Southern California Edison's Comments May 27, 2008

Integrated Balancing Authority Area Modeling and Pricing Amendment Filing

4th Replacement CAISO Tariff (MRTU)

Further Revision of the Draft IBAA Tariff Language Posted on January 22, 2008

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27.5.3 Integrated Balancing Authority Areas.

To the extent sufficient data is available or adequate estimates can be made for an IBAA, the FNM used by the CAISO for the CAISO Markets Processes will include a model of the IBAA's network topology. The CAISO monitors but does not enforce the network constraints for an IBAA in running the CAISO Markets Processes, unless enforcement of constraints is allowed under a Market Efficiency Enhancement Agreement. Similarly, the CAISO models the resistive component for transmission losses on an IBAA but does not allow such losses to determine LMPs that apply for pricing transactions between an IBAA and the CAISO Balancing Authority Area, unless allowed under a Market Efficiency Enhancement Agreement. As described in Section 27.5.3.4 below, for Bids and Schedules between the CAISO Balancing Authority Area and the IBAA, the CAISO will model the associated sources and sinks that are external to the CAISO Balancing Authority Area using individual or aggregated System Resource injections and withdrawals at locations in the FNM that allow the impact of such injections and withdrawals on the CAISO Balancing Authority Area to be reflected in the CAISO Markets Processes as accurately as possible given the information available to the CAISO.

27.5.3.1 Currently Defined Integrated Balancing Authority Areas.

The FNM includes the defined IBAAs listed below. Additional details regarding the modeling specifications for these IBAAs are provided in the Business Practice Manuals.

- (1) The Sacramento Municipal Utility District (SMUD) IBAA including the transmission facilities of the following entities:
 - (a) Western Area Power Administration Sierra Nevada Region
 - (b) Modesto Irrigation District
 - (c) City of Redding
 - (d) City of Roseville
- (2) Turlock Irrigation District IBAA

27.5.3.2 Process for Adopting a New Integrated Balancing Authority Area/Market Efficiency <u>Enhancement Agreement (MEEA)</u> -or Modifying an Existing Integrated Balancing Authority Area/ Market Efficiency Enhancement Agreement.

As appropriate and after consulting with the applicable Balancing Authority Area and its-CAISO Market Participants pursuant to the process further defined in the Business Practice Manuals, the CAISO may establish new IBAAs/MEEA and modify existing IBAAs/MEEA. Changes to an existing IBAA may include changes to the modeling of the IBAA's network topology or to the specification of the default Resource IDs described in Section 27.5.3.4. Upon completion of this process and having determined it necessary to adopt a new IBAA/MEEA or modify an existing IBAA/MEEA, the CAISO will make any necessary filings with the Federal Energy Regulatory Commission to amend its tariff as appropriate, at which time the CAISO shall also provide its supportive findings for the addition of the new IBAA/MEEA or modification to an existing IBAA/MEEA.

27.5.3.3 Factors to Be Considered in Adopting a new Integrated Balancing Authority Area or Modifying an Existing Integrated Balancing Authority Area.

In creating a new IBAA or modifying an existing IBAA, the factors that the CAISO will consider shall include, but are not limited to the following:

- (1) The number of interconnection points with the CAISO Balancing Authority Area;
- (2) Whether the Balancing Authority Area's system runs in parallel to major parts of the CAISO Controlled Grid;
- (3) The frequency and magnitude of unscheduled flows at designated tie-points;
- (4) The number of hours where actual direction of flows was reversed from scheduled directions;
- (5) The availability of information to the CAISO for modeling accuracy; and
- (6) The estimated improvement to the CAISO's power flow modeling and congestion management processes to be achieved through more accurate modeling of the Balancing Authority Area.

27.5.3.4 Default Designation of External Resource Locations for Modeling Transactions Between the CAISO and an IBAA.

Prior to the adoption of a new IBAA or a change to an existing IBAA in the CAISO Markets, the CAISO will define and publish default Resource Identifiers (Resource IDs) to be used for submitting import and

export Bids and for settling import and export Schedules between the CAISO and the IBAA. These default Resource IDs will specify in the Master File the default associations of Scheduling Point Bids and Schedules to supporting individual or aggregate System Resource injection or withdrawal locations in the FNM.. The supporting injection and withdrawal locations will be determined by the CAISO to allow the impact of the associated Scheduling Point Bids and Schedules on the CAISO IBAA to be reflected in the CAISO Markets Processes as accurately as possible given the information available to the CAISO. The CAISO's methodology for determining such default Resource IDs, as well as the specific default Resource IDs that have been adopted for the currently defined IBAAs, are provided in the Business Practice Manuals. Alternative Resource IDs to be used instead of the default Resource IDs may be created and adopted for use in conjunction with Scheduling Point Bids and Schedules between the CAISO and the IBAA based on a Market Efficiency Enhancement Agreement.

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36.14 CRR Implications of Adopting New IBAAs or Modifying Existing IBAAs.

36.14.1 Coordination of IBAA Changes with Release of CRRs.

To the extent practicable, the CAISO will coordinate the adoption of future IBAA changes, including adoption of new IBAAs and modifications to existing IBAAs, with the annual CRR Allocation and Auction processes. Thus, where feasible the CAISO will adopt the FNM containing the IBAA changes for use in the CAISO Markets beginning with the markets for a Trading Day of January 1 of a new calendar year and, consistent with Sections 6.5.1, will provide Market Participants all the IBAA modeling and pricing details as part of the FNM information package that is made available for CRR purposes prior to the CAISO conducting the annual CRR release process for that calendar year. As a result, all CRRs released in that process will be based upon the same FNM for IBAAs that will be used in the CAISO Markets when the released CRRs and the IBAA changes become effective. In the event that there is a need to implement an IBAA change mid-year, the CAISO will incorporate the IBAA change into the FNM for the monthly CRR release process for the first month in which the IBAA change will take effect. In all cases the CAISO will follow the provisions described below for assessing and mitigating impacts on any Previously-Released CRRs.

36.14.2 Modifications to CRR Settlement of Previously-Released CRRs to Reflect IBAA Changes.

To the extent an IBAA change, including the adoption of a new IBAA or a change to an existing IBAA, modifies the pricing for settlement purposes of IFM scheduled transactions between the CAISO and the IBAA, the settlement of certain Previously-Released CRRs may no longer be consistent with the modified IFM settlement. A CRR Holder of a Previously-Released CRR whose CRR Source or CRR Sink is so affected by an IBAA change may make a one-time election either to (a) modify the settlement of the affected CRR Source or CRR Sink to conform to the revised IFM pricing associated with the IBAA change, or (b) retain the original CRR Source or Sink specification of the Previously-Released CRR. The CRR Holder of such a CRR must make the one-time election prior to the first CRR release process that incorporates the IBAA change in the CRR FNM, in accordance with the process time line specified in the CRR BPM. If the IBAA change is implemented to coincide with the beginning of a calendar year and is coordinated with the annual CRR release process for that year, as described in Section 36.14.1, the provisions discussed herein apply only to Previously-Released CRRs that are LT-CRRs and Previously-Released CRRs that are Seasonal CRRs obtained through the CRR Allocation and are eligible for PNP nomination. In the event that the IBAA change is implemented in the CAISO Markets mid-year, then these provisions apply also to any Previously-Released CRRs that are Seasonal CRRs effective for the remainder of the year in which the IBAA changes is implemented.

36.14.3 Potential Impact of an IBAA Change on the Revenue Adequacy of Previously-Released CRRs.

It is possible that as a result of modifying the CRR Sources or Sinks of Previously-Released CRRs as provided in Section 36.14.2, the entire set of Previously-Released CRRs may no longer be simultaneously feasible. Any such violation of simultaneous feasibility may or may not lead to a revenue shortfall, that is, a deficiency over the course of a month between the IFM Congestion Charge and the amount of funds needed to fully settle the CRRs that are in effect for that month. Consistent with Section 11.2.4.4.1, any revenue shortfall that may result from IBAA-related changes to CRR Sources and CRR Sinks would be funded through the relevant monthly CRR Balancing Account.

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CAISO Tariff Appendix A

Master Definitions Supplement

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IBAA

Integrated Balancing Authority Area

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Integrated Balancing Authority Area (IBAA)

A Balancing Authority Area as provided in Section 27.5.3 that has been determined to have one or more direct interconnections with the CAISO Balancing Authority Area, such that power flows within the IBAA significantly affect power flows within the CAISO Balancing Authority Area, and whose network topology is therefore modeled in further detail in the CAISO's Full Network Model beyond the simple radial modeling of interconnections between the IBAA and the CAISO Balancing Authority Area.

Market Efficiency
Enhancement Agreement

An agreement between the CAISO and the Balancing Authority of an IBAA or any entity or group of entities that use the transmission system of an IBAA, which provides for an alternative modeling and pricing arrangement to the default IBAA modeling and pricing provisions provided in Section 27.5.3. The CAISO may enter into such an agreement provided that there is a demonstrable benefit to the CAISO Markets resulting from such alternative arrangements. Such agreements will follow the process set forth in section 27.5.3.2, will be filed with the Federal Energy Regulatory Commission and will be posted on the CAISO Website.

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Previously-Released CRRs

Those CRRs that were released based on a CRR FNM that did not include an IBAA change and that will continue to be in effect – either as active financial instruments or as allocated CRRs eligible for renewal nomination in the Priority Nomination Process (PNP) – when the IBAA change is implemented in the CAISO Markets.

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CAISO Tariff Appendix C

Locational Marginal Price

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G. Scheduling Point Price Calculation

The CAISO calculates LMPs for Scheduling Points, which are represented in the FNM as PNodes or aggregations of PNodes external to the CAISO Balancing Authority Area through the same process that is used to calculate LMPs within the CAISO Balancing Authority Area. A Scheduling Point typically is physically located at an "outside" boundary of the CAISO Controlled Grid (e.g., at the point of interconnection between a Balancing Authority Area utility and the CAISO Controlled Grid). In some cases, facilities that are part of the CAISO Controlled Grid but are external to the CAISO Balancing Authority Area connect some Scheduling Points to the CAISO Balancing Authority Area, and in these cases the Scheduling Points are within external Balancing Authority Areas. In both of these cases, the Scheduling Points are represented in the FNM. The CAISO places injections and withdrawals at the Scheduling Point PNodes to represent Bids and Schedules whose supporting physical injection and withdrawal locations are unknown, and the LMPs for Settlement of accepted Bids are established at the Scheduling Point PNodes.

G.1 Scheduling Point Price Calculation for IBAAs

As described in Section 27.5.3, the CAISO's FNM includes a full model of the network topology of each IBAA. Consistent with the provisions of Section 27.5.3.4 the CAISO Tariff will specify Resource IDs that associate Scheduling Point Bids and Schedules with supporting injection and withdrawal locations on the FNM. As provided in Section 27.5.3.4, such Resource IDs may be specified by the CAISO based on the information available to it, or developed pursuant to a Market Efficiency Enhancement Agreement. Once these Resource IDs are established, the CAISO will determine Scheduling Point LMPs based on the

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injection and withdrawal locations associated with each Scheduling Point Bid and Schedule by the appropriate Resource ID. In calculating these LMPs the CAISO follows the provisions specified in Section 27.5.3 regarding the treatment of transmission constraints and losses on the IBAA network facilities.

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