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<td><strong>Docket Number:</strong></td>
<td>19-IEPR-01</td>
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<td><strong>Project Title:</strong></td>
<td>General/Scope</td>
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<td>SCE Comments on CA Economic and Demographic Outlook_FNL</td>
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<td><strong>Organization:</strong></td>
<td>Catherine Hackney/SCE</td>
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SCE Comments on CA Economic and Demographic Outlook_FNL

Additional submitted attachment is included below.
January 31, 2019

California Energy Commission  
Docket Office, MS-4  
Re: Docket No. 19-IEPR-01  
1516 Ninth Street  
Sacramento, CA 95814-5512  
docket@energy.ca.gov

Re: Southern California Edison Company’s Comments on the California Energy Commission Docket No. 19-IEPR-01: Workshop on California’s Economic and Demographic Outlook

Dear Commissioners:

On January 17, 2019 the California Energy Commission (CEC) held a workshop focusing on California’s economics, demographics, and business climate as part of the 2019 Integrated Energy Policy Report (IEPR) Proceeding. During the workshop, Commissioner McAllister and Commissioner Scott posed a set of questions to SCE about the types of customer programs, energy efficiency measures, and incentives offered for existing buildings and large industrial customers. Southern California Edison Company (SCE) was represented on one of the panels and thanks the CEC for the opportunity to provide written comments in response to these inquiries below.

1. Why do constraints exist on technology and customer rebates for large industrial customers?

Many of the constraints on technology and customer rebates for large industrial customers exist due to uncertainty in a project’s ability to obtain approval. Industrial customers need assurance that the projects and the associated risks are worth the extensive effort needed to get them approved. The complexity of industrial projects require long lead times, because industrial customers use a customized program approach that tries to accommodate as many possible business and measure types as possible. Due to the broad nature of these approaches, however, programs typically build in lengthy project lifecycle times for extensive reviews, measurement and verification, and consideration of Industry Standard Practices. In addition, SCE’s influence on a customer’s adoption of energy efficiency recommendations is closely examined and can impact a
customer’s willingness to participate. SCE is addressing this with the introduction of an Early Screening process to determine, at inception, the potential for a project’s advancement to incentive or disqualification. SCE also notes that incentives are key considerations in motivating large industrial customers’ participation in energy efficiency programs, especially when the incentives are designed to outweigh the risks to the time and costs associated with moving a project forward.

II. Which projects can SCE identify to move forward on with Port of Long Beach?

Many people assume that buildings are major contributors to electric load for terminal customers, but most of the Port of Long Beach (POLB) terminal buildings were constructed in the last 10 years and are LEED certified. They contribute approximately 15-25% of the terminals’ connected load and offer very few EE measures that would equate to substantial electric load reductions by converting to more efficient technologies. The largest demand on most terminals comes from two technologies: Ship to Shore cranes with very large (500HP) electric motors that power the lifting of cargo containers, and exterior, high-mast lighting operated by High Pressure Sodium (HPS) fixtures. EE measures related to the Ship to Shore cranes would be limited to premium efficiency motors and exterior lighting on the cranes themselves. The terminal operators have not been interested in looking at the replacement of crane motors due to the high replacement costs, which in turn would cause long financial payback. The most attractive projects are the replacement of exterior HPS fixtures with LED technologies. SCE developed and submitted three exterior LED high-mast lighting retrofit projects in 2017. SCE staff developed these projects in partnership with terminal customers and the POLB EE Rebate Match program, which was approved by the Harbor Commission in 2017. The projects, once completed in Q2 2019, are expected to reduce approximately two megawatts of connected load and save over five million kilowatt hours of energy on an annual basis. Due to recent changes in the SCE’s EE programs, LED exterior lighting measures are no longer eligible for incentives.

SCE is also partnering with the POLB and two terminal operators to convert existing diesel-fueled equipment to electric. At ITS Terminal Pier G, for instance, SCE is installing necessary infrastructure to support the charging of twenty battery electric yard-tractors. At Pacific Maritime/SSA Terminal Pier J, SCE is installing the infrastructure needed to support the conversion of rubber tire gantry cranes to all-electric. These pilot programs would not have been possible without the collaboration of the Terminals, POLB staff and SCE. They are intended to
demonstrate efforts that will be replicated in the recently approved SCE Charge Ready Transport program. SCE has identified several projects in the POLB complex that will submit applications in Q2 2019 for the Charge Ready Transport program once it goes live.

III. How do we help home efficiency programs overcome the challenges of climate change?

SCE offers a number of demand side management (DSM) programs targeting high energy end uses (e.g., lighting, HVAC, appliances) through its residential programs. For example, the Energy Advisor Program, Multifamily Energy Efficiency Rebate Program, and Primary Lighting play an important role in educating and guiding homeowners on energy efficiency equipment and operational best practices that will help reduce their energy use and electric bills while also contributing to the reduction of greenhouse gas emissions and criteria pollutants.

In year 2017—through its customer programs, energy efficiency measures, and incentives—SCE has saved a total of 1555 GWH, and 727,135 tons of avoided CO2 over the life of equipment. Table 1 below shows program impacts.

Table 1. 2017 SCE Gross Annual Environmental Impacts from Energy Efficiency

<table>
<thead>
<tr>
<th>Annual Results</th>
<th>EE Savings [GWH]**</th>
<th>Annual tons of CO2 avoided</th>
<th>Lifecycle tons of CO2 avoided</th>
<th>Annual tons of NOx avoided</th>
<th>Lifecycle tons of NOx avoided</th>
<th>Annual tons of PM10 avoided</th>
<th>Lifecycle tons of PM10 avoided</th>
</tr>
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<tbody>
<tr>
<td>2017 SCE Energy Efficiency Portfolio</td>
<td>1554.3</td>
<td>727,135</td>
<td>7,018,042</td>
<td>92</td>
<td>92</td>
<td>49</td>
<td>535</td>
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*EE savings total includes Energy Savings Assistance and Codes & Standards Programs

Beyond traditional EE support, SCE’s Clean Power and Energy Pathway whitepaper outlined a vision for California to reduce GHG emissions and air pollutants through a coordinated market intervention strategy in three economic sectors: electric, transportation and buildings. The Pathway will help California achieve its climate goals and significantly reduce today’s health-harming air pollution in local communities. In recognition of climate change impacts and need for bold strategies, SCE’s Clean Power and Energy Pathway proposed the achievement of an electric grid supplied by 80 percent carbon-free energy, more than 7 million electric vehicles on California roads, and using electricity to power nearly one-third of space and water heaters, in increasingly energy-efficient buildings.
To make strides towards this goal, the development of a coordinated market intervention strategy that ensures consumers are positioned to make informed decisions and the industry readily equipped to support end uses as they transition to clean fuel is necessary. SCE is proud to be a long-standing partner with the state, customers and our communities on important climate change and air quality efforts. We look forward to continuing this broad-based partnership to pursue practical, cost-effective approaches to achieving a bold, clean energy future.

IV. What are utilities doing to offer energy efficiency incentives on existing buildings?

SCE is committed to addressing the energy challenges faced by existing buildings and offers a diverse portfolio of energy efficiency measures and load management programs, aimed at reducing existing building energy consumption. As a part of SCE 2018-2025 Business plan, SCE outlined a number of strategies for meeting the energy needs in all existing buildings. SCE leveraged several intervention strategies outline as a part of the CEC’s Existing Building Energy Efficient Action Plan originally laid out as a part of AB758. Some of these intervention strategies include:

- **Demonstration Projects** - Demonstrate best practices and disseminate technical expertise in order to overcome knowledge gaps for market actors or industry
- **Small Business Outreach** - Leveraging existing partnerships with community-based organizations and local governments to market program offerings to small businesses.
- **Building Energy Benchmarking Data Access** - Leverage customer data to benchmark facilities and provide a roadmap for EE retrofit opportunities; allow sub-metering costs to be included in project costs; identify solutions to help identify savings potential and manage energy use
- **Strategic Energy Management** – Introduce customers to organizational energy management approaches that set long term energy savings goals, leverage rigorous tracking and reporting systems and institutionalize such practices to sustain long-term savings.

For a comprehensive summary of the approaches and offerings, please see the filed 2018-2025 Business Plan. SCE will note that Program Administrators are currently undergoing a Request for

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1 CEC’s AB758 Existing Building Energy Efficiency Action Plan is available here: [https://www.energy.ca.gov/efficiency/existing_buildings/16-EBP-01/](https://www.energy.ca.gov/efficiency/existing_buildings/16-EBP-01/)
2 Southern California Edison’s 2018-2025 Business Plan is available here: [https://www.caeecc.org/business-plans-1](https://www.caeecc.org/business-plans-1)
Abstracts process for Third Party programs to foster new approaches and support existing building’s energy needs.

SCE appreciates the Joint Agencies’ consideration of these comments and looks forward to continuing its collaboration with the Energy Commission and relevant stakeholders. Please do not hesitate to contact me at (916) 441-3979 with any questions or concerns you may have. I am available to discuss these matters further at your convenience.

Very truly yours,

/s/

Catherine Hackney