PUBLIC UTILITIES COMMISSION

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Date: July 15, 2015

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

From: CPUC Ex Ante Review Staff

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

Subject: Mid-Year 2015 Efficiency Savings and Performance Incentive Ex Ante Review

Performance Feedback

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

Custom Projects

With regard to custom projects, The CPUC staff review dispositions touched four SDG&E projects with current activity in 2015. CPUC staff identified the below high-level issues of concern from these projects. A summary of these issues, captured from the review findings dispositions issued, as they relate to the particular projects is provided in Attachment B of this memo. This attached document is intended to provide the utility with information as to how the issues may potentially translate to upward or downward scoring movement in the ESPI scoring metric. The qualitative feedbacks are designated as follow:

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

Generally, SDG&E needs to take steps to remedy identified deficiencies in the dispositions and improve in the following areas:

Program influence

SDG&E staff needs to do better in demonstrating program influence on projects and adjust the determination of eligibility when there is little or no evidence of real program influence on a project or substantial evidence that the project would have proceeded without ratepayer support. For example, the project documentation for the Welder Project (Application ID EEBI 5905) did not demonstrate that program influence caused the customer to accelerate the replacement.

Program rules

CPUC staff is not seeing SDG&E following the statewide Saving By Design (SBD) program rules that specifically require program influence for participation. The SBD project applications package CPUC staff has reviewed is not showing that the steps as described in the program rules are being followed. As of this writing SDG&E staff is working with CPUC staff to document program influence in projects in the Saving By Design program.

• Potential free-ridership issue

As in the data center project (EEBI 5744), SDG&E staff did not adequately demonstrate that this project was not a free-rider and that the project was not simply capacity expansion. SDG&E has been working on a pilot free-ridership identification mechanism, but SDG&E staff has not presented preliminary or interim results to CPUC staff.

• Incremental cost information

SDG&E staff did not provide incremental cost information in the data center project (EEBI 5744) and the whole building project (Project 5001132432). SDG&E staff must do a better job of including project incremental cost information in project documentation.

• Proposed measure and verification (M&V) method

CPUC found that for the data center project (EEBI 5744) the proposed M&V methods were deficient. SDG&E staff did request an early opinion review of the proposed M&V efforts for the welder project. Unfortunately this project had program influence issue that SDG&E staff missed. CPUC staff looks forward to SDG&E staff identifying critical issues first moving forward.

• Adequacy of initial custom project assessments and the completeness of project documentation

SDG&E needs to improve upon the adequacy of initial custom project assessments and the completeness of project documentation, in particular with regards to posting the

CPUC staff requested final project documentation to the CMPA project folder once a project receives final approval and submitted the savings claims. For example, for the Savings By Design project Application ID 5001132432, the final incremental cost documentation was not posted in the project directory.

SDG&E staff must take steps to remedy these deficiencies as directed in the review dispositions moving forward.

On the positive note, SDG&E staff continues to identify projects that may be problematic and ask CPUC staff to provide early feedback through the Early Opinions process. However, SDG&E staff must better identify of concern, their own review findings and interpretations for the project, and state where the grey areas are for which CPUCs staff clarification or recommendations are being requested. SDG&E Engineering Department staff has been proactive bringing the utility program staff to the project discussion calls so that those utility program staff will better understand the Commission directions, policies, and CPUC staff review expectations for custom projects. CPUC staff expects to see improvements on the part of SDG&E's program staff on their internal project review and approval relative to removing project and measure activities that represent industry standard practice or little or no program influence. SDG&E staff continues to be proactive in bringing forth topics for discussions with CPUC staff, which CPUC staff recognizes is an important component for improving utility internal due diligence.

Workpapers

With regard to the workpaper assessment for SDG&E, the CPUC staff has performed preliminary reviews on 24 workpapers and also reviewed SDG&E's ex ante data submittals. The following general areas of concern are identified:

• Ex Ante Database Submittals (improvement compared to 2014)

The SDG&E ex ante data submissions are generally compliant in format and structure but are sometimes incomplete. Areas of improvement include: referencing DEER values whenever those values exist in the ex ante database as opposed to renaming and resubmitting identical data; and using more descriptive information that more clearly identifies technical and implementation information about the measures and data from within the database without having to refer to a workpaper.

• Comprehensiveness of Submittals (needs improvement)

On initial review, many workpapers lack appropriate program information to support critical ex ante values such the use of the "Hard-to-reach" net-to-gross value. Sometimes technical information needed to support the savings calculations is missing. In some workpapers, the narrative describes delivery mechanisms that are inconsistent with the accompanying ex ante data.

• Incorporation of Previous Direction (needs improvement)

CPUC staff remains concerned that a large amount of previous guidance, CPUC staff direction, and Commission decision direction are still not being incorporated into the broader approach to workpaper development and deemed measure implementation. It appears that direction from decisions as early D.11-07-030 has not been incorporated into workpapers.

• Collaboration and Staff Involvement (improvement compared to 2014)

SDG&E staff engages in an active yet informal effort to keep CPUC staff up-to-date on its workpaper development efforts. While generally positive, CPUC staff encourages SDG&E staff to develop a more formal status update process related to workpapers.

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

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

2015 Ex Ante Review Interim ESPI Performance Feedback — SDG&E

Custom Projects

PA Application ID	Measure Description	Discussion	Rating Feedback	Metric 1a	Metric 1b	Metric 2	Metric 3	Metric 4	Metric 5	Metric 6a	Metric 6b	Metric 7	Metric 8	Metric 9	Metric 10
5001132432	Whole Building All necessary information / documentation was provided with the application to review the project. The exception was the incremental measure cost information. After the building was built, PA verified installed measures and did not claimed savings for measures not installed.	documentation was provided with	This SBD project was well conducted.	+	m	+	+	n/a	+	n/a	n/a	n/a	n/a	n/a	n/a
		The IMC has not been submitted yet as requested by the CS (expected date of submission was 1/20/2015).	n/a	-	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
5744	was found for incremental	Since last PA submission was 9/12/14, it could not have been influenced by 2014 ESPI scoring.	m	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	+	n/a	n/a	
		unsubstantiated. No documentation was found for incremental	Key issues were lack of documentation regarding project.	n/a	n/a	n/a	-	n/a	-	n/a	-	n/a	n/a	n/a	n/a
		construction costs. Proposed M&V methods were found to be deficient.	Measure eligibility and measure life assessment issues.	n/a	n/a	n/a	-	n/a	-	n/a	-	n/a	n/a	n/a	n/a
			Calculation methodology was flawed.	n/a	n/a	n/a	n/a	n/a	n/a	-	-	-	n/a	n/a	n/a
			M&V plan needed to be modified.	n/a	n/a	n/a	n/a	n/a	n/a	-	-	-	n/a	n/a	n/a
5001165732	Saving By Design Hospital new construction non- VAV baselines remain a concern and need an ISP assessment to demonstrate appropriate application.	Since last PA submission was 7/21/14, it could not have been influenced by 2014 ESPI scoring.	m	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	m	n/a	
		Lacked documentation of program influence which should accompany all SBD new construction projects.	Project measure eligibility was not adequately documented and no evaluation of program	n/a	n/a	-	-	n/a	m	m	m	-	n/a	n/a	n/a

Attachment B: Custom and Workpaper Performance Feedback

PA Application ID	Measure Description	Discussion	Rating Feedback	Metric 1a	Metric 1b	Metric 2	Metric 3	Metric 4	Metric 5	Metric 6a	Metric 6b	Metric 7	Metric 8	Metric 9	Metric 10
			influence.												
5905-15 (Early Opinion review)	Inverter Welders	Project is the proposed replacement of existing transformer based welders with inverter type. Project identified as early retirement, which has a requirement for demonstration program influence. No clear documentation was provided that indicated program influence criteria were met by the PA.	PA was looking for specific issues associated with proposed M&V effort and savings calculation. CS indicated that the early replacement claim had not met the criteria for program influence. CS provided comments on the M&V plan in the early opinion document.	+	n/a	+	m	+		n/a	m	-	n/a	n/a	-

Workpapers

	Metric	Benchmarks							
1a	Timeliness of action in the implementation of ordered ex ante requirements (e.g., A.08-07-021, D.11-07-030, D.12-05-015, etc.) in the presubmittal/ implementation phase: Timing of disclosure in relation to reporting	 Fraction of deemed measures for which workpapers have been submitted to Commission prior to measure being offered in the portfolio; Fraction of workpapers disclosed prior to or during work commencement and submitted upon completion rather than withheld and submitted in large quantity; Fraction of workpaper development projects for new technologies submitted for collaboration versus total number of workpapers for new technologies submitted 							
	Noted Progress: SDG&E has a more informal practice of reaching out to the EAR team to provide updates on workpaper development activities and request guidance.								
	Needs Improvement: SDG&E still does not have a formal process for informing CPUC staff of their on-going workpaper development activities.								
	 To Be Determined: Through the end of 2015, the EAR team will be examining claims for the following: Claims that appear to be deemed measures which were instead claimed as custom measures due to the lack of workpaper submission High contributions of new technology measures that should have been subject to early review and collaboration. 								
1b	Timeliness of action in the implementation of ordered ex ante requirements (e.g., A.08-07-021, D.11-07-030, D.12-05-015, etc.) in the post-submittal/ implementation phase: Timing of responses to requests for additional information (higher percentage = lower								
	Noted Progress: The EAR team performed preliminary reviews on 24 SDG&E workpapers and found that four had all information necessary in order to move on to a detailed review.								
	Needs Improvement: 20 out of 24 SDG&E workpapers have been delayed at the preliminary review stage due to incomplete submittals. CPUC notes that the ex ante team has increased its efforts to perform preliminary reviews on workpapers, and as a result, a large number of comments and requests for additional information are expected. SDG&E should use this first group of preliminary reviews to help institute improvements to their workpaper developments and content which would result in more workpapers passing through preliminary review and on to the detailed review stage.								
	To Be Determined: Preliminary reviews will contin	inue throughout the year.							
2	Breadth of response of activities that show an intention to operationalize and streamline the ex ante review process	Percentage of workpapers that address all aspects of the Uniform Workpaper Template (as described in A.08-07-021, or any superseding Commission directive)							
	Noted Progress: The April 3 rd workpaper submission included a single summary file describing the scope of the workpaper submission which helped Commission staff review the submitted files. Additionally, SDG&E provided a single MS Access database including all submitted ex ante data								

Metric Benchmarks

Needs Improvement: The response to the preliminary reviews has been haphazard. Commission staff has had miscellaneous phone conversations with various personnel which has led to a response for one of the 20 incomplete workpapers. Additionally, this 1 response was incomplete.

To Be Determined: Preliminary reviews will continue throughout the year. SDG&E should increase efforts to operationalize their workpaper submissions and communicate their plans to Commission staff.

- Comprehensiveness of submittals (i.e., submittals show that good information exchange and coordination of activities exists, and is maintained, between internal program implementation, engineering, and regulatory staff to ensure common understanding and execution of ex ante processes)
- Percentage of workpapers that include appropriate program implementation background as well as analysis of how implementation approach influences development of ex ante values;[6]
- Percentage of workpapers which, on initial submission, were found to include all applicable supporting materials or an adequate[7] description of assumptions or calculation methods

Noted Progress: SDG&E routinely submits databases which reflect the required ex ante database format fairly well. SDG&E personnel are open to feedback and are actively working to make there submissions comply with Commission direction.

Needs Improvement: As noted above ex ante data submittals are improving. SDGE ex ante data submissions are generally compliant in format and structure but are sometimes incomplete (missing descriptive data). "MeasureCost" records specify full technology costs as requested by ex ante reviews but do not specify labor versus material costs and do not utilize location cost adjustments. Measure records for lighting measures do not comply with ex ante requirements: they do not reference existing DEER lighting technologies for all cases (measure, code/standard and pre-existing) and do not utilize the scaled calculation type and normalized energy impacts. Measure and technology descriptions have improved but are not always adequate to fully describe how a measure is achieving improvements in energy efficiency and sometimes are missing altogether.

On initial review, several workpapers lack appropriate program information, specifically with regard to how the direct install in Hard to Reach installations are tracked consistent with D.14-10-046 OP 16. Additionally, supporting documentation is sometimes missing from workpapers submissions (e.g. WPSDGENRPR0002rev0: Pump System Overhaul for Pumps Less Than or Equal to 50hp, WPSDGENRRN0010rev2: Commercial Reach in Refrigerators and Freezers). Finally, several submissions included inconsistencies between narrative workpapers and the associated ex ante data.

For revised workpapers, it is difficult to determine what the actual revisions are from previous versions and how the ex ante values have changed. There typically is no summary in the workpaper of what the nature and magnitude of the revisions. For workpapers that have undergone review, input or development from the CalTF, workpapers don't typically include any discussion of how the final workpaper values have been influenced by the CalTF process.

To Be Determined: Preliminary and detailed reviews will continue throughout the year. Additionally, the EAR team will be continuing to review ex ante database submittals. The EAR team will also be reviewing workpapers and providing feedback to all PAs in terms of how the change documentation for revisions summarizes the basis, nature, and magnitude of changes.

4 Efforts to bring high profile, high impact, or existing (with data gaps) projects and/or measures to Commission staff in the formative stage for collaboration or input

Percentage of high profile program, or high impact measure, workpapers submitted for collaboration or flagged for review

Noted Progress: SDG&E has increased its effort to informally exchange information about new measures and program offerings and how best to develop workpapers for these measures. SDG&E also reached out early in their role as the lead developer of the LED tube replacement workpaper.

	Metric	Benchmarks							
	Needs Improvement: A claims review (see below) is needed to provide more detailed evaluation of this metric.								
	To Be Determined: Similar to 1b, above, the EAR team will be reviewing claims for high contributions of new technology measures that should have been subject to early review and collaboration.								
5	Quality and appropriateness of project documentation (e.g., shows incorporation of Commission policy directives) Frequency of inappropriate or infe at the time of initial Commission of (higher frequency = lower score)								
	Noted Progress:								
	Needs Improvement:								
	To Be Determined: The ex ante team has not performed any detailed reviews of SDG&E submitted workpapers.								
6a	Depth of IOU quality control and technical review of ex ante submittals: Third party oversight	Quality of workpapers prepared by consultants, third parties, and local government partners submitted by IOUs							
	Noted Progress: SDG&E appears to have engaged workpaper development efforts. This is generally								
	Needs Improvement: Most of SDG&E's third party Errors generally included inconsistencies between								
	To Be Determined: Preliminary reviews will conting reviews are completed and collaborative efforts a workpapers developed by subcontractors to improve	re undertaken, the EAR team expects							
6b	Depth of IOU quality control and technical review of ex ante submittals: Clarity of submittals and change in savings from IOU-proposed values not related to M&V	 Percentage of workpapers which required changes to parameters of more than 10% or required substantial changes to more than two parameters among UES, EUL/RUL, NTG, impact shape, or costs; Percentage change from IOU-proposed values to ED-approved values (higher percentage = lower score) 							
	Noted Progress:								
	Needs Improvement: Preliminary reviews show that some workpapers are intended to support claims for the NTG value for "hard to reach" markets and that additional information is required to support the use of this NTG reference. A detailed review has not been performed on these workpapers yet. If final disposition disallows the use of the HTR-NTG reference, then ex ante values will drop and the score for this metric would be affected by that direction. To Be Determined: The ex ante team has not performed any detailed reviews of SDG&E submitted workpapers so no assessment can be provided in terms of changes in proposed ex ante values.								
7	Use of recent and relevant data sources that reflect current knowledge on a topic for industry standard practice studies and parameter development that reflects professional care, expertise, and experience	Percentage of workpapers with analysis of existing data and projects that are applicable to technologies covered by workpaper							
	Noted Progress: The EAR team has not performed SDG&E has shown some improvement in bringing with the EAR team to identify new sources of relevances with the LED tube replacement and advances.	forward recent research as well as collaborating vant data. Examples of this noticeable effort							

occurred with the LED tube replacement and advanced power strips workpaper.

Metric **Benchmarks Needs Improvement:** While there is noted progress above, efforts for those same workpapers also highlighted some areas needing improvement. One example is the need for LED products to meet the requirements of D.12-11-015 OP 30, which required LED products not covered by CEC standards to be selected from the top half of quality on the market. At this time, it appears the workpaper effort for LED tubes has been suspended in lieu of a pilot project taken on by SCE. To Be Determined: Future detailed reviews of additional workpapers are needed to provide further detail on this metric. 8 Thoughtful consideration, and incorporation, of Frequency of revisions to workpapers in CPUC comments/inputs. In lieu of response to (and/or appropriate and wellincorporation of comments/input, feedback on defended rejection of) CPUC reviewer's why comments/input were not incorporated recommendations Noted Progress: SDG&E reached out to Commission staff at the end of April both via telephone and email. SDG&E communicated that they had received the preliminary review comments, had reviewed them, and were in process with making corrections. Needs Improvement: Preliminary reviews were returned to SDG&E more than 10 weeks ago. Although SDG&E initially indicated they would provide a rapid response, very little has been submitted to the WPA. It is not clear from food service workpapers submitted by other IOUs that direction from D.11-07-030 requiring ISP analysis has been implemented. To Be Determined: Need to perform additional detailed reviews and compare final workpapers against preliminary review comments as well as direction from previous workpapers reviews and other Commission staff and EAR team directions. 9 Professional care and expertise in the use and Percentage of workpapers, including those application of adopted DEER values and DEER covering new or modified existing measures, methods that appropriately incorporate DEER assumptions and methods Noted Progress: SDG&E has shown effort to reference DEER values in their workpapers and ex **Needs Improvement:** Several workpapers were submitted which use costs derived from outdated versions of DEER. While the costs themselves may be acceptable, SDG&E needs to provide additional justification showing why the costs are still valid. Additionally, several preliminary reviews identified typos and/or inconsistencies in the application of the EUL and NTG tables. To Be Determined: As the EAR team performs additional workpaper reviews, SDG&E's submissions are expected to improve. 10 Ongoing effort to incorporate cumulative Percentage of workpapers including analysis experience from past activities (including prior of previous activities, reviews and Commission staff reviews and direction[11] recommendations) into current and future work products Noted Progress: SDG&E is working toward a workpaper system that utilizes the existing DEER data contained in READI as much as possible and not resubmit data already included as DEER data in the ex ante database. SDG&E appears to have engaged additional subcontract assistance as well as increased staff resources to address previously issued reviews and direction. **Needs Improvement:** Preliminary reviews showed some workpapers HTR-di NTG values without supporting documentation consistent with D.14-10-046 OP 16. Additionally, one submitted workpaper indicates that SDG&E intends to adopt measures covered by the 2013-2014 Lighting Retrofit disposition, however, the workpaper does not incorporate the disposition lighting measures. To Be Determined: SDG&E should incorporate comments made in preliminary reviews into future

workpaper submissions where appropriate. For example, major improvements are expected in the ex ante data quality specifically regarding the Measure Cost table and references to measures

already in the Commission's ex ante database.