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**Proposed Tariff Amendment to  
Address Low Voltage  
Transmission Revenue  
Requirement (LVTRR) Cost  
Recovery  
for  
Non-Load-Serving Participating  
Transmission Owners (NLS PTO)**

**CAISO Revised White Paper  
July 17, 2006**

Proposed Tariff Amendment to address Low Voltage Transmission  
Revenue Requirement Cost Recovery for Non-Load-Serving  
Participating Transmission Owners

*Revised White Paper Prepared Based on Stakeholder Discussions of July 7 and July 11, 2006*

## **1 Introduction**

The potential need for an ISO Tariff amendment regarding cost recovery of Low Voltage Transmission Revenue Requirement (LVTRR) for Low Voltage Transmission Facilities of non-Load-serving Participating Transmission Owners (NLS PTOs) was underlined at in the context of the Trans Bay Cable Project (Project) to be developed by Trans Bay Cable LLC (TBC).

On September 8, 2005, the ISO Governing Board (Board) unanimously approved TBC's Project as the preferred long-term transmission alternative to address reliability concerns regarding the San Francisco peninsula area. TBC's Project consists of a new, single, 59-mile high voltage direct current (HVDC) transmission line running under San Francisco Bay, and associated substation facilities, extending between Pacific Gas and Electric Company's (PG&E) Pittsburg Substation in the eastern portion of the San Francisco Bay Area and PG&E's Potrero Substation in San Francisco, including modifications at the substations to connect the line. Although its Project consists primarily of High Voltage Transmission Facilities, TBC recently pointed out that a portion of its converter station facilities and its facilities connecting to PG&E's Potrero Substation will be 115 kV facilities, which are Low Voltage Transmission Facilities subject to LVTRR recovery pursuant to TBC's TO Tariff.

On June 14, 2006, the Board accepted TBC's application for status as a PTO subject to FERC acceptance of TBC's TO Tariff, which has currently been provided in draft by TBC and which will be filed with FERC much nearer to the in-service date of the TBC Project – currently scheduled for early 2009. The Board was also informed of a potential need for an ISO Tariff amendment to clarify the recovery of LVTRR for a NLS PTO such as TBC.

With regard to recovery by a PTO of its Transmission Revenue Requirement (TRR), the ISO Tariff distinguishes between High Voltage Transmission Facilities (transmission facilities 200 kilovolts (kV) and above) and Low Voltage Transmission Facilities (transmission facilities below 200 kV). Pursuant to Section 26.1 and Appendix F, Schedule 3 of the ISO Tariff, the TRR for High Voltage Transmission Facilities is recovered through the ISO's transmission Access Charges, which are in the process of transitioning to a uniform "grid-wide" rate assessed to all Gross Load and Wheeling customers served by the ISO Controlled Grid. In contrast, Section 26.1 of the ISO Tariff provides that a PTO's LVTRR is to be recovered through a Low Voltage Access Charge (LVAC) assessed by the PTO through its individual TO Tariff and by the ISO for Scheduling Coordinators (SCs) that schedule a Wheeling transaction at each Scheduling Point (Section 26.1.4).<sup>1</sup>

It is generally the current practice of PTOs with Low Voltage Transmission Facilities to establish a LVAC that they assess to their End-Use Customers and the ISO collects from Wheeling customers

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<sup>1</sup> To date, the ISO on behalf of the PTOs charges SCs serving Load in a PTO Service Territory that are connected to a Low Voltage Transmission Facility a Low Voltage Wheeling Access Charge for the Scheduling Point where the SC serves the Load. Further detail can be found on the ISO's website ([www.caiso.com](http://www.caiso.com)) under Wheeling Access Charge. The revenue associated with this assessment is credited to the PTO through the Transmission Revenue Balancing Account.

taking service over their Low Voltage Transmission Facilities pursuant to their TO Tariffs. However, TBC will not have its own End-Use Customers or Wheeling customers to which to assess its LVAC, and currently there is no provision in the ISO Tariff that explicitly addresses recovery of the cost of Low Voltage Transmission Facilities where a PTO has no End-Use Customers or Wheeling customers. The most applicable provision is the sentence in ISO Tariff Section 26.1 that reads as follows: "If a Participating TO is using the Low Voltage Transmission Facilities of another Participating TO, such Participating TO shall also be assessed the Low Voltage Access Charge of the other Participating TO by such other Participating TO." This sentence lacks clarity regarding its potential application to TBC's circumstances. An ISO Tariff amendment is needed either to (1) clarify unambiguously how this provision could be applied in practice to address NLS PTO LVTRR cost recovery, or (2) provide specific provisions for NLS PTO LVTRR cost allocation.

## **2 Resolution of Issue Based on Prior Stakeholder Input**

A stakeholder meeting was held on July 7, 2006 to discuss the issue of cost recovery of LVTRR for Low Voltage Transmission Facilities of NLS PTOs. The objective was to determine if the current ISO Tariff could be used with no amendment to address the LVTRR cost allocation issue that arose recently in the context of the TBC Project, or whether an amendment to the ISO Tariff is needed, and if so, the nature of the amendment. The discussion started based on a white paper posted on June 30, 2006, which included two options and included a placeholder for other options in case the stakeholders could not agree on either option. The two options were:

- (1) ISO Proposal: Interpretation of the current ISO Tariff in conjunction with relevant PTO TO Tariffs (the TO Tariffs of PG&E and TBC in this case) to determine which PTOs would be allocated the LVAC of the NLS PTO (TBC in this case), and use that information to guide the determination of the NLS PTO's LVAC rate in the first place.
- (2) PG&E's Proposal: Amendment of the existing ISO Tariff to allocate LVTRR cost of a NLS PTO to all Load in the TAC Area in which the transmission facility of the NLS PTO is located. This would not require the identification of the Load served by a particular Low Voltage Transmission Facility.

The participating stakeholders received neither option favorably. The main conclusion of the meeting was that the existing ISO Tariff language needs clarification (amendment) to explain how the inter-PTO usage of a Low Voltage Transmission Facility as provided in Section 26.1 would work in practice, and how such clarification could then be applied to resolve NLS PTO LVTRR cost recovery and allocation.

Since no definite resolution could be reached at the meeting, it was agreed to form a voluntary LVTRR Stakeholder Working Group to flesh out a proposal for ISO Tariff clarification (or amendment).

The LVTRR Stakeholder Working Group held a conference call on Thursday, July 13, 2006. A revised white paper was generated by the ISO to work out how the ISO Tariff could be amended to clarify how the inter-PTO clause of section 26.1 could be applied for LVTRR cost recovery of a NLS PTO. The conclusion of the July 13 LVTRR Stakeholder Working Group discussion regarding ISO Tariff clarification/amendment was as follows:

1. To the extent a Load-serving PTO charges its own Load directly for its own LVAC, there is no settlement through the ISO. To the extent a UDC, MSS Operator, or Wheeling customer uses the Low Voltage Transmission Facilities of a non-affiliated PTO, the settlement for the recovery of the LVTRR of the non-affiliated PTO would occur through the ISO's settlement system.
2. The use of a NLS PTO's Low Voltage Transmission Facility can occur in one of two ways:
  - a. Wheeling through the Low Voltage Transmission Facility, in which case the power leaves the ISO Controlled Grid. This case is unambiguously defined in the ISO Tariff. The ISO will assess the NLS PTO's Low Voltage Wheeling Access Charge to the SC for the Wheeling customer.
  - b. Using the NLS PTO's Low Voltage Transmission Facility to serve Load of a UDC or MSS Operator that is associated with a PTO. This is where the clause "*If a Participating TO is using the Low Voltage Transmission Facilities of another Participating TO, such Participating TO shall also be assessed the Low Voltage Access Charge of the other Participating TO by such other Participating TO*" requires clarification.
3. To clarify Case 2b, the LVTRR Stakeholder Working Group agreed that the LVAC of the NLS PTO will apply to other PTOs (in their role as UDCs or MSS Operators) that are directly connected to the Low Voltage Transmission Facility of the NLS PTO. With this interpretation (and associated clarifying ISO Tariff amendment), the application of this test to NLS PTOs would mean that only the PTOs (in their role as UDCs and MSS Operators) with Load directly connected to the Low Voltage Transmission Facility of the NLS PTO will be assessed the LVAC of the NLS PTO in question through the ISO's settlement system.
4. Once the unaffiliated PTOs (for the recovery of the NLS PTOs' LVTRR) are identified, these costs would be allocated to the applicable MSS Operator(s)/UDC(s) associated with each such unaffiliated PTO (if there are multiple PTOs identified pursuant to principle 3 above) based on the percentage of the Load of each MSS Operator(s)/UDC(s) associated with each identified unaffiliated PTO to the total Load of the MSS Operator(s)/UDC(s) associated with the identified unaffiliated PTOs.
5. Each PTO that is charged the LVTRR of another PTO shall be allowed to net such payments with any revenues (e.g., proceeds from its own Low Voltage Wheeling Access Charges to Wheeling customers) in its Transmission Revenue Balancing Account for the annual true up of its own LVTRR recovery.

### **3 Request for Further Stakeholder Input**

The LVTRR Stakeholder Working Group recommendations above are hereby shared with all stakeholders for comments. Comments may be sent to [LVTRR@caiso.com](mailto:LVTRR@caiso.com). Comments received by July 21, 2006 will be included in the Board document on this issue for the August 3, 2006 Board meeting.