TANC SUPPLEMENTAL COMMENTS ON THE

CAISO'S 2013-2014 TRANSMISSION PLANNING PROCESS STUDY RESULTS

The Transmission Agency of Northern California (TANC) appreciates this opportunity to provide further comments on the California Independent System Operator's (CAISO) 2013-14 Transmission Planning Process (TPP). Previously, on October 10, 2013 TANC submitted comments on the results of the CAISO's 2013-2014 TPP studies as originally posted on the CAISO website on August 15, 2013 and presented at the TPP Stakeholder meetings on September 25 and 26, 2013; these initial comments raised several questions/issues TANC identified related to the CAISO's planning studies. Additionally, at the TPP Stakeholder meetings held on November 20 and 21, 2013, TANC re-iterated its concerns regarding line ratings raised in our October 10, 2013 written comments, and requested clarification regarding line ratings and other items previously raised by TANC. TANC's comments have focused on the reliability assessment results for the Pacific Gas and Electric Company's (PG&E) bulk transmission system and on how issues associated with the PG&E bulk system can impact the California-Oregon Transmission Project (COTP) for which TANC is the Project Manager and largest Participant.

To date, TANC has not received a response regarding any initial comments, or the issues raised at the November 20 and 21 stakeholder meetings. Therefore, we want to take this opportunity to again raise what we believe are important issues that the CAISO should address, as follows:

- The TPP studies noted a number of issues due to an outage of the Table Mountain-Tesla and Table Mountain-Vaca Dixon (the "Table Mountain-South") 500-kV lines if the California Department of Water Resources (CDWR) generation at Hyatt and Thermalito is not tripped via the remedial action scheme (RAS) and identified potential mitigation solutions for each. The suggested solutions included upgrading the impacted line, limiting California-Oregon Intertie (COI) transfers, limiting generation in northern California, or modifying other existing RAS to drop generation at other locations. However, the only form of mitigation discussed in any detail during the September stakeholder's meetings was limiting COI transfers, with no detailed information presented on the other potential mitigation options. As noted previously, TANC is:
 - Concerned that "under playing" the available options might lead stakeholders to believe that the only option is to limit COI imports and lead the CAISO to a suboptimal result; and
 - Of the opinion that all of the impacts of limiting COI imports have not been adequately studied, and is concerned about CAISO statements that limiting COI import capability (by reducing the existing nomograms) does not impact the reliability of the system.

- TANC is not clear as to whether the CDWR pump-drop remedial action was or was not modeled in the TPP studies without the CDWR generation-drop remedial action. In its September 24, 2013 email, the CAISO informed TANC that the pump-drop RAS was not modeled in the studies. However, in a response to a question from TANC at the September 25, 2013 stakeholder meeting, the CAISO indicated that the CDWR pump-drop remedial action was modeled. TANC is still awaiting clarification on this modeling question. TANC strongly believes it is critical that the studies identify how the remedial actions currently being provided by CDWR for PG&E are modeled in the TPP studies.
- During recent operational studies it was noted that the base cases initially used in these studies (which were derived from Western Electricity Coordinating Council (WECC) cases) did not model the correct ratings on a number of PG&E facilities in northern California. As was noted at the November 21, 2013 Stakeholder meeting, TANC with the Western Area Power Administration (Western) and the Sacramento Municipal Utility District (SMUD), remain concerned that the data sets used by the CAISO in the TPP studies may not accurately reflect the ratings of critical lines in northern California (particularly those impacted by the Table Mountain-South outage as discussed above). If such is the case, the potential impacts on COI transfer capability or the need for reinforcements to the transmission grid could well be greater than those identified during the TPP studies. We request clarification from the CAISO regarding which data set for line ratings were utilized in the TPP studies.

TANC is of the opinion that the 2013-2014 TPP reliability studies should not be deemed complete until the above items have been adequately addressed. As such, if the reliability studies are not complete, TANC questions whether the economic studies are accurate, since they were run subsequent to the reliability studies.

TANC also has comments/questions regarding the economic studies particularly related to potential congestion (or lack thereof) on the COI. The CAISO presented information on the most congested paths as part of the economic planning study process. The presentation showed just three hours of congestion on the COI for 2018 and no congestion for 2023. The 2018-2023 congestion assumptions represent a significant departure from recent reports from the CAISO. In fact, the 2012 Annual Report on Market Issues & Performance published by the CAISO Department of Market Monitoring (April 2013 Table 7.1 [p. 151]) shows considerable congestion over the prior three years: 11 percent of the hours in 2010 and 2011 and 42 percent of the hours in 2012 for the Pacific AC Intertie (PACI) were congested, and the COTP rights within the CAISO Balancing Authority Area (BAA) was congested 1 percent, 12 percent, and 8 percent in 2010-2012, respectively. This table indicates that Path 66 was the most congested import path in 2012 and is frequently one of the top three or four most congested paths in the state every year. It is consistently the most costly in terms of congestion charges. The Market Monitoring Report, Table 7.1 showed that congestion on the PACI cost between \$20 million and \$84 million from 2010 to 2012.

TANC is concerned about this apparent discrepancy between planning studies and actual operations. It also seems to contradict the language of the CAISO Tariff. Section 24.4.6.7, *Economic Studies and Mitigation Solutions*, states that:

The CAISO will conduct the High Priority Economic Planning Studies selected under Section 24.3.4 and any other studies that the CAISO concludes are necessary to determine whether additional transmission solutions, are necessary to address:

(a) Congestion identified by the CAISO in the Congestion Data Summary published for the applicable Transmission Planning Process cycle; and the magnitude, duration, and frequency of that Congestion;

Appendix A: Master Definition Supplement defines the "Congestion Data Summary" as "A report issued by the CAISO on the schedule set forth in the Business Practice Manual¹ that sets forth historic Congestion on the CAISO Controlled Grid...."

TANC is concerned that the CAISO's TPP studies understate the congestion along Path 66 and fail to account for the impact the expected reduction in the transfer capability of Path 66 will have on congestion on the COI (see comments above regarding DWR RAS). Congestion on Path 66 is very costly to California. By assuming in the 2013-14 economic studies that there is virtually no congestion along the COI, the CAISO fails to fully account for recent experience, the CAISO's own tariff, and the financial impact of congestion from PG&E's loss of the CDWR remedial action.

_

¹ The words "Congestion Data Summary" do not appear in the Transmission Planning Business Planning Manual.