

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



SENT BY E-MAIL

October 31, 2017

Mr. Jeff Billinton
Manager, Regional Transmission, North
California Independent System Operator
jbillinton@caiso.com

SUBJECT: Estrella Substation and Paso Robles Area Reinforcement Project Proposed by NextEra Energy Transmission West, LLC and Pacific Gas and Electric Company (the Applicants) in Application (A.) 17-01-023

Dear Mr. Billinton:

The California Public Utilities Commission's (CPUC's) Infrastructure Permitting and CEQA section has completed a preliminary review of the Applicants' filing. We met with you on January 11, 2017 to discuss the proposed project, as well as inquire about any CAISO-considered alternatives, such as a Templeton Expansion Alternative. This letter is meant to update you on our progress in reviewing the proposed project as well as request additional information to support our review.

The Applicants submitted a Proponents Environmental Assessment (PEA) in January 2017. The CPUC has not yet deemed the PEA complete, largely due to inadequate information about potential alternatives. Full information about feasible alternatives so that they can be analyzed with respect to environmental impacts is a requirement of the CEQA Environmental Impact Report (EIR) process. We notified the Applicants that an EIR would be prepared in July 2017 after reviewing the May 2017 responses from the Applicants to our first PEA deficiency letter. We submitted a second PEA deficiency letter to the Applicants in June 2017.

In our third deficiency letter to the applicants, we requested further information about potential alternatives to the proposed project (see Deficiency Letter #3, September 28, 2017, attached).¹ In addition to asking the Applicants for information about alternatives, we would like to discuss the alternatives with the CAISO. Specifically, we would like the CAISO to provide its opinion about the potential feasibility of alternatives, see deficiency items 4-3.1, 4-3.2, G3.1, G6.1, G9.1, G14, G15, and G16 in the attached. These deficiency items are summarized in Attachment 1 to this letter.

To further our understanding of the proposed project and the needs of the transmission grid that this project proposes to address, we would also like the CAISO to provide the most recent transmission planning information (in particular recent loads and expected thermal overloads) that presumably still justify the need for the proposed project. Please provide an updated forecast for thermal overloads caused by the Category B events identified during the 2013/2014

¹ Other than information marked confidential by the Applicants, all documents related to the CPUC's CEQA review for A.17-01-023 will be made publicly available, including copies of all submittals by the Applicants and CPUC deficiency letters to the Applicants at: <http://www.cpuc.ca.gov/environment/info/horizonh2o/estrella/index.html>

transmission planning process (TPP; CAISO July 16, 2014) when the proposed project was first identified. The expectation in 2014 was that the proposed project would be operational in May 2019. What was the forecast date of the first overload in the original 2013/2014 TPP analysis?

Also, please provide updated information about loads and forecasted thermal overloads based on the most recently completed TPP cycle (2016/2017). We would like to know if the timing and type of overloads forecast to occur in the project area have changed. Please provide a list of each facility that would overload (each contingency), as well as identify the first year that an overload would occur based on the TPP 2016/2017 forecasts.

If there is more recent data available from the current, 2017/2018 TPP that would provide a more accurate assessment and basis of need and alternatives analysis, please provide that in lieu of using the 2016/2017 TPP forecasts. Please provide the historical and forecast data for each facility that would overload in a format similar to Table 1. We would be happy to discuss the exact data response format at your convenience. The 2013/2014 TPP applied the previous NERC/CAISO terms for contingencies. If desired, you may want to update the terminology used pursuant to the latest NERC/CAISO standards.

Please coordinate with PG&E as needed to obtain the most recent data possible for any 70-kV or 230-kV facilities required to complete this analysis. The information requested above is summarized in Attachment 1 to this letter.

Table 1 (Example): [insert facility] Projected Peak Loading in Megavolt Amperes (MVA) with loss of either the Templeton 230/70 kV #1 Bank or the Paso Robles-Templeton 70 kV Line (N-1 / Category B)

Recorded Peak Loading	2010	2011	2012	2013
Planned Maximum Operating Limit (1-in-10 year heat storm)				
Projected Peak Loading (1-in-10 year heat storm)				
Planned Maximum Emergency Operating Limit (N-1 condition)				
Projected N-1 Loading				
Recorded Peak Loading	2014	2015	2016	
Planned Maximum Operating Limit (1-in-10 year heat storm)				
Projected Peak Loading (1-in-10 year heat storm)				
Planned Maximum Emergency Operating Limit (N-1 condition)				
Projected N-1 Loading				
Projected Peak Loading	2017	2018	2019	2020
Planned Maximum Operating Limit (1-in-10 year heat storm)				
Projected Peak Loading (1-in-10 year heat storm)				
Planned Maximum Emergency Operating Limit (N-1 condition)				
Projected N-1 Loading				
Projected Peak Loading	2021	2022	2023	2024
Planned Maximum Operating Limit (1-in-10 year heat storm)				
Projected Peak Loading (1-in-10 year heat storm)				
Planned Maximum Emergency Operating Limit (N-1 condition)				
Projected N-1 Loading				
Projected Peak Loading	2025	2026	2027	2028
Planned Maximum Operating Limit (1-in-10 year heat storm)				
Projected Peak Loading (1-in-10 year heat storm)				
Planned Maximum Emergency Operating Limit (N-1 condition)				
Projected N-1 Loading				

Source: CAISO 2017

Key:

N-1 = A Category B event that involves the loss of a single bulk electric system element, such as a generator, a substation transformer, a transmission line, or a shunt device.

Following receipt of the updated forecast information, we would like to meet with you to discuss the information and its impacts on any alternatives to be evaluated pursuant to CEQA. We will be meeting with the Applicants to further discuss the alternatives as well. To set up a meeting with our team, including Molly Sterkel and Lonn Maier, please contact me at (916) 823-4748 or robert.peterson@cpuc.ca.gov.

Sincerely,



Rob Peterson
Energy Division, Infrastructure Permitting and CEQA

cc:

Neil Millar, Executive Director of Infrastructure Development, CAISO
Peter Klauer, Smart Grid Manager, CAISO
Tom Johnson, Principal Land Planner, PG&E
Andy Flajole, Environmental Licensing Lead, NEET West
Mike Della Penna, Principal, Energy Storage Project Development, PG&E
Sandy Goldberg, Advisor to Commissioner Clifford Rechtschaffen, CPUC
Simon Baker, Deputy Director, Energy Division, CPUC
Molly Sterkel, Program Manager, Infrastructure Planning and Permitting, CPUC
Gabe Petlin, Supervisor, Grid Planning and Reliability
Lonn Maier, Supervisor, Infrastructure Permitting and CEQA, CPUC
Jack Mulligan, Attorney, CPUC
Tom Engels, Principal, Horizon Water and Environment
Mike Gravely, Energy Technology Systems Integration, Senior Engineer, CEC

Attachment 1: Summary Checklist of Information Requested from the CAISO
Attachment 2: CPUC 2017-0928 *Deficiency Letter No. 3.zip* to Applicants
Attachment 3: CPUC 2017-0629 *Deficiency Letter No. 2.zip* to Applicants

Attachment 1

Summary Checklist of Information Requested from the CAISO by the CPUC, Energy Division, Infrastructure Planning and Permitting, CEQA Unit on October 31, 2017

1. CAISO's expectation in 2014 was that the proposed project would be operational in May 2019. What was the forecast date of the first overload in the original 2013/2014 TPP analysis?
2. Please provide an updated forecast for thermal overloads caused by the Category B events identified during the 2013/2014 TPP. The update should be based on data from the most recent TPP cycle: either 2016/2017 or, if possible, the current 2017/2018 TPP. We would like to receive the most recent, accurate update possible.
 - i. Please coordinate with PG&E as needed to obtain the most recent data possible for any 70-kV or 230-kV facilities required to complete the updated analysis.
 - ii. Please identify the first year that an overload is now forecast to occur.
 - iii. Please include a list of each facility forecast to overload (each contingency).
 - iv. Please provide the historical and forecast data for each facility that would overload in a format similar to Table 1, which was provided in the letter that accompanies this attachment. Alternately, we would be happy to discuss the exact data response format at your convenience.
3. Please provide an opinion about the potential feasibility of alternatives described in deficiency items 4-3.1, 4-3.2, G3.1, G6.1, G9.1, G14, G15, and G16 in Attachment 2: 2017-0928 Deficiency Letter No. 3. Feasible alternatives will need to address any NERC violations identified in the updated forecast analysis (see above). Since, distribution system issues must also be considered for the proposed project, we believe that battery storage is relevant to our analysis. In summary, the alternatives described in Deficiency Letter No. 3 include:
 -) Use of the existing Templeton–Paso Robles 70-kV alignment or a new alignment for a second Templeton–Paso Robles 70-kV line;
 -) Expansion of Templeton Substation to include one or more new 230/70-kV transformers installed by NEET West within or adjacent to the fence line of the existing substation;
 -) Connecting battery storage to PG&E's distribution system to delay, avoid, or reduce the need for new distribution facilities and longer-term need for further substation expansions or new substation construction; and
 -) Battery storage sited to support pending and existing renewables generation in the Paso Robles area.
4. Following receipt of the updated forecast information and your review of potentially feasible alternatives from our deficiency letter to the Applicants, we would like to meet with you as described in the letter that accompanies this attachment.