

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 and beyond. This Appendix contains the Responses to Recommendations in the report:

RTR for the Impact Evaluation Report: Commercial HVAC Sector—Program Year 2020
(DNV, Calmac ID #CPU0337.01, ED WO #GroupA_HVAC_Com_YR4)

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 CPUC Decision (D.) 07-09-043¹ and the Energy Division-Investor Owned Utility Energy Efficiency Evaluation, Measurement and Verification (EM&V) Plan² for 2013 and beyond.

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 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.”

² 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>.

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.

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

SDG&E was not included in the original M&V study and is responding in the capacity of Lead IOU for HVAC.

Study Title: Impact Evaluation Report: Commercial HVAC Sector—Program Year 2020
Program: HVAC
Author: DNV
Calmac ID: CPU0337.01
ED WO: GroupA_HVAC_Com_YR4
Link to Report: https://www.calmac.org/publications/Group_A_YR4_ComHVAC_Impact_Report_Final_CALMAC.pdf

Item #	Findings	Best Practice / Recommendations (Verbatim from Final Report)	Recommendation Recipient	PG&E (if applicable)		SCE (if applicable)		SCG (if applicable)		SDG&E (if applicable)	
				Disposition	Disposition Notes	Disposition	Disposition Notes	Disposition	Disposition Notes	Disposition	Disposition Notes
			If incorrect, please indicate and redirect in notes.	Choose: Accepted, Rejected, or Other	Examples: Describe specific program change, give reason for rejection, or indicate that it's under further review.	Choose: Accepted, Rejected, or Other	Examples: Describe specific program change, give reason for rejection, or indicate that it's under further review.	Choose: Accepted, Rejected, or Other	Examples: Describe specific program change, give reason for rejection, or indicate that it's under further review.	Choose: Accepted, Rejected, or Other	Examples: Describe specific program change, give reason for rejection, or indicate that it's under further review.
1	<p>All Programs: PA tracking and participant data fails to adequately document claims.</p> <p>Additional Supporting Information: Across all evaluated technology groups, the PAs were unable to consistently provide critical pieces of data essential for third-party evaluators to validate and assess claimed savings. Overall, site contact names were missing or invalid for over two-thirds of requested sites and phone numbers were missing or invalid for over half of all requested sites. This resulted in evaluation data collection delays, reduced site and survey counts, poor relative precision, and above all, questions whether all of these claims are actually installed and operating as intended.</p>	<p>PAs should increase efforts to provide accurate and consistent tracking documentation. The evaluator recommends the PAs and their implementers increase efforts to train participating midstream program distributors on proper documentation requirements, consistent and accurate data recording, as well as regular quality control reviews of the data prior to submittal. Systematically capturing a valid site contact name, phone number, email address, and business name should all be incorporated into the program data requirements.</p>	All PAs	Other	We appreciate the detail which helps us to review criteria for 'low quality data'. Especially in mid-stream programs, this is a somewhat consistent comment which we believe reflects the challenge in obtaining the information rather than a reluctance to do so. That said, PG&E PMs have made substantial attempts to emphasize the importance of this issue when conducting field visits to distributors with program implementers. The mid-stream delivery model is typically multi-layered and thus involves more than one salesperson or one decision maker which is common for smaller customer projects. Medium to larger size projects typically include multiple decision makers such as distributor outside sales, distributor inside sales, installing contractor, customer district manager who has approval authority, facility manager who has budget authority over multiple building systems, and HVAC Systems manager who has design authority and most ground level information on the details of the project. In many cases the distributor salesperson may know which facility is getting the equipment but	Rejected	SCE's Commercial HVAC programs have been closed and the recommendation is no longer relevant to SCE. The Commercial HVAC market is served by SDG&E's Statewide HVAC Third-Party Program.	Accepted	Contact name, phone number, email address, and install address are required. SoCalGas PA is reviewing this when reviewing enrollments.	Accepted	Although the SW-HVAC program was not active in Program Year (PY) 2020, SDG&E has chosen to offer responses to these PY'2020 RTR recommendations from the evaluations performed during PY2021. SDG&E acknowledges the need for better data collection and has worked with its Third-Party Implementer to incorporate these fields into the program data collection plan for SW HVAC, along with an accompanying quality assurance process to ensure quality data.

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					may not know the local facility manager at the other end of the pipeline. Despite this complexity of program distributors, PG&E's processes include earnest attempts to provide a listed contact for each sale that occurs, even though PA program managers typically don't have a way to verify that information at the time of submission. We are hopeful the mid-stream programs, now operating at a Statewide Level, will have more influence with participating distributors to systematically collect and provide incentives for higher quality contact data.						
2	<p>Replacement HVAC Systems: PAs not reporting building types or vintages.</p> <p>Additional Supporting Information: The PAs defaulted to using the commercial average building type and existing building vintage for all reported replacement HVAC system claims. The measure package model savings estimates vary significantly by both building type and vintage of the building where installed.</p>	<p>PAs should track and report claim savings using accurate building vintages and types. By specifying the correct building type and vintage ex-ante savings estimates will be considerably more accurate on a claim-by-claim basis and result in more reliable cost savings estimates.</p>	All PAs	Accepted	PG&E did have a verification of building type that was reviewed during the overall incentive application process. In situations where no data was available within the overall PG&E database specific to this criteria, PG&E passed these applications if all other data elements of the application were correct and met the other indicated criteria. There are tools being developed for future programs (specific to NMEC profiling) that will result in building vintages and types data being upgraded or identified.	Rejected	SCE's Commercial HVAC programs have been closed and the recommendation is no longer relevant to SCE. The Commercial HVAC market is served by SDG&E's Statewide HVAC Third-Party Program.	Accepted	<p>Building type and vintage are collected for each enrollment. Currently, for the majority of measures this is only "New" or "existing" vintage.</p> <p>SoCalGas is having ongoing discussions with other IOU's and the CPUC, to include all building vintages with measures for which savings depend on vintage. This will allow for better tracking of savings dependent on building vintage.</p>	Accepted	Given the time delay in ex-post evaluations, SDG&E sees PY2021 as a transition year because the approved eTRM HVAC measure packages still contained the commercial average building type for "Com". However, starting 1/1/2022, the measure packages were updated to include all DEER commercial and industrial building types, plus the commercial average "Com" building type. As of 7/1/2022, commission staff provided new guidance and conditional approval for updating upstream/midstream data collection and eligibility requirements. Other SDG&E customer program updates include implementation of improved midstream Quality Assurance (QA) sampling plans to validate customer DEER building types and building vintages in order to improve customer enrollment reporting claims.
3	<p>Replacement HVAC Systems: PAs claiming electric savings outside their service territory.</p> <p>Additional Supporting Information: Evaluators visited five sites where the PAs claimed both electric and gas savings for the installed units, but the sites' electricity is provided by a municipal electric utility. The evaluated gross kWh and kW savings for claims installed at these sites</p>	<p>PAs should not claim electric savings for installations outside their service territory. The evaluator recommends the PAs check to confirm the claimed system's installation address has a valid electric and gas account before claiming the corresponding savings. Additionally, they should make</p>	All PAs	Accepted	We accept the findings and reductions of electric savings claimed which include installation addresses not in the service territory. Unless the listed address provided by the distributor is incorrect, a PA should be able to validate customer addresses and accounts before submittal. Fortunately, from the reporting provided by DNV, this circumstance occurred in only 12% of	Rejected	As part of the creation of the SW PA policy, savings percentages have been agreed upon contractually and without consideration for individual service territory but based upon financial contributions to the program.	Accepted	As a single-fuel utility, SoCalGas has its Energy Efficiency goals set in a single fuel—Natural Gas. Since SoCalGas goals are only measured in Therms, SoCalGas cannot claim electric savings. SoCalGas reports electric savings for measures which use or save electricity but does not claim those savings toward goals since there is no kWh goal.	Other	Access to statewide account data is currently not available. For PY 2022, SDG&E as administrator of statewide HVAC program is implementing validation of program end use data by zip code as well as installation address. To help verify installations occur only in qualified service territories, SDG&E will also address eligibility of projects as part of its quality assurance activities.

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	were zero because the savings is occurring outside the PAs service territory. Additionally, the incentive is benefiting an electric end-use customer that is not contributing to the Public Purpose Program Funds. This resulted in a decreased electric gross savings realization rate for this technology group.	sure that the end-use customer contributes to the PPP Funds.			samples sites and resulted evaluated energy savings by only 8%, but surely room for improvement. PG&E continues to undertake a thorough review of zip codes and address checks to verify specific installation site being within the electric service territory and minimize mistakes. Coordination of account verification across Statewide programs is intended to reduce the occurrence of these errors.						SDG&E continues to explore options for accessing statewide account data as a potential way to enhance eligibility verification for future program years.
4	<p>Commercial Boilers: Poor net savings realization is driven by programs' lack of influence on distributor actions.</p> <p>Additional Supporting Information: Distributors reported that they would recommend program eligible high-efficiency units at the same frequency without the program. End-user surveys indicate decisions are most driven by distributor recommendations and by price to a lesser extent. The participating distributors we spoke with claim their recommendations have minimal impact on purchasing decisions, which represents a lost opportunity because end-users say otherwise.</p>	<p>PAs and implementers should encourage distributors to upsell highest efficiency tier boilers. The evaluator recommends future programs consider offering increased incentives on the highest-efficiency tier boilers, so distributors increase high-efficiency equipment recommendations. Most end-user survey respondents (70%) reported they would pay full price for high-efficiency boilers if that's what their distributor or contractor recommended. By providing an increased incentive to distributors for selling the higher efficiency tier units they will be more likely to upsell the higher efficiency units and achieve greater program attribution. The PAs should dutifully notify distributors and other market actors of expected large program changes for boiler measures.</p>	All PAs	Accepted	<p>PG&E recognizes the rationale for the recommendation for PAs to encourage distributors to upsell and offering additional incentives that may have an impact on a greater number of higher efficiency unit. End users willing to pay more for a higher efficiency unit and even placing high confidence in distributor recommendations to some degree, represents a realistic view of the market. Both statements, however, oversimplify the purchasing process for system-based equipment. Equipment that operates within a broader system relies on the other components of the system to accommodate the highest efficiency unit and thus it is critical to consider those other components when assessing efficiency possibilities. Another key factor that must be considered is the higher cost of the HE inventories. Distributors don't get paid for these units until they sell them. Higher per-unit costs reduce the number of units and inventory which can be purchased, and it is common for purchasing agreements of equipment manufacturers to limit unsold product returns. Distributors consider carrying costs of unsold inventory when making decisions of what units to stock; the higher the cost of the unit, the higher the cost to that distributor to carry them. Distributors weigh these risks based on the 'velocity' or turnover rate when considering what to have on</p>	Rejected	<p>Implementers are not in the business of up-selling direct to customers, which may include other factors the implementor may not have taken into consideration as much as the distributors have as they take part in these conversations directly with their respective customer base.</p>	Accepted	<p>SoCalGas has incorporated dealer rebates into the midstream water heating program to encourage the upselling of highly efficient appliances through Distributor Incentives.</p> <p>Some dealers have said that the application requirement is excessive, so a more compelling incentive is necessary to induce them to participate in the program.</p>	Accepted	<p>No change is needed for the SW HVAC Program. SW HVAC has implemented increased incentives for higher efficiency tier measures. Distributors and Manufacturers are notified during program enrollment, and this incentive structure is reinforced during distributor onboarding training and contractor outreach.</p>

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					hand. Merely offering additional incentives and encouragement may help, but our expectations should be tempered by financial risks borne by distributors when cost, availability, and economic factors, such as market and investment stability, are considered. Installation costs and accompanying component upgrade costs also factor into the total project cost of the 'system'. Even customers who decide on higher efficiency units are likely to get competitive pricing from several sources, thus reinforcing distributor perceptions that price is most important. With this in mind, individual salespeople may hope to minimize their risk (commission) by not offering the highest efficiency units possible. In summary, yes, the basic finding is largely true, but the situation is far more nuanced than the recommendations indicate.						