June 15, 2018

Advice Letter 3654-E/3654-E-A

Russell G. Worden  
Director, State Regulatory Operations  
Southern California Edison Company  
8631 Rush Street  
Rosemead, CA 91770

SUBJECT: Southern California Edison Company’s 2018 Energy Efficiency Program and Portfolio Annual Budget

Dear Mr. Worden:

Advice Letter 3654-E and supplemental 3654-E-A are rejected.

Sincerely,

Edward Randolph  
Director, Energy Division
September 1, 2017

ADVICE 3654-E
(U 338-E)

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA
ENERGY DIVISION

SUBJECT: Southern California Edison Company’s 2018 Energy Efficiency Program and Portfolio Annual Budget

In compliance with Decision (D.)15-10-028, Administrative Law Judges’ Ruling Modifying Schedule dated June 9, 2017, and the Energy Division’s “2018 Energy Efficiency Portfolio Filing and Reporting Guidance” dated July 24, 2017, Southern California Edison Company (SCE) hereby submits for filing its interim 2018 Energy Efficiency (EE) Program Budget (including budget for IDSM) for approval by the California Public Utilities Commission (“Commission” or “CPUC”), and to provide information on SCE’s modifications to certain EE programs and sub-programs as detailed below.

PURPOSE

The purpose of this filing is to provide SCE’s 2018 EE annual budget and associated energy savings and cost-effectiveness results. This filing also provides explanations for EE programs that have been added, expanded, modified, or are expected to be phased out in 2018.

The supporting documents for this filing are as follows:

1. Attachment A: CEDARS Filing Confirmation;
2. Attachment B: Requested Guidance and Supporting Documentation;\(^\d\)
3. Attachment C: Description of Program Changes; and

\(^\d\) This attachment includes supporting information as directed by the Energy Division (ED) in its August 2, 2017 email which provided guidance and Excel templates for supporting information to be included in this advice letter.
BACKGROUND

D.15-10-028 requires each EE Program Administrator (PA) to file a Tier 2 advice letter with the PA’s annual EE budget for the coming year in September of each year and requires such advice letters to contain:

- Portfolio cost effectiveness statement;
- Application summary tables with forecast budgets and savings by sector and program/intervention; and
- More detail than the business plans to support spending authorization and revenue requirements for rate recovery purposes.

On September 1, 2016, SCE filed its 2017 Annual Energy Efficiency Program and Portfolio Budget Request (AL-3465), which requested a $279.58 million EE portfolio budget for a program portfolio that met SCE’s energy savings goals and cost effectiveness thresholds. In AL-3465, SCE requested to adjust its authorized revenues to reflect the 2017 proposed EE budget. Multiple parties protested this filing, in particular to SCE’s request for approval of programmatic changes in the annual budget advice letter. At the request of Energy Division (ED), on July 27, 2017, SCE filed its amended 2017 Annual Energy Efficiency Program and Portfolio Budget Request (AL-3465-E-B) which excluded the requests for approval of programmatic changes and reverted to the currently authorized budget of $333.32 million which was previously authorized in D.14-10-046 (and modified by D.15-01-002). This amended advice letter was approved by the ED on July 28, 2017 with an effective date of October 1, 2016.

On July 24, 2017, ED provided the following guidance to PAs in its memo titled “2018 Energy Efficiency Portfolio Filing and Reporting Guidance.” According to this guidance:

- PAs are to provide “Tier 2 Advice Letters by September 1, 2017, using the portfolio budgets and 2018 goals established in D.15-10-028;”

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2 See D.15-10-028, ordering paragraph 4.
3 See D.15-10-028, p. 59.
4 See D.15-10-028, p. 62. The business plan should contain high level estimates, and the budget advice filing should contain more detail.
5 See September 21, 2016 TURN Partial Protest, pp. 1-2; and September 20-21 2016 protests from California Building Industry Association (CBIA), pp. 1-3; County of Los Angeles on Behalf of the Southern California Regional Energy Network, pp. 1-3; North American Insulation Manufacturers Association (NAIMA), pp. 1-2; Owens Corning, pp. 1-3; and Santa Barbara, San Luis Obispo and Ventura Counties pp. 1-3.
6 See Attachment D.
ED “recognizes that many changes are afoot this year that affect portfolio savings goals and cost effectiveness” and that “In effect, this filing is considered ‘interim’”;

Cost-effectiveness inputs shall use “2017 avoided costs found in CET v.17.3.0.1”;

“Pursuant to D.15-10-028, advice letters are no longer necessary for fund shifting that exceeds certain thresholds.”

### 2018 EE PORTFOLIO BUDGET

The original intent of D.15-10-028 was that this annual budget advice letter would be filed after the Commission’s approval of SCE’s amended business plan.\(^7\) However, the Commission’s approval of SCE’s amended business plan is pending. This timing dependency between the business plan approval and the filing of the budget advice letter was recognized by the ALJs who stated that the budgets should be evaluated by the Commission “on an annual basis regardless of the status of the approval of the business plans.”\(^8\) The ALJs also stated that the final decision on the business plan proposals “will likely provide further direction for budget modification and/or true-up.”\(^9\) ED also recognized this issue, and directed the PAs “to file conforming Tier 2 Advice Letters by September 1, 2017, using the portfolio budgets and 2018 goals established in D.15-10-028…”\(^10\) As such, the ALJs’ Ruling identified March 1, 2018 as the date that this advice letter must be revised or “trued-up” with the Commission’s final decision on PAs’ business plans.

Furthermore, as shown in the table below, the Commission has provided the following criteria for SCE’s 2018 EE portfolio budget:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Applicability to 2018 Budget</th>
<th>Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cost Effectiveness</td>
<td>• Statutory requirement to provide cost-effective portfolio(^\dagger)</td>
<td>• California P.U. Code, Section 454.5(b)(9)(c)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• D.16-08-019</td>
</tr>
</tbody>
</table>

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\(^7\) SCE’s Amended Business Plan was filed on February 10, 2017.

\(^8\) See Administrative Law Judges’ Ruling Modifying Schedule, p. 6, June 9, 2017.

\(^9\) Ibid.

\(^10\) See Attachment D. As described previously, D.15-01-028 did not establish SCE’s energy efficiency portfolio budgets. Rather, SCE’s energy efficiency portfolio budget was authorized in D.14-10-046 (and modified by D.15-01-002).

\(^\dagger\) Per California P.U. Code, Section 454.5(b)(9)(c): The electrical corporation shall first meet its unmet resource needs through all available energy efficiency and demand reduction resources that are cost effective, reliable, and feasible.
In its amended business plan application, SCE proposed portfolio modifications and competitive solicitations designed to meet the criteria above. Because a final decision on SCE’s business plan is pending, SCE is unable to provide a 2018 budget that achieves all three criteria as shown in Table 1. For this advice filing, SCE developed its 2018 budget based on the best available information, including: approved legislation (Assembly Bill (AB) 793 and AB 802), delays in authorization to solicit new third-party programs, and necessary changes to other programs to meet current market conditions. SCE prioritized its statutory requirement to provide a cost-effective portfolio and to achieve its energy savings goals per D.15-10-028. The resulting portfolio meets the cost-effectiveness threshold (criteria 1 above) and energy savings goals (criteria 2), reduces SCE’s 2018 EE budget (from $333.320 million to $299.637 million), and makes other changes to SCE’s portfolio in order to meet the cost-effectiveness and goals criteria. The primary drivers of differences between SCE’s portfolio and its amended business plan are as follows:

12 Per D.16-08-019, pages 30-31, “Since D.12-11-015, the costs and benefits of the utilities’ codes and standards work have not been used to meet the cost-effectiveness requirements that benefits exceed costs in the utility portfolios, specifically using the total resource cost test. Instead, the costs and benefits of the codes and standards programs are used as a “cushion” or a “hedge” when added to the rest of the portfolio, to ensure that the overall portfolio will remain cost effective as implemented, and not just as planned. However, the rest of the utility portfolio is required to be cost-effective on its own, prior to consideration of the costs and benefits of the codes and standards activities. These requirements are not altered by this decision.”


15 SCE’s 2018 proposed budget is based on SCE’s 2015 Total Approved Budget adopted in D.14-10-046 and modified in D.15-01-002. The Decision approved an annual authorized budget level for 2015 which is to remain in place (less carry-forward of unspent funds from prior portfolio cycles) until the earlier of 2025 or when the Commission issues a superseding decision on funding. See OP 21.

16 Per D.15-10-028, p. 43, the annual budget advice letter shall provide “a budget for the programs/implementation strategies described in the business plans.” However, because the Commission’s approval of SCE’s amended business plan is pending and because there will be a true-up after the business plans are approved, SCE did not prioritize consistency with programs and implementation strategies described in SCE’s amended business plan.
Pending approval of SCE’s amended business plan. This situation affects program closures, third-party programs, and primary lighting programs, as follows:

- SCE’s 2018 budget does not include significant new third-party programs that were expected to be bid and awarded by January 1, 2018 because SCE cannot issue Requests For Proposals (RFP) for third-party programs until its business plan is approved.\(^{17}\)

- SCE’s 2018 budget restores programs\(^{18}\) that were proposed to be phased out in 2017 at reduced funding levels until its business plan is approved.\(^{19}\)

- SCE’s 2018 budget restores primary lighting measures that are currently available for 2018.\(^{20}\) SCE’s Primary Lighting program supports advancements in technology and market transformation improvements for residential customers throughout Southern California. For its 2018 Primary Lighting program, SCE incorporated proposed DEER savings values from Resolution E-4867. The impacts of these new savings values are reflected in the diminished scope of the program. A fraction of overall program spend on advanced compact fluorescent lamps (CFLs),\(^{21}\) which yields a significant amount of the forecasted program energy savings. These new, advanced CFLs continue to provide highly cost-effective savings that are supported by DEER 2018. Furthermore, CFLs are included in SCE’s territory in the draft Potential and Goals Study used to set future savings goals.

- AB 793 requires several new programs that have been authorized by the CPUC, such as the Residential Pay-for-Performance Program. AB 802 enables programs through the High Opportunity Programs and Projects (HOPPs) process to incorporate the net metered energy savings based approach to take advantage of To-Code savings opportunities. For 2018, SCE’s approved HOPPs are the: (1) Public Sector Performance-Based Retrofit High Opportunity Program, and (2) Comprehensive Value Chain Heating, Ventilation, and Air Conditioning

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\(^{17}\) This results in an approximate budget reduction (relative to amended business plan) of $34.4 million for New Residential Programs (Third Party Design and Delivered).

\(^{18}\) Programs referred to are Residential HVAC Program, Cool Planet, Cool Schools, Commercial Utility Building Efficiency, Lighting Innovation, Sustainable Communities, and Residential New Construction.

\(^{19}\) Programs intended to be phased out pending CPUC approval of SCE’s business plan are assumed to be operational through first quarter 2018 resulting in an approximate budget increase (relative to amended business plan) of $2.8 million. Effected programs are Energy Upgrade California / Residential HVAC, Residential New Construction, Lighting Innovation, Commercial Utility Building Efficiency, Cool Schools, ARRA-Originated Financing, and WE&T Planning.

\(^{20}\) Results in an approximate budget increase (relative to amended business plan) of $35.4 million.

\(^{21}\) SCE’s spend on CFLs compared to its spend on LEDs in its 2018 forecast falls well within compliance obligations related to D.14-10-046, OP 19.
initiative within Non-Residential HVAC program as described in Attachment C. As such, SCE’s 2018 budget includes these authorized additions.

- SCE optimized its portfolio to maintain cost-effectiveness and exceed its energy goals. As reflected in D.15-10-028, it will become more difficult for SCE to meet the Commission’s energy savings goals while maintaining cost-effectiveness.22 Thus, SCE optimized its portfolio and measures to reflect current market projections by performing a bottoms-up analysis for labor, non-labor, and measures offered for each program.

- SCE’s updated 2018 budget reflects evaluation, measurement, and verification (EM&V) costs equal to 4 percent of the EE portfolio budget.23

“Interim” Budget Filing. Because of the pending final decision on SCE’s amended business plan, SCE’s proposed 2018 EE annual budget of $299.6 million is an interim budget as recognized by ED in its July 24, 2017 guidance.24 In addition, the June 9, 2017 ALJ Ruling noted the interim nature of a 2018 budget by requiring a “true-up budget advice letter” submission on March 1, 2018.25 As such, SCE will file its true-up advice letter consistent with the final decision on SCE’s business plan and may perform additional portfolio optimization to meet the portfolio requirements adopted in the final decision.26 SCE’s proposed 2018 EE annual budget of $299,637,16027 represents an increase from SCE’s amended business plan 2018 budget of approximately $49.348 million (from $250.289 million to $299.637 million). SCE’s 2018 budget proposed in this advice letter includes $17.314 million in funding for SoCalREN and is reflected in SoCalREN’s 2018 annual budget advice letter. In addition, SCE included $6.910 million for 2018 funding to continue DR IDSM activities. SCE was originally authorized funding for these activities in D.14-10-046.28

Given the interim nature of this budget, SCE is not requesting a rate change at this time. If revenue requirement changes are required as a result of a final decision on SCE’s business plan, SCE will update its revenue requirements, including any carryover funds, in its March 1, 2018 True-Up advice letter.

For program planning purposes, SCE assumed that DEER values will remain intact for all of 2018, with no retroactive changes. SCE recognizes that the CPUC could reject at

22 D.15-10-028, p. 2.
23 Approximately (relative to amended business plan) $1.1 million. However, the EM&V budget decreased compared to SCE’s 2017 budget advice letter filing.
26 e.g., cost effectiveness and energy savings requirements.
27 This amount excludes $53.156 million in unspent EE program carryover funds and $6.844 million in unspent/uncommitted EM&V carryover funds. See Attachment B for more detailed supporting information.
28 D.14-10-046, p. 104.
a later date the inclusion of CFLs in its 2018 portfolio for policy or other reasons (e.g., future adjustments to baseline in response to AB 1109). If such action occurs with a 2018 effective date, SCE will need to adjust its forecast so that its portfolio of measures and programs meet the Commission’s energy savings and cost-effectiveness targets. However, based on current forecasts, SCE cannot achieve a cost effective portfolio (which excludes Codes and Standards Program) and obtain its energy savings goal if Primary Lighting measures are excluded in SCE’s 2018 energy efficiency portfolio. Assuming no other changes occur to its portfolio, removing Primary Lighting from SCE’s portfolio would result in a TRC (without Codes & Standards) of 0.73.30

2018 EE Portfolio Savings

Table 2 below provides SCE’s forecast of energy savings and demand reduction for its 2018 EE portfolio. Note that the Codes and Standards31 Program and Low Income Energy Savings Assistance Program are included in these figures.

<table>
<thead>
<tr>
<th></th>
<th>2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>Energy Savings (Gross GWh)</td>
<td>1,603</td>
</tr>
<tr>
<td>Demand Reduction (Gross MW)</td>
<td>293</td>
</tr>
<tr>
<td>Gas Savings (Gross MMTh)</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Portfolio Cost-Effectiveness Table

Tables 3 and 4 below provide the Total Resource Cost (TRC) test and Program Administrator Cost (PAC) test scenario results for SCE’s 2018 EE portfolio.

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29 Such measures include LED Reflector Lamps Including PAR, R, and BR; LED Screw-in Recessed Retrofit Kits; LED A-lamps; and 80+ Lumens-Per-Watt CFLs.

30 Assuming no other changes to the portfolio assumptions as presented in this advice filing. In addition, on August 24, 2017, the CPUC approved a decision adopting an interim greenhouse gas adder. Due to the recent timing of such decision, SCE has not yet updated the avoided cost calculator and such adder is not reflected in its cost-effectiveness calculations. However, SCE will include the approved interim greenhouse gas adder in its March 1, 2018 true-up budget advice letter.

31 C&S savings are currently based on 1st year net savings estimated by 3rd party (Craig Tyler & Associates) and are subject to change based on final approval of savings goals for 2018.
Table 3: TRC Cost-Effectiveness Scenario Results

<table>
<thead>
<tr>
<th></th>
<th>2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource and Non-Resource Portfolios, without C&amp;S</td>
<td>1.00</td>
</tr>
<tr>
<td>Resource and Non-Resource Portfolios, with C&amp;S</td>
<td>1.31</td>
</tr>
</tbody>
</table>

Table 4: PAC Cost-Effectiveness Scenario Results

<table>
<thead>
<tr>
<th></th>
<th>2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource and Non-Resource Portfolios, without C&amp;S</td>
<td>1.32</td>
</tr>
<tr>
<td>Resource and Non-resource Portfolios with C&amp;S</td>
<td>3.49</td>
</tr>
</tbody>
</table>

Cap and Target Table

Table 5 below provides SCE’s 2018 EE portfolio budget and the associated budget caps and targets. D.09-09-047 required that administrative costs be capped at 10 percent of the total budget, ME&O costs have a target of 6 percent of the budget, nonincentive direct implementation costs have a target of 20 percent of the total budget, and EM&V funding is capped at 4 percent of the authorized budget.

<table>
<thead>
<tr>
<th></th>
<th>Administrative</th>
<th>Marketing</th>
<th>Non-Incentive Direct Implementation</th>
<th>Incentive</th>
<th>EM&amp;V</th>
</tr>
</thead>
<tbody>
<tr>
<td>IOU Budget</td>
<td>$15,067,527</td>
<td>$9,139,777</td>
<td>$123,544,894</td>
<td>$122,585,475</td>
<td>$-</td>
</tr>
<tr>
<td>REN</td>
<td>$1,558,260</td>
<td>$865,700</td>
<td>$8,772,443</td>
<td>$6,117,597</td>
<td>$-</td>
</tr>
<tr>
<td>EM&amp;V Budget</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$11,985,487</td>
</tr>
</tbody>
</table>

32 Includes statewide marketing, education & outreach ($6.7 million), Energy Savings Performance Incentive (ESPI) earnings ($17.6 million), and estimated pension and benefit costs ($16.5 million). Also, includes 5% spillover (market effects) for resource programs. Excludes Emerging Technology, On-Bill Financing revolving loan pool, credit enhancements, and SoCalREN.

33 Excludes benefits and costs associated with the Codes and Standards Program.

34 Includes statewide marketing, education & outreach ($6.7 million), Energy Savings Performance Incentive (ESPI) earnings ($17.6 million), and estimated pension and benefit costs ($16.5 million).

35 Excludes benefits and costs associated with the Codes and Standards Program.

36 10 percent cap requirement based on D. 09-09-047 is set for IOU only.
As described previously in this advice letter, SCE’s 2018 EE annual portfolio budget in its amended business plan application is $250.3 million, and SCE’s 2018 proposed EE annual budget in this annual advice letter is $299.6 million resulting in a difference of $49.3 million. The differences between these budgets are summarized in Table 6 and described below.

**Table 6: 2018 Proposed Budget Variance Compared to Amended Business Plan Budget**

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018 EE Portfolio Budget per Amended Business Plan</td>
<td>$ 250.3</td>
</tr>
<tr>
<td>Add:</td>
<td></td>
</tr>
<tr>
<td>Expanded and New Programs</td>
<td>20.3</td>
</tr>
<tr>
<td>Programs Assumed To Be Phased Out in SCE’s Amended Business Plan</td>
<td>3.8</td>
</tr>
<tr>
<td>Portfolio Optimization</td>
<td>23.3</td>
</tr>
<tr>
<td>Evaluation, Measurement, and Validation</td>
<td>1.9</td>
</tr>
<tr>
<td>2018 EE Portfolio Budget</td>
<td>$ 299.6</td>
</tr>
</tbody>
</table>

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37. 2018 Proposed Budget includes GRC labor adders (pensions and benefits) and 2018 SW ME&O budget per D.16-09-020.

38. Cap and Target calculation excludes REN’s budget.

39. As described later, in SCE’s amended business plan, certain programs were assumed to be phased out in 2017. However, because the Commission’s approval of SCE’s business plan is pending, these programs have not yet been phased out. As such, in its 2018 proposed budget, SCE adds back the costs of these programs with assumption that these programs will be operational for a portion of 2018.
Expanded and New Programs

As part of SCE’s updated portfolio, the following programs in Table 7 have either been added or expanded, and have resulted in approximately $23.3 million budget increase from SCE’s amended business plan.

Table 7: Summary of Expanded and New Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Type of Change</th>
<th>Driver</th>
<th>Budget Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Residential Pay for Performance Program (SCE-13-TP-024)</td>
<td>New program</td>
<td>AB 793</td>
<td>Allocated approximately $600k to support AB 793 implementation</td>
</tr>
<tr>
<td>2. Public Sector Performance-Based Retrofit High Opportunity Program (SCE-13-L-003I)</td>
<td>New program</td>
<td>AB 802</td>
<td>Allocated approximately $500k to support HOPPs41</td>
</tr>
<tr>
<td>3. Commercial Direct Install (SCE-13-SW-002D)</td>
<td>Expanded Program</td>
<td>AB 793</td>
<td>Allocated $2.7 million to support AB 79342</td>
</tr>
<tr>
<td>4. Non-Residential HVAC Program (SCE-13-SW-002F)</td>
<td>Expanded Program</td>
<td>AB 802</td>
<td>Allocated $1.5 million to support HOPPs43</td>
</tr>
<tr>
<td>5. On-Bill Financing (SCE-13-SW-007A)</td>
<td>Extend Program44</td>
<td>Fund 2018 program activity</td>
<td>$15.0 million budget increase</td>
</tr>
</tbody>
</table>

See Attachment C for more information about the above expanded and new programs.

Program Phase Outs

SCE’s amended business plan assumed that certain programs were to be phased out in 2017, and therefore have no budget in 2018. However, because the Commission’s approval of SCE’s amended business plan is pending, these programs have not yet been phased out. As such, in its 2018 proposed budget, SCE adds back the costs of the programs shown in Table 8 with the assumption that these programs will be operational for only a portion of 2018 depending on a final decision on SCE’s amended plan.

40 See AL-3605-E, which provided SCE’s program changes to support AB 793, approved by ED on June 30, 2017.
41 See AL-3460-E-A, which provide SCE’s program changes to support AB 802, approved by ED on February 17, 2017.
42 See AL-3605-E, which provide SCE’s program changes to support AB 793, approved by ED on June 30, 2017.
43 See AL-3463-E/3463-E-A/3463-E-B, which was approved by ED on July 11, 2017.
44 SCE’s amended business plan assumed carryover funding for this program with assumption that the OBF (e.g., applying loan repayments to make additional loans across program cycle and into future cycles). However, SCE does not yet have authority to utilize unspent and uncommitted funds in the EEFPBA from the previous 2010-2016 EE program cycles, including OBF loan repayments, to fund the 2018 (and beyond) EE Finance Program budget. As such, SCE increased its 2018 On-Bill Finance Program assuming that unspent and uncommitted funds will not be available to fund 2018 program activity.
business plan. The budget impacts of adding these programs into SCE’s 2018 proposed budget is an increase of $3.8 million.

Table 8: Summary of Programs Assumed to Be Phased Out in SCE’s Amended Business Plan

<table>
<thead>
<tr>
<th>Program</th>
<th>Type of Change</th>
<th>Driver</th>
<th>Budget Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Residential HVAC Program (SCE-13-SW-001E) and Energy Upgrade California (SCE-13-SW-001D)</td>
<td>Program closure, consistent with business plan</td>
<td>Optimization</td>
<td>Budget increase assumes program closure in 2018</td>
</tr>
<tr>
<td>2. Sustainable Communities (SCE-13-TP-019)</td>
<td>Program closure, consistent with business plan</td>
<td>Optimization</td>
<td>Budget increase assumes program closure in 2018</td>
</tr>
<tr>
<td>3. Cool Planet (SCE-13-TP-002)</td>
<td>Program closure, consistent with business plan</td>
<td>Optimization</td>
<td>Budget increase assumes program closure in 2018</td>
</tr>
<tr>
<td>4. Cool Schools (SCE-13-TP-013)</td>
<td>Program closure, consistent with business plan</td>
<td>Optimization</td>
<td>Budget increase assumes program closure in 2018</td>
</tr>
<tr>
<td>5. Commercial Utility Building Efficiency (SCE-13-TP-014)</td>
<td>Program closure, consistent with business plan</td>
<td>Optimization</td>
<td>Budget increase assumes program closure in 2018</td>
</tr>
<tr>
<td>6. Lighting Innovation Program (SCE-13-SW-005B)</td>
<td>Program closure, consistent with business plan</td>
<td>Optimization</td>
<td>Budget increase assumes program closure in 2018</td>
</tr>
<tr>
<td>7. Residential New Construction (SCE-13-SW-001F)</td>
<td>Program closure, consistent with business plan</td>
<td>Optimization</td>
<td>Budget increase assumes program closure in 2018</td>
</tr>
<tr>
<td>8. American Reinvestment Recovery Act (ARRA)-Originated Financing (SCE-13-SW-007B)</td>
<td>Program closure, consistent with business plan</td>
<td>Optimization</td>
<td>Budget increase assumes program closure in 2018</td>
</tr>
<tr>
<td>9. Workforce, Education &amp; Training Planning (SCE-13-SW-010C)</td>
<td>Program closure, consistent with business plan</td>
<td>Optimization</td>
<td>Budget decrease assumes program closure in 2018</td>
</tr>
</tbody>
</table>

See Attachment C for more information about the above programs.

**Portfolio Optimization**

As described previously, SCE optimized its portfolio to maintain cost-effectiveness and its energy goals. As reflected in D.15-10-028, it will become more difficult for SCE to meet the Commission’s energy savings goals while maintaining cost-effectiveness.45 Given the known regulatory drivers discussed above, SCE optimized its portfolio and measures to reflect current market projections by performing a bottoms-up analysis for labor, non-labor, and measures offered for each program. As a result of this optimization, SCE’s portfolio budget increased by $23.3 million compared to its amended business plan budget.

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45 D.15-10-028, dated October 22, 2015, p. 2.
**Evaluation, Measurement, and Verification (EM&V)**

SCE estimates its EM&V budget at 4 percent of its overall portfolio budget. Due to increases in the program budgets, SCE’s EM&V budget increased by approximately $1.9 million compared to its amended business plan budget.

**Program Realignments**

As part of SCE’s optimized portfolio, Table 9 lists the programs and associated budgets that have been realigned in 2018.

<table>
<thead>
<tr>
<th>Program</th>
<th>Type of Change</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Strategic Energy Management (SCE-13-SW-003D)(^{46})</td>
<td>Consolidation of Continuous Energy Improvement Programs</td>
<td>Operational Efficiency</td>
</tr>
<tr>
<td>2. Agriculture Continuous Energy Improvement Program (SCE-13-SW-004D)</td>
<td>Consolidation into Strategic Energy Management (SCE-13-SW-003D)</td>
<td>Operational Efficiency</td>
</tr>
<tr>
<td>3. Commercial Continuous Energy Improvement Program (SCE-13-SW-002E)</td>
<td>Consolidation into Strategic Energy Management (SCE-13-SW-003D)</td>
<td>Operational Efficiency</td>
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<tr>
<td>4. Industrial Continuous Energy Improvement Program (SCE-13-SW-003D)</td>
<td>Consolidation into Strategic Energy Management (SCE-13-SW-003D)</td>
<td>Operational Efficiency</td>
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<tr>
<td>5. City of Redlands (SW13-L-002C)</td>
<td>Consolidation into San Bernardino Regional Energy Leader Partnership (Program #?)</td>
<td>Regional Alignment</td>
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<tr>
<td>6. City of Santa Ana (SCE-13-L-002D)</td>
<td>Consolidation into Orange County Cities Energy Leader Partnership (SCE-13-L-002L)</td>
<td>Regional Alignment</td>
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<td>7. Community Energy Leadership Partnership (SCE-13-L-002G)</td>
<td>Program closure(^{47})</td>
<td>Regional Alignment</td>
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<td>8. West Side Energy Leader Partnership (SCE-13-L-002T)</td>
<td>Program renaming</td>
<td>Regional Alignment</td>
</tr>
</tbody>
</table>

See Attachment C for more information about the above program changes.

This advice filing will not cause the withdrawal of service, or conflict with any other schedule or rule.

\(^{46}\) Previously this program number was used for SCE’s Industrial Continuous Energy Improvement program. See Attachment C for more information.

\(^{47}\) Cities in this programs have been transferred into other partnership programs. See Attachment C for more information.
TIER DESIGNATION

Pursuant to GO 96-B, Energy Industry Rule 5.2, this advice letter is submitted with a Tier 2 designation.

EFFECTIVE DATE

This supplemental advice filing will become effective on October 1, 2017, the 30th calendar day after the date filed.

NOTICE

Anyone wishing to protest this advice filing may do so by letter via U.S. Mail, facsimile, or electronically, any of which must be received no later than 20 days after the date of this advice filing. Protests should be submitted to:

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, California 94102
E-mail: EDTariffUnit@cpuc.ca.gov

Copies should also be mailed to the attention of the Director, Energy Division, Room 4004 (same address above).

In addition, protests and all other correspondence regarding this advice letter should also be sent by letter and transmitted via facsimile or electronically to the attention of:

Russell G. Worden
Managing Director, State Regulatory Operations
Southern California Edison Company
8631 Rush Street
Rosemead, California 91770
Telephone (626) 302-4177
Facsimile: (626) 302-5210
E-mail: AdviceTariffManager@sce.com

Laura Genao
Managing Director, State Regulatory Affairs
c/o Karyn Gansecki
Southern California Edison Company
601 Van Ness Avenue, Suite 2030
San Francisco, California 94102 Facsimile: (415) 929-5544
E-mail: Karyn.Gansecki@sce.com
There are no restrictions on who may file a protest, but the protest shall set forth specifically the grounds upon which it is based and must be received by the deadline shown above.

In accordance with General Rule 4 of GO 96-B, SCE is serving copies of this advice filing to the interested parties shown on the attached GO 96-B and R.13-11-005 service lists. Address change requests to the GO 96-B service list should be directed by electronic mail to AdviceTariffManager@sce.com or at (626) 302-4039. For changes to all other service lists, please contact the Commission’s Process Office at (415) 703-2021 or by electronic mail at Process_Office@cpuc.ca.gov.

Further, in accordance with Public Utilities Code Section 491, notice to the public is hereby given by filing and keeping the advice filing at SCE’s corporate headquarters. To view other SCE advice letters filed with the Commission, log on to SCE’s web site at https://www.sce.com/was/portal/home/regulatory/advice-letters.

For questions, please contact Paul Kubasek at (626) 302-3323 or by electronic mail at Paul.Kubasek@sce.com.

Southern California Edison Company

/s/ Russell G. Worden
Russell G. Worden

RGW:pk:jm
Enclosures
Attachment A
CEDARS Filing Confirmation
CEDARS FILING SUBMISSION RECEIPT

The SCE portfolio filing has been submitted and is now under review. A summary of the filing is provided below.

PA: Southern California Edison (SCE)

Filing Year: 2018

Submitted: 10:04:50 on 31 Aug 2017

By: Eric Lee

Advice Letter Number: 3654-E

* Portfolio Filing Summary *

- TRC: 1.3106
- PAC: 3.4925
- TRC (no admin): 1.6983
- PAC (no admin): 8.9178
- RIM: 3.4925
- Budget: $282,323,157.53

* Programs Included in the Filing *

- SCE-13-ESA: Energy Savings Assistance Program
- SCE-13-ESPI: Energy Savings Performance Incentive
- SCE-13-L-002B: City of Long Beach Energy Leader Partnership
- SCE-13-L-002C: City of Redlands Energy Leader Partnership
- SCE-13-L-002D: City of Santa Ana Energy Leader Partnership
- SCE-13-L-002F: Gateway Cities Energy Leader Partnership
- SCE-13-L-002G: Community Energy Leader Partnership
- SCE-13-L-002H: Eastern Sierra Energy Leader Partnership
- SCE-13-L-002I: Energy Leader Partnership Strategic Support
- SCE-13-L-002J: Desert Cities Energy Leader Partnership
- SCE-13-L-002K: Kern County Energy Leader Partnership
- SCE-13-L-002L: Orange County Cities Energy Leader Partnership
- SCE-13-L-002M: San Gabriel Valley Energy Leader Partnership
- SCE-13-L-002N: San Joaquin Valley Energy Leader Partnership
- SCE-13-L-002O: South Bay Energy Leader Partnership
- SCE-13-L-002P: South Santa Barbara County Energy Leader Partnership
- SCE-13-L-002Q: Ventura County Energy Leader Partnership
- SCE-13-L-002R: Western Riverside Energy Leader Partnership
- SCE-13-L-002Rollup: Energy Leader Partnership Program
- SCE-13-L-002S: High Desert Regional Energy Leader Partnership
- SCE-13-L-002T: West Side Community Energy Leader Partnership
- SCE-13-L-002U: Local Government Strategic Planning Pilot Program
- SCE-13-L-002V: North Orange County Cities
- SCE-13-L-002W: San Bernardino Association of Governments
- SCE-13-L-003A: California Community Colleges Energy Efficiency Partnership
- SCE-13-L-003B: California Dept. of Corrections and Rehabilitation EE Partnership
- SCE-13-L-003C: County of Los Angeles Energy Efficiency Partnership
- SCE-13-L-003D: County of Riverside Energy Efficiency Partnership
- SCE-13-L-003E: County of San Bernardino Energy Efficiency Partnership
- SCE-13-L-003F: State of California Energy Efficiency Partnership
- SCE-13-L-003G: UC/CSU Energy Efficiency Partnership
- SCE-13-L-003I: Public Sector Performance-Based Retrofit High Opportunity Program
- SCE-13-PB: Pension and Benefits
- SCE-13-SW-001A: Energy Advisor Program
- SCE-13-SW-001B: Plug Load and Appliances Program
- SCE-13-SW-001C: Multifamily Energy Efficiency Rebate Program
- SCE-13-SW-001D: Energy Upgrade California
- SCE-13-SW-001E: Residential HVAC Program
- SCE-13-SW-001F: Residential New Construction Program
- SCE-13-SW-001G: Residential Direct Install Program
- SCE-13-SW-002A: Commercial Energy Advisor Program
- SCE-13-SW-002B: Commercial Calculated Program
- SCE-13-SW-002C: Commercial Deemed Incentives Program
- SCE-13-SW-002D: Commercial Direct Install Program
- SCE-13-SW-002F: Nonresidential HVAC Program
- SCE-13-SW-002G: Savings By Design
- SCE-13-SW-002H: Midstream Point of Purchase Program
- SCE-13-SW-003A: Industrial Energy Advisor Program
- SCE-13-SW-003B: Industrial Calculated Energy Efficiency Program
- SCE-13-SW-003C: Industrial Deemed Energy Efficiency Program
- SCE-13-SW-003D: Strategic Energy Management Program
- SCE-13-SW-004A: Agriculture Energy Advisor Program
- SCE-13-SW-004B: Agriculture Calculated Energy Efficiency Program
- SCE-13-SW-004C: Agriculture Deemed Energy Efficiency Program
- SCE-13-SW-005A: Lighting Market Transformation Program
- SCE-13-SW-005B: Lighting Innovation Program
- SCE-13-SW-005C: Primary Lighting Program
- SCE-13-SW-006: Integrated Demand Side Management Program
- SCE-13-SW-007A: On-Bill Financing
- SCE-13-SW-007A1: On-Bill Financing Loan Pool
- SCE-13-SW-007B: ARRA-Originated Financing
- SCE-13-SW-007B1: ARRA-Originated Financing Loan Pool
- SCE-13-SW-007C: New Finance Offerings
- SCE-13-SW-008A: Building Codes and Compliance Advocacy
- SCE-13-SW-008B: Appliance Standards Advocacy
- SCE-13-SW-008C: Compliance Improvement
- SCE-13-SW-008D: Reach Codes
- SCE-13-SW-008E: Planning and Coordination
- SCE-13-SW-009A: Technology Development Support
- SCE-13-SW-009B: Technology Assessments
- SCE-13-SW-009C: Technology Introduction Support
- SCE-13-SW-010A: WE&T; Centergies
- SCE-13-SW-010B: WE&T; Connections
- SCE-13-SW-010C: WE&T; Planning
- SCE-13-SWMO: Statewide Marketing, Education & Outreach
- SCE-13-TP-001: Comprehensive Manufactured Homes
- SCE-13-TP-002: Cool Planet
- SCE-13-TP-003: Healthcare EE Program
- SCE-13-TP-004: Data Center Energy Efficiency
- SCE-13-TP-005: Lodging EE Program
- SCE-13-TP-006: Food & Kindred Products
- SCE-13-TP-007: Primary and Fabricated Metals
- SCE-13-TP-008: Nonmetallic Minerals and Products
- SCE-13-TP-009: Comprehensive Chemical Products
- SCE-13-TP-010: Comprehensive Petroleum Refining
- SCE-13-TP-011: Oil Production
- SCE-13-TP-013: Cool Schools
- SCE-13-TP-014: Commercial Utility Building Efficiency
- SCE-13-TP-018: School Energy Efficiency Program
- SCE-13-TP-019: Sustainable Communities
- SCE-13-TP-020: IDEEA365 Program
- SCE-13-TP-021: Enhanced Retrocommissioning
- SCE-13-TP-022: Water Infrastructure Systems Energy Efficiency Program
- SCE-13-TP-023: Midsize Industrial Customer Program
- SCE-13-TP-024: AB793 Residential Pay for Performance
- SCE-3OV0100: SCE EM&V;
- SCE-3OV0200: CPUC EM&V;
Attachment B
Requested Guidance and Supporting Information
<table>
<thead>
<tr>
<th></th>
<th>Electric Average Rate (Res and Non-Res) $/kwh</th>
<th>Gas Average Rate (Res and Non-Res) $/therm</th>
<th>Total Average Bill Savings by Year ($)</th>
<th>Total Average Lifecycle Bill Savings ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present Rates - System Average</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>$0.16</td>
<td></td>
<td>$87,209,070</td>
<td>$981,191,659</td>
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<tr>
<td>2014</td>
<td>$0.17</td>
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<td>$103,251,635</td>
<td>$1,090,731,032</td>
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<tr>
<td>2015</td>
<td>$0.16</td>
<td></td>
<td>$93,081,321</td>
<td>$885,955,571</td>
</tr>
<tr>
<td>2016</td>
<td>$0.15</td>
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<td>$65,492,695</td>
<td>$704,523,862</td>
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<tr>
<td>2017</td>
<td>$0.15</td>
<td></td>
<td>$83,570,931</td>
<td>$726,322,498</td>
</tr>
<tr>
<td>2018</td>
<td>$0.16</td>
<td></td>
<td>$88,065,105</td>
<td>$840,561,019</td>
</tr>
</tbody>
</table>

Consistent with SPM TRC/PAC/RIM tests, all savings used from actuals and forecasts in this table are NET.
1) Average first year electric bill savings is calculated by multiplying an average electric rate with first year net kWh energy savings.
2) Average first year gas bill savings is calculated by multiplying an average gas rate with first year net therm energy savings.
3) Total average first year bill savings is the sum of Notes 1 and 2.
4) Average lifecycle electric bill savings is calculated by multiplying an average electric rate with lifecycle net kWh energy savings.
5) Average lifecycle gas bill savings is calculated by multiplying an average gas rate with lifecycle net therm energy savings.
6) Total average lifecycle bill savings is the sum of Notes 4 and 5.
7) Total Annual and Lifecycle Bill Savings excluded savings from Codes & Standards and ESA Programs.
### Table 2a - Electric Bill Payer Impacts - Current and Proposed Revenues and Rates, Total and Energy Efficiency, by Customer Class

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Bundled</td>
<td>4,681,802</td>
<td>136,211</td>
<td>125,447</td>
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<td>0.0046</td>
<td>0.0044</td>
<td>0.0042</td>
<td>0.0042</td>
<td>-4.05%</td>
<td>0.0042</td>
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<tr>
<td>Domestic Lighting</td>
<td>3,788,150</td>
<td>110,211</td>
<td>105,310</td>
<td>-4.05%</td>
<td>0.0043</td>
<td>0.0042</td>
<td>0.0042</td>
<td>0.0042</td>
<td>-4.05%</td>
<td>0.0042</td>
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<tr>
<td>Large Power</td>
<td>1,732,157</td>
<td>50,395</td>
<td>48,421</td>
<td>-4.05%</td>
<td>0.0030</td>
<td>0.0029</td>
<td>0.0029</td>
<td>0.0029</td>
<td>-4.05%</td>
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<tr>
<td>Agricultural &amp; Pumping</td>
<td>377,687</td>
<td>10,988</td>
<td>10,479</td>
<td>-4.05%</td>
<td>0.0033</td>
<td>0.0031</td>
<td>0.0031</td>
<td>0.0031</td>
<td>-4.05%</td>
<td>0.0031</td>
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<tr>
<td>Street &amp; Area Lighting</td>
<td>124,005</td>
<td>3,608</td>
<td>3,309</td>
<td>-4.05%</td>
<td>0.0046</td>
<td>0.0045</td>
<td>0.0045</td>
<td>0.0045</td>
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<tr>
<td>Direct Access Service Residential</td>
<td>40,867</td>
<td>1,189</td>
<td>1,023</td>
<td>-4.05%</td>
<td>0.0027</td>
<td>0.0026</td>
<td>0.0026</td>
<td>0.0026</td>
<td>-4.05%</td>
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<tr>
<td>Commercial - Small</td>
<td>325,108</td>
<td>9,459</td>
<td>8,386</td>
<td>-4.05%</td>
<td>0.0020</td>
<td>0.0019</td>
<td>0.0019</td>
<td>0.0019</td>
<td>-4.05%</td>
<td>0.0019</td>
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<tr>
<td>Commercial - Medium</td>
<td>378,488</td>
<td>11,012</td>
<td>9,640</td>
<td>-4.05%</td>
<td>0.0014</td>
<td>0.0014</td>
<td>0.0014</td>
<td>0.0014</td>
<td>-4.05%</td>
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<tr>
<td>Commercial - Large</td>
<td>5,415</td>
<td>158</td>
<td>143</td>
<td>-4.05%</td>
<td>0.0017</td>
<td>0.0016</td>
<td>0.0016</td>
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<tr>
<td>Agricultural</td>
<td>3,093</td>
<td>90</td>
<td>111</td>
<td>-4.05%</td>
<td>0.0031</td>
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<td>-4.05%</td>
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### Table 2b - Gas Bill Payer Impacts - Current and Proposed Revenues and Rates, Total and Energy Efficiency, by Customer Class

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<tr>
<td>Domestic Lighting</td>
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<td>Large Power</td>
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<td>Direct Access Service Residential</td>
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<tr>
<td>Commercial - Small</td>
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<tr>
<td>Commercial - Medium</td>
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<tr>
<td>Commercial - Large</td>
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### Table 3 - Budget and Cost Recovery by Funding Source

<table>
<thead>
<tr>
<th>2018 EE Portfolio Budget</th>
<th>Budget by Funding Source</th>
<th>Revenue Requirement for Cost Recovery by Funding Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>Gas PPP Surcharge Funds</td>
<td>2018 Budget 2018 Revenues Allocation after Carryover adjustment</td>
</tr>
<tr>
<td>-</td>
<td>Total Funds</td>
<td>$299,637,160 2018 Revenue Requirement after Carryover adjustment</td>
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**Budget by Funding Source**

<table>
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<tr>
<th>2018 Authorized (Before Carryover)</th>
<th>2018 Budget</th>
<th>Allocation</th>
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</thead>
<tbody>
<tr>
<td>Electric Procurement EE Funds [1]</td>
<td>$299,637,160</td>
<td>100%</td>
</tr>
<tr>
<td>Gas PPP Surcharge Funds</td>
<td>$</td>
<td>-</td>
</tr>
<tr>
<td>Total Funds</td>
<td>$299,637,160</td>
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</tbody>
</table>

**Revenue Requirement for Cost Recovery by Funding Source**

<table>
<thead>
<tr>
<th>2018 Authorized Funding in Rates (including carryover)</th>
<th>2018 Revenue Requirement</th>
<th>Allocation after Carryover adjustment</th>
</tr>
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<tbody>
<tr>
<td>Electric Procurement EE Funds [1]</td>
<td>$299,637,160</td>
<td>100%</td>
</tr>
<tr>
<td>Gas PPP Surcharge Funds</td>
<td>$</td>
<td>-</td>
</tr>
<tr>
<td>Total Funds</td>
<td>$299,637,160</td>
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</table>

**Unspent/Uncommitted Carryover Funds in positive $ amounts**

<table>
<thead>
<tr>
<th>Total Unspent/Uncommitted Funds</th>
<th>Electric PGC</th>
<th>Electric Procurement</th>
<th>Total Electric</th>
<th>Gas</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
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<tr>
<td>2013-2015</td>
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<td>2010-2012 [2]</td>
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<td>Pre 2010</td>
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<td>Total Pre-2016</td>
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</table>

**EM&V Unspent/Uncommitted Funds**

<table>
<thead>
<tr>
<th>Total EM&amp;V Unspent/Uncommitted Funds</th>
<th>Electric PGC</th>
<th>Electric Procurement</th>
<th>Total Electric</th>
<th>Gas</th>
<th>Total</th>
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<tr>
<td>2016</td>
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<td>2013-2015</td>
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<td>Total Pre-2016</td>
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</table>

**Program Unspent/Uncommitted Funds**

<table>
<thead>
<tr>
<th>Total Program Unspent/Uncommitted Funds</th>
<th>Electric PGC</th>
<th>Electric Procurement</th>
<th>Total Electric</th>
<th>Gas</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>2016</td>
<td>$</td>
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<tr>
<td>2013-2015</td>
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<td>2010-2012</td>
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<td>Pre 2010</td>
<td>$</td>
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<tr>
<td>Total Pre-2016</td>
<td>$</td>
<td>$</td>
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</tr>
</tbody>
</table>
### Table 4 – Budget, Spent, Unspent, Carryover Details

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Residential New Construction Program</td>
<td>11,768,685</td>
<td>20,978,685</td>
<td>15,645,270</td>
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<tr>
<td>Industrial Deemed Energy Efficiency Program</td>
<td>10,971,906</td>
<td>4,788,863</td>
<td>4,633,367</td>
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<tr>
<td>Agriculture Energy Advisor Program</td>
<td>9,093,983</td>
<td>5,025,800</td>
<td>5,020,259</td>
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<td>Agriculture Deemed Energy Efficiency Program</td>
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<td>3,102,460</td>
<td>3,099,387</td>
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<tr>
<td>Lighting Innovation Program</td>
<td>19,479,794</td>
<td>5,199,794</td>
<td>5,669,550</td>
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<tr>
<td>Primary Lighting Program</td>
<td>51,849,051</td>
<td>65,319,051</td>
<td>64,727,671</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>New Finance Offerings</td>
<td>21,900,000</td>
<td>23,573,459</td>
<td>7,661,879</td>
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<tr>
<td>Compliance Improvement</td>
<td>2,419,108</td>
<td>3,944,108</td>
<td>4,866,981</td>
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<tr>
<td>Technology Development Support</td>
<td>5,557,769</td>
<td>5,557,769</td>
<td>6,534,544</td>
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<tr>
<td>WE&amp;T Centergies</td>
<td>16,714,127</td>
<td>17,825,127</td>
<td>17,816,571</td>
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<tr>
<td>San Joaquin Valley Energy Leader Partnership</td>
<td>3,128,471</td>
<td>2,014,653</td>
<td>1,837,882</td>
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<tr>
<td>Public Sector Performance-Based Retrofit High Opportunity Program</td>
<td>8,173,826</td>
<td>11,984,626</td>
<td>11,977,189</td>
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<tr>
<td>Lodging EE Program</td>
<td>6,654,161</td>
<td>6,041,161</td>
<td>6,019,988</td>
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<tr>
<td>Cool Schools</td>
<td>5,081,800</td>
<td>2,361,800</td>
<td>2,359,963</td>
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<tr>
<td>Energy Efficiency for Entertainment Centers</td>
<td>2,577,117</td>
<td>1,582,117</td>
<td>1,578,942</td>
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<td></td>
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<tr>
<td>Comprehensive Chemical Products</td>
<td>10,678,037</td>
<td>10,347,037</td>
<td>7,634,963</td>
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<tr>
<td>IDEEA365 Program</td>
<td>12,552,655</td>
<td>9,102,655</td>
<td>5,319,636</td>
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<tr>
<td>EM&amp;V - CPUC</td>
<td>30,448,097</td>
<td>30,448,097</td>
<td>21,736,675</td>
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<td></td>
<td></td>
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</tbody>
</table>

Total EE Portfolio: 1,027,529,341 $  1,027,529,341 $  884,330,416 $  1,775,271 $  21,051,000 $  333,320,000 $  74,062,997 $  299,637,160 $
Table 5 - Total 2018 Requested and 2013-2017 Authorized Budgets ($000).

<table>
<thead>
<tr>
<th>Category (2013-17 Authorized and 2018 Request)</th>
<th>Electric Demand Response Funds</th>
<th>Electric Energy Efficiency Funds</th>
<th>Natural Gas Public Purpose Funds</th>
<th>Total Energy Efficiency Funds</th>
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<tbody>
<tr>
<td>2013-2015 Annualized Program Funds - Utility</td>
<td>$11,746</td>
<td>$310,823</td>
<td>$322,569</td>
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<tr>
<td>2013-2015 Annualized Program Funds - REN</td>
<td>$17,687</td>
<td>$17,687</td>
<td></td>
<td>$17,687</td>
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<tr>
<td>2013-2015 Annualized Program Funds - CCA</td>
<td>$-</td>
<td></td>
<td></td>
<td>$-</td>
</tr>
<tr>
<td>2013-2015 Annualized EM&amp;V</td>
<td>$13,999</td>
<td></td>
<td></td>
<td>$13,999</td>
</tr>
<tr>
<td>2013-2015 Total Annualized Portfolio</td>
<td>$11,746</td>
<td>$342,510</td>
<td>$-</td>
<td>$354,256</td>
</tr>
<tr>
<td>2016 Program Funds - Utility</td>
<td>$11,746</td>
<td>$302,673</td>
<td>$314,419</td>
<td></td>
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<tr>
<td>2016 Program Funds - REN</td>
<td>$17,314</td>
<td>$17,314</td>
<td></td>
<td>$17,314</td>
</tr>
<tr>
<td>2016 Program Funds - CCA</td>
<td>$-</td>
<td></td>
<td></td>
<td>$-</td>
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<tr>
<td>2016 EM&amp;V</td>
<td>$13,333</td>
<td></td>
<td></td>
<td>$13,333</td>
</tr>
<tr>
<td>2016 Annualized Total</td>
<td>$11,746</td>
<td>$333,320</td>
<td>$-</td>
<td>$345,066</td>
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<tr>
<td>2017 Program Funds - Utility</td>
<td>$10,137</td>
<td>$302,725</td>
<td>$312,862</td>
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<tr>
<td>2017 Program Funds - REN</td>
<td>$17,262</td>
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<td>$17,262</td>
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<tr>
<td>2017 Program Funds - CCA</td>
<td>$-</td>
<td></td>
<td></td>
<td>$-</td>
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<tr>
<td>2017 EM&amp;V</td>
<td>$13,333</td>
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<td>$13,333</td>
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<tr>
<td>2017 Annualized Total</td>
<td>$10,137</td>
<td>$333,320</td>
<td>$-</td>
<td>$343,457</td>
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<tr>
<td>2018 Requested Program Funds - Utility</td>
<td>$6,910</td>
<td>$270,338</td>
<td>$277,248</td>
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<tr>
<td>2018 Requested Program Funds - REN</td>
<td>$17,314</td>
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<td>$17,314</td>
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<tr>
<td>2018 Requested Program Funds - CCA</td>
<td>$-</td>
<td></td>
<td></td>
<td>$-</td>
</tr>
<tr>
<td>2018 Requested EM&amp;V</td>
<td>$11,985</td>
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<tr>
<td>2018 Total Portfolio Request</td>
<td>$6,910</td>
<td>$299,637</td>
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<td>$306,547</td>
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</table>

1 Authorized budget excludes reductions from past unspent funds, carryover and is consistent with funding approved in D. 09-09-047, D. 12-11-015, D.14-10-046 and D.15-10-028.
<table>
<thead>
<tr>
<th>Category</th>
<th>Electric Procurement Funds</th>
<th>Natural Gas Public Purpose Funds</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-2015 EM&amp;V Funds</td>
<td>$11,517</td>
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<td>$11,517</td>
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<tr>
<td>2013-2015 Program Funds - Utility</td>
<td>$103,250</td>
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<td>$103,250</td>
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<td>2013-2015 Program Funds - REN</td>
<td>$2,186</td>
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<tr>
<td>2013-2015 Program Funds - CCA</td>
<td>$0</td>
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<td>$0</td>
</tr>
<tr>
<td>2016 EM&amp;V Funds</td>
<td>$12,552</td>
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<td>$12,552</td>
</tr>
<tr>
<td>2016 Program Funds - Utility</td>
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<td>$35,276</td>
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<tr>
<td>2016 Program Funds - REN</td>
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<td>$5,211</td>
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<td>2016 Program Funds - CCA</td>
<td>$0</td>
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<td>$0</td>
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<tr>
<td>2017 to date EM&amp;V Funds [2]</td>
<td>$6,414</td>
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<td>$6,414</td>
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<td>2017 to date Program Funds - REN [2]</td>
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<tr>
<td>2017 to date Program Funds - CCA [2]</td>
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<td></td>
<td>$0</td>
</tr>
<tr>
<td>Total</td>
<td>$262,587</td>
<td>$0</td>
<td>$262,587</td>
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</table>

[1] As of June 30, 2017
[2] 2017 collected revenue less program spent through June 30, 2017
Table 7 - 2016 Authorized and Spent/Unspent Detail

<table>
<thead>
<tr>
<th>Category</th>
<th>Electric Procurement Funds</th>
<th>Natural Gas Public Purpose Funds</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016 Annualized Authorized Program Budget</td>
<td>$319,987</td>
<td>$319,987</td>
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<tr>
<td>2016 Actual Spent [1]</td>
<td>$235,448</td>
<td>$235,448</td>
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<tr>
<td>2016 Unspent</td>
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<tr>
<td>2016 Committed funds</td>
<td>$40,484</td>
<td>$40,484</td>
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</tr>
<tr>
<td>2016 Unspent/uncommitted - estimated available for 2018</td>
<td>$0</td>
<td>$0</td>
<td></td>
</tr>
</tbody>
</table>

[1] Actual spent through June 30, 2017
Attachment C
Description of Program Changes
Description of Program Changes

Expanded and New Programs

1. **Residential Pay for Performance Program** (SCE-13-TP-024)
   California Assembly Bill 793 (AB 793), and the associated California Public Utilities Commission’s (CPUC or Commission) Resolution E-4820, mandates all IOUs to develop and implement incentive programs targeting residential customers who acquire Energy Management Technologies (EMTs). Pursuant to Resolution E-4820, program offerings should include a mechanism to incentivize residential customers to acquire EMTs to meet Energy Efficiency (EE) savings goals under a pay-for-performance model. Through a request for offer (RFO) process, SCE is seeking cost-effective, and “ready-to-implement” proposals from qualified entities to initiate a Pay-for-Performance program that links incentives directly to measured energy savings. The proposed incentive structure must also conform to Senate Bill 350’s definition of Pay for Performance. The pay-for-performance program will welcome participation by energy management technology vendors and products, including energy management software-as-a-service. The pay-for-performance program will not rely exclusively on retrofits, as the intent of Assembly Bill 793 is not to stimulate energy efficiency retrofit activities. As such, SCE has created a new program and allocated $635,984 in budget for this effort.

2. **Public Sector Performance-Based Retrofit High Opportunity Program** (SCE-13-L-003I)
   On August 22, 2016, Southern California Edison Company (SCE) filed Tier 1 advice letter 3460-E, consistent with the Commission’s “Assigned Commissioner and Administrative Law Judge’s Ruling Regarding High Opportunity Energy Efficiency Programs Or Projects”, dated December 30, 2015 (the HOPPs Ruling). In this original submission of the advice letter, SCE proposes a Public Performance-Based Retrofit (PBR) Program. The Public PBR Program targets California State University, University of California, and Community Colleges, as well as non-educational public buildings. Four pilot program sites have been identified: South Hall at UC Santa Barbara, the Social & Behavioral Sciences Building at CSU Dominguez Hills, the Social Science Building at Cerritos College, and the State Government Center Building for CalTrans. Each of these buildings meets the stated criteria for the program, and may begin project activities as additional program participants are considered. The program is designed to interface with Southern California Gas Company’s (SoCalGas) High Opportunity Programs and Projects (HOPPs) Monitored Performance-Based Retrofits (MPBR) Program, and the three educational facilities listed as pilot projects in SCE’s supplemental advice letter were also named as pilot projects in SoCalGas’s supplemental advice letter 4956-G-A. As such, SCE has created a new program and allocated approximately $534,000 in budget for this effort.

3. **Commercial Direct Install** (SCE-13-SW-002D)
   The Commercial Direct Install program has expanded to include a new work stream to support AB 793. Additional budget has been requested to fund a new Smart-Thermostat offering within the Commercial Direct Install program to support the goals
from AB 793. Current plans are to incorporate innovative program designs which can deliver Smart-Thermostat savings with either a performance or deemed based savings. SCE allocated $2.7 million for this effort.

4. **Non-Residential HVAC Program** (SCE-13-SW-002F)
   To support the HOPPs initiative “Comprehensive Value Chain Heating, Ventilation, and Air conditioning Program, SCE proposed a comprehensive value chain HVAC program that provides incentives to both the commercial end-use customer and contractor. The contractor incentive is contingent on the new or optimized air conditioner and duct optimization showing energy savings after one year of a post evaluation period. The program includes a random coefficients model to estimate the normalized metered energy consumption (NMEC), site testing of the HVAC system, and metered whole building energy use. It will also require a three-year maintenance contract. The goal of this program is to improve upon existing commercial quality maintenance programs by testing the performance of the system before and after the program treatment, optimizing the HVAC system and allowing for the option of installing new equipment. In support of this effort, Energy Division approved SCE’s Advice Letter 3643-E/3463-E-A/3463-E-B on June 23, 2017. SCE allocated $1.5 million for this effort.

5. **On-Bill Financing** (SCE-13-SW-007A)
   SCE’s amended business plan assumed carryover funding for this program (i.e., applying loan repayments to make additional loans across program cycle and into future cycles). However, SCE does not yet have authority to utilize unspent and uncommitted funds in the Energy Efficiency Finance Programs Balancing Account (EEFPBA) from the previous 2010-2016 EE program cycles, including OBF loan repayments, to fund the 2018 (and beyond) EE Finance Program budget. As such, SCE increased its 2018 On-Bill Finance Program budget assuming that unspent and uncommitted funds will not be available to fund 2018 program activity.

**Program Assumed To Be Phased Out in SCE’s Amended Business Plan**

The following programs were proposed to be phased out in SCE’s amended business plan, primarily due to low cost-effectiveness. As such, SCE’s budget reflects reduced funding levels for these programs in 2018. Unless noted, budgets for these programs are set at levels equivalent to one quarter of funding to reflect the anticipated phase out at the end of the first quarter 2018.

1. **Residential HVAC and Energy Upgrade California** (SCE-13-SW-001E and SCE-13-SW-001D)
   Energy Upgrade California Home Upgrade (“Home Upgrade”) for 2018 will be adding existing Residential HVAC Program measures currently offered through the Residential HVAC program. This will eliminate the need to have a standalone Residential HVAC program as part of SCE’s Energy Efficiency portfolio. To accomplish this, the current third-party implementer for EUC will conduct DI verification, commissioning, and training associated with these new measures as part of the Home Upgrade offering to our customers. However, while SCE has made
multiple improvements since program inception, the Home Upgrade program continues to have a low Total Resource Cost Test ratio, which is currently 0.14.

2. **Sustainable Communities** (SCE-13-TP-019)
   Sustainable Communities activities focus on developing strategies for the uptake and broad adoption of Zero Net Energy (ZNE) projects, primarily focused on residential new construction. Working closely with the Codes & Standards Program, the Emerging Technologies Program, and EM&V, Sustainable Communities focuses on a variety of intervention and support strategies such as a multi-family ZNE demonstration, builder outreach, industry training on high performance building practices, the role of the real estate and mortgage industries, behavioral aspects of ZNE, as well as working with our Service Planning organization on ZNE infrastructure impacts.

3. **Cool Planet** (SCE-13-TP-002)
   The 2013-2016 Cool Planet Program is a non-resource program that provides utility business customers with education and technical training to measure and manage their energy use and greenhouse gas (GHG) emissions. Customers earn public recognition and awards of 1-, 2-, or 3-year memberships with The Climate Registry based on meeting kWh energy savings or demand response program participation thresholds. Cool Planet Program also includes a water-energy GHG education pilot program that offers a clear means to quantify, compare, and analyze the GHG emissions embedded in delivered water using a consistent and transparent methodology. This phase out will avoid offering duplicate programs, improve the cost-effectiveness of the overall portfolio, and better align with a Public Sector approach. Additionally current customers interested in recognition and outreach will be able to do so through other offerings such as those found in the WE&T programs.

4. **Cool Schools** (SCE-13-TP-013)
   The focus of the Cool Schools program is to assist public and private institutions with EE and conservation. Cool Schools utilizes the knowledge and communication channels of trusted end-user associations and financial assistance to accelerate the replacement of existing equipment reaching the end of its useful life with new, more energy-efficient equipment. Cool Schools has been a challenging program because of the overlap with turnkey programs that retrofit many lighting measures, making the payback on HVAC or ancillary measures much less attractive to customers. Proposition 39 funding has also proved challenging as many school customers choose to utilize the funding to only bring their buildings up to code instead of achieving savings above code.

5. **Commercial Utility Building Efficiency** (SCE-13-TP-014)
   CUBE provides audits, technical assistance, and incentives to support installation of recommended EE equipment at privately owned commercial office buildings. Given changes in claimable energy savings due to Title 24 updates and changes in Industry Standard Practice (ISP) assumptions, the number of eligible measures for CUBE has been drastically reduced.
6. **Lighting Innovation Program** (SCE-13-SW-005B)
The Lighting Innovation Program developed medium-scale demonstration projects and trial studies to identify measures and program models that would potentially be supported in the Primary Lighting Program. Within the past few years, LIP pilot programs were designed and implemented, achieving results that proved to be useful in helping SCE develop an incentive design for the midstream delivery channel. One of those programs that proved successful was the development of the Midstream Lighting Program that transitioned out of LIP and is currently implemented today within the Deemed Core Program umbrella.

7. **Residential New Construction** (SCE-13-SW-001F)
The California Advanced Home Program (CAHP) successfully moved many builders and developers progressively beyond Title 24, yet only one percent of new homes built achieve these standards. The program has not proven to be cost-effective. SCE allocated budget to process outstanding rebates in this program. SCE will sunset CAHP and the Sustainable Communities program to focus efforts on new program design efforts that lead to Zero Net Energy (ZNE) qualified homes. Going forward, SCE will use existing partnerships to advance awareness of residential and non-residential ZNE standards through education and outreach. The ZNE strategy of working with builders, architects, and the housing industry will ultimately shift in 2020 to facilitate competency in the commercial and institutional space toward 2030 ZNE mandates. SCE’s Codes and Standards Program is working with City of Santa Monica and other communities seeking to implement ZNE “reach codes” prior to 2020.

8. **American Reinvestment Recovery Act (ARRA)-Originated Financing** (SCE-13-SW-007B)
This program (also known as “EmPower Energy Efficiency Program” is a continuation of financing programs originally supported by American Recovery and Reinvestment Act (ARRA) stimulus funding in 2011 and 2012 and implemented by local governments. The Program was created to streamline the process of attaining low-cost unsecured loans, qualifying Third-Party Contractors, and providing utility rebates to help homeowners overcome the high upfront cost and confusion associated with making home energy upgrades. EmPower was also meant to coordinate with and enhance the Participating Utilities Energy Upgrade California program (“EUC Program”) by driving customer participation. However, the EmPower program has a very low conversion rate from turning interested customers into actual EUC projects with few to no closed loans and very limited evidence of direct correlation between its activities and EUC or other program participation.

9. **Workforce, Education & Training Planning** (SCE-13-SW-010C)
SCE requests authority to streamline all three Workforce Education and Training (WE&T) subprograms (Connections, Planning, and Centergies) into one overarching WE&T program to enhance efficiencies, establish a clearer participant pathway with a single point of contact, and enhance alignment to both portfolio and market needs.
Program Realignments

1. **Strategic Energy Management** (SCE-13-SW-003D)
   SCE will consolidate the Agriculture Continuous Energy Improvement Program (SCE-13-SW-004D), Commercial Continuous Energy Improvement Program (SCE-13-SW-002E), and the Industrial Continuous Energy Improvement Program (SCE-13-SW-003D) into a single program named the Strategic Energy Management program which will use the program number SCE-13-SW-003D (previously the program number for the Industrial Continuous Energy Improvement). The Strategic Energy Management (SEM) program is a resource program that provides a concierge approach service in identifying, assisting, and implementing EE projects with a whole facility approach while assisting the customer through the process. SEM is a milestone-based program with eight workshops that span 26 months for a customer. The purpose of the workshops is to educate the customer. SEM is designed to provide a method of delivering savings for the customer through a two-year process. The concierge service is to have one implementer and one point of contact to assist the contractor through the sunrise and sunset of EE projects with a whole building approach.

2. **Agriculture Continuous Energy Improvement Program** (SCE-13-SW-004D)
   Per discussion above, SCE will consolidate this program into the Strategic Energy Management program.

3. **Commercial Continuous Energy Improvement Program** (SCE-13-SW-002E)
   Per discussion above, SCE will consolidate this program into the Strategic Energy Management program.

4. **Industrial Continuous Energy Improvement Program** (SCE-13-SW-003D)
   Per discussion above, SCE will consolidate this program into the Strategic Energy Management program. SCE will reassign the program number for this program to the new Strategic Energy Management program.

5. **City of Redlands** (SW13-L-002C)
   SCE has realigned its single city partnerships into regional partnerships. This will enable a city to leverage best practices from other partnership members, focus its resources on targeted regional energy efficiency projects, and improve the cost effectiveness of the partnerships. As such, the City of Redlands has joined the San Bernardino Regional Energy Leader Partnership (SANBAG). Members of regional partnerships have the same partnership program benefits and incentives as single city partnerships.48

6. **City of Santa Ana** (SCE-13-L-002D)
   As described above, SCE has realigned its single city partnerships into regional partnerships. This will enable a city to leverage best practices from other partnership

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48 See Advice 3543-E which was approved by Energy Division on March 15, 2017, effective February 3, 2017.
members, focus its resources on targeted regional energy efficiency projects, and improve the cost effectiveness of the partnerships. As such, the City of Santa Ana has joined the Orange County Cities Energy Leader Partnership. Members of regional partnerships have the same partnership program benefits and incentives as single city partnerships.49

7. **Community Energy Leadership Partnership** (SCE-13-L-002G)
Consistent with the effort to move towards regional partnerships described above, SCE has discontinued the Community Energy Leadership Partnership (CEP) in July of 2017 and moved cities within CEP to regional partnerships. SCE has moved the City of San Bernardino to SANBAG, moved the City of Moreno Valley and the City of Corona to the Western Riverside Energy Leader Partnership, and moved the City of Irvine to the Orange County Cities Energy Leader Partnership in January of 2017. In addition, SCE moved the City of Santa Monica and the City of Santa Clarita to the West Side Community Energy Partnership in July 2017.50

8. **West Side Energy Leader Partnership** (SCE-13-L-002T)
Consistent with the effort to move towards regional partnerships described above, SCE has renamed the West Side Energy Leader Partnership to the West Side Community Energy Partnership and expand its partnership to incorporate surrounding cities, such as the City of Santa Monica and City of Santa Clarita.51

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49  Ibid.
50  Ibid.
51  Ibid.
Attachment D
Clarification Letter on 2018 Energy Efficiency Portfolio Filing and Reporting Guidance
To: Energy Efficiency Program Administrators  
From: Amy Reardon, CPUC Energy Division, Data Management and Reporting  
Subject: 2018 Energy Efficiency Portfolio Filing and Reporting Guidance  

July 24, 2017

This memo provides guidance on upcoming changes to energy efficiency reporting. The next EE reporting PCG is scheduled for July 25 at the CPUC, and we will discuss these items at that time. Please direct any questions you have to amy.reardon@cpuc.ca.gov.

2018 Annual Budget Filings on September 1, 2017

Decision 15-10-028 directs IOUs to submit annual compliance filings as Tier 2 Advice Letters by September 1st that include a portfolio cost effectiveness statement and application summary tables. Energy Division recognizes that many changes are afoot this year that affect portfolio savings goals and cost effectiveness—and indeed the entire portfolio mix of sectors and programs--and that the requirement for a cost effective portfolio showing may not be achievable in 2018 using these parameters and given current uncertainties. However, a compliance filing is still needed in accordance with the “bus stop” schedule set forth in the Decision. Therefore, Energy Division directs the PAs to file conforming Tier 2 Advice Letters by September 1, 2017, using the portfolio budgets and 2018 goals established in D.15-10-028, and cost effectiveness inputs using 2017 avoided costs found in CET v.17.3.0.1

In effect, this filing is considered “interim.” Staff will weigh the validity of any protests to the advice letters against our recognition of current ambiguity in the Proceeding, with the end goal of receiving supplemental filings as soon as possible after new goals and avoided costs are approved. Furthermore, Staff understands that upon approval of the Business Plans, the PAs will refile fully updated portfolios sometime in 2018.

Revised Budget Filing Appendices

The 2017 budget filings included three Excel-based appendices containing detailed application summary tables. After taking inventory of those appendices, we identified that nearly all of this information was now captured in the CEDARS data system, and could be queried to generate those appendices without the PAs needing to file them. Energy Division and consultants will write queries to generate the Excel workbooks that PAs filed in 2017 (Appendices A,B, and C) and will call this queried report “Budget Filing Detail Report.” The rationale is that Energy Division needs the data to come from a common source—CEI submitted in CEDARS by the PAs—so there are no inconsistencies between the database and the filings.

1 The 2017 avoided cost tables are integrated in CEDARS-CET and will be used for processing filings.
Our data inventory shows that there is still a small subset of incremental data not collected in CEDARS, so a new appendix template to capture any additional needed information will be provided and discussed at the July 25th PCG meeting.

The appendices will require updating when the Commission approves the interim cost effectiveness adders and new 2018 goals.

**Monthly Reporting Module in CEDARS**

Energy Division has advised the PAs of a new reporting structure within CEDARS that will replace the Excel-based monthly reporting format. This new specification will be ready to test in third quarter. This Monthly Reporting Module will capture program budget fund shifts, therefore removing the requirement for the IOUs to file quarterly fund shifting reports because this report will be generated from CEDARS and posted as an Excel file. Pursuant to D. 15-10-028, advice letters are no longer necessary for fund shifting that exceeds certain thresholds.

**New Reporting Schedule**

At the June 14, 2017 EE Reporting Project Coordination Group (PCG) meeting, Energy Division discussed whether the staggered reporting schedule—in which the RENs/MCE report earlier than the IOUs in order to enable the IOUs to capture REN/MCE information in their reports—was still necessary once the monthly reporting module was launched in CEDARS. We expect that the new schedule, with all PAs reporting on the same timeline, will commence by September or October (depending on how testing goes for the new monthly reports.) We also agreed at the PCG that IOUs and RENs/MCE would coordinate together informally to obtain any data needed to be exchanged prior to filing their reports. The current reporting schedule can be found on EEStats and will be updated once the monthly reporting module is in effect.²

**Water-Energy Reporting**

The CEDARS quarterly program tracking claims specification now includes a water/energy table to capture savings associated with measures identified to achieve both on-site and off-site energy savings. PAs have been advised to create a proxy program ID that will record savings associated with such measures; since water/energy measures have their own cost effectiveness calculator, they will be excluded from the portfolio cost effectiveness roll up performed in CEDARS. Water/Energy savings will not be included in monthly reports once the new CEDARS Monthly Reporting Module is released.

Local Government Partnership Program “Dashboards”

At the June PCG, IOUs presented two types of quarterly reports for local government partnerships:

- Key Performance Indicator (KPI) report, an excel file developed especially for Energy Division staff;
- Local Government Dashboards, provided by the IOUs to individual communities showing quarterly progress.

Energy Division’s assessment of the KPI report is that much of the information already exists in the CEDARS database and that this report is no longer required. Energy Division acknowledges that there is value in the Local Government Partnership dashboards to local communities, and encourages the continuance of this communications service.
**CALIFORNIA PUBLIC UTILITIES COMMISSION**

**ADVICE LETTER FILING SUMMARY**

**ENERGY UTILITY**

**MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)**

<table>
<thead>
<tr>
<th>Company name/CPUC Utility No.:</th>
<th>Southern California Edison Company (U 338-E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility type:</td>
<td>Contact Person: Darrah Morgan</td>
</tr>
<tr>
<td>☑ ELC</td>
<td>Phone #: (626) 302-2086</td>
</tr>
<tr>
<td>☐ GAS</td>
<td>E-mail: <a href="mailto:Darrah.Morgan@sce.com">Darrah.Morgan@sce.com</a></td>
</tr>
<tr>
<td>☐ PLC</td>
<td>E-mail Disposition Notice to: <a href="mailto:AdviceTariffManager@sce.com">AdviceTariffManager@sce.com</a></td>
</tr>
<tr>
<td>☐ HEAT</td>
<td></td>
</tr>
<tr>
<td>☐ WATER</td>
<td></td>
</tr>
</tbody>
</table>

**EXPLANATION OF UTILITY TYPE**

<table>
<thead>
<tr>
<th>ELC = Electric</th>
<th>GAS = Gas</th>
<th>PLC = Pipeline</th>
<th>HEAT = Heat</th>
<th>WATER = Water</th>
</tr>
</thead>
</table>

Advice Letter (AL) #: 3654-E  
Tier Designation: 2

Subject of AL: Southern California Edison Company’s 2018 Energy Efficiency Program and Portfolio Annual Budget

Keywords (choose from CPUC listing): Compliance, Energy Efficiency

AL filing type: ☑ One-Time  ☐ Monthly  ☐ Quarterly  ☐ Annual  ☐ Other

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: Decision 15-10-028

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL:  

Summarize differences between the AL and the prior withdrawn or rejected AL:  

Confidential treatment requested? ☐ Yes  ☑ No

If yes, specification of confidential information:  
Confidential information will be made available to appropriate parties who execute a nondisclosure agreement.  
Name and contact information to request nondisclosure agreement/access to confidential information:

Resolution Required? ☐ Yes  ☑ No

Requested effective date: 10/1/17  
No. of tariff sheets: -0-

Estimated system annual revenue effect: (%):

Estimated system average rate effect (%):

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting):

Tariff schedules affected: N/A

Service affected and changes proposed:  

Pending advice letters that revise the same tariff sheets: None

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1 Discuss in AL if more space is needed.
Protests and all other correspondence regarding this AL are due no later 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, California 94102
E-mail: EDTariffUnit@cpuc.ca.gov

Russell G. Worden
Managing Director, State Regulatory Operations
Southern California Edison Company
8631 Rush Street
Rosemead, California 91770
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Attorneys for the GreenFan® Inc. and Verified® Inc.

September 22, 2017

California Public Utilities Commission – Energy Division  
Attention: Tariff Unit  
505 Van Ness Avenue  
San Francisco, CA 94102


Dear Energy Division Tariff Unit,


GreenFan® and Verified® support the ORA and TURN protests and similarly recommend the Commission reject all four Investor-Owned Utilities’ (IOUs) and MCE’s 2018 budget advice letters due to their failure to meet the Commission’s required ex ante cost-effectiveness thresholds for EE programs in their 2018 Annual Budget Advice Letter (ABAL) filings and/or the likelihood that their portfolios will fail to be cost-effective when implemented. The ABALs provide no evidence to indicate any improvement over 2016 cost effectiveness. ORA highlights that rejection of the ABALs will not adversely affect EE programs since D.15-10-028 already provides a remedy to ensure funding stability in the event that the Commission does not approve the ABALs. Therefore, no additional remedy is required at this time.
I. BACKGROUND

As noted by ORA, Commission policy requires that EE portfolios must be cost-effective in order to approve funding. In D.05-04-051, the Commission affirmed that a prospective showing of cost-effectiveness for the entire portfolio “is a threshold condition for eligibility for ratepayer funds.”

In order to establish the cost-effectiveness of EE portfolios, the Commission relies upon a dual test and requires that PAs establish that their portfolios meet a specified threshold of benefits to costs using the Total Resource Cost (TRC) test and the Program Administrator Cost (PAC) test.

The threshold is typically a benefits-to-costs ratio substantially greater than a 1.0 because, as the Commission explained in D.09-09-047, “[i]n order to meet the requirement of Public Utilities Code Section 454.5(b)(9)(c) to approve cost-effective energy efficiency programs, and to set just and reasonable rates, it is prudent policy to adopt a margin of safety for the calculation of cost-effectiveness.”

In D.12-11-015, the Commission required that TRC values for prospective portfolios exceed a 1.25 benefit-to-cost ratio, and specified that the calculation should exclude savings and costs associated with spillover effects and codes and standards (C&S) programs.

In D.14-10-046, the Commission modified the cost-effectiveness threshold to 1.0 for the PAC and TRC for 2015 EE portfolios in order to accommodate the transition to rolling portfolios. However, the Commission also noted that it would require a TRC of 1.25 or above for subsequent years for all IOU PAs as well as MCE. D.14-10-046 also extended annual funding authorization at 2015 levels through 2025 or until the Commission provided superseding direction.

In D.15-10-028, the Commission ordered each EE PA to file an annual Tier 2 advice letter containing, among other things, its proposed budget and portfolio cost-effectiveness statement.

The Commission also provided that if a PA’s ABAL did not receive a disposition from the Commission by the end of the calendar year in which it was filed, the prior year’s budget would remain in place until disposition of the pending advice letter.

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1 D.05-04-051 at 22.
2 D.09-09-047 at 68-69.
3 D.09-09-047 Conclusion of Law (COL) 1 at 353.
4 D.12-11-015 at 100-101.
5 D.14-10-046 at 109-110. The Commission also recognized in footnote 96 that there is a tension between its expectation of returning to a 1.25 TRC/PAC threshold and the potential for substantial changes to budgets, but did not resolve the tension in that decision.
6 D.14-10-046 at 31.
7 D.15-10-028 OP 4 at 123-124.
8 D.15-10-028 OP 5 at 124.
II. DISCUSSION

A. The Commission should reject the IOUs’ and MCE’s ABALs because the PAs’ proposed EE portfolios are either not cost-effective as filed or are unlikely to be cost-effective when implemented.

As noted in the ORA comments, the Commission’s expectation in D.14-10-046 was to return to the 1.25 benefit-to-cost ratio threshold for the TRC and PAC that it established in D.12-11-015. There is, however, some ambiguity regarding whether the lower 1.0 threshold established for 2015 continues to apply since the budget authorization under which the PAs continue to operate has been unchanged since program year 2015. ORA provided cost effectiveness results for the IOU portfolios submitted by all the PAs as shown in Table 1.9

Table 1: Total Resource Cost Results by Program Administrator10

<table>
<thead>
<tr>
<th>IOU</th>
<th>PA</th>
<th>Scenario</th>
<th>2016 Claimed</th>
<th>2017 Forecast</th>
<th>2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>PGE</td>
<td>PGE</td>
<td>Resource and NonResource (no C&amp;S)</td>
<td>0.81</td>
<td>1.04</td>
<td>0.86</td>
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<tr>
<td>PGE</td>
<td>BAY</td>
<td>Resource and NonResource (no C&amp;S)</td>
<td>0.39</td>
<td>0.35</td>
<td>0.20</td>
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<tr>
<td>PGE</td>
<td>MCE</td>
<td>Resource and NonResource (no C&amp;S)</td>
<td>0.27</td>
<td>0.91</td>
<td>0.57</td>
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<tr>
<td>SCE</td>
<td>SCE</td>
<td>Resource and NonResource (no C&amp;S)</td>
<td>1.00</td>
<td>1.02</td>
<td>1.01</td>
</tr>
<tr>
<td>SCE</td>
<td>SCR</td>
<td>Resource and NonResource (no C&amp;S)</td>
<td>0.05</td>
<td>0.33</td>
<td>0.40</td>
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<tr>
<td>SCG</td>
<td>SCG</td>
<td>Resource and NonResource (no C&amp;S)</td>
<td>0.74</td>
<td>1.22</td>
<td>1.05</td>
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<tr>
<td>SCG</td>
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<td>Resource and NonResource (no C&amp;S)</td>
<td>0.05</td>
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<tr>
<td>SDGE</td>
<td>SDGE</td>
<td>Resource and NonResource (no C&amp;S)</td>
<td>0.96</td>
<td>1.16</td>
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<td>SW Total</td>
<td>SW Total</td>
<td>Resource and NonResource (no C&amp;S)</td>
<td>0.97</td>
<td>1.02</td>
<td>0.88</td>
</tr>
</tbody>
</table>

As noted in previous comments filed by GreenFan® and Verified®, the IOUs are averse to submitting workpapers for cost effective technologies for CPUC Ex Ante Review. This fact is reinforced in the Table 1 showing “business as usual” forecasts of non-cost effective programs through 2018. This aversion is based on a lack of scientific understanding of the fundamental principles of energy efficiency least cost planning where the most cost effective measures are installed first. Instead some IOU programs take the opposite approach where non cost-effective measures are installed first and cost effective measures are not installed at all. For example, in the statewide residential QM programs the motor replacement measure realization rates were 0 to 71% and the expected cost effectiveness would be 0 to 0.37.11 This example supports the ORA

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9 The table includes two PAs, the Bay Area Regional Energy Network and Southern California Regional Energy Network, that are not currently subject to the Commission’s minimum cost-effectiveness thresholds.

10 Data for Table 1 come from the Commission’s California Energy Data and Reporting System (CEDARS), accessed on September 20, 2017. The data do not exclude emerging technologies budgets and, therefore, result in minor discrepancies when compared with the cost-effectiveness showings in PAs’ ABAL filings. However, the discrepancies are minor (no more than 0.01 difference) and do not alter ORA’s substantive recommendations.

11 Impact Evaluation of 2015 Commercial Quality Maintenance Programs (HVAC3), Table 19, pp. 40. Motor replacement kWh realization rate was 0% for SDG&E and 71% for PG&E. The ex ante TRC for motor replacement ranged from 0.2 to 1.6 with a climate-zone weighted average TRC of 0.53. Therefore, the range of expected cost
protest regarding why the IOU EE portfolios are unlikely to be cost effective. The ABALs provide insufficient information for the CPUC (or any party to this proceeding) to understand why the proposed programs are non-cost effective, and this one of the most important reasons why the CPUC should reject the ABALs.

As ORA describes in its protest, if the appropriate cost-effectiveness threshold is a minimum 1.25 benefit/cost ratio excluding codes and standards and market effects, then all the PAs have failed to submit cost-effective portfolios, as shown in Table 1. If the appropriate cost-effectiveness threshold is 1.0, then PG&E, SDG&E, and MCE fail to meet the minimum cost-effectiveness threshold while SoCalGas and SCE just barely meet the minimum (at 1.05 and 1.01, respectively). Taken together, the entire EE statewide portfolio fails to meet minimum cost-effectiveness regardless of the operative threshold.

Therefore, the Commission should reject the IOUs’ and MCE’s ABALs because their proposed EE portfolios either are not cost-effective as filed or are unlikely to be cost-effective when implemented. All PAs fail to meet the 1.25 threshold and three fail to even meet the 1.0 threshold. Further, even if the Commission were to determine that the 1.0 cost-effectiveness threshold continues to be operative, then past program results show that nominally cost-effective portfolios (SCE and SoCalGas) are unlikely to achieve cost-effectiveness in practice when implemented. Virtually all the past EM&V studies have found no evidence to support 100% of the IOU ex ante energy savings claims. In fact, most of EM&V studies have reported ex post savings far less than ex ante estimates and some have reported zero energy savings.12

As ORA notes in their protest, the likelihood of failure to meet cost-effectiveness upon implementation can be seen in the reported (unevaluated) cost-effectiveness result in the “2016 Claimed” column. When implemented, all IOUs but SCE failed to meet a minimum 1.0 TRC threshold and SCE only met the lower 1.0 threshold by the slimmest of margins (1.00). The discrepancies between forecast TRC and reported TRC are striking. For 2015 and 2016, SCE forecast a portfolio TRC of 1.26 but after implementation reported a portfolio TRC only 1.00 for 2016.13 SoCalGas forecast a portfolio TRC of 1.27 in the same period but reported a portfolio TRC of only 0.74 for 2016.

Given the track record of significantly lower cost-effectiveness achievements when compared to prospective ex ante cost-effectiveness showings, even the marginally cost-effective prospective 2018 portfolio showings from SCE and SoCalGas are likely to be significantly below even the lower 1.0 threshold when implemented. This gap between prospective cost-effectiveness showing and actual reported cost-effectiveness results is precisely the reason the Commission required a “margin of safety” and adopted a minimum cost-effectiveness threshold significantly above 1.0 in D.09-09-047 and D.12-11-015.

d.09-09-047 and D.12-11-015.

12 Impact Evaluation of 2015 Commercial Quality Maintenance Programs (HVAC3), pp. 6-9. “The savings derived from the residential QM programs has been uncertain. The 2013 Workpaper Disposition for these programs revised the QM measure group ex ante savings down substantially due to concerns about the use of incorrect maintenance techniques that could lead to either an improvement in efficiency or an increase in energy usage. The findings from the billing analysis implemented on 2013 and 2014 program participants in PG&E’s and SDG&E’s service territories reinforce the CPUC’s concerns. SDG&E’s residential QM program had no net energy savings and PG&E’s had a net realization rate of 26% in 2015.”

13 SCE Advice 3149-E-B, Appendix A, Table 7.1.
EE portfolios that are not cost-effective are an unjust and unreasonable burden to ratepayers. Therefore, the Commission should reject the four IOUs’ and MCE’s 2018 ABALs accordingly.

B. The Commission has provided a remedy to ensure funding stability in the event that the Commission does not approve the annual ABALs.

As noted above, D.14-10-046 extended annual funding authorization at 2015 levels through 2025 or until the Commission provided superseding direction. Furthermore, the Commission provided in D.15-10-028 that a prior year’s budget remains in place until the disposition of a pending ABAL. Failure to meet cost-effectiveness thresholds does not automatically defund EE programs, but instead triggers the filing of a new business plan via application.

Since the Commission has not yet approved the PAs’ EE Business Plans in Application (A.) 17-01-013 and authorized funding has not changed since program year 2015, the PA’s funding can continue at its current levels whether or not the Commission approves their 2018 ABALs. The failure to meet cost-effectiveness thresholds requires that the PAs submit business plans – as they have already done. Therefore, no additional remedy is required by the Commission at this time.

III. CONCLUSION

GreenFan® and Verified® supports the ORA and TURN protests and respectfully requests the Commission adopt the recommendations contained herein.

Respectfully submitted,

Dated: September 22, 2017

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Kundu PLLC
1300 I Street NW, Suite 400E
Washington, DC 20005
Email: sudip.kundu@kundupllc.com

Attorneys for the GreenFan® Inc. and Verified® Inc.

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    ROrtiz@SempraUtilities.com, mcaulson@semprautilities.com

14 D.14-10-046 at 31.
15 D.15-10-028 OP 5 at 124.
16 D.15-10-028 at 53.