

February 21, 2020

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

**COMMENTS OF HORIZON WEST TRANSMISSION, LLC IN REGARDS TO THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION 2019-2020 TRANSMISSION PLANNING PROCESS STAKEHOLDER MEETING HELD ON FEBRUARY 7, 2020**

Horizon West Transmission, LLC (Horizon West) appreciates this opportunity to provide comments on the California Independent System Operator Corporation's (CAISO) 2019-2020 Transmission Planning Process (TPP) February 7, 2020 stakeholder meeting. Horizon West respectfully requests that CAISO consider the following factors as it completes the 2019-2020 TPP efforts:

**Central Coast Los Padres Reliability Issues and Lopez – Divide 230 kV Transmission Solution**

The CAISO's 2019-2020 draft transmission plan includes one previously approved active project<sup>1</sup> in the Central Coast/Los Padres area that is not modeled in the study cases due to constructability issues, cost increase or misalignment of scope of the project with the nature of the identified need. The 2019-2020 Reliability Assessment and the draft plan confirm in this cycle severe P2 and P6 thermal overloads in the 115 kV system supplied from the Mesa substation, thus indicating that mitigation is still required.

CAISO's recommendation to solve the reliability need is the North of Mesa upgrade (which consists of building Andrew 230/115 kV substation, energizing Diablo – Midway 500 kV line at 230 kV and connecting to Andrew substation, and looping-in the SLO – Santa Maria 115 kV line to Andrew and Mesa substations). At the February 7<sup>th</sup> Stakeholder Conference, CAISO recommends the North of Mesa upgrade to remain on hold so further study assessments could be performed. CAISO indicated at the February 7<sup>th</sup> meeting that more time is needed to reevaluate the generation retirement (Diablo Canyon), reassess repurposing Diablo – Midway 500 kV line, and to better understand the integration of new renewable resources into the area. In addition, CAISO confirmed in the draft plan TPP 2019-2020, that Horizon West Transmission solution, Lopez – Divide 230 kV, mitigates the same reliability issues as the North of Mesa Upgrades.

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<sup>1</sup> The project, PG&E's Midway – Andrew 230kV, which was initially approved by CAISO in the 2012-2013 TP process, is currently on hold. The original 2019 in-service date was critical due to the reliance on the Mesa and Santa Maria SPS as interim solutions to avoid voltage collapse following several outages in the area including a P2 stuck breaker outage at the Mesa 115 kV bus. The interim solution also relied on the Divide SPS to trip load following a P6 outage in the area.

Based on Section 24.6.2 of the CAISO Tariff<sup>2</sup>, Horizon West is requesting a special study to expedite a transmission solution for this area, rather than waiting to evaluate it in the next TPP (2020-2021) as the consequences of an SPS failure will result in unacceptable outcomes according to CAISO Planning Standards, specifically, ISO SPS4.

## **Bellota and Tesla Reliability Issues and Weber – Manteca 230 kV Transmission Solution**

Horizon West encourages the CAISO to take a broader look at the reliability needs at Bellota and Tesla 230 kV and 115 kV and to perform a comprehensive cost/benefit assessment prior to recommending the most optimal long term reliability plan for both areas.

At the February 7<sup>th</sup> stakeholders meeting, CAISO recommended an SPS to address P2-4 contingency at Bellota 230 kV substation. The recommended SPS trips the 115 kV lines connected to the Bellota 115 kV bus following the P2-4 contingency. In addition, CAISO indicated that it is currently working with PG&E to evaluate an SPS or substation upgrade alternative to address P2-4 issues at Tesla substation. However, it is the opinion of Horizon West, that the proposed Weber-Manteca 230 kV Project offers a reliability solution in this area at a much lower cost than the proposed Bellota 230 kV and Tesla SPS and Bus upgrades.

In order to achieve the same comprehensive reliability benefits as the Weber-Manteca 230 kV Project, PG&E would require the bus upgrade at Bellota 230 kV (protect against P2 Bellota 230 kV Section 1E & 2E), as well as a bus upgrade at Tesla 230 kV (protect against P2 Tesla 230 kV Section 2E & 1E) and Tesla 115 kV (protect against P2 Tesla 115 kV Section 1D & 2D) and install a 3<sup>rd</sup> 230/115 kV transformer at Bellota (protect against P6 Bellota 230/115 kV Transformers #1 & #2). A full cost breakdown was included in the Request Window Submission and it was estimated that Weber-Manteca 230 kV Project cost was conservatively four (4) times less than the bus upgrades and transformer bank in order to achieve the same reliability benefits.

Horizon West believes that a broader approach will meet the systems reliability needs, while ensuring the least cost to rate payers, and will demonstrate adherence to the ISO's planning standards.

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<sup>2</sup> CAISO Tariff Section 24.6.2 "If the CAISO determines that the proposed completion date has been delayed beyond the date upon which the transmission solution was found to be needed, the CAISO shall issue a market notice stating that it is necessary for the CAISO, the Approved Project Sponsor (to the extent the Approved Project Sponsor has not abandoned the project), and the applicable Participating TO(s) to develop a plan to address potential NERC reliability standards violations as set forth in Section 24.6.3 as well as any other issues that may be of material concern arising from the delay of the transmission solution. If the potential NERC reliability standards violations, or other issues of material concern, cannot be promptly and adequately addressed, the CAISO will take appropriate action including but not limited to, determining that an alternate Approved Project Sponsor is necessary to complete the transmission solution as set forth in Section 24.6.4."

## **Oakland Reliability Issues and Oakland – Sobrante 230 kV Transmission Solution**

In the 2018-2019, and 2019-2020 TPP cycle, the CAISO indicates that it will continue to consider transmission, generation or non-transmission solutions as they revisit the assessment of Oakland area needs. CAISO's recent analysis for the Oakland Subarea (Load and Resources 2020, Slide 10, Economic and Policy Assessment, CAISO November 18 Stakeholders Meeting) shows significant increase in load in this pocket. At the February 7<sup>th</sup> stakeholders conference, CAISO confirmed that the Oakland area load did increase compared to previous cycles. Near term needs are being met by existing local generation. In the mid-term, the Oakland Clean Energy Initiative (OCEI) project may meet mid-term reliability objectives with some modifications made to the portfolio size. CAISO also confirms that the long-term solution for Oakland area is still under evaluation and that the CAISO will continue to monitor load growth in the area along with how the procurement of the OCEI materializes in the future.

Horizon West believes that the Northern Oakland Area Reinforcement Project, recently proposed by PG&E, requires multiple transmission upgrades to address the identified reliability issues, is very costly, and will require a very lengthy environmental and construction process. Therefore, Horizon West seeks CAISO's consideration in performing a special assessment of the Oakland and East Bay area and to evaluate portfolio of existing system reinforcement, new transmission elements (such as the Horizon West proposed Oakland –Sobrante 230 KV alternative) in combination with minor upgrades in the Oakland area and/or energy storage solutions, in order to determine the most robust and cost effective long term reliability solution. Detailed cost/benefit assessment should be undertaken to determine the best solution between upgrading the existing grid and new greenfield transmission solutions that will connect the load to strong generation sources.

### **Conclusion**

Horizon West commends CAISO's staff for all of the time and effort that it put into the 2019-2020 TPP and appreciates the opportunity to participate in the transmission planning process and to provide these comments.

Sincerely,

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