

RTR Appendix

Southern California Edison, Pacific Gas and Electric, Southern California Gas, and San Diego Gas and Electric (“Joint Utilities” or “Joint IOUs”) developed Responses to Recommendations (RTR) contained in the evaluation studies of the 2010-2012 Energy Efficiency Program Cycle. This Appendix contains the Responses to Recommendations in the report:

Study of the California Utility Internal Measure Development Process - Final Report (2015, Evergreen Economics, Calmac ID# SCE0380.01)

The RTR reports demonstrate the Joint Utilities’ plans and activities to incorporate EM&V evaluation recommendations into programs to improve performance and operations, where applicable. The Joint IOUs’ approach is consistent with the 2013-2014 Energy Division-Investor Owned Utility Energy Efficiency Evaluation, Measurement and Verification (EM&V) Plan (version 3) ¹ and CPUC Decision (D.) 07-09-043².

Individual RTR reports consist of a spreadsheet for each evaluation study. Recommendations were copied verbatim from each evaluation’s “Recommendations” section.³ In cases where reports do not contain a section for recommendations, the Joint IOUs attempted to identify recommendations contained within the evaluation. Responses to the recommendations were made on a statewide basis when possible, and when that was not appropriate (e.g., due to utility-specific recommendations), the Joint IOUs responded individually and clearly indicated the authorship of the response.

The Joint IOUs are proud of this opportunity to publicly demonstrate how programs are taking advantage of evaluation recommendations, while providing transparency to stakeholders on the “positive feedback loop” between program design, implementation, and evaluation. This feedback loop can also provide guidance to the evaluation community on the types and structure of recommendations that are most relevant and helpful to program managers. The Joint IOUs believe this feedback will help improve both programs and future evaluation reports.

¹ Page 336, “Within 60 days of public release of a final report, the program administrators will respond in writing to the final report findings and recommendations indicating what action, if any, will be taken as a result of study findings. The IOU responses will be posted on the public document website.” The Plan is available at http://www.energydataweb.com/cpucFiles/pdaHomeDocs/2/2013-2014_Energy_Efficiency_EMV_Plan.zip (visited on 10/1/14).

² Attachment 7, p.4, “Within 60 days of public release, program administrators will respond in writing to the final report findings and recommendations indicating what action, if any, will be taken as a result of study findings as they relate to potential changes to the programs. Energy Division can choose to extend the 60 day limit if the administrator presents a compelling case that more time is needed and the delay will not cause any problems in the implementation schedule, and may shorten the time on a case-by-case basis if necessary to avoid delays in the schedule.”

³ Recommendations may have also been made to the CPUC, the CEC, and evaluators. Responses to these recommendations will be made by Energy Division at a later time and posted separately.

EM&V Impact, Process, Market Assessment Study Recommendations

Study Title: Study of the California Utility Internal Measure Development Process - Final Report (8/31/15) SCE0380.01

Program: UIMD

Author: Evergreen Economics

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1	26-27	While interviewed PG&E staff felt the measure development process works well, some noted that timely communication is urgent, because multiple groups are involved and the process is very structured. Although the physical proximity of members of the core teams leads to frequent communication, one person noted that there are opportunities to better use communication tools such as SharePoint and GoToMeeting.	If other PG&E staff concur that communications tools are not being used correctly or optimally, PG&E might develop procedures or training to improve staff usage. SharePoint and similar file sharing services can be useful for tracking and disseminating new measures status, but require detailed attention to files organization and version control, so that staff can find the most current information they need.	PG&E	Accepted	PG&E is currently developing an internal workflow system to link the ETP process with Energy Insight, PG&E'S Salesforce based downstream product and program management system. The new system will consolidate many of the existing ETP and product development documents, and will contain tracking controls.
2	27	CPUC decision D12-05-015 ordered the ETP to coordinate with other entities to bring new measure ideas into the portfolio	PG&E should develop formal processes for tracking primary and contributing information sources for new measures (e.g., other IOU ETP staff, conference attendees, manufacturing representatives, etc.) to document compliance with the order and better assess the relative contributions of different information sources going forward.	PG&E	Accepted	PG&E is currently developing a funnel for enabling governance and decision making as a procedure for new ideas captured via the ETCC and other internal and external sources. This new governance gate ("Gate Zero") was added to our SPARC product and program development process. Any product, system, or solution that is identified in a PG&E product roadmap will go to Gate Zero, which will involve required documentation including the sources by which that product, system or solution was identified or proposed.
3	26-27	A senior member of the engineering team reported that work paper development is initiated by the Product Manager, and it is not always clear to the engineers whether each measure has gone through an ET assessment or not. Because ET study results do not automatically go to the engineering team, the hand-off of ETP studies for use in development of work papers is less structured and less predictable than optimal for planning needs.	We recommend that PG&E Product Management consistently and formally share ETP results with the engineering team and others to ensure that all available data are used in work paper development. We recommend that there be a formal procedure to ensure this interaction.	PG&E	Accepted	PG&E recently operationalized our product development in to our Salesforce platform Energy Insight. As part of this deployment, there are system-level checks and balances which ensure that Product Managers deliver a completed Product Brief to the Engineering team in order to initiate workpaper development. The Product Brief includes a section that details any data or insights gathered through ETP efforts. Engineering will not begin workpaper development until they have received the Product Brief.
4	25-27	The engineering teams have recently started collaborating with CPUC staff at the start of the work paper development process, which has helped to reduce the number of revisions iterations overall, according to the interviewees. In particular, engineers inform CPUC staff which work papers are likely to be submitted each month, and CPUC staff indicate which ones they would like to be most directly involved with before the work papers are submitted. While this has been helpful, interviewed engineering staff commented that CPUC staff can still be reluctant to render a final decision and show a preference for generally wanting more or "better" data.	PG&E Engineering staff are proactively working with CPUC work paper reviewers to identify required inputs at the start of some work papers, and should confer with the CPUC and other IOUs to see if there are ways to enhance or develop new guidance for work paper development. This could help to reduce remaining uncertainty about required study sites and data collection, would give the IOUs more confidence that new work papers are sufficiently developed, and help to further expedite reviews by the CPUC.	PG&E	Other	This Recommendation has merit but is out of scope for ETP. See response to Item #21.
5	42-43	Lack of organizational knowledge of the Gate Process outside the IMD actors, and in particular, the single intake process	To support the measure development process, SCE should consider improving organizational knowledge of the Gate Process and hasten process widespread adoption by developing educational materials and presentations for staff highlighting the benefits and successes of the Gate Process. SCE have engaged a staff member to communicate the value of the process since the inception of this study.	SCE	Accepted	SCE has accepted and implemented this recommendation: The ETP program manager along with the New Product Development & Launch organization's Gating process owners developed materials and a presentation to train staff on the intake process, and implemented the training at the beginning of Q3. Trainings will recur periodically to train new staff as needed.
6	30,43	There are some concerns among non-ETP interviewees we spoke with that having a single path for all new measures could slow down the process of developing and later deeming custom measures. Others, however, noted that while the process may lead to slower development of some products, the overall goal of the reorganization is to deliver products to market more efficiently. Before the reorganization, new ideas could come through a wide variety of channels leading to inefficient use of company resources. The goal of the reorganization is to streamline the process to ensure that company resources are utilized efficiently, ultimately reducing the overall time and energy spent on new measure development in aggregate. The Idea Proposal form is an important new streamlining feature. According to SCE staff, it is fairly easy to complete the short, two-page Idea Form, and because the amount of required information is not onerous SCE staff can submit many ideas without consuming significant staff resources	If SCE's goal is to have one intake channel for all new measures, as planned, SCE should incorporate the Engineering Analysis Request form into the Idea Proposal form so there is one standardized application portal.	SCE	Other	This recommendation is unnecessary. P. 30 of the report already captures, "ETP staff noted that SCE is adjusting the process so all that all new measures will follow Path 1 above, which will help to reduce potentially duplicate measures." Additionally since interviews were conducted, ETP, Gating Process owners group and the DSM engineering are now part of the same organization and processes have been adjusted as stated above.
7	31,43	Both the Idea Proposal form and the EA gather important information including the primary information sources for new measures. Staff believe there is value in tracking the primary source, but suggest that they should also be tracking a complete chain of involvement rather than only one originating source, so that success of a measure can be attributed correctly across multiple parties	SCE is already tracking the primary information sources for new measures, and should develop a method (e.g., enhanced Idea form) to try to track contributing secondary information sources, which would help to illuminate the full idea generation phase and potentially reveal additional data that can be used in SCE assessments.	SCE	Rejected	We believe the evaluators may be misunderstanding a few concepts: the "success" of a measure depends upon work by multiple parties, yes, but these are parties within the utility that help develop the measure and promote it to the customer. The success of a measure depends on customer uptake. A "complete chain of involvement" refers to involvement during measure development. The originating and secondary sources are not important to the success of a measure, and illuminating "the full idea generation phase" is not necessary for measure development.

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8	34,43	Because ETP measures have undergone significant testing they typically have more technical data, more advanced concept development, and possibly field data and customer implementation. ETP measures are often able to move directly to the Product Development stage, which can reduce the length of the process by 2 – 18 months depending on the measure. Once an ETP technology moves to the Product Development phase it typically requires a similar level of work as a non – ETP technology. One interviewee involved with work-paper development noted that data from ETP studies are often not sufficient to complete a work paper because ETP studies are often very site-specific, requiring additional sites to be studied. This interviewee noted that DSM Engineering and ETP have recently collaborated on a tool to help generalize savings from ETP that may make ETP studies more valuable to the work paper process in the future.	SCE Engineering and ETP staff should work with the CPUC and other IOUs to see if there are ways to enhance or develop new guidance for work paper development, which could help to reduce uncertainty about required study sites and data collection. This would give the IOUs more confidence that new work papers are sufficiently developed, and help to expedite reviews by the CPUC.	SCE	Other	Duplicate recommendation, please see response to Item #21.
9	35,43	In addition, for each individual measure there is a DSM Solutions project manager who, in collaboration with the sponsoring DSM Operations manager, is responsible for shepherding the progress of the individual measure through the Gate Process. One interviewee noted that these individuals act as champions for the measure and are “polite naggers” who “keep the measure on the radar of key stakeholders,” which can be challenging. Another challenge to the communication process mentioned by one interviewee was a lack of role clarity, which can cause confusion in the process. However, this interviewee also believed that IMD process roles would become clearer as staff acclimate to the recent reorganization and new Gate Process.	The success of SCE’s IMD process is reliant on adequate resource allocation and staffing, since there are several gates and potential delay points. To ensure that resources are allocated efficiently, the NPD&L team could include resource allocation reviews as a topic to periodically review in team meetings.	SCE	Accepted	This is already being done informally, but SCE will review whether a more formal process would be useful. The evaluators did not seem to document a particular need for this recommendation.
10	54	Although the duration of measures development at SDG&E does not appear to be excessive compared to other utilities, there is anecdotal evidence that processes can be expedited, since consultants were reviewing some intra-departmental processes during our research. We did not have access to the findings or recommendations from these consultants.	More formal documentation of communications, information/data provision and next action steps could help SDG&E to better track the status of new measures and identify persistent delay areas (if any) to remedy. In addition to considering the consultant’s recommendations, SDG&E could also consult with other IOUs regarding their detailed methods and tools for documenting new measures communications and status (e.g., email distributions, SharePoint notifications), some of which are currently being refined.	SDG&E	Accepted	Should SDG&E’s consultant agree that more formal tracking would be beneficial, SDG&E will consult other utilities on their lessons learned.
11	54	While one staff member reported tracking ETP information sources on a quarterly basis for the CPUC, at least two other measure development staff were not aware of this tracking.	SDG&E should share tracking processes internally and could consider merging information sources inside of ETP with those outside of ETP if they see this as valuable.	SDG&E	Accepted	SDG&E will share tracking processes internally.
12	54	Staff desired more frequent updates about what ETP is researching. Discussions with ETP staff indicate that they are proactively researching new products, revealing a communication disconnect as other staff are not entirely aware that ETP is looking to multiple sources for new products. Better communication may help facilitate understanding among staff involved in the new measures development process.	Consider publishing a quarterly status report, which can allow ETP to communicate its role in measure development to stakeholders who may be unfamiliar with it. This report can also be used to educate new program staff about ETP’s capabilities, as well as provide documentation of the path emerging technologies take through a utility’s measure development process.	SDG&E	Other	SDG&E ETP used to provide quarterly status report to Customer Programs, along with 3-hour in-person briefing and discussion. This was discontinued in response to feedback from the program leads due to the challenges in accommodating a large audience’s schedules and their diverse interests in various projects. We find it more effective and productive to engage stakeholders of each ET project from project initiation to final results review, approval and transfer. Additionally, ETP will continue to distribute periodical program reports and tracking database requested by ED also to internal interested stakeholders.
13	45,54	Work papers are created by the Engineering Staff when measures are believed to be cost effective, desirable to customers, and solve a market problem. They may utilize information from the Technology Assessments described above. At this point, the Project Team will have looked at project goals, strategy, scope, high level implementation plans, and measurement and verification considerations. ETP often provides information such as product performance, savings estimates, cost, manufacturer strength, customer acceptance, and adoption barriers in their Technical Assessments. Work papers are submitted to the Energy Division of the California Public Utilities Commission (CPUC) for approval to integrate into programs as deemed measures. If the measure already has a work paper for a prior version of the technology, then Engineering generally will update the existing work paper internally (likely without ETP assistance) and resubmit it for review. A comment from one non-ETP staff member may illuminate why some products may not move forward in the UIMD process. They noted that Engineering staff sometimes desire additional clarity on work paper requirements from the CPUC in order to feel more confident that their papers are likely to be accepted. We note here, however, that uniform requirements may be challenging to implement as work papers are used to cover a diverse set of technologies and applications.	SDG&E Engineering and ETP staff should work with the CPUC and other IOUs to see if there are ways to enhance or develop new guidance for work paper development, which could help to reduce uncertainty about required study sites and data collection. This would give the IOUs more confidence that new work papers are sufficiently developed, and help to expedite reviews by the CPUC.	SDG&E	Other	Duplicate recommendation, please see response to Item #21.
14	48,54	Currently customer utilization of measures is tracked through program performance metrics and through mandated evaluations, but this information is seen by Program Staff and is not received by ETP or the Engineering team. Emerging Technologies is interested in tracking this information in order to understand how much savings can be attributed to their group. They are hoping to flag successful measures in the future in order to better understand customer uptake.	SDG&E’s measure development stakeholders should formally disseminate customer utilization data with ETP and Engineering staff and solicit their feedback to documented customer barriers. This feedback could potentially improve customer uptake of “lagging” measures through additional refinements, and also help ETP staff to focus on additional new measures with characteristics similar to successful measures with proven savings and/or high demand.	SDG&E	Accepted	SDG&E ETP will share this recommendation with the measure development stakeholders.
15	54	Two respondents stressed a need to focus more on the process of bringing accepted measures to end-users. One person cited the 10 percent program budget cap for administrative activities as a limit to measures rollout and customer outreach.	If SDG&E wants to focus more on the process of introducing approved measures to end users (i.e., improving awareness), then they should conduct additional, narrowly focused research on new measures rollout - a topic we could not explore in-depth through our interviews. Inadequate customer awareness of new measures has been documented in other SDG&E program evaluations, and it is possible that Marketing, Program Management and Account Management staff can better systematically inform customers of new measures. SDG&E could set up a meeting a certain amount of time after the product launch where staff from Marketing, Program Management, and Account Management assesses the rollout and give feedback (if related to the development process) to ETP and the Engineering staff.	SDG&E	Accepted	SDG&E ETP will work with other measure development stakeholders within SDG&E to see if ETP can assist with additional, narrowly focus research on new measures rollout.
16	75	SoCalGas is monitoring the efficiency and effectiveness of its new IN Process as more new measures are studied and launched.	SoCalGas should develop an annual report documenting process achievements and deficiencies that required changes (if any). This reporting should probably commence in early 2016, so the new process has had at least 12 months to operate and solidify.	SoCalGas	Accepted	Beginning 2014Q4, SCG has already developed an annual report documenting process achievements and deficiencies.

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17	75	Like SCE, SoCalGas is implementing a complex measure development process that may require several months for measure development and other staff to understand and accept.	As needed, SoCalGas should consider developing internal educational materials and presentations (less detailed than the full Procedures Manual) to inform staff on how the process works, what information is developed and when, and to highlight successful new measures resulting from the process.	SoCalGas	Accepted	SCG already has already developed internal education materials (Powerpoint) and a full Procedure Manual for internal staff.
18	74-75	When asked about guidance desired from the CPUC four respondents shared suggestions for improvements. Two non-ETP staff wanted the CPUC to provide more guidance and transparency on how they approve new work papers. In addition, a respondent asked for more information on how to account for savings of products with behavioral change components. An ETP staff requested that Commission staff take into account the low free ridership of new measures when considering cost effectiveness (given the high costs of products and need for utility involvement to help consumers procure the product). A non-ETP staff member suggested that the Commission reconsider the level of scrutiny given more generally. According to this interviewee, "CPUC thinks it is important to have valid and highly analyzed data but there is a point where there may be too much." Two non-ETP staff wanted a faster CPUC work paper approval process but another staff noted that the Commission is already working to accelerate this process.	SoCalGas Engineering and ETP staff should work with the CPUC and other IOUs to see if there are ways to enhance or develop new guidance for work paper development, which could help to reduce uncertainty about required study sites and data collection. This would give the IOUs more confidence that new work papers are sufficiently developed, and help to expedite reviews by the CPUC.	SoCalGas	Accepted	Duplicate recommendation, please see response to Item #21.
19	75	Cost effectiveness for new gas measures is a challenge for SoCalGas and one interviewee stated that SoCalGas does try to identify additional electric and water savings, to potentially partner with SCE and Los Angeles Department of Water and Power on measures. According to this staff person, SoCalGas staff are still learning how to best leverage these partnerships within the IN process framework, so that all potential energy and water savings are identified more systematically.	SoCalGas should look for opportunities to enhance the IN process so that potential electric and/or water savings are identified systematically without impacting the SoCalGas program budget. For example, existing information on potential electric/water savings should be compiled during the idea generation or preliminary analysis stage, and technology assessment work scopes should be submitted to utility partners prior to execution if there is potential for additional resource savings.	SoCalGas	Accepted	SCG already incorporated this process into our internal measurement during the preliminary analysis stage (Stage 2 of INI). This process is documented in our education materials and Procedure Manual.
20	100-101,	Some interviewees did not perceive a significant benefit from systematic tracking of information sources, since the utilities claim to have a good understanding of which sources to explore and which are most valuable to them (detailed in the earlier chapters). As the Commission would like the IOUs to implement systematic tracking, however, we have recommended at the end of this chapter that the IOUs discuss with CPUC the value of tracking detailed information sources and preferred formats for doing this.	The IOUs should request one or more meetings with the CPUC to review the tracking that is currently done on information sources for new measures (ETP and non-ETP), confirm the value of detailed tracking and agree to acceptable tracking tools or templates. As multiple information sources can often be linked to new measures, it is important that the IOUs and CPUC agree to the level of detail that must be captured, so that analytical needs are balanced with administrative requirements.	All IOUs	Accepted	The IOUs are planning to go through the tracking database systematically and review whether each element being tracked is useful or not. As Commission Staff have changed over the years, their tracking desires have changed, but fields have only been added to the ETP database without fields being removed. The IOUs agree that there is a need to confirm the value of detailed tracking.
21	111-113	A common challenge reported by IOU staffs is the work paper approval process at the end of the UIMD pipeline. Work papers for deemed measures are only one specific element of the overall UIMD process, and this study did not conduct in-depth research on the work paper review and approval process or quality of work papers submitted. Since work papers were not a primary study focus, Evergreen did not interview staff at the California Public Utilities Commission (CPUC), CalTF or consultants that review work papers for CPUC for their perspectives on the process. That said, multiple IOUs reported that uncertainty about CPUC work paper requirements and frequent requests for additional data have lead to multiple submittal iterations or sometimes no submittal at all.	The IOUs should request one or more meetings with the CPUC to review current work paper requirements, to see if guidance documents can be enhanced or expanded based on recent IOUs submittals and/or CPUC needs. IOU staff are aware that work paper requirements need to vary to account for a range of measure types and end use applications, but it may be possible for both parties to better clarify and understand more defined sets of requirements.	All IOUs	Other	This recommendation is not really necessary because this effort has already been ongoing since the 2006-2008 program cycle, and is being addressed by multiple divisions across all utilities. Recent efforts have been made between the joint-IOUs and the CalTF to coordinate new statewide measure developments, provide independent reviews on technical documentation, and mediate the communications between the CPUC and the Program Administrators
22	112-113	Interviewed IOU staffs found the ETP's Technical Assessments to be valuable to the full measure development process, however sometimes they do not produce sufficiently robust data to support subsequent work papers.	The IOUs should continually assess how their ETP Technical Assessments are funded, selected and implemented, so that the value of the resulting data is optimized. Confirming CPUC's work paper requirements (#2 above) may help to rectify this, and the IOUs should also refer to the Best Practices guidance developed to improve the level of rigor of Technology Assessments.	All IOUs	Other	ETP already assesses funding, project selection, and implementation on a continual basis; the barrier to workpaper approval is not one of robustness of data, but rather lack of clarity and consistency about ED's expectations for work papers. This has not been resolved, and the IOUs will continue their efforts to get clarity. As part of this overall effort, ETP will ask ED to confirm whether the "Best Practices" guidelines aligns with workpaper rigor requirements. ETP had asked this question in the past but ED did not respond. ETP would welcome greater clarity on gathering data so that it matches the ED needs. The "best practices" guideline does not address this need.