DOCKETED	
Docket Number:	24-IEPR-03
Project Title:	Electricity Demand Forecast
TN #:	260205
Document Title:	PG&E Comments RE IEPR Draft Load Modifier Results
Description:	N/A
Filer:	System
Organization:	Josh Harmon
Submitter Role:	Public
Submission Date:	11/21/2024 11:51:17 AM
Docketed Date:	11/21/2024

Comment Received From: Josh Harmon

Submitted On: 11/21/2024 Docket Number: 24-IEPR-03

PG&E Comments RE IEPR Draft Load Modifier Results

Additional submitted attachment is included below.



1415 L Street, Suite 280 Sacramento, CA 95814 (628) 777-4138 Joshua.Harmon2@pge.com

21 November 2024

California Energy Commission Docket Number 24-IEPR-03 715 P Street Sacramento, CA 95814

Pacific Gas and

Electric Company...

RE: IEPR Commissioner Workshop on Draft Load Modifier Electricity Demand Forecast Results

Pacific Gas and Electric Company (PG&E) appreciates the opportunity to comment on the California Energy Commission's (CEC) IEPR Commissioner Workshop on Draft Load Modifier Electricity Demand Forecast Results held on November 7, 2024.

PG&E commends the CEC for its robust analysis of the variables that will shape future electricity demand. In particular, PG&E appreciates the effort and resources the CEC invested in making meaningful advancements to all its load modifier forecasting methodologies. PG&E offers three general comments on the workshop that cut across multiple load modifiers.

First, PG&E appreciates the addition of the Data Center load modifier forecast and recommends the CEC expand the scope of IEPR electricity forecasting to further include other emerging large industrial loads such as industrial electrification, cryptocurrency mining, and hydrogen production.

PG&E applauds the CEC's rapid development of a new load modifier forecast for data centers, including the collaboration and open feedback between CEC and electric utilities. We look forward to continuing this collaboration in the future as the CEC works to refine its forecasting methodology.

Regarding other large industrial loads: PG&E recognizes that forecasting them is challenging and would likely require substantial investment of resources. However, there is reasonable likelihood that these new loads will have major impacts on a decarbonized energy system in the United States and California. Some of these new industrial loads could be flexible and play a meaningful role in improving the efficiency and reliability of California's energy resources and grid as they decarbonize.

In the specific case of hydrogen production, such a forecast would provide a valuable, more comprehensive insight into how hard-to-electrify industrial customers and hydrogen fuel cell transportation — especially of medium- and heavy-duty vehicles, for which the CEC already forecasts vehicle population — will affect electricity demands. Furthermore, Governor Newsom's July 2024 announcement of the renewable Hydrogen Hub in California increases the importance and relevance of developing this forecast.

Second, PG&E recommends the CEC explore the sensitivity of assumptions in load modifier forecasts, particularly those with low scenarios, to uncertainty in federal policy.

The CEC's load modifier forecasts assume no changes to state or federal policy. However, policy or legal activity at the federal level could have both short- and long-term impacts on the efficacy of state policies and the deployment of forecasted technologies, namely behind-the-meter (BTM) solar, electric space and water heaters, and electric vehicles.

For BTM solar, PG&E recommends the CEC consider updating the low adoption scenario so that its scenario set better reflects uncertainty around potential federal policy changes to the Investment Tax Credit through the Inflation Reduction Act (IRA). For building electrification technologies like electric space and water heaters, the CEC could consider how federal policy or legal activity may impact the effectiveness of CARB and BAAQMD's zero emissions appliance standards. And for electric vehicles, the CEC's forecast does not currently include a low adoption scenario, but if the CEC were to add this scenario, we recommend accounting for similar impacts to state-level policies around zero-emission vehicles, namely Advanced Clean Cars II and Advanced Clean Fleets, as well as the IRA's electric vehicle tax credit.

Third, PG&E is eager to collaborate with the CEC to identify reliable sources of fuel substitution adoption data.

PG&E requests the CEC keep PG&E involved in its process of estimating currently installed electric appliances. This information will be critical for assessing progress towards the state's six million heat pump goal and PG&E's goal for a 2040 net-zero energy system. For example, we are interested in collaborating on the development and refinement of the heat pump baseline, which the CEC currently estimates as 1.5 million existing heat pumps. We believe there is high uncertainty in this number but significant value in creating and aligning on an accurate assessment. Moreover, identifying reliable electric appliance adoption data sources that are continuously updated will be critical for understanding the actual pace of building electrification and impact of both programmatic adoption and adoption induced by zero-emission appliance standards.

PG&E appreciates the opportunity to respond to this workshop and looks forward to continuing to collaborate with the CEC. Please reach out to me if you have any questions.

Sincerely,

Josh Harmon State Agency Relations