

**PUBLIC UTILITIES COMMISSION**

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Date: July 23, 2019

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

From: Peter Biermayer, California Public Utilities Commission

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

Subject: Mid-Year Feedback – 2019 Efficiency Savings and Performance Incentive (ESPI)  
Expected Savings (Ex Ante) Review

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Pursuant to Decision (D).13-09-023, D.15-10-028 and D.16-08-019, the California Public Utilities Commission (CPUC) Staff and consultants are providing mid-year feedback on the program administrators' (PAs') activities producing expected (aka ex ante)savings estimates in the January 1 through June 30, 2019, timeframe (the review period). The mid-year feedback focuses on specific issues and concerns with the expected savings estimates of custom projects<sup>1</sup> and workpapers.<sup>2</sup> This feedback will help the PAs address these issues for the remainder of the year.

## **I. CPUC STAFF FINDINGS ON 2019 EXPECTED SAVINGS ACTIVITIES**

The following sections provide a description of the findings, including areas of achievement and areas requiring improvement.

### **A. Custom Projects Review Overview**

The CPUC selected a new contractor to assist the Staff with the custom projects expected savings review and expects to commence review activity in the third quarter of 2019. No custom projects were selected for expected savings review in the first two quarters of 2019, so there is no custom project feedback at this time.

### **B. Deemed Workpapers Review Overview**

#### **1. Summary of 2019 Mid-year Achievements**

For the 2019 mid-year review, the CPUC Staff observed improvements in SDG&E's development and management of workpaper submissions in the following areas:

- SDG&E, in collaboration with the other PAs, has managed the revision and/or development of a high volume of workpapers during the review period. The CPUC acknowledges SDG&E's role in making this submission cycle successful and timely.
- SDG&E has systematically reviewed aspects of Database for Energy-Efficient Resources (DEER)<sup>3</sup> or Preliminary Ex Ante Resource database (PEAR)<sup>4</sup> and reported back anomalies in a clear succinct manner. This has been beneficial to all stakeholders.

#### **2. Summary of Areas of Improvement**

The Staff highlights the following recommendations for improvement:

- SDG&E has played a limited role in the development and management of workpaper submissions during the review period. Staff encourages SDG&E to find a leadership role in some area of interest.

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<sup>1</sup> Custom projects are energy efficiency efforts for which the customer financial incentive and expected energy savings estimates are determined using site-specific analysis of the customer's facility. See [D.13-09-023](#), Section 7.4.

<sup>2</sup> "Deemed" measures are individual energy efficiency measures with predetermined, or "deemed," savings estimates. They represent all portfolio savings from programs other than custom projects or codes & standards advocacy programs.

<sup>3</sup> The [Database for Energy Efficient Resources](#) contains information on selected energy-efficient technologies and measures.

<sup>4</sup> The Preliminary Ex Ante Resource database contains proposed updates to DEER for vetting before being finalized in DEER.

- SDG&E, in collaboration with the other PAs, should plan workpaper updates holistically, with research activities coordinated across workpapers of the same end-use.
- SDG&E, in collaboration with the other PAs, should identify disruptive issues earlier and propose methods for their orderly resolution.
- Workpaper plans should include detailed schedules and they should allocate adequate subject matter expert review time and adequate stakeholder notification.

## **II. DISCUSSION**

### **A. Custom Projects Expected Savings Review Discussion**

As stated in Section I, no custom projects were reviewed in the first two quarters of 2019.

### **B. Deemed Workpapers Expected Savings Review Discussion**

SDG&E submitted eighteen workpapers in the first half of 2019 through mid-June, fifteen of which were adoptions of previously approved workpapers and none of which were statewide workpapers. SDG&E was the lead for the statewide HVAC measures; however, those measures are not included in this mid-year review and Staff engagement with SDG&E has been limited. SDG&E is actively leading workpaper development for one measure.

The comments below are organized by the five scoring metric areas created in D.16-08-019.<sup>5</sup> The narrative includes observations common to multiple workpapers and feedback related to the workpaper development process. Specific workpaper feedback is provided in tables in Attachment A, at the end of this document. The Workpaper Detailed Review Table provides feedback on specific workpapers. The Workpaper Submissions Table lists all workpapers submitted by SDG&E during the review period. Workpapers that were led by SDG&E and were either disposed or reached approval status during the review period were selected for feedback. The Staff acknowledges that workpaper development may have been supported by multiple PAs; however, at the time of this mid-year review, there is no mechanism for apportioning feedback among PAs. Therefore, feedback is only provided for the submitting PA, with the assumption that they are the lead PA.

#### **1. Timing and Timeliness of Submittals**

SDG&E has met deadlines for submission of statewide workpapers in the review period, which was an accomplishment considering the volume of workpaper submissions and the challenges of the consolidation process. There are, however, improvements that can be made in this metric.

Large numbers of scheduled workpapers were submitted just in time to meet a deadline. The Staff and consultants would appreciate it if SDG&E distributed submissions over several weeks before the deadline, rather than as a batch right at the deadline. SDG&E submitted the majority of the 2019 Phase 1 in the last few days of 2018.

Should SDG&E develop a workpaper, Staff and consultants expect that a workpaper plan will be submitted and include at least a target workpaper submission date early in the development cycle. As the development cycle advances, the schedule should become more detailed with itemized tasks, interim deliverables, and Staff review milestones with projected due dates. A detailed workplan schedule allows the Staff to monitor the progress of the workpaper

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<sup>5</sup> See [D.16-08-019](#) at 87.

development and to schedule subject matter expert to review deliverables. The Food Services workpaper plan includes a schedule that can be used as a template for future workpaper plan detailed schedules.

The Staff requests that the PA joint Work Paper Plan required by D.15-10-028, and typically submitted in October, include all planned workpaper submissions, including Phase 2, resubmitted Phase 2, and PA adoption workpapers, as well as 2020 Phase 1 workpapers.

## **2. Content, Completeness, and Quality of Submittals**

The content, completeness, and quality of workpapers has generally met standards. From the Staff perspective, the consolidation process has gone well, considering the volume of workpapers, the coordination that has been required, and the difficulties acquiring all the reference building prototypes.

PAs have an important responsibility to identify new technologies and delivery methods, and to develop workpapers where a deemed option makes sense. SDG&E has one workpapers under development for a phase change material for walk-in refrigeration applications. The CPUC encourages the continued development of new measure workpapers to ensure innovative measures.

The CPUC encourages planning workpaper updates more comprehensively and by end-use, borrowing elements from the workpaper consolidation planning. Planning by end-use (such as lighting or refrigeration) provides an opportunity to leverage research activities across multiple measures and workpapers. The CPUC notes that the catalog of potential areas of improvement by end-use is also very useful and should be continuously updated as issues arise.

Rather than single workpaper or workpaper parameter updates, the CPUC encourages comprehensive updates by workpaper groupings, like the in-progress update of five food services workpapers. The plan for updating these five workpapers includes standard practice research, equipment testing, customer surveys, hours of operation measurements, and updated compilation of product characteristics. Updating the uncertain and impactful parameters means these workpapers should not require updating again for a significant period. The CPUC encourages a proposal from the PAs for updating workpapers grouped by end-use spaced over a multi-year time horizon.

Workpapers are focused on defining well-supported savings and cost estimates, but measures are delivered in a program and regulatory context that is not described in the workpaper. The Staff finds it useful to hear PA views on program and regulatory issues and encourages briefing when appropriate. As an example, the SoCalGas smart communicating thermostat program manager described to the Staff and consultants the measure's role in multiple co-offerings with other PA programs. Also, SCE presented to the Staff and consultants a data-rich analysis of workpaper trends and their potential impact on the portfolio savings and cost-effectiveness. Both presentations were excellent, and the CPUC encourages similar communication of thoughtful and data-rich program and regulatory perspectives on important issues.

## **3. Proactive Initiative of Collaboration**

The CPUC recognizes that the consolidation of workpapers into single, statewide workpapers has required considerable coordination and collaboration between the PAs, and the PAs are to be commended.

SDG&E is the lead for HVAC measure development; however, Staff engagement has been limited during the review period. SDG&E also collaborated with the other PAs and the Staff to present a Third Party Workpaper Q&A webinar on April 11.

#### **4. PA's Due Diligence and Quality Assurance/Quality Control Effectiveness**

Of the eighteen workpapers submitted, SDG&E was the lead for the three workpapers listed in the submitted table in Attachment A, at the end of this document. Leading this workpaper development taxes PA resources, and the CPUC acknowledges and commends PAs taking on this work.

The Staff expects that the PAs manage workpaper development well, including the submission of a workpaper plan and schedule early in the development process, as noted in Section 1, and that the schedules are managed to meet deadlines. The phase change material workplan included a timeline, but not a detailed schedule. The Staff also expects that the lead PA will coordinate with other PAs to ensure each submission is complete from the perspective of all PAs.

#### **5. PA's Responsiveness to Needs for Process and Program Improvements**

SDG&E partnered with the Staff and other PAs to resolve common issues and implement process improvements. Examples of these include:

- Development of a solution for implementing the new measure application types (MAT).
- Implementation of workpaper cover page. All workpaper submissions from SDG&E have included a complete cover page since its rollout.

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. For example, SDG&E found and reported that refrigerant charge measures were missing in DEER.

While there have been some procedural improvements, PAs have been deficient in anticipating and acting to resolve looming issues, such as the MAT implementation and defining the workpaper references for the September Annual Budget Advice Letters. As a group, the PAs need to better manage potential problems by first articulating issues early and then developing an action plan to resolve them in an orderly fashion. The Staff requests that the monthly joint meeting include a standing agenda item to inventory upcoming issues and to begin formulating action plans to address them. The CPUC expects PAs to volunteer to take leads on high-priority issues.

The California Technical Forum (CalTF), who is consolidating measure workpapers, proposed eTRM,<sup>6</sup> new third-party contracting process, and implications of Resolution E-4939<sup>7</sup> all set the stage for rethinking workpaper processes. It is incumbent upon the PAs to provide their vision of what these processes might be, although other stakeholders will also have important input on the final processes. There has been limited progress on developing a communications plan that fully meets the needs of all stakeholders. The Staff will seek organized and thoughtful input on this

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<sup>6</sup> The eTRM, or electronic Technical Reference Manual, is an online relational database intended to be a repository for all statewide deemed measures. The development was sponsored by PAs and managed by the California Technical Forum, known as CalTF.

<sup>7</sup> [Resolution E-4939](#) sets forth principles for regular updates of measure baselines.

## 2019 SDG&E Mid-Year Feedback on Expected Savings Review Performance

topic. SDG&E's initiative in piloting a mechanism for stakeholders to formally log workpaper complaints is the kind of thinking the CPUC encourages.

The DEER team has requested that all DEER-related support questions be issued to [DEERsupport@dnvgl.com](mailto:DEERsupport@dnvgl.com) . The Staff notes that compliance is good but seeks full compliance.

Questions or comments about the feedback or final scores should be directed to Peter Biermayer at [Peter.Biermayer@cpuc.ca.gov](mailto:Peter.Biermayer@cpuc.ca.gov) . Note that pursuant to D.13-09-023, the Staff will schedule a conference call meeting with SDG&E to discuss and answer clarifying questions from this memorandum.

**ATTACHMENT A: WORKPAPER FEEDBACK**

The table below lists workpaper submissions by ID number, revision number, and title. The qualitative scores shown will be combined into a single score in the final expected savings review performance memorandum. Each category’s total score will be equally weighted in the final total score for the metric. The PA may refer to the individual dispositions for more detailed descriptions of the specific actions the Staff required for each workpaper.

The ESPI Metric Columns in the tables correspond to the metrics described below:

Metric #	Metric Description
1	Timing and timeliness of submittals
2	Content, completeness, and quality of submittals
3	Proactive initiative of collaboration
4	PA’s due diligence and quality assurance/quality control effectiveness
5	PA’s responsiveness to needs for process and program improvements

The qualitative scores 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 a neutral (midpoint) scoring impact on a metric (meeting expectations).
- no indicates that the review feedback is not applicable to a metric.

2019 SDG&E Mid-Year Feedback Expected Savings Review Performance

Workpaper Detailed Reviews: SDG&E				ESPI Metrics				
WP ID	Rev	Title	Comments	1	2	3	4	5
WPSDGENRA G0003	0	Agricultural Greenhouse Thermal Curtains	New workpaper. Review did not result in any comments. Workpaper complete.	1	yes	yes	yes	+
WPSDGENRA P0001	0	Gas Dryer Modulating Valve Commercial and Multi-Family	New workpaper. Review did not result in any comments. Workpaper complete.	1	yes	yes	yes	+
WPSDGENRA G0001	2	Sprinkler to Drip Irrigation	New workpaper. Review did not result in any comments. Workpaper complete.	1	yes	yes	yes	+



2019 SDG&E Mid-Year Feedback Expected Savings Review Performance

Workpaper Submissions			
WP ID	Rev	Title	Lead or Adopt
WPSDGEREWP0002	8	Variable Speed Pool Pump	Adopt
WPSDGENRAG0003	0	Agricultural Greenhouse Thermal Curtains	Lead
WPSDGENRWH1205B	0	Non-Res Storage WH (>75kBTU/h)	Adopt
WPSDGENRAG0001	2	Sprinkler to Drip Irrigation	Lead
WPSDGENRHC0022	2	Com Refrigerant Charge	Adopt
WPSDGENRHC1010	2	Com Evap Coil Cleaning	Adopt
WPSDGENRHC1020	4	Commercial Cond Coil Cleaning	Adopt
WPSDGEREHC0032	2	Res HVAC Quality Maintenance	Adopt
WPSDGEREHC1065	4	Res Brushless Fan Motor	Adopt
WPSDGEREHC0024	3	Res Fan Delay Controller	Adopt
WPSDGEREWH1012	2.1	Faucet Aerators for Bathroom and Kitchen Sinks in Res Bldg	Adopt
WPSDGEREWH0022	3	Residential Heat Pump Water Heater	Adopt
WPSDGEREHC0030	0.2	Residential Smart Communicating Thermostat	Adopt
WPSDGEREWH0024	2	StorageTank WH	Adopt
WPSDGEREWH0025	2	Res High Efficiency Instantaneous Water Heater	Adopt
WPSDGENRAP0001	0	Gas Dryer Modulating Valve Commercial and Multi-Family	Lead
WPSDGENRHC0029	0	Enhanced Ventilation and VFD for Packaged HVAC Units with Gas Heating and Packaged Heat Pumps	Adopt
WPSDGENRHC0027	1	Economizer Repair for Package AC	Adopt