



November 30, 2017

Submitted to: CAISO ([regionaltransmission@caiso.com](mailto:regionaltransmission@caiso.com))

**COMMENTS OF NEXTERA ENERGY TRANSMISSION WEST, LLC ON THE  
CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION'S 2017-2018  
TRANSMISSION PLANNING PROCESS NOVEMBER 16, 2017  
STAKEHOLDER MEETING**

NextEra Energy Transmission West, LLC (NEET West) appreciates this opportunity to provide comments on the California Independent System Operator Corporation's (CAISO) 2017-2018 Transmission Planning Process (TPP) November 16, 2017 stakeholder meeting where CAISO presented the preliminary economic assessment results and the recommendations for reliability projects with an estimated cost of less than \$50 million. In summary, we respectfully request CAISO to consider the following factors as it undertakes its current transmission planning efforts to improve reliability in the 2017-2018 TPP:

- **NEET West recommends CAISO to release the Rio Oso Area 230 kV (+200/-260 MVar) Voltage Support Static Var Compensator (SVC) for competitive solicitation in 2017-2018 TPP**

In the 2016-17 and 2017-18 Transmission Plan studies, the CAISO has identified a reliability-driven need for a +200/-260 MVar dynamic reactive power support at Rio Oso substation in PG&E's service territory. The dynamic reactive power support is required to address high voltages during normal system conditions (P0) in Rio Oso and Gold Hill area (115 kV, 60 kV) and to address low voltages during low hydro and system outage conditions. Similar to Suncrest SVC, NEET West recommends that CAISO release this project for competitive solicitation during 2017-18 TPP cycle. To be more specific, and consistent with the CAISO functional specification for Suncrest 230 kV 300 MVar Dynamic Reactive Power Support<sup>1</sup>, the approved project sponsor will build, own, operate, and maintain all transmission facilities including the new reactive power support 230 kV SVC up to and including the 230 kV terminal line structure that will connect to the existing PG&E's Rio Oso substation. In addition, this competitive solicitation process will ensure to the California rate payers that the most qualified and cost competitive bid is selected to build, own, operate, and maintain the project.

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<sup>1</sup> <https://www.caiso.com/Documents/Description-FunctionalSpecificationsSuncrest230ReactivePowerSupport.pdf>

- **NEET West recommends CAISO performs a careful evaluation of NEET West's proposed Lockeford – Industrial 230 kV line reliability project in 2017-2018 TPP**

The Lockeford-Lodi Area 230 kV Development Project approved by the CAISO Board in the 2012-13 Transmission Plan was put on hold earlier this year for reassessment. At the September 21-22, 2017 Stakeholder Meeting for the 2017-18 TPP, this project was discussed with a preliminary conclusion that further analysis is required. Subsequently, the City of Lodi requested<sup>2</sup> that the most recent CAISO's study for the Lockeford – Lodi Area incorporate the revised 10-year peak load forecast that reflects recent economic development in the area spurred by the growing wine industry in the region.

To improve the reliability and to mitigate thermal overloads within the Lodi and Lockeford area, NEET West proposed a new reliability transmission that consists of a new Lockeford – Industrial 230 kV Line and a new Industrial 230 kV bus with a new 230/60 kV Industrial Transformer. The preliminary project cost estimate for this project is \$30 million, which is very cost competitive when compared to other considered alternatives. NEET West requests that the CAISO's 2017-2018 TPP cycle include a special assessment of the Lodi/Lockeford area and to evaluate the NEET West project alternative against all alternatives considered to determine the most cost effective solution.

- **NEET West recommends CAISO performs a careful evaluation of NEET West's proposed Lopez – Divide 230 kV line reliability project in 2017-2018 TPP**

The CAISO's 2017-2018 Reliability Assessment – Preliminary Study Results for Central Coast Los Padres (CCLP) identified a number of contingencies that generated potential overloads. The Mesa/Santa Maria Remedial Action Scheme (RAS) and Divide RAS were put in place as an interim solution to voltage collapse issues in the CCLP area until PG&E's proposed Midway-Andrew Transmission Project (approved in 2012), or a different alternative currently under reliability re-valuation by CAISO, comes in-service. Many of the contingencies that cause the potential for overloads in the preliminary reliability results will initialize the operation of the RAS. Elimination of these overloads is critical as non-consequential load loss for P1-P7 contingencies does not coincide with CAISO's Planning for High Density Urban Load Area Standard.

To improve reliability and mitigate thermal overloads within Mesa and Santa Maria area for critical contingencies including Morro Bay, Mesa, Diablo transmission segments, NEET West proposed a new reliability transmission solution that consists of a new Lopez 500/230 kV substation, a new Divide 230/115 kV substation, and a new 230 kV Lopez – Divide transmission line. NEET West's proposed Lopez-Divide 500/230 kV Project would resolve the

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<sup>2</sup> <https://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=1EA035BE-FFB0-4663-AC6D-03C9788FE840> (CAISO TPP 2017-18; City of Lodi Comments)

same potential overloads to the CCLP system identified in this year's Preliminary Reliability Assessment that are resolved by the PG&E's proposed Midway-Andrews Project. However, NEET West's proposed solution resolves the identified thermal and voltage issues at a much lower project cost. The preliminary project cost estimate for this project is \$100 million, which is very cost competitive when compared to other more expensive alternatives including PG&E's Midway – Andrew project<sup>3</sup>. NEET West's Lopez-Divide Project also eliminates the significant reliance on the Mesa/Santa Maria RAS and Divide RAS. NEET West requests that the CAISO's 2017-2018 TPP cycle include a special assessment of the Mesa/St Maria area and to evaluate the NEET West project alternative against all alternatives considered to determine the most cost effective solution. NEET West urges CAISO to approve the project for this area in this 2017-18 TPP cycle as this area has been identified by CAISO for reliability improvement since 2012. The previously approved reliability project for this area, Midway – Andrew 230 kV, (as approved in 2012-2013 TPP cycle) is on hold primarily due to significant cost escalation and CAISO is now testing other alternatives to select the most optimal reliability plan.

- **Consideration of Preferred Resources Solutions**

NEET West is encouraged to see that preferred resources solutions were highlighted as potential alternative solution(s) to address local reliability transmission issues in the latest reliability assessment. To support this process, NextEra Energy Resources, LLC (NEER) submitted several preferred resource solutions – Battery Energy Solution Systems (BESS) that will provide cost effective and reliability mitigations for Lodi area (Lodi 40 MW BESS), Oakland area (Oakland 40 MW BESS), and Alto/Las Galinas area (Alto 45 MW, Las Galinas 22 MW BESS).

Finally, NEET West would like to continue stress importance of CAISO working with stakeholders to develop a methodology for evaluating energy storage resources (non-wires solutions), including how energy storage solutions will be compared in a cost/benefit analysis to other transmission alternatives that could provide the same type of service.

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<sup>3</sup> The CAISO approved PG&E's Midway-Andrew Project in the 2012-2013 Transmission Planning Process (TPP). At the time, the project was needed to address several potential overload and voltage conditions in the area, including voltage collapse concerns in the Mesa, Santa Maria, and Divide systems. The project's objective was to reduce the overdependence on the Mesa Substation and enhance system maintenance and clearance options. The project also eliminated the reliance on two under voltage load shedding schemes that have a potential to trip significant load served from the Mesa, Santa Maria and Divide substations. The project was identified to cost between \$120 million to \$150 million, and included the conversion of an existing idle line into the new Midway- Andrew line. On March 10, 2016 PG&E filed a Petition for Declaratory Order requesting transmission rate incentives for eight major transmission projects, including the Midway-Andrew Project. In the petition, PG&E states that the Midway-Andrew Project no longer consists of a conversion of an existing idle line into the new Midway-Andrew line, but rather the project will include "...the construction of a new 230 kV transmission line spanning approximately 65 miles (with alternative routing options extending up to 100 miles)." The petition includes direct testimony from Brian M. McDonald, Sr. Director Transmission Project Development at PG&E, in which Mr. McDonald identifies that the new project cost of Midway-Andrew is estimated at \$413,770,544, and increase of over 275% from the 2012-2013 TPP.

(Ref 1) Petition for Declaratory Order of Pacific Gas and Electric Company, Docket No. EL16-47-000, March 10, 2016, Page 4.

(Ref 2) Petition for Declaratory Order of Pacific Gas and Electric Company, Docket No. EL16-47-000, March 10, 2016, Exhibit PGE-1, Page 18 of 23.

**Conclusion**

NEET West commends CAISO's staff for all of the time and effort that it put into the 2017-2018 TPP. NEET West submits these comments with the goal of enhancing the processes utilized in the evaluation of reliability projects in the transmission planning process. NEET West appreciates the opportunity to participate in the transmission planning process and to provide these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Edina Bajrektarević", is written over a light blue horizontal line.

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