## 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 2013-2015 Energy Efficiency Program Cycle. This Appendix contains the Responses to Recommendations in the report:

RTR for the Integrated Demand Side Management Market Characterization Study: Residential and Small Commercial Markets (Evergreen Economics, Calmac ID #SDG0286.01, ED WO #2072)

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 2013-2016 Energy Division-Investor Owned Utility Energy Efficiency Evaluation, Measurement and Verification (EM&V) Plan<sup>1</sup> and CPUC Decision (D.) 07-09-043<sup>2</sup>.

Individual RTR reports consist of a spreadsheet for each evaluation study. Recommendations were copied verbatim from each evaluation's "Recommendations" section. 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.

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/cpuc.

Attachment 7, page 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."

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.

## Response to Recommendations (RTR) in Impact, Process, and Market Assessment Studies

Study Title: Integrated Demand Side Management Market Characterization Study: Residential and Small Commercial Markets

Program: IDSM

Author: Evergreen Economics

Calmac ID: SDG0286.01

ED WO: 2072

Link to Report: http://calmac.org/publications/IDSM\_MarketStudy\_SmComRes\_Final.pdf

Item#	Page #		Best Practice / Recommendations	Recommendation Recipient	Disposition (Accepted, Rejected, or Other)	Disposition Notes (e.g. Description of specific program change or Reason for rejection or Under further review)
1		We recommend that the IOUs and the CPUC consider utilizing existing and/or future research to support efforts to establish continuous engagement with customers via online tools and complementary outreach efforts.		IOUs and CPUC	Accepted	Each of the IOUs are continously improving online offering to our customers. Examples include enhancement of Business Energy Solution from both SDG&E and PGE, and the recent update of the Energy Efficiency Audit Tool from SCE. Each of the IOU's send out surveys and gathers input related to the tools and incorporate the responses as feasible.
1a	86		The frequency and motivations behind their use of IOU online tools, with a focus on identifying drivers for repeated exposures.	IOUs and CPUC	Accepted	The tools developed today by the IOUs focus on the motivational factors of the customers and will continue to improve over time. There is applied logic for recommendations and tips that are provided to customers who complete the online audit. The IOUs believe this is an area available for future research studies to improve the offerings and the best ways to use data analytics for our respective customers. All research is contingent upon the CPUC's approval for proposed research.
1b	86		The success and accuracy of personalized features—including whether business types and household features reflected in the tools are accurate, what types of information are most important to the perceived degree of personalization, and the role of personalization in driving repeated use of the tools.	IOUs and CPUC	Accepted	Each of the IOUs continues to use extensive data analytics to help ensure a positive customer experience while fitting the needs of the customer. As the IOUs develop more extensive data points with the existing offerings that will serve as a good reference point for additional customization. There is also an opportunity for additional studies to better understand the best ways to customize information for the customers in our respective service territories. All research is contingent upon the CPUC's approval for proposed research.
1c	86	More specifically, consideration should be	The role of energy consumption feedback on a customer's degree of continuous engagement. This could include presence of in-home displays, Home Energy Reports, and other AMI-enabled and/or Green Button applications.	IOUs and CPUC	Accepted	Each of the IOUs currently offers programs that support this recommendation and would be willing to entertain the offer to complete additional studies in these areas. All research is contingent upon the CPUC's approval for proposed research.
1d		given to analyzing tracking data and gathering feedback from customers regarding:	Whether information is clear and successful in communicating IDSM solutions, with a focus on measuring the educational success of the tools, particularly for frequent users.	IOUs and CPUC	Accepted	Each IOU is continually improving their online tools with reporting and new functionalities to help customers learn about IDSM solutions and tips. Information from users that are the most engaged in the tools are surveyed for additional information and feedback is incorporated as necessary. There is an opportunity for additional studies to further understand the best ways to communicate IDSM solutions. All research is contingent upon the CPUC's approval for proposed research.

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1e	86	What the primary motivations are for creating tool-based long-term energy plans and updating them.	IOUs and CPUC	Accepted	As more information becomes available to the IOUs additional customization can be made based on the customers long term energy plans and the best ways for the IOUs to engage with that customer. This idea aligns more with the customer journey, wherein the connection with the customer is made and then walked through a variety of tools and potential interventions the customer can do to help them reduce their energy consumption, reduce their monthly bill and potentially engage in other programs available such as DR. There is an opporutnity for additional studies to better understand the customers long term energy plans and the best ways to engage with them. All research is contingent upon the CPUC's approval for proposed research.
1f	86	Feedback regarding the usability of the tools for customers seeking both basic and detailed IDSM information.	IOUs and CPUC	Accepted	Evaluations are on going to understand and improve customer impacts and the feedback that is gathered is incorporated as necessary and feasible.
2	86-87	We recommend the IOUs and the CPUC consider investigating the power of various events or circumstances in predicting highly receptive IDSM need states. The data available to support targeted marketing to customers experiencing those events or circumstances should be considered in parallel, and may largely drive the focus of this research area. We recommend considering research into the following events that may correlate with more receptive need states:  • Recent changes in household occupancy, such as marriage/co-habitation, a new baby, or a son/daughter leaving home; • Customers entering the housing market; • Refinancing of customers' homes; • Applications for home equity loans by customers; • Planning a roof replacement; • Addressing old or failing HVAC equipment; • Customers considering installation of Solar PV; • Starting or expansion of customers' businesses; • Application for business loan or line of credit; • Subscribing to architecture and design journals or magazines;	IOUs and CPUC	Other	There was a study completed by Evergreen under management by the ED, which looked at various drivers and barriers to IDSM uptake and evaluated the role of various customer "need states" on predicting IDSM adoption. This study can be found on CALMAC as study number CPU120.01. All of the IOUs gather substantial information regarding customers in a large variety of ways. A few examples, would be capitalizing on Move in / Move out services, online and physical audits and On Bill Financing. Further, each of the IOUs use both internal research and external research studies and market reports to further develop marketing plans for customers. Customer Privacy is incredibly important to all the IOUs and is highly respected. The IOUs do not want to create the feeling of overstepping its scope which a few of the recommendations appear to be potentially inapporpriate for the utility to engage in. There is an opportunity for additional studies to further understand the best ways to communicate IDSM solutions. All research is contingent upon the CPUC's approval for proposed research.
3		We recommend the IOUs continue to leverage the opportunity presented by the transition of small commercial customers to TOU rates to raise IDSM knowledge and awareness. This transition offers both a rare instance of IOU focus on this relatively hard-to-reach customer segment, as well as a 'teachable moment' where customers may be more receptive to energy management information than during times where energy procurement is 'business-as-usual'.	IOUs and CPUC	Accepted	The IOUs agree and puts this integration into practice through IDSM marketing on a regular basis. The IOUs consistantly use Time of Use and Time of Use with a DR component in outreach and communications as an IDSM awarness vehicle. *SoCalGas currently does not offer TOU pricing or DR programs.
4		We recommend the IOUs and the CPUC consider rate-based and integrated programmatic changes. Due to the compartmentalization and narrowly defined fields of DSM specialization, success in creating IDSM awareness and promoting the uptake of IDSM solutions may require a combination of policy and programmatic support. Recent updates to Title 24 building codes and ZNE initiatives are both very positive developments for promoting IDSM. These changes present an opportunity to leverage new levels of attention on the importance of energy management and IDSM solutions, but to be successful they will also require strong programmatic support. We recommend the IOUs leverage changes in Title 24 building codes as a platform for IDSM education, as well as to facilitate greater levels of code compliance and intelligent IDSM uptake. Given the history of low levels of code compliance, there could even be a justification for direct program support to bring customers up to code, especially as the code becomes more stringent. Otherwise significant IDSM opportunities may remain untapped.	IOUs and CPUC	Accepted	The IOUs agree that the code change is a good platform to educate customers on IDSM programs and are using that as a platform when appropriate.
4a	87	New construction programs offering design assistance, as well as workforce education and training efforts will help to ensure the codes are implemented intelligently and consistently with their intention.	IOUs and CPUC	Accepted	The IOUs will continue to offer design assistance as well as education and training related to code.

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4b		We recommend the IOUs and the CPUC create and enhance programs to support successful implementation of these policies:	We recommend the IOUs and CPUC consider placing greater attention and increased program resources on ensuring code compliance. We recommend consideration be given to setting compliance goals and investigate programmatic options that financially incentivize measured improvements in compliance rates.	IOUs and CPUC	Accepted	With the passage of AB802 there are additional opportunities for the utilities and will explore those opportunities in the future. With that said, the IOUs do not want the role of enforcing code compliance which is outside of the scope of the utilities role.
4c	88		Consider enhancing the DR and load shifting elements of ZNE goals in the small commercial and residential sectors. The design and construction of ZNE buildings offers opportunities for DR education and deployment, along with EE and DG.	IOUs and CPUC	Accepted	The IOUs will continue to advocate for many aspects related to ZNE including DR, EE, DG and conservation. *SoCalGas does not currently offer DR programs.
4d	88		Consider adding a DR element to California's Quality Installation and Quality Maintenance programs. Residential air conditioning makes up a substantial portion of summer peak usage, and with control features such as pre-cooling and small temperatures changes, DR may offer measurable peak curtailment potential in the future.	IOUs and CPUC	Other	These issues are currently being discussed in the IDER proceeding. The loading order is a key asspect of the proceeding which impacts this recommendation.
4e	88		If not already in place, consider bolstering DR and/or load shifting incentives for solar PV owners by instituting a TOU rate that more closely reflects true time-specific costs of net consumption.	IOUs and CPUC	Other	Changes to the NEM program are being considered in the open NEM proceeding, which address all costs and benefits of solar.