

In the Matter of: ) Docket No. 11-IEP-1C, 11-IEP-1K, and 11-IEP-1L  
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 Preparation of the ) COMMENT ON ECONOMIC, DEMOGRAPHIC, AND  
 2011 Integrated Energy Policy Report ) ENERGY PRICE INPUTS FOR ELECTRICITY, NATURAL  
 ) GAS, AND TRANSPORTATION FUEL DEMAND  
 ) FORECASTS

**Comments of the California Public Utilities Commission's Energy Division  
 on the *Input Data and Assumptions to Prepare Energy Demand Forecasts for the 2011 IEPR***

The California Public Utilities Commission's (CPUC) Energy Division respectfully submits these comments to the California State Energy Resource Conservation and Development Commission (CEC or Energy Commission) in regards to the *2011 IEPR - Electricity, Natural Gas and Transportation Energy Forecasts* (Forecast Assumptions). The CPUC is pleased to collaborate with our sister agency, the Energy Commission, in the 2011 Integrated Energy Policy Report (IEPR) proceeding (proceeding). Energy Division provides the following comments regarding the assumptions for the 2011 IEPR forecast. The CPUC has been an active participant in the current and past IEPs, collaborating on issues ranging from demand forecasting and energy efficiency quantification to a joint proposal on implementation of once-through-cooling (OTC) replacement infrastructure in support of the State Water Resources Control Board's draft OTC policy. Likewise, Energy Commission Staff has collaborated with CPUC Staff in developing assumptions for proceedings at the CPUC, including development of the 2010 Long Term Procurement Plan (LTPP).

**Multiple Scenarios**

The CPUC Staff commends the Energy Commission's consideration of multiple scenarios affecting energy demand and rates in the 2011 IEPR. These proposed scenarios appear to represent a reasonable range of plausible future economic and energy price conditions.

**Staff Proposed Economic Scenarios.** The CEC Staff's proposed scenarios seem consistent with the opinions presented by the panel during the *Staff Workshop on the Economic Outlook in California*. However, the CPUC Staff recommends that additional detail on the timing and factors influencing the proposed scenarios be made available so that parties may assist in developing the record if the other alternative scenarios seem more plausible. For example, the "Moody's Base" has no additional detail identifying the assumptions used to create the economic scenario.

## Demand Response

It appears that the proposed 2011 IEPR forecast scenarios<sup>1</sup> do not explicitly include demand response (DR) scenarios as they do for energy efficiency and self-generation. The CPUC Staff is, however, encouraged to see that the Energy Commission is considering demand response as a part of the electricity rate scenarios,<sup>2</sup> which is a part of the forecast scenarios. The CPUC Staff would like to engage in further discussions with the Energy Commission Staff to ensure the full consideration of demand response in the Energy Commission's 2011 IEPR demand forecast and to better understand how demand response programs may already be embedded in the historical record. A close coordination between the two agencies is important to ensure that the impact of all DR programs is appropriately captured and double counting of DR resources is avoided.

**Non-event Based Demand Response.** As a general comment, the CPUC Staff would like clarification that the Energy Commission forecast scenarios include the three Investor-Owned Utilities' (IOU) non-dispatchable demand response programs, as the Energy Commission indicated in the 2009 IEPR, and do not include dispatchable DR programs.<sup>3</sup> The CPUC Staff recommends that the Energy Commission include the IOUs' non-dispatchable programs (also referred to as non-event based DR) in the 2011 IEPR demand forecast. The IOUs have many existing non-event-based programs (e.g. new default and optional TOU rates) and new programs in 2011 and beyond.

Each year on April 1st, the IOUs are required under CPUC Decision 08-04-050 to file annual reports of their demand response activities using the Commission adopted load impact protocols.<sup>4</sup> The reports include current program enrollment and forecast enrollments that are linked to ex-ante load impact forecast for 1-in-2 weather year condition and 1-in-10 weather year condition. As a part of the Electricity Rate Scenarios, the load impact reports for non-dispatchable DR programs in the 1-in-2 weather year condition would provide a good starting point for estimating the impact for "current demand response" under Scenarios One and Two. Under Scenario Three, instead of assuming a 5% additional DR, the CPUC staff suggests the use of the "current demand response" and the IOUs' newly

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<sup>1</sup> Kavalec, C. (2011). *2011 IEPR preliminary electricity and natural gas demand forecast: General approach and economic assumptions* [presentation].

<sup>2</sup> Kavalec, C. (2011). *2011 IEPR preliminary electricity and natural gas demand forecast: Rate, efficiency, and self-generation assumptions* [presentation].

<sup>3</sup> Kavalec, Chris and Tom Gorin, 2009. *California Energy Demand 2010-2020, Adopted Forecast*. California Energy Commission. CEC-200-2009-012-CMF at page 28.

<sup>4</sup> Available at [http://docs.cpuc.ca.gov/published/Final\\_decision/81972.htm](http://docs.cpuc.ca.gov/published/Final_decision/81972.htm)

implemented Advanced Metering Infrastructure (AMI) enabled non-event based DR programs. These programs are either recently implemented or anticipated to be implemented by the CPUC. The CPUC has included these programs in the 2010 LTPP standardized planning assumptions because no demand response impacts including these programs were counted in the Energy Commission's 2009 IPER demand forecast.<sup>5</sup> The 2011-2020 load impact forecast of the three IOUs' newly implemented programs and AMI enabled can be found in the most recent Attachment 1 of the Scoping Ruling for the 2010 LTPP (R.10-05-006)<sup>6</sup>. The three IOUs will be filing their annual reports on DR activities on April 1, 2011. The CPUC Staff could coordinate with the Energy Commission Staff on how forecasted DR load impact could be incorporated into the 2011 IEPR based on the information provided in the IOUs' reports.

### **Committed Energy Savings**

The CPUC Staff supports the Energy Commission's effort to update the committed savings assumptions (accomplishments) that were included in the 2009 IEPR demand forecast for the 2006-2009 period. Significant evaluation efforts on the 2006-2008 program cycle and updates applied to 2009 provide the best available estimate of the savings that were achieved for that time period. The detail of the data available allows for a range of estimates<sup>7</sup> to be considered in the current IEPR and the subsequent 2012 LTPP proceeding. Energy Division anticipates significant progress in addressing this issue through the ongoing processes at the Energy Commission, and through continued collaborating in sharing the necessary data sets to make this update.

### **Uncommitted Energy Efficiency**

The CPUC Staff is pleased to see that the work on uncommitted EE, which began in the 2009 IEPR, is continuing in the 2011 IEPR with the inclusion of LADWP and SMUD into the uncommitted forecasts. Given the impacts of the recession on new construction, the CPUC Staff agrees additional effort should be expended on measuring the impacts of Big Bold EE Strategies if the market remains depressed as indicated by the panelists at the January 19, 2011 *Staff Workshop on the Economic Outlook in California*. The CPUC Staff, however, would appreciate additional clarity from Energy Commission Staff in explaining how the uncommitted EE will be applied to the 2011 IEPR. In the 2009 IEPR, uncommitted EE

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<sup>5</sup> *Ibid*, p.28.

<sup>6</sup> Available at <http://www.cpuc.ca.gov/NR/rdonlyres/C382EBDD-7E00-4D2F-863B-7380EDBF843C/0/TechnicalAttachmentSpreadsheetv5.xls>

<sup>7</sup> Reported IOU savings, Gross Evaluated Savings, Net Evaluated Savings are all among the available options.

scenarios were provided as additional analysis to the demand forecast, allowing selection of which future parties felt most plausible. As a demonstration of how this information is used in the CPUC's processes, the December 3 2010 LTPP Scoping Memo<sup>8</sup> as subsequently modified, identified "common value" assumptions for uncommitted EE most likely to occur. These values were based on the range of incremental uncommitted EE impacts assessed by the CEC and the record of party comments in the 2010 LTPP proceeding (Rulemaking [R.] 10-05-066).

The Incremental Uncommitted Energy Savings report issued by the CEC last year represents a significant effort to reconcile modeling methods used by the Energy Commission in the demand forecast and the CPUC for determining energy savings goals, and is the best available information on the range of possible future savings for the uncommitted period. In this IEPR it appears that the uncommitted EE will be applied directly to a forecast.<sup>9</sup> The CPUC Staff encourages the Energy Commission to make available the values from the uncommitted EE analysis, apart from the IEPR forecast, so that committed EE effects can be distinguished from uncommitted EE effects. This is necessary to enable the CPUC to effectively utilize the IEPR forecast and incremental uncommitted EE analyses in the LTPP process.

### **Combined Heat and Power**

The CPUC Staff is encouraged to see that the Energy Commission is continuing to evaluate the impact and role of combined heat and power in meeting the state's greenhouse gas goals. As part of this analysis, the CPUC Staff would like to encourage the use of assumptions consistent with the 2010 LTPP for the Energy Commission Staff proposed base case for combined heat and power.

### **Transportation**

As with other sectors, the CPUC Staff supports Energy Commission's expertise in forecasting transportation sector fuel demand and costs. Our comments are limited to the discussion of Residential Transportation Electricity Prices<sup>10</sup> as it relates to issues under consideration in the ongoing CPUC

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<sup>8</sup> Available at <http://docs.cpuc.ca.gov/EFILE/RULC/127542.htm> and subsequently modified in <http://docs.cpuc.ca.gov/EFILE/RULINGS/130667.htm>

<sup>9</sup> Kavalec, C. (2011). *2011 IEPR preliminary electricity and natural gas demand forecast: General approach and economic assumptions* [presentation].

<sup>10</sup> Bahreinian, Aniss, Gordon Schremp, Malachi Weng-Gutierrez, Ryan Eggers. 2011. California Energy Commission. CEC-600-2011-001. *Transportation Fuel Price Cases and Demand Scenarios: Inputs and Methods for the 2011 Integrated Energy Policy Report*.

Alternative-fueled vehicle rulemaking (R. 09-08-009) to consider tariffs, infrastructure and alternative-fueled vehicle policies.

In compliance with the requirements of Senate Bill (SB) 626 (Kehoe, Stats. 2009, c. 355, § 1.), a pending CPUC Proposed Decision on Phase 2 of the proceeding will address a number of priority issues relevant to California's Plug-in Electric Vehicle (PEV) market from now until 2013. For example, the proposed decision will address residential PEV rates and metering arrangements, rates for PEV charging at non-residential customer premises, utility notification programs, and other issues.

The CPUC Staff looks forward to working with the Energy Commission to update the IEPR analysis as needed to reflect the outcome of the Final Decision on Phase 2 matters, and on related matters of importance to the PEV market.

## **Conclusion**

The CPUC Staff thanks the Energy Commission for the opportunity to provide comments on the Forecast Assumptions and looks forward to continued collaboration with the Energy Commission and its Staff to help address the myriad challenges and opportunities facing California's energy sector today.

Dated March 7, 2011

Respectfully submitted,

Julie A. Fitch  
Director, Energy Division  
California Public Utilities Commission  
505 Van Ness Avenue, 4<sup>th</sup> Floor  
San Francisco, CA 94102-3298