

## 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 2010-2012 Energy Efficiency Program Cycle. This Appendix contains the Responses to Recommendations in the report:

### ***SDG&E Agricultural Sector Market Study***

(2015, Evergreen Economics, Calmac ID# SDG0292.01)

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 2013-2014 Energy Division-Investor Owned Utility Energy Efficiency Evaluation, Measurement and Verification (EM&V) Plan (version 3) <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/cpucFiles/pdaHomeDocs/2/2013-2014\\_Energy\\_Efficiency\\_EMV\\_Plan.zip](http://www.energydataweb.com/cpucFiles/pdaHomeDocs/2/2013-2014_Energy_Efficiency_EMV_Plan.zip) (visited on 10/1/14).

<sup>2</sup> Attachment 7, p.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 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  
2015 Agriculture Study

| Study ID             | Study Type                            | Study Title                            | Study Manager | Author                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Pub Date                                                                                                                                                                                                                                                                             |                          |          |          |                      |                                                                                                                                                                                                                                                                                                                                                                              |  |
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| CALMAC ID SDG0292.01 | Market Study                          | SDG&E Agricultural Sector Market Study | SDG&E         | Evergreen Economics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | March, 2015                                                                                                                                                                                                                                                                          |                          |          |          |                      |                                                                                                                                                                                                                                                                                                                                                                              |  |
| Item #               | Program                               | Document                               | Page          | Findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Best Practice / Recommendations                                                                                                                                                                                                                                                      | Recommendation Recipient | Accepted | Rejected | Under further review | Notes: Specific program change/ Reason for rejection or further review                                                                                                                                                                                                                                                                                                       |  |
| 1                    | Agriculture Energy Efficiency Program | SDG&E Agricultural Sector Market Study | 30            | SDG&E Agriculture customers are significantly more interested in water-related measures (sprinkler to drip irrigation, low pressure sprinkler nozzles and water pump efficiency testing) than other agriculture-related offerings, and significantly more respondents said that money and water savings were more important motivators than saving the environment.                                                                                                                                                                                                                                                                                                                             | Wherever possible, SDG&E should focus on money and water savings when marketing its energy efficiency options to the agriculture sector. SDG&E could consider marketing its on-site audit as an irrigation checkup in order to appeal to the customer desire to save on water costs. | SDG&E                    | Accept   |          |                      | Promoting the on-site audit is already a part of our marketing strategy. The Ag audience is one of 3 primary targets for us this year. Communications calendar and budgets are being finalized. The Ag offer includes water/energy nexus, rebates, OBF & WISE (water pump audit).                                                                                            |  |
| 2                    | Agriculture Energy Efficiency Program | SDG&E Agricultural Sector Market Study | 30            | Mail survey findings indicate that indoor and indoor/outdoor growers are more likely to be interested in a suite of measures (motors, boilers, fans, on-site audits, infrared film for greenhouses, and greenhouse heat curtains) rather than being interested in just a single measure.                                                                                                                                                                                                                                                                                                                                                                                                        | SDG&E should consider creating a central place or document for agricultural customers to access that presents the full suite of measures that may be of interest to them.                                                                                                            | SDG&E                    | Accept   |          |                      | We are currently developing specific, relevant content for our Ag industry segment web pages. Expected to launch by 6/15/15                                                                                                                                                                                                                                                  |  |
| 3                    | Agriculture Energy Efficiency Program | SDG&E Agricultural Sector Market Study | 30            | The research found three examples of rebated measures that SDG&E could refer to using agricultural-specific language, which might improve uptake. These measures are: agricultural irrigation pump VFDs, horizontal air flow fans, and root zone heating.                                                                                                                                                                                                                                                                                                                                                                                                                                       | SDG&E should use agriculture-specific terms for measures when marketing directly to their agricultural customers to increase interest, for example:<br>-Agricultural Irrigation Pump VFDs<br>-Horizontal Air Flow Fans<br>-Root Zone Heating                                         | SDG&E                    | Accept   |          |                      | When we promote specific measures, we use measure-specific terms. However, we are in the process of developing an Ag-specific catalog/one sheet with all relevant measures and terminology.                                                                                                                                                                                  |  |
| 4                    | Agriculture Energy Efficiency Program | SDG&E Agricultural Sector Market Study | 30            | SDG&E utilizes past customers (who have take advantage of offerings) as examples when presenting information to trade associations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | SDG&E should expand its use of customer testimonials to its website.                                                                                                                                                                                                                 | SDG&E                    | Accept   |          |                      | Ag testimonials are part of our marketing strategy. Our Communications team is producing a testimonial video featuring a local grower. Final cut is pending. We will solicit additional testimonials from other Ag customers as resources allow.                                                                                                                             |  |
| 5                    | Agriculture Energy Efficiency Program | SDG&E Agricultural Sector Market Study | 30, 31        | SDG&E reported participation is low, with customers reporting having received an average of 0.2 items out of 11 relevant offerings. Customers report lack of awareness and lack of having enough information as the two largest barriers to participation. Awareness is lowest for greenhouse measures. Respondents were significantly more likely to get their information from industry organizations, suppliers and colleagues as opposed to an SDG&E contact.                                                                                                                                                                                                                               | SDG&E should continue working with industry organizations in order to inform and educate customers with the intent of increasing awareness of program offerings.                                                                                                                     | SDG&E                    | Accept   |          |                      | SDG&E's Customer Outreach and Education is already working intensely with vendors and trade organizations.                                                                                                                                                                                                                                                                   |  |
| 6                    | Agriculture Energy Efficiency Program | SDG&E Agricultural Sector Market Study | 31            | It is unclear if SDG&E incentivizes suggestions made through the Water Infrastructure and System Efficiency (WISE) Program inspection.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | SDG&E should add clarity to documentation about WISE so that customers are aware of next steps and offerings that follow an inspection.                                                                                                                                              | SDG&E                    | Accept   |          |                      | SDG&E is working to improve the documentation for enrolling customers, including Ag customers, in the Energy Efficiency Business Rebates (EEBR) and Energy Efficiency Business Incentive programs (EEBI) after a pump inspection has been completed. The customer will be informed at the time of the inspection on how the EEBR and EEBI program application process works. |  |
| 7                    | Agriculture Energy Efficiency Program | SDG&E Agricultural Sector Market Study | 31            | While SDG&E provides many of the offerings appropriate for this sector, we found additional energy efficient measures that do not exist among SDG&E's offerings. These include natural ventilation, scientific irrigation, low energy precision application irrigation, solar well pumps, gooseneck elbows for drop tubes, sprinkler repairs and replacement, irrigation system conversions, perimeter insulation, greenhouse climate controls, triple polycarbonate glazing, and chicken litter gasification. Note that some of these measures (specifically the ones related to heating and cooling) may not be as appropriate in San Diego County due to the temperate nature of the locale. | SDG&E should research and consider additional measures presented in Section 3 of the report (listed under findings).                                                                                                                                                                 | SDG&E                    | Accept   |          |                      | SDG&E will take a targeted approach to include new agricultural items in the Business Rebates and Direct Install offerings. Engineering will evaluate the items listed in the report and determine if any show sufficient promise to warrant a work paper and inclusion in program offerings.                                                                                |  |

| Item # | Program                               | Document                               | Page   | Findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Best Practice / Recommendations                                                                                                                     | Recommendation Recipient | Accepted | Rejected | Other further review | Notes: Specific program change/ Reason for rejection or further review                                                                                                                                                                                                                                                                                                                                                                                                              |
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| 8      | Agriculture Energy Efficiency Program | SDG&E Agricultural Sector Market Study | 31     | Close to half of all respondents thought that incentive amounts were too low, and half thought incentive amounts were about right. Though it is noted that self-reported participants were just as likely to report that rebate levels were too low, even though they said they participated. Likewise, customers may be tempted to say that rebates are too low so they might be increased. There are no downsides for customers indicating they would like to increase rebate levels. These results may be most useful for providing relative comparisons of rebate levels across measures: low-pressure nozzles stood out from the other measures in that respondents were more likely to think that the pricing for that measure was about right. Finally, lack of awareness and information seemed to be a more significant barrier. We found that the way that the incentive for greenhouse cover rolls (in amount per square foot rather than per roll) is confusing to customers and creates the need for them to multiply and estimate square footage to understand the full cost benefit of the rebate. | SDG&E may consider changing the way that the greenhouse cover roll is presented (and calculate the incentive per roll rather than per square foot). | SDG&E                    |          | Reject   |                      | Even in a per-roll type calculation, the available rebate will still depend on the total square footage of greenhouse heat curtains installed. Additionally, changing to a per-roll type calculation has the potential to increase rebate complexity due to (1) non-standard roll sizes and (2) situations where only a fraction of a roll is installed.<br><br>Additional clarification of complicated measure requirements will be included in the agricultural specific catalog. |
| 9      | Agriculture Energy Efficiency Program | SDG&E Agricultural Sector Market Study | 31, 32 | Just over half of mail survey respondents said that the ability to receive an incentive at the supplier would make them either a little or a lot more likely to participate in SDG&E's offerings. We also found that indoor/outdoor growers are significantly more likely to get information from suppliers than livestock customers. Additionally, indoor/outdoor growers are significantly more likely to say that the midstream approach would make them a lot more likely to take advantage of SDG&E's offerings when compared to outdoor growers and livestock customers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | SDG&E should consider a midstream rebate approach for crop producing (indoor and/or outdoor) growers.                                               | SDG&E                    | Accept   |          |                      | Starting on July 1st, SDG&E's Direct Install program will be offering most products currently found in the Business Rebates program, which means agricultural customers will be able to have SDG&E selected contractors perform an energy audit and install energy saving equipment.<br><br>More evaluation is needed of the potential for providing midstream rebates directly to agricultural equipment suppliers.                                                                |
| 10     | Agriculture Energy Efficiency Program | SDG&E Agricultural Sector Market Study | 32     | Close to seventy-five percent of customers reported their business name, providing an opportunity to attempt to match to SDG&E's customer tracking data. This matching effort (while not completed for this report) could provide context on the energy usage of a sample of the participating business, and whether size is correlated with customer barriers and drivers to participation. However, it is noted that attempting to match this data could require substantial effort and not all customers who provided their business name would be successfully matched.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | SDG&E should consider connecting the data collected in the mail survey to customer information.                                                     | SDG&E                    |          | Reject   |                      | Only 273 out of the 452 mail survey received had Business Name and Address that were not Post Office Boxes. For the amount of effort and time to hand-match the Business Names and Addresses provided by the customers with the SDG&E Customer Master File, we do not think that the quality of the resulting database would be worth the effort.                                                                                                                                   |