

July 12, 2013

California Energy Commission
Docket Office, MS-4
Sacramento, CA 95814-5512
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Re: *Southern California Edison Company's Comments on the California Energy Commission Docket No. 13-IEPR-1L Joint Lead Commissioner Workshop on Inputs and Methods for Transportation Energy Demand Forecasts*

To Whom It May Concern:

On June 26, 2013, as part of the California Energy Commission's (Energy Commission's) 2013 Integrated Energy Policy Report (2013 IEPR) process, the Energy Commission held a Joint Lead Commissioner Workshop to address Inputs and Methods for Transportation Energy Demand Forecasts (the Workshop). Southern California Edison ("SCE") participated in the Workshop and appreciates the opportunity to provide these written comments.

SCE commends the Energy Commission's efforts to forecast California's transportation energy demand. Transportation energy demand is an important matter of statewide concern because, as the Energy Commission noted at the Workshop, electricity remains the lowest cost fuel per mile and historically, Californians buy 10% of all light duty vehicles (LDVs), 24% of hybrid vehicles and in 2011, 29 % of plug-in electric vehicles (PEVs). In light of those statistics, SCE agrees with the Energy Commission that an updated Department of Motor Vehicle (DMV) estimate of existing PEVs in California should be incorporated into the Energy Commission's forecast.

SCE was pleased that the Energy Commission expanded its survey to include, for the first time, battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs) in its choice sets, as well as electricity as a fuel type, various charging station locations, and high occupancy vehicle (HOV) access and rebates. The inclusion of these vehicle choices will assist the Energy Commission in forecasting the future adoption of these emerging vehicle technologies.

SCE recommends that the Energy Commission similarly expand its currently single forecast for electric vehicle adoption and consider adopting a forecasting methodology similar to SCE's. Due to the uncertain rate of transportation electrification, SCE's forecast methodology utilizes three scenarios: a low-case scenario based on minimum compliance with the California

Air Resources Board (CARB) Zero-Emission Vehicle Mandate,¹ a mid-case scenario based on an analysis of eight recently published studies (which SCE uses primarily), and a high-case scenario based on a factor of 1.75 to 2 times the mid-case scenario. Incorporating the uncertainty associated with the rate of transportation electrification into the Energy Commission's forecast will better enable industry stakeholders to understand the implications of the various scenarios for the electric system.

To provide a thorough assessment of future increases in electrification demand, SCE also recommends that the Energy Commission include all types of electrification in addition to electric vehicles such as high speed rail, electric fixed route medium and heavy duty trucks, forklifts, catenary trucks and shore power to assess the level of additional load that could be included in its demand forecasts.

In addition, SCE suggests that the Energy Commission collaborate with the Air Quality Management Districts (AQMDs) and the CARB Vision for Clean Air Study², the policies of which will necessitate greater electrification of transportation. The 2012 IEPR Update³ correctly points out that further South Coast AQMD measures will increase electricity demand in the LA basin more than in the 2012 CEC forecast. At minimum the transportation electrification forecast for the LA basin should incorporate the additional load from the Southern California Association of Governments (SCAG) Regional Transportation Plan⁴ for new light rail lines and the CARB rules for shore power⁵ at the port.

In conclusion, SCE looks forward to its continuing collaboration with the Energy Commission and industry stakeholders and appreciates the Energy Commission's consideration of these comments. Please do not hesitate to contact me at (916) 441-2369 with any questions or concerns you may have. I am available to discuss these matters further at your convenience.

Very truly yours,

/s/ Manuel Alvarez

Manuel Alvarez

¹ SCE does not believe, however, that minimum compliance with the CARB mandate is realistic. It is merely a bounding scenario. Several auto manufacturers are substantially exceeding the minimum mandate requirements, and manufacturers that are not subject to the mandate are also producing significant numbers of PEVs. Over 15 PEV models are in the market and are selling at over twice the rate of traditional hybrid electric vehicles when they were launched over a dozen years ago. In addition, over 20 additional models are due by the end of 2015. Starting in 2018, 16 auto manufacturers will be required to produce the mandated vehicles.

² http://www.arb.ca.gov/planning/vision/docs/vision_for_clean_air_public_review_draft.pdf

³ <http://www.energy.ca.gov/2012publications/CEC-100-2012-001/CEC-100-2012-001-CMF.pdf> at p. 33

⁴ <http://rtpscs.scag.ca.gov/Documents/2012/final/f2012RTPSCS.pdf>;
http://rtpscs.scag.ca.gov/Documents/2012/final/SR/2012fRTP_GoodsMovement.pdf

⁵ <http://www.arb.ca.gov/ports/shorepower/meetings/10032012/presentation.pdf>