

November 30, 2017

GridLiance West Transco (GWT) appreciates the opportunity to submit comments after the public stakeholder meeting #3 adding to our previous comments submitted in March and October this year.¹

CAISO 2017 – 2018 Draft Transmission Plan Reliability projects

GWT submitted its Valley – Innovation 230 kV project into the CAISO TPP window on September 15, 2017. As GWT described in its project submission, the project is needed to increase grid reliability by adding significant transmission capacity and by resolving the outstanding number of contingencies needing mitigation. It will also strengthen the existing 230 kV loop to facilitate the export of renewable power from Nevada into California. The proposed project extends GWT's 230 kV loop by 40 miles west from its current westerly most position. The conceptual cost estimate of this project is \$40 million. This project should be approved in the 2017-2018 TPP.

The project includes

- Installing a second 230 kV circuit on an existing vacant tower position from Innovation to Johnnie Tap,
- Upgrading the existing Johnnie Tap to Valley Substation line to double circuit 230/138 kV,
- Expanding Valley substation to install new 230/138 kV transformer, and
- Adding necessary terminal equipment at Valley and Innovation.

The project is forecasted to increase reliability by adding significant transmission capacity, strengthening the existing 230 kV loop in VEA's service territory and reducing the number of contingencies requiring mitigation. First, the rebuilt line will add about 800 MVA of transmission capacity in the GWT system. Second, the 230 kV loop is a vital grid design needed to facilitate delivery of renewable generation out of Nevada into California. The proposed project extends GWT's 230 kV loop by 40 miles west from its current westerly most position. Third, the project dramatically reduces the number of contingencies requiring mitigation – 100% reduction for P1 contingencies, 89% reduction for P4-P7 contingencies, and 90% percent reduction for P6 contingencies.

The project is a better option than increasing the number of Remedial Action Schemes (RAS) to protect against grid contingencies. GridLiance's preferred alternative is to construct a new transmission line to decrease dependency on RAS. New transmission capacity will strengthen the electrical grid and increase overall grid reliability. GridLiance has observed that eastern interconnection regions do not depend upon RAS for long-term transmission solutions; rather these regions mitigate long-term issues by constructing new current carrying facilities such as transmission lines. GridLiance offers the proposed project as a means of balancing the reliance on RAS with the need for new transmission capacity.

CAISO 2017 – 2018 Draft Transmission Plan Study Indicates Continued Significant Path Congestion

CAISO's analyses thus far have shown that the Bob Switch (Bob SS) to Mead path will present significant congestion in the upcoming years. This congestion will likely have detrimental effects on CAISO

¹ GridLiance filed comments requesting an Economic Study of the Bob SS to Mead path on March 14, 2017 and comments following the TPP Stakeholder Meeting #2 on October 30, 2017.

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ratepayers by constraining supplies and potentially by adding to renewable curtailment which itself may trigger overbuild of renewable resources to meet targets. Upgrades to the path seem both technically feasible and economically viable.

The CAISO Preliminary Results of Congestion and Economic Assessments as posted and presented at TPP Stakeholder Meeting #3 for the 2017 – 2018 Transmission Plan study identifies nearly \$11 million of expected congestion annually, affecting approximately 550 hours, in its 2027 study year on the Bob Switch (Bob SS) to Mead line. Though the cost of congestion is less than the previous year's study, the affected hours are approximately the same, and the congestion on the Bob SS to Mead path continues to top the list of congested paths. Additionally, congestion on the order indicated in these preliminary results, with approximately one in every 16 hours being constrained, and at an average cost of almost \$20,000 per constrained hour, continues to demonstrate that this path is an ideal candidate for an economic upgrade.

Upgrade of the Bob Switch (Bob SS) to Mead Path is Feasible

The 15-mile Bob Switch (Bob SS) to Mead 230 kV path can be upgraded from its current approximate 400 MVA rating to 800 MVA, 2000 A or greater, by rebuilding the existing line. Utilizing existing ROW, the upgrade could be built within 18 months to two years of approval.

Considering these preliminary results and recommitting to our \$20 to \$25 million cost estimate, the total cost of the project is fully covered by reduction in the cost of congestion to the CAISO participants over the course of less than 2 ½ years.

Comments on Methodology

Though the TEAM approach has been recently modified to better reflect the historically relied upon ratepayer perspective, we continue to stress the cost of non-delivery of renewable energy and the cost of economic dispatch to accommodate renewables are legitimate adverse impacts borne by CAISO ratepayers.

GridLiance appreciates this opportunity to submit comments and encourages CAISO to move forward with the recommendation for approval of the economic upgrade of the Bob Switch (Bob SS) to Mead 230 kV path and the reliability upgrade of the Valley – Innovation 230 kV project in this 2017 – 2018 TPP.

Respectfully Submitted by:



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