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 California Zero Net Energy State Buildings Decision Maker Study (Opinion Dynamics, Calmac ID #CPU0176.01, ED WO #ED_D_ZNE_2)

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.

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

Study Title: California Zero Net Energy State Buildings Decision Maker Study

Program: ZNE

Author: Opinion Dynamics

Calmac ID: CPU0176.01

ED WO: ED_D_ZNE_2

Link to Report: http://calmac.org/publications/CPUC_ZNE_State_Agency_Study_Report_2017_10_06_FINAL.pdf

| ltem # | Page # | Findings | Best Practice / Recommendations (Verbatim from Final Report) | Recommendation Recipient | Disposition | |
|--------|--------|---------------------------|--|--|--|--|
| | | | | If incorrect, please indicate and redirect in notes. | Choose: Accepted, Rejected, or Other | Describe spec |
| 1 | 73 | See section 7.1 of study. | State decision makers should continue to pursue new ZNE funding sources. | State decision makers | | |
| 2 | 73 | See section 7.1 of study. | DGS should develop a ZNE Manual for use by other state departments. | DGS | | |
| 3 | 73-74 | See section 7.1 of study. | The State of California should focus ZNE, at least initially, on those departments that represent the most significant portion of state-owned building square footage. CDCR should consider installing individual electric and/or gas meters on at | State departments | | |
| | | | least some buildings. | | | |
| | | | In addition to CDCR, focus on campus settings. | | | |
| | | | • Across all departments, identify high potential buildings and prioritize them. | | | |
| | | | Continue to work toward energy efficiency goals with all departments. | | | |
| 4 | 74 | See section 7.1 of study. | State departments should select buildings for energy efficiency retrofits, to- ward the goal of reaching ZNE, on a case-by-case basis as each building's con- dition and circumstances are unique. | State departments | | |
| 5 | 74-75 | See section 7.1 of study. | DGS should supplement the Energy Star Portfolio Manager (ESPM) data collection process. Review and carefully consider data elements that could be collected as part of the ESPM data collection process. Identify buildings, leveraging institutional knowledge, that make little practical sense to address in terms of taking aggressive steps to reduce energy use. | DGS and state departments | | |
| 6 | 75 | See section 7.1 of study. | The CPUC, IOUs, and DGS should work collectively to develop a legal template to cover interconnection issues in situations where a state department owns the solar PV. As a general rule, key issues have been worked out when renewa- bles are purchased through a Power Purchase Agreement (PPA) as the PPA tech- nically "owns" the solar PV and signs the interconnection agreement. However, when the state owns the solar PV, and therefore must sign the interconnection | All IOUs, CPUC, DGS | Accepted | The IOUs agr address inter ment owns t participating various inter based upon t |

Disposition Notes

Examples: becific program change, give reason for rejection, or indicate that it's under further review.

agree that the CPUC, DGS, and IOUs work collectively to terconnection issues in situations where a state departis the solar PV. The IOUs have begun this discussion by ing in a meeting with DGS on July 27, 2016 where the terconnection options and tariff options were explored on the ZNE definition contained in the DGS document,

| | | | agreement, there are inconsistencies and issues that arise when trying to satisfy both IOU, DGS and state legal and indemnification requirements. Generally, when budgets permit, some departments view owning the solar PV installation as preferable to a PPA. Other department, due to either budget limitations or concerns about long-term PV maintenance, prefer PPAs. Nevertheless, solving complicated legal issues is important to departments preferring to own the so- lar PV. | | | "Definition of Compliance v However, the better unders best serve the would be ber |
|---|----|---------------------------|---|----------|----------|---|
| 7 | 75 | See section 7.1 of study. | IOUs should consider providing ZNE technical assistance to state departments. IOUs are uniquely positioned, given their long-standing role in promoting en- ergy efficiency, to provide advice and expertise around energy efficiency im- provements. Some of the IOUs also have staff that are intimately familiar with ZNE challenges in both new construction and retrofit. Finally, utility staff are of- ten aware of the resources that can be leveraged (e.g., consulting firms, con- tractors, distributors, etc.) toward the goal of improving energy efficiency and reaching ZNE. Many state department decision makers are less familiar with ZNE and how to achieve it. Thus, key IOU personnel could provide needed levels of expertise and guidance. Ultimately, it is up to the CPUC to determine whether or not—and to what extent—incentives are needed to encourage IOUs to promote ZNE within state government and include the service in their re- spective State Partnership Programs. | All IOUs | Accepted | The IOUs agrin nical assistan been success to state agen Other statew gram and var ing energy ef nical assistan years. More r agencies with Buildings Inst audit tool, ch study based t has expertise achieving ZNI cies. Howeve vices under c of these prog arate which r vice offering with the CPU more easily c mend a modi EE program d adding the fo gram implem vide ZNE tech should be end |

of Zero Net Energy ZNE) for California State Agency e with Executive Order B-18-12" dated May 19, 2016. he IOUs would like to continue discussions to gain a erstanding of the needs of the state departments to them_and to determine whether a legal template peneficial.

gree that consideration be given to providing ZNE techance. The statewide Savings By Design Program has essfully providing energy efficiency technical assistance encies for new buildings since program inception. ewide IOU programs including the Partnerships provarious retrofit programs have been successfully providefficiency, demand response, and self-generation techance to state agencies for existing buildings for several re recently, the IOUs have been providing DGS and state ith ZNE technical support by contracting with NBI (New nstitute) for developing design process briefs, virtual checklists for design, construction, operations; case ed technical training, ZNE verification, etc. IOU staff also se and available resources to support customers in ZNE and intends to provide ZNE services to state agenver, there is a significant barrier to offering these serr current CPUC policies that generally keep the funding ograms limited to either EE, DR, or self-generation seph makes offering an integrated and cohesive ZNE serg extremely difficult. The IOUs welcome a discussion PUC and DGS and how ZNE technical assistance can be offered and funded. In addition, IOUs also recomodification to also address D.16-08-019 that transitions design and delivery to 3Ps. The IOUs recommend following language: "IOUs should encourage 3P proementers to design and implement programs that proechnical assistance to state departments. The IOUs encouraged to fund such 3P programs."