

**DOCKETED**

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*Comment Received From: Sophie Meyer*  
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**Form Energy comments on IEPR Commissioner Workshop on  
Inputs and Assumptions**

Please find our comments attached. Thank you.

*Additional submitted attachment is included below.*



August 31, 2023

Heidi Javanbakht  
California Energy Commission (CEC)  
Docket Unit, MS-4  
Docket No. 23-IEPR-03  
715 P Street  
Sacramento, CA 95814

**Subject: Electricity and Gas Demand Forecast**

Dear Ms. Javanbakht:

Form Energy appreciates the opportunity to comment on the August 15, 2023 IEPR Commissioner Workshop on Inputs and Assumptions. CEC's energy demand forecasts are foundational to the State's energy planning. As we transition to a 100 percent clean energy grid, and given the growing challenges climate change imposes on our electricity grid, it is critical that the State's demand forecasts reflect the latest understanding of grid conditions we are likely to face – now and into the future.

Form Energy is developing a new class of multi-day energy storage system. Our goal is to enable a fully renewable electrical grid that is reliable and cost-effective year-round, even in the face of multi-day weather events. Our first commercial product is a rechargeable iron-air battery capable of continuously discharging electricity for 100 hours at a system cost less than one-tenth of the total installed cost per unit of energy of lithium-ion battery technology. With over 250 employees, Form is headquartered in Somerville, MA, with offices in Berkeley, CA and the Greater Pittsburgh area.

We strongly agree with the statement included in the workshop slides that historical weather data is no longer sufficient for predicting future grid conditions. It is necessary, therefore, to begin accounting for more extreme weather conditions, both regarding its impact on demand and generation. In order to fully account for the impacts of weather, including extreme weather, on our electricity grid, and therefore underpin broader energy planning efforts across state agencies to enable our transition to a carbon-free, reliable electricity grid, we encourage CEC to take the following steps in its 2023 IEPR electricity demand forecasts:

- Develop 1-in-40 year forecasts, as well as 1-in-2, 1-in-5, 1-in-10 and 1-in-20 year forecasts.

- In developing net-peak electricity demand forecasts, ensure that hourly weather assumptions underpinning solar and wind generation profiles are the same as those used to develop hourly demand forecasts (for example, renewable generation profiles shouldn't assume it's cloudy in a given hour if the demand profile reflects a sunny day for the same hour.)
- Extreme weather scenarios should reflect both multiday and geographically widespread weather events that are increasingly impacting our electricity grid.

Thank you again for the opportunity to comment on the workshop and development of California's next electricity demand assumptions. We look forward to continuing to work with you to advance California's ambitions to develop a clean, reliable and affordable electricity grid. Please do not hesitate to reach out with any questions or follow up items.

Sincerely,

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Form Energy  
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