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05/21/19
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**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE
STATE OF CALIFORNIA**

Order Instituting Rulemaking Concerning
Energy Efficiency Rolling Portfolios, Policies,
Programs, Evaluation, and Related Issues.

R.13-11-005

**SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338 E) COMMENTS ON
ADMINISTRATIVE LAW JUDGE'S RULING INVITING COMMENTS ON DRAFT
POTENTIAL AND GOALS STUDY**

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Dated: **May 21, 2019**

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Pursuant to the Rules of Practice and Procedure of the California Public Utilities Commission (Commission or CPUC), and in compliance with the Administrative Law Judge’s (ALJ) Ruling Inviting Comments on Draft Potential and Goal Study (Ruling), issued on May, 1, 2019, Southern California Edison Company (SCE) respectfully submits these Comments.

I.

INTRODUCTION

Southern California Edison (SCE) appreciates the opportunity to provide comments on the California Public Utilities Commission’s (CPUC) Draft Potential and Goal Study Report as part of the 2020 Energy Efficiency (EE) Potential and Goals and provides the following comments organized as responses to the questions posed in the ruling. California Public Utilities Code¹ states that utilities must first meet their unmet resource needs through all available EE and demand reduction resources that are cost-effective, reliable, and feasible.

¹ California Public Utilities Code § 454.5(b)(9)(C)

SCE understands that the purpose of the Draft 2019 Energy Efficiency Potential and Goals Study (Draft 2019 EE Potential Study) is to develop estimates of energy and demand savings potential in the service territories of California's major investor-owned utilities (IOUs) during the post 2019 EE rolling portfolio planning cycle.

The Draft 2019 EE Potential Study results showing decreased market potential and decreased IOU EE goals highlight a culmination of several complex challenges affecting the current and future landscape of EE in California. While the Rolling Portfolio framework is based on planning concepts from 2009-2011, it struggles with meeting today's need to achieve all EE and demand reduction resources that are cost-effective, reliable, and feasible. To address the evolving environment, there is a need to modernize EE and the Rolling Portfolio Framework, including incorporating EE into the Integrated Resource Planning process, re-assessing EE's primary purpose in the current policy environment, and collaboratively planning for flexible approaches to changing circumstances.

SCE provides the comments below in support of this study.

II.

QUESTIONS FOR COMMENTS BY PARTIES

- 1. Commission staff proposed five scenarios that attempt to capture a reasonable range of energy efficiency potential for 2020-2030. Which scenario – either in the Navigant study or an alternative recommendation – is most appropriate to inform 2020 – 2030 goals? Justify your recommendation.***

The Reference and Alternative 2 scenarios are most appropriate to inform 2020-2030 goals and most consistent with recent Commission direction regarding portfolio cost-effectiveness requirements² and EE program rules and practice. Alternative 2 scenario is also the most reasonable and in-line with the Commission direction regarding providing a cost-effectiveness buffer to encourage the realization on an ex-post basis of cost-effective savings when a portfolio is designed and delivered.

² D.18-05-041, Decision Addressing Energy Efficiency Business Plans, p. 161.

It is prudent to be conservative with a 1.25 measure-level TRC screen in goal setting to match the expectations of the portfolio during a transition period to Third Party implementation. Additionally, non-resource obligations such as Workforce, Education & Training are not accounted for when establishing the EE Program goal. This places an additional cost burden on the portfolio that is not accounted for in the Potential and Goals process.

Additionally, Decision (D.) 17-09-025, which adopted EE goals for 2018-2030, included a discussion on the merits of the Program Administrator Cost (PAC)³ to set goals. SCE believes an alternate scenario using the PAC test may provide valuable future planning insights to stakeholders and related proceedings on the existing cost-effectiveness barriers (i.e. full measure costs) limiting the EE portfolio's ability to cost effectively capture below code savings.

2. Do you recommend alternative values for any of the inputs or modeling used in the Navigant study? If so, specify the particular input or modeling (with section or page references, if applicable) and your recommendation for alternative values. Justify your recommendation and provide references. In particular, we invite responses regarding the following specific assumptions used in the Navigant study:

- i. SCE recommends calibrating the model to include the most recent (2017-2018) program budget and expenditure data.

During the March 21, 2019 calibration workshop and in informal comments submitted to the Potential & Goals Study (P&G study) team, SCE expressed concerns that the program budget and expenditure data used for model calibration did not include the most recent 2017-2018 program years, leaving out significant insights from rapidly declining program expenditures. The Navigant study team explained that the exclusion was due to modeling compatibility issues between data extracted from CPUC Energy Efficiency Statistics (EESStats) and California Energy Data and Reporting System (CEDARS).

³ D.17-09-025 Decision Adopting Energy Efficiency Goals for 2018-2030, p. 17.

The Draft 2019 EE Potential Study states, “calibration develops parameters that describe the customer decision-making process and the velocity of the market based on recent history.”⁴ Using only 2013-2016 program budget and expenditure data creates a barrier to anchoring the model in recent program and market conditions, thus injecting uncertainty into the goal setting process.

- ii. SCE recommends the lighting end uses account for the impending Department of Energy (DOE) Federal standard changes, specifically impacts to General Service Lamps (GSL).

As discussed at the March 21, 2019 Calibration workshop and the May 9, 2019 Draft Results workshop, there is uncertainty around the DOE’s proposed narrowing of the federal GSL definition. Specifically, the amended definition would result in the inclusion of A-lamps and reflector products. A narrower definition would mean that some lamps, such as reflectors and many decorative bulbs, would no longer be subject to the 2007 Energy Independence and Security Act (EISA) backstop minimum efficacy standard of 45 lumens per watt⁵ (LPW). The new EISA standard will come into effect January 1, 2020. The resulting absence of a minimum efficacy standard for reflectors and decorative bulbs would subject them to a potentially more stringent (greater than 45 LPW) California Energy Commission (CEC) rulemaking in the near future. The current Primary Lighting program has a high concentration of reflectors and the fluid definition for GSLs has potential to significantly impact the forecasted growth and market velocity for residential lighting. To reflect the high likelihood that either DOE or CEC requires an efficacy of at least 45 LPW, SCE recommends that the P&G model be updated using LED lamps as the baseline to remove the forecasted potential from GSLs in all applicable sectors and

⁴ Administrative Law Judge’s Ruling Inviting Comments on Draft Potential and Goals Study, R.13-11-005, p. A-1.

⁵ EISA – Section H.R. 6-89, *available at* <https://www.govinfo.gov/content/pkg/BILLS-110hr6enr/pdf/BILLS-110hr6enr.pdf>

end uses as identified in Table 3-8 of the Draft 2019 EE Potential Study⁶, including applicable whole building packages.

- iii. SCE recommends calibrating residential electric appliances and plug loads to account for CPUC guidance on Smart Connected Power Strips and the cancellation of the Refrigerator Recycling program.

SCE supports the prospect of new and cost-effective EE measures. However, SCE received CPUC guidance specific to Advanced Power Strips and Smart Connected Power Strips⁷. On June 1, 2018, Advanced Power Strips became ineligible for savings claims and Smart Connected Power Strips were no longer cost effective. SCE recommends removing the forecasted potential for this proposed new measure in all applicable sectors.

SCE is concerned that the Residential Appliance recycling measure was included in the draft results. As discussed at the Calibration Workshop and informal comments, the Appliance Recycling program was discontinued March 13, 2016⁸ as market indicators determined that customers no longer needed incentives (such as those offered through appliance recycling programs) to recycle old, inefficient units.

SCE strongly recommends that the refrigerator recycling measure and savings potential be removed from the 2019 Measure Level Results Database⁹.

- iv. SCE recommends reevaluating the measure level savings for the Mining and Low Income Sector.

SCE evaluated the Peak to Energy Ratios (MW/GWh) comparing 2018 Draft EE Program actual savings 2018/2019 EE Goals to the Draft 2019 EE Potential Study. The graphic

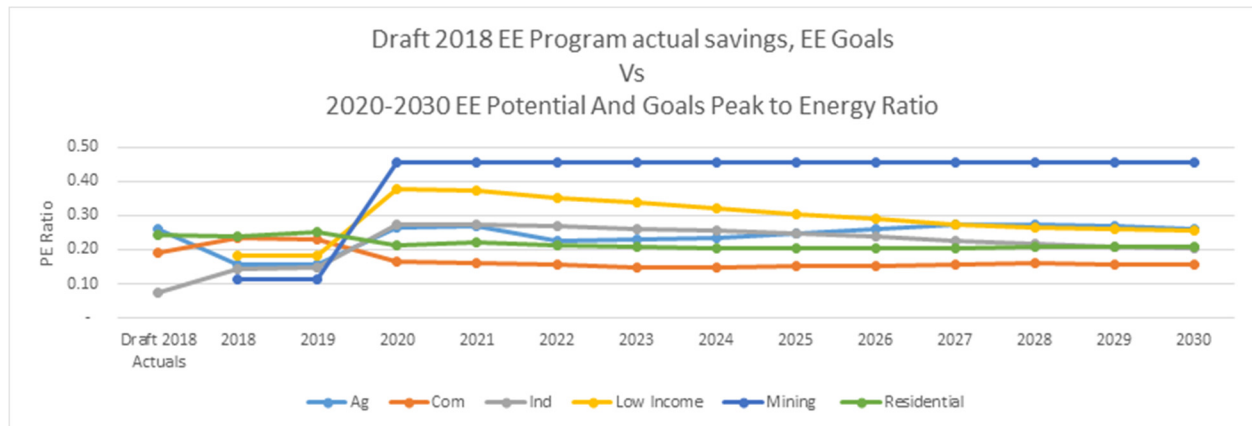
⁶ Administrative Law Judge's Ruling Inviting Comments on Draft Potential and Goals Study, R.13-11-005, p. 42. Table 3-8.

⁷ SCE17CS014 Revision 1 Tier 2 Advanced Smart Connected Power Strips, California Public Utilities Commission, Energy Division, June 1, 2018, p.4

⁸ Advice Letter 3365-E, Approved on March 8, 2016, p.4

⁹ 2019 PG Measure Level Results Database, *available at* ftp://ftp.cpuc.ca.gov/gopherdata/energy_division/EnergyEfficiency/DAWG/2019%20PG%20Study%20Measure%20Level%20Results%20-%20Draft%20Public%20042619.xlsx

below shows that the Mining and Low Income Peak to Energy Ratios are out of alignment with past program performance. SCE recommends that Energy Division / Navigant reevaluate the measure level saving value inputs¹⁰ to assure congruence with the EE Program ability to capture savings.



a. Do you agree with the cost assumptions used in the Navigant study? Explain why or why not, and (if applicable) provide references to alternative sources of information for specific cost assumptions used in the Navigant study.

Table 3-11 of the Draft Report describes the hierarchy of data sources used for technology cost information and cites the “California Measure Cost Study (2012)” as the primary source of information used for equipment and installation costs. SCE recommends using 2019/2020 DEER cost data and IOU workpapers as the primary and secondary sources respectively to inform cost inputs as this data is more relevant and up-to-date than the 2012 study.

Additionally, SCE recommends updating Administrative and Marketing costs allocation to the measure level. Currently, Administrative and Marketing costs are allocated to the measure level based on energy savings proportions. This cost allocation method paints all alike measures with the same cost allocation. In practice, similar measures can be found in different programs containing drastically different

¹⁰ 2019 PG Measure Input Characterization System, available at <https://www.cpuc.ca.gov/General.aspx?id=6442461220>

Administrative and Marketing costs. Appropriately allocating administrative and marketing costs at the measure-level would provide a higher degree of accuracy.

b. Do you agree with the assumptions used in the BROs section of the Navigant study? Explain why or why not, and (if applicable) provide specific references to alternative sources of information for specific assumptions used in the Navigant study. In particular:

The current forecasts for BROs are relatively aligned with recent performance. However, future BROs forecasted potential may be overstated. In section 3.8.1 of the Draft Report, Navigant states that “[p]enetration forecasts are the most uncertain because of limited historic penetration rates upon which to base a forecast.”¹¹ Given that penetration is a key element of future forecasts, SCE is concerned that the overall BROs forecast might be overstated. As such, SCE supports Navigant’s recommendation on page 70 of the Draft 2019 EE Potential Study to “consider pilot studies along with measurement and verification to provide better data to future potential studies.”

i. HERs represent a significant amount of incremental electric savings in 2020. Do you agree with the assumptions used to forecast HERs energy savings in this study?

As noted above, SCE generally agrees that the current forecast for HERs is relatively aligned with recent performance. However, penetration for future forecasts may be overly optimistic given the existing randomized control trial (RCT) design and the future saturation of HERs over time. Within the current program design, the Residential HERs Program has consistently targeted high use residential service accounts and is nearing a savings ceiling with greater market saturation. While future HERs approaches will need to increase the volume of mid- to low-use service accounts to match the current momentum of the existing waves, SCE believes that starting in 2021, future savings will not be able to sustain the same savings trajectory and flatten significantly over time. SCE

¹¹ Draft 2019 EE Potential Study, p.70.

reiterates our support of Navigant's recommendation for better data from pilot studies and measurement and verification to inform HERs forecast in the next P&G Study cycle to better account for market saturation.

ii. The Navigant study includes new items in BROs forecasting, which indicate significant savings potential. Do you agree with the building benchmarking and universal audit tool assumptions used to calculate BROs savings?

SCE supports new opportunities to capture deeper energy savings. However, savings forecasts from the universal audit tool (UAT) are not currently achievable due to the pending CPUC review and approval of the Universal Audit Tool workpaper. In absence of an approved workpaper to claim savings, SCE recommends delaying the 2020-2021 forecasted potential until the next study cycle when addition measure savings information will be available.

In behavior programs, building benchmarking is generally an opt-in activity. However, AB 802¹² directed the Energy Commission to create a state-wide building energy use benchmarking and public disclosure program for certain buildings. The Commission's regulations require building owners to annually report building characteristic information and energy use data. As Building Benchmarking is currently a non-resource program with no claimable savings, there is uncertainty about whether IOUs will be able to claim savings from this mandated initiative. As such, SCE recommends that the forecasted potential for benchmarking be reduced by 50% to reflect this uncertainty.

¹² Assembly Bill No. 802, Chapter 590, p.1-2., available at https://www.energy.ca.gov/benchmarking/documents/AB_802_chapter_590.pdf

- c. Whole Building rebate programs represent a significant portion of potential savings. Whole Building rebate programs encompass elements from multiple technology types and construction measures. Do you agree with the assumptions used in the Whole Building section of the Navigant study? Explain why or why not, and (if applicable) provide specific references to alternative sources of information for specific assumptions used in the Navigant study.***

SCE generally agrees with the overall assumptions in the Whole Building section of the draft report given the rigor and availability of data sources used. However, while Whole Building initiatives are modeled as a package of multiple efficiency measures that are installed at the same time, SCE recommends that the technology types modeled as part of Whole Building technology groups reflect the aforementioned policy changes (i.e., changes to lighting (GSLs) and advanced power strips) affecting modeled technologies and measures included in Whole Building packages.

In addition, in the Industrial and Agricultural sector, the Whole Building potential is consistently high throughout the forecasted horizon. At the May 9, 2019 Draft Results workshop, multiple parties agreed that there is insufficient data to accurately forecast EE potential in the Industrial and Agricultural sectors, specifically an up-to-date saturation survey. Given the forecast uncertainty that is created from the absence of recent data, Whole Building potential in these sectors may be overstated when compared to previous program performance in the same sectors. SCE recommends that Whole Building savings for the industrial and agricultural sectors be reevaluated to reflect declining savings commensurate to the revised penetration rate applied to generic custom savings to show a 2.1% annual decrease as described on page 63 of the Draft 2019 EE Potential Study.

d. Do you agree with the assumptions used in the Low-Income section of the Navigant study? Explain why or why not, and (if applicable) provide specific references to alternative sources of information for specific assumptions used in the Navigant study.

The Draft 2019 EE Potential Study's Bass diffusion method for simulating market adoption in the low-income sector conflicts with the current Energy Savings Assistance (ESA) program rules, policy directives, and ongoing program changes in the low-income proceeding¹³, due to different program objectives than EE rebate programs.

The ESA program provides no-cost services and reduced rates to income-qualified customers to alleviate their energy burden while improving health, comfort, and safety. These objectives are governed by the low-income proceeding¹⁴ rules and household treatment goals that are unique to the low-income sector. Given these different programmatic approaches, the ESA program adoption should also be treated differently.

Specifically, the EE Potential and Goals model estimates measure adoption using a "payback-based approach". Payback time reflects the length of time required for an EE investment to recover the initial upfront cost in terms of energy savings. Although this is a useful method when estimating EE program measure adoptions, it does not reflect best practices when estimating low income program adoptions. Estimating customer payback for zero customer cost ESA program measures, as was done in the P&G model, is misaligned with the more detailed and structured approach used in estimating the ESA programs.

Thus, SCE recommends the following three actions for the low income portion of the study:

¹³ See Proposed Decision Issuing Guidance to Investor Owned Utilities for California Alternative Rates for Energy/Energy Savings Assistance Program Applications for 20210-2026 and Denying Petition for Modification, *available at* <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M285/K715/285715816.PDF>

¹⁴ *Id.*

- 1) Wait for the ESA program to complete post 2021 program planning to avoid prematurely estimating ESA savings;
- 2) Strive to keep the savings aligned with ESA program plans;
- 3) Update ESA savings estimates based on ESA program plans in SCE's upcoming ESA/CARE application.

By taking these three actions, Energy Division can assure CPUC program goals follow cross proceeding EE and ESA program requirements.

3. Should the Commission adopt goals that include energy savings potential from the low-income sector? Explain why or why not.

While the P&G study identifies EE potential in the low-income sector, the estimates from the low-income sector as currently contained in the Draft 2019 EE Potential Study should not be adopted at this time to avoid misalignment with the low-income program. As discussed in the April 30, 2019 Proposed Decision¹⁵ regarding post-2020 ESA Program Applications, the ESA program is anticipated to undergo substantial changes that could draw the current low-income approach and the ESA savings goal out of alignment with the ability to capture and claim the savings potential that was identified.

Additionally, as the proposed decision discusses building electrification efforts, the accounting rules for claiming and counting savings will need to be articulated and should consider a unifying metric, such as greenhouse gas (GHG), to encourage EE portfolios to align most effectively with the State's GHG reduction goals.

4. In D.10-04-029, the Commission adopted a different process for crediting savings from comparative energy use (e.g., HERs) programs, prohibiting the utilities from submitting workpapers for ex ante numbers to project savings for these programs; instead, savings from these programs can only be credited after the Commission verifies them. Results from

¹⁵ Proposed Decision Issuing Guidance to Investor-Owned Utilities for California Alternative Rates for Energy/Energy Savings Assistance Program Applications for 2021-2026 and Denying Petition for Modification, *available at* <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M285/K715/285715816.PDF>

HERs program impact evaluations have been consistently higher than estimates for the past several (approximately seven) years. Should the Commission continue to evaluate home energy report behavior programs that have had consistent evaluation results for several years?

SCE agrees with the Commission that past HERs' program impact evaluations have demonstrated consistently high evaluation results. As a result, the Commission should consider removing the current requirement for calculation of program results. With the removal of the current requirement, program administrators and third party implementers would have the option to either continue with current program designs or consider modifications to current program designs. Providing more options in designing EE portfolios will allow program administrators to better meet the goals and targets of California EE portfolios and meet the needs of customers.

5. What are the impacts of reduced energy savings goals, if adopted by the Commission?

Should reduced energy savings goals result in smaller portfolio budgets, going forward?

Explain why or why not, and (if applicable) how much smaller.

SCE's EE budgets and expenditures have declined significantly in recent years when compared to years prior to the EE Business Plan. SCE has tried to reduce the costs of administering its portfolio of EE programs and remove cost-ineffective programs and measures, and expects additional reductions will be required to achieve cost effectiveness in the future. Even with these previous reductions, SCE expects that lower energy savings goals will continue to result in lower EE budgets.

However, as low-cost measures are removed from the energy efficiency portfolios, the cost per kWh increases. Thus, there is not a direct linear relationship between reductions in the goal and corresponding changes in the portfolio budget. In addition, the cost per kWh is affected by policy changes including: avoided cost updates, peak changes, code, Industry Standard Practice (ISP) baseline changes, dispositions, third party solicitations, and more. SCE's EE portfolio also contains several non-resource programs that do not contribute to goals, but are funded from the EE portfolio and are included in the cost effectiveness calculation. Such costs,

not included in the P&G study, may result in a divergence between reduced goals and direct reductions to budgets. Support of these non-resource programs from a different budget (such as income qualified programs) could increase the responsiveness of the EE budget to reductions in the EE goals.

Additionally, during the 2020-2022 period, the EE portfolio will transform as utilities transition the majority of program design, delivery, and implementation to third party partners. During this transition there will be some start-up and ramp-up costs for Third Parties without immediate savings, while other programs begin to ramp-down. This may necessitate having multiple programs budgeted simultaneously to ensure that cost-effective energy savings are delivered, even as new programs ramp up in the marketplace. For example, SCE included approximately \$6 million of third party program startup funds in its 2019 budget with no forecasted savings. Regardless of budget changes, SCE will continue to work diligently to ensure the prudent use of ratepayer funds.

6. Given the changes in potential for 2020, should there be any changes to the required components of annual budget advice letters (ABALs) due from the PAs in September 2019, and/or to the process or criteria for reviewing the September 2019 ABALs (Sections 7.2 and 7.3 of D.18-05-041)? Explain why or why not. Any recommendations in response to this question should focus on new ideas and not repeat recommendations previously made and that the Commission has already dismissed.

The 2020 ABAL is anticipated to involve more uncertainty in inputs than previous years due to increased uncertainty about measures, activities related to the transition to statewide program management, and the timing of Third-Party program solicitations. Currently there remains uncertainty around the inclusion of significant portions of SCE's EE portfolio in 2020, including lighting. In addition, the current potential forecast does not account for the energy savings allocations from statewide energy efficiency programs. The claimable savings from a statewide program for any IOU will be determined by the percentage of budget derived from each IOU's load share and not the potential or installations occurring in its service territory. For

example, if SCE is 40% of the load share, it will provide 40% of the statewide program's budget and receive 40% of associated savings. This load share-based allocation may result in more or fewer savings being attributed to SCE than it is assigned in the goal setting process. SCE requests that the Commission incorporate this topic as part of the discussion in the decision adopting goals for 2020 and future years, to improve clarity about the impacts of transitioning to the statewide administration model.

Finally, the timing of the third party solicitations and resulting advice letter process for approval of contracts will result in assumptions being made about the budget and impact for third party solicitations in SCE's 2020 ABAL. SCE likely will not have certainty by the time it files its 2020 ABAL. Therefore, the review and approval process for the ABAL will require flexibility in the assumptions. This can include, but is not limited to the following: flexibility on the assumptions for budget, energy savings and cost-effectiveness of new third party programs, relief from the annual energy savings and demand reduction targets, relief from the Third Party and/or statewide program percentage targets; and/or relief from the administrative cost cap. The extent of the flexibility necessary will be driven largely by the adopted goals, available measures, and timing of solicitations being completed across the state.

III.

CONCLUSION

SCE appreciates the opportunity to provide these comments.

Respectfully submitted,

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Date: May 21, 2019