

January 24, 2013

California Energy Commission  
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Re: California Energy Commission Docket No. 13-IEP-1A -- Draft 2013 IEPR Scoping Order

To Whom It May Concern:

On January 9, 2013, the California Energy Commission (“Energy Commission”) released a Notice of Request for Public Comments on Draft 2013 Integrated Energy Policy Report Scoping Order (“Draft Scoping Order”) as part of the Energy Commission’s 2013 Integrated Energy Policy Report (“2013 IEPR”) process. Southern California Edison Company (“SCE”) appreciates the opportunity to provide these written comments.

The Draft Scoping Order identifies nine topics to be addressed by the 2013 IEPR. SCE generally supports the Energy Commission’s efforts to undertake the actions identified in the Draft Scoping Order. SCE’s comments focus on clarifications of the Energy Commission’s points and suggest plans to address four of the Draft Scoping Order issues in the 2013 IEPR proceeding. SCE’s comments focus on optimal ways to study the appropriate balance of the need for reliable and cost-effective electric generation in the future and achieving key state policy goals, such as reducing Greenhouse Gas (“GHG”) emissions.

### **Energy Efficiency**

The 2013 IEPR should focus on cost-effective energy efficiency solutions. The Draft Scoping Order includes consideration of pathways to Zero-Net Energy (“ZNE”) homes. Any pathway to the State’s goals for ZNE homes should maximize customer adoption of *cost-effective* demand-side management (“DSM”) solutions, in addition to GHG emissions savings. For technical and economic reasons including building type, vintage, and site conditions, no single bundle of DSM solutions will be appropriate for all homes. The appropriate definition of ZNE homes must allow flexibility to choose appropriate DSM solutions. Market and economic factors will regulate customer choice in the adoption of DSM solutions. It is not feasible or practical to force a particular set of measures on all customers. Additionally, the market for ZNE homes is still in its infancy and significant uncertainty exists regarding optimal building design, construction, and operation as well as the impact of ZNE buildings on electricity grid. For these

reasons, the appropriate definition of ZNE homes must allow the flexibility to choose appropriate DSM solutions.

## **Demand Response**

The 2013 IEPR should focus on cost-effective Demand Response (“DR”) solutions. The Draft Scoping Order proposes to analyze the technical, economic, and market barriers to using DR to reduce peak demand and support the integration of renewable resources. SCE agrees that this examination is appropriate and timely, as DR resources have the potential to provide many system benefits. In fact, SCE, as part of California’s DR Measurement and Evaluation Committee,<sup>1</sup> recently commissioned a study to address this issue, “Potential Role of Demand Response Resources in Maintaining Grid Stability and Integrating Variable Renewable Energy under California’s 33 Percent Renewable Portfolio Standard.”<sup>2</sup> Generally, the study found that the potential exists to modify some existing utility retail DR programs to meet the California Independent System Operator’s (“CAISO”) current grid management ancillary product requirements. However, the study identifies numerous obstacles to retail DR supporting the integration of renewable resources, including program-related limitations, technology barriers and wholesale market barriers. As an example, enabling existing individual retail DR assets to provide wholesale ancillary services will require new telemetry equipment that provides four-second interval reads for load (and potentially, instantaneous power, reactive power, and other process characteristics). This level of performance speed is not typically required in DR applications today and, therefore, creates a technology barrier to the use of retail DR for integration of renewable resources. The Energy Commission should incorporate the results of this study in any future analysis of DR potential.

It is also important for the Energy Commission to distinguish between wholesale and retail DR market issues when analyzing barriers to DR development. Wholesale DR participates directly in CAISO markets through its wholesale market DR products, while retail DR participates through utility tariffs. Both markets have their own unique challenges and opportunities. For instance, Federal Energy Regulatory Commission (“FERC”) Order 745 requires that CAISO compensate cost-effective DR resources that can balance supply and demand as an alternative to generation resources at the Locational Marginal Price in the market. CAISO implementation of FERC Order 745 will significantly change how DR resources are compensated in wholesale energy markets, and, therefore, will fundamentally change the wholesale DR market. As these rules change, it will be important to maintain support for cost-effective retail DR through the utility tariff structure to reduce peak demand. This will maintain existing DR program stability, give DR customers access to communications from the utilities about changes in tariffs and market structure, and allow for continued availability of tariff programs during testing of new DR market rules.

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<sup>1</sup> California’s Demand Response Measurement & Evaluation Committee is composed of staff from the California Public Utilities Commission (CPUC) and the Energy Commission, as well as representatives of the state’s three investor-owned utilities (IOUs) – Pacific Gas & Electric (PG&E), SCE, and San Diego Gas & Electric (SDG&E)

<sup>2</sup> [http://www.navigant.com/insights/library/energy/2012/maintaining\\_grid\\_stability/](http://www.navigant.com/insights/library/energy/2012/maintaining_grid_stability/)

## **Electricity**

The 2013 IEPR should focus on appropriate evaluations of the costs and benefits of different generation technologies as well as other GHG reducing policies, not just increasing the amount of renewable generation in the State. SCE supports the Draft Scoping Order's proposal to evaluate electricity system needs in 2030. Such analyses provide the information necessary for policymakers to make decisions that are in the best long-term interest of the State's electricity customers. However, the Energy Commission should expand the scope of this analysis to include other GHG reducing policies rather than assume *a priori* that a higher Renewables Portfolio Standard is the only strategy for reaching the State's GHG reduction goals. Additionally, the Energy Commission should establish a timeline for conducting this analysis that will incorporate actual renewable resource performance data. To date, similar analyses have relied extensively on simulated photovoltaic and wind performance data. Given the timeframe under evaluation, allowing sufficient time for actual to accumulate would add substantial value to stakeholders and policymakers. SCE urges the Energy Commission to rely on a stakeholder-driven process for this analysis especially in formulating the analysis plan and vetting results.

SCE also looks forward to working with Energy Commission Staff to develop updated estimates of new electricity generation costs. This work should differentiate between generation technologies that provide varying levels of flexibility in response to system conditions. For example, some gas-fired generators can start up, shut down, and ramp up faster than others. Undertaking this analysis will provide a consistent and publicly-available set of cost data that distinguishes the costs for different types of generators. Understanding the cost of varying levels of flexibility will be necessary for use in a variety of analytical studies throughout the State including the Energy Commission's planned 2030 analysis. This research will assist studies of the potential need for flexible capacity to support higher levels of intermittent renewable generation. Also, the Energy Commission should evaluate differences in land cost for generation resources in rural and urban environments. Doing so will assist stakeholders seeking to understand the cost implications of distributed generation. With these analyses, the Energy Commission generation cost estimates will continue to be a valuable data source for stakeholders across the State.

## **Transportation**

The 2013 IEPR should focus significant attention on the role of alternative fuel (i.e. electric and natural gas) transportation in helping the State achieve its environmental policy goals. SCE appreciates the Draft Scoping Order's recognition of the role of alternative fuel transportation and recommends two additional items for study. First, electric transportation should be evaluated as part of the broader 2030 study recommended above. As a major contributor to the State's total GHG emissions each year, the transportation sector offers an opportunity to cost-effectively achieve substantial GHG reductions. Second, the Energy Commission should reforecast alternative vehicle market penetration given updated forecasts of economic conditions. These efforts will help ensure that the State's resources are optimally deployed toward promoting those measures offering the most cost-effective opportunities for meeting the State's environmental policy goals.

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SCE appreciates the opportunity to provide comments on the Draft Scoping Order for the 2013 IEPR. We look forward to a collaborative partnership and a successful proceeding. If you have any questions or need additional information about these written comments, please contact me at (916)441-2369.

Very truly yours,

/s/ Manuel Alvarez

Manuel Alvarez