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 Review and Validation of 2014 IOU Home Energy Reports Program *Impacts* (DNV GL; ED Work Order ED_D_Res_3; Calmac IDs #CPU0123.01, #CPU0124.01, #CPU0125.01). Note: The three reports contained the same set of recommendations, so one RTR was created for all.

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) Plan¹ 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.

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.

Impact Evaluation

Study Title: Review and Validation of 2014 IOU Home Energy Reports Program Impacts

Program: HER

Author: DNV GL

Calmac ID: CPU0123.01, CPU0124.01, CPU0125.01

ED Work Order: ED_D_Res_3

Link to Report: http://www.energydataweb.com/cpucFiles/pdaDocs/1490/Final%20Report%20of%202014%20MCE%20HUR%20Impact%20Evaluation.pdf

ltem #	Section #	Findings	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		DNV GL and the IOUs are using different assumptions on the distribution of savings from measures installed under IOU rebate programs.	DNV GL is working with the IOUs and their consultants to standardize the approach used in joint savings analysis.	DNV GL, PG&E, SCE and SDG&E		SDG&E and SCE Accepted. We look forward to continue colloborating with DNV-GL. Accepted by PG&E. PG&E and its evaluation contractor Nexant look forward to continue colloborating with DNV-GL SCG: Although not a recommendation recipient, SCG is very much interested in following up with the recommendation to collaborate with DNV-GL on standardized approach used in joint savings analysis.
2		approaches in calculating joint savings at the peak.	DNV GL proposes leveraging CA statewide lighting report to estimate peak savings from efficient bulbs. DNV GL is working with the IOUs and their consultants to standardize the approach.	DNV GL, PG&E, SCE and SDG&E		SDG&E and SCE Accepted. In the past SDG&E did not claim peak savings. However, going forward SDG&E looks forward in colloborating with DNV-GL to standardize this approach. Accepted by PG&E. PG&E and its evaluation contractor Nexant look forward to continue colloborating with DNV-GL
3		heat waves identified in PG&E HER early impact study while seeming to leverage data from the	DNV GL proposes to employ a separate definition of peak period for comparison with the current peak definition. DNV GL is working with the IOUs and their consultants to standardize this process.	SCE and SDG&E	Accepted	SDG&E and SCE Accepted. We look forward to continue colloborating with DNV-GL Accepted and completed by Nexant on behalf of PG&E in its Early M&V report for 2015 on behalf of PG&E.
4		in peak demand savings that can produce substantially different results.	Estimate or continue to estimate demand savings at the wave-level instead of calculating demand savings at the climate zone-level. DNV GL is working with the IOUs and their consultants to standardize the approach used in calculating peak demand savings.	DNV GL, PG&E, SCE and SDG&E	Accepted	SDG&E and SCE Accepted. SDG&E supports estimating sagvings at the wave-level. Accepted and completed by Nexant on behalf of PG&E. In 2014, Nexant estimated demand savings at the climate zone level, but in the 2015 Early M&V Nexant estimates demand savings at the wave level.
5		estimates and saving estimates reported in the	Standardize the billing month assignment. Use or continue to use the mid-point when assigning billing months to standardize the approach and minimize the sources of discrepancies in the results.	DNV GL, PG&E, SCE and SDG&E	Accepted	SDG&E and SCE Accepted. SDG&E supports standardizing the billing month assignment. Accepted. PG&E supports standardizing the billing month assignment. Nexant has used the mid-point to assign billing months in past years and continues to use this methodology in the 2015 Early M&V.

#	Section #	Findings	Best Practice / Recommendations	Recommendation Recipient	Other)	Disposition Notes (e.g. Description of specific program change or Reason for rejection or Under further review)
6		Rebate savings from program participation of inactive customers were counted in joint savings calculation for PG&E HER early impact study.	DNV GL recommends calculating joint savings based on rebate participation of customers that are still active in 2014.	PG&E	Accepted	Accepted and completed by Nexant on behalf of PG&E in its Early M&V report for 2015.
7	AC-1	Combining households from all Gamma waves (or Wave One) can produce results that are substantially different.	DNV GL recommends splitting out Gamma and Wave One sub-waves in the PG&E HER rebate analysis so that the treatment group is compared to the corresponding control group and for consistency with the approach used in energy savings calculation.	PG&E	Accepted	Accepted and completed by Nexant on behalf of PG&E in its Early M&V report for 2015.
8		Early impact evaluation of PG&E HER reported standard errors for the aggregated savings that were based on a regression model at the wave- level where an overall post-treatment indicator was specified.	The standard errors of the annual savings should be calculated using the combined monthly parameter standard errors weighted by the monthly counts.	PG&E	Accepted	Accepted and completed by Nexant on behalf of PG&E in its Early M&V report for 2015 for 2015 data (the standard errors are based on a regression model where an overall post treatment indicator was specified, and at the wave level.