TANC COMMENTS
ON THE CAISO'S 2016-2017 TRANSMISSION PLANNING PROCESS
OCTOBER 6, 2016

The Transmission Agency of Northern California (TANC) appreciates this opportunity to provide comments on the California Independent System Operator's (CAISO) 2016-2017 Transmission Plan September 21-22, 2015 stakeholder meetings primarily detailing results of the reliability studies performed by the CAISO and the Investor Owned Utilities (IOUs). TANC is discouraged by the CAISO's continued reliance on potential derates to the California-Oregon Intertie (COI) to mitigate identified reliability issues on the CAISO system when, in several instances, other options exist to mitigate such problems.

TANC urges the CAISO give more credence to and explore alternative solutions that do not limit the import capacity of the COI. During the first day of the stakeholder meetings, the CAISO presented its reliability results for the Pacific Gas & Electric's (PG&E) Bulk System, within which the COI facilities are located. As shown in Table 1, the CAISO identified multiple reliability issues that could be mitigated by upgrading the impacted facility; by bypassing the series capacitors in the affected line (or a "downstream" line); or by reducing the imports over the COI.

TABLE 1

Impacted Facility	Potential Mitigation
P1 (N-1) Outages	
Round Mt-Table Mt #1 or #2 500-kV line	Bypass series capacitors in overloaded line or in the Table Mt-Vaca Dixon line or reduce COI
P6 (N-1-1) Outages	
Round Mt-Table Mt #1 or #2 500-kV line	Bypass series capacitors in the overloaded line or in the Table Mt-Vaca Dixon line or reduce COI
Cottonwood-Round Mt #3 230-kV line	Upgrade the line or limit COI flows during on-peak conditions
P7 (N-2) Outages	
Cottonwood-Round Mt #3 230-kV line	Upgrade the line or limit COI

TANC believes the reliance on curtailing COI imports and limiting the transfer capabilities between the Pacific Northwest and California, is inefficient and inappropriate for the CAISO to use as a mitigation resource. As a Balancing Authority (BA), the CAISO should not be taking actions that limit transfer capabilities. Such actions do not only effect the import of the CAISO BA but also adversely affect the Balancing Authority of Northern California (BANC) and Turlock Irrigation District (TID) BAs, as well as market participants in the Pacific Northwest. The CAISO's proposed regional expansion also should lead the CAISO to seek solutions that do not limit transfers between balancing regions. As has been noted in the CAISO SB350 studies and the PacifiCorp Economic benefits study, the benefits are increased by maximizing the transfer capability between regions based both on increased economic dispatch and resource adequacy savings. Furthermore, with additional

Pacific Northwest participants in Energy Imbalance Market (EIM), the economic benefits of higher transfer capability will also increase.

Additionally the CAISO has not provided any economic analysis to show that limiting the COI is more economic than other alternative mitigation measures. This violates the CAISO Tariff at 24.4.6.2, "The CAISO will determine the solution that meets the identified reliability need in the more efficient or cost effective manner." CAISO has approved several projects in the Southwest, such as Devers-Colorado River and Harry Allen-Eldorado, primarily on the economics of increased intertie capacity and/or increased flows on existing paths. Therefore it is puzzling why the CAISO would so readily rely on a mitigation strategy that would limit the intertie capacity between the Pacific Northwest and Northern California, when it is contrary to the practice the CAISO has employed on other parts of the California grid. As a BA, the CAISO should not be taking actions that limit intertie transfer capabilities.

During the presentation of the PG&E Bulk system, flows along the COI were presented including approximately 2,000 MW of South to North flow during the 2018 and 2019 Spring Off-peak case. TANC notes that South to North flows are very rare on the COI especially at levels of 2000 MWs, and are the result of very specific system conditions. TANC understands that a growing amount of overgeneration in the state may have an effect on the direction of flows, but most of this occurs in Southern California. TANC requests that the CAISO provide a complete and detailed description of the case studies load and generation as well as the mechanism by which they lead to this dramatic change.

Finally, TANC commends the CAISO for its continuing evaluation of the needs of previously approved projects within the PG&E service territory. TANC would recommend, in light of the anticipated declining loads and increased energy efficiency and distributed generation expected in the next decade (per the California Energy Commission (CEC)) that the CAISO should examine all previous projects that have been approved, not just those in the PG&E's service territory. As an example, TANC would strongly suggest a second look at the Harry Allen – Eldorado 500-kV Project that was approved in the 2013-14 TPP. The "Scenario 2016 in Excel v1.2" from the CEC, dated August 5, 2016,[1] shows a resource surplus of around 30-40% through 2036. A significant amount of the economic benefits of the Harry Allen – Eldorado Project came from anticipated capacity benefits that the CAISO economic studies perceived – from studies that indicated that SP26 would be resource 'short' by 2019-20. Based upon the current CEC analysis and the CAISO's own push through the RETI process for Energy-Only interconnections – this Project may no longer provide the economic benefits or justification that the CAISO previously stated.

[1] http://www.cpuc.ca.gov/General.aspx?id=11681