## 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 PY2013-2014 California Statewide Workforce Education and Training Program: Workforce Conditions Data Investigation* (Opinion Dynamics, Calmac ID #CPU0133.01, ED WO #ED\_O\_WET\_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) 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.

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:PY2013-2014 California Statewide Workforce Education and Training Program: Workforce Conditions Data InvestigationProgram:WE&TAuthor:Opinion DynamicsCalmac ID:CPU0133.01ED WO:ED\_O\_WET\_2Link to Report:http://calmac.org/warn\_dload.asp?e=0&id=3352

| Item # | Page # | Findings   | Best Practice / Recommendations   | Recommendation<br>Recipient | Disposition<br>(Accepted, Rejected,<br>or Other) | Disposition Notes<br>(e.g. Description of specific program change or Reason<br>for rejection or Under further review)   |
|--------|--------|--|---|-----------------------------|--|---|
| 1      | 8      | Electronic payroll tracking is the best method to<br>acquire the demographic and wage<br>information requested but investment is not<br>justifiable for all energy efficiency programs   | Based on this limited investigation, we generally<br>agree with the DVC recommendation that<br>workforce conditions be tracked electronically<br>through certified payroll records or other data<br>tracker applications for programs where the<br>IOUs have a direct contracting relationship with<br>contractors. We believe this is the only way to<br>achieve the true objective of determining the<br>impact of program efforts on job quality or work<br>quality. A statewide approach keeps contractors<br>who work for multiple IOUs from having to input<br>their workforce multiple times. However, such<br>effort requires a long-term strategy and long-<br>term commitment to provide the necessary<br>resources and funding. We do not recommend<br>that the CPUC require that investment unless<br>they have reason to believe that there is a work<br>quality or job quality issue for a specific program | IOUs and CPUC               | Accepted   | The IOUs agree that electronic tracking of<br>workforce conditions will require a long-term<br>strategy, commitment and significant resources,<br>and acknowledge that there may be other ways<br>of determining the impact of program efforts on<br>job and/or work quality. Furthermore, we agree<br>that no action or investment should be taken<br>unless factual evidence or information<br>demonstrates that a work or job quality issue<br>exists. However, we would add that before<br>additional investment or action is taken, the<br>CPUC should validate the need for this data in<br>lieu of existing federal, state and trade-specific<br>demographic and wage information.<br>Additionally, the CPUC should determine if the<br>benefits to ratepayers exceed the costs. |
| 2      | 8      | Data intensive effort not warranted at this time<br>for programs similar in design to the<br>Home Upgrade and Non-Residential Deemed and<br>Custom Core Programs<br>The Home Upgrade Program requires highly<br>skilled workers who are trained and who are<br>typically paid fair living wages therefore a large<br>data collection effort into wages would likely not<br>show that the program is support low wage/low<br>skill jobs. The Program also offers ongoing<br>training and mentorship for all participating | of the program designs we do not recommend<br>that the Home Upgrade Program and Non-<br>Residential Lighting Programs, or other similar<br>programs where the IOU is not in a direct<br>contracting relationship, invest the resources  | IOUs and CPUC               | Accepted   | The IOUs agree with the findings and<br>recommendation. In the event that the CPUC has<br>a reasonable concern over a contractor's work<br>quality and/or wage levels, the CPUC should<br>determine feasibility and that the benefits<br>outweigh the costs before the effort is<br>undertaken.   |

|        |        |   |   |                | Disposition          | Disposition Notes   |
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|        |        | contractors.  | demographic information only if the CPUC has a<br>reasonable concern over the contractors' work |                |                      |   |
|        |        | The Care and Deemed lighting programs are   |   |                |                      |   |
|        |        | The Core and Deemed lighting programs are   | quality and/or wage levels in a specific program.   |                |                      |   |
|        |        | difficult in that the programs do not have a set  |   |                |                      |   |
|        |        | list of participating contractors. Customers are allowed to hire their own contractors for        |   |                |                      |   |
|        |        |   |   |                |                      |   |
|        |        | installation. This program is intended as a self-<br>service program for customers who can assess |   |                |                      |   |
|        |        | their own measure needs, navigate the   |   |                |                      |   |
|        |        | application process on their own, and simply  |   |                |                      |   |
|        |        | want to apply for an incentive. As such, there is   |   |                |                      |   |
|        |        | no set list of participating contractors and the  |   |                |                      |   |
|        |        | program does not do any specific training nor   |   |                |                      |   |
|        |        | does it have training requirements for  |   |                |                      |   |
|        |        | contractors.  |   |                |                      |   |
|        |        |   |   |                |                      |   |
| 3      | 9      | Wait until ESA has a good model to follow before  |   | IOUs and CPUC  | Other                | The IOUs agree that the resource programs   |
|        |        | requiring other programs to executive a   | terms of size (energy savings and budget) and   |                |                      | should wait to execute a more comprehensive   |
|        |        | comprehensive approach  | design (direct contracting relationship with  |                |                      | approach to collecting workforce conditions data  |
|        |        |   | contractors) and skill requirements wait to   |                |                      | until additional studies or information are   |
|        |        |   | execute a more comprehensive approach to  |                |                      | available to show the value of it to the CPUC and                                       |
|        |        |   | collecting workforce conditions data until the  |                |                      | stakeholders. Further the IOUs agree that the   |
|        |        |   | ESA program has successfully accomplished this study and can show the value of it to the CPUC   |                |                      | data collection logistics for low-income/ESA programs may not be transferrable to other |
|        |        |   | and stakeholders. Once this is complete, then   |                |                      | resource programs since program design and  |
|        |        |   | the CPUC may decide to aim this data collection   |                |                      | relationship with the contractors are   |
|        |        |   | effort to similar ESA programs where job quality  |                |                      | fundamentally different.  |
|        |        |   | and work quality may be of concern such the   |                |                      |   |
|        |        |   | Small Business Direct Install programs that are   |                |                      |   |
|        |        |   | known to outsource measure installation to  |                |                      |   |
|        |        |   | "workers for hire". However, this does not  |                |                      |   |
|        |        |   | suggest that ESA's approach to data collection  |                |                      |   |
|        |        |   | can be duplicated for other programs. Using one   |                |                      |   |
|        |        |   | type of program to learn from may not yield   |                |                      |   |
|        |        |   | cross-cutting solutions and more precise  |                |                      |   |
|        |        |   | definitions and pilot testing may be warranted.   |                |                      |   |
| 4      | 9      | Consider the learnings from this study when   | In addition to the lessons learned from ESAP's  | IOUs and CPUC  | Accepted             | The IOUs agree with and will consider these   |
| 4      | Э      |   | previous data collection efforts summarized in  |                | Accepted             | lessons learned and data collection insights,   |
|        |        | information from ESA contractors or other   | this report, we offer further lessons learned from  |                |                      | when determining how best to approach data  |
|        |        | program contractors in the future   | this study including:   |                |                      | collection efforts.   |
|        |        |   | ins study melading.   |                |                      |   |
|        |        |   | Contractor interviews revealed that employers   |                |                      |   |
| i I    |        | I   | Contractor interviews revealed that employers   | I              | I                    | I I   |

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|              |        |   | cannot provide valid demographic data of their    |                |                      |  |
|              |        |   | workforce. Based on the contractors we            |                |                      |  |
|              |        |   | interviewed, collecting demographic information   |                |                      |  |
|              |        |   | only from employers about their workers is not    |                |                      |  |
|              |        |   | possible given their lack of knowledge about      |                |                      |  |
|              |        |   | their employees' ethnicity, household income      |                |                      |  |
|              |        |   | levels or disadvantaged status. Data should be    |                |                      |  |
|              |        |   | collected from each worker within a company       |                |                      |  |
|              |        |   | instead of asking a company representative to     |                |                      |  |
|              |        |   | report on all of their workers.                   |                |                      |  |
|              |        |   | The use of subcontractors for the installation of |                |                      |  |
|              |        |   | program measures is common in the lighting        |                |                      |  |
|              |        |   | segment and occurs to some extent among           |                |                      |  |
|              |        |   | Home Upgrade Program contractors. Contractors     |                |                      |  |
|              |        |   | do not have the requested information for         |                |                      |  |
|              |        |   | installers who are not their own employees. As a  |                |                      |  |
|              |        |   | result, data collection from contractors would    |                |                      |  |
|              |        |   | not capture the entire installer workforce unless |                |                      |  |
|              |        |   | subcontractors are approached as well.            |                |                      |  |
|              |        |   | Provide a clear and compelling argument for why   |                |                      |  |
|              |        |   | contractors should provide this information to    |                |                      |  |
|              |        |   | the state. Both IOU staff and contractors         |                |                      |  |
|              |        |   | expressed some concerns regarding the             |                |                      |  |
|              |        |   | collection of sensitive wage and demographic      |                |                      |  |
|              |        |   | information. They are in general agreement that   |                |                      |  |
|              |        |   | employees should not be required to provide       |                |                      |  |
|              |        |   | this information and requested a clear            |                |                      |  |
|              |        |   | explanation as to why such information is         |                |                      |  |
|              |        |   | needed and how it would benefit the industry.     |                |                      |  |
|              |        |   |   |                |                      |  |
|              |        |   | Use existing government wage data sources as      |                |                      |  |
|              |        |   | context for program contractor findings.          |                |                      |  |
|              |        |   | Compare reported wages to government wage         |                |                      |  |
|              |        |   | data and check that workers participating in the  |                |                      |  |
|              |        |   | programs are making a living wage or have         |                |                      |  |
|              |        |   | higher-than-average wages.                        |                |                      |  |
| 5 a, b, c, d | 11-12  | Require indirect contracting relationship energy  | For programs not in a direct contracting          | IOUs and CPUC  | Other                | The IOUs do not currently have concerns over           |
|              |        | efficiency programs to collect and submit select  | relationship, similar to the Residential EUC Home |                |                      | work or job quality with the programs where            |
|              |        | information at this time (making modifications as | Upgrade and the Deemed and Custom Non-            |                |                      | IOUs are not in a direct contracting relationship,     |

|        |        |                                       |  |                | Disposition          | Disposition Notes                                      |
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|        |        | needed through initial pilot efforts) | Residential Lighting Programs, we recommend        |                |                      | and agree that an investment in data collection        |
|        |        |                                       | that these programs leverage existing data         |                |                      | efforts should be made only where there is a           |
|        |        |                                       | sources and program staff to collect the           |                |                      | concern over work or job quality. However, in          |
|        |        |                                       | information that is readily available to them in   |                |                      | response to this recommendation, and in                |
|        |        |                                       | 2015 (See Table 3 below). This information will    |                |                      | consultation with Energy Division, the IOUs will       |
|        |        |                                       | help the CPUC to continue to monitor the           |                |                      | provide 2015 data that is available and readily        |
|        |        |                                       | training, work and job quality of contractors      |                |                      | accessible for the selected residential and non-       |
|        |        |                                       | supporting these programs and to determine if      |                |                      | residential program areas listed below as an           |
|        |        |                                       | further data collection is necessary.              |                |                      | initial effort. The IOUs will be prepared to           |
|        |        |                                       |  |                |                      | provide this data, upon data request, to the           |
|        |        |                                       | 5a.  |                |                      | CPUC.  |
|        |        |                                       | · Workforce condition data: Number of              |                |                      |  |
|        |        |                                       | inspection failures and types of failures          |                |                      | Residential program areas:                             |
|        |        |                                       | · What: The percentage of inspections that fail    |                |                      | · PG&E, SCE and SDG&E: Pool Pumps,                     |
|        |        |                                       | due to installation quality issues and the reasons |                |                      | · SoCalGas: Clothes Washers.                           |
|        |        |                                       | for failure  |                |                      |  |
|        |        |                                       | · Why: Determine if program has an installation    |                |                      | Non-Residential program areas:                         |
|        |        |                                       | quality concern                                    |                |                      | · PG&E: Non-Res Energy Smart Grocer,                   |
|        |        |                                       | · Recommendation: Collect through                  |                |                      | · SCE: Non-Res Express,                                |
|        |        |                                       | implementation QA/QC process throughout            |                |                      | SDG&E: Commercial EEBR Lighting,                       |
|        |        |                                       | 2015; provide to the CPUC at end of 2015           |                |                      | · SoCalGas: Non-Res Boilers                            |
|        |        |                                       |  |                |                      |  |
|        |        |                                       | 5b.  |                |                      |  |
|        |        |                                       | · Workforce condition data: Level and type of      |                |                      |  |
|        |        |                                       | utilities' training and screening                  |                |                      |  |
|        |        |                                       | · What: Description of the screening the           |                |                      |  |
|        |        |                                       | program does to allow contractors to participate;  |                |                      |  |
|        |        |                                       | description of the training/ skills required for   |                |                      |  |
|        |        |                                       | contractors to participate; description of the     |                |                      |  |
|        |        |                                       | training that the program provides to              |                |                      |  |
|        |        |                                       | participating contractors                          |                |                      |  |
|        |        |                                       | • Why: Determine if level and type of              |                |                      |  |
|        |        |                                       | training/screening is sufficient to support the    |                |                      |  |
|        |        |                                       | technologies incented by the program               |                |                      |  |
|        |        |                                       | · Recommendation: Program staff description        |                |                      |  |
|        |        |                                       | provided to the CPUC at end of 2015                |                |                      |  |
|        |        |                                       |  |                |                      |  |
|        |        |                                       | 5c.  |                |                      |  |
|        |        |                                       | • Workforce condition data: Customer feedback      |                |                      |  |
|        |        |                                       | for these contractors, positive and negative,      |                |                      |  |
|        |        |                                       | · What: Customer satisfaction scores with          |                |                      |  |
|        | I I    | l                                     | what, customer satisfaction scores with            |                | l                    | 1  |

|        |   |   |  |                | Disposition   | Disposition Notes                                      |
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|        |   |   | contractors' performance overall and the quality             |                |   |  |
|        |   |   | of the work performed; open-ended responses                  |                |   |  |
|        |   |   | for why customers are not satisfied                          |                |   |  |
|        |   |   | • Why: Informs whether the program needs to                  |                |   |  |
|        |   |   | give contractors more training or needs a new<br>requirement |                |   |  |
|        |   |   | · Recommendation: Process and impact surveys                 |                |   |  |
|        |   |   | in 2015; provide to the CPUC at end of 2015                  |                |   |  |
|        |   |   |  |                |   |  |
|        |   |   | 5d.  |                |   |  |
|        |   |   | · Workforce condition data: The utilities'                   |                |   |  |
|        |   |   | assessment of any other needs of the existing                |                |   |  |
|        |   |   | workforce,   |                |   |  |
|        |   |   | · What: Program description of any workforce                 |                |   |  |
|        |   |   | needs to support the program technologies;                   |                |   |  |
|        |   |   | program staff assessment of whether the                      |                |   |  |
|        |   |   | participating contractor pool is sufficient to meet          |                |   |  |
|        |   |   | program goals; program description of how they               |                |   |  |
|        |   |   | determine the number of contractors needed to                |                |   |  |
|        |   |   | fulfill program goals,                                       |                |   |  |
|        |   |   | $\cdot$ Why: Informs whether the program needs to            |                |   |  |
|        |   |   | give contractors more training or needs a new                |                |   |  |
|        |   |   | requirement,   |                |   |  |
|        |   |   | · Recommendation: Program staff description                  |                |   |  |
|        |   |   | provided to the CPUC at end of 2015                          |                |   |  |
| 6      | 13  | Notably, there is some preliminary work that      | The IOUs need help to standardize the definition             | IOUs and CPUC  | Accepted  | The IOUs agree and recognize the challenge of          |
|        |   | needs to be done before the IOUs can execute      | of work quality across the IOUs and the                      |                |   | standardizing the definition of work quality and       |
|        | on the directive to begin collecting and reporting upon the number of inspection failures and the | coding of inspection failures                     |  |                | coding of inspection failures. The IOUs are willing |  |
|        |   |   |  |                | to work with Energy Division using the initial      |  |
|        |   | types of inspection failures for the EUC and Core |  |                |   | data collection effort described in the above          |
|        |   | Lighting Programs. See Section 4.2 for more       |  |                |   | response to Item #5 as the starting place for this     |
|        |   | detail.   |  |                |   | effort. The IOUs are open to collaborating with        |
|        |   |   |  |                |   | necessary stakeholders in this effort, and             |
|        |   |   |  |                |   | acknowledge that more exploration is needed to         |
|        |   |   |  |                |   | uncover any potential challenges associated with       |
|        |   |   |  |                |   | these activities including increase to program         |
|        |   |   |  |                |   | cost. The IOUs welcome a discussion with the           |
|        |   |   |  |                |   | CPUC on the best approach to move forward              |
|        |   |   |  |                |   | with this recommendation.                              |

|        |        |  |  |                | Disposition          | Disposition Notes                                      |
|--------|--------|--|--|----------------|----------------------|--|
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| Item # | Page # | Findings   | Best Practice / Recommendations              | Recipient      | or Other)            | for rejection or Under further review)                 |
| 7      | 13     | Notably, the IOUs raised an administrative         | An administrative challenge amongst the IOUs | All IOUs       | Accepted             | The IOUs agree with the findings that these            |
|        |        | challenge in response to receiving the draft       | needs to be addressed for WE&T               |                |                      | issues are not core WE&T activities, and               |
|        |        | results from this study. The WE&T program          |  |                |                      | recognize the ongoing coordination and                 |
|        |        | began as a program that included the IOU Energy    |  |                |                      | facilitation challenges for the WE&T Program           |
|        |        | Center education efforts and K-12 education        |  |                |                      | Team. Nevertheless, the IOUs are diligently            |
|        |        | programs. However, policy decisions and the        |  |                |                      | addressing all cross-cutting program issues            |
|        |        | strategic plan now goes beyond just these two      |  |                |                      | within our program administrative                      |
|        |        | efforts and has evolved into a cross-cutting topic |  |                |                      | responsibilities that are addressed in both            |
|        |        | across all energy efficiency programs. This        |  |                |                      | Commission policy decisions and the strategic          |
|        |        | presents an administrative challenge amongst       |  |                |                      | plan. The IOUs look forward to collaborating with      |
|        |        | the IOUs because the IOU WE&T Program Team         |  |                |                      | necessary stakeholders to determine the best           |
|        |        | must now also be responsible for coordination      |  |                |                      | course of action moving forward.                       |
|        |        | and facilitating workforce concerns across the     |  |                |                      |  |
|        |        | entire program portfolio.                          |  |                |                      |  |
|        |        |  |  |                |                      |  |