim approval
WPSDGENRHC0025	0	Commercial Air-cooled Unitary Air Conditioners and Heat Pumps >=65 kBtu/h	Review waived - interim approval
WPSDGENRWH1206	1	Instantaneous WH for Commercial Applications	Detailed review – resubmit - scored in detailed review section
WPSDGEREWH0023	0.1	Central System NG Boilers MF	Review waived - interim approval
WPSDGEREHC0032	0.1	SF Res Refrigerant Charge	Review waived - interim approval
WPSDGERERN001	3.1	Residential Single Family and Multi-Family Condenser Coil Cleaning	Review waived - interim approval
WPSDGEREHC1065	3	Residential HVAC Quality Maintenance and Motor Retrofit	Review waived - interim approval
WPSDGEREHC0030	0.1	Residential Smart Thermostats	Review waived - interim approval
WPSDGENRHC1052	0	High Efficiency Package Terminal	Review waived - interim approval
WPSDGENRRN0017	0	Refrigeration Floating Suction and Head Pressure Controls	Review waived - interim approval
WPSDGENRCC0015	1	Commercial Combination Ovens-Gas and Electric	Review waived - interim approval
WPSDGEREWH0025	0	Residential High Efficiency Instantaneous Water Heater	Review waived - interim approval for 2017 but should have been resubmitted for 2018 to consider standards change to UEF
WPSDGENRCC0018	1	Commercial Combination Ovens-Gas and Electric	Review waived - interim approval
WPSDGENRLG0107	0	SF_Recessed Downlight Retrofit Kit	Review waived - interim approval
WPSDGENRLG0106	6	SF_Integral LED Lamps	Review waived - interim approval
WPSDGENRLG0080	4	LED High-Bay and Low-Bay Fixtures	Review waived - interim approval
WPSDGENRLG0181	5	LED_Outdoor Area and Street Lighting	Review waived - interim approval
WPSDGENRLG0107	0	SF_Recessed Downlight Retrofit Kit	Review waived - interim approval
WPSDGENRWH1205A	0	Non-Res Storage WH 55 gallons and under (<75kBTU/h)	See comments in the Workpaper Review Section.
WPSDGENRWH1206	2	Instantaneous WH for Commercial Applications	See comments in the Workpaper Review Section.
WPSDGEREHC0030	0	Residential Smart Communicating Thermostat	See comments in the Workpaper Review Section.
WPSDGEREHC0032	1	Refrigerant Charge	See comments in the Workpaper Review Section.
WPSDGEREHC1067	1	Res DuctTestSeal	See comments in the Workpaper Review Section.
WPSDGERERN001	4	Res Condenser Coil Cleaning	See comments in the Workpaper Review Section.
WPSDGEREWH0024	1	StorageTank WH	See comments in the Workpaper Review Section.
WPSDGEREWH0025	1	Res High Efficiency Instantaneous Water Heater	See comments in the Workpaper Review Section.

Process Adder

ESPI Metrics

	Weight	1	2	3	4	5
IOUs are required to submit all workpapers subject to the most recent DEER update before January 1 of the subsequent year. SCG submitted workpaper and workpaper revisions in response to DEER2019 updates, meeting the January 1, 2019 due date.	1	yes	no	no	no	no
SDG&E has been particularly alert to DEER and PEAR database issues and has provided quick feedback in a clear manner when issues were found. The DEER team has found this to be most helpful.	1	no	no	no	no	+
IOUs are required to submit workpaper submission plans each year within thirty days of the filing of the Resolution. SDGE submitted the appropriate data to SCE for compilation. The plan included active and inactive workpapers organized by measure type and flagged by key characteristics.	1	yes	no	no	no	no
SDG&E has not led workpaper developments but instead adopts workpapers. This is a positive development. However, SDG&E is still responsible for the quality of the adopted workpaper and for its adaptation to SDG&E requirements. The hot water workpapers were submitted late in the year with the wrong calculators; SDG&E could have provided a quality control review to the benefit of all the IOUs. SDG&E submitted a short form lighting workpaper, but the source workpaper did not include all of SDG&E measures.	1	no	no	+	-	no
SDGE collaborated with the other IOUs and the CPUC to present two successful workpaper training sessions in November 2018 geared to third party contractor bidders.	1	no	no	yes	no	no
The CPUC transitioned to a new consultant team late in 2018. SDGE as well as the other IOUs have been helpful and patient with the new workpaper and DEER consultants during this transition period.	1	no	no	+	no	no

Attachment D: 2018 Performance Annual Ratings

Custom Scoring

2018 Annual Custom Ratings		Metric 1	Metric 2	Metric 3	Metric 4	Metric 5	
Direct Workproduct Review Score	N/A Adjusted Dispostion Score (1-5)	2.50	3.19	2.25	1.83	1.43	
Review Process Score Enhancements	Technical & Policy QC Increase	0.00	0.00	0.00	0.00	0.50	
	Implementation Increase	0.00	0.00	0.00	0.00	0.50	
Total Score	N/A Adjusted Final Metric Score (1-5)	2.50	3.19	2.25	1.83	2.43	Total Points
	N/A Adjusted Metric Points	2.50	9.58	2.25	4.58	6.06	24.98

2017 Annual Custom Ratings		Metric 1	Metric 2	Metric 3	Metric 4	Metric 5	
Direct Workproduct Review Score	Dispositions Score	4.18	2.12	0.00	1.59	3.13	
Review Process Score Enhancements	Technical & Policy QC Increase	0.00	0.50	1.50	0.50	0.50	
	Implementation Increase	0.00	0.00	1.00	0.50	0.00	
Total Score	Final Metric Score (1-5)	4.19	2.63	2.50	2.60	3.64	Total Points
	Metric points	4.19	7.89	2.50	6.50	9.10	30.18

Workpaper Scoring

2018 Annual Workpaper Ratings		Metric 1	Metric 2	Metric 3	Metric 4	Metric 5	
Direct Workproduct Review Score	SDG&E "-"	56%	20%	0%	67%	100%	
	SDG&E "+"	0%	0%	0%	0%	0%	
	SDG&E "Yes"	44%	80%	100%	33%	0%	
	Dispositions Score %	22%	40%	50%	17%	0%	
	Dispositions Score	1.11	2.00	2.50	0.83	0.00	
Review Process Score Enhancements	SDG&E "-"	0%	0%	0%	100%	0%	
	SDG&E "+"	0%	0%	67%	0%	100%	
	SDG&E "Yes"	100%	0%	33%	0%	0%	
	Process Score %	50%	0%	83%	0%	100%	
	Process Increase Score	2.50	0.00	4.17	0.00	5.00	
	Process Increase Weight	0.50	0.50	0.50	0.50	0.50	
Total Score	Process Increase Wtd Score	1.25	0.00	2.08	0.00	2.50	
	Final Metric Score (1-5)	2.36	2.00	4.58	1.00	2.50	Total Points
	Metric Points with Weighting	2.36	6.00	4.58	2.50	6.25	21.69

2017 Annual Workpaper Ratings		Metric 1	Metric 2	Metric 3	Metric 4	Metric 5	
Direct Workproduct Review Score	SDG "-"	67%	57%	67%	67%	57%	
	SDG "+"	27%	0%	0%	0%	0%	
	SDG "Yes"	7%	43%	33%	33%	43%	
	Dispositions Score %	30%	21%	17%	17%	21%	
	Dispositions Score	1.50	1.08	0.84	0.84	1.08	
Review Process Score Enhancements	SDG "-"	20%	20%	33%	0%	17%	
	SDG "+"	0%	0%	33%	0%	0%	
	SDG "Yes"	80%	80%	33%	100%	83%	
	Process Score %	40%	40%	50%	50%	42%	
	Process Increase Score	2.00	2.00	2.50	2.50	2.09	
	Process Increase Weight	0.50	0.50	0.50	0.50	0.50	
Total Score	Final Metric Score (1-5)	2.50	2.08	2.09	2.09	2.13	Total Points
	Metric points	2.50	6.24	2.09	5.23	5.31	21.37

Explanations of scoring tables row entries

1. The row labeled with *IOU* “-“ lists the percent of workpaper reviews undertaken 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 workpaper reviews undertaken 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 workpaper reviews undertaken 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 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 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 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 Work product 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.