

## 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 2013-2014 Energy Efficiency Program Cycle. This Appendix contains the Responses to Recommendations in the report:

***RTR for the 2013-2014 Multifamily Focused Impact Evaluation Study*** (Apex Analytics and DNVGL, Calmac ID #CPU0119.02), including the Multifamily Energy Upgrade California and the Multifamily Energy Efficiency Rebate Programs

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.<sup>3</sup> 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.

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<sup>1</sup> 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>.

<sup>2</sup> 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.”

<sup>3</sup> 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: 2013-2014 Multifamily Focused Impact Evaluation Study**

**Program: MFEER and EUC-MF**

**Author: Apex Analytics and DNVGL**

**Available at: CALMAC ID #CPU0119.02**

Item #	Page #	Findings	Best Practice / Recommendations	Recommendation Recipient	Utility/Agency Perspective	Program Actions
1	39	IOU MF-WB projects were difficult to isolate from the single-family EUC projects within the CPUC tracking database.	The MF-WB projects should be assigned a different program name or number from the single-family EUC projects, to facilitate clear delineation between the two project streams.	All IOUs	The IOUs agree that the EUC MF program should be assigned separate accounting IO's from the single family Home Upgrade program.	The IOU's will request that EUC MF be filed separately from the single family Home Upgrade program in the next program cycle.
2	39	The IOU and REN MF-WB program tracking data have varying levels of completeness.	IOUs and RENs should adjust data collection and program tracking to ensure all fields in Table 4-1, including participant contact information, measure details, pre-existing conditions, property systems, property details, and utility meter numbers are collected and easily accessible for all completed projects.	All IOUs, BayREN, SoCalREN	The IOUs agree that these data fields are important and will work towards ensuring that the fields are captured to include: Energy Audit Reports that document existing baselines, as well as, post retrofit Verification Reports detailing Energy Efficiency Measures (EEMs) installed.	The IOUs will continue to track the information on an ongoing basis.
3	39	The tracking databases showed that projects were assigned a standard or deemed EUL instead of one based on actual measure installations using the logic described in this report.	Program administrators should be sure to use the correctly weighted and calibrated EUL and RUL instead of the set EUL currently reported in the tracking database.	All IOUs, BayREN, SoCalREN	The IOUs agree that the weighted approach may be difficult to implement and that this approach may not be feasible. The foreseeable challenge will be in developing a methodology to appropriately weigh each measure.	The IOUs agree to evaluate a methodology for properly weighting and calibrating EUL and RUL for projects.
4	39	Although both IOUs and RENs have assumed an ER baseline on their first-year savings, they are not always calculating life-cycle savings to reflect a change in baseline after the end of the project's RUL.	Both IOUs and RENs should calculate life-cycle savings for ER projects using the ER baseline for the RUL period, then using a code baseline for the remainder of the EUL.	All IOUs, BayREN	The IOUs agree that the multifamily market segment typically does not proactively perform early replacement of equipment. On the contrary, the market segment is more likely to "repair indefinitely." Therefore, the use of a dual baseline on comprehensive whole building program will negatively impact the program efforts. These programs should be able to use the more favorable single baseline approach.	N/A
5	39	There is not a consistent way to bundle MFEER program measures into projects or properties, making it challenging to survey a single property owner on all his or her incented measures.	The evaluation team recommends assigning and using consistent Site IDs for measures installed on a given application or site.	All IOUs	Upon further discussion with the ED and the evaluators on 4/14/16, it was clarified that the recommendation is that unique SiteIDs be utilized for each multifamily property, so that all activity (measures and/or projects) can be tracked to that specific site.  The IOUs in preparation for AB802 are evaluating the feasibility of establishing unique SiteIDs for every MF property with 5+ units.	N/A
6	40	Contact data for the MFEER participants was highly inaccurate, leading to a low complete rate during survey efforts.	The evaluation team recommends that implementers accurately transfer contact information on the primary decision maker—as entered on the program application—into the CPUC tracking database.	All IOUs	The IOUs currently capture two sets of contact information for each project submitted: 1) Site Contact and 2) Property Owner or Property Manager (as authorized agent for property owner).  The IOUs may have inadvertently only submitted the Site Contact information. Upon further clarification, the IOUs provided both the Site Contact and Property Owner or Property Manager. The IOUs believe they provided correct data as captured in the submitted applications. The IOUs are open to discussing any errors with the data provided respectively.	N/A

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7	40	The team was unable to validate the program claimed savings via an engineering review because of insufficient tracking data and the inability to find deemed savings estimates.	Simulation models or billing analysis may provide a more effective approach to validating the claimed savings. In addition, site visits would allow for true verification of model inputs, which—as identified by the single-family assessment of EnergyPro—can significantly affect the accuracy of the claimed savings.	Energy Division	N/A	
8	40	Matching program data to billing data using account IDs was largely unsuccessful, likely because of the high turnover rate for multifamily tenants.	Program administrators should collect meter numbers to allow for improved matching of program and billing data.	All IOUs, BayREN, SoCalREN	The IOUs have the ability to identify the property accounts within each of the IOUs database using the following: opportunity numbers, account numbers or reservation numbers.	N/A
9	40	The consumption analysis of the MF-WB participants showed that the reported savings ratios were very close to project-level gas (therm) reported savings.	Even though the savings claims were close to billing calibrated consumption ratios, it would still be optimal to allow aggregate project-level billing data to be shared with the program administrators to ensure calibrated models.	All IOUs, BayREN, SoCalREN	The IOUs agree to calibrate its energy models using energy data.	Through AB802 implementation starting in 2017, all participants will be required to adopt MF Benchmarking which will satisfy this recommendation.
10	40	This research indicated that a substantial portion of projects may have been assigned incorrect baselines.	The IOUs and their contractors should set up a survey at intake to better determine the appropriate baseline for each project and measure.	All IOUs, BayREN, SoCalREN	The IOU's perform ASHRAE Level II type audits for each of its projects. Baselines are well documented within the Energy Audit Reports for each project.	N/A
10a	40	This research indicated that a substantial portion of projects may have been assigned incorrect baselines.	The IOUs and their contractors should set up a survey at intake to better determine the appropriate baseline for each project and measure.	All IOUs	The IOUs are currently following the values prescribed in the work papers. Requiring an in-take survey for a deemed measure will un-necessarily complicate the program implementation.	N/A
10b	41	A review of the baseline assignments in the tracking database showed inconsistencies within and across the IOUs for the same measure.				
11	41	The research found an overall NTFR of 51.6% for the 2013-2014 MFEER program.	As the MFEER program measure mix, incentive levels, or outreach/intervention strategies change, the FR may also change. These values should continue to be updated as the programs evolve.	All IOUs, Energy Division	The IOUs acknowledge this recommendation.	IOUs agree to update NTFR as programs evolve.
12	41	A review of the ex ante NTFR values in the tracking database showed inconsistencies within and across the IOUs.	The IOUs should properly and thoroughly assign DEER-based NTFR values to their measures in their tracking database systems.	All IOUs	The Res-default-HTR-direct install NTG is 0.85. This default NTG applies to all other EE measures with no evaluated NTG, or direct install measures. It applies to any building types and any building vintage.	The IOUs will address the ongoing issue of NTG impacts with the ED and EM&V.