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California Independent
System Operator Corporation

Memorandum

To: ISO Board

From: Charles A. King, P.E., Vice President of Market Development and Program Management
Farrokh A. Rahimi, Ph.D., Principal Market Engineer

cc: Anjali Sheffrin, Ph.D., Director, Market and Product Development, Mike Dozier, Counsel

Date: July 27, 2006

Re: ***Proposed Tariff Amendment to Address Recovery of Low Voltage Transmission Revenue Requirement by a Non-Load-Serving Participating Transmission Owner***

This memorandum requires Board action.

EXECUTIVE SUMMARY

In this memo Management presents a recommendation for Board approval of an ISO Tariff amendment to clarify how a non-Load-serving Participating Transmission Owner (NLS PTO) can recover its Low Voltage Transmission Revenue Requirement (LVTRR). The need for such Tariff amendment was underlined in the context of the Trans Bay Cable Project (Project) to be developed by Trans Bay Cable LLC (TBC). 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 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. Management conducted a stakeholder process on July 7 to determine (1) if the existing ISO Tariff can be interpreted to resolve the TBC's LVTRR cost recovery, or (2) if an ISO Tariff amendment is indeed needed, whether a specific amendment proposed by PG&E is acceptable to other stakeholders. The conclusion of the meeting was that an amendment was needed, but PG&E's proposed amendment was not acceptable. A voluntary stakeholder Working Group was formed to work out an acceptable amendment; the Working Group was charged to develop an interim solution for TBC's LVTRR issue in case it could not reach consensus on a specific amendment. The Working Group had a conference call on July 13, and reached consensus on the amendment reported herein. A white paper summarizing the proposed Tariff amendment was posted on July 18 for comments. Comments received by July 24 are summarized in this memorandum for Board information. An amendment to the ISO Tariff is proposed herein for Board approval. Once the Board approves the proposed amendment, revised Tariff sheets will be prepared for filing with FERC.

MOVED,

That the ISO Board of Governors approve amendment of the ISO Tariff as stated in this memorandum of July 27, 2006, and direct Management to prepare revised Tariff sheets and make a FERC Section 205 filing accordingly.

ISSUE STATEMENT

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, (TAC), 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).[1]

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 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.

[1] 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) under Wheeling Access Charge. The revenue associated with this assessment is credited to the PTO through the Transmission Revenue Balancing Account.

ISSUE RESOLUTION BASED ON 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 TBC Project's LVTRR cost allocation issue, 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 as well as 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 needed 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 Working Group was also to propose an interim solution for TBC Project's LVTRR cost recovery pending Tariff amendment in case consensus could not be reached in time for a Tariff amendment to enable TBC's project financing in 2006. The LVTRR Stakeholder Working Group held a conference call on Thursday, July 13, 2006 and did reach consensus on a Tariff Amendment. A revised white paper was posted on July 18, describing the proposed amendment for comments by all stakeholders. Comments received were generally supportive.

PROPOSED TARIFF AMENDMENT

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, unless a bilateral contractual arrangement exists between the two PTOs allowing direct settlement between the two parties [2].
2. The use of a NLS PTO's Low Voltage Transmission Facility can occur in one of two ways:

[2] An example of such contractual arrangement is the arrangement between the City of Banning and Southern California Edison.

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 in section 26.1 stating "*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 include such payments, along with any revenues (e.g., proceeds from its own Low Voltage Wheeling Access Charges to Wheeling customers), in its Low Voltage Transmission Revenue Balancing Account (TRBA) for the annual true up of its own LVTRR recovery. The NLS PTO would also have a TRBA and include any over- or under- collection of its LVTRR in that account for annual true up.

The LVTRR Stakeholder Working Group recommendations above were shared with all stakeholders for comments through a market notice on July 18.

JUSTIFICATION OF THE PROPOSED TARIFF AMENDMENT

The proposed amendment is justified based on the following criteria:

1. Consistency – The main test of consistency is to ensure that the entities that are allocated the cost of the project in question (i.e., are allocated the LVTRR cost of the project) do not face different charges depending on who builds the low voltage transmission facility. Another measure of consistency is compatibility with other Tariff provisions and TAC Settlement. The proposed amendment satisfies these requirements. Other options such as allocating the LVTRR to the TAC area, where the NLS PTO low voltage transmission facility is located, would fail this test.

2. Simplicity and ease of implementation – The proposed amendment is simple to implement. Variations of the amendment attempting to measure "who" benefits from the project would be complicated and potentially not amenable to a single LV AC rate applicable to all such beneficiaries who may benefit to different degrees.

3. Stability and transmission investment compatibility. The proposed amendment providers for an easy method to determine the rate to be used in the NLS PTO's TO Tariff, and ensure demonstration of stable expected revenues

for project financing. Using the gross load of the Load Serving PTOs as the billing determinant provides such stability. Other variants attempting to base LVTRR cost recovery on the actual flow through the NLS PTO's low voltage transmission facility would have been too volatile.

STAKEHOLDER COMMENTS REGARDING THE PROPOSED TARIFF AMENDMENT

As stated above the revised white paper, describing the stakeholder Working Group's proposed amendment stated above, was posted on July 18. Comments have thus far been received from only two entities: SCE and the State Water Project of the California Department of Water Resources.

SCE provided some edits and clarifications, which are incorporated above in the description of the proposed amendment. SCE also provided suggestions for wording of the relevant sections of the Tariff to be amended. Their proposed edits will be helpful in drafting the revised Tariff provisions in the event the proposed ISO Tariff amendment is approved by the Board.

SWP's comments were mainly relevant to the case of multiple Load Serving PTOs using the NLS PTO's low voltage transmission facility. SWP's proposal was to allocate the NLS PTO's LVTRR cost based on actual usage of the line by each Load Serving PTO. This was not the ISO's understanding of the Working Group's proposal and is not as consistent with the criteria of simplicity and stability of cost recovery guarantee mentioned above. At any rate, it would not impact the resolution of TBC's cost recovery issue since there will be only one Load Serving PTO (PG&E) physically connected to TBC's low voltage transmission facility.

MANAGEMENT RECOMMENDATION

Management recommends that the Board accept the proposed Tariff amendment as outlined above and authorize Management to prepare revised Tariff sheets and file them with FERC.

Appendix
LIST OF WORKING GROUP PARTICIPANTS

The voluntary LVTRR Working Group consisted of the following participants (besides ISO staff not mentioned in the Table):

Name	Company	Attended July 13 Conference Call
Barkovich, Barbara	Trans Bay Cable (Consultant)	Y
Cohen, David	Navigant Consulting	Y
Cuillier, James	SCE	Y
Gardiner, Stuart	PG&E	Y
Hahn, Ernest	MWD	
Hansen, Bert	SCE	Y
Hitson, Brian	PG&E	
Debra Lloyd	City of Palo Alto	
Schneider, Susan	Phoenix Consulting	Y
Terry, Lee	CDWR	
Valdberg, Anna	SCE	
Werner, Michael	CDWR	Y
Williams, Steven	SCE	Y
Yan, Jason	PG&E	Y
Zimmer, Tony	NCPA	Y