

JOINT QUESTIONS  
REGARDING CAISO'S PROPOSED  
IBAA TARIFF CHANGES

Below are several questions prompted by the conference call last week regarding the CAISO's proposed tariff changes to reflect its IBAA pricing and modeling methodology. The CAISO posted responses to several parties' questions on January 29<sup>th</sup> and February 1<sup>st</sup>. To the extent CAISO's answers to those questions are responsive to the questions posed below, please cross-reference your earlier answers. We have attempted to consolidate the questions of SMUD, TID and the City of Santa Clara.

- 1) During the January 24, 2008 stakeholder meeting, Mark Rothleder stated that designation of one entity as an IBAA, but not others, would have ripple effects on the LMP calculations at other points on the CAISO grid.**
  - a. How will third parties know when a party becomes an IBAA and how they will be affected?
  - b. Does the tariff, as drafted, permit the CAISO to designate any IBAA it chooses? Does the tariff say that specific IBAAs can be added individually? If so, how are third parties notified under the tariff of the ripple effect of adding an IBAA to LMPs elsewhere on the CAISO grid?
  - c. Does the tariff require the ISO to use any criteria in designating a new IBAA? If so, where in the tariff are these criteria identified?
  
- 2) During the January 24, 2008 stakeholder meeting, CAISO explained that the weighting given to each of the pricing nodes in an IBAA, which are subsequently aggregated into a hub price, will have a direct impact on prices charged or paid at the hub.**
  - a. How are third parties alerted to this by the tariff if the tariff does not identify the current IBAAs?
  - b. What criteria are employed to determine distribution factors? If the IBAA disagrees, or if third parties disagree, how does the tariff resolve this?

- c. Were the weighting factors listed in “Table 1: APNODE available for CRR Nomination and Auction” that was provided in CAISO’s January 29 IBAA responses the weighting factors that were used for all tiers of the annual CRR allocation and also for the annual auction? Or did CAISO use the weighting factors that were listed in Table 1 of the Discussion Paper on “MRTU Release 1 Implementation of Preferred Integrated Balancing Authority Area Modeling and Pricing Options?” If the CAISO used the former weighting factors, what are the impacts on market participants (CRR recipients and non-CRR recipients) and on the IBAA’s of using different weighting factors in the allocation process vs. those used to settle the CRRs that were allocated?

**3) The CAISO announced at the January 24, 2008 conference call how it will treat certain injections under the IBAA proposal.**

- a. Are all injections at Tracy 500 kV (Tracy 500), including those of non-IBAA’s, modeled as injections at Captain Jack (COTP)?
- b. If so, how will the CAISO distinguish between injections at Tracy 500 which originate from Captain Jack or elsewhere within the SMUD/Western BA?
- c. How will CRRs using Tracy 500 hedge injections at Captain Jack?
- d. The CAISO indicated on the January 24 call that parties, such as DOE, should have used Captain Jack rather than Tracy 500 as a source for CRRs. At what point had the CAISO finalized its proposal to the extent that a stakeholder should have relied upon it for CRRs? How were stakeholders notified of the mapping of each Intertie point to a particular source, and of changes to the mapping? If the notification was via the Full Network Model data tables, how were entities that did not receive the Full Network Model data tables notified of the mapping?
- e. Will N-S schedules on COTP under the current market model that are scheduled with the CAISO as Imports at Tracy be settled at the Captain Jack LMP congestion and loss components under the IBAA proposal? Will N-S schedules on COTP that under the current market model are scheduled as imports to the SMUD/Western Balancing Authority Area, be modeled and priced in the CAISO’s MRTU market model using the Captain Jack congestion and loss components as the “source” prices? If so, what will be used as the “sink” prices?

- f. If the congestion and loss components at Captain Jack are used to settle COTP Imports at Tracy, will the prices of those components reflect the marginal cost of congestion, and the marginal cost of losses, respectively, on the CAISO Controlled Grid? If the answer to this question is yes, does that mean that COTP Imports at Tracy will be assessed CAISO congestion and loss charges?
- g. Under the current market structure, COTP Imports at Tracy do not require FTRs to hedge congestion costs between Captain Jack and Tracy. Under the IBAA proposal CRRs would be required to hedge congestion between Captain Jack and Tracy, even though the COTP project is not part of the CAISO Balancing Authority Area or the CAISO Controlled Grid. Please explain how a Tracy CRR obligation mapped back to Captain Jack does not place additional burdens on COTP owners that do not exist under the current market structure.
- h. As a non-CAISO transmission facility, COTP interchange transactions can be made "post-Day Ahead". Please explain how post-Day Ahead COTP schedule changes (for Tracy Imports) will be protected from CAISO congestion charges under the IBAA proposal.
- i. Will Imports at Malin be settled using the congestion and loss components at Malin? Given that Captain Jack and Malin are directly connected to each other by 500 kV facilities, is it reasonable to assume that the congestion and loss components at Malin and Captain Jack will be similar? Given that the COTP terminus at Tracy is directly connected to the Pacific AC Intertie terminus at Tesla by 500 kV facilities is it reasonable to assume that the congestion and loss components at Tesla and Tracy would be similar to one another (assuming that Tracy is not mapped backed to the Western Hub as contemplated in the IBAA proposal)? Would one expect that congestion and loss differentials between Malin and Tesla and between Captain Jack and Tracy to be similar?
- j. Given that COTP schedules are assessed transmission losses by Western (based on actual losses), please explain why assessing CAISO losses for COTP Imports at Tracy does not result in COTP Imports being "double" charged for losses. Will COTP schedules that are not imported to the CAISO be assessed CAISO losses? Are the actual loss impacts on the CAISO Controlled Grid from COTP schedules that are imported to the CAISO Controlled Grid at Tracy the same as the loss impacts on the CAISO Controlled Grid from COTP schedules that are not imported to the CAISO

Controlled Grid? Are the loss impacts on the CAISO Controlled Grid from Malin Imports essentially the same as COTP imports at Tracy?

- k. Regarding the proposed Western Hub pricing, will the Western Hub loss component be a different price than the loss component at Tracy (absent the proposed IBAA Western Hub aggregation)? Given that Western customers take delivery of their Western allocations at Tracy, how can Western customers within the CAISO Balancing Authority Area maintain the current responsibility for losses and congestion from the Tracy delivery point?

**4) During the January 24, 2008 conference call concerning the tariff filing, CAISO presented a slide indicating that the CRR allocations it had made had been predicated on the IBAA proxy hub pricing methodology. This also raises several questions:**

- a. Southern California Edison's written comments filed before the January 24, 2008 conference call had expressed concern that if the IBAA pricing methodology were adopted it would affect the value of the CRRs already allocated. How, if at all, were non-IBAA entities informed that CRRs would be based on the IBAA pricing methodology since CAISO still hasn't filed it? Does CAISO claim that IBAA entities were aware that their CRRs would be based on this pricing methodology at the time they requested CRRs? What entities were assumed to be IBAA entities for purposes of calculating CRRs and how were they informed?
- b. How could CRR allocations have been made based on what the ISO described as recently as December as a recommended or proposed, i.e. non-final pricing methodology?
- c. The CAISO has asked for parties to submit comments by February 4, concerning its proposed IBAA tariff changes. If the tariff changes are not yet finalized, what authority does CAISO claim to allocate CRRs based on tariff provisions that were not in effect and that may still change from what was circulated to stakeholders last week? If the tariff changes have been finalized, what is the purpose of the comment period and what is the purpose of the follow up conference CAISO states it will hold after the February 4 comments are received?

**5) During the January 24, 2008 conference call the CAISO introduced the new "Compensating Injection" term. SMUD, WASN, MID and TID**

**scheduled net interchange will be altered by the CAISO's use of "Compensating Injections" to model parallel flows through the SMUD/WASN/TID systems. This raises several questions.**

- a. Mark Rothleder of the CAISO acknowledged on the January 24, 2008 conference call that compensating injections would affect LMPs, not only at Rancho and Lake, but at Captain Jack and Tracy as well. Is it correct that, as a consequence, all market participants scheduling on COTP will be affected by CAISO's use of compensating injections?
- b. Given the acknowledged effect of "compensating injections" on system-wide LMPs, does the CAISO plan to include detail regarding use of compensating injections in its tariff? If not, why not?
- c. Did the CAISO previously use "compensating injections" in the 2005 CAISO modeling of the FNM for the CRR runs? If so, did it inform users of the CAISO tariff of this and how were they informed?

**6) The CAISO has identified the need for more accurate modeling of interconnected control areas. Based on its January 2, 2008 whitepaper, titled, "Implementation of 'Partial Loop' Intertie Network Configuration for MRTU" (Partial Loop Proposal), the CAISO makes no mention of pricing, only modeling.**

- a. Can the CAISO improve its modeling without creating aggregated IBAA hubs?
- b. If, so, how? If not, why not?

**7) NCPA posed some questions regarding the effect of CAISO's IBAA methodology on LSEs located within the CAISO control area that have acquired CRRs sourced at Tracy with a sink at the PG&E default Load Aggregation Point. In its January 29, 2008 response, the CAISO states that for "all CRRs sourced or sunk at the Tracy Intertie – whether nominated by an IBAA entity or a non-IBAA entity – were mapped similarly and will be treated in the same manner as described in CAISO's discussion paper," noting that the discussion paper is found at <http://www.aiso.com/1cb4/1cb4e0984a670.pdf>. The website reference is to a December 14, 2007 Discussion Paper that describes itself as detailing the CAISO's "recommended modeling approach of the IBAA," and explains**

**that the CAISO is “proposing a pricing and settlement approach that supports and aligns the settlement of transactions between the IBAA and the CAISO with the operational reality of the system.”**

- a. Does the CAISO mean by its answer to NCPA to state that it allocated CRRs based on a pricing and settlement approach that is still only in the proposal stage?
- b. If so, will CRRs already allocated be revised if the proposed pricing and settlement approach is later modified either (1) by the CAISO before filing with FERC or (2) by FERC after the CAISO files? If the CAISO determines that revisions to its proposed pricing and modeling approach are warranted based on review of the comments it has requested of stakeholders, does it intend to revisit the adequacy of determined CRR allocations?
- c. If, the pricing and settlement approach described in the December 14 discussion paper is not a proposal, but final, when was the decision to finalize it made and how, if at all, were users of the CAISO grid informed?
- d. If, the pricing and settlement approach described in the December 14 discussion paper is not a proposal, but final, what is the precise purpose of the process established for receiving comments?

**8) Slide 38 of the CAISO presentation on January 8, 2008 and January 24, 2008 states that “Losses internal to the IBAA are excluded from the Marginal Loss component of LMP.” However, the Losses associated with LMP study 3C for Walnut suggests that the CAISO HUB numbers are calculating losses on external transmission lines.**

- a. Is the CAISO calculating losses on external transmission lines in the 3C LMP Study?
- b. Please explain how the CAISO will remove or exclude losses associated with other entities’ transmission from its various Hub prices (e.g., Walnut Hub).

**9) The CAISO has indicated that it is using the 3C study in its presentations to give examples of HUB prices, however, Jim Price has acknowledged that the model used in the study is inaccurate as it relates to TID and others as external balancing authorities because:**

- **It treats those external balancing authorities that were part of the CAISO Control Area during the period that was modeled as being still in the ISO Control Area even though these entities are now out of the ISO Control Area; and**
  - **The CAISO’s treatment of losses (i.e., computing MW losses for power flow purposes in order to preserve the accuracy of the network model and congestion management, but excluding marginal losses in areas outside the CAISO BAA from calculations of the CAISO’s LMPs) is a custom feature of the MRTU software and this MRTU software has not completed testing and thus has not been available for use in the LMP Studies.**
- a. Please explain why the CAISO did not study and model TID and other entities that have left the CAISO Control Area as external, rather than internal to the ISO Control Area.
  - b. Please explain how the TID and other entities that have left the CAISO Control Area can, based on the CAISO’s presented data and information, understand the implications of the CAISO’s modeling and pricing proposal?
  - c. Please explain how the ISO can understand the implications of its proposal as it relates to TID and the similarly situated entities.
  - d. Will the CAISO ever model TID and other entities that have left the CAISO Control Area as external, rather than internal to the ISO Control Area?
    1. If so, when?
    2. Will it occur before or after MRTU implementation?
    3. If after, please explain how these entities will be protected from negative ramifications arising from the CAISO’s proposal?
  - e. When will the “custom feature of the MRTU software” be completed so that it can be used in future LMP Studies?

**10) The CAISO has indicated that it plans to use tags to monitor the so-called IBAA’s transactions and “behavior.”**

- a. Please explain in detail how the CAISO proposed tagging process will work and how the CAISO intends to monitor transactions and behavior.

**11) The Interconnected Control Area Operating Agreements (ICAOs) between the IBAs and the CAISO or the CAISO's Transmission Owners (e.g., PG&E) contemplate emergency wheeling under certain emergency conditions.**

- a. How will emergency wheeling under the ICAOA be dealt with under the CAISO's proposal?

**12) On January 8, 2008, the ISO provided a graph on slide 21, entitled "Unscheduled Flow Data from 7/1/07-7/11/30/07, of the "Modeling and Pricing of Integrated Balancing Authority Areas Introduction and Overview".**

- a. Please provide the raw data used to create the graph on slide 21.
- b. What is the source of the collected data used to perform the study?

**13) During the January 24, 2008 conference call, the CAISO made mention that it planned a compliance filing by the end of January or, at most, a few weeks thereafter. The reference to "compliance filing" seems to have been inadvertent inasmuch as the filing is plainly a rate change that must be filed under Section 205.**

- a. Please confirm that CAISO plans to make a Section 205 filing.
- b. If not, please identify precisely what Commission directive CAISO believes requires it to file the new IBAA pricing methodology.

**14) Proposed changes to Section 27.5.3 include a statement that "additional modeling specifications for specific IBAs is provided in the Business Practice Manuals." This language raises several questions.**

- a. During the January 24, 2008 conference the CAISO indicated that it did not have any new BPM language. If that is correct, where is the "additional detail" referenced in the existing BPMs? Does this detail identify "specific IBAs"? If so, where are they identified and who are they? And when and how is a newly-designated IBAA informed of its status? How are other parties subject to the ISO tariff informed when there is a newly-designated IBAA?



- b. Can new IBAAAs be added by the CAISO? If so, would the new IBAAAs then be identified in the BPMs?
- c. Can a party reading the CAISO proposed tariff identify the IBAAAs from the tariff? If so, how?

**15) To what entities does Section 27.5.3 of the revised tariff apply? Their identities do not appear in the tariff, so how do they or third parties become aware of their status as IBAAAs?**

**16) Section 27.5.3.3 seems to indicate that the CAISO has the unilateral ability to identify sub-regions within an IBAA, stating that “the CAISO will predefine individual or aggregate system resources for the sub-regions.”**

- a. Is that correct?
- b. If so, how is this language to be reconciled with Appendix C, which indicates that designation is to occur “through consultation?”
- c. Does the ISO believe it has undertaken any consultation before designating any IBAAAs? Does “consultation” require agreement between an entity designated as an IBAA and CAISO or does the CAISO believe that it can make the designation unilaterally in the absence of agreement?

**17) Section G.1 of Appendix C indicates that “LMPs for such scheduling points *may* be based on multiple aggregated /hub prices if it is determined that subsystems operate within the affected IBAA.”**

- a. Does use of “may” mean that the ISO retains discretion whether to use multiple hub prices? If so, where in the tariff is it explained how the ISO’s discretion is constrained?
- b. When the ISO says that it may have multiple hubs “if it is determined that subsystems operate within the affected IBAA,” who does it contemplate will make this determination?

**18) The definition of IBAA in Appendix C is unclear.**

- a. Can the IBAAAs the ISO designates be determined from the definition?

- b. If not, how can they be identified from the tariff if a third party looking at the tariff wants that information?
- c. The CAISO defines an IBAA as follows:

“A Balancing Authority Area that has one or more direct interconnections with the CAISO Balancing Authority Area, such that power flows in the IBAA *significantly affect power flows in the CAISO Balancing Authority Area*, and that is therefore modeled in detail in the CAISO’s Full Network Model.” (Emphasis added.)

1. What objective criteria is the CAISO using to determine a threshold whereby an entity has a “significant affect” on power flows?
2. Where in the tariff or BPMs are these criteria set forth in a manner that would allow a third party to identify an IBAA?