

March 1, 2012

California Energy Commission
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DOCKET	
12-IEP-1B	
DATE	MAR 01 2012
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Re: California Energy Commission Docket No. 12-IEP-1B Demand Forecast: Lead
Commissioner Workshop on 2012-2022 Revised Staff Electricity and Natural Gas Demand
Forecasts

To Whom It May Concern:

On February 23, 2012, the California Energy Commission (“Energy Commission”) held a Lead Commissioner Workshop on the 2012-2022 Revised Staff Electricity and Natural Gas Demand Forecasts (“the Workshop”). The Workshop was held as part of the Energy Commission’s 2012 Integrated Energy Policy Report Update (“2012 IEPR Update”) process. Southern California Edison Company (“SCE”) participated in the Workshop and appreciates the opportunity to provide these written comments on the Workshop.

Members of the Energy Commission staff presented the 2012-2022 California Electricity Demand Forecast (“CED”) and explained the base assumptions of the individual portions of the forecast. SCE has some concerns related to some of these assumptions. SCE recommends that in the future the Demand Analysis Working Group (“DAWG”) stakeholder meetings be used to vet all assumptions and analyses prior to their inclusion in the forecast. Specifically, SCE has concerns with the following:

- Electrification of goods and people movement
- Light-duty plug-in-electric vehicles
- Non-residential sales growth rates

The specific issues related to these assumptions are described below.

1. Load Growth Associated with Electric Goods and People Movement

SCE cautions the Energy Commission against assuming zero incremental load growth for electric goods and people movement (e.g., port electrification, light rail, freight rail, truck stop electrification, truck refrigeration units at warehouses) in the 2012-2022 CED. Twelve (12) new light rail systems are now under development in the Los Angeles area due to the passage of Measure R in 2008. Assuming zero load growth for this segment is therefore not a reasonable assumption.

2. Load Growth Associated with Plug-In Electric Vehicles

Considering recent changes to the Zero Emissions Vehicle (“ZEV”) Program and efforts by General Motors and Nissan to substantially exceed their ZEV requirements, SCE believes that the load forecast for plug-in-electric vehicles (“PEVs”) that are considered “light duty” included in the 2012-2022 CED is too low. This new program includes efforts to increase the number of plug-in hybrids and ZEVs in California. For the 2011-2017 period, the Energy Commission is assuming just 2% of light-duty vehicles (“LDV”) sales will be PEVs, but for the 2018-2020 period, over 11%. SCE suggests the Energy Commission increase its 2% assumption to something in the 4-5% range to account for the recent changes to the ZEV program and the fact that a few automakers are clearly exceeding their ZEV requirements.

Additionally, SCE recommends Energy Commission use the California Air Resources Board (“ARB”) Emission Factor (“EMFAC”) model inputs for the number of miles traveled per year and the total number of cars and trucks sold each year. For instance, the assumption that PEVs will only drive 36 percent of their miles using grid electricity appears understated. Chevrolet, for example, has stated that Chevy Volt electric car customers are driving 67% of their miles using electricity from the grid. Finally, SCE recommends that the Energy Commission use a factor closer to this 67% number.

3. Comparison of SCE and Energy Commission Residential Sales Growth Forecasts

The table below compares SCE’s residential customers’ sales growth forecast with the Energy Commission’s forecast.

Growth Rate	Energy Commission Forecast	SCE Forecast
2012-2017	0.8%	1.9%
2017-2022	2.4%	2.7%
2012-2022	1.6%	2.3%

SCE’s residential sales growth forecasts are higher than the Energy Commission 2012-2022 CED, particularly for the 2012-2017 period (1.1% higher). However, a large part of SCE’s higher growth rate can be explained by SCE’s forecast of higher PEV load. Therefore, SCE’s suggested adjustments to the Energy Commission’s PEV forecast will reduce this discrepancy.

4. Comparison of SCE and Energy Commission Non-Residential¹ Sales Growth Forecasts

The table below compares SCE’s non-residential customers’ sales growth forecast with the Energy Commission’s forecast.

¹ For this comparison, SCE’s Non-Residential customers are defined to include Commercial, Industrial and Public Authority customers.

Growth Rate	Energy Commission Forecast	SCE Forecast
2012-2017	1.2%	1.3%
2017-2022	0.5%	2.9%
2012-2022	0.8%	1.6%

The Energy Commission's Non-Residential growth (commercial, manufacturing, mining and TCU) is substantially lower in the 2017-2022 time period than the 2012-2017 time period. Interestingly, the Energy Commission's residential growth in the 2017 to 2022 time period (2.4%) is substantially higher than the growth rate in the 2012 to 2017 period (0.8%). However, for the Non-Residential sector, the trend in growth rate is quite the opposite: 1.2% for the 2012 to 2017 period, but substantially lower (0.5%) for the 2017 to 2022 period. SCE believes that growth in the commercial sector will be more closely tied to the residential growth rate, as opposed to the growth in floor stock which the Energy Commission's end-use model assumes.

Under current economic conditions, the Energy Commission's use of the growth in floor stock as the major driver of growth in the commercial sector in its end-use model may not be appropriate. In SCE's service territory, there is a large amount of vacant or underutilized commercial buildings. Thus, growth in the commercial sector can be accommodated by filling out these commercial floor spaces without any significant growth in commercial floor stock.

During the Energy Commission's revised IEPR forecast presentation, increased building efficiency standards was mentioned as a possible explanation for the commercial sector growth rate being lower in the 2017 to 2022 forecast period. However, in the data supplied by the Energy Commission in Table A-8, Electricity Efficiency/Conservation Consumption Savings, the non-residential energy efficiency growth rate due to building standards is 5.5% for the 2012 to 2017 period, but only 4.3% for the 2017 to 2022 period, which does not appear to be consistent with this explanation.

SCE understands that differences between the growth rates from Energy Commission's end-use model and the Energy Commission's econometric model are significant, which indicate that some fundamental differences related to methodology likely account for some of the divergence between the Energy Commission's and SCE's forecasts. Therefore, SCE recommends that the Energy Commission include the results of their econometric forecast in their final report. It would also be prudent to investigate the reasons underlying those differences. Due to the short comment period, SCE did not have access to the Energy Commission's revised econometric model results. However, based on graphical and descriptive information about the forecast from the Energy Commission's econometric models, SCE believes that the results from Energy Commission's econometric models will likely be more similar to SCE's internal forecast.

As always, SCE appreciates the opportunity to submit its comments. Feel free to contact me regarding any questions or concerns.

Very truly yours,

/s/ Manuel Alvarez

Manuel Alvarez, Manager
Regulatory Policy and Affairs

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